

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOE No.: 13882
 MEPA Analyst: Holly Johnson
 Phone: 617-626-1623

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: Municipal Supply Well at Test Well Site 27-03		
Street: West Gate Road		
Municipality: Brewster	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates: 41.719553 / 70.106068	Latitude: 41 43' 10.39" Longitude: 70 06' 21.85"	
Estimated commencement date: Spring 2007	Estimated completion date: Spring 2008	
Approximate cost: \$3.8 million	Status of project design: 50 %complete	
Proponent: Brewster Water Department		
Street: 1671 Main Street		
Municipality: Brewster	State: MA	Zip Code: 02631
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Maura Callahan		
Firm/Agency: Watershed Hydrogeologic	Street: P.O. Box 741	
Municipality: Acton	State: MA	Zip Code: 01720
Phone: (978) 394-4245	Fax: (978) 263-1525	E-mail: maura.callahan@comcast.net

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): Not applicable

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

Yes (Specify: **DEP New Source Approval, Water Management Act**) No

List Local or Federal Permits and Approvals: **New Source Approval (BRP WS 19)**
and 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 checked="" 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 (including Legislative Approvals) – Specify:
Total site acreage	140	0	140	
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	864	
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	
WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	1.3 MGD	1.3 MGD	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0	1.3 miles	1.3 miles	

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 1494 Eastern Box Turtle**) 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 Brewster Water Department (BWD) is proposing to construct a municipal supply well at Test Well Site 27-03. Site 27-03 is located in the southwestern part of Brewster within the Punkhorn Parklands. The Brewster Conservation Commission and Water Department manage the 835-acre Punkhorn Parklands for purposes of conservation, water supply and passive recreation. The BWD controls 140 acres of the Southern Punkhorn which is largely wooded and undeveloped. Mixed oak species and pitch pine dominate the forest vegetation and the understory is consistently shrubby, comprised of black huckleberry and lowbush blueberry, with scrub oak occurring to a lesser extent.

The site is located on USGS topographic map of the Harwich Quadrangle at 41⁰43'10" latitude and 70⁰06'21" longitude approximately 1,500 feet east of West Gate Road (refer to Locus and Site Plan in Appendix A).

The purpose of the proposed well is to create flexibility and reliability in the water system. The new well will provide redundancy in case of emergencies and mechanical breakdowns and is intended to provide enhancements to water quality and reduce local environmental impacts from prolonged pumping of existing wells. An Alternatives Analysis for a well at Site 27-03 is included in Appendix B.

The BWD is currently authorized by the State under the Water Management Act to withdraw a total of 1.57 million gallons per day (mgd) on average over a calendar year. The new well is intended to augment the Town's existing supply wells and will not result in an overall increase in water withdrawals.

In pursuing this new supply, the BWD has been careful to consider federal, state and local regulations, and to minimize environmental impacts. Well Site 27-03 was placed outside wetlands to avoid direct impacts and minimize indirect impacts to wetlands. To meet Zone 1 restrictions, TW 27-03 was situated on BWD land more than 400 feet from abutting properties. A Request for Site Exam and Prolonged Pumping Test Proposal for TW 27-03 were submitted to DEP's Southeast Regional Office in January, 2006. A site exam was held on March 10, 2006. DEP approved the Request for Site Exam and Prolonged Pumping Test Proposal in a letter dated May 8, 2006. The Brewster Conservation Agent was consulted in advance of the pumping test. No local permits were necessary.

A prolonged pumping test was conducted in June 2006 to evaluate the suitability of TW Site 27-03 as a new water supply. The pumping test indicates that a permanent gravel-packed well at the site could yield 900 gallons per minute (gpm). Water-quality testing indicates that the water meets applicable drinking water

standards for those parameters tested. The well will not require treatment at this time, except for corrosion control purposes.

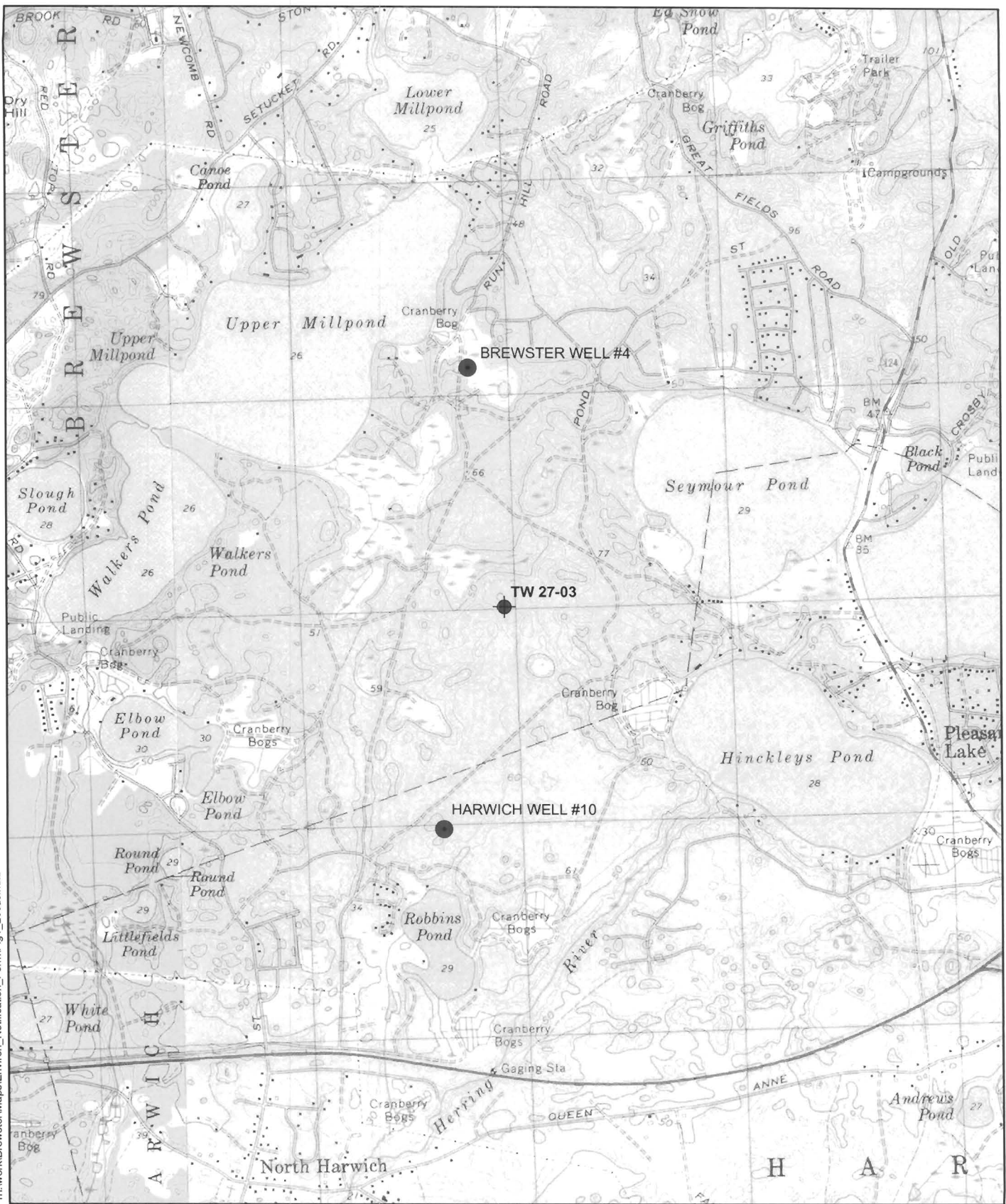
A one-story pump station (approximately 24 feet by 36 feet and 10 feet in height) is proposed to house pumping equipment, meters, valves and water-quality monitoring equipment. The building will house containment for potassium hydroxide, which will be used to adjust pH of the water before it is pumped into the distribution system. An emergency generator will be located in the station in case electric service is interrupted. A conventional propane storage tank will be installed outside the building to service this generator.

An existing dirt access road, extending from West Gate Road will be enhanced with gravel to provide access to the well site. Approximately 1.3 miles of 12-inch water main will be installed beneath the access road and continue westerly down Black Duck Cartway to Cranview Road to Slough Road where it will connect to the existing distribution system. Power to the site will be supplied from the south, installed underground along West Gate Road (refer to Site Plan in Appendix A). The access route was selected to minimize wetland disturbance and gravel was chosen to reduce impervious surfaces and reduce run-off.

In a response to a Massachusetts Endangered Species Act project review filing with the Natural Heritage Endangered Species Program (NHESP), the NHESP informed the BWD that TW 27-03 is located within Priority Habitat 1494, habitat of the Eastern Box Turtle. NHESP states that the construction of the new well and pumping station will not result in a "take", but that trenching to install water main and power should be timed to avoid harm to the turtles. The NHESP letter dated June 19, 2006 is included in Appendix C.

Three large ponds are about one-half mile from TW 27-03, Seymour Pond to the northeast, Hinckleys Pond to the southeast and Upper Millpond to the northwest. Numerous low areas and wetlands are also within one half mile. Three shallow drive points (DP-1, DP-2S and DP-2D) were driven in the abandoned cranberry bog 700 feet north and northwest of TW 27-03. An additional drive point, DP-3, was installed in another abandoned cranberry bog 900 feet southwest of Test Well 27-03 during a 2003 test-well investigation (see Site Plan for locations). The points were used to evaluate potential impacts to groundwater levels in the bogs during pumping. An excerpt from the Prolonged Pumping Test Report for Test Well 27-03 discussing the potential impacts on sensitive receptors is included in Appendix D of this filing.

The project will not result in the introduction of any pollutants into surface waters or groundwater. At all times during construction, hay bales and silt fencing will be located between the work and any nearby wetland resource area, as a means of sedimentation control and to define the limit of work. There are no hazardous particulate or soluble materials used in the installation of the well or water main. 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 seeded) prior to removal of the sedimentation and erosion control barrier. A Distribution List for this ENF is included in Appendix E and a copy of the Public Notice is in Appendix F.



m:\work\Brewster\Maps\Environ_Notification_Form\Fig1_Locus.mxd

September 2006

Source: Harwich and Dennis, Massachusetts USGS quadrangle scanned by MassGIS

EarthTech
A tyco International Ltd. Company

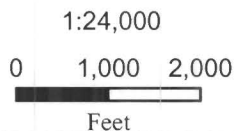


FIGURE 1-1
LOCUS
TEST WELL SITE 27-03
BREWSTER WATER DEPARTMENT
BREWSTER, MASSACHUSETTS