

BETWEEN SEA AND LAND

8th i-Rec 2017 Student Competition

CANADA

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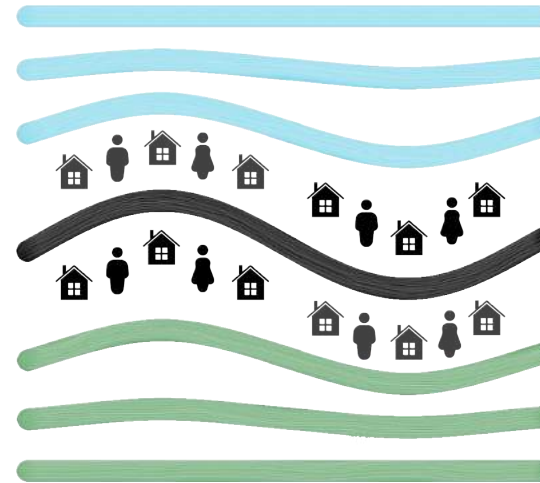
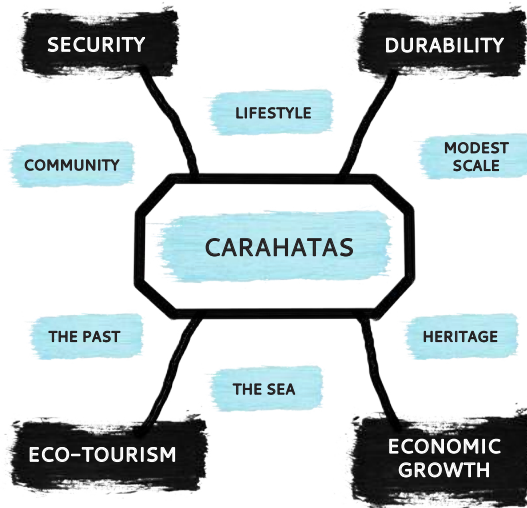
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CONTEXTUALIZATION:

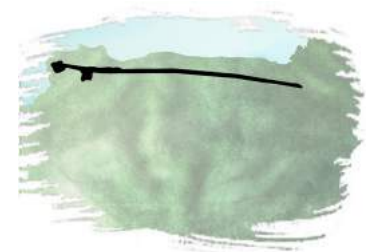
The rising waters due to climate changes in Carahatas, Cuba forces the government to establish laws that give no other choices to seashore communities than to relocate in remote territories which are not adapted to their needs. The phenomena is occurring in multiple countries around the world. Our project focuses on the ethical way of practicing architecture throughout a complex environmental problem while innovating. Here are the solutions we are proposing.



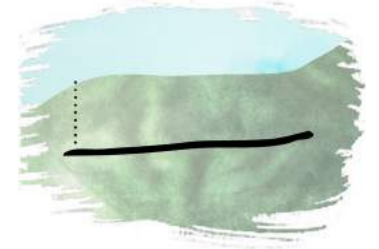
Architecture is, on multiple levels, ephemeral. It is evolving or not throughout time. It's being taken down, built back up, affected by natural disaster and mostly reorganized to be more functional in time. In all cases, architecture leaves some remains of any form. This idea of being aware of the history that the urban organization leaves behind to better adapt to changes in the future is a fundamental idea in our action plan.

The village, that was once even closer to the water, got washed away throughout time by erosion, water rising and natural catastrophes. With people's attachment to the sea, the community kept on establishing itself on the coastline to be able to always have a great proximity to the water, their first economic security but also by principle of integrity. That explains the density of families established in border of the ocean. Unfortunately they are part of the first wave of inundation predicted by the Cuban Government.

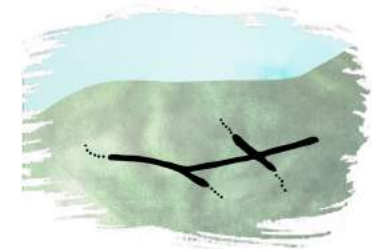
In an approach where the human being is the center of the architectural project, our concept offers a solution for the relocation of coastal village's inhabitants due to the climate changes which force the communities to resettle in remote areas. In our opinion the phenomena of rising waters should be the opportunity to take advantage of the constant progression and maintain a close proximity to the water for the people while ensuring a protected and safe constructed environment near agricultural lands. The primary idea is to respect and recreate an habitat that is deferential of the community's lifestyles and traditions, where the man follows the sea and the sea follows the man.



1_MAIN AXIS



2_SLIDING



3_DEFORMING



4_PROLIFERATING



URBAN PLAN 2050
SCALE : 1_3000

To be able to preserve this attachment to the water for all those people who wouldn't trade their lifestyles, for any reasons you can think of, the solution that we propose is to maintain the accessibility to the water while giving the opportunity of secure movement to the families. Giving them the chance to chose a more adaptive solution, while assuring their security on a long period of time. We propose two important movements for the urban reorganization, firstly the relocation of all public buildings services such as school, medical center, community center and so on, all situated at two specific clusters that articulate the new main axis. This axis will be developed behind the secure line proposed by the Cuban government. This will give the chance to the first wave of migrant families to establish themselves along the axis close to the services and still along the shore to be.

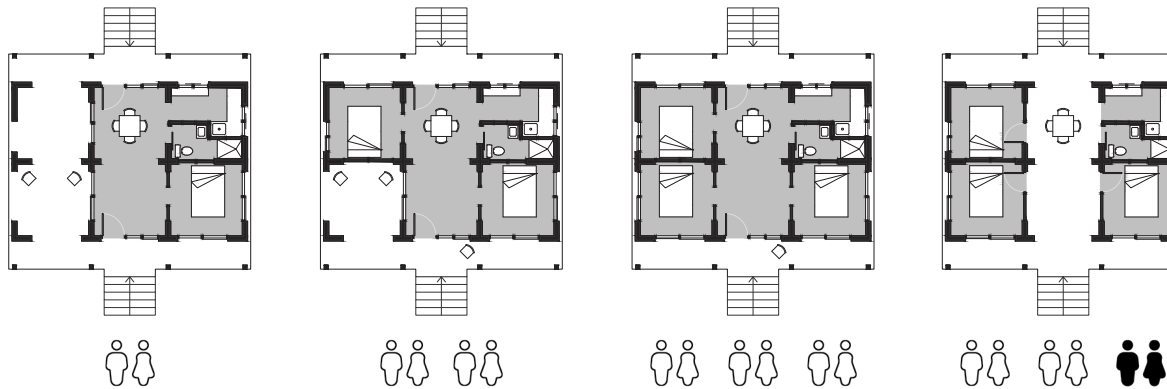


URBAN PLAN 2100
SCALE : 1_3000

While the water will keep on rising, families will have to migrate towards the new Carahatas. We will initiate the movement of a more organic urban organization by establishing small continuity of the existing streets for people to eventually develop these other axes on their own. The present organization follows the nature of the environment of the land, that is the idea we want to bring on to the new village. On to the left, an opportunity is presented by the lack of habitations which gives us the chance to establish the direct connection to the water while constructing a more economic pole for the fishing industry. One of the other ways of bringing economical growth into the village is by inviting tourism into the mix. We would build on water an opportunity for tourists to stop by and live the rural experience of the Cuban life. That potential can be seen in the plan as the docks that are aligned with the disappearing streets of the old village.

ARCHITECTURE // LAND

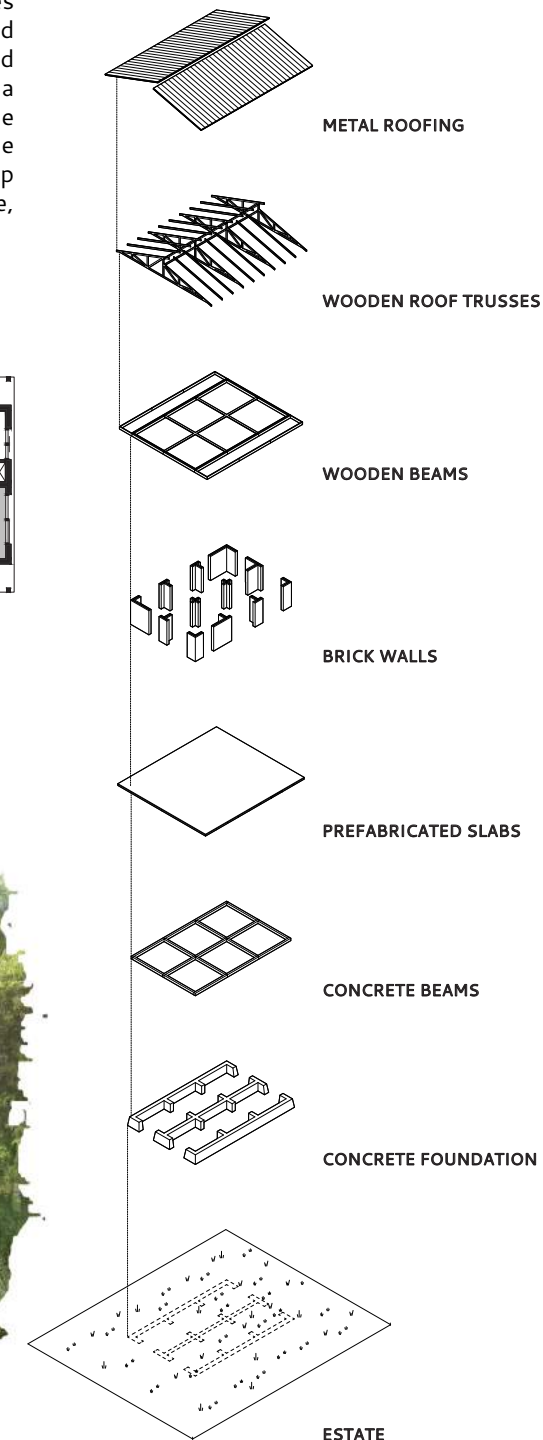
Our intention is to provide a new sense of security for the community. It is essential that the new structures are constructed on stilts, to protect from flooding, and they need to be resistant to strong winds caused by hurricanes. Therefore, the services and the foundations of the habitations should be a prefabricated concrete structure payed and constructed by the government. On top of the prefabrication, we suggest a construction of brick and concrete following a grid that offers a flexible arrangement of living spaces. The villagers are then free to build their home depending on their needs, even if every family gets the same foundations provided by the authorities. A light wooden roof is then erected and tightly attached on top of the structure. The idea is to promote the recycling of materials that are still useful from the old village, therefore keeping the trace of the old Carahatas.

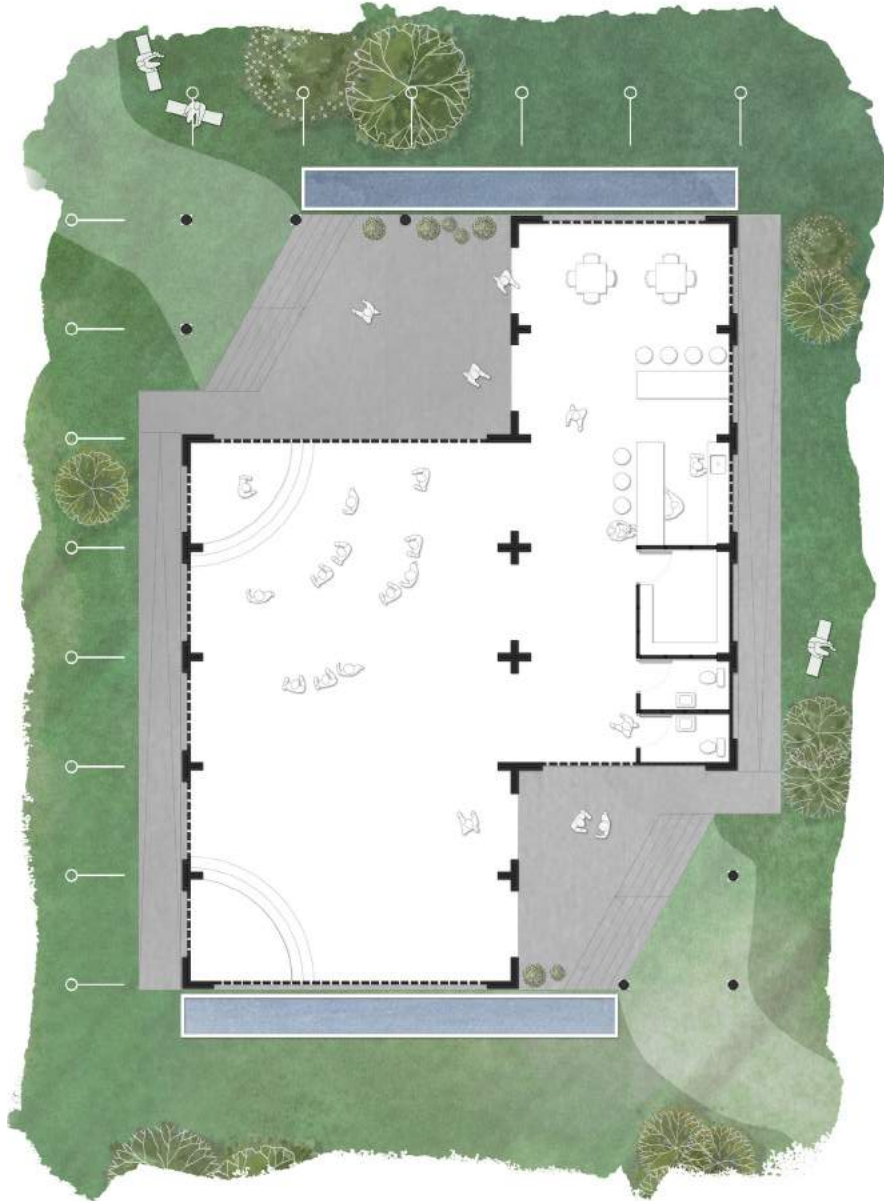


DEVELOPMENT POTENTIAL ACCORDING TO THE FRAME OF THE HABITATION



THE NEW CARAHATAS

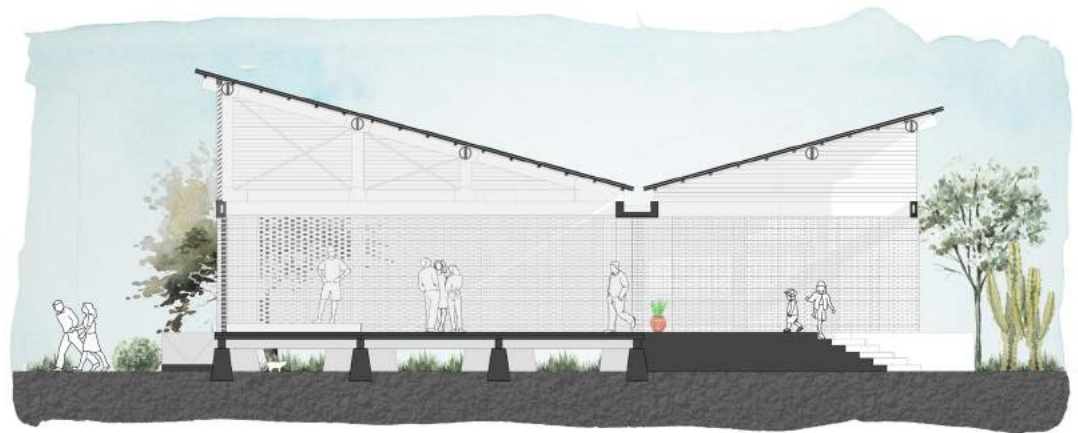




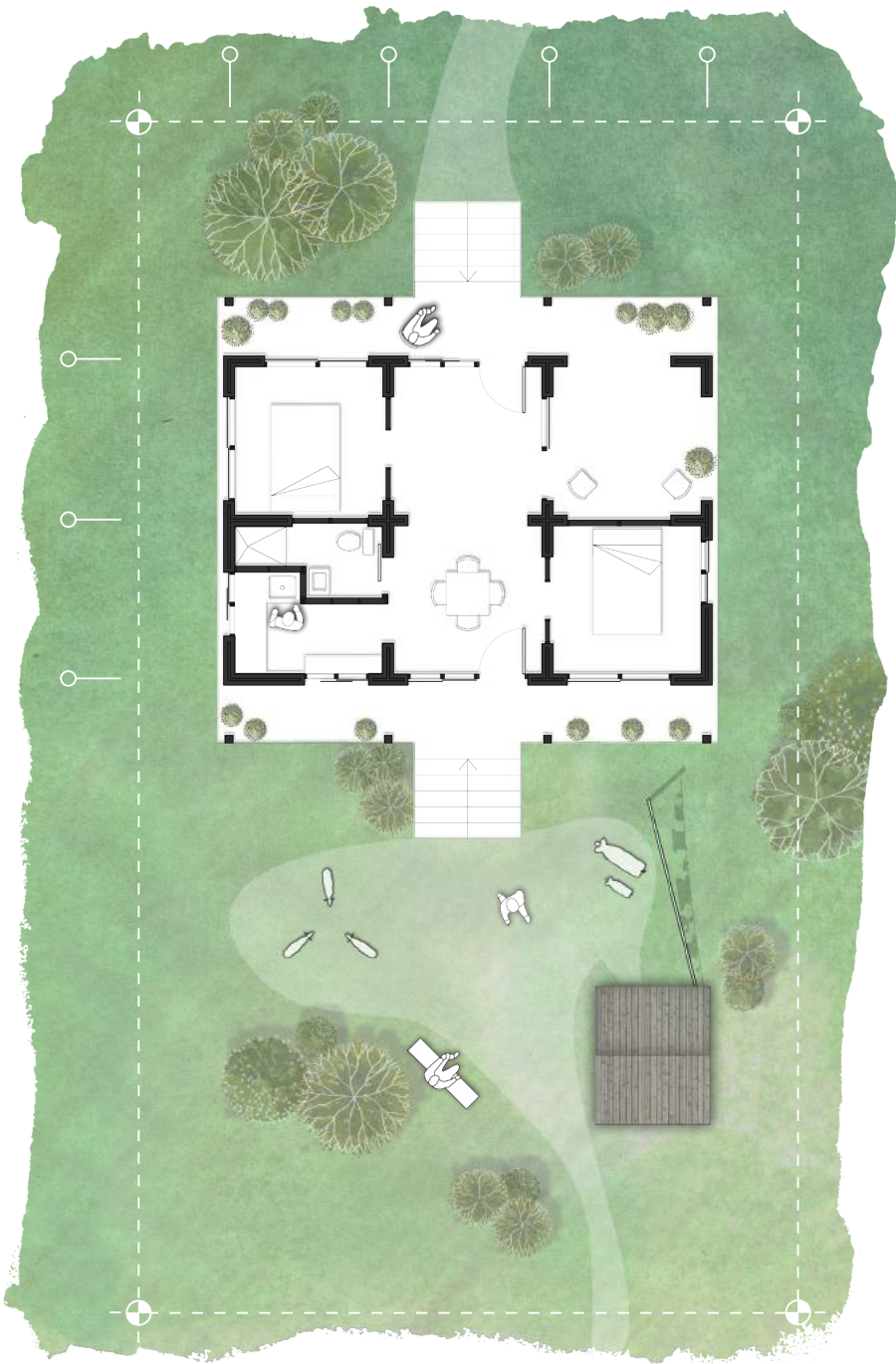
PLAN // CIRCULO SOCIAL
SCALE : 1_200



ELEVATION // CIRCULO SOCIAL



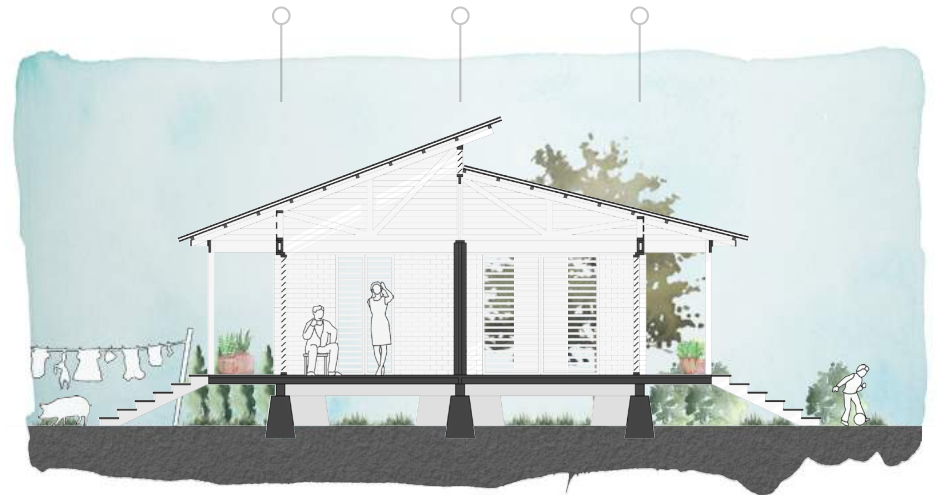
SECTION // CIRCULO SOCIAL



PLAN // HABITATION ON LAND
SCALE : 1_150



ELEVATION // HABITATION ON LAND
SCALE : 1_150



SECTION // HABITATION ON LAND
SCALE : 1_150

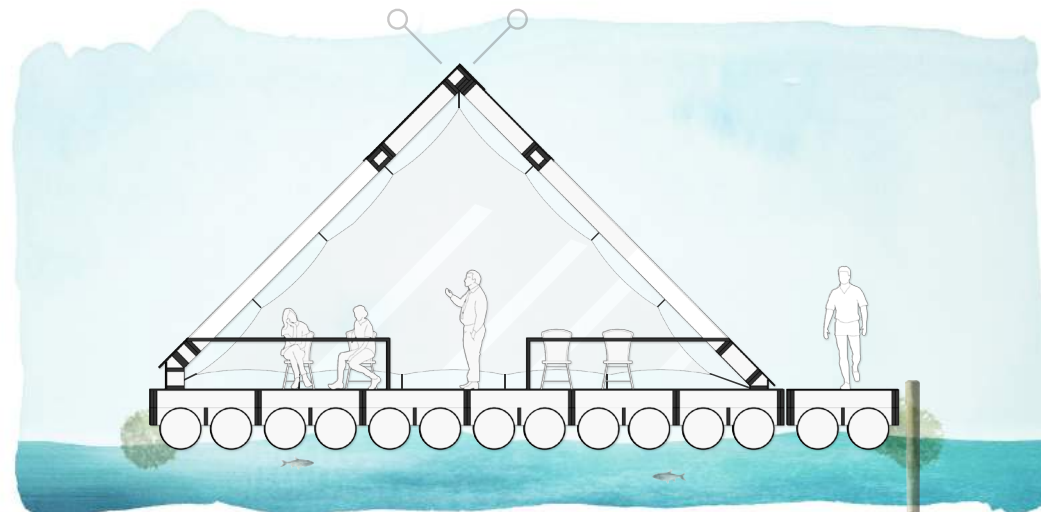
ARCHITECTURE // SEA



THE NEW MODULAR AND FLOATING UNITS

The modular unit on water combines experience, comfort and security. The idea behind the module is to be able to secure the infrastructure in case of natural catastrophes. The structure is simple and constructed with reused materials. It is easily foldable into one layer and then carried by boats either on land or in the mangroves to be protected throughout the bad weather. It can be constructed at multiple scale and by any one because of its simplicity. However, our goal was to be able to find a solution that was adaptable for all the places in the world that are affected by the same problematic as Cuba; the rising waters.

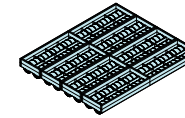
We created a prototype that can be use as a pop-up habitation for the tourists, in which the openings become the furnitures and where the bed is built in the platform. On land there is a sanitary building for those who stay the night. At a larger scale we created a pop-up unit that would serve the purpose of a Fishing School or simply an gathering space. Bringing back the traditions that got lost in time, the space is created to encourage exchanges with the youth and the fishermen but also to be open to the outside while giving a great protection against the sun. Again the openings become furnitures to serve many purposes.



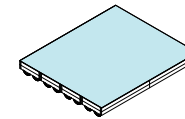
SECTION // FISHING SCHOOL / REMOVABLE UNIT



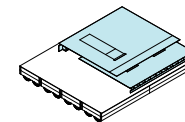
MODULAR STRUCTURE



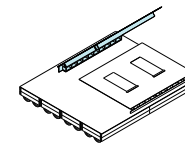
MODULE ASSEMBLY



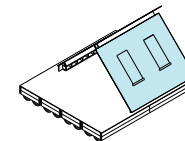
ADDITION OF A PLATFORM



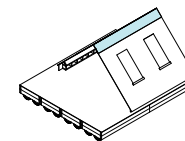
FOLDED WALLS



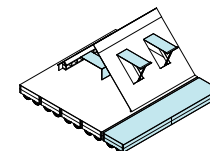
UPRAISE OF THE PRINCIPAL WALL



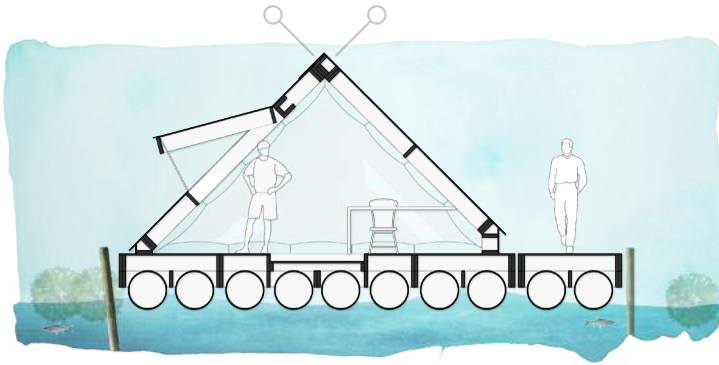
UPRAISE OF THE SECONDARY WALL



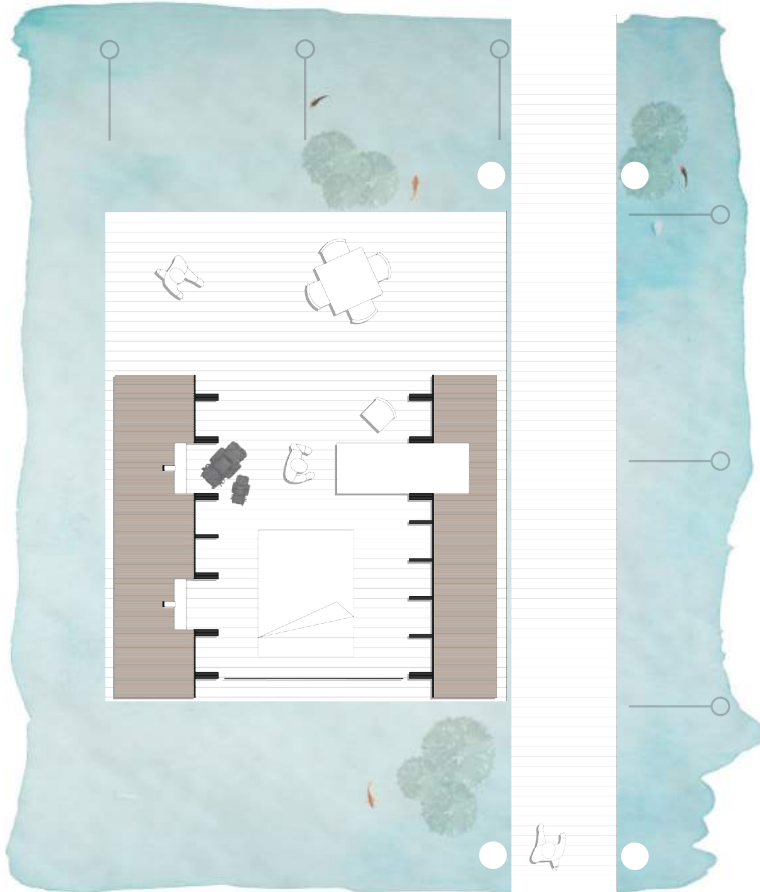
SEALING OF THE JUNCTION BETWEEN THE TWO WALLS



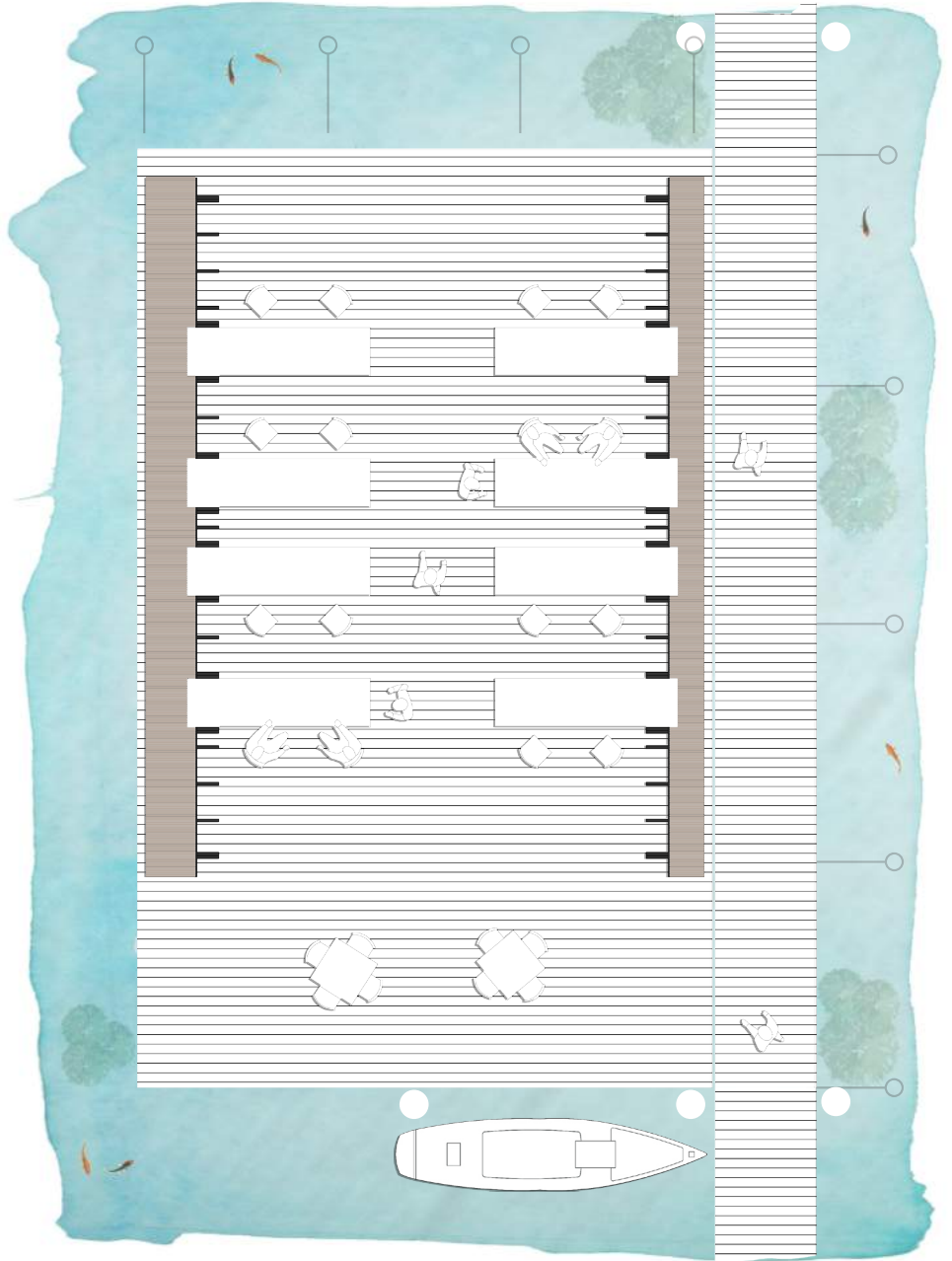
DEPLOYMENT OF FURNITURE



SECTION // FLOATING ACCOMODATION ON SEA
SCALE : 1_150



PLAN // FLOATING ACCOMODATION ON SEA
SCALE: 1_150



PLAN // FISHING SCHOOL
SCALE : 1_150