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.: 13407
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.

Project Name: Massachusetts Department of Fire Services/Firefighting Academy		
Street: State Road		
Municipality: Stow, MA	**Watershed:** Sudbury-Assabet-Concord	
Universal Transverse Mercator Coordinates: Zone 19 4696298.372 N; 296185.437 E	**Latitude:** 42° 23' 39" N **Longitude:** 71° 28' 34" W	
Estimated commencement date: April 2006 (Phase One)	**Estimated completion date:** July 2008 (Phase One); other phases to be schedule as spending is approved	
Approximate cost: $25 million	**Status of project design:** 25 %complete	
Proponent: Massachusetts Division of Capital Asset Management		
Street: One Ashburton Place		
Municipality: Boston	**State:** MA	**Zip Code:** 02108
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Holly Carlson		
Firm/Agency: Epsilon Associates, Inc.	Street: 150 Main Street	
Municipality: Maynard	State: MA	Zip Code: 01754
Phone: (978)461-6260	Fax: (978)897-0099	E-mail: hcarlson@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) ☐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 $25 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:

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03): The MFA project exceeds the ENF threshold for land by creating more than five acres of new impervious area.

- ☒ 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	50.1		
New acres of land altered		4.0	
Acres of impervious area	8.24	5.51	13.75
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	
STRUCTURES			
Gross square footage	69,000	88,000	157,000
Number of housing units	0	50 beds	50 beds
Maximum height (in feet)	55	0	55
TRANSPORTATION			
Vehicle trips per day	200 (peak 375)	25	225
Parking spaces	93	285	378
WATER/WASTEWATER			
Gallons/day (GPD) of water use	6641.8	4358.2	11,000
GPD water withdrawal	6641.8	4358.2	11,000
GPD wastewater generation/ treatment	6,038	3,962	10,000
Length of water/sewer mains (in miles)	2.65 (14,000 ft) (water)	-1.61 (switching from Maynard to Sudbury line)	1.04 (5,500 ft) (water)

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: DEP Groundwater Discharge Permit per 3.14 CMR 5.00

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 (Change in use for the portion of the site subject to Article 97 was approved by Section 24 of Chapter 245 of the Acts of 2002) ☐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.*)

The proposed project involves the renovation and expansion of the Department of Fire Services (DFS)/Massachusetts Firefighting Academy (MFA) facility in Stow, Massachusetts in order to meet space requirements for statewide fire protection, homeland security and public safety programs as well as firefighter training programs. The original MFA facility was constructed on an 8.73-acre lot; a land transfer from the Department of Environmental Management (DEM) (now Department of Conservation and Recreation) giving DFS care and control of 50 developed and undeveloped acres, including the original site, is underway and will be completed before final design begins. This expanded site is located in the southeastern corner of Stow on the north side of Sudbury (State) Road near the intersection of the Sudbury and Hudson town lines. The project site is surrounded by the Marlborough-Sudbury State Forest, the Assabet River National Wildlife Reserve, and open space protecting White Pond, a currently unused public water supply belonging to the Town of Hudson.

The first MFA facility, built in 1971, burned down and was replaced by the present 36,740-square-foot (sf) academy building, a burn building, and a training tower in 1988. An approximately 181,000-sf flammable gas training area was added later. In 1996, DFS was created and additional support staff moved from Boston to the MFA facility. Modular buildings (totaling 12,350 sf) and 22 CONEX storage boxes (totaling 7,040 sf) are on site to provide additional administrative and storage space. The current DFS/MFA facility is inadequate due to progressively worsening overcrowding. Designed to accommodate the MFA's approximately 50 training staff and 44 recruits, the facility now houses 158 staff and, in double sessions, up to 88 recruits. Total DFS/MFA staff on site is expected to grow to 183 by 2007.

The proposed expansion will include: (1) a new 33,978-gross-square-foot (gsf) Administration Building for MFA and DFS office functions now housed in the Academy Building and in five wooden modular buildings; (2) a new 31,430 gsf training Fire Station; (3) a new 15,274 gsf warehouse; (4) a new 47,318 gsf CCTS (Conference Center, Training, and Shops) Building that will be a renovation and roughly 11,000-gsf expansion of the existing Academy Building to accommodate training and maintenance needs and to create an assembly area for graduations and conferences; and (5) a 15,000 gsf dormitory with a 50-bed capacity for trainees and weekend conference attendees. In addition, 285 parking spaces will be added to the current 93 to alleviate a parking situation which has at times resulted in cars lining Sudbury Road. Proposed project activities also include construction of new walkways, a new water line connection in Sudbury, and an on-site biological wastewater disposal system. The proposed project does not involve any changes to the existing burn building, training tower, or flammable gas training area.

The project will be built in phases. Phase One will include the new Administration Building, new walkways, additional parking spaces, new water line, wastewater treatment system, and demolition of the existing modular buildings. DFS and the MFA will continue to operate on site during all phases of construction. The balance of the project will be built in one or more additional phases as appropriated funds become available for spending.

One of the proposed project's primary goals is to create a functional complex that responds both environmentally and aesthetically to the site and its surroundings in a sustainable and sensitive manner. For this reason, the project's design emphasizes a sustainable and environmentally sound approach, including innovative water use and sewage treatment technologies. Wastewater from all buildings will be treated on site by a biological wastewater treatment system with a design flow of approximately 10,000 gallons per day (GPD). This will involve the replacement of an existing Title 5 wastewater treatment system on site that has a capacity of just over 6,000 GPD.

The volume of water used in firefighting drills is not expected to change from existing levels. Currently, this water is obtained from an intake structure at White Pond, located south of State Road, and from a recycled water storage chamber. Water used in training exercises in the training area and in the flammable gas training area is captured and recycled through a Miox filtration system. The Miox system is a self-contained, portable package plant that provides filtration, disinfection, and monitoring for turbidity

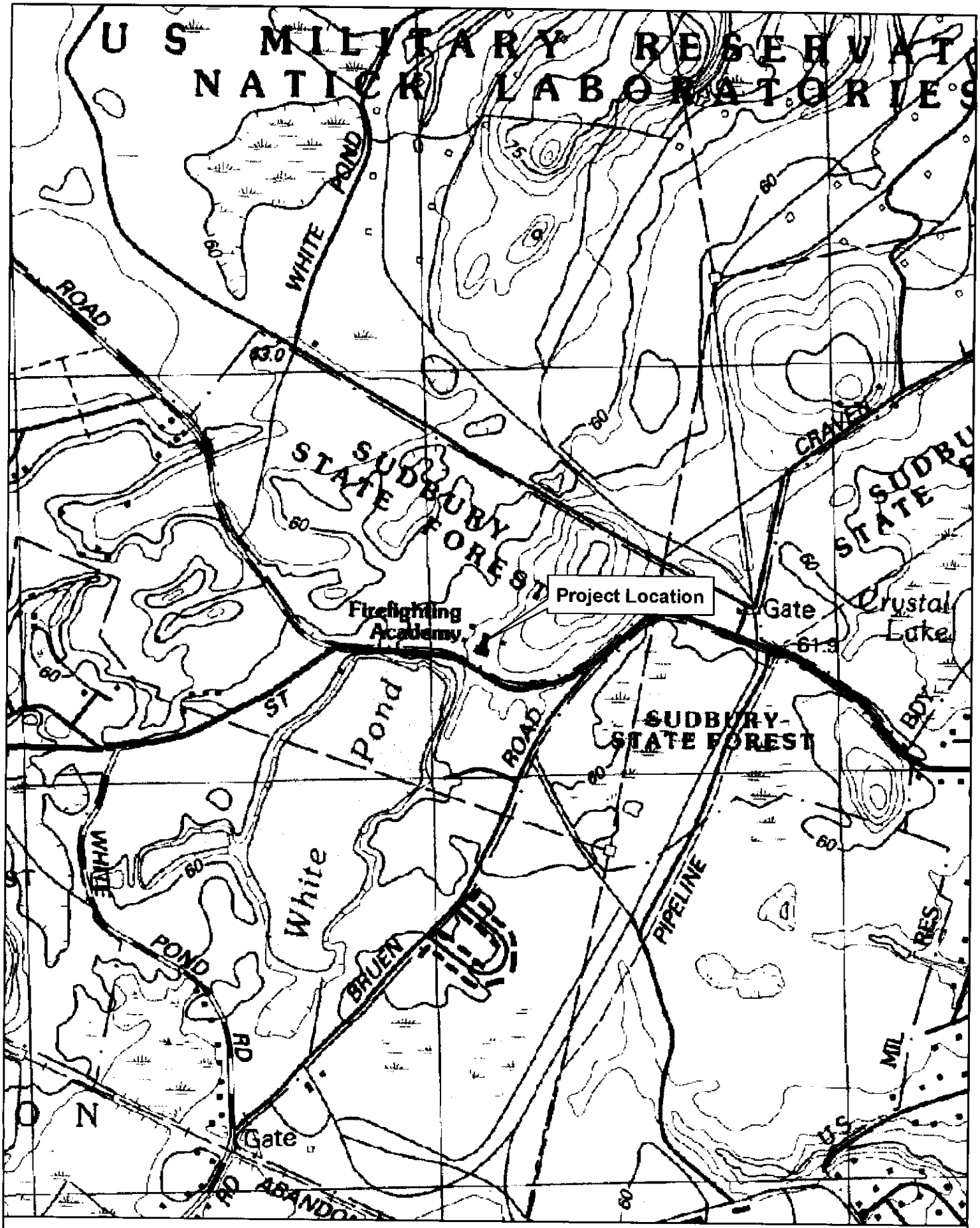
and chlorine residual, as required by the U.S. EPA Surface Water Treatment Rule. This water is non-potable. The recovery system collects the used water into three underground separation chambers with a 10,000-gallon capacity, and the water is then stored in a 20,000-gallon underground tank. Make-up water is pumped as needed from the non-potable White Pond Reservoir. The facility has a written agreement with the Town of Maynard for this water use from White Pond, and this gray water recovery system will be maintained by the proposed project.

Since the Town of Stow has no public water system, potable water is currently supplied by the Town of Maynard municipal water system, which is connected to the site via a decrepit 8-inch-diameter 14,000-foot water main that crosses the Assabet River National Wildlife Reserve. Rather than incur the expense and difficulties of performing utility work in a sensitive conservation area, the project will connect to the Sudbury Water District by extending the existing main in State Road to the site boundary near the Stow town line.

The proposed site development concept assumes that final design will avoid any work within 100 feet of wetlands. If it becomes necessary to conduct work within 100 feet of wetlands, the project will file a Notice of Intent with the Stow Conservation Commission as required by state wetlands regulations. This project proposes to alter approximately 4 acres of land, with an increase in impervious area of roughly 5.5 acres over the existing site layout, inclusive of building footprints. With a total parcel size of approximately 50 acres, the proposed design will leave roughly 28 acres (56% of the project site) as open space.

The only alternative to this project is a no-build alternative, which will not improve the overcrowding conditions at the academy and will do nothing to accommodate projected future growth. 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. Such a certification is achieved by pursuing opportunities identified in a LEED checklist. These opportunities include developing an Erosion and Sedimentation Control Plan, reducing site disturbance, designing water-efficient landscaping, and optimizing energy performance, among others.

The proposed project site qualifies for LEED certification based on the requirement for proper site selection. The proposed project site is not prime farmland, allows for some building reuse, is more than five feet above the 100-year flood elevation, does not include endangered species habitat, and avoids work proposed within 100 feet of wetlands. In addition, there are no potentially productive aquifers, wellhead protection areas, public or private water supplies, or Interim Wellhead Protection Areas within a 500-foot radius of the site. The site is not located within an Area of Critical Environmental Concern, estimated habitat of rare wetland wildlife, protected open space or within a vernal pool. All phases of design and development for the project will include the examination of alternatives consistent with LEED criteria in each of the major categories of LEED based on (life-cycle) cost analyses, technical feasibility, and other rationales.



Scale 1:12,000
1 inch = 1,000 feet
500 0 500 1,000
Feet

Project Locus

Massachusetts Firefighting Academy
Stow, Massachusetts

Basemap: 1987 USGS Quadrangles, MassGIS

EPSILON ASSOCIATES INC.
Engineers ■ Environmental Consultants

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11/10/04