

Submitted for :  
IFLA Asia-Pacific LA & Luminary Awards 2023 - Parks and Open space

Takatamatsubara Memorial Park for TSUNAMI Disaster  
Mourning, Remembering and Recovering



PROJECT TITLE

Takatamatsubara Memorial Park for TSUNAMI Disaster

PROJECT STATEMENT

The Takatamatsubara Memorial Park for TSUNAMI Disaster is a symbol of reconstruction from the Great East Japan Earthquake and Tsunami that occurred in March 2011. It was developed in collaboration with the National government, Iwate prefecture, and Rikuzentakata City.

The park aims to pass down the memories and lessons learned to the next generation, to provide a place for memorial and reflection on those lost in the disaster, and to communicate the strong desire to rebuild to the rest of the world.

In this park and its surroundings, there are places to pray for the victims, remains from the earthquake that subsist as memories of the disaster, and the natural environments of the scenic Takata Pine Grove and Furukawa Marsh that reveal the natural regeneration of the place. Since the earthquake, experts, developers, and designers have been working together to design this park with the cooperation of the citizens.

PROJECT NARRATIVE

Context

Takatamatsubara Memorial Park for TSUNAMI Disaster is located in Rikuzentakata City, Iwate Prefecture, where Takata Matsubara Park (translated as Takata Pine Grove Park) used to be. It was the prefecture’s most visited beach recreation area, which was loved not only by citizens but also by 1 million tourists and bathers every year.

In March 2011, an unprecedented natural disaster, the Great East Japan Earthquake struck Rikuzentakata City where the park is situated. The whole area was submerged by a tsunami of over 13m height and the Takata Mastsubara Park and its Pine Grove were swept away by the wave. Only one pine tree remained, now known as the Miracle Pine Tree. It is a symbol of hope for reconstruction, and it continues to convey the memory of the disaster.

After the earthquake, various reconstruction and restoration projects were carried out. A large-scale seawall with an altitude of 12.5 m was constructed, and various infrastructures such as river embankments and roads were restored. In addition, a hill and embankments were created to relocate the housing to a safe raised area. A new urban area was formed.



## Site and Governance Structure

Developed on an Area of 53 hectares the Takatamatsubara Memorial Park for TSUNAMI project was launched in 2011.

It is a collaborative work of the Ministry of Land, Infrastructure, Transport and Tourism (National government), Iwate Prefecture, and Rikuzentakata City to symbolize the recovery from the Great East Japan Earthquake of 2011.

## Planning and Concept

The park followed three core planning concepts :

- Praying for the lives lost during the disaster
- Passing on the lessons learned to future generations
- Showing a strong will to recover to everyone

It aimed to create an open space that is integrated into the town reconstruction, featuring the National Memorial and prayer facility that has been erected by the national government and the local natural environment and landscapes of the Takata Pine Grove, which used to be a Place of Scenic Beauty, and Fukurawa Marsh, that are being regenerated.

Takatamatsubara Memorial Park for TSUNAMI Disaster can be synthesized as this: “In the place where the Miracle Pine Tree remains, we will convey to the future the lessons learned from the earthquake and the appearance of reconstruction, along with the feelings of mourning for the lives lost”.

## Landscape Design and Architecture

### Mourning the lives lost

The National Memorial and Prayer facility, developed by the government, is a Place of Prayer that forms the core of the entire park. The proposition was to create a place of prayer where symbolism could be continuously demonstrated.

Therefore, the administration building, consisting of the Roadside Station Takatamatsubara and the Iwate Tsunami Memorial Museum, is designed as a symbolic gate surrounded by a symmetric artificial hills.

This space is centered on the “**axis of prayer**”, a strong straight line extending toward the sea where the tsunami struck. This axis comprises a cut-out space surrounded by walls, a floral tribute spot, a footbridge, and a sea view spot.

Due to the construction of a coastal sea wall during the city reconstruction time, the sea was hidden. The challenge was to integrate the sea into the Master plan of the Park. For that purpose, the “Sea View Spot” was created by using the Coastal sea wall as a stage at the end of the “**Axis of Prayer**”. It is a place where you can widely observe the sea, the scenic spot Takata Matsubara, the city area, and the surrounding mountains.

The “**Axis of Reconstruction**”. The Iwate Tsunami Memorial Museum is an exhibition facility for passing on lessons learned from the earthquake, and the Roadside Station Takatamatsubara is a facility for regional development to turn toward tomorrow. These show the past, the present, and the future.

In addition, Topic 45, a former Roadside Station that is a Remains left from the earthquake, is adjacent to the Administration building and its presence indicates the threat of the earthquake. We regard these east-west connections as the “**axis of reconstruction**” that form a space where indoors and outdoors are unified.

A pathway is placed on the “**axis of reconstruction**” that leads to the disaster remains Topic 45, and it has a gradient that gives the impression of descending into the disaster-stricken area.



## Memory

In the park, various remains were left from the disaster and are now regarded as important resources to pass on the memory of the earthquake and tsunami to future generations. These convey the magnitude of damage caused by the disaster, such as the height of the tsunami.

Discussions with citizens were organized to either keep or remove those remains since they can be traumatic memory. Therefore, the solution was to design the surrounding of the remains purposely. For example, mounds were created with trees to smooth the view of remains from the city side.

**Topic 45**, which was a roadside station, is a remains where the ground level is preserved as it was immediately after the disaster. The tremendous power of the Tsunami is visible at the exterior and the interior of the building with Pine tree trunks of the previous Pine Grove stuck inside. Trees centered on cherry blossoms were planted in the surrounding area. From March to April, *Prunus speciosa* blooms. In addition, a mound of soil was designed to softly hide the remain from the city side.

**Kesen Junior High School.** On the disaster day, the three-story school building was submerged in a few minutes, but the results of daily training are demonstrated and all students and staff were able to evacuate before the tsunami arrived. This remain is showing that training in flooding areas is an important knowledge to pass on.

**The foundation of the conveyor belt** that has made great achievements in shortening the construction period for the raised embankment work in the damaged urban area is positioned as a “reconstruction remains”.

**The Miracle Pine Tree** is the only remaining pine from the forest of Takata Pine Grove. Immediately after the earthquake, it supported people’s hearts and continues to exist as a symbol of reconstruction.

## Regeneration

To regenerate the former Takata Pine Grove, efforts are underway to grow seedlings from the Miracle Pine Tree branches cuttings and seeds collected from pine cones, as well as seeds from the previous Takata Pine Grove’s pine cones that were picked up and preserved by neighboring residents. On May 27th 2017, some of them were planted at the first commemorative tree planting event with citizens. We will continue to carry out long-term upbringing activities such as weeding, cutting vines, and thinning in collaboration with local communities.

In Furukawa Marsh, after the disaster, various natural environments such as tidal flat environment, brackish water environment, and pond environment have been gradually regenerated. For the conservation of such a natural environment, we merely left it to the succession of nature, avoiding topographical changes as much as possible, for the habitat of migratory birds and fishes.

After the tsunami, we also observed the resurgence of Mizuaoi (Hyacinth family) endemic to this zone. Conservation measures were taken such as setting up a temporary pool from the construction stage and temporarily transplanting the soil containing seeds.

## Safeness - Safe evacuation route to raised areas

The Takatamatsubara Memorial Park for TSUNAMI Disaster is located in the Great East Japan Earthquake and Tsunami flood zone. In the unlikely event of a disaster, evacuation routes and evacuation signs are placed so that people can safely evacuate from the park to the evacuation area on the city side. Since this park is about 2km long in the east-west direction, there is a total of four evacuation routes connecting to the nearest evacuation site. Currently, disaster prevention training is organised periodically to ensure the safety of people.





Takata Matsubara Park - March 2010



Takata Matsubara Park - 11th March 2011



Takata Matsubara Park - March 2011



View from the Roadside Station Topic 45 - Before the disaster



View from the Roadside Station Topic 45 - After the disaster



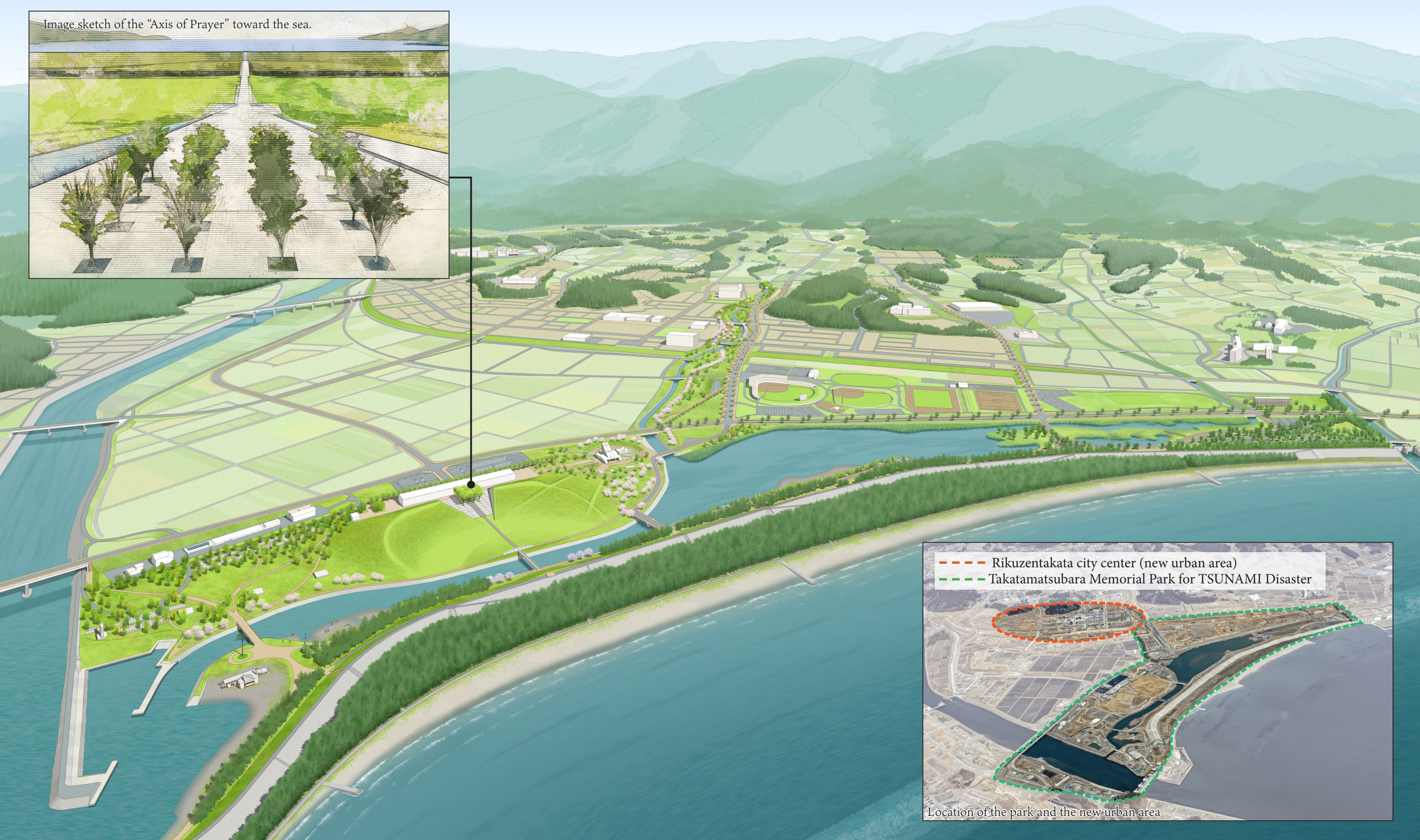
View from Furukawa Marsh - Before the disaster



View from Furukawa Marsh - After the disaster

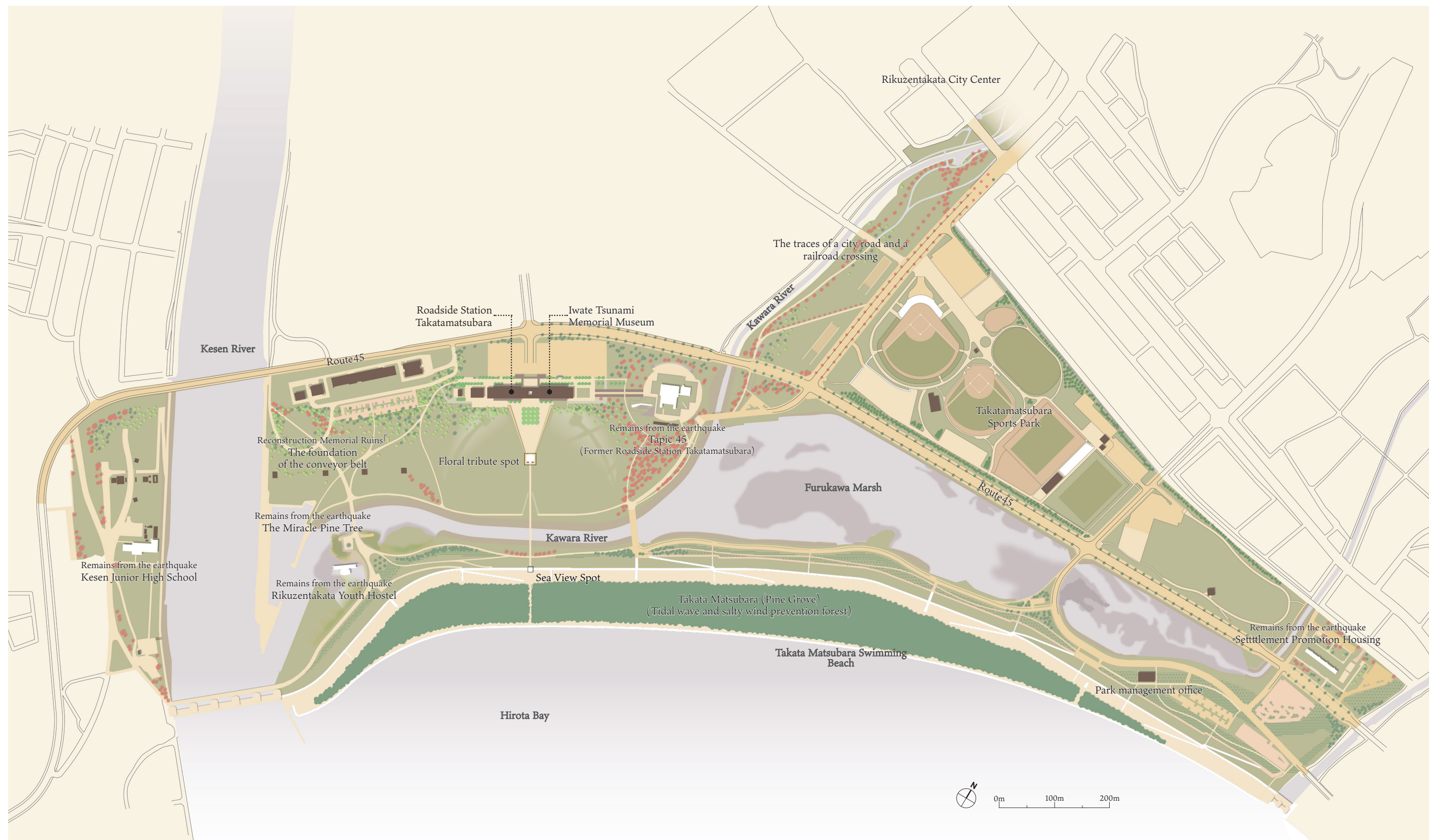
These photos are showing the situation, within the park, before and after the disaster. The whole forest and seawall were swept away by the tsunami. We can visually understand the destructive power of the earthquake and tsunami that hit this area.





Takatamatsubara Memorial Park for TSUNAMI Disaster aims to create an open space that is integrated into the town reconstruction. The local natural environment and landscapes of the Takata Pine Grove, which used to be a Place of Scenic Beauty, and Fukurawa Marsh are to be regenerated.

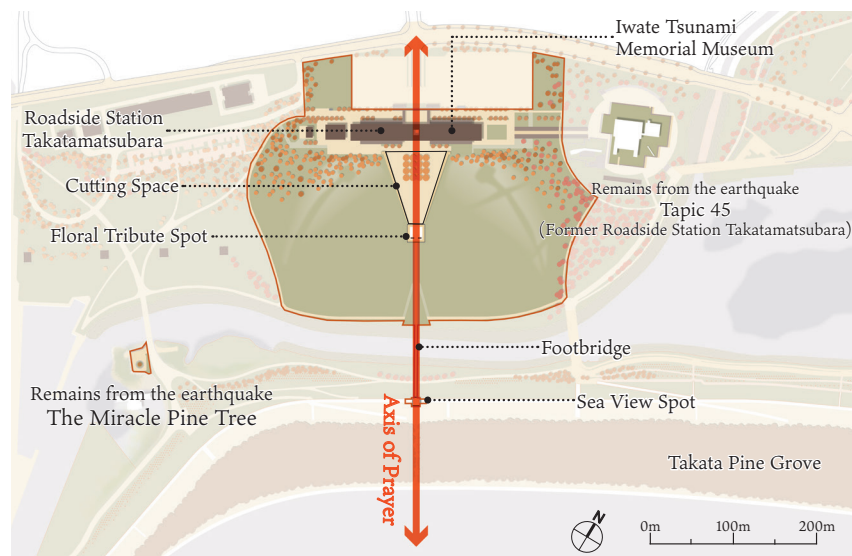




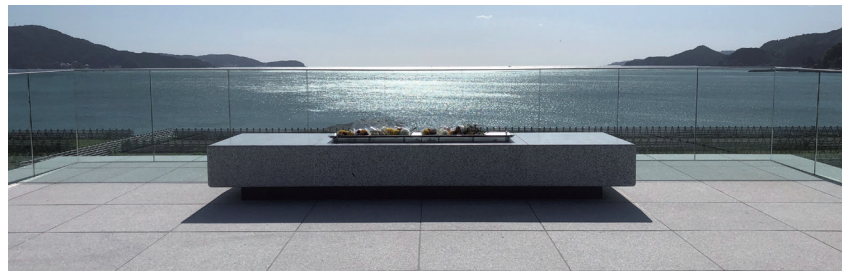
Takatamatsubara Memorial Park for TSUNAMI Disaster - Park Map

The Park is a collaborative work of the Ministry of Land, Infrastructure, Transport and Tourism, Iwate Prefecture, and Rikuzentakata City. There are places to pray for the victims, remains from the earthquake that subsists as memories of the disaster, and natural environments of the Pine Grove and Furukawa Marsh.





Plan-National Memorial and Prayer facilities, and the “Axis of prayer.”



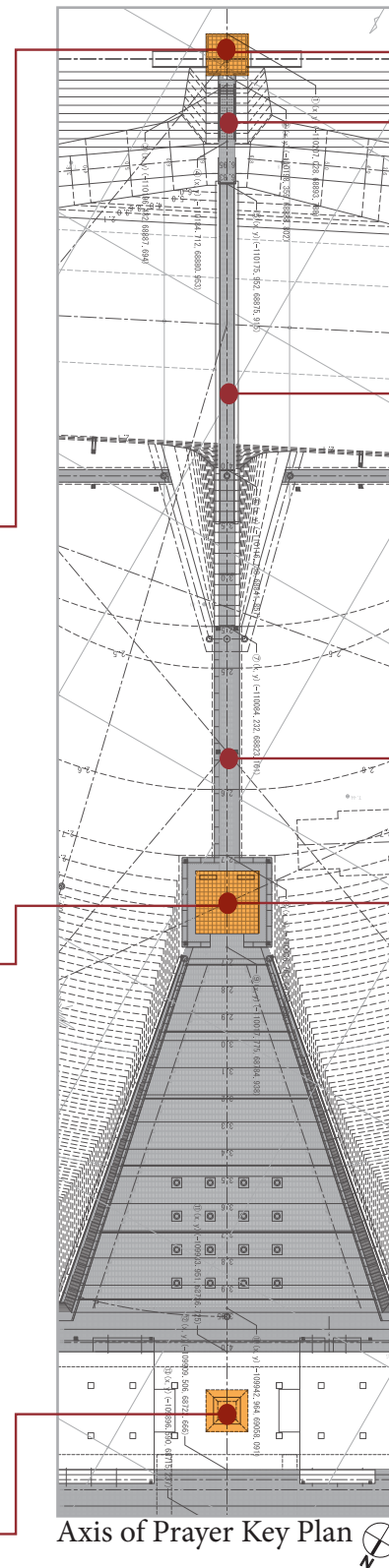
On the “Axis of prayer” it is the only place where you can overlook the sea and confront the coast struck by the tsunami with solemn thoughts.



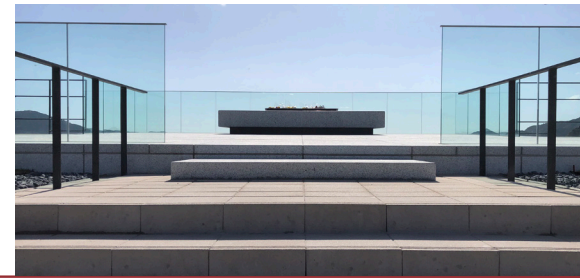
The Floral Tribute spot is where the flowers are placed while looking at the “Axis of prayer.”



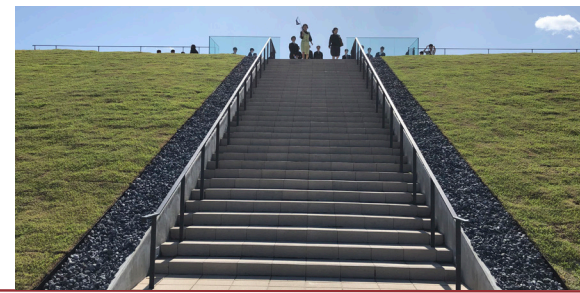
The roof is open at the intersection of the “Axis of prayer” and the “Axis of reconstruction.” The natural light illuminates the basin.



Axis of Prayer Key Plan



The Sea view spot



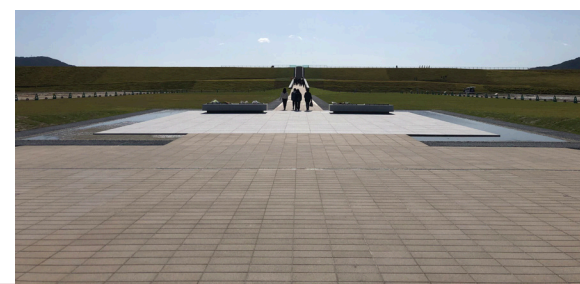
Stairs



Footbridge



Slope



Floral Tribute Spot



Wide view on the Hirota Bay from the Sea View Spot



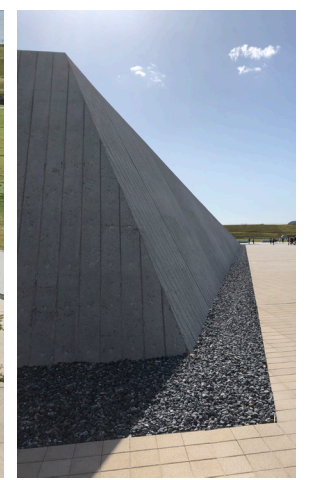
Footbridge



A flower stand arranged at the Floral Tribute Spot



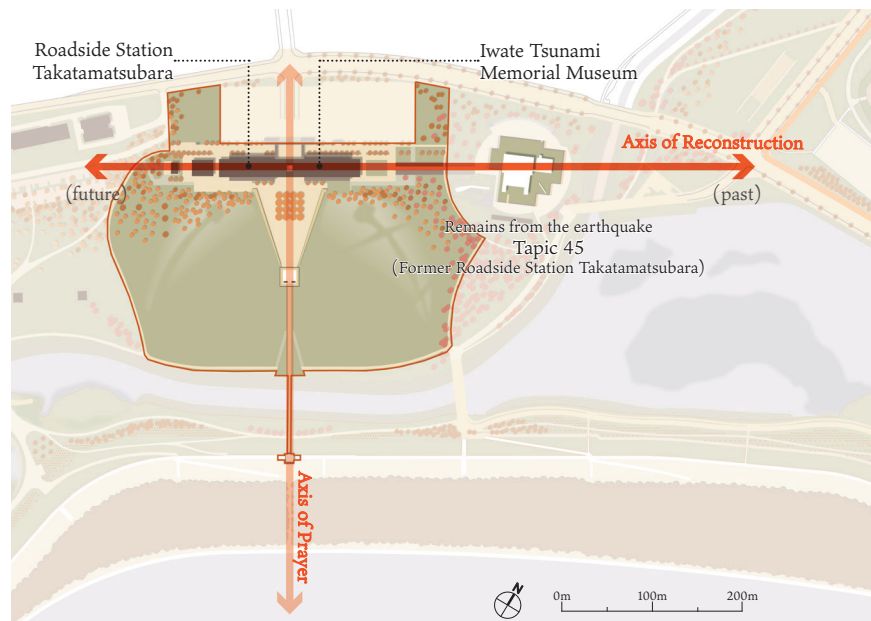
View of the “Axis of Prayer”



Cutout wall

The “axis of prayer,” consists of a cut-out space surrounded by walls, a floral tribute spot, a footbridge, and a sea view spot. The sea view spot is a location where you can observe the sea, the Pine Grove, the city area and the surrounding mountains.





Plan-National Memorial and prayer facility and "Axis of Reconstruction"

The on-axis pathway leading to the earthquake disaster remains Taptic 45 is an image of descending to the damaged land.

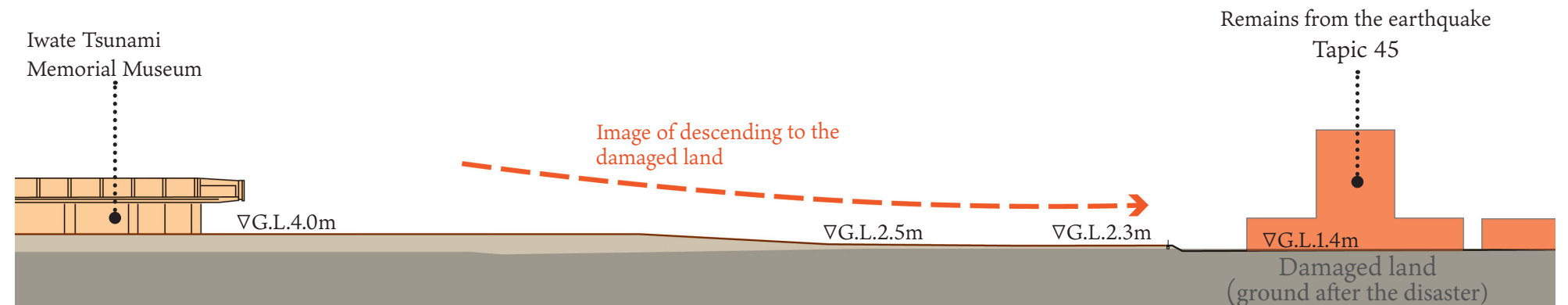


Figure-"Reconstruction axis" cross-section image



Photo-View of the remains Taptic 45 from inside the Iwate Tsunami Memorial Museum

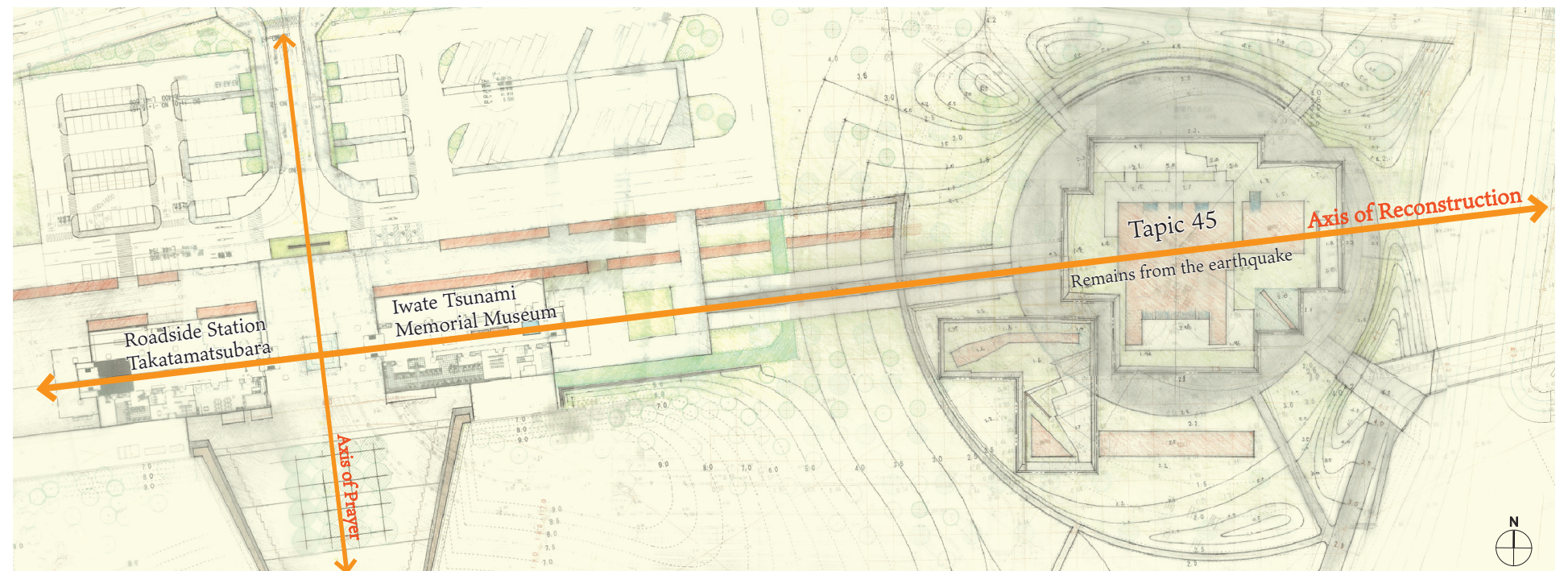


Figure- The "Axis of Reconstruction" study plan around the Earthquake Remain Taptic 45



Photo-View of the remains Taptic 45 from the building side



Figure-Front view of the Administration building

The connections between the Administration building and the remains Taptic45 is the "axis of reconstruction" that unified the indoors and the outdoors. A pathway is placed on this axis that leads to the remains and gives the impression of descending into the disaster-stricken area.





View of the Roadside Station Topic 45 before the earthquake



View of the Remains Topic 45 after the earthquake, a trunk is stuck inside



Current view of the Remains Topic 45 area



View of the Kesen Junior Highschool before the earthquake



View of the Kesen Junior Highschool during the Tsunami



Current view of the remain Kesen Junior Highschool (area under construction)



View of the Takata Pine Grove before the earthquake



View of the Miracle Pine Tree after the earthquake (The Pine Grove disappeared)



Current view of the Miracle Pine Tree area

Some of the remains from the earthquake have been preserved to show the power of the tsunami and pass down the memory and lesson. Because of the trauma caused by this disaster, it was decided to smooth the view of remains from the city side.





After the Tsunami, the resurgence of the endemic flower Mizuaoi (Hyacinth family). Areas were created to encourage the implantation of this flower in the park



Beach pea naturally spreading on the slope of the seawall



Bindweed around Rikuzentakata Youth Hostel



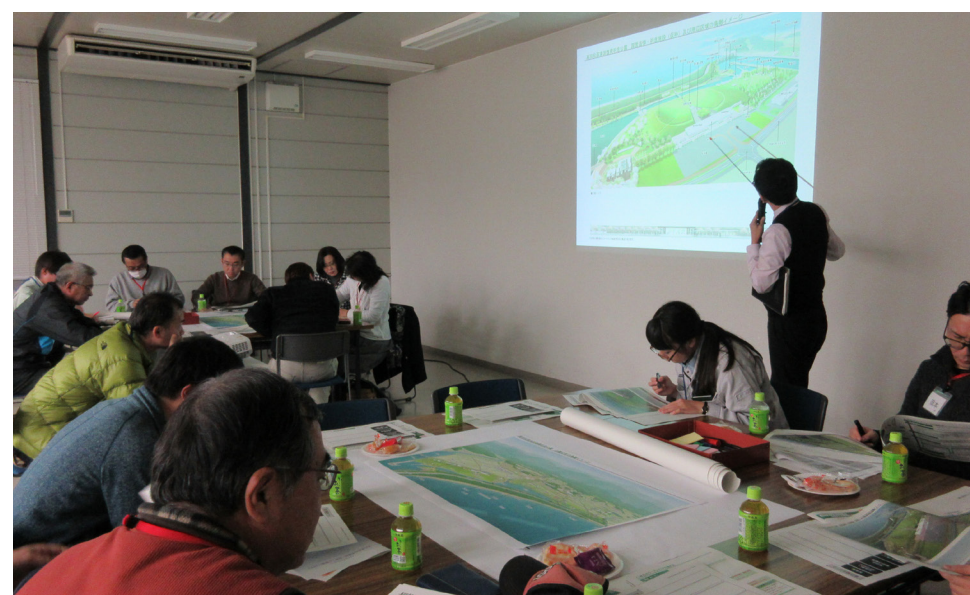
By planting trees by themselves, citizens combine the growing forest with the reconstruction of their daily life



Environmental survey (Furukawa Marsh)



Environmental survey (Furukawa Marsh)



Workshop, project explanation with citizens were prominent in the design process

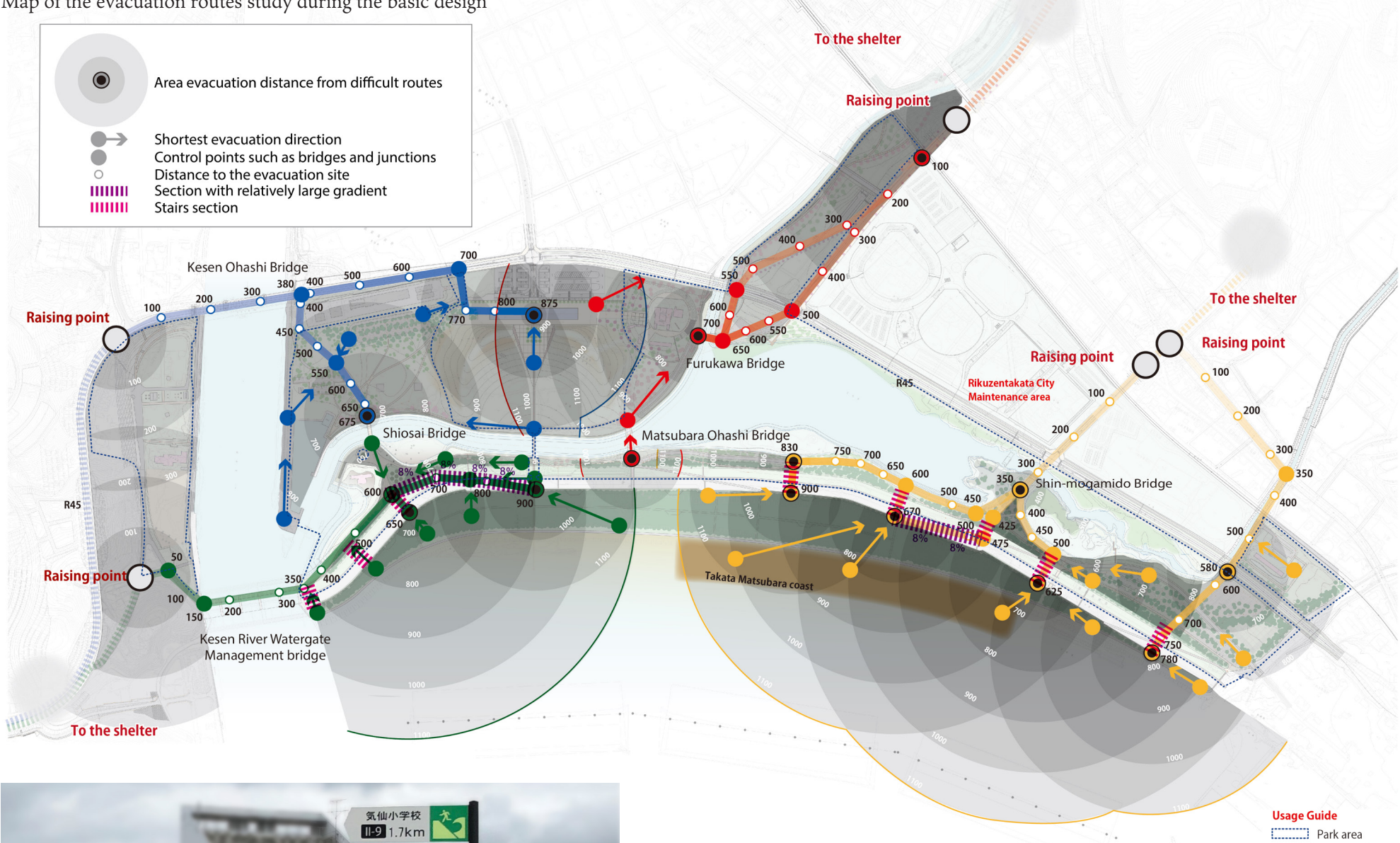


Disaster prevention education, risk mitigation, etc. were discussed repeatedly

Nature returns gradually since the disaster. A disappeared endemic specie “Mizuaoi” has been found on the site during inspections. Areas were created to encourage the recovery of this flower. Also, plantation such as the renewal of the Takata Pine Grove were arranged with local communities.



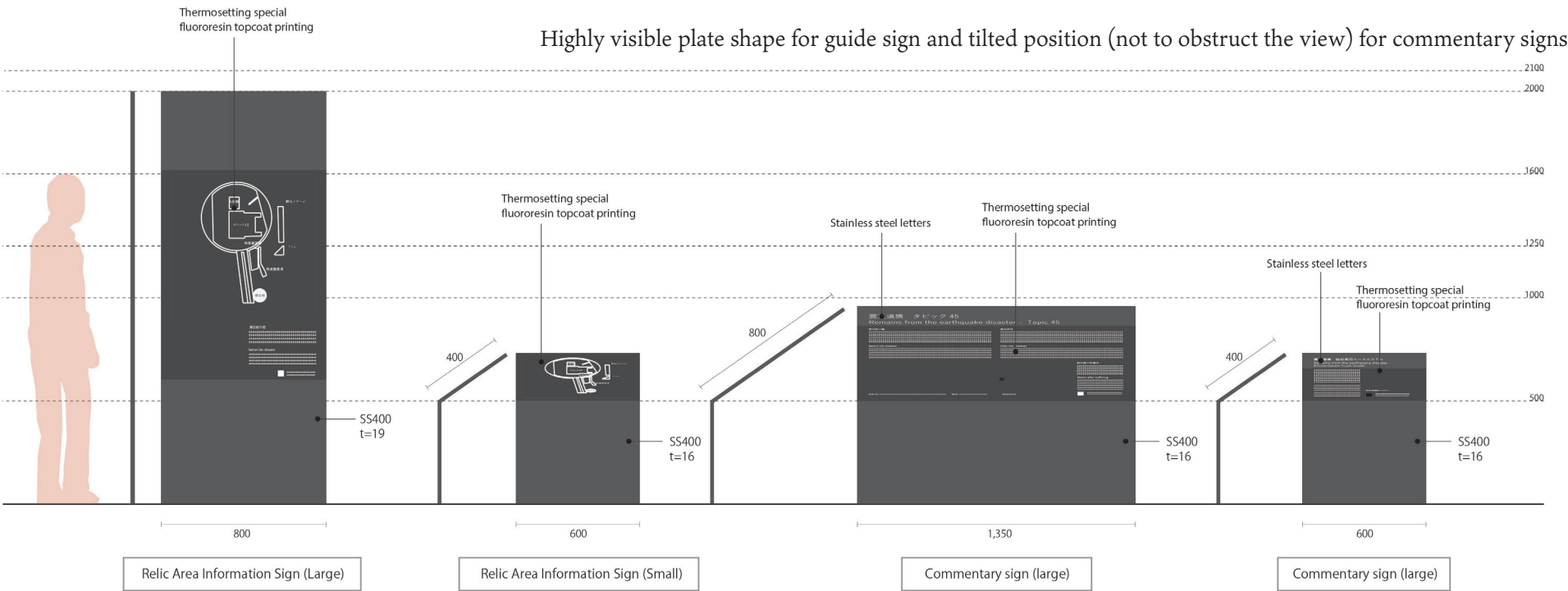
Map of the evacuation routes study during the basic design



Guide sign displaying informations of a remain and evacuation route plan



Directional arrow sign showing evacuation route



Maps and graphic informations help people to understand the concept and purpose of the park. Since the park is located in a Tsunami flood zone, evacuation routes and evacuation signs are placed to move from the park to safe areas on the city side.





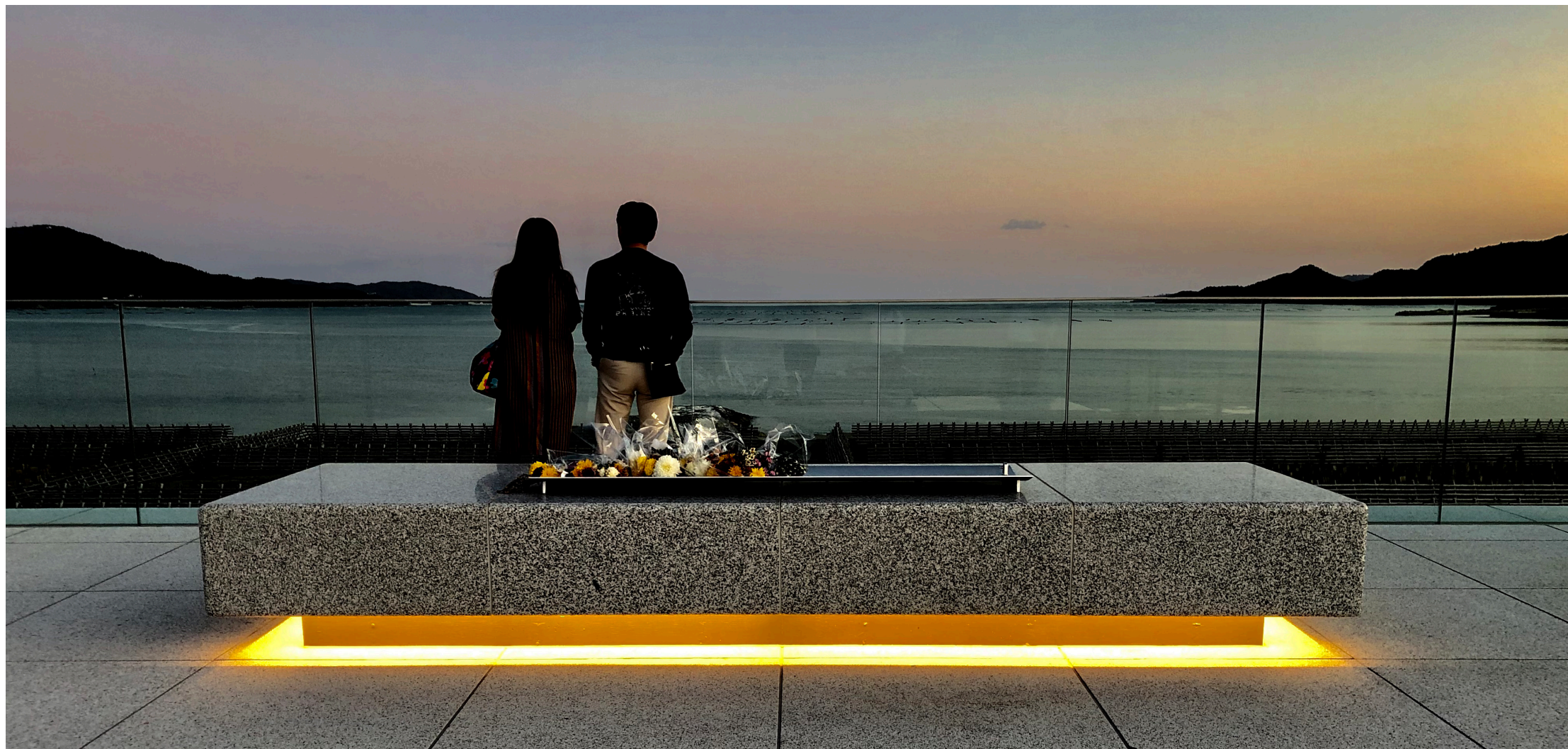
Administration building by night. The small lights points symbolize the lives lost



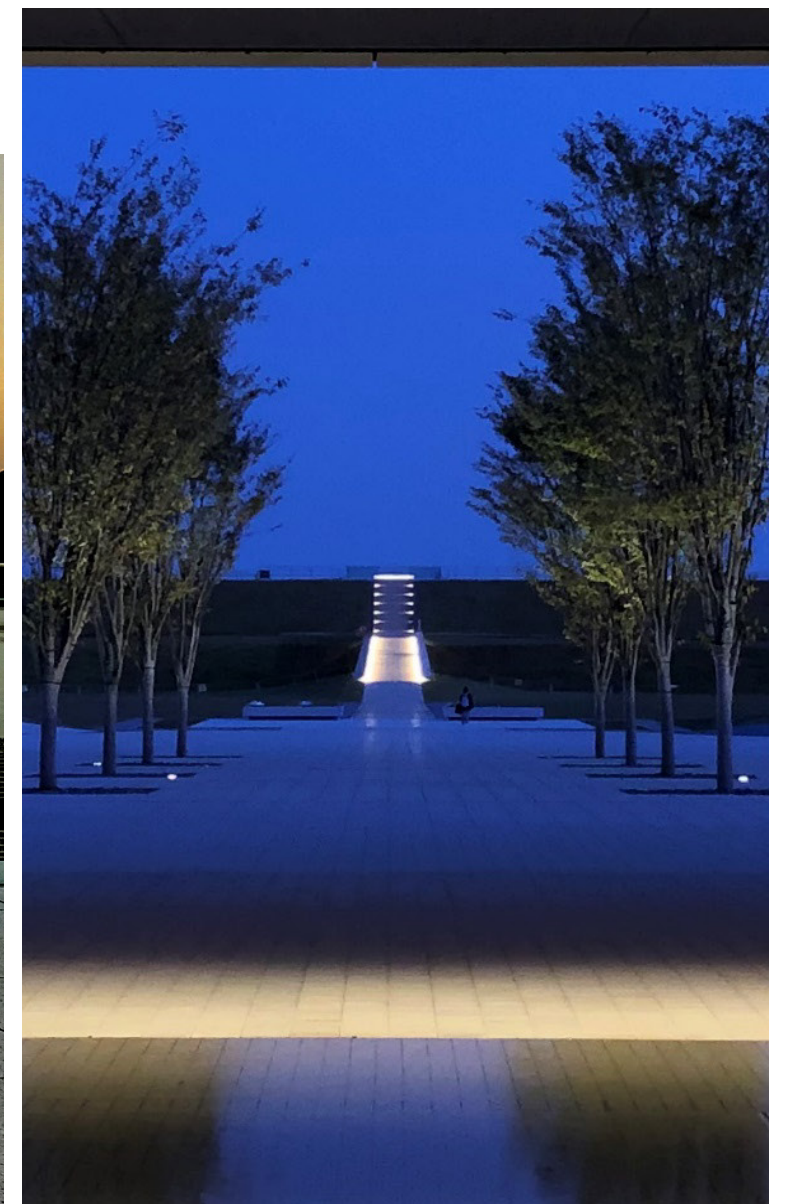
Footbridge by night. The light emphasize the Axis of Prayer



Lights of the stair to reach the Sea View Spot



Sea View Spot by night. Indirect lighting that makes the flower table stand out



View on the Axis of Prayer from the Administration building

Elements such as light provide visibility ,confort and enhance the design purpose of the Memorial Park.