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.: 13576
MEPA Analyst: Rich Bourré
Phone: 617-626-1130

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 Mattapoisett River Valley Water District Water Treatment Facility		
Street: Tinkham Lane		
Municipality: Mattapoisett	Watershed: Buzzards Bay	
Universal Transverse Mercator Coordinates: 4616320.243N 346629.431E	Latitude: 41° 41' 02" N Longitude: 70° 50' 34" W	
Estimated commencement date: March 2006	Estimated completion date: May 2007	
Approximate cost: 13.3 Million	Status of project design: 50 %complete	
Proponent: Mattapoisett River Valley Water District Commission		
Street: P.O. Box 1055		
Municipality: Mattapoisett	State: MA	Zip Code: 02739
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Susan T. Hunnewell, P.E.		
Firm/Agency: Tata & Howard, Inc.	Street: 125 Turnpike Road	
Municipality: Westborough	State: MA	Zip Code: 01581
Phone: (508) 366-5760	Fax: (508) 366-5785	E-mail: shunnewell@tataandhoward.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. 4987) ☐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): Drinking Water State Revolving Fund, Department of Environmental Protection, 13.3 Million Dollars

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

List Local or Federal Permits and Approvals: Special Permit from Zoning Board of Appeals, Notice of Intent, BRP WS 24 (Approval to Construct a New Treatment Facility), BRP WS 32 (Distribution Modification for System > 3,300 People), Road Opening Permit, Disposal System Construction Permit, Department of Army Permit, Special Legislation for Conveyance of Wellfield and Water Supply Protection Land.

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	22.0 (WTF)		
New acres of land altered		1.67 (WTF) 0.97 (Mains)	
Acres of impervious area	0.01	0.79	0.80
Square feet of new bordering vegetated wetlands alteration		14,200	
Square feet of new other wetland alteration		7,500 (riverfront area)	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	288	12,065	12,353
Number of housing units	0	0	0
Maximum height (in feet)	0	20	20
TRANSPORTATION			
Vehicle trips per day	2	2	4
Parking spaces	0	4	4
WATER/WASTEWATER			
Gallons/day (GPD) of water use	0	300	300
GPD water withdrawal	5,980,000	0	5,980,000
GPD wastewater generation/ treatment	0	200	200
Length of water/sewer mains (in miles)	0	2.44	2.44

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:

Disposal System Construction Permit

Approval to Construct a Water Treatment Facility

Modifications to Distribution System > 3,300 People

Special Permit from Mattapoisett Zoning Board of Appeals

Site Plan Review-Mattapoisett Planning Board

Application for Department of Army Permit

Legislative Approval for the conveyance of Wellfield and Water Supply Protection Land to the Mattapoisett River Valley Water District

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 Spotted Turtle *(Clemmys guttata)*) ☐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: *Not yet determined, PNF pending. See attached correspondence.*) ☐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.*)

Description

The Mattapoisett River Valley Water District (MRVWD) was established by the Towns of Fairhaven, Marion, Mattapoisett and Rochester to address water quality and quantity needs of the Towns. The District's specific goals are to minimize public health threats, improve overall water quality, address water supply deficits, provide emergency interconnections for the Towns, optimize corrosion control and provide general upgrades of each Town's existing pumping stations. The proposed water treatment facility will be capable of treating up to 6 million gallons per day (mgd) of water and reduce iron and manganese concentrations below Secondary Maximum Contaminant Levels of 0.3 mg/l and 0.05 mg/l, respectively. The facility will treat raw water from eight (8) existing groundwater wells that provide water to the Towns of Fairhaven, Marion, and Mattapoisett. The proposed project will also involve limited upgrades to the existing pump stations and provide a new metering station with chemical feed capabilities.

The proposed treatment facility will utilize ozone oxidation and ultrafiltration to remove iron and manganese from the blended raw water. The treatment facility components include an ozone generator that utilizes liquid oxygen, an ozone detention/aeration tank, ozone destruction system, prefilters, ultrafiltration membrane units, clearwell, decant, backwash recovery and neutralization tanks, and multiple pumping and chemical feed systems. The proposed water treatment facility will be sited in the Town of Mattapoisett on a Town-owned parcel. The parcel is depicted on the Town of Mattapoisett Assessor's Map 22 as Lot 19. The parcel is bounded by Tinkham Lane to the north, the Mattapoisett River to the east, by an additional Town of Mattapoisett parcel to the south, and residential properties to the west. The site, approximately 22 acres in size, is primarily wooded with a significant bordering vegetated wetland (BVW) encompassing the eastern portion of the parcel and a smaller BVW located near the center of the parcel. In addition, the Town of Mattapoisett's Well Station #4 is located on this parcel.

Along with the proposed treatment facility, the project will include the installation of new raw water and finished water transmission mains, as well as a metering station. A raw water transmission main will be installed to connect Fairhaven's Tinkham Lane and Wolf Island Road Wells #1, #2, and #3, Mattapoisett Wells #3, #4 and #5, and Marion's Wolf Island Road Well to the water treatment facility. The finished water transmission main will connect to the existing system distribution systems in the vicinity of the Fairhaven Tinkham Lane Well, between Mattapoisett Wells #3 and #4, and Marion's Wolf Island Road Well. Generally, the route of the transmission mains is in a north-south direction through Town-owned lands and private property via easements. These Town owned land's intended use is for the siting of the existing wells and source water protection, while the private property is used for a cranberry growing operation. Besides the cranberry growing operation, the parcels are primarily undeveloped wooded areas. The transmission mains, as proposed, would be installed in the right of way of Wolf Island Road and Tinkham Lane and along existing gravel access roads and cart paths that traverse the wooded parcels. However, the transmission main installations will require one riverfront and three bordering vegetated wetland crossings that will result in a temporary disturbance of the resource area.

Alternatives

The land area within the vicinity of the eight wells was reviewed to identify open space and Town-owned parcels that may be suitable for construction of a water treatment facility. The suitability of each identified parcel was evaluated based on its proximity to the wells requiring treatment; the size of the parcel; the location of bordering vegetated wetland areas, the 100-year flood zone and the 200-foot riverfront area; setback requirements (in accordance with local zoning bylaws); estimated rare habitat areas; and the availability of electrical power requirements. The two sites considered included a 21.6 acre site off Wolf Island Road adjacent to the existing Fairhaven Wolf Island Road Wells and a 22 acre site on Tinkham Lane across from the existing Fairhaven Tinkham Lane Well site and north of Mattapoisett Wells No. 3 and 4.

The Wolf Island Road site had many disadvantages associated with the construction of a water treatment facility. These disadvantages included limited buildable land area due to the proximity of bordering vegetated wetlands and an endangered species habitat area, electrical service limitations, and the site would require pumping over half of the treatment facility's capacity (represented by the Tinkham Lane and Mattapoisett #3, #4, and #5 wells) a significant distance from the distribution system resulting in increased additional pumping energy costs. The Tinkham Lane site, which was chosen, offered many advantages over the Wolf Island Road site. A significant portion of this site is outside the bordering vegetated wetland buffer zone, as well as the Riverfront Area, there are no endangered species, the electrical service could meet the demands imposed by the new treatment facility, and the treatment facility would be located essentially adjacent to the largest sources of supply.

Additionally, an evaluation was performed as to whether to provide two treatment facilities or a single treatment facility. The two treatment facility option was proposed as a result of the significant distance between the wells located along Wolf Island Road and the wells located in the vicinity of Tinkham Lane. This approach would permit a phased approach to the construction and reduce the overall water main length. However, due to site constraints associated with bordering vegetated wetlands, site constraints on the Wolf Island Road parcel, and higher capital and operation and maintenance costs, this option was not pursued.

Mitigation

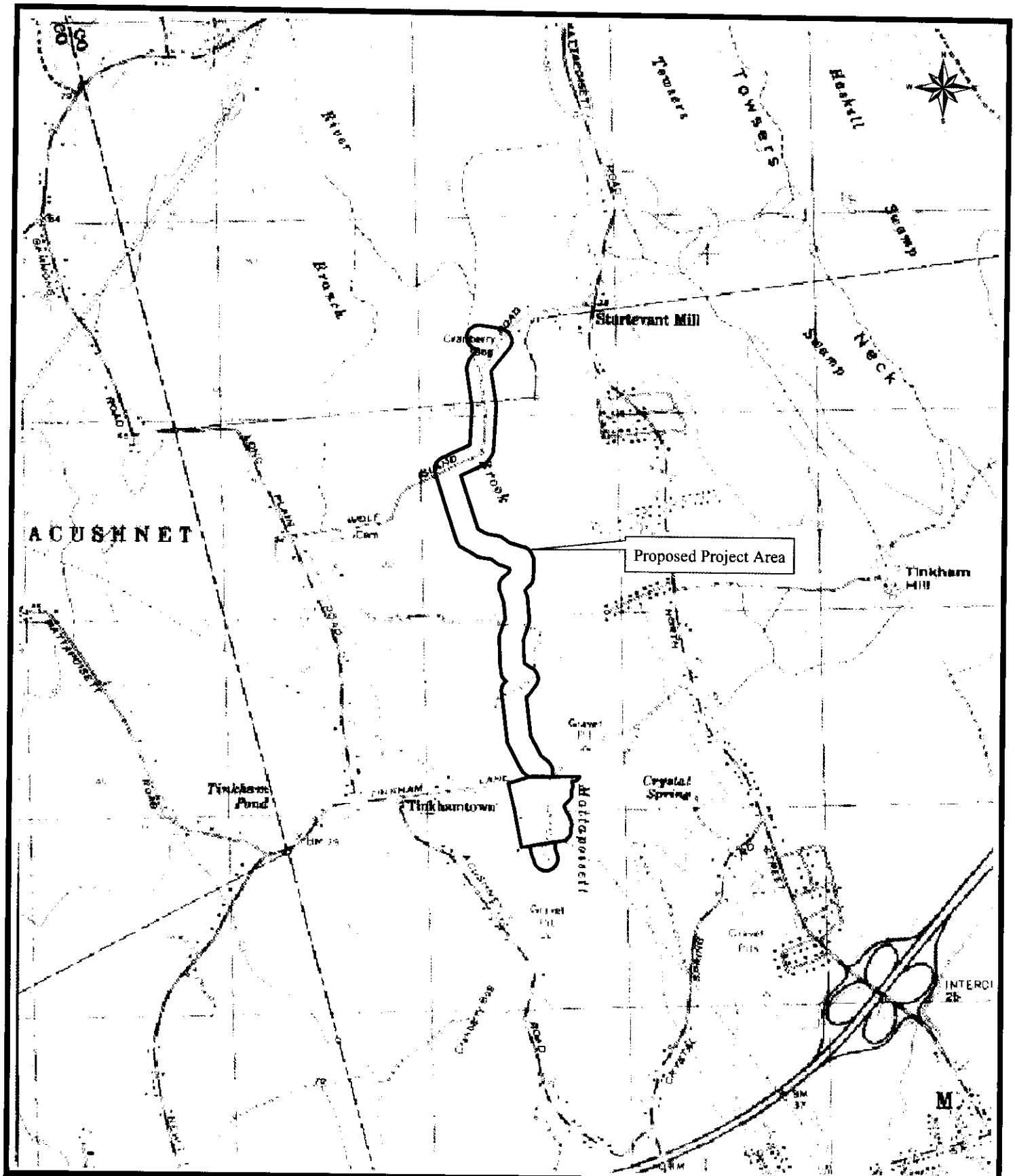
It is the District's intent to minimize the amount of disturbance necessary to construct the water treatment facility and maintain as much of natural vegetation as possible. As mentioned previously, the proposed water treatment facility will be located on a parcel owned by the Town of Mattapoisett, on which one of the Town's existing water supply wells are located. It is in the District's best interest to provide as much vegetation and open space for the area surrounding the wells as a means of source water protection. To accommodate this goal, the treatment facility will be located in a previously disturbed section of the parcel that has been stripped of trees and vegetation. In addition, there will be limited tree clearing associated with the facility's subsurface sewage disposal system, stormwater management system and infiltration bed. The anticipated clearing associated with the treatment facility will be limited to approximately 1.17 acres of the 22-acre parcel.

The proposed treatment facility site is not within the buffer zone to bordering vegetated wetlands or the 200-foot Riverfront area. The only planned impacts associated with the treatment facility site work is the detention basin associated with the site's stormwater management system, which will be located within the buffer zone to a bordering vegetated wetland. During construction, siltation fence and haybales will be installed to define the limit of work. This will also prevent sediment from entering resource areas and limit erosion. Prior to initiating the work, the Contractor will be required to develop and implement a stormwater pollution prevention plan and to obtain a permit from the EPA. This is required in accordance with Phase II of the National Pollution Discharge Elimination System permitting.

In an effort to reduce impervious surfaces, the building footprint was based on the minimum areas that would be necessary to accommodate equipment and provide suitable working space as required for the specific tasks that a water operator could reasonably anticipate, while pavement widths were designed to accommodate semi-trailer turning radius' thereby permitting fire apparatus and chemical delivery access. Stormwater runoff from these impervious surfaces will be directed to a stormwater management system in accordance with the DEP Stormwater Management Policy. Stormwater will be treated, attenuated and infiltrated through a series of best management practices outlined in the Stormwater Management Policy to address water quality and quantity issues.

The overall development of the parcel will use Low Impact Development philosophies to the greatest extent possible. Low Impact Development principles include conserving natural areas, minimizing development impacts, maintaining site runoff rates, use of integrated management practices, and the implementation of pollution prevention. These principles would be accomplished by limiting the amount of clearing on site including within the buffer zone to bordering vegetated wetlands, limiting the use of closed conduit piping (where applicable), limiting impervious surfaces, recharging roof runoff, maintaining natural flow paths, minimizing site grading, and requiring a Contractor's pollution prevention plan.

As mentioned above, the water transmission main will be installed in the right of way of existing roads and along existing gravel access roads and cart paths within the wooded areas of the Town-owned and private parcels. However, the transmission main installations will require one riverfront and three bordering vegetated wetland crossings that will result in a temporary disturbance of the resource area. During the installation within the buffer zone and the resource area, haybales and siltation fence will be installed along the water main route to mitigate sediment from resource areas and the trench will be backfilled with the excavated native material. In addition, the work within the resource area will be planned during late summer and early fall when water levels are typically at their lowest to minimize disturbance.



Tata & Howard, Inc. **Westborough, MA** **Scale: 1" = 24,000' June 2005**	**USGS Plan** **Proposed Mattapoisett River Valley** **Water Treatment Facility and Water Mains** **Mattapoisett/Rochester, Massachusetts**	**Figure No.** **1**