Project Brief

Requirements

“..a comprehensive design”

Iconic Architectural elements & Spatial Layout

Virtual Reality

"..a fabulous story"

Public Amenities

Amphitheatre
Food Courts
Curio Shops
Pools & Decks

Interactive Public Spaces

Gardens & Promenades
Parking Facility

Large Live Exhibits: Kursura Submarine, TU 142 & Sea Harrier Jets & other large fibre replicas & instruments

Theme related Entertainment

Areas for elite theme related shows/ parties/ exhibitions

Visual Auditory & Spatial Experience
A Flexible primary architectural language adaptable for different sites

- straight planes, creating vistas and sensible circulation patterns.
- simple and pure forms that can work flexibly in different site configurations
- Aims to incorporate landscape as part of museum experience

Site Option (A)
(Either by maintaining Rajiv Smriti Bhavan or not)

Site Option (B)
Plot behind AU Convention centre
The proposed building for submarine museum can be worked out by retaining the existing structure and by making minor modifications.
Active engagement with Seaside Landscape

A building that fits into the seaside landscape and incorporates its vistas.

Maximizing perception of space:

- A glass and steel structure
- Water pools
- Double glazed walls
- Projection screens and multipurpose halls are also included.

Movement through the Vertical space

Using a building language of catwalks, bridges and ramps to experience the building and view exhibits.

A “non-building” to keep the element of mystery
Millennium Park, Chicago

The park interfaces various urban blocks and integrates surrounding cityscape.

BMW Welt and Museum, Munich, Germany

Building seamlessly connects to road.

Continuous Ramp gradually becomes exhibit space.

Light Structure
Glass & Steel
Architectural Frames
Framing the city & sky

Catwalks and bridges give comprehensive & overhead view of exhibits & life in the museum.

Overhead natural lighting

©
01 SITING The proposed building is sited such that it is in proximity to the INS Kursura and TU 142, capturing views, encompassing the surrounding seascape & to create a visual pointer on the unpunctuated landscape.

Design Process of Submarine Museum

02 BUILDING LANGUAGE

SUBMARINE MUSEUM PROPOSAL | ENVIRONMENTAL CREATIONS ©
1. Entrance Plaza
2. Main Museum
3. Open Air Ribbed Theatre
4. TU 142
5. Serpentine Gallery
6. Tower/Windmill (Optional)
7. INS Kursura
8. Pedestrian Subway
9. Parking
10. Reflecting Pool
11. Existing Building - AU Convention Centre
12. Sea
01 On site & Basement of Main Museum
500 No.s for Cars & 2Wheelers each

PARKING

02 Underground Parking
600-700 No.s for Cars & 2Wheelers each if underground basement is developed upto YMCA Parking Lot
01 MAIN MUSEUM
• 3 Floors of 16,575 SQ. Ft area each with themed sub galleries
• A continuous ramp with restaurants/kiosks

02 SERPENTINE GALLERY
• Total Length of 200 m with a 30 minute walk time

03 OPEN AIR RIBBED THEATRE
• Has a capacity of 1500 person (+ option to expand for 1500 more)
• A tensile structure with exterior fabric

04 PROMENADE
• Wide pedestrian stretches for jogging/walking & free movement of people
A Museum Experience drawn from the landscape & urbanity of Visakhapatnam
VR Ride in the Serpentine Gallery

- Ties the site and various components
- Offers a 30 minute ride animated by VR/ spatial media displays
- 200 m Length with two pods to enter and exit
- Schematic serpentine cross-section at various points

Interior concept

- Is cantilevered continuously by a series of steel supports with a height of 4 metres from ground.
- Cladded with embossed stainless steel (weatherproof)
- 6m x 6m pentagon section that twists along the length
- Ducts provided in a 50 cm deep clear space below interior deck
- Streamlined to let strong winds pass
Reflective Surfaces

Magnify sense of space & helps integrate design with the landscape
Flexible interiors

allow the museum to be partitioned & to accommodate new and existing technology.
Flexible museum space accommodates current & future technology

Museum exhibits are split among three levels of the museum:

- SECOND FLOOR
- FIRST FLOOR
- GROUND FLOOR

Flexible museum space accommodates current & future technology

Creating a Story
Group exhibits thematically to tell a good story

- How does a Submarine Work?
- Display of Actual Submarine Equipment
- VR Experience of Piloting a Submarine
- Mock-up spaces with equipment/gear displays
- Infographic display panels
- Scaled models of different classes of submarines + timeline of missions
- Submarine Equipment Museum
- Submarine Fibre Models & Gear
- Indian Submarine History Museum
- Large Hanging Exhibits like Missiles etc
- Life of an Indian Naval Submarine Officer
- 50 Years of Indian Submarines
Sea World, San Diego

Simulated rides incorporated into the serpentine that narrates the story of the submarine through movement.

Museum of Science + Industry, Chicago

Aboard a re-created sub environment, climb through the hatch and experience the sights, sounds and feel that was reality for the U-505's 59 sailors during wartime.

A play of VR, Digital & Physical Displays

Spatial Media animation
Victory Memorial

**Site Area:** 20,000 SQ FT

- 95 m long site sloped up to 2m height.
- Length of plot used for a recreational park with waterbody.
- Tower Height: 11m + 4 m high mini gallery below

CLOCKWISE FROM TOP: 1) Aerial View of Site 2) view from Podium 3) Reflective Tower element to capture landscape 4) Way towards underground gallery 5) Steps form dome of gallery+ Ramp leads down to underground gallery
The Submarine Museum acts as a backdrop for the integrated beach development on the Kursura Side.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Area (SQ.FT)</th>
<th>Cost (CR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Main Museum, Landscaping, VR Displays, Sea Harrier</td>
<td>29,945 + 1,02,257 + 5715</td>
<td>15</td>
</tr>
<tr>
<td>II</td>
<td>Open Air Theatre, Wind Turbine</td>
<td>37,750</td>
<td>9</td>
</tr>
<tr>
<td>III</td>
<td>Beachfront, Wind Turbine</td>
<td>6,652</td>
<td>5-8</td>
</tr>
</tbody>
</table>

Indicative cost is mentioned.

* © SUBMARINE MUSEUM PROPOSAL | ENVIRONMENTAL CREATIONS
Thank you