Logan International Airport: A Proposal for Terminal A (2)

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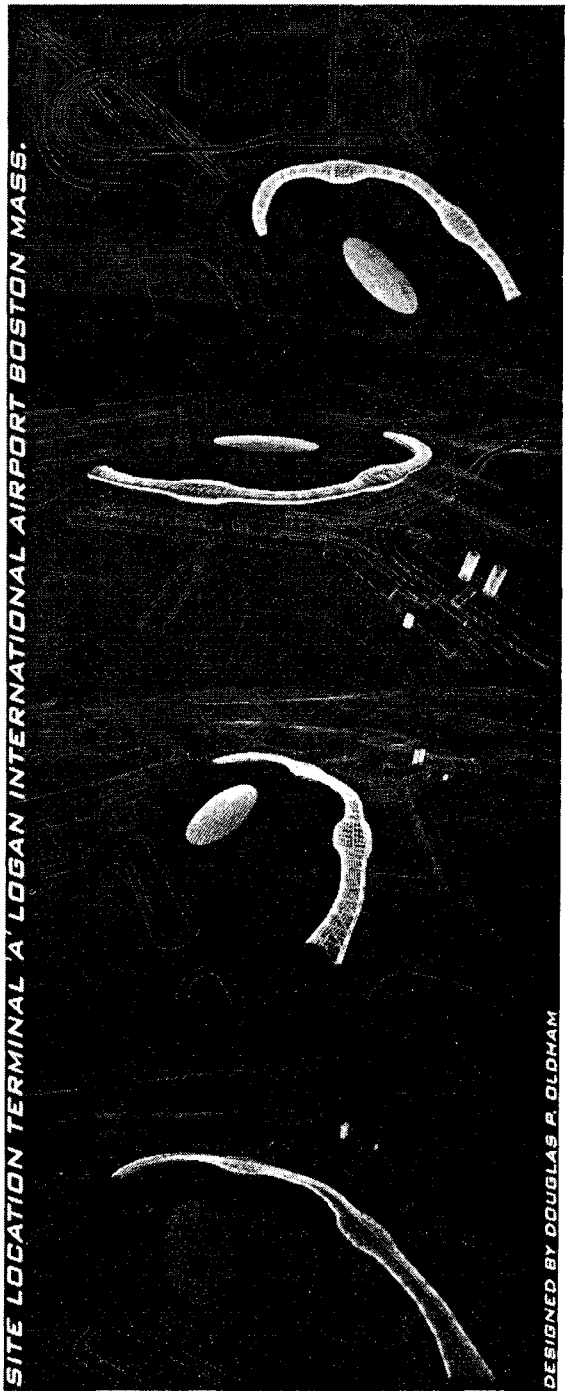


The project for the design studio was to design the proposed Terminal A at Logan International Airport in Boston, Massachusetts. The project was to follow the guidelines outlined as part of the Logan 2000 Master Plan developed by Skidmore, Owings and Merrill, New York. The intention was to focus on emerging technologies in architectural building and design.

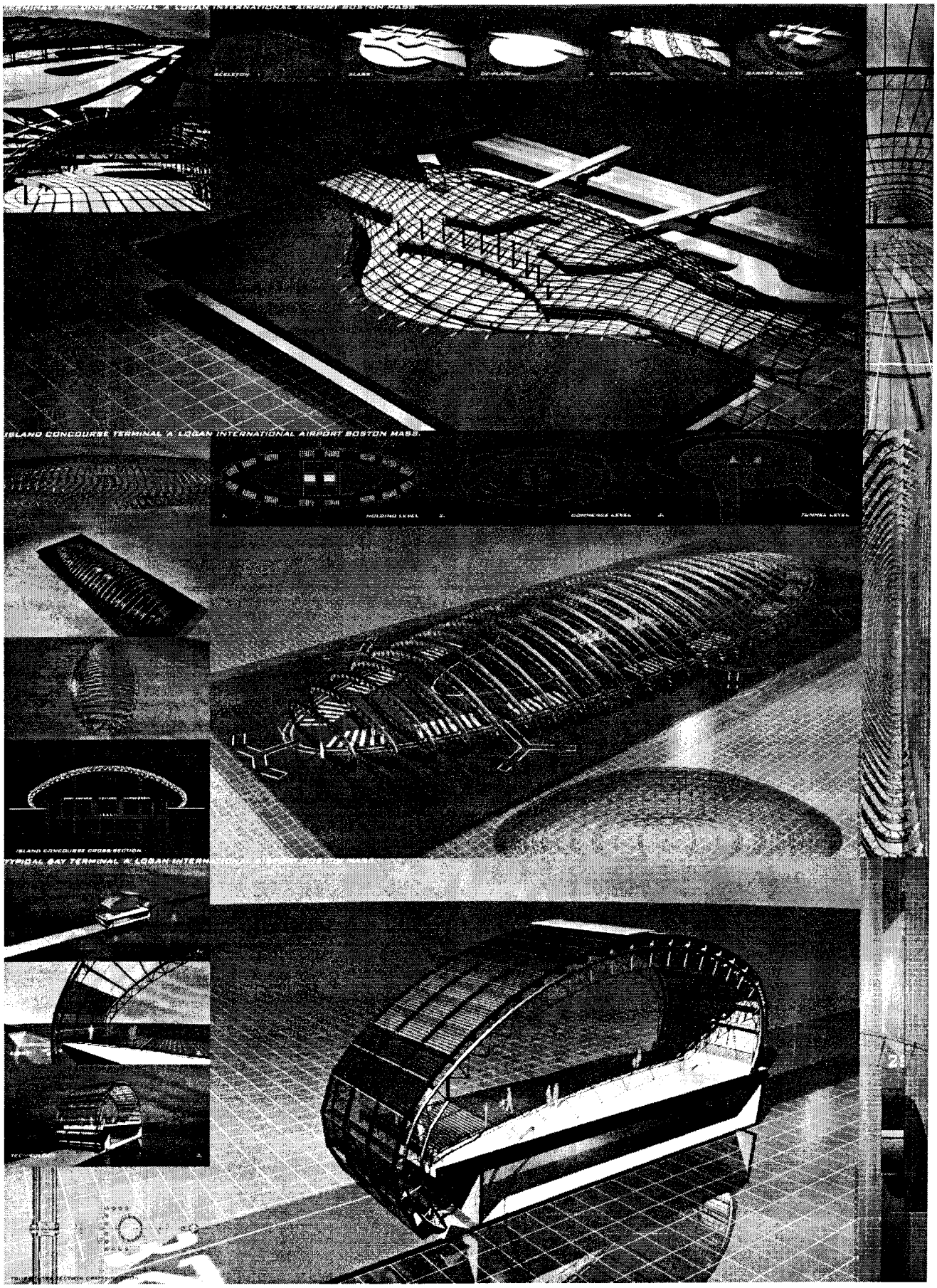
This solution to the problem is rooted in five themes: light, moment, journey, reward, and experience.

In order to create a more efficient circulation system for pedestrian and air traffic, I proposed to remove both the terminal and concourse on the west side of Terminal B. Pedestrian travel for the new airport, including the gates displaced from Terminal B, in this scheme minimized due to the utilization of an island concourse.

The primary structural system is a series of custom trusses that are designed to accommodate the shift of the compression forces from the top member to the bottom as the moment and deflection diagram dictate. Secondary structural members include the purlins and posts which span the trusses and support the enclosure system.

The Island concourse is a self-contained world culminating in a lily pad of with views of Boston Harbor and downtown Boston. The structural system for the Island Concourse is similar to that of the rest of the project.

The technologies incorporated within the systems of this project are intended to completely achieve the desired nature of the spaces. The enclosure system consists of a double membrane detail. Within the cavity of this system are independently computer controlled louver bays which can accommodate all lighting conditions within the varying orientations of the airport. The exterior membrane is glass. The glazing on the interior of the membrane gives way to a translucent membrane. This prevents the condition of over lighting and creates a surface for diffuse up lighting during the night.


SKELETON
SLABS
SKYLIGHTS
SKYLIGHTS
GARAGE ACCESS
ISLAND CONCOURSE TERMINAL 'A' LOGAN INTERNATIONAL AIRPORT BOSTON MASS
HOLDING LEVEL
CONCOURSE LEVEL
TUNNEL LEVEL
ISLAND CONCOURSE CROSS SECTION