Commonwealth of Massachusetts

Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 13985
MEPA Analyst: Holly Johnson
Phone: 617-626-1023

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: **Crescent Street and East Street Water Treatment Facilities**		
Street: **East, Crescent, and Washington Streets, NSTAR easement near Hudson and Pond Streets, and Chestnut, Bridge, Belmont, Pleasant, Summer and Bedford Streets**		
Municipality: **East Bridgewater**	Watershed: **Taunton River Basin**	
Universal Tranverse Mercator Coordinates:	Latitude: **42.02** Longitude: **-70.9**	
Estimated commencement date: **September 2007**	Estimated completion date: **September 2008**	
Approximate cost: **14 million dollars**	Status of project design: **50%** complete	
Proponent: **East Bridgewater Department of Public Works**		
Street: **100 Willow Avenue**		
Municipality: **East Bridgewater**	State: **MA**	Zip Code: **02333**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Nicole Sanford, Environmental Scientist**		
Firm/Agency: **Stantec Consulting Services**	Street: **136 West Street, Suite 203**	
Municipality: **Northampton**	State: **MA**	Zip Code: **01060**
Phone: **413-584-4776**	Fax: **413-584-3157**	E-mail: **nicole.sanford@stantec.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 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): **DEP SRF – DWSRF -2995 – 14 million dollars**

Are you requesting coordinated review with any other federal, state, regional, or local agency? ☒Yes(Specify: **MA DEP**) ☐No

List Local or Federal Permits and Approvals: **DEP Technical, DEP SRF, Planning Board, Conservation Commission and Board of Health**

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

- ☐ Land
- ☒ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☐ Wetlands, Waterways, & Tidelands
- ☐ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	23 acres = Well No 5 East St WTP 26 acres = Well No 2 Crescent St WTP		
New acres of land altered		2.6 Well No 5 2.8 Well No 2	
Acres of impervious area	0.3 Well No 5 0.4 Well No 2	0.6 Well No 5 0.5 Well No 2	0.9 Well 5 0.9 Well 2
Square feet of new bordering vegetated wetlands alteration		6,000 permament 4, 760 temporary	
Square feet of new other wetland alteration		Riverfront = 13,000 BLSF = 13,000	
Acres of new non-water dependent use of tidelands or waterways		N/A	
STRUCTURES			
Gross square footage	Well No 1 = 300 SF Well No 2 = 363 SF Well No 3 = 421 SF Well No 4 = 328 SF Well No 5 = 510	Crescent Street WTP = 4,480 SF East Street WTP = 4,480 SF	Well No 1 = 300 SF Well No 2 = 4,843 SF Well No 3 = 421 SF Well No 4 = 328 SF Well No 5 = 4,990 SF
Number of housing units	N/A	N/A	N/A
Maximum height (in feet)	Existing well structures are one story	Proposed WTPs will be 2 ½ story or 44 feet tall	44 feet tall WTP at Well No 2 site and Well No 5 site

State Permits & Approvals

- ☒ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☐ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

TRANSPORTATION			
Vehicle trips per day	2 trips each site	0	2 trips each site
Parking spaces	3 at each site	3 additional at each WTP site	6 total at each WTP site
WATER/WASTEWATER			
Gallons/day (GPD) of water use	0	0	0
GPD water withdrawal	Five wells total 2.9 MGD	0	2.9 MGD
GPD wastewater generation/ treatment	0	30,000 at each WTP site of backwash wastewater	60,000 of backwash wastewater
Length of water/sewer mains (in miles)	8.6	2.32	10.92

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: **Portions of project work will occur within mapped Estimated and Priority Habitat)**

☐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.*)

Introduction

The Town of East Bridgewater has been experiencing a decline in water quality within their municipal drinking water distribution system. In order to correct the water quality issues in the most cost effective manner, the Town needs to build two treatment facilities that will treat the raw water from their five existing wells (Figure 1). Treatment of these supplies is needed to allow pumping of the wells without introducing elevated levels of iron and manganese into the water distribution system. No increase in permitted

withdrawal is proposed at any of the well sites. This project exceeds the MEPA review threshold at 310 CMR 11.03 (4) (b) (4) construction of a new drinking water treatment plant with the capacity of 1 MGD or more.

Project Description

The existing well sites are owned and operated by the Town of East Bridgewater Department of Public Works and consist of access roads with well houses ranging in size from 300 SF to 500 SF. The proposed East Street Water Treatment Facility (WTP) will be located near the existing Well No. 5 and the proposed Crescent Street WTP will be located near the existing Well No. 2. The proposed Crescent Street WTP will treat the raw water from Well Nos. 1 through 4 due to its proximity to these existing wells, and the proposed East Street WTP will treat the raw water from Well No. 5. As shown on the enclosed plans, the project will involve the construction of two separate, 4,800 SF, water treatment facilities at Well No. 5 (East Street) and Well No. 2 (Crescent Street) with associated infrastructure (e.g., septic systems, stormwater structures and lagoons for backwash wastewater) and the installation of associated utilities to connect the wells to the WTPs and the treated water to the existing distribution system.

Since it is not cost effective to build treatment facilities at each individual well, the raw water from Well Nos. 1, 2, 3 and 4 will have to be connected to the Crescent Street treatment facility with raw water transmission mains. To connect Well No. 1 (Pond Street Well) to the proposed treatment facility, an 8-inch diameter HDPE water transmission main will be installed between Well No. 1 and Well No. 4 (Hudson Street Well). The most direct route is through the NSTAR easement, which is adjacent to both wells. NSTAR will not allow the water main to be installed in an existing gravel access road which runs down the center of their right-of-way. Therefore, the water main will be directionally drilled within the first 10 feet of the edge of the right-of-way parallel to the NSTAR easement edge approximately 4,800 feet to the Well No. 4. At Well No. 4, the new transmission main can be tied into to the Town's existing water main that is currently within an existing easement within the NSTAR easement between Well No. 4 and Well No. 2 (Crescent Street Well). After completion, Well Nos. 1, 2 and 4 will be able to pump directly to the proposed Crescent Street WTP. To connect Well No. 3 (Washington Street Well) to the proposed treatment facility, an 8-inch diameter raw water transmission main needs to be installed in Washington Street between Well No. 3 and the intersection of Crescent Street, continuing on Crescent Street to the entrance to Well No. 2, and down the well access road to the proposed location of the Crescent Street WTP. Approximately, 32,600 LF of water main will be replaced within portions of Chestnut, Crescent, Bridge, Belmont, Summer and Bedford Streets. The existing mains are greater than 50 years old, are relatively small and have been constricted by tuberculation due to the presence of iron and manganese in the water system. The construction of the water treatment plants will improve the water quality and the distribution system improvements will improve the system's flows and fire flows.

Project Alternatives

Since Well No. 5 (East Street Well) is located on the other side of the distribution network in Town, an alternatives analysis was conducted to determine if it was more cost effective to build a second WTP at East Street or install approximately 17,500 linear feet of 12-inch diameter ductile iron raw water transmission main and increase the capacity of the Crescent Street WTP. The cost of the additional raw water transmission main, as well as the increased cost of enlarging the treatment capacity of the proposed Crescent Street WTP to treat all five wells was more expensive than the building of a second WTP. In addition, the second WTP at East Street provides the Town with the ability to keep one facility operating in the event one of the facilities needs to be shutdown. Additionally, there are no practicable off-site alternatives for this project and it only makes logistical and economic sense to construct facilities near the wells they are designed to treat.

Project Impacts

The project will require the filing of a Notice of Intent with the Conservation Commission for work at East Street and along the installation route for the raw water transmission mains. Approximately, 6,000 SF of bordering vegetated wetland will be permanently impacted due to the installation of gate valves on the cross country portion of the raw water main from Well No. 1 to Well No. 4. This impact will be minimized to the extent practicable and wetland replication will be provided and discussed during the Notice of Intent process as mitigation for this impact.

The cross country portion of the water main installation will occur within Estimated and Priority Habitat and a copy of this ENF is being sent to the Natural Heritage and Endangered Species Program for their review.

Directional drilling of the water main in this area is favorable over the traditional open cut trench excavation method.

NSTAR is currently reviewing plans regarding the installation of the water main using directional drilling technology within their existing easement.

Summary

In summary, only 5.42 acres of the 49 acres will be disturbed as it is the goal of public drinking water supplies to the leave areas surrounding wells as natural as possible. The project will not result in an increase in permitted water withdrawal and will only improve the quality and reliability of drinking water for the Town of East Bridgewater.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1)
___ Yes **X** No; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings	**0.01 Well 5**	**0.11 each**	**0.12 Well 5**
	0.01 Well 2		**0.12 Well 2**
Roadways, parking, and other paved areas	**0.3 Well 5**	**0.6 Well 5**	**0.9 Well 5**
	0.4 Well 2	**0.5 Well 2**	**0.9 Well 2**
Other altered areas (describe)	**0**	**0**	**0**
Undeveloped areas	**23 Well 5**	**2.2 Well 5**	**21 Well 5**
	26 Well 2	**2.2 Well 2**	**23 Well 2**

B. Has any part of the project site been in active agricultural use in the last three years?
___ Yes **X** No; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?
___ Yes **X** No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a DEM-approved forest management plan:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes **X** No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction?
___ Yes **X** No; if yes, does the project involve the release or modification of such restriction?
___ Yes ___ No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes **X** No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ No **X** ; if yes, describe:

H. Describe the project's stormwater impacts and, if applicable, measures that the project will take to comply with the standards found in DEP's Stormwater Management Policy: