

Submitted for:
IFLA AAPME Awards 2023 - Cultural and Urban Landscape



NIHOMBASHI GARDEN

Japanese Garden connected to the Imperial Palace

PROJECT TITLE

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PROJECT STATEMENT

Nihombasi Garden is located on the roof of Mitsukoshi, the flag ship of Japan's oldest department stores which began in 1673. Since the formation of the Tokugawa shogunate, Nihombashi, close to the palace of the shoguns, was the starting-point of the Five Great Highways of Japan. This historical connection, along with the realization that the roof of Mitsukoshi was at the same level as the Imperial Palace, inspired us to recreate the vegetation of the Imperial Palace in their new garden.

Located 31m high above the streets of Nihombashi (the most historical distinct in Tokyo) the garden is designed as a strolling pond garden, referencing the traditional Japanese concept of nature where the garden and the architecture are one. We refer to the rooftop greenery as 'Forest of Connections,' an acknowledgment the verdant forest in the heart of Tokyo. The garden features a large gabled open roof structure, a reflective pond and native vegetation. This nostalgic landscape emphasis connections - providing a space to reconnect humans and nature, acknowledging those that once lived and worked here, and offering the chance for visitors to learn of the Japanese lifestyle that matured at Nihombashi.

PROJECT NARRATIVE

Design Concept

Cutting-edge environmental technology for a traditional garden space

1.Special greening technology that does not place a load on existing buildings

The following efforts are being made to tackle the difficult problem of creating a forest on the roof of an existing building with load restrictions.

- To avoid placing a load on the building frame, we use the EPS (Expanded Polystyrene Structural) method, which is lightweight, self-supporting, compressible, and easy to construct, to create an undulating topography on the rooftop space that resembles a walk in a forest.

- All trees on the rooftop are planted in special cage planters inspired by bonsai cultivation methods. The cages provide the necessary soil thickness for the trees and also inhibit the growth of roots inside the cage, preventing damage to the structure by root growth.

- The soil, which serves as the foundation for the growth of greenery, is made of environmentally friendly artificial lightweight soil that is recycled from soil generated from water purification at water treatment plants in Tokyo and clinker ash discharged from thermal power plants.

2.Large roof equipped with state-of-the-art environmental control devices

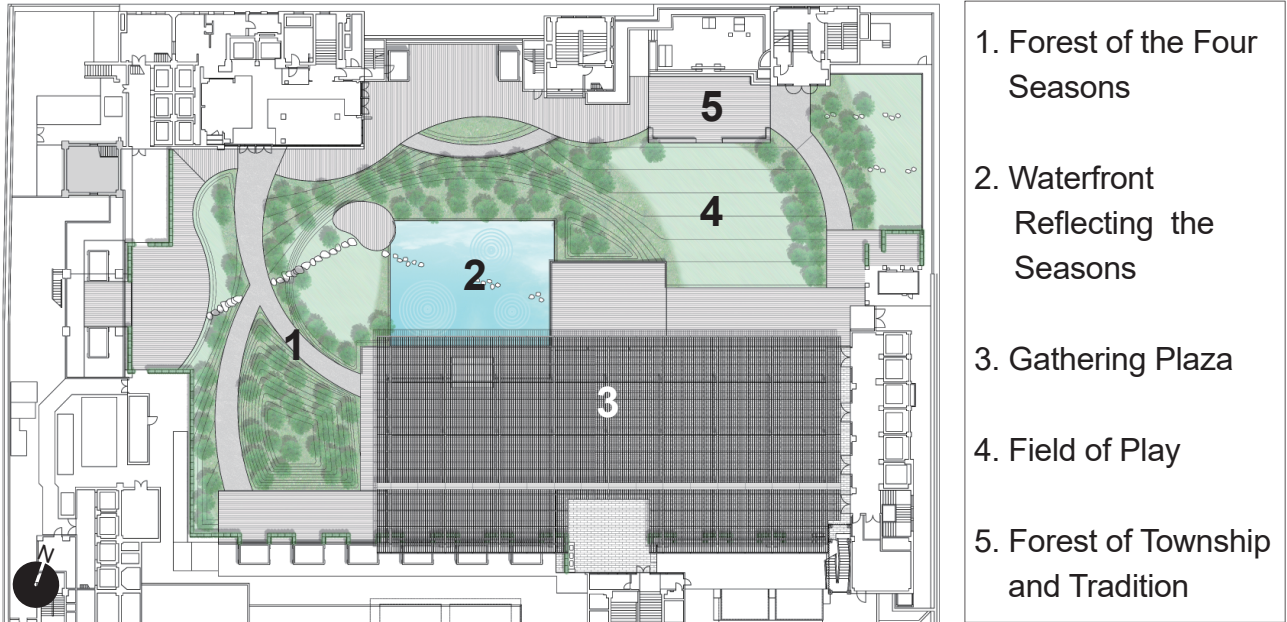
The following efforts are being made to realize the concept of "creating a comfortable environment through deep eaves in a water-filled garden", in which garden and architecture are harmoniously integrated, on the rooftop space of a modern city with a high environmental impact.

- As Japan transitions from a growing society to a mature society, there

is an increasing need to enjoy meals and music outdoors. At the same time, however, it is necessary to be prepared for weather disasters that were previously unthinkable, such as extremely hot summers and frequent guerrilla downpours.

- The roof of the Nihombashi Garden is equipped with a large retractable tent that not only provides a safe place to spend time on the roof during the summer heat wave or sudden downpour, but also serves as a temporary shelter for people who have difficulty returning home in the event of a disaster.
- The tent is linked to a wind speed sensor and automatically closes when the wind picks up, thus supporting safe facility operation.
- The lighting on the main roof is not designed to provide full brightness under the entire roof, but rather to use state-of-the-art, power-saving small lighting fixtures in the right places to create a lighting plan that combines dramatic effects with safety functions.

Five areas that make up Nihombashi Garden



1.Forest of the Four Seasons

Learning from the Imperial Palace Forest, a New Environmental Device for the City

The Imperial Palace Forest reflects the desire of Emperor Showa to restore the nature of Musashino forest which is native vegetation of forest in this region.

The Imperial Palace Forest, which has been nurtured from the Showa to the Heisei era, now functions to nurture a variety of living creatures in the city and mitigate the urban heat island effect, as climate change due to global warming has become a social issue.

As we mark the transition from the Heisei era to the 2022 era, we thought that we could contribute to the improvement of the urban environment by continuing the Musashino forest cultivation on the roof of the Mitsukoshi main building, which is located close to the Imperial Palace forest. The trees used consisted of species observed in the Imperial Palace forest, and all materials were carefully selected and procured from the Kanto region, which is in the same watershed as the Imperial Palace, in order to create a comfortable environment not only for humans but also for living creatures, while preventing disturbance of the ecosystem.

2.Waterfront Reflecting the Seasons

Nihombashi's water mirror reflects the changing seasons of nature.

Since ancient times, architecture and gardens have been an integral part of Japanese traditional beauty. The Nihombashi Garden recreates a view of the world that combines awe and appreciation of nature, using the pond-and-spring-envelope style established in the Edo period. Symbolic of this is the reflecting pond at the center of the garden. The greenery viewed from the traditional Japanese veranda space connecting the inside and outside is reflected on the surface of the water throughout the day and night and all

four seasons, allowing visitors to enjoy the garden in a relaxed atmosphere and also serving as an impressive backdrop for events. In addition, as a symbol of the garden that represents the Mitsukoshi head office, the pond is decorated with the famous Odawara stone in the rhythm of 3/5/7 on the axis where the shadow of the golden pagoda falls in the direction of 3p.m. on 5th of July(7).

3.Gathering Plaza

Cutting-edge technology supporting a traditional landscape

In summer, water is poured in the shade of the trees and deep shelters are drilled to keep cool. In winter, the forest floor is flooded with light and heated by wood and charcoal. The traditional Japanese gabled roof and the garden surrounded by Musashino forest thickets express this kind of mental landscape created by the Japanese people's relationship with nature.

The large roof made of light steel construction incorporates a retractable tent controlled by environmental sensors, creating an environment in which visitors can enjoy a mature Japanese lifestyle in a space that combines traditional garden techniques with cutting-edge architectural technology.

4.Field of Play

Bringing children the joy of playing in a nostalgic landscape

The words “mountain”, “village”, and “field” are used to describe the original landscape of the Japanese people, and this lawn square is inspired by the generous fields that once existed in Japan's satochi satoyama. The name of the plaza, “field of play”, expresses the hope that children will run around and play energetically in the gently sloping field.

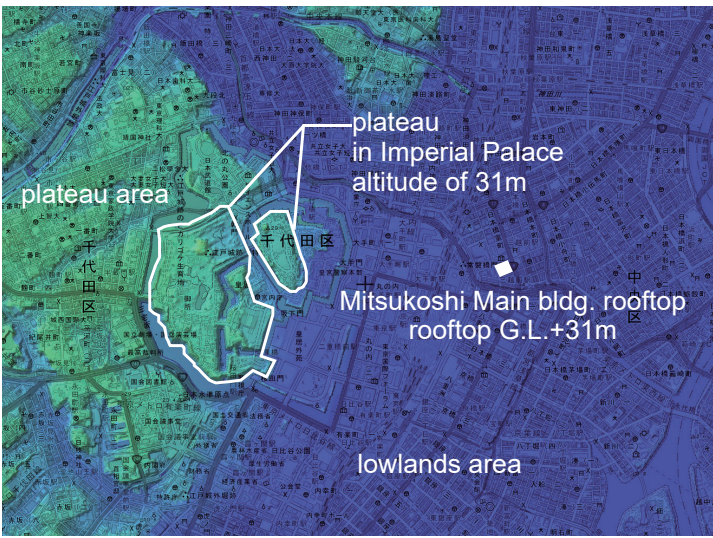
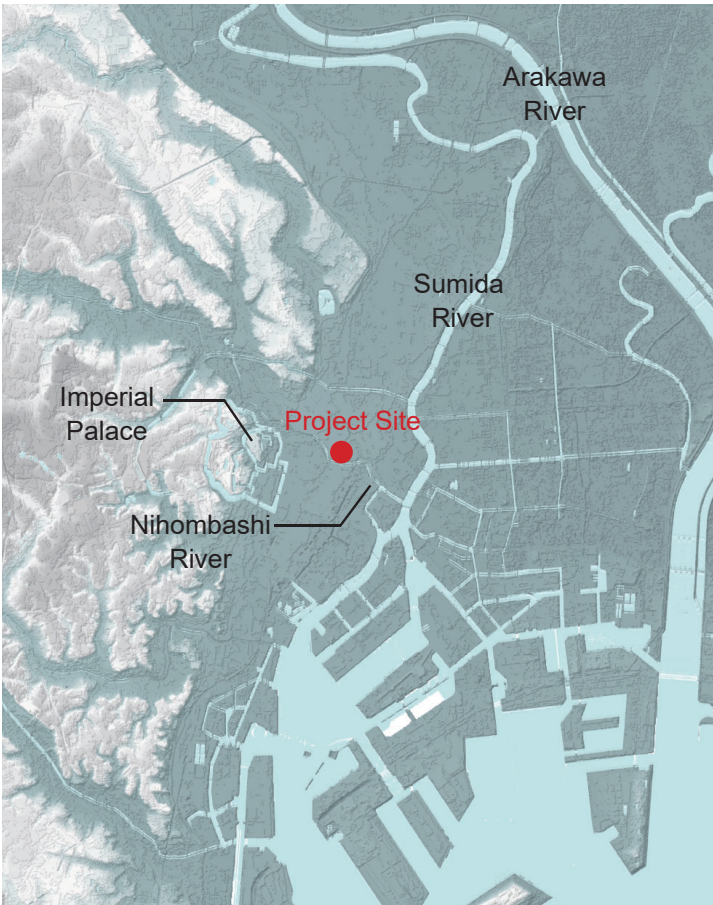
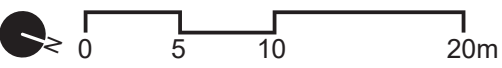
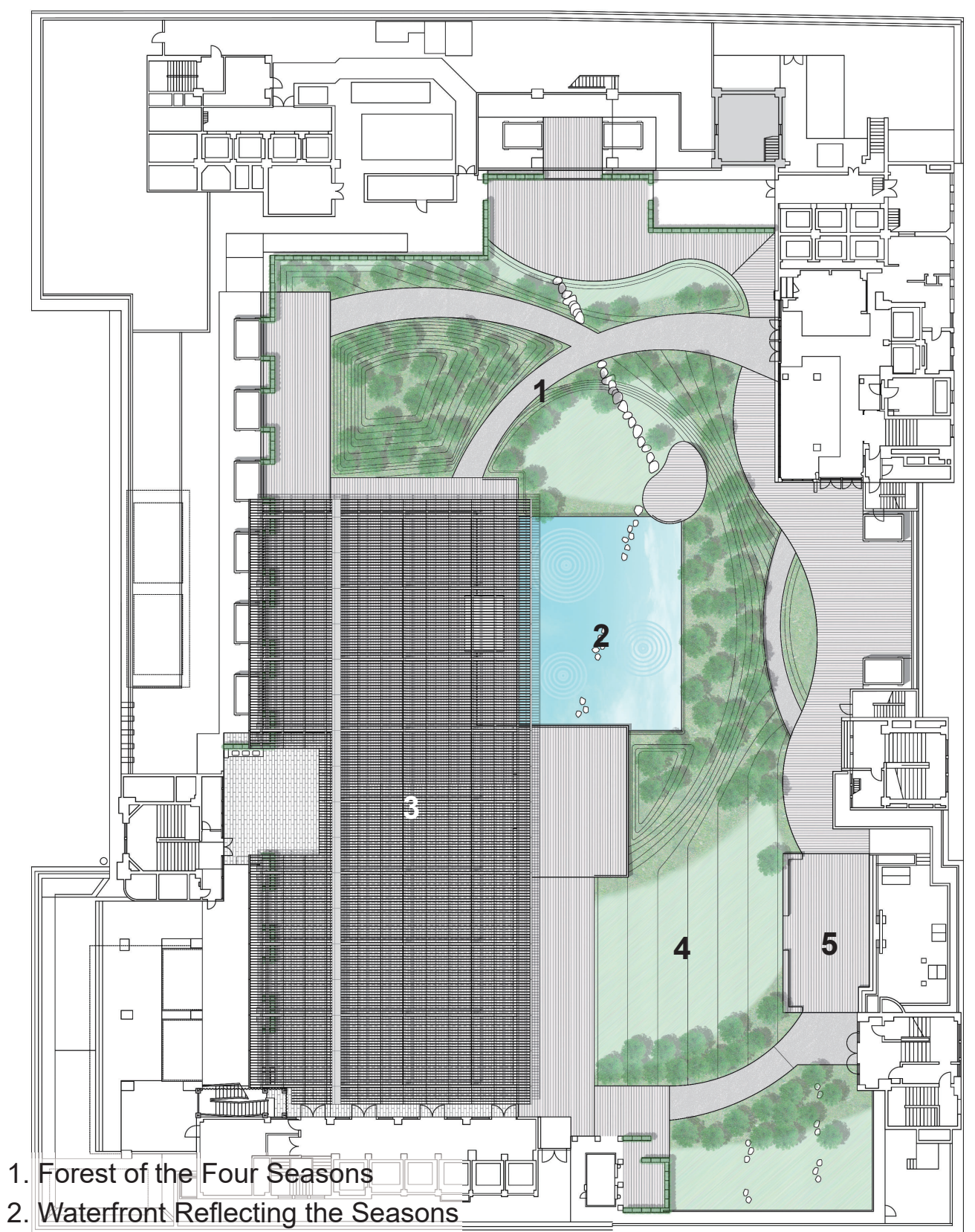
5.Forest of Township and Tradition

A Forest of Prayer to Remember History and Connect to the Future

Mimeguri Shrine, located in Mukojima, Sumida-ku, is the guardian deity of the Mitsui family, and has been worshipped by the Mitsui family since the Edo period as a protection against the devil's gate. It was on September 21, 1914 that a branch spirit was enshrined on the roof of the Nihombashi Mitsukoshi main building, the successor to the Mitsui Echigoya. The "Katsudai Daikokuten" enshrined in the precincts of the Mimeguri Shrine on the rooftop of the Nihombashi Mitsukoshi Main Building was carved by the master craftsman Koun Takamura. The benevolent expression on the face of Daikokuten stands on a bale and raises an Uchide-no-Kozuchi (mallet) with his right leg outstretched, representing an active figure that is about to bestow blessings and fortune.

MASTERPLAN

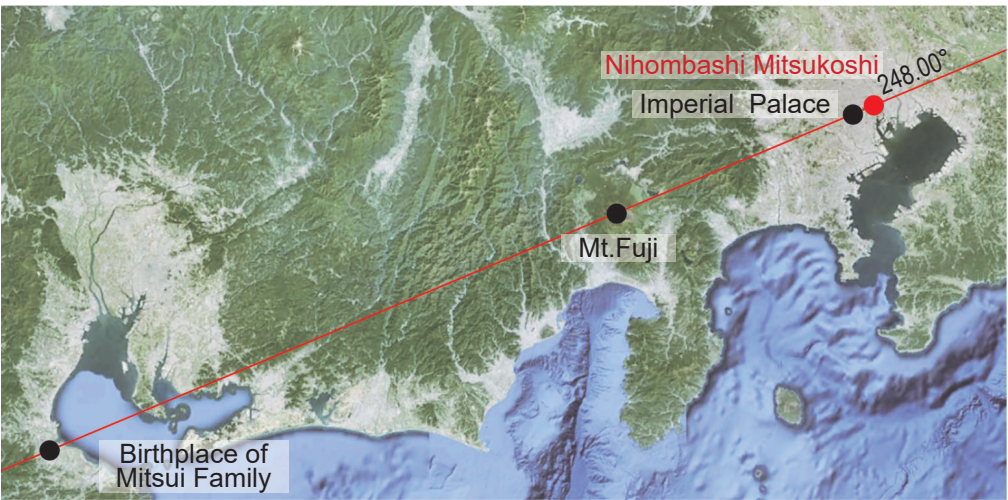
LOCATION



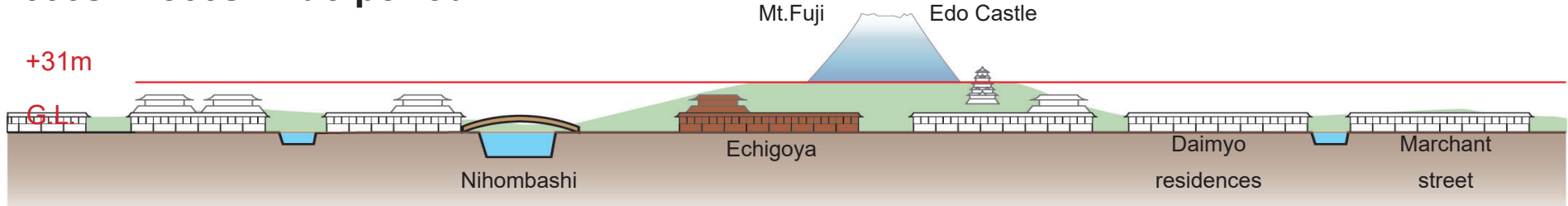
Nihombashi Garden is located on the roof of Mitsukoshi began in 1673. This building is located in the midst of Japan's symbol such as Imperial Palace and Mt.Fuji. And the roof of Mitsukoshi is at the same level as Imperial Palace.

DESIGN PROCESS

Toporogical and Historical Connection

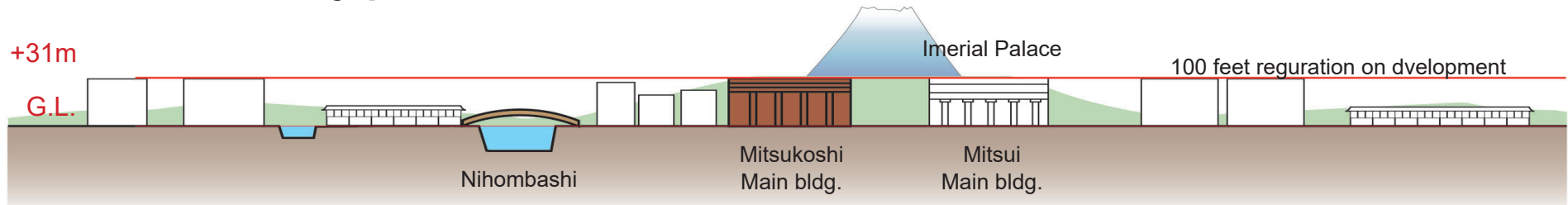


1600s - 1860s Edo period



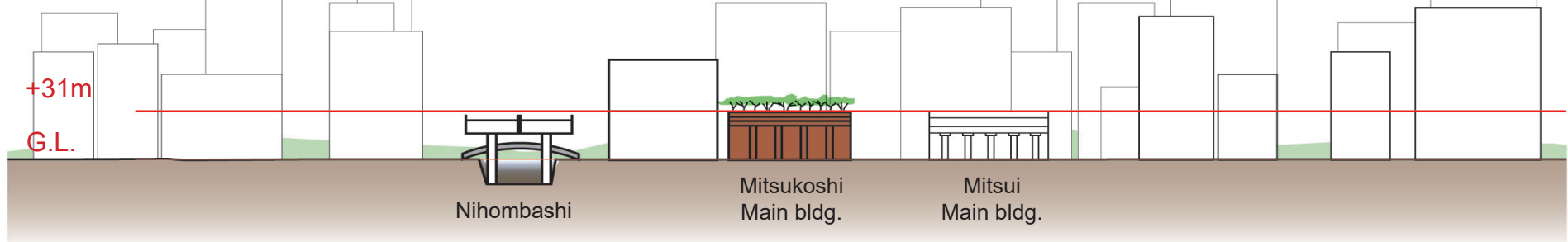
The axis connecting birth place of Mitsukoshi founder, Mt. Fuji and Imperial Palace

1860s - 1910s Meiji period



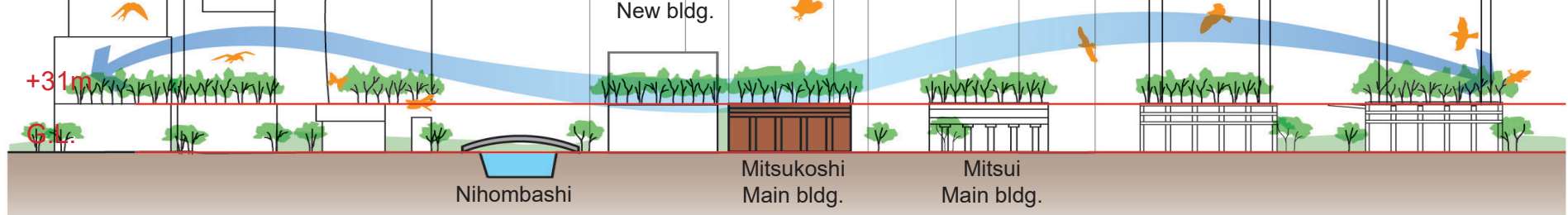
Edo period painting showing the strong connection between Mt. Fuji and Mitsukoshi

1970s - Current



Mitsukoshi decided maintaining the height of 31 meters to respect for Imperial Palace

Future -

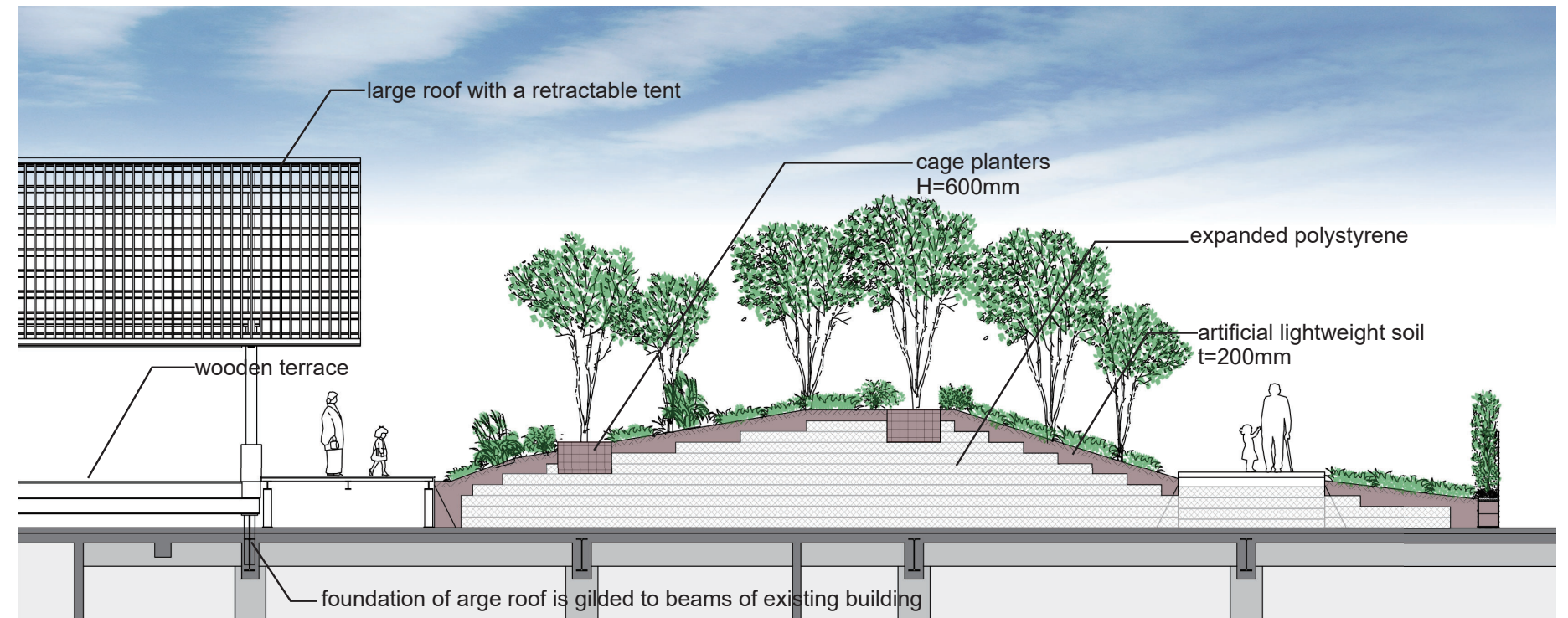
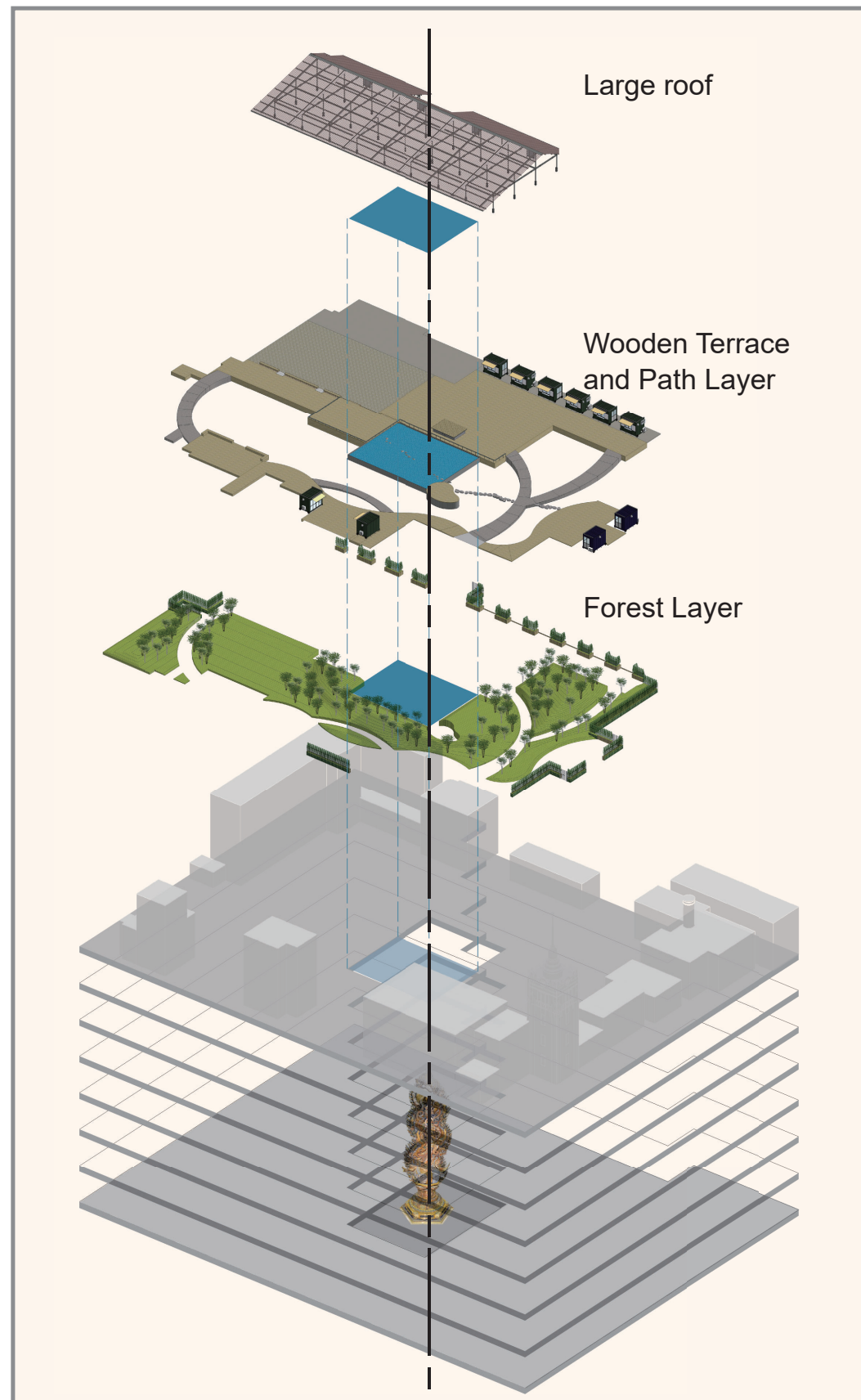


The Nihonbashi starting point for abundant greenery throughout the city in the future

At the end of the axis connecting Mitsukoshi, Mt. Fuji, and the Imperial Palace is the birthplace of Takatoshi Mitsui, the founder of Mitsukoshi, and an Edo period painting depicts Mitsukoshi's predecessor, Echigoya, and Mt. Thus, Mitsukoshi has strong ties to the symbolism and political center of Japan.

DESIGN PROCESS

Cutting-edge Technology for Traditional Garden Space



To avoid placing a load on the building frame, we use lightweight, self-supporting, compressible, and easy to construct, to create an undulating topography on the rooftop space that resembles a walk in a forest.

Oasis in Urbanscape



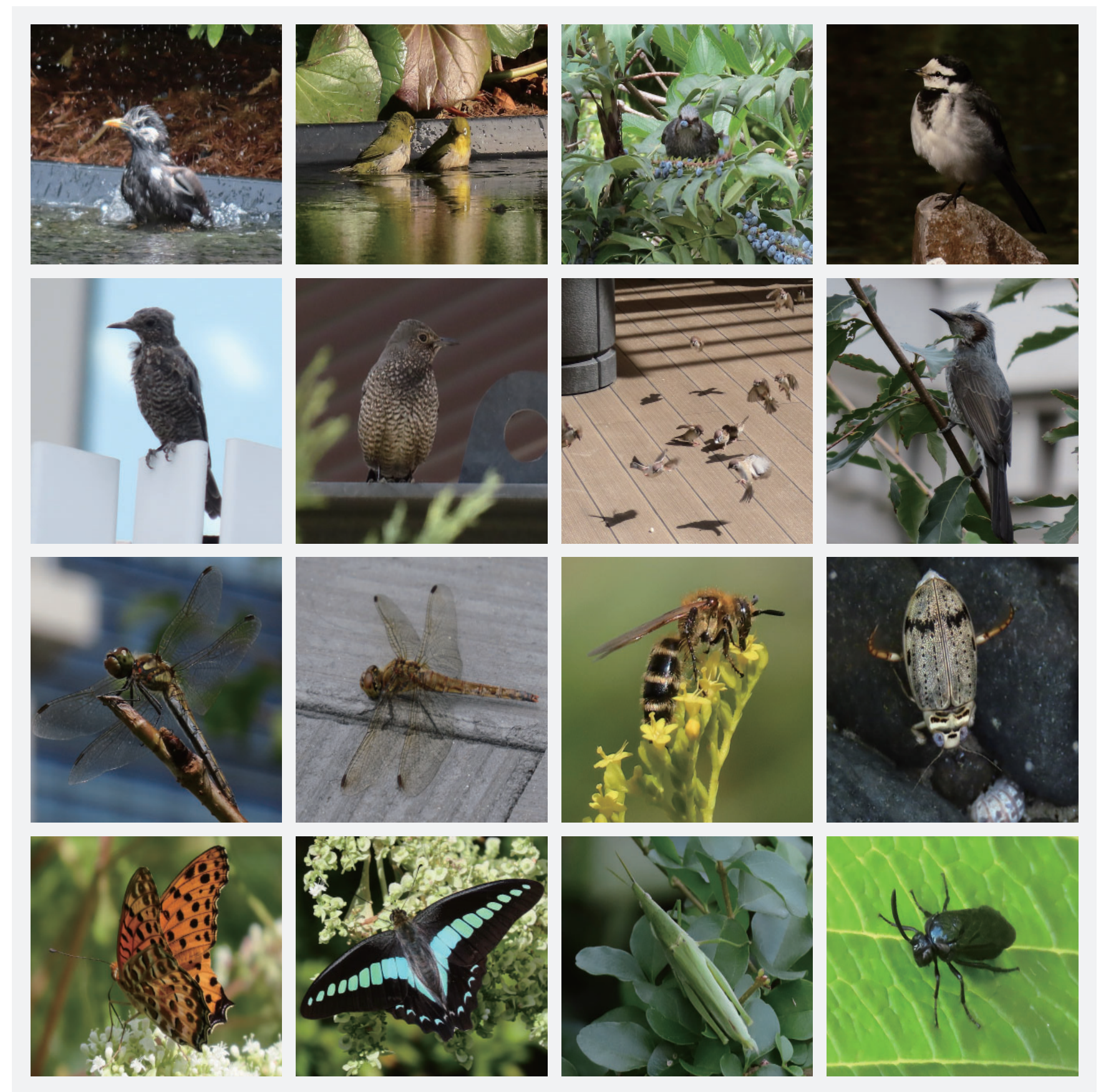
In a densely populated city covered with asphalt and buildings, the lush green Nihombashi Garden is an urban oasis where people can relax.

System



The Nihombashi Garden is equipped with devices to make visitors feel comfortable.

Research



To quantitatively evaluate design concept of Nihombashi Garden, 'Forest of Connection', an ecological survey is being conducted.

Images



The trees used consisted of species observed in the Imperial Palace forest, and all materials were carefully selected and procured from the Kanto region, which is in the same watershed as the Imperial Palace.

Images



In the waterfront space, people is relaxing under the large roof.



Children find their favorite places and spend their time as they wish.

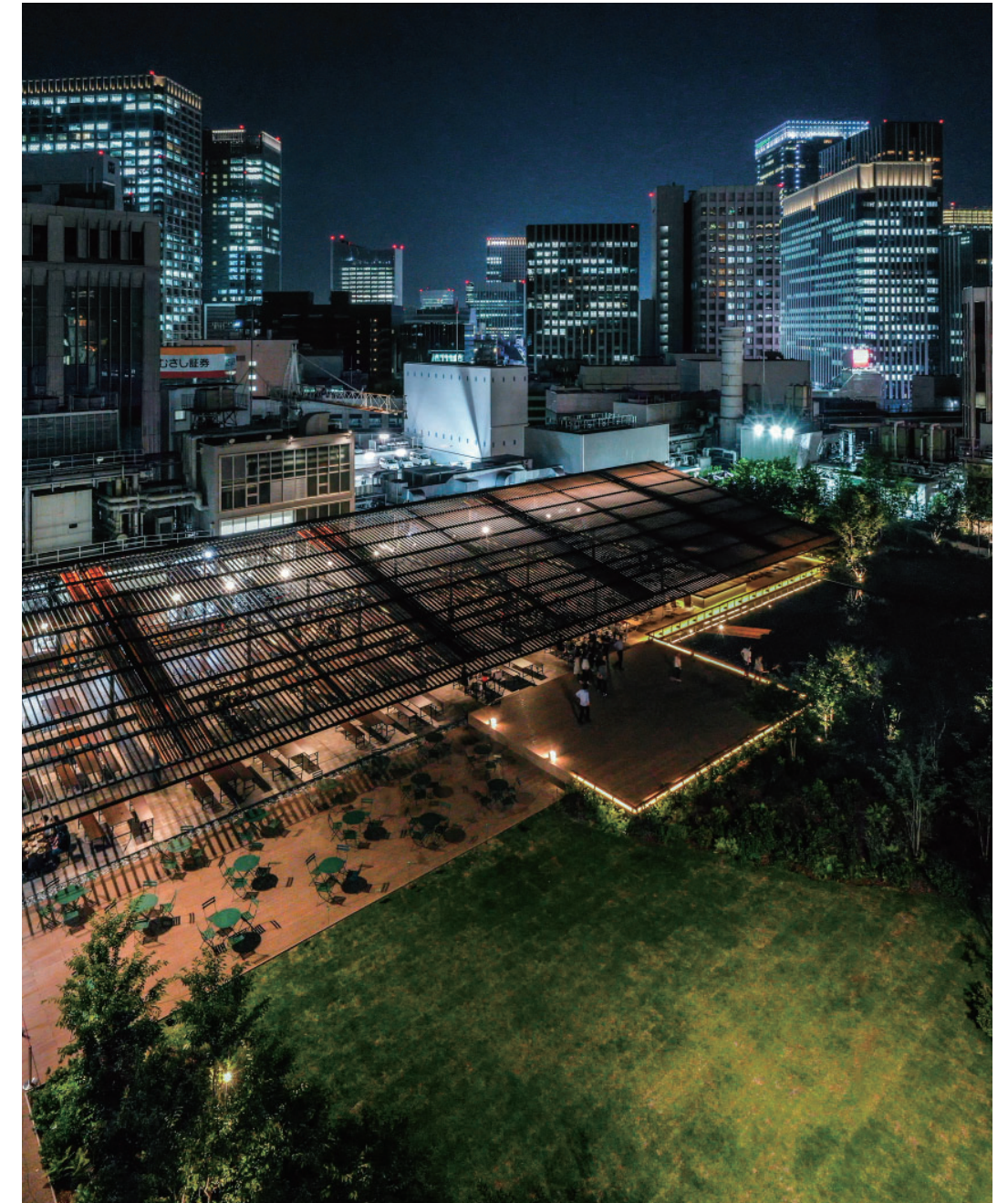


Nihombashi Garden is the contemporary strolling pond garden with a water feature at the center.

Images



The symbol tower of Nihombashi Mitsukoshi, is reflected in the water feature.



Nihombashi Garden contrast beautifully with the urbanscape.