

BARNSTABLE COUNTY ASSEMBLY OF DELEGATES

In the Year Nineteen Hundred and Ninety Eight

Ordinance 98-25

To establish a District of Critical Planning Concern pursuant to the Cape Cod Commission Act in the Bournedale area, Bourne, Massachusetts.

Barnstable County hereby ordains:

SECTION 1. SOURCE OF AUTHORITY AND GENERAL PURPOSES

As authorized by Sections 10 and 11 of the Cape Cod Commission Act, Barnstable County hereby designates the Bournedale area, as hereinafter described, as a District of Critical Planning concern ("District" or "DCPC"). The purposes of this District shall be protection of the Buzzards Bay and North Sagamore Water Resource Districts which provide water supply to the town; protection of natural resource interests including unfragmented forest habitat, wellhead protection areas, rare wildlife habitat, wetlands and vernal pools; protection of historic and archaeological resources including several historic structures, historic landscapes, Native American ways and settlement areas, scenic roads, and the character of this rural landscape; planning for economic development sensitive to the character of the area based on an inventory of resources and the constraints arising therefrom; and planning for transportation resources as the area is bound by both of the major routes to Cape Cod and as both the local and state transportation infrastructure is inadequate to support additional land development capacity. A purpose of the District shall be to protect against development which would negatively impact the resources of the area and which would stress the area's infrastructure capacity.

SECTION 2. EFFECTIVE DATE

This Ordinance shall take effect upon the effective date of this Ordinance or upon recording of this Ordinance at the Barnstable County Registry of Deeds, whichever occurs later.

SECTION 3. WRITTEN DESCRIPTION OF THE AREA

The area nominated for District designation is as follows:

- Beginning in the northeast corner of the District, at the junction of Route 3 and the Plymouth/Bourne town line;
- Continuing south along Route 3, including the Route 3 layout as may be amended from time to time, to the base of the Sagamore Bridge;
- Turning west along the Cape Cod Canal to the base of the Bourne Bridge;
- Turning north along Route 25, including the Route 25 layout as may be amended from time to time, to the Plymouth/Bourne town line;
- Turning east along the Plymouth/Bourne town line to the junction with Route 3.

A map showing the boundaries of the District is attached as Appendix A for the general information of the public and municipalities and is hereby incorporated by reference. The District boundary shall be based upon the narrative description set forth in this Section and shall take precedence over any map.

The Bournedale District of Critical Planning Concern encompasses approximately 2,000 acres in Bourne. Approximately 1,500 acres are in private ownership with the remainder owned by town, state and federal agencies. The town owns approximately 180 acres of water district land and 150 acres of conservation land. The Army Corps of Engineers owns land along the canal, and the Massachusetts Highway Department owns several small lots along the Scenic Highway totaling approximately 10 acres, as well as the rights of way for Route 3, Route 25 and the Scenic Highway. Included within the District are approximately 1,000 acres of vacant land, approximately 180 acres of which are severely constrained by topography and other environmental

features.

The Bournedale District includes a number of significant resources. A large portion of the land is within the Buzzards Bay and North Sagamore Water Resource Districts, encompassing Zones of Contribution to public wells serving both Buzzards Bay and North Sagamore. The District also includes the Herring Pond Area of Critical Environmental Concern which encompasses approximately 60% of the District. This area contains rare wetland wildlife habitat, wetlands and vernal pools, in addition to large tracts of unfragmented forest habitat. The town has also identified numerous historic and scenic resources, including historic structures and landscapes, Native American ways and potential archaeological sites, scenic roads and vistas to the Cape Cod Canal. The District is bounded by both of the major transportation routes to Cape Cod and includes the Scenic Highway and a limited network of local roadways which are inadequate to support the area's development potential. Redesign of highway access to this area may affect resources within the District. In addition to identifying the above resources, the town of Bourne has noted the economic development potential of large undeveloped lots in the District, as well as concerns regarding the most appropriate uses of these parcels and the appropriateness of current zoning districts.

SECTION 4. TYPE OF DISTRICT/REASONS FOR DESIGNATION

The Bournedale area described above qualifies under Section 10(a) of the Cape Cod Commission Act for proposed designation as a District due to the following factors:

- the presence of significant natural, coastal, scientific, cultural, archaeological, historic, economic and recreational resources; and
- the presence of substantial areas of sensitive ecological conditions which render the area unsuitable for development.

In accordance with the DCPC Guidance Document issued by the Cape Cod Commission in December 1990, the Town of Bourne identified the area as eligible for designation for any or all of the following:

- a) Water Resource District;
- b) Wildlife, Natural, Scientific, or Ecological Resource District;
- c) Cultural, Historic, Architectural, or Archaeological Resource District;
- d) Economic or Development Resource District; and
- e) Transportation Management District.

Given the variety of resources within the area, this District is designated as a Growth Management District. A Growth Management District will allow for economic development based on the capacity of local resources to support development, while protecting interests in public water supply, open space, natural resources, historic and archaeological preservation, and transportation. Through this designation, the town has the opportunity to identify valued resources and develop a regulatory structure to guide future development in the Bournedale area.

The Bournedale area is of regional importance and controlled development of land and water within the Bournedale District is important to the protection of drinking water quality, preservation of an adequate water supply, the assurance of a safe transportation network, preservation of the area's unique historic resources and community character, and protection of rare wildlife habitats and significant natural resources, in particular those within the Herring River Area of Critical Environmental Concern. Set forth below are the reasons why the area is of critical concern to the region, the problems associated with uncontrolled or inappropriate development, and the advantages to be gained by the development of the area in a controlled manner.

SECTION 4.1 WATER RESOURCES

Land uses within the Bournedale DCPC have the potential to impact all of the water resources of concern identified in the Regional Policy Plan for Barnstable County: drinking water wells, ponds, rivers, and coastal embayments. Based on preliminary analyses, the functions of these resources do not appear to have been unduly impacted by existing levels of development. Additional analyses are necessary to evaluate the impacts of future development on these resources.

Drinking Water Resources:

Three community supply wells are currently located within the District boundaries, with one additional well also proposed. Wells to the west of the Herring River are operated by the Buzzards Bay Water District, while the wells to the east of the Herring River are operated by the North Sagamore Water District. The District contains wellhead protection areas for these wells and two additional wells located outside of the boundaries. The majority of the land areas for the wellhead protection areas extend into the Town of Plymouth. Three irrigation wells for cranberry bogs are also located within the boundaries and private drinking water wells are used for a small area of land west of the Herring River. Additional analysis is necessary to identify how much of the water pumped from the drinking water wells is utilized outside of the district.

A review of Bourne's regulations within wellhead protection areas, completed by the Cape Cod Commission as part of the Sagamore Lens Project (Belfit, et al., 1996), indicated that the overlay districts needed to be updated to cover all the wellhead protection areas. Preliminary analysis of nitrogen loading within these areas (based on 1990 land use in Bourne and Plymouth) suggest that existing nitrogen levels in the Buzzard Bay Water District wells should be very low, while the North Sagamore wells should be higher, but still not exceeding the regional 5 ppm standard. This analysis needs to be updated with the corrected wellhead protection areas and land use information from Plymouth. With this information, estimates can be made of the impact of future development or build-out on nitrogen concentrations and whether larger lot sizes or other preventative measures are needed to ensure that all wells remain below the regional standard.

The 1996 review of town regulations also suggested that additional measures should be taken to protect the town wells from potential hazardous material impacts. At the time, Bourne was the only town of the five examined that allowed new underground storage tanks in wellhead protection districts. Strengthening of the existing hazardous waste bylaw was also recommended. Additional review of existing regulations should also be undertaken to ensure that water quality in existing and future private wells is adequately protected.

Additional analysis is also recommended to determine potential future water demands from the wells within the District. This analysis will require an evaluation of zoning and potential development inside and outside of the District boundaries, since the wells within the District supply water to areas outside of the District. This demand analysis can help to determine whether additional land within the District boundaries will be necessary for the installation of additional wells to support expected demand. This effort will also require cooperation with Plymouth, since drinking water for portions of Plymouth is supplied by existing wells within the District.

Ponds:

Using the water table of the Plymouth-Carver Aquifer assessment, Cape Cod Commission staff have delineated watersheds to the ponds within the District with depth information determined by McCann (1969). To protect the water quality in these ponds, efforts should be undertaken to evaluate how well existing health, conservation, and planning regulations incorporate best management practices to ensure good water quality.

Herring River:

The U.S. Geological Survey measured water flow in the Herring River in July 1986 as part of their assessment of the Plymouth-Carver Aquifer (Hansen and Lapham, 1992). This information

indicated that between the outflow from Great Herring Pond and a measurement point near Foundry Pond the flow in the River decreased 0.93 cfs (cubic feet per second). This loss of flow indicates that water in the river is recharging into the surrounding aquifer. Loss of flow also indicates that the River likely has a relatively limited watershed, if any. The water quality within the river should then be largely determined by the water quality in Great Herring Pond, which will be determined by surrounding land uses within the Town of Plymouth. Since only one flow measurement was determined, it may be helpful to take one or more additional measurements to assess the variability in the flow and associated variability in the watershed. As an interim effort, a setback buffer determined based on surrounding slopes may effectively address erosion and stormwater runoff flows into the River.

SECTION 4.2 TRANSPORTATION

The District is bounded on three sides by elements of the regional roadway network. Route 3 and Route 25 are the primary accesses to Cape Cod, and the Scenic Highway provides a connection between the two. Within these boundaries there are two primary local roadways – Herring Pond Road and Bournedale Road – which connect the Bournedale area to South Plymouth and Buzzards Bay. These local roadways are winding and rural in character, but have experienced increased traffic as people seek alternate routes to avoid congested conditions on the regional road network. Additional analysis is necessary to determine the impacts of future development and of alterations to the regional road system on the District's transportation infrastructure and safety.

Traffic Safety:

On the Scenic Highway, 98 accidents were recorded for the years 1995-1997. It is important to note that additional accidents may have occurred along the Scenic Highway but not been included in these accident reports if, for example, the accidents were merely listed as occurring on "Route 6."

Regarding Herring Pond Road and Bournedale Road, a review of the accident records for the years 1995-1997 reveals the following: there were 31 accidents – 9 of which were clearly at an intersection with the Scenic Highway.

Existing Traffic Flow:

The most recent traffic counts taken by the Cape Cod Commission show that in July of 1997, Scenic Highway under the Bourne Bridge and west of the Sagamore Rotary was carrying about 33,700 and 31,000 vehicles per weekday, respectively. For Bournedale Road north of Scenic Highway and west of Route 25, observed traffic was about 900 or 1,000 vehicles per weekday, in May 1994 and May 1995, respectively. In May of 1997, Herring Pond Road (north of Bournedale Road) was carrying about 2,000 vehicles per weekday.

A preliminary capacity analysis indicates that these road segments have good level of service (LOS B) when the roads are considered in isolation. However, considering intersections – including driveways which access these roads – is important because these are the key focal points of congestion and delay. Commission staff will schedule turning movement counts for these intersections and will subsequently prepare LOS analyses.

Currently, local roads are being used by regional traffic to bypass congestion on canal area roadways and intersections such as Scenic Highway and the rotaries at either end. This occurs to a great degree during summer weekends. During these times, highways leading to the canal area as well as roads along the canal and the canal bridges are overburdened by vehicle traffic, resulting in multi-mile backups lasting for hours.

While the state and the Cape Cod Commission are working on parts of a Canal Area Transportation Study to help improve traffic flow and safety, major traffic improvements may not occur for many years into the future. Development and transportation should be coordinated within the District to

achieve the following objectives:

- serve residents' needs with balanced development: (e.g., village stores/branch bank/post office, etc.) to reduce the need to use the stressed regional road system.
- be location-efficient: residential use nearer to village centers allows walking/bicycling to be an effective alternative.
- make local road improvements to support local access, not cut-through traffic. This may include traffic calming strategies on existing roads to discourage cut through traffic.
- ensure that any state highway improvements such as the Route 3/Sagamore Rotary are consistent with the goals and interests of the District.

It is unlikely that large amounts of new traffic added to the regional roads and bridges could be accommodated without significant mitigation. Existing zoning which allows for land use scenarios with significant traffic generation should be examined very carefully.

SECTION 4.3 HERITAGE RESOURCES/COMMUNITY CHARACTER

Few structures in the town of Bourne are listed on the National or State Register of Historic Places but numerous historic resources are located within the District. The Holway House, Packard House, Nathan Gibbs House, and the Little Red Schoolhouse are among the historic structures identified by local historical organizations. In addition, the area includes historic landscapes such as Nightingale Cemetery and the Herring Run, which was the focus of historic development in this area. Bournedale village, located in the center of the District, is a distinctive, small scale village which developed around the Herring River and grew with the establishment of small scale industrial activities in the early 1800s. This village has maintained much of its rural character despite the construction of the scenic highway and the Cape Cod Canal, which destroyed some of its architectural fabric and archaeological sites. Zoning for this area should be evaluated to ensure that it reinforces traditional development patterns to both ensure the village's viability and preserve its distinctive characteristics.

While historic structures can be identified relatively easily, archaeological resources and other significant sites associated with Native American use of the area present a greater challenge. Some sites such as Sacrifice Rock and key Native American trails are known to local historians, but the history of the Bournedale area suggests that there are other Native American sites which have yet to be identified. The Great Herring Pond and Herring River were important resources for Native Americans in the region and likely supported settlements in the area. In the colonial period, the area around Herring Pond included one of the first "praying villages" where Christian missionaries preached to Native Americans. Archaeological staff of the Massachusetts Historical Commission have indicated several areas of archaeological sensitivity within the District and are working to develop a sensitivity statement for the area.

Currently, there are no historic districts or other protections for historic or archaeological resources in the Bournedale District. Preservation has been the responsibility of individual property owners. As development pressures increase, these resources are most likely to be altered or lost. One of the most common reasons for loss of historic and archaeological resources is the lack of knowledge about their significance. The town of Bourne recently received a preservation grant from the Massachusetts Historical Commission and will be hiring a consultant to inventory historic and archaeological resources in the town during the next year. One area of focus for the inventory will be the Bournedale area. This inventory information will allow appropriate regulations to be developed with a better understanding of the extent of historic and archaeological resources in the area and their sensitivity.

Much of Bournedale's character is defined by the winding rural roads which traverse it. Wooded lands abut the Herring Pond Road and Bournedale Road along much of their length, helping to maintain the rural character of the area. Current zoning includes no provisions for maintenance of this wooded, rural character, and new development along the road edge has begun to alter it while

also adding to transportation safety concerns. Preservation of the distinctive character of these roadways should focus on guiding development away from the road edge with substantial buffers and limiting the number of access points. This will reduce the visibility of new development and also help to ensure safe access, which will in turn limit the need for future structural improvements which would change the character of the roads.

Views to the Cape Cod Canal from the scenic highway are a distinctive aspect of the Bournedale area. The potential for development between the canal and the Scenic Highway is limited because the majority of the land is owned by the Army Corps of Engineers. The town should coordinate with the Army Corps to ensure these views are maintained. Preservation of views along the Scenic Highway should also include an effort to set new development well back from the edge of the highway, maintaining the visual focus on the canal.

SECTION 4.4 NATURAL RESOURCES

The 1997-98 edition of the atlas published by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) has identified a large area around the Herring River as estimated habitat of rare wetlands wildlife. The NHESP maps also identify two certified vernal pool sites within the District bounds. NHESP also identifies an area in the northwest quadrant of the District as a priority site of rare species habitats and exemplary natural communities, a designation for use in planning for the protection of both upland and wetland habitats for rare plant and animal species. The Association for the Preservation of Cape Cod (APCC) Critical Habitats Atlas identifies several critical resources specific to Cape Cod, including an additional vernal pool near Great Herring Pond, and a significant coastal plain pond shore habitat around Black Pond. Many of these critical resources occur over portions of fourteen currently developable parcels totaling over 350 acres. In addition, a significant amount of privately owned developable land within the District is currently unfragmented forest habitat.

Vernal pools are seasonal waterbodies which provide critical breeding habitat for amphibian and invertebrate species. Coastal Plain Pond Shores, defined as that area between the highest water line and the lowest water line, provide critical habitat for many state-listed rare plant and wildlife communities. According to APCC, this resource is also a globally rare habitat. These resources are sensitive to development, particularly changes in hydrology and water quality.

The Herring River ACEC, which incorporates the watershed to the Herring River and Great Herring Pond within its bounds, overlays approximately two thirds of the District. Within the District, the ACEC includes "one of the most important anadromous fish runs along the coast," and includes at least three known state-listed rare and endangered species, including the Eastern Box turtle and the Spotted turtle. The Secretary of Environmental Affairs designated this ACEC in November 1991 on the basis of the presence of several critical resources significant to the region and the state. The area includes nine of the eleven criteria required by the ACEC regulations (301 CMR 12.06) for consideration, including the presence of fishery habitat (specifically the herring run), inland surface waters, water supply areas, agricultural areas (specifically, cranberry bogs), wildlife habitat resources, special use areas (including camps and recreational areas), and the location of significant resources across more than one municipality.

Almost the entire District is located within a Significant Natural Resource Area as mapped by the Cape Cod Commission. Significant resources include unfragmented forest habitat, potential and existing public water supply wellhead protection areas, and rare wetland wildlife habitat (also identified on the NHESP atlas, mentioned above). Several wetlands and waterbodies occur within the District bounds. Information on their location has been mapped from 1993 aerial orthophotos. The area remains largely wooded, characteristic of Bournedale's historically rural nature. Pockets of development occur throughout the proposed district area, but large developable parcels still remain. The Town of Bourne owns several properties, some of which are protected for conservation purposes.

Open space protection is an important function of the District to achieve the Town's stated goals in the nomination application. Objectives in open space preservation are the maintenance of wildlife corridors and the provision of adequate buffers to sensitive resources, scenic roads, and between conflicting land uses. Additionally, open space preservation should be planned as much as possible to retain critical natural resource values (i.e. habitats, buffers to wetlands and waterbodies) and viewsheds, and toward this end should be contiguous with existing protected areas. As the area is built-out, the town should strive to retain both large patches of undeveloped and permanently protected open areas, and a network of corridors connecting these patches for the purpose of wildlife movement and to provide natural breaks from development. The town has developed an open space plan which identifies many parcels within the District as priorities for acquisition.

SECTION 4.5 DEVELOPMENT POTENTIAL

With approximately 800 acres of developable land, potential future residential and commercial development in the District would have significant impacts on the resources discussed above. The demand for public water to meet the needs of the additional development would increase, perhaps requiring additional public supply wells. Relatedly, new development would increase the density of septic systems in zones of contribution to public supply wells, potentially degrading water quality. The amount of residential and commercial development allowed under zoning would increase traffic generation which, if access is not controlled, could significantly reduce safety and levels of service on local roadways and the scenic highway. The character of scenic roads would be altered, and unprotected historic and archaeological resources could be disturbed without notice. Forest habitat in the area would be significantly reduced, limiting wildlife corridors and placing more pressure on rare wildlife habitats.

Current zoning district boundaries and regulations have little relationship to these significant resources which the town hopes to preserve. Both development density and appropriate uses need to be evaluated to determine what forms of development can occur in conjunction with resource protection goals. There is room for economic development in the District, designed to follow the Cape's traditional historic development patterns and carefully planned to limit impacts on transportation and water infrastructure.

SECTION 5. SUGGESTED GUIDELINES FOR DEVELOPMENT

The following guidelines shall serve as the basis for the future establishment of implementing regulations to be adopted by the Town pursuant to Section 11 of the Cape Cod Commission Act to control development within the Bournedale District.

SECTION 5.1 INTRODUCTION AND GENERAL GUIDELINES

The Bourne Board of Selectmen and Bourne Planning Board shall oversee the development, adoption, and enforcement of Implementing Regulations consistent with the Guidelines described herein. Implementing Regulations for the District may take the form of zoning bylaws, regulations, management initiatives, or other means identified by the town of Bourne which help to achieve the goals and interests of the District. To the extent that some of the resources identified in the goals are currently being evaluated, the level of protection required will be determined by the scientific analysis developed as part of this study process and in conjunction with Regional Policy Plan standards. Cape Cod Commission staff will assist the town of Bourne in performing development and resource analyses within the District and in drafting appropriate regulations.

The town of Bourne shall propose Implementing Regulations for the District to the Cape Cod Commission. In order to be approved, Implementing Regulations adopted by the town of Bourne must be found by the Commission to be consistent with these Guidelines, pursuant to Section 11(d) of the Act. The Cape Cod Commission shall determine whether the Implementing

Regulations proposed by the Town are sufficient to protect the goals and interests of the District and may then issue a Certificate of Consistency.

The town of Bourne shall adopt and incorporate Implementing Regulations within twelve (12) months of the District's designation by ordinance. If the town of Bourne fails to adopt and incorporate implementing regulations which are consistent with the Guidelines within twelve (12) months, the Commission may grant an additional ninety (90) days. After the additional ninety (90) days, the Commission may propose and the Assembly and County Commissioners may adopt by ordinance implementing regulations for the District. Upon the adoption of certified Implementing Regulations, local permitting previously stayed by the District nomination may proceed consistent with the newly adopted Implementing Regulations.

SECTION 5.2 GOALS AND INTERESTS

DCPC implementing regulations shall ensure full protection of the following goals and interests of the District:

- to protect water quality within zones of contribution to public supply wells;
- to protect potential well areas to serve future town needs;
- to maintain or improve Level of Service and safety on the Scenic Highway and local roadways;
- to eliminate curb cuts along the Scenic Highway;
- to preserve the scenic character of area roads and views to the canal;
- to preserve historic structures, landscapes and archaeological sites;
- to protect rare wildlife habitat, wetlands and vernal pools;
- to maintain unfragmented forest habitat and wildlife corridors;
- to increase the percentage of permanently protected open space to retain rural character, provide opportunities for recreation and protect significant natural resources;
- to encourage development of neighborhood services; and
- to foster new development that reinforces traditional development patterns.

SECTION 5.3 DEFINITIONS

Definitions shall be the same as those included in the Cape Cod Commission Act, the Regional Policy Plan, and the Town of Bourne Bylaws and Regulations.

SECTION 5.4 REVIEW OF DEVELOPMENTS OF REGIONAL IMPACT (DRIs) WITHIN THE DCPC

The regulations adopted pursuant to these Guidelines in no way alter the process for referral and review of Developments of Regional Impact according to the Act and Regulations of the Cape Cod Commission.

SECTION 5.5 WATER QUALITY AND QUANTITY

The town shall establish adequate protections for water quality within the District, and the town shall establish adequate protections for future public water supply within the District.

5.5.1 The boundaries of the existing Buzzards Bay and North Sagamore Water Resource Districts should be re-examined and redrawn, if necessary, to include the zones of contribution for all existing and proposed public water supply wells within the DCPC.

5.5.2 Future public water supply well sites should be identified consistent with projected demand established through a build-out analysis of the area. Development should be limited within 400 feet of these future public supply wells.

5.5.3 If a cumulative nitrogen loading analysis for the zones of contribution indicates that nitrogen loading will exceed 5 ppm, then the town shall reduce the existing allowed development density in the District through a combination of changes in zoning and land protection measures to protect water quality within the District.

5.5.4 Uses currently allowed within the Water Resource Districts should be examined and zoning changed, if necessary, to ensure that no allowed uses would result in degradation of water quality. Town regulations and zoning bylaws should address Private Sewage Treatment Facilities (PSTFs) and surface water quality. In the case of Great Herring Pond, the Town should work with the Town of Plymouth and the Department of Environmental Management to protect water quality.

5.5.5 Standards should be established to protect the quality of future private wells, including setback requirements from roads, existing development, septic systems, etc.

5.5.6 An analysis of potential water demands should be conducted. This issue needs to be addressed in concert with Plymouth since the Buzzards Bay Water District supplies a portion of that town. Potential future water supply is also related to open space acquisition, since additional protected water supply areas may be needed if demand is projected to increase beyond what can currently be supplied by available wells/land.

SECTION 5.6 TRANSPORTATION

The town shall establish mechanisms to limit new traffic generation, reduce conflict points on the Scenic Highway, and preserve the character of local roadways while maintaining or improving traffic flow and safety within the District. The town shall direct development according to land use management planning which recognizes transportation goals.

5.6.1 Means to limit traffic generation and preserve roadway capacity should be identified, including alternative transportation such as public transit, bicycle and pedestrian facilities, and zoning changes to focus new development near village centers.

5.6.2 To ensure safe traffic flow into the future, regulations shall be developed which limit access to parcels fronting on the Scenic Highway to existing local roadways or signalized intersections on the Scenic Highway. Such regulations should apply to new development proposals as well as applications for expansion or changes of existing use.

5.6.3 Incentives should be developed to remove existing curb cuts from the Scenic Highway.

5.6.4 The boundaries of the traffic management zone should be expanded to cover local collector roads in the District, or similar standards for separation between curb cuts and adequate sight distance should be established pursuant to Massachusetts Highway Department Design Manual to protect traffic flow and safety on local roads.

5.6.5 The development of road links between existing roadways should be considered for the purpose of serving local traffic and reducing impacts on the Scenic Highway.

5.6.6 Cooperation with Massachusetts Highway Department should be pursued in order to ensure that state road improvements are consistent with the goals of the District.

SECTION 5.7 HERITAGE RESOURCES

The town shall establish means for protecting the rural character of the District and for increasing protection of historic and archaeological resources.

5.7.1 Regulations should be established to protect the rural character of the District's scenic roads,

including a 100-foot vegetated buffer along the roadways outside of village centers, limits on the number of curb cuts allowed, and other means of reducing the need for structural improvements which would be inconsistent with the character of the District.

5.7.2 Subdivision regulations should be revised to address historic and archaeological resources on proposed development sites. In addition, the town should consider developing a special permit process to protect historic resources and archaeologically sensitive areas, consistent with the findings of the upcoming town inventory and the Massachusetts Historical Commission.

5.7.3 Incentives for improving the visual quality of businesses along the Scenic Highway should be considered.

SECTION 5.8 NATURAL RESOURCES

The town shall establish adequate protections for wetland resources, rare or significant wildlife species habitats, and mechanisms for protecting the rural character of Bournedale.

5.8.1 Buffers to wetlands, waterbodies, and vernal pools should be increased as necessary, consistent with the standards established in the Regional Policy Plan, to better protect these resources. The town should also consider clarifying, through establishment of appropriate criteria, the provision in the Wetland Bylaw where the Conservation Commission may prohibit location of structures within ACECs.

5.8.2 Bourne's Open Space Community Bylaw should be reviewed and revised to expand its applicability to other residential zoning districts, create incentives for its use, and to better protect sensitive resources on development sites.

5.8.3 An overlay district to protect significant resources within the Herring River ACEC should be considered, and other mechanisms for habitat conservation planning and protection with the District should be established.

5.8.4 The town should pursue ways to implement Bourne's Open Space and Recreation Plan, create incentives for open space planning, and increase permanently restricted open space within the district.

SECTION 5.9 LAND USE

The town shall review the zoning bylaw for inconsistencies with the goals of the District and propose zoning amendments, as necessary, to achieve all of the goals described above.

5.9.1 The town should identify means to reduce or redistribute density within the District in accordance with the findings of a traffic capacity study, an analysis of water quality, future water demand projections, and an inventory of sensitive environmental and cultural resources. Mechanisms to reduce or redistribute density which should be explored include: open space protection, downzoning, and Transfer of Development Rights (TDR).

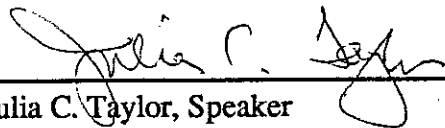
5.9.2 A special permit process should be considered for major residential developments to provide opportunities to protect significant environmental and cultural resources, provide affordable housing, and address traffic generation.

5.9.3 The zoning bylaw should be reviewed and revised as necessary to encourage the development of neighborhood-scale commercial services in order to reduce traffic generation within the District. In addition, the town should revise the Open Space Community Bylaw as described above.

5.9.4 The town should examine the purpose, current zoning provisions and district boundaries of the B2 and SDD zoning districts. These zoning districts should be revised to better achieve the goals of the District.

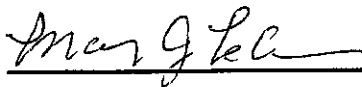
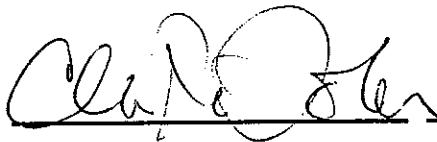
5.9.5 If direct access to Route 25 is feasible, the town may consider development of a technology or industrial zone within this portion of the District. Similarly, special zoning provisions for resort development should be established based on access through existing signalized intersections.

Adopted on December 2, 1998 by the Assembly of Delegates.



Julia C. Taylor, Speaker

Approved by the Board of County Commissioners, Dec. 9, 1998, at, 11:02 a.m.
Date Time

Proposed Bournedale DCPC Boundary

Map created by the Cape Cod Commission on September 15, 1998

