

ENF Environmental
 Notification Form

For Office Use Only
 Executive Office of Environmental Affairs
 EOEa No.: 13526
 MEPA Analyst: Aisling Eglinton
 Phone: 617-626-1024

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Route 132 Improvement Project		
Street: Route 132 (Iyanough Road), Shootflying Hill Road, Huckins Neck Road		
Municipality: Barnstable	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates: UTM 19 388661E 4616084N (WGS84/NAD83) to UTM 19 391019E 4614499N (WGS84/NAD83)	Latitude: 70°19'39.23" Longitude: 41°40'56.143"	
Estimated commencement date: April 2006	Estimated completion date: November 2007	
Approximate cost: \$9.6 Million	Status of project design: 75 %complete	
Proponent: Massachusetts Highway Department/Town of Barnstable		
Street: 10 Park Plaza, Room 4260		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Grace Arthur		
Firm/Agency: MassHighway	Street: 10 Park Plaza, Room 4260	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: (617) 973-8251	Fax: (617) 973-8879	E-mail: Grace.Arthur@state.ma.us

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301 CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): 80% of the construction costs will be federally funded (FHWA) and 20% will be state funded.

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify) No

List Local or Federal Permits and Approvals: Negative Determination of Applicability – Barnstable Conservation Commission; NPDES Construction Stormwater General Permit – US EPA; FHWA – CE Checklist

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|--|---------------------------------------|--|
| <input checked="" type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input checked="" type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				
Total site acreage	48.5 (2mi x 200ft)			
New acres of land altered		16.7		
Acres of impervious area	13.25	9.50	22.75	
Square feet of new bordering vegetated wetlands alteration		0.00		
Square feet of new other wetland alteration		0.00		
Acres of new non-water dependent use of tidelands or waterways		0.00		
STRUCTURES				
Gross square footage	N/A	N/A	N/A	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
TRANSPORTATION				
Vehicle trips per day	38,900 (2002)	0.00	38,900	
Parking spaces	N/A	N/A	N/A	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/ treatment	N/A	N/A	N/A	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify A letter was received from the Massachusetts Natural Heritage Program on March 9, 2005 (see letter in Attachment E) stating that the project could impact several protected habitat areas listed in the 11th Edition of the "Massachusetts Natural Heritage Atlas": Priority Habitat (PH) 1600; Priority Habitat 1590; Estimated Habitat WH 416; and Estimated Habitat WH 7069. These habitat areas are located adjacent to the project right-of-way.) No

HISTORICAL/ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No*

*The Sandy Neck/Barnstable Harbor ACEC is located approximately 0.8 miles north of the project locus. However, due to the significant distance from the ACEC, the project is not anticipated to impact the area.

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

The Massachusetts Highway Department, in cooperation with the Town of Barnstable, is proposing to construct traffic and roadway improvements to Route 132 (Iyanough Road) from the Route 6, Exit 5 Eastbound ramps easterly to the intersection of Bearses Way, a distance of approximately 2.0 miles (See Project Locus Map, Figure 1, Attachment B). The project will widen Route 132 from a two to a four lane cross-section with shoulders for approximately 7,500 feet (1.42 miles) from the Route 6 interchange to Phinney's Lane. The remaining project length, approximately 2,500 feet (0.47 miles), has an existing four lane cross-section. The project also includes: the construction of a vegetated median; the installation of protected left turn lanes at three new signalized intersections (Route 6 EB ramps, Relocated Shootflying Hill Road/Golf Club driveway, and Old Route 132) and two existing signalized intersections (Route 6 WB ramps and

Phinney's Lane) along the corridor; the construction of an engineered stormwater drainage system; the addition of a sidewalk along the southern side of the Route 132 alignment; and the relocation of the existing Shootflying Hill Road intersection a distance of approximately 1,500 feet to the east to create a new signalized intersection with the existing golf course driveway. The existing Huckins Neck Road intersection with Route 132 will be relocated to create a new intersection with Shootflying Hill Road before its intersection with Route 132.

As part of the improvements to the three proposed and two existing signalized intersections, protected left turn lanes and side street widenings to accommodate proper turning radii will also be constructed.

The project is designed to improve safety and alleviate congestion along the Route 132 corridor and will improve access to transportation facilities in the area such as the Barnstable Municipal Airport, the Steamship Authority Hyannis terminal and the Hyannis Transportation Center. (See Figure 2, Attachment B).

The Town of Barnstable has long considered Route 132 to be a major "gateway" to Hyannis and the waterfront. The proposed project, with the vegetated median, provides an aesthetically pleasing roadway link from Route 6 to Hyannis and the waterfront.

The basis of the project stems from a 1992 study by the Cape Cod Commission¹ which recommended further consideration of a Route 132 improvement project consisting of a "...four lane cross section with planted median..." and stressing the advantages of such a design in preserving mobility and limiting future strip development along the corridor. The project is also consistent with the Barnstable comprehensive plan² and is specifically mentioned in the plan. The plan states that the Route 132 improvements are critical to the implementation of the town's growth plans and policies.

An Environmental Notification Form (ENF) is required because the proposed work involves:

- Direct alteration of more than 25 acres of land (301 CMR 11.03(1)(b)1);
- Creation of five or more acres of impervious area (301 CMR 11.03(1)(b)2);
- Construction of a new roadway one-quarter mile or more in length (301 CMR 11.03(6)(b)1.a) – the relocation of Shootflying Hill Road approximately 1,500-feet (0.28 mile) is required to address existing safety issues with the current intersection;
- Widening of an existing roadway by 4 or more feet for ½ or more miles (301 CMR 11.03(6)(b)1.b), and;
- Alteration of bank or terrain located ten or more feet from the existing roadway for ½ or more miles (301 CMR 11.03(6)(b)2.a).

Existing Conditions

Within the project area, Route 132 (Iyanough Road) is a two-lane urban arterial with shoulders that vary in width from one to two feet. The existing right-of way along this portion of Route 132 is a state highway layout approximately 200 feet wide from the westerly limits at the Route 6 EB ramps to the easterly limits at Bearses Way.

1 Cape Cod Commission, Routes 28 & 132 Traffic Circulation Study - Barnstable Area, 1992

2 Recommended Capital Facility Priorities - Hyannis Vision Plan - 1993-1995)

Route 132 is a north-south route that connects Route 6A (Old Kings Highway) to the north and Route 28 and Barnstable Road at the Hyannis Airport Rotary to the south, and serves as an access to: local hotels and conference centers (visitor services); the Independence Park industrial area; Hyannis regional shopping centers and the downtown Hyannis commercial area; as well as the waterfront. Route 132 is a direct link from Route 6 to the Barnstable Municipal Airport, the Hyannis Transportation Center, which accommodates both bus service and the Cape Cod Railroad, and the Steamship Authority parking lot located at the corner of Yarmouth Road and Main Street in Hyannis. In addition, Route 132 serves as one of the primary access routes to the Cape Cod Hospital from Route 6 and the Upper Cape. The Cape Cod Community College is located immediately north of the project limits and generates additional traffic volumes during daytime and evening classes.

Purpose and Need

The Route 132 corridor experiences year-round congestion, especially during peak hour periods with Average Daily Traffic (ADT) volumes within the project area recorded at 38,900 vehicles in 2002 and expected to increase to 57,800 in 2022. Current peak hour volumes total approximately 3,000 and are expected to increase to more than 4,300 in 2022. The existing two-lane cross section provides insufficient capacity to meet the current and future demands. The high traffic volumes, inadequate capacity along with the lack of turn lanes results in long queues and difficulties accessing and exiting bordering properties and side streets along the corridor. As a link to the Barnstable Municipal Airport, the Hyannis Transportation Center and the Steamship Authority Hyannis terminal, congestion on Route 132 not only affects people commuting by car but also travelers accessing other transportation modes in the project area. Vehicles traveling along the Route 132 corridor experience long delays.

A total of 102 accidents were reported at study area intersections during the most recent three-year period, according to accident data obtained from MassHighway. The intersections experiencing the highest number of accidents were: Route 132 at Phinney's Lane; Route 132 at the Route 6 EB ramps/Shootflying Hill Road, and Huckins Neck Road. Accidents are caused by a combination of inadequate geometry, lack of turning lanes, lack of wide shoulders, and lack of traffic signal control at key intersections.

Proposed Improvements

In order to improve traffic operations and minimize congestion, improve traffic and pedestrian safety, improve access and egress to abutting properties, to improve flow to regional transportation facilities in the Hyannis area, and to provide for an improved gateway appearance to Hyannis, Route 132 will be widened to accommodate a four-lane roadway consisting of two 12-foot lanes and two four-foot shoulders heading southbound and the two 12-foot travel lanes and two four-foot shoulders heading northbound, separated by a variable width vegetated median. The median will start at the Route 6 WB off-ramp and continue southeasterly to a point 500-feet west of the intersection with Bearses Way, a total length of approximately 8,400 feet.

Turning lanes and new traffic signals will be installed at the intersections with the Route 6 EB ramps, Shootflying Hill Road and Old Route 132. The existing signals at the intersection with the Route 6 WB ramps and Phinney's Lane will be upgraded. The intersection of Shootflying Hill Road with Route 132 will be relocated approximately 1,500 feet (0.28 miles) to the south to a new intersection with the existing Hyannis Golf Club driveway and Route 132. Huckins Neck Road will

intersect the realigned Shootflying Hill Road prior to the new intersection with Route 132.

From the point adjacent to the intersection of the Route 6 Westbound off and on ramps (northern end) to a point at the intersection of Bearses Way (southern end), the project involves the addition of two travel lanes, shoulders and a vegetated median strip. The existing two lane roadway varies in width from 26 to 30 feet. The proposed additional travel lanes will widen the road approximately 32 feet (two twelve foot lanes with four foot shoulders); the median strip will result in an additional 30 feet of widening from the Route 6 WB ramps to a point approximately 700 feet south of Old Route 132, resulting in a total widening to this section of approximately 62 feet for approximately 5,600 feet in length.

South of Old Route 132 to a point approximately 400 feet south of Phinney's Lane, the median will be reduced to a varying width of 6 to 20 feet for an approximate distance of 2,800 feet in order to avoid impacts to wetlands associated with a small pond east of Old Strawberry Hill Road and to avoid adverse impacts to adjacent properties to the south of Route 132.

The project will also include the upgrade of an existing sidewalk, the construction of a new six-foot wide continuous sidewalk with required ADA accessible ramps along the southern side of the alignment from the Route 6 WB ramps to Bearses Way. Additionally, the introduction of the proposed four foot shoulders will serve as the bicycle accommodation for the route.

Although minimal land takings will be required to implement the project, the majority of the project will take place within the Route 132 Right of Way. The required land takings will be conducted by the Town of Barnstable and easements will be given to MassHighway for construction purposes.

No direct impacts to regulated wetland resources will occur, although the project will result in the alteration of 36,700 square feet (0.84 acres) of the 100-foot Buffer Zone to a bordering vegetated wetland associated with the small pond at the intersection of Route 132 and Old Strawberry Hill Road. An engineered storm drainage system, designed in compliance with the Massachusetts Stormwater Performance Standards, will be constructed.

Alternatives Analysis

Several other alternatives for this project were studied in the 1992 Cape Cod Commission report, including the following:

- 1) Existing two lane section (No Build) – this alternative does not address the existing deficiencies in traffic operations, safety, aesthetics and access and will not serve to address future traffic operations.
- 2) A four lane undivided section – this alternative, while providing for additional capacity, safety and property access does not address the Town's desire to create a gateway to Hyannis and the waterfront.
- 3) A six lane cross section – this alternative, while providing for safety, traffic operations and property access resulted in unnecessary roadway width and additional environmental impacts.