

## Seaport Ferry Terminal

*An architecture of wind, light, and air*

2007 Rotch Traveling Fellowship



# Seaport Ferry Terminal

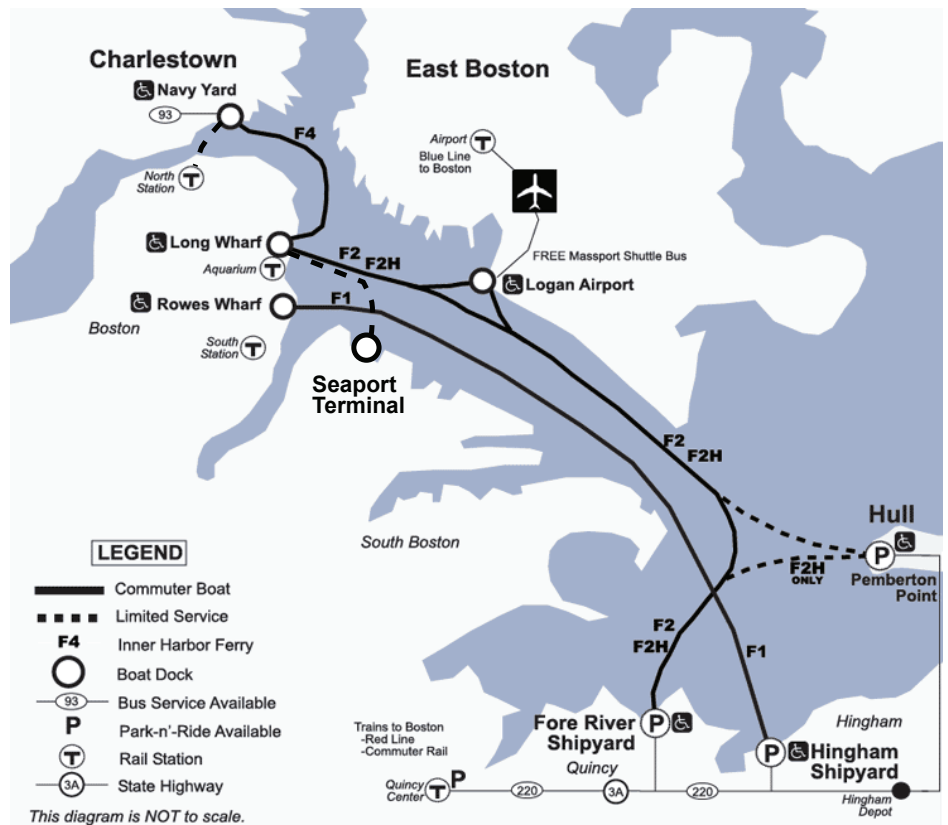
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### Background

The rapid development of the South Boston Seaport District over the past several years has driven an increased need for public access to the area. Public transportation systems under consideration include new or extended subway, bus and commuter ferry boat services. The Boston Convention Center, the World Trade Center, the Moakley Court House, the new Institute of Contemporary Art, and four new hotel towers are currently being underserved due to access limitations imposed by the lack of adequate public transportation. Mayor Menino's recent proposal to move City Hall to the South Boston Waterfront will only increase the current pressure to improve public access. Without adequate transportation planning, the South Boston Waterfront has the potential of becoming a single occupancy vehicle-based environment replete with excessive surface parking, traffic congestion, noise, heat gain, and poor air quality. Boston's last remaining undeveloped expanse of open waterfront in South Boston has the potential of becoming a contemporary example of open public space, responsible planning, and sustainable design.

The preliminary Rotch program provides an opportunity for designers to explore provocative alternatives for an activated and radically sustainable high-performance water transportation facility on the South Boston waterfront.

Currently the South Boston Waterfront is served by one local MBTA bus and the Silver Line. There are two additional buses that have limited service to Salem and Marblehead. There is a ferry landing along Northern Avenue at the foot of Commonwealth Pier (Pier 5) site of the World Trade Center which is currently used by the Seaport Express Water Shuttle and two on-call water taxi services. Until last year the MBTA offered ferry service from this location to Charlestown, Lovejoy Wharf (North Station), and Long Wharf. Currently only the Charlestown to Long Wharf ferry route exists, and there are plans to expand and increase commuter ferry services, once ferry terminal facilities are in place. The commute by high speed ferry boat offers distinct practical advantages. The expanse of the Boston Waterfront Boston provides a direct line of access to communities where travelers would otherwise need to drive along lengthy peninsular landmasses. Traveling in all seasons when winds are below 40 MPH, contemporary ferry boats offer interior protected passenger space as well as open decks and can be very fuel efficient and commuters are not subjected to on-land traffic congestion or snow removal slow downs.



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### Building Technology

The Seaport Commuter Ferry Terminal is an outdoor open-air facility intended to provide an alternative mode of public transportation to Boston Harbor, one of the world's most significant urban harbors. The design of the Commuter Ferry Terminal should be innovative and forward-thinking in its address of the needs of contemporary commuters, who may wish to work using wireless or wired computation and communication technologies while in the terminal, or its surrounding waterfront landscape. The commute by ferry boat, unlike any other form of public transportation, offers to the public unprecedented opportunities to experience the natural phenomena of the waterfront: the play of light, access to vistas and the long horizon, and the unique physical situation of being on the edge where land and water meet.

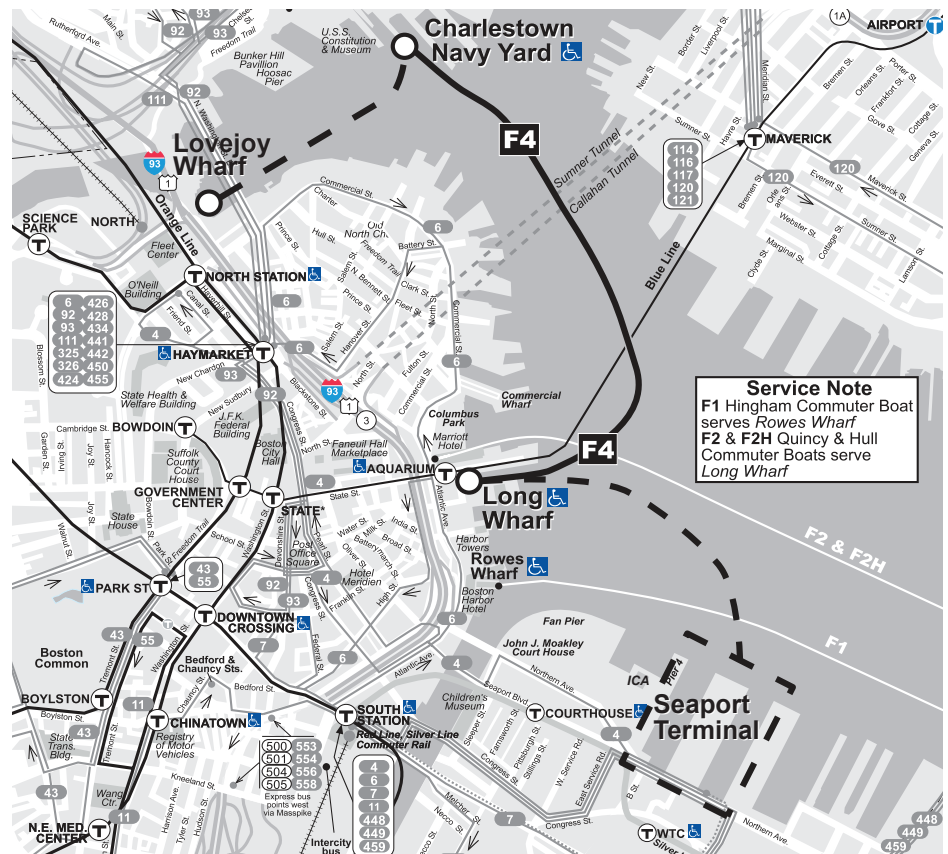
The design of the terminal building and its landscape context should allow commuters to engage these dynamic experiences, which will change according to time of day, weather and season. The preliminary Rotch competition program provides a chance for designers to explore in their proposals for a new Seaport Ferry terminal the formal and functional potentials of an architecture of *wind, light and air*.

It is very important that the building design explore the use of environmentally responsible and renewable building infrastructure and reflect a high degree of engineering rigor in demonstrating how these technologies may be integrated in the proposed building design. Designers may wish to explore engineering strategies for efficient lightweight roof structures, such as fabric membranes, tension/compression structures, as well as radiant localized heating, summer shading, localized wind screens, energy efficient lighting and smart

transportation systems. Candidates are encouraged to engage digital design and modeling, digital computation and/or digital fabrication strategies in the development of design proposals for the new Commuter Ferry Terminal that:

- 1) Explore innovative preliminary design concepts that demonstrate how distributed energy may be integrated into the building design and harvested from on site renewable sources including solar, wave action, tidal flow, and wind energy,
- 2) Consider alternative building systems including natural ventilation and day-lighting, passive and/or localized radiant heat sources, energy efficient lighting, and “real-time” scheduling and/or/communications through electronic media,
- 3) Provide localized “comfort zones” inside and/or outside for protection from wind, rain, and snow. These localized “comfort zones” offer the designer opportunities to rethink the conventional relationships between infrastructure, furniture and building form, and should not be considered at conventional, fully- enclosed structures.

Views from the Terminal looking across the water and from the ferry boat looking back or towards the new Terminal are important as this new ferry terminal facility has the potential to provide the public with a memorable landmark for the waterfront. Just as important will be the ordinary temporal act of waiting, reflection, and repose that commuters experience on a daily basis while going from home to work and back again. The rich phenomenological characteristics of wind, light, and air should provide the inspiration for the design of this public experience of the Boston waterfront.





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## Program

The Seaport Ferry Terminal program will consist of a 10,000 square foot outdoor open-air commuter terminal structure that includes a waiting area, ticket booth, administration office, café and newsstand, observation area(s), mechanical/electrical room, and maintenance storage room. The waiting area is a singularly generous space that comprises roughly 50% of the allotted program area and will require the design of an efficient long-span roof structure for shelter.

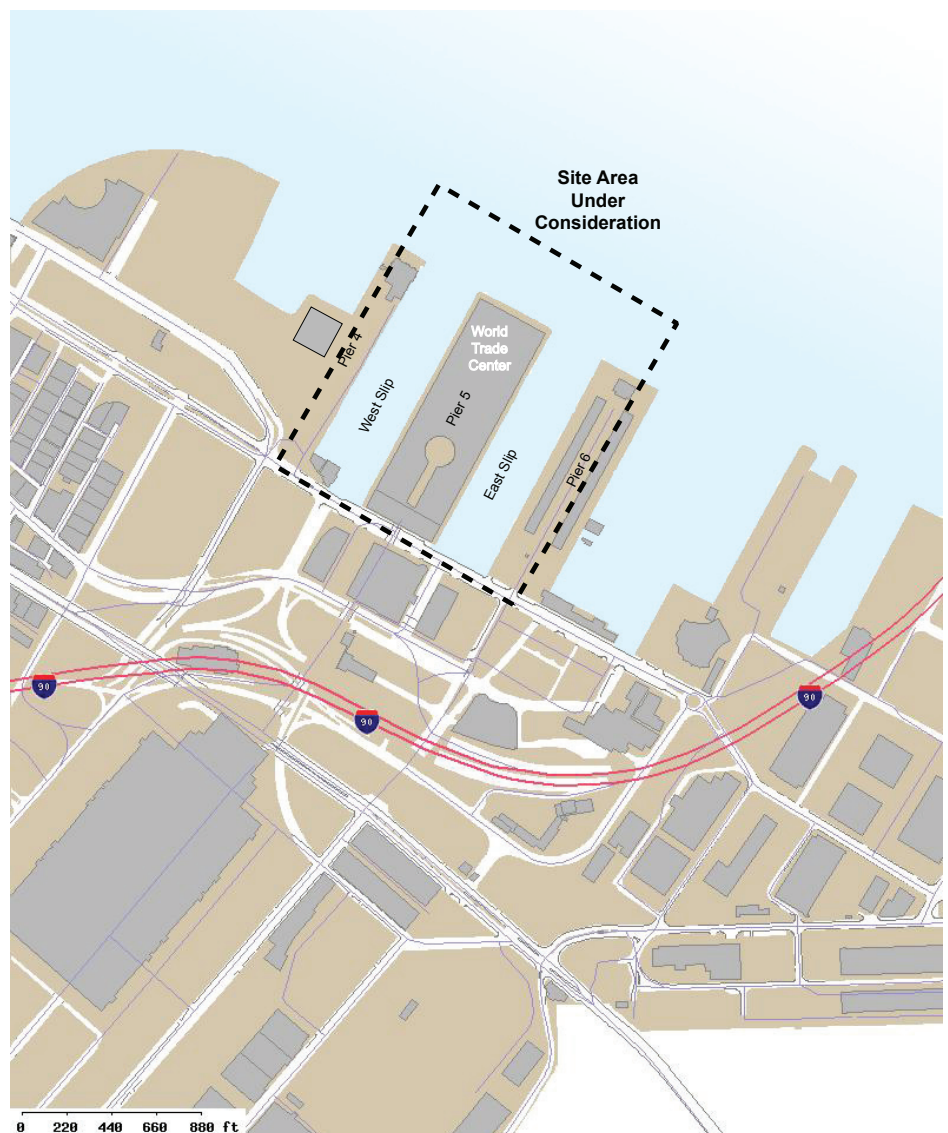
The roof structure should be light-weight, beautiful in its form, efficient in its use of material and elegant in the principles of its engineering. The roof should provide a reasonable area of rain protection and summer shading for the remaining program elements and “comfort zones” which may be aggregated or remain as independent smaller-scaled structures or furniture elements.

The specific functional program of each “comfort zone” is open interpretation by the designer based upon the needs of the ferry boat commuter and may include seating, socializing and/or work areas for individuals and groups of people.

Ferry Vessels will be boarded via a hinged standard gangway leading to a pre-manufactured standard floating barge that will accommodate varying vessel types and tide level variations which can reach up to 11 feet. Accommodation for the simultaneous docking of two 80' long 150 passenger commuter vessels is required.

## Site

The Seaport Ferry Terminal site will be located within the general site area defined between Pier 4 and the Fish Pier (Pier 6) including the Commonwealth Pier (Pier 5) which provides access from Northern Avenue. The exact location of the terminal structure will be determined by the candidate based on pedestrian and vessel access to the terminal facility and ongoing commercial businesses, orientation, sight lines and environmental strategy. Further site information can be found at: [http://www.mapjunction.com/places/Open\\_BRA/](http://www.mapjunction.com/places/Open_BRA/)



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## Requirements

Entries must be received by 10:00 am at:

**Boston Architectural Center**

**320 Newbury Street**

**Boston, MA 02115**

**by February 5, 2007**

Out of state competitors' boards must be postmarked no later than 10:00 AM of the same date.

The speculative argument for the design proposal and a concise description of the proposal and its design intentions should be included in the form of text and diagrams, model photographs and/or images that support the design proposal. Text should be no more than 300 words. Candidates should feel free to include any supporting research, documentation, and technical diagrams that help to convey the attributes of the proposal in a compelling way.

The following constitutes the minimum requirements:

- Maximum 2 boards 24 X 30 vertically arranged
- Locus Plan 1"=100'
- Plan representation 1"=40'
- Sections at 1/8"=1'-0" or larger
- Supporting 3-D representations such as a physical or computer generated model, axonometric, diagrams of key building technologies and/or perspective drawings. At least two experiential perspective representations are required.

No models or projections from the boards are permitted although model photographs or drawings may be mounted on boards. Finalists should be prepared to provide pdf files of their submitted proposal. The Rotch Committee reserves the right to use the drawings for publication.

## Criteria For Evaluation

- The content and quality of proposed design concepts as these engage the specific opportunities and parameters outlined in the brief; as expressed in the analytical and speculative argument of each design proposal.
- The quality, consistency and clarity of the presentation. to suggest a compelling and evocative image of the proposed design solution, as manifested in the proposal's text, technical diagrams, drawings and representations.
- Demonstration that the submitting architect has the talent and skill to imagine the proposal as a realized work of architecture.

