### Commonwealth of Massachusetts

**ENF** 

Project Name:

Executive Office of Environmental Affairs ■ MEPA Office

# Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
EOEA No.: 13676
MEPA Analyst Anne Canaday
Phone: 617-626-1035

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.

Pinelli Site TW 1-04 and 13-04					
Street: Off Old Westport Road					
Municipality: Dartmouth	Watershed: B	Watershed: Buzzards Bay			
Universal Tranverse Mercator Coordinates:	Latitude: 41				
331745,4610976 and 331768, 4610944		<u>°01'12" / 71°01'11"</u>			
Estimated commencement date:Winter 20		pletion date: Fall 2006			
Approximate cost: \$1.9 million		ct design: 50%complete			
Proponent: Dartmouth Water and Sewer	Division				
Street: 751 Allen Street	1				
Municipality: North Dartmouth	State: MA	Zip Code: <b>02747</b>			
Name of Contact Person From Whom Copi Maura Callahan	es of this ENF Ma	y Be Obtained:			
Firm/Agency: Earth Tech	Street: 196 Ba	aker Avenue			
Municipality: Concord	State: MA	Zip Code: <b>01742</b>			
Phone: <b>978 371 4008</b> Fax: 9	78 371 2468	E-mail:Maura.Callahan@earthtech.com			
Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?    Yes					
— Are you requesting coordinated review with any ⊠Yes (Specify <b>DEP New Sou</b> List Local or Federal Permits and Approvals: New Source Approval (BRP W	rce Approval and \	, regional, or local agency? <b>Nater Management</b> )			

## 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):						
☐ Land ☑ Water ☐ Energy ☐ ACEC	☐ Rare Speci☐ Wastewate☐ Air☐ Regulation	er 🔲	Transportat Solid & Haz	zardous Waste Archaeological		
Summary of Project Size	Existing	Change	Total	State Permits &		
& Environmental Impacts				Approvals		
	_AND			☑ Order of Conditions		
Total site acreage	107	0	107	Superseding Order of Conditions		
New acres of land altered	0	0.12	0.12	Chapter 91 License		
Acres of impervious area	0	0.12	0.12	401 Water Quality Certification		
Square feet of new bordering vegetated wetlands alteration	0	0.12	0.12	MHD or MDC Access Permit		
Square feet of new other wetland alteration	0	0	0	Water Management Act Permit		
Acres of new non-water dependent use of tidelands or waterways	0	- 0	0	New Source Approval		
STRU	☐ DEP or MWRA					
				Sewer Connection/ Extension Permit		
Gross square footage	0	650 sq.ft.	650 sq.ft.	Other Permits (including Legislative Approvals) - Specify:		
Number of housing units	0	0	0			
Maximum height (in feet)	0	10	10			
	PORTATION					
Vehicle trips per day	0	1	1			
Parking spaces	0	2	2			
WAS <sup>-</sup>	TEWATER					
Gallons/day (GPD) of water use	0	0	0			
GPD water withdrawal	0	864,000	864,000			
GPD wastewater generation/ treatment	0	0	0			
Length of water/sewer mains (in miles)	0	0.03	0.03			

**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, prese restriction, or watershed preservation restriction?	ervati	on restriction, agricultural preservation
☐Yes (Specify)	) [	⊠No
RARE SPECIES: Does the project site include Estimated Habi Sites of Rare Species, or Exemplary Natural Communities?		•
⊠Yes (Specify The Priority Habitat Atlas identifies the	e site	<b>as WH 4093.</b> )
HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the	proje	ect site include any structure, site or district
listed in the State Register of Historic Place or the inventory of Commonwealth?	Histo	oric and Archaeological Assets of the
☐Yes (Specify	)	⊠No
If yes, does the project involve any demolition or destruction of archaeological resources?		
☐Yes (Specify	)	⊠No
AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the Environmental Concern?	proje	ect in or adjacent to an Area of Critical
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 Dartmouth Water and Sewer Division is proposing to construct two new municipal groundwater supply sources in the Shingle Island sub-basin of the Buzzards Bay River Basin. The permanent production wells will be constructed at the sites of Test Well Nos. 1-04 and 13-04, referred to as the Pinelli Site in Dartmouth, Massachusetts (see Figure 1 in Attachment A). Each well will be capable of producing 300 gallons per minute (gpm). The Town is currently authorized by the State under the Water Management Act to withdraw a total of 3.27 million gallons per day (mgd) on average over a calendar year. The wells are intended to augment the Town's existing supply wells and will not result in an overall increase in water withdrawals.

The Pinelli Site is located on the USGS topographic map of the Fall River East quadrangle at latitude 41° 37' 58" and longitude 71° 1' 12". The Site is located approximately 0.75 mile west of the intersection of Cross Road and Old Westport Road. The land is forested and owned by the Town of Dartmouth for the purposes of water supply. A Locus Map, Surveyed Site Plan and Proposed Plan are included in Attachment A and an Alternative Analysis is included in Attachment B.

One-story pump stations, approximately 10 feet in height, are proposed to house pumping equipment and materials associated with the wells. The larger pump station at TW 1-04 will be 20 by 21 feet. It will include a generator room and controls for both stations. The smaller station at TW 13-04 will be 11.5 by 20 feet. Both wells will tie into an existing raw water main that runs through the site to be delivered to the Town's treatment facility.

An existing dirt road will be reconstructed with bituminous concrete, approximately 700 feet in length, to provide access for Water Department personnel to the well site from Highwood Estates, the condominium development off Route 6. Crushed stone will be placed around the stations and concrete pads of outside components such as the propane tank. Fencing will be provided to control access to the site and to protect equipment from vandalism. The northern access route was selected to minimize impacts to wetlands. Approximately 0.015 acres will be disturbed for the pump stations and approximately 0.1 acres will be reconstructed for the access road for a total of 0.115 acres of a 107 acre property.

The purpose of the proposed wells at the Pinelli Site is four-fold: 1) to reduce stress on the Paskamanset River from pumping of the Town's Violletta and Chase Road Wells 2) to reduce the Town's reliance on purchasing water from New Bedford, 3) to replace lost withdrawal from Well No. 4 (Route 6 Well), and 4) to create flexibility and reliability in the distribution system.

The Town of Dartmouth has a 4,000 gpm inter-municipal connection with New Bedford (PWS 4201000). New Bedford has surface water supplies located in the Taunton River Basin. The chemistry of New Bedford's surface water supplies differs from Dartmouth's groundwater sources which creates water quality problems when the two are mixed. It is the intention of the Town to reduce its reliance on purchased water to reduce costs and improve water quality.

The proposed water supplies at the Pinelli Site would allow the Town to reduce over pumping of the Violetta and Chase Road wells which have WMA permitting conditions that restrict use during low flow conditions in the Paskamanset River. The project is intended to provide more reliability in the water system because low flow conditions coincide with peak demands in Dartmouth.

Gravel packed well No. 4, also known as the Route 6 Well, is located approximately 2,300 feet to the west of the Pinelli Site (see Figure 1). Well No. 4 is the only municipal well located in the Shingle Island River subbasin. The well is currently inactive due to poor water quality and possible contamination. The proposed project will allow the Town to replace this lost withdrawal.

#### **Priority Habitats**

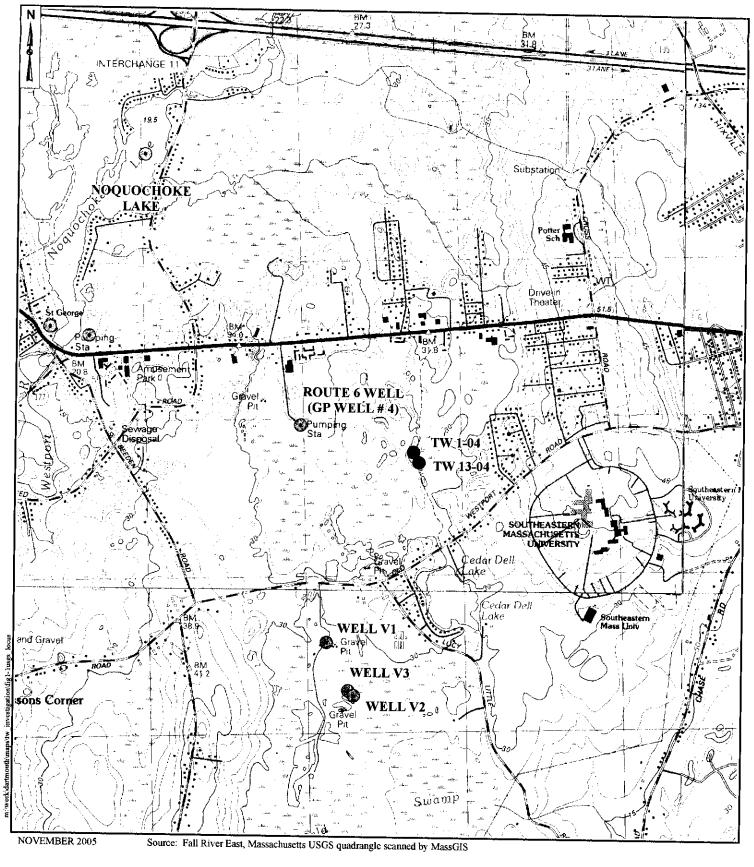
A review of the Priority Habitats Atlas of the Natural Heritage and Endangered Species Program indicate that rare and endangered species have been identified in the area of the proposed site. This area is identified in the Atlas as WH 4093. A Natural Heritage and Endangered Species Program Project Filing was submitted for the project in October 2005 and the NHESP has determined that this project will NOT result in a prohibited "take" of state-listed rare species (letter dated November 8, 2005).

#### Wetlands

The wetlands on the site were delineated by Prime Engineering of Lakeville, Massachusetts. The test wells are located in the buffer zone of bordering vegetated wetlands; they were placed outside the wetlands to avoid direct impacts. An existing dirt road will be reconstructed with bituminous concrete to provide access to the site. The northern access route was selected to minimize wetland impacts.

The project will not result in the introduction of any pollutants into surface water or groundwater. There are no hazardous particulate or soluble materials used in the installation of the well or water main. To prevent suspended solids from the temporarily exposed site from being transported into the wetland area hay bales and/or silt fencing will be installed along the project perimeter. Hay bales and/or silt fencing will be removed only after these areas are re-vegetated and stabilized.

Potential impacts to water levels in the wetlands from pumping were investigated during the prolonged pumping tests conducted at the proposed wells. Earth Tech installed shallow drive points in the wetlands surrounding TW Sites 1-04 and 13-04 at two locations: DP-2S and DP-2D, 216 feet southwest of TW 13-04, and DP-1S, 192 feet north of TW 13-04. The drive points were installed to a depth of 5 to 7 feet. TW 16-04, was driven two feet from DP-1S to a depth of 32 feet, the base of the pumped aquifer. Please refer to the Site Plan in Attachment A for drivepoint locations and a discussion of wetlands monitoring and a graphical representation of the data are included in Attachment C.



SCALE: 1:24,000

0 1,000 2,000 Feet

Test Well

Public Water Supply Well

FIGURE 1-1 SITE LOCUS PINELLI TEST WELL SITE DARTMOUTH, MASSACHUSETTS

