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/ ISSUE 114. 2020 • S\$8 /

A SIMPLE HEADQUARTERS

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DESIGN COLLECTIVE
ARCHITECTS

TEMPLE IN STONE AND LIGHT

SPACEMATTERS

VIRTUAL REALITY

INTEGRATING VR INTO
THE DESIGN PROCESS

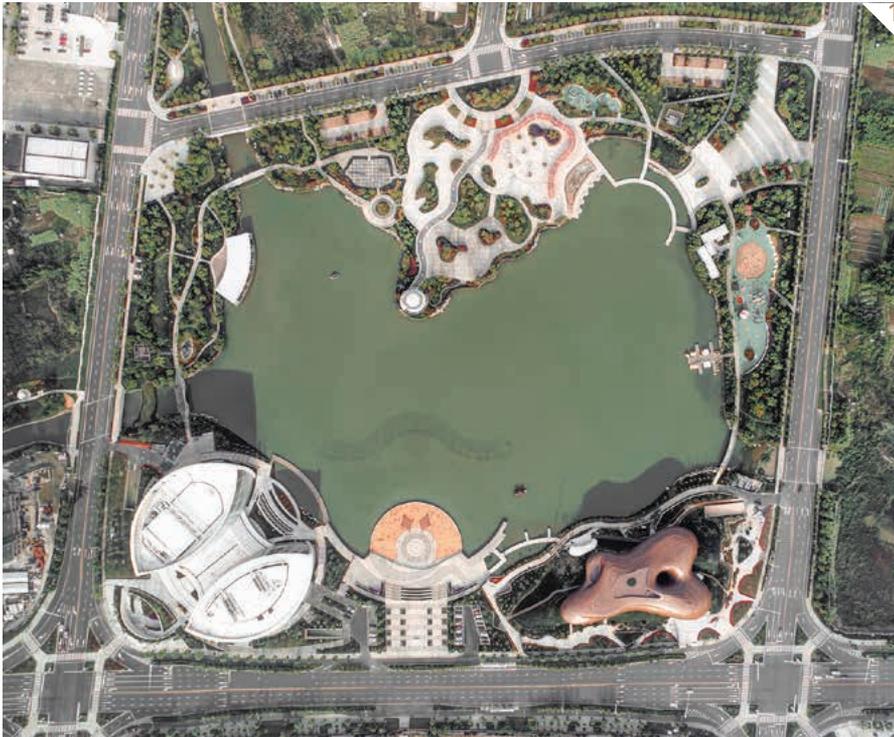


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/ WORDS MICHELE KOH MOROLLO

HISTORY WITHIN THE HILLS

A traditional Chinese musical instrument inspired the curving lines of this futuristic local history museum in Liyang City.



In the new Yan Lake Park urban district in Liyang City, in China's Jiangsu Province, architecture firm CROX has completed Liyang Museum, an undulating, organically-shaped local history museum inspired by the *jiaweiqun* – a traditional Chinese mandolin that is one of the region's cultural symbols.

The brief from the project's client, Suwan China Cooperation Demonstration Area Construction, was for a local history museum with contemporary architecture but Chinese cultural attributes.

"Liyang Museum is a multi-functional venue that showcases a collection of cultural relics, as well as urban planning and temporary exhibitions on the waterfront of the new urban park," says CROX's Director, C.R. Lin who designed the museum as a 19,000m² space with about two-thirds of its programme located above ground and the remainder underground.

Within the building are three main zones – a hall dedicated to artifacts from prehistoric Liyang, a hall that showcases displays related to Liyang's more recent

/ 1-2
Liyang Museum is bordered on the eastern side by Yan Lake.



LIYANG MUSEUM

LOCATION / JIANGSU, CHINA
COMPLETION / 2019
SITE AREA / ABOVE GROUND 12,000M², UNDERGROUND 7,000M²
ARCHITECT / CROX
LEAD ARCHITECT / C.R. LIN
LANDSCAPE / CROX





developments, and a third zone spread across the three floors that showcases Liyang cultural relics from different periods in Chinese history.

THE CHINESE MANDOLIN

Though the museum's flowing form looks somewhat futuristic, it was in fact an ancient Chinese folktale that led the architects to the idea of the *jiaoweiqun*, which in turn informed the silhouette of the structure.

The story, which originated during the Han dynasty, tells of a Chinese imperial scholar and official named Yong Cai who

listened to the crackling of firewood, sensed its musical potential and pulled the charred wood out of the fireplace crafting it into the *jiaoweiqun*.

"Reconstructing the symbolic sense of form, we tried to integrate the allegory of allusions into the multi-faceted space, so as to connect the architecture and nature with the city, create an organic form and undulating mountain, an open and free atmosphere, and a landscape of oriental poetry," says Li.

Not wanting the museum to be a continuation of the cookie cutter, block-shaped modern buildings nearby, Li and

/ ABOVE
The main road borders the west of the museum, connected to it via the southwestern end of the site.



C.R. Lin,
Director, CROX



his team nestled the structure amidst a series of rolling green hills and decided on a horizontal rather than a vertical spread.

When seen from afar, the museum appears to float above ground like part of the natural landscape.

The façade was constructed as a vertical aluminum plate curtain wall with locked edges. Alternating light and dark brown coloured plates were used to give the curvy façade the striated appearance of an organic wooden object.

PART OF THE TERRAIN

The site consists of four hills and the building's volume conforms to the contours of the hills.

The programme is divided into two parts: low, subterranean spaces set between the dips of the rolling green hills, and an upper "floating" portion that rests above the hilly terrain.

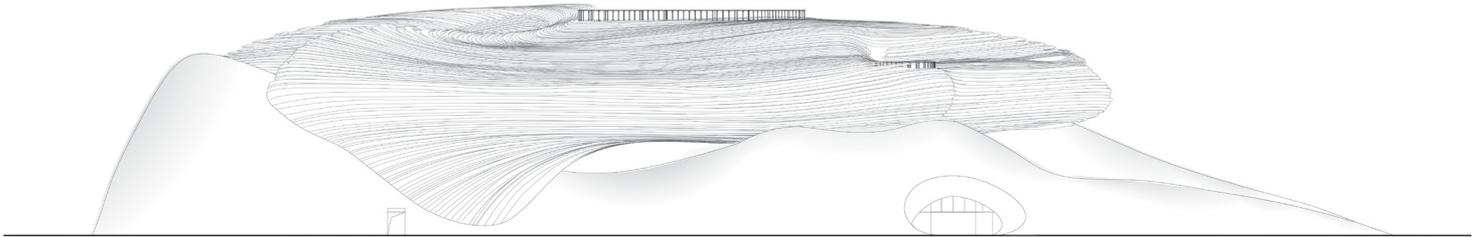
The low spaces contain a central atrium surrounded by an office, educational room and a lounge.

/ 3-4

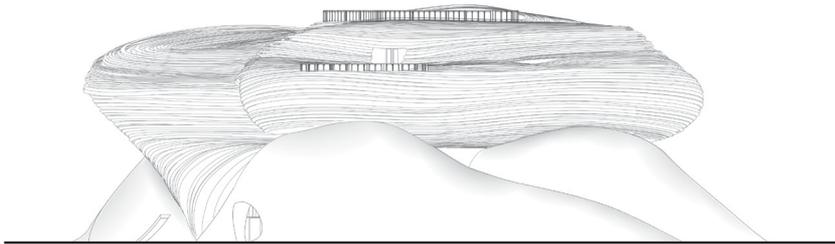
View of the northeastern section of the museum. Its shape follows the contours of the four hills on the site.

/ INSTITUTIONAL /

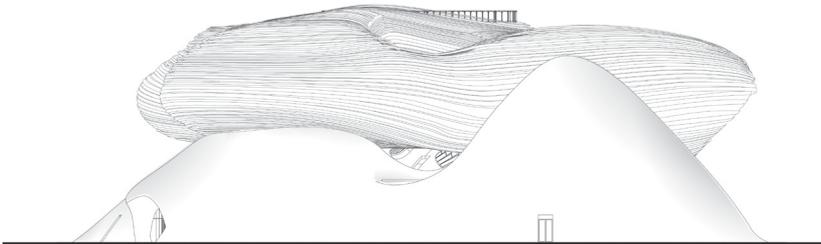
ELEVATION



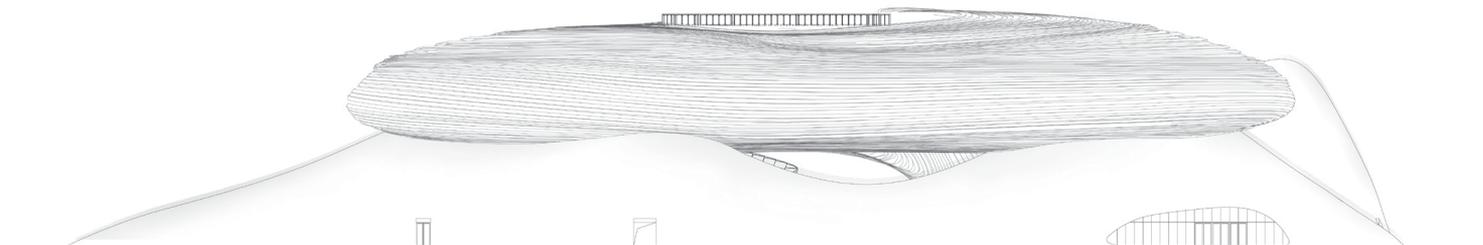
EAST ELEVATION



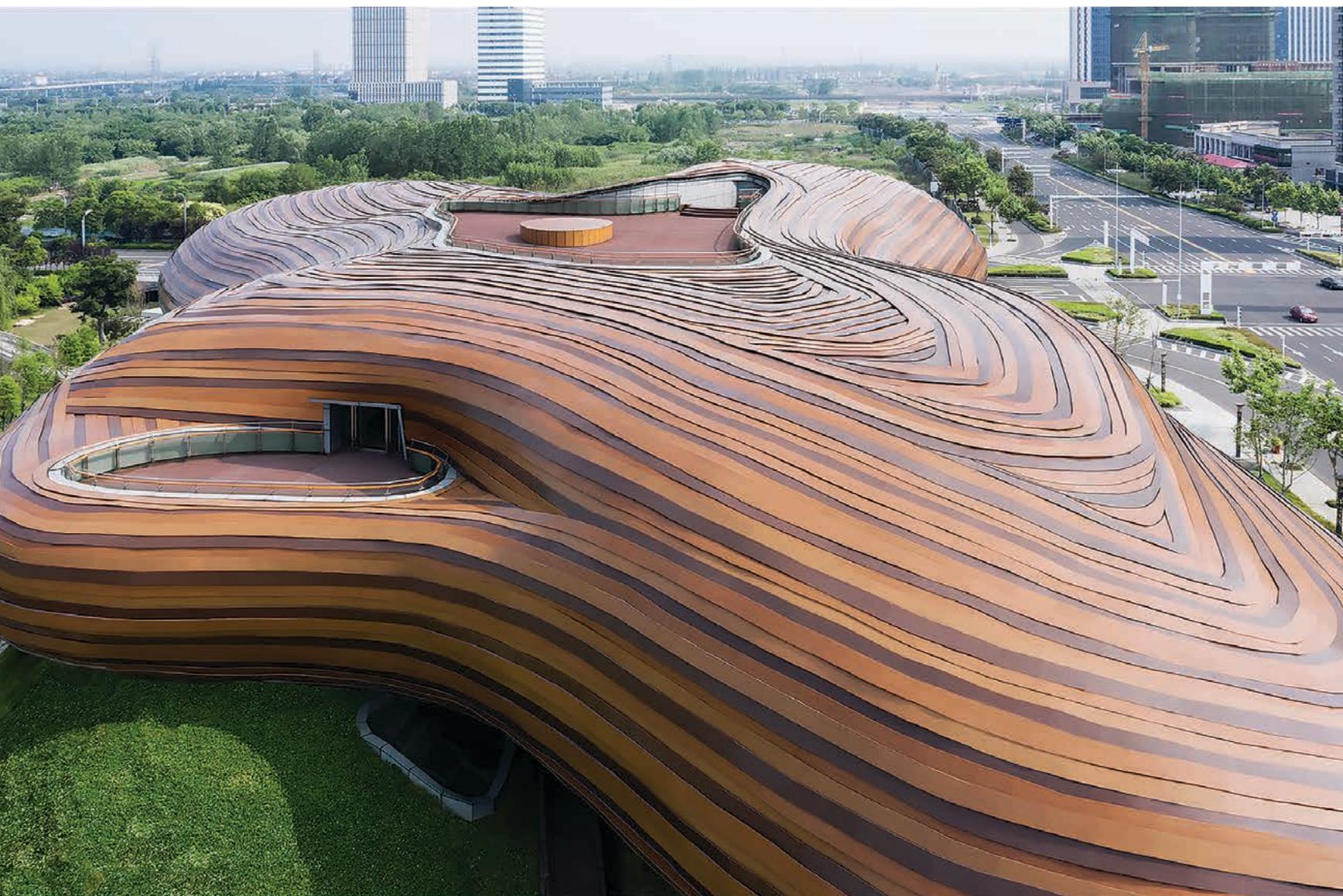
NORTH ELEVATION



SOUTH ELEVATION



WEST ELEVATION



Within the upper portion are exhibition halls, and a rooftop patio and viewing terrace where visitors can look out to views of Yan Lake.

The southwestern end of the site connects to the main road and has an overhang that serves as a visitor's entrance.

The northeastern end of the building is designed like a public plaza that slopes gently downwards as a passageway to the central atrium.

"The hill in the south is the highest, and here, the upper part of the museum is hidden to increase the conversion of sight, and a large hole is left in the suspension

so sunlight can stream in to illuminate the central atrium.

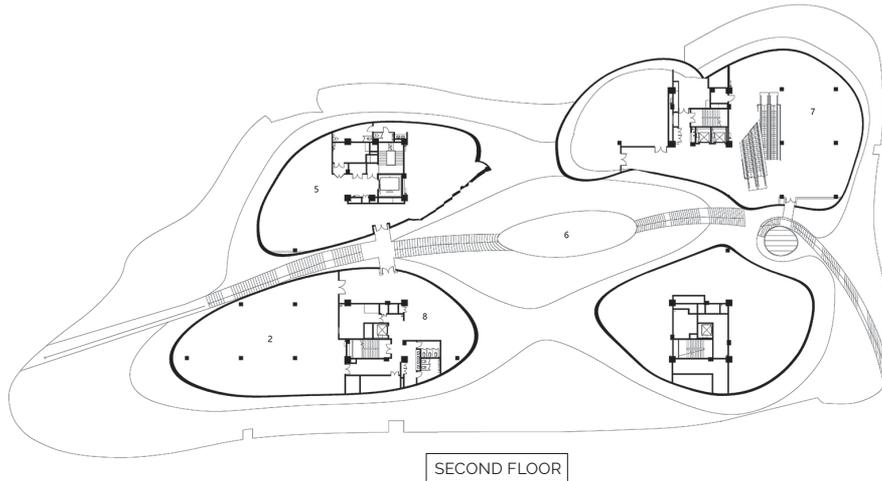
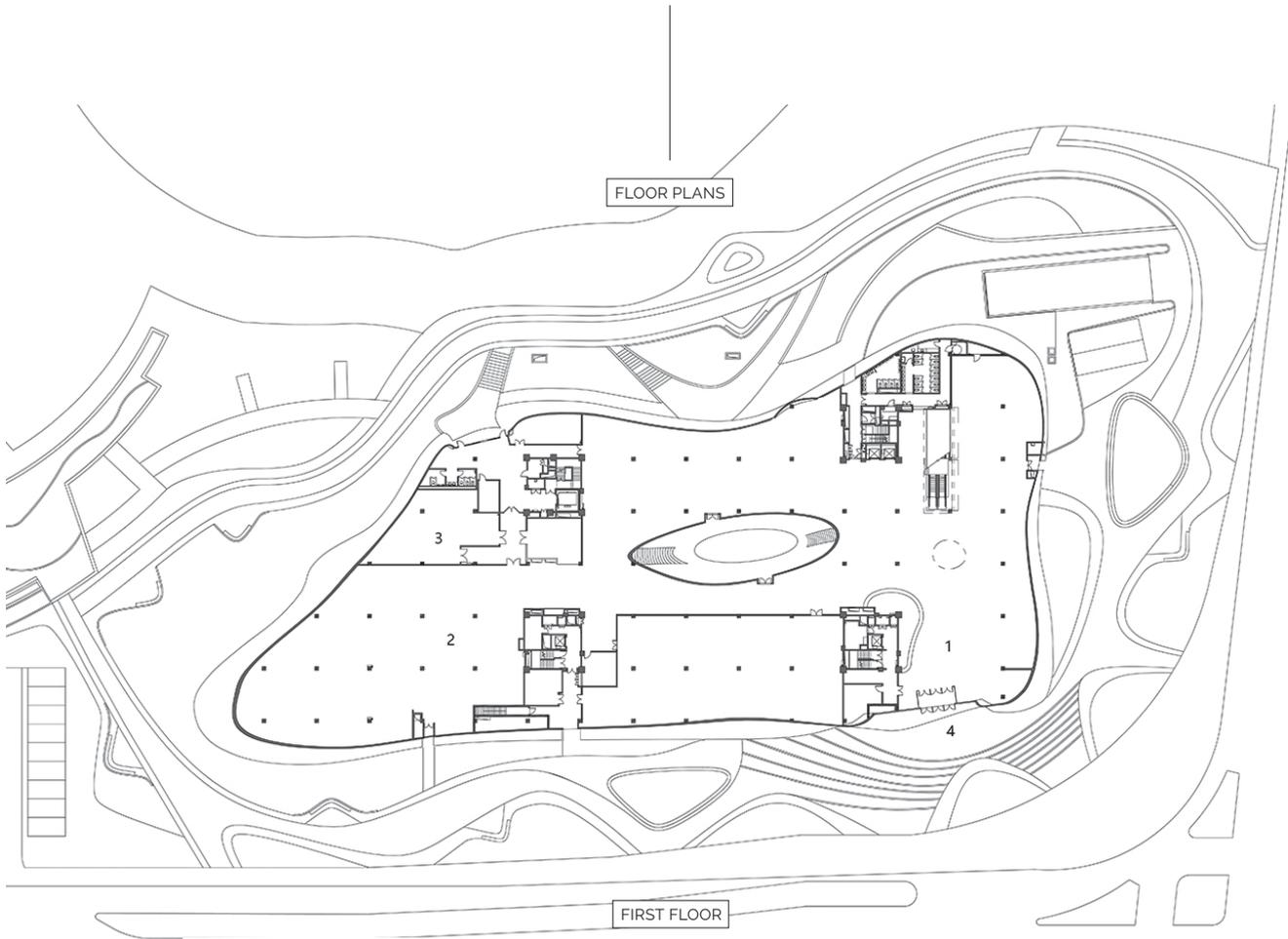
"This creates an interior chamber with a strong natural atmosphere," says Li.

"The hole is a void that embodies the artistic concept of the blank space in Chinese landscape painting. The hole also echoes the hollowed-out chamber of the *jiaweiqun*," he adds.

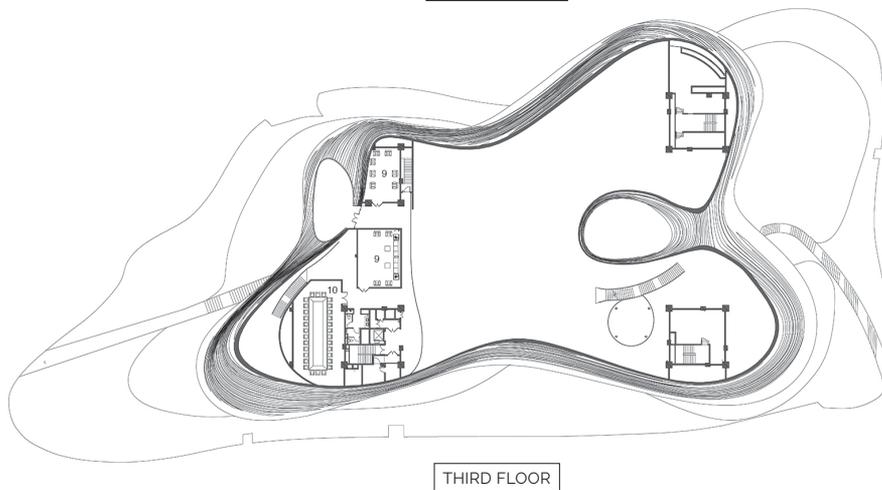
To enhance the natural aspect of the building, the exterior of the ground level was planted with winter and summer grasses, and the interiors with kidney fern and wheat winter, which do not require as much sunlight as the grasses.

/ ABOVE

On the roof of the building are a patio and viewing terrace where visitors can look out towards Yan Lake.



- 1. LOBBY
- 2. EXHIBITION HALL
- 3. STOREROOM
- 4. PLAZA
- 5. OFFICE
- 6. COURTYARD
- 7. EDUCATION ROOM
- 8. LOUNGE
- 9. EDUCATION ROOM
- 10. CONFERENCE ROOM





“Liyang Museum is an ingenious combination of a free suspension and natural mountain shape. It is divided into two structural systems – a reinforced concrete structure for the lower part, and a steel structure for the upper part, and is the first local project in Liyang constructed with

Building Information Modelling (BIM),” says Li.

“The total project cost was 250 million yuan, and it took two years to construct the indoor and outdoor sections. It was a huge challenge for us, but we are very happy with the success of the completed project.”



/ 5

A large void in a section of the roof creates a skylight that illuminates the atrium.

WORDS MICHELE KOH MOROLLO

OPEN AND FLEXIBLE

The interiors of this new Brutalist-inspired office building in Hanoi enable adaptable and flexible configurations, as well as future expansion.



On Le Van Huu Street, in a part of Hanoi's Old Quarter that has many warehouses and logistic halls, G8A Architecture & Urban Planning collaborated with execution architects VUUV to build The Bridge – an office building with a series of bridge-like platforms supported by two concrete cores.

The first core contains the main service areas and circulation paths. The second core contains all of the office's

documentation, and is what G8A's Swiss lead architect Grégoire Du Pasquier calls the office's "memory wall".

Created to house the multiple core businesses of Vietnam-headquartered investment firm OpenAsia Group, The Bridge meets its client's need for highly adaptable and flexible working spaces, while also responding to the context of its site.

"The Bridge houses the teams of several luxury brands that make up

/ 1

The office building responds to its densely-packed urban fabric site with a design that opens up its interiors.





2



Grégoire Du Pasquier,
Lead Architect,
G8A Architect

the OpenAsia Group. The architecture embodies a design solution that responds to the spatial and socio-economic landscape of urban Vietnam. Topologically located between warehouse and logistic service buildings, the structure stands enigmatically in the middle of Hanoi's Old Quarter," says Du Pasquier.

PANORAMIC VIEWS

Located within a 400m² land parcel at the end of an alley, The Bridge is integrated into the urban fabric of the site, and has a gross floor area of 2,679m² spread across seven floors.

The ground floor consists of an entrance reception and water basin. An access ramp to the basement is hidden through an architectural gesture that gives the entrance its unique appearance.

The offices spaces are located on the first, second, third and fifth floor. Some of the work areas are connected, while some are isolated.

Conference rooms are located on the fourth floor, and on the sixth floor is an



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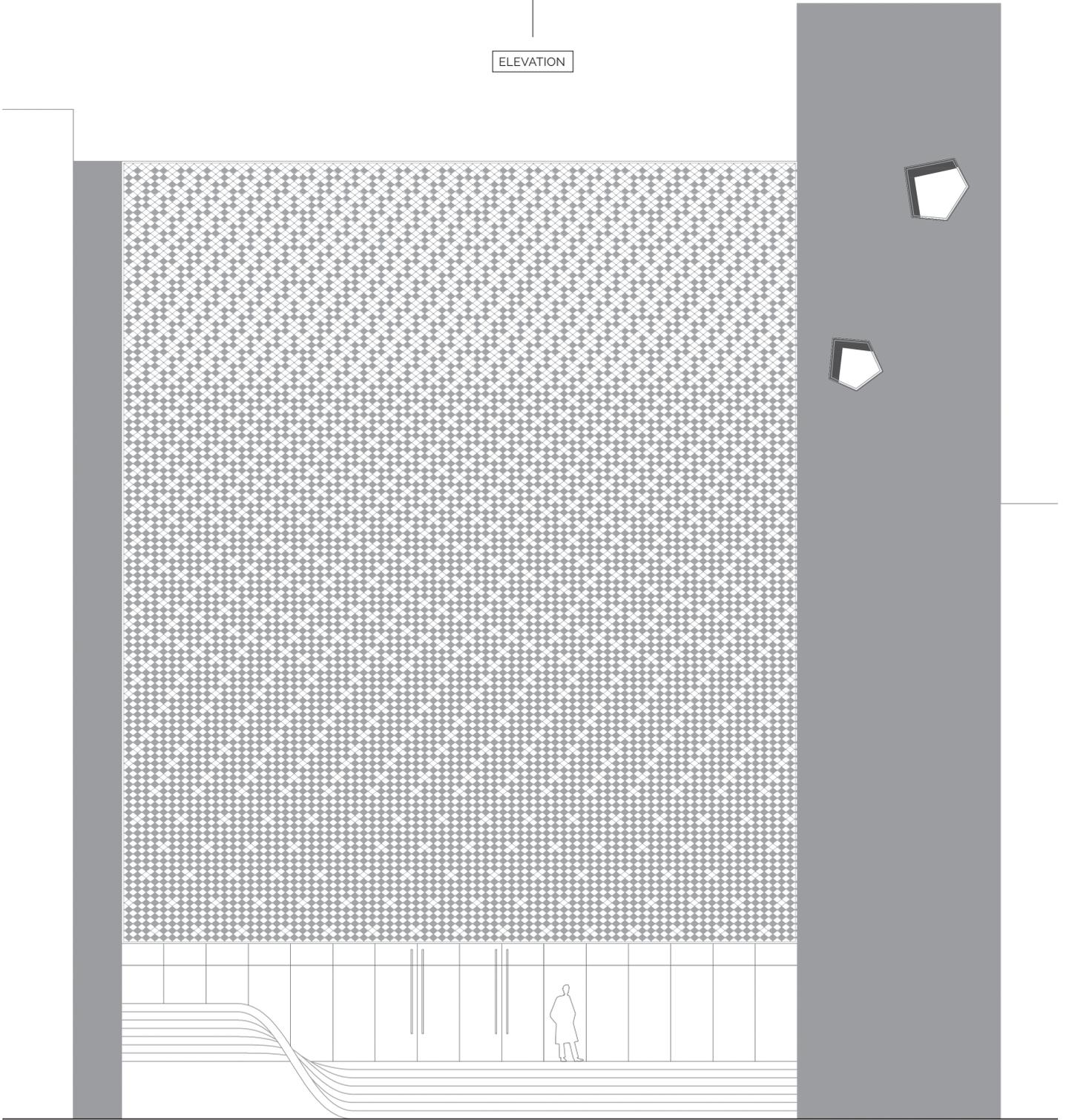
office cafeteria and rooftop terrace. All levels have a large storage area and toilets.

To avoid the claustrophobia associated with densely built-up urban sites, the architects opened the interiors of the building so natural light flows through from one facade to the other, traversing and illuminating all the interior spaces.

"In-between the two cores are column-free interstitial spaces, so each floor has

/ 2-3
The staircase on the ground floor entrance has a dynamic, sculptural form.

ELEVATION





4

/ 4
The floors can be accessed via a concrete stairwell.

/ 5
One of the expansive office spaces in The Bridge that's framed by panoramic windows on both sides.

unobstructed panoramic windows on both sides," says Du Pasquier.

Because each level is free of columns, a high level of flexibility is possible with a grid of mechanical, electrical and plumbing (MEP) accesses that allowed the architects to create any type of space – small, large, closed or open plan.

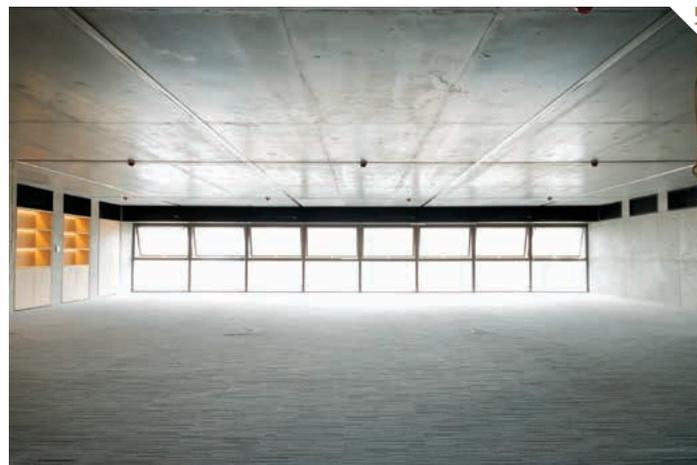
A span of 14m was achieved in the main spaces with beamless, post-tension slabs. This helped to keep the height limits within the site's construction codes.

All technical structures were concealed within hidden pathways throughout the building.

"Though the structure is large, it has a low profile that allows it to sensibly blend in with its surroundings. We avoided any structure impact or influence on the office space by working with a modular system to integrate all MEP systems," says Du Pasquier.

CONCRETE AND METAL

The building's Brutalist form and material was inspired by two of the client's



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core businesses Alba Water and Hanoi. Both brands focus on the transformation of rough materials into fine products.

Du Pasquier and his team thought about how to translate the client's refining process into the architectural language of the building.

They decided on concrete circulation zones as the symbol for raw materiality and open plan spaces, full glass partitions,

/ OPPOSITE
Asymmetrical geometric shapes are cut out from a section of wall to form windows visible from the backyard.





6
 / 6-7
 Stainless steel
 inox plates were
 used to create
 mesh facades that
 let air and light in.

fine carpets, and neat metal finishes to symbolise refinement.

“Upon entering the building, we are met with cues of materiality that embody the OpenAsia philosophy of ‘the transformation of raw material to fine product’. A prevailing use of the brut texture of concrete in relation to light hues and fine polished details of bronze communicates the idea of transforming rough to precious, and brut to polished.

“This precedes another sense of contrast as the user moves from the defined areas of circulation to the panoramic open work spaces,” says Du Pasquier.

A metal mesh sheath was used on the front-facing, entrance facade to reduce noise pollution from the street and filter out some of the strong sunlight entering the building.

On the rear façade, a tall, open shaft was incorporated to improve natural ventilation.

THE BRIDGE

- LOCATION / HANOI, VIETNAM
- COMPLETION / 2018
- SITE AREA / 400M²
- BUILDING AREA / 325M²
- GROSS FLOOR AREA / 2,670M²
- DESIGN ARCHITECT / G8A ARCHITECTURE & URBAN PLANNING
- LEAD ARCHITECT / GRÉGOIRE DU PASQUIER
- EXECUTION ARCHITECT / VUUV ARCHITECTURE & INTERIOR DESIGN
- INTERIOR FIT-OUT / LUXXY VIETNAM JSC
- CONTRACTOR / CONSTRUCTION JOINT STOCK COMPANY NO. 2
- C&S CONSULTANT / ATEK ASSOCIATES
- M&E CONSULTANT / INES CORPORATION
- LANDSCAPE / G8A ARCHITECTURE & URBAN PLANNING



7
 “The metal-sheathed frontage together with the green façade cabling at the rear provides passive cooling while creating a sense of intimacy,” says Du Pasquier.

To increase privacy on the lower floors, more inox plates were used for the mesh on these levels to shield the office interiors from strong sunlight and the eyes of neighbours.



8

/ 8
Panoramic windows
on the building's
back facade.

On the upper levels, fewer inox plates were used so users on these higher levels can enjoy clearer views of the city.

The mesh also helps to break up the structural denseness of the concrete volume and brings visual porosity to the building's door-less entrance.

"The door-less entrance of the building appears like an extension of the sidewalk on the building's north-south exposure, permitting an open platform. Facades are placed voluntarily in recess to absorb the potential construction of surrounding buildings, in anticipation of further growth in the coming years," says Du Pasquier.

In stark contrast to the dense surroundings, the platform levels open to the environment offering users a sensation of open space.

"These sweeping office areas represent synergies and transparency, allowing for a maximum of flexibility for any future use," he adds.