THACHALOM FISHING VESSEL LEARNING CENTER

PLEASE SCAN
VIDEO PRESENTATION

https://youtu.be/4lzfo3JXxdM

Country / City	Thailand, Samutsakorn
University / School	King Mongkut's Institute of Technology Ladkrabang
Academic year	2019/2020
Title of the project	Thachalom Fishing Vessel Learning Center
Authors	Chaiyot Kiewkaew

TECHNICAL DOSSIER

Title of the project	Thachalom Fishing Vessel Learning Center
Authors	Chaiyot Kiewkaew
Title of the course	BLA/Landscape Architecture Thesis
Academic year	2019/2020
Teaching Staff	Worrasak Luangsuwan
Department/Section/Program of belonging	Landscape Architecture/BLA
University/School	King Mongkut's Institute of Technology Ladkrabang

Written statement, short description of the project in English, no more than 250 words

Once known as fishing vessel manufacturing district and the largest port town in the coastal plain of central Thailand for many decades, Thachalom is now facing environmental degradations, lacking public spaces, and the disappearing knowledge of traditional fishing vessel manufacturing. This project is proposed as a part of the historic Mahachai Fish Market - Thachalom district development plan for community-based tourism by incorporating the principles of resilient design and advanced active learning concept, in order to revive its lost identities and providing holistic development for the community.

The site is located on the bank in the estuary of the Thachin River, covering a total area of 21.35 acres. To help mitigate the issues from the development, the project proposes a public park and the learning center that promotes ecological restoration, heritage identities, and community engagement. It is divided into three main parts based on the functions and their relationships to the city: public zone, learning zone, and industrial zone. The public zone provides recreational spaces for the community and acts as transition space, connecting the site to its surroundings. Learning zone displays the natural changes of the site and the locals' way of life, while the continuously-operating dockyard in the industrial zone opens its door for people to learn about the traditional fishing vessels and their construction processes. This project integrates the natural features and native species into the public space, while adapts Thachalom's fishing vessel components into design elements for educational purposes, making Thachalom's heritages survive in the rapidly changing world.

For further information
Máster d'Arquitectura dePaisatge -DUOT - UPC

T: + 34 93 401 64 11 / +34 93 552 0842
Contact via email at: biennal.paisatge@upc.edu

Máster d'Arquitectura dePaisatge -DUOT - UPC
ETSAB - Escola Tècnica Superior
d'Arquitectura de Barcelona
Avenida Diagonal, 649 piso 5
08028 Barcelona-Spain

CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

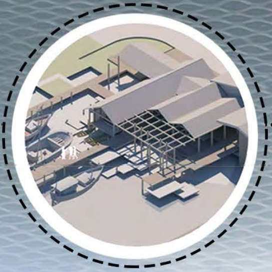
Barcelona September 2020

SCHOOL PRIZE

LOCAL ST
TAWAII ROAD AXIS
PARKING
SERVICE ENTRANCE
MAIN ENTRANCE
LOCALFOOD SHOPHOUSE
TIDAL PARK
CREATIVE FACTORY
LEARNING HALL
DOCKYARD PORT
SANK FLOATING
THACHIN PORT
LEARNING PORT
THACHALOM JETTY
WISDOM HOUSE
AMPHITHEATER
INDUSTRIAL
INDUSTRIAL HOUSE
THACHIN PORT
PUMP SLOT
SLIPPER SLOT
DOCKYARD CAFE
HOSTEL
CLASSROOM
SUB ENTRANCE
TRAIN STOP
THACHALOM HOSPITAL
โรงพยาบาลท่าฉลอม
SANK FLOATING

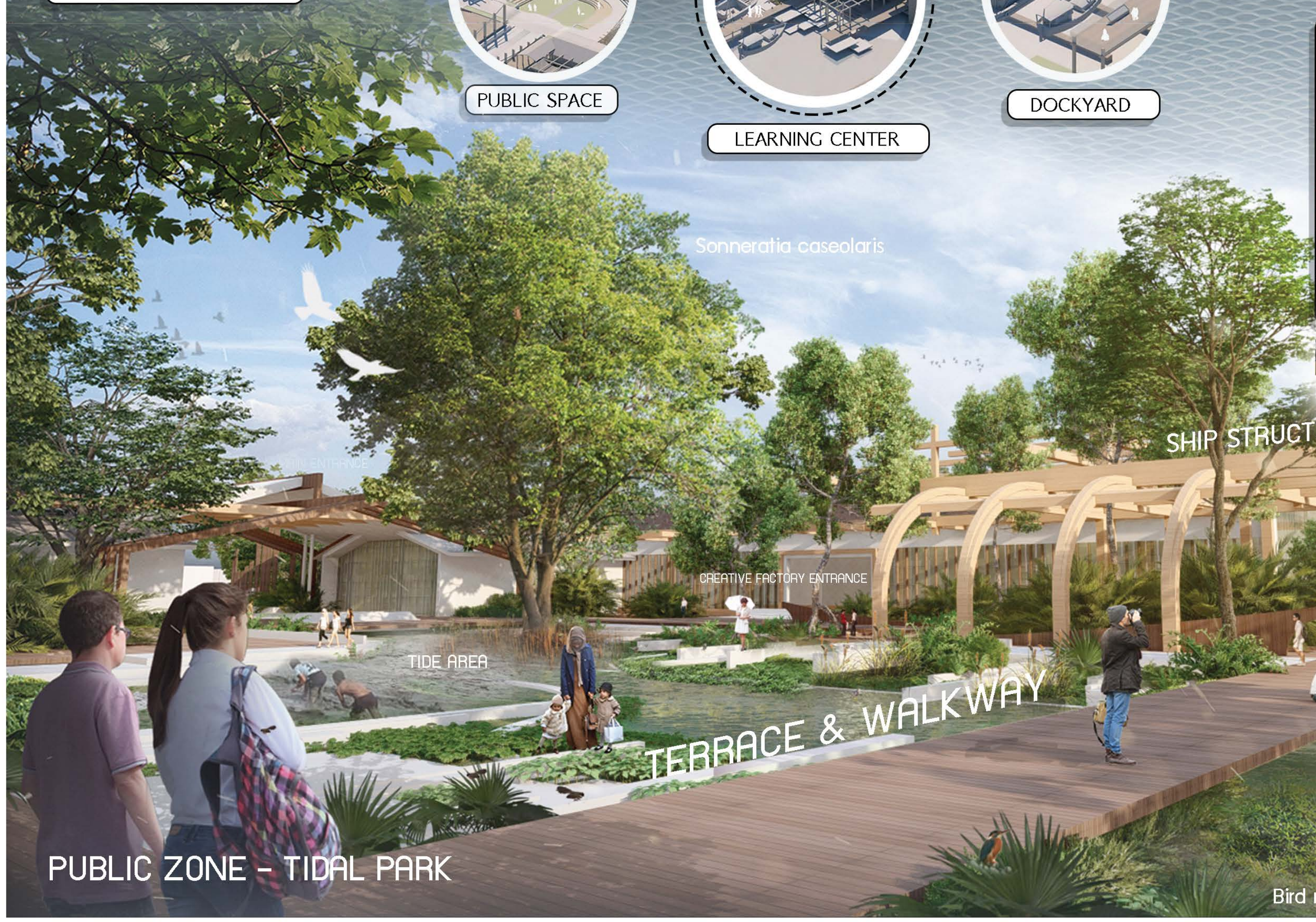
PROJECT CONTENT

PUBLIC SPACE



LEARNING CENTER

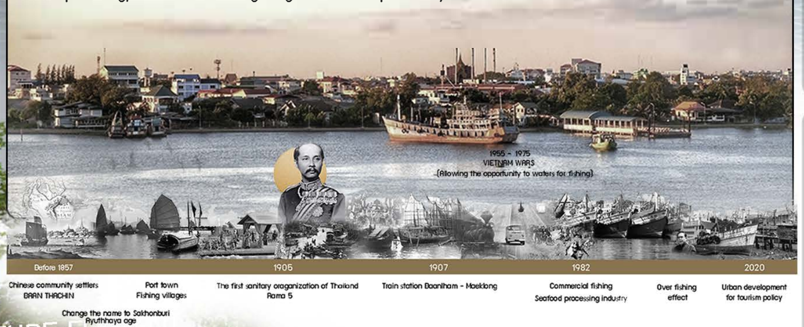
DOCKYARD



PUBLIC ZONE - TIDAL PARK

PROJECT BACKGROUND

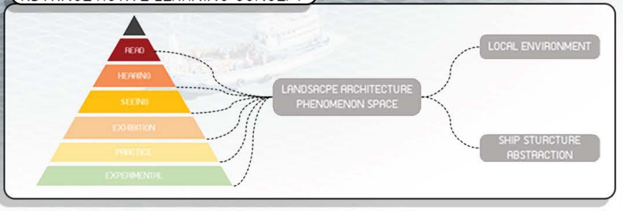
Thachalom is a seaside in the Gulf of Thailand with the Tha Chin River flowing in the middle of the province. It is a province in the lower central region of Thailand with a long history foi moie than 700 yeais. It was formerly a large community where Chinese people brought junks to dock, trade, exchange gaads and live in large numbers. Therefore, It was called Ban Tha Chin that means the place wheie Chineses live. Ban Tha Chin has become Thachalom municipality and it is now undei the iedevelopment plan for Mahachai Market - Tho Chalom Cammunity To promote community tourism. Thachalom is now known as a fishing industry town, its seafood processing, Thai - Chinese fishing villages and coastal plain ecosystems.



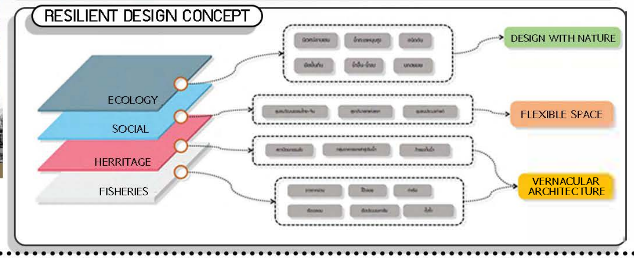
1955 - 1975
VIETNAM WARS
(Allowing the opportunity to waters for fishing)
Before 1857
1905
1907
1982
2020
Chinese community settlers BAAN THACHIN
Change the name to Sakhonburi Ayuthhaya age
Port town Fishing villages
The first sanitary oraganization of Thailand Rama 5
Train station Baanlham - Maeklong
Commercial fishing Seafood processing industry
Over fishing effect
Urban development for tourism policy

CONCEPT DESIGN

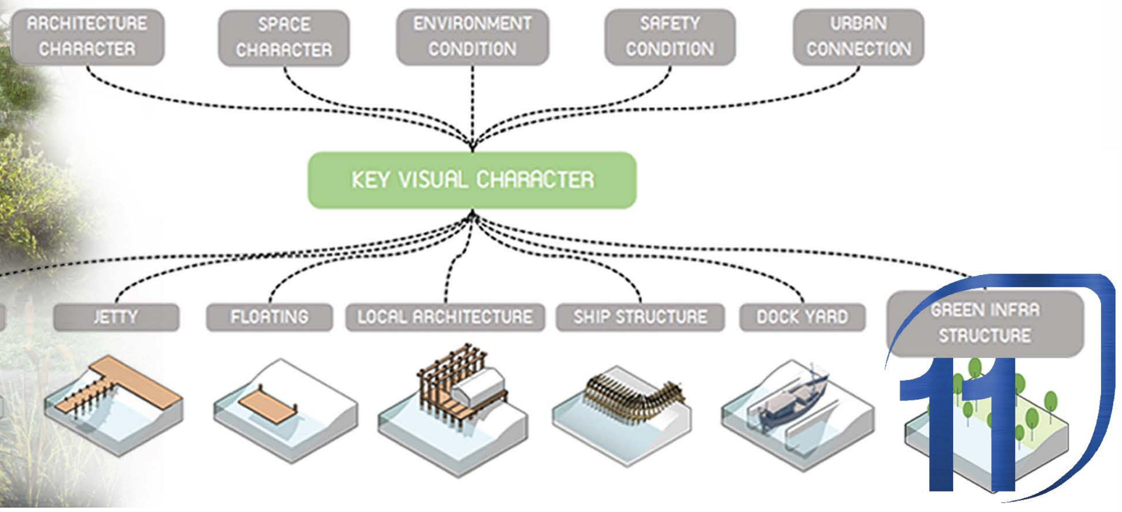
ADVANCE ACTIVE LEARNING CONCEPT



RESILIENT DESIGN CONCEPT



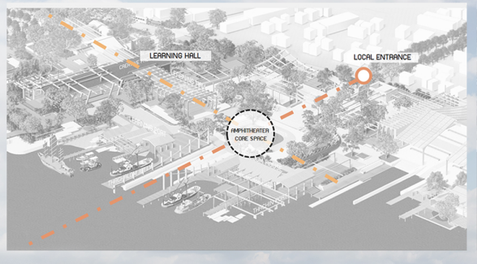
DESIGN STRATEGY



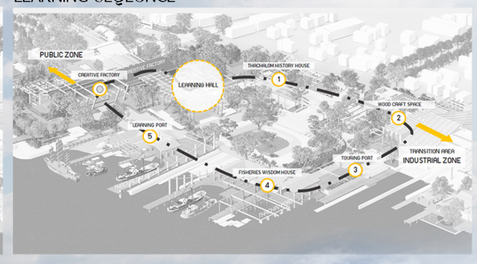
AMPHITHEATER SCENARIO

LEARNING ZONE DIAGRAM

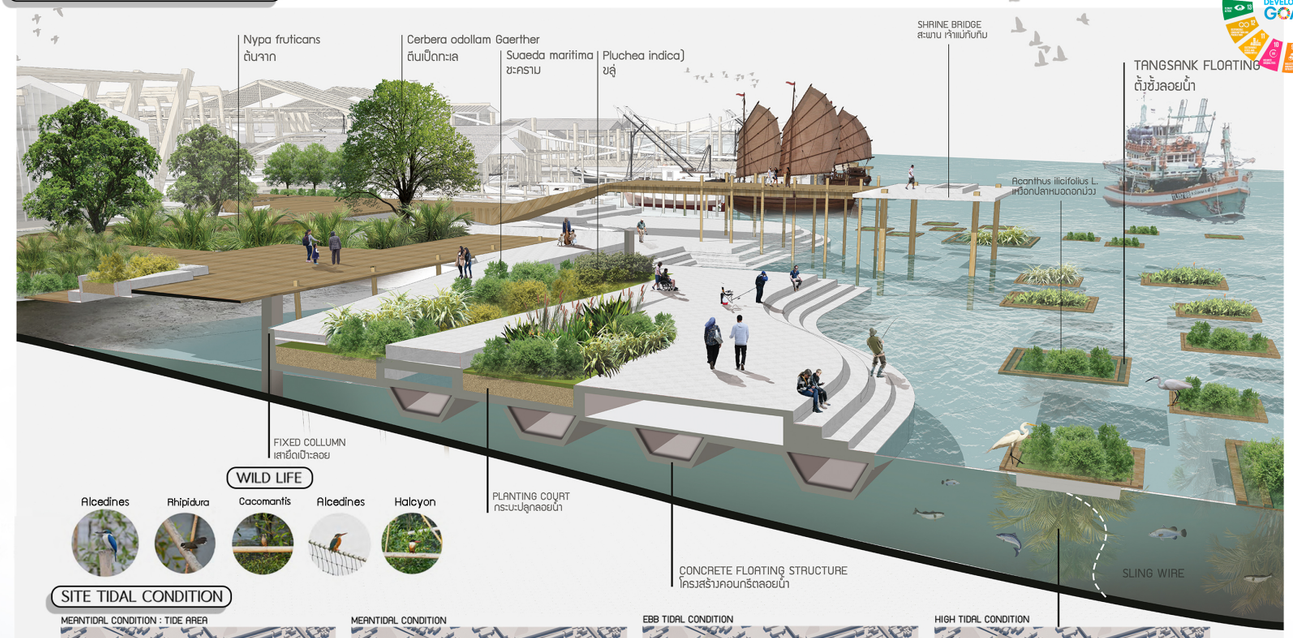
AMPHITHEATER AXIS



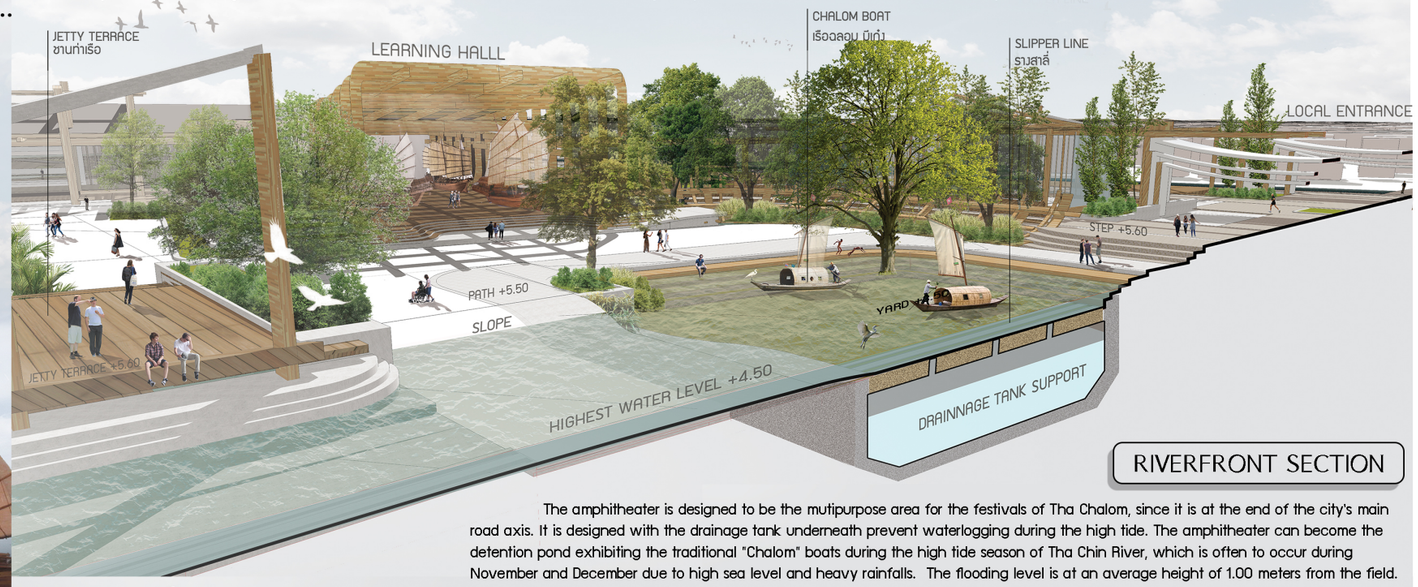
LEARNING SEQEUNCE



RIVERFRONT SECTION

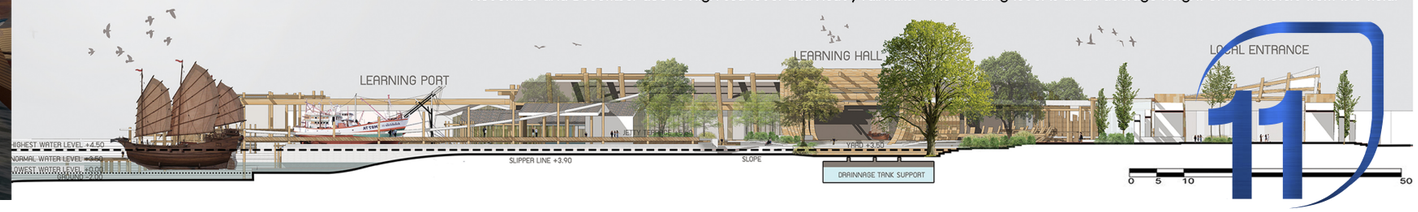


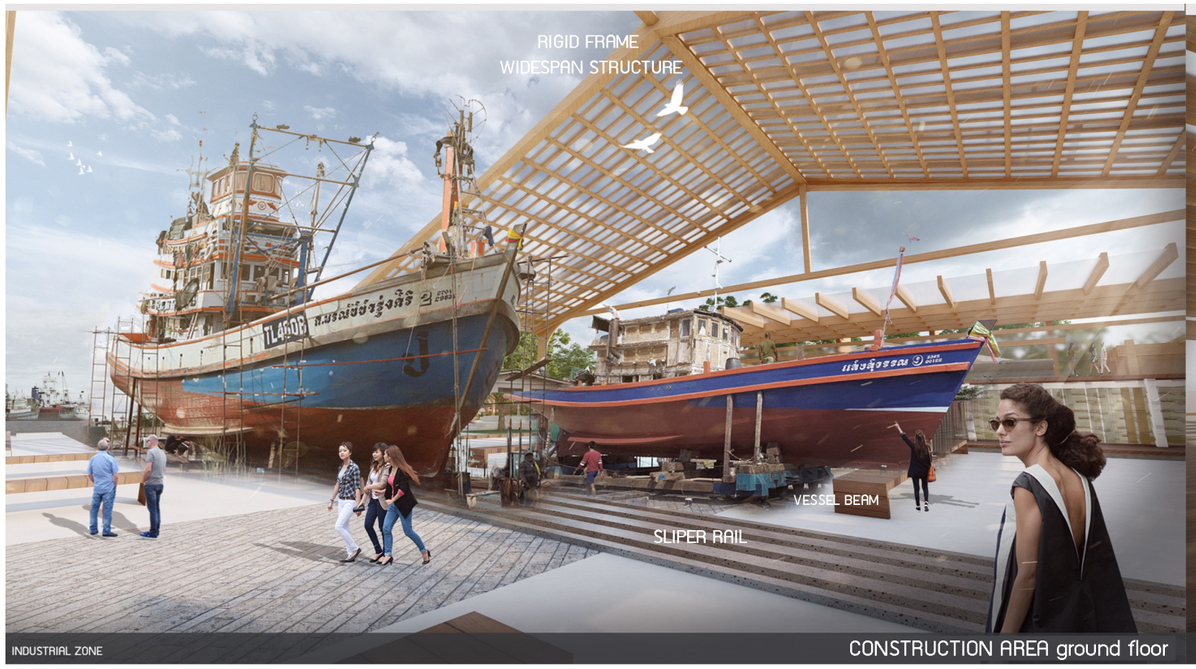
The riverfront area provides flexible floating pontoon structures in order to withstand the extreme weather without blocking the intervention of the nature, and is designed with considerations to use all yecr round. The design includes the vertical bamboo fences to determine the boundary and prevent bak erosion. It is also a shelter for many birds and aquatic animals.



RIVERFRONT SECTION

The amphitheater is designed to be the mutipurpose area for the festivals of Tha Chalom, since it is at the end of the city's main road axis. It is designed with the drainage tank underneath prevent waterlogging during the high tide. The amphitheater can become the detention pond exhibiting the traditional "Chalom" boats during the high tide season of Tha Chin River, which is often to occur during November and December due to high sea level and heavy rainfalls. The flooding level is at an average height of 1.00 meters from the field.





INDUSTRIAL ZONE

CONSTRUCTION AREA ground floor

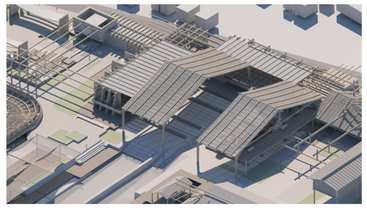
LEARNING ZONE

CONSTRUCTION AREA 2nd floor

Industrial area is developed from exisiting Mongkol Prasertchai dockyard by adding more the educational functions and proposing new wide span roof structures (rigid frame) for the aesthetic and functional purposes. The design derives from the existing site from the past to the present.

DOCKYARD SYSTEM

WIDESPAN STRUCTURE

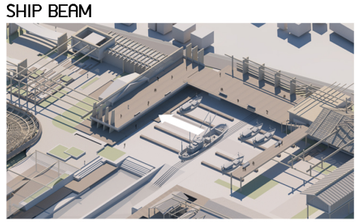


WORKING FLOOR - LEARNING FLOOR

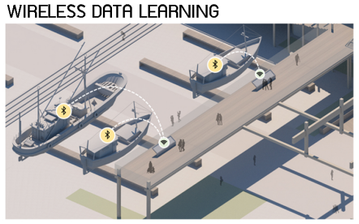
SHIP SLIPPER LINE

The proposed new buildings around the existing factory are designed to catch the visitors' attentions and make them slow down. The new buildings create the boundaries preventing people from entering dangerous area, and provide more learning facilities, that the ground floor is occupies by operation and system management, while the second floor is used as exhibit spaces.

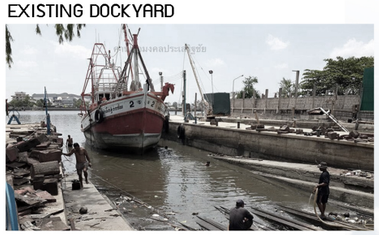
SHIP BEAM



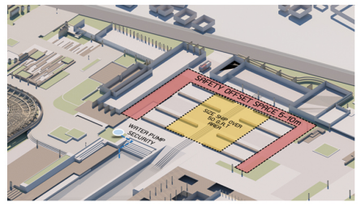
WIRELESS DATA LEARNING



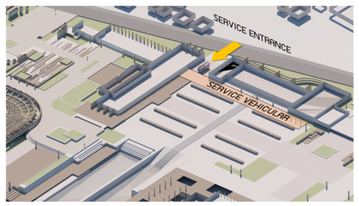
EXISTING DOCKYARD



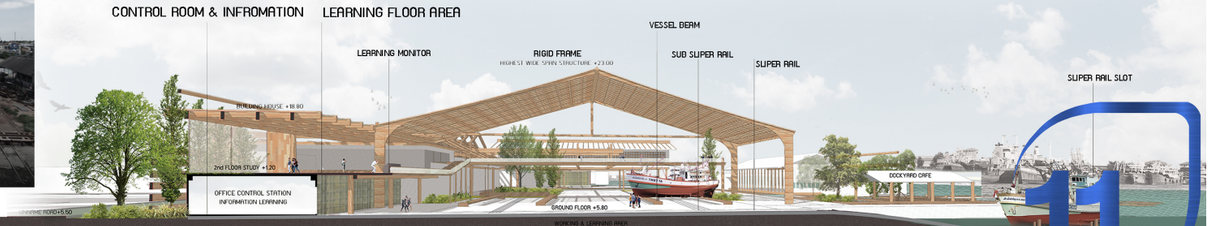
SAFETY OFFSET SPACE



SERVICE ENTRANCE



DOCKYARD ZONE



SECTION E : INDUSTRIAL ZONE