

# ENF Environmental Notification Form

*For Office Use Only*  
 Executive Office of Environmental Affairs  
 EOEA No.: 13817  
 MEPA Analyst: Nick ZAVOLAS  
 Phone: 617-626-1030

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.

<b>Project Name:</b> Massachusetts Department of Fire Services/Firefighting Academy		
<b>Street:</b> Sudbury Road		
<b>Municipality:</b> Stow	<b>Watershed:</b> SuAsCo	
<b>Universal Transverse Mercator Coordinates:</b> 4,696,298.372 N; 296,185.437 E	<b>Latitude:</b> 42° 23' 39" N <b>Longitude:</b> 71° 28' 34" W	
<b>Estimated commencement date:</b> Fall 2006	<b>Estimated completion date:</b> 2009	
<b>Approximate cost:</b> \$28 million	<b>Status of project design:</b> 40 %complete	
<b>Proponent:</b> Massachusetts Division of Capital Asset Management		
<b>Street:</b> One Ashburton Place		
<b>Municipality:</b> Boston	<b>State:</b> MA	<b>Zip Code:</b> 02108
<b>Name of Contact Person From Whom Copies of this ENF May Be Obtained:</b> Corinne Snowdon		
<b>Firm/Agency:</b> Epsilon Associates, Inc.	<b>Street:</b> 3 Clock Tower Place, Suite 250	
<b>Municipality:</b> Maynard	<b>State:</b> MA	<b>Zip Code:</b> 01754
<b>Phone:</b> (978) 897-7100	<b>Fax:</b> (978) 897-0099	<b>E-mail:</b> 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. 5760; 13407)  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): Massachusetts Division of Capital Asset Management will fund the project, with an estimated cost of \$28 million.

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

List Local or Federal Permits and Approvals: DCAM will voluntarily seek Orders of Conditions under the Massachusetts Wetlands Protection Act for site and infrastructure improvements, although the project will not directly impact jurisdictional wetlands resources (buffer zone only). As a state agency, DCAM is exempt from local zoning and wetlands bylaws. No Federal permits are required, however a Federal restriction will be placed on lands being transferred from the care and control of MHD to the care and control of DCR.

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

- |                                          |                                       |                                                                |
|------------------------------------------|---------------------------------------|----------------------------------------------------------------|
| <input checked="" 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 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
<b>LAND</b>				<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 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 <i>(including Legislative Approvals) – Specify:</i>  <b>Article 97 Land Transfer</b>
Total site acreage	50.12			
New acres of land altered (remote parking and on-site septic)		3.93		
Acres of impervious area	9.26	5.05	14.31	
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		
<b>STRUCTURES</b>				
Gross square footage	69,000	78,555	147,555	
Number of housing units	0	0	0	
Maximum height (in feet) (*new structures max 35')	55	0*	55	
<b>TRANSPORTATION</b>				
Vehicle trips per day	609	61	670	
Parking spaces	93 striped parking spaces <sup>1</sup>	294	387	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use <sup>2</sup>	4,705	4,458	9,163	
GPD water withdrawal <sup>3</sup>	2,720	0	2,720	
GPD wastewater generation/ treatment (design flow, not actual)	6,038	1,293	8,330	
Length of water/sewer mains (in miles) <sup>4</sup>	2.65 (14,000 ft) (water)	1.04 (5,500 ft) (water)	1.04 (5,500 ft) (water)	

1 while the facility currently has 93 striped parking spaces, it accommodates considerably more vehicles on a regular basis, as described in the attached supplemental project description.

2 potable water currently obtained from Town of Maynard system; future potable water to be obtained from Sudbury Water District; existing use based on actual meter readings; total/change based on 110% of Title 5 estimate for design, not actual, flow

3 firefighting training water from White Pond

4 new water line only; no sewer connection. NOTE: Existing and proposed lengths are not additive; the new line will not extend the water main that currently serves the site

**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 The project involves former Article 97 land that was previously converted, and provides for mitigation of previously-converted Article 97 land. See further discussion in the attached supplemental project description)  
 No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify see further discussion under supplemental narrative portion of this ENF)  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.)

## PROJECT DESCRIPTION

The Division of Capital Asset Management (DCAM) is proposing the renovation and expansion of the Department of Fire Services (DFS)/Massachusetts Firefighting Academy (MFA) facility in Stow, Massachusetts to meet space requirements for statewide fire protection, homeland security and public safety programs as well as firefighter training programs. The project site is located along Sudbury Road in the southeastern-most portion of Stow; a small portion of the property extends into the Town of Sudbury, as shown in Figure 1. The portion of the site on which the proposed facilities will be located is largely developed, while the surrounding area is predominantly undeveloped. Abutting land uses include the Marlborough-Sudbury State Forest, the Assabet River National Wildlife Reserve (formerly a US Military Reservation), and White Pond, a back-up public water supply for the Town of Maynard.

The present MFA facility includes a 36,740 sf academy building, a burn building, a training tower, a flammable gas training area, associated parking/vehicular circulation and utility infrastructure. In 1996, the MFA was subsumed by the creation of the DFS, at which time additional staff were relocated to the MFA facility from a facility located in Sudbury (the relocated staff previously occupied a building that is now the State Crime Lab). Modular buildings (totaling 12,350 sf) and 22 walk-in, metal storage boxes (totaling 7,040 sf) have been incrementally added to the site to provide additional administrative and storage space, as the MFA curriculum has grown and DFS functions have expanded. The existing facilities were constructed in the 1980s on Article 97 lands; although certain approvals were obtained at the time, it has only more recently become evident that not all of the necessary authorizations were obtained. The proposed facilities will be developed within the land areas legislatively-authorized to be transferred from DCR care and control to DFS care and control in 1984, the limits of which were increased by legislative authorization in 2002.

An Environmental Notification Form (ENF) for the proposed expansion of the DFS/MFA facility was filed in November of 2004, but was withdrawn to enable DCAM to develop a greater level of to allow DCAM to more fully develop the project design; the attached supplemental project description provides a more detailed description of the current design and associated facilities.

The proposed expansion/renovations as presently envisioned will include: (1) a new 42,880-gross-square-foot (gsf) Administration Building for DFS/MFA office functions now housed in the Academy Building and in five wooden modular buildings; (2) a new 20,150 gsf training Fire Station; (3) a new 15,525 gsf warehouse; and (4) renovations to the existing Academy Building. It is the project's intent to secure a Leadership in Energy and Environmental Design (LEED) Gold certification, which is a certification in a green building rating system that is a voluntary national standard for developing high-performance, sustainable buildings. In addition, 294 formal parking spaces (including formalized parking for fire trucks) will be added to the current 93 striped parking spaces. At present, considerably more vehicles are accommodated on and in the vicinity of the site, including vehicles parked along the side of Sudbury Road, which is not designed to accommodate on-street parking, as well as in various locations throughout the site that are not intended for parking, competing for space available for firefighting training activities. Proposed project activities also include a new water line connection in Sudbury, and an on-site Title 5 wastewater disposal system. The proposed project does not involve any changes to the existing burn building, training tower, or flammable gas training area. Figures 3 and 4 illustrate the proposed site plan.

## ALTERNATIVES

**Project Site Alternatives** Accommodating additional staff and recruits on the current site is the preferred alternative as compared to relocating the facility due to the nature of the highly-specialized support facilities associated with the MFA (e.g., burn building, flammable gas training area, etc.). Siting of such a facility is complicated due to the nature of the training activities; most notably, the amount of smoke produced by training activities makes it difficult to locate fire training facilities in developed areas, whereas it is also not desirable to develop new facilities on "green fields" sites. Expansion of the current facility is both environmentally responsible and economically advantageous. It should be noted that, due to increased demand for fire and homeland security training, the "no-build alternative" – with respect to the current site – would simply result in adding more modular buildings, which would not be as efficient from either programming or energy perspectives, than the proposed building program, while the site and adjacent public road would continue to suffer from ongoing ad-hoc parking practices.

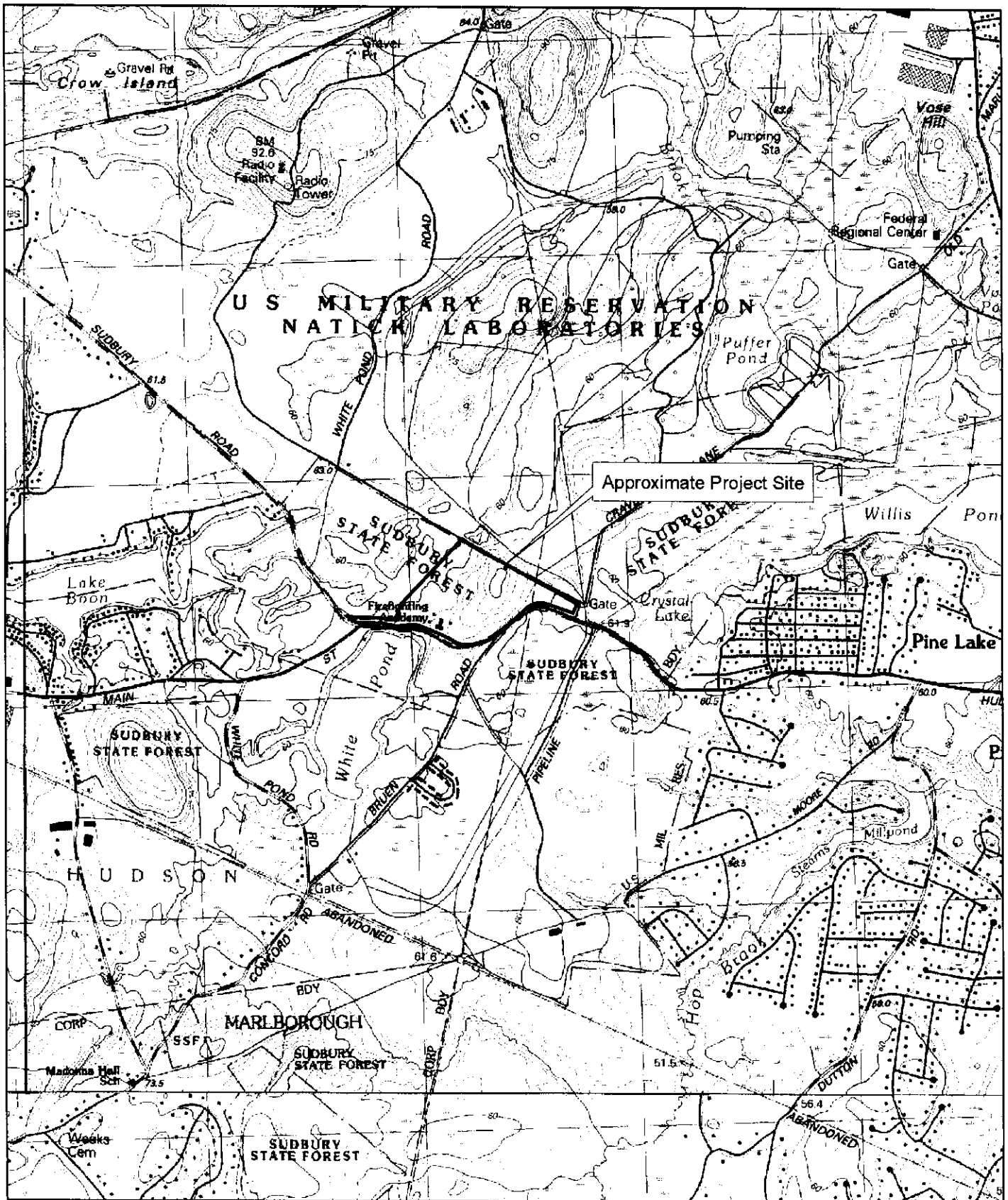
**Infrastructure Alternatives:** As part of the project goal to achieve LEED certification, a number of infrastructure alternatives have been considered to support the proposed facilities. Infrastructure issues potentially subject to MEPA jurisdiction including management of water, wastewater and stormwater.

**Water Supply** The current facilities obtain potable water from the Town of Maynard municipal water supply system, and obtain firefighting water from a combination of recycled stormwater and fire training water, supplemented by withdrawals from White Pond. Three alternatives were considered to meet potable water demand for the proposed facilities: continuation of the current use of water provided by the municipal water supply system maintained by the Town of Maynard, development of an on-site well, and a connection to the water supply system in the Town of Sudbury (i.e., Sudbury Water District (SWD) facilities). For reasons described in greater detail in the attached supplemental project narrative, the proposed project involves a connection to the SWD system. A number of water-saving measures are being explored in association with construction of the project, including use of waterless urinals and a more aggressive program than is already in place for the capture and reuse of rainwater. The volume of water used in firefighting drills is not expected to change from existing levels. As noted above, most of this water is obtained from stormwater runoff and through recycling of fire training water, and is occasionally supplemented by withdrawals from an existing intake structure at White Pond, located south of Sudbury Road. Alternatives to continuation of this practice include the use of potable water supplies, or the development of an on-site well. The DFS/MFA facility proposes to continue its current practices for reasons described in greater detail in the attached supplemental project narrative.

**Wastewater** The DFS/MFA facility is currently served by an on-site Title 5 wastewater treatment system with a design flow of 6,038 gpd. Sanitary wastewater calculations indicate that the proposed facilities necessitate a wastewater treatment system capable of managing a design flow of approximately 8,330 prior to consideration of any significant water conservation strategies, as described further in the attached supplemental narrative. There is no municipal sewer service in the vicinity of the project. Innovative wastewater treatment facilities being contemplated are described further in the attached supplemental project narrative.

**Stormwater** As noted above, the current facility already captures stormwater runoff from paved surfaces to supplement the firefighting training water supply (which is itself largely recycled.) The project design team is exploring a combination of a more aggressive program for capturing and reusing stormwater for irrigation and toilet flushing in addition to the current recycled water program for fire training exercises, as well as contemplating use of pervious materials for parking areas to reduce the overall impervious areas.

All mitigation measures associated with the proposed project are discussed in the attached supplemental narrative.



Basemap: 1987 USGS Quadrangles, MassGIS

**Figure 1**  
**Project Locus**

**Massachusetts Firefighting Academy**  
**Stow, Massachusetts**

