

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: 13830
 MEPA Analyst: Bill GAGE
 Phone: 617-626-1025

ENF Environmental Notification Form

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: Thomas A. Watson Generating Station		
Street: Potter Road		
Municipality: Braintree	Watershed: Weymouth/Weir	
Universal Transverse Mercator Coordinates: 19 (X,Y) 337723 , 4677747	Latitude: 42.2351°N (42°, 14', 6.2" N) Longitude: 70.9667°W (70°, 58', 0.0" W)	
Estimated commencement date: 2008	Estimated completion date: 2009	
Approximate cost: \$95 million	Status of project design: 10 %complete	
Proponent: Braintree Electric Light Department		
Street: 150 Potter Road		
Municipality: Braintree	State: MA	Zip Code: 02184
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Corinne Snowdon		
Firm/Agency: Epsilon Associates, Inc.	Street: Three Clock Tower Place, Suite 250	
Municipality: Maynard	State: MA	Zip Code: 01754
Phone: 978-897-7100	Fax: 978-897-0099	E-mail: csnowdon@epsilonassociates.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): n/a

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

List Local or Federal Permits and Approvals: Federal: Prevention of Significant Deterioration (PSD) Permit; coverage under NPDES General Permit for Storm Water during Construction Activities. Local Order of Conditions; Building Permit, Storage Tank Permit. _____

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 type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Energy | <input checked="" 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 checked="" type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: <u>EFSB Approval to Construct</u> <u>Legislative authorization for design-build (enacted 3-26-06)</u> <u>Above Ground Storage Tank Permit (502 CMR 5.00)</u>
Total site acreage	2.8			
New acres of land altered		0		
Acres of impervious area	0.65	-0.17	0.48	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		1.4 acres LSCSF; 0.14 a. RA *		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	8,100	8,900	17,000	
Number of housing units	0	0	0	
Maximum height (in feet)	Potter I stack: 100' a.g.l.; Potter I rooftop: 86' a.g.l. Potter II stack 130' a.g.l.		stack height to be determined through modeling	
TRANSPORTATION				
Vehicle trips per day	200	0	200	
Parking spaces	80	5	85	
WASTEWATER				
Gallons/day (GPD) of water use**	150,000 (Potter II, when operating)	75,000	225,000	
GPD water withdrawal	0	0	0	
GPD wastewater generation/ treatment	Nominal (sanitary flows)	0	Nominal (sanitary flows)	
Length of water/sewer mains (in miles)	0	4,000 ft (sewer); 800 ft. (water)	4,000 ft (sewer); 800 ft. (water)	

* LSCSF: Land Subject to Coastal Storm Flowage; RA: Riverfront Area

** Note: water use for NOx control.

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

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.*)

Braintree Electric Light Department (BELD) was founded in 1892 by Thomas A. Watson, co-inventor of the telephone. Operated by the Town of Braintree as a municipal light plant, BELD has more than 14,000 electric customers. BELD proposes to construct a new electric generating station, to be named The Thomas A. Watson Generating Station, at its Potter Road facility in East Braintree.

The proposed project will be a nominal 105 megawatt (MW), quick start simple cycle unit. The combustion turbine based unit is expected to have a heat rate of 9,500 Btu/kwhr or better (HHV, ISO conditions). It will have the capability to fire natural gas or ultra-low sulfur diesel (ULSD) oil, both of which are available at the site. The unit will be equipped with water injection and a Selective Catalytic Reduction (SCR) system for NOx control and an oxidation catalyst for control of carbon monoxide emissions. Power from the new unit will be fed to the existing on-site 115 kV switchyard. Two existing underground 115kv transmission lines connect the BELD switchyard to the regional power grid via NSTAR 115kv lines identified as 478-502 and 478-509.

The project site is BELD's existing Potter Road utility operation, on the western shore of Weymouth Fore River. To the north are the CITGO tank farm and then the former Fore River Shipyard. To the west is Quincy Avenue. South of the site is a wooded buffer, and a residential area of east Braintree. Fig. 1 is the USGS locus map showing the site. Fig. 2 is an aerial view of the BELD operation.

As shown on Figure 2, the new unit will be constructed on an approximately 2.8 acre portion of the BELD site, a portion of which is currently occupied by the decommissioned "Potter I" generating station. Completed in 1959, Potter I was an oil-fired, water-cooled unit that generated approximately 13 MW. Potter I was decommissioned in the mid-1970s; internal asbestos has been encapsulated and removed. BELD plans to remove the remaining building equipment, shell and stack later this year.

BELD's Potter Road site is also the location of the Potter II generating station. Potter II is the only station of significant size in the eastern section of the Northeast power grid that is capable of starting and generating electricity on its own. This "black start" capability is an important benefit to BELD customers and to the larger region, in the

event of a blackout. Potter II is a combined cycle unit with a maximum capacity of approximately 95 MW. The unit is equipped with air cooled condensing, uses water injection for NO_x control and can be fired on either natural gas or distillate oil. Potter II was placed in service in 1975; the unit has been carefully maintained and is available for ISO dispatch.

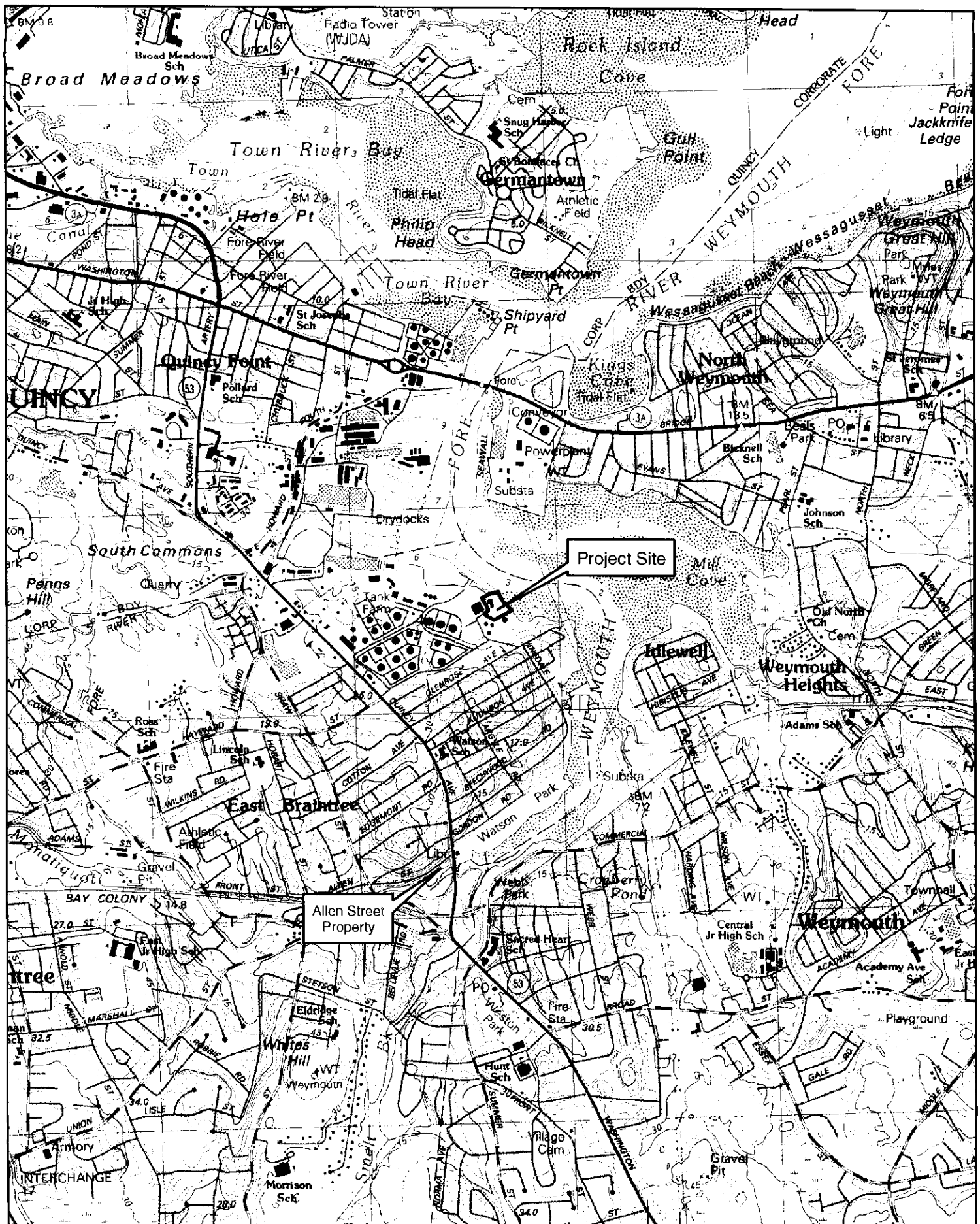
In developing the project, BELD has worked closely with Braintree's State Representatives and Senator, Town of Braintree officials, Braintree's Representative Town Meeting and the citizens of Braintree. In two separate votes, Town Meeting has given overwhelming approval to the project concept and has authorized the necessary bonding. Of equal importance, the Braintree state legislative delegation sponsored a successful home rule petition which enables BELD to use an Engineering, Procurement and Construction (EPC) firm to build the new plant. This legislation was signed by Governor Romney in March 2006.

Alternatives considered included the no-build alternative (essentially, the status quo since Potter I was decommissioned), and a potential facility of smaller rating (e.g., a facility of less than 100 MW, which would not undergo review by the Energy Facilities Siting Board). No alternative fuels were considered, as both gas and oil are present at the site, and the Commonwealth's electrical energy supply, which is heavily reliant on natural gas, benefits from capability to burn oil. The proposed BELD unit will use ULSD; this very clean fuel has a sulfur content of only 15 ppm sulfur, as compared with 500 ppm sulfur for the currently available transportation grade distillate oil.

With respect to siting, off-site locations were not considered, since the project site is, and has been, occupied by generating facilities for nearly 50 years, is owned by BELD, and has immediate access to fuel oil and natural gas supplies, switchyard and transmission facilities and BELD's administrative offices and operations facility. Within the BELD complex, the location of the decommissioned Potter I unit is the most suitable location for the new unit. Other portions of BELD's 23-acre site are either closer to residential areas, or are occupied by office and operations facilities.

As previously noted, the proposed project will employ a full array of emission control devices in accordance with Best Available Control Technology and Lowest Achievable Emissions Rate requirements. Plant water supply will be via the Braintree municipal system which has sufficient capacity. A demineralizer system will be used to provide the very high quality water required for turbine water injection. The demineralizer system/resins will be periodically trucked offsite for regeneration. As a result, there will be no routine process wastewater from the new facility.

Site/civil work will be limited to some grading/filling to bring the 2.8 acre site above the 500-year flood zone level, together with necessary foundations and retaining walls. No in-water work is planned. Lastly, BELD owns Allen Station, a former generating, operations and administrative facility on the Monaquot River just north of Quincy Avenue (see Fig. 1). Opportunities to establish public use of this facility will be evaluated during the EIR.



Scale 1:24,000
1 inch = 2,000 feet



0 1,000 2,000
Feet

Figure 1
USGS Locus Map

Basemap: 1984 USGS Quadrangles

Thomas A. Watson Generating Station
Braintree Electric - Braintree, Massachusetts

Epsilon
Aerial Data, Inc.