

Town of Harwich

**Local Comprehensive
Plan 2000**

**Final Plan
Approved by Town Meeting
May 2, 2000**



**TOWN OF HARWICH
LOCAL COMPREHENSIVE PLAN 2000
TABLE OF CONTENTS**

Preamble	i
Vision Statement	ii
Summary	iii
1.0.0 LAND USE/GROWTH MANAGEMENT	1
Summary of Issues and Recommendations	1
Technical Aspects	6
1.1.0 Goals	8
1.2.0 Recommendations	9
2.0.0 Natural Resources – WATER RESOURCES and AIR QUALITY	25
Issues Summary	
Water Resources	25
Air Quality	26
Overview of Recommendations	
Water Resources	26
Air Quality	27
Relation to Other Sections	
Water Resources	27
Air Quality	27
Technical Aspects	28
2.1.0 Goals	
Water Resources	29
Air Quality	30
2.2.0 Recommendations	
Water Resources	30
Air Quality	36
3.0.0 Natural Resources – COASTAL	38
Issues Summary	38
Overview of Recommendations	38
Relation to Other Sections	38
Technical Aspects	38
3.1.0 Goals	39
3.2.0 Recommendations	40
4.0.0 Natural Resources – WETLANDS	43
Issues Summary	43
Overview of Recommendations	43
Relation to Other Sections	43
Technical Aspects	43
4.1.0 Goals	44
4.2.0 Recommendations	44
5.0.0 Natural Resources - WILDLIFE AND PLANT HABITAT	47

Issues Summary	47
Overview of Recommendations	47
Relation to Other Sections	47
Technical Aspects	47
5.1.0 Goals	48
5.2.0 Recommendations	48
6.0.0 ECONOMIC DEVELOPMENT	49
Issues Summary	49
Overview of Recommendations	49
Relation to Other Sections	49
Technical Aspects	50
6.1.0 Goals	51
6.2.0 Recommendations	51
7.0.0 Community Facilities – TRANSPORTATION	56
Issues Summary	56
Overview of Recommendations	56
Relation to Other Sections	57
Technical Aspects	57
7.1.0 Goals	57
7.2.0 Recommendations	58
8.0.0 Community Facilities - SOLID/HAZARDOUS WASTE MANAGEMENT	65
Issues Summary	65
Overview of Recommendations	65
Relation to Other Sections	65
Technical Aspects	65
8.1.0 Goals	66
8.2.0 Recommendations	66
9.0.0 Community Facilities - CAPITAL FACILITIES AND INFRASTRUCTURE 69	
Issues Summary	69
Overview of Recommendations	69
Relation to Other Sections	69
Technical Aspects	69
9.1.0 Goals	70
9.2.0 Recommendations	70
10.0.0 Community Facilities – ENERGY	73
Issues Summary	73
Overview of Recommendations	73
Relation to Other Sections	73
Technical Aspects	73
10.1.0 Goals	74
10.2.0 Recommendations	74
11.0.0 AFFORDABLE HOUSING	77
Issues Summary	77
Overview of Recommendations	77

Relation to Other Sections	78
Technical Aspects	78
11.1.0 Goals	79
11.2.0 Recommendations	79
12.0 OPEN SPACE AND RECREATION	88
Issues Summary	88
Overview of Recommendations	88
Relation to Other Sections	89
Technical Aspects	89
12.1.0 Goals	90
12.2.0 Recommendations	90
12A.0 Cemeteries	96
12A.1 Goals	96
12A.2 Recommendations	96
13.0.0 HISTORIC PRESERVATION/COMMUNITY CHARACTER	97
Issues Summary	97
Overview of Recommendations	97
Relation to Other Sections	97
Technical Aspects	97
13.1.0 Goals	98
13.2.0 Recommendations	99

- Appendix I – Village Center Maps**
- Appendix II – Community Facilities Inventory**
- Appendix III – Town Cemeteries**

Town of Harwich Comprehensive Plan 2000

Preamble

The Town of Harwich was incorporated over three hundred years ago. The same spirit, which led those early settlers to thrive— self-reliance, hard work, and cooperation – still exists today. The attached plan represents the cooperative efforts of many individuals and presents a vision for our future and that of our children where our highest hopes may be realized.

We recognize that some of the goals will not be easy to achieve; the important things in life rarely are. It may well prove impossible to achieve all the dreams embodied in this document during the time we have given ourselves to do so. Nonetheless, we are hereby committed to doing our very best to see that as many of these promises as possible are made a reality for the benefit of the residents of Harwich today and those yet to come.

Town of Harwich Local Comprehensive Plan 2000

Vision Statement

We see the residents of Harwich coming together to support those actions that will enhance the small town atmosphere and quality of life that is prized by current residents and visitors alike. The outcome will be a pleasant environment for living, working, recreation and shopping with enhancement of existing village centers and commercial areas. We will take those actions necessary to provide for the appropriate use of land and a variety of housing types, residential densities, and neighborhoods in order to maintain social diversity. All actions will be consistent with the carrying capacity of Harwich's natural environment, the Cape Cod Commission's Regional Policy Plan, and the ability to support the required infrastructure.

Town of Harwich Local Comprehensive Plan 2000 – Summary

The following interrelated development issues were facing the Town of Harwich as of 2000:

- ◆ Excessive population potential
- ◆ High potential for greatly increased vehicular traffic
- ◆ Increasing threats to the Town's natural resources
- ◆ Inadequate protection of the Town's character
- ◆ Too few affordable housing opportunities
- ◆ Obstacles to compatible economic development

These issues are interrelated because the development of land generates additional traffic, sources of water and air pollution, and demands on drinking water supplies.

This Plan proposes to accomplish the following primary objectives:

- ◆ **Reduction of total population potential** -- The annual cost of providing services to residential land uses is likely to be higher than the tax revenue received from such uses. This means that the average new home is a losing proposition from a revenue perspective. As the Town grows in population, fewer dollars will be available to pay for the current level of municipal services and facilities upkeep without exceeding the taxing limits of Proposition 2 ½. Also, every new home makes an incremental contribution to the total traffic volume on the Town's roadways, and new homes place additional demands on the Town's water supply system. The reduction of population potential can be best accomplished through the purchase of open space. The challenge is to purchase enough of the most strategic parcels before they are developed.
- ◆ **Reduction in total traffic potential/traffic safety improvements** -- For each 1,000 new homes, we will experience roughly 10,000 new vehicle trips per day on Harwich roadways. This is approximately what has occurred in Harwich between 1990 and 1999. One of the most effective and most reasonable ways to reduce traffic potential is to avoid the full residential potential through a progressive program of open space protection. Another method is to provide for land use patterns that facilitate walking, bicycling, and mass transit as regular modes of travel. A secondary source of traffic is the Town's nonresidential sector. Proposed enhancements to traffic safety are include improvements to known dangerous intersections and road segments, additional sidewalks and trails, and bicycle safety improvements.
- ◆ **Optimal protection of the Town's natural resources** -- Any resort area community must strive to protect the natural features that make it a pleasant and desirable place to experience. Environmentally sensitive areas are known and mapped and must be part of an aggressive and strategic land protection program before development further destabilizes the natural balance of the Town's water resources. By purchasing developable land in appropriate,

strategic locations, the Town can do much to protect natural resources, avoid excessive traffic growth, and prevent too much residential growth, all at the same time.

- ◆ **Protection and enhancement of the Town's character** -- The Town has retained its native-born inhabitants and drawn to it many others due to its unique character and charm. Much of this character has been produced through adherence to traditional styles of construction, retention of the "wooded lot" look and beautiful scenic vistas, maintenance of the village "feel", historic preservation, and small scale development. The look and feel of Harwich is changed little by little, with each new construction project. Character can be preserved through the retention of key elements of the Town's natural and built environments. Preservation of the remaining open space is key to the protection of what we now perceive as natural land with its feeling of space between land uses. Guiding the form, scale, placement, and design of new structures is another important measure for long-term character retention. The look and feel of each new project is increasingly critical to the preservation of the existing character.
- ◆ **Provision of affordable housing opportunities** -- There remains a critical shortage of affordable housing, especially year-round rental housing, for Harwich citizens and those who would like to be. This group in need includes a majority of the local work force and retired population. It also includes children of most current householders. The Town's natural resources are threatened by existing development patterns and new growth. This serves up an additional obstacle to providing affordable housing the traditional way.
- ◆ **Enhancement of economic development** -- Economic development doesn't just mean more commercial and industrial buildings. It also means enhanced revenue flow through the Town from sources outside of the Town, which can occur through many different sources. One such source is home based enterprise and telecommuting. Tourism and second homeownership, the historic mainstays of the local economy in recent decades, are significant opportunities as well, especially with the increasing popularity of environmentally based activities including nature hiking and kayaking. . Another source of economic opportunity is retirement and investment income to retirees who reside here. Modest growth of nonresidential space within existing commercial and industrial zones (possibly in the form of redevelopment) is also important to help reduce the need to increase taxes to provide basic municipal services.
- ◆ **Development of Village Centers** -- Village Centers are areas where development and redevelopment are expected and encouraged to occur with due regard for the limits of natural and man-made systems. Village centers will be provided with enhancements to complement the existing road infrastructure without any additional travel lanes being added. In all village centers, accommodation of pedestrian, bicycle, and mass transit modes would be incorporated within the existing rights-of-way, wherever possible.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies

AAB - Architectural Advisory Board

BA - Board of Assessors

BD - Building Department

BPSC - Bike Path Study Committee

BOH - Board of Health

BOS - Board of Selectmen

BWC – Board of Water Commissioners

CC – Cemetery Commission

CCC – Cape Cod Commission

COC – Capital Outlay Committee

CofC – Chamber of Commerce

ConC – Conservation Commission

DRC – Disability Rights Committee

DHM – Division of Highways and
Maintenance

FC- Finance Committee

FD – Fire Department

HA – Housing Authority

HC – Historical Commission

HDC – Historic District Commission

HM – Harbormaster

HRSC – Herring River Study Committee

PEDC – Partnership for Economic
Development Committee

PB – Planning Board

PD – Police Department

RC – Recycling Committee

REOS – Real Estate & Open Space
Committee

RYC – Recreation and Youth Commission

TAc – Town Accountant

TAd – Town Administrator

TE – Town Engineer

TW – Tree Warden

TSC – Traffic Safety Committee

TT - Town Treasurer

WQM – Water Quality Management Task
Force

WWC – Waterways Committee

ZBA – Zoning Board of Appeals

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

1.0.0 LAND USE/GROWTH MANAGEMENT

Summary of Issues and Recommendations

¹The following interrelated development issues were facing the Town of Harwich as of 2000:

- a. Excessive population potential
- b. High potential for greatly increased vehicular traffic
- c. Increasing threats to the Town's natural resources
- d. Inadequate protection of the Town's character
- e. Too few affordable housing opportunities
- f. Obstacles to compatible economic development

²These issues are interrelated because the development of land generates additional traffic, sources of water and air pollution, and demands on drinking water supplies. Land development changes the character of neighborhoods, creates greater need for more affordable housing, and affects economic development opportunities. The manner in which land is protected or developed between now and full development will have a direct bearing on each of these issues. It will also influence the cost of providing adequate services to current and future residents.

³This section of the Plan and other related sections propose to accomplish the following primary objectives:

⁴**Reduction of total population potential** – This is imperative for a number of reasons. First, the annual cost of providing services to residential land uses is likely to be higher than the tax revenue received from such uses, according to the Southern New England Forest Consortium in its September 1, 1995 report, *Cost of Community Services in Southern New England*. In basic terms, this means that the average new home is a losing proposition from a revenue perspective. As the Town grows in population, fewer dollars will be available to pay for the current level of municipal services and facilities upkeep without exceeding the taxing limits of Proposition 2 ½. There is a time lapse for the demand for increased services (i.e. It takes time for construction to be approved, buildings to be built and the new residents to move in and begin requiring new services). While there is continued robust building, new taxpayers are added to the rolls to fund this pent up prior demand. But at buildout, the demand will “catch up,” and place a great deal of pressure on Harwich's tax base, as has been evidenced in other similar communities throughout the Commonwealth.

⁵Second, every new home makes an incremental contribution to the total traffic volume on the Town's roadways. Third, new homes, especially those with large landscaped areas and automatic irrigation systems, place additional demands on the Town's water supply system. The best way to minimize the impacts of such results is to prevent as much new residential development as possible.

⁶The reduction of population potential can be best accomplished through the purchase of open space. The passage of the Cape Cod Land Bank has put town acquisition of some five hundred acres within reach. Doing so would avoid the construction of roughly 400 new homes, or about 1000 new residents, along with the associated permanent costs. The challenge is to purchase enough of the most strategic parcels before they are developed. Strategic parcels are those, which if acquired, would advance as many of the goals of this Plan as possible. The agencies responsible for the planning and financial aspects of open space acquisition should approach the process with the intention of employing the most cost-effective way to purchase the most

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

strategic acreage as soon as possible. The recent adoption of a policy that will allow for borrowing will enable the Town to compete more effectively with the land development industry.

⁷The population projections developed in 1990 for the 1993 Harwich Comprehensive Plan estimated that under the established zoning, the Town's population would level off at about 20,000 residents at full development. Since 1990, about 400 acres have been purchased by the Town and the Harwich Conservation Trust. If another 500 acres can be purchased with Land Bank funds, we could anticipate a total reduction in ultimate population to about 18,000 year-round residents. If another 1,500 acres could be purchased, a new population ceiling of 15,000 would result. This would also mean about 19,000 fewer daily vehicle trips, perhaps two less new water supply wells, and roughly 500 fewer school age children in the build-out year. Any additional land protected from development through gifts, conservation restrictions, and other means would further reduce the total population potential.

⁸**Reduction in total traffic potential/traffic safety improvements** – According to the Cape Cod Commission, traffic management is the single most important planning issue for Harwich. Traffic primarily comes from residential land uses at an estimated vehicle trip generation rate of about 10 trips per day for each single-family dwelling. For each 1,000 new homes, we will experience roughly 10,000 new vehicle trips per day on Harwich roadways. This is approximately what has occurred in Harwich between 1990 and 1999. Assuming 2,300 developable acres capable of yielding another 2000 new homes, and approximately 2,000 additional new homes from existing vacant building lots, we would have to accommodate another 40,000 new vehicle trips per day at full development. The monetary costs of this result are difficult to quantify but clearly the costs of greater congestion and inconvenience, diminished quality of life, lesser air quality, and less safe roadways make mitigation of future traffic potential a top priority. One of the most effective and most reasonable ways to reduce traffic potential is to avoid the full residential potential through a progressive program of open space protection. Another method is to provide for land use patterns that facilitate walking, bicycling, and mass transit as regular modes of travel. The policies contained in this Plan support these approaches.

⁹A secondary source of traffic is the Town's nonresidential sector. Route 28 through West Harwich, Harwich Port and South Harwich, Routes 137 and 39 in East Harwich, and Queen Anne Road in North Harwich are the primary areas of concern regarding congestion and traffic safety due to nonresidential traffic. Along Route 28, a partial solution lies in substituting affordable housing for some commercial development potential in appropriate cases. This would provide alternative equity for commercially zoned property owners, reduce future traffic potential, make public transit more viable along Route 28, provide affordable housing opportunities in areas that are close to employment and shopping areas, and help preserve the character of the Town along this highly visible corridor.

¹⁰Proposed enhancements to traffic safety include improvements to known dangerous intersections and road segments, additional sidewalks and trails, and bicycle safety improvements.

¹¹**Optimal protection of the Town's natural resources** – Harwich is a community whose quality of life and economy are closely tied to the quality of the natural environment. Any resort area community must strive to protect the natural features that make it a pleasant and desirable place to experience. Water quality is chief among the resource protection issues. The

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

quality of the Town's drinking water and its recreational waters and wetlands depends on effective management strategies as more people inhabit the Town and as more year-round occupancy occurs. Since we have largely inherited the development patterns that continue to threaten these resources, the solution lies in reducing future development potential and mitigating the pollution impacts of existing land uses.

¹²Environmentally sensitive areas are known and mapped and must be part of an aggressive and strategic land protection program before development further destabilizes the natural balance of the Town's water resources. Other unique habitats must also be included in this approach. In addition, the findings of the Priority Land Acquisition Assessment Project, June 1999, prepared by the Cape Cod Commission, indicate a need to secure certain strategic lands in Harwich for future water supply.

¹³By purchasing developable land in appropriate, strategic locations, the Town can do much to protect natural resources, avoid excessive traffic growth, and prevent too much residential growth, all at the same time. New thinking will also be required to deal with the current and future water quality impacts from residential development now manifesting in algae blooms in swimming ponds and salt water embayments, fish kills from oxygen depletion, and near closures of swimming areas due to fecal coliform contamination. Neighborhood sewage collection and treatment may be the only answer short of any significant breakthroughs in the cost and effectiveness of advanced septage treatment in on-site septic systems, especially for seasonal uses, which have not adapted well to current advanced treatment technologies.

¹⁴**Protection and enhancement of the Town's character** – The Town has retained its native-born inhabitants and drawn to it many others due to its unique character and charm. These qualities are hard to define but we tend to know them when we see them. Much of this character has been produced through adherence to traditional styles of construction, retention of the "wooded lot" look and beautiful scenic vistas, maintenance of the village "feel", historic preservation, and small scale development. The look and feel of Harwich is changed little by little, with each new construction project. Changes to the built environment usually include a change to the natural environment such that natural landscapes have been replaced by buildings, pavement, and/or artificial landscapes. All of these things are built-in components of change and are products of the Town's zoning, which has been passed down since the 1950's.

¹⁵There are options available but few are feasible. With each new building that is constructed, both residential and commercial, there is change. Character can be preserved through the retention of key elements of the Town's natural and built environments. Preservation of the remaining open space is key to the protection of what we now perceive as natural land with its feeling of space between land uses. Guiding the form, scale, placement, and design of new structures is another important measure for long-term character retention. Currently, there is design control only in a limited part of Harwich Center, where there is a local historic district. Otherwise, only advisory design review is given to nonresidential projects and no appearance design review of any kind is given to residential structures.

¹⁶With so many development sites more apparent than ever before, the visibility and impact of character changes due to new construction are at an all time high. The vision and hard work of several agencies have helped produce compatible structures for the most part. However, other than in the Historic District, there is no legal obstacle to new construction taking any shape, size, or color within the required setback, height, and coverage limits. The look and feel of each new project is increasingly critical to the preservation of the existing character. Therefore,

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

this Plan promotes effective design and siting controls for the benefit of all property owners and residents.

¹⁷**Provision of affordable housing opportunities** – Thanks to the impressive affordable housing achievements by the Harwich Community Development Corporation, the Harwich Ecumenical Council for the Homeless, The Harwich Housing Authority, and Mid-Cape Church Homes, we have more subsidized, affordable units than ever before. However, there remains a critical shortage of affordable housing, especially year-round rental housing, for Harwich citizens and those who would like to be. This group in need includes a majority of the local work force and retired population. It also includes children of most current householders. According to the Massachusetts Department of Housing and Community Development, nearly 40% of Harwich households are considered low and moderate income, which means they earn less than 80% of the median household income for this area (\$37,156 per 1995 Barnstable County estimate). Yet, only about 2.3% of the Town's housing stock is considered affordable by State and Federal standards. This is *down* from 2.6% in 1990 due to the very high rate of construction of market rate units and the extremely low production of affordable units since that time.

¹⁸The Town's natural resources are threatened by existing development patterns and new growth. This serves up an additional obstacle to providing affordable housing the traditional way, i.e. through higher per acre densities. In addition, the need to limit the ultimate population of the Town for its optimal fiscal health and the other reasons stated above, work against significant progress toward achieving any affordable housing goal.

¹⁹These conditions provide a strong incentive for the Town and other providers to focus and get creative in addressing this critical need. This Plan recommends that we explore and create partnerships, purchase land for affordable housing development, convert larger homes into apartments, and look to portions of Route 28 for opportunities for adding affordable units. It also sets forth a goal of 10% affordable housing by the Year 2025, as called for in the Regional Policy Plan of the Cape Cod Commission. Although the 10% goal is noble and will be pursued, we believe that a more realistic and obtainable objective given the continued overall growth rate is to reach 5% by 2010, 6.5% by 2015 and 7% by 2020 and 10% by 2025. The Plan proposes adopting an inclusionary affordable housing program so that each new development project can contribute to the attainment of the goal, instead of push us farther from it. Additionally, it recommends pursuing all grant opportunities for affordable housing development in a manner consistent with the policies recommended in this Plan.

²⁰If done correctly, the production of affordable housing can actually help limit potential traffic growth along Route 28, as described above under the Traffic Reduction narrative. It is also possible to produce affordable housing and protect open space and natural resources on certain sites through a more compact form of development that would be served by advanced septage treatment technology. This Plan recommends these approaches as an integrated means to addressing several issues concurrently.

²¹**Enhancement of economic development** – Economic growth is a very necessary part of the Town's future. Without it, residents and homeowners will be required to fund an ever-growing share of the costs of basic governmental services, such as police and fire protection, education, and roads with fewer means to do it. Economic development doesn't just mean more commercial and industrial buildings. It also means enhanced revenue flow through the Town from sources outside of the Town, which can occur through many different sources. One such

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

source is home based enterprise and telecommuting. Tourism and second homeownership, the historic mainstays of the local economy in recent decades, are significant opportunities as well, especially with the increasing popularity of environmentally based activities including nature hiking and kayaking. Our ability to maintain Harwich as an attractive tourism destination will also depend on the competitiveness of its hotel, motel and bed and breakfast facilities. Another source of economic opportunity is retirement and investment income to retirees who reside here. An increase in the retiree population also presents the opportunity for growth in support services catering to the needs of this sector, especially in healthcare. This increase in the need for healthcare professionals also presents the opportunity for the establishment of a Harwich-based satellite college or professional training facility. Finally, specialty manufacturing of unique Cape-oriented products is a field of potential further economic growth.

²²Enhancing any or all of these revenue channels, as recommended by this Plan, would benefit the Town as a whole. Doing so would bring more revenue into the community to be spent in the community, thereby strengthening the overall local economy and improving the quality of life for Harwich citizens and visitors. Moreover, these benefits can accrue without needing to significantly increase the number and size of nonresidential buildings and the traffic such growth might generate. However, modest growth of nonresidential space within existing commercial and industrial zones (possibly in the form of redevelopment) is important to help reduce the need to increase taxes to provide basic municipal services. This Plan also recommends improving the attractiveness of existing business areas so as to enhance shopping activity and increase property values within them, which will further strengthen the Town's fiscal standing.

²³In a resort area such as Harwich, the objectives of open space and natural resource protection are wholly consistent with the goal of enhancing tourism because the Town is what we have to market to tourists. By preserving large amounts of open space, keeping traffic at a manageable level, and protecting water quality and community character, we maintain the desirable qualities that attract tourists, home based entrepreneurs, telecommuters, and retirees. While it is true that successful tourism translates into high levels of traffic during the summer months, it is what we are accustomed to already and is a necessary element in maintaining the balance and interdependence of environmental protection and economic vitality. The transportation improvement recommendations of this Plan will help to mitigate peak season traffic problems.

²⁴**Village Center Concept** – This Plan extensively promotes the idea of Village Centers, which are areas where development and redevelopment are expected and encouraged to occur with due regard for the limits of natural and man-made systems. Modest growth in the village centers will be sustained with adequate infrastructure and natural resource protection, economic vitality, compatible architecture, attractive public spaces, transportation services, and pedestrian/cyclist accommodation.

²⁵Village centers will be provided with enhancements to complement the existing road infrastructure without any additional travel lanes being added. In the East Harwich village center, intersection improvements may require some widening of the intersection for additional turning lanes, but only if no equally functional and safe alternatives can be provided (i.e. success in reducing build-out potential, and/or a modern roundabout, and/or new bypass roadways). In all village centers, accommodation of pedestrian, bicycle, and mass transit modes would be incorporated within the existing rights-of-way, wherever possible. Any widening of the rights-of-way would ideally only be for sidewalks, bicycle lanes, or transit

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

stops where such facilities cannot be placed within the existing layouts of the respective public ways.

Technical Aspects

The following are explanations of some of the key terms and concepts, which appear in this section:

Affordable housing - Housing which is subsidized for a long term so as to be affordable for rental or owner occupancy by households which earn less than the Harwich median household income, especially those with incomes at or below 80% of the Harwich median household income.

Best management practices - A collection of the most practical and up-to-date approaches to managing the disposal of storm water.

Betterment assessments - Assessments to individual property owners within a defined betterment district to pay for special public improvements which enhance the value of property in the district. Assessments would be in addition to real estate taxes.

Cluster development - The creation of building lots for homes or businesses whereby the same number of lots allowable by conventional subdivision are created in a development but the lot area and frontage is reduced so that the land left over can become permanent open space.

Denitrifying sewage treatment/septic facilities - Sewage treatment facilities, either serving a single parcel or an entire area, which significantly reduce the levels of nitrate-nitrogen in the wastewater prior to discharge into the ground water.

Environmentally sensitive area - A natural resource area such as a pond, public wellfield, wetland, beach, dune, coastal bank, designated Area of Critical Environmental Concern (ACEC), steeply sloping area, rare wildlife habitat, or an area through which precipitation ultimately recharges a surface water body or public wellfield.

Gateway area - An area at the fringe of a special place such as the Town of Harwich itself or any of its village centers, along a major road which provides access to the special place. The purpose of a gateway is to draw visitors' attention to their arrival at the special place and is typically decorated with an aesthetically pleasing symbol, sign, display and/or arrangement of materials such as plantings, fence sections, statues, pillars, stone walls, etc.

Greenhouse agriculture - Cultivation of cash crops within greenhouses so as to extend/maximize the growing season.

Ground watershed - The total area of contribution of ground water to its outlet.

Infill - Development, residential, commercial, or industrial which occurs within and between already developed and partially developed parcels.

Mixed uses - Commercial and residential uses in an area where buildings and or parcels are shared by both use types.

Multi-unit residential - Any residential land use which involves three or more dwelling units.

Nitrogen-sensitive areas - Areas determined by the Massachusetts Department of Environmental Protection and/or Harwich Board of Health, which are particularly sensitive to the discharge of pollutants from on-site sewage disposal systems.

Recharge area - The land area that contributes storm runoff, irrigation water and septic discharges to a specified resource such as a well, pond, or harbor.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Strategic parcels of land – Land parcels that would advance one or more goals of this Plan through their protection from residential or commercial/industrial development or acquisition as open space.

Strip commercial development – Continuous or intermittent linear roadside development, generally one commercial space deep and characterized by multiple roadway access points, highly visible off-street parking, and an assortment of commercial uses with direct access to abutting roads.

Transfer of Development Rights (TDR) – The existing rights under zoning to build residential or commercial structures which, instead of being built on the land where the rights currently exist, can be transferred to other parcels in the same areas or in completely different areas of town.

Transitional uses - Land uses which serve to buffer high intensity uses from low intensity uses. For example, multi-unit residential would serve as a transitional use between commercial and detached single-family residential uses.

Village Center - A concentrated area of activity, consisting of either mixed commercial and residential, all commercial, or all industrial land uses. Village centers, as presented in this Plan, are areas where development and redevelopment are expected and encouraged to occur with due regard for the limits of natural and man-made systems. Modest growth in the village centers will be sustained with adequate infrastructure and natural resource protection, economic vitality, compatible architecture, attractive public spaces, transportation services, and pedestrian/cyclist accommodation. Classification of village center types is provided below.

a. Local Commercial/Residential - An area with definite boundaries in which growth to serve local demand is preferred, encouraged and supported, within appropriate limits to be established under zoning, so as to establish and maintain attractive, compact, and vital places for business, leisure and residence.

b. Local and Regional Commercial - Same as (a) above but with an allowance for commercial uses of a regional nature and no provision for residential use.

c. Small Scale Commercial/Residential- Same as (a) above but with an emphasis on encouraging small scale businesses and lodging within existing structures.

d. Industrial- An area in which industrial growth is encouraged and supported, within appropriate limits established by zoning where industry supported by the local economy can grow, prosper, and provide employment opportunities for local residents.

e. Economic – An area similar to (d) above, but which, due to its unique access to a regional transportation corridor, also encourages the establishment of regional land uses within appropriate limits to be established under zoning so as to optimize the enhancement of the nonresidential tax base and provide employment opportunities for Harwich residents.

Village-style development patterns - Patterns of development which are adjacent to a confined commercial area and exhibit a relatively consistent scale, form, and spacing of buildings and placement of parking facilities.

Zoning bonuses - The granting during the development review process of additional development capacity such as more site coverage or fewer parking spaces than required, in exchange for provision of a public benefit or amenity and/or advancement of a goal in this Plan. Any increase in residential density should improve water quality in designated Water Quality Improvement Areas.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Land Use/Growth Management goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

1.1.0 Goals

- 1.1.1 To maintain and enhance the Town's small town atmosphere and quality of life.
- 1.1.2 To allow moderate growth and development consistent with the carrying capacity of Harwich's natural environment.
- 1.1.3 To limit land use intensity outside of designated village centers so as to minimize the need for public infrastructure in such areas.
- 1.1.4 To discourage high intensity uses in locations where such uses would be contrary to the goals and objectives of this Plan.
- 1.1.5 To encourage the preservation and enhancement of existing village centers and commercial areas that provide a pleasant environment for living, working and shopping for residents and visitors.
- 1.1.6 To provide and maintain appropriate recreational facilities.
- 1.1.7 To maintain or improve the Town's tax base.
- 1.1.8 To provide a variety of housing types, residential densities, and neighborhoods in order to maintain social diversity in the Town.
- 1.1.9 To provide for the appropriate use of land within the Town so as to best meet the needs of residents, businesses and visitors with an emphasis on protecting and enhancing the Town's assets.
- 1.1.10 To eliminate or minimize the Town's land use liabilities and conflicts.
- 1.1.11 To preserve and enhance agricultural uses that are environmentally compatible with Harwich's natural resources in order to maintain the productive and scenic values associated with agricultural lands.
- 1.1.12 To promote public safety and well being.
- 1.1.13 To maximize the benefits of Land Bank revenue to secure strategic land parcels for open space preservation.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

1.2.0 Recommendations

- 1.2.1 Reduce the Town's year-round residential capacity (based on dwelling units) to a level not to exceed 15,000 residents by acquiring for open space or otherwise protecting from development 2500 acres of land. This will be accomplished by means of employing all available planning tools, prudent acquisitions of open space and park or recreation facilities and by not altering zoning requirements to increase housing density (other than for affordable housing with appropriate septage management facilities) in a manner consistent with this Plan. (Over the last several years open space has been acquired for conservation and recreation purposes at a rate of approximately 90 acres per year. With the passage of the Land Bank, it is anticipated that more land will be put forward each year for purchase. For Town Meeting in 2000, for example, 151 acres are being put before the voters for purchase.) Any higher density development which might still be permissible under current by-laws shall improve water quality in designated Water Quality Improvement Areas.

Implementation

The Real Estate and Open Space Committee should aggressively pursue the acquisition/protection of strategic parcels of land and recommend same for action by Town Meeting. The Committee shall work with all relevant local, regional, and state agencies as well as nonprofit organizations, to maximize the quantity of strategic land protected before it is converted to land for residential use. Every attempt shall be made to stretch the local Land Bank dollars and other available funds through cooperative purchases, creative financing, conservation restrictions, promotion of gifts of land, grants, and any other practical means to increase the supply of protected land. The key policy decision in this area is the ability to borrow against anticipated Land Bank funds. The Planning Board should seek to encourage land preservation through incentives for limited development, such as reduced road improvement requirements in exchange for fewer lots and dedicated open space.

Key Agencies (lead agencies in bold)

BOS, REOS, PB, ATM, TC, Community Organizations

Timing

The work of the Real Estate and Open Space Committee is ongoing and will continue for the next twenty years or until there is no longer a need for such committee.

- 1.2.2 Prohibit new strip commercial development and provide incentives for mitigating the visual and traffic impacts of existing strip development.

Implementation

The Planning Board should develop and propose zoning amendments that accomplish these objectives. The Board's approach may include creation of a special permit process for retail and service uses with special criteria for building design and configuration, access, location of parking, and building size.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agency in bold)

PB, AAB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

1.2.3 Designate the following locations as Village Centers:

East Harwich - Local and Regional Commercial Village Center within the existing boundaries of the CH-2 (Commercial Highway – 2) Zone. The proposed boundaries are shown on Figure 1.2.

Harwich Port – Local Commercial/Residential Village Center generally along the C-V Commercial Village Zone and CH-1 (Commercial Highway – 1) Zone areas and specifically represented on Figure 1.3.

West Harwich – Small Scale Commercial/Residential Village Center generally along CH-1 Zone area and specifically represented on Figure 1.4.

North Harwich – Industrial Village Centers within the limits of existing industrial zones, as shown on Figures 1.5 and 1.6.

Pleasant Lake – Economic Village Center at the Route 6 interchange area and specifically shown on Figure 1.7.

Harwich Center – Small Scale Commercial/Residential Village Center within the boundaries of the existing C-V Zone, as shown on Figure 1.8.

South Harwich – Small Scale Commercial/Residential Village Center generally along CH-1 Zone area and specifically represented on Figure 1.9

See discussions of each village center type under Technical Aspects, above. Maps showing the Village Center areas are in Appendix I.

Implementation

After one or more public hearings on these actions, the Planning Board should propose appropriate Zoning By-Law and Map amendments to designate the described village centers. This recommendation designates in both the Town's Comprehensive Plan and Zoning By-Law the limits of significant commercial and industrial activity throughout the Town. It also supports the siting of such activity in appropriate locations by promoting the provision of adequate infrastructure in the subject areas.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM,

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.3.1 For all designated village centers, design and construct improvements, including but not limited to appropriate bicycle, pedestrian and transit facilities contributing to safe roadways and intersections, and environmentally sound stormwater drainage facilities.**

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Board of Selectmen, Planning Board, Capital Outlay Committee, Finance Committee, Traffic Safety Committee as well as relevant town department heads (working under the direction of the Town Administrator), including the Town Engineer, Director of Highways and Maintenance, Police Department, Fire Department, the Town Planner/Grantwriter, and others will identify and actively pursue proposals for needed improvements

Key Agencies (lead agencies in bold)

BOS, PB, TA, PD, TSC, FD, TE, COC, FC, ATM

Timing

Form Steering Committee either new or existing immediately following certification of this Plan by the Cape Cod Commission and develop a draft implementation plan within one year of the formation of a steering committee and a final implementation plan within one year of completion of the draft plan.

- 1.2.3.2 For all designated village centers**, adopt appropriate buffering and transition provisions where commercial and industrial activities will abut land zoned for residential purposes. Transition areas may include multi-unit dwellings to better separate commercial and single-family residential uses.

Implementation

The Planning Board should develop and propose Zoning By-Law amendments to provide for adequate buffering of nonresidential uses from areas used primarily for single-family purposes.

Key Agencies (lead agency in bold)

PB, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.3.3 For all designated village centers**, provide for the establishment of attractive gateway areas to identify the entry into each village center. This will emphasize the goal of the plan to focus development and redevelopment within the village centers.

Implementation

The Board of Selectmen and other relevant town agencies, including the Architectural Advisory Board should work with the Chamber of Commerce, Garden Club, and other local service clubs and organizations to encourage the establishment of appropriate gateways. The gateways may involve a simple, decorative sign or a more permanent construction. Neighborhood preferences will be taken into consideration in the planning of any gateway.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agency in bold)

BOS, AAB

Timing

Discussions concerning location and design of the proposed gateways should be underway within one year of the certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.3.4 In all designated village centers, establish the appropriate mix of land uses that will promote and enhance the vitality and unique character of each village center.**

Implementation

The Planning Board should conduct a process to establish the unique visions of residents and property owners in each of the designated village center areas. When each village has set forth the type of area it chooses, then a review of the permitted uses shall be conducted to determine the appropriate mix necessary for implementing each vision. Where zoning changes are needed, a collaborative process with property owners whose land will be affected by such changes shall be undertaken. The Planning Board should strive to provide realistic incentives, wherever possible, for landowners to make or accept the desired land use changes.

Key Agencies (lead agency in bold)

PB, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission.

- 1.2.3.5 In the East Harwich, Harwich Port, West Harwich, and Harwich Center Village Centers, design and construct streetscape beautification improvements in a manner consistent with the vision established for each village center.**

Implementation

The Board of Selectmen and other relevant town agencies, including the Planning Board and the Architectural Advisory Board should work with the Chamber of Commerce, Garden Club, and other local village betterment organizations to develop a plan of improvements for village streetscapes, which reflect the individual visions of the four village centers named above. Such process shall include a description of needs, proposed improvements and potential funding sources.

Key Agencies (lead agencies in bold)

BOS, PB, AAB, PD, TSC, TE, COC, FC, ATM

Timing

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Begin meetings to discuss priorities for streetscape improvements within one year of the certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

1.2.3.6 In the East Harwich Village Center

- A. Allow for regional and local commercial facilities within the core of the CH-2/WR area, and smaller-scale uses along the periphery, provided nitrate-nitrogen loading will not be permitted to exceed 5 parts of nitrate-nitrogen per million parts of water and further provided that no such facilities or uses shall include the handling, storage, or disposal of toxic or hazardous materials.

Implementation

The Planning Board should amend the Use Table in the Zoning By-Law to provide for both large- and small-scale facilities, or other appropriate design as determined through the village center design concept, in the CH-2 zone while excluding the larger ones from other commercial areas (except Pleasant Lake Economic Village Center). The larger scale uses shall be permitted, subject to appropriate criteria, within the central core of the village center while only small-scale, local uses shall be permitted along the periphery of the area. The Zoning Map shall be amended to delineate the core and periphery areas of the CH-2 Commercial Zone. The criteria for certain uses should be developed jointly with the Board of Health and Board of Water Commissioners relative to water protection issues.

Key Agencies (lead agencies in **bold**)

PB, TC, BOH, ATM

Timing

Adopt appropriate provisions within two years following certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- B. Complete detailed study of the CH-2 Commercial Zone and implement its recommendations.

Implementation

The Planning Board will complete the CH-2 Study. The Board will then work with the Board of Selectmen and other relevant agencies to implement the zoning and infrastructure recommendations of the study.

Key Agencies (lead agency in **bold**)

PB, BOS, TC, TE, DHM

Timing

Adopt zoning amendments and infrastructure improvement schedule within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- C. Develop and propose zoning bonuses for provision of open space for sub-DRI projects in the CH-2 Commercial Zone

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose zoning amendments to provide for specific incentives for the creation of open space in the CH-2 Zone which shall be above the minimum 60% of pervious surface now required. Such incentives shall provide for either additional development rights or reduction of certain other requirements in exchange for the provision of additional open space, which will help protect groundwater quality.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

1.2.3.7 In the Harwich Port Village Center

- A. Permit multi-unit housing in appropriate locations, subject to specific criteria.

Implementation

The Planning Board should develop and propose specific criteria for the establishment of multi-unit housing in the Harwich Port Village Center. These criteria shall, at the minimum, consider existing and proposed housing density, septage treatment requirements, affordability, buffering and setbacks, and parking.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- B. Open a dialogue with MassHighway concerning future improvements to Route 28.

Implementation

The Traffic Safety Committee should work with the Board of Selectmen and (through the Town Administrator) the Department of Highways and Maintenance to pursue with MassHighway the provision of safe, ADA compliant sidewalks and environmentally sound drainage facilities along the entire length of Route 28 through Harwich Port.

Key Agencies (lead agency in bold)

TSC, BOS, DHM

Timing

Commence discussions upon the adoption of this Plan by Town Meeting.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- C. Establish 15 foot maximum setback from Route 28.

Implementation

The Planning Board should develop and propose zoning amendments to require a maximum setback of 15 feet from Route 28 for properties with highway frontage in the Harwich Port Village center. Said amendments shall include measures to avoid rendering a significant number of properties nonconforming, wherever possible. Such measures may include the allowance of front yard patios, decks and gardens to serve as facilities from which the front setback is measured.

Key Agencies (lead agency in bold)
PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

1.2.3.8 In the West Harwich Village Center

Open a dialogue with MassHighway concerning future improvements to Route 28.

Implementation

The Traffic Safety Committee should work with the Board of Selectmen and (through the Town Administrator) the Department of Highways and Maintenance to pursue with MassHighway the provision of safe, ADA compliant sidewalks and environmentally sound drainage facilities along the entire length of Route 28 through West Harwich.

Key Agencies (lead agency in bold)
TSC, BOS, DHM

Timing

Commence discussions upon the adoption of this Plan by Town Meeting and/or its approval at Town Meeting (whichever is later).

1.2.3.9 In the North Harwich Village Center

- A. Consider the establishment of an industrial park in the area within the existing North Harwich industrial district generally bounded by Great Western Road, the westerly town boundary, Main Street extension and Depot Street, excluding marginal areas identified on the Future Land Use Map, and providing for septic and storm water disposal outside of any Water Resource Protection District. Limit access to the industrial park to Great Western Road, if possible. Such action may include town involvement in securing a road layout and an appropriate area for environmentally sound septic and/or storm water discharge.

Implementation

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Currently, an industrial park may be established by a landowner that controls a significant amount of acreage in the described area with or without any changes to the Zoning By-Law. However, it may be to the advantage of the Town to create a special industrial park overlay district with standards for development that would promote clean, high quality industrial developments that would complement each other and enhance the image of the park as a whole. Specific performance standards could be developed so as to facilitate special permit review of any uses, thereby expediting the permitting procedure.

Key Agencies (lead agencies in bold)

BOS, PB, TE, TC, ATM

Timing

Within two years following adoption of this Plan by Town Meeting research industrial park options and formulate an approach for consideration by the Planning Board and Board of Selectmen.

- B. Promote complementary building design in all industrial areas through design guidelines and zoning incentives.

Implementation

The appearance of industrial areas can be improved greatly through the consistent application of one or more design themes which can be promoted by developing the appropriate guidelines and amending the Zoning By-Law to provide adequate incentives for existing and future development to adhere to the design guidelines. Signage, facade materials, fencing and landscaping can be used to implement this concept.

Key Agencies (lead agencies in bold)

PB, AAB, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- C. Allow for small scale neighborhood retail/service uses between the Cape Cod Rail Trail and Great Western Road along the west side of Depot Street to serve the convenience needs of the industrial and residential areas and help reduce vehicular traffic growth to and from existing commercial areas.

Implementation

The Planning Board should develop and propose Zoning By-Law amendments to allow small-scale retail/service stores in the described area. Any such amendment shall include consideration of design guidelines and viability of specific uses allowed.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- D. Prohibit any further commercial gasoline storage and dispensing in the industrial area west of the Herring River due to the extreme vulnerability of the downstream ecosystem. Require appropriate containment areas and techniques for any existing dispensing facilities.

Implementation

The Planning Board should develop and propose zoning amendments to ban gas stations and any new private gasoline, kerosene, diesel fuel, etc., storage facilities. (These uses are now allowed with a special permit). Current regulations will be reviewed for adequacy and appropriate zoning amendments prescribing mitigation measures for existing facilities, including containment areas and/or techniques, will be developed as appropriate.

Key Agencies (lead agency in bold)

PB, CC, BOS, BOH, FD, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

1.2.3.10 In the Pleasant Lake Village Center

Require pollutant-intercepting storm drainage systems for all nonresidential development in designated nitrogen sensitive areas.

Implementation

The Planning Board and Board of Health should develop and propose amendments to the Zoning By-Law and Board of Health Regulations, respectively, to require the appropriate facilities.

Key Agencies (lead agencies in bold)

PB, BOH, BOS, ATM, TC

Timing

Adopt regulatory framework within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

1.2.3.11 In the Harwich Center Village Center

- A. Permit multi-unit housing in appropriate locations, subject to specific criteria.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose specific criteria for the establishment of multi-unit housing in the Harwich Center Village Center. These criteria shall, at the minimum, consider existing and proposed housing density, septage treatment requirements, affordability, buffering and setbacks, and parking.

Key Agencies (lead agency in bold)

PB, HDC, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

B. Implement appropriate traffic management measures.

Implementation

The Traffic Safety Committee will examine the alternatives prepared by the traffic consultant for this area, presented in Section VIII, Community Facilities, and conduct ample public meetings to arrive at a consensus as to what measures to implement. They should also consider and adopt any appropriate measures which have not yet been identified. If structural improvements are deemed appropriate, the design and construction funding should be submitted for placement in the capital outlay plan.

Key Agencies (lead agencies in bold)

TSC, PD, BOS, DHM, TE, PB

Timing

Initiate in-depth study following adoption of this Plan by Town Meeting. Program any construction of improvements within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

1.2.3.12 In the South Harwich Village Center

Open a dialogue with MassHighway concerning future improvements to Route 28.

Implementation

The Traffic Safety Committee should work with the Board of Selectmen and (through the Town Administrator) the Department of Highways and Maintenance to pursue with MassHighway the provision of safe, ADA compliant sidewalks and environmentally sound drainage facilities along the entire length of Route 28 through South Harwich.

Key Agencies (lead agency in bold)

TSC, BOS, DHM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Commence discussions upon the adoption of this Plan by Town Meeting and/or its approval at Town Meeting (whichever is later).

OTHER TOWN-WIDE LAND USE RECOMMENDATIONS

- 1.2.4 Provide for substitution of commercial development potential with affordable housing in existing commercial zoned areas along Route 28 that lie outside of designated village centers.

Implementation

The Planning Board should develop and propose zoning amendments to provide an option for commercial property owners in the specified areas to trade commercial development potential for permission to establish multiple units of housing, provided at least 30% of said units are affordable. Incentives for 50% and 100% affordable units shall also be provided. Such incentives may include an allowance for full depth utilization of Route 28 parcels which lie partially in the commercial zone and partially in a residential zone. Where all of the commercial potential is not traded for housing, mixed use shall be permitted, subject to a special permit process with criteria to limit the size and extent of the commercial facilities. The basic tenet of this approach is to minimize the generation of vehicular traffic from commercial zoned properties while optimizing the opportunities for affordable housing near shopping, employment and transportation.

Key agencies (lead agency in bold)

PB, BOS, HA, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.5 Develop a special permit process to allow for partial transfer of development rights between any two parcels, where such transfer will satisfy specific criteria to be established in the Zoning By-Law. Said criteria shall generally produce a result that provides for better protection of natural resources, better management of development-related traffic, or less total development than would otherwise occur. The criteria shall also include appropriate provisions for protecting the integrity of the neighborhood and the groundwater quality in which the aspect of increased development density may be permitted and shall not be substantially inconsistent with any goal or policy of this Plan. When applicable, any increased density shall occur only when appropriate septage management facilities are installed, which, when combined with other offsets of nutrient loading, improve the watershed's ground water quality in designated Water Quality Improvement areas. Outside of Water quality improvement areas, "appropriate facilities" are those which will assure that the nitrate-nitrogen discharge to result will be equal to or less than what conventional development of the subject parcel would have produced.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose zoning amendments to accomplish this objective. Adequate provisions for density limits, open space, site design, and other protections shall be included in any such amendments.

Key Agencies (lead agency in **bold**)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.6 Adopt an inclusionary housing policy and program which allows for the option of requiring a proportionate contribution of affordable housing resources from each new housing development. Such contributions should be in the form of developed or rehabilitated units, land, or cash resources for the express purpose of producing affordable housing. Contributed resources may be either on-site or off-site, as determined by the contributor and agreed to by the Planning Board.

Implementation

The Planning Board should develop and propose zoning amendments and other appropriate provisions to accomplish this objective. The Board should seek to minimize the consumption of vacant, contiguous acreage for affordable housing by promoting the use of existing building lots in all of the Town's seven villages. This can be accomplished through the use of land already under the control of the Board of Selectmen (town-owned land) or a land procurement process to be conducted by the Town. This latter option may include cash collected from contributions and other resources it deems appropriate. The inclusionary program shall provide for any required contributions in a manner to be set forth in a by-law or regulations. The inclusionary housing program should also include provision of incentives to subdividers to provide additional contributed resources by reducing certain requirements for frontage and road installation. It is intended that cost savings from such measures would go directly toward provision of more affordable housing.

Key Agencies (lead agencies in **bold**)

PB, BOS, TC, HA, ATM

Timing

Adopt appropriate provisions within two years following certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.7 Include design criteria in the requirements for the issuance of special permits for nonresidential and multi-family construction projects.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose zoning amendments to accomplish this objective. Such criteria should be linked to specified incentives such that project proponents will be encouraged to adhere to the design guidelines to be developed by the Town. Such guidelines should articulate when certain architectural styles, building mass, setbacks, etc should used but should not specify color or materials to be used.

Key Agencies (lead agency in bold)

PB, AAB, BOS, TC, ATM

Timing

Adopt appropriate provisions within two years following certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.8** Revise zoning standards to permit continuance of village-style development patterns within village centers and on their fringes.

Implementation

The Planning Board should develop and propose zoning amendments to designate the village centers and fringe areas as special zoning districts to facilitate the implementation of revised development standards to permit existing development patterns (lot size, frontage, setbacks, etc.) to continue with infill and redevelopment.

Key Agencies (lead agency in bold)

PB, BOS, TC, HDC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.9** Establish upper limits on the size of new commercial buildings and expansions of existing commercial buildings.

Implementation

The Planning Board should develop and propose zoning amendments to limit the size of commercial buildings, both new construction and expansions, either by establishing a floor area ratio or imposing a cubic footage limit.

Key Agencies (lead agency in bold)

PB, BOS, BD, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- 1.2.10** Address Zoning By-Law deficiencies identified in Existing Land Use section (Section I). Include thresholds for the requirement of traffic impact analyses and nitrate-nitrogen loading studies.

Implementation

The Planning Board should develop and propose zoning amendments to accomplish these objectives

Key Agencies (lead agency in bold)

PB, BOS, BOH, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.11** Maintain existing compatible zoning at town boundaries.

Implementation

This self explanatory measure should not exclude the ability of Harwich to amend development standards or adjust permitted use classifications, provided the basic zoning compatibility between towns is not breached. An example of such a breach would be changing a single-family residential zone along a town boundary to a commercial zone or high-density multi-family zone.

Key Agency

PB

Timing

Ongoing

- 1.2.12** Adopt appropriate provisions for requiring on-site denitrifying septic systems in village centers, for certain affordable housing developments, and for other land uses, where feasible and necessary. Such provisions shall include requirements and incentives for shared systems and retrofitting of existing systems which serve high nitrate-nitrogen generating uses.

Implementation

The Planning Board and Board of Health, in consultation with the Massachusetts Department of Environmental Protection, should jointly develop appropriate regulations and by-laws to implement this provision as soon as possible. Such requirements should incorporate use of the most affordable, cost-effective technology available for use in the State.

Key Agencies (lead agencies in bold)

PB, BOH, BOS, TC, ATM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Adopt regulatory measures within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).+

- 1.2.13** Develop system of zoning incentives to achieve other goals as development occurs townwide.

Implementation

The Planning Board should develop and propose zoning amendments to specify what types of voluntary amenities offered by a developer would qualify for specific variations of existing and future zoning standards. For example, if two property owners join together to provide a shared parking lot or shared driveway, the interior landscaping requirements would be reduced. Another example would be the provision of a pocket park in exchange for greater site coverage or a setback leeway of five feet. The incentives should be administered by the Planning Board during site plan review.

Key Agencies (lead agencies in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.14** Emphasize protection of the historical character of the village centers in Harwich Port, West Harwich, and Harwich Center through development of appropriate building siting, scale, and design guidelines and incentives along with any regulatory controls pursuant to implementation of the historic preservation recommendations contained in this Plan.

Implementation

Using design guidelines to be developed pursuant to Section 13 of this Plan, the Planning Board, Historical Commission, and Architectural Advisory Board should confer and propose regulatory incentives to owners of historic structures to restore and maintain the traditional architectural features of their buildings. Such incentives should also promote compatible design of new development.

Key Agencies (lead agencies in bold)

PB, HC, AAB, BOS, TC, ATM

Timing

Begin work on the guidelines following adoption of this Plan by Town Meeting. Establish regulatory framework within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 1.2.15** Develop and adopt appropriate standards and criteria in the zoning by-law and Planning Board Rules and Regulations to protect significant natural and fragile areas, including critical wildlife and plant habitat; water resources such as ponds, rivers, aquifers, shorelands and wetlands;

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

historic, cultural, and archaeological areas; significant scenic roads and views; unfragmented forest; and significant landforms.

Implementation

The Planning Board should collaborate with the respective town agencies involved in the above topic areas to develop and propose any needed zoning and/or rules and regulations amendments to accomplish this objective

Key Agencies

PB, BOS, BOH, ConC, TC, ATM

Timing

Adopt regulatory amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

2.0.0 Natural Resources – WATER RESOURCES and AIR QUALITY

Issues Summary

Water Resources

Topics covered by this section include drinking water, streams, rivers, ponds and salt water bodies. Technical findings on these topics are provided in detail in Section V – Physical Characteristics, compiled during the data gathering phase of this Plan. A summary of the material is contained in a document entitled "Technical Findings Summary". Another relevant document, the Pleasant Bay Resource Management Plan, included herein by this reference, provides a wealth of findings and recommendations regarding the long-term care of Pleasant Bay. All are available for review in the Harwich Planning Department office. Water issues related to wetlands are covered in section 4.0.0.

Regarding potable water, a 1996 analysis by the Cape Cod Commission of all the public supply wells which were on line as of 1989 and two future wellfields in East Harwich, indicated that only the South Harwich wellfield would exceed at build-out plus 100% year round occupancy the planning standard of 5 parts per million (ppm) of nitrate-nitrogen in the water to be drawn by this well. That same report states that "while the nitrogen loading analysis has not identified a significant amount of potential drinking water quality problems, the upward trend in nitrogen concentrations should be a concern for both human and environmental health." The Study, also indicated that water supplies in Harwich could reach a 2 million gallons per day (mgd) shortfall by 2015. At full development, this projected shortage would be worse. The levels of nitrate-nitrogen is a reliable indication of drinking water quality. Therefore, measures to mitigate the sources of nitrate-nitrogen loading in the zones of contribution to the affected wellfields are warranted. The findings of the Priority Land Acquisition Assessment Project, Cape Cod Commission, June 1999 indicate potential new sources of drinking water in Harwich, which should have high priority for protection.

Studies on Long Island and Cape Cod have verified that residential densities greater than one, three-bedroom dwelling per acre is detrimental to drinking water quality over the long-term. This suggests that maintenance of water quality in supply wells (public, existing and future, and private) depends on respecting this density ceiling. Improper handling and storage of hazardous materials was also identified as a threat to potable water supplies.

Ponds were found to be most impacted by excess phosphorus from septic systems and lawns, bacteria from septic systems, and by polluted runoff of stormwater from streets. Groundwater in general and other surface waters have also been negatively impacted from these same sources. Generalized and specific areas upgradient of ponds (recharge areas) were identified as needing special management to prevent excessive loading of contaminants into pond waters. Evidence of actual damage from these threats appeared in 1998 in several Harwich ponds in the form of excessive coliform bacteria in one swimming pond and high concentrations of algae in several other ponds.

Four salt water embayments (harbors) were studied for their ability to cleanse themselves of nitrogen through tidal flushing. This study was documented in a report entitled, 'Cape Cod

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Coastal Embayment Project, September 1998' and was prepared by the Cape Cod Commission. The results indicated a need to define appropriate loadings and measures to minimize and/ or mitigate septic discharges in the identified recharge areas to these resources. Other evidence of impacts on salt water resources includes extensive closures of shellfish beds due to bacterial contamination from water fowl, surface runoff, and malfunctioning septic systems.

Air Quality

The projected growth of the Town's population, even if successfully held to 15,000 residents, as proposed in the Land Use/Growth Management section of this Plan, will likely result in increased levels of air pollutants. Currently, Cape Cod's air quality in the summer months fails to meet Federal and State air quality standards for ozone, a pollutant that occurs when fuel combustion exhaust and fuel vapors mix with sunlight and high temperatures. All forms of gas powered motorized equipment and vehicles contribute to the total emissions in the air, which lead to the formation of ground level ozone.

As automobile makers produce cleaner burning engines, the most effective way for a local community to reduce the presence of ozone appears to be through reduction of vehicle trips. The Land Use and Transportation sections of the Plan include recommendations to reduce the ultimate number of daily vehicle trips, through encouraging compact development, reducing the build-out population, and encouraging mass transit, bicycling, and walking.

Overview of Recommendations

Water Resources

In order to properly manage the groundwater impacts of the growth projected between 1999 and full development, specific goals for nitrate-nitrogen loading are recommended. A goal of 5ppm is recommended for critical water supply resource areas such as wellhead protection areas, and potential water supply areas. To achieve this goal, there is a need to limit the density of development. The town has and continues to pursue land acquisition as one means to control density. However, under Title 5, density (bedrooms) can be increased by using so called I/A septic systems which are designed to remove nitrogen. More importantly, nitrogen is only one of many potential threats to drinking water quality found in septic system discharges and related to total human activity. The town's experience with the reliability of these systems has been fair at best, even when operation is supervised by a professional, which is a Town requirement. Further, the aggregation of flows in larger systems to handle multiple residences only serves to concentrate and increase these same risks. Therefore, the discharge of private and public sewage treatment facilities (I/A technologies) in these areas shall not be permitted except to remediate water quality impaired areas.

The management of nutrient loads to coastal embayments is actually more complex than water supply resources. First they are all different in terms of what they can tolerate and some may already be beyond acceptable loading. Each system must be evaluated to determine the acceptable load and then appropriate measures can be applied to restore and preserve water quality. Detailed studies are proposed to determine acceptable loadings and identify measures to achieve them. In order to minimize additional loading, interim regulations should be adopted where practicable. For example, in a watershed with significant developable land, interim

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

standards/regulations could be effective. Each watershed will be evaluated to determine the efficacy of interim measures to control future loading. Action plans (short and long range) and standards for mitigating pollutants in stormwater runoff are recommended to protect all types of water resources from future and some existing sources of contaminants. The Herring River system is also recommended to be included in such plans.

Detailed studies are also recommended for the fresh water ponds to determine appropriate measures to limit the influx of phosphorous and bacterial loading. There is a well developed body of knowledge that could be applied to limit further load while studies to reduce existing loading proceed.

The village centers will have the same water quality goals as the water resource areas in which they are located (i.e. drinking water = 5ppm, etc...).

Air Quality

Much like the protection of water quality, the prevention of air pollution will be primarily achieved largely through appropriate actions of individuals on a daily basis. To this end, this section's recommendations emphasize education as a key tool in protecting air quality. In addition, compact land use patterns and vehicle trip reduction through a variety of methods, are recommended.

Relation to Other Sections

Water Resources

The Water Resources section has its greatest connection with the Land Use section where there are recommendations to pursue groundwater and water body protection through application of creative growth management techniques and incentive zoning. The Land Use section also contains recommendations for controlling the concentration of pollutants entering the ground water. Measures to properly manage storm runoff are also proposed in the activity center portions of the Land Use section.

There is some necessary overlap with the Coastal Resources and Wetlands sections which follow since these both deal with fresh and salt water. The Solid/Hazardous Waste Management, Capital Facilities, and Historic Preservation/Community Character sections also include water resource protection provisions and concepts.

Finally, water resources in Harwich have been determined to be of vital importance to the Town's tourism and seasonally based economy. Therefore, implementing measures to preserve water quality can be viewed as supporting the viability of the Town's economy.

Air Quality

As stated above, the Land Use and Transportation sections of the Plan include recommendations to reduce the ultimate number of daily vehicle trips, through encouraging compact development, reducing the build-out population, and encouraging mass transit, bicycling, and walking.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Technical Aspects

The following are explanations of some of the key terms and concepts which warrant clarification as they appear in this section:

Artificial wetlands - Wetlands which have been constructed as opposed to being formed naturally.

Cape Cod Commission - Water Resources Office Technical Bulletin #91-001 - A document of methodology for projecting the quantities of nitrate-nitrogen expected to be generated by development. Copies of this document are available at the offices of the Cape Cod Commission and the Harwich Planning Department.

Community Septic System – A septic system designed and operated to collect and treat the septage from a small group of homes utilizing a sewage collection system and a single site for septage treatment and effluent disposal.

Cumulative impact analysis - Within the water resources context, an analysis of the cumulative water quality impacts, taking into account all existing and potential future development within a specific watershed in which a proposed development project would be situated.

Fresh water recharge area - The land area that contributes storm runoff and ground water. to a specified fresh water resource such as a well, pond, or wetland.

GPD or gpd - Gallons per day.

Ground water - Fresh water which generally lies amidst particles of soil and sediment below the surface of the ground. Where depressions in the land form ponds and wetlands, ground water becomes surface water.

Impaired area - In the water resource context, an area in which the quality of ground water is likely to have a concentration of nitrate-nitrogen which is at or higher than 10 parts per million (ppm),

Innovative waste water treatment technologies - A collection of nontraditional approaches to the treatment of sewage. The solar aquatics (tm), peat septic system, and recirculating sand filter are three examples of such approaches.

Marine water recharge area - A recharge area such as defined above which drains into a salt water embayment or brackish (mixed salt and fresh water) river.

Maximum cumulative nitrate-nitrogen load - The ultimate level of nitrate-nitrogen loading expected as determined by a cumulative impact analysis.

Mitigation - The reduction of expected impacts.

Nitrate-nitrogen loading - The build-up of levels of nitrate-nitrogen in ground or surface waters (fresh or salt) attributable to sources such as septic systems, sewage treatment plants, and garden/lawn fertilizer.

Potential public water supply area - An area which has promise as a public water supply well area due to favorable results of preliminary tests and levels of existing and potential future development in its recharge area which would not jeopardize the long-term quality of the water.

PPM or ppm - Parts per million.

Recharge area - The land area which contributes precipitation, irrigation water, and septic system discharges which drain through a specified point or area. There are recharge areas for ponds, harbors, rivers, bays, wetlands, and wells.

Sewage effluent - The outflow of wastewater from a septic system or sewage treatment plant.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Water quality improvement area - An impaired area that lies fully or partially within one or more of the following: wellhead protection area, potential public water supply area, fresh water recharge area, and marine water recharge area.

Wellhead protection area - The delineated zone of contribution to existing public and community water supply wells.

Zone II - Effectively the same as a wellhead protection area. (See 310CMR 22.02)

310 CMR 22.02 - Definitions section of the Code of Massachusetts Regulations, section 22, which pertains to drinking water regulations, a copy of which is on file in the office of the Harwich Planning Department. The definition referred to in this Plan is "Zone II" which reads as follows: "Zone II means that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation). It is bounded by the groundwater divides which result from pumping the well, and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone II shall extend upgradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary)."

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Water Resources and Air Quality goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP – November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

While the East Harwich Village Center lies within the Drinking Water Resource Protection District which thereby causes nitrogen levels to be of concerns, this Plan calls for the development and application of stringent standards for assuring optimal cleansing of storm water and appropriate limits on septic effluent disposal. This approach is consistent with the intent of the Regional Policy Plan.

2.1.0 Goals

Water Resources

- 2.1.1 To maintain the overall quality and quantity of Harwich's ground water to ensure a sustainable supply of high quality, minimally treated drinking water.
- 2.1.2 To preserve and restore the ecological integrity of marine and fresh surface waters.
- 2.1.3 To limit the use of public and private sewage treatment facilities in appropriate areas where they will advance the goals of this Plan and where they can be adequately managed and maintained.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Air Quality

2.1.4 To maintain and improve the Town's air quality so as to ensure a safe, healthful, and attractive environment for present and future residents and visitors.

2.2.0 Recommendations

Water Resources

2.2.1 Establish 5ppm as the maximum cumulative nitrate-nitrogen load for the following areas:

- A. wellhead protection areas (zone I and II)
- B. potential water supply areas

Further, prohibit the use of sewage treatment plants in these areas except to remediate water quality impaired areas.

Implementation

The Planning Board and Board of Health should jointly develop and propose appropriate amendments to the Zoning By-Law and Board of Health Rules and Regulations.

Key Agencies (lead agencies in **bold**)

PB, BOH, CCC, BOS, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

2.2.2 Establish a water quality management planning process to examine appropriate options for addressing the existing and projected nutrient load and bacterial contamination in the following watershed areas and adopt interim measures for minimizing additional load:

- A. Allen's Harbor (main)
- B. Allen's Harbor (arm)
- C. Round Cove
- D. Pleasant Bay
- E. Saquatucket Harbor
- F. Wychmere Harbor
- G. Herring River
- H. Fresh water recharge areas(ponds)

Implementation

The Board of Selectmen have created, with members from the Planning Board, Conservation Commission, Board of Health and members of the public a Water Quality Management Task Force to look at the available options for short-term and long-term management of the areas identified and recommend appropriate measures to protect the Outstanding Recreational Water classifications of the A through H above and the overall health of the ponds. Such options will include 300 foot setbacks for septic systems from ponds, decentralized sewage treatment plants, stormwater treatment and restrictions on fertilizer applications among others. The Planning

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Board and Board of Health should each amend the Zoning By-Law and Board of Health Rules and Regulations, respectively, to assist in achieving those reduced nutrient loadings.

Key Agencies (lead agency in **bold**)
WQM, PB, BOH, BOS, ATM, TC,

Timing

Adopt interim regulations and begin work on water quality management planning within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 2.2.3** Identify and adopt appropriate standards for minimizing impacts on surface waters and wetlands from construction of structures, septic systems, parking areas and erosion/sedimentation. Such standards shall include requirements for storm water management plans for new development that preclude direct discharge of untreated storm water into natural wetlands and water bodies, and to locate new storm water discharges at least 100 feet from wetlands and water bodies, and at least 200 feet from rivers and perennial streams where feasible. This process will need to consider stormwater management guidelines as embodied in the DEP and CZM Stormwater Management Policy and Technical Handbooks in areas under the jurisdiction of the Wetlands Protection Act or environmentally sensitive areas of high groundwater as well as Drinking Water Resource Protection Districts.

Implementation

The Planning Board, Board of Health and Conservation Commission should jointly develop and propose mutually supportive regulations to establish appropriate standards. These should include design and construction criteria for artificial wetlands, as they may be used to mitigate pollutants in storm water runoff. They shall also include Best Management Practices which promote the optimal removal of pollutants, including sedimentation, oil and grease separation and physical and biological filtration, where appropriate.

Key Agencies (lead agencies in **bold**)
PB, BOH, ConC, TE, BOS, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 2.2.4** Prepare short-term and long-range plans for mitigating existing discharges of untreated public road/parking area runoff into wetlands and water bodies.

Implementation

The Board of Selectmen should charge the Water Quality Management Task Force with investigating the options for mitigating polluted runoff, inventory the locations where existing discharges occur and develop a plan for mitigating each discharge with an implementation and

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

potential funding schedule. The task force shall also investigate grant opportunities to accomplish these objectives.

Key Agencies (lead agency in bold)
WQM, BOS, ConC, BOH, TE, PB

Timing
Committee to begin task immediately following adoption of this Plan by Town Meeting.

- 2.2.5 Develop and implement a private well monitoring program with specific attention to withdrawal volumes and water quality.

Implementation

The Board of Health and Board of Water Commissioners should coordinate with the Mass. Department of Environmental Protection and private well-drilling firms to receive routine data on private wells, both existing and new. This would produce data to enable appropriate land use planning for protection measures, resource management, and extension of water distribution facilities to priority areas.

Key Agencies (lead agency in bold)
BOS, BOH, BWC

Timing
Commence immediately following adoption of this Plan by Town Meeting.

- 2.2.6 Continue the in-depth study of the Herring River system by the Herring River Study Committee and act to implement the Committee's recommendations, as appropriate.

Implementation

The Board of Selectmen should continue to appoint the full membership of the Herring River Study Committee until its work has been completed.

Key Agencies (lead agency in bold)
HRSC, BOS

Timing
Continue the work of the Herring River Study Committee, act on its recommendations in a timely manner, and incorporate policy recommendations into the next update of this Plan..

- 2.2.7 Develop water conservation goals and devise a system for achieving the stated goals.

Implementation

The Board of Water Commissioners should expand its current water conservation efforts and work with the Planning Board, Board of Health and Conservation Commission to incorporate measures to conserve water through the permitting procedures of each agency. The Board of

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Selectmen should issue policy statements supportive of the conservation efforts and otherwise be active in promoting water conservation

Key Agencies (lead agencies in bold)

BWC, PB, BOS, BOH, ConC, BD

Timing

Commence work immediately following adoption of this Plan and adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 2.2.8** Develop and implement a policy of requiring monitoring wells for development, based on thresholds and criteria to be established.

Implementation

The Planning Board should work with the Board of Water Commissioners to develop and propose appropriate regulatory measures to require the installation of ground water monitoring wells for development in drinking water Resource Protection Districts and other pollution-sensitive areas. The requirements shall include specifications for monitoring well placement, sizing, maintenance, and monitoring.

Key Agencies (lead agencies in bold)

PB, BWC, BOH, TC, ATM.

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 2.2.9** Maintain an adequate hazardous waste spill response capacity.

Implementation

The Board of Selectmen and Finance Committee should continue to support the capabilities of the Fire Department, the Board of Water Commissioners and any other town agency having a role in responding to a hazardous waste spill.

Key Agencies (lead agency in bold)

BOS, FD, FC, ATM

Timing

Ongoing

- 2.2.10** Implement the following water resource protection measures:

- A. Maintain the water resource protection zoning overlay districts and their accompanying zoning regulations.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- B. Amend the Drinking Water Resource Protection District map to reflect the most recently amended boundaries.
- C. As data from testing identifies viable future water supply areas, they shall be mapped and included within the scope of the prevailing water resource protection measures. Land acquisition in the designated areas shall be made a high priority.
- D. Develop and implement roadway snow removal management strategies that minimize the total application of salt and other de-icing chemicals that would threaten water quality.
- E. Prioritize substandard septic systems in Water Quality Improvement Areas

Implementation

Maintain or amend the Zoning By-Law as indicated. Item C would need to be carried out by the Board of Water Commissioners. Item D would be under the jurisdiction of the Division of Highways and Maintenance, in consultation with the Board of Health, the Board of Water Commissioners and Conservation Commission. Item E would be implemented by the Board of Health.

Key Agencies (lead agency in bold)

PB, BOH, BWC, DHM, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

2.2.11 Continue the pursuit of water resource recharge area delineation.

Implementation

The Planning Board should work with the Board of Water Commissioners and the Water Resources staff of the Cape Cod Commission to establish appropriate delineation of all water resource recharge areas, with updates as needed, so as to complete the delineation of these resources. Implicit in this is the need to follow through with inclusion of affected lands within the appropriate protection categories identified in this Plan and the related protection measures for such lands.

Key Agencies (lead agency in bold)

PB, BWC, CCC

Timing

Ongoing

2.2.12 Develop and implement a program to protect delineated water resource recharge areas which includes the following measures:

- A. Completion of appropriate nutrient loading analysis of each recharge area, including inter-town analyses of shared water resources.
- B. Development of recharge area management plans which will include nutrient loading guidelines and requirements for new development, upgrading of existing septic systems when

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

affected property is sold or re-developed, responsibility and awareness programs for all property owners, and establishment of land acquisition priorities as needed.

Implementation

The Planning Board, Board of Health, and Conservation Commission should collaborate on the development and implementation of the proposed protection program with each agency incorporating the new provisions within their respective rules and regulations, by-laws, and programs.

Key Agencies (lead agencies in bold)

PB, BOH, ConC, BOS, TC, ATM

Timing

Adopt regulatory measures for existing delineated areas within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later). Incorporate newly delineated areas within one year of their approved delineation.

- 2.2.13** Pursue appropriate measures to assure the sufficiency of the public water supply needed to meet the projected year-round and seasonal water demand at build-out.

Implementation

The Planning Board should work with the Board of Water Commissioners to determine the needed water supply capacity in terms of pumping facilities and new well fields and to coordinate the inclusion of known potential recharge areas within the appropriate protection categories identified in this Plan and the related protection measures for such lands.

Key Agencies (lead agency in bold)

PB, BWC

Timing

Commence following adoption of this Plan by Town Meeting and adopt regulatory changes within two years of identification of potential public supply well recharge areas.

- 2.2.14** Identify locations of private wells and septic systems, especially in densely developed areas, and undertake inspection and improvement programs for upgrading pre-Title 5 and failing septic systems.

Implementation

The Board of Health and the Board of Water Commissioners should collaborate to identify and prioritize areas of existing private wells and septic systems in order to address threats to water quality from poorly functioning and failing septic systems. The Board of Health should pursue the establishment of a septic inspection and improvement program, which will require additional staff or contractual resources for this purpose.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies

BOH, BWC, BOS, FC, TAd, ATM

Timing

Commence following adoption of this Plan by Town Meeting

- 2.2.15** Pursue methods to require regular pump-out, inspection and maintenance of septic systems for parcels served by private wells and parcels located in freshwater recharge areas.

Implementation

The Board of Health should review available methods to accomplish this objective including amending the Town's Health Regulations and use of computer software and GIS to identify the parcels in question and track pumping history and maintenance information. The Board of Health will also implement a public education program regarding septic maintenance, particularly for the areas mentioned above.

Key Agencies

BOH, TC, BOS, CCC, WQM

Timing

Have methods and public education materials ready for consideration within two years of adoption of this Plan by Town Meeting.

Air Quality

- 2.2.16** Encourage the continuance and enhancement of mixed land uses in the nonindustrial village centers.

Implementation

This will largely be achieved through implementation of the village center recommendations in the Land Use/Growth Management section.

Key agencies

PB, BOS

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 2.2.17** Promote the establishment and viability of alternative transportation modes throughout the Town, especially to and within the village centers.

Implementation

Implementation will occur through positive action on the recommendations in the Transportation section of this Plan.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key agencies

BOS, PB

Timing

Pursuant to the relevant recommendations of section 7.0.0, Transportation.

- 2.2.18** Limit the proliferation of drive-through facilities to reduce emissions from idling vehicles.

Implementation

The Planning Board should develop and propose zoning amendments to address this objective.

Key agencies

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 2.2.19** Work with the Cape Cod Commission and the Massachusetts Department of Environmental Protection to provide public education about ways that residents and businesses can help improve air quality.

Implementation

The Board of Health should work with the above mentioned agencies to implement this recommendation.

Key Agencies

BOH, CCC

Timing

Begin discussions following adoption of this Plan by Town Meeting.

3.0.0 Natural Resources - COASTAL

Issues Summary

All coastal resources in the Town are valuable environmental, economic, and aesthetic assets. Property values and tourism activity are directly linked to the quality of coastal and other scenic/recreational resources.

Overall, impacts from human activity and natural forces constitute the main issues for coastal resources in Harwich. Specifically, the continued development of land along and adjacent to coastal environments has threatened the sustainable viability of such areas. Nevertheless, property values and rights are strongly vested in these unique areas. Therefore, proper management of coastal area development and the actual coastal resources (as opposed to acquisition) is the only practical option available.

Chief among the impacts found to occur were erosion, high bacteria counts in coastal embayments following the collection and discharge of storm water from developed areas, high nutrient loading into coastal embayments from upgradient development and alteration to drainage or flowage characteristics within flood zones.

Threats of more frequent flooding and more extensive storm damage to natural and man-made coastal features lie in the future course and extent of sea level rise.

Beach areas and other salt water wetlands provide critical habitat for coastal wildlife. These resources are threatened by human overuse, litter, pollution, and lack of education among users. Conversely, adequate access to beaches was found to be lacking for existing and projected populations.

Overview of Recommendations

The plan for protection and enhancement of coastal resources is embodied in a recommended set of 18 types of guidelines and policies to be implemented by various boards and commissions in town.

Relation to Other Sections

Since coastal resource issues include water, wetlands, wildlife, development, harbors, recreation and community character, the following sections of this Plan have some overlap with this one: Land Use/Growth Management, all the Natural Resource sections, Economic Development, Capital Facilities/Infrastructure, Open Space and Recreation, and Community Character.

Technical Aspects

The following are explanations of some of the key terms and concepts which appear in this section:

Base flood elevation - As shown on National Flood Insurance Rate Maps, the vertical distance above mean sea level at or above which first finished floors of new structures or substantial improvements in a flood zone may be constructed.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

First floor elevation - The vertical distance above mean sea level of the first finished floor of a structure.

Flood prone areas - Areas subject to periodic inundation from sea water driven by storms or extreme high tides. Effectively, FEMA V and A flood zones.

High hazard areas - Areas at risk of structural damage or loss of life due to flooding or erosion.

Marine waste holding tank pump-out facility - Apparatus, either mobile or fixed in place, which is used to extract the waste from boat toilet holding tanks. Such facilities eliminate the need to discharge holding tanks into marine waters.

Mounded septic systems - Septic systems which are established on fill material in order to achieve the required minimum clearance between the bottom of a leaching facility and the ground water beneath it.

Nonwater-dependent use - A land-based use of property which does not require direct access to coastal waters to be viable. Some examples of such uses are: dwellings, offices, and retail stores.

Pleasant Bay Resource Management Plan – The plan prepared for the Pleasant Bay Steering Committee by the Pleasant Bay Technical Advisory Committee and Ridley & Associates, Inc., dated April 1998.

Public views of the shoreline - Any views of coastal shoreline which can be seen from a way, park, beach, structure, etc., to which the public has access.

Water-dependent use - A land-based use of property which requires direct access to coastal waters to be viable. Some examples of such uses are: marinas, boatyards, and aquariums.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Coastal Resources goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

3.1.0 Goals

- 3.1.1** To protect the public interests in the coast, including rights for fishing, fowling, and navigation and expand, where appropriate public access to the shoreline, through acquisitions or donations and provision of facilities.
- 3.1.2** To preserve and manage coastal areas so as to safeguard and perpetuate their biological, economic, and aesthetic values.
- 3.1.3** To control development in high hazard areas in order to minimize the loss of life and structures and the environmental damage resulting from storms, natural disasters, and sea level rise.
- 3.1.4** To maintain and improve coastal water quality to allow shellfishing and/or swimming in all coastal waters as appropriate, and to protect and facilitate improvement of coastal ecosystems which support shellfish and finfish habitat.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

3.2.0 Recommendations

3.2.1 Develop and implement coastal protection/development guidelines and requirements which will specify or include the following:

- A.** Ensuring that existing public rights-of-way to coastal waters are not interfered with or obstructed.
- B.** Criteria for maintaining views of saltwater bodies
- C.** Incentives for private development to provide public walkways and/or other access to the shorelines.
- D.** Establishment of public access to beaches that is sustained in whole or in part by publicly funded projects.
- E.** Any changes of a use from water-dependent to non water-dependent must include one or more of the following public benefits:
 - 1.** Provision on-site of new public access to the shoreline in the form of parking space, walkways, and/or new public views of the shoreline.
 - 2.** Provision off-site (within the Town) of coastal facilities such as rest rooms at beaches, additional land, parking or other coastal facilities for public use.
- F.** Incentives/requirements to encourage developable waterfront property to accommodate water dependent uses to the greatest practical extent.
- G.** Standards/requirements for construction/reconstruction in FEMA V and A zones in conformance with design requirements for Flood-Resistant Construction required by the MA State Building Code found at 780 CMR 3017.0 in order to accommodate sea level rise, ensure human health and safety and protect the integrity of coastal landforms and natural resources.
- H.** Develop regulations aimed at prohibiting development on coastal dunes.
- I.** Minimum building setbacks from a coastal bank or dune.
- J.** Guidelines for minimizing pedestrian and bicycle, boat, and automobile traffic through critical wildlife and plant habitat areas.
- K.** Criteria for private and public dredging projects, including provisions for town determination of where dredge material is to be deposited.
- L.** Prohibition of new mounded septic systems except to upgrade an existing system posing a demonstrated threat to coastal resources.
- M.** A minimum five-foot separation to ground water for septic systems.
- N.** Design criteria for storm water systems in coastal areas so that such systems could function properly after a one-foot rise in mean sea level.
- O.** Incentives for community docks as opposed to multiple docks for individual owners.
- P.** Appropriate contributions of funding or construction of marine waste holding tank pumpout facilities from establishments that can accommodate new water or land storage of ten or more boats.
- R.** Criteria for installation and operation of waterfront fueling facilities.

Implementation

Recommended guidelines, criteria, requirements, and incentives shall be proposed for inclusion within Town by-laws and policies following their development by the Conservation Commission, Waterways Committee, Board of Health, and Planning Board, as appropriate.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agencies in bold)

ConC, BOH, PB, WWC, BOS, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 3.2.2** Develop a harbor management plan which is substantially consistent with state guidelines for such plans.

Implementation

The Waterways Commission, Conservation Commission, and the Planning Board will work with the Harbormaster and Town Engineer (through the Town Administrator) to develop the Plan and pursue its adoption and implementation.

Key Agencies (lead agency in bold)

WWC, HM, PB, ConC, TA, TE, TC, ATM

Timing

Pursue formulation of a harbor plan following adoption of this Plan by Town Meeting.

- 3.2.3** Develop a list of projects that would provide appropriate types of coastal access and shoreline use to serve as local input to the conditioning of Chapter 91 licenses issued by the State.

Implementation

The Conservation Commission, Harbormaster, Waterways Commission and Planning Board should develop and update the suggested list so that the Board of Selectmen may consider the adoption of the project list following sufficient public discussion and modification, if needed.

Key Agencies (lead agencies in bold)

ConC, BOS, HM, WWC, PB

Timing

Develop list following adoption of this Plan by Town Meeting.

- 3.2.4** Maintain the established “No Discharge Zone” along the Harwich Shoreline area in Nantucket Sound.

Implementation

The Board of Selectmen should assure the continued operational support for the marine waste pumpout systems now provided for boaters at Nantucket Sound marinas (public and private) and assure continued adherence to all provisions of the Town’s application for No Discharge Zone designation.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agency in bold)

BOS, WWC, HM, ATM

Timing

Ongoing.

- 3.2.5** Establish a means for determining building setbacks relative to eroding coastal banks, using the approach set forth in the Cape Cod Commission' Regional Policy Plan or other method which provides equal or better protection for structures near the coastal shoreline. As an interim standard, the Town should adopt the Regional Policy Plan standard, pursuant to Minimum Performance Standard 2.2.2.4.

Implementation

The Planning Board and Conservation Commission should jointly develop and propose appropriate zoning amendments to accomplish this objective.

Key Agencies (lead agency in bold)

PB, ConC, BOS, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 3.2.6** Implement the relevant recommendations of the Pleasant Bay Resource Management Plan (PBRMP).

Implementation

The Board of Selectmen should assure continued pursuit of all town actions recommended in the PBRMP through periodic progress meetings and specific requests for action by the Planning Board, Conservation Commission, Board of Health, etc..

Key Agencies (lead agency in bold)

BOS, PB, ConC, BOH, TC, ATM

Timing

Ongoing.

4.0.0 Natural Resources - WETLANDS

Issues Summary

Wetlands, both inland and coastal, are extremely valuable natural resources. With wetlands covering 12% of the Town's land area, their protection and management is critical to maintaining their diverse ecological and economic functions.

Fresh water or inland wetlands disperse and absorb flood waters, recharge and purify groundwater, provide critical habitat for wildlife, denitrify acid rain and excess fertilizer, take up and retain pollutants, and support unique flora. Cranberry bogs, valuable scenic and economic resources for Harwich, are considered fresh water wetlands. The greatest threat to this type of wetland is inappropriate development resulting in removal, filling, contamination, and/or siltation.

Salt water or coastal wetlands include tidal beach areas and salt marsh environments and are largely represented by the Herring, Red, and Monomoy River systems in Harwich. These areas provide for buffering of wave energy from storms and offer unique habitat for coastal wildlife. In addition to vulnerability to the same threats as fresh water wetlands, saltwater wetlands are subject to abrupt changes from storms. The introduction of new structures along the shoreline may cause more severe damage to other unprotected beach areas or existing adjacent structures.

A more detailed discussion of wetlands is contained in Section V - Physical Characteristics compiled during the data gathering phase of this Plan. Also, a summary of the findings in Section V is contained in a document entitled "Technical Findings Summary". Both are available for review in the Harwich Planning Department office.

Overview of Recommendations

The recommendations for wetlands involve reasonable, realistic measures to protect and enhance wetland resources in Harwich, including the adoption of soil erosion and sediment control measures for new development on any property within 1,000 feet of a vegetative wetland.

Relation to Other Sections

There is some interrelationship between this section and the Water Resources, Coastal Resources, Wildlife and Plant Habitat, and Land Use sections of this Plan.

Technical Aspects

The following are explanations of some of the key terms and concepts which appear in this section:

Best management practices - within the context of bog management a collection of the most practical and up-to-date approaches to managing the application of chemicals in cultivating cranberries.

Buffer areas - Areas 100 feet in depth which lie adjacent to vegetative wetland areas or open water. Any development within this 100 foot buffer area or its adjoining wetland must be reviewed by the Harwich Conservation Commission.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Non Water dependent uses - A land-based use of property which does not require direct access to coastal waters to be viable. Some examples of such uses are: dwellings, offices, and retail stores.

Soil erosion and sediment control - A development management practice which incorporates measures to prevent both short and long-term loss of soil from a development site where soil is disturbed by excavation, devegetation, grading, stockpiling, or filling.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Wetlands goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

4.1.0 Goals

4.1.1 To preserve, protect, and enhance the quality and quantity of inland and coastal wetlands in Harwich.

4.2.0 Recommendations

4.2.1 Revise wetland regulations to prohibit construction or disturbance of natural vegetation within 100 feet of wetlands for non-water dependent uses with appropriate exceptions such as access pathways and vista pruning, except when no other feasible alternative to such construction or disturbance exists.

Implementation

The Conservation Commission should develop and propose by-law amendments as needed and hold hearings on the same to work towards this objective.

Key Agencies (lead agency in bold)

ConC, BOS, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

4.2.2 Amend the Town's Wetland Protection By-Law to prohibit wetland creation or replication as mitigation options when wetland alteration is unavoidable.

Implementation

The Conservation Commission should develop and propose such amendment, adhering to the minimum criteria for such activity provided in section 2.3.1.1 of the RPP.

Key Agencies (lead agency in bold)

ConC, BOS, TC, ATM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 4.2.3 Restoration of currently altered or degraded wetlands and buffer zones should be encouraged.

Implementation

The Conservation Commission, Planning Board, Board of Health, and Waterways Committee should work together to develop meaningful incentives (regulatory or otherwise) for property owners and developers to achieve the desired objectives.

Key Agencies (lead agencies in bold)

ConC, PB, BOH, WWC, BOS, TC, ATM

Timing

Commence development of incentives following adoption of this Plan by Town Meeting and adopt any regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 4.2.4 Develop/maintain guidelines for best management practices for wetland related agriculture.

Implementation

The Conservation Commission should consult with the DEP, The Army Corps of Engineers and the Cooperative Extension Service in developing any guidelines and/or regulations which might be appropriate for the most environmentally sound operation of cranberry bogs. As best management practices evolve over time, routine review of the guidelines for the need to update is warranted.

Key Agencies (lead agency in bold)

ConC

Timing

Adopt needed regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 4.2.5 Develop regulations for soil erosion and sediment control during construction for any properties where siltation can impact wetlands or waterbodies. Require erosion/sedimentation controls around catch basins adjacent to areas of earthmoving/excavation to prevent clogging of leaching catch basins or discharge to wetlands/waterbodies where catch basins lead to a discharge pipe.

Town of Harwich – Local Comprehensive Plan 2006 – Final Plan

Implementation

The Conservation Commission and Planning Board should develop and propose appropriate soil erosion and sediment control requirements for site disturbances within 1,000 feet of uninterrupted slope toward a vegetative wetland.

Key Agencies (lead agencies in bold)

ConC, PB, BOS, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

5.0.0 Natural Resources - WILDLIFE AND PLANT HABITAT

Issues Summary

The primary issue under this section is the ongoing loss/degradation of habitat through conventional land development and zoning practices. An aggressive land acquisition program and the preservation of existing species populations and diversity, and particularly the rare species habitat identified in town, are of critical importance.

A full discussion of habitat issues is contained in Section V - Physical Characteristics compiled during the data gathering phase of this Plan. Also, a summary of the findings in Section V is contained in a document entitled "Technical Findings Summary." Both are available for review in the Harwich Planning Department office.

Overview of Recommendations

The plan proposes the adoption of five types of guidelines as well as enhancements to the design of permanent open space to optimize habitat preservation.

Relation to Other Sections

Much of the protection proposed for habitat areas is embodied in the Land Use section since it deals with land development patterns and techniques for preserving open space. For a similar reason, this section directly relates to the Open Space and Recreation section.

Technical Aspects

The following are explanations of some of the key terms and concepts which appear in this section:

Critical wildlife and plant habitat - Consists of habitat areas of rare (threatened or endangered) plant and wildlife species and species of special concern as generally identified and mapped by the Natural Heritage and Endangered Species Program (administered by the Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement) and other critical habitat areas as identified and mapped by the Association for the Preservation of Cape Cod's "Cape Cod Critical Habitats Atlas. Copies of the atlas area available for review in the offices of the Harwich Planning Department and the Cape Cod Commission.

General wildlife and plant habitat - All undeveloped areas which are not considered critical wildlife and plant habitat areas.

Habitat management plan - A written statement of specific measures to be implemented which will preserve, protect and maintain some or all of the habitat areas on a parcel or parcels of land. Such a plan, when required, would likely be a condition of approval for a development permit.

Vernal pool - Seasonal water bodies which hold water for at least two consecutive months in the spring and/or summer during most years and which are free of fish. Certain frogs and salamanders breed exclusively in vernal pools and fish-free water. (Source: Cape Cod Critical Habitats Atlas).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Wildlife and Plant Habitat goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

5.1.0 Goals

- 5.1.1 To prevent loss or degradation of critical wildlife and plant habitat, to minimize the impact of new development on wildlife and plant habitat, and to maintain existing populations and species diversity.

5.2.0 Recommendations

- 5.2.1 Incorporate the following guidelines into town by-laws and regulations, as appropriate, for each of the respective land development permitting agencies:
- A. Guidelines for determining significant impact of development on rare wildlife and plant habitats.
 - B. Guidelines and requirements for when and how to do a habitat management plan.
 - C. Guidelines and requirements for clearing in areas of critical wildlife and plant habitat.
 - D. Guidelines for habitat assessment.
 - E. Guidelines for general clearing and maintenance/restoration of habitat.
 - F. Prohibit any disturbance within any vernal pool or within 100 feet thereof.

Implementation

The Conservation Commission and Planning Board should collaborate to produce appropriate amendments to Town By-Laws and regulations to achieve the desired objectives of habitat protection. Implementation of item (F) will require accurate mapping and classification of vernal pools in town, consistent with the methodology employed by the state Natural Heritage and Endangered Species Program.

Key Agencies (lead agency in bold)

ConC, PB, BOS, TC, ATM

Timing

Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

6.0.0 ECONOMIC DEVELOPMENT

Issues Summary

The Harwich economy is based largely on income from tourism, retirees, and seasonal homeowners. However, there is a high concentration of low wage, seasonal jobs. Overall, the economy would be improved by greater diversity in employment opportunities along with growth in business activity.

During the data gathering phase of this Plan, a document entitled Section IX - Economic Characteristics was compiled. This document, which is available for review in the Harwich Planning Department office, contains extensive information about the nature of the Harwich economy but is too voluminous to review here. A summary of this information is contained in a related document entitled "Technical Findings Summary", also in the Planning Department office.

Overall, the findings indicate a need to provide for economic growth through continued year-round and seasonal job creation, diversification into non-seasonal and off-season business activity, and support of the cranberry and fishing industries. Commercial space potential is abundant for meeting the projected demand for retail goods and services by the year-round and seasonal build-out population. Commercial space potential would remain adequate even with trade-offs for affordable housing, as proposed in the Land Use section.

However, industrial space potential appeared to be greater than the projected demand, based on current usage patterns. While such potential space might be good to have as a reserve, it would do little to enhance the tax base as it has been demonstrated that developed commercial and industrial land yield greater net revenue than undeveloped or residential land.

Overview of Recommendations

Consistent with the Land Use section, this section promotes the fulfillment of the village center concept which would channel economic activity into vital, compact centers so as to avoid an intensive commercial strip from one end of Route 28 to the other in Harwich. The centralization of commerce as well as residential uses in the village centers would allow for better traffic management, enhance the village atmosphere, foster more efficient provision of municipal services, and preserve the character of the less developed areas. The plan seeks to promote the use of incentives in concert with reasonable regulations, to allow future development activity to help achieve many of the goals stated herein. Numerous individual measures are recommended to stimulate and diversify the local economy, improve the appearance and function of existing strip development, and support the cranberry and fishing industries.

Relation to Other Sections

As mentioned above, there is considerable overlap of this section and the Land Use section. Between the two, it is intended to create and/or enhance the vitality of business centers by making them attractive, functional, convenient, and interesting areas. The economic development recommendations also relate to affordable housing by promoting creation of

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

higher wage year-round employment opportunities which could lessen the demand for subsidized housing. There are also meaningful connections to the Historic Preservation/Community Character, Transportation, and Capital Facilities sections.

Technical Aspects

The following are explanations of some of the key terms and concepts which warrant clarification as they appear in this section:

Affordable lodging - Lodging priced below that of luxury (high quality) lodging so as to accommodate families with average incomes and seasonal employees.

Design compatibility - Relative consistency of design of new development with that of existing development in the area.

Design guidelines - A document to be produced by the Town which will include suggestions as to what features of design would be considered complementary to existing designs.

Development bonuses (zoning bonuses) - The granting during the development review process of additional development capacity such as more site coverage or fewer parking spaces than required, etc., in exchange for provision of a public benefit or amenity and/or advancement of one or more goals in this Plan. Any higher density development shall improve water quality in designated Water Quality Improvement Areas.

Village center - An area with definite boundaries in which growth is permitted and encouraged. See also Land Use section.

High quality lodging - Lodging which commands prices on the high end of the lodging price spectrum due to above average or exceptional facilities and service.

Level of service E - A condition of a roadway segment or intersection in which there is considerable congestion but not gridlock.

Mixed use development - Commercial and residential uses in an area where buildings and/or parcels are shared by both use types.

Nitrate-nitrogen loading standard - An upper limit for the contribution of nitrate-nitrogen into the ground water of a particular area.

Pre-permitted - A use or uses fitting certain size and location criteria which is entitled to automatic approval because the various impacts and issues have already been considered and worked out by the permitting agencies.

Strip commercial development - Continuous or intermittent linear roadside development, generally one commercial space deep and characterized by multiple roadway access points, highly visible off-street parking, and an assortment of commercial uses with direct access to abutting roads.

Partial Transferable Development Rights - The trading off of individual rights under zoning wherein residential or commercial structures can be built in excess of certain applicable zoning regulations by transferring that ability from rights which currently exist elsewhere in town.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Economic Development goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

6.1.0 Goals

- 6.1.1 To promote businesses that are compatible with Harwich's environmental, cultural, and economic strengths in order to ensure balanced economic development.
- 6.1.2 To provide appropriate locations for economic development so as to preserve Harwich's environment and cultural heritage, minimize adverse impacts, and enhance the quality of life.
- 6.1.3 To encourage the creation and diversification of year-round employment opportunities in Town.
- 6.1.4 To maintain opportunities for the traditional occupations and economic diversity associated with agricultural activities.
- 6.1.5 To encourage the provision of seasonal lodging facilities to house employees of local seasonal businesses.

6.2.0 Recommendations

- 6.2.1 Encourage commercial/industrial land use within designated commercial and industrial village areas in order to scale down commercial potential outside of village centers.

Implementation

The Planning Board should develop and propose zoning amendments and other incentives to implement the following concepts in commercial village centers:

- A. Expand boundaries of commercial zone, in accordance with the relevant village center maps (see Land Use section).
- B. Establish trade-offs of certain zoning standards as incentives for commercial development within village centers as opposed to outside village centers.
- C. Encourage rehabilitation or reuse of existing structures.
- D. Set area-wide nitrate-nitrogen loading standard to 10 parts per million except in water resource protection districts and marine recharge areas.
- E. Permit traffic flow to drop to level of service E.
- F. Allow private sewage treatment plants in controlled circumstances.

Key Agencies (lead agency in bold)

PB, BOS, BOH, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- 6.2.2 Where feasible, emphasize incentives rather than regulations to achieve consistency with guidelines for use promoting complementary uses and compatible building and site designs.

Implementation

The Planning Board should collaborate with other design-related agencies to develop and propose guidelines for use compatibility and design consistency. Continue to investigate new means for providing incentives.

Key Agencies (lead agency in bold)

PB, BOS, HC, HDC, AAB, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 6.2.3 In order to provide appropriate stimulation of the Town's economy, the following concepts shall be pursued upon adoption of this Plan by Town Meeting (Key agencies are shown in parentheses, lead agencies are in **bold**, and adoption of all zoning changes shall be within two years of certification of this Plan by the Cape Cod Commission):

- A. Encourage and facilitate growth of the marine science and environmental education industries.

Implementation

The Planning Board should develop and propose zoning amendments to remove any unnecessary regulatory obstacles, which might preclude the establishment of such facilities. Special considerations for the height and bulk of institutional structures shall be included. (**PB**, BOS, TC, ATM)

- B. Encourage off-season tourism through greater promotion of the Town's cultural (historical, environmental, recreational, and educational) assets. This should include a focus on building a reputation as a place of abundant cultural activities throughout the year, such as festivals and other special events; musical, theatric, and dance performances; arts and crafts events; golf and water-oriented leisure activities; cultural and environmental education forums, classes, and lectures; antique shows, historic house tours, etc.

Implementation

The Board of Selectmen should confer with the Chamber of Commerce to elicit specific guidance on how to develop a reputation for year-round cultural activities, including recommendations for any regulatory changes that might be needed. (**BOS**, PB, TC)

- C. Facilitate off-season tourism and special indoor events year-round. High quality lodging and affordable lodging facilities shall be encouraged. Conference, performance, and teaching facilities shall also be encouraged.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose zoning amendments to remove unnecessary obstacles which might impede the establishment of such uses, provided due regard is given to maintaining water quality in natural systems where such uses are developed. (PB, BOS, TC, ATM)

- D. Establish a fully staffed visitor center and town promotion program.

Implementation

The Board of Selectmen should investigate with the Chamber of Commerce ways to provide a fully staffed visitors' center as well as other means to help promote Harwich as a tourism destination. (BOS)

- E. Provide incentives for growth of the health and human services industry.

Implementation

The Board of Selectmen and Planning Board should investigate providing site selection assistance and/or zoning incentives to health care and human service facilities as well as for training facilities for individuals engaged in providing these services (both for-profit and nonprofit) to encourage the establishment of such facilities (BOS, PB, TC, ATM)

- F. Build on the existing economic base by enhancements to the climate for the retail and service industries.

Implementation

The Board of Selectmen and Planning Board should pursue streetscape and other village center visual and safety enhancements, as provided in this Plan, in a timely manner so as to provide the appropriate infrastructure for attracting and retaining quality retail and service establishments.

The Board of Selectmen should also foster greater town cooperation with the Harwich Chamber of Commerce to optimize the promotion of business activity. (BOS, PB, TE, DHM, PEDC, ATM)

- G. Provide incentives for job creation by new or existing businesses.

Implementation

The Board of Selectmen should explore with the Partnership for Economic Development and the Barnstable County Economic Development Council the possibility of establishing a revolving loan fund to match other applicable grant programs in assisting small business to expand and create jobs. (BOS, PEDC, ATM)

- H. Encourage redevelopment of underutilized existing commercial space.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose regulatory incentives that would facilitate and encourage full utilization of existing commercial space in lieu of new construction, especially in designated village centers. (PB, BOS, TC, ATM)

- I. Permit cottage industries (home-oriented business in structures other than a home) on large residential lots in rural areas.

Implementation

The Planning Board should develop and propose Zoning By-Law amendments to establish cottage industry as a new use category and provide reasonable standards to permit cottage industries on large residential lots while protecting abutting properties. (PB, BOS, TC, ATM)

- J. Prohibit large-scale manufacturing and warehousing everywhere but in an industrial zone.

Implementation

The Planning Board should develop and propose appropriate zoning amendments to accomplish this objective. (PB, BOS, TC, ATM)

- K. Streamline the permitting process.

Implementation

The Town Administrator should explore ways to minimize permitting delays due to preventable problems early in the development design process. Among the options, periodic meetings between permitting agencies might be held to discuss particular projects in the permitting process and other potential permitting improvements. (TAd, PB, ZBA, BD, ConC, FD, BWC, TE)

- L. Encourage year-round agricultural business activity through greenhouse agriculture in rural areas.

Implementation

The Board of Selectmen through the Town Administrator and relevant town departments should explore means with the Barnstable County Extension Service to encourage agriculture. This may include promotion of agricultural tax exemptions and cooperative farming using small grants to help pay for shared power/heating/water/storage facilities. Any grants issued by the Town shall be contingent upon a guaranteed period of nondevelopment of the subject land, similar to the existing conservation restriction program. The Board should also investigate purchasing development rights to help stimulate and preserve agricultural activity. (BOS, TA, TC, TP, ATM)

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- 6.2.4** Provide incentives for improvements to the appearance and function of existing strip commercial development, including development bonuses for the following:
- A. Reductions in the number and size of curb cuts.
 - B. Consolidating parking used by several businesses.
 - C. Adding landscaping.
 - D. Screening or relocating parking.
 - E. Facade improvements.
 - F. Achieving consistency with design guidelines.
 - G. Provision of public art.
 - H. Provision of extra green space.

Implementation

The Planning Board should develop and propose appropriate zoning amendments to provide zoning bonuses to property owners who improve their property consistent with 6.2.4 A through H.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 6.2.5** Protect, maintain, and enhance economically productive resource based areas such as shellfish areas, fishery habitat, and cranberry bogs.

Implementation

The Planning Board should collaborate with the Conservation Commission, Board of Health, and Harbor Master to develop and propose zoning amendments to include standards for new development and redevelopment within reasonable impact areas affecting the resource areas.

Key Agencies (lead agencies in bold)

PB, ConC, BOH, HM, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

7.0.0 Community Facilities - TRANSPORTATION

Issues Summary

Of primary concern is the proper management of increased traffic levels between the present and full development of the Town. During the data gathering phase of this Plan, a document entitled Section VIII - Community Facilities was compiled. In it are traffic projections by village and a wide array of other transportation-related findings. A copy of this document is available for review in the office of the Harwich Planning Department.

The greatest expected increases in traffic volume through build-out would be in East Harwich and Harwich Port where commercial growth is expected to occur. In East Harwich and other less developed villages, traffic increases will occur as the remaining vacant land is developed for housing and commercial development.

A number of locations in town which have experienced relatively high traffic and accident frequency or are known to be deficient in their design were listed and identified as needing correction. Many of the public parking facilities in town were found to need repair and/or expansion. Most of these facilities had seasonal parking supply problems.

Sidewalks were cited as a major need in all villages of the Town. Even where they exist, they are deficient in many ways. Recreational walking trails were noted as an under emphasized asset since so much of the year-round and seasonal populations enjoy walking.

Public transportation within Harwich, another alternative mode which could reduce roadway congestion, was only provided in a limited way by the H2O Line between Hyannis and Orleans and the Cape Cod Regional Transit Authority's "b-bus" which operates on demand and by appointment, similar to a taxi. No widescale regularly scheduled service between villages was available.

Of great concern regarding any physical improvements to the transportation network is the need to give due regard to preserving community character.

Overview of Recommendations

This Plan seeks to prioritize transportation improvements within the context of a viable regional transportation plan. This would include considering road alterations, bike lanes, and sidewalks, in all of the village centers and then to provide appropriate bike and pedestrian facilities for safe access to and ultimately linkage of the village centers. Consideration should be given to providing regular transit service at predictable intervals on well marked and known routes within the Town. These measures, together with reducing the ultimate population and commercial development potential, are expected to minimize congestion levels town-wide.

The Traffic Safety Committee will make recommendations to address intersections and road segment deficiencies and other traffic safety issues.

Numerous miscellaneous recommendations seek to provide a safe, efficient, and compatible transportation network in town.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Relation to Other Sections

The recommendations of this section build on and support the village center concept advanced by the Land Use and Economic Development sections.

Technical Aspects

The following are explanations of the key terms and concepts which warrant clarification as they are presented in this section:

Bike Lane - A dedicated paved space, 3 to 5 feet in width, adjacent to the edge of a roadway.

Bikeway - A way, either paved or hardpacked, which provides for exclusive use by bicycles, skates, and pedestrians.

Channelization - Provision of a marked path for vehicles seeking a certain direction to follow. Road lanes with pavement arrows to go straight or turn right are examples of channelization.

Level of Service (LOS) - A condition of a roadway segment or intersection which measures the degree of traffic movement or congestion under specified circumstances. The optimal condition is LOS A which is analogous to free flowing highway traffic. The worst is LOS F which is at or near gridlock.

Mitigation - The lessening of an impact.

Pedestrian/bicycle/transit facilities - Pedestrian facilities include sidewalks, benches, crosswalks, accessible curbing at crosswalks and signal activator buttons at signalized intersections. Bicycle facilities are bike lanes, bike racks or other storage equipment, and appropriate signage. Transit facilities include designated bus/shuttle stop locations with appropriate signage and posted route information and may also include shelters at some or all bus stops.

Regional transportation plan - The annually developed transportation plan for Barnstable County, prepared by the Cape Cod Commission. Such a plan typically includes a list of specific transportation projects within the towns for which federal construction funding would be sought. Transit or mass transit - A network of vehicles and routes managed so as to provide for the regular movement of people.

Transit facilities - In the context of this Plan, such facilities include designated bus/shuttle stop locations with appropriate signage and posted route information and may also include shelters at some or all bus stops.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Transportation goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

7.1.0 Goals

- 7.1.1** To develop a transportation plan in Harwich for present and future year-round needs which promotes safe, convenient, accessible, predictable and economical transportation and is consistent with the Town's recreational needs and its historic, scenic, and natural resources.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

7.1.2 To encourage alternate modes of transportation so as to reduce dependence on private automobiles.

7.2.0 Recommendations

7.2.1 Prioritize improvements to roadways and pedestrian/bicycle and transit facilities in village centers (as provided in 7.2.1.1 through 7.2.1.5) and throughout the Town and seek inclusion in regional transportation plan for possible construction grant funding.

Implementation

The Traffic Safety Committee, the Board of Selectmen and (when appropriate) the Capital Outlay Committee and the Finance Committee should collaborate with input from the Town Administrator, Engineering Department, and the Division of Highways and Maintenance to establish a priority ranking for construction of transportation improvements and act thereupon.

Key Agencies (lead agencies in bold)

TSC, **BOS**, COC TE, DHM, TA, FC, ATM

Timing

Commence process following adoption of this Plan by Town Meeting.

7.2.1.1 Using the findings of the CH-2 Zone Study, develop a strategy for addressing the long-range traffic circulation and safety issues.

Implementation

The Traffic Safety Committee should collaborate with the Planning Board and the Board of Selectmen as well as the Division of Highways and Maintenance, and Police Department (through the Town Administrator) to review the findings and develop a consensus plan for future mitigation of projected traffic congestion and safety problems at the intersection of Routes 137 and 39 and along these roads to their points of intersection with other arterial roadways

Key Agencies (lead agencies in bold)

TSC, **PB**, BOS, TA, TE, DHM, PD

Timing

Commence following adoption of this Plan by Town Meeting.

7.2.1.2 In Harwich Port and West Harwich Village Centers:

A. Work with Transportation Department of Cape Cod Commission and Mass Highways to produce adequate designs for relevant segments of Route 28 pursuant to findings of Route 28 corridor study and other relevant studies.

B. Incorporate adequate pedestrian/bicycle/transit facilities.

C. Incorporate environmentally sound method of storm drainage management.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

D. Design improvements for construction.

E. Seek inclusion in regional transportation plan and pursue federal, state, and local funding for construction.

Implementation

The Board of Selectmen should encourage relevant town committees to work with the County and State to accomplish these objectives. Hiring of consultants by the Town may be necessary to complete certain design work for roadway and drainage improvements. Likewise, town funding of design work may be necessary to be eligible for any state construction funding and might expedite completion of the work by the State.

Key Agencies (lead agency in bold)

BOS, TSC, TE, DHM

Timing

Commence following adoption of this Plan by Town Meeting.

7.2.1.3 In Harwich Center Village Center:

A. Develop consensus on best approach to traffic management in core of the center.

B. Incorporate adequate pedestrian/bicycle/transit facilities.

C. Design improvements for construction.

D. Seek inclusion in regional transportation plan and pursue federal, state, and local funding for construction.

Implementation

The Traffic Safety Committee in consultation with the Harwich Center Initiative should conduct a series of public meetings to consider the many facets of addressing the traffic congestion and safety problems in Harwich Center. The Committee should consider specific guidance from the Planning Board's report on the area prepared by its traffic consultant and input from other sources, including the Police Department, Division of Highways and Maintenance, and area property owners. Any proposed changes in traffic flow or regulation shall be developed with the participation of the Police Department and MassHighway. The Committee shall submit its recommendations to the Board of Selectmen.

Consultants may be needed to augment in-house design work on any structural improvements. Completion of design work would likely be a pre-requisite to obtaining any state construction funding.

Key Agencies (lead agencies in bold)

TSC, PD, TE, DHM, BOS, PB, ATM, MHW

Timing

Commence following adoption of this Plan by Town Meeting.

7.2.1.4 In Pleasant Lake village center area:

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- A. Conduct design study to determine the appropriate improvements where growth will impact local and regional road network, including the intersections of: Route 124/Queen Anne Road, Route 124/bike trail at the Exit 10 interchange (if applicable), and Route 124/ Headwaters Drive.
- B. Incorporate adequate pedestrian/bicycle/transit facilities.
- C. Design improvements for construction.
- D. Seek inclusion in regional transportation plan and pursue federal, state, and local funding for construction.

Implementation

The Traffic Safety Committee should determine appropriate improvements and then proceed to the design-for-construction phase using in-house and consultant resources as directed by the Board of Selectmen. Since the State has jurisdiction over this area, the cooperation and involvement of MassHighway in any design study would be necessary. Town funding of the design work will expedite state completion of the improvements.

Key Agencies (lead agency in bold)

TSC, BOS, PD, TE, DHM, PB, ATM, MHW

Timing

Commence following adoption of village center zoning.

7.2.1.5 In North Harwich industrial areas:

- A. Incorporate adequate pedestrian/bicycle/transit facilities.
- B. Design improvements for construction.
- C. Seek inclusion in regional transportation plan and pursue funding for construction.

Implementation

The Traffic Safety Committee should determine appropriate improvements and then proceed to the design-for-construction phase using in-house and consultant resources as directed by the Board of Selectmen. Town-sponsored design work may facilitate eligibility for construction grants

Key Agencies (lead agency in bold)

TSC, BOS, DHM, TE, PD, PB, ATM

Timing

Commence following adoption of this Plan by Town Meeting. Adopt any zoning amendments which may be required within one year after completion of the design work.

- 7.2.2 Design and construct adequate sidewalks and bikeways/bike lanes so as to link village centers and facilitate non-automobile access to village centers from outlying residential neighborhoods.**

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Traffic Safety Committee and Bike Path Study Committee should jointly examine the most appropriate ways to link the village centers and outlying neighborhoods for cross-town pedestrian and bike travel. All segments of the pedestrian and bicycle lane/path network shall be evaluated and ranked for priority according to standard criteria to be developed by the committees. The whole network shall be developed over time according to a multi-phased plan to be developed. Construction funding could be sought through the County Transportation Improvement Plan as design work is completed on each of the numerous phases.

Key Agencies (lead agency in bold)

TSC, BPSC, DHM, TE, BOS, PD, ATM

Timing

Commence following the adoption of this Plan by Town Meeting.

- 7.2.3 To ensure the provision of public transportation among the village centers, encourage and facilitate the operation of a new public transit system (or promote expansion of existing services) through and/or within Harwich. Form a public transportation committee to investigate ways to provide and encourage the use of public transit and establish appropriate transit facilities throughout the Town.

Implementation

The Board of Selectmen should charge a public transportation committee either existing or to be formed to examine the financial, market, legal, licensing, and operational aspects of establishing fixed route transit service by one or more mini-buses and/or the Cape Cod Regional Transit Authority. Publicly owned and private initiative options should be investigated and reported to the Board. Also to be considered is the goal of linking village centers and other key destinations with populated areas and the location and configuration of bus stops. If a local transit system appears feasible, then the committee should also examine ways to promote its use.

Key Agencies (lead agency in bold)

BOS, (PTC), TC

Timing

Implement following adoption of this Plan by Town Meeting.

- 7.2.4 Set an appropriate threshold for developments relative to when a traffic impact analysis shall be required to support an application for development. Also develop minimum criteria for the content of a traffic impact analysis consider funding of such work through a development application fee system.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose Zoning By-Law amendments to specify what minimum conditions would require an applicant to submit a traffic impact analysis and what the analysis must address. Planning Board should consider amending regulations pursuant to Chapter 593 of the Acts of 1989, to include an applicant-funded special account or some other applicant-sponsored funding mechanism, for the purpose of hiring a traffic consultant to evaluate traffic analyses for the Board.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Implement following adoption of this Plan by Town Meeting.

- 7.2.5 Develop transportation models to analyze traffic level of service (LOS) indicators for village centers and incorporate LOS objectives into the Zoning By-Law.

Implementation

The Planning Board and Traffic Safety Committee should collaborate with the Transportation staff of the Cape Cod Commission to develop traffic models for the village centers to enable the establishment of realistic level-of-service standards in the Zoning By-Law which new development in the village centers will need to satisfy.

Key Agencies (lead agencies in bold)

PB, TSC, CCC, BOS, ATM

Timing

Initiate following adoption of this Plan by the Cape Cod Commission.

- 7.2.6 Develop a roadway improvement guidelines manual to reflect local construction standards and acceptable mitigation measures and requirements.

Implementation

The Town Engineer and Division of Highways and Maintenance should confer through the Town Administrator with the Traffic Safety Committee and Planning Board to produce a set of construction guidelines for the various types of expected roadway improvements in town.

Key Agencies (lead agencies in bold)

TE, DHM, ConCom, TA, TSC, PB

Timing

Commence following adoption of this Plan by Town Meeting.

- 7.2.7 Provide public parking facilities within any or all business and industrial areas of the Town.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Board of Selectmen should consider options for maintaining existing and creating new public parking facilities within village centers. This may include acquiring appropriate pieces of property to concentrate parking facilities so as to minimize curb cuts and the intrusion of parking into yard areas.

Key Agencies (lead agency in bold)
BOS, ATM

Timing

Implement following adoption of this Plan by Town Meeting.

7.2.8 Continue to discourage dead-end roads.

Implementation

The Planning Board should maintain its current regulations which provide for interconnection of new, existing and future roadways through the subdivision process.

Key Agencies (lead agency in bold)
PB

Timing

No action required.

7.2.9 Continue the installation of plantings along public and private roadways.

Implementation

This effort should be coordinated by the Tree Warden

The Planning Board should also develop and propose zoning and subdivision regulations amendments to include incentives and/or requirements for provision of plantings along the street edge in site plans and subdivision plans. Guidelines for preferred species type and placement shall be developed and adopted

Key Agencies (lead agency in bold)
TW, PB, BOS, ATM

Timing

Implement following adoption of this Plan by Town Meeting.

7.2.10 Prohibit major access to village center facilities through residential zones.

Implementation

The Planning Board should develop and propose zoning amendments to specify the ban on commercial access through residential zones.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 7.2.11** Provide incentives for accommodating pedestrian and bicycle traffic on commercial properties and in and between subdivisions.

Implementation

The Planning Board should develop and propose appropriate amendments to the Zoning By-Law and subdivision rules to provide for incentives and/or requirements to incorporate bicycle and pedestrian access and passage through new development.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 7.2.12** Retain ownership of all town transportation rights-of-way.

Implementation

The Board of Selectmen should request the Town Administrator to instruct relevant town departments to identify and map town owned rights of way so as to preserve ownership.

Key Agencies (lead agency in bold)

BOS, TA

Timing

Implement policy following certification of this Plan by the Cape Cod Commission or its adoption at Town Meeting.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

8.0.0 Community Facilities - SOLID/HAZARDOUS WASTE MANAGEMENT

Issues Summary

With closure of the Town's landfill likely to occur in 2000, the expense of solid waste management will likely become much higher than at present. Since it costs the Town money to dispose of its solid waste, optimal methods for efficient and economical disposal of solid waste will need to be developed.

Perhaps the greater hazardous waste issue involves assuring the proper handling, storage and disposal of toxic substances, particularly in water resource areas.

Overview of Recommendations

While Harwich currently has one of the highest compliance rates in the commonwealth for its recycling efforts, more needs to be done. The approach of this Plan is straightforward in that it recommends providing for adequate recycling, storing, composting and handling of solid waste. It also promotes reasonable regulation and education as means for proper management of hazardous waste.

Relation to Other Sections

Since adequate solid waste facilities would be fostered by the Town, there is a connection to the Capital Facilities and Infrastructure section.

Technical Aspects

The following are explanations of some of the key terms and concepts which appear in this section:

Hazardous waste - Any toxic by-product of a process which requires additional handling to be re-used or disposed of properly or any toxic material which is spilled or accidentally released from its container. Some examples of potential hazardous waste include gasoline, heating oil, photograph and X-ray developing chemicals, and radioactive materials.

Massachusetts Hazardous Waste Regulations, 310 CMR 30.00 - The section of state regulations which deals with hazardous waste. This document contains a more precise definition of hazardous waste than given above. A copy of this document is available for review in the office of the Harwich Health Department.

Recharge areas to ponds and embayments - Areas which contribute ground water to specific ponds and salt water bodies such as harbors and other estuaries.

Responsibility and awareness program - An initiative to emphasize the role each property user needs to play in protecting the resources their activities may impact.

Solid waste - Any material discarded which is neither human waste nor hazardous waste. Examples include household trash, yard debris, demolition debris, old appliances & furniture, etc.

Water resource recharge areas - Areas which contribute groundwater or surface water to a pond, public well, or salt water embayment.

Well recharge areas - Areas which contribute ground water to an existing or future public drinking water supply well.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Solid and Hazardous Waste Management goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

8.1.0 Goals

- 8.1.1 To develop an integrated solid waste system that includes source reduction, recycling, and composting and to divert the maximum practical amount of municipal solid waste from incinerator and landfill facilities through recycling and composting programs.
- 8.1.2 To manage the disposal of hazardous wastes generated by Harwich households and businesses in an environmentally sound manner.

8.2.0 Recommendations

- 8.2.1 For commercial and industrial developments, require adequate space for and access to recycling areas (with possible incentives for the provision of common storage facilities) with a further requirement that commercial waste haulers preserve this separation.

Implementation

The Board of Health should adopt changes to waste handling regulations to assure that such source separated recyclables as are handled by the transfer station are delivered by commercial haulers in their separated state as a condition of use of the town transfer station. Further, the Planning Board should develop and propose zoning amendments to include provisions which require areas for the storage and pick-up of recyclable materials in business establishments. Shared facilities could be permitted and encouraged by zoning incentives such as site coverage and/or parking bonuses. In drafting the regulations, the Planning Board should collaborate with the Board of Health and Recycling Committee.

Key Agencies (lead agency in bold)

PB, BOH, RC, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 8.2.2 Provide adequate town facilities and programs to recycle, compost, and process all forms of solid and routine hazardous wastes and to make usable by-products available to the public over time.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Board of Health and Division of Highways and Maintenance should coordinate with the Board of Selectmen and Capital Outlay Committee to establish the appropriate facilities and programs for the recycling and composting of wastes.

Key Agencies (lead agencies in bold)

BOH, DHM, BOS, COC

Timing

Implement following adoption of this Plan by Town Meeting.

- 8.2.3 Develop and distribute a hazardous waste management manual for all business licensees and homeowners.

Implementation

The Board of Health should seek Town Meeting and/or grant funding to produce and distribute hazardous waste manuals or guidance materials for businesses and homeowners. If funds are limited, then this information shall be distributed at least to property owners and renters within identified recharge areas to wellfields, ponds, and harbors. The Board should also seek to have such information distributed to new homeowners and tenants. Any such materials shall detail and strongly emphasize the roles of individuals, especially in well recharge areas and recharge areas to ponds and embayments.

Key Agencies (lead agency in bold)

BOH, BOS, ATM

Timing

Commence following adoption of this Plan by Town Meeting.

- 8.2.4 Condition development permit approvals on compliance with Massachusetts Hazardous Waste Regulations, 310 CMR, 30.00.

Implementation

Applicants for development permits for uses which involve routine handling or storage of hazardous wastes shall be required to submit a certification of compliance with the applicable portions 310 CMR, 30.00, in a format that shall be developed by the Board of Health. Such submission shall accompany commercial or industrial site plan applications, notices of intent involving commercial or industrial projects, and any commercial or industrial projects requiring Board of Health approval. The respective agencies which process such applications shall amend their rules and regulations to include the certification of compliance.

Key Agencies (lead agency in bold)

BOH, PB, ConC, TC, FD

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Complete regulatory changes within two years of certification of this Plan by Town Meeting.

- 8.2.5 Restrict uses involving the routine handling and storage of hazardous waste from water resource recharge areas.

Implementation

Maintain appropriate zoning bans on uses involving hazardous materials and amend as needed to include other uses not specifically listed in the by-law as each is identified.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning changes as needed.

- 8.2.6 Consider adoption of a toxic and hazardous materials by-law or regulation.

Implementation

Model regulations produced by Barnstable County and other jurisdictions shall be reviewed by the Board of Health in implementing this measure.

Key Agencies (lead agency in bold)

BOH, BOS, TC, ATM

Timing

Commence following adoption of this Plan by Town Meeting.

- 8.2.7 Develop a detailed assessment of past and present solid/hazardous waste management conditions/options and future generation and management needs based on projected residential and commercial growth.

Implementation

The Board of Health should undertake the recommended assessment as resources permit. Grant funding shall be sought from available sources and technical assistance shall be obtained from the Harwich Recycling Committee, Division of Highways and Maintenance, the Mass Department of Environmental Protection, and the Cape Cod Commission.

Key Agencies (lead agency in bold)

BOH, RC, DHM

Timing

Commence following adoption of this Plan by Town Meeting.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

9.0.0 Community Facilities - CAPITAL FACILITIES AND INFRASTRUCTURE

Issues Summary

The demand for services by an increasing population will need to be met in part by new and/or expanded municipal facilities. Appendix II lists the community facilities owned by the Town with corresponding maps for each village center.

Recent major facility upgrades have occurred via the Brooks Free Library renovation and expansion, the new Community Center, and the new Fire Department headquarters. Future demand for capital improvements will be driven by the significant projected growth of the residential and commercial sectors of the Town. Even without such growth, numerous facilities will need to be upgraded, maintained and properly staffed. Capital projects will need to be prioritized and spread out over a number of years in order to meet construction needs without sharp increases in town debt.

Overview of Recommendations

This Plan seeks to integrate the gradual provision of the needed facilities over time based on need and priority ranking. It proposes the option to assess development impact fees, the orderly use of the capital outlay planning process, prudent extension of municipal infrastructure, and giving due regard to community character in the specific plans for community facilities.

Relation to Other Sections

Since most community facility needs will be a function of population growth as opposed to being "caused" by this Plan, they can almost be considered separate from the Plan. However, the sections on land use, economic development, the other community facility types, open space and recreation and community character include capital facilities and infrastructure concepts.

Technical Aspects

The following are explanations of some of the key terms and concepts which warrant clarification as they appear in this section:

Capital facilities - Buildings, vehicles, equipment, roads, water and sewer lines and land (excluding land for open space, conservation or watershed purposes). This is consistent with the Capital Outlay Committee's definition of this term.

Capital outlay planning process - An annual procedure by which capital facility needs are defined, prioritized, and scheduled for funding by the voters of the Town.

Infrastructure - The actual facilities used to provide public services and utilities such as transportation, storm water drainage, electricity, drinking water and waste disposal, among other things.

Private water supply enhancements - Measures either partially or fully funded by the Town which provide for adequate long-term drinking water quality and yield of private wells.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Capital Facilities and Infrastructure goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

9.1.0 Goals

- 9.1.1** To provide and maintain adequate community and regional facilities to meet community and regional needs consistent with the goals and policies established in this Plan and the Regional Policy Plan.
- 9.1.2** To encourage the development and use of appropriate financing mechanisms and innovative technologies for the construction and maintenance of the Town's capital facilities and infrastructure consistent with the goals and policies established in this Plan and Regional Policy Plan.
- 9.1.3** To encourage the provision of adequate and appropriately-sited telecommunications facilities so as to promote economic development and preserve the quality of life and visual character of Harwich and neighboring towns.

9.2.0 Recommendations

- 9.2.1** When infrastructure needs are generated by major new development or redevelopment consideration should be given to funding such improvements in a pro-rata manner by the proponents of such development, based on the calculated benefit of the work to such development.

Implementation

This provision would become effective only following certification by the Cape Cod Commission that this Plan is consistent with the goals and policies of the Regional Policy Plan for Cape Cod. At that time if it is the desire of the town to levy such fees, the Planning Board and the Town Administrator at the discretion of the Board of Selectmen will need to develop and present for action by Town Meeting an impact fee program, which would spell out the thresholds and methods for calculating and collecting fees to cover the cost of public infrastructure attributable to a particular development. Any impact fees contemplated must bear a rational relationship to the infrastructure need and be based on the calculated benefit of the work to the subject development.

Key Agencies (lead agencies in bold)

BOS, PB, TA, COC, TC, ATM

Timing

Adopt option for impact fees program as a Zoning By-Law amendment within two years of certification of this Plan by the Cape Cod Commission and/or approval of Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- 9.2.2.1** Provide for appropriate sewage collection and treatment facilities in village centers consistent with the land use and water quality goals of this Plan.

Implementation

The Board of Health, Planning Board, and Board of Selectmen should develop a consensus on the best ways to provide for the appropriate handling of septic wastes in village centers and water quality improvement areas (See Section 2.0.0, Natural Resources - Water). Such action is necessary to effectively implement the water quality standards specified in Section 2.0.0. Options include Town-sponsored design, construction, and operation of shared sewage handling systems, privately developed and operated systems, or a mix of the two. This should be coordinated through the water quality management task force strategies for reducing nutrients to coastal embayments

Once a consensus is reached, a plan for implementation shall be developed by the same three agencies.

Key Agencies (lead agency in bold)

BOH, BOS, PB

Timing

Discussions shall commence following adoption of this Plan by Town Meeting and the implementation plan should be completed within two years of certification of this Plan by the Cape Cod Commission.

- 9.2.2.2** Maintain a commitment to managing septic wastes on-site-, provided nitrogen-reducing community systems may be required outside such areas to enhance water quality

Implementation

Implementation simply means not considering sewage collection and treatment facilities for large geographic areas of the Town. This is necessary to maintain the proposed boundaries of the village centers. Sewer systems outside village centers would invite additional growth where this Plan does not contemplate it.

Key Agencies (lead agency in bold)

BOH, BOS, ATM

Timing

No action necessary.

- 9.2.3** Promote appropriate streetscape improvements in village center areas pursuant to the recommendations of section 1.2.0 of this Plan

Implementation

See implementation sections under section 1.2.3.1 of this Plan.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- 9.2.4 Limit the expansion of public facilities in flood hazard zones.

Implementation

New public infrastructure that would facilitate additional development (above what could be done without such infrastructure) in flood hazard areas shall be avoided so as to minimize the potential for loss of property and life in such areas. The Board of Selectmen and Planning Board should jointly develop and propose for Town Meeting action a policy to indicate the appropriate purposes for infrastructure in flood hazard areas such as facilities which maintain existing services or which address problems with existing development.

Key Agencies (lead agency in bold)

PB, BOS, ATM

Timing

Implement following adoption of this Plan and adopt policy within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting.

- 9.2.5 Using an adopted capital outlay planning process, prioritize and schedule for funding all of the relevant projects which advance the goals of this Plan.

Implementation

This would be the normal function of the Capital Outlay Committee.

Key Agencies (lead agency in bold)

COC and all departments needing capital facilities.

Timing

This work should continue to be done annually.

- 9.2.5.1 For inclusion by reference, this section shall include the Capital Outlay Plan most recently adopted by Town Meeting.

Implementation

This section provides for the automatic inclusion of the most recently adopted capital outlay plan in this comprehensive plan without the need for a second town meeting vote (to amend this Plan following the vote on the capital outlay plan).

Key Agencies (lead agency in bold)

COC

Timing

No action required.

10.0.0 Community Facilities - ENERGY

Issues Summary

It is recognized that energy consumption in the typical United States home has been much higher than it needs to be without any sacrifice of comfort level. Advances in energy conservation and production technology, combined with a significant national dependency on foreign oil and continued inflationary price increases in such fuel, it is imperative to pursue the implementation of appropriate conservation measures.

Overview of Recommendations

The plan seeks to encourage energy conservation by promoting the development of incentives for appropriate design and siting of new construction for optimal solar gain and for energy efficient construction.

Relation to Other Sections

Many of the land use and transportation recommendations have the effect of potentially reducing energy consumption by motor vehicles. For example, the clustering of homes to create open space also serves to reduce energy consumption by virtue of the shorter road lengths in cluster development. Energy is saved both during construction and over the long-run (i.e. less energy used to make and install asphalt and less used by vehicles, including town snow plows, in traversing the shorter roads). Another example is the proposed village center concept of the Land Use section. Realization of the concept would go far in minimizing automobile use over the long-term.

In the Transportation section, the proposed bike lanes, sidewalks and public transit system will allow for significant reductions in energy consumed automobile usage. Energy savings would also be realized by the Solid/Hazardous Waste Management section recommendations.

Technical Aspects

The following are explanations of some of the key terms and concepts which warrant clarification as they are presented in this section.

Energy efficient construction - Construction, renovation or redevelopment which includes any or all of the following and other energy-saving measures:

- ◆ above minimum R values for insulation of walls, attics and foundations.
- ◆ use of thermal pane windows with low emissivity coating with high R values.
- ◆ annual fuel usage efficiency ratings of at least 80% for all new heating systems, and use of indirect type water heaters and minimum efficiency requirements for stand alone water heaters.

Renewable energy resources - In the context of this Plan, solar and wind-generated power are the primary renewable resources contemplated.

Siting - The placement of a structure on a parcel.

Solar gain - Receipt of energy benefits from solar exposure orientation.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Energy goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

10.1.0 Goals

10.1.1 To encourage energy conservation and improved energy efficiency, to encourage and stimulate investment in energy, conservation, and renewable energy resources, and to manage land uses to maximize energy efficiency.

10.1.2 To more fully utilize human energy in town and promote continued citizen involvement in town affairs in order to maintain or increase the utilization of volunteers in the provision of town services.

10.2.0 Recommendations

10.2.1 Provide incentives for siting and designing new facilities and additions for optimal solar gain, wind utilization or other innovative/alternative technologies.

Implementation

Some zoning and/or property tax incentives may be feasible to encourage optimal utilization of active and passive solar access.

Key Agencies (lead agency in bold)

BOS, PB, BA, TC, UECC, ATM

Timing

Form committee following adoption of this Plan by Town Meeting.

10.2.2 Provide incentives/requirements for energy efficient construction.

Implementation

The Planning Board, Board of Assessors, and Building Department should collaborate to develop incentives which will lead to highly energy-efficient structures. Recommendations for by-law amendments shall be presented for action by Town Meeting.

Key Agencies (lead agency in bold)

PB, UECC, BA, BD

Timing

Pursue following adoption of this Plan.

10.2.3 Make municipal buildings, facilities and street lighting more energy efficient.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Board of Selectmen, Building Department, Town Engineer and Highway Department will consider energy efficient construction methods and materials when proposing improvements to municipal buildings, facilities and street lighting.

Key Agencies

BOS, BD, DHM, UECC

Timing

As improvements become necessary.

- 10.2.4** Consider utilizing clean alternative fuels for all new fleet vehicles and shuttle buses.

Implementation

The Town Administrator (or whoever buys cars) will research energy efficiency, air quality benefits and cost benefits of vehicles using alternative fuels when considering fleet vehicle and shuttle bus purchases.

Key Agencies

TM, BOS

Timing

Pursue following adoption of this Plan.

- 10.2.5** Take steps to avail the Town of options and savings provided in a competitive electric utility market.

Implementation

The Board of Selectmen and Town Administrator will research existence of possible savings in electricity costs.

Key Agencies

BOS, TM

Timing

Pursue following adoption of this Plan.

- 10.2.6** Establish a priority list of overhead utility lines and associated structures that should be installed underground.

Implementation

The Board of Selectmen should request a list of areas that would benefit either for visual quality or safety reasons from the undergrounding of utility lines and associated structures. Lists will

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

be requested from the Traffic Safety Committee, Historic District Committee, Partnership for Economic Development, and Conservation Commission.

Key Agencies

BOS, ConC, PEDC, HDC, TSC

Timing

Pursue following adoption of this Plan.

11.0.0 AFFORDABLE HOUSING

Issues Summary

In order to properly assess affordable housing needs, an in-depth analysis entitled "Housing Characteristics and Housing Needs Analysis" was compiled. A summary of the findings from this study is included in the "Technical Findings Summary" for this Plan. Both documents are on file for review in the office of the Planning Department.

This work showed that the greatest identified need is for affordable rental opportunities. Given the employment outlook for the Town and the Cape as a whole (i.e. job creation in the lower paying occupations by far outpacing the number of higher paying jobs), there has been and will continue to be a strong need for rental housing. Householders in low-paying occupations generally have too few resources in terms of money, time, and job security to commit to home ownership. In addition, the backbone of the local and regional economies - tourism and retirees - requires an abundant labor supply to remain viable. It is therefore imperative to provide sufficient rental opportunities into the foreseeable future.

Since deep subsidies are often required to construct new rental housing and single-family detached homes are the largest component of the Cape's housing stock, the focus needs to be on providing realistic mechanisms and financial assistance for rental of existing dwellings. Given the preponderance of land zoned for single-family dwellings, new affordable housing programs need to provide financial assistance for the lease or purchase of such units. Sources of rental subsidies and down payment and loan interest assistance should also be identified and encouraged by the town to help the greatest number of families. Given the town's high priority to procure and protect open space for future generations, any successful strategy for affordable housing must include housing rehabilitation for occupancy by low and moderate income households.

Affordable housing opportunities for senior citizens, particularly those living alone are also needed. Attached and congregate housing units can be included to address these needs.

Finally, assistance should be available to families who are in danger of losing their housing due to temporary crises such as an injury, change in job status, or change in family composition. The Harwich Ecumenical Council for the Homeless has a successful emergency homelessness prevention program which has served as a model for the State. Encouraging more such a programs as well as vigorously pursuing available grants needs to be part of the Town's housing strategy.

Overview of Recommendations

The recommendations of this section seek to promote the provision of evenly distributed affordable housing, primarily by the private sector, through density and other zoning bonuses (where sufficient groundwater protection can be provided through appropriate septage management facilities and improvement of water quality in designated Water Quality Improvement Areas), increased housing opportunities along Route 28, where appropriate, multi-unit housing, encouragement of affordable rental housing in accessory apartments,

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

apartments above stores and in duplexes, encouragement of affordable housing for special needs populations, and encouragement of nonprofit sponsorship of affordable housing development.

Miscellaneous other measures are proposed to enhance and administer the growth of the Town's affordable housing stock.

Relation to Other Sections

As with most other sections, the housing component shares the greatest number of concepts with the Land Use section which promotes the appropriate regulatory framework for implementation of many of the affordable housing recommendations. Specifically, the proposed exchange of commercial development potential for affordable housing opportunities along Route 28 and the village center concept provide for the higher densities which are typically necessary to stimulate private sector production of affordable units.

There is a tangent connection with the Economic Development section which promotes employment opportunities for Harwich residents which will help to lessen the need for subsidized housing.

Technical Aspects

The following are explanations of some of the key terms and concepts which warrant clarification as they are presented in this section:

Accessory apartments - A small separate dwelling unit which is part of a larger single-family dwelling. Such accessory apartments are allowed by special permit and must conform to specific criteria as set forth in the Zoning By-law. Accessory apartments are commonly referred to as "in-law apartments".

Affordability controls - Legal administrative mechanisms which provide for maintenance of affordability upon subsequent re-sale or re-renting of an affordable housing unit. These typically take the form of a deed restriction or covenant.

Affordable housing - At the minimum, this means housing which can be purchased or rented by a household which earns 80% or less of the median income for the area so that no more than 30% of household income is used for housing costs. Housing which is more expensive than as stated above but significantly less expensive than comparable market rate housing can be considered affordable and would be welcome but it would not be likely to count toward the Town's ultimate affordable housing goal, as computed by the Commonwealth of Massachusetts.

Congregate and shared housing for the elderly - Housing which features separate living units or just sleeping quarters and sanitary facilities in a building or group of buildings where common cooking, eating and/or living facilities are available to residents.

Density bonus - An allowed increase in the number of housing units and/or bedrooms per acre, provided a reasonable number of affordable units are created. A density bonus can lead to affordability because it reduces the land cost per lot or housing unit so the savings can be passed on to eligible prospective occupants. As stated elsewhere in this Plan, density increases shall occur only when appropriate septage management facilities are provided to protect groundwater resources and achieve improved water quality in designated Water Quality Impaired Areas.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Multi-unit housing - Housing equal to or greater than three dwelling units on a parcel of land.

Single-room occupancy unit - A dwelling space containing one room with an efficiency kitchen which shares bathroom facilities with other such units.

Water resource recharge areas - The land area through which water resources such as public wells, ponds, and harbors collect their ground water.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Affordable Housing goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

11.1.0 Goals

- 11.1.1 To promote the provision of fair, decent, safe, affordable housing for rental and purchase that meets the needs of present and future Harwich residents.
- 11.1.2 To promote equal opportunity in housing and give special consideration to meeting the housing needs of the most vulnerable segments of the Town's population.
- 11.1.3 To strive to provide, at least 5% of the year-round housing stock as affordable housing for rental and ownership by the year 2010, 6.5% by 2015, 7% by 2020 and 10% by 2025. A sub-goal should be to produce affordable housing such that 70% of all units hereinafter created should be affordable rental units and 30% should be affordable units for ownership by the occupants.

11.2.0 Recommendations

- 11.2.1 Encourage the provision of compatibly designed, evenly distributed affordable housing in each of the Town's seven villages.

Implementation

The Planning Board and Board of Selectmen should collaborate to produce the desired results of this recommendation. Basic design guidelines for compatibility with the style, scale, and design of existing buildings in each of the seven villages shall be developed and adopted by the Planning Board, Architectural Advisory Board, Board of Selectmen, Board of Appeals, Historical Commission, Historic District Commission, and local housing agency(ies) following a formal process to achieve this result.

The even distribution of affordable housing shall be effected through adequate incentives, zoning provisions, land offerings, to make affordable housing achievable with the same relative likelihood in each of the seven villages. In addition, any town board or committee which receives requests from developers interested in creating affordable housing, shall direct the

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

attention of such developers to villages which have a lower percentage of affordable units (compared to the total stock of year-round housing) than other villages.

Inclusion in any village of affordable housing units which represent 10% or more of the year-round housing stock for that village shall indicate conclusively that said village has provided its fair share of the Town's ultimate affordable housing supply.

Key Agencies (lead agencies in **bold**)
PB, BOS, AAB, ZBA, HC, HDC, HA

Timing

Compile and adopt design guidelines and zoning measures within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

11.2.2 Establish the following priority for the types of affordable housing to be provided:

- A. Rental units for non-retired householders, including units for very low income households.
 - B. Rental units for retired householders, including units for very low income households.
 - C. Ownership units.
 - D. Congregate housing for any age group.
 - E. Units for the mentally ill, homeless persons and families, and people with disabilities.
- These shall be integrated with types A through D above.

Implementation

The above priority list shall be adopted by resolutions of Town Meeting, the Board of Selectmen, local housing agencies, the Planning Board, and Board of Appeals. Any feedback or outreach to potential developers of affordable housing shall include this priority list.

The Planning Board should develop and propose zoning amendments to make feasible and promote the achievement of the 70%/30%-affordable-unit-mix goal in 11.1.3. This may require greater zoning incentives for production of rental units than for ownership units.

Boards which issue development permits for affordable housing shall refer to the priority listing in determining the merit of a particular application.

Key Agencies (lead agency in **bold**)
PB, BOS, HA, ZBA, TC, ATM

Timing

Adopt resolutions as early as possible following adoption of this Plan by Town Meeting. Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission.

11.2.3 Provide density and other zoning bonuses (such as reduced frontage and area requirements) for provision of affordable housing in all local Commercial/Residential village centers, commercial

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

zones along Route 28, and new residential subdivisions outside any water resource recharge areas.

Implementation

The Planning Board should develop and propose appropriate zoning amendments to include such density bonuses, provided any such bonuses are conditioned upon the provision of facilities that will adequately protect ground and surface waters. Any density increase for affordable housing shall not exceed 6 dwelling units per acre and shall result in improved water quality in designated Water Quality Improvement Areas.

Key Agencies

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 11.2.4** Provide for substitution of commercial development potential with affordable housing in existing commercial zoned areas along Route 28 that lie outside of designated village centers.

Implementation

See Implementation under 1.2.4 of this Plan.

Key Agencies (lead agency in bold)

PB, BOS, HA, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 11.2.5** Encourage multi-unit housing (including affordable units) as a transitional use along the fringes of commercial village centers.

Implementation

The Planning Board should develop and propose zoning amendments to include provisions to encourage multi-unit housing where it will serve to separate commercial uses from single-family residential uses along the edges of commercial/residential village centers.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- 11.2.6** Use an existing affordable housing agency or create a new one to:
- A. Monitor marketing and sales of affordable units.
 - B. Develop and administer specific regulations for affordability controls.
 - C. Develop and administer a process for awarding affordable units to eligible households.

Implementation

The Board of Selectmen should meet with the existing providers of affordable housing in town (public and nonprofit), discuss this recommendation, and either establish a new housing agency or ask an existing provider to accomplish the above objectives.

Key Agencies (lead agency in **bold**)

BOS, HA

Timing

Commence discussions following adoption of this Plan by Town Meeting and assign responsibility within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 11.2.7** Require that any zoning bonuses/incentives to facilitate the provision of affordable housing be conditioned upon compliance with year-round affordability criteria.

Implementation

The Planning Board should develop and propose zoning amendments to establish this as a specific performance standard for projects involving affordable housing. The Board of Selectmen should also adopt a policy to require this type of provision in any agreements it enters into with public or private providers of affordable housing.

Key Agencies (lead agencies in **bold**)

PB, **BOS**, ATM, TC

Timing

Adopt zoning amendments and Board of Selectmen policy within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 11.2.8** Utilize town-owned parcels (both existing and future acquisitions for this purpose) for nonprofit development of affordable housing and invite the participation of both nonprofit and for-profit sponsors of affordable housing.

Implementation

Nonprofit sponsors of affordable housing such as the Harwich Housing Authority, Mid-Cape Church Homes, Harwich Community Development Corporation, Habitat for Humanity, the Harwich Ecumenical Council for the Homeless (H.E.C.H) etc., as well as for-profit sponsors, should be invited by the Board of Selectmen to submit competitive proposals for the use of

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

town land for affordable housing development so as to maximize the number of suitably designed affordable units.

Key Agencies (lead agency in bold)

BOS, HA, ATM

Timing

Commence following adoption of this Plan by Town Meeting.

11.2.9 Encourage the creation of affordable rental housing by:

- A. Permitting accessory apartments in detached structures where they are currently permitted now in one structure. Relax size limits of such units based on size of lots and setbacks.
- B. Permitting the construction and/or conversion of existing facilities (such as motels) to create apartments and apartment houses in commercial/residential village centers and along Route 28.
- C. Permitting duplexes by special permit and subject to design and affordability criteria, provided the total bedroom count does not exceed three bedrooms per acre. Disperse duplexes outside growth areas by requiring a 500 foot separation between existing and new duplexes.

Implementation

The Planning Board should explore and develop appropriate zoning amendments after considering each of these objectives. Any amendments shall include the requirement for affordability controls.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

11.2.10 Designate the Harwich Community Development Corporation or some other existing or new entity as the local recipient agency for contributions of land or units for affordable home ownership and designate the Harwich Housing Authority or some other existing or new entity as the local recipient agency for contributions of land or units for affordable rental housing.

Implementation

Following a public hearing on the subject, the Board of Selectmen should vote to designate the roles of the respective organizations relative to the receipt/management of affordable housing contributions by Developments of Regional Impact as defined in the Cape Cod Commission Act or other local developers pursuant to a local inclusionary housing program.

Key Agencies (lead agency in bold)

BOS, HA

Timing

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Complete following adoption of this Plan.

11.2.11 Establish a local fund for affordable housing for:

- A. Receipt of cash contributions.
- B. Receipt of grant monies from state or private foundations.
- C. Acquisition of land and/or existing buildings by Town Meeting for creation of affordable housing.

Implementation

The Board of Selectmen should charge an existing or new housing agency to manage an affordable housing fund to be authorized by Town Meeting either with or without an initial appropriation. In carrying out the purposes of recommendation 11.2.11, the designated agency might also engage in fund-raising activities and assist and encourage emergency assistance programs operated by HECH and others.

Key Agencies (lead agency in bold)

BOS, HA, TC, TT

Timing

Implement following adoption of this Plan by Town Meeting.

11.2.12 Establish an inclusionary housing program

Implementation

The Planning Board should develop and propose zoning amendments to enable the town to require the contribution of resources, either, land, cash, or both, for the production of affordable housing. Said contributions should come from developments meeting certain size thresholds to be set forth in the zoning amendments. The regulations should also specify how much shall be contributed on a fair share basis, based on project size and/or value.

11.2.13 Establish criteria for lot, unit or development site contributions for affordable housing contributions pursuant to 11.2.12 above. Such criteria should include considerations about buildability of a parcel(s), suitability of area for residential use, proximity to goods and services, habitability of existing units per the State building code, timing of conveyance, compatibility of design and appearance with market rate units, order of preference for types of contributions, etc.

Implementation

The Planning Board should adopt a policy and/or regulation pertaining to appropriate local criteria for affordable housing contributions from local development projects. In addition to the above considerations, the criteria shall also include provisions to locate affordable housing on a scattered-site basis throughout the seven villages, utilizing existing building lots whenever possible and avoiding consumption of larger tracts of vacant land.

Key Agencies (lead agency in bold)

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

PB, BOS

Timing

Adopt regulations within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 11.2.14** Incorporate reasonable numbers of affordable units for households with special needs such as elderly rentals in apartments, congregate and shared housing for the elderly, housing for the physically and mentally disabled, and single-room occupancy units through density bonuses and other zoning incentives in areas where higher density is permitted. Any higher density development shall improve water quality in designated Water Quality Improvement Areas.

Implementation

The Planning Board should develop and propose zoning amendments to include in the special permit provisions for density bonuses the authority to specify inclusion of affordable units for households with special needs. This should include appropriate bonuses/incentives to permit financial feasibility of such construction. However, no density bonuses shall be provided where groundwater protection cannot be assured through the provision of appropriate septage management facilities.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt regulations within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 11.2.15** Encourage and assist acquisition and renovation of existing units for re-use as affordable units through reverse annuities and/or tax incentives.

Implementation

The Board of Selectmen, Board of Assessors, and Planning Board should explore the creation of a program by which real estate tax incentives would be offered to owners of existing housing units who renovate and make available for affordable rental rates, existing housing units. These same agencies should, as a group, seek to develop a program for encouraging the private sector use of reverse annuities to acquire housing units over time for inclusion in the stock of long-term affordable housing.

Key Agencies (lead agency in bold)

BOS, BA, PB, TC, ATM

Timing

Implement following adoption of this Plan by Town Meeting.

- 11.2.16** Provide open space in affordable housing developments through lot and unit clustering.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Planning Board should develop and propose zoning amendments to encourage/require the provision of open space in affordable housing developments.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 11.2.17 Continue participation in the Barnstable County Home Consortium which provides funding for housing rehabilitation and other assistance to increase the supply of decent, affordable housing.

Implementation

The Board of Selectmen should schedule the appropriate votes for Town Meeting action.

Key Agencies (lead agency in bold)

BOS, ATM

Timing

Include article on Annual Town Meeting warrant as needed.

- 11.2.18 Update the Housing Needs Analysis every three years.

Implementation

The Planning Board should work with the public and private housing and social service agencies to update the affordable housing needs of the Town's current and future residents.

Key Agencies (lead agencies in bold)

PB, HA

Timing

Complete update every three years, starting with date of original analysis.

- 11.2.19 Any obstacles to conversion of existing housing stock or commercial facilities to affordable housing use shall be identified and, where feasible, removed, consistent with the town's interest in groundwater protection and the provision of appropriate septage management facilities.

Implementation

The Planning Board should develop and propose zoning amendments to encourage the conversion of existing buildings to affordable housing.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agency in bold)

PB, HA TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

12.0 OPEN SPACE AND RECREATION

Issues Summary

The remaining, unprotected open space in Harwich is vulnerable to loss through continued development of land, primarily for housing. Since all land in town is zoned for some type of development, it is likely that undeveloped land identified in this Planning program will not stay that way. And since much of the character of the Town is determined by its open space, preservation of such character requires retention and protection of significant portions of undeveloped land. As mentioned in Section 1.0.0, efforts and resources for land protection must focus on strategic parcels, meaning those which will advance a variety of the goals of this Plan.

Although the Town has great recreational assets such as Brooks Park and Whitehouse Field in Harwich Center, the other six villages of the Town are somewhat underserved by open play areas. In addition, most public bathing beaches may pass comfortable capacity levels once the projected increase in the Town's population is added to continued use of these facilities by either the current or an increased level of tourists. This is dictated by the finite limited supply of beach areas relative to growing demand. Adequate access to and protection of recreational facilities and programs for the benefit of both disabled and non-disabled residents and visitors is also lacking.

Given the Town's location in a resort region, the identified lack of sufficient recreation opportunities and facilities for the projected year-round and seasonal populations needs to be addressed.

The above findings and others are expressed in greater detail in the data-gathering stage documents entitled "Existing Land Use" (Section VI), "Community Facilities" (Section VIII), and "Historic Resources/Community Character" (Section X). These sections as well as a summary of their findings are on file for review in the office of the Planning Department. In addition, this Plan incorporates by this reference the findings and recommendations of the Draft 1998 Town of Harwich Open Space and Recreation Plan dated March 16, 1998, and any subsequent revised versions.

Overview of Recommendations

The open space recommendations in this section seek to preserve a significant amount of permanent open space at the lowest feasible cost to the Town. This Plan seeks to create greenbelt areas containing contiguous open space and an extensive trails network. Open space management improvements as well as setting of priorities for land acquisition are also proposed.

Recommendations pertaining to recreation include enhancement, protection, and linkage of existing trail corridors, more active recreation facilities, a new extension of the bike trail, and improved access to recreational facilities for disabled residents.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Relation to Other Sections

As proposed in this Plan, the creation of permanent open space has a strong foundation in the Land Use section which recommends regulatory tools that can provide for incremental additions to the amount of preserved open space.

Protection of water resource recharge areas tends to result in long-term preservation of open space. Hence, there is a significant connection to the Water Resources section.

Since the Community Facilities section promotes the adequacy of Town facilities which include recreation and conservation land, it should be consulted in concert with this one to understand the full scope of the open space and recreation recommendations.

Finally, the character-preserving benefits of open space preservation support the recommendations under Historic Resources/Community Character.

Technical Aspects

The following are explanations of key terms and concepts which warrant clarification as they appear in this section:

Clustering as-of-right - Cluster development which does not require a special permit or variance to proceed.

Cluster development - Development of land which involves the subdivision of a parcel or parcels whereby the minimum required lot area and frontage may be reduced, provided the same number of lots are created as would be using full size lots and frontage and further provided the residual land left over from use of the smaller lot areas is dedicated to permanent, common open space. Clustering is authorized by the Harwich Zoning By-Law under the heading: "Open Space Residential Development." State law requires the granting of a special permit for this style of development.

Density bonus - The granting of a higher intensity use, usually one or more extra dwelling units or building lots, to a developer in exchange for a public benefit specifically authorized in the Zoning By-Law. As stated elsewhere in this Plan, density increases shall occur only when appropriate septage management facilities are provided to protect groundwater resources and improve water quality in designated Water Quality Improvement Areas.

DRI - Development of Regional Impact as provided under the Cape Cod Commission Act. A copy of this Act is available for review in the office of the Planning Department.

Greenbelt areas - Large, mostly contiguous areas of currently undeveloped land.

Mandatory clustering - Cluster development which is required by a zoning by-law which offers the choice to either cluster or build conventionally at a very slow rate such as one dwelling unit every 2 years.

Nature learning center - A structure with accessory parking facilities which provides for classroom instruction and exhibit space for the purpose of teaching visitors about the natural features of the area.

Open space - Land without structures or extensive paved or finished surfaces, typically occurring as woodland, open fields, bogs, waterbodies, farmland, play areas, and parks. Open space may also include yard areas, buffer areas, and cemeteries and may be permanent or temporary. As used in this Plan, open space is intended to be permanent.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Water resource recharge areas - The land area through which water resources such as public wells, ponds, and harbors collect their ground water.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Open Space and Recreation goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

12.1.0 Goals

- 12.1.1 To preserve and enhance the availability of open space in Harwich in order to provide wildlife habitat, recreation opportunities, and protect the natural resources, scenery, and character of the Town.
- 12.1.2 To preserve and enhance opportunities for passive and active recreation in the natural environment to meet the needs of both residents and visitors.

12.2.0 Recommendations

- 12.2.1 Preserve large tracts of undeveloped land through an aggressive program of land acquisition and leveraging of preservation through other available means.

Implementation, Key Agencies, and Timing

See recommendation 1.2.1 in the Land Use/Growth Management section of this Plan.

- 12.2.2 Provide for the linkage of existing and future open space areas for wildlife and trail corridors.

Implementation

The Planning Board should develop and propose zoning amendments to include incentives and requirements, which seek to connect newly created open space, either by lot clustering or other means, with existing and future open space and town-owned land. Such amendments will enable the Planning Board to shape the design of development that provides open space. The Board would be guided by the open space network map which is incorporated as a part of this Plan.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

12.2.3 Use mandatory clustering and/or zoning incentives to guide development to occur outside of greenbelt areas to the greatest extent possible and to avoid severing connected open space areas with development.

Implementation

The Planning Board should develop and propose appropriate zoning amendments to accomplish these objectives.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

12.2.4 Amend subdivision process to require submission of a cluster concept sketch plan for parcels larger than five acres.

Implementation

The Planning Board should amend its Rules and Regulations Governing Subdivisions to include this suggestion.

Key Agencies (lead agency in bold)

PB, TC

Timing

Adopt amendment within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

12.2.5 Designate a committee either new or existing as the open space management agency relative to action on Developments of Regional Impact and village center open space issues, including adoption and implementation of standards for on-site and off-site open space.

Implementation

The Board of Selectmen should collaborate with the Planning Board, the Conservation Commission and Real Estate and Open Space Committee to accomplish this. Regardless of the outcome of this process, the Planning Board and Conservation Commission should jointly prepare zoning standards for on-site and off-site open space.

Key Agencies (lead agency in bold)

BOS, PB, REOS, ConC, TC, ATM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Initiate collaboration following adoption of this Plan by Town Meeting. Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 12.2.6** Encourage the maintenance of existing open space in development and redevelopment in village centers, where practical, by amending the Zoning By-Law to require the maximum practical retention of natural vegetation on a development site.

Implementation

The Planning Board should develop and propose appropriate zoning incentives and standards to minimize encroachment of new building construction and parking facilities on existing vegetation/open space beyond any reasonable disturbances necessary for construction.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 12.2.7** Prioritize open space purchases and contributions as follows:

1. Wellfield protection for South Harwich wells.
2. Wellfield protection in other existing and future well areas.
3. ACEC recharge areas.
4. Pond recharge areas.
5. Harbor recharge areas
6. Wetland areas.
7. Linkage of existing open space parcels.
8. Enhancement of greenbelt areas.
9. Parcels adjacent to other preserved open space.
10. Steep slope areas.

Implementation

This priority ranking should be reviewed for any changes in ranking by the Board of Selectmen the Real Estate and Open Space Committee and the Planning Board and, if practical, included in the Zoning By-Law to facilitate its application to development proposals.

Key Agencies (lead agency in bold)

BOS, TC, REOS, ATM, PB

Timing

Adopt resolutions and zoning changes, if any, within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

- 12.2.8** Adopt provisions to maximize compatibility of new development with adjacent protected open space.

Implementation

The Planning Board should develop and propose zoning amendments to require incorporation of undisturbed buffer areas on lots created adjacent to existing protected land but which would lack any permanent open space of their own.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 12.2.9** Acquire trail easements 10-20 feet in width to provide a permanent network of wooded trails throughout the Town. Trails in wetlands and their buffer zones shall be of minimum width to limit vegetation removal. Creation of looped, interconnected trails shall be a main objective.

Implementation

The Real Estate and Open Space Committee, Conservation Commission, and Planning Board will work together to develop a detailed action plan which prioritizes the acquisition of specific segments of the proposed trail network. Acquisition articles shall be presented for Town Meeting action as appropriate.

Key Agencies (lead agencies in bold)

REOS, ConC, PB, TC, ATM

Timing

Commence following adoption of this Plan by Town Meeting. Present acquisition articles for segments of the trails network as soon as possible but by no later than 2005. The order of acquisition shall be based on the relative priority of each segment.

- 12.2.10** Develop trail systems for public use throughout all major town-owned parcels and facilities.

Implementation

The same key agencies as in 12.2.9 should include interior and connecting trails on Town-owned parcels (where pedestrian and bicycle traffic would not be detrimental) in the detailed trail action plan. Any other affected agency not identified as a key agency should be included in the planning process.

Key Agencies (lead agencies in bold)

REOS, ConC, PB, TC, ATM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Commence following adoption of this Plan by Town Meeting and/or its approval at Town Meeting (whichever is later).

- 12.2.11** Encourage the establishment of open space for active recreation in under-served areas of town by permitting it as a trade-off for higher density or other zoning relief. Any higher density development shall improve water quality in designated Water Quality Improvement areas.

Implementation

Currently, the Planning Board can require a subdivider to create a lot in a proposed subdivision for park purposes, provided the Town pays the developer fair market value for the land within three years of plan approval. This recommendation would improve this process by enabling the Planning Board to offer one or more zoning/subdivision incentives for a park lot without the need for a Town appropriation. Such incentives, to be developed and proposed by the Planning Board might include frontage reductions, an additional building lot (through lot area reduction), road construction waivers, etc. Any density bonuses shall be conditioned upon the provision of facilities that will adequately protect ground and surface waters. Any higher density development shall improve water quality in designated Water Quality Improvement Areas. The Board should coordinate with the Recreation and Youth Commission to determine where additional park facilities would be needed.

Key Agencies (lead agency in bold)

PB, BOS, RYC, TC, ATM

Timing

Identify target areas following adoption of this Plan. Adopt regulatory changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- 12.2.12** Establish a nature learning center in the Bell's Neck/Reservoir area.

Implementation

The Board of Selectmen should charge a committee either existing or new to examine the merits and mechanics of such a facility in the Bell's Neck area. Further implementation would be subject to the report of the committee.

Key Agencies (lead agency in bold)

BOS

Timing

Commence following adoption of this Plan by Town Meeting

- 12.2.13** Pursue the off-road extension of the Cape Cod Rail Trail Bikeway out of Chatham through East Harwich and into Brewster and from the existing Rail Trail in Harwich Center into Harwich Port.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Implementation

The Bike Path Study Committee should study potential alternate routes to accomplish these objectives.

Key Agencies (lead agency in bold)

BPSC

Timing

Commence following adoption of this Plan by Town Meeting.

12.2.14 Construct facilities to provide for reasonable access by disabled persons to recreation facilities and natural areas including:

- A. Beach access ramps and boardwalks.
- B. Braille signage in appropriate locations.
- C. TDD equipment where audio programs are offered.
- D. Wheelchair accessible trail facilities.
- E. Accessible comfort stations.

Implementation

The Disability Rights Committee and the Recreation and Youth Commission should work with the Town Engineering Department to prepare a detailed action plan for providing the suggested access improvements. The plan should be implemented through the normal budget and article appropriation process.

Key Agencies (lead agency in bold)

DRC, BOS, RYC, TE, ATM

Timing

Commence following adoption of this Plan by Town Meeting.

12.2.15 Provide for at least one public recreational/facility (park, playground, building, and/or other recreational place) within each of the residential village centers.

Implementation

The Real Estate and Open Space Committee should pursue donation and/or acquisition of vacant and/or developed land, according to a consensus on the type of recreational facility desired in each village center. Such lands shall be as near as possible to the center of each village's population concentration so as to optimize their accessibility without the need for extensive parking facilities.

Key Agencies (lead agency in bold)

REOS, BOS, PB, RYC, TC, ATM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Commence following adoption of this Plan by Town Meeting.

12A.0 Cemeteries

There are currently 18 cemeteries in the Town of Harwich, of which the Town owns 5 and maintains an additional 12 (see Appendix III). Total cemetery area is approximately 65 acres. Burial in a Town cemetery is available to anyone who is a resident or property owner in town. As of the end of 1999, there were approximately 5,900 available plots, however, based on the current rate of growth, those plots will be used by 2020. Given anticipated future demand, the Cemetery Commission is in the process of locating land for cemetery use. The Commission believes the Town will require approximately 50 additional acres of burial space in order to accommodate demand over the next 50-75 years. With the increasing acceptance of cremation in preference to casket interment, the anticipated need for burial space is shrinking but the number of older citizens choosing to retire on Cape Cod is increasing.

When existing burial space is exhausted, Harwich will have no further need to develop traditional “neighborhood” cemeteries. The Cemetery Commission envisions one large parcel of land to serve as a “final resting place.” It will be a place of serene beauty, a place of quiet and solitude away from the outside world that invites moments of reflection. The grieving and the care-giving will be joined by walkers, bird-watchers and joggers. The cemetery will serve as a town open space as well as memorial to those who have passed away.

12A.1 Goals

To ensure that adequate burial space is available in Harwich for any eligible resident or property owner wishing to be buried here.

12A.2 Recommendations

Look at tracts of land 50 acres and larger which could be used for a future Town cemetery.

Implementation

The Cemetery Commission, working with the Real Estate and Open Space Committee and the Board of Selectmen, look at available parcels in the 50+ acre range to determine which parcels may be best suited to cemetery use. In addition, the three groups will work together to design a facility that meets the Town’s burial needs as well as providing an open space that can provide for the passive recreation needs of Harwich residents.

Timing

Commence evaluation of available properties immediately following adoption of this plan by Town meeting.

Key Agencies (lead agency in bold)

CC, REOS, BOS

13.0.0 HISTORIC PRESERVATION/COMMUNITY CHARACTER

Issues Summary

Based on the historic resources inventory work completed by volunteers and then by a paid consultant, there is abundant documentation of the extent and importance of historic resources in Harwich. For specific findings on this work, the Section X - Historic Resources/Community Character document prepared for this Plan, available for review in the office of the Planning Department, should be consulted.

Overall, concentrations of historically significant structures and sites exist in the village centers of South Harwich, Harwich Center, Harwich Port, West Harwich, and North Harwich. Smaller groupings of older structures exist in East Harwich and Pleasant Lake. As new development and redevelopment are accommodated, careful attention to the preservation of the historic qualities of these areas and individual structures is needed.

The Section X report also documents the extensive and appealing elements which help visually define the character of Harwich as a whole and the unique features of each of the seven villages. In general, the report identifies the most essential elements of community character and emphasizes the need to preserve them.

Overview of Recommendations

In addition to recommending the consideration of specific areas as effective but less stringently regulated, historic resource districts, the plan seeks to protect historic resources and character by promoting design guidelines for rehabilitation or additions to historically significant structures and design review procedures for otherwise unregulated historic structure work.

Community character preservation should be achieved by encouraging designs of new construction which would complement existing character-determining features and by a broad recommendation to preserve identified scenic components among the villages.

Relation to Other Sections

This section seeks to assure that new development of any magnitude respects the character of each of the village centers as set forth in the Land Use/Growth Management section.

There are less significant connections between this section and the Community Facilities and Water Resources sections.

Technical Aspects

The following are explanations of the key terms and concepts which warrant clarification as they are presented in this section:

Built environment - An environment which represents structures and other fixed features such as parking lots and fences, which are not naturally occurring.

Character-determining features - Visible features or patterns either natural or built which help define and connect a structure to its setting. Features which are common to a group of

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

buildings or yard areas usually play a role in determining character. Generally, the greater the number of common features, the more clearly definable the character will be.

Design compatibility - Relative consistency of design of new development with that of existing development in the area.

Design guidelines - A document to be produced by the Town which will include suggestions as to what features of design would be considered complementary to existing designs.

Historic resource districts - An area with definite boundaries which contain a significant collection of structures, sites, and settings which represent important aspects of the history of the area in need of greater aesthetic protection than zoning would permit.

Historically significant structures - Historic structures (pre-1945) which either individually or as grouped exhibit architectural style/design features which constitute clear examples of key design aspects prevalent during their construction.

Local historic structure inventory - A list maintained by the Harwich Historical Commission which identifies all structures believed to be built before a specified date.

Regional Policy Plan (RPP) - A planning document produced and updated by the Cape Cod Commission which sets forth the planning goals and policies for all of Barnstable County. A copy of the RPP may be reviewed in the office of the Harwich Planning Department or obtained from the Cape Cod Commission, Main Street, Barnstable Village.

Visual character of Harwich - The composite image of the Town as it is determined by the entirety of its built and natural components.

Consistency with Regional Policy Plan

This Plan incorporates by this reference consistency with all of the Historic Preservation/Community Character goals, minimum performance standards, and town actions of the Cape Cod Commission's Regional Policy Plan (RPP - effective November, 1996). Implicit in this statement is the intention to complete timely adoption of local policies and regulations to implement all provisions of the RPP.

13.1.0 Goals

- 13.1.1** To protect and preserve the historic and cultural features of the Town's landscape and built environment as these are important components of the Town's character, heritage, and economy.
- 13.1.2** To ensure that future development and redevelopment respects the traditions and character of village centers and outlying rural areas so as to protect the visual and historic character of Harwich.
- 13.1.3** To promote the appreciation and preservation of historic and scenic resources through ongoing education.
- 13.1.4** To coordinate the various historic preservation and community character activities and interests in order to mutually address current and future issues, opportunities, and responsibilities.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

13.2.0 Recommendations

13.2.1 Historic Preservation

- A. Develop design guidelines for rehabilitation of or additions to historically significant structures.

Implementation

The Historical Commission and Historic District Commission as well as the Architectural Advisory Board, should collaborate with the Planning Board to develop appropriate design guidelines for historic structures both within and outside of designated historic districts. Such guidelines shall be distributed with and referenced in all the relevant permit literature to encourage their application when renovations or additions are made to historic structures. The guidelines shall be incorporated into any regulations for designated historic districts.

Key Agencies (lead agency in bold)

HC, HDC, AAB, PB, BOS, TC

Timing

Commence following adoption of this Plan by Town Meeting and complete guidelines within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

- B. Identify potential historic resource protection districts.

Implementation

The Board of Selectman should charge a committee, either existing or new, to assess the unique historical architectural character of each of the town's villages and make recommendations concerning each area.

Key Agencies (lead agency in bold)

BOS

Timing

Commence Following adoption of this plan.

- C. Acting on the recommendations agreed upon in (B) above, adopt customized historic district regulations which include the clear designation of locally appropriate historical, cultural and architectural features to be subject to scrutiny.

Implementation

As historic resource districts are created, the appropriate regulatory tools and/or incentives will need to be considered. In crafting any regulations, care should be given to avoiding excessive requirements for historic district commission scrutiny through the development and use of locally determined criteria and creative preservation incentives.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agency in bold)

BOS, HC, HDC, TC, ATM

Timing

Commence after consideration and approval of the recommendations for historic district designations. Seek to adopt regulations concurrent with designation of each district.

D. Areas should be surveyed for possible listing of structures in the National Register of Historic Places and/or listing as a property within an historic district:

Implementation

The Harwich Historical Commission should complete the inventory work identified above. Any areas which appear to warrant historic district status shall be included as such.

Key Agencies (lead agency in bold)

HC, BOS, ATM

Timing

Commence following adoption of this Plan by Town Meeting

E. Develop guidelines for sensitive design of development on or adjacent to prehistoric or historic archaeological sites. Include process for review of proposals subject to the guidelines.

Implementation

The Harwich Historical Commission should develop and propose the appropriate design guidelines and process.

Key Agencies (lead agency in bold)

HC, TC, ATM

Timing

Adopt guidelines within two years of certification of this Plan by the Cape Cod Commission.

F. Provide incentives for parcels not subject to design regulation to achieve design compatibility with historic preservation goals.

Implementation

The Planning Board should develop and propose zoning amendments to incorporate zoning bonuses for the achievement of design consistency of new development with existing features within and surrounding the development site. Bonuses shall also be included to encourage the re-use and rehabilitation of historic structures. Any higher density development shall improve water quality in designated Water Quality Improvement Areas.

Key Agencies (lead agency in bold)

PB, AAB, HC, TC, ATM

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

G. Establish permanent historic interpretive facilities in or near areas frequented by large numbers of tourists, such as Wychmere Harbor, The Herring River corridor, and the Cape Cod Rail Trail (at Main Street or Pleasant Lake Avenue), and promote understanding and appreciation of the rich history of the Town.

Implementation

The Historical Commission should recommend the locations and designs for interpretive facilities to the Board of Selectmen for inclusion in a Town Meeting Warrant for construction funding. The Commission should also work with other town, county, and state agencies to develop promotion programs for appreciation of the Town's historic resources and history.

Key Agencies (lead agency in bold)

HC, BOS, ATM

Timing

Commence following adoption of this Plan by Town Meeting.

H. Provide realistic options for the preservation and re-use of historic structures and maintain the demolition delay by-law to help prevent unnecessary demolition of such structures.

Implementation

This suggests doing everything practicable to prevent the loss of historic structures through implementation of other provisions of this Plan.

Key Agencies (lead agencies in bold)

PB, HC, AAB, HDC, BOS, TC, ATM

Timing

Commence following adoption of this Plan by Town Meeting. Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or approval of Town Meeting (whichever is later)..

I. Adopt specific building bulk and setback criteria to prevent inappropriate encroachment of new commercial or residential development on historic resources.

Implementation

The Planning Board should develop and propose appropriate zoning amendments to achieve this objective.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

Key Agencies (lead agency in bold)

PB, HC, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

J. Designate a central coordinating agency, either existing or new for historic preservation activity recommended by this Plan.

Implementation

Following designation as the coordinating agency by the Board of Selectmen, the committee, either new or existing shall develop a means to coordinate its preservation work with that of the historic preservation agencies/groups, the Planning Board and regional, state, and federal preservation agencies.

Key Agencies (lead agencies in bold)

BOS, HC, HDC, PB, CCC, MHC

Timing

Commence following adoption of this Plan by Town Meeting.

13.2.2 Community Character

A. Develop and implement incentives for compatibility of new development with existing character-determining features.

Implementation

The Planning Board should develop and propose zoning amendments to encourage such design compatibility.

Key Agencies (lead agency in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning changes within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

B. Preserve the scenic components of each village as identified in background Section X, Historic Resources/Community Character.

Implementation

The Board of Selectmen should appoint/designate a board, commission, or committee, either existing or new, as the agency responsible for recommending to the Board a series of measures to protect and/or enhance the relevant aspects of each scenic resource identified and any others

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

worthy of inclusion. These recommended measures should be referred to the Board of Selectmen for their consideration and implementation, as appropriate

Key Agencies (lead agency in bold)

BOS

Timing

Commence following adoption of this Plan by Town Meeting.

- C. Designate roads as Local Scenic Roadways and establish guidelines and other measures to protect their scenic aspects:

Implementation

The Board of Selectmen should charge a committee, either existing or new, to develop such a list and, with input from the Planning Board, Conservation Commission, and Historical Commission should consider recommending that Town Meeting designate these roads as scenic. According to Massachusetts General Laws, Ch.40. Sec. 15C, "after a road has been designated as a scenic road, any repair, maintenance, reconstruction, or paving work done with respect thereto shall not involve or include the cutting or removal of trees, or the tearing down or destruction of stone walls, or portions thereof, except with the prior written consent of the Planning Board...after a public hearing." Such designation would not affect the eligibility of the Town to receive Chapter 90 aid for such roads. To provide guidance on how to address and properly handle proposed activities along scenic roads, guidelines and/or regulations need to be developed for use by the Planning Board as it conducts the required public hearings.

Key Agencies (lead agencies in bold)

PB, ConC, HC, BOS, ATM, TC

Timing

Commence following adoption of this Plan by Town Meeting. Adopt any regulatory measures within one year of designation of any scenic road.

- D. Adopt regulatory tools to provide for adequate protection of community character in connection with development and redevelopment. These tools shall be designed to accomplish the following objectives:

1. Building height and scale – The height and scale of a new building or structure and any addition to an existing building should be compatible and harmonious with its site and existing surrounding buildings. No new development should include a single structure which has a footprint greater than 50,000 square feet, unless it can be demonstrated through the design of the building and vegetative or other screening methods that the project will not have adverse visual impacts on the surrounding neighborhood.
2. Building design – Where proposed development and redevelopment is surrounded by buildings with distinctive architectural styles, building height and exterior look should be harmonious with the character of the surrounding area.

Town of Harwich – Local Comprehensive Plan 2000 – Final Plan

3. **Buffering** – All new development should provide adequate landscaped buffers in order to limit adverse visual impacts on the surrounding neighborhood. When new development is proposed adjacent to significant vistas, open landscapes, scenic roadways, historic districts or individual historic structures, landscaped buffers should be provided in order to limit visual impacts on these resources from the new development. Preservation of existing natural vegetation in these buffer areas is preferred.
4. **Landscaping** – Landscaping that integrates buildings with their environment, enhances architectural features, and provides amenities for pedestrians should be provided on site by all new development. All development should implement a landscape plan, which addresses the functional aspects of landscaping, such as drainage, erosion prevention, wildlife habitat enhancement, screening and buffering, wind barriers, provision for shade, energy conservation, sound absorption, dust abatement and reduction of glare.
5. **Exterior lighting** – Exterior lighting in new development or redevelopment should comply with appropriate standards relative to design, light source, total light cutoff, and foot-candle levels.
6. **Signs** – All signs should be designed to complement the design and siting of the uses they pertain to and in no case should any billboard or new off-premise sign be permitted.
7. **Utilities** – All utilities for development, including cable, should be placed underground, except where the presence of natural features such as wetlands or archaeological resources prevent such placement.
8. **Parking** – Parking should be located to the rear or the side of a building or commercial complex in order to promote traditional village design in commercial areas unless such location would have an adverse or detrimental impact on environmental or visual features on the site, or is completely unfeasible.
9. **Open storage** – Open storage areas, exposed machinery, refuse and waste removal areas, service yards and exterior work areas and parking lots should be visually screened from roads and adjacent residential areas through fencing, stone walls, or landscaping. Where landscaping is used as screening, it should be equally effective in summer and winter. Landscape screening should be installed at a height, density, and depth that provides for the full desired effect within three years' growing time. If plantings are not an alternative due to site limitations, the facilities should be screened from public view with materials harmonious with the building.

Implementation

The Planning Board should develop and propose for adoption zoning by-law amendments to accomplish the above objectives.

Key Agencies (lead agencies in bold)

PB, BOS, TC, ATM

Timing

Adopt zoning amendments within two years of certification of this Plan by the Cape Cod Commission and/or its approval at Town Meeting (whichever is later).

Village Center Maps

Appendix I

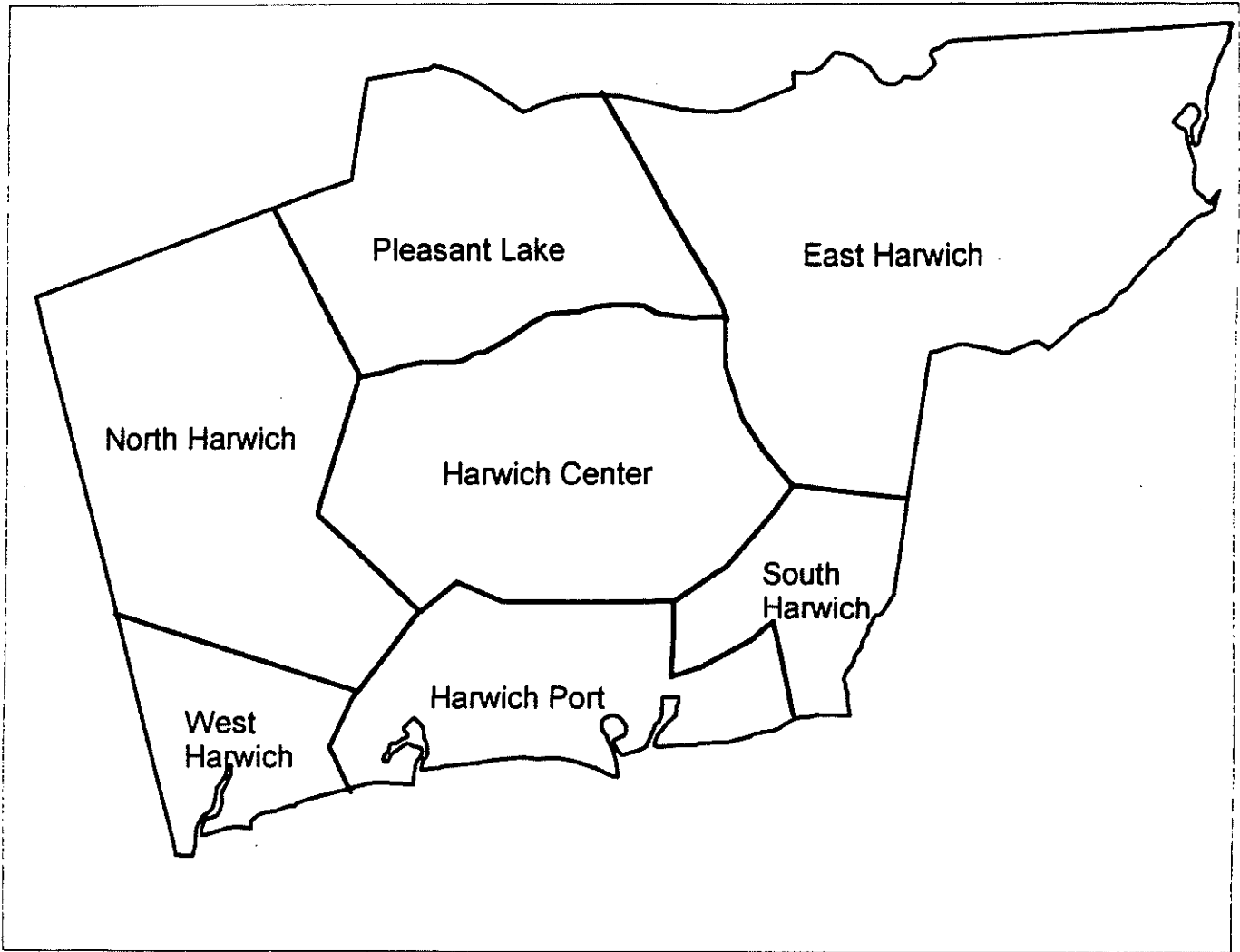


Figure 1.1 -- Village Center Areas



Source: Harwich Planning Department

Proposed East Harwich Village Center

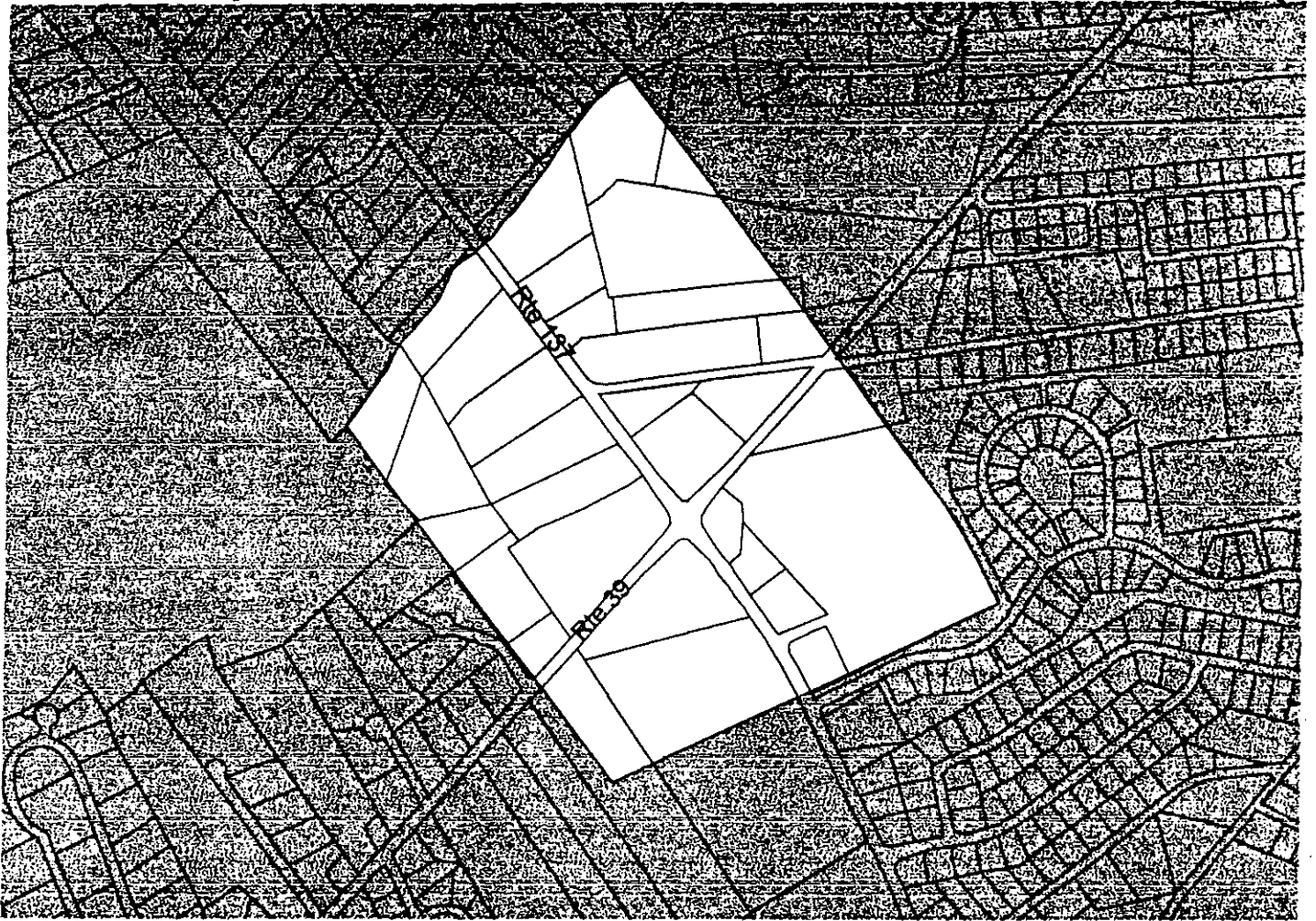


Figure 1.2

Legend

 Local and Regional Commerical Village Center



Source: Compiled by the Harwich Planning Department, June, 1999.

Proposed Harwich Port Village Center

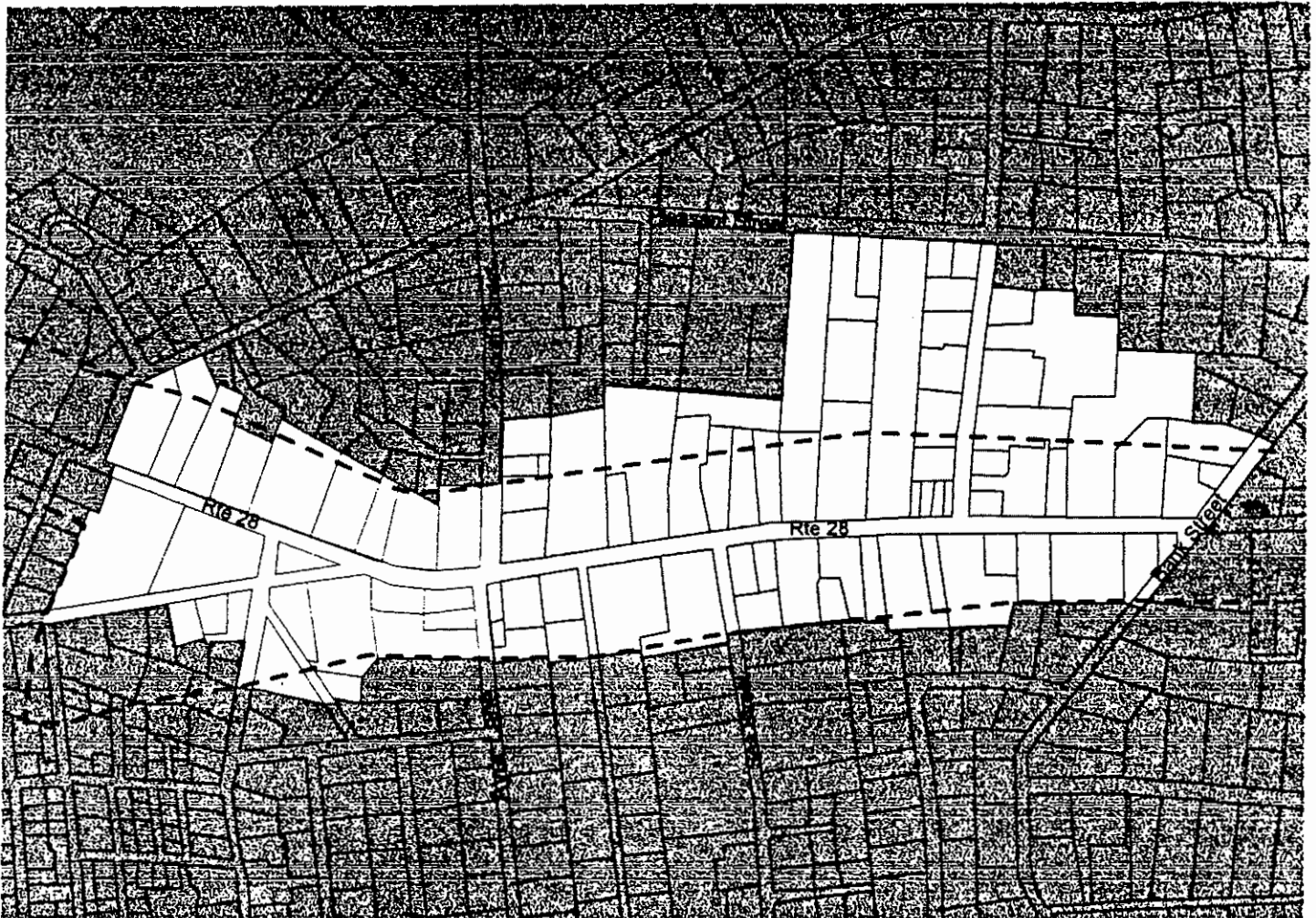


Figure 1.3



Source: Town of Harwich Planning Department, June, 1991

Proposed West Harwich Village Center



Figure 1.4

Legend

 **Small Scale Commerical & Residential Village Center**



Proposed Industrial Village Center

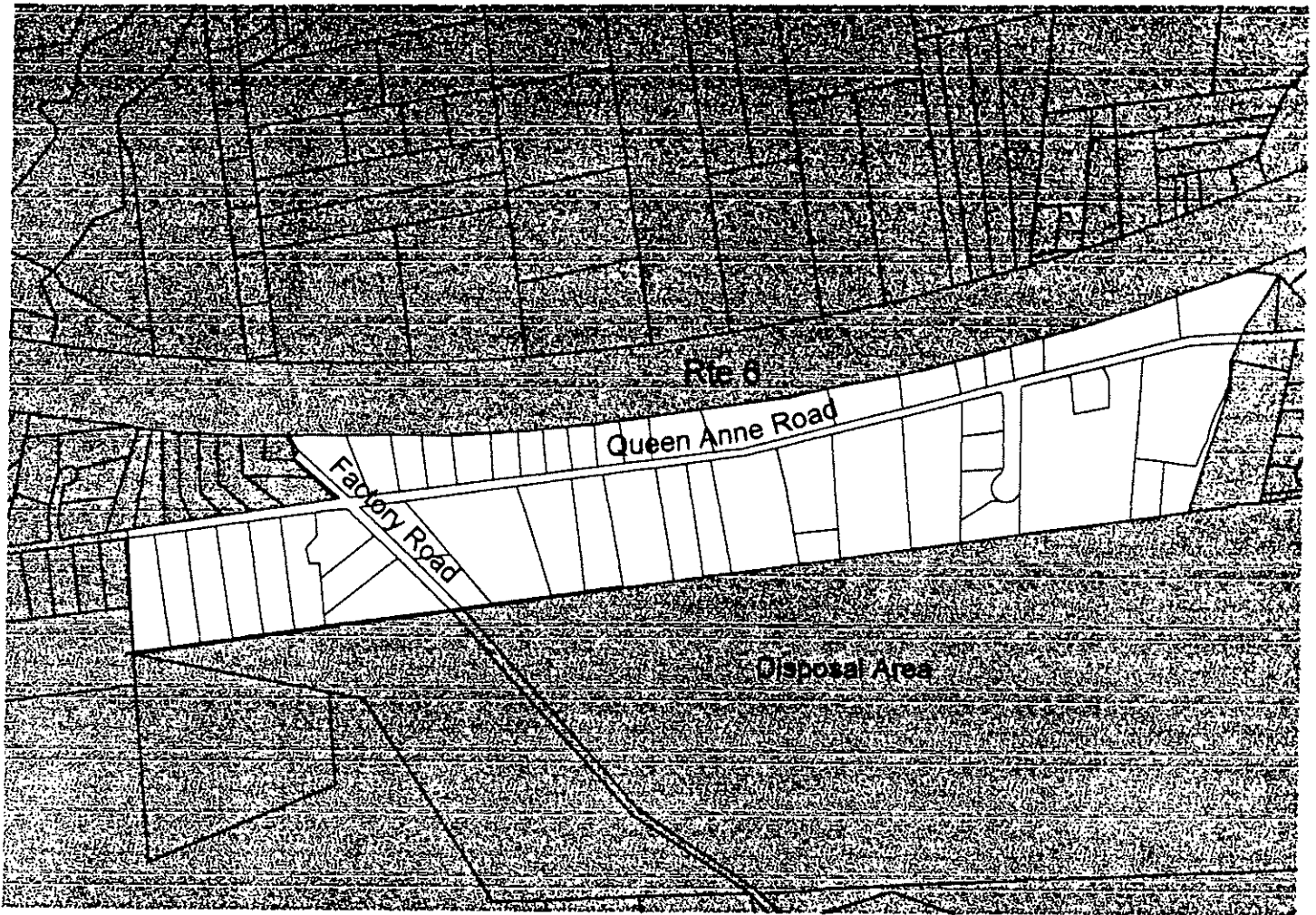


Figure 1.5



Source: Compiled by the Harwich Planning Department, June, 1999.

Proposed North Harwich Village Center



Figure 1.6

Legend

-  Industrial Village Center
-  100 Foot Buffer Area
-  Neighborhood Scale Retail Area



Proposed Pleasant Lake Village Center

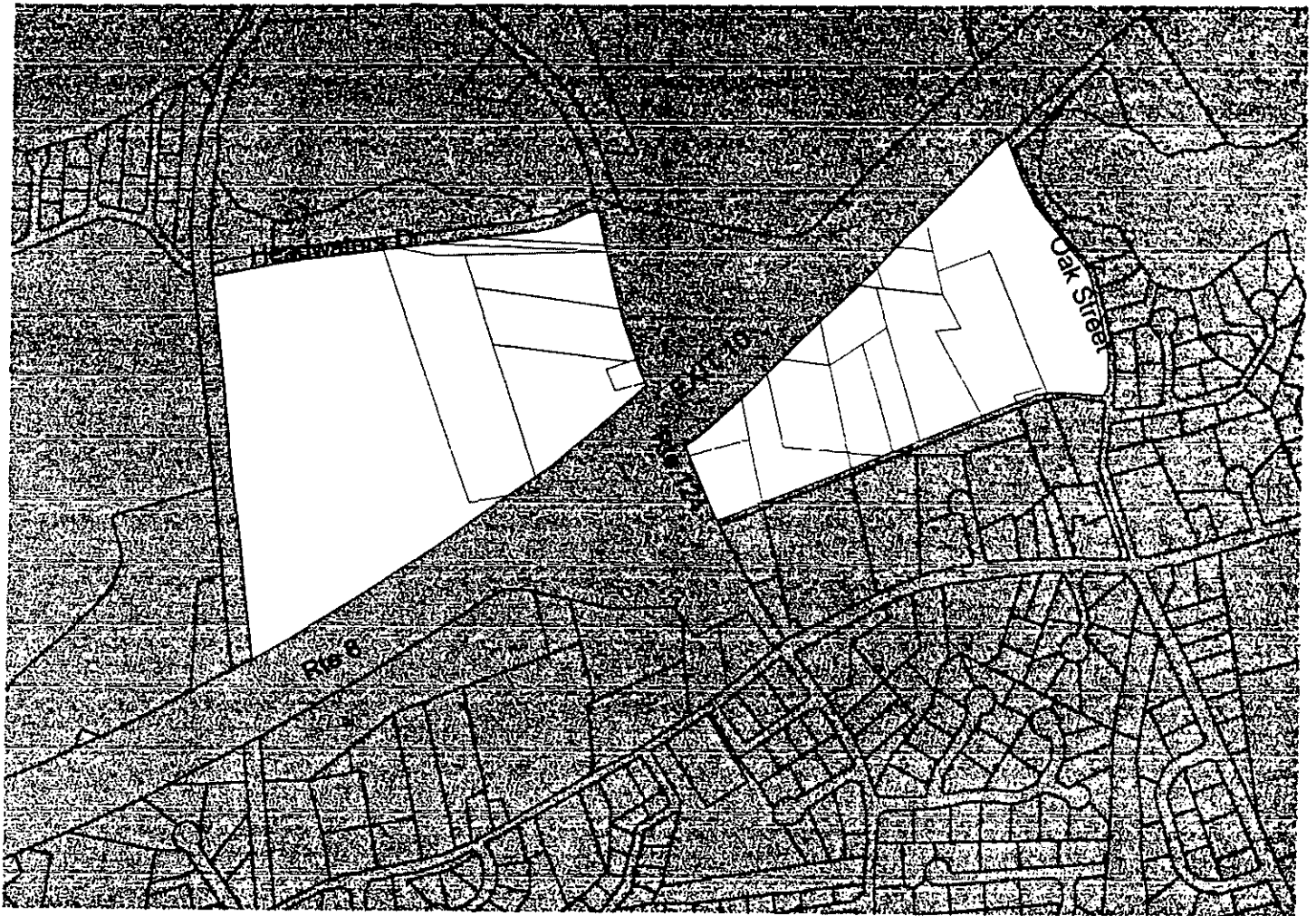
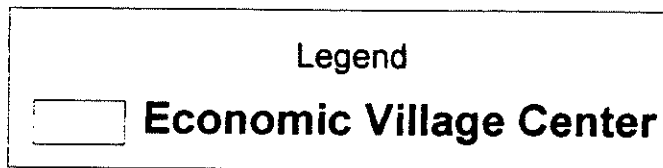


Figure 1.7



Proposed Harwich Center Village Center

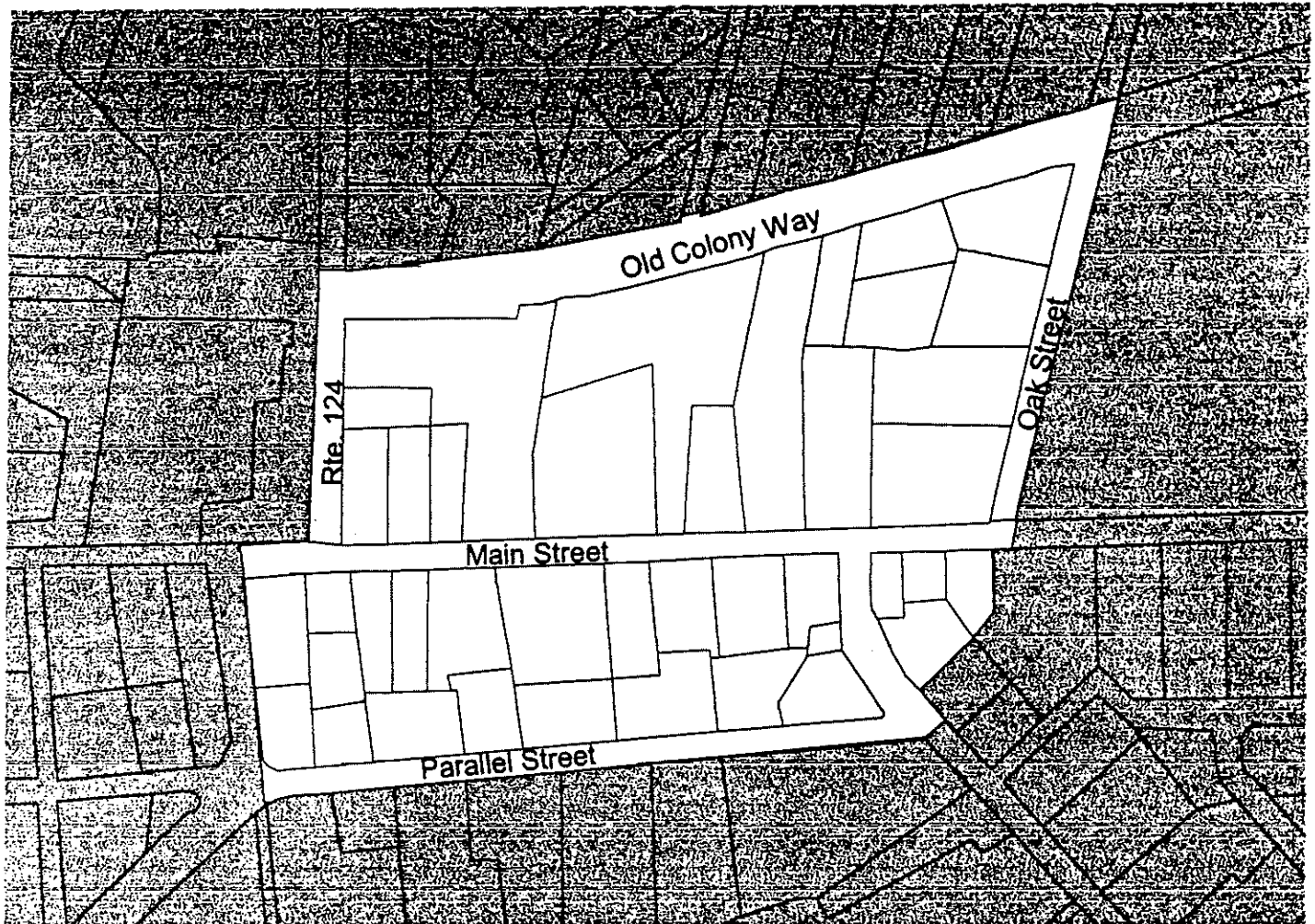


Figure 1.8

Legend

 Small Scale Commerical & Residential Village Center



Source: Compiled by the Harwich Planning Department, June, 1999.

Proposed South Harwich Village Center



Figure 1.9

Legend

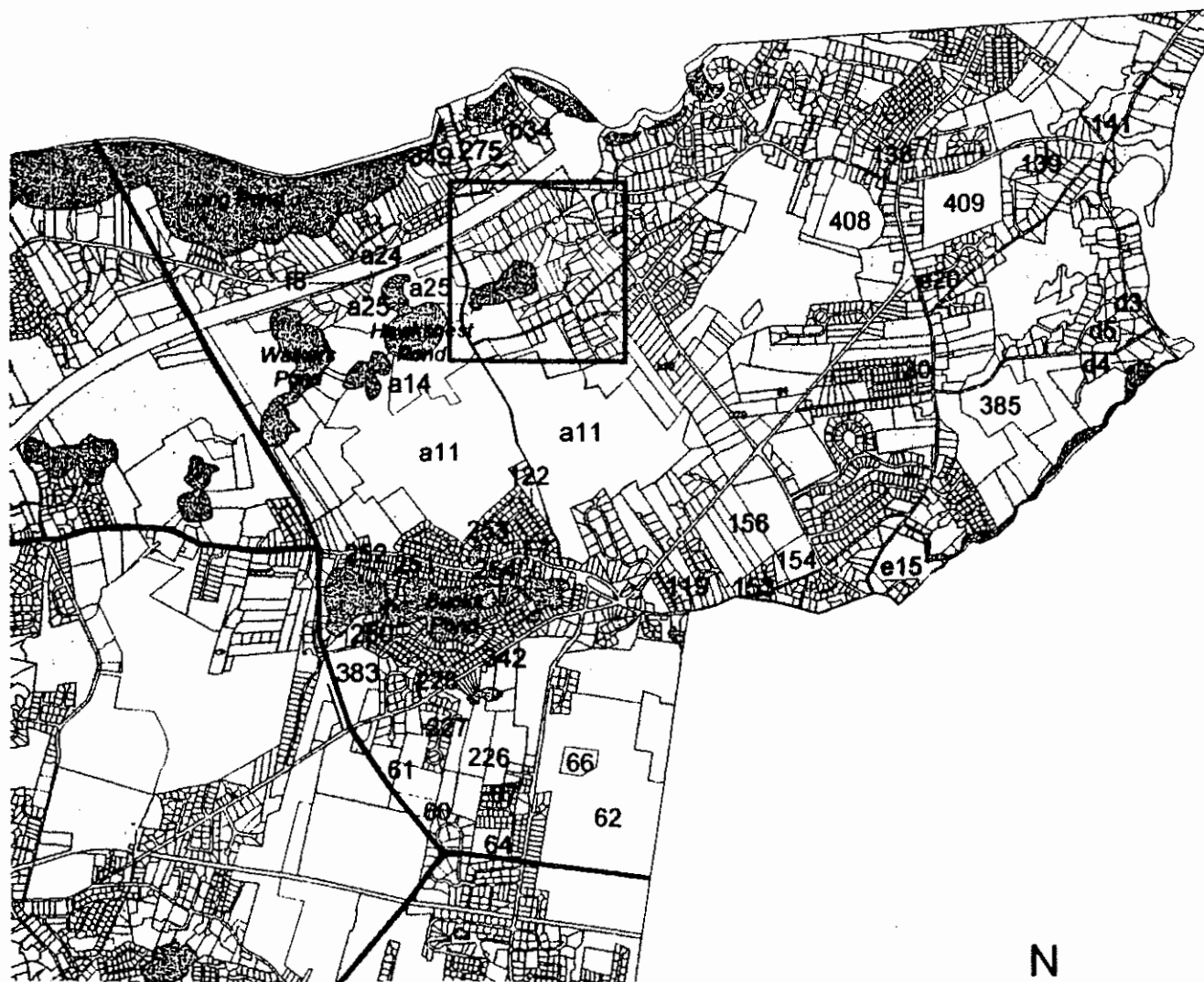
 Small Scale Commercial & Residential Village Center



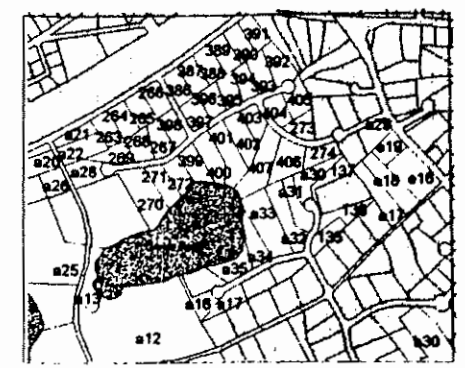
Community Facilities

Appendix II

East Harwich Community Facilities

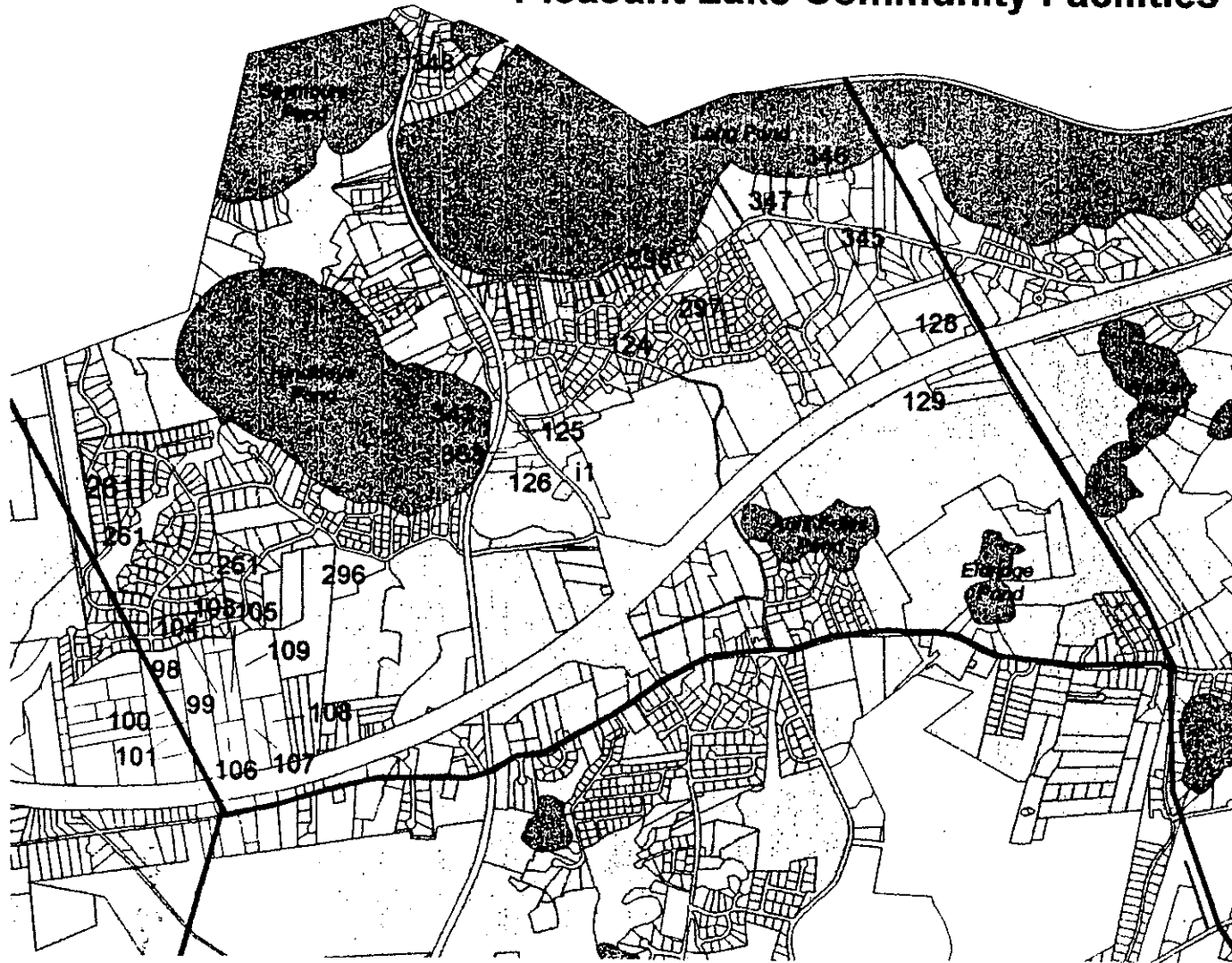


- Inset
- Village Boundaries
- Community Facilities
- Ponds



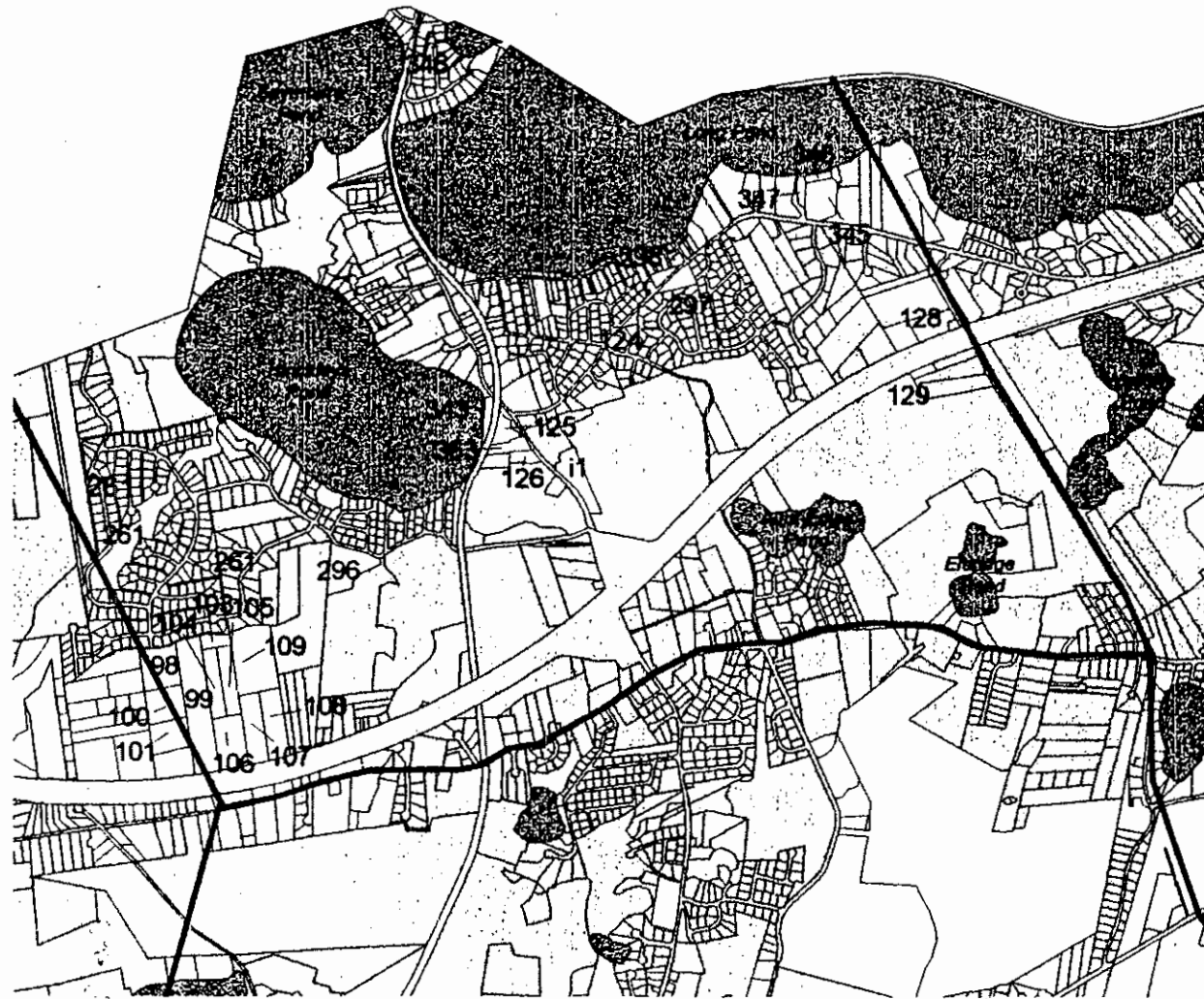
Source: Compiled by the Harwich Planning Department: July, 1999.

Pleasant Lake Community Facilities



-  Village Boundaries
-  Community Facilities
-  Ponds

Pleasant Lake Community Facilities

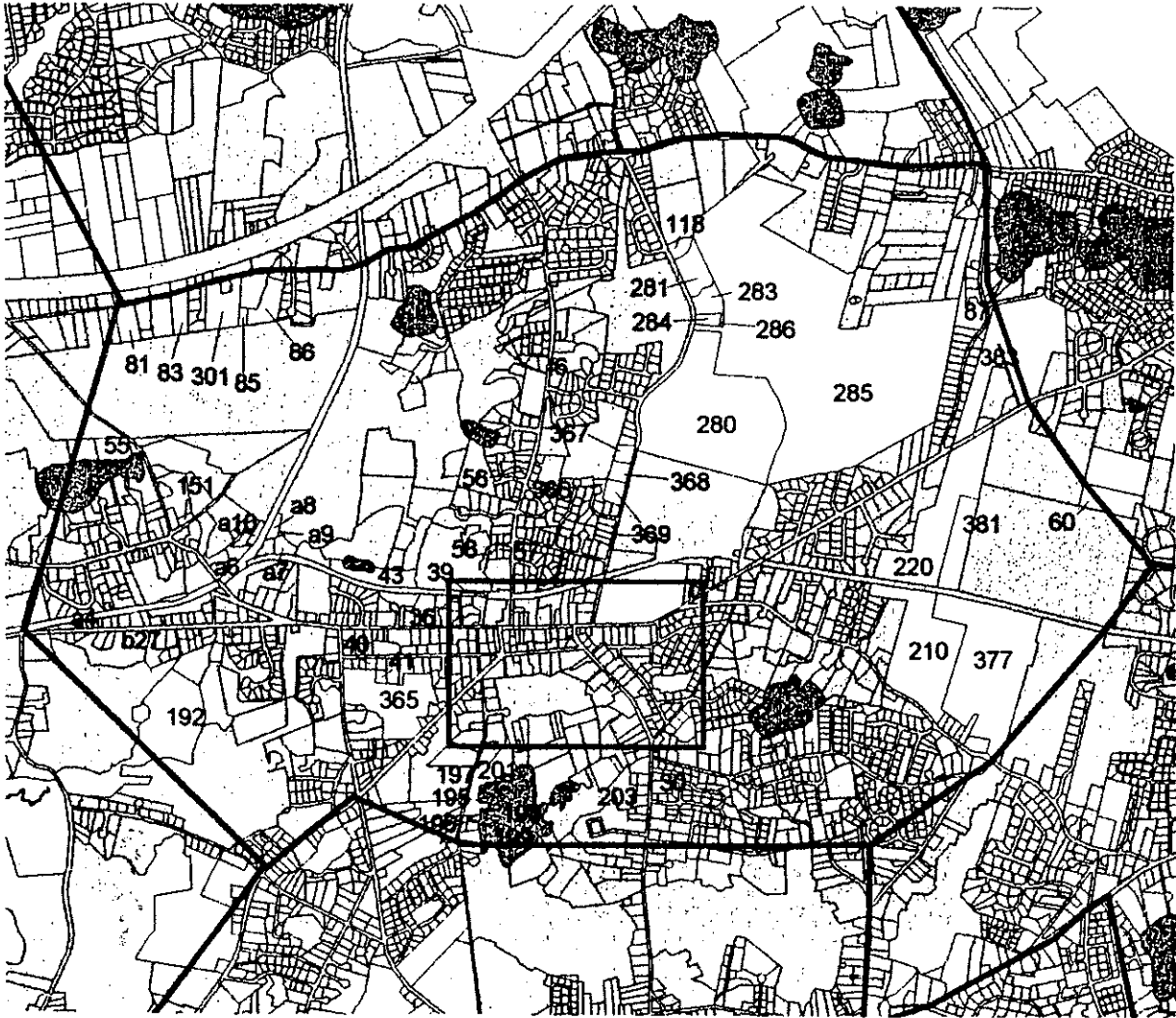


-  Village Boundaries
-  Community Facilities
-  Ponds



Source: Compiled by the Harwich Planning Department: July, 1999.

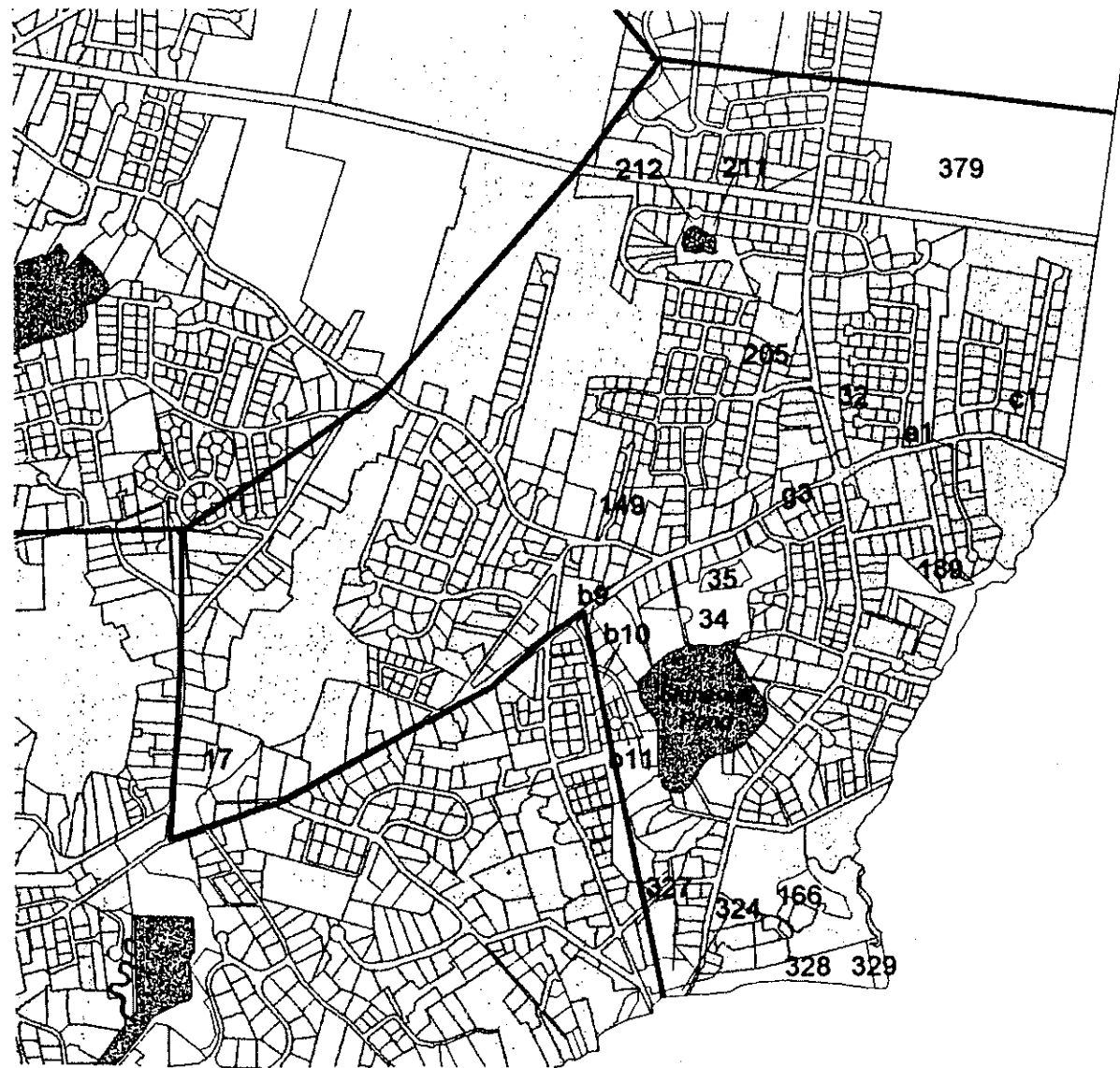
Harwich Center Community Facilities



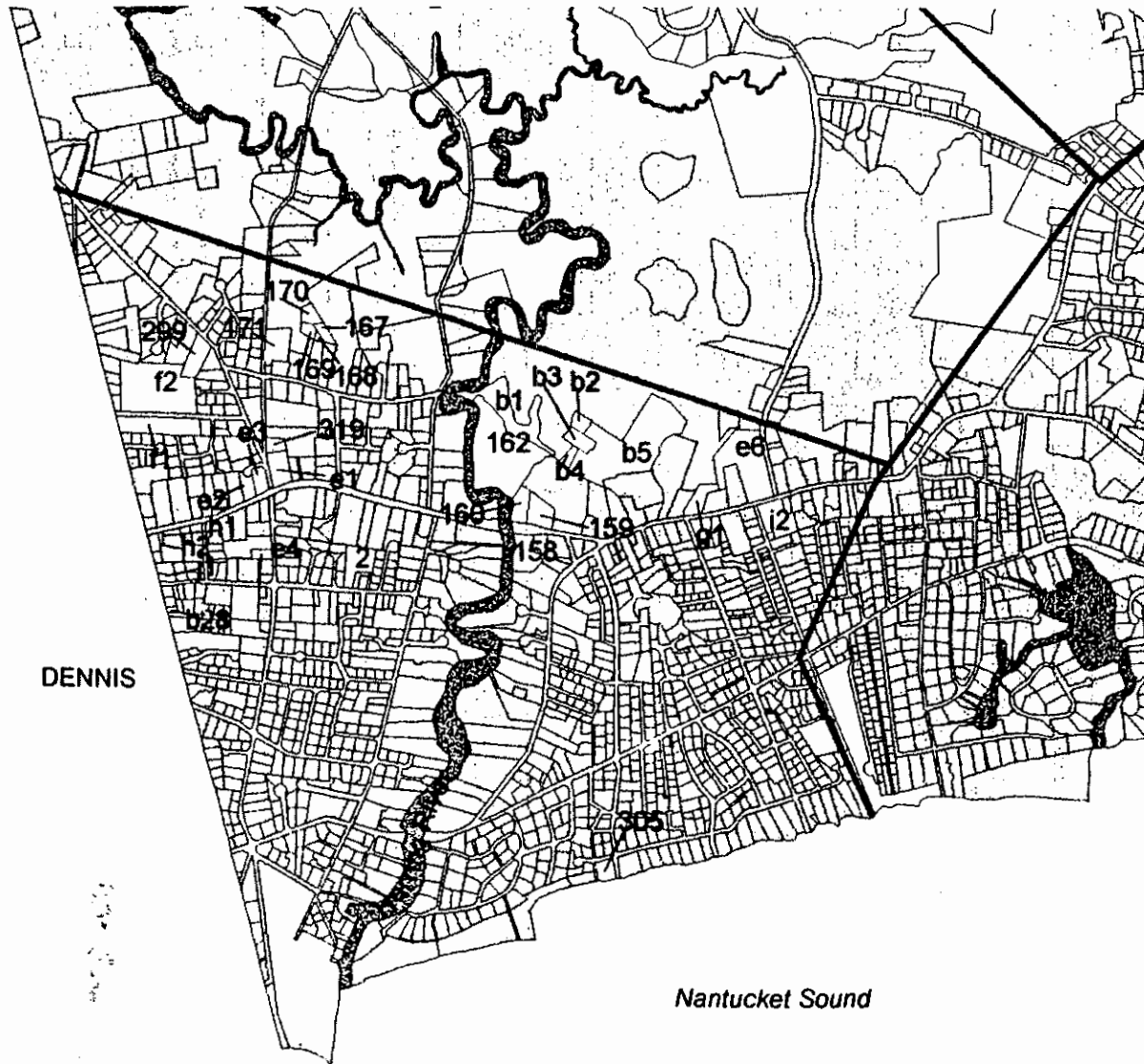
-  Inset
-  Village Boundaries
-  Community Facilities
-  Ponds



South Harwich Community Facilities



West Harwich Community Facilities



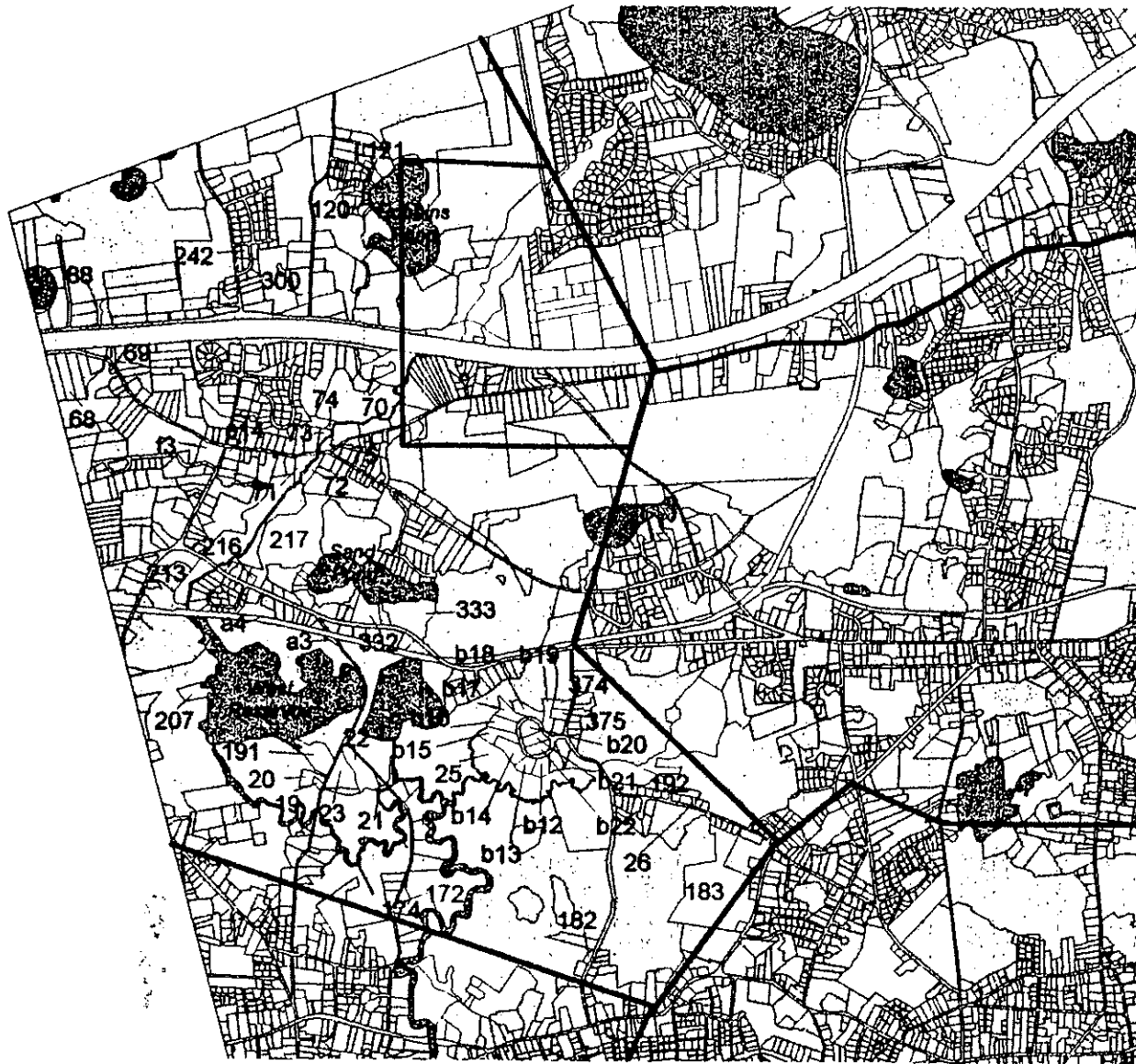
DENNIS

Nantucket Sound

-  Village Boundaries
-  Community Facilities
-  Ponds



North Harwich Community Facilities



-  Inset
-  Village Boundaries
-  Community Facilities
-  Ponds



TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

DEPT BOARD OF SELECT- MEN	#	FACILITY	LOCATION	VIL	MAP #	PCL #	AREA	BLDGS	FL AR
	1	Bank Street Beach	Bank Street	HP	7	J2-1	0.42	No	0
	2	Land	70 Willow Street	WH	10	X3	1.81	No	0
	3	Land	Lower County Road	HP	13	P1-3A	0.02	No	0
	4	Land	Rt 28 & Neel Road	HP	15	H5	0.18	No	0
	5	Land	Saquatucket Drive	HP	15	K6-6	0.17	No	0
	6	Land	Saquatucket Drive	HP	15	K6-7	0.07	No	0
	7	Land	Saquatucket Drive	HP	15	K6-8	0.49	No	0
	8	Land	Julien Road	HP	16	C3	0.03	No	0
	9	Land	Saquatucket Bluffs Rd	HP	16	N1-23A	0.33	No	0
	10	Land	Cranberry Lane	HP	16	W4-1	0.61	No	0
	11	Land	Julien Road	HP	16	W6-A	1.33	No	0
	12	Land	Julien Road	HP	16	W6	0.3	No	0
	13	Land	Julien Road	HP	16	W5	0.3	No	0
	14	Land	Julien Road	HP	16	W8	0.3	No	0
	15	Land	109 Sisson Road	HP	21	E4-2	0.54	No	0
	16	Land	Off Gorham Road	HP	23	C2	4.5	No	0
	17	Land	Hoyt Road Off	HP	24	S6-1	1.5	No	0
	18	Land	Lake Street	SH	25	L3	7.98	No	0
	19	Land	142 Bell's Neck Road	NH	27	M1-A	0.49	No	0
	20	Land	146 Bell's Neck Road	NH	27	M1	1.3	No	0
	21	Land	North Road	NH	28	C4	0.83	No	0
	22	Land	North Road	NH	28	C5	4.53	No	0
	23	Land	Bells Neck & North Rd	NH	28	C6	4	No	0
	24	Land	Bells Neck & North Rd	NH	28	C7	1.8	No	0
	25	Land	Coy Brook	NH	29	M8	21.18	No	0
	26	Land	Gilbert Lane off	NH	30	A3	0.52	No	0
	27	Land	Sisson Road off	HP	30	S4	4.96	No	0
	28	Land	Bank Street rear	HC	32	R7-A	2.48	No	0
	29	Land	Bank Street	HC	32	R7-B	0.45	No	0
	30	Land	Bank Street	HC	32	F1-7	0.21	No	0
	31	Land	272 Chatham Road	HC	34	N2-5	0.94	No	0
	32	Land	Arrowhead Drive	SH	34	K1-3A	0.08	No	0
	33	Land	270 Chatham Road	SH	34	N3-1	0.17	No	0
	34	Land	Route 28	SH	34	V1-D	0.43	No	0
	35	Land	Off Route 28	SH	34	V6	1.41	No	0
	36	Land	Island Pond Road	HC	40	H5	0.18	No	0
	37	Land	Forest Street	HC	40	J7	0.36	No	0
	38	Land	690 Main Street	HC	40	K3	0.26	No	0
	39	Land	Island Pond Road	HC	40	K3-A	0.36	No	0
	40	Land	13 Parallel Street	HC	40	R1	0.48	No	0
	41	Land	23 Parallel Street	HC	40	S7-1	0.6	No	0
	42	Land	Island Pond Road off	HC	40	V1	5.48	No	0
	43	Land	Island Pond Road off	HC	40	V2	7.05	No	0
	44	Land	Parallel Street	HC	40	W6-8	0.13	No	0
	45	Land	75 Parallel Street	HC	40	W6	0.48	No	0
	46	Land	Old Colony Road off	HC	41	C3-2	0.41	No	0
	47	Land	Old Colony Road	HC	41	C4-C	0.26	No	0
	48	Town Hall	732 Main Street	HC	41	C5	0.7	Yes	1515'
	49	Land	Great Western Road	NH	45	S2-1	4.04	No	0
	50	Land	3 Great Western Rd	NH	45	S4-1	0.55	No	0
	51	Land	7 Great Western Rd	NH	45	S4-2	0.56	No	0
	52	Land	11 Great Western Rd	NH	45	S4-3	0.56	No	0
	53	Land	15 Great Western Rd	NH	45	S4-4	0.56	No	0
	54	Land	21 Great Western Rd	NH	45	S4-5	0.5	No	0
	55	Land	Great Western Road	NH	45	S4-6	1.59	No	0
	56	Land	Flax Pond	NH	48	K1	1.61	No	0
	57	Land	Pleasant Lake Avenue	HC	49	W5	0.14	No	0
	58	Land	5 Dexter Road	HC	49	X1-4	0.31	No	0
	59	Land	3 Dexter Road	HC	49	X1-6	0.29	No	0
	60	Land	Off Oak Street	HC	50	C2	13.76	No	0
	61	Land	Off Dundee Circle	EH	52	N1-10	6.22	No	0
	62	Land	Off Dundee Circle	EH	52	N1-11	9.82	No	0
	63	Land	Driftwood Lane	EH	53	A5-1	0.42	No	0
	64	Land	Driftwood Lane	EH	53	A5-2	0.34	No	0
	65	Land	Driftwood Lane	EH	53	A5-3	0.4	No	0

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

DEPT	#	FACILITY	LOCATION	VIL	MAP #	PCL #	AREA	BLDGS	FL AR
BOARD OF OF SELECT- MEN	66	Land	Driftwood Lane	EH	53	A5-4	0.4	No	0
	67	Land	Driftwood Lane	EH	53	A5-5	0.2	No	0
	68	Land	Driftwood Lane	EH	53	A5-6	0.23	No	0
	69	Land	Driftwood Lane	EH	53	A5-7	0.22	No	0
	70	Land	Driftwood Lane	EH	53	A5-8	0.2	No	0
	71	Land	Driftwood Lane	EH	53	G6	6.2	No	0
	72	Land	Driftwood Circle	EH	53	N1-6	7.5	No	0
	73	Land	Driftwood Lane	EH	53	G5	3	No	0
	74	Town Forest	Depot Road	EH	53	H3	123.5	No	0
	75	Land	Community Way	EH	53	E1	4.83	No	0
	76	Land	138 Depot Road	EH	53	F15	0.17	No	0
	77	Land	Off Driftwood Lane	EH	53	G3-1	11.7	No	0
	78	Land	Off Depot Road	EH	53	H1	6.3	No	0
	79	Land	175 Depot Road	EH	53	H2	0.41	No	0
	80	Land	Main Street	NH	55	G9	2.9	No	0
	81	Land	Main Street	NH	55	E2	0.2	No	0
	82	Land	Bog Lane	NH	56	M3	8.5	No	0
	83	Land	195 Main Street	NH	56	T1	1.58	No	0
	84	Land	199 Main Street	NH	56	T2	1.59	No	0
	85	Land	218 Main Street	NH	56	T4-C	0.89	No	0
	86	Land	Off Main Street	NH	56	T4-D	0.34	No	0
	87	Land	220 Main Street	NH	56	Z2	0.86	No	0
	88	Land	172 Queen Anne Rd	NH	58	K1-3	0.68	No	0
	89	Land	178 Queen Anne Rd	NH	58	K1-4	0.79	No	0
	90	Land	246 Queen Anne Rd	NH	58	K6	1.88	No	0
	91	Land	209 Queen Anne Rd	HC	58	N1	1.15	No	0
	92	Land	213 Queen Anne Rd	HC	58	N2	1.16	No	0
	93	Land	222 Queen Anne Rd	HC	58	N3	3.22	No	0
	94	Land	Queen Anne Road	HC	58	N5	0.54	No	0
	95	Land	243 Queen Anne Rd	HC	58	N6-2	2.62	No	0
	96	Land	251 Queen Anne Rd	HC	58	N7-2	3.27	No	0
	97	Land	Queen Anne Road	PL	58	K6	1	No	0
	98	Land	Queen Anne Road	PL	58	K7	0.79	No	0
	99	Land	Queen Anne Road	HC	59	R3	0.61	No	0
	100	Land	Queen Anne Road	HC	59	R4	6	No	0
	101	Land	John Joseph Road	HC	62	P18	3.76	No	0
	102	Land	Mid-Cape Highway	NH	65	N3	0.68	No	0
	103	Land	Factory Road	NH	67	T1-1	2.69	No	0
	104	Land	Factory Road	NH	67	T1-2	1.05	No	0
	105	Land	Mid-Cape Highway	NH	67	T2	0.5	No	0
	106	Land	Mid-Cape Highway	NH	67	T4	0.5	No	0
	107	Land	Mid-Cape Highway	NH	67	T5	0.8	No	0
	108	Land	Mid-Cape Highway	NH	67	T6	0.8	No	0
	109	Land	Mid-Cape Highway	NH	67	T8	0.1	No	0
	110	Land	Mid-Cape Highway	NH	67	T9	2	No	0
	111	Land	Mid-Cape Highway	NH	67	T10	1.1	No	0
	112	Land	Off Mid-Cape Highway	NH	68	E2	5.17	No	0
	113	Land	Mid-Cape Highway	PL	68	E3	11.3	No	0
	114	Land	Off Mid-Cape Highway	NH	68	E4	4.4	No	0
	115	Land	Rear Mid-Cape Hwy	NH	68	E5	4.4	No	0
	116	Land	Off Mid-Cape Highway	NH	68	E6	3.4	No	0
	117	Land	Off Mid-Cape Highway	PL	68	E7	1.9	No	0
	118	Land	Off Mid-Cape Highway	PL	68	E8	3.6	No	0
	119	Land	Off Mid-Cape Highway	PL	68	E9	3.7	No	0
	120	Land	Off Mid-Cape Highway	PL	68	E10	5.5	No	0
	121	Land	Off Mid-Cape Highway	PL	68	E11	5.7	No	0
	122	Land	Off Mid-Cape Highway	PL	68	E12	5.3	No	0
	123	Land	Off Mid-Cape Highway	PL	68	E13	10.3	No	0
	124	Land	Mid-Cape Highway	PL	68	F2	1.9	No	0
	125	Land	Mid-Cape Highway	PL	68	F3	1.1	No	0
	126	Land	Mid-Cape Highway	PL	68	F4	0.8	No	0
	127	Land	Mid-Cape Highway	PL	68	F5	0.8	No	0
	128	Land	Mid-Cape Highway	PL	68	F6	3.7	No	0
	129	Land	Mid-Cape Highway	PL	68	F7	3.8	No	0
	130	Land	Mid-Cape Highway	PL	68	F8	6.5	No	0

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

<u>DEPT</u>	<u>#</u>	<u>FACILITY</u>	<u>LOCATION</u>	<u>VIL</u>	<u>MAP #</u>	<u>PCL #</u>	<u>AREA</u>	<u>BLDGS</u>	<u>FL AR</u>	
BOARD OF SELECT- MEN	131	Land	Mid-Cape Highway	PL	66	F8	7.2	No	0	
	132	Land	Oak Street	HC	71	A1-4	1.08	No	0	
	133	Land	6 Holmes Road	EH	74	S6-15	0.17	No	0	
	134	Land	15 Cahoon Road	NH	78	B7	0.12	No	0	
	135	Land	Shore Drive	NH	78	C27	0.17	No	0	
	136	Land	13 Haromar Heath	EH	85	S102	0.25	No	0	
	137	Land	Headwaters Drive	PL	89	Z1	19.41	No	0	
	138	Land	Cottonwood Road	PL	92	H5-A	0.44	No	0	
	139	Land	Pleasant Lake Ave	PL	92	P2	1.92	No	0	
	140	Land	Pleasant Lake Ave	PL	92	P4	1.17	No	0	
	141	Land	Pleasant Lake Avenue	PL	92	R2-A	0.01	No	0	
	142	Land	Mid-Cape off	PL	93	J1-1	2.39	No	0	
	143	Land	Mid-Cape off	PL	93	J1-2	0.81	No	0	
	144	Land	140 Bay Road	EH	98	T7	4.08	No	0	
	145	Land	29 Cedardale Road	PL	102	R1-2	0.45	No	0	
	146	Land	30 Cedardale Road	PL	102	R1-3	0.45	No	0	
	147	Land	28 Cedardale Road	PL	102	R1-4	0.52	No	0	
	148	Land	Cedardale Road	PL	102	R1-5	4.03	No	0	
	149	Land	Winslow Drive	EH	105	R1-11	0.93	No	0	
	150	Land	Winslow Drive	EH	105	R1-12	0.93	No	0	
	151	Land	Winslow Drive	EH	105	R1-13	0.92	No	0	
	152	Land	Off Route 137	EH	107	E4-B	0.16	No	0	
	153	Land	Kendrick Road	EH	108	Y1	3.19	No	0	
	154	Land	215 Pleasant Bay Rd	EH	113	X5	0.61	No	0	
	155	Land	6 Cove Landing Road	EH	115	R3	0.15	No	0	
			Land	Off Depot Street	NH	?	?	1	No	0
			Land	Unknown	?	?	?	1.5	No	0
			Land	Halls Island	WH	?	?	1	No	0
			Land	Coy Brook	NH	?	?	1	No	0
			Land	Off Main Street	NH	?	?	0.25	No	0
			Land	Unknown	?	?	?	0.2	No	0
			Land	Unknown	?	?	?	1	No	0
			Land	Herring River	NH	?	?	8.5	No	0
			Land	Sand Pond	NH	?	?	2.25	No	0
			Land	Pleasant Lake Ave	HC	?	?	0.14	No	0
		Land	Unknown	?	?	?	0.76	No	0	
		Land	Lothrop Avenue	NH	?	?	31	No	0	
		Land	Unknown	?	?	?	10	No	0	
		Land	Off Deep Hole Road	SH	?	?	0.26	No	0	
		Land	Off Bell's Neck Road	NH	?	?	5	No	0	
		Land	Island Pond	HC	?	?	0.34	No	0	
		Land	Island Pond	HC	?	?	1	No	0	
		Land	Island Pond	HC	?	?	1	No	0	
		Land	Unknown	?	?	?	2	No	0	
		Land	Unknown	?	?	?	1	No	0	
		Land	Unknown	?	?	?	1	No	0	
		Land	Island Pond	HC	?	?	0.27	No	0	
		Land	Unknown	?	?	?	0.5	No	0	
		Land	Unknown	?	?	?	1	No	0	
		Land	Unknown	?	?	?	1	No	0	
		Land	Island Pond	HC	?	?	0.3	No	0	
		Land	Smith Street	WH	?	?	1.5	No	0	
		Land	Herring River	WH	?	?	3	No	0	
		Land	Off Queen Anne Rd	?	?	?	1	No	0	
		Land	Nickerson Neck	?	?	?	0.3	No	0	
		Land	Nickerson Neck	?	?	?	0.19	No	0	
		Land	Nickerson Neck	?	?	?	0.5	No	0	
BOLT AND BROOKS FREE LIB.	156	Brooks Free Lib.	735 Main Street	HC	41	E1	0.12	Yes	18000	
	157	Brooks Free Lib.	739 Main Street	HC	41	E2	0.13	Yes		
	158	Land	741 Main Street	HC	41	S1-1	0.24	No	0	
	159	Land	335 Bank Street	HC	41	S10-1	0.24	No	0	
BROOKS ACADMY	160	Brooks Aca & Pkg	80 Parallel Street	HC	40	J9	0.66	Yes	6000	
	161	Museum Parking	Parallel Street	HC	40	J8	0.28	No	0	

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

DEPT	#	FACILITY	LOCATION	VIL	MAP #	PCL #	AREA	BLDGS	FL AR
CEMETRY COMM.	162	Mt. Pleasant Cem	95 South Street	HP	22	H1	9.36	Cem Grge	875
	163	SH Cem	Chatham Road	SH	34	N3	2.23	No	0
	164	Island Pond Cem	Main Street/Island Pd	HC	40	V3	16.31	No	0
	165	Kelley Street Cem	North Main Street	NH	48	T1-2	0.43	No	0
	166	Land	Queen Anne Road	EH	73	F1-76	0.58	No	0
	167	Evergreen Cemetery	Cemetery Road	EH	75	A4	0.21	No	0
	168	Evergreen Cemetery	Cemetery Road	EH	75	A5	9.24	No	0
	169	Evergreen Cemetery	Cemetery Road	EH	75	A6	1.87	No	0
	170	Old Meth Cem	Queen Anne Road	EH	75	G3	0.5	No	0
	171	Land	Orleans Road	EH	86	M2-A	7.31	No	0
CONSERV COMM.	172	Frances Gray Merkel	Snow Inn Rd Beach	HP	8	N5-B	3.55	No	0
	173	Peggy O'Hanian	157 Route 28	WH	11	S1-A	1.67	No	0
	174	Route 28	154-160 Route 28	WH	11	T2	1.32	No	0
	175	Richard Bush	Route 28	WH	11	T9	0.92	No	0
	176	Bowman's Island	Route 28	WH	11	C9-5	0.5	No	0
	177	Bowman's Island	Route 28	WH	11	C9-8	6.53	No	0
	178	Elton Yasuna	7 Cranberry Way	SH	16	W4-10	0.28	No	0
	179	Land	1 Cranberry Way	SH	16	W4-11	0.61	No	0
	180	Josephine Jenkins	23 Walther Road	HP	16	T6	0.9	No	0
	181	Hillary LeClaire	Bobwhite Lane	SH	17	G3-2	2.36	No	0
	182	Frederick Cobb	Off Bells Neck Road	WH	18	K7	0.42	No	0
	183	Frederick Cobb	Off Bells Neck Road	WH	18	K8	0.1	No	0
	184	Frederick Cobb	Off Bells Neck Road	WH	18	K9	0.33	No	0
	185	Frederick Cobb	Off Bells Neck Road	WH	18	K10	0.5	No	0
	186	Evelyn Spear	41 Bell's Neck Road	WH	18	X5	1.95	Yes	1200
	187	Great Marsh	Off North Road	NH	19	M6	4	No	0
	188	Catherine Hudson	North Road	WH	19	M4	3	No	0
	189	Land	Lothrop Avenue	NH	20	A3	0.7	No	0
	190	Land	Lothrop Avenue	NH	20	A5	2.8	No	0
	191	Land	Lothrop Avenue	NH	20	A6	0.75	No	0
	192	Land	Lothrop Avenue	NH	20	A7	0.37	No	0
	193	Land	Lothrop Avenue	NH	20	A8	0.31	No	0
	194	Land	Lothrop Avenue	NH	20	A9	0.8	No	0
	195	Land	Lothrop Avenue	NH	20	A10	0.78	No	0
	196	Land	Lothrop Avenue	NH	20	A11	0.52	No	0
	197	Land	Lothrop Avenue	NH	20	A22	0.67	No	0
	198	Kline-Berry Patch Farm	50 Sisson Road	HP	21	D2-1	28.4	No	0
	199	Land	Forest Street	HP	22	S4	2.3	No	0
	200	Land	87 Forest Street	HP	22	S6	0.7	No	0
	201	Land	99 Forest Street	HP	22	S8	2.1	No	0
	202	Land	101 Forest Street	HP	22	S9	0.82	No	0
	203	James Marceline	105 Forest Street	HP	22	S10	0.34	No	0
	204	Harold McKenna	Off Uncle Venies Rd	SH	26	P7-18	6.35	No	0
	205	Everett Sahrback	South Chatham Rd	SH	26	L1-1	0.78	No	0
206	Raymond Thacher	Bells Neck Road	NH	27	M2	4.41	No	0	
207	Coy Brook Bogs	Lothrop Avenue	NH	29	M7	27.9	No	0	
208	Land	Lothrop Avenue	NH	29	A3	0.73	No	0	
209	Land	Lothrop Avenue	NH	29	A4	0.47	No	0	
210	Ashael Drake - Land	Forest Street	HC	31	D11	1.4	No	0	
211	Land	135 Forest Street	HC	31	D12	0.3	No	0	
212	Land	Forest Street	HC	31	D12-A	0.18	No	0	
213	Land	127 Forest Street	HC	31	D14	0.98	No	0	
214	Land	117 Forest Street	HC	31	D15	0.7	No	0	
215	Land	113 Forest Street	HC	31	D17	0.32	No	0	
216	Dwight Sleeper	Forest Street	HP	31	G1	4	No	0	
217	Anna Allison	127 Forest Street	HP	31	D14	0.98	No	0	
218	Anna Allison	117 Forest Street	HP	31	D15	0.7	No	0	
219	Anna Allison	113 Forest Street	HP	31	D17	0.32	No	0	
220	Land	Off Bank Street	HP	31	P3	0.21	No	0	
221	Land	Off Bank Street	HP	31	P6	2.49	No	0	
222	Land	Off Bank Street	HP	32	B8	0.18	No	0	
223	Land	17 Packet Way	SH	34	S1-71	0.25	No	0	
224	Guida	Herring River	NH	36	M3	184.84	No	0	

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

DEPT	#	FACILITY	LOCATION	VIL	MAP #	PCL #	AREA	BLDGS	FL
CONSERV	225	Land	Off Depot Street	NH	36	M2	2.84	No	0
COMM.	226	Land	Bells Neck Road	NH	37	C10	55.76	No	0
	227	Raymond Sprinkle	Bank Street	HC	41	N8	1.69	No	0
	228	Thompson's Field	Chatham Road	HC	42	C2	29.5	No	0
	229	Tod Lee	26 Martha's Lane	SH	44	N1-15	0.42	No	0
	230	Land	30 Martha's Lane	SH	44	N1-16	0.46	No	0
	231	John Hall/Gonsalves	Great Western Road	NH	45	K	20	No	0
	232	Joseph Curtis	Great Western Road	NH	45	T2	4	No	0
	233	Land	Great Western Road	NH	45	T1	22.05	No	0
	234	Land	Care's Way	NH	46	E2-12	8.55	No	0
	235	Land	Great Western Road	NH	46	H1-2	0.69	No	0
	236	Land	Great Western Road	NH	46	H1-3	22.28	No	0
	237	Lawrence Washburn	Bog-Kelley Street	NH	48	XX-89	15.56	No	0
	238	Phillips	Island Pond	HC	49		1.33	No	0
	239	Geneva Cahoon	Swamp/Island Pond	HC	49	A3	0.25	No	0
	240	Laurie Hake	Dexter Avenue	HC	49	X14-X16	0.6	No	0
	241	Thompson's Field	Orleans Road	HC	51	A1	28.04	No	0
	242	Dorothy Small	Depot Road	EH	53	H1	7	No	0
	243	Victor Ryder	Herring River	NH	56	T4A-T5	2.09	No	0
	244	Land	Depot Road	EH	63	J1	1.41	No	0
	245	Land	Orleans Road	EH	63	J2	4.59	No	0
	246	Land	Depot Road	EH	63	J3	17.35	No	0
	247	Land	Off Depot Road	EH	63	J4	2.7	No	0
	248	Land	Depot Road	EH	63	J6	2.06	No	0
	249	Land	Off Depot Road	EH	63	N1-7	9.3	No	0
	250	Land	Off Little Lane	EH	63	N1-8	6.4	No	0
	251	Land	Orleans Road	EH	63	P2-7	0.9	No	0
	252	Land	Belmont Gardens	NH	65	A4-31	0.06	No	0
	253	Land	Belmont Gardens	NH	65	A4-36	0.8	No	0
	254	Land	Belmont Gardens	NH	65	A4-56	0.68	No	0
	255	Land	Belmont Gardens	NH	65	A4-78	0.29	No	0
	256	Northridge Estates	7 Rose Lane	NH	66	A14	0.35	No	0
	257	Northridge Estates	3 Rose Lane	NH	66	A15	0.42	No	0
	258	Land	Belmont Gardens	NH	66	A1-1	1.6	No	0
	259	Land	Belmont Gardens	NH	66	A1-32	0.17	No	0
	260	Land	Belmont Gardens	NH	66	A1-101	0.17	No	0
	261	Land	Belmont Gardens	NH	66	A2-9	0.34	No	0
	262	Land	Belmont Gardens	NH	66	A2-17	0.57	No	0
	263	Land	Belmont Gardens	NH	66	A2-44	1.37	No	0
	264	Land	Belmont Gardens	NH	66	A3-9	0.29	No	0
	265	Land	Belmont Gardens	NH	66	A3-18	1.2	No	0
	266	Land	Belmont Gardens	NH	66	A3-43	0.86	No	0
	267	Land	Belmont Gardens	NH	66	A3-62	0.35	No	0
	268	Herring River	Robbins Pond Area	NH	67	S1	2.31	No	0
	269	Herring River	Robbins Pond Area	NH	67	S2	2.13	No	0
	270	Herring River	Robbins Pond Area	NH	67	S3	10.88	No	0
	271	Herring River	Robbins Pond Area	NH	67	S4	11.99	No	0
	272	Calvin Josselyn	33 Lakeside Terrace	EH	72	W284	0.23	No	0
	273	Calvin Josselyn	29 Lakeside Terrace	EH	72	W285	0.25	No	0
	274	Calvin Josselyn	25 Lakeside Terrace	EH	72	W286	0.35	No	0
	275	Wales Road	15 Wales Road	EH	73	F1-78	0.3	No	0
	276	Land	832 Queen Anne Rd	EH	73	F1-13	0.24	No	0
	277	Timothy Lynch	White Pond	NH	77	N5-1	8.66	No	0
	278	Land	Belmont Gardens	NH	78	A1-38	0.3	No	0
	279	Land	Belmont Gardens	NH	78	A1-45	0.4	No	0
	280	Land	Belmont Gardens	NH	78	A1-54-57	0.23	No	0
	281	Land	Belmont Gardens	NH	78	A1-62	0.2	No	0
	282	Land	Belmont Gardens	NH	78	A2-29	0.46	No	0
	283	Oliver's Pond	Hawksnest Road	EH	85	T3	44	No	0
	284	Sentry Bank	Greenbelt/Headwaters	PL	90	A1	20.2	No	0
	285	Spero Theoharidis	Route 28/Muddy Crk	EH	99	V1-2	0.09	No	0
	286	Land	Spruce Road	EH	105	C1-1A	0.92	No	0
	287	Land	Spruce Road	EH	105	C1-2A	0.92	No	0
	288	Land	Spruce Road	EH	105	C1-3A	0.94	No	0
	289	Land	Spruce Road	EH	105	C1-4A	0.92	No	0

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

DEPT	#	FACILITY	LOCATION	VIL	MAP #	PCL #	AREA	BLDGS	FL AR	
CONSERV COMM.	290	Land	Spruce Road	EH	105	C1-18	0.93	No	0	
	291	Land	Spruce Road	EH	105	C1-19	0.92	No	0	
	292	Land	Spruce Road	EH	105	C1-20	0.92	No	0	
	293	Land	Spruce Road	EH	105	C1-22	2.03	No	0	
	294	Land	Spruce Road	EH	105	C1-23	1.12	No	0	
	295	Land	Spruce Road	EH	105	C1-24	0.96	No	0	
	296	Land	Spruce Road	EH	105	C1-32	0.92	No	0	
	297	Land	Spruce Road	EH	105	C1-33	0.92	No	0	
	298	Land	47 Cahoon Road	EH	111	B1-6A	0.42	No	0	
			Bales	Great Western Road	NH	?	?	5	No	0
			Edmund Roderick	Cranberry Bog	NH	?	?	3.78	No	0
			Horton	Depot Street	NH	?	?	3.43	No	0
			Land	Halls Island	WH	?	?	2	No	0
			Land	Off Grassy Pond	HC	?	?	0.1	No	0
			Land	Unknown	?	?	?	0.12	No	0
	COA	299	Albro House	725 Main Street	HC	41	B8	1.38	Yes	1272
FIRE DEPT.	300	Fire Headquarters	175 Sisson Road	HC	31	H1-2	3.63	Yes	1960C	
	301	Old Highway Barn	175 Sisson Road	HC	31	H1-1		Yes	2600	
	302	Station 2	149 Route 137	EH	87	J1	3.68	Yes	1000C	
GOLF COMM.	303	Cranberry Valley GC	183 Oak Street	HC	61	A1	23.31	No	0	
	304	Land	183 Oak Street	HC	71	A1-3	6.53	No	0	
	305	Land	Oak Street	HC	71	A1-4	1.08	No	0	
	306	ComElec easement	183 Oak Street	HC	61	B1-A	1.58	No	0	
	307	ComElec easement	183 Oak Street	HC	61	B1-B	1.31	No	0	
	308	Cranberry Valley GC	183 Oak Street	HC	61	H1	184.5	Yes		
		Maintenance Building	183 Oak Street	HC	61	H1			4800	
		Pump House	183 Oak Street	HC	61	H1			144	
		Recovery well building	183 Oak Street	HC	61	H1			48	
		Chemical storage bldg	183 Oak Street	HC	61	H1			100	
		Administration building	183 Oak Street	HC	61	H1			1470	
		Restroom	183 Oak Street	HC	61	H1			432	
		Cart shed	183 Oak Street	HC	61	H1			1152	
	309	Starter building	183 Oak Street	HC	61	H1			100	
		Land	Oak Street	HC	61	H2	0.08	No	0	
HARBOR- MASTER/ NATURAL RES.	310	Saquatucket Harbor	715 Route 28	HP	15	T3	20.3	Yes	1500	
	311	Wychmere Harbor	44 Harbor Road	HP	15	U23	0.48	Yes	600	
	312	Allen Harbor Bulkhead	Lower County Road	HP	12	Y1-58-02	0.1	Yes		
	313	Allen Harbor	Lower County Road	HP	12	Y1-58A	0.21	No		
	314	Allen Harbor	343 Lower County Rd	HP	12	Y1-58B	0.45	No		
	315	Herring River Landing	Route 28	WH	11	S1-A	0.5	No	0	
	316	Round Cove	Cove Landing Road	EH	115	P2	0.35	No	0	
	317	Old Fire HQ Building	199 Bank Street	HP	23	B2	0.72	No	0	
	318	Old Fire HQ Building	Off Bank Street	HP	23	B2-1	0.66	No	0	
	319	Old Fire HQ Building	203 Bank Street	HP	23	B3	0.25	Yes	10000	
HARWICH HOUSING AUTH.	320	Family Housing	127 Headwaters Drive	PL	81	B2	5.4	Yes	12444	
	321	Family Housing	111 Long Pond Drive	PL	102	Q1-2	2.1	Yes	5984	
	322	Vacant Lot	102 Long Pond Drive	PL	102	Q1-1	0.78	No	0	
	323	Housing	66 Depot Road West	WH	18	V1	1.36	Yes	6532	
ECUMEN- ICAL COUNCIL	324	Land	Depot Road	NH	66	P2	2.07	No	0	
HIGHWAYS & MAINT.	325	Highway Maintenance	273 Queen Anne Rd	HC	58	N8	5.84	Yes	1680	
	326	Landfill	205 Queen Anne Rd	HC	58	M1	138.5	Yes		
		Transfer Station	205 Queen Anne Rd	HC	58	M1			2400	
		Scalehouse	205 Queen Anne Rd	HC	58	M1			64	
		Office/Equipment	205 Queen Anne Rd	HC	58	M1			1040	
		Storage Building	205 Queen Anne Rd	HC	58	M1			576	

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

<u>DEPT</u>	<u>#</u>	<u>FACILITY</u>	<u>LOCATION</u>	<u>VIL</u>	<u>MAP #</u>	<u>PCL #</u>	<u>AREA</u>	<u>BLDGS</u>	<u>FL A/c</u>
POLICE DEPT.	327	Police Station	183 Sisson Road	HC	31	H1-3	1.25	Yes	13525
REC. & YOUTH COMM.	328	Belmont Road Beach	Belmont Road	WH	1	A7-1	0.04	No	0
	329	Pleasant Road Beach	Pleasant Road	WH	2	B1-18	1.6	Yes	150
	330	Brooks Road Beach	Brooks Road	WH	5	K1-A19	0.3	No	0
	331	Earle Road Beach	Earle Road	WH	5	D3	6.5	No	0
	332	Earle Road Beach	Earle Road	WH	5	D6	0.13	No	0
	333	Grey Neck Road Beach	Grey Neck Road	WH	5		0.3	No	0
	334	WahWah Taysee Rd Bh	WahWah Taysee Rd	HP	6		0.3	No	0
	335	Atlantic Street Beach	Atlantic Street	HP	6B		0.25	No	0
	336	Wyndemere Bluffs Rd	Seabreeze Avenue	HP	6B	E2	1	No	0
	337	Zylpha Road Beach	Zylpha Road	HP	6B	H2-44	0.25	No	0
	338	Bank Street Beach	Bank Street	HP	7	J11	1.34	Restrooms	22
	339	Bank Street Beach	Bank Street	HP	7	F2-A	0.16	No	0
	340	Sea Street Beach	Sea Street	HP	7		0.3	No	0
	341	Merkel Beach	Snow Inn Road	HP	8	N5-B	3.55	No	0
	342	Neel Road Beach	Neel Road	SH	9		0.3	No	0
	343	Harwich Youth Center	5 Bells Neck Road	WH	10	G1	0.63	Yes	347
	345	Schoolhouse Pkg Lot	Route 28	HP	14	F3	1.13	No	0
	346	Schoolhouse Pkg Lot	550 Route 28	HP	14	F3-A	0.5	Restrooms	21
	347	Doane Park (Vil Green)	Rt 28 & Lower County	HP	14	R8	0.25	No	0
	348	Larsen Park	647 Route 28	HP	15	P5-B	1.12	No	0
	349	Land	Deep Hole Road	SH	17	N3-J	0.6	No	0
	350	Land	Off Deep Hole Road	SH	17	N3-K	0.33	No	0
	351	Land	Deep Hole Road	SH	17	N4	0.23	No	0
	352	Land	Deep Hole Road	SH	17	N6	2.19	No	0
	353	Red River Beach	Uncle Venies Road	SH	17	Z1-A	8.4	Restrooms	150
	354	Red River Beach	Uncle Venies Road	SH	17	Z1-B	1	No	0
	355	Red River Beach	Uncle Venies Road	SH	17	R2-6C	0.39	No	0
	356	Land	Uncle Venies Road	WH	17	R2-6G	0.14	No	0
	357	Sand Pond Beach	Great Western Road	NH	37	N2	2.5	Restrooms	216
	358	Sand Pond Beach	Great Western Road	NH	37	N5	4.86	Boathouse	120
	359	Recreation Building	265 Sisson Road	HC	40	Z5	1.11	Yes	440
	360	Brooks Park	Oak Street	HC	41	C6	18.02	Strge Shed	500
	361	Exchange Park	Routes 39 & 124	HC	41	B9	0.26	No	0
	362	HHS Recreation Area	off Oak Street	HC	41			No	0
	363	Whitehouse Field	off Oak Street	HC	50	E5	24	Press Box	240
	364	Whitehouse Field	off Oak Street	HC	50	E5		Shed	144
	365	Potter Softball Field HS	81 Oak Street	HC	50	S5 (por.)	3	No	0
	366	Soccer Field	behind Whthse Field	HC	60			No	0
	367	Great Sand Lakes	Clwtr & Frshwtr Drs	EH	63	BA-C		No	0
	368	Hinckleys Pond Beach	off Route 124	PL	91	K4	0.97	No	0
	369	Pleasant Bay Beach	Route 28	EH	99	G6-2	0.09	No	0
	370	Long Pond Beach	Long Pond Drive	PL	102	K1	3.16	Yes	150
	371	(Fernandez Bog)	Off Long Pond Drive	PL	102	K1-1	0.7	No	0
	372	(Fernandez Bog)	Off Long Pond Drive	PL	102	K1-2	0.89	No	0
	373	Seymours Pond Beach	Pleasant Lake Ave	PL	110	C2	0.1	No	0
	374	LP Beach Wixon Mem.	Cahoon Road	EH	111	B1	1.34	No	0
		Memorial Squares:							
	375	Carleton S. Francis, Jr.	Chase St & Low Cty	WH	4		0.1	No	0
	376	Clarence L. Barry	Depot Road West	WH	10	E4	0.01	No	0
	377	Lieut. Richard Rogers	Rt 28 & Chase St	WH	11		0.1	No	0
	378	Robert B. Megathlin	South St & Pleast St	HP	14		0.1	No	0
	379	Earl M. Chase	Sisson & Route 28	HP	21		0.08	No	0
	380	Ralph W. Saley	Bank St & Freeman	HP	23	Q1	0.02	No	0
	381	Donald H. Barrett	Sisson & Allen	HC	30		0.05	No	0
	382	Clifford Peters	Great Wtn & Main St	HC	39		0.1	No	0
	383	Harry B. Albro	75 Parallel Street	HC	40	W6-B	0.13	No	0
	384	Robert V. Paine	Sisson & Forest	HC	40		0.05	No	0
	385	Plum Hall	Great Wtn & Depot	NH	45		0.1	No	0
	386	Lieut. Thomas Haggerty	QA Rd & Route 39	EH	74			No	0
	387	Josiah Nickerson	Cemetery Rd & 137	EH	75		0.05	No	0
	388	Valmer H. Bassett	Route 124 & Long Pd	PL	92	P3	1.68	No	0
	389	Scott C. Nickerson	Rt 28 & Kendrick Rd	EH	115		0.1	No	0

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

<u>DEPT</u>	<u>#</u>	<u>FACILITY</u>	<u>LOCATION</u>	<u>VIL</u>	<u>MAP #</u>	<u>PCL #</u>	<u>AREA</u>	<u>BLDGS</u>	<u>FL AR</u>	
SCHOOL DEPT.	390	Elementary School	268 South Street	HC	40	T6	13.34	Yes	78965	
		Middle School	204 Sisson Road	HC	40	T6	0	Yes	74695	
	391	High School	81 Oak Street	HC	50	S5	49.58	Yes	85541	
	392	Land (Future Comm Ctr)	100 Oak Street	HC	50	T1	1.62	Yes	32000	
	393	Land (Future Comm Ctr)	Oak Street	HC	50	T2	1.4	Yes		
	394	Land (Future Comm Ctr)	Oak Street	HC	50	T3	1.28	Yes		
WATER DEPT. & WATER COMM.	395	Kildee Hill Tank	386 Route 28	HP	13	A3	0.3	No	0	
	396	Chatham Rd Wellfield	Chatham Road	HC	33	L3-1	1.85	Yes		
	397	Main Station	196 Chatham Road	HC	33	L3	20.7	Yes	2900	
	398	Land	Chatham Road	HC	33	L5	8.5	No	0	
			Garage (Main Station)	Main Street	HC	33	L3			2540
			Pipe Shed (Main Station)	Main Street	HC	33	L3			550
			Storage Building (M.S.)	Main Street	HC	33	L3			660
			Pumping Station #1	Main Street	HC	33	L3		Yes	238
			Pumping Station #2	Main Street	HC	33	L3		Yes	238
			Pumping Station #3	Main Street	HC	33	L3		Yes	238
			Pumping Station #4	Main Street	HC	33	L3		Yes	360
		399	Lothrop Avenue Tank	Lothrop Avenue	NH	38	M5-1	0.95	Yes-Tank	N/A
		400	Lothrop Avenue Tank	Lothrop Avenue	NH	38	M5-2	0.93		
		401	Brooks Park Tank	off Route 39	HC	41	C6			N/A
		402	Thompson's Field	Chatham Road	HC	43	C3	21.4	No	0
		403	Land	Off Chatham Road	HC	43	F2	1.34	No	0
		404	Holmes Forest Wellfid	off Depot Road	SH	44	H5	49	Yes	
			Pumping Station #5	off Depot Road	SH	44	H5		Yes	300
			Pumping Station #6	off Depot Road	SH	44	H5		Yes	300
			Pumping Station #7	off Depot Road	SH	44	H5		Yes	360
		405	Land	Depot Road	SH	44	H6	17.13	No	0
		406	Land	Off Orleans Road	HC	51	A4	8.59	No	0
		407	Route 39 Tank	Orleans Road	EH	62	W3	31.7	Yes-Tank	N/A
		408	Westgate Rd Wellfield	North Westgate Rd	NH	89	A5	72.14	No	0
		409	Bay Road Wellfield	Bay Road	EH	98	X2	19.5	Yes	
			Pumping Station #9	Bay Road	EH	98	X2		Yes	456
		410	Land	Spruce Road	EH	105	C1-5A	0.97	No	0
		411	Land	Spruce Road	EH	105	C1-6A	0.92	No	0
	WATER DEPT. & WATER COMM.	412	Land	Spruce Road	EH	105	C1-7	0.92	No	0
		413	Land	Spruce Road	EH	105	C1-8	0.92	No	0
		414	Land	Spruce Road	EH	105	C1-9	0.92	No	0
		415	Land	Spruce Road	EH	105	C1-10	0.92	No	0
		416	Land	Spruce Road	EH	105	C1-11	1.01	No	0
417		Land	Spruce Road	EH	105	C1-12	1.04	No	0	
418		Land	Spruce Road	EH	105	C1-13	0.92	No	0	
419		Land	Spruce Road	EH	105	C1-14	0.92	No	0	
420		Land	Spruce Road	EH	105	C1-15	0.92	No	0	
421		Land	Spruce Road	EH	105	C1-16	0.96	No	0	
422		Land	Spruce Road	EH	105	C1-17	0.92	No	0	
423		Land	Spruce Road	EH	105	C1-25	1.1	No	0	
424		Land	Spruce Road	EH	105	C1-26	1.29	No	0	
425		Land	Spruce Road	EH	105	C1-27	1.81	No	0	
426		Land	Spruce Road	EH	105	C1-28	1.33	No	0	
427		Land	Spruce Road	EH	105	C1-29	0.92	No	0	
428		Land	Spruce Road	EH	105	C1-30	0.92	No	0	
429		Land	Spruce Road	EH	105	C1-31	0.93	No	0	
430		Land	Spruce Road	EH	105	C1-34	1.91	No	0	
431		Land	Spruce Road	EH	105	C1-35	1.96	No	0	
432		Puritan Lane Wellfield	off Pleasant Bay Rd	EH	107	E1-A	26.54	No	0	
433		Pleasant Bay Wellfid	Pleasant Bay Road	EH	114	S5	38.86	No	0	
434		Old Colony RR Bed	Rt 39 - Chatham Line	HC/ SH			17	No	0	

TOWN OF HARWICH - COMMUNITY FACILITIES INVENTORY

<u>DEPT</u>	<u>#</u>	<u>FACILITY</u>	<u>LOCATION</u>	<u>VIL</u>	<u>MAP #</u>	<u>PCL #</u>	<u>AREA</u>	<u>BLDGS</u>	<u>FL</u>
		TOTAL	434 PARCELS				2259.79 ACRES		43
		Board of Selectmen	190 Parcels				559.08 Acres		1
		Bd of Lib Trustees	4 Parcels				0.73 Acres		1
		Brks Acad Comm	2 Parcels				0.94 Acres		
		Cem Comm	10 Parcels				48.04 Acres		
		Conservation Com.	136 Parcels				717.62 Acres		
		Council on Aging	1 Parcel				1.38 Acres		
		Ecumenical Council	1 Parcel				2.07 Acres		
		Fire Department	3 Parcels				7.31 Acres		3
		Golf Commission	15 Parcels				218.39 Acres		
		Hrbmstr/Nat Res.	10 Parcels				24.02 Acres		1
		Housing Authority	6 Parcels				9.64 Acres		2
		Highways & Maint.	2 Parcels				144.34 Acres		
		Police Department	1 Parcel				1.25 Acres		1
		Recreation & Youth	63 Parcels				96.9 Acres		1
		School Department	6 Parcels				67.22 Acres		27
		Water Department	52 Parcels				360.86 Acres		
		TOTAL	434 PARCELS				6715.95 ACRES		42

OTHER COMMUNITY FACILITIES IN THE TOWN OF HARWICH

<u>#</u>	<u>FAC. TYPE & NAME</u>	<u>ATTRIBUTE</u>	<u>LOCATION</u>	<u>VIL</u>	<u>MAP #</u>	<u>PCL #</u>	<u>AREA</u>	<u>BLDGS?</u>
	Open Space and Vacant Land							
A1	Commonwealth of MA	Land	1021 Route 28	SH	35	S1-4	0.54	No
A2		Land	493 Depot Street	NH	36	S5	0.25	No
A3		Land	Bells Neck Road	NH	37	C8	0.32	No
A4		Land	Bike Path	HC	39	K4	47.47	No
A5		Land	Depot Road	HC	39	K5	0.29	No
A6		Land	Main Street	HC	48	T14-1	0.87	No
A7		Land	Main Street	HC	48	W1-8	1.48	No
A8		Land	Main Street	HC	48	W1-9	0.76	No
A9		Land	Main Street	HC	48	W1-10	0.07	No
A10		Land	Main Street	HC	48	W1-11	0.81	No
A11		Land	Hawksnest	EH	85	T3	196.3	No
A12		Land	187 Hawksnest Road	EH	95	R1	12.41	No
A13		Land	201 Hawksnest Road	EH	95	T3	0.86	No
A14		Land	Hawksnest Road	EH	95	T3-1	29.5	No
A15		Land	Olivers Pond	EH	96	R1-20	1.01	No
A16		Land	Olivers Pond	EH	96	R1-21	0.94	No
A17		Land	Olivers Pond	EH	96	R1-22	0.93	No
A18		Land	Olivers Pond	EH	96	R1-23	0.92	No
A19		Land	Olivers Pond	EH	96	R1-24	0.92	No
A20		Land	Spruce Road	EH	104	K3	0.53	No
A21		Land	Spruce Road	EH	104	K4	0.53	No
A22		Land	247 Hawksnest Road	EH	104	K6	1.13	No
A23		Land	103 Spruce Road	EH	104	S3	0.4	No
A24		Land	Spruce Road	EH	104	S4	0.36	No
A25		Land	Hawksnest Pond	EH	104	W1-2	21.44	No
A26		Land	240 Hawksnest Road	EH	104	W2	0.89	No
A27		Land	Hawksnest Road	EH	104	W2-2	1.78	No
A28		Land	Hawksnest Road	EH	105	C1-21	0.96	No
A29		Land	Hawksnest Road	EH	105	C5	4.28	No
A30		Land	Winslow Drive	EH	105	R1-14	1.02	No
A31		Land	Winslow Drive	EH	105	R1-15	1	No
A32		Land	Winslow Drive	EH	105	R1-16	1.77	No
A33		Land	Olivers Pond Road	EH	105	R1-17	2.42	No
A34		Land	Olivers Pond Road	EH	105	R1-18	1.06	No
A35		Land	Olivers Pond Road	EH	105	R1-19	1.08	No
B1	Harwich Cons Trust	Land	Herring River	WH	11	C3	1.5	No
B2		Land	Herring River	WH	11	C4	1.5	No
B3		Land	Herring River	WH	11	C5	2	No
B4		Land	Herring River	WH	11	C6	0.75	No
B5		Land	Herring River	WH	11	C7	5.5	No
B6		Land	2 Hilltop Road	HP	22	A2-12	0.27	No
B7		Land	2 Gorham Court	HP	24	R3-4	0.54	No
B8		Land	878 Route 28	SH	25	C3-4	0.42	No
B9		Land	885 Route 28	SH	25	C3-5	0.46	No
B10		Land	28 Skinequit Road	SH	25	C3-9	0.66	No
B11		Land	24 Skinequit Road	SH	25	C3-10	0.63	No
B12		Land	Great Marsh Road	NH	29	M10-4	1.04	No
B13		Land	Great Marsh Road	NH	29	M10-5	1.05	No
B14		Land	Great Marsh Road	NH	29	M10-6	1.8	No
B15		Land	Great Marsh Road	NH	29	M10-7	1.75	No
B16		Land	Great Marsh Road	NH	29	M10-8	1.28	No
B17		Land	Great Marsh Road	NH	29	M10-9	1.35	No
B18		Land	Great Marsh Road	NH	29	M10-10	1.83	No
B19		Land	Great Marsh Road	NH	29	M10-11	1.81	No
B20		Land	Great Marsh Road	NH	29	M10-13	0.92	No
B21		Land	Great Marsh Road	NH	29	M10-14	0.92	No
B22		Land	Great Marsh Road	NH	29	M10-15	0.92	No

OTHER COMMUNITY FACILITIES IN THE TOWN OF HARWICH

#	FAC. TYPE & NAME	ATTRIBUTE	LOCATION	YIL	MAP #	PCL #	AREA	BLDGS?
B23	Harwich Cons Trust	Land	Lovers Lane	HC	32	G1-3	0.35	No
B24		Land	Lovers Lane	HC	32	G2	0.37	No
B25		Land	Lovers Lane	HC	32	G3	0.37	No
B26		Land	Off Lovers Lane	HC	32	G5	1.5	No
B27		Land	398 Great Western Rd	HC	39	B5	0.71	No
B28		Land	Off Lovers Lane	HC	41	W1	2.82	No
B29		Land	Lovers Lane	HC	41	W4	0.35	No
B30		Land	Federal Lane	EH	96	W3-B	10	No
B31		Land	226 Route 137	EH	96	W5-7	3.57	No
B32		Land	Winslow Drive	EH	105	C1-6	2	No
B33		Land	1660 Orleans Road	EH	107	E3	1	No
B34		Land	26 Mill Pond Road	EH	111	G1-3	0.29	No
		Land	Herring River	NH	?	?	0.5	No
C1	Town of Chatham	Land	Off Route 28	SH	35	E3	4.5	No
D1	Chatham Cons Foun	Land	Off Church Street	EH	88	J1	4.5	No
D2		Land	Off Church Street	EH	88	J2	4.5	No
D3		Land	2023 Route 28	EH	99	V1-1	0.95	No
D4		Land	2020 Route 28	EH	99	V1-5	2.24	No
D5		Land	2019 Route 28	EH	99	V1-7	1.9	No
<u>Churches</u>								
E1	First Baptist Church	Building & Land	62 Route 28	WH	10	G2	1.56	Yes
E2		Land	48 Route 28	WH	10	D4-1	0.71	No
E3		Thrift Shop	52 Route 28	WH	10	D4-2	0.74	Yes
E4		Building	180 Belmont Road	WH	10	T3-B	0.25	Yes
E5	Holy Trinity Catholic Ch.	Rectory	245 Route 28	WH	12	P1-A	2.29	Yes
E6		Church	240 Route 28	WH	12	B3	5.95	Yes
E7	Pilgrim Congregational	Church	527 Route 28	HP	14	P5	0.98	Yes
E8		Land	527 Route 28	HP	14	U5-2	0.06	
E9	Christian Scientist	Church	648 Route 28	HP	15	P5-A	0.94	Yes
E10		Building	560A Route 28	HP	14	S8	0.05	Yes
E11	First Congregational Church	Church	690 Main Street	HC	40	K3	2.79	Yes
		Cemetery	690 Main Street	HC	40	K3		
		Parish House	690 Main Street	HC	40	K3		
		Parking	Pleasant Lake Avenue	HC	40	K3		
E12		Church Office	697 Main Street	HC	40	Y1	0.48	Yes
E13		Thrift Store	701 Main Street	HC	40	Y4	0.21	Yes
E14	CC Bible Fellowship	Land	151 Main Street	NH	56	P9	1.1	No
E15	Methodist Episcopal Ch	Church	1138 Queen Anne Road	EH	75	W4	1.67	Yes
		Cemetery	1138 Queen Anne Road	EH	75	W4		Yes
E16	St. Peters Lutheran	Church	310 Route 137	EH	105	W3	2.07	Yes
E17		Land	Round Cove Road	EH	105	W1	1.59	No
E18		Land	Round Cove Road	EH	105	W2	1.57	No
E19		Land	318 Route 137	EH	105	W4	0.93	No
E20	Jehovah's Witness	Church	1599 Orleans Road	EH	107	W1	0.74	Yes
E21	Christ Ch Parish of HP	Building	671 Route 28	HP	15	S1	1.24	Yes
<u>Cemeteries</u>								
F1	Pine Grove Cemetery	Cemetery	Pine Grove Road	WH	10	B1	3.05	No

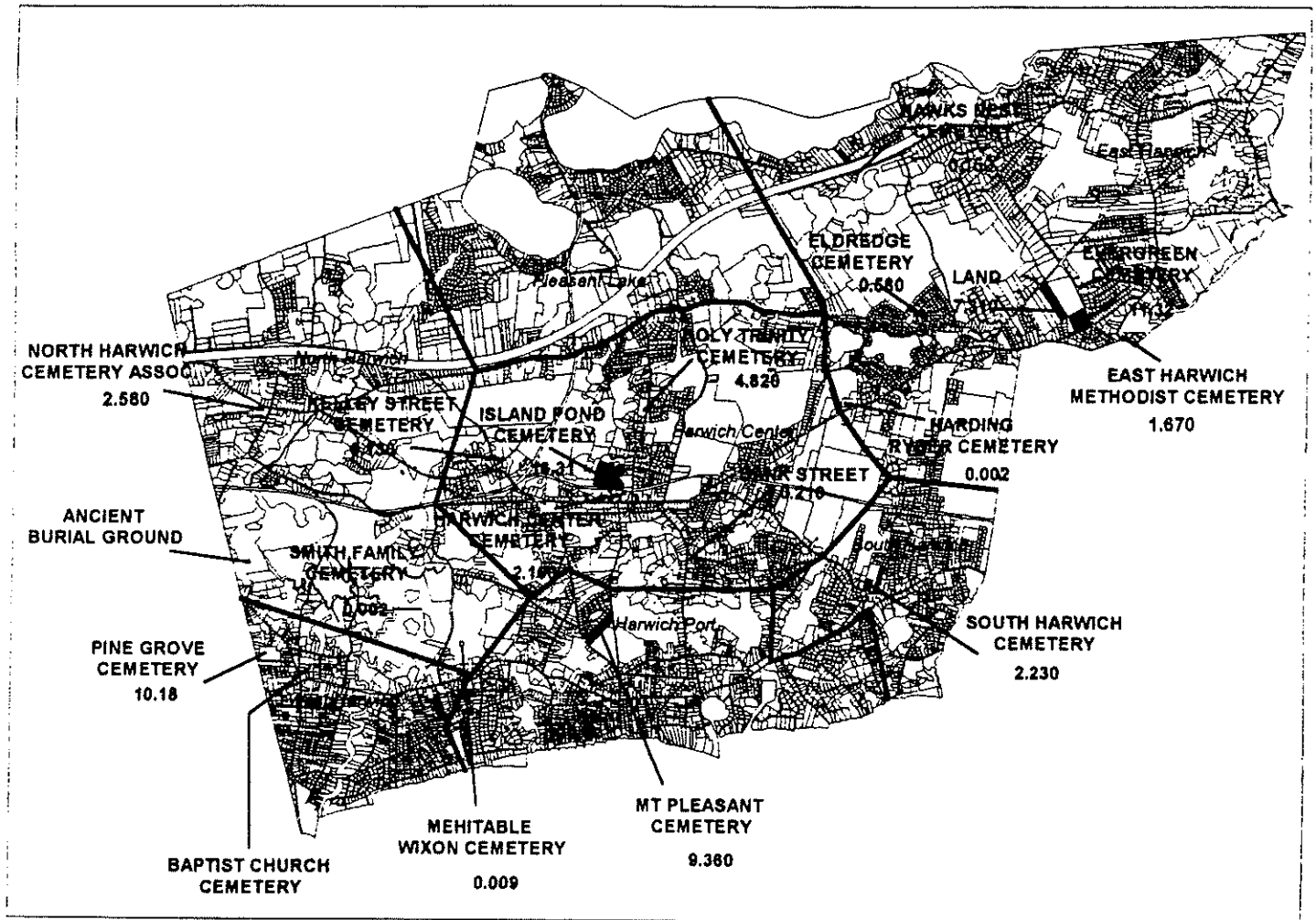
OTHER COMMUNITY FACILITIES IN THE TOWN OF HARWICH





#	FAC. TYPE & NAME	ATTRIBUTE	LOCATION	VIL	MAP #	PCL #	AREA	BLDGS?
F2		Cemetery	Pine Grove Road	WH	18	S5	7.13	No
F3	North Harwich Cemetery Association	Cemetery	610 Depot Street	NH	56	N4	2.58	No
F4	Holy Trinity Cemetery	Cemetery	Pleasant Lake Avenue	HC	60	B13	0.44	No
F5		Cemetery	Pleasant Lake Avenue	HC	60	B14	0.08	No
F6		Cemetery	Pleasant Lake Avenue	HC	60	C1	4.3	No
F7	Eldredge Cemetery	Cemetery	Queen Anne Road	EH	73	F1-76	0.58	No
	Mehitable Wixon	Cemetery	Off Lothrop Avenue	WH			0.009	No
F8	Hawksnest Cemetery	Cemetery	Walker's Pond Road	EH	104	S3	0.15	No
	Harding Ryder	Cemetery	Route 39	HC			0.002	No
	Smith Family Cemetery	Cemetery	Bell's Neck Road	NH			0.002	No
<u>Post Offices</u>								
G1	West Harwich	Post Office	216 Route 28	WH	11	M2	0.97	Yes
G2	Harwich Port	Post Office	491 Route 28	HP	13	W8	1.04	Yes
G3	South Harwich	Post Office	944 Route 28	SH	34	W1-122	0.47	Yes
G4	East Harwich	Post Office	1484 Route 39	EH	97	R4-2A	2.72	Yes
<u>Libraries</u>								
H1	Chase Library	Library	7 Route 28	WH	10	N2	0.11	Yes
H2		Land	Off Route 28	WH	10	N3-A	0.02	No
H3	Harwich Port Library	Library	49 Bank Street	HP	14	X9	0.33	Yes
<u>Schools</u>								
I1	Cape Cod Regional Technical High School	High School	351 Pl Lake Avenue	PL	82	A1	67	Yes
I2	Holy Trinity School	School	245 Route 28	WH	12	P1-A	2.29	Yes
I3	Bate School	School	702 Route 28	HP	15	K1-8	0.59	Yes
<u>Recreation</u>								
J1	Harwich Junior Theater	Theater	105 Division Street	WH	10	P2	0.27	Yes
J2	Harwich Port Golf Course	Land	South Street	HP	13	G1-A	24.96	No
J3		Land	51 South Street	HP	22	S1-B	15.75	Yes
J4		Land	Forest Street	HP	22	S1-C	17.9	No
TOTAL							180.663	

Appendix III

Cemeteries

Cemeteries



-  Village Boundary
-  Town Owned Cemeteries
-  Town Maintained Cemeteries
-  Private Cemeteries



Source: Town of Harwich Cemetery Commission

