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Authors:	Takehito Takahashi, Takenaka Corporation Noboru Sakou, Takenaka Corporation Takehshi Hagiwara, Takenaka Corporation
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Micro Urban Voids in Tokyo

Takehito Takahashi¹, Noboru Sakou², Takehshi Hagiwara³,

1. Takenaka Corporation Tokyo, Japan, takahashi.takehito@takenaka.co.jp

2. Takenaka Corporation Tokyo, Japan, sakou.noboru@takenaka.co.jp

3. Takenaka Corporation Tokyo, Japan, hagiwara.takeshi@takenaka.co.jp



Takehito Takahashi

Biography

Currently first class licensed architect in Design section, Building design department, Takenaka Corporation

2005~ Assigned to Skidmore, Owings & Merrill NY office, USA

1998~ Building design department, Takenaka Corporation, Tokyo, Japan

1998 Received master degree of engineering

1996~ Graduate School of Engineering, department of architecture, The University of Tokyo

1992~ School of architecture, Faculty of Engineering, Kyoto University

1974 Born in Kyoto, Japan

Major works / Tokyo Shiodome Building (2005), Conrad Hotel Tokyo (2005), Finalist of National Kaohsiung

Performing Arts Center International Competition (2007), Awarded Taiwan Hakka Cultural Center

International Competition (2008), Park Front Tower (2010)

Abstract

Park Front Tower is an office building constructed next to a city park. Due to its location beside a park in the center of Tokyo, the aim is to balance the comfort of the office space with a design that depicted the boundary between the park and the town.

In the urbanism development of Tokyo, various small voids are inherited from Edo-period(1603-1868).

Daimyo gardens in their territories have turned to the public park. Recently development is planned in low density area, then many micro urban voids have been developed and disappeared. The location of Park Front Tower used to be as well as Daimyo garden. How to re-design and how to keep the micro urban void is a main subject in this project.

This planning is creating a new micro urban void in the site connecting to the existed urban void. A pavilion-style open space and sidewalk-like open space that are integrated with the adjacent park have been provided and helped to improve the urban environment and achieving a high-rise building that is comfortable and rich in greenery, then interior space of high-rise building should be related and activated with existed urban void and here history. The façade on the park side was offset 7.5 ° from the north-south axis as a response to the position of the park on the urban axis. Bended full-height curtain wall units have been provided to create an abundant interior area. This subtle phase shift and the clear-cut massing together of a glass volume passing through the solid core made it possible to create a building with a landmark quality in the urban landscape.

Keywords: Architecture, Urban design, Sustainable design

Figure 2 Exterior from town side



Location

Park Front Tower is an office building constructed next to a city park. Due to its location beside a park in the center of Tokyo, the aim is to balance the comfort of the office space with a design that depicted the boundary between the park and the town. The façade on the park side was offset 7.5° from the north-south axis as a response to the position of the park on the urban axis. Bended full-height curtain wall units have been provided to create an abundant interior area. This subtle phase shift and the clear-cut massing together of a glass volume passing through the solid core made it possible to create a building with a landmark quality in the urban landscape. Moreover, a pavilion-style open space and sidewalk-like open space that are integrated with the adjacent park have been provided under the Tokyo metropolitan comprehensive design system, helping to improve the urban environment and achieving an high-rise building that is comfortable and rich in greenery. (Figure 1)

History

In the urbanism development of Tokyo, various voids are inherited from Edo-period (1603-1868). Daimyo gardens in their territories have turned to the public park. (Figure 3)
The surrounding location of Park Front Tower used to be as well as Daimyo garden. Here has been boundary of void and town in Edo-period.

*Daimyo = territorial lords in samurai period

Figure 3 Tokyo map in Edo-period (A.D. 1809)

Density analysys

Low density of high-rise and high density of middle-rise buildings are characteristic of buildings distribution in Tokyo compared with New York City. It is because many developments are located around railway station. But recently, target is changed.

Development is planned in low density area, then many micro urban voids have been developed and turned to be high-rise. (Figure 4)

High-rise buildings are increasing continuously in Tokyo especially from 1990s. The present issue is how to keep the micro urban voids. (Figure 5)

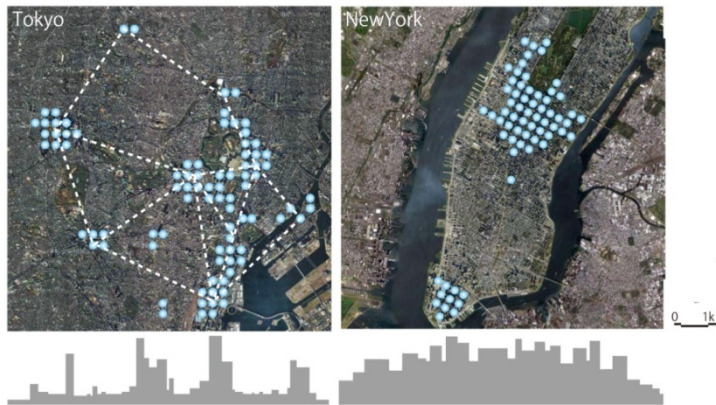
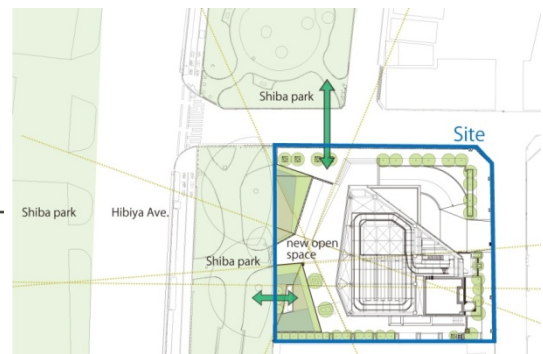
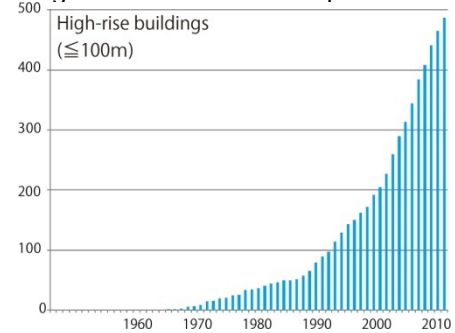


Figure 4 Distribution of high-rise buildings

Figure 1. Exterior from park side



Concept and Space

This planning concept is creating a new micro urban void in this site. This new void is connected to the existed park next to the site where is inherited from Daimyo garden. The historic urban landform is re-designed and re-defined by the new micro urban void. (Figure 6)



Figure 6 Site plan

The interior space of high-rise building should be related to history. This architecture utilizes natural resources from the existed urban void and the new micro urban void. The interior space next to the new micro urban void means “Environmental barrier-free zone”, which softens outside impacts to interior. It is not an interior space with artificial environmental device but utilizes natural ventilation, sunshade by trees, limited air-conditioned in people height.



Figure 7 Interior space next to the micro urban void