THE NET

Integrated Fisheries Development Hub

Submited By :Yasmine Mohamed Mohamed Amin 1210397
Supervised By :
Dr Soha El Gohary -TA. ENG Aya Hany

Location Overview

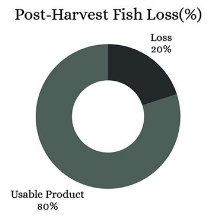
Rosetta (Rashid), Egypt

Rosetta is a historic Mediterranean coastal city whose identity is strongly connected to fishing and maritime activities. The city supports fishing, aquaculture, fish trade, and fish-processing industries that contribute significantly to the local economy. In addition, Rosetta is renowned for its architectural heritage, cultural landmarks, traditional urban fabric, and agricultural landscapes, reflecting the city's long-standing relationship with both land and water.

Problem Definition

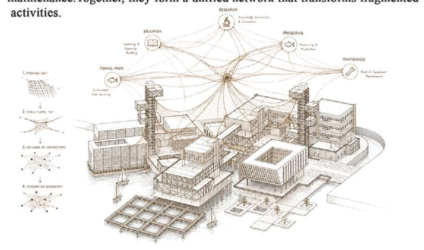
Rosetta's fishing industry lacks an integrated system that connects sustainable fishing practices, scientific research, public awareness, fish processing, and vessel support services. As a result, overfishing, resource depletion, post-harvest losses, and economic uncertainty continue to threaten both the fishing community and the long-term sustainability of the sector.

Post-Harvest Fish Loss(%)



Concept

More than a fishing tool, the net becomes a metaphor for connection. Its woven structure is reflected physically in the architecture and functionally in the relationships between research, education, fishing, processing, and maintenance.Together, they form a unified network that transforms fragmented activities.

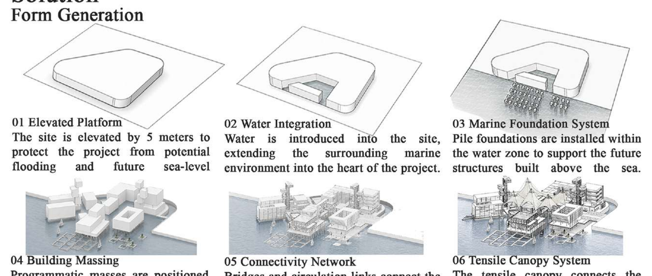


User Analysis

TEACHING STAFF
COMMUNITY MEMBERS
FISHERMEN
ADMINISTRATIVE STAFF
MAINTENANCE STAFF
VISITORS

Solution

Form Generation



01 Elevated Platform
The site is elevated by 5 meters to protect the project from potential flooding and future sea-level

02 Water Integration
Water is introduced into the site, extending the surrounding marine environment into the heart of the project.

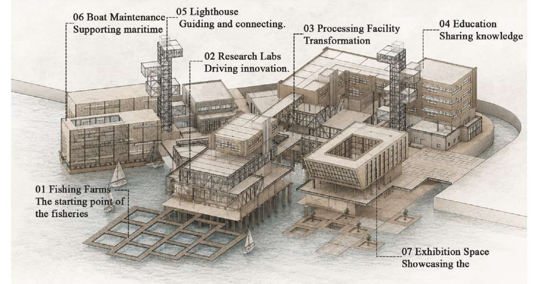
03 Marine Foundation System
Pile foundations are installed within the water zone to support the future structures built above the sea.

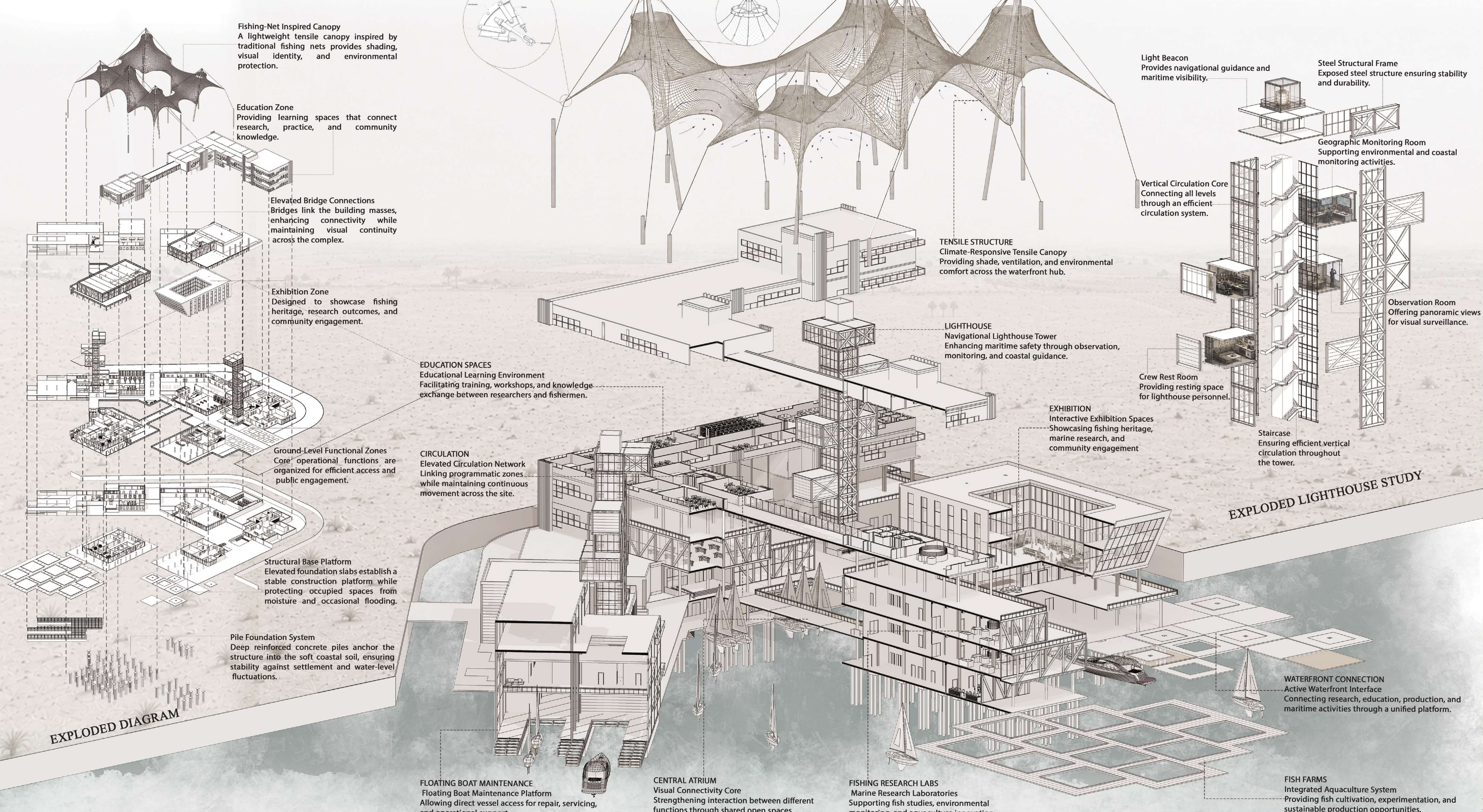
04 Building Massing
Programmatic masses are positioned on the elevated platform and over-water foundation system according to functional requirements.

05 Connectivity Network
Bridges and circulation links connect the different masses, ensuring continuous movement across the water-integrated site.

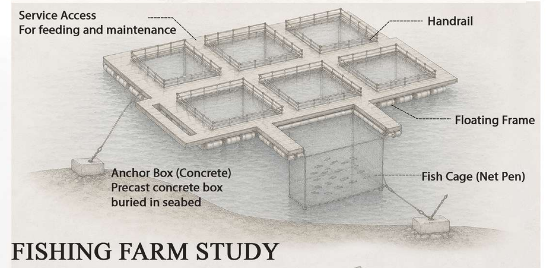
06 Tensile Canopy System
The tensile canopy connects the different masses while creating shaded, naturally ventilated outdoor spaces.

Fish processing & Developement Loop

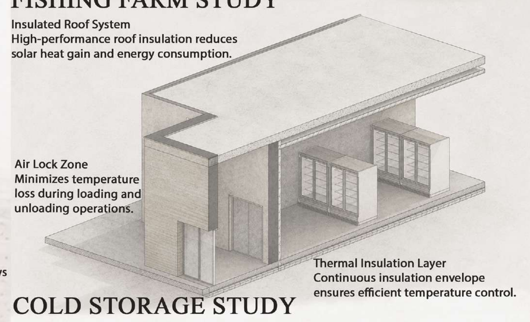




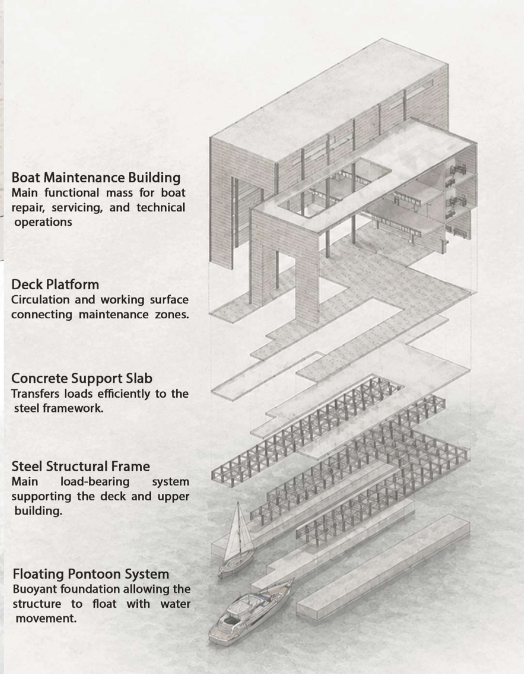
EXPLODED DIAGRAM



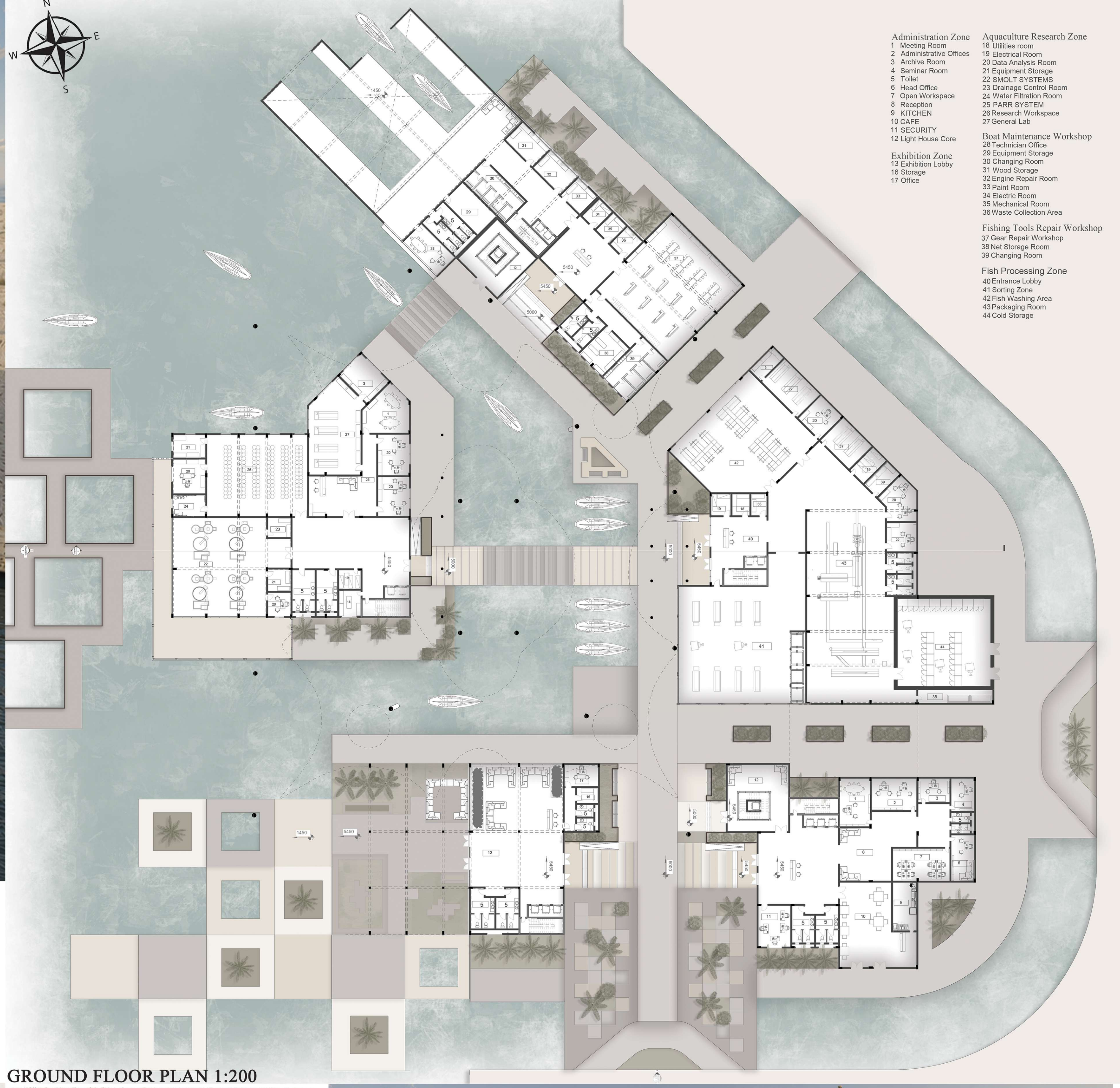
FISHING FARM STUDY



COLD STORAGE STUDY



BOAT MAINTENANCE BUILDING STUDY



Administration Zone
1 Meeting Room
2 Administrative Offices
3 Archive Room
4 Seminar Room
5 Toilet
6 Head Office
7 Open Workspace
8 Reception
9 KITCHEN
10 CAFE
11 SECURITY
12 Light House Core

Exhibition Zone
13 Exhibition Lobby
16 Storage
17 Office

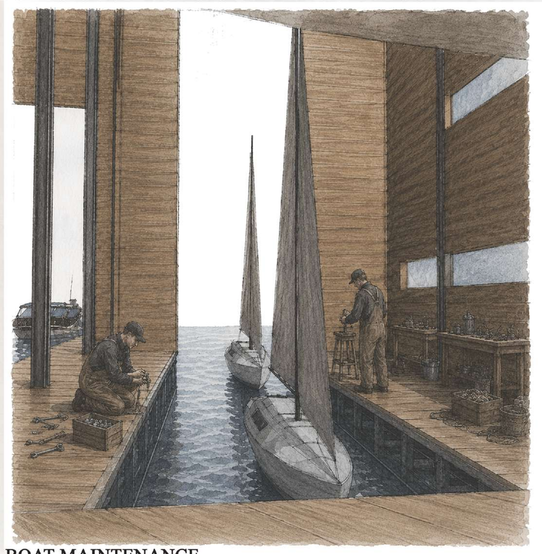
Aquaculture Research Zone
18 Utilities room
19 Electrical Room
20 Data Analysis Room
21 Equipment Storage
22 SMOLT SYSTEMS
23 Drainage Control Room
24 Water Filtration Room
25 PARR SYSTEM
26 Research Workspace
27 General Lab

Boat Maintenance Workshop
28 Technician Office
29 Equipment Storage
30 Changing Room
31 Wood Storage
32 Engine Repair Room
33 Paint Room
34 Electric Room
35 Mechanical Room
36 Waste Collection Area

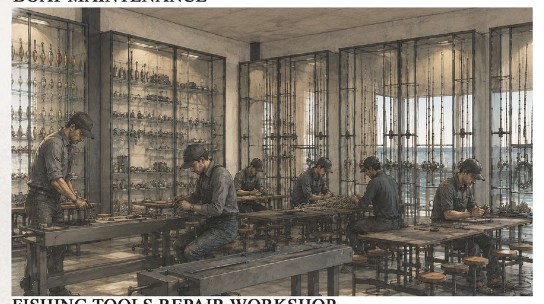
Fishing Tools Repair Workshop
37 Gear Repair Workshop
38 Net Storage Room
39 Changing Room

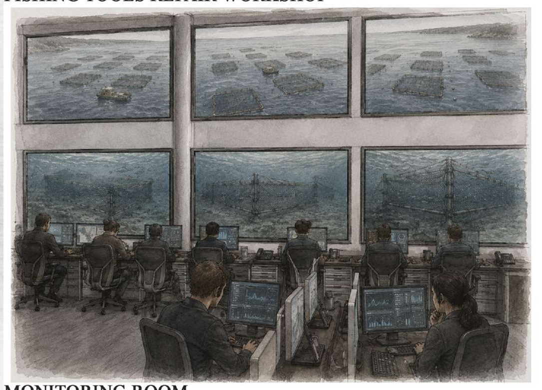
Fish Processing Zone
40 Entrance Lobby
41 Sorting Zone
42 Fish Washing Area
43 Packaging Room
44 Cold Storage

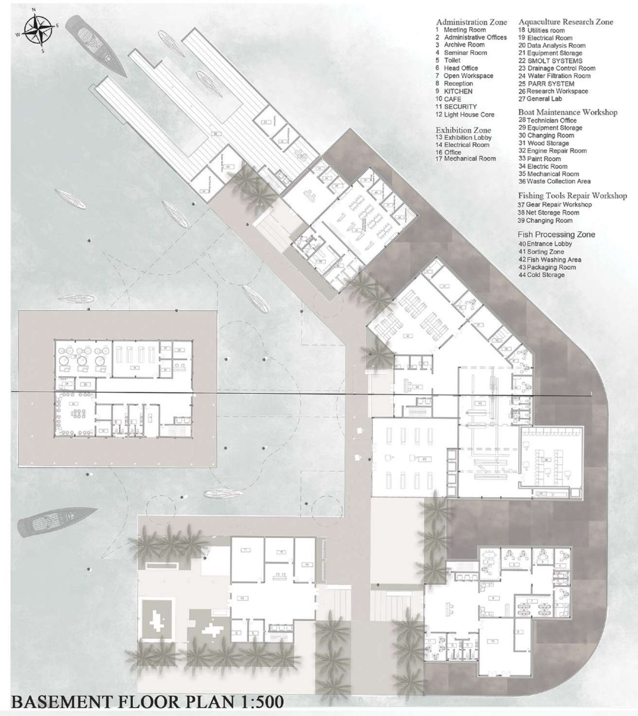
GROUND FLOOR PLAN 1:200

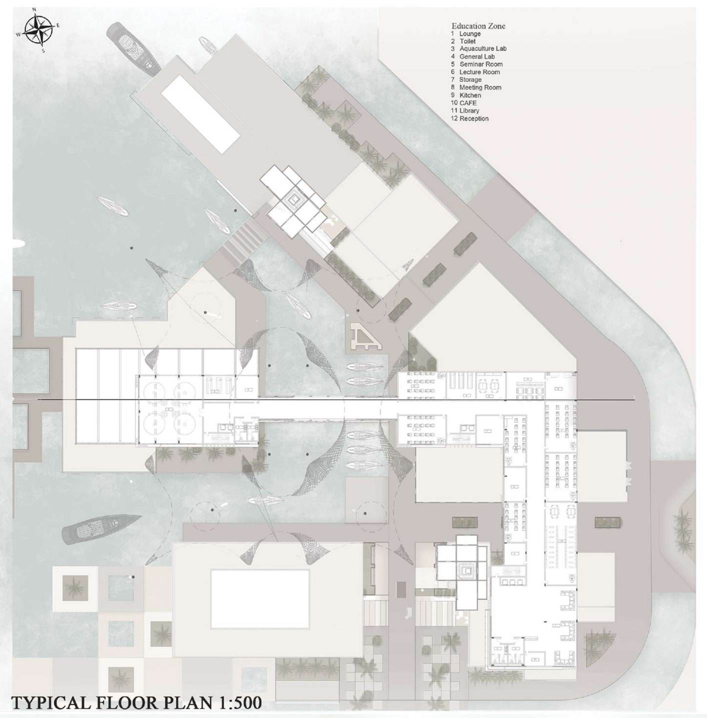

BOAT MAINTENANCE

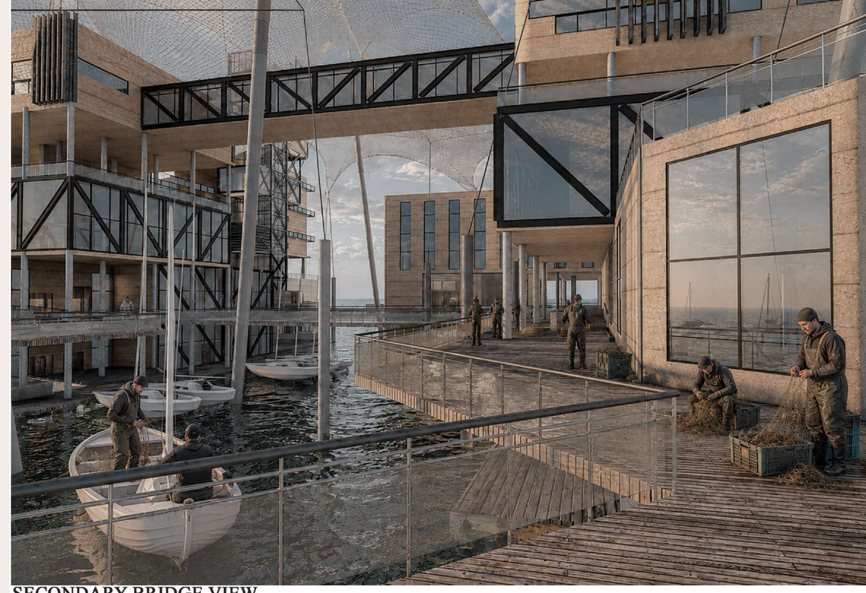

SEA VIEW SHOT

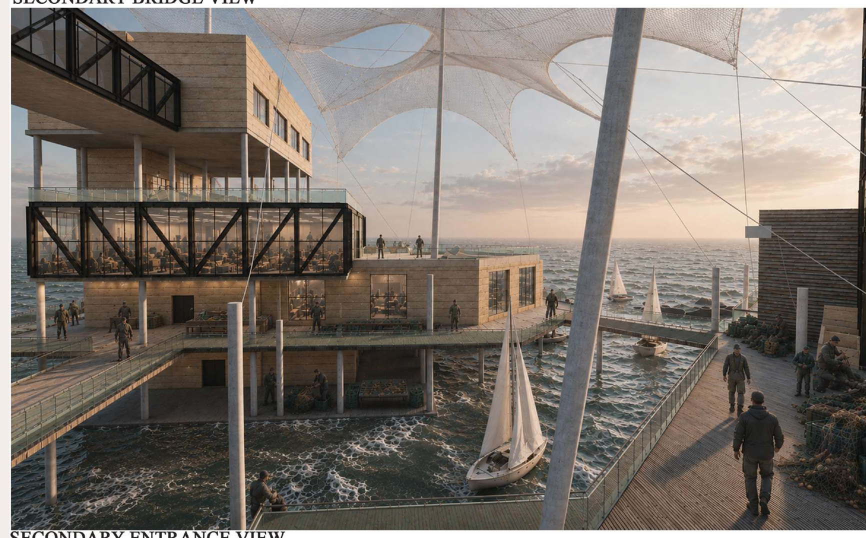

FISHING TOOLS REPAIR WORKSHOP

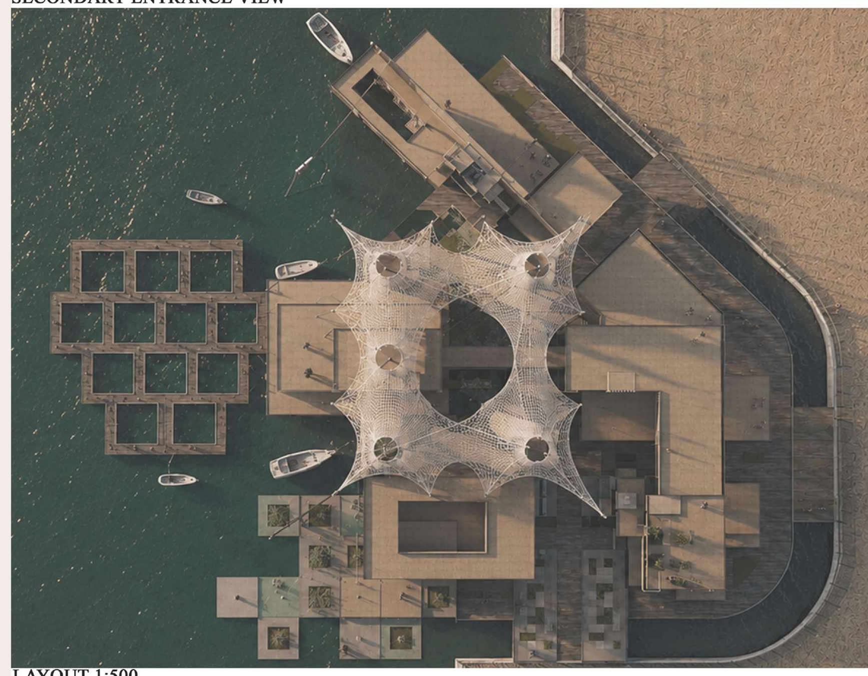

MONITORING ROOM


BASEMENT FLOOR PLAN 1:500


TYPICAL FLOOR PLAN 1:500

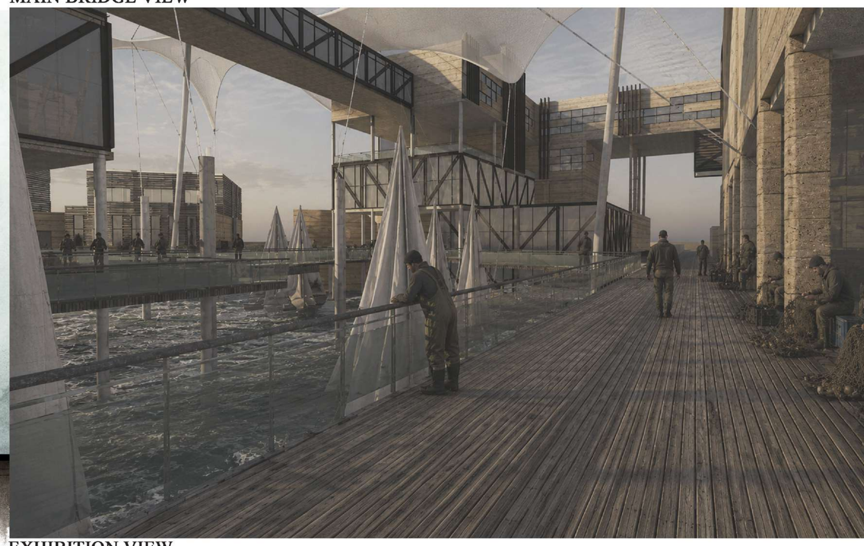

SECONDARY BRIDGE VIEW

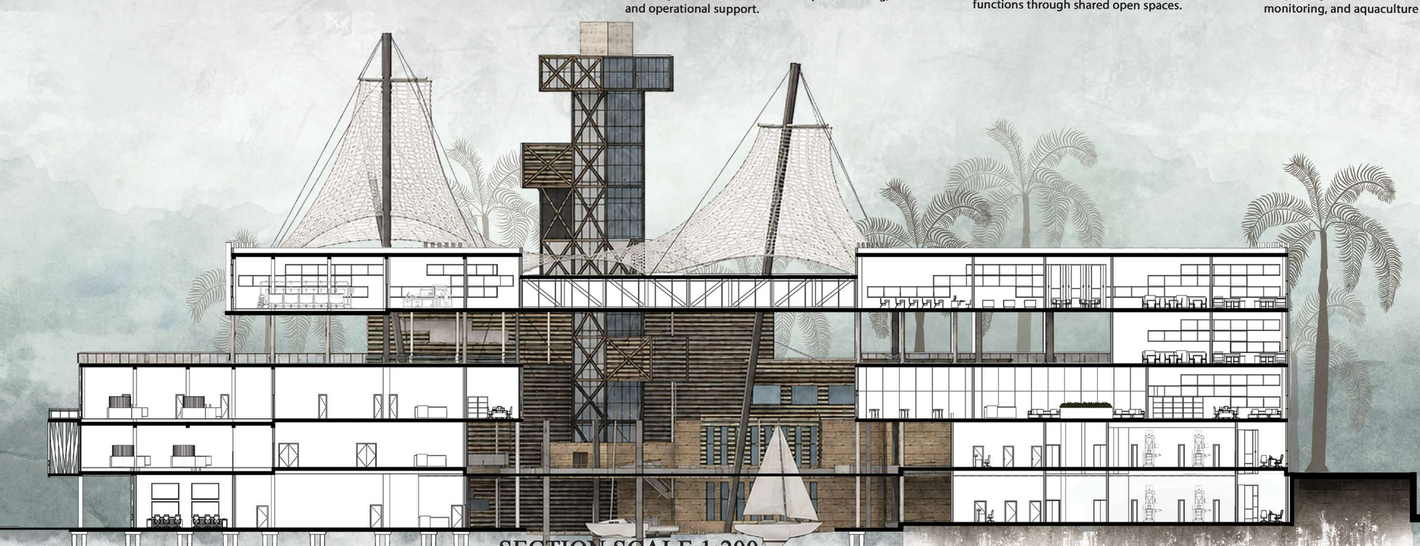

SECONDARY ENTRANCE VIEW


LAYOUT 1:500

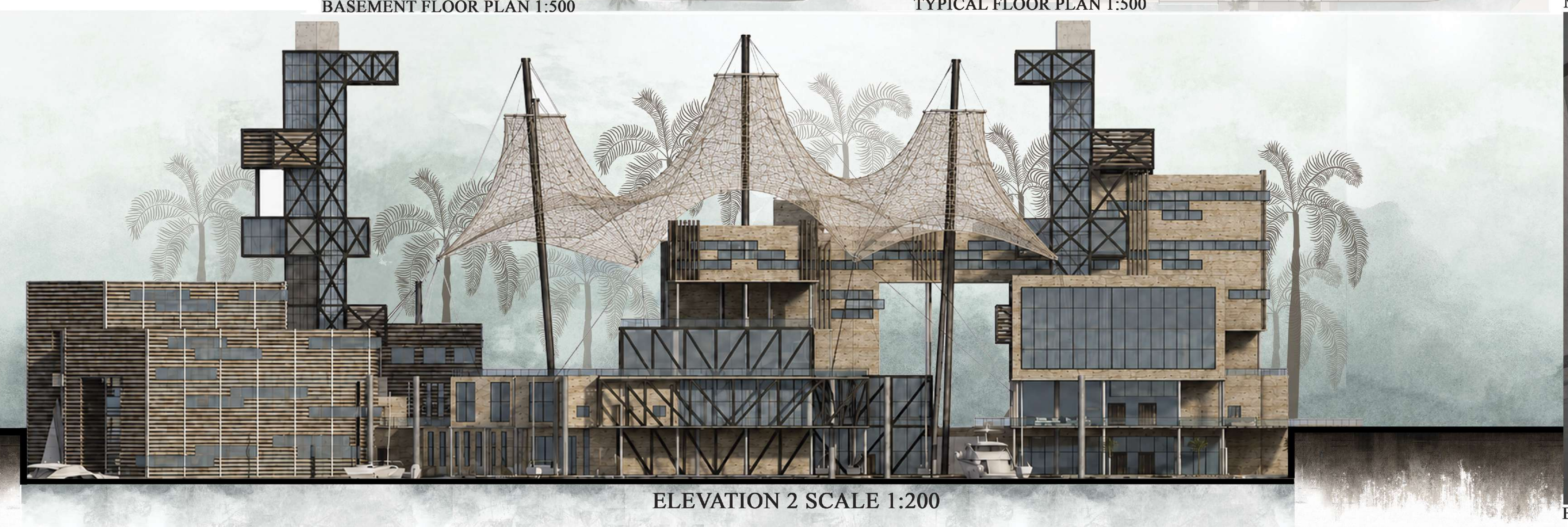

MAIN ENTRANCE VIEW


MAIN BRIDGE VIEW


EXHIBITION VIEW


SECTION SCALE 1:200


ELEVATION 1 SCALE 1:200


ELEVATION 2 SCALE 1:200