

For Office Use Only
Executive Office of Environmental Affairs
EOEA No.: 13585
MEPA Analyst: *Beriony Angus*
Phone: 617-626-1029

ENF Environmental Notification Form

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: Test Well Site 2-04		
Street: Pennywise Path		
Municipality: Edgartown	Watershed: Cape & Islands	
Universal Transverse Mercator Coordinates: x=368812.050696; y=4584659.243936	Latitude: 41°24'10" Longitude: 70°34'10"	
Estimated commencement date: Spring 2005	Estimated completion date: Spring 2006	
Approximate cost: \$750,000	Status of project design: 25% %complete	
Proponent: Edgartown Water Department		
Street: 24 Machacket Road		
Municipality: Edgartown	State: MA	Zip Code: 02539
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Maura Callahan		
Firm/Agency: Earth Tech	Street: 196 Baker Avenue	
Municipality: Concord	State: MA	Zip Code: 01742
Phone: 978 371 4008	Fax: 978 371 2468	E-mail: Maura.Callahan@earthtech.com

- 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): None

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify DEP New Source Approval and Water Management) No

List Local or Federal Permits and Approvals:
New Source Approval (BRP WS 19),
Water Management Act Permit Amendment (BRP WM 02)

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 type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input checked="" 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
LAND				<input type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input checked="" type="checkbox"/> Water Management Act Permit <input checked="" type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	118	0	118	
New acres of land altered	0	0.2	0.2	
Acres of impervious area	0	0.2	0.2	
Square feet of new bordering vegetated wetlands alteration	0	0	0	
Square feet of new other wetland alteration	0	0	0	
Acres of new non-water dependent use of tidelands or waterways	0	0	0	
STRUCTURES				
Gross square footage	0	864 sq. ft.	864 sq. ft.	
Number of housing units	0	0	0	
Maximum height (in feet)	0	10	10	
TRANSPORTATION				
Vehicle trips per day	0	1	1	
Parking spaces	0	1	1	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	1.0 MGD	1.0 MGD	
GPD wastewater generation/treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0.58	0.58	

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 for State Protected Rare Species (PH 1730)) 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

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 Edgartown Water Department is proposing to construct a municipal water supply well at Test Well Site 2-04. The site is located on the USGS topographic Edgartown Quadrangle at latitude 41° 24'10" and longitude 70°34'10". Test Well 2-04 is located approximately 1,700 feet southwest of Vineyard Haven Road on Town owned property. A one-story pumping station (approx. 24' by 36') will be built to house the pumping equipment and materials associated with the well. A semi-pervious gravel road will be constructed to access the site from Pennywise Path. Approximately 2,000 linear feet of 12-inch water main will be installed within the access road; another 1,000 feet of main will extend down 22nd Street to connect to the existing distribution system on Edgartown-Vineyard Haven Road. A Locus Map, Surveyed Site Plan and Proposed Project Plan are included in Attachment A.

The purpose of a new public water supply well at Site 2-04 is primarily to alleviate water quality problems at Edgartown's Machacket Well. The Water Department is not currently looking to increase its authorized water withdrawals. The Department would like to reduce its reliance on the Machacket Well, which is experiencing aesthetic water quality problems from high iron concentrations. More than simply creating redundancy, the new well will create reliability in the system by providing water of superior quality to its customers.

Edgartown's existing water supply consists of 4 groundwater sources. Under the Water Management Act Program, the Water Department is currently authorized to withdraw a total of 0.89 million gallons per day (mgd) on average over a calendar year. Machacket and Lily Pond Wells are registered with the State to withdraw an average daily volume of 0.65 mgd. Wintucket Well No. 2 and Quenomica Well are permitted to withdraw an average of 0.24 mgd. Withdrawals from Wintucket Well No. 2 and Quenomica Well are not to exceed the approved maximum daily volumes of 1.0 mgd and 1.30 mgd, respectively.

For the period 1999 to 2003, Edgartown's highest peak day demand was 2.573 mgd (July 3, 1999), and its highest maximum week demand was 18.05 mgd (August 9 through 15, 2002).

The Quenomica Well is Edgartown's largest supply source. In an evaluation of supply adequacy, the largest source of supply is often considered out of service, to account for potential mechanical problems, groundwater contamination, or power outages. In accordance with AWWA Distribution System Requirements for Fire Protection (Manual M31), the Department's pumping capacity (in conjunction with available storage) should be sufficient to handle maximum day demands and the maximum required fire flow with the largest pump out of service. With the Quenomica Well out of service, Edgartown's three remaining wells could potentially meet peak demands however, the water quality in the Machacket Well would plummet. It is the intention of the Water Department to construct a new well to reduce the reliance on the Machacket Well and eliminate or postpone the need for treatment.

Alternatives

Edgartown Water Department has been considering several potential sites for future water supply development. A detailed Alternatives Analysis is included in Attachment B of this submittal. A test well program was completed in the spring of 2004 which identified three potential sites for water supply development. One potential site was identified within the town-owned property that currently houses the Quenomica and Wintucket Wells. This site

was purchased and protected for future water supply purposes. However, at this time the Town would like to locate a new supply away from the two existing public supply wells to ensure flexibility in the system.

The Town is also currently in discussions with the State regarding locating a supply source within the State Forest, i.e. land owned by the citizens of the Commonwealth of Massachusetts and under the administrative control of the Department of Conservation and Recreation (DCR). Under current policy, DCR does not allow development of municipal water supplies on land under their control, except under extreme circumstances. However, the Town may be willing to trade land ownership or leasing for two promising test well sites. Because State Forest is normally remote from human activity, it is likely that the groundwater quality on these lands is of the highest quality. To date, the State has not agreed to the proposed land transfer. However, in view of promising water-quality and the cost of land in Edgartown, the Water Department will continue its negotiations.

Under a "No Action" alternative, no public supply well would be installed at Test Well Site 2-04. The "No Action" alternative would require that the peak day and peak week demands are met using Edgartown's existing wells. This alternative would not provide adequate water quality to satisfy water supply customers. Currently, use of the Machacket Well produces multiply complaints from water users. If a new well is not constructed to replace the Machacket Well, higher demands will be made from the Lily Pond Well, Wintucket Well No. 2 and the Quenomica Well. Wells that are operated continuously for long periods of time often develop problems with iron and manganese. "No Action" would not protect long-term water quality of these water supplies.

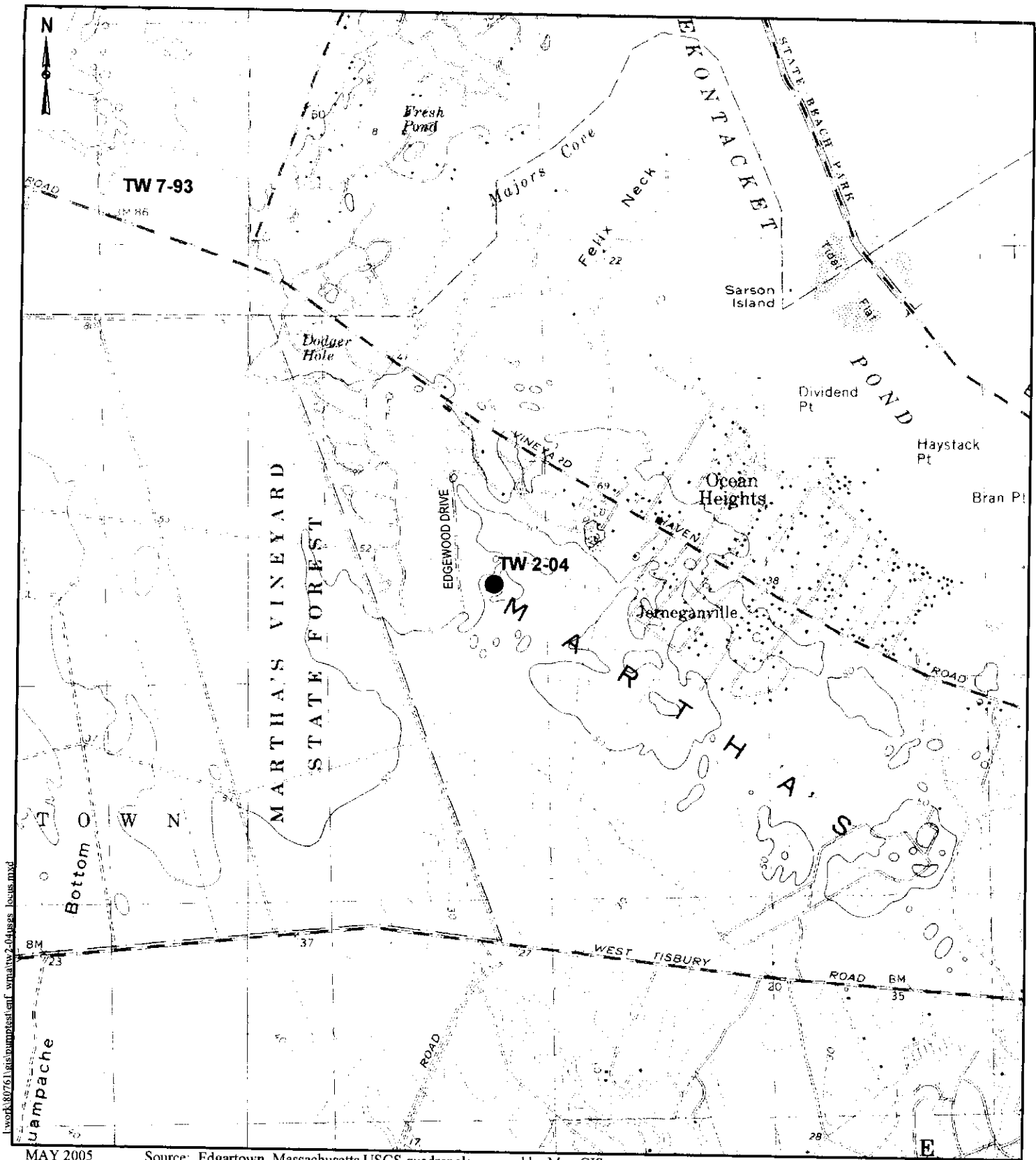
"No Action" would not provide the necessary flexibility or offer system redundancy to allow the Town to effectively manage the water system. An additional source of supply would allow the Town to reduce pumping from individual wells and preserve quality. Finally, an additional supply will reduce potential localized ecological impacts that might be caused by higher pumping of the existing wells, such as the Wintucket Well No. 2.

Proposed Mitigation Measures

Test Well 2-04 was placed outside wetlands and their associated buffer zones to avoid direct impacts and minimize indirect impacts to wetlands. To meet Zone I restrictions, Test Well 2-04 was situated more than 400 feet from abutting properties.

An examination of the most recent Massachusetts Natural Heritage Atlas indicates that the well site is located on land identified as Priority Habitats for State-Protected Rare Species: not equivalent to 'Significant Habitat' as designated under Massachusetts Endangered Species Act. The project has been designed to avoid any work within any wetland resource or resource buffer zone. The access road and water main route was selected based on existing conditions with the goal of minimizing disturbance. Gravel was chosen for the road surface to minimize impervious surfaces and reduce potential run-off.

At all times during construction, hay bales and silt fencing will be located between the work and any wetland resource area, as a means of sediment control and to define the limit of work. Refueling of all vehicles (except the drilling rig, which will be stationary, once erected) will take place outside of resource areas and their buffer zones. All areas temporarily disturbed by construction activities will be restored (mulched and reseeded) prior to the removal of the sedimentation and erosion control barrier.



MAY 2005

Source: Edgartown, Massachusetts USGS quadrangle scanned by MassGIS

SCALE 1:24,000

0 1,000 2,000 Feet



**LOCUS
TEST WELL SITE 2-04
EDGARTOWN, MASSACHUSETTS**

