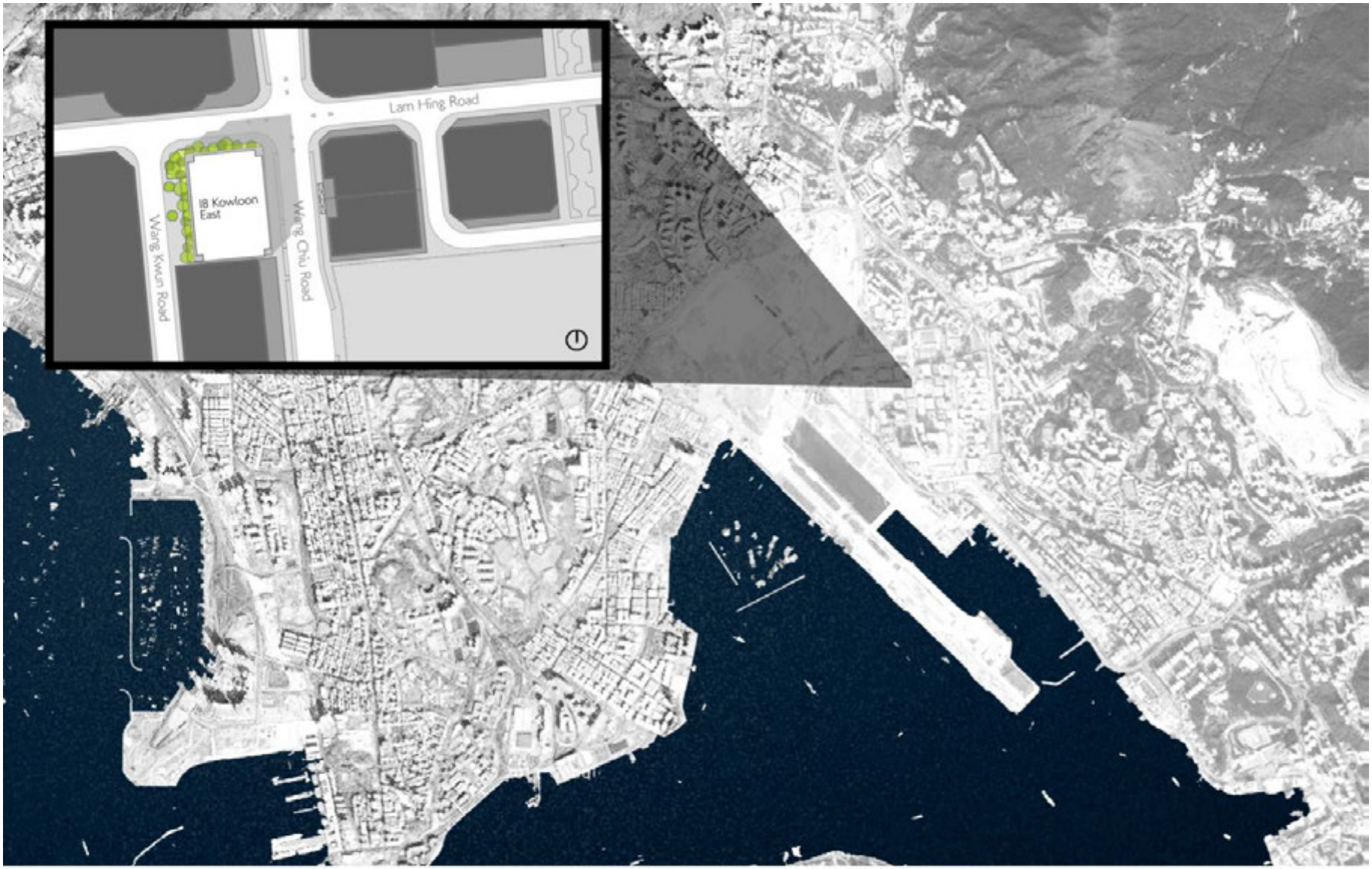
Disclaimer: The copyright of this presentation rests with the speaker and / or the organization the speaker represents. If you wish to use or reproduce the information shown in this presentation for any purpose; or you have any query related to this presentation, please contact the speaker direct.


Lam Hing Road
18 Kowloon East
Wang Kwun Road
Wang Chiu Road

Kowloon Bay

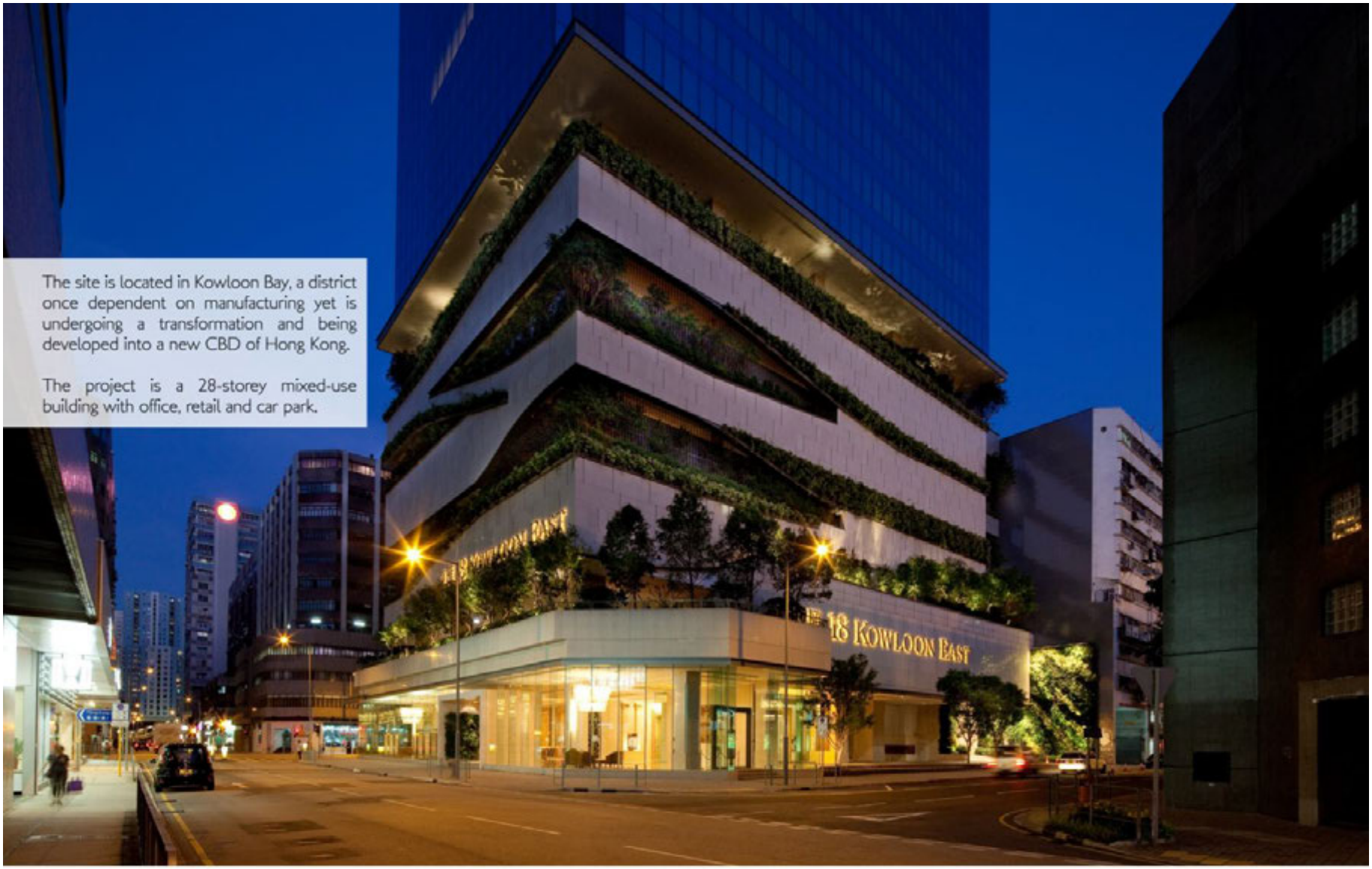
Kowloon Bay is a predominately industrial area that is undergoing a process of transformation from its historical roots into one of offices and retail.

It has recently been designated as a place of focused development into a new business district away from the office clusters of Central.

Our design responds to this context through provisions for the future.

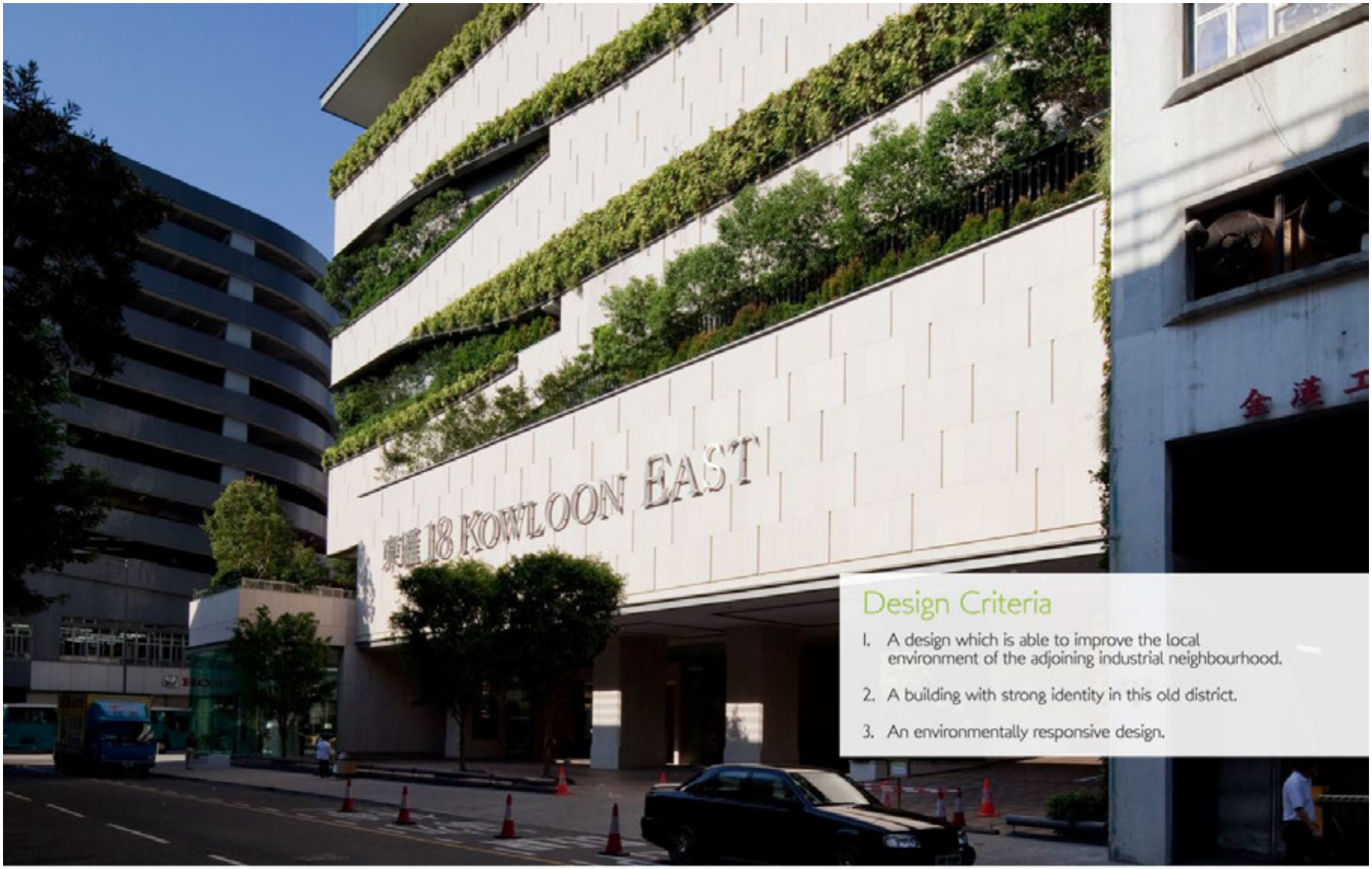
Design Brief

In contrast to the bare concrete of the surrounding buildings, 18 Kowloon East represents a breath of fresh air against the changing industrial negihbourhood.



The site is located in Kowloon Bay, a district once dependent on manufacturing yet is undergoing a transformation and being developed into a new CBD of Hong Kong.

The project is a 28-storey mixed-use building with office, retail and car park.

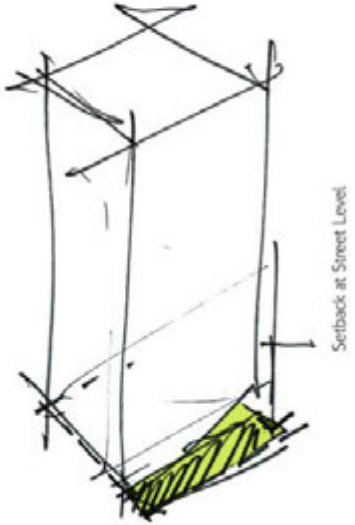


Design Criteria

1. A design which is able to improve the local environment of the adjoining industrial neighbourhood.
2. A building with strong identity in this old district.
3. An environmentally responsive design.

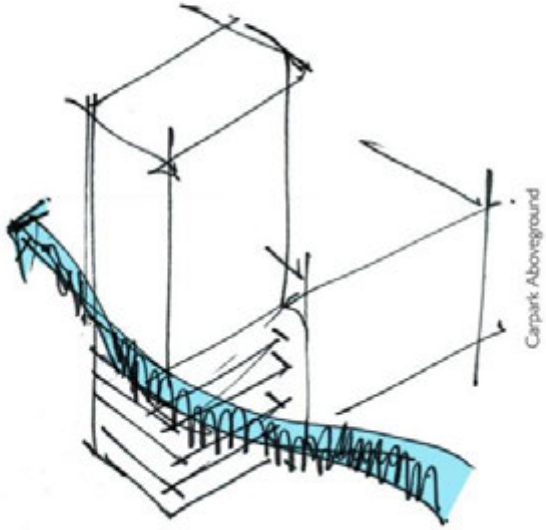
Design Evolution

Design Evolution



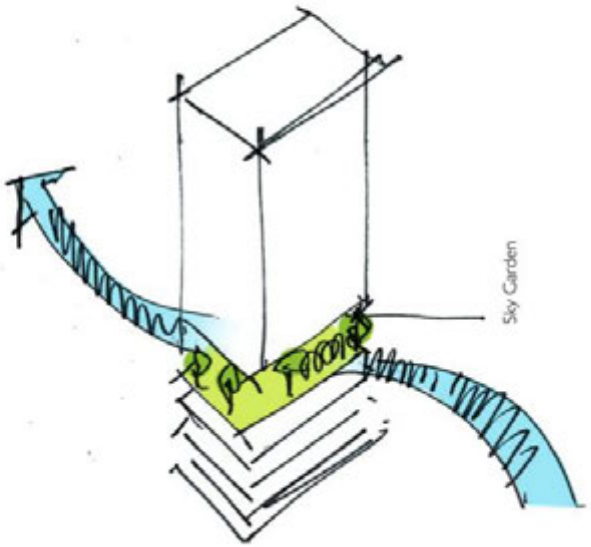
1. Setback at Street Level

The building is set back at street level to provide a more spacious street level condition for pedestrians.



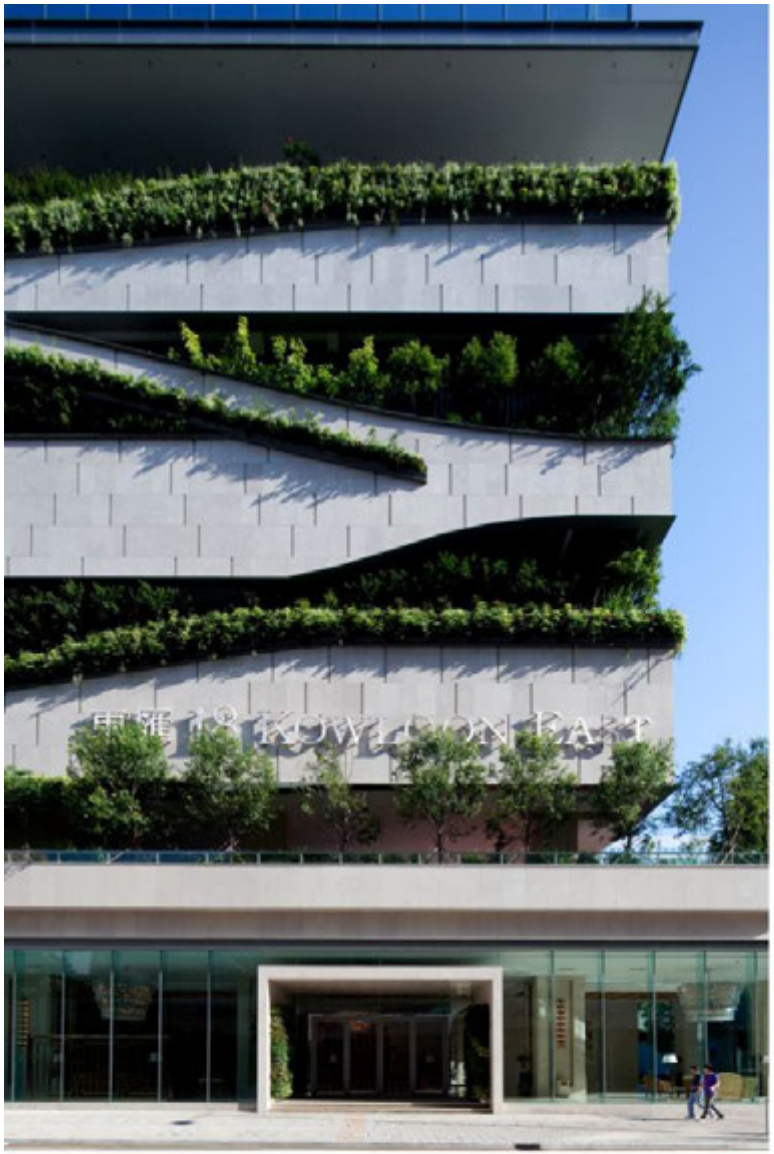
2. Car Park Above Ground

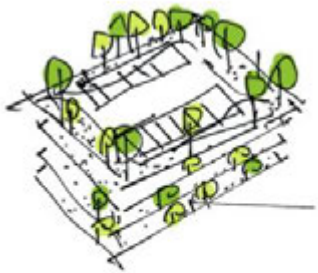
To achieve a more cost effective design, the car park floors are located at above ground low level rather to adopting a basement design. In addition, by the car park floors, the porosity of the building can be enhanced at low levels to improve the ventilation in urban scale and to alleviate the heat island effect.



3. Incorporation of Sky Garden

The air ventilation of the adjoining district can be further improved by incorporation of the Sky Garden. This garden acts as the interface between the office and car park floors. It provides the building users with a nice communal area.

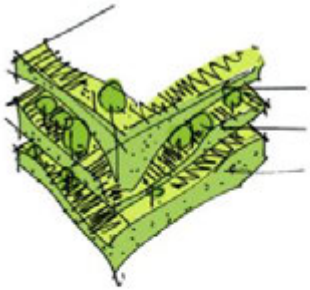




Design Evolution

4. Extensive Planting

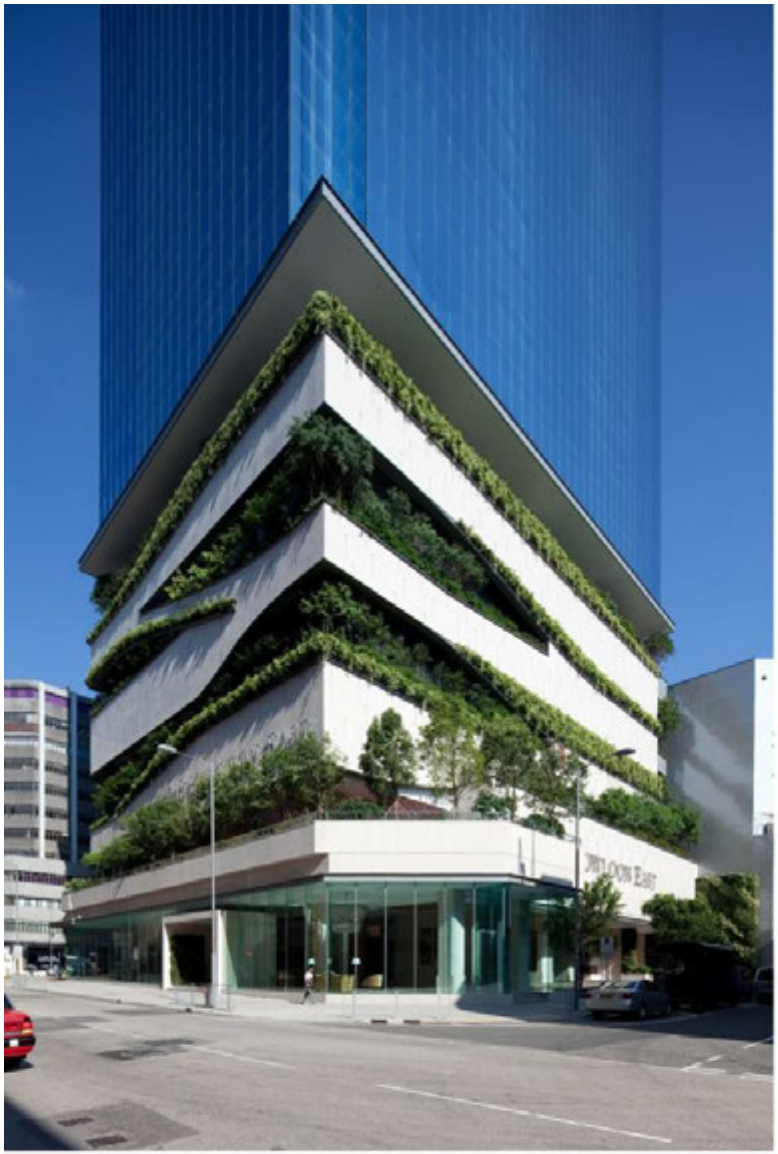
Extensive planter area is incorporated to different floors of the car park.



5. Vertical Green Walls

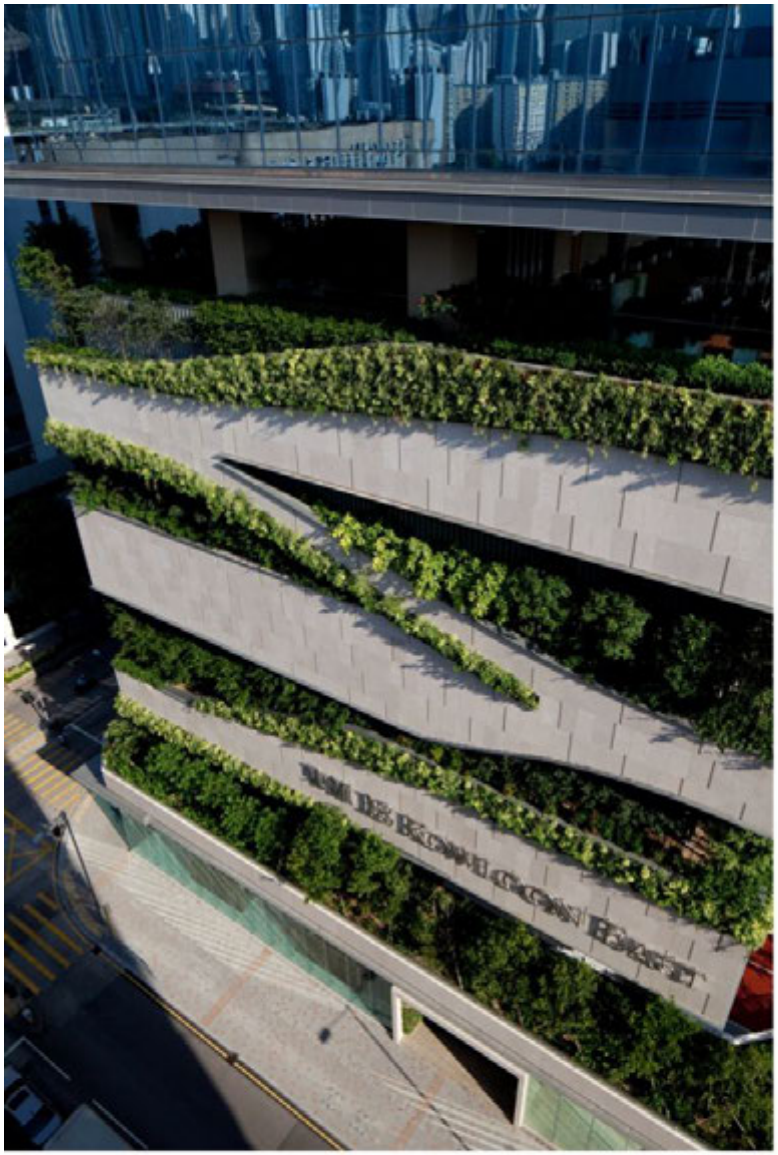
In addition to the planters, vertical green walls have bee incorporated to the car park floors.
Environmentally, it serves as a filter for the car park and the adjoining district. Aesthetically, it provides the greening effect to the neighbourhood.

Final Design



Final Design

Being located in a community with dense industrial blocks, instead of providing another office tower being wrapped entirely by a cool glazed skin, the design investigates the possibility of providing an environmentally sustainable design in such an industrial area. The target is to contribute a greening effect to the neighbourhood and enhance the quality of life for the building users as well as pedestrians at street level.



Final Design

With 'green' as the theme, the final design introduces extensive planting of both vertical green walls and planters at the car park floors locating at the lower portion of the tower. In addition to the visually greening effect to the neighourhood, the planting also filters the air and improves the air quality of the car park. Hopefully, the suspended particulates in the air can be reduced and the design is able to provide the users of the car park a more pleasant experience of parking.

Setback at Street Level

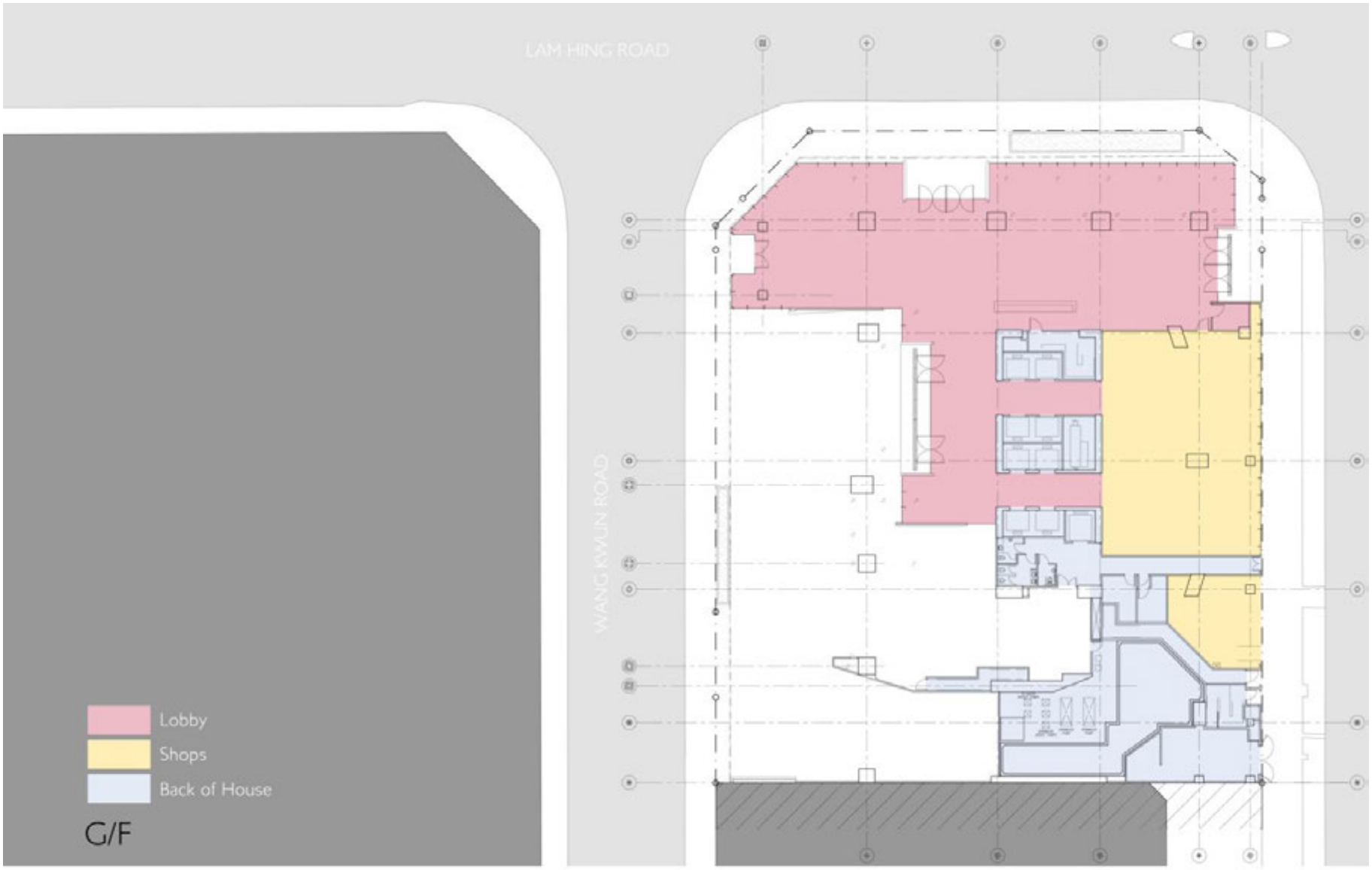
Air ventilation at pedestrian level is enhanced by improving the building porosity at low level. In addition to the open car park with filters of planting, a sky garden is introduced between the car park and the office floors to facilitate ventilation in urban scale. The sky garden also serves as a communal space for the building users.

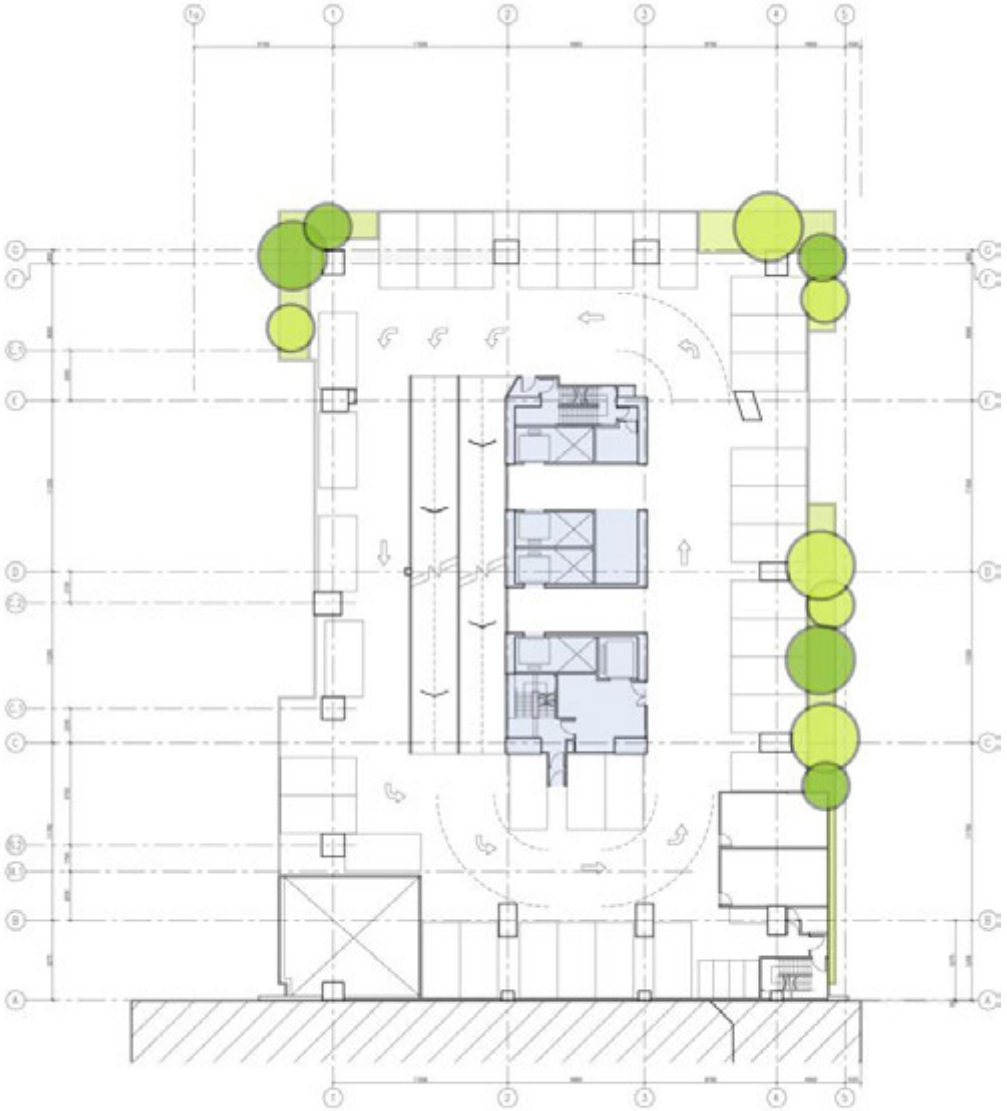
This design presents the following strength:

- **Responsive to the Site Context**
  It includes the setback at street level and the extensive vertical greening. Both these approaches significantly improve the neighbourhood environment.

- **A Building with Strong Identity**
  The project, especially the low levels of the building presents a vivid image to the public and demonstrates a new approach to commercial architectural design.

- **Cost Effectiveness**
  More efficient configurations of floor plate for both office and car park are obtained.

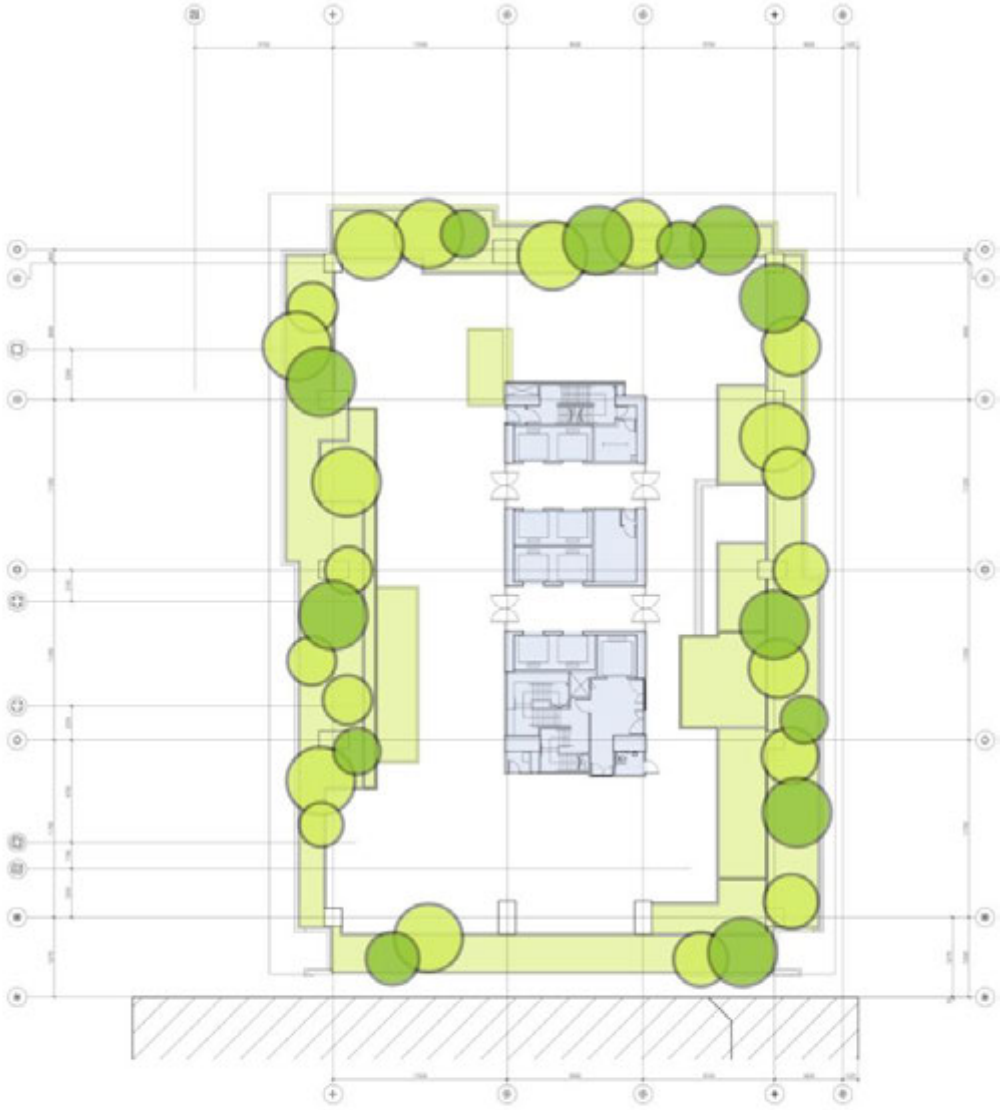

LAM HING ROAD
WANG KWUN ROAD
Lobby
Shops
Back of House
G/F



Greenery

Back of House

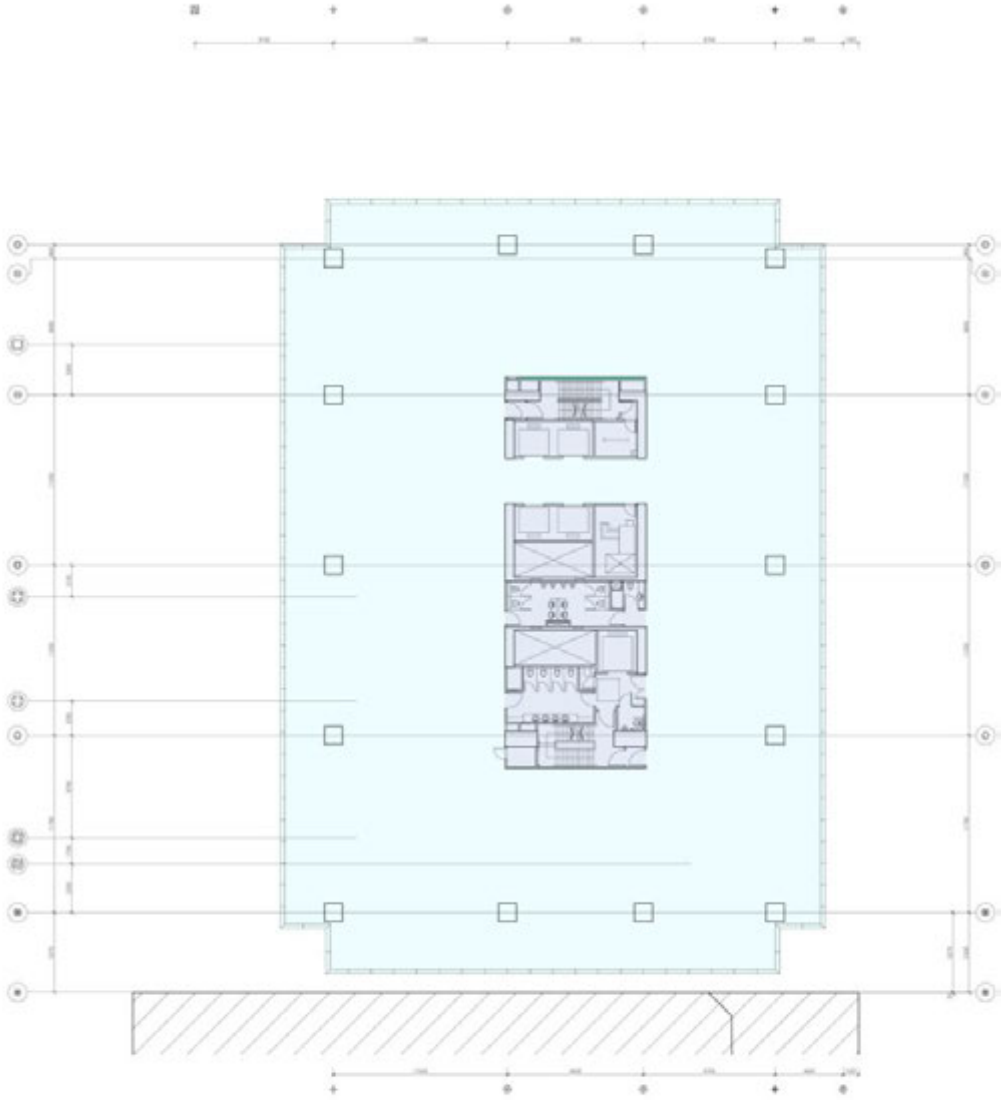
Podium Floor - Car Park



Greenery

Back of House

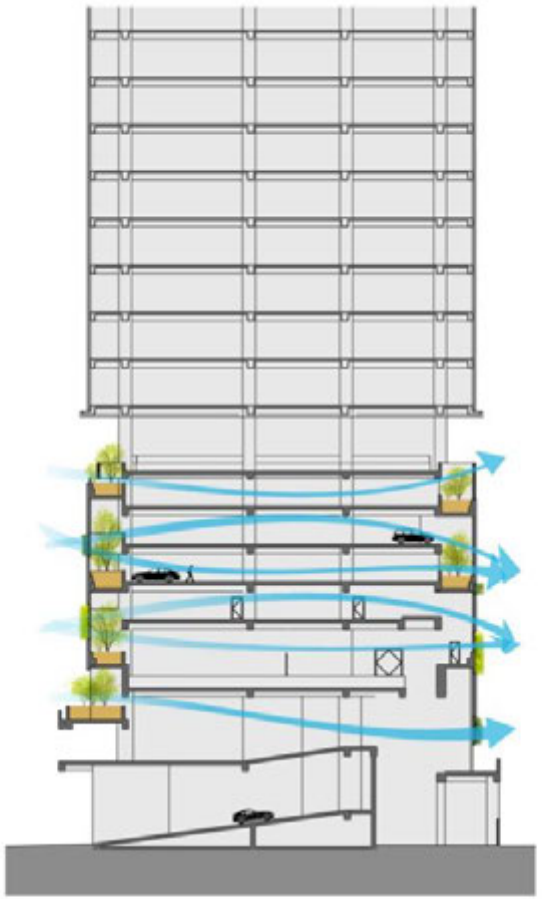
Podium Floor - Sky Garden



Open Plan Office

Back of House

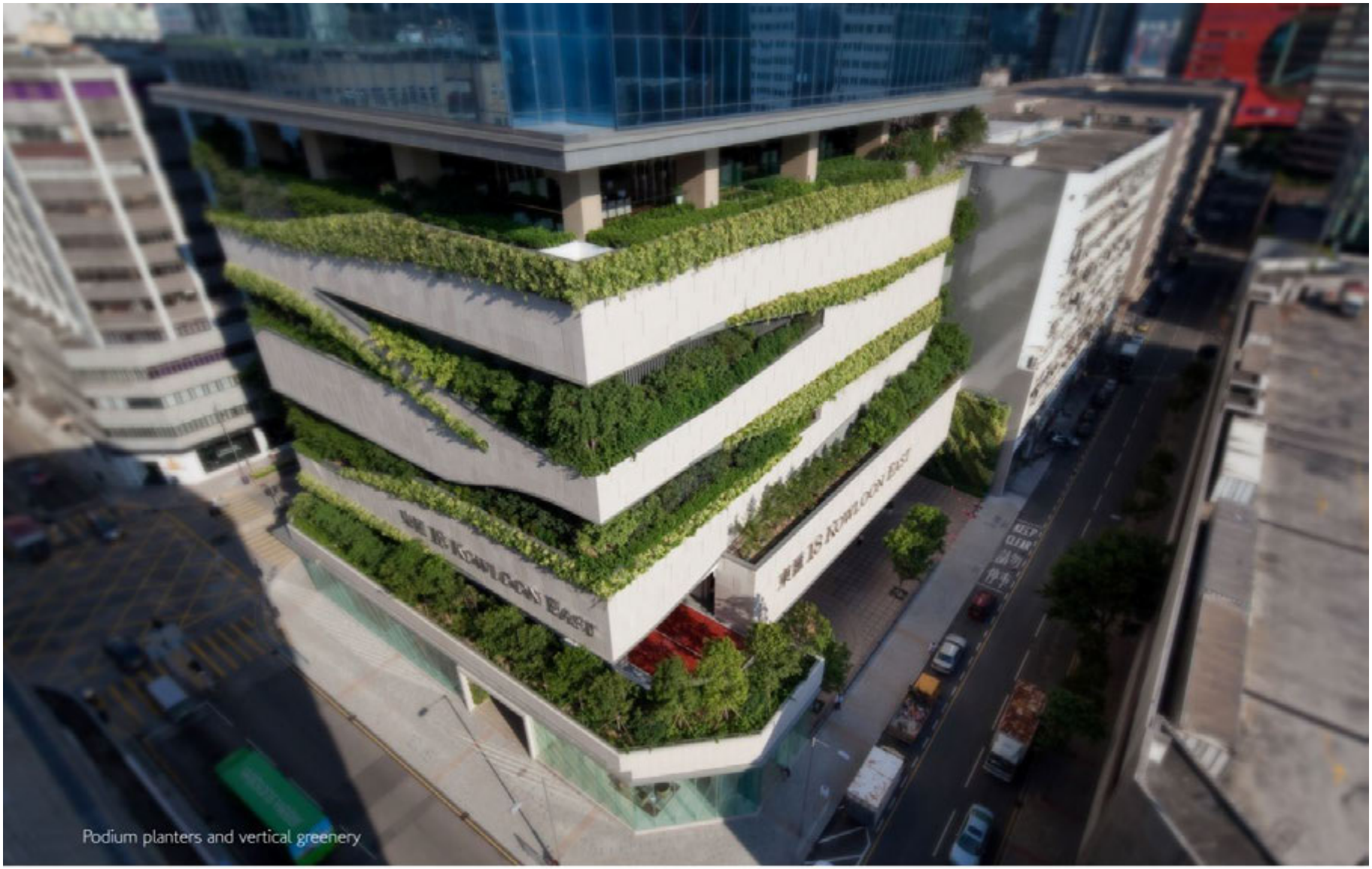
Typical Office Floor



Wind passes through the green wall at the podium level to naturally ventilate the car park and provide a filter towards the pollutants in the air.

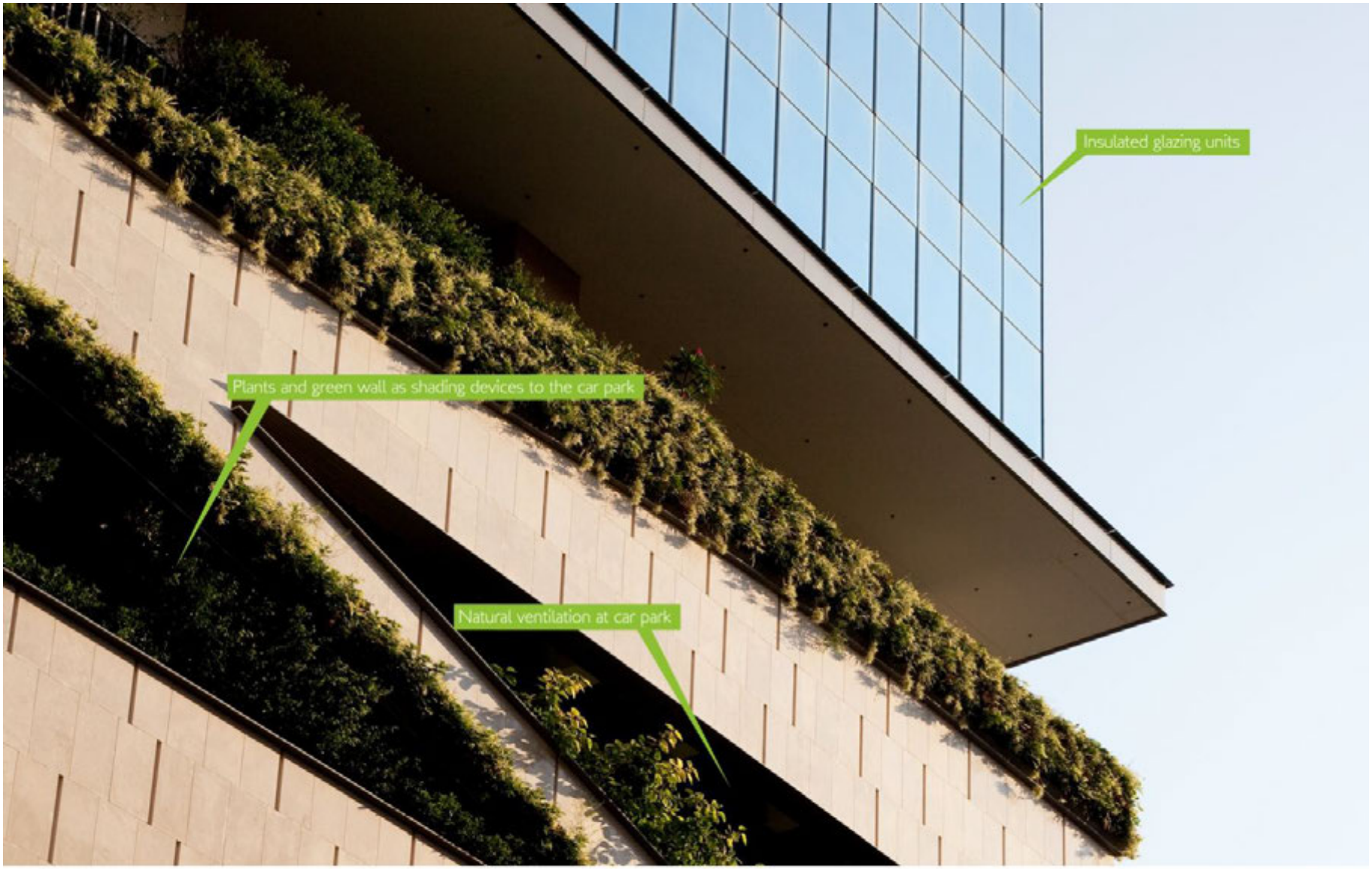
At the pedestrian level, the greenery offers a charming dynamics to the streetscape

The green wall and planters transform the experience of the carpark from a mundane service space into an area of greenery.



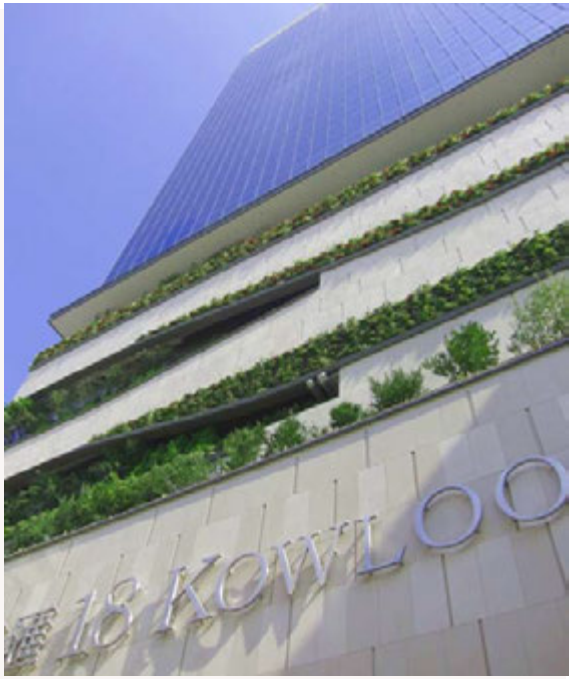
Podium planters and vertical greenery

The podium garden is designed as a space for social interaction.

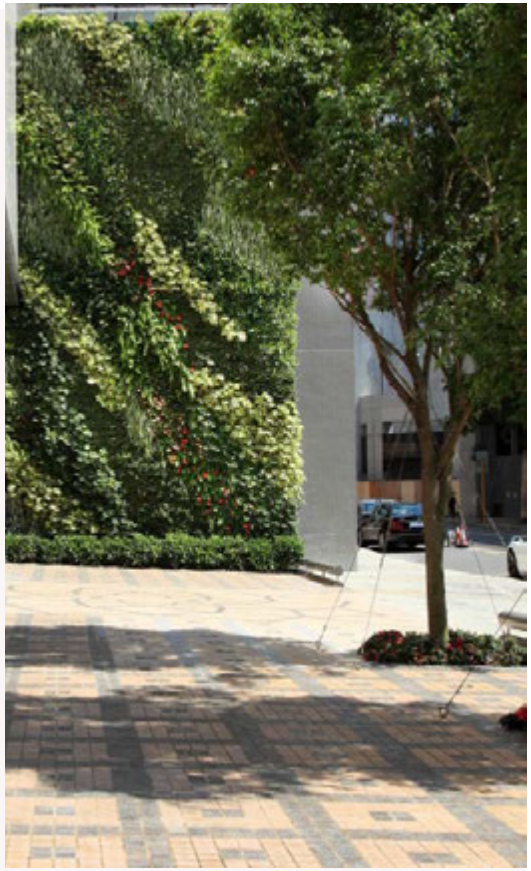

Insulated glazing units
Plants and green wall as shading devices to the car park
Natural ventilation at car park

Interplay between planters and vertical green wall.

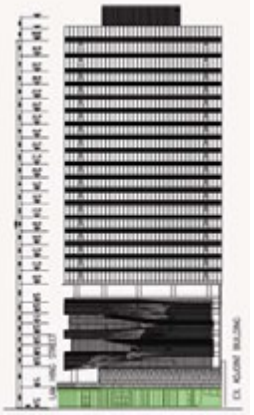
LANDSCAPE DESIGN



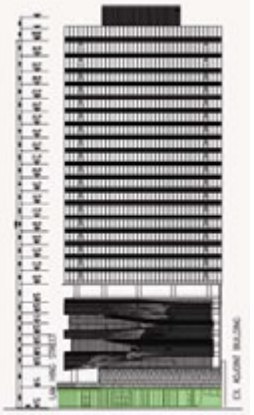
- Planter area • 2,000 sq. m
- Max height • 39 m
- Plants • 56,000
- Installation • 7 months
- Irrigation zones • 62
- Watering time • 6 hrs

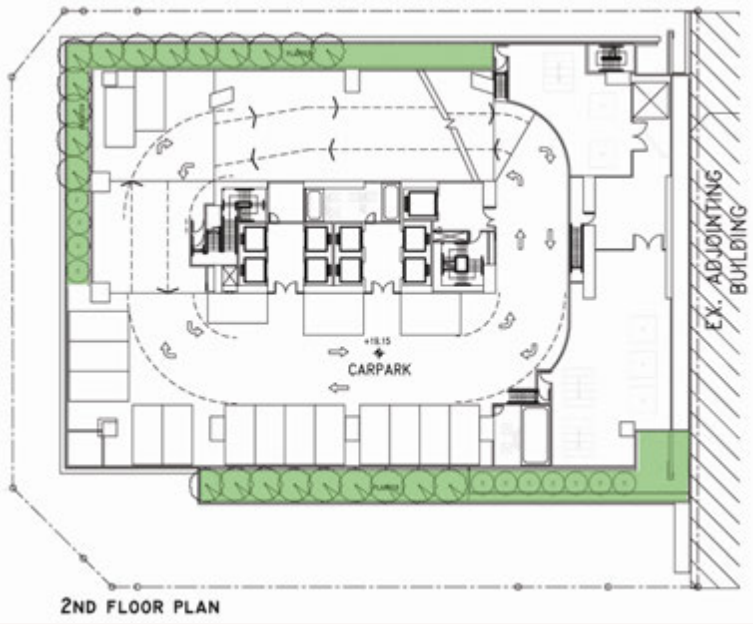


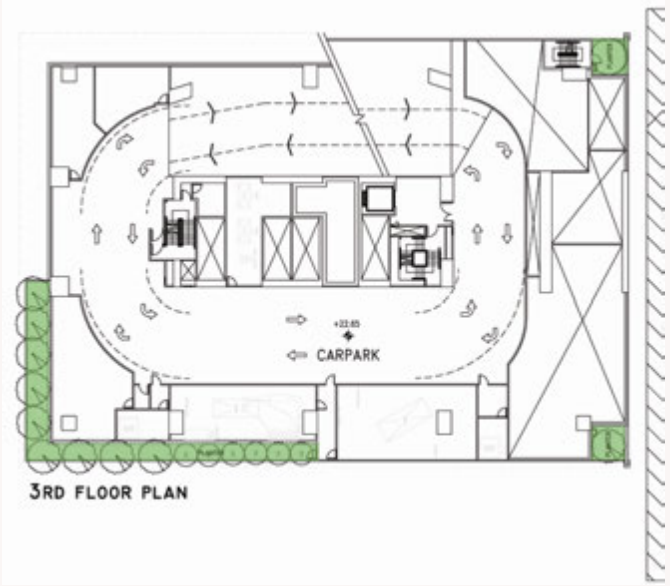
- Locations
- Enclosure
- Visual pleasure



- In and out
- Lights
- Delights



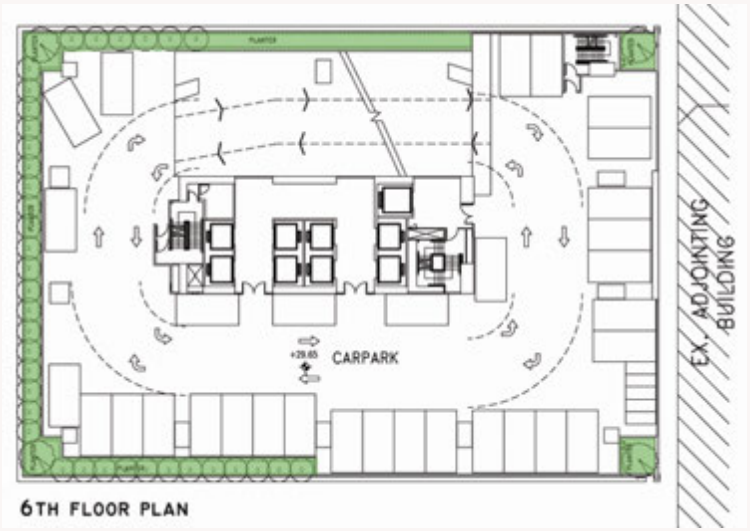


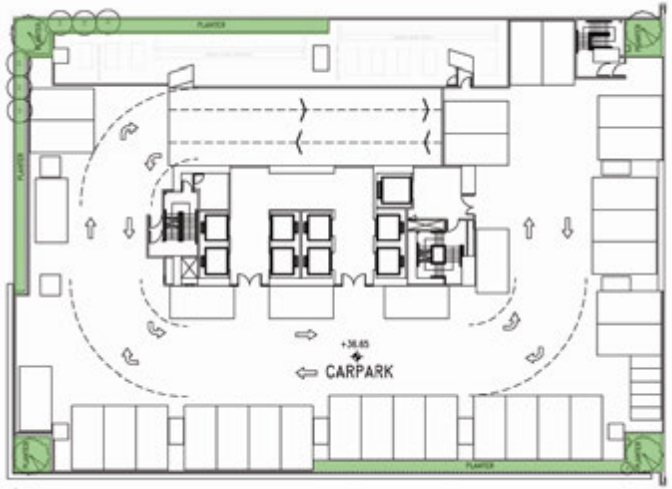


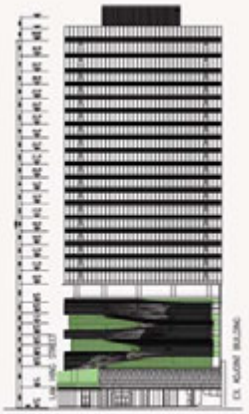
Greenery at Multiple levels

- Periphery greenery
- Vertical greening
- Trees planting

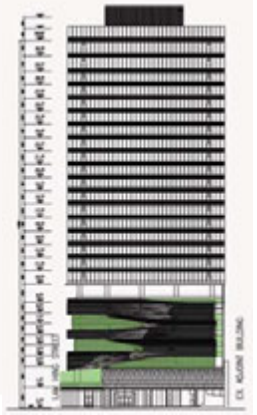
- Enhance parking environment

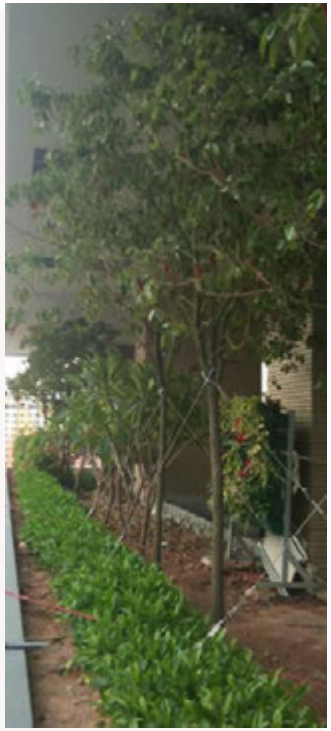






- Reduce solar absorption
- Enliven building outlooks
- Introduce urban biodiversity





Technical considerations

- Automatic irrigation
- Safety & Maintenance

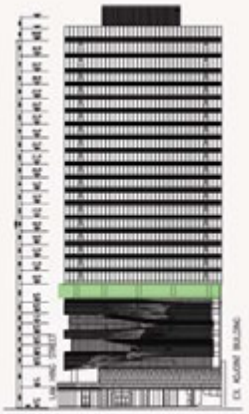
Technical Considerations

- hardiness
- sustainability
- ease of maintenance

- Mock up
- Welding and pull out test for structural members
- Irrigation testing
- Procurement of plants

Oasis in the Sky

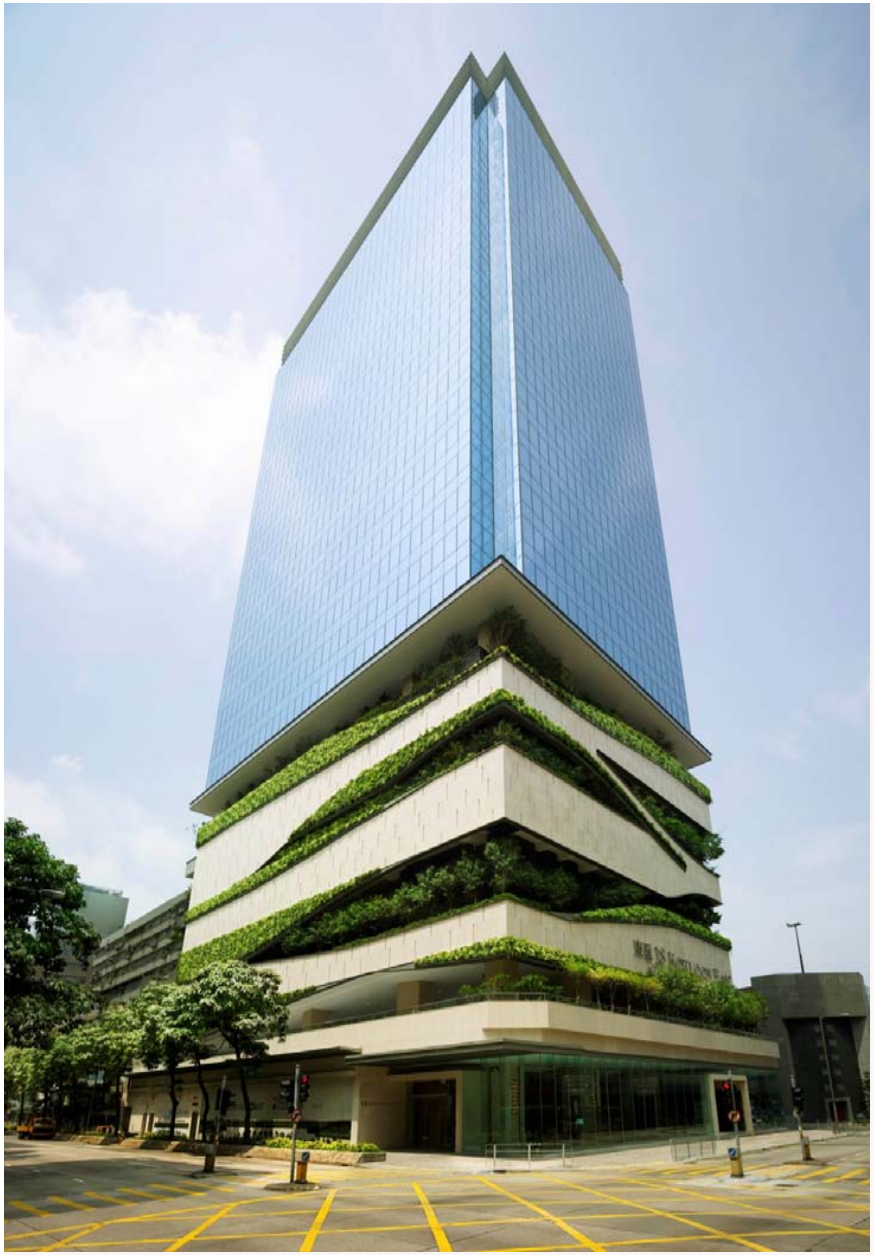
- 28% greening ratio
- 4.6m headroom
- 520 m^2 planting area
- Shrubs 7700 nos.
- Trees 50 nos.



SKYRISE GREENERY AWARDS 2012

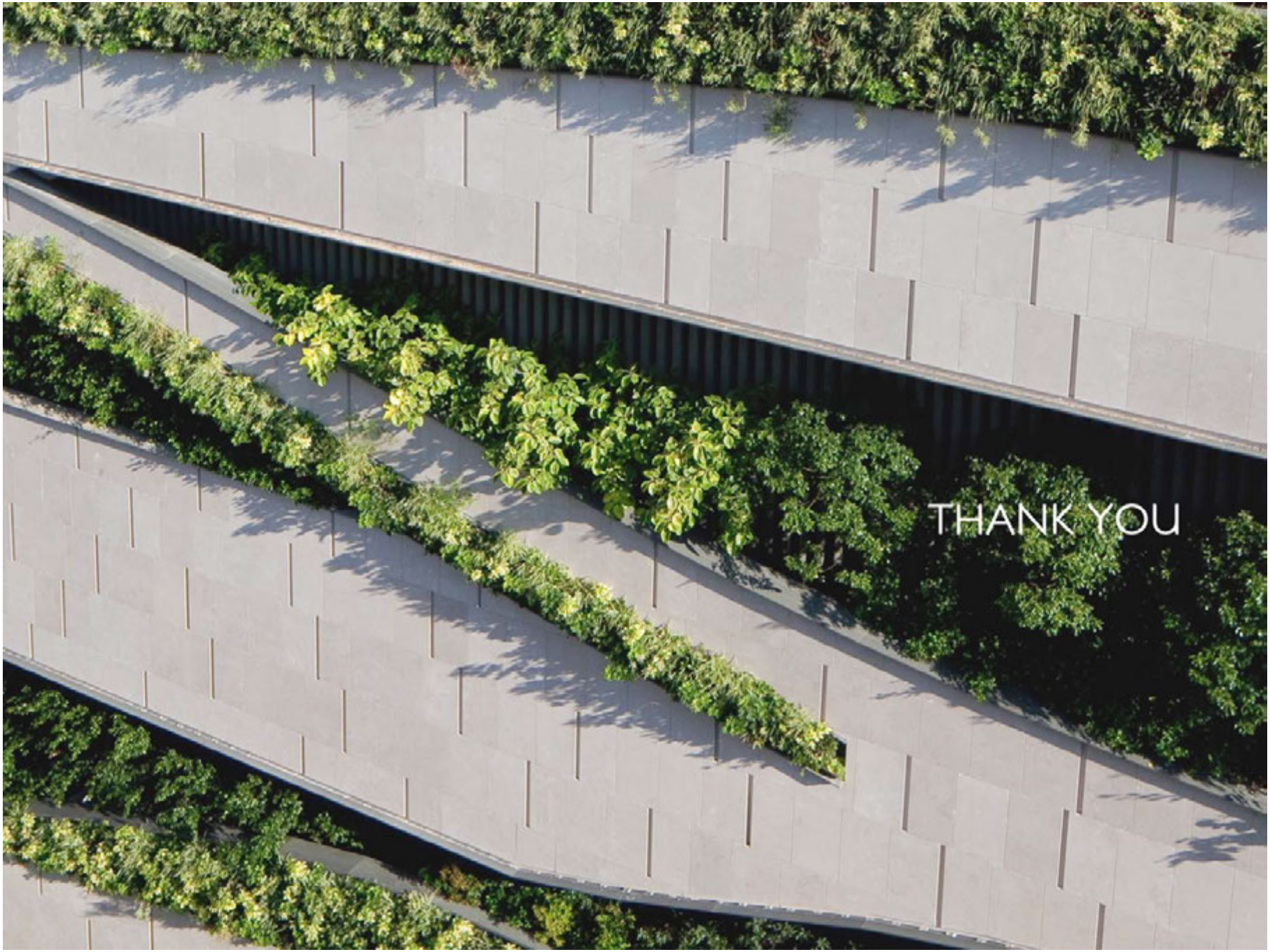
● GREENERY AT 9/F

18 Kowloon East



Skyrise Greenery

- Sustainable Measures
- Value Propositions
- Global Phenomenon


THANK YOU