

EDUCATION CENTER PAVILION 3

ARCHITECTURE 2201
Architectural Design I
Fall Semester 2011

This semester you will be designing an Education Center Pavilion to be located on Chicago's Northerly Island. This project is part of the proposed future ecological park planned for Northerly Island.

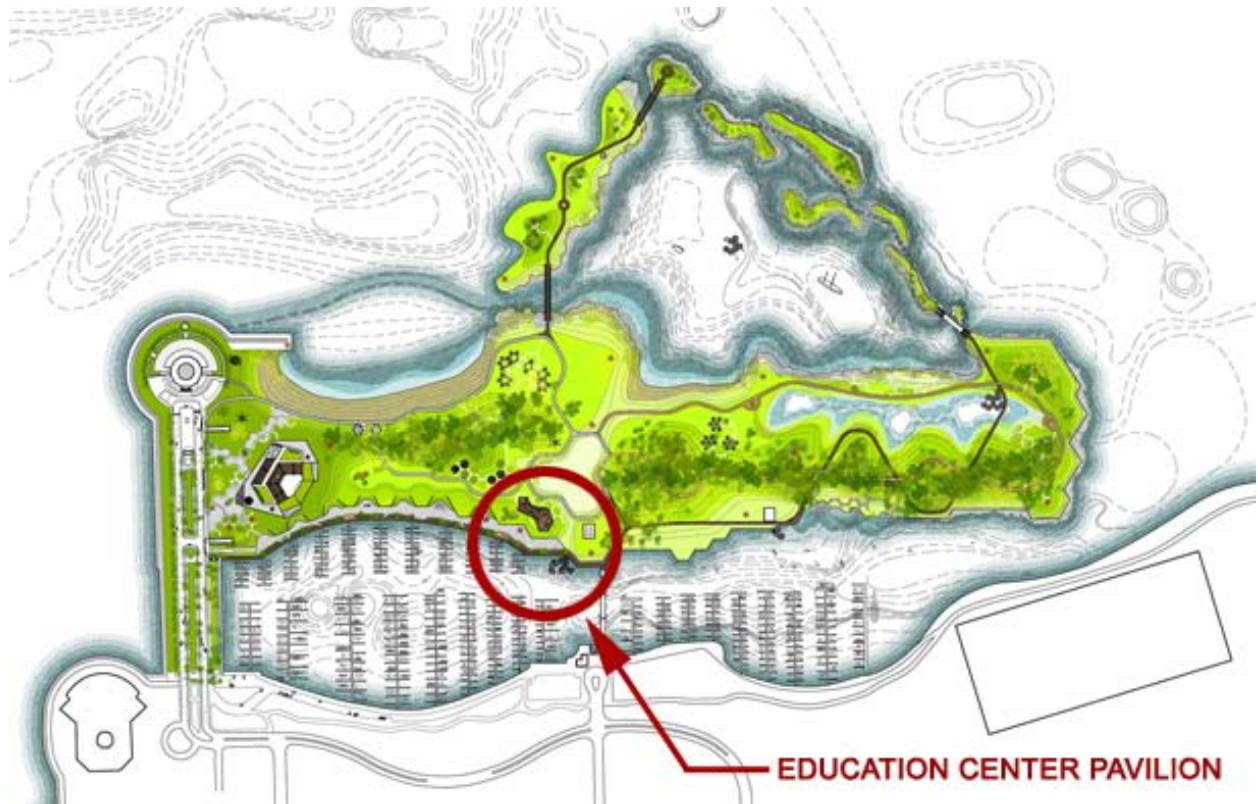
The Northerly Island framework plan currently outlines the future development of Northerly Island into a coastal ecological park. The intent of the framework plan is to create an ecological park that will integrate with the museum campus and provide recreational, environmental, cultural and educational opportunities along this ideal lakefront location.



Proposed Ecological Park on Northerly Island

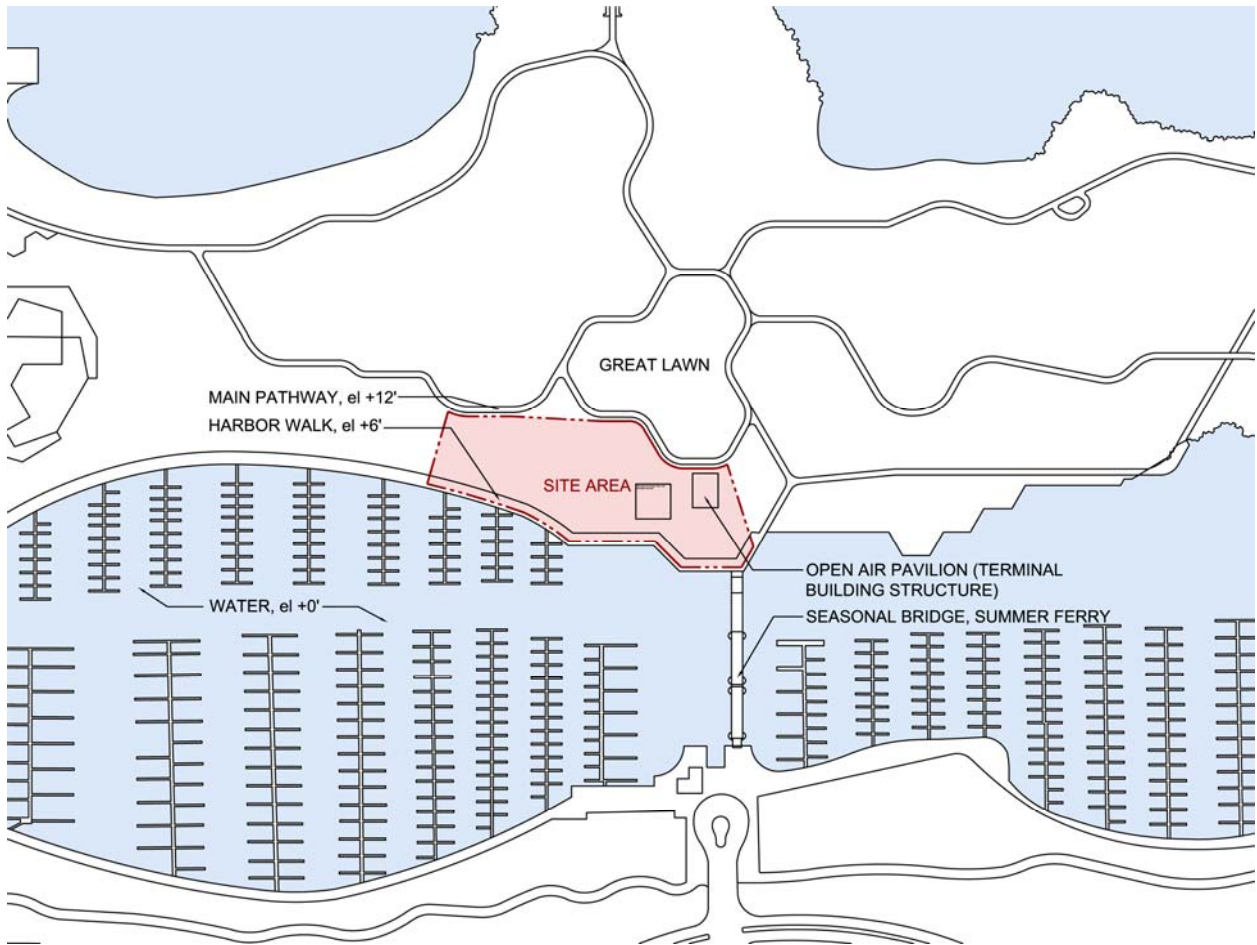
DESIGN CHALLENGE:

The Education Center Pavilion will be designed to accommodate exhibits, classes, meetings, and other educational opportunities. The intent of the Education Center is to expand educational opportunities from the adjacent museum campus into the new park, as well as provide an opportunity for visitors to learn about the ecological and environmental features of the park.



The design challenge is to create an innovative and thoughtfully conceived Education Center. Designs should be developed based on a clear design concept, and should provide a strong connection to the site and context. Your pavilion designs should be a site specific act, relating directly to the unique features of the project site. Projects should seek a deeper connection to the City of Chicago, becoming emblematic of the unique physical, political, historical, social and cultural aspects of the site and city. Successful projects will create a unique narrative with the site and city.

Pavilion designs should create connections, transitions and unique and memorable spaces for visitors.



Education Center Site Plan

PROGRAM REQUIREMENTS:

INTERIOR SPACES

ENTRY VESIBULE: 150 SF

This space is the public entrance to the facility. Provide an airlock protecting the space against cold Chicago winters. All exit doors must swing in the direction of exit travel.

RECEPTION: 300 SF (Adjacent to Entry Vestibule)

This space is intended to provide orientation and serve as an initial gathering space for visitors. This space should include a reception and information desk.

EXHIBIT: 1500 SF

This space is the main exhibit space for environmental education exhibits. This space should be flexible, capable of accommodating exhibits and artwork in a variety of formats and media, including both permanent and temporary exhibits.

MULTIPURPOSE SPACE: 2000 SF

This space should be an open, flexible space designed to accommodate a variety of functions. This space may be used for meetings, lectures, receptions, displays and /or temporary exhibits. A clear ceiling height of at least 16'-0" is required for this space.

STORAGE: 200 SF (Adjacent to Multipurpose Space)

This space should accommodate general storage for the Multipurpose Space, including table and chair storage.

CLASSROOMS: (2) at 600 SF ea.

Design should include (2) classroom spaces that will be used for educational activities. Each classroom should accommodate a minimum of 24 seats with movable classroom style table seating. Classrooms should also have a sink, counter space, and built-in storage for crafts and educational activities.

CAFÉ: 450 SF (Adjacent to Entry)

Provide a Café with seating for 20 patrons. Seating should be both indoor and outdoor. This space should have a high level of visibility. This space includes area for a sales counter, product display, and back of counter prep areas.

CAFÉ STORAGE: 70 SF (Adjacent to Café)

Provide a small storage area for non perishable food and supply storage.

GARBAGE: 70 SF (Adjacent to Café)

Provide a garbage room that opens directly to the outside for ease for garbage collection. This room must accommodate two (2) 95 gallon roll out standing garbage containers.

DIRECTORS OFFICE: 120 SF

Provide one private office space for the Education Center director. This space should have at least a desk, side table and chair.

STAFF OFFICE: 200 SF (Adjacent to Director's office)

Provide an open office area that can accommodate at least two staff work areas. This space should also provide space for general storage, copy and printing areas.

CONFERENCE ROOM: 200 SF (Adjacent to Director's office)

Designs should include a conference room with conference style seating and a projection screen. This space should also include a counter surface and built-in storage.

RESTROOMS: (2) at 150 SF ea.

Provide one accessible restroom (2 water closets) per each gender. This space should be highly accessible to the public. Restrooms must be designed in accordance with the American with Disabilities Act. Consult Graphic Standards chapter 21 for information regarding universally accessible restrooms.

MECAHNICAL: 150 SF

Provide a back of house space for mechanical, electrical, and plumbing equipment.

(Approx 7600 SF total building area, including 10% circulation factor. Note: Square footages are for planning purposed only and may evolve as the project is developed)

EXTERIOR SPACES

OUTDOOR CLASSROOM

Include an open, exterior classroom for educational events. This space should include a small performance area or stage for outdoor concerts or lectures. This space must accommodate up to a maximum of 35 people seated comfortably. Consider the design of seating areas as an architectural element.

OUTDOOR TERRACE (OUTDOOR SPACES)

Designs should incorporate a variety of outdoor public spaces and seating areas designed to take advantage of the natural setting of the site. Terrace areas may be considered an extension of the building, providing additional public space for the education center, café or multipurpose areas.

ROOF TERRACE / OBSERVATION TOWER (optional)

An optional space may be provided on the roof (or in a tower element) to accommodate outdoor use and to provide a platform for viewing. This space must be fully accessible, and will require ramps or an elevator.

CONNECTION TO HARBOR WALK AND MAIN PATH

All projects must provide an exterior, accessible route from the Main path (el. +12') to the Harbor Walk (el. +6') as a requirement for this project. See accessibility requirements below.

CODE REQUIREMENTS:

Spaces must have a minimum clear height of 8'-0".

Openings must be a minimum of 3'-0" wide and 6'-8" in height.

Stairs must have a maximum riser of 7" and a minimum tread of 11". Stairs must be a minimum of 44" wide.

Load Bearing Elements: Load bearing walls must have a minimum thickness of 12". Columns must be a minimum of 8" square. Beams must be a minimum of 12" deep to span 20'. Long span structures must be developed for spans exceeding 20'-0" in length. (You may deviate from these rules as your design becomes more specific as to the actual proposed structural system)

All spaces must be fully accessible. Ramps must have a maximum of 1:12 slope. Ramps with a slope greater than 1:20 must include handrails. Ramps over 30 feet in length must include an intermediate landing.

Elevators are not permitted for this project, with the exception of serving the optional roof terrace / observation tower.

OTHER REQUIREMENTS:

Wall Planes:

Use wall planes to differentiate spaces and provide the appropriate level of enclosure.

Level changes:

Level changes are encouraged for spatial organization and delineation.

Structural grid:

Your designs should include a structural grid (system) with a 20'-0" maximum span. Your designs should start with a 20' rectangular structural grid, but you will be allowed to deviate from this as the design progresses and you become more specific with the structural system that you are proposing.

Like wall planes, which define program functions, structure is a space organizing system. The structural system or grid should not be imposed on the building plan, but must be considered in relation to all other aspects of the project during the design process.

Spatial Delineation / Choreography of space:

Look back to your study of the Barcelona pavilion last year. Remember how the experience of space was created by the composition of architectural elements. Like this assignment, these elements include roof planes, wall planes, level changes and structural elements. Use your understanding of these elements to define space in your pavilion.