

Commonwealth of Massachusetts
 Executive Office of Energy and Environmental Affairs
 Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

<p><i>For Office Use Only</i></p> <p>EEA#: <u>15816</u></p> <p>MEPA Analyst: <u>Kevin Flaherty</u></p>
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The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Plymouth Water System Expansion		
Street Address: 26 Court Street		
Municipality: Plymouth	Watershed: South Coastal	
Universal Transverse Mercator Coordinates:	Latitude: 41.905047 Longitude: -70.622944	
Estimated commencement date: July 2018	Estimated completion date: Jan 2020	
Project Type: Municipal Water System	Status of project design: 10 %complete	
Proponent: Town of Plymouth		
Street Address: 26 Court Street		
Municipality: Plymouth	State: MA	Zip Code: 02360
Name of Contact Person: Sarah Price, PE		
Firm/Agency: Environmental Partners Group	Street Address: 1900 Crown Colony Dr.	
Municipality: Quincy	State: MA	Zip Code: 02169
Phone: 617-657-0200	Fax: 617-657-0287	E-mail: sfp@envpartners.com

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

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you 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
 (Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
 New withdrawal or expansion in withdrawal of 100,000 or more gpd from a water source that requires new construction for the withdrawal

Which State Agency Permits will the project require?
 DEP BRP WM03 – Water Withdrawal Permit Amendment
 DEP BRP WS20 – Approval to Construct Water Supply Source > 70 gpm
 DEP BRP WS32 – Distribution Modifications for Systems that serve more than 3,300 people

13816
Fair Harbor

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.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	2.41		
New acres of land altered		0.84	
Acres of impervious area	1.57	0.84	2.41
Square feet of new bordering vegetated wetlands alteration		0	

Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0	3,231	3,231
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	15	15
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A	N/A	N/A
WASTEWATER			
Water Use (Gallons per day)	N/A	N/A	0
Water withdrawal (GPD)	0	1,048,000	1,048,000
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	0.91	2.59	3.5
Length of sewer mains (miles)	N/A	N/A	N/A
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

See Supporting Information – Section 5

Describe the proposed project and its programmatic and physical elements:

See Supporting Information – Section 2.

Plymouth supplies approximately 14,000 water system customers with drinking water from eleven wells at a total of ten groundwater supply source locations. Drinking water is distributed to customers via more than 200 miles of pipe. The water system is divided into six pressure zones, each of which is interconnected with at least one other pressure zone to allow for distribution of water during times of peak demand or emergency conditions. The water system utilizes ten water storage tanks to store the Town's finished drinking water so that it is available for periods of high demand and fire flow conditions.

The Town completed a Water System Master Plan in 2006 that identified a lack of redundancy in their water supplies needed to reliably meet system demands, as well as a potential need for additional water supply volume over the long term.

The Plymouth Water System Expansion consists of the development of a new water supply at Forges Field. Preliminary hydraulic modeling of the expanded Bradford Pressure Zone with the addition of the Forges Field water supply has been completed. Based on this modeling, customers located along the proposed water main route will be adequately served by typical operating pressures within this zone. Furthermore, the modeling suggests that a 12-inch water main is required to provide the needed fire flow (750 gallons per minute or greater at 20 psi) to the residential customers along Russell Mills Road and Jordan Road between Forges Field Road and Russell Mills Road.

In addition to development of the Forges Field well as a new water supply, the proposed water system improvements consist of the following elements:

- Construction of a pump station building at Forges Field where the water will be chemically conditioned for pH and disinfection.
- Installation of a transmission main that will deliver water from Forges Field to the Bradford Pressure Zone via Jordan Road and Russell Mills Road.
- Construction of a valve control station along Forges Field Road near Jordan Road to provide a new option for routing water from the Bradford Pressure Zone to the Plymouth Center Zone.

The water system expansion is to be constructed as a single, continuous construction effort during 2018 and 2019, and coming online in early 2020. A description of the well field, valve control station and distribution system is provided below.

Water Supply Well Station at Forges Field

A well station will be located at the Forges Field Site. This well station building is approximately 35' x 50' in size and will house the pump, telemetry and water conditioning equipment. Adjacent to the

well station will be a generator and propane tank for backup electrical and heating purposes.

The well field currently has an existing 12-inch diameter well that were used for the prolonged aquifer performance tests. New production wells are proposed in the same vicinity as the test well, which will serve as the water supply well for the system. Electrical utilities and water mains will be installed on existing well field access roads. The overall area to be cleared for the well station is approximately 150' x 150'. Chain link fencing is to be placed around the wells and pump house for security purposes.

Valve Control Station

Construction of a valve control station is proposed along Forges Field Road near Jordan Road that will provide a new option for routing water from the Bradford Pressure Zone to the Plymouth Center Zone.

Distribution System

The water system expansion consists of approximately 13,680 feet of new ductile-iron water mains with associated services, hydrants, and valves. This includes the installation of approximately 8,904 feet of water main along Forges Field Road, Jordan Road and Russell Mills Road for system expansion, and potentially the replacement of approximately 4,776 feet of existing water main along Russell Mill road within the Bradford pressure zone. The need to replace the existing water main on Russel Mill Road will be confirmed as part of the design process, and will be determined on the adequacy of the existing pipe's material, age, and diameter. The water mains will generally be located almost exclusively within existing roadway right-of-ways.

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

See Supporting Information – Section 4.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:
See Supporting Information – Section 9.

If the project is proposed to be constructed in phases, please describe each phase:

The project is to be constructed in a single, continuous effort from July 2018 through the end of 2019.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify _____)
 No

if yes, does the ACEC have an approved Resource Management Plan? ___ Yes ___ No;

If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes ___ No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see