

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: 13208
MEPA Analyst: Arthur Pogsley
Phone: 617-626-1029

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: Hamant Brook Well Site		
Street: West Side of Hamant Brook, Just off of Shattuck Road		
Municipality: Sturbridge, MA	Watershed: Quinebaug	
Universal Tranverse Mercator Coordinates: 739844 E 4663619 N	Latitude: 42 degrees 05' 17" N Longitude: 72 degrees 06' 00" W	
Estimated commencement date: Spring 2004	Estimated completion date: Spring 2006	
Approximate cost: \$3,300,000	Status of project design:	0 %complete
Proponent: Department of Public Works, Water Department		
Street: Town Hall, 308 Main Street, PO Box 182		
Municipality: Sturbridge	State: MA	Zip Code: 01566
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Suzanne L. Pisano, P.E. and Michael Zylich		
Firm/Agency: Tighe & Bond, Inc.	Street: 324 Grove Street	
Municipality: Worcester	State: MA	Zip Code: 01605
Phone: 508-754-2201	Fax: 508-795-1087	E-mail: slpisano@tighebond.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 Anticipated**

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals:

- **Wetlands Order of Conditions for pumping test (completed)**
- **Filing of NOI for Wetlands Order of Conditions for construction of the water main (crossing under Hamant Brook culvert and Quinebaug River bridge)**
- **Planning and Zoning Site Plan Review**

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 checked="" 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	35			
New acres of land altered		<0.5		
Acres of impervious area	0	0.01	0.01	
Square feet of new bordering vegetated wetlands alteration		0.0		
Square feet of new other wetland alteration		0.0		
Acres of new non-water dependent use of tidelands or waterways		0.0		
STRUCTURES				
Gross square footage	0	300	300	
Number of housing units	0	0	0	
Maximum height (in feet)	0	15	15	
TRANSPORTATION				
Vehicle trips per day	0	1	1	
Parking spaces	0	2	2	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	712,000	0*	712,000	
GPD water withdrawal	1,050,000	0*	1,050,000	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0**	1.7	1.7	

* The current gpd of water use is based on 2002 data. The 2003 permitted gpd water withdrawal is 1.05 MGD from their Water Management Permit. The new well is for replacement of contaminated water supply well that was shut-down (Well #1). With the shut-down of Well #1, there was a net loss of 576,000 gpd. With the installation of the new water supply Well #4, approximately 467,533 gpd will be provided to replace a portion of the net loss from Well #1.

** Although the Town currently has water mains, there are no water mains in the new well area.

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 _____) No

The project does not fall within an estimated habitat, which is identified on the most recent Estimates Habitat Map of State-Listed Rare Wetlands Wildlife, published by the Natural Heritage and Endangered Species Program. Information was also requested from the Fisheries & Wildlife Services on the presence of any rare or endangered species. They indicated in their response letter that "we are not aware of any rare plants or animals or exemplary natural communities in the area of this site."

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

An inquiry was made to the Massachusetts Historical Commission requesting comments on potential impacts to historic or archeological resources caused by the projects. In their response letter, they indicated that "it has been determined that the project is unlikely to affect significant historic or archeological resources."

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 Town's current water supply system includes three production wells located along the Quinebaug River just to the south of Route 20. These three production wells are referred to as Wells #1, #2 and #3 with Well #1 being the oldest and most northerly located (closet to Route 20) and Well #3 being the newest and most southerly. In general terms, the three wells are capable of producing a combined 1,200± gpm and are roughly equal in pumping capacity. During the mid 1980's, it was discovered that Well #1 was impacted by the release of gasoline products from two commercial gasoline stations located to the north of the Town's wells along Route 20. Water quality from Well #1 contains the gasoline constituent methyl-tert-butyl ether (MTBE). The MADEP has ruled that Well #1 may be used only for emergency drinking water needs. Since that time, the Town has been forced to rely on the remaining two production wells. With only two available supply sources, the water system has insufficient reserve capacity and during peak water use seasons, the existing wells are operated near maximum capacity. The purpose of this project is to construct a new drinking water supply well to replace the capacity from the shut-down Well #1.

A new water supply production well (identified as Well #4) is proposed at a location on the west side of Hamant Brook, off of Shattuck Road (Figure 2). The site has been selected for further testing based upon the favorable findings of data collected using several small diameter (2½ - inch) test wells. The small diameter test wells were installed, pumped for a short period of time and preliminary data collected regarding soils characteristics, depth to bedrock, water pumping and water quality

characteristics. These data, combined with a review of existing land uses, available property and other available alternatives lead to a finding that the Hamant Brook site appears to offer the best choice of alternatives for the citing and construction of a new Town drinking water supply well.

The proposed new pumping station will be a small above ground structure sized to house each of the following: an above ground well casing extension; pumping system electric drive motor (primary driver); backup pump drive system (either generator or engine); well discharge system; electric power service and distribution system; data acquisition and supervisory control system (SCADA); well discharge piping and valves; and, chlorine addition system. The structure will be designed to be economical, low maintenance and for the purpose of year-round operations and system security. Possible materials of construction may include built in place masonry walls, concrete slab on grade floor and wooden truss roof with shingles or metal panel roofing or alternatively a pre-cast concrete type of structure installed on a crushed stone foundation. The pumping station site will include a small crushed stone surfaced driveway for personnel vehicle access, a hydrant for flushing purposes and be enclosed within a gated fenced area.

The only new water main piping proposed for the project is the connection of the new well water pumping station to the existing water treatment plant. The existing untreated well water transmission main will be extended 9,000± feet of 12-inch diameter pipe to the proposed new well site, as shown on the Figure 3 - Proposed Well #4 System Schematic in Appendix A. No new storage facilities are proposed with the installation of the well. A concept design for crossing of Hamant Brook is illustrated in Figure 4.

Several alternatives were considered for addressing the Town of Sturbridge's water supply capabilities prior to selecting the Hamant Brook well site. The alternatives included the following considerations: Leak Detection Survey; Conservation and Demand Management Alternative; Treatment of Well #1; Interconnection with an adjacent water system; and Alternative well sites. As a result of this alternatives evaluation, it was concluded that the installing a new well site at Hamant Brook was the most technically and economically feasible option. The detailed alternatives analysis was presented in the Preliminary Engineering Report and an Environmental Report prepared for USDA, Rural Development in May 2002. Copies of these reports can be provided upon request by calling the contact person for this project. The Environmental Report also outlines the various impacts of the new water supply source option. A summary of the impacts is presented in the table below. Details of the evaluation are presented in the report.

Description	Mitigation	Enforcement
Land Use/Farmland	No Mitigation Required	
Floodplains	No Mitigation Required	
Wetlands	Erosion & Sediment Controls, Restoration of Disturbed Areas	Sturbridge Conservation Commission
Cultural Resources	No Mitigation Required	
Biological Resources	No Mitigation Required	
Water Quality Issues	No Mitigation Required	
Coastal Resources	No Mitigation Required	
Socio-Economic/ Environmental Justice Issues	No Mitigation Required	
Air Quality	Dust Control, water spray	Will be specifically addressed in the Construction Specifications
Transportation	Traffic Control, police and signage	Will be specifically addressed in the Construction Specifications
Noise	Noise Control, limited work hours	Will be specifically addressed in the Construction Specifications