



# The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

100 Cambridge Street, Suite 900

Boston, MA 02114-2524

MITT ROMNEY  
GOVERNOR

KERRY HEALEY  
LIEUTENANT GOVERNOR

ROBERT W. GOLLEDGE, JR  
SECRETARY

September 22, 2006

Tel. (617) 626-1000  
Fax. (617) 626-1181  
<http://www.mass.gov/envir>

## CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Spaulding Rehabilitation Hospital
PROJECT LOCATION	: Sixteenth Street - Charlestown Navy Yard - Boston
PROJECT WATERSHED	: Boston Harbor
EOEA NUMBER	: 13861
PROJECT PROPONENT	: Spaulding Rehabilitation Hospital Corporation
DATE NOTICED IN MONITOR	: August 23, 2006

Pursuant to the Massachusetts Environmental Policy Act (G. L., c. 30, s. 61-62H) and Sections 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that the above project requires the preparation of a mandatory Environmental Impact Report (EIR).

According to the Environmental Notification Form (ENF), the proposed project consists of the construction of 240,000 square foot (sf) 150-bed Inpatient Rehabilitation Facility with an outpatient clinic on Parcel 6 at the Yard's End of the Charlestown Navy Yard (CNY). The project will include all private rooms, state-of-the-art gymnasiums and therapy rooms, an aquatic center, an outpatient clinic, interior ground-floor community-use space, a Harbor Walk, exterior public open space, research space, and multi-purpose conference and meeting space. It will provide approximately 300 underground parking spaces. The project site contains about 3.02 acres, and it consists entirely of filled and flowed Commonwealth tidelands.

The project is subject to a mandatory EIR pursuant to Sections 11.03(3)(a)(5) and 11.03(6)(a)(6) of the MEPA regulations because it requires a Chapter 91 License for more than one acre of new non-water dependent use of tidelands and it generates 3,000 or more new vehicle trips. It will require a 401 Water Quality Certificate, a Sewer Connection/Extension Permit, a Construction Dewatering Permit, a Fossil Fuel Emission Permit, a Non-Major Comprehensive (Air Quality) Plan Approval, and a Chapter 91 Waterways License from the Department of Environmental Protection (MassDEP). The project may need to obtain a Construction

Dewatering Permit from the Massachusetts Water Resources Authority (MWRA). The Massachusetts Historical Commission (MHC) will evaluate the project impacts in order to issue a No Adverse Effect Determination under Chapter 254. The project involves a land transfer from the Boston Redevelopment Authority (BRA) pursuant to Chapter 121A, Urban Redevelopment Act. It will require a Determination of Need from the Massachusetts Department of Public Health. The project must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. The project will require a Programmatic General Permit from the U.S. Army Corps of Engineers. It may need to undergo Federal Consistency Review by the Massachusetts Coastal Zone Management (MCZM) Office. The project will require an Order of Conditions from the Boston Conservation Commission. Because the proponent is seeking financial assistance from the Commonwealth for the project from the Massachusetts Health and Educational Facilities Authority (MHEFA), MEPA jurisdiction extends to any aspects of the project that may have significant environmental impacts.

Access to the proposed parking garage will be from Sixteenth Street. Using the Institute of Traffic Engineers Trip Generation land use code 610 for Hospital, the proponent has estimated that the project will generate approximately 3,500 unadjusted new average daily vehicle trips. However, after adjusting for Boston Transportation Department (BTD) mode splits for Charlestown, the proponent estimated that the project would generate approximately 1,187 new vehicle trips.

The proposed project will be connected to existing municipal water and sewer service. It will consume approximately 33,000 gallons per day (gpd) of water and will generate 30,000 gpd of wastewater flow.

The project is subject to review by the BRA under the Article 80 Large Project Review process of the Boston Zoning Code. Accordingly, the proponent will prepare a Project Impact Report (PIR). It is my view that the planning for this project would be best served by a coordinated review and the submission of a single set of documents to satisfy the requirements of both MEPA (Section 11.09(4)(c)) and the BRA (Section 80-6). The proponent should coordinate this joint review process with both agencies to establish the necessary review periods.

In the Certificate on the Supplemental EIR for Parcel 4 at Yards End of the CNY dated November 15, 2002, the Secretary stated that "the future development of Parcels 6 and 7 would need to be coordinated in a single MEPA review." However, Partners HealthCare has stated that it has no plans at this time to develop Parcel 7. When Partners HealthCare has determined what would be developed on Parcel 7, the proponent for the development of Parcel 7 is required to submit a Notice of Project (NPC).

## SCOPE

This EIR should follow the MEPA Regulations at 301 CMR 11.07 for outline and

content, as modified by this scope and the Article 80 requirements. It should address the comments listed at the end of this Certificate, to the extent that they are within the required scope, and should include a copy of this Certificate.

**Project Description:**

The EIR should provide a detailed project description with a summary/history of the relocation of this existing facility from 125 Nashua Street to the CNY. It should identify and summarize the past proposed projects on this site (EOEA #13009 and #8883). The EIR should include existing and proposed site plans for the CNY. The EIR should identify and explain any project phasing.

The EIR should discuss the consistency of the project with local and regional growth management and open space plans, Executive Order 385 (Planning for Growth), and the Master Plan for the CNY and any revisions to the Yards End site. It should discuss and include a copy of the special legislation approved for this project. The EIR should also describe the current status of planning for Parcels 5 and 7 at Yards End.

**Alternatives Analysis:**

In addition to the No-Build Alternative and the Preferred Alternative, the EIR should discuss alternative building configurations on the site that might result in fewer impacts. The EIR should include alternative building designs for the proposed hospital within the building envelopes approved by the Massachusetts Historical Commission per its Memorandum of Agreement with the BRA, the General Services Administration, and the Advisory Council on Historic Preservation. The EIR should also evaluate the proposed site layout and describe alternative site layouts within Parcel 6 that were considered in the Section 106 historical review process for the CNY. This analysis should provide a comparison of the differences between the environmental impacts associated with each of the alternative building designs and site layouts. The building designs and site layouts should analyze alternative locations, landscape layouts, and designs that will be inviting to the public. The EIR should identify how Parcel 6 can be improved to maximize visual enjoyment and to minimize wind and shadow impacts.

**Waterways Licensing:**

The EIR must describe how the proposed project will comply with the Waterways Regulations, 310 CMR 9.00. The waterways licensing concerns are building massing, wind and shadow impacts, public views, facilities of public accommodation (FPA), water-based public facilities, open space, parking, and site specific information as outlined in the MassDEP comment letter.

Section 16 of Chapter 192 of the Acts of 2006 addresses the maximum height of the building and the setback distance from Sixteenth Street. Parcel 6 is also no longer subject to the

Boston Municipal Harbor Plan per a clarification letter sent by the Secretary to the BRA dated February 18, 1998. Therefore, the Chapter 91 regulations apply as modified by Section 16 of Chapter 192 for the building height. The EIR should describe all the development controls on the property and include any supporting documentation.

The EIR should contain site and floor plans for the hospital showing cross-sectional views and elevations of the floor levels. Both the MEPA Unit and the permitting agencies need to evaluate site design and layout. The EIR should inventory all existing and proposed site lines. The various design alternatives for the First and Second Avenue view corridors should be included in the EIR. These design alternatives should use pedestrian level perspectives to assess impacts to water views. The specific ground floor FPAs should be identified in the EIR.

The EIR should provide sufficient information to document the project's compliance with all applicable provisions of M.G.L. c. 91 and its implementing regulations (310 CMR 9.00). It should present a clear technical analysis of how the project complies with the various dimensional requirements set forth in the regulations as they pertain to new buildings for non-water dependent use. The EIR should show how the project will comply with the limitations on facilities of private tenancy and the requirements for FPAs found in the referenced regulations at 9.51(3)(b) and 9.53(2)(c).

I ask the proponent to consult with MassDEP and MCZM to determine the issues to be included in the EIR analyzing alternative design and project layouts. The EIR will need to address how the project will meet the open space standards of the Waterways Regulations.

**Traffic:**

The EIR should be prepared in conformance with the EOEA/EOTC Guidelines for EIR/EIS Traffic Impact Assessment. It should identify appropriate mitigation measures for areas where the project may impact traffic operations. It should analyze traffic impacts by determining the level-of-service (LOS) at the following affected intersections:

Chelsea Street/Sixteenth Street (Gate #6);  
Chelsea Street/Medford Street;  
Chelsea Street/Thirteenth Street (Gate #5);  
Chelsea Street/Fifth Street (Gate #4);  
Rutherford Avenue/Chelsea Street/No. Washington Street Bridge (City Square); and  
Warren Street/Chelsea Street.

The EIR's LOS analysis should include both a.m. and p.m. weekday peak hours, volume to capacity ratios, a traffic distribution map, and background growth from other proposed projects in the area. Future conditions should cover a five-year time horizon (2011).

The EIR should examine present (2006) and future (2011) build and no-build traffic

volumes for all impacted roadways and intersections. It should utilize trip generation estimates based on Land Use Code (LUC) 610 (Hospital). Trip generation rates should be quantified and explained in the EIR. Since this is a specialized hospital with outpatient services, the EIR should identify the number of outpatient visits anticipated by the proponent. The EIR should provide information regarding how these outpatient visits will reach the hospital. It should include a breakdown by transportation mode and the reasoning behind these estimated trip generation numbers. It should fully describe all of the proposed components at the hospital to provide accurate trip generation estimations. The EIR should discuss the suitability of proposed signalization changes. Any Massachusetts Highway Department (MassHighway) or Boston plans for the reconstruction of roadways in the vicinity of the project should be discussed in the EIR. Traffic accident history for the three most recent years for which data are available should be reviewed and presented for the study area.

**Parking:**

Parking at the site will include approximately 300 parking spaces in an underground parking garage. The EIR should identify the parking supply in the area, both off- and on-street parking, proposed parking fees, and parking demand from the project. It should describe how the number of parking spaces needed was determined. The EIR should identify the number of parking spaces required by zoning, and recommended by the Boston Transportation Department (BTD) in its citywide standards. It should describe any proposed valet parking at the project site. The EIR should describe any proposed off-site parking and for whom this parking is available.

**Pedestrian and Bicycle Facilities:**

The EIR should provide a map showing existing and proposed pedestrian/sidewalk facilities, which are proposed for the project. It should identify the proposed bicycle facility improvements included with this project. The EIR should identify pedestrian demand and pedestrian level-of-service abutting the project on the Harbor Walk and along First Avenue and Sixteenth Street.

**Transportation Demand Management (TDM) and Public Transportation:**

The EIR should identify the potential TDM measures that the proponent will commit to implementing. At the existing Spaulding Rehabilitation Hospital (SRH), the proponent provides the following TDM measures:

- MBTA transit passes for employees are subsidized at a 25 percent discount.
- Transit information is located at the SRH lobby.
- The site is served by the Partners Shuttle Bus with connections to North Station and off-site parking.
- Ridesharing information is made available to staff.
- SRH encourages use of bicycles by providing bicycle racks as well as shower and locker

facilities.

- Employees are provided information on their transportation options at their orientation.

The proponent states that it intends to maintain its existing TDM measures when relocated and will identify new measures as needed.

The EIR should identify MBTA bus routes and stops in the neighborhood. Private shuttle buses (the Partners Bus) should be identified and included.

### **Wind and Shadow:**

The EIR should consider specific building design alternatives as a means of reducing adverse wind and shadow impacts on the ground level pedestrian environment. The development of Yards End will in and of itself lead to greater public enjoyment of that area of the CNY. The proponent should strive to accomplish this development in a way that is truly inviting. The completion of the Harbor Walk along the Little Mystic Channel will be of little utility if it is so windy and shadowed that no one will choose to walk there.

The EIR's mitigation measures should be guided by the wind tunnel testing of the Yards End massing. This wind tunnel testing is essential to determine the potential impacts of wind at the pedestrian level. For purposes of the EIR, a wind analysis that evaluates pedestrian level impacts will be sufficient.

Mitigation for wind impacts is essential. The Little Mystic Channel's portion of the Harbor Walk may be impacted by unacceptable winds for walking.

The Harbor Walk north of the hospital could be in shadow for significant periods of the day and year. I encourage the proponent to explore mitigation measures that could be implemented to lessen the shadow impacts of the proposed project and improve the quality of the pedestrian experience in that location.

### **Drainage:**

The EIR should evaluate potential drainage impacts on water resources from the project. It should include a detailed description of the existing site's drainage system design in the construction area and identify any proposed changes, including a discussion of the alternatives considered along with their impacts. The EIR should present drainage calculations such as the rates for stormwater runoff for the 10, 25, and 100-year storm events. It should identify the quantity and quality of flows. The proponent should consider recharge rather than discharge to the Harbor.

Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland resources, should be

evaluated. The location of detention/infiltration basins and their distances from wetland resource areas, and the expected water quality of the effluent from said basins should be identified. This analysis should address current and expected post-construction water quality of the predicted final receiving water bodies. The drainage analysis should insure that on- and off-site wetland resource areas are not impacted by changes in stormwater runoff patterns.

The EIR should address the performance standards of MassDEP's Stormwater Management Policy. It should demonstrate that the project is consistent with this policy. The proponent should use the MassDEP Stormwater Management handbook when addressing this issue.

The EIR should discuss the consistency of the project with the provisions of the National Pollutant Discharge Elimination System (NPDES) General permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites. It should include discussion of best management practices employed to meet the NPDES requirements, and should include a draft Pollution Prevention Plan.

A maintenance program for the drainage system will be needed to ensure its effectiveness. This maintenance program should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems.

#### **Drinking Water:**

The EIR should explain any impacts from the project on the drinking water supply and distribution system. It should propose mitigation as appropriate.

#### **Wastewater:**

The wastewater system in the project area is a combined system for stormwater and sewer. The proponent should propose separation of stormwater/wastewater around the site. The EIR should outline the proponent's efforts to reduce water consumption and thereby reduce wastewater generation. It should identify any capacity deficiencies within the municipal wastewater system to handle the project's additional wastewater flows. In its comment letter, the MassDEP is requesting this proponent to consider Infiltration/Inflow (I/I) reduction at a minimum of a 4:1 ratio for the sewershed to which the flow is added. The EIR must address this I/I issue and work closely with the Boston Water and Sewer Commission (BWSC), the Massachusetts Water Resources Authority (MWRA), and MassDEP.

#### **Construction Issues:**

The EIR should include a construction management plan that describes the project's phasing, erosion and sedimentation controls, monitoring, and contingencies. It should identify any amount of fill material required to bring the site above the 100-year flood level and estimate

the number of truck trips per day to complete the filling. Truck routes to the proposed construction site should be identified in the EIR. The EIR should identify construction hours and any impacts expected during peak travel hours on local roadways.

**Visual/Aesthetics:**

The EIR should include a visual resource assessment . The visual resource assessment should include a conceptual-level landscaping plan and building elevations from all sides.

**Hazardous Wastes:**

The EIR should present a summary of the results of hazardous waste studies and remediation efforts undertaken at the project site by the proponent to comply with the Massachusetts Contingency Plan, 310 CMR 40.0000.

**Historic Resources/Cultural Issues:**

The project site is located within the Boston Naval Shipyard, a district which is listed in the State and National Registers of Historic Places and which is a local historic district as well. The EIR should provide a comprehensive examination of the effects of wind and shadow on adjacent and proximate historic properties. The potential shadow impacts should be superimposed on maps with the historic properties identified. The Massachusetts Historical Commission (MHC) has requested the opportunity to review designs for the exterior building treatments and design as they evolve. The EIR should address MHC's concerns. It should demonstrate that the project complies with the Navy Yard Design Guidelines (as amended) The EIR should identify the process for amending these Design Guidelines and the current status of the proposed project to amend these Design Guidelines.

**Sustainable Design:**

To the maximum feasible extent, the proponent should incorporate sustainable design elements into the project design. The EIR should summarize the proponents' efforts to obtain a Leadership in Energy and Environmental Design (LEED) Certification for the building. The basic elements of a sustainable design program may include, but not be limited to, the following measures:

- optimization of natural day lighting, passive solar gain, and natural cooling;
- use of energy efficient HVAC and lighting systems, appliances and other equipment, and use of solar preheating of makeup air;
- favoring building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy;
- provision of easily accessible and user-friendly recycling system infrastructure into building design;



- development of a solid waste reduction plan;
- development of an annual audit program for energy consumption, waste streams, and use of renewable resources;
- LEED certification; and
- water conservation and reuse of wastewater and stormwater.

**Mitigation:**

The EIR should include a separate chapter on mitigation measures. This chapter on mitigation should include a proposed Section 61 Findings for all state permits. The proposed Section 61 Findings should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation should also be included.

In the ENF, the proponent has committed to provide the following mitigation measures:

- Extend the Harbor Walk along the seaward edge of the site.
- Create over an acre of open space
- Provide public access ways from Sixteenth Street to the water's edge on a site that has no public access.
- Continue its Charles H. Weingarten Adaptive Sports and Recreation program at the CNY site.  
Provide FPAs (multi purpose conference and meeting space, lobby space with restrooms, a cafeteria, and an indoor Aquatic Center and therapeutic swimming pool with evening programs for community residents) to a site that has none.  
Expand the proponent's existing TDM measures.
- Contribute to Boston's Payment in Lieu of Taxes program

The EIR should describe the proponent's efforts to establish the Harbor Walk and public open space as well as FPAs on the ground floor of the building as part of its Chapter 91 Licensing process. It should describe the proponent's efforts to work with the community regarding the types of public facilities to be provided at this location. The proponent should consider working with The Boston Harbor Association and other Charlestown advocacy groups to improve Boston's harborside.

**Response to Comments:**

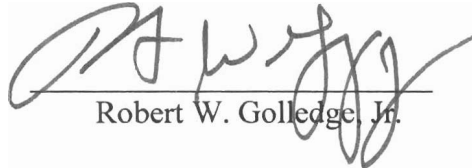
The EIR should respond to the comments received to the extent that the comments are within the subject matter of this scope. Each comment letter should be reprinted in the EIR. I defer to the proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to the questions raised.

**Circulation:**

The EIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to Boston officials. A copy of the EIR should be made available for public review at the Boston Public Library (Charlestown Branch).

September 22, 2006

DATE

  
Robert W. Golledge, Jr.**Comments received :**

MassDEP/Boston, 8/23/06  
MassDEP/Boston, 9/7/06  
Epsilon Associates, 9/7/06  
MCZM, 9/7/06  
WalkBoston, 9/11/06  
MassDEP/Boston, 9/11/06  
Kathia A. Capellupo, 9/11/06  
Barbara A. Laakso, 9/11/06  
BWSC, 9/12/06  
MWRA, 9/12/06  
MHC, 9/12/06  
The Boston Harbor Assoc., 9/12/06  
MassDEP/NERO, 9/12/06  
Friends of the Charlestown Navy Yard, 9/12/06  
Michael W. Parker, 9/13/06  
BED, 9/15/06

13861enf

RWG/WTG/wg