

David S. Ingalls Rink

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Lighting Proposal Memo

Overview

The following memorandum describes in details the four spaces of David S. Ingalls Rink that will be studied for senior thesis lighting depth. Each space is analyzed through dimensions, materials and activities/visual tasks. The proposed lighting redesign scope includes the following:

- | | |
|-------------------------------|-----------------------|
| - Building Exterior | Outdoor space |
| - Ice Rink | Special Purpose Space |
| - Concourse and Seating Floor | Circulation Space |
| - Schley Memorial Club Room | Work Space |

Three schematic design concepts will be developed for the building exterior. The Schley Memorial Club Room will be designed to provide a psychological impression.

Building Exterior



Figure 1 | Aerial View

The exterior of David S. Ingalls Rink establishes its visual identity – “the Yale Whale” with the dramatic sweeping roof. The elliptical shaped building has its main structure of 290 foot long reinforced concrete spine for cable net to hang from to support the iconic roof. It lands in a quiet neighborhood of residential houses in the Yale Old campus, with several educational buildings on its south side. The exterior will be designed with three different concepts to give different impressions and establish unique nighttime appearance.

Dimension: 335'L x 196'W x 66'H max above grade

Material: Oak roof supported by steel cables suspended from reinforced concrete arch. The exterior wall is made out of unfinished concrete with wood texture to echo the oak roof. Wooden door frame and insulated glass curtain wall form the building façade.

Activities: Public Entrance

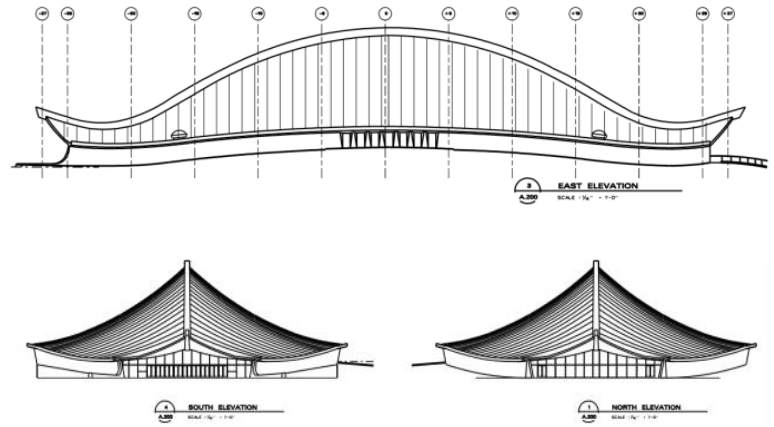


Figure 2 | Building Elevation

Ice Rink



Figure 3 | Ice Rink

The rink has a capacity of 3,500. With 290 feet spine to support the roof, the interior of the rink does not have any columns inside. The curved ceiling gives an open impression with a maximum ceiling height at 70 feet. The materials used for exterior of the building got carried inside, combined together to give a remarkable visual appearance.

Dimension: 200' L x 85' W x 70' H max

Material: Existing 5" ice floor has 1" plaster pipe 3.5" on centers; new insulated roof was given to preserve the original oak timbers.

Activities: Sport, Performance

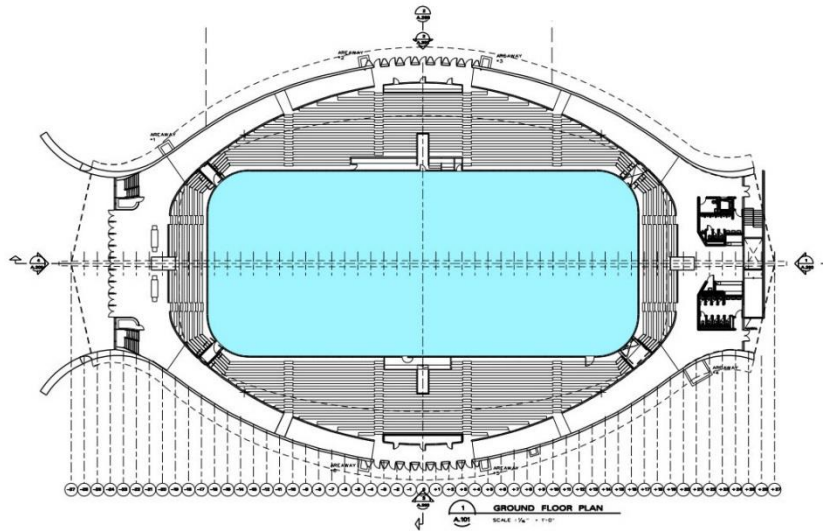


Figure 4 | Ground Floor Plan – Ice Rink

Concourse and Seating Floor



Figure 5 | Concourse and Seating Floor

The concourse surrounds the rink and provides main circulation to the public. Building entrances are located on the east and west end, whereas seven exit doors are located on the north and south. There are a total of fifteen rows of benches, with press box located on the back row of north and south side. There are four isles each lead to the seating on the north and south and two on the east and west.

Dimension: Concourse Width – 8’W
Isle Width – 4’W
Sloped Ceiling – 10’H max

Material: Seamless flooring with 4” rubber base; CMU painted walls and CMU painted Ceilings; Plaster ceiling above the circulation.

Activities: Socialization, Circulation

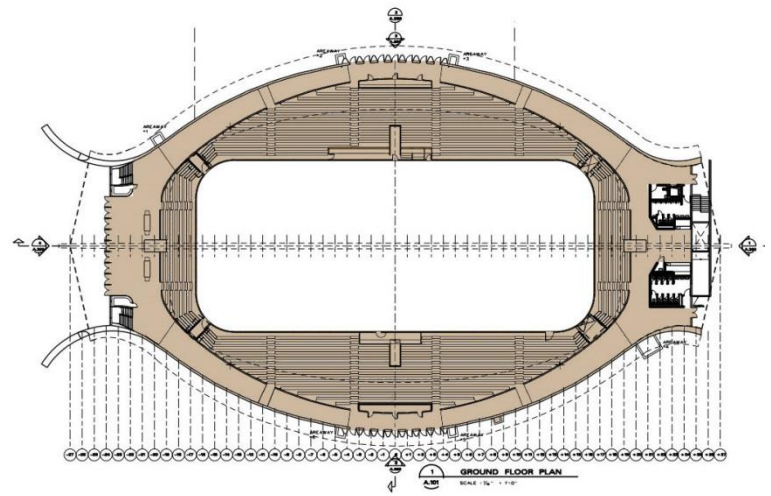


Figure 6 | Ground Floor Plan - Circulation and Seating

Schley Memorial Club Room



Figure 7 | Schley Memorial Club Room

The Schley Memorial Club Room provides an intimate atmosphere for visitors to sit and rest. There are display cases and timeline photos spanned across the entire wall highlighted by wall mounted task light, telling the story of Yale hockey history dated back to 1895. This space will be designed to give a lighting solution with unique psychological reinforcement.

Dimension: 77'L x 22'W max x 14' H max

Material: Carpet Floor on wood base;
Painted gyp board wall finish; Custom wood
paneling on the ceiling.

Activities: Socialization, Working

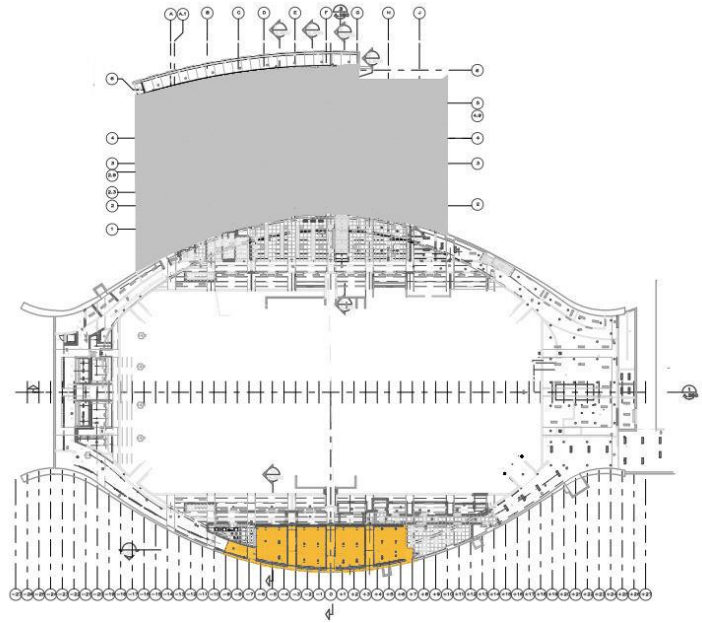


Figure 8 | Basement Floor Plan – Schley Memorial Club Room