

# RESILIENT FERRY STATIONS

AN ADAPTIVE APPROACH TO THE CHANGING CITIES

## FERRY SERVICE EXPANSION ISSUES

Water transportation in Metro Manila faces many challenges which affects the development of the ferry service as an efficient and sustainable transport system for the urban population. There is limited usable space given the lack of uniformity in developing the waterfront and the natural vulnerability to floods.



### CHANGING RIVER WATER LEVELS

- Low water level during dry season limiting the ferry service
- Climate change leading to rising waters
- Waterfront areas become more prone to flooding



### DISCONNECTED TRANSPORTATION SYSTEM

- Most ferry stations are located far from the main road
- Not many available modes of public transportation
- Lack of proper loading and unloading zones



### LIMITED WATERFRONT DEVELOPMENT

- Most of the waterfront is occupied by informal settlements
- Varying conditions of sites: raised barriers to prevent floods, roads beside the rivers, setbacks, etc.
- Loss of interaction with the river

## RESILIENCE & CONNECTIVITY

The resilience of architecture is not only based on its design and construction, but also in its connection to the community and context in which it is built.

### ADAPTABLE



Use innovative solutions to combat changing water levels and be adaptable to the community's needs.

### MIXED-USE



Improve engagement with the waterfront by providing other functions such as commercial or government services.

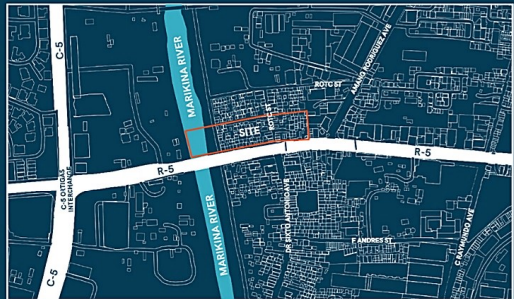
### INTERCONNECTED



Increase accessibility to public roads and transportation, as well as improve visibility of pathways and facilities.

## PROJECT SITE

[14°35'28.93" N, 121°5'5.29" E]  
BRGY ROSARIO, PASIG CITY, NCR



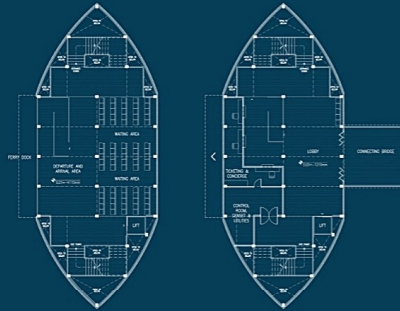
## FERRY STATION



The resilient ferry station employs multiple solutions into a singular design.

A modular system allows a variety of designs to be built according to the aesthetics and programmatic requirements.

The amphibious structural framework anchored with guide posts lets the ferry station remain stable on reclaimed land. This also allows it to rise with the water levels through the pontoon system.



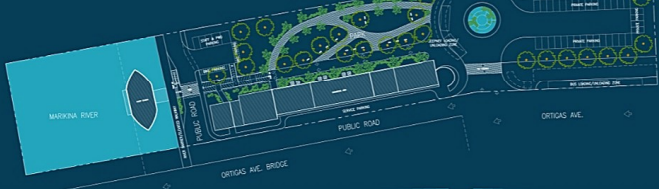
## COMMERCIAL AREA



## SITE ELEVATION



## SITE DEVELOPMENT



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