

# BEFORE THE FLOOD

## A world in Le Havre

Architecture & Experience

WORKBOOK

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# BEFORE THE FLOOD

## A world in Le Havre

Architecture & Experience

SOUTENANCE  
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### Before the flood – a world in Le Havre

After having tested the hypothesis to build a world in Arc-et-Senans, Guise, Clairevivre and Firminy, we settle this year in the city of Le Havre.

We are interested in this city for many reasons and particularly for its capacity to condense several dimensions able to inform the projects. Due to its singular geographic position, at the estuary of the Seine, Le Havre is one of the most important European ports. Built at the beginning of the 16th century, the growth of the port goes alongside with the fast economic development of the city and the rise of pre-industrial brick and tile workshops. Some see this port as the entrance port to Paris, like the Piraeus for Athens. Le Havre is at the crossroad of landscapes, in-between land and sea, the Seine and the Channel, clear and saltwater, giving it a special quality. Thus, the city is also imbued with the imaginary of Perret who actively participated to the post-war Reconstruction.

Nevertheless, its geographic situation is also the sword of Damocles of Le Havre. Following the most pessimist projections of the IPPC (GIEC), the average water levels could rise by one meter until 2100. This rise of water levels increases the risk of water submersions, permanent or temporary, the risk of coastal erosion, increases salt intrusions into coastal aquifer, thus increases the risk on coastal and port infrastructures. Le Havre is then on the frontline facing environmental issues that makes it a representative subject to study the question of the coastal fringe. This question is even more relevant that by the year of 2040, in France, coastal regions could gather a third of the population.

By the interest on the coastal fringe landscape, the aim of a world in Le Havre is to evaluate the consequences of such a situation on the architecture and how this situation opens a huge field of experimentation that leads us to question the definition of architecture. In other words, the question is to understand how the architectural form could be deeply redefined in relation with the environmental issues and then generate unexpected results. Environmental imbalances create a strong paradigm shift that forces us to radically think about our relations to the territory, the construction, the mobility, the uses, etc. and thus to define new balances within the architectural form. In addressing the subject of environmental issues through the means of architecture, we affirm our attachment to the definition of architecture as a knowledgeable and exploratory discipline while outlining the contours of a possible disciplinary approach of the environment in order to propose new standards of comfort.

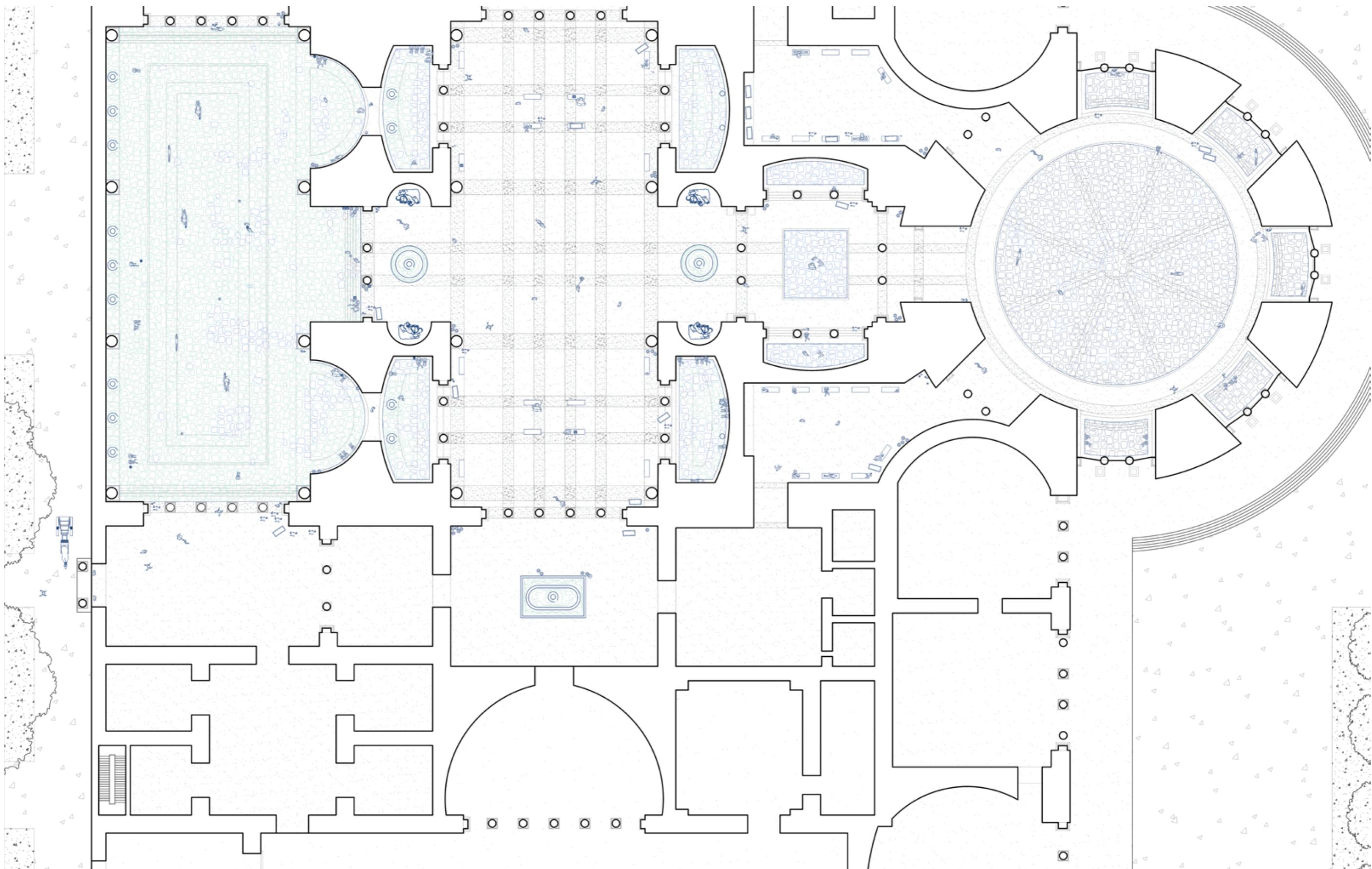
These explorations on the definition of the architectural form and new standards echoes with the work of Perret for the Reconstruction of Le Havre. He developed the “Immeuble standard” or “Appartement modulaire” both based on the use of a constructive grid of 6,24 meter offering at once standardization of the construction and flexibility of uses in order to “inscribe city in measure, like a musical harmony”, to use his words.

## **Explorations**

**Seaside culture**  
**Learning from constraints**  
**L'abris souverain**  
**Pilotis**

## Seaside culture

Thermes de Caracalla, Rome, Italie, 212-216 ap. J-C



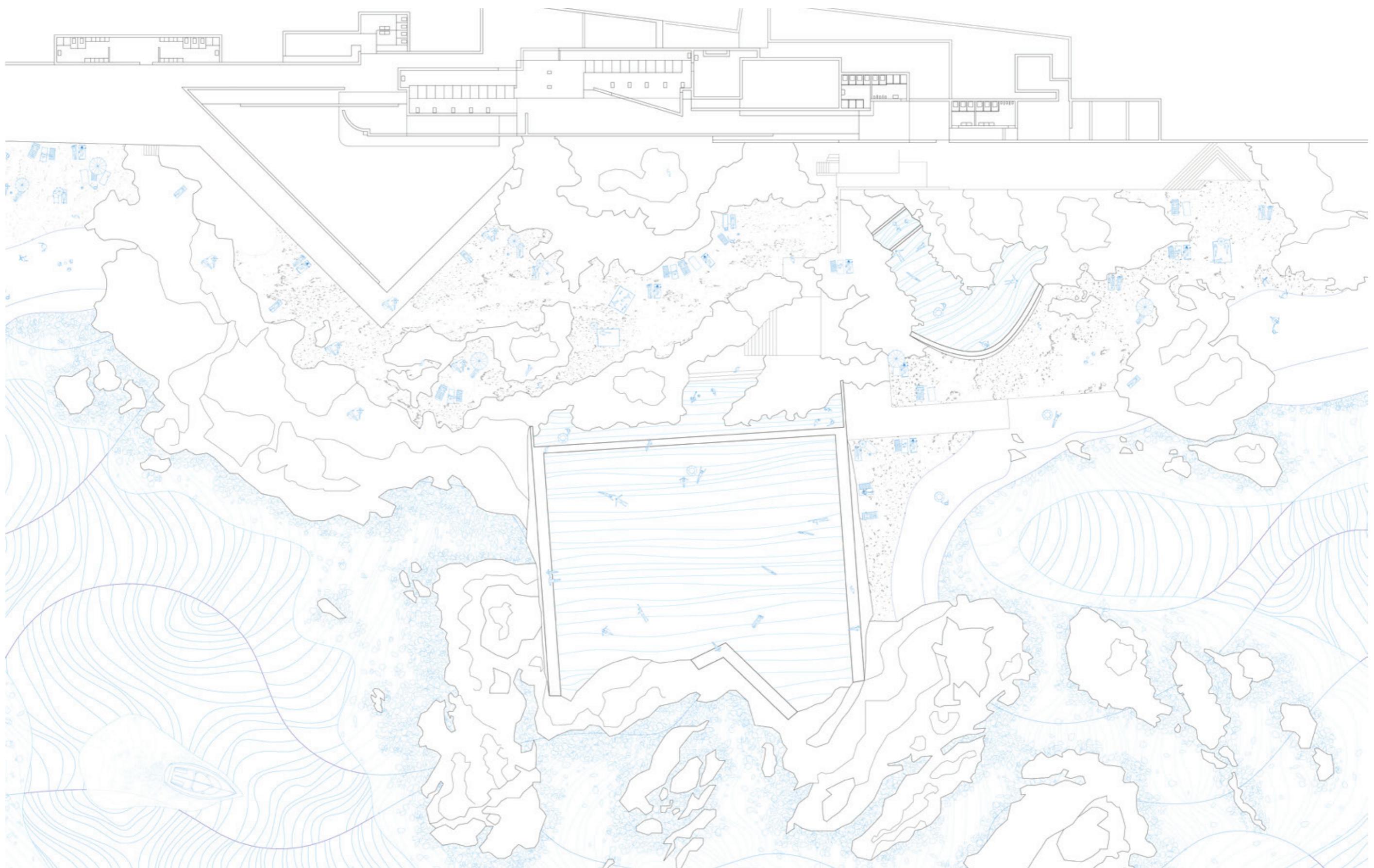
## Seaside culture

Pier Luigi Nervi, Piscine d'Ostia Lido, Rome, Italie, 1950



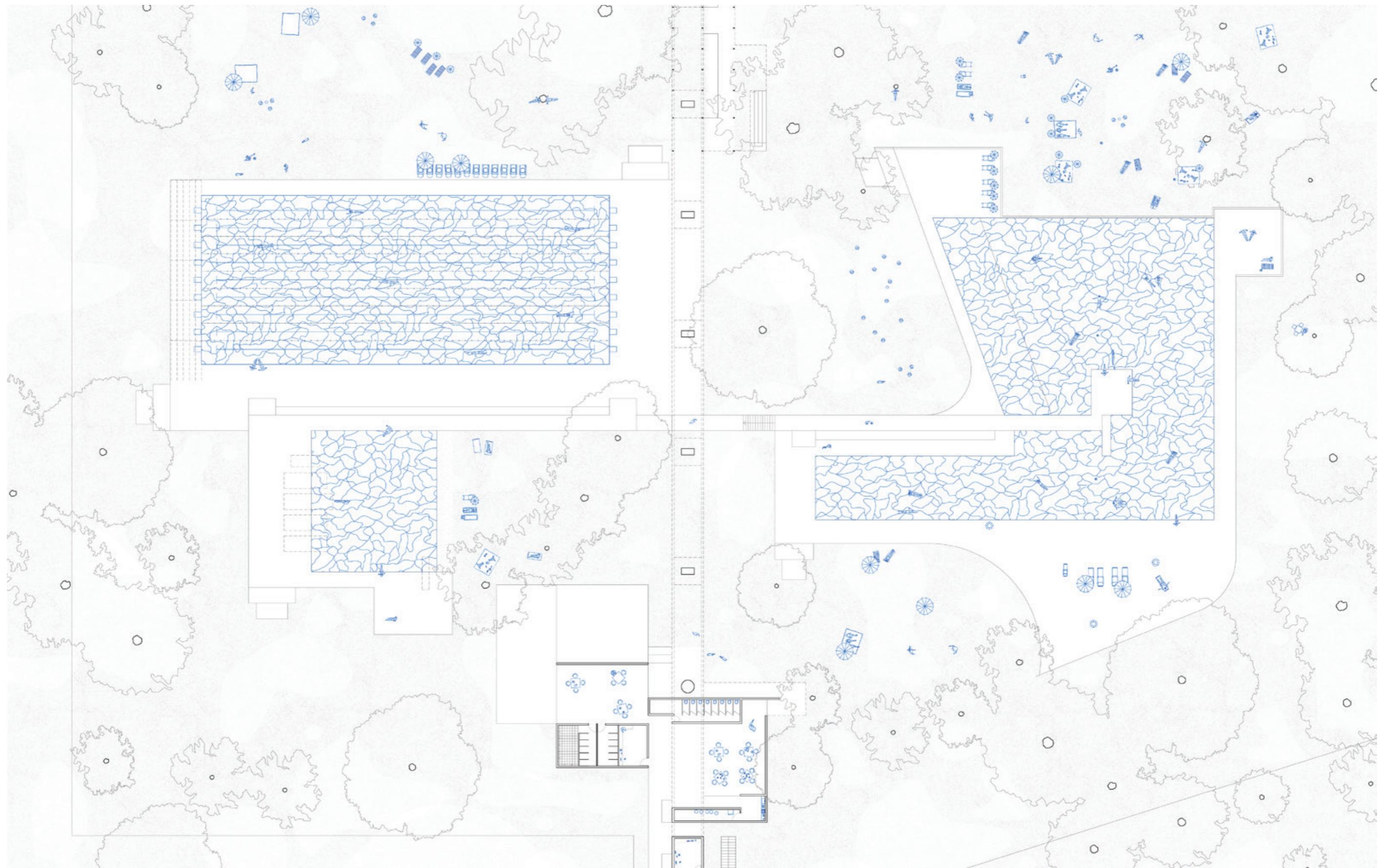
**Seaside culture**

Alvaro Siza, Piscine Leca da Palmeira, Matosinhos, Portugal, 1966



## Seaside culture

Aurelio Galfetti, Piscine, Bellinzola, Italie, 1967



**Learning from constraints**  
Château de Chenonceaux, France, 1513



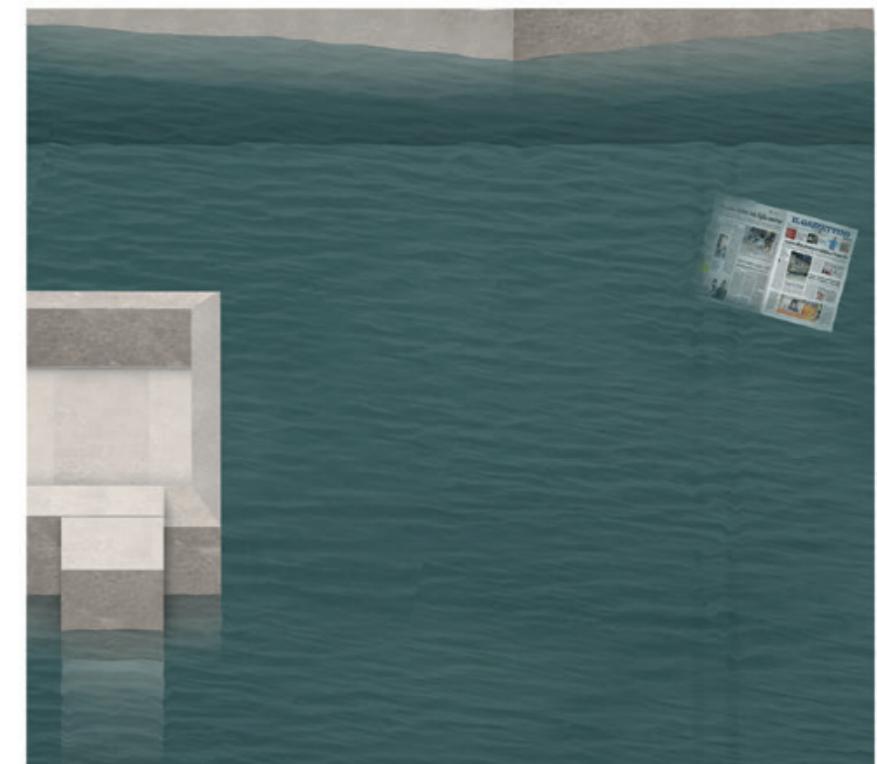
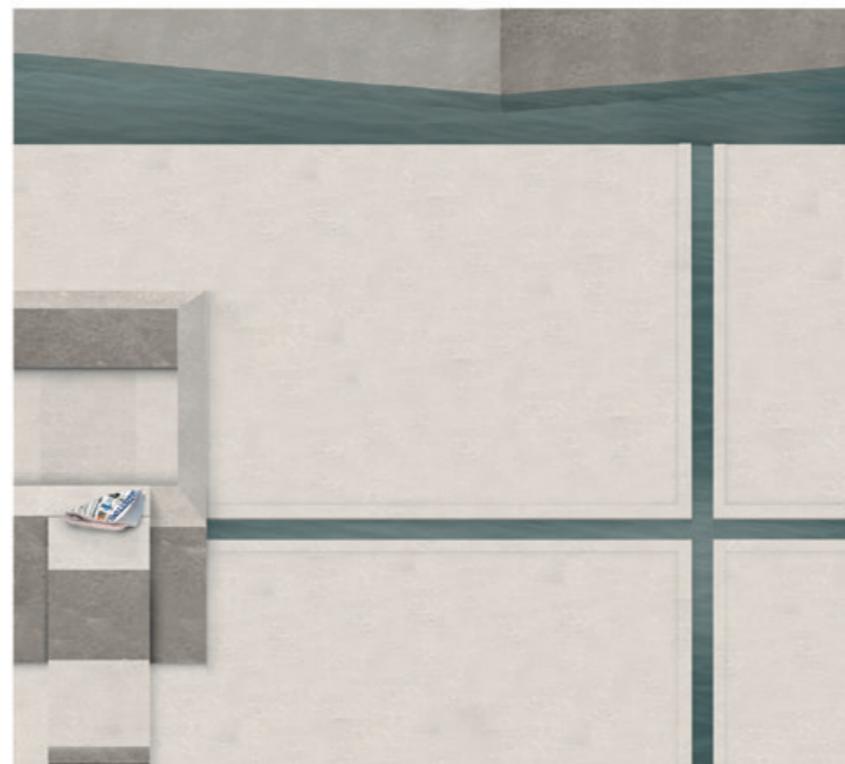
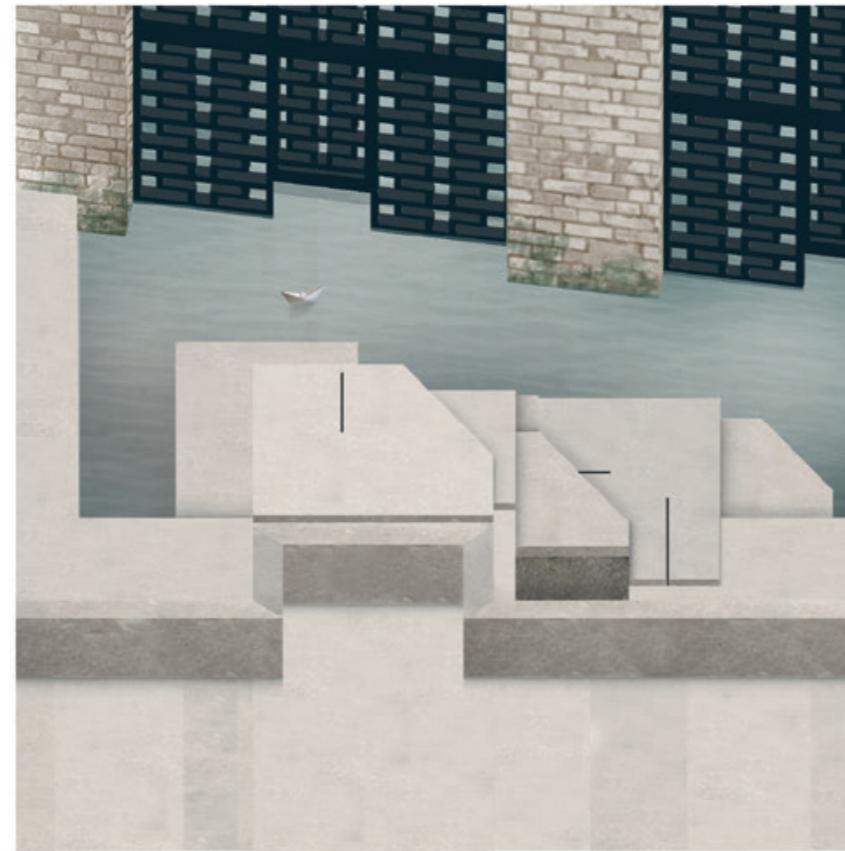
## Learning from constraints

Le Corbusier, l'asile flottant, Paris, France, 1929, (flooded in 2018)



## Learning from constraints

Carlo Scarpa, Fondation Querini Stampalia, Venise, Italie, 1960

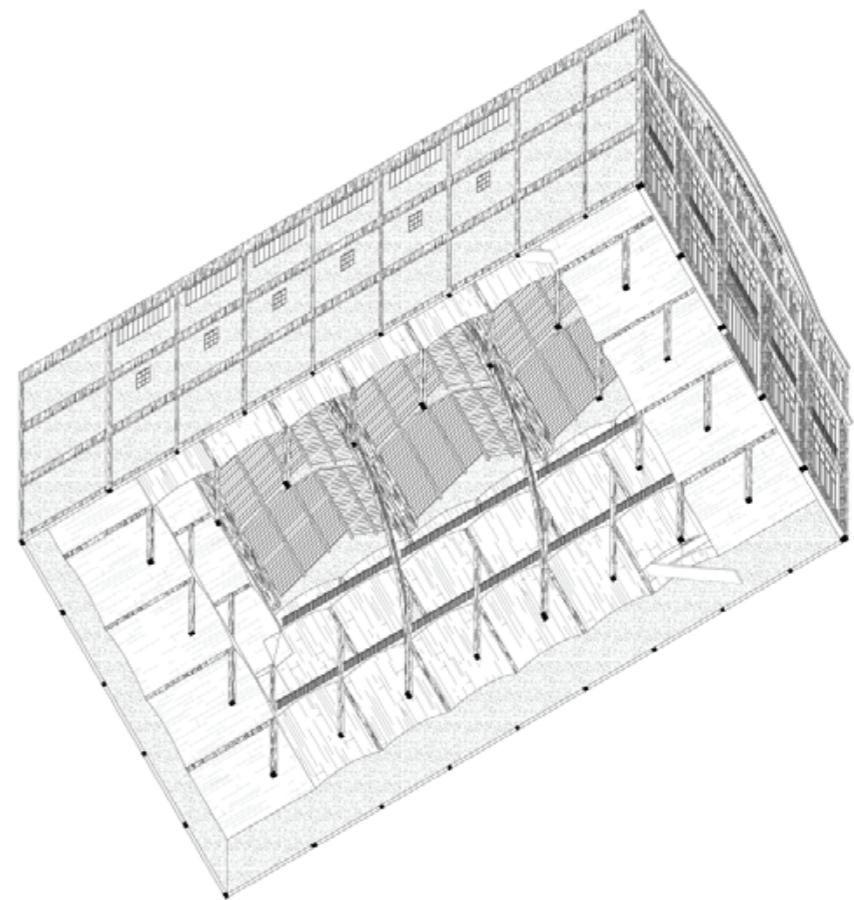


**Learning from constraints**  
Rem Koolhaas, Piscine flottante, 1978



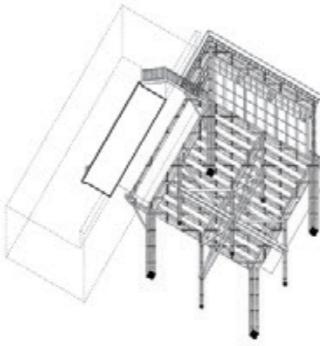
**Perret - L'abris souverain**

Les ateliers Esders, Paris, France, 1919, (demolished in 1960)

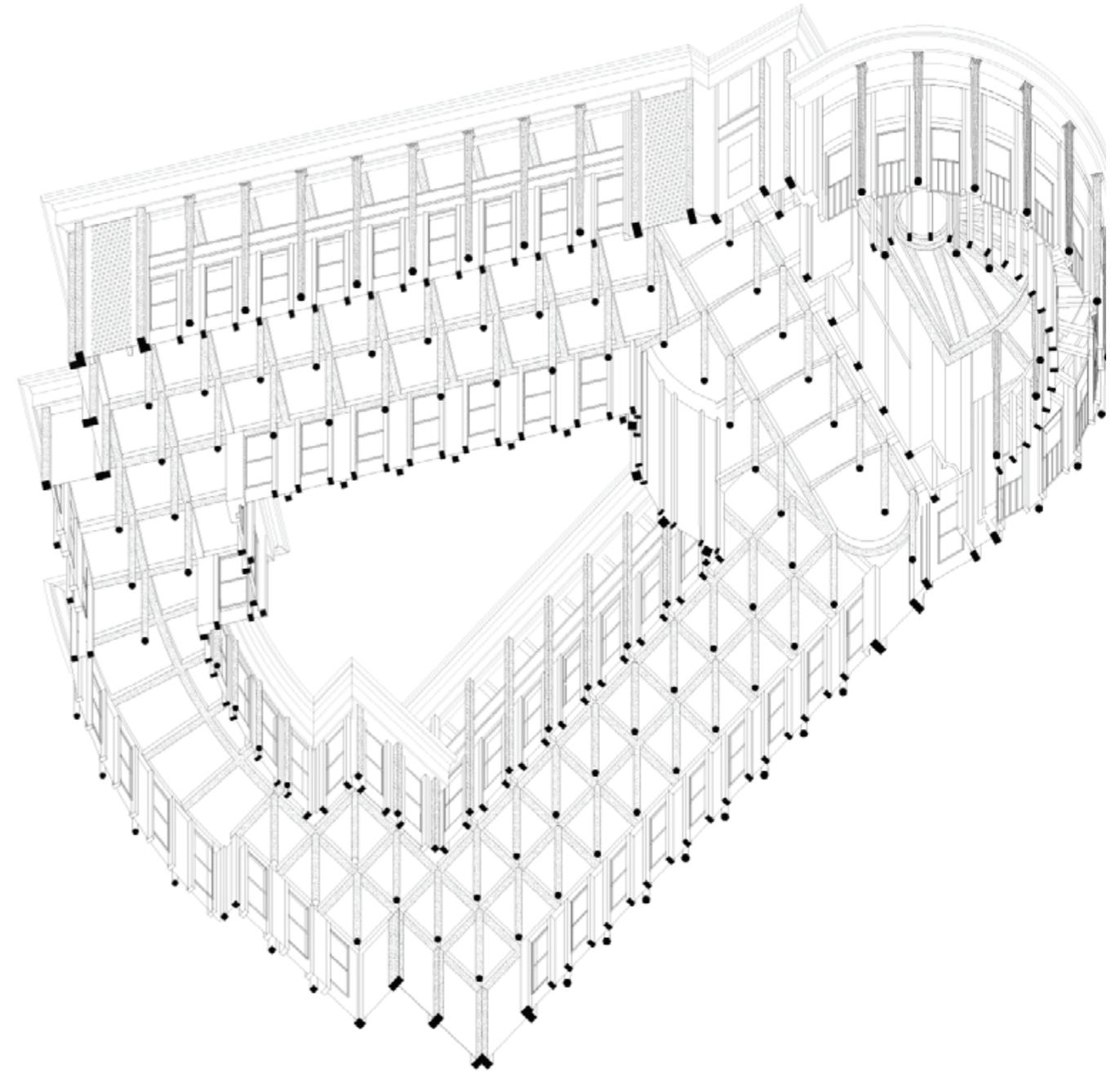


**Perret - L'abris souverain**

Pavillon d'entrée de la librairie centrale des beaux-arts, exposition internationale des Arts Décoratifs Paris, France, 1925

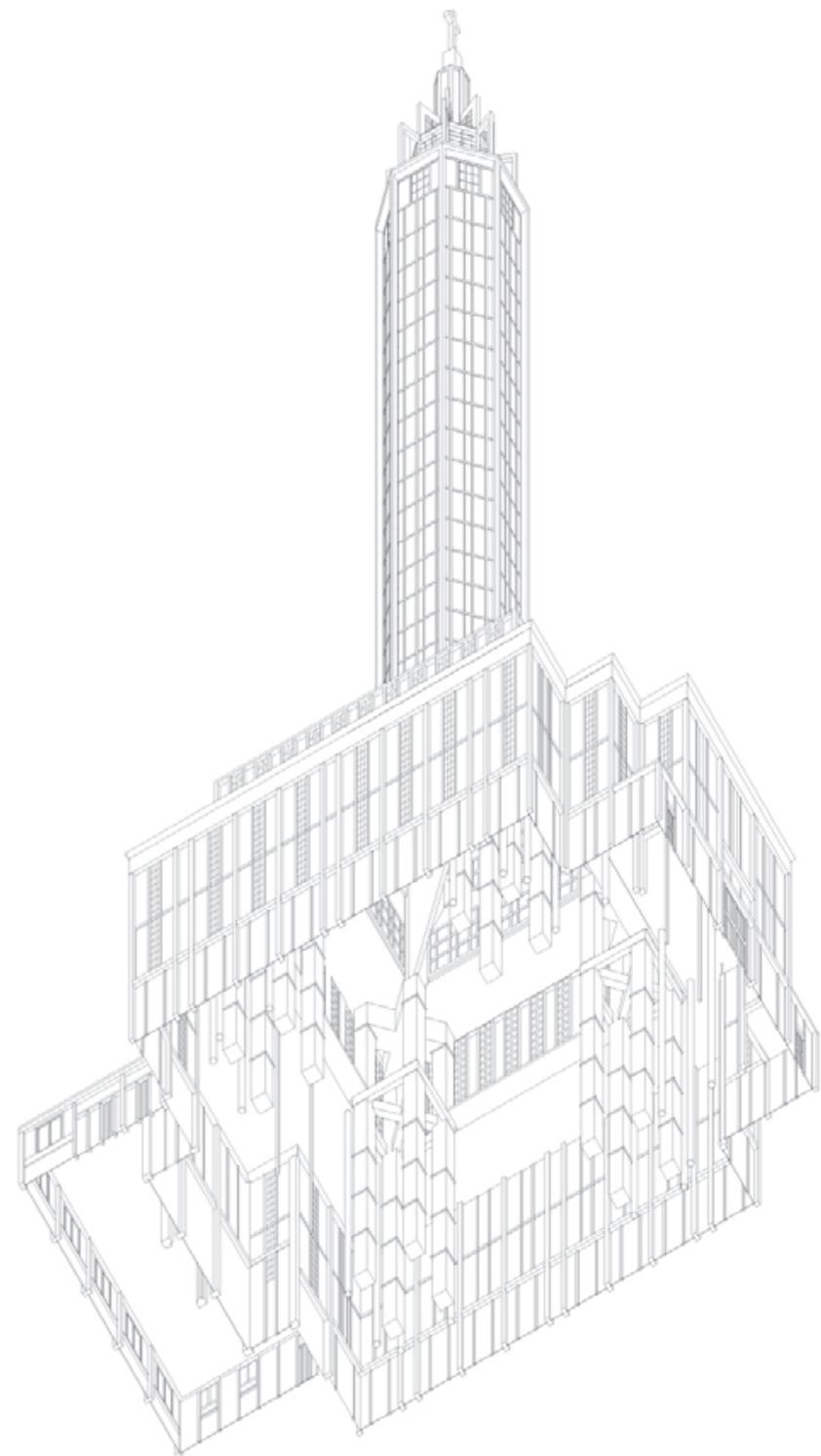


**Perret - L'abris souverain**  
Palais de Chaillot, Paris, France, 1937



**Perret - L'abris souverain**

Église Saint-Joseph, Le Havre, France, 1957



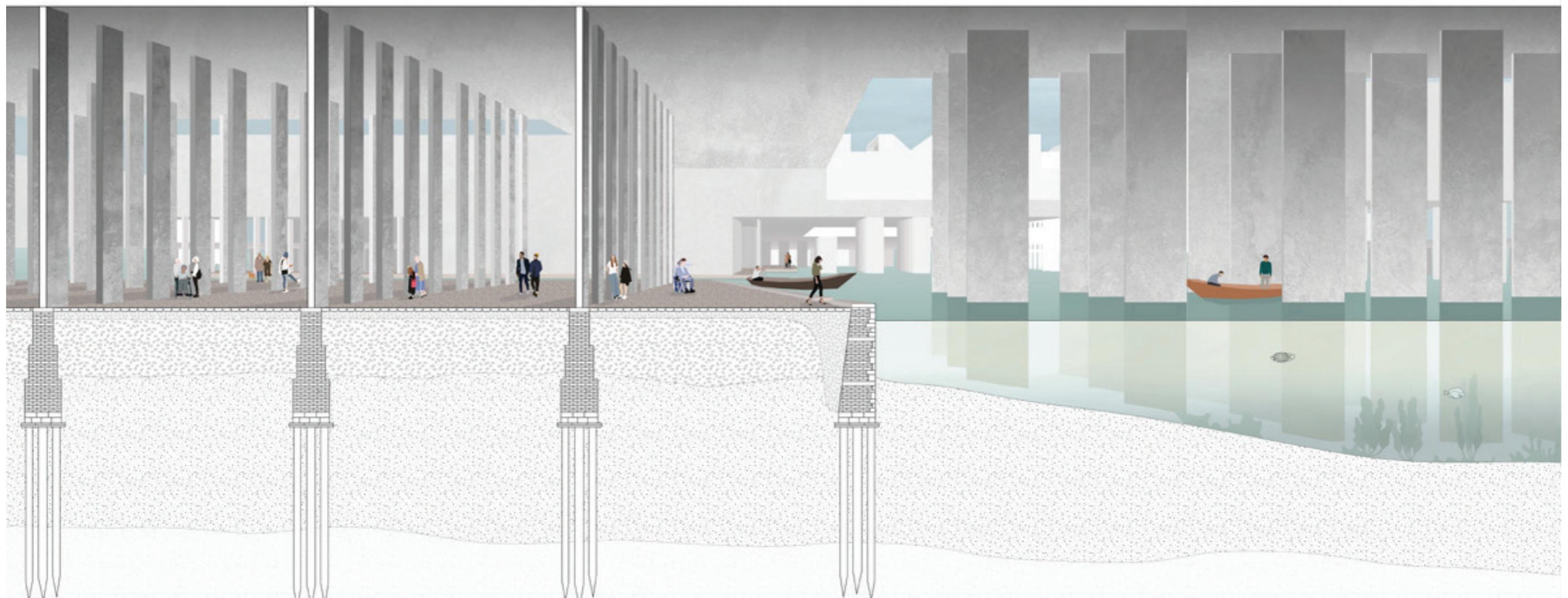
## Pilotis

Enrico Cardelli, Rotonda a Mare, Senigallia, Italie, 1933



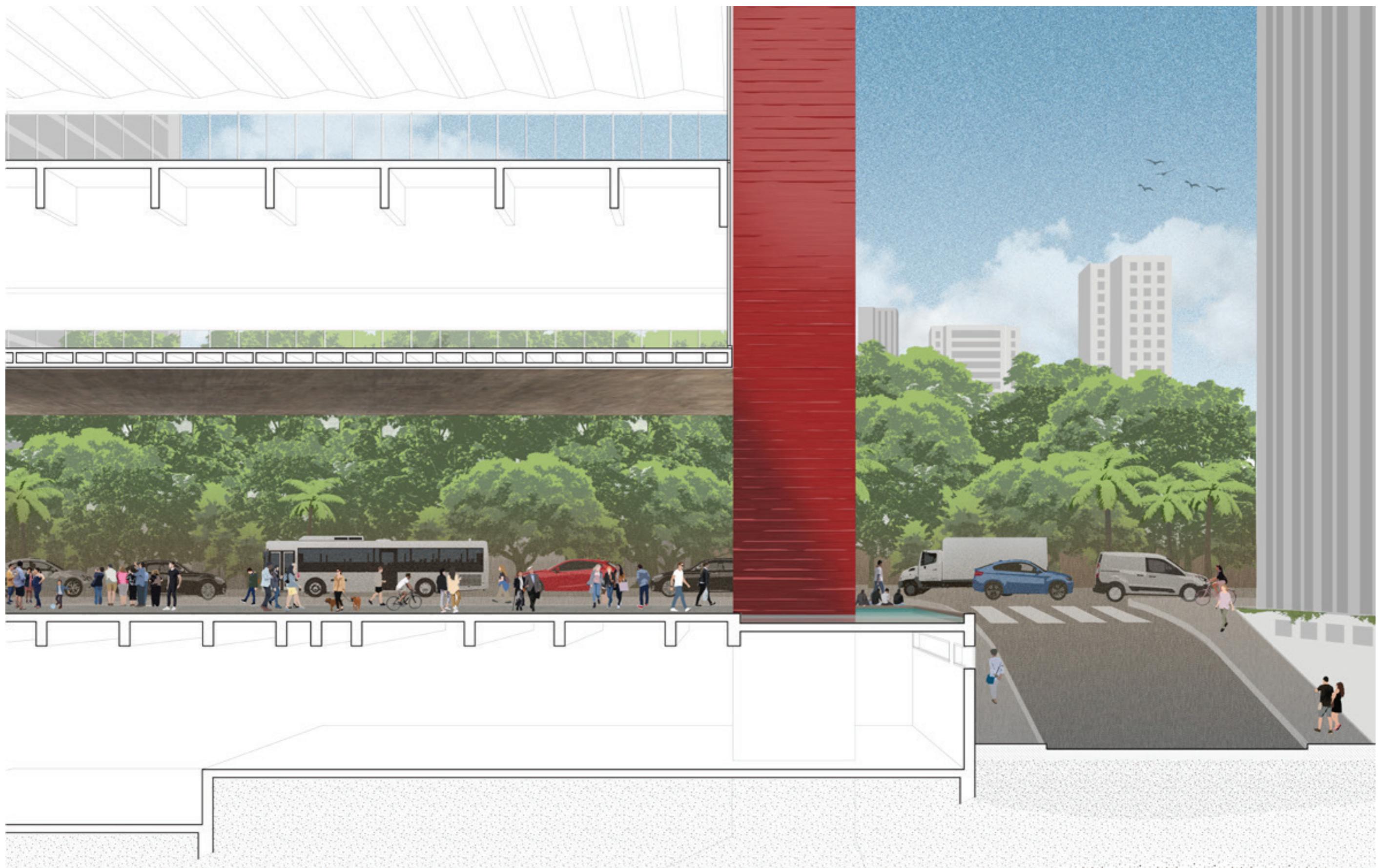
**Pilotis**

Le Corbusier, Hôpital, Venise, Italie, 1964



**Pilotis**

Lina Bo Bardi, MASP, São Paulo, Brasil, 1968



**Pilotis**

Lacaton & Vassal, Maison, Cap Ferret, France, 1998



**BEFORE THE FLOOD - A WORLD IN LE HAVRE**

**Le Havre**



**Sites**



## Sites

Site 1 - CLIFF



Site 2 - CITY CENTER



Site 3 - HARBOR



Site 2 - SWAMP



**DAY 1**

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- 19 PERFORMING ART CENTER p.203



**DAY 1**

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**DAY 2**

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**DAY 1**

10 SALT WATER FARMING

p.131

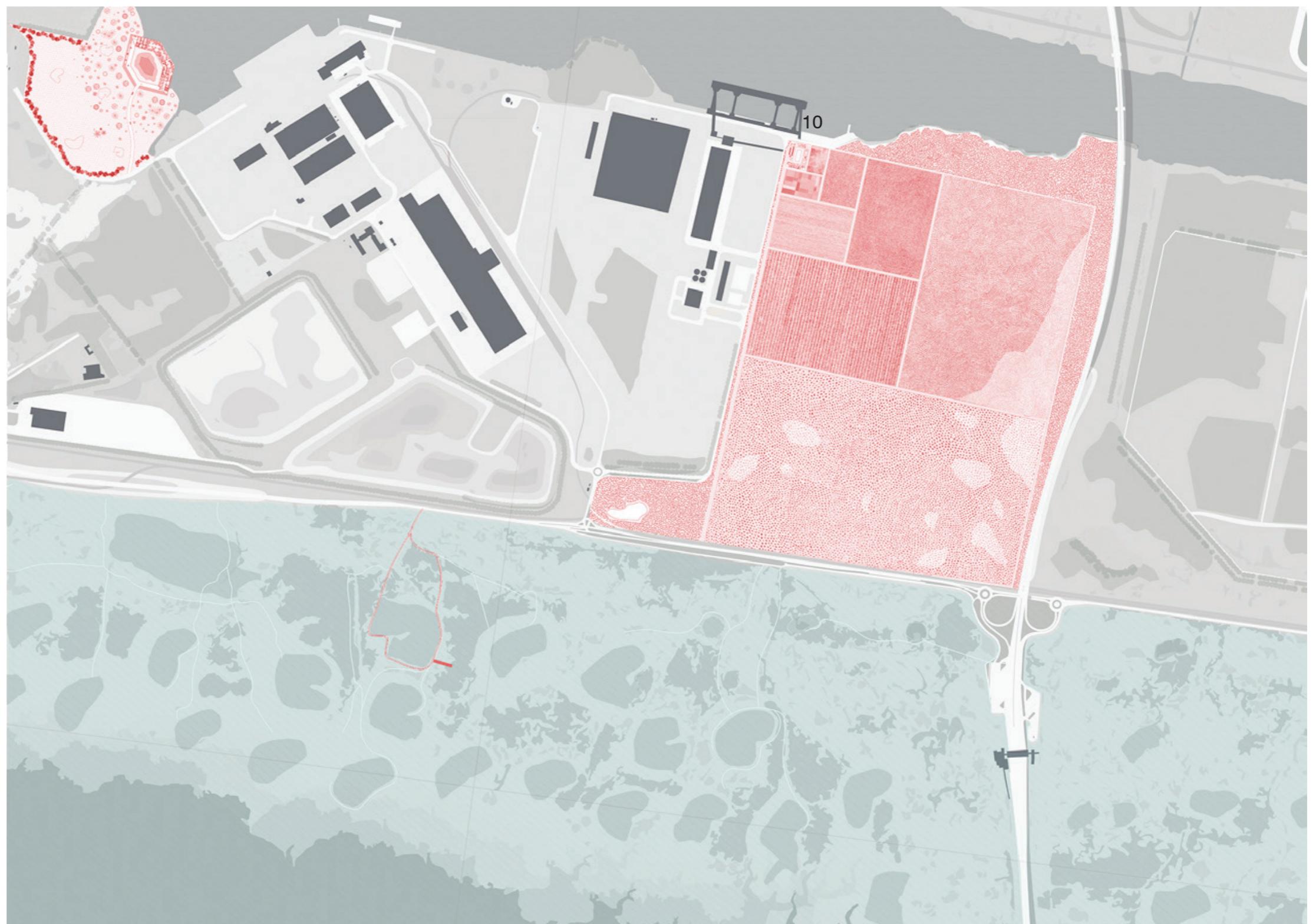
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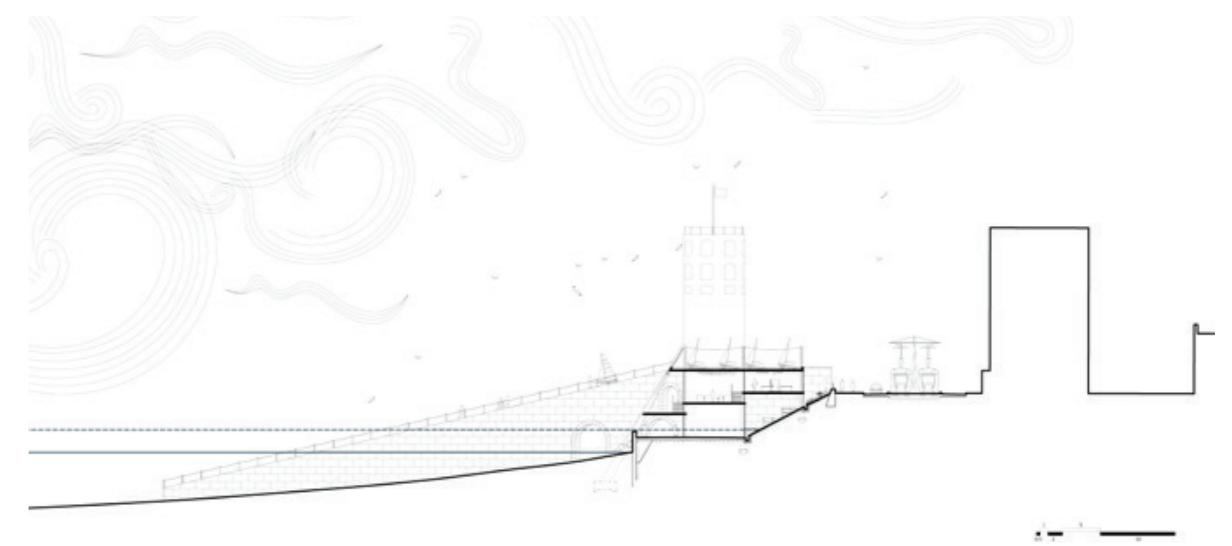
11 CANAL MAINTENANCE

p.139

12 OCEANOGRAPHIC CENTER

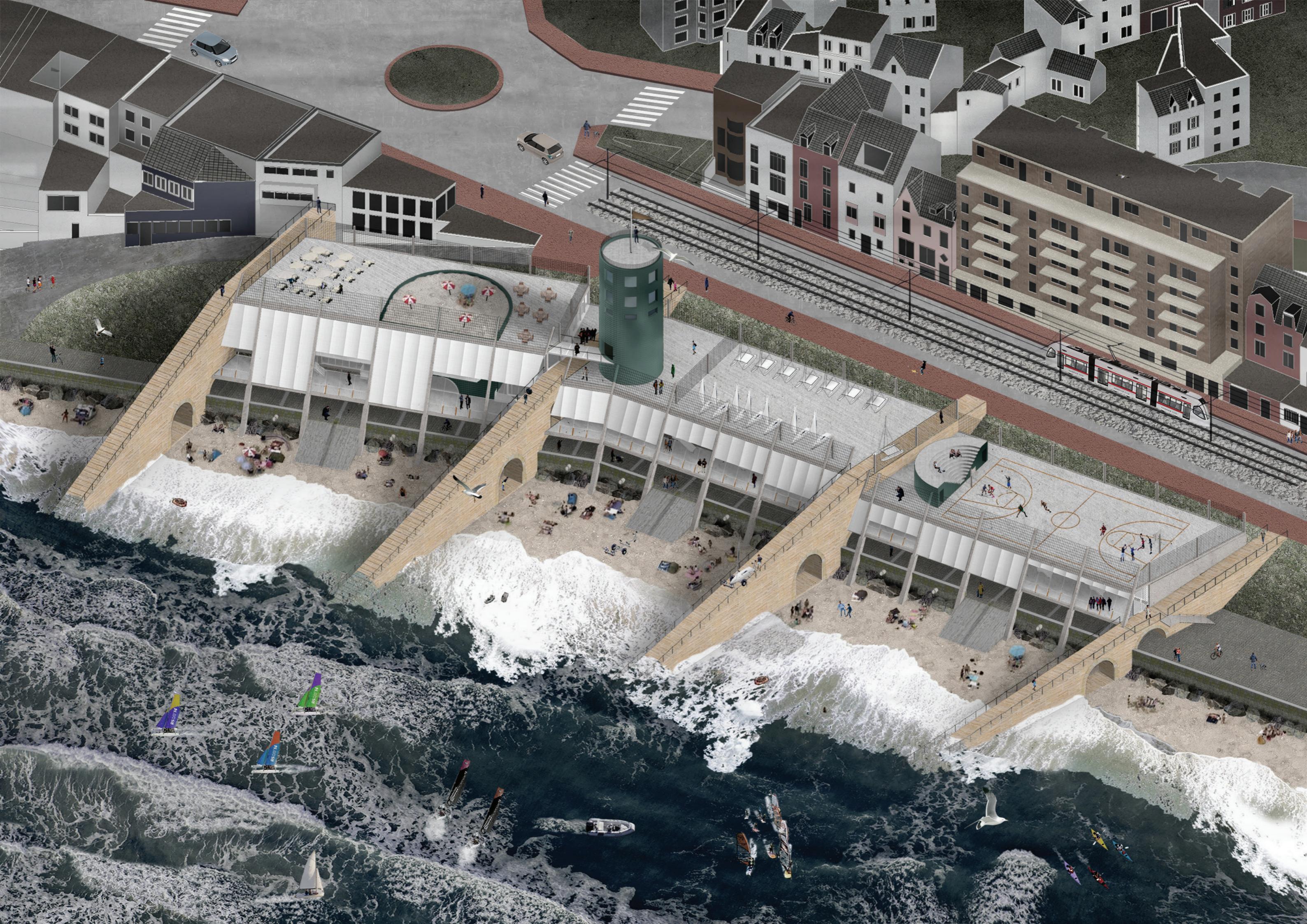
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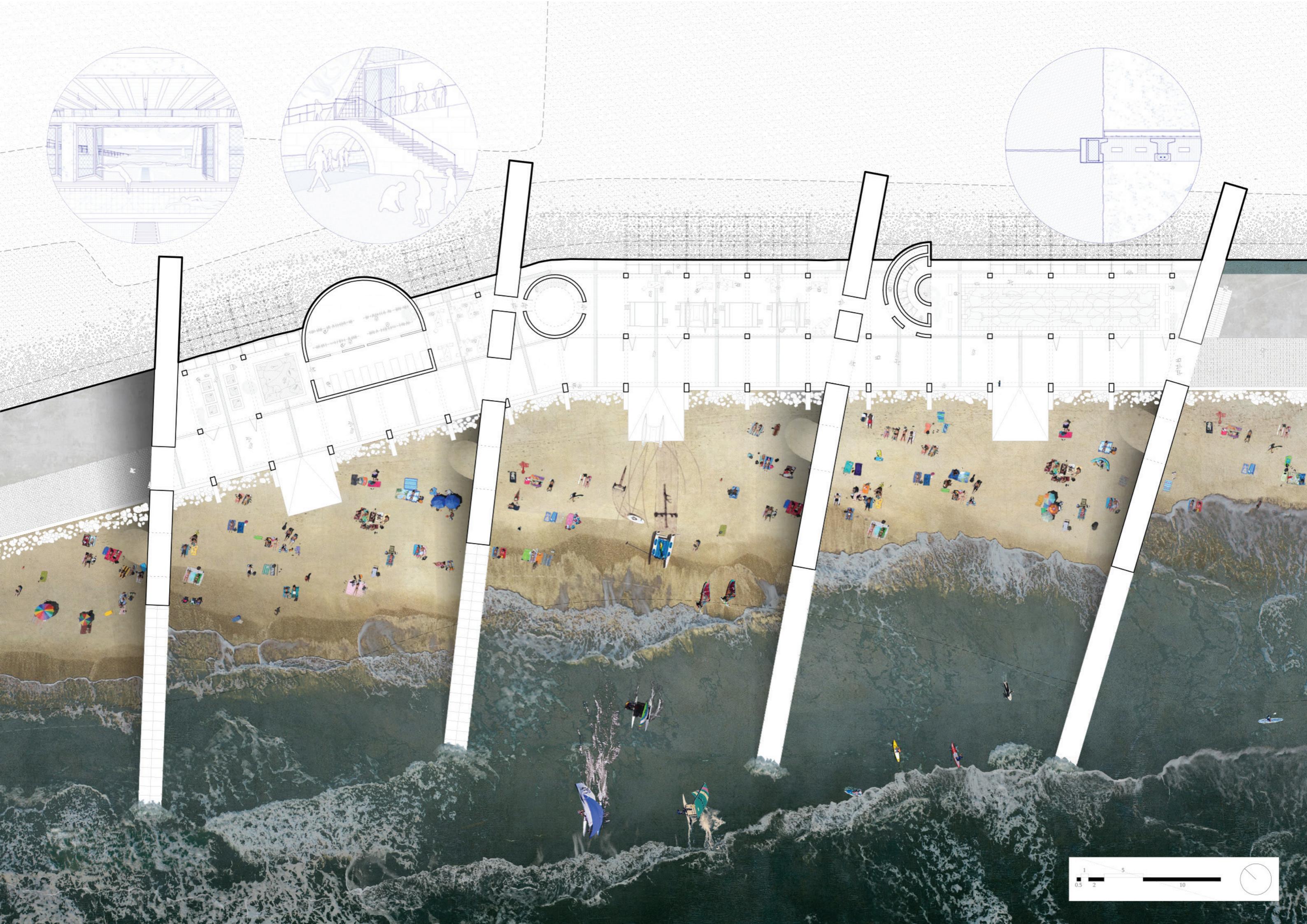




### 01 Le Havre Citizen School

Maxence Heidert, Clément Paillon, Marie Przopiorski de Cay, Quentin Toulemonde





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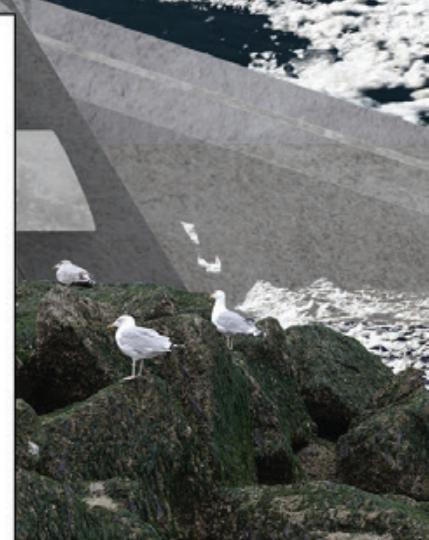


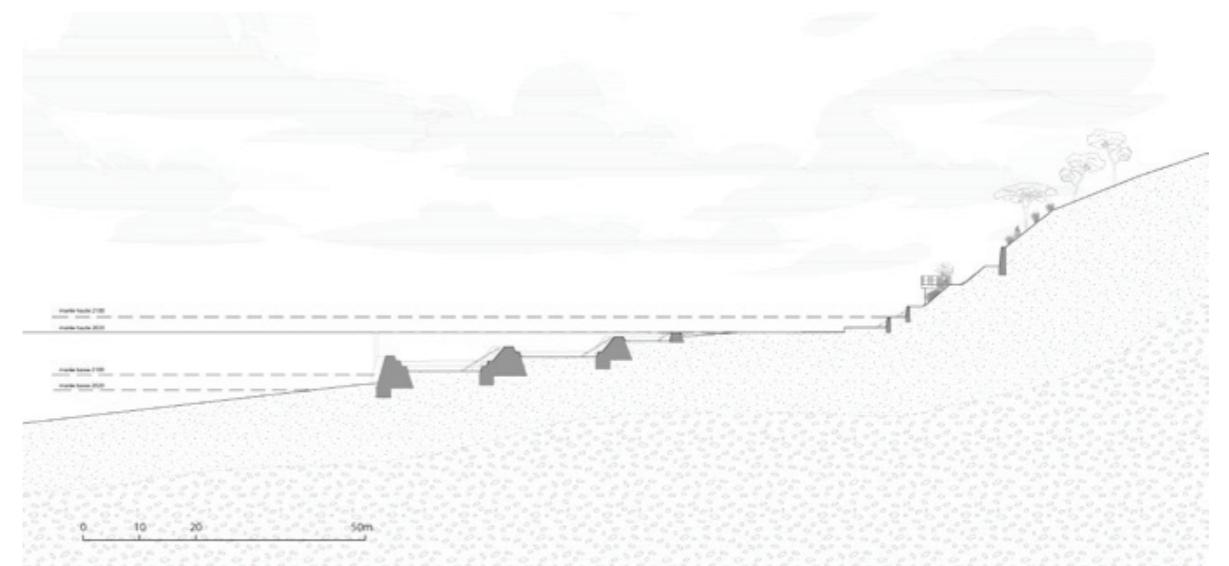


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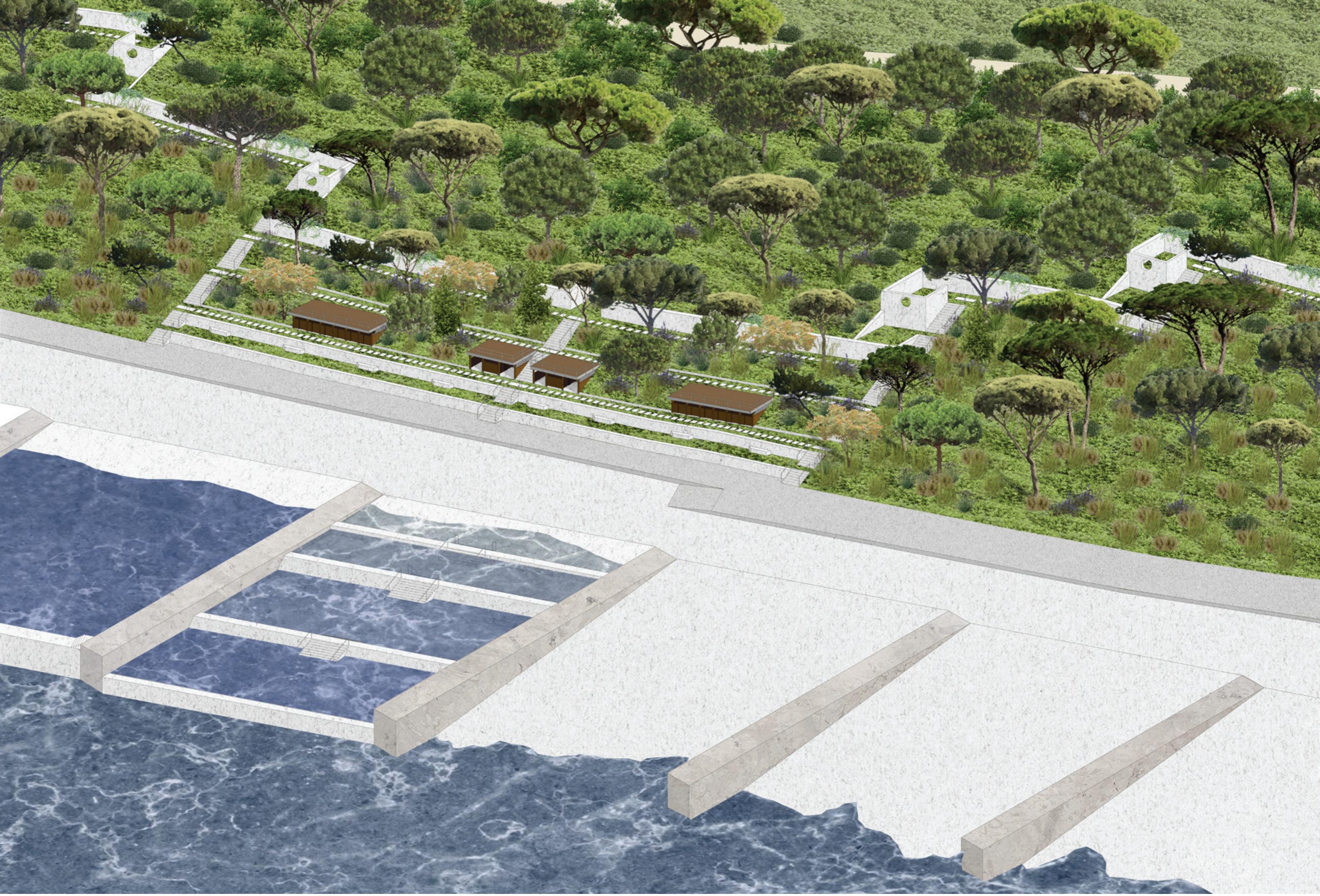
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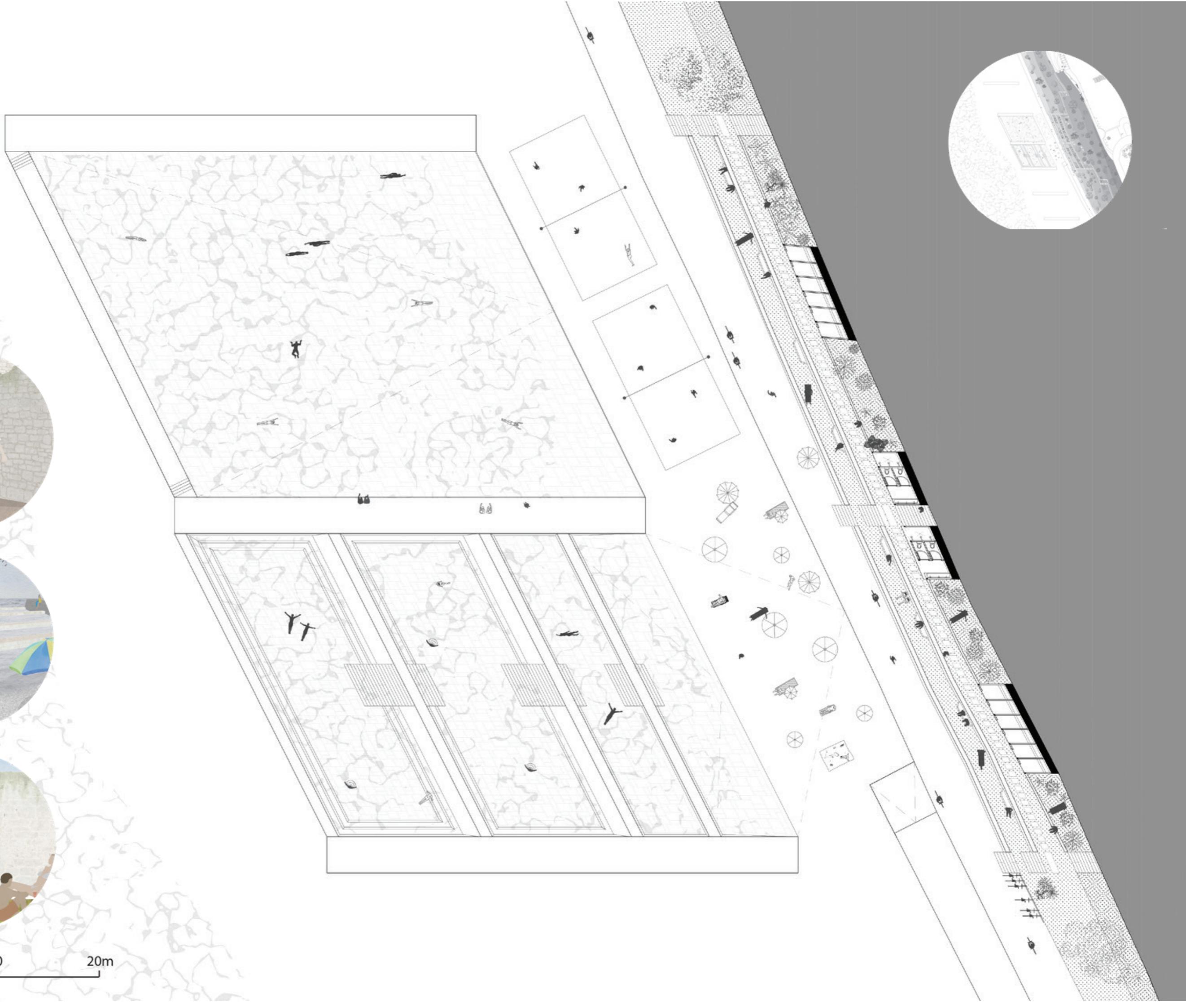




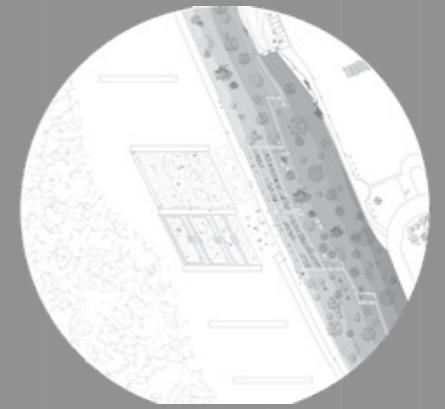
## 02 Bodycare - Solarium

Gregoire Lortie, Laura Neumann, Louis Chessé

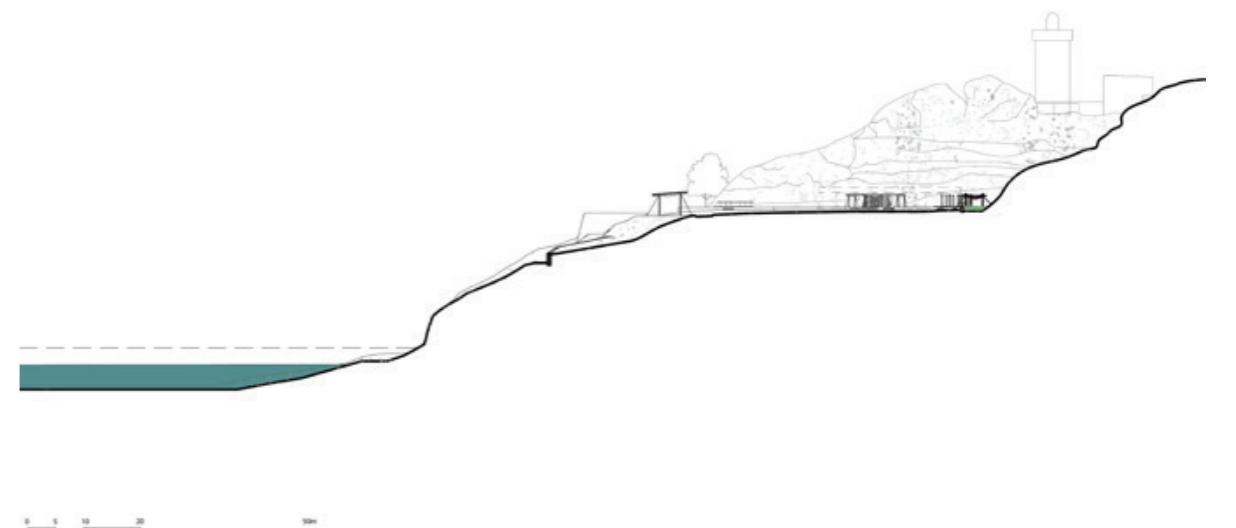




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### 03 Cliffside swimming pool

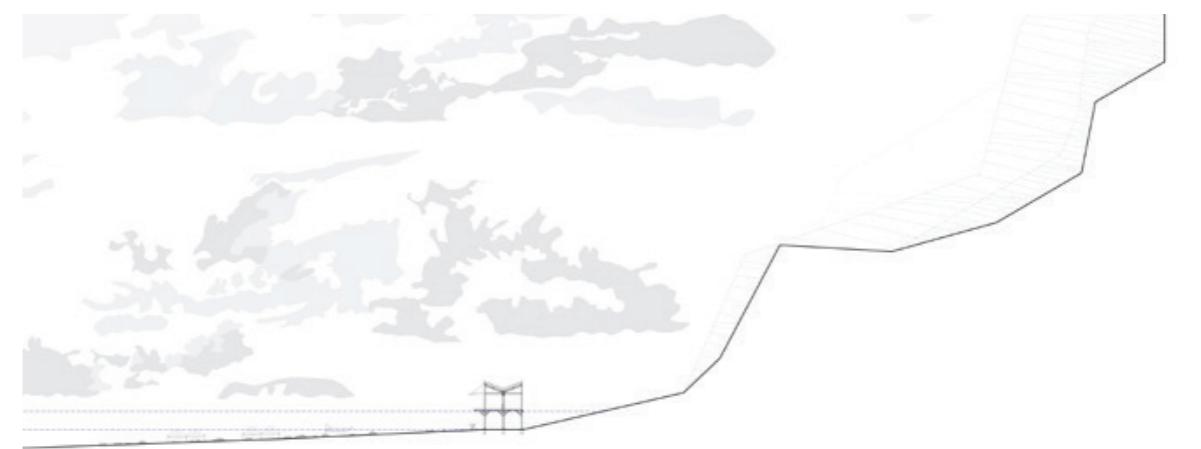
Agathe Convert, Alexis Da Costa, Camille Perillat



0 2 4 10m







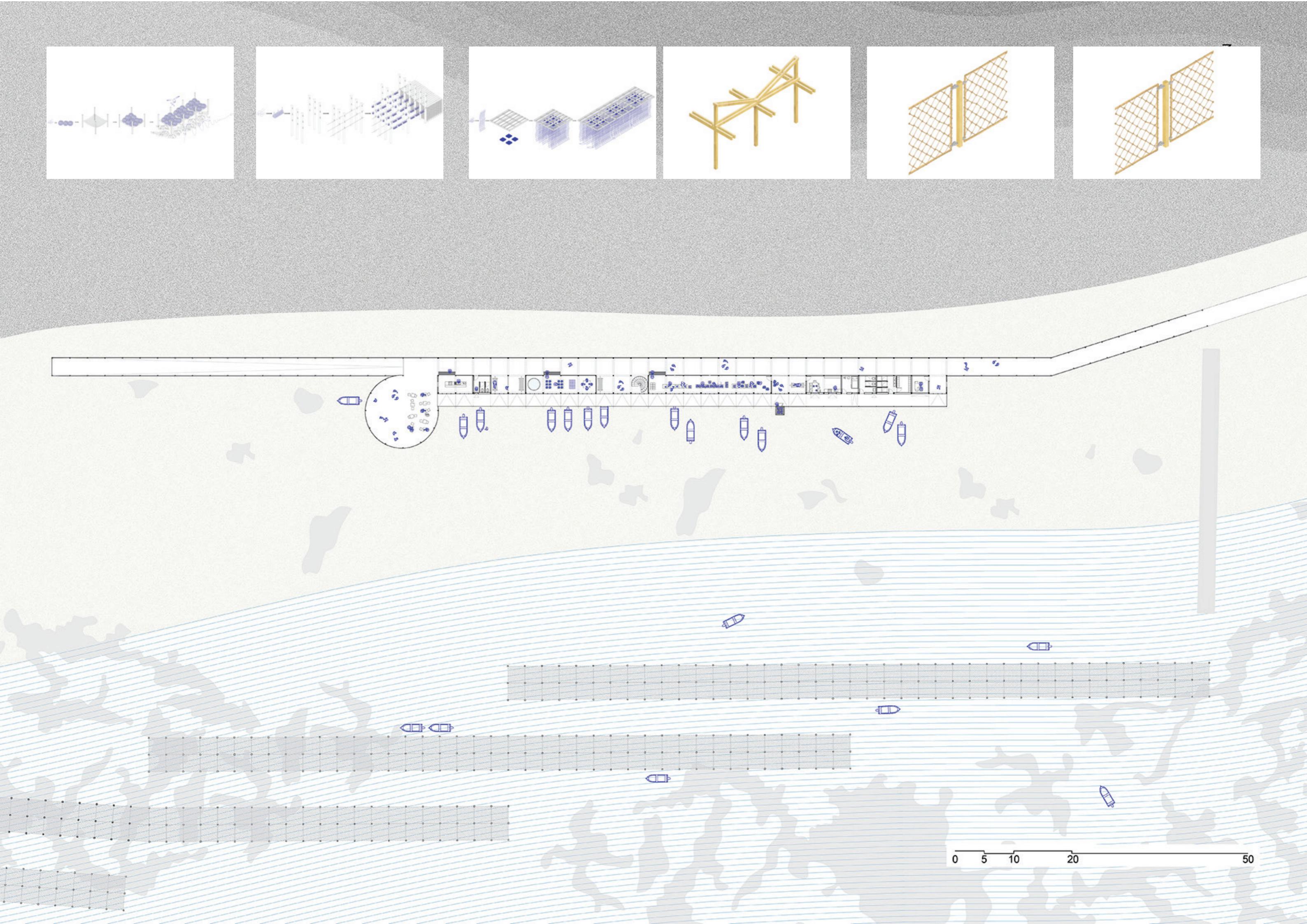
#### 04 Oyster Farming

Mariam Bedraoui Drissi, Nelu Dragomir, Casey Isidor

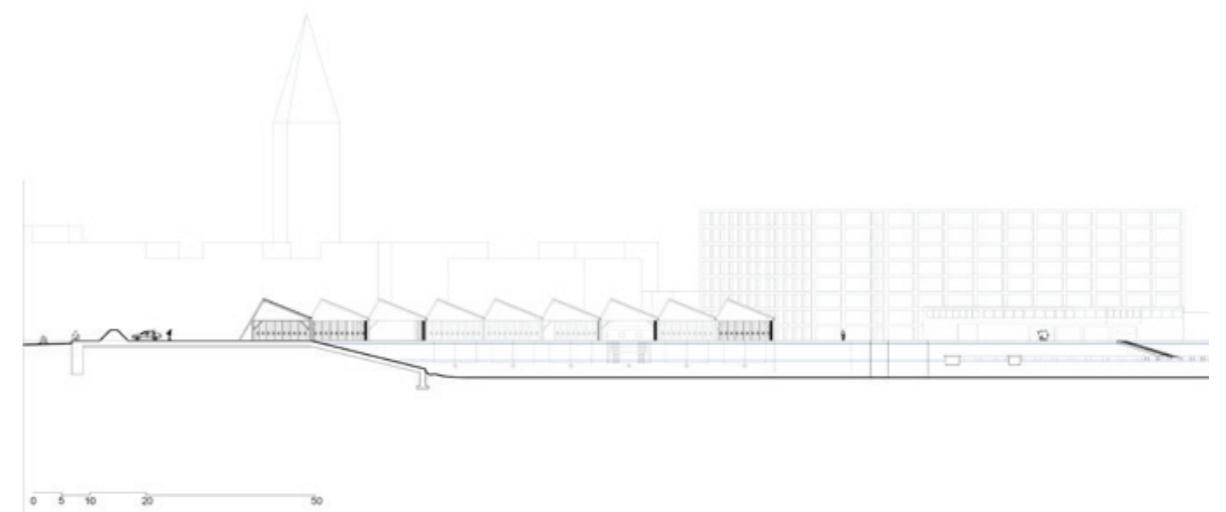
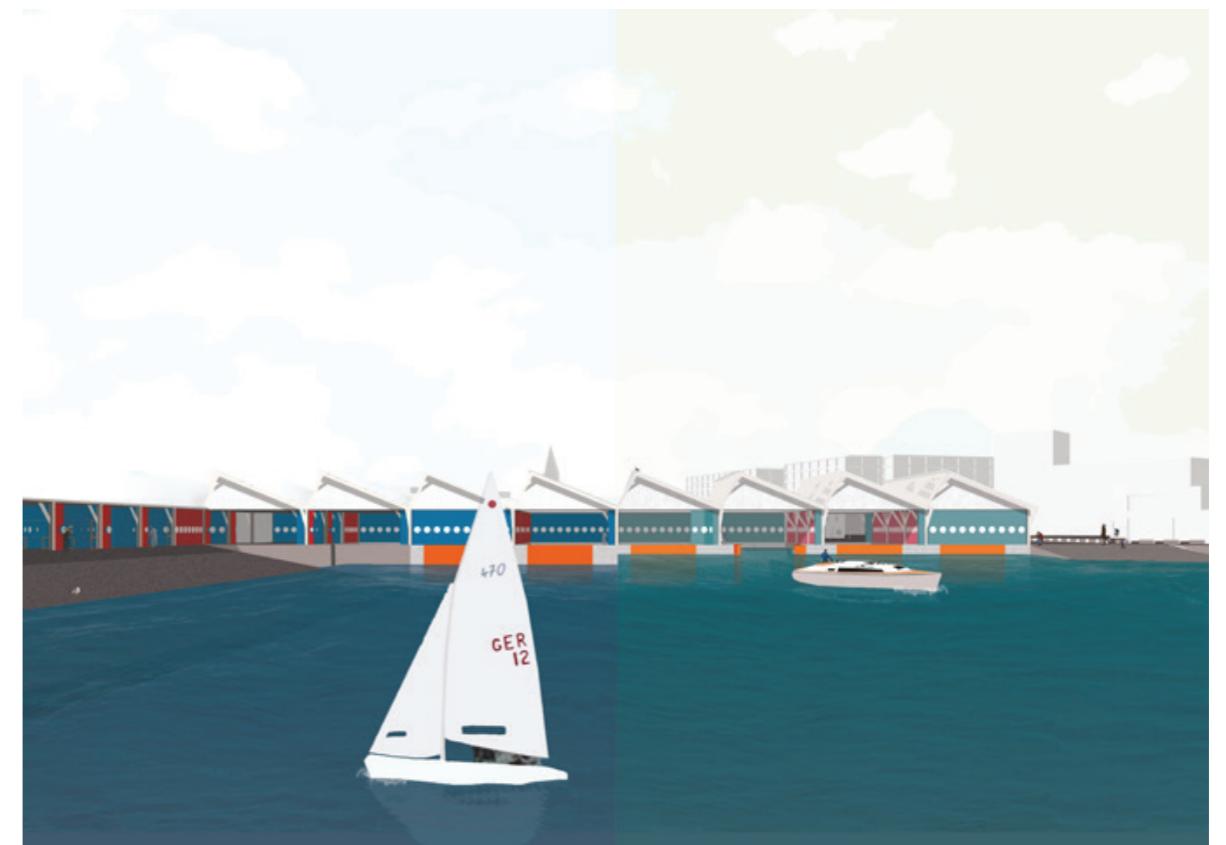


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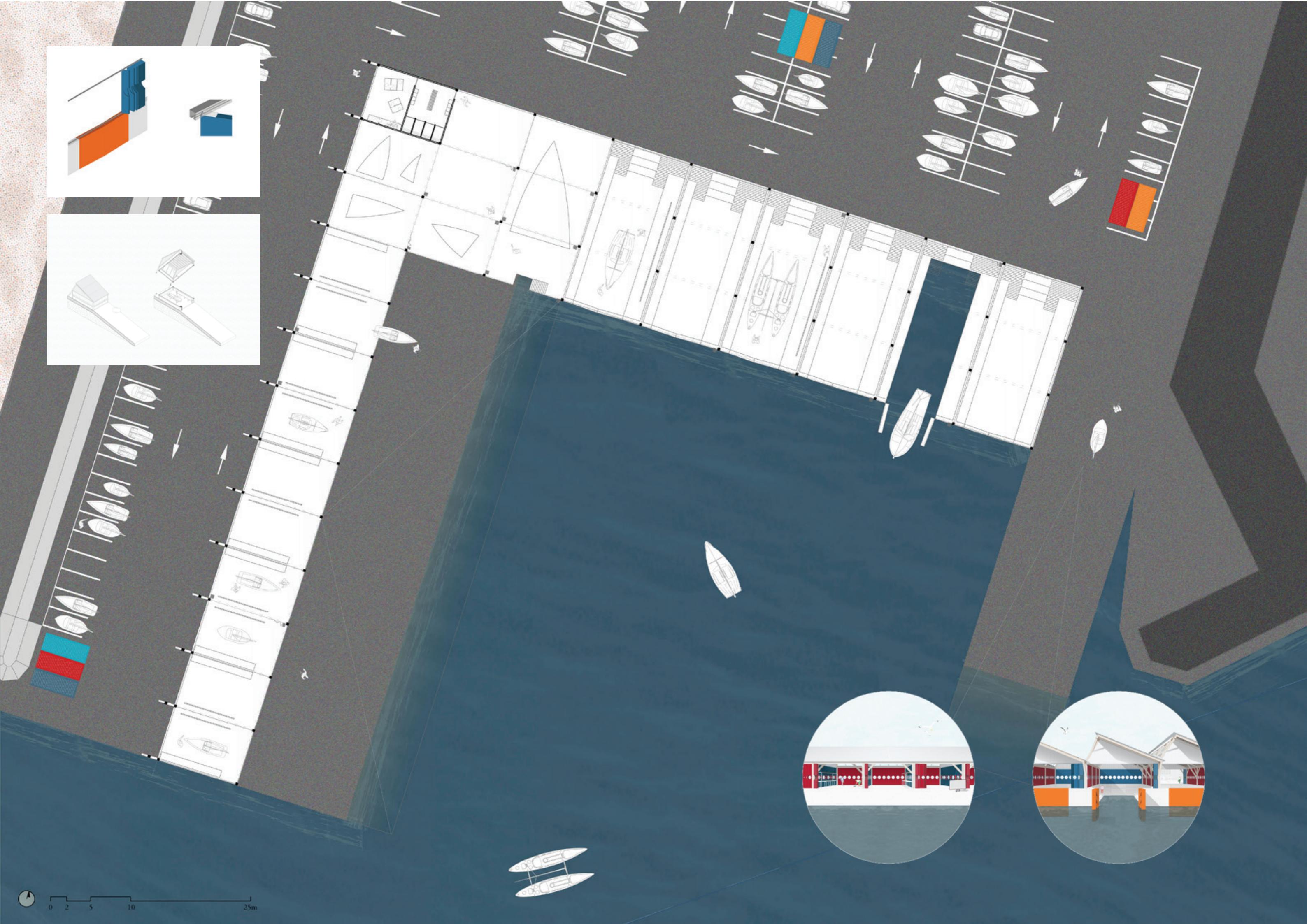




## 05 Boat repair

Flore Derouen, Mariana Monteiro, Victor Payen



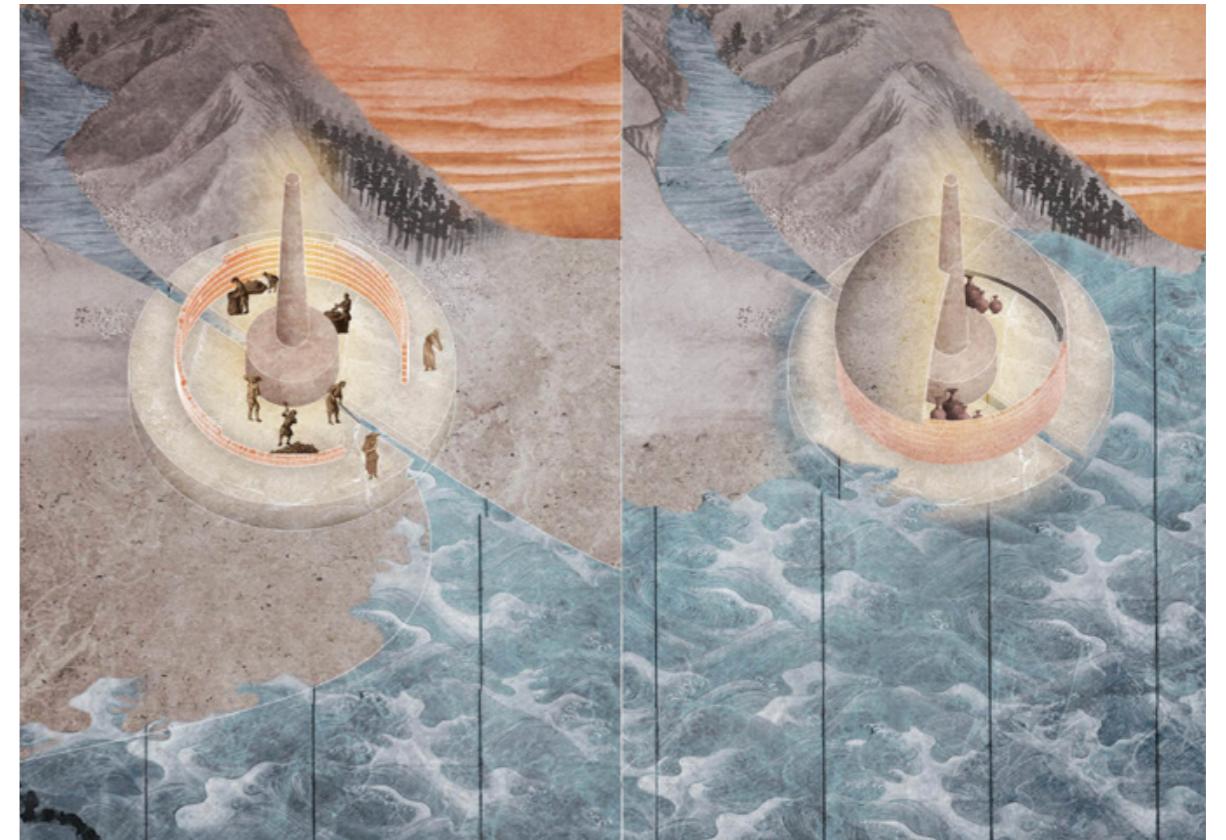


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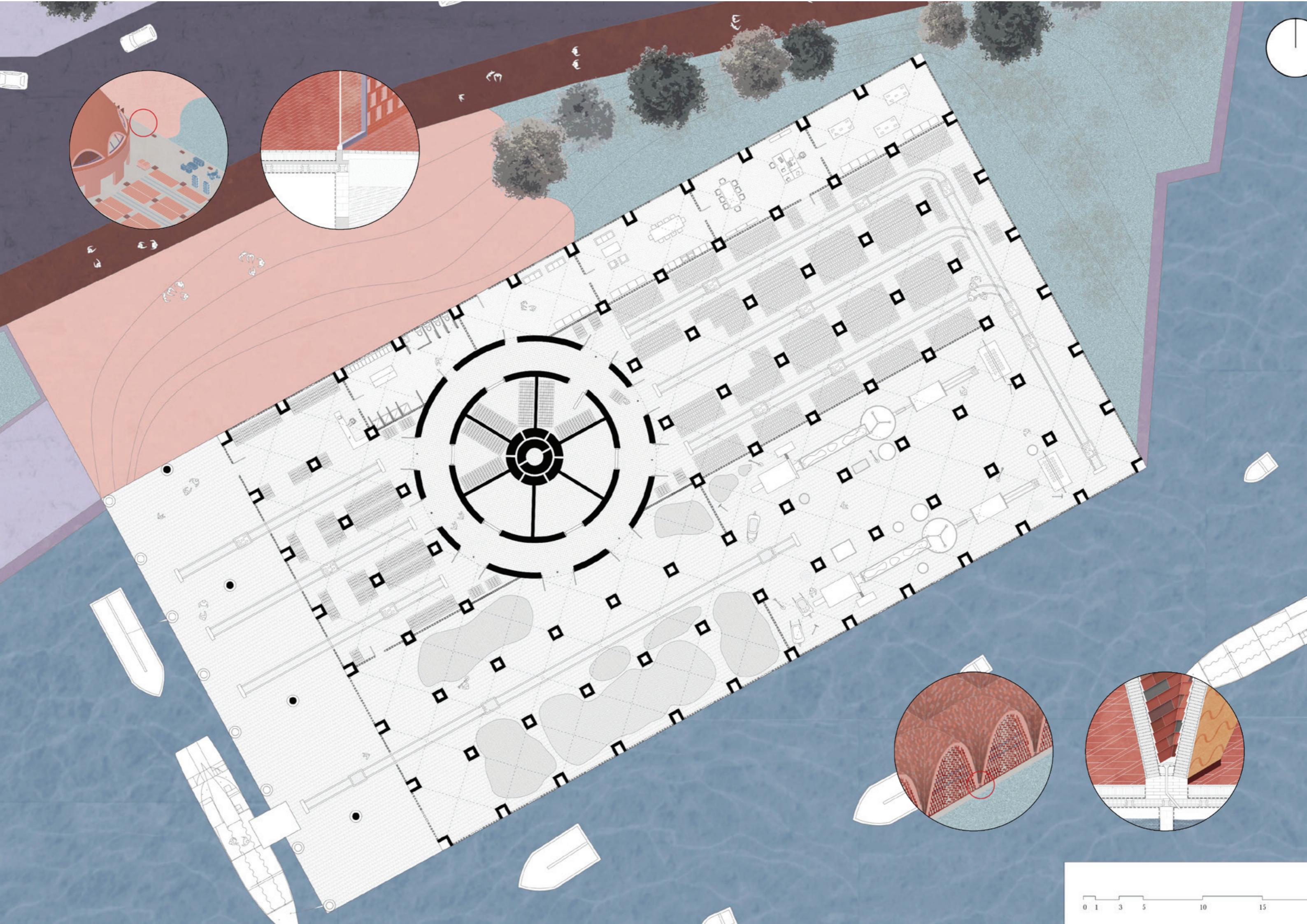




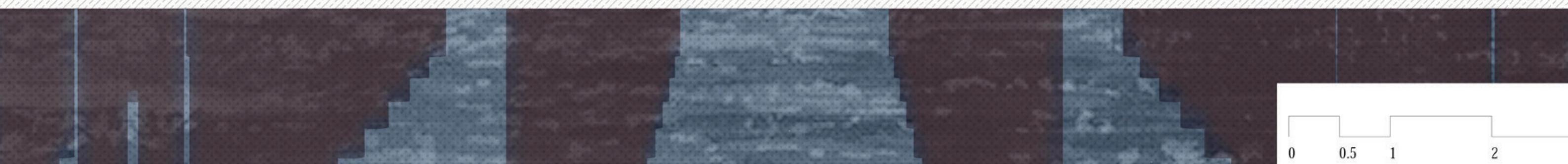
## 06 Another brick in the wall

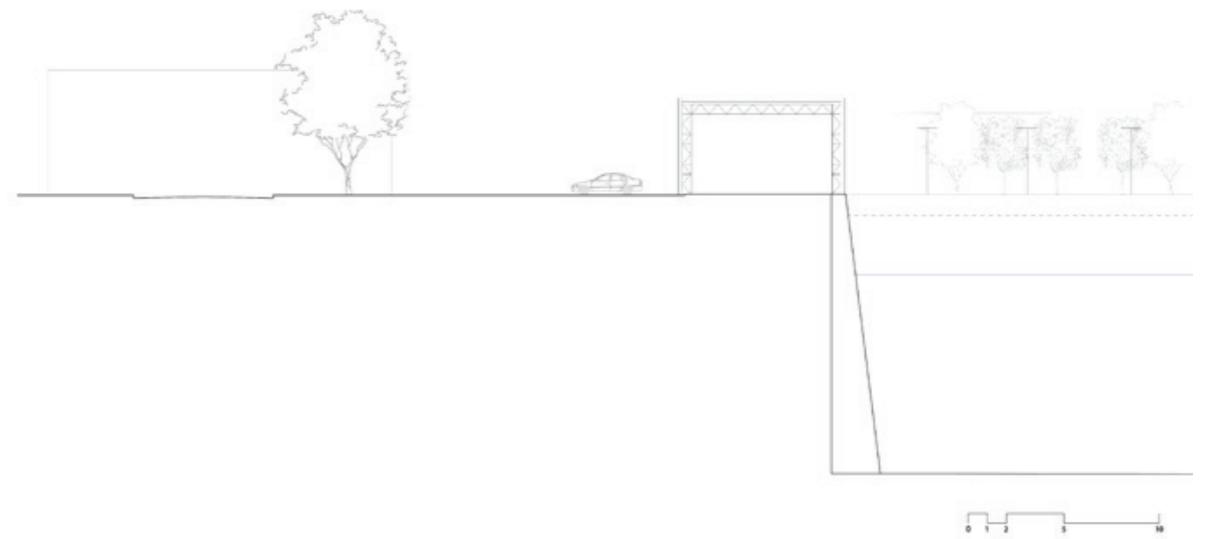
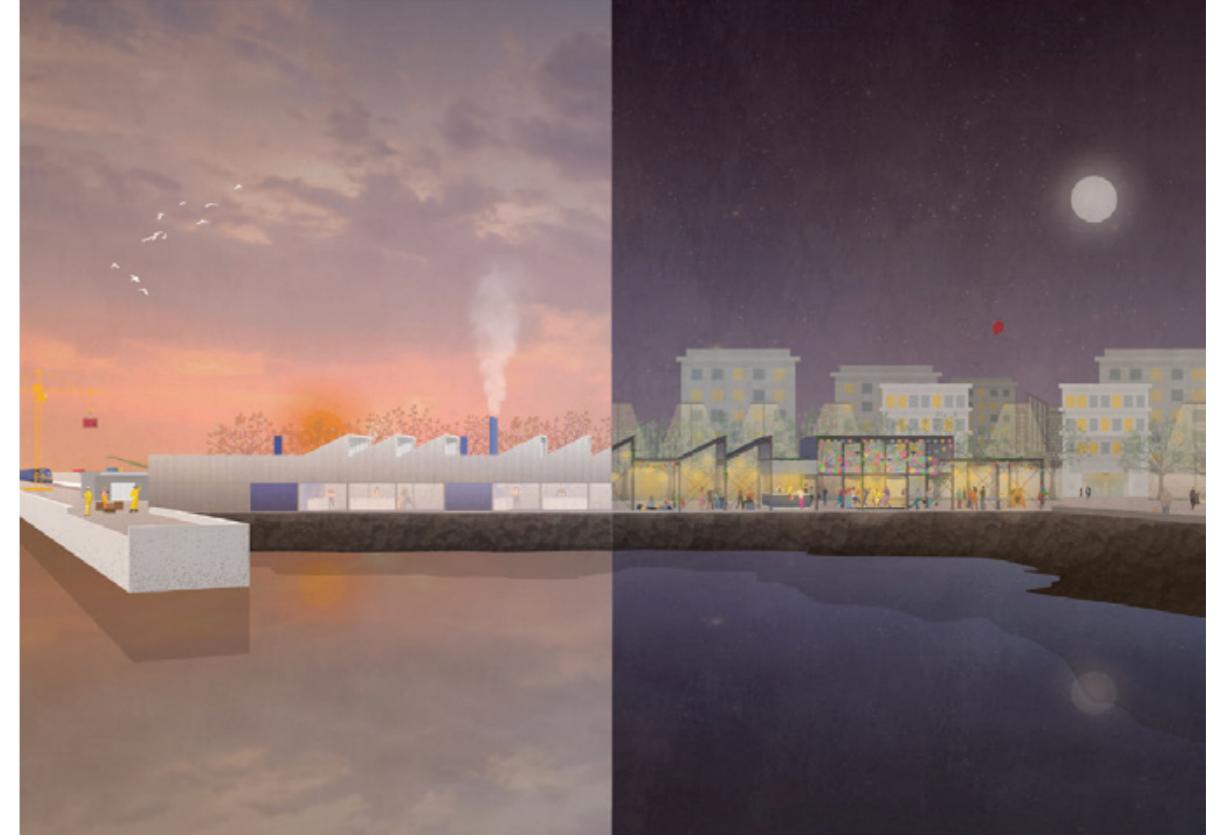
Simon Cheritat, Valère Hognait, Cynthia Tréport





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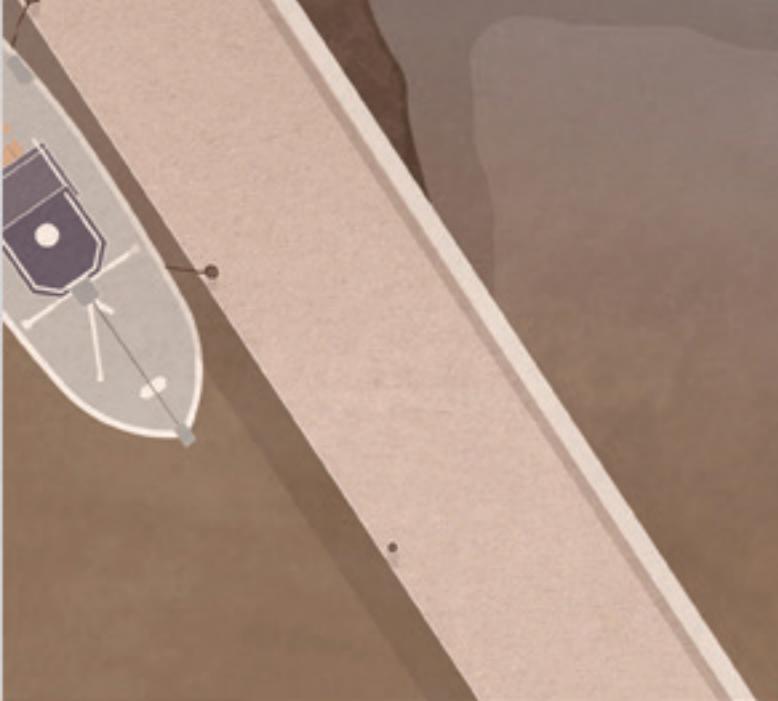
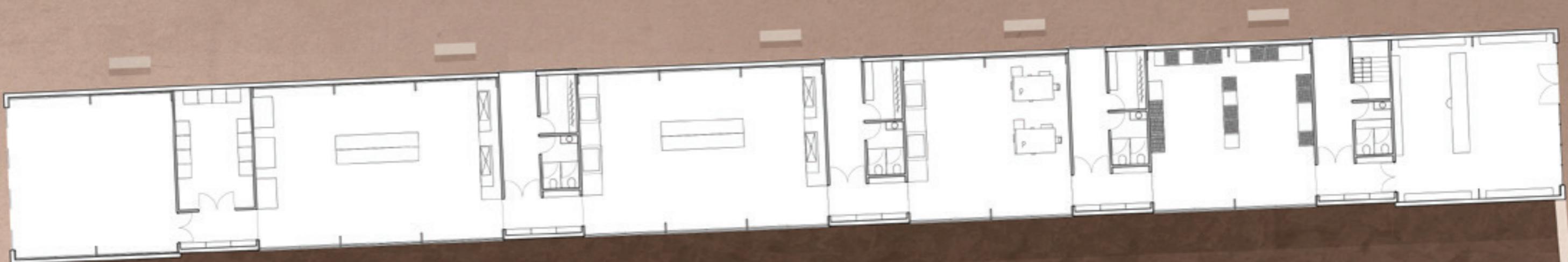
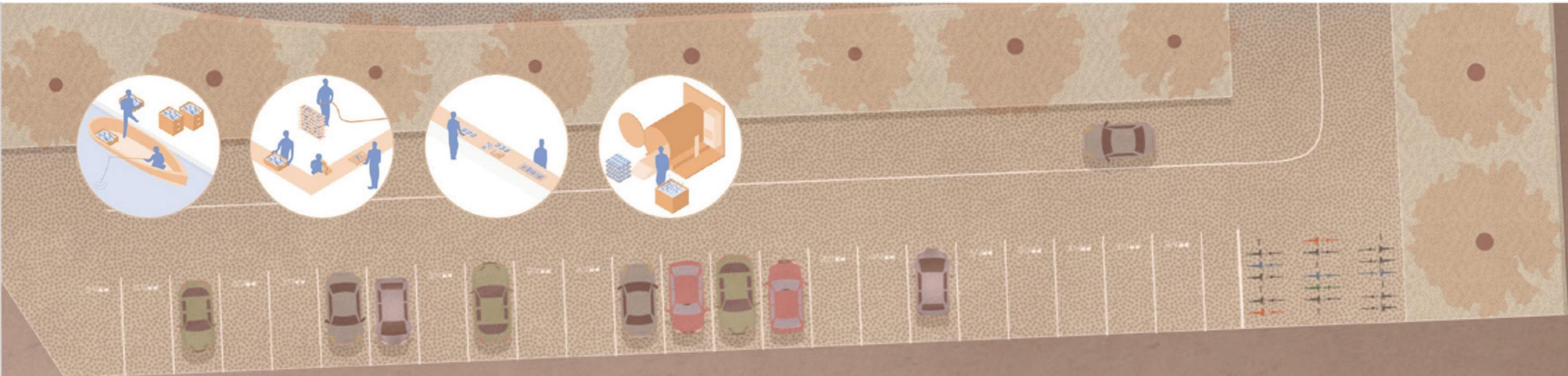




## 07 Cannery

Enzo d'Auria, Gabriel Flor de Oliveira, Melhing Roselet



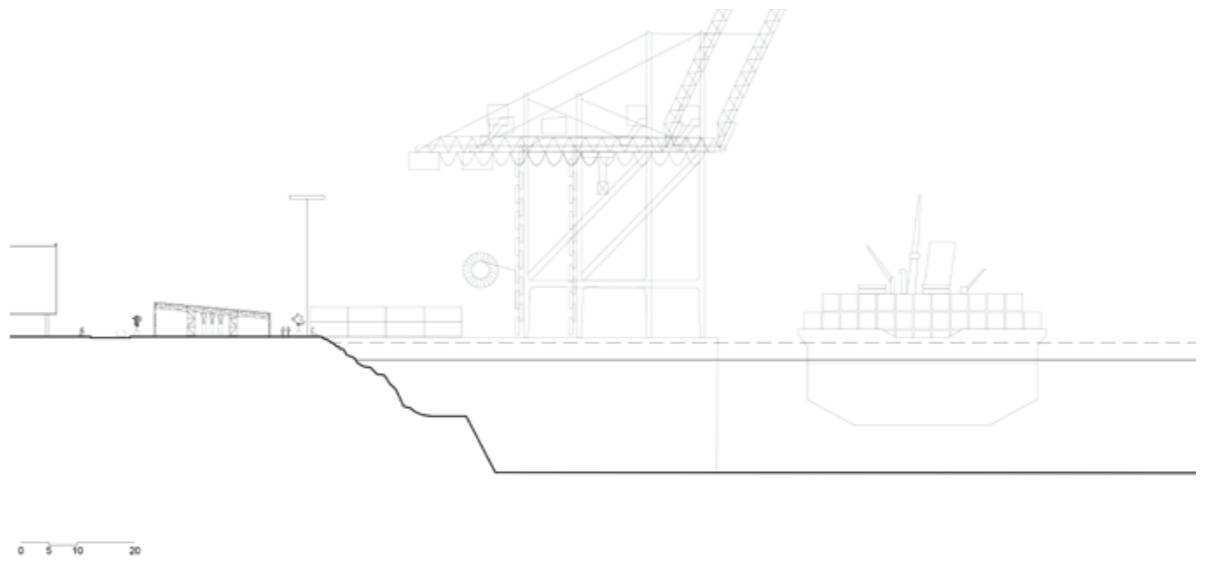
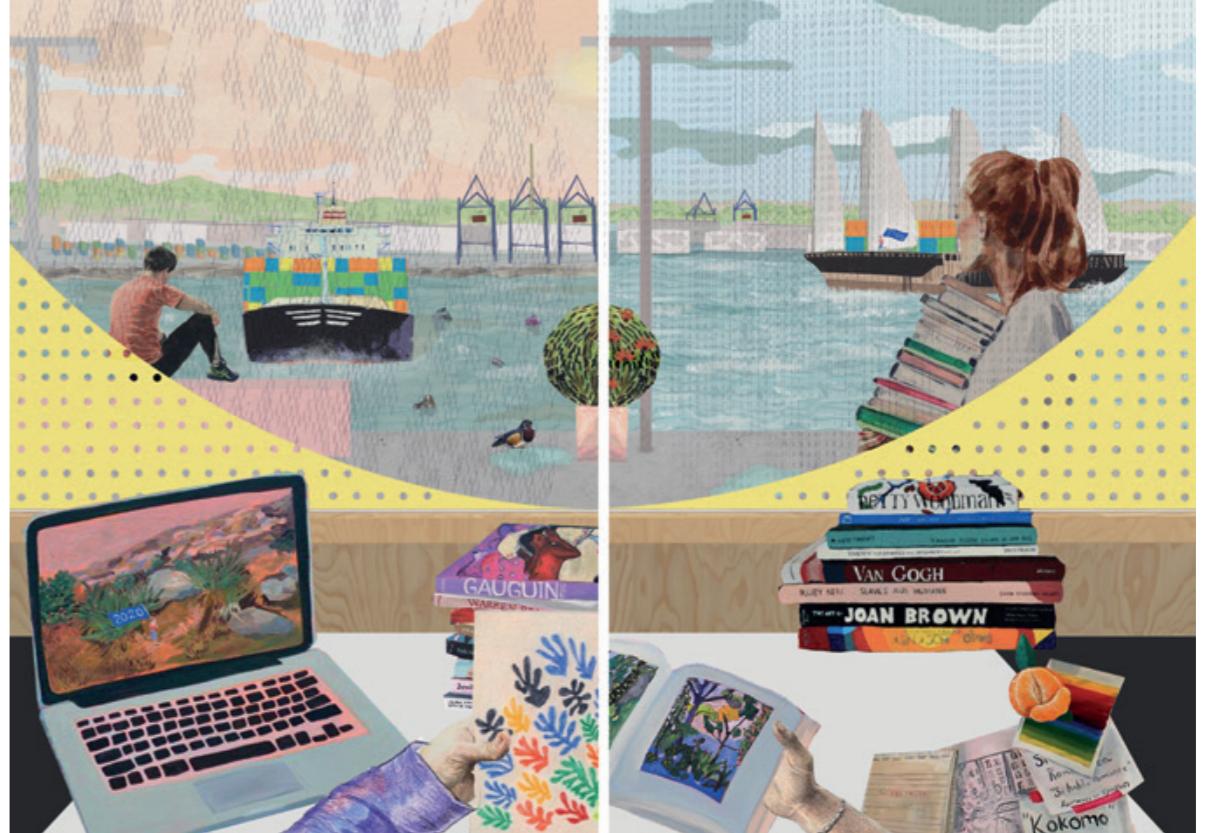


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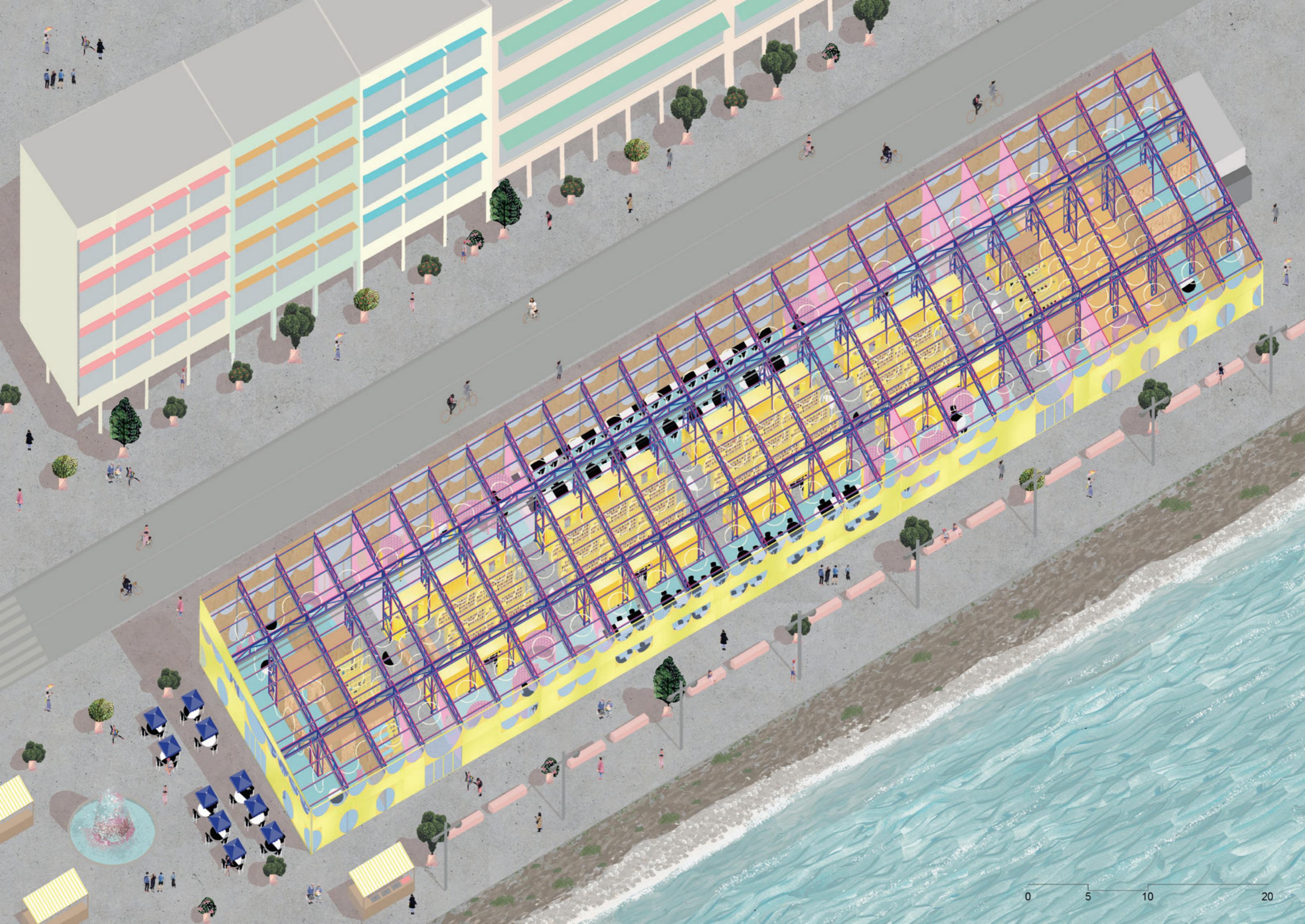


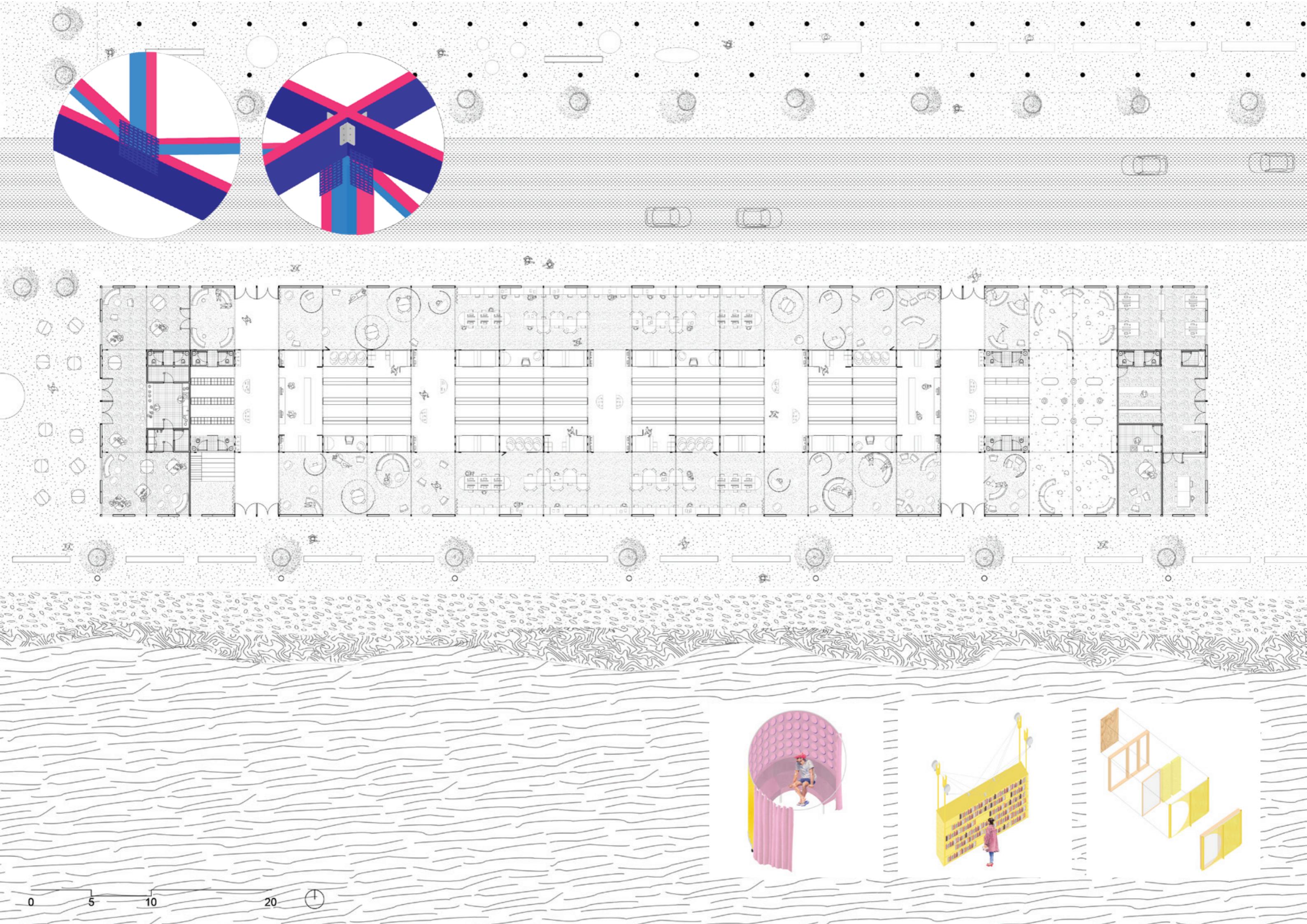
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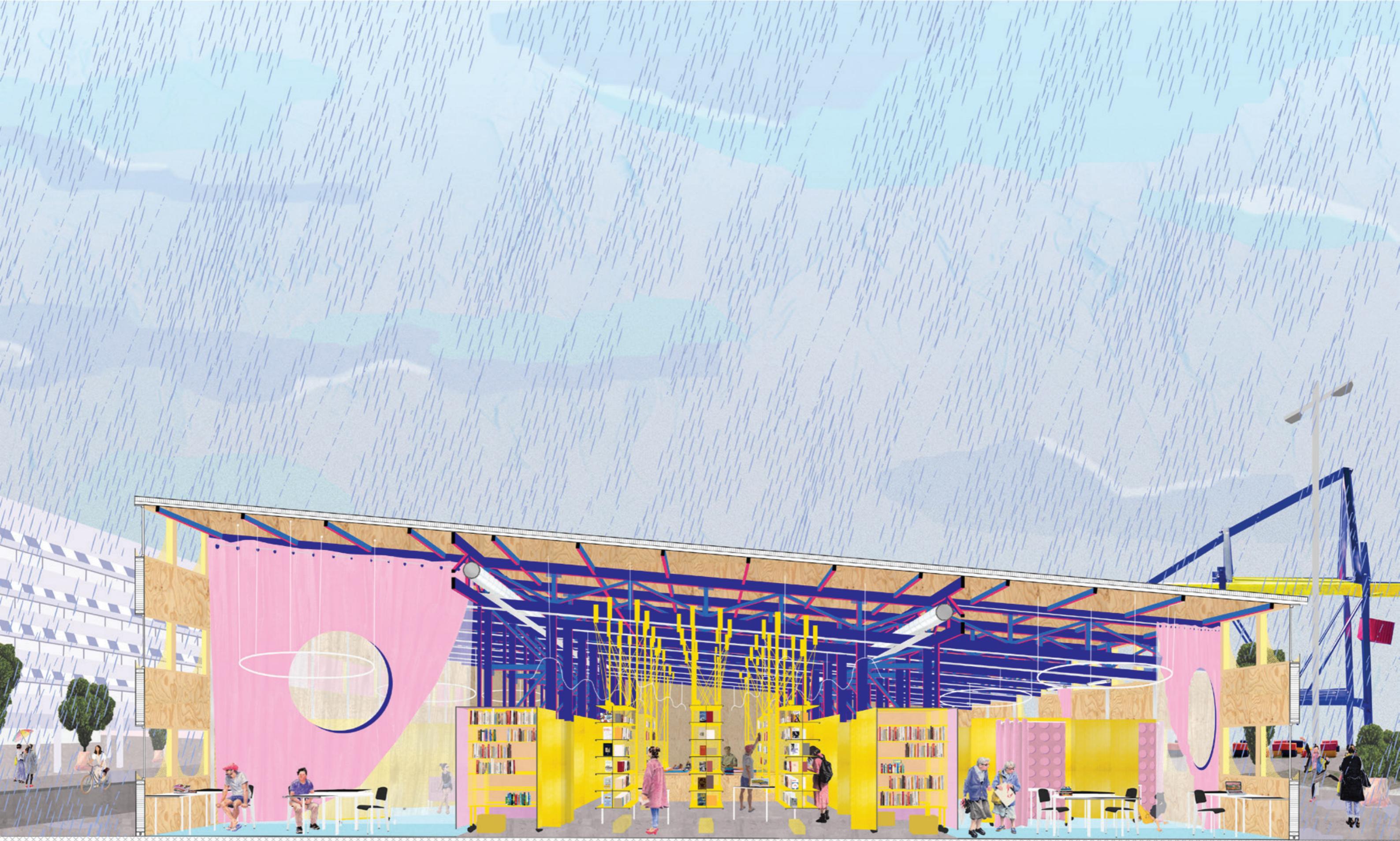


### 08 Books by the Ocean

Khadija Barkani, Myriam Berthier, Shaojun Luo, Eva Morin









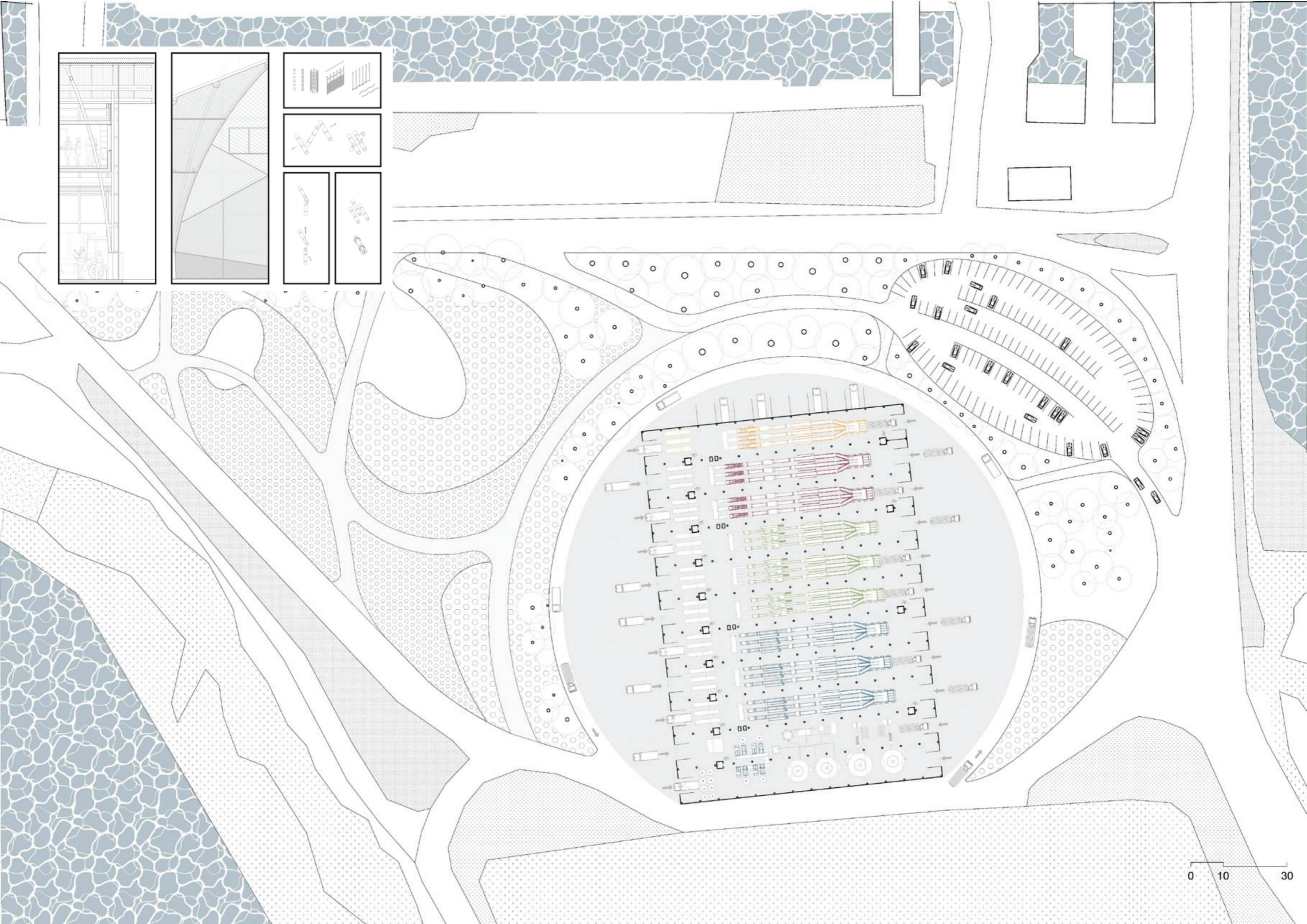
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### 09 Sorting center

Helena Kocik, Bouchra Larbi Bouamrane, Gabriel Santos

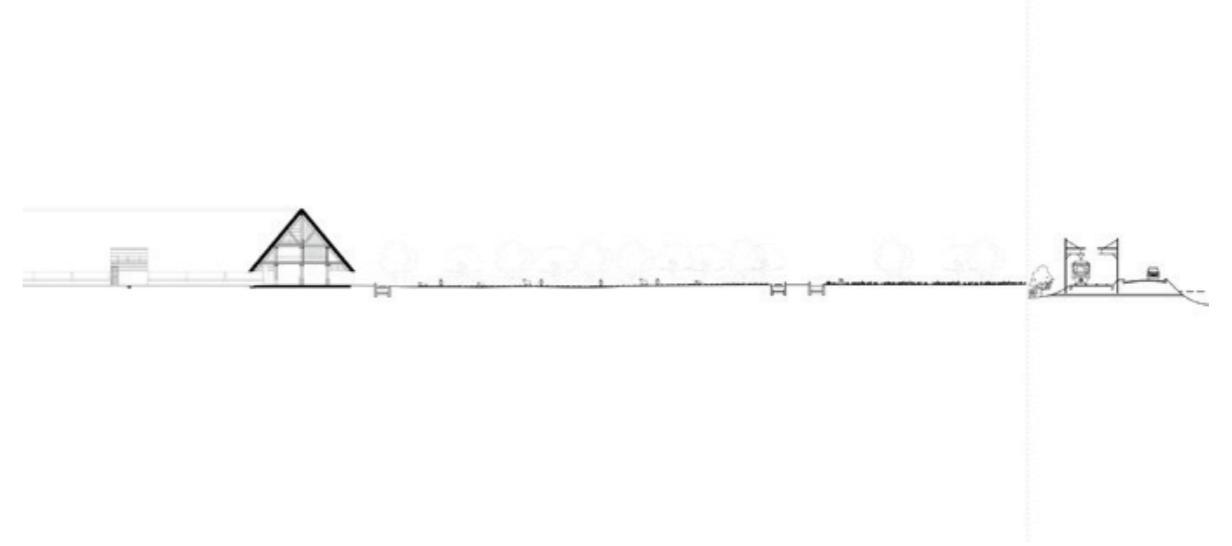


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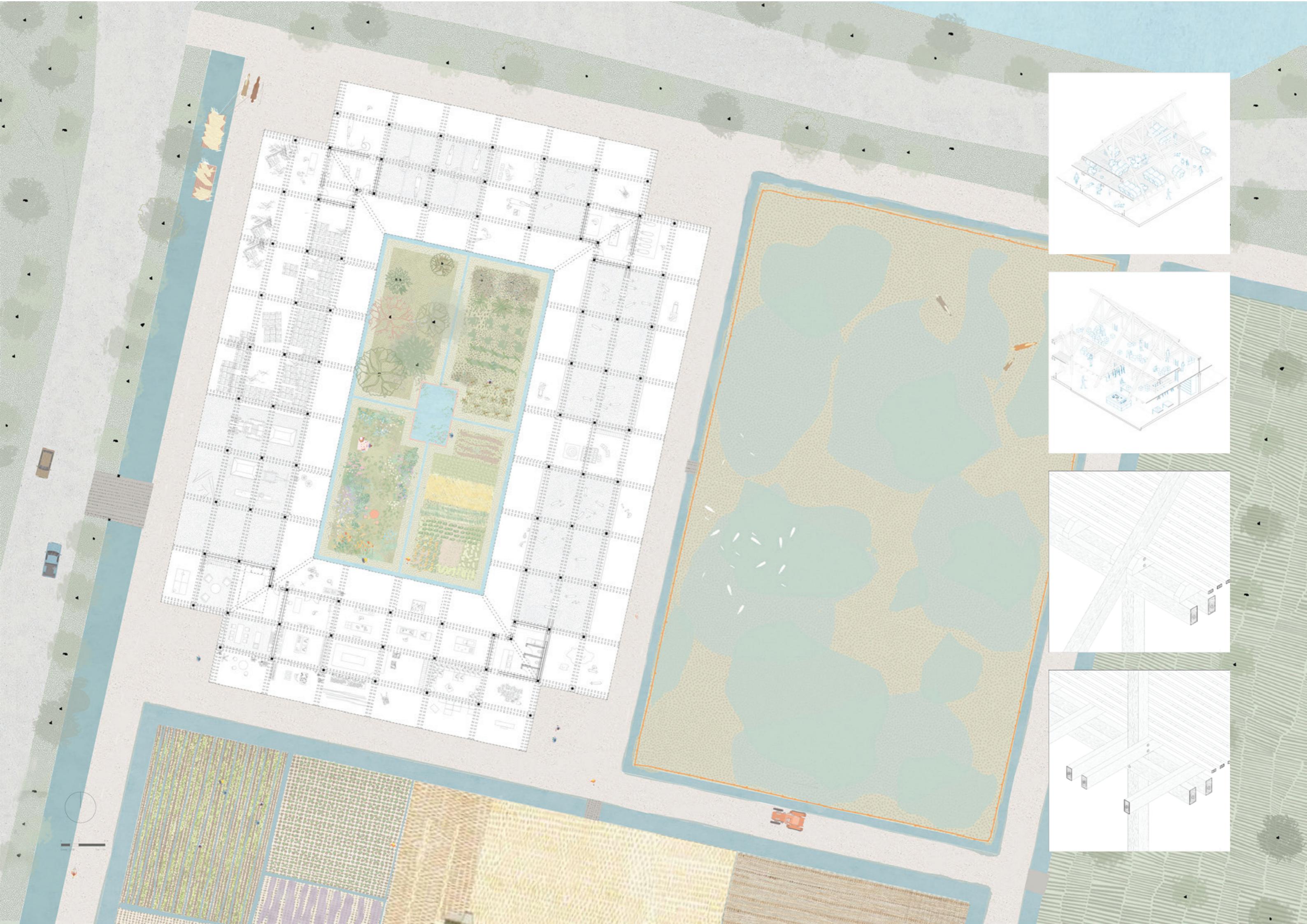




## 10 Salt water farming

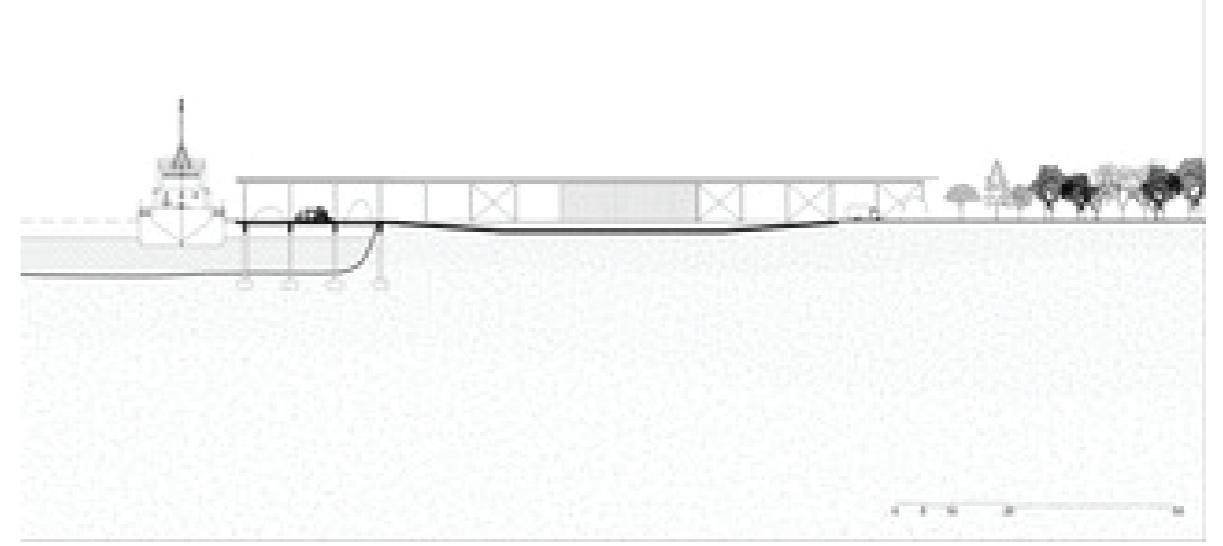
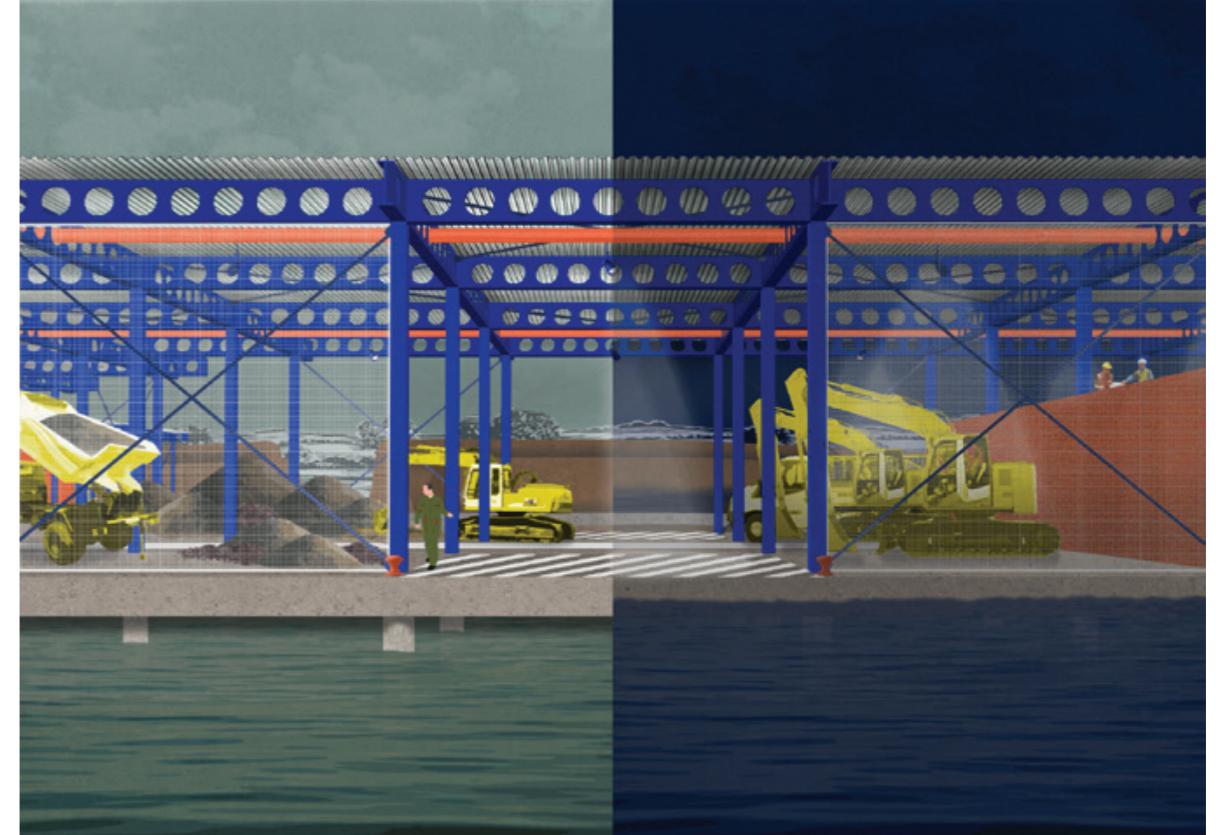
Margot Sustar, Soline Lengaigne, Thibaut Vilcoq







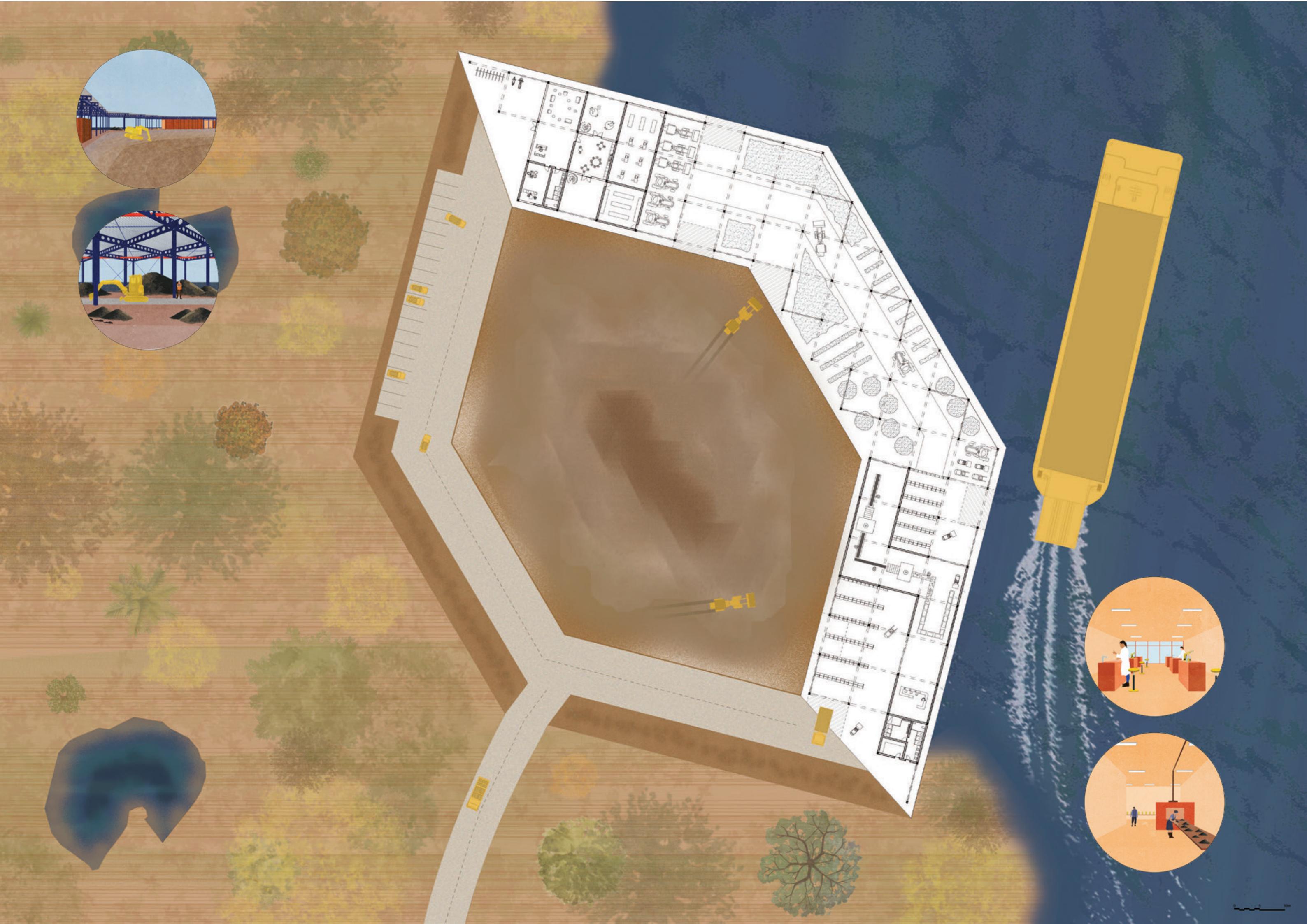
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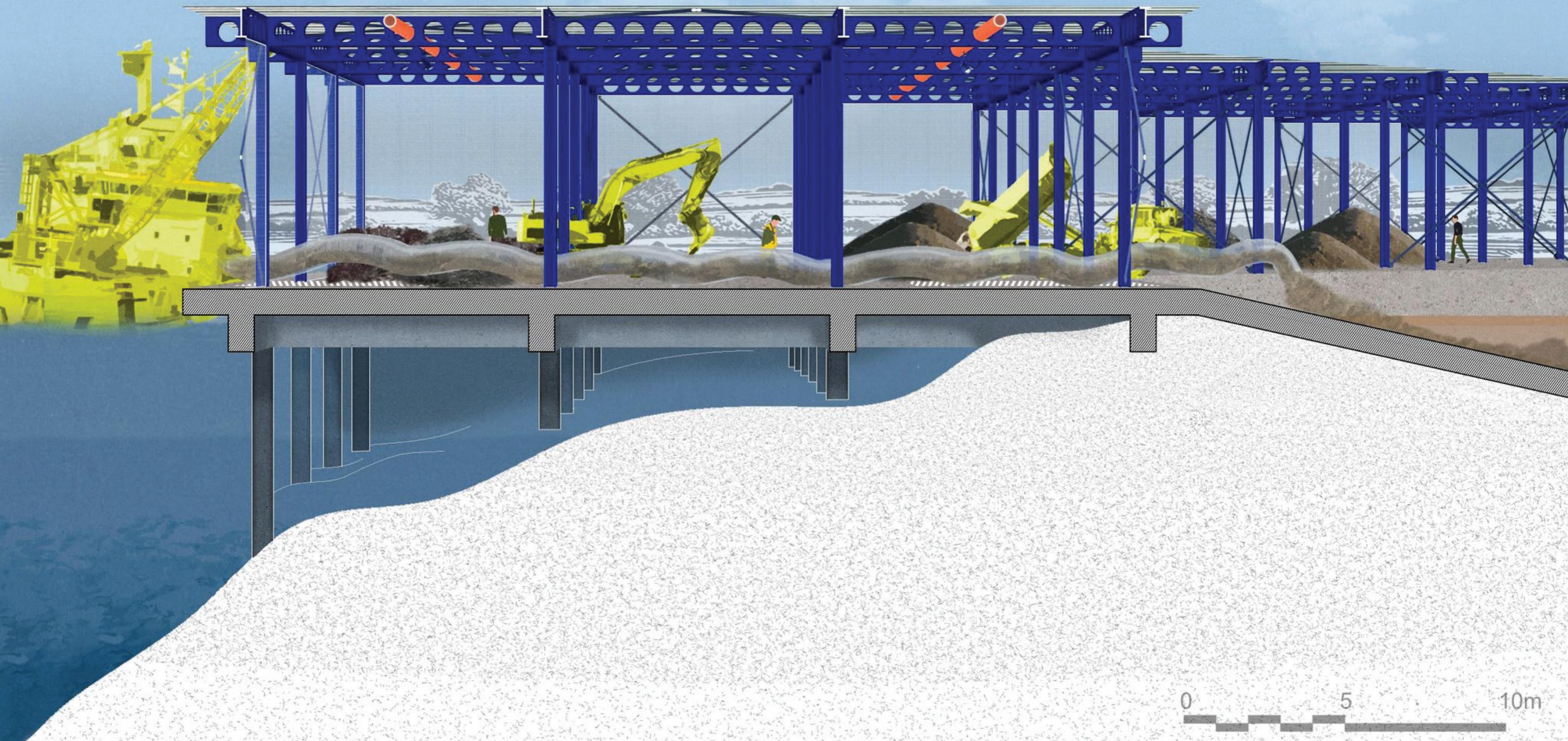


## 11 Canal & water maintenance

Anne Branchereau, Sirine Damir, Axel Eugene



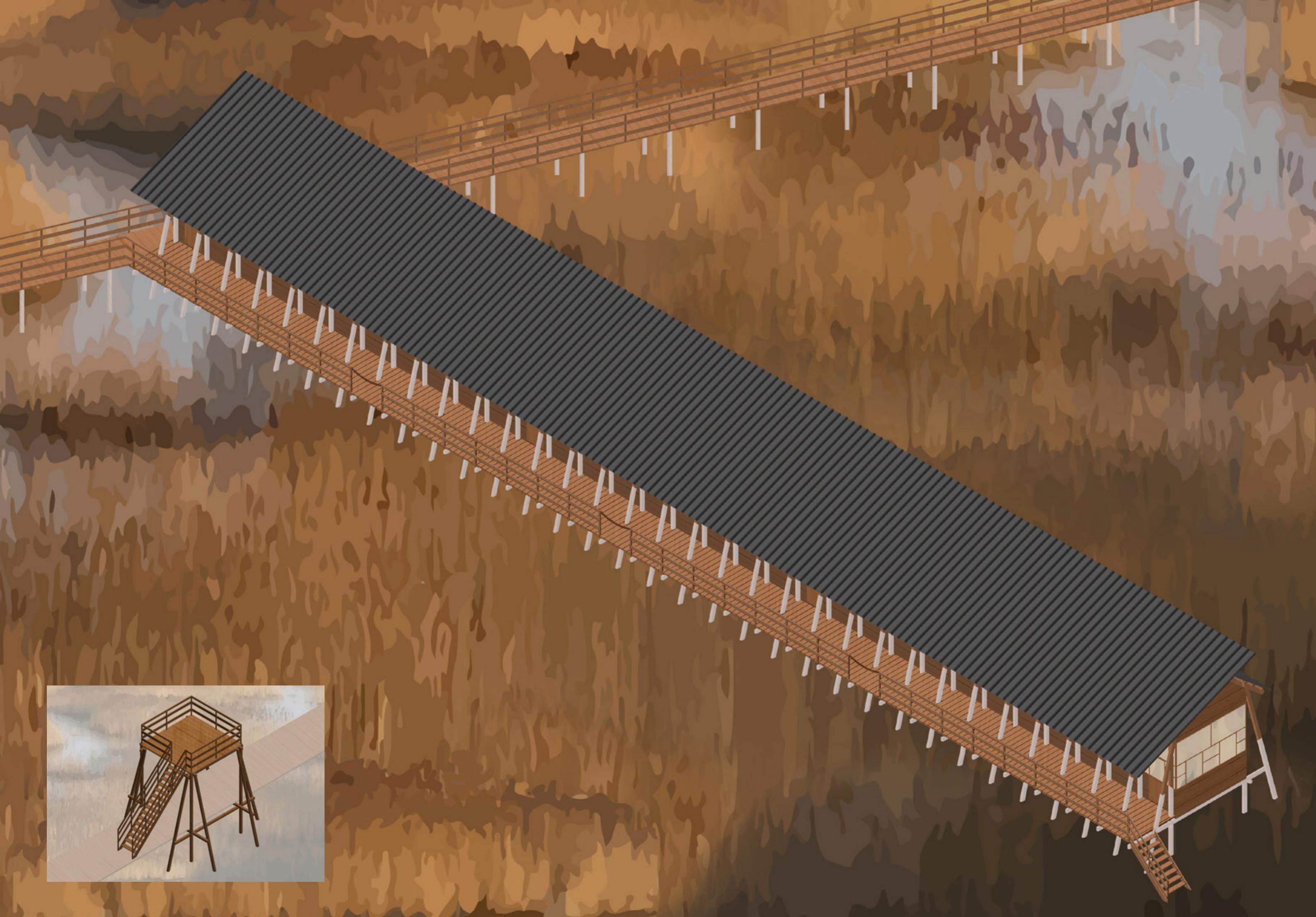


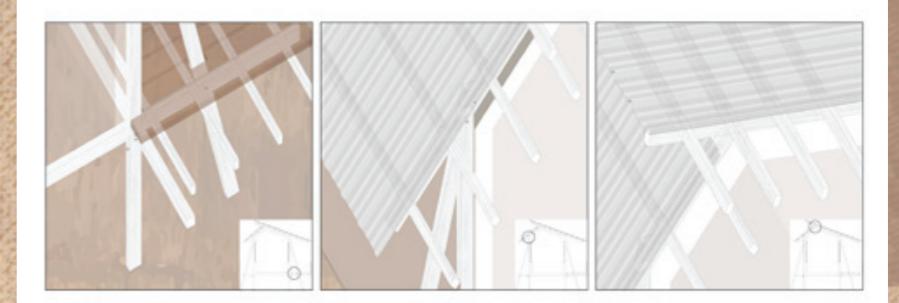
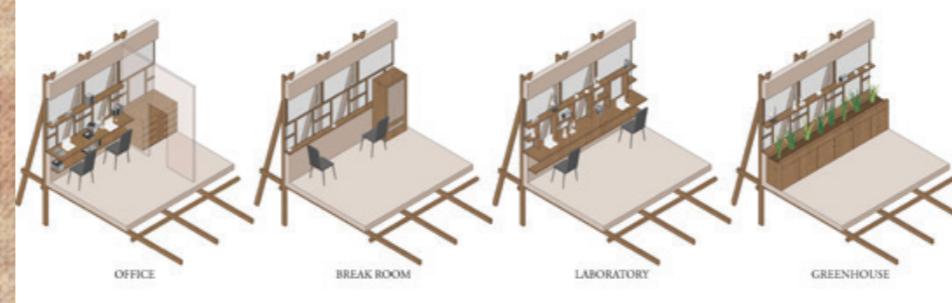
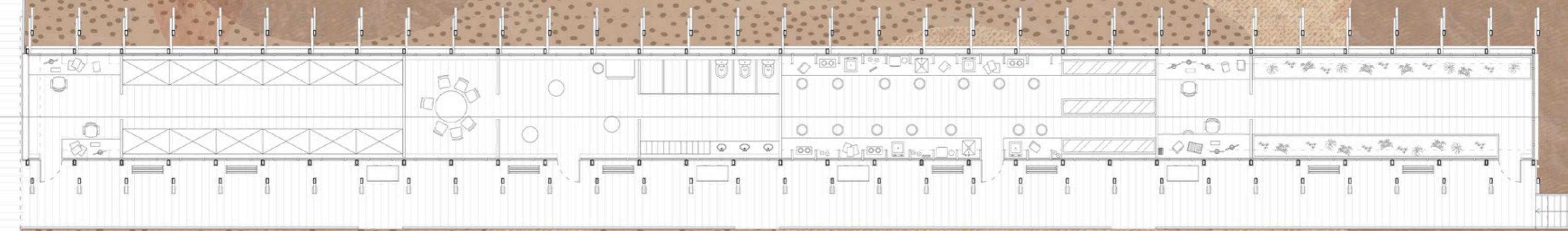




## 12 Oceanographic research center

Florian Brehin, Flore Daurel, Clémence Hugues

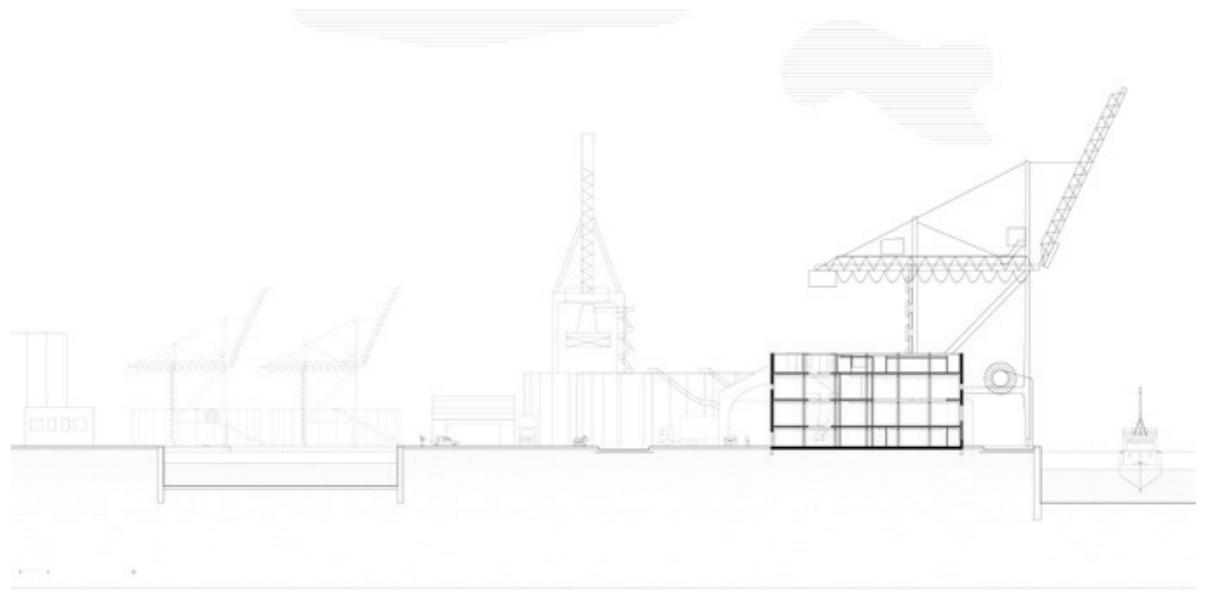
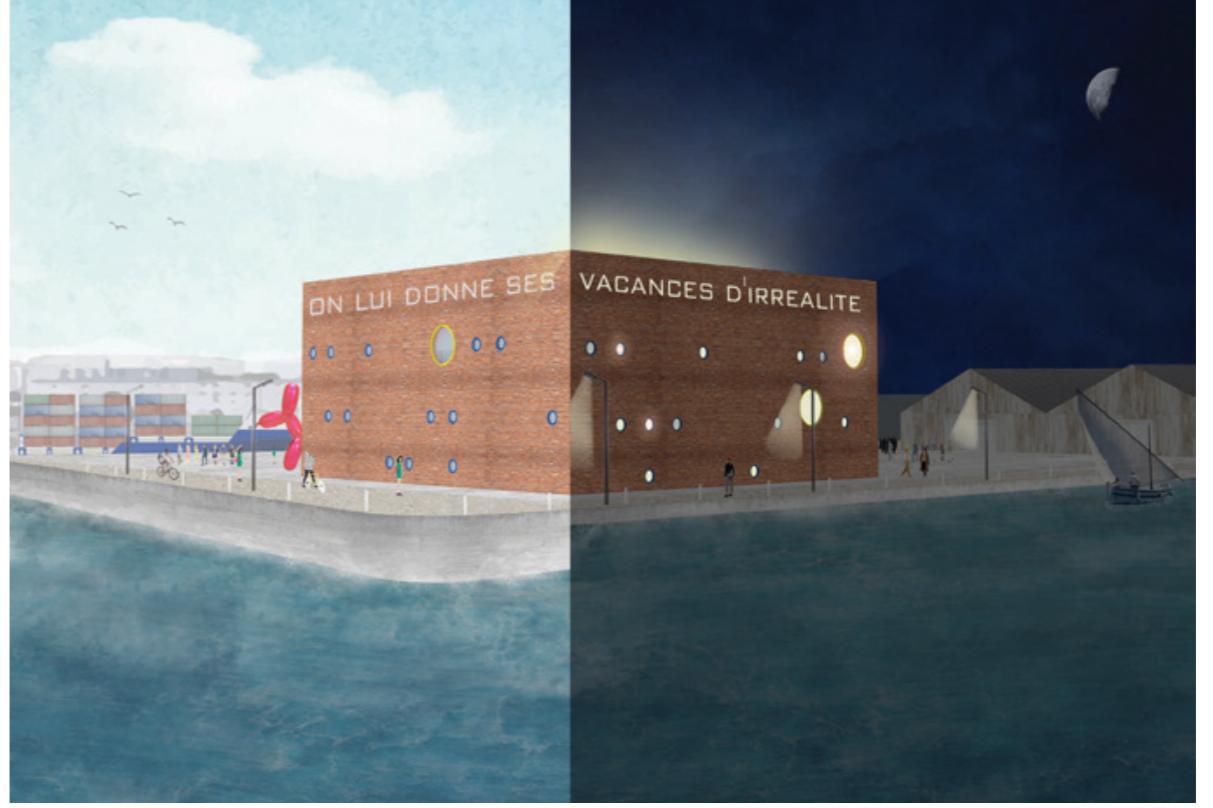




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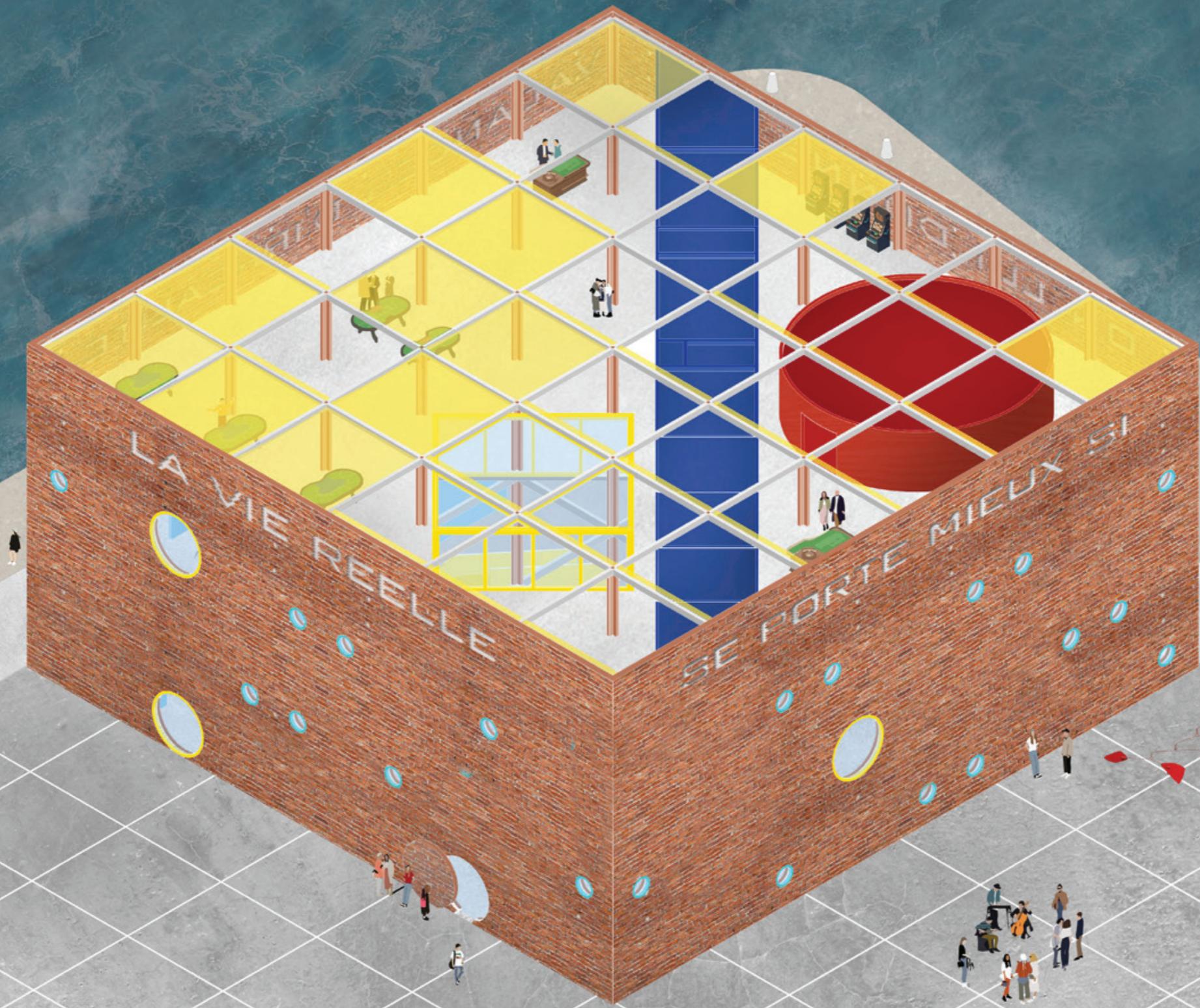
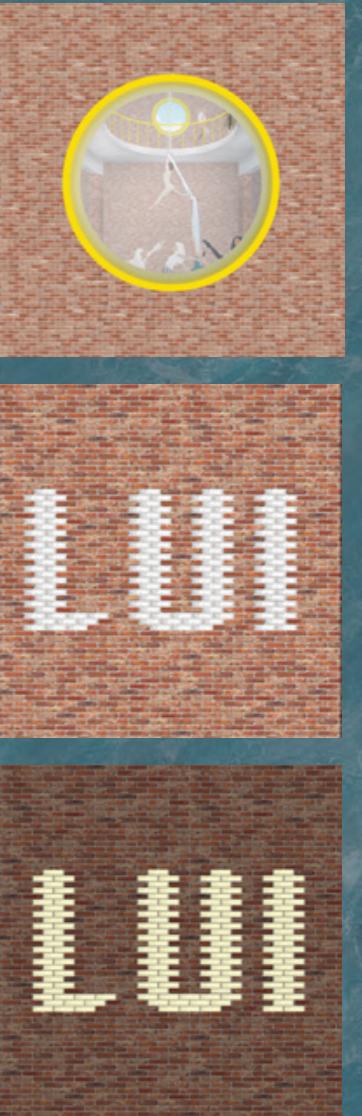


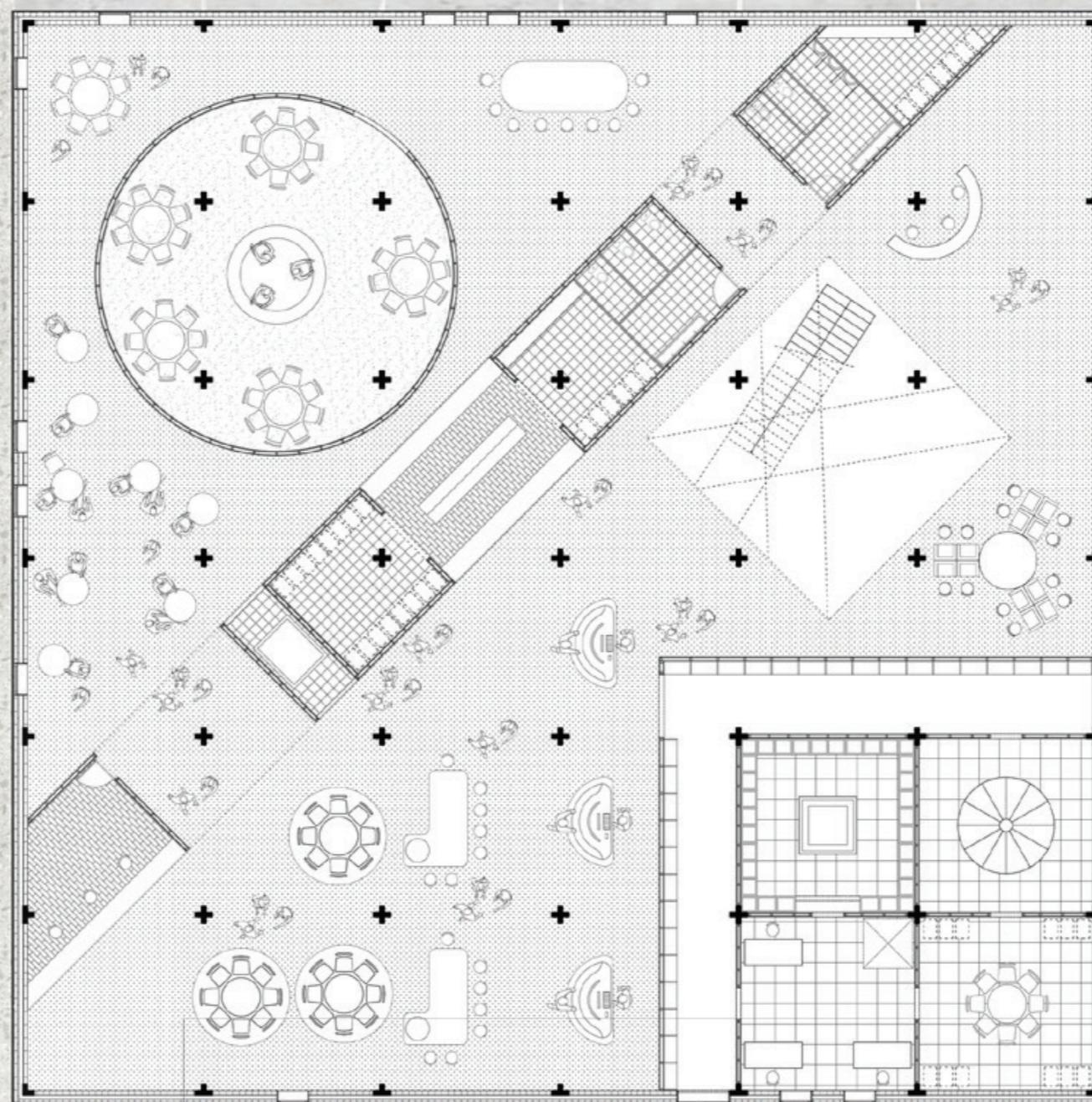
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### 13 Casino

Maxence Lelievre, Sarah Rodriguez, Lucas Vaudoux

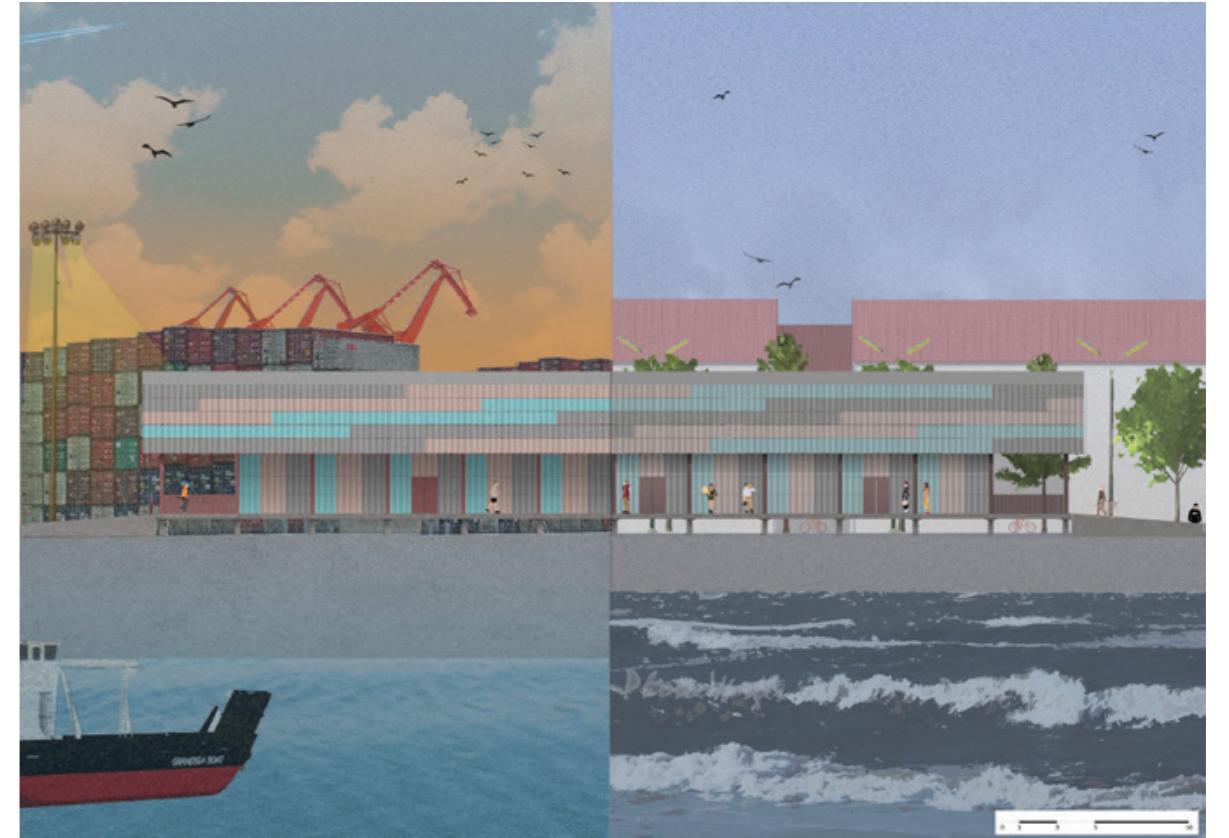




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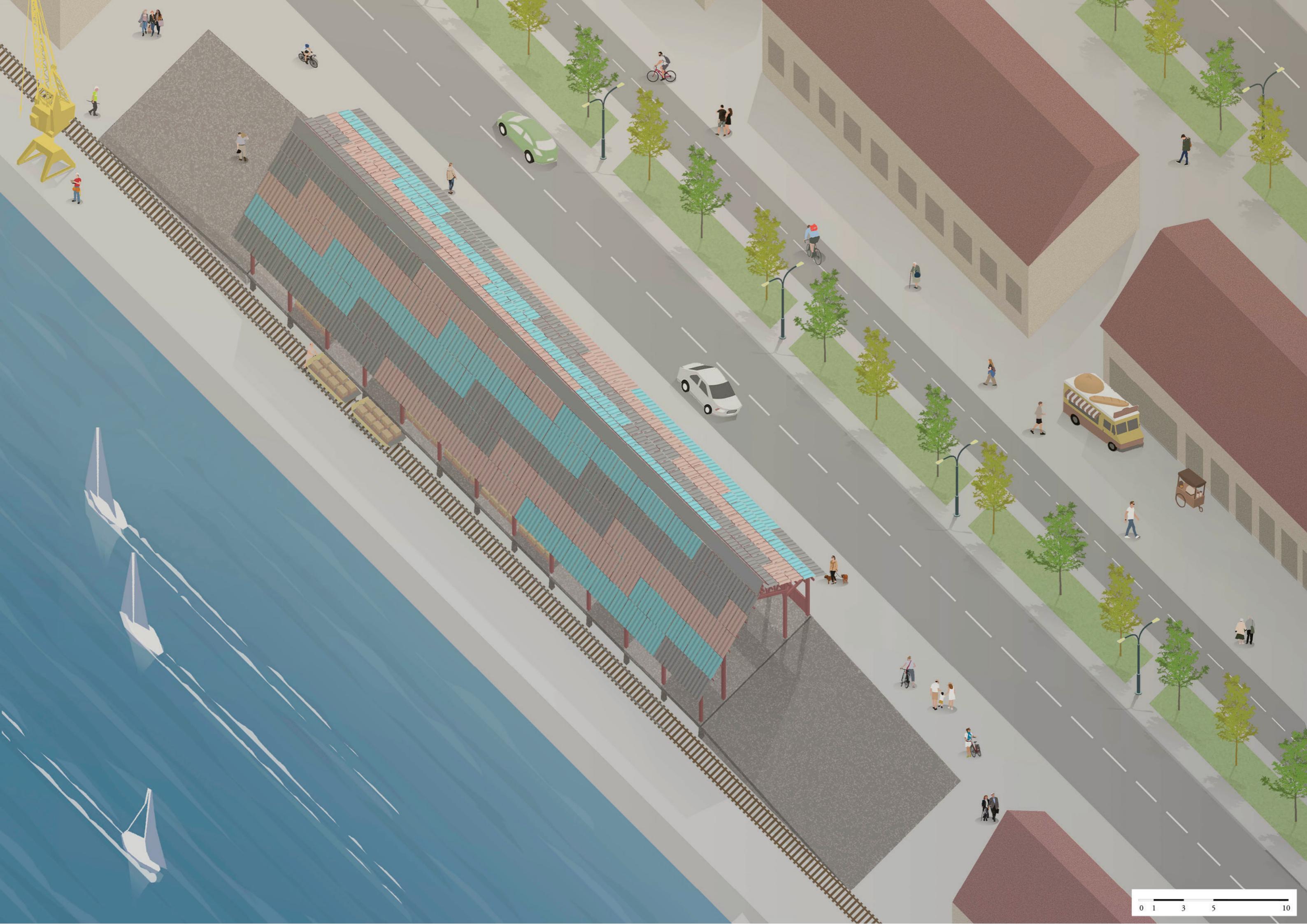




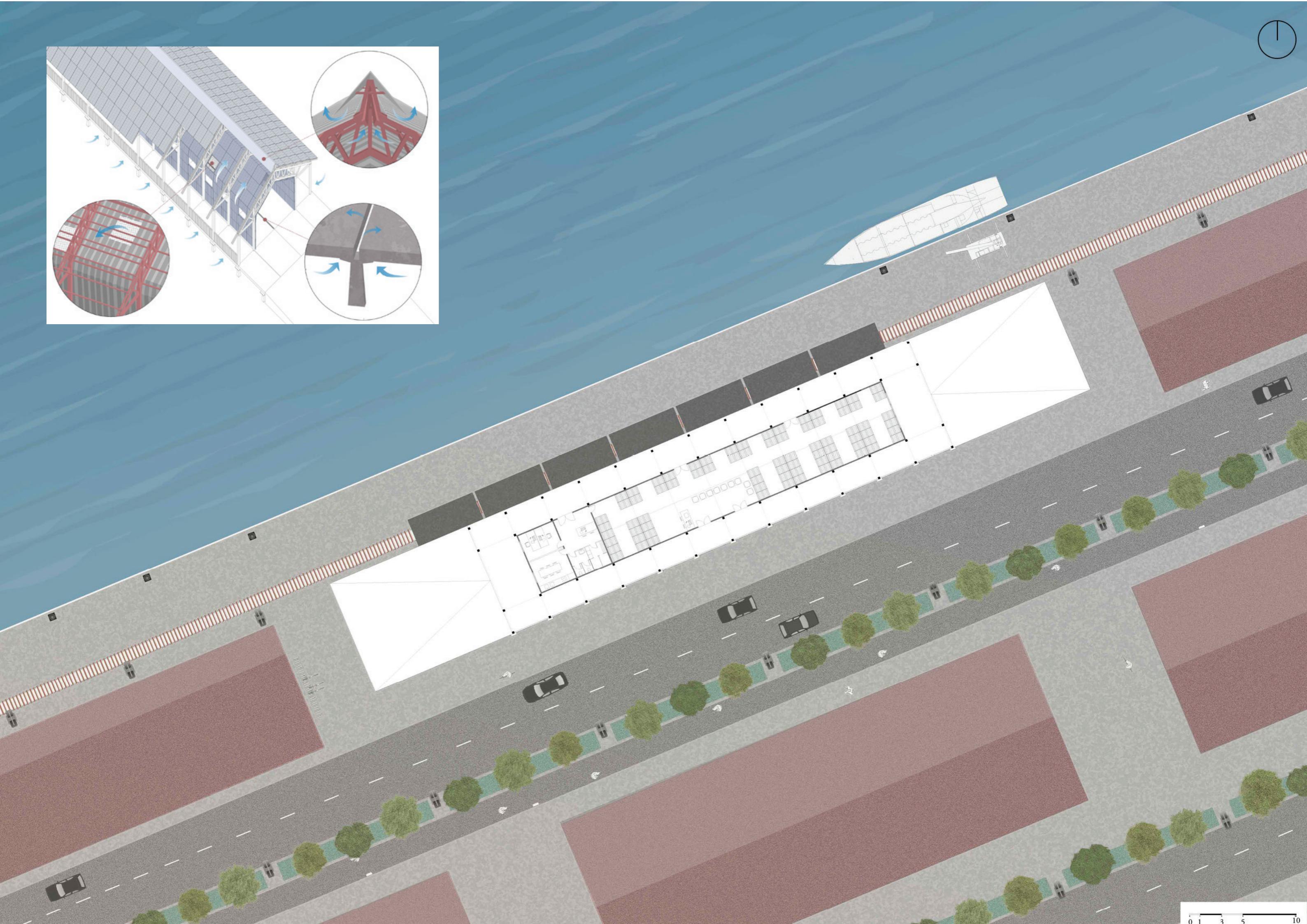


#### 14 Le Havre's Attic

Kelly Chhour, Loic Castelotto, Thibaut Ruix



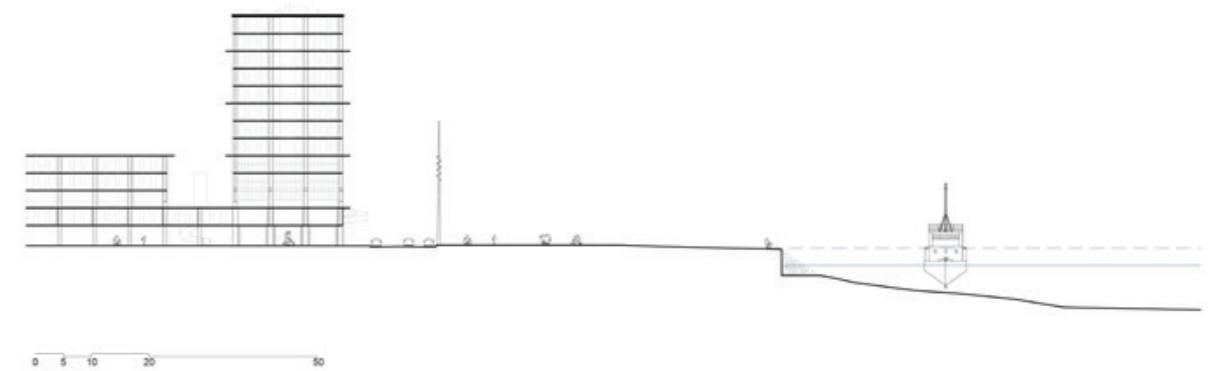
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0 1 3 5 10



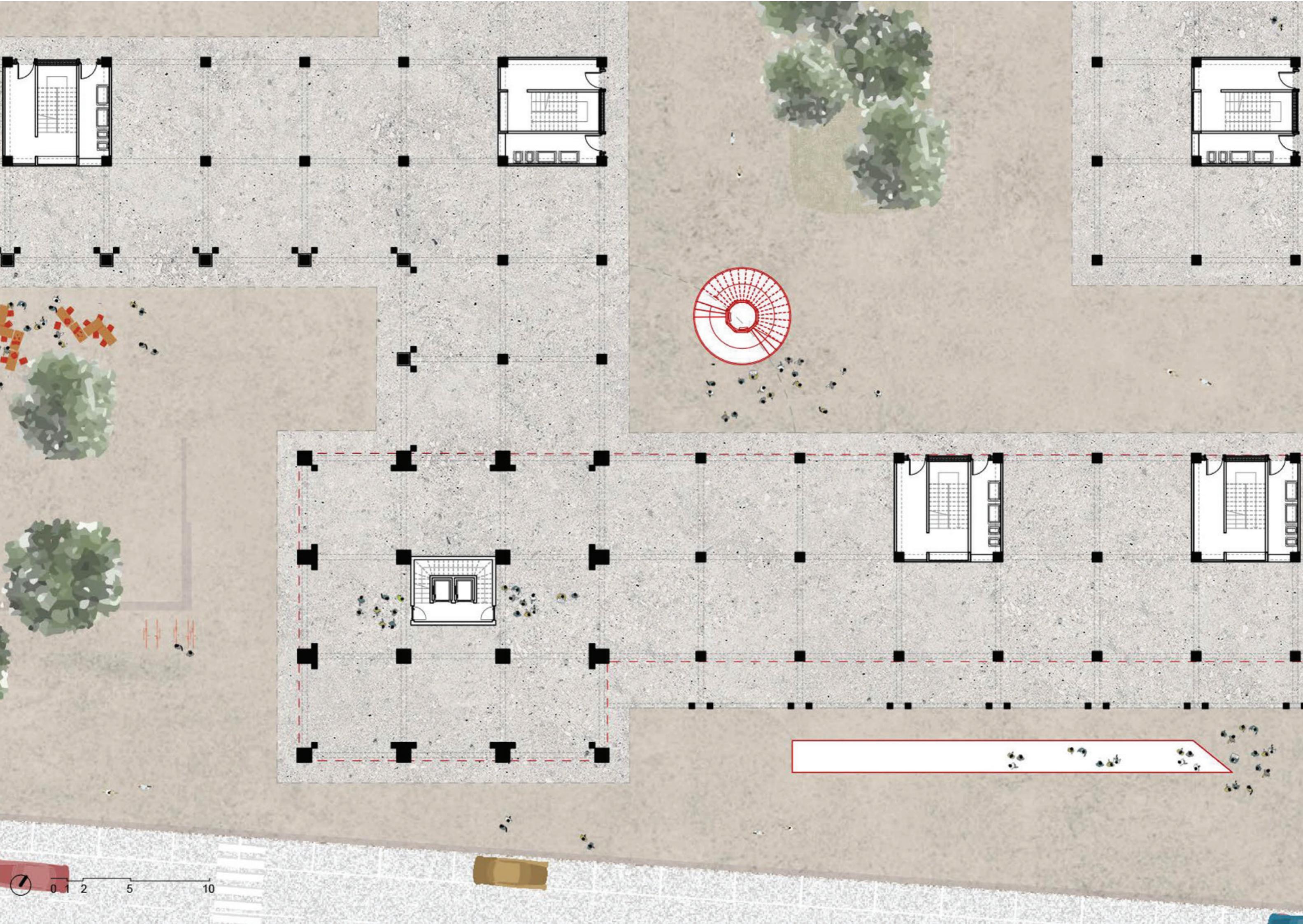
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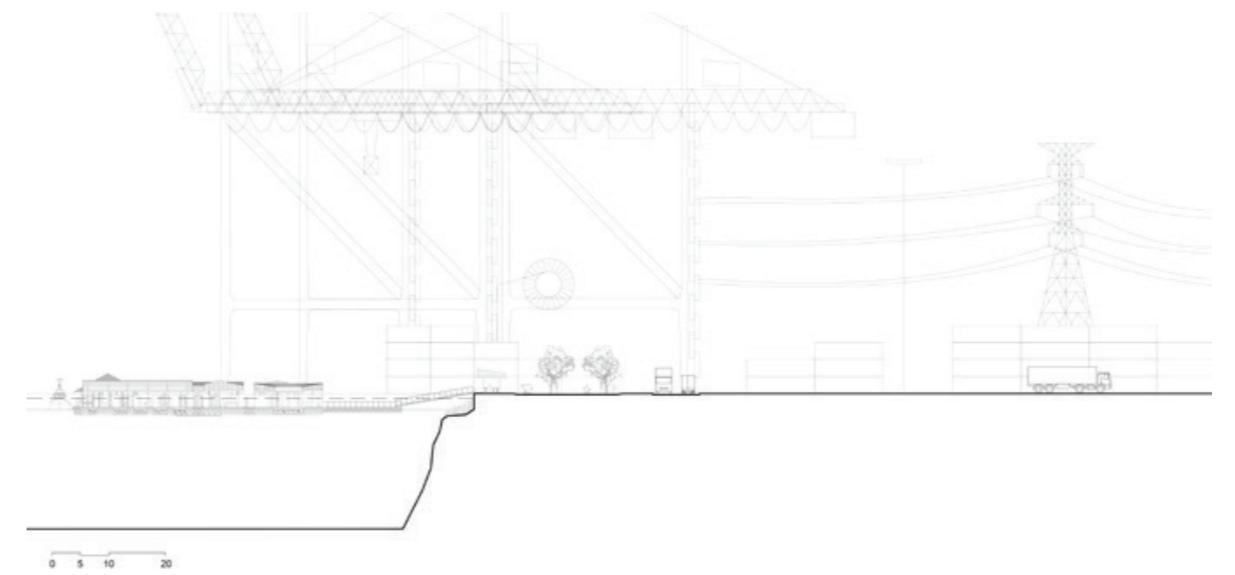
### 15 Smoke on the water

Antoine Jellimann, Mathilde Maroudeau, Augustin Michel





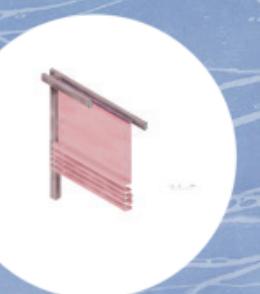
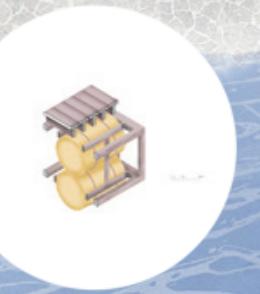
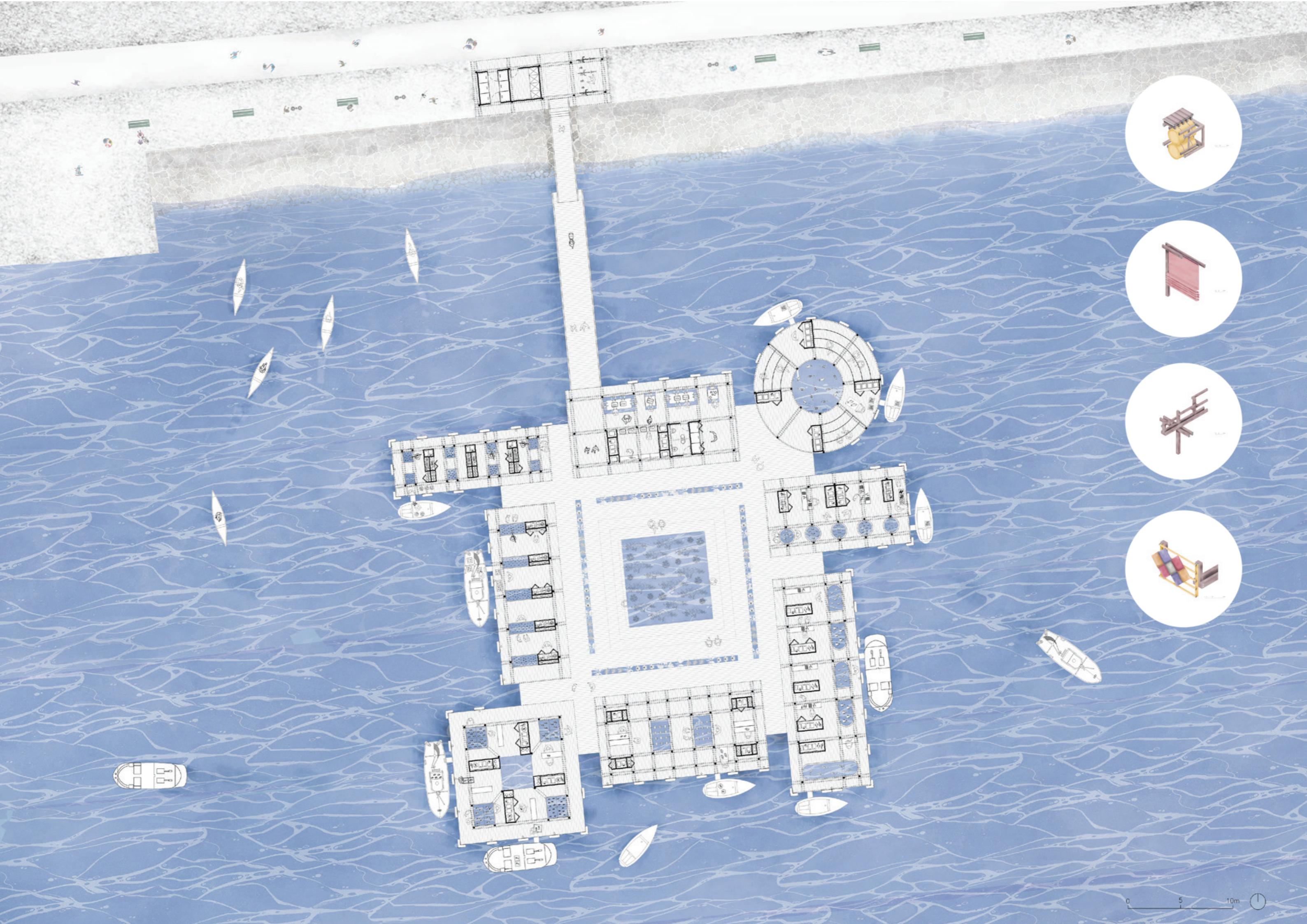




### 16 Floating Market

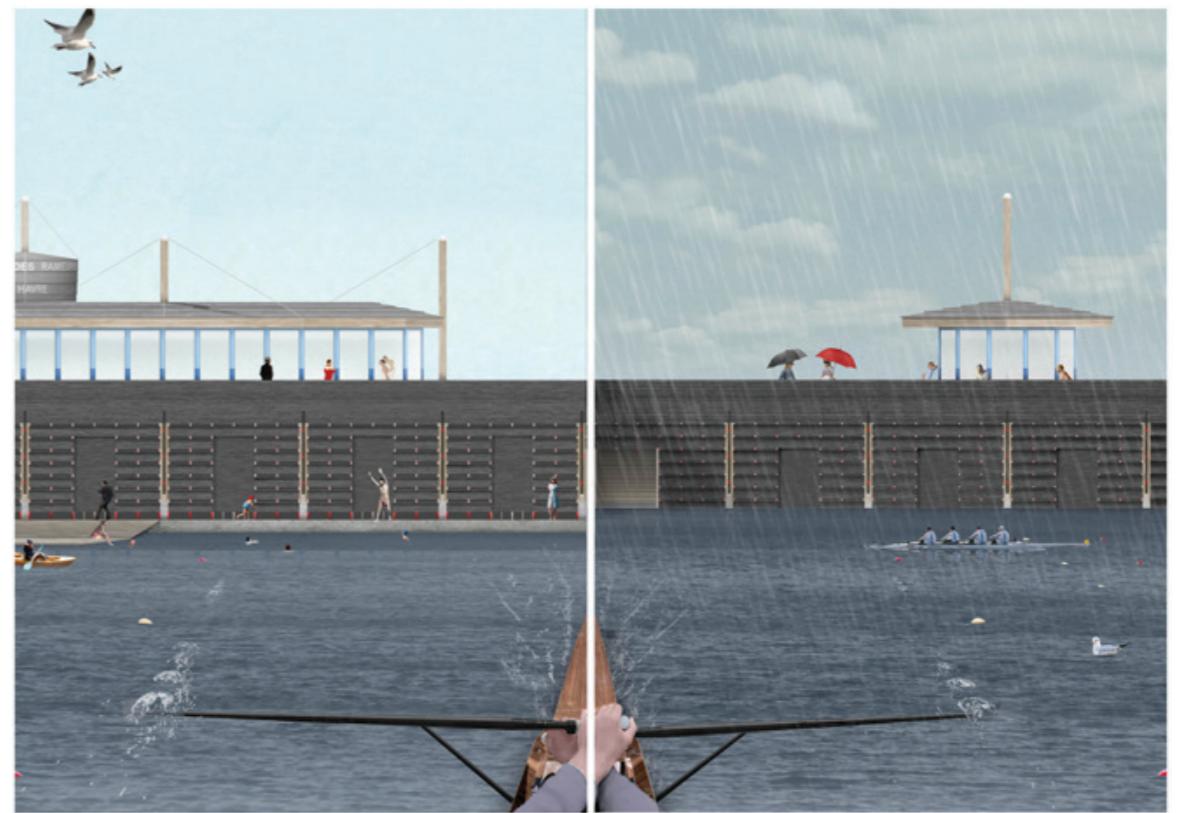
Sophie Curty, Claire Vachetti, Inssaf Zinelabidine





0 5 10m

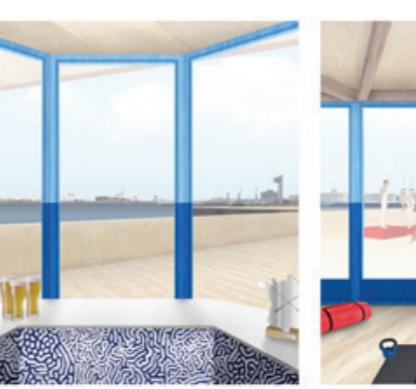
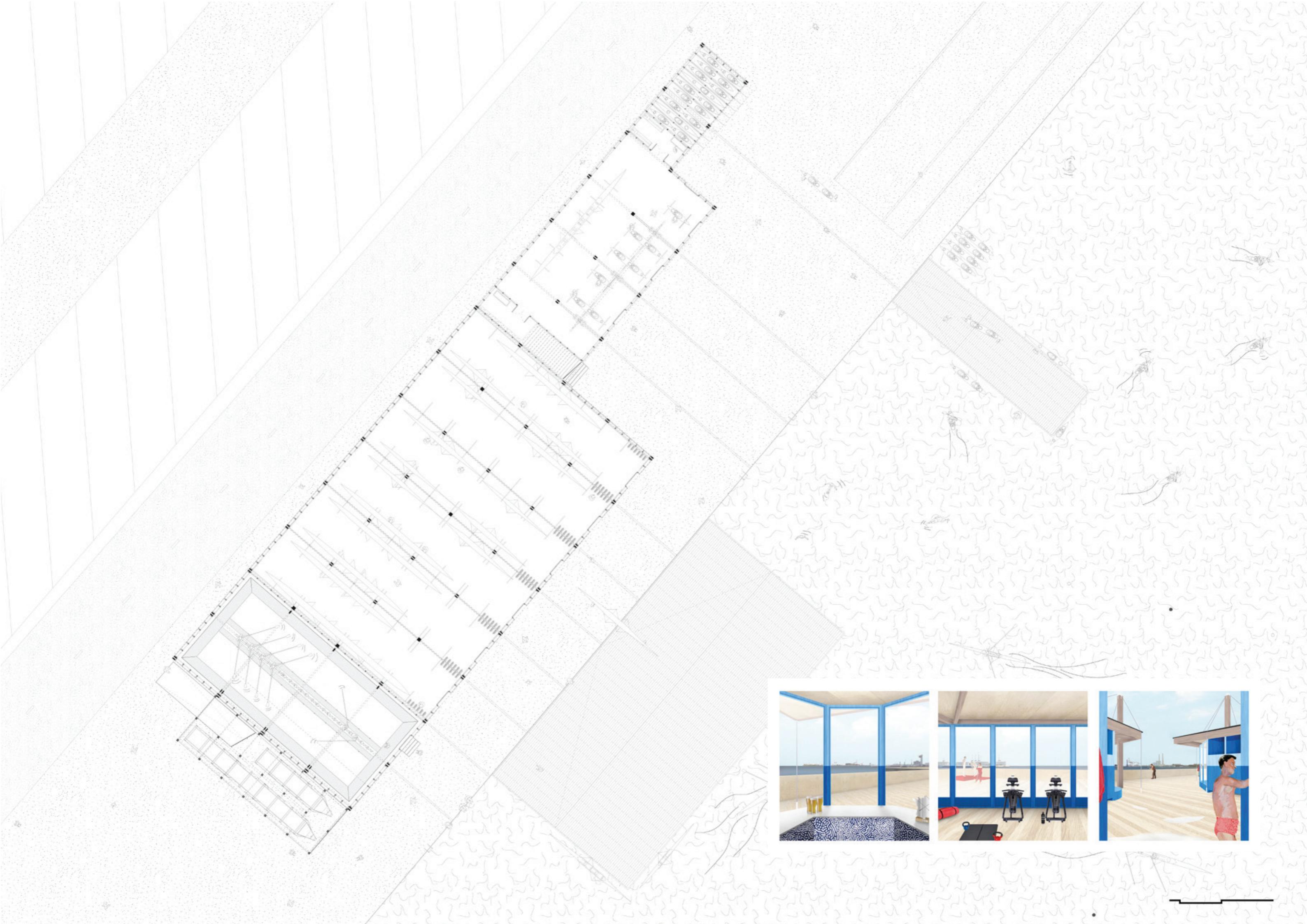


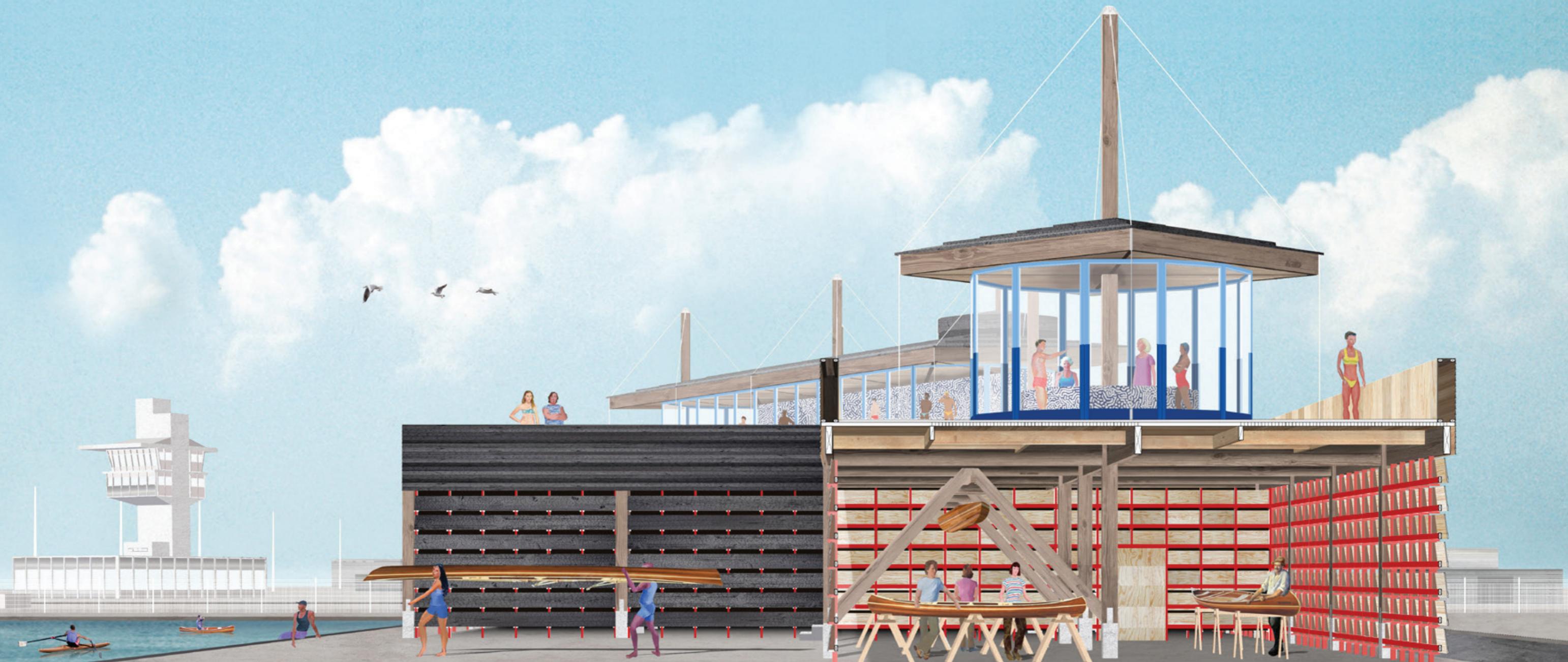


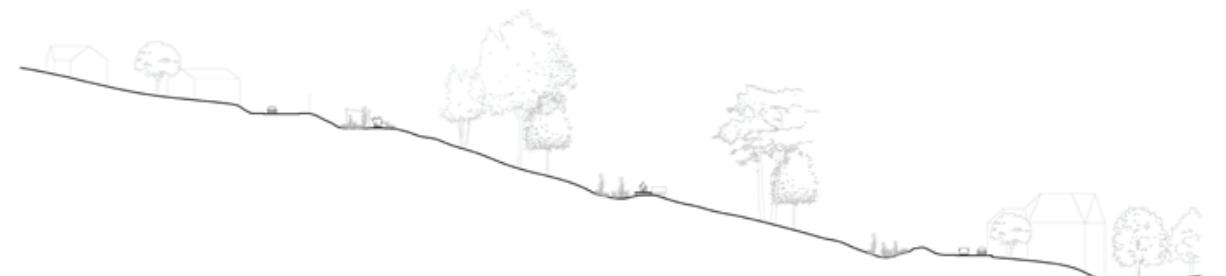
### 17 Le Havre Rowing Club

Angela Da Silva, Ange Lemée, Théo Miquel



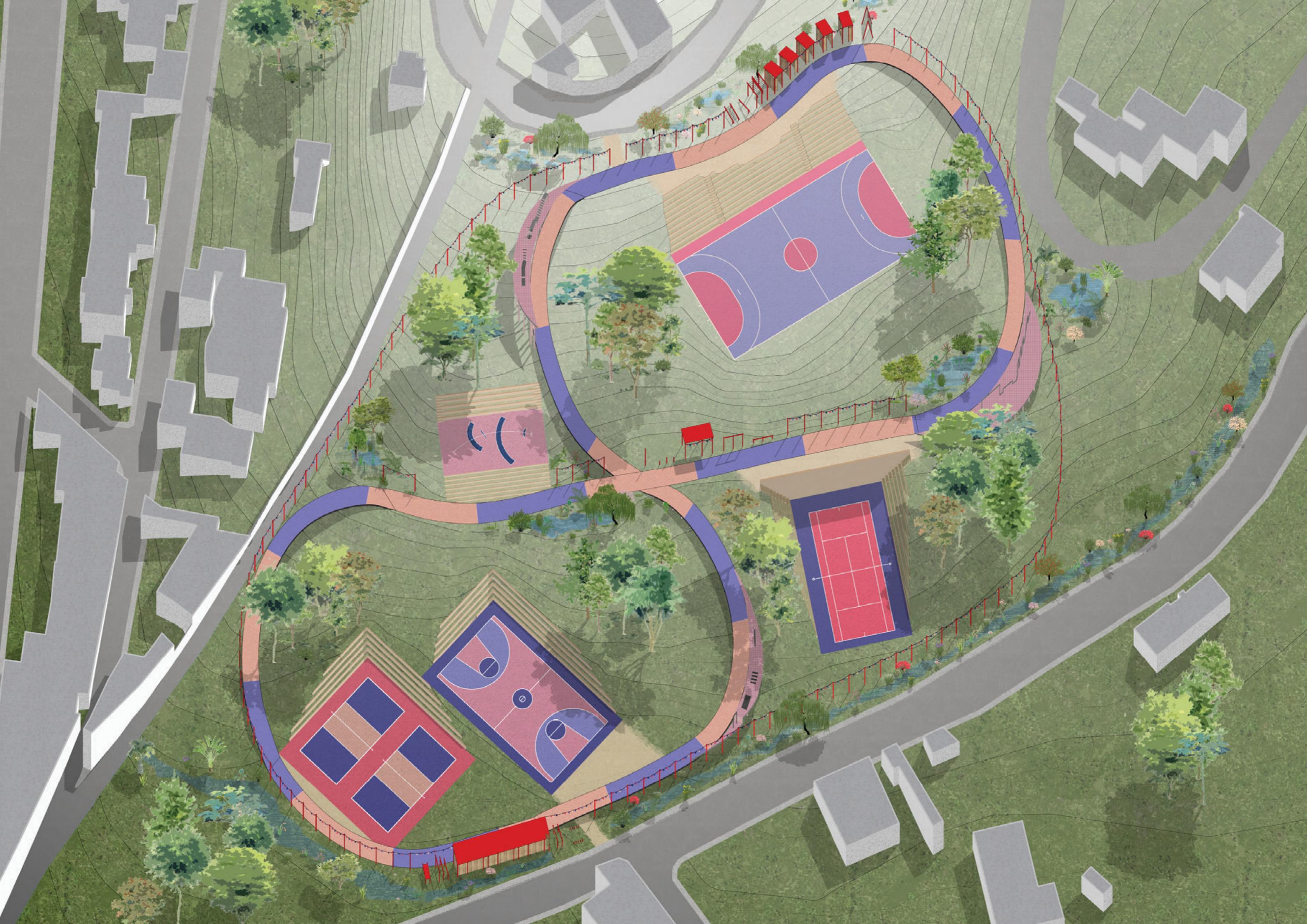






## 18 The Octopus garden - An outdoor athletic club

Guillaume Grégoire, Arianna Migliarino, Lucas Nény

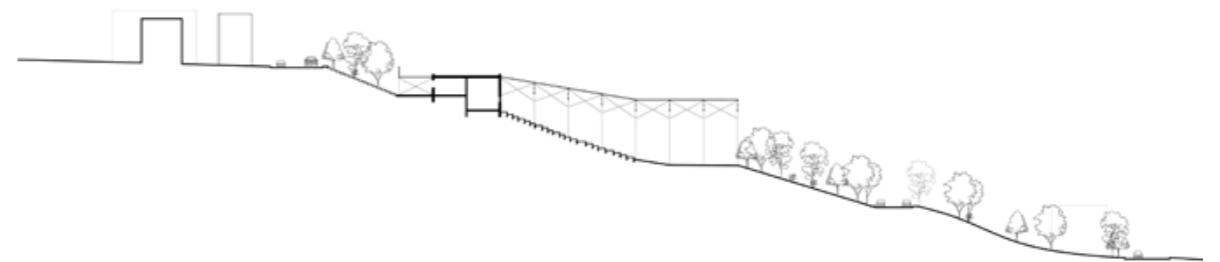




0 2 5 10 20

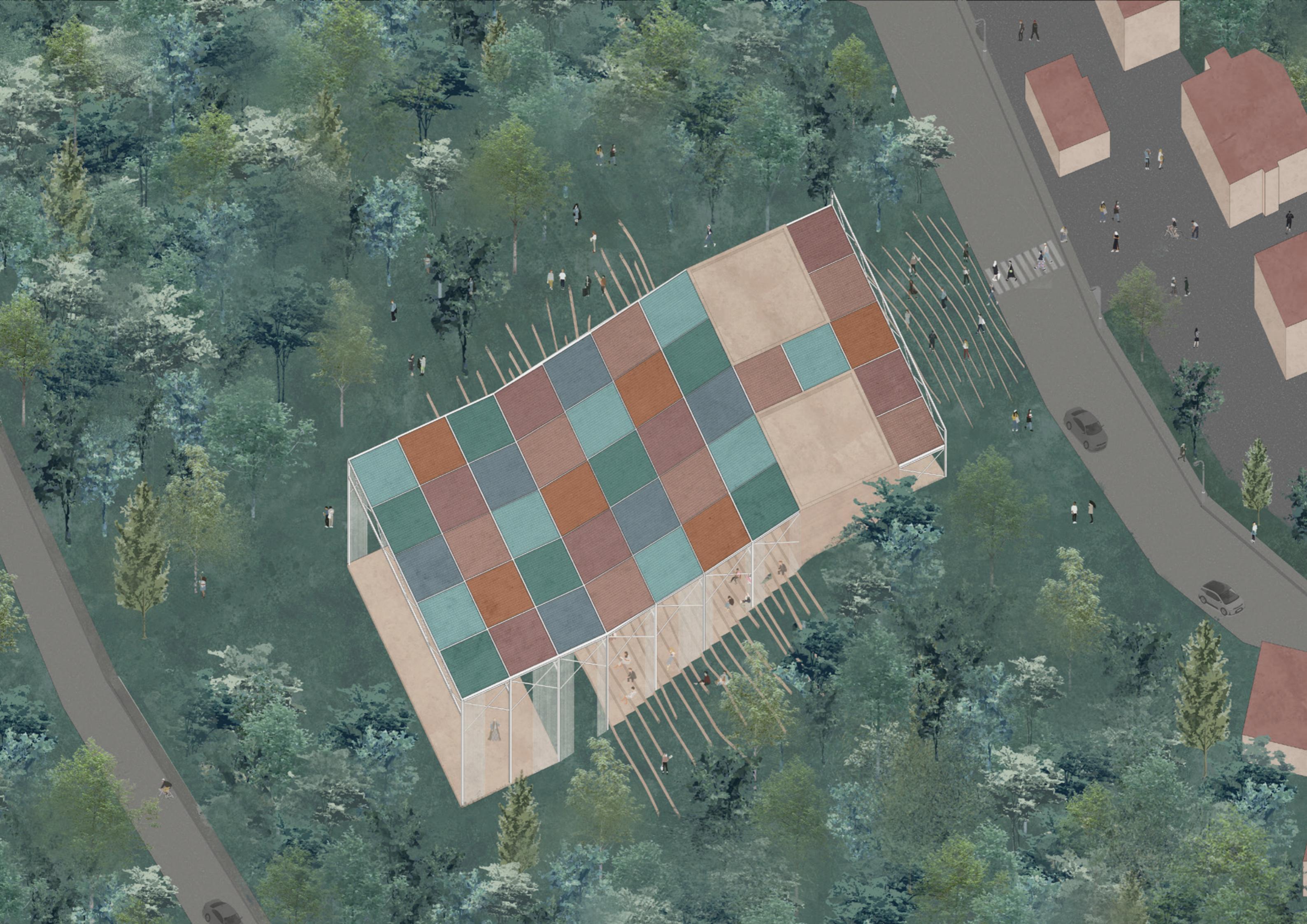


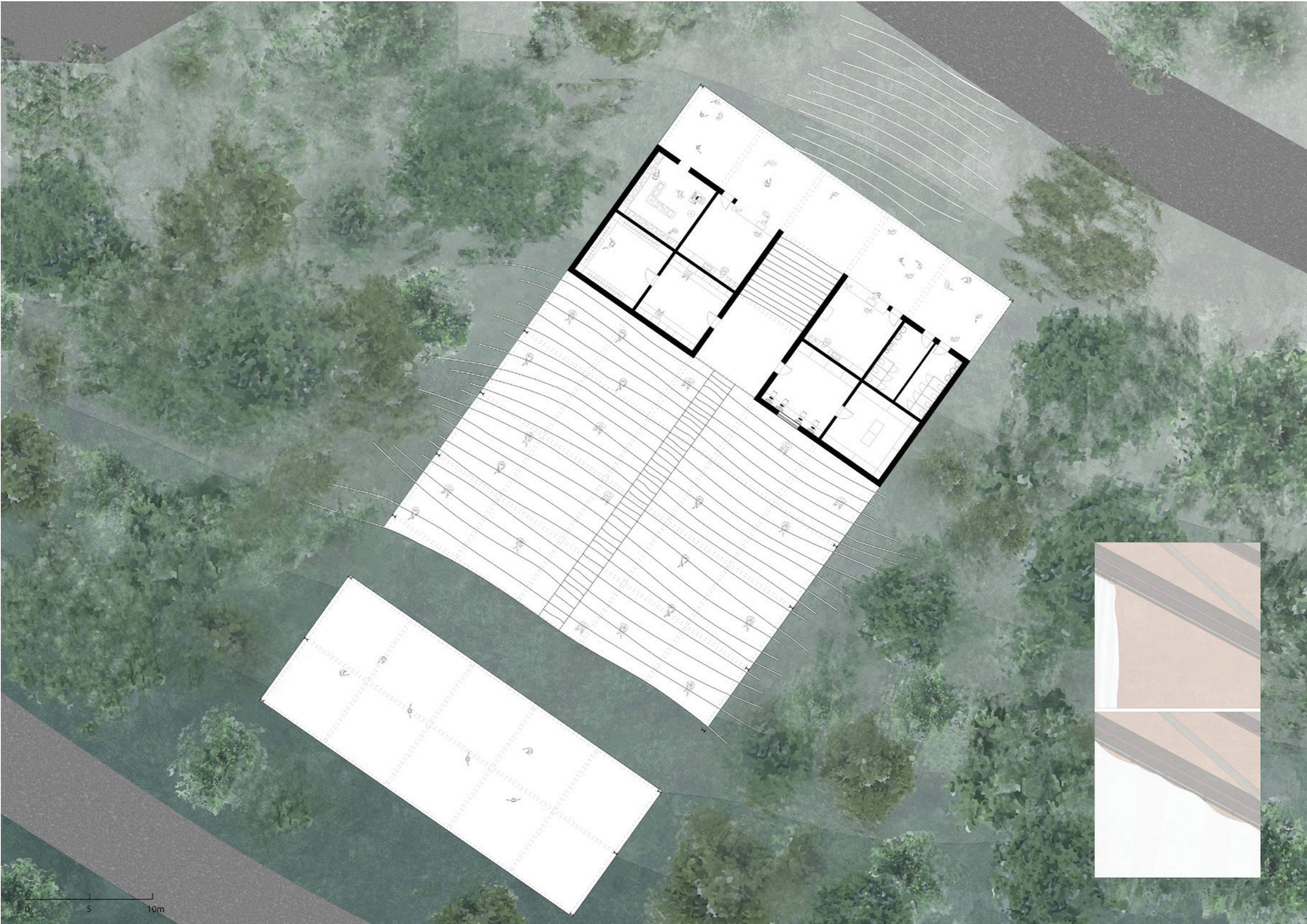
0 0.5 1 2



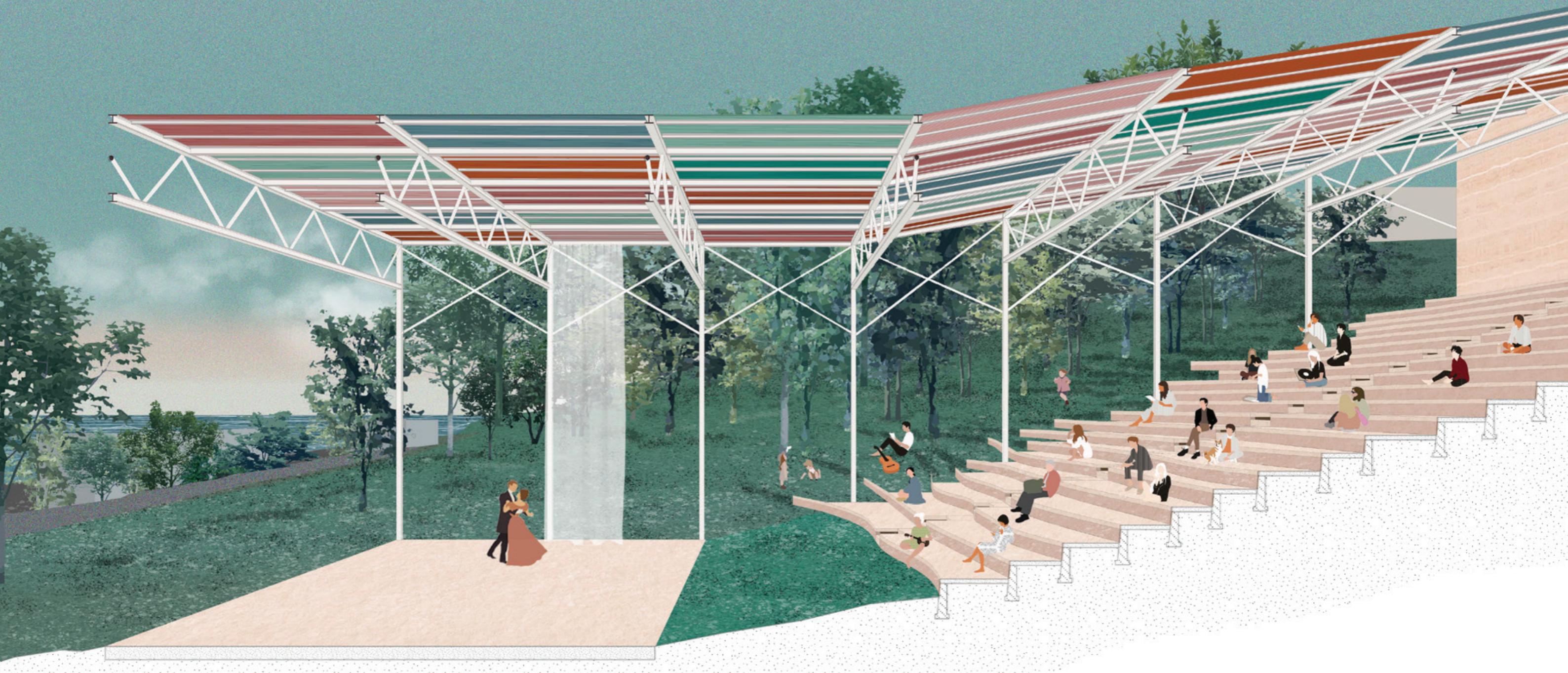
## 19 Performing Arts Center

Célia Codja, Solène Frémont, Ysamine Majber





0 5 10m





Bedraoui Drissi Mariam, Berthier Myriam, Branchereau Anne, Cheritat Simon, Chessé Louis, Corty Sophie, da Costa Alexis, Damir Sirine, Daurel Flore, Gregoire Guillaume, Hoguait Valere, Lemée Ange, Lengaigne Soline, Mahoudeau Mathilde, Majber Yasmine, Migliarino Arianna, Miquel Théo, Morin Eva, Paillon Clement, Payen Victor, Perrillat-Charlaz Camille, Rodriguez Sarah, Roselet Melhing, Ruiz Thibaut, Santos Gabriel, Toulemonde Quentin, Vilcoq Thibaut, Zinelabidine Inssaf, Barkani Khadija, Brehin Florian, Castellotto Loïc, Chhour Kelly, Codjia Célia, Convert Agathe, d'Auria Enzo, da Silva Angela, Derouen Flore, Dragomir Nelu, Eugene Axel, Fachetti Claire, Flor de Oliveira Gabriel, Frémont Solène, Heidet Maxence, Hugues Clémence, Isidore Casey, Jellmann Antoine, Kocik Hélena, Larbi Bouamrane Bouchra, Lelièvre Maxence, Lortie Grégoire, Luo Shaojun, Michel Augustin, Monteiro Mariana, Nény Lucas, Neumann Laura, Przopiorski de Cay Marie, Sustar Margot, Tréport Cynthia, Vaudoux Lucas