Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 14061
MEPA Analyst: Holly Johnson
Phone: 617-626-1023

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: Ministers Point Revetment		
Street: 2, 24 & 26 Salt Pond Road		
Municipality: North Chatham	Watershed: Pleasant Bay	
Universal Tranverse Mercator Coordinates:	Latitude: N 41 42' 12" Longitude: W 69 56' 45"	
Estimated commencement date: 11/2007	Estimated completion date: 12 / 2007	
Approximate cost: $ 270,000.00	Status of project design: 95 %comple	
Proponent: Gerald Milden AND Mary Holmes		
Street: 2 Salt Pond Road AND 26 Salt Pond Rd.		
Municipality: Chatham	State: MA	Zip Code: 02650
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Robert M. Perry, P.E.		
Firm/Agency: Cape Cod Engineering, Inc.	Street: P.O. Box 1517	
Municipality: East Dennis	State: MA	Zip Code: 02641
Phone: 508-385-1445	Fax: 508-385-1446	E-mail: bobperry@capecod.net

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐ Yes **X** No

Has this project been filed with MEPA before?
☐ Yes (EOEA No._____) **X** No

Has any project on this site been filed with MEPA before?
☐ Yes (EOEA No._____) **X** No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
a Single EIR? (see 301 CMR 11.06(8)) ☐ Yes **X** No
a Special Review Procedure? (see 301CMR 11.09) ☐ Yes **X** No
a Waiver of mandatory EIR? (see 301 CMR 11.11) ☐ Yes **X** No
a Phase I Waiver? (see 301 CMR 11.11) ☐ Yes **X** 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):_____

Are you requesting coordinated review with any other federal, state, regional, or local agency?
X Yes (Specify CZM,DEP Waterways, USACE) ☐ No

List Local or Federal Permits and Approvals: **Order of Conditions, USACE Programmatic General Permit Cat. 2**

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

- ☐ Land
- ☐ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- X Wetlands, Waterways, & Tidelands
- ☐ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	4.2 ac.		
New acres of land altered		0.11	
Acres of impervious area		0	
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		0.18	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage			
Number of housing units			
Maximum height (in feet)			
TRANSPORTATION			
Vehicle trips per day			
Parking spaces			
WASTEWATER			
Gallons/day (GPD) of water use			
GPD water withdrawal			
GPD wastewater generation/ treatment			
Length of water/sewer mains (in miles)			

State Permits & Approvals

- X Order of Conditions
- ☐ Superseding Order of Conditions
- X Chapter 91 License
- X 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

_____

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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_____) **X**No

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

☐Yes (Specify_____) **X**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_____) **X**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_____) **X**No

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

☐Yes (Specify_____) **X**No

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

X Yes (near boundary of the Pleasant Bay ACEC) ☐No

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.*)

NARRATIVE

The area subject to this ENF is land in North Chatham on what is known as Minister's Point, mapped on the USGS quadrangle map also as Allen Point. The land area involves 3 residential properties off of Salt Pond Road. Each of the 3 coastal properties contains a single family dwelling and assorted out buildings. The three properties possess coastal bank stabilizing measures of a varied composition: timber bulkhead and stone revetment.

The land area surrounding the dwelling is a mix of semiformal landscaping and natural areas including heavy thickets of natural vegetation areas containing coastal plant varieties and salt marsh areas to the west. The Pleasant Bay ACEC southern point boundary is approximately coincident the project site northern extremity before heading northeast out to Strong Island but the ACEC does not encompass the project area.

Resource areas near to and within the project site include coastal bank (310CMR 10.30), land subject to storm flow, salt marsh (10.32), coastal beach(10.27) and land containing shellfish (10.34), barrier beach (10.29).

The eastern 750 ft. long waterfront of the project site on Chatham Harbor consists of two stone revetment segments; 100 ft. and 145 ft. in length respectively with the remaining length consisting of two timber bulkhead segments. The segments of bulkhead are displaying signs of failure of an overturning nature and regular backfill losses. The west side of the land mass is stable and vegetated. The recent breakthrough of North Beach is creating circumstances unanticipated in the bulkhead design. As a result of the reeent events and the bulkhead condition the two bulkhead segments must be replaced. Best available measures indicate use of the proposed stone revetment.

The proposed revetment alignment relies upon a careful examination of the available upland terrain recognizing the practical need to reasonably preserve the existing site features at the two locations. The proposed revetment segments shall tie into the stones of the adjacent revetment segments maintaining a similar alignment

The alignment of the bulkhead uses the best available means and reasoning to utilize available upland where practicable with seaward encroachment only when absolutely necessary to preserve existing site features or to preserve adequate land area to maintain reasonable use. Please see the plan for the proposed alignment. Due to the ENF narrative limitations a more lengthy and detailed analysis of the impact to resources and mitigation effects has been included with the Notice of Intent.

An alternatives summary is on a second sheet.

Ministers Point Stone Revetment Narrative Summary (Continued)

ALTERNATIVES

We provide a general discussion of alternatives as follows: sand fill, sandbags, fiber rolls, vertical bulkhead, and stone revetment all in combination with managed vegetation.

- **Sand fill** will involve mechanized means of deposition and will have a very short term value. Sand fill will not protect the bank or bulkhead from repetive high storm tides. In all cases consideration must be given to the frequency of required work. Sand fill protection will require frequent maintenance with accompanying impacts relating to placement. It is not at all feasible but listed here as a measure taken at other, much less energetic locations.

- **Sandbags** will be significantly similar to the function and form of a stone array with higher wave reflectivity. Aesthetic considerations are relevant due to the artificial appearance from the water and from the beach. Frequency of maintenance is a consideration as the fabric composition of the bags is susceptible to damage, wear and tear. The machine activity and hydraulic aetion represent a considerable level of activity as intensive as that required for stone revetment work.

- **Fiber roll** protection will have serious shortcomings relating to the exposure of the site. Fiber roll protection is lacking the necessary mass to withstand wave disruption. Sand fill is typically required and will be regularly washed off. The non-durable nature of the fiber, and sand fill applications will increase the frequency of maintenance. Due to the potential for ocean energy exposure an effort to obtain a long-term solution is very important for this site. Fiber rolls are not at all feasible.

- **Replacement vertical wall (bulkhead),** whether made of timber, steel, composites or vinyl, is a viable option. The reasons for discouraging the bulkhead are related to the manmade materials, long term maintenance requirements and general aesthetic quality. The use of a bulkhead at this site is inconsistent with the general policies concerning impacts to coastal beaches caused by wave reflection and scour. Aerial photos and topographic data indicate that the beach deposit is sandier at the locations currently containing the revetment segments as the textured, angled surface collects more sediment from the littoral system. The bulkheads are currently licensed under MGL Chapt. 91.

- **Repair of the existing bulkhead.** This option is also a cautiously viable option but is far less practical than the complete replacement of the bulkhead. An effective design will be difficult to achieve due the fact that no certifications can be made with regard to the integrity of the existing materials or full dimensions of the wall constituents without significant subterranean investigation of all parts. Existing material age will soon become a factor, reducing long term expectations.

- **Stone Revetment.** This choice is currently in place successfully directly adjacent to and within the site and at numerous locations along the Chatham shoreline. No adverse impact is evident. The exposed stone array can be made of completely native, natural durable stone material, of a color and composition identical to the granite sands of the area. The resulting stone array will not require maintenance for the longest term, perhaps many decades or longer if sloped and constructed properly. Dynamics of the harbor shoreline play a large role in the life expectancy of any type of protection. History indicates that the vast deep channel created farther south where a vast beach and dune deposit were once formed and then evacuated will not develop here. The value of the proposed revetment is to provide the most absorbent wave break and to provide the greatest potential for allowing the waterfront protection to remain untouched by recurrent construction or maintenance for the longest possible time. These facts and other attributes, when compared to the alternatives allow the conclusion that the proposed stone array, properly constructed to the specifications of the plan is a superior option at the specific location.