

# ENF Environmental Notification Form

<i>For Office Use Only</i> Executive Office of Environmental Affairs	
EOEA No.:	<u>13988</u>
MEPA Analyst:	<u>Aisling Eglinton</u>
Phone:	<u>617-626-1024</u>

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.

<b>Project Name: Nantucket Stormwater Improvements – Phase I</b>		
Street: Various locations in Nantucket Harbor area. <b>In-street Work:</b> Harbor View Way, New Whale Street, Orange Street, India Street, Cambridge Street, Easy Street, Commercial Street, Washington Street, Easton Street, South Water Street; <b>Off-street Work:</b> Children’s Beach, Marine Fisheries Pier, Brant Point Beach, Francis Street Beach, Commercial Street Beach, earthen-filled pier near Commercial Wharf.		
Municipality: Nantucket	Watershed: Island of Nantucket	
Universal Transverse Mercator Coordinates: UTM Zone 19: 408,206 East; 4,570,487 North	Latitude: 41° 16' 50.18"	Longitude: 70° 05' 46.02"
Estimated commencement date: Phase I - Fall 2007 Phase II and Phase III – Unscheduled	Estimated completion date: Phase I - Fall 2009 Phase II and Phase III - Unknown	
Approximate cost: Phase I - \$8,000,000 Phase II and III – Unknown	Status of project design: Phase I: 95% complete Phase II and III: 0% complete	
Proponent: Town of Nantucket, Department of Public Works		
Street: 188 Madaket Road		
Municipality: Nantucket	State: MA	Zip Code: 02554-2623
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Mary Ellen Radovanic, AICP		
Firm/Agency: Earth Tech, Inc.	Street: 300 Baker Avenue, Suite 290	
Municipality: Concord	State: MA	Zip Code: 01742
Phone: (978) 371-4000	Fax: (978) 371-2468	E-mail: <a href="mailto:maryellen.radovanic@earthtech.com">maryellen.radovanic@earthtech.com</a>

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 301CMR 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): State Revolving Fund \$8,000,000

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

Yes (Specify \_\_\_\_\_)  No

List Local or Federal Permits and Approvals: Local Order of Conditions, Chapter 91 License, U.S. Army Corps of Engineers Category 2 MA PGP

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

- |                                 |                                       |  |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land   | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water  | <input type="checkbox"/> Wastewater   | <input 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
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input checked="" type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: _____ _____ _____ _____ _____
Total site acreage	Approx. 1.4 acres			
New acres of land altered		Approx. 0.3 acres		
Acres of impervious area	1.1 acres	0 acres	1.1 acres	
Square feet of new bordering vegetated wetlands alteration		0 ft <sup>2</sup>		
Square feet of new other wetland alteration		14,545 ft <sup>2</sup>		
Acres of new non-water dependent use of tidelands or waterways		To Be Determined		
<b>STRUCTURES</b>				
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	
<b>TRANSPORTATION</b>				
Vehicle trips per day	n/a	n/a	n/a	
Parking spaces	n/a	n/a	n/a	
<b>WASTEWATER</b>				
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 Priority Habitat of Rare Species and also Estimated Habitat of Rare Wildlife source: MA Natural Heritage Atlas, 12<sup>th</sup> Edition, 2006)  No

Nantucket Harbor is designated as a Priority Habitat of Rare Species and also Estimated Habitat of Rare Wildlife. A small area of Land Under Water will be impacted by the project and stormwater flows into the harbor.

**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 Nantucket Historic District, Town of Nantucket; Brant Point Light Station)

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

**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.*)

Downtown Nantucket is a densely developed and highly utilized waterfront locale. Impervious area (e.g. streets, sidewalks, buildings and driveways) comprises approximately 33 percent of the downtown drainage watersheds. Stormwater collected from downtown is primarily discharged into Nantucket Harbor. Several of the drainage outfalls (DOs) are undersized and in extremely poor condition. These outfalls are impacted by backwater from the ocean tides, causing upstream flows to surcharge and sediment to deposit in the system. Sediments are flushed into the harbor during storm events.

The Nantucket Department of Public Works proposes to improve the stormwater collection, treatment and disposal system in downtown Nantucket to provide appropriately sized stormwater pipes, improve the quality of stormwater discharge and reduce localized street flooding. The existing stormwater collection system consists of a network of storm drains, catch basins, infiltrators, grit chambers, and outfall pipes. The entire system includes approximately 8-1/2 miles of drainage pipes and 340 catch basins. This project is based on recommendations outlined in a Drainage Outfall Evaluation (the Evaluation) (*Earth Tech, January 2005*), which assessed the existing stormwater management system. The Evaluation

identified 21 drainage outfalls and prioritized system upgrades over three phases. The existing outfalls are shown in Attachment 1, Plan of Existing Conditions. Phase I improvements focus on the downtown/waterfront collection and outfall discharge system. Downtown improvements will resize some stormwater discharge outfalls and provide treatment to remove sediments from first flush events that presently discharge from some of the larger outfalls to Nantucket Harbor. Attachment 2 presents the proposed conditions upon completion of Phase I Stormwater Improvements. Attachment 3 presents a USGS Map and environmental constraints map.

Phases II and III of the Stormwater System Improvements will be implemented, respectively, in the midland and upland portions of each outfall's tributary watershed after first evaluating the performance of the Phase I improvements. The scope, schedule and budget for the two future phases are not known at this time, thus it is not possible to assess those areas of impact in this ENF. Each phase may include some of the following elements: rehabilitate existing storm drains and replace undersized storm drains; rehabilitate existing catch basins to meet DEP standards and install new catch basins in areas subject to surface flooding; screen and select BMP structures as appropriate to provide sediment, trash, and grease and oil removal; and implement stormwater storage systems (either surface or subsurface) in areas subject to surface flooding or system surcharging.

Work proposed for Phase I, the subject of this ENF, involves the following improvements: (1) construct eight drainage outfalls comprised of two new drainage outfalls, three relocated drainage outfalls, and the in-situ rehabilitation of three existing drainage outfalls and/or associated pipes; (2) remove 2,700 linear feet of pipeline (of which 650 linear feet is outfall pipe); (3) install 5,600 linear feet of new pipeline ranging in size from 12-inch to 48-inch HDPE gravity drain and appurtenances; (4) install nine BMP's, 39 manholes, and 32 catch basins. The eight outfall discharges with BMPs will remove 80 percent of total suspended solids (TSS), and 90 percent of debris, as well as capture grease and oil prior to discharge into Nantucket Harbor. Attachment 5 presents a summary of the proposed work at each existing and proposed outfall location. No overall increase in the quantity of the stormwater discharge is proposed, as the stormwater system is not expanding from current conditions, but significant improvements to the water quality of the discharge are anticipated.

#### **Alternatives Analysis**

**No-Build Scenario:** Under the no-build alternative the Town does not undertake stormwater improvements described herein. Existing DOs remain in use, and existing nonstructural BMPs continue to be implemented by the Town (e.g., frequent street and parking lot sweeping, catch basin cleaning). Potential adverse impacts associated with the no-build scenario include: (1) the ongoing presence of DOs which are in extremely poor condition to the point where they may pose a public hazard and/or are partially buried under sand (see photos in Attachment 5); (2) continued sediment releases from first flush events; (3) continued release of untreated stormwater without benefit of BMP structures that provide capture and treatment of sediments and floatables; and (4) continued localized flooding caused by inadequately sized collection and discharge components, potentially causing long-term damage to private property and/or public infrastructure.

The advantage of the no-build scenario is that no new wetland resource areas will be directly impacted by stormwater discharge outfalls during construction or operation. The significant disadvantage of pursuing the no-build scenario is continued degradation of water quality in Nantucket Harbor from discharge of untreated stormwater. In the long-term, this approach will adversely impact coastal wetland resource areas, as well as the aquatic and shellfish resources, within the harbor. The no-build alternative is not acceptable given the importance of the harbor for its environmental, economic, recreational, and aesthetic value to the Town. In fact, page 70 of the **Revised Nantucket & Madaket Harbors Action Plan** (Final Draft, January 17, 2007), notes that "all harbor-related activities are literally contingent on water quality."

**Build Scenario:** Under the build scenario, the project is undertaken as outlined above, initially with Phase I activities, then over time expanding to Phases II and III. The major benefit of the build scenario is the anticipated improvement to Nantucket Harbor water quality achieved by 80 percent TSS removal, and 90 percent removal of debris and floatables in the stormwater prior to discharge. As noted previously, many of the exposed outfall pipes are structurally deteriorated, with holes and cracks that allow sediment deposition. This sediment is then flushed out into the harbor during storm events. Implementation of the build scenario will require some work in coastal wetland resource areas and associated buffer zones, including Coastal Beach, Dune, Top of Coastal Bank, Isolated Vegetated Wetlands (IVW), Land Under Ocean (LUO), and Land Subject to Coastal Storm Flowage (LSCSF). Most of these impacts are construction-related and thus temporary. A Notice of Intent (NOI) will be filed with the Nantucket Conservation Commission describing all work in resource areas, and defining appropriate measures that will be taken to avoid or mitigate adverse impacts to resources. Permit Applications will also be filed with the US Army Corps of Engineers as well as with the DEP for a Chapter 91 License.

Nantucket Harbor is designated as a Priority Habitat of Rare Species and also Estimated Habitat of Rare Species. Approximately 480 ft<sup>2</sup> of LUO will be permanently impacted by this project for placement of rip rap. Based on site investigations and discussions with the Town Biologist we do not anticipate any adverse impacts from construction to Habitat of Rare Species. Overall, the project will be a benefit to habitat by improving Nantucket Harbor water quality. The ENF and NOI for this project will be sent to Natural Heritage for review and comment.

Construction impacts associated with the project may also involve short-term traffic disruption, noise and fugitive dust emissions from trench excavation. The Brant Point outfall (DO-203) and the three Washington Street outfalls (DO-187, DO-197, and DO-236) all may be either transite or asbestos concrete type pipes, which contain asbestos. The contractor will be responsible for conducting all work associated with these pipes within required means and methods for handling and legal disposal of the asbestos-containing material.

**Mitigation for Build Scenario:** Work will be conducted during the “off-season” when the island is less populated and has little or no traffic congestion. Activities below mean high water level, e.g., pipe removal, rip rap installation, will occur during low tide. Prior to work, erosion and sedimentation controls (e.g. hay bale barrier) will be installed between the limits of work and adjacent wetland resources to minimize the potential of indirect water quality and erosion impacts, and to define the limits of construction. Protective measures shall be used around catch basins (e.g., hay bale barrier/silt sock) to control sedimentation from storm water runoff. These catch basins will be kept clean of sediment and other debris during construction. Upon completion of the project, any accumulated silt will be removed from the roadway, legally disposed of, and catch basin sumps will be cleaned. Erosion and sedimentation controls will be maintained along the project until disturbed areas have been fully restored and stabilized.

The Town will develop and implement a stormwater management program that incorporates both nonstructural and structural BMPs. Nonstructural BMPs include utilization of source controls to reduce the type and concentration of contamination in stormwater runoff, and development of pollution prevention programs to increase public awareness of the importance of good stormwater management practices. Examples include street and parking lot sweeping; catch basin cleaning; local by-laws and regulations; public education; and a pollution prevention plan. The structural BMPs implemented by this project will be hydrodynamic separation BMPs.