

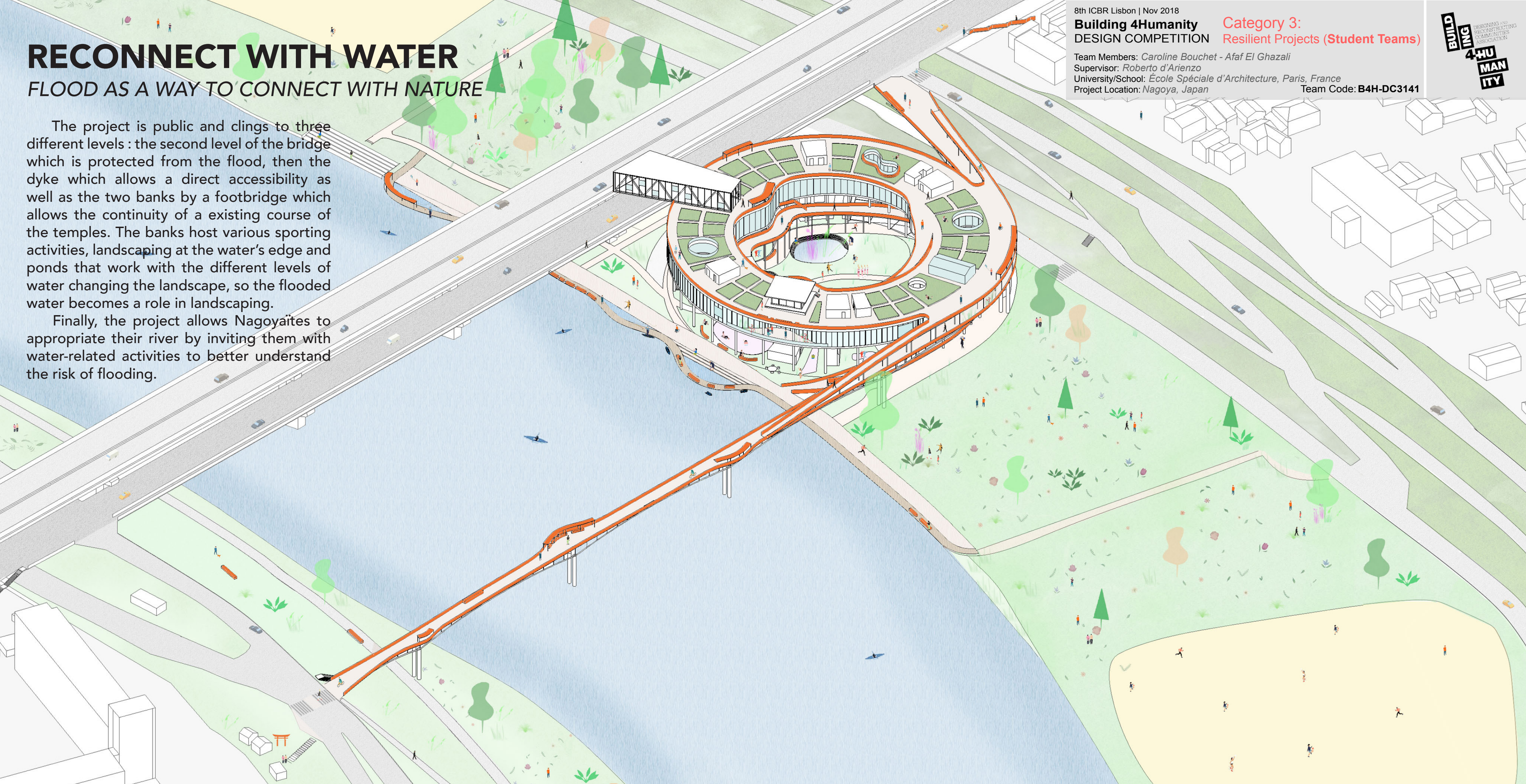
RECONNECT WITH WATER

FLOOD AS A WAY TO CONNECT WITH NATURE

The project is public and clings to three different levels : the second level of the bridge which is protected from the flood, then the dyke which allows a direct accessibility as well as the two banks by a footbridge which allows the continuity of a existing course of the temples. The banks host various sporting activities, landscaping at the water's edge and ponds that work with the different levels of water changing the landscape, so the flooded water becomes a role in landscaping.

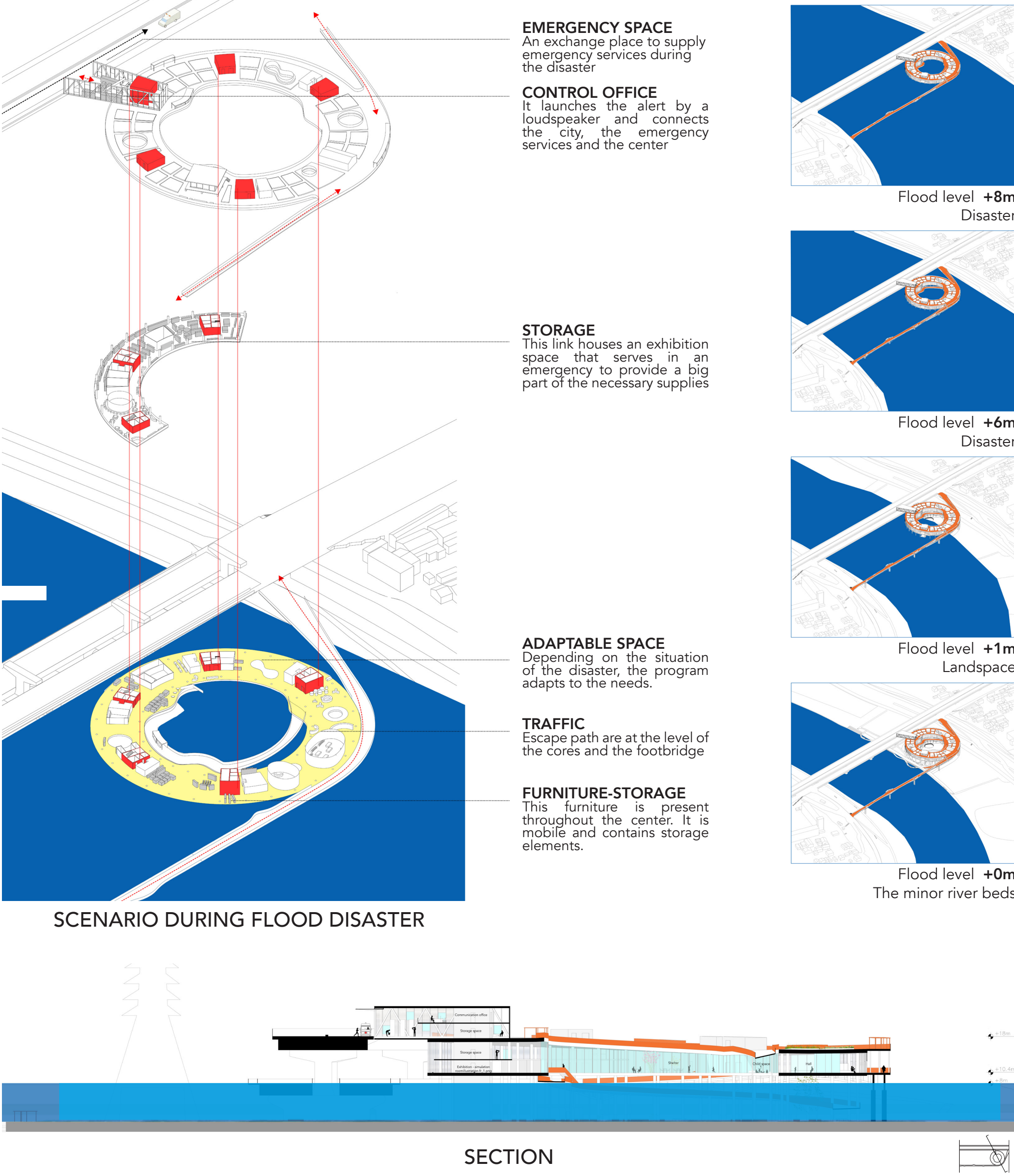
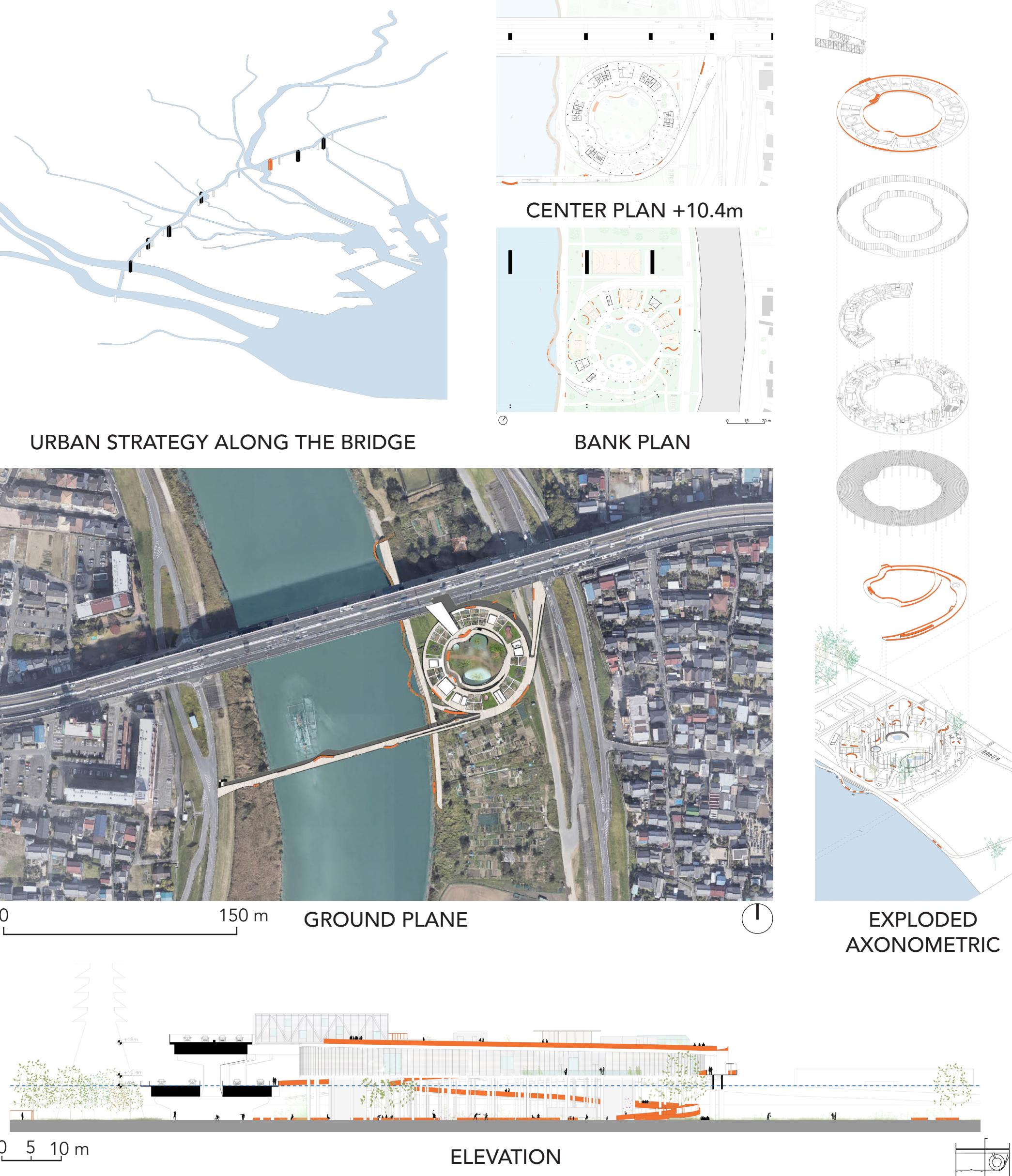
Finally, the project allows Nagoyaïtes to appropriate their river by inviting them with water-related activities to better understand the risk of flooding.

8th ICBR Lisbon | Nov 2018
Building 4Humanity
DESIGN COMPETITION
Category 3:
Resilient Projects (Student Teams)
Team Members: Caroline Bouchet - Afaf El Ghazali
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University/School: École Spéciale d'Architecture, Paris, France
Project Location: Nagoya, Japan
Team Code: B4H-DC3141



SCENARIO WITHOUT FLOOD

SCENARIO DURING FLOOD DISASTER



RECONNECT WITH WATER

FLOOD AS A WAY TO CONNECT WITH NATURE

THE RELATIONSHIP OF THE NAGOYAİTES WITH THEIR RIVER

The City of Nagoya in Japan has known for decades floods that have changed the relationship between people with their water.

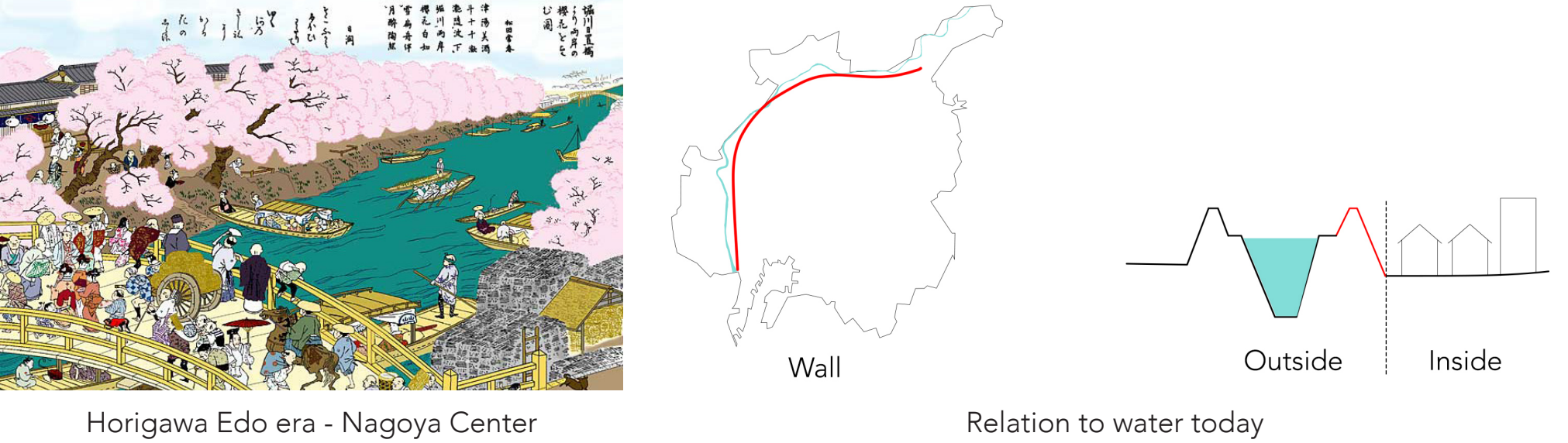
During the Edo era (1603-1868), the Nagoyaïtes lived in harmony with water by creating places of leisure, gathering and pleasure.

During the High Growth (1960), Nagoya suffered dreadful water-related disasters. Ise typhoon in 1959 causing 5,000 deaths and the Tokai flood in 2000 are major disasters that were a great lesson for the country, which helped to improve these systems of prevention and protection against the risk of flooding.

However, to protect itself from these constant threats, the city of Nagoya has turned its back on its rivers and nature by building concrete walls that encircle it. The inhabitants have thus moved away from their river and have abandoned their banks.

In recent years, the citizens of Nagoya have begun to reconnect with water through sports activities.

These banks have a great potential in the city but they are not put in value for the inhabitants, thus how to allow the Nagoyaïtes to reconnect with the river?



THE SITE

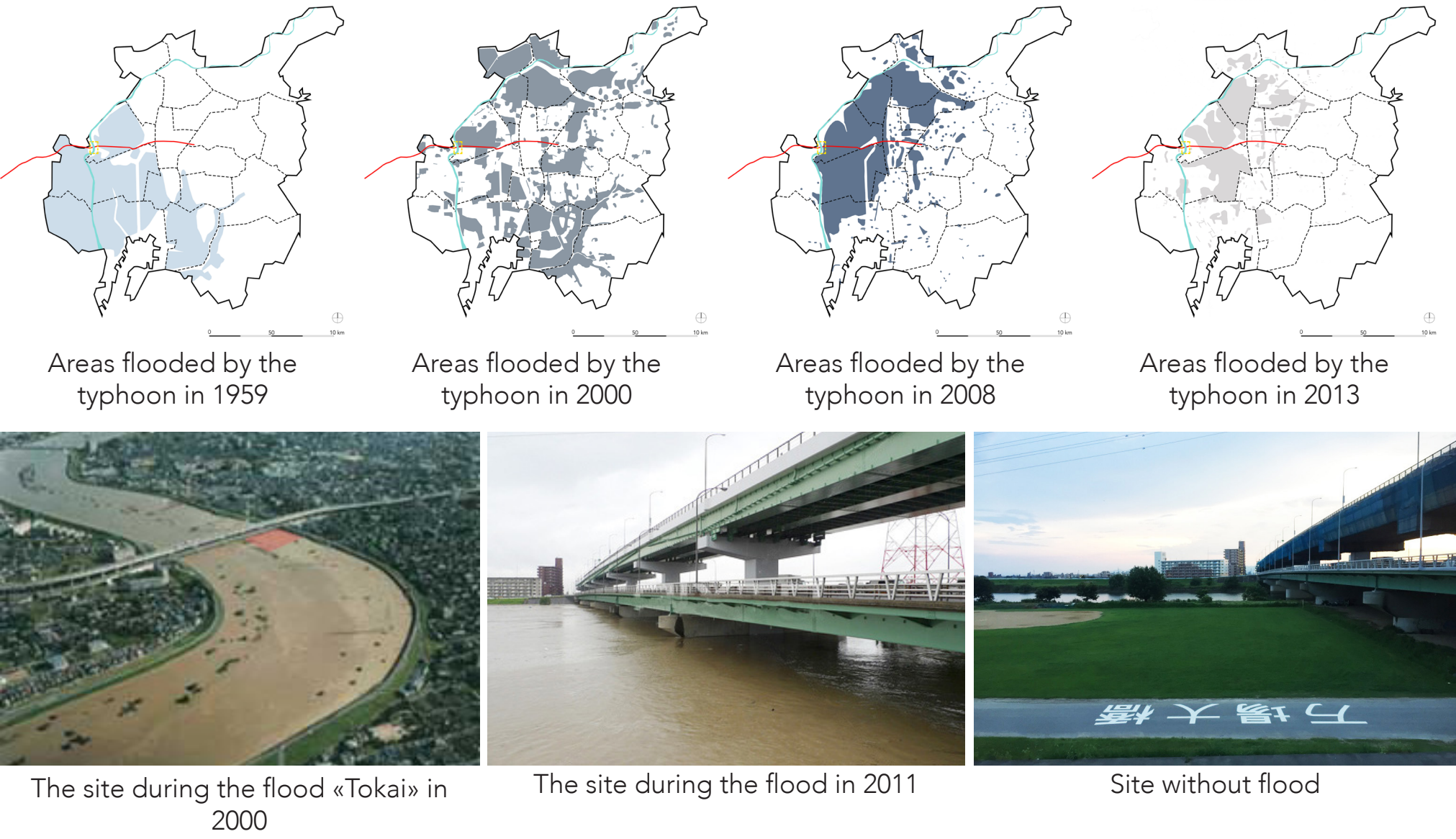
The site is located on the banks of Nagoya at the junction of the Shonai River and Ohashi Manjo Bridge, in the Nakamura district, a flood-prone area defined by past disasters.

The site was chosen for its position on the banks of Shonai, which is one of the most important rivers of the city, moreover, it is crossed by a road bridge on two levels.

This bridge crosses a large part of the plain of Nobi and allows to escape the flood.

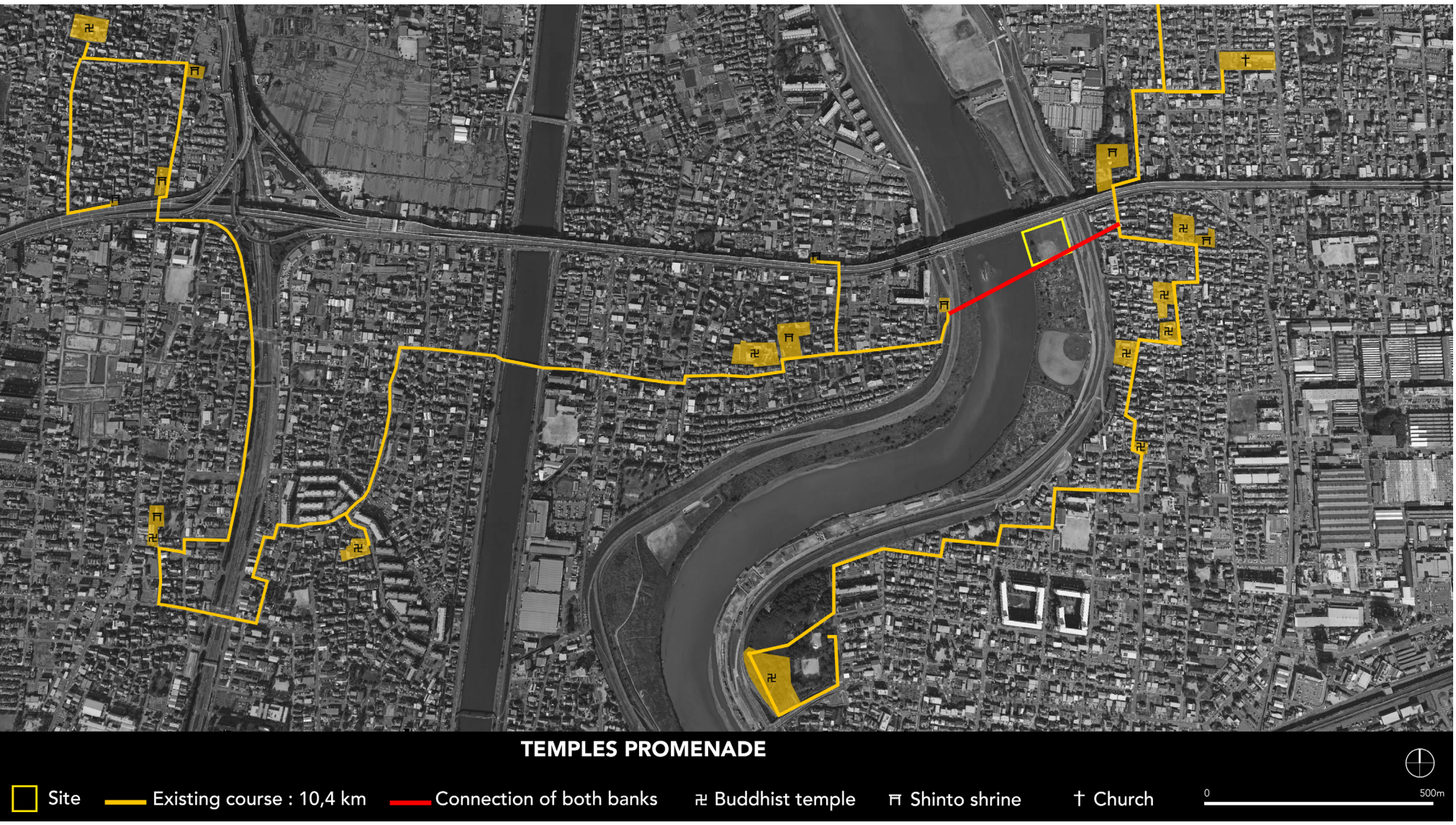


FLOODS EXPERIENCED ON THE SITE



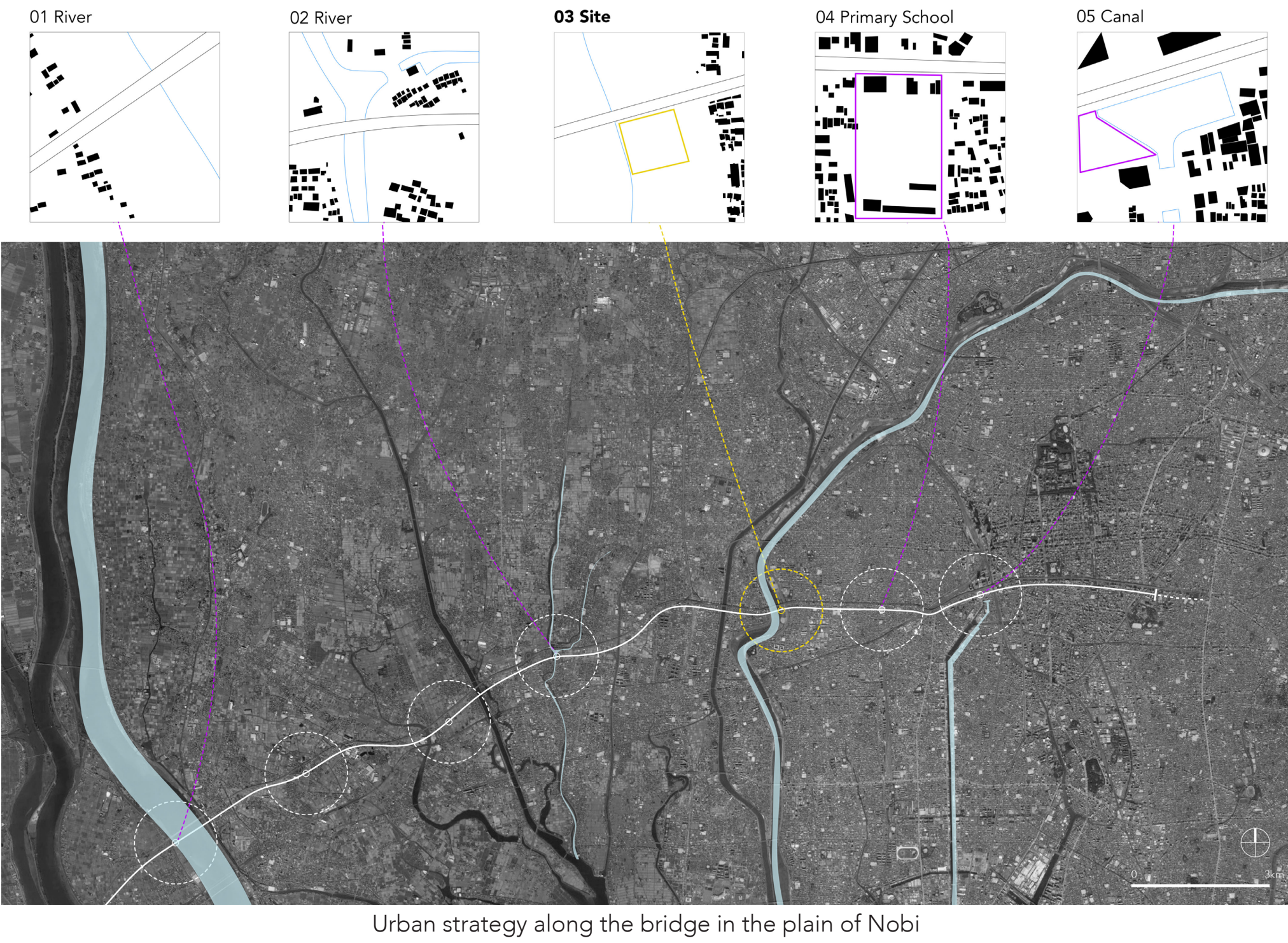
THE TOUR OF TEMPLES

A tour is offered in the district of Nakamura-ku and Nakagawa-ku by the city to visit historical sites along both banks of the Shonai River mainly Shinto sanctuary or Buddhism temples 10.4 km altogether, (4,7 km on the right bank, 5,7 km on the left bank in the picture).



URBAN STRATEGY

This bridge crosses a large part of the plain of Nobi and makes it possible to escape the flood. That is why, along the second level of the road bridge, an urban strategy is set up. Hang on the road bridge which is an emergency lane and thus allows to work with emergency services in case of flood disaster.



THE PROGRAM

The program is a flood disaster prevention center.

During a flood alert, few residents evacuate and the new ones have not necessarily known about the disaster or have forgotten about it, so they don't know how to react.

The aim of the project is to train them to the risk of flooding, to make them understand the water, its benefits and its risks and how to use and warn them through an initiatory journey at different stages; moving from theory (museum, exhibitions, training areas) to practice (rescue workshop, rescue, agriculture, flood simulation rooms) and to communion with water and finally a reconnection with this element.

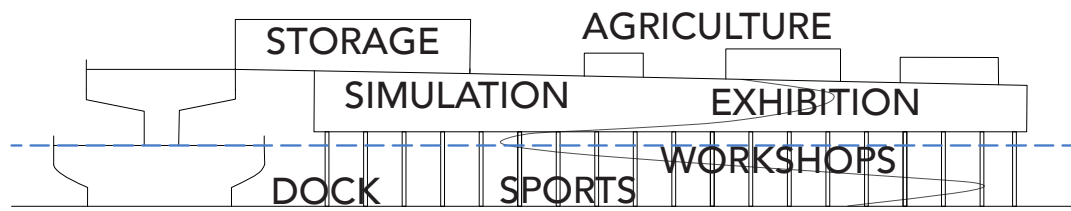
This project works in two stages, a time without flood and a flood time.

Without flooding : it is a Center of Prevention (educational space by the history of the city, exhibitions, various activities related to the water, agriculture, the prevention by the trainings of rescue boats and simulation rooms, typhoon, rainwater, underground flood).

In flood time : The center helps the different emergency services, which will use the second level of the bridge to distribute the supplies (food, bag of sands ...) and it is also a temporary shelter, emergency for the inhabitants on the banks (case of a rapid flood). In addition, the center is raised above flood level, 8 meters defined by the old disasters of the site to provide security in case of disasters.

TIME WITHOUT FLOOD

KNOWLEDGE	Exhibition room 1 620m ²	Training space 1 38m ²	Children's area 40m ²	Coworking space 100m ²
	Exhibition room 2 480m ²	Training space 2 20m ²	Offices 90m ²	Library 210m ²
	Exhibition room 3 365m ²	Orientation space 27m ²	Changing room 15m ²	Coffe shop 120m ²
	Exhibition room 4 70m ²	Conference 180m ²	Bookstore 50m ²	Restaurant 500m ²
PRACTICE	Simulation room 1: underground flood 35m ²	Simulation room 2 : Water level door 10m ²	Simulation room 3: Heavy rain 108m ²	Simulation room 4 : Typhoon 27m ²
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PREVENTION	Emergency storage 871m ²	Emergency and communication office / speaker alert 98m ²	Technical local 50 m ²	WC 218 m ²
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TIME WITH FLOOD

EMERGENCY	■ Temporary shelter (around the center)	TOTAL SURFACE 13 103m²
	■ Place of care	
	■ Exchange platform with the emergency services	