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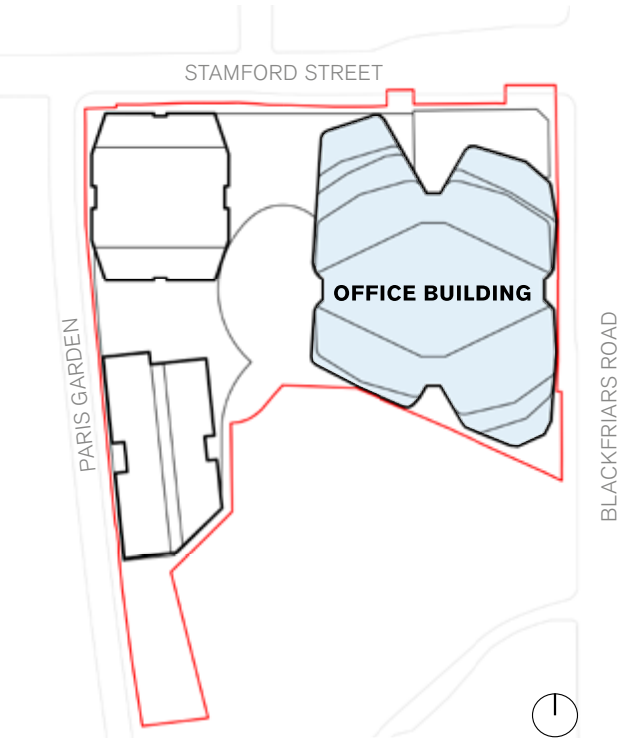
Office Design

6.1.1 Office Design Overview

The Proposal

The Office Building is located in the eastern part of the Site and rises to a parapet height of 199.28m AOD. The Office Building would contain 45 storeys above the Podium.

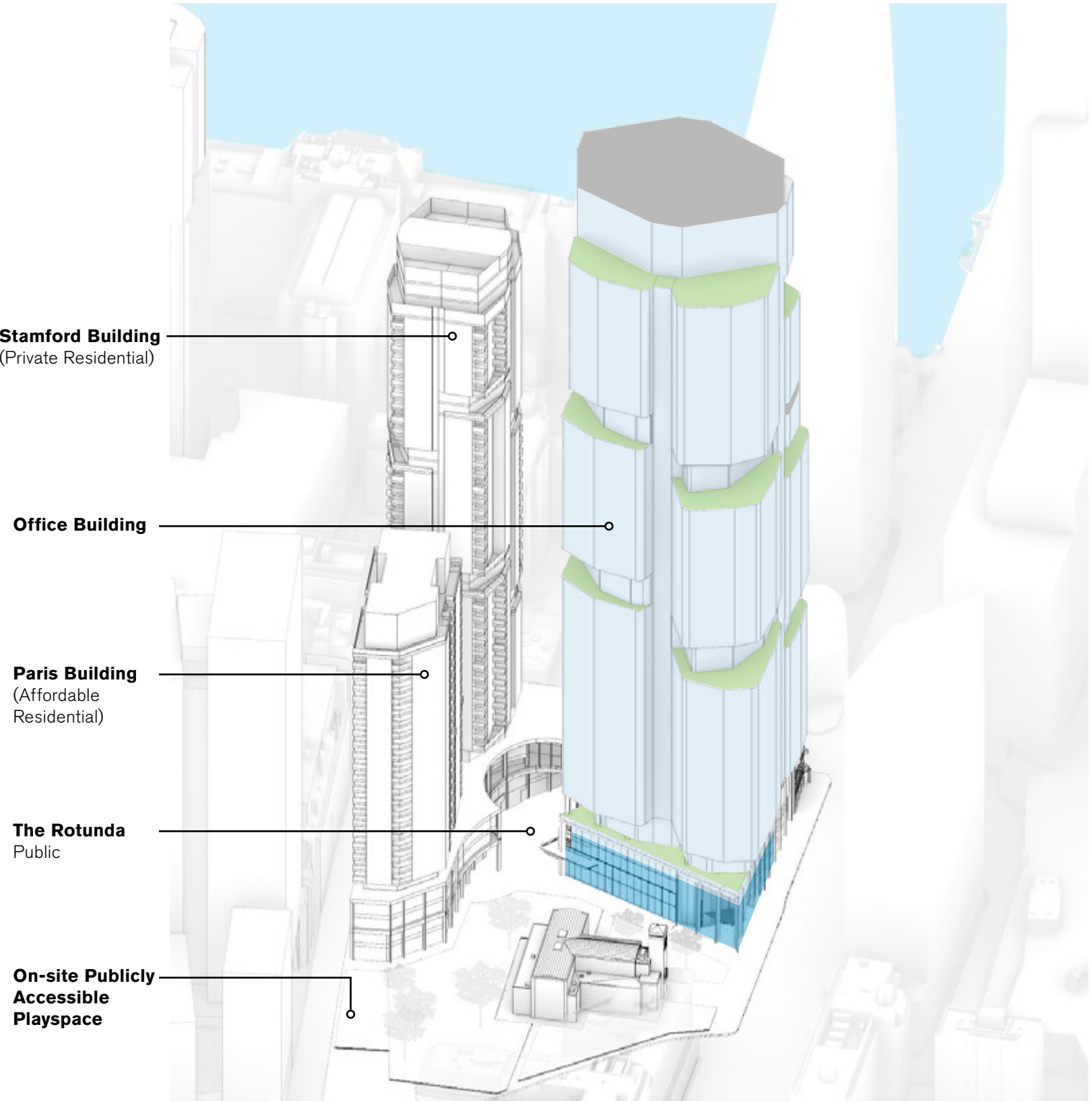
The proposal for the Office Building comprises office accommodation together with amenities. These amenities include external Sky Garden terraces located at intervals throughout the Office Building. An office lobby is located within the Podium spanning levels GF - 01, whilst cycle parking spaces and other amenities, including relevant access and servicing provision, are located within the shared basement.



- Key**
- Office
 - Office + Cycle Lobby and Amenities
 - MEP and Plant
 - Office Sky Garden Terraces

Left:
Example roofplan showing location of office building within Site.

Right:
Axonometric view showing distribution of functions across Office Building.



6.1.1 Office Design Overview

The Proposal: Section Principles and Arrangement

As outlined in the previous chapter, key design principles of the Office Building include:

- Vertical slots to unify and articulate the massing and increase daylight provision to internal workspaces.
- Sky Garden amenities to break down the massing and improve occupant wellbeing.
- Massing set backs at higher levels to improve townscape views and provide a variety of floorplates that respond to diverse tenant types.
- Sustainable design solutions.

The section shown on this page illustrates the vertical arrangement of the massing and various ancillary functions associated with the Office Building. Key locations for ancillary functions include the office entrance lobby at levels GF - 01, plant facilities at basement, mid and top of the building, and a cycle hub at levels GF - basement. Sky Gardens are located at intervals throughout the building.

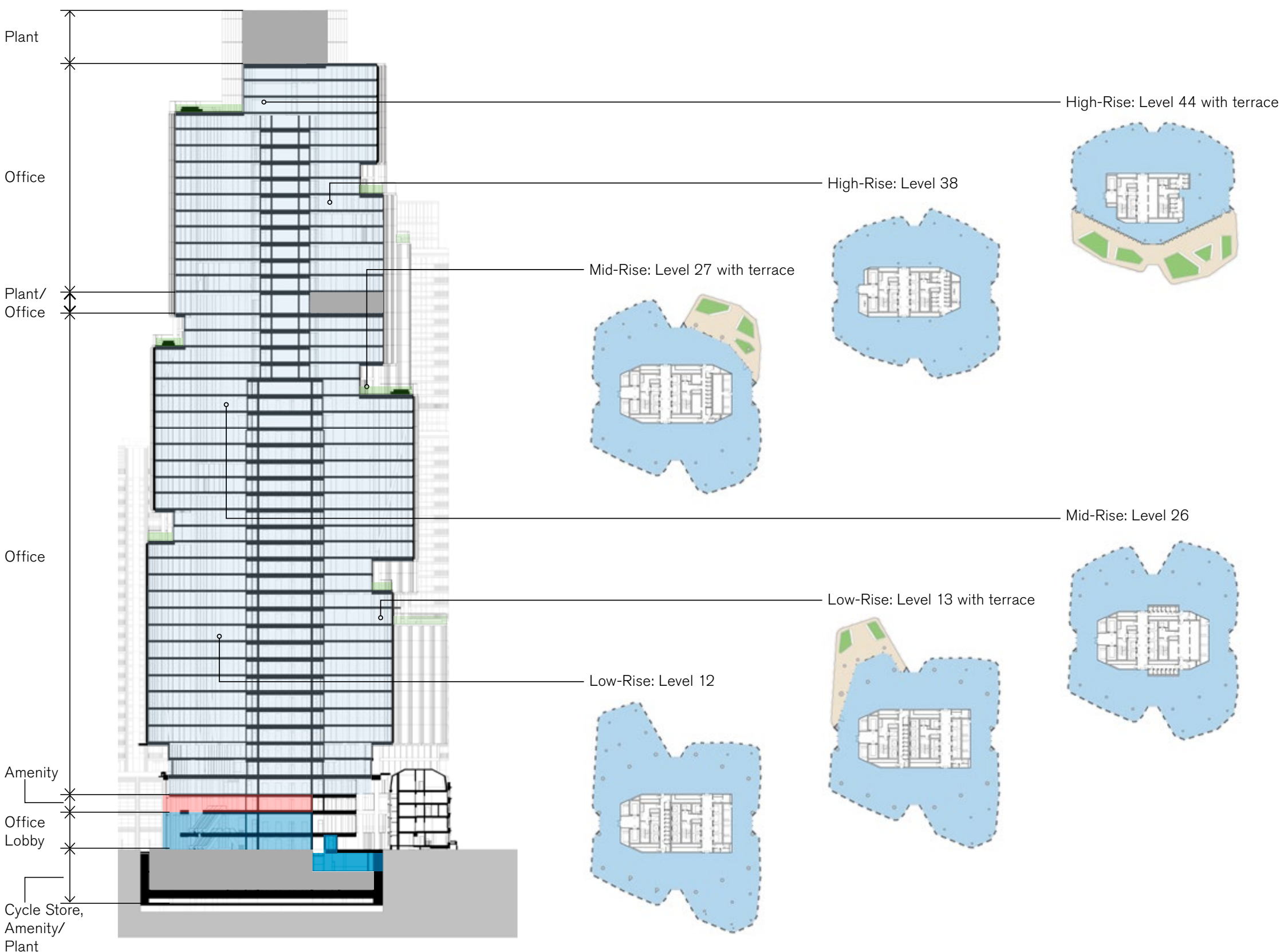
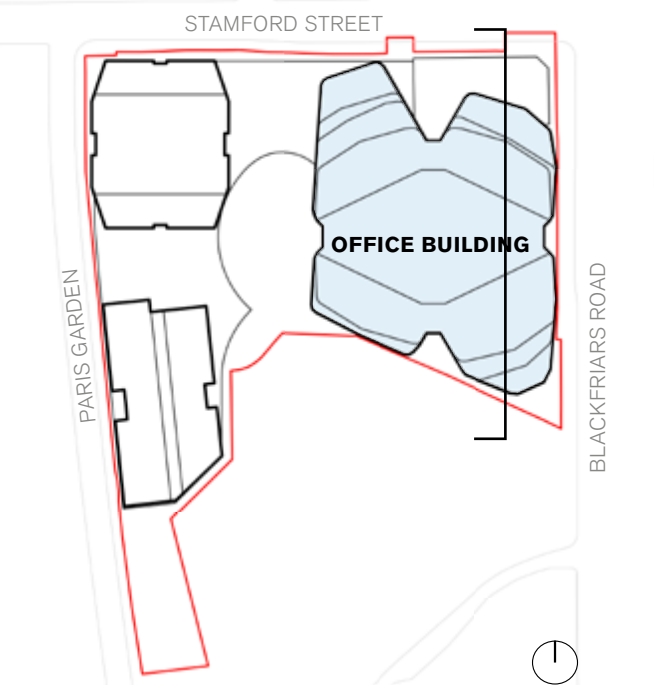
Key

- Office

Office Amenity

Office Lobby
- Cycle Hub

Plant



6.1.1 Office Design Overview

The Proposal: Floorplan Principles and Layout

Key design principles of typical floorplans, including the floorplan displayed on this page, include:

- 'Vertical slots' at the four points of the compass bring daylight deep into the plan and offer views out.
- Four 'neighbourhoods' on each level which allow the floorplate to be used in a diverse way: either as a single floorplate or a floorplate with two, three or four work environments.
- Ability to subdivide low rise levels into two tenancies per floor.
- Increased glazing towards the north for views out and increased facade solidity to the south to manage solar heat gains and reduce operational carbon.
- Fully glazed Sky Garden facades to promote connectivity to the Sky Garden amenities.
- Carefully angled facades provide diverse views out to the River Thames, city landmarks and Christ Church Gardens whilst helping to visually break down the massing externally.
- Careful consideration of the massing to minimise overlooking between the office and residential buildings.

Key

- Views to Christ Church Gardens

Views to River Thames and city landmarks

Daylight penetration into floorplate

Sky Garden amenity

Office Building

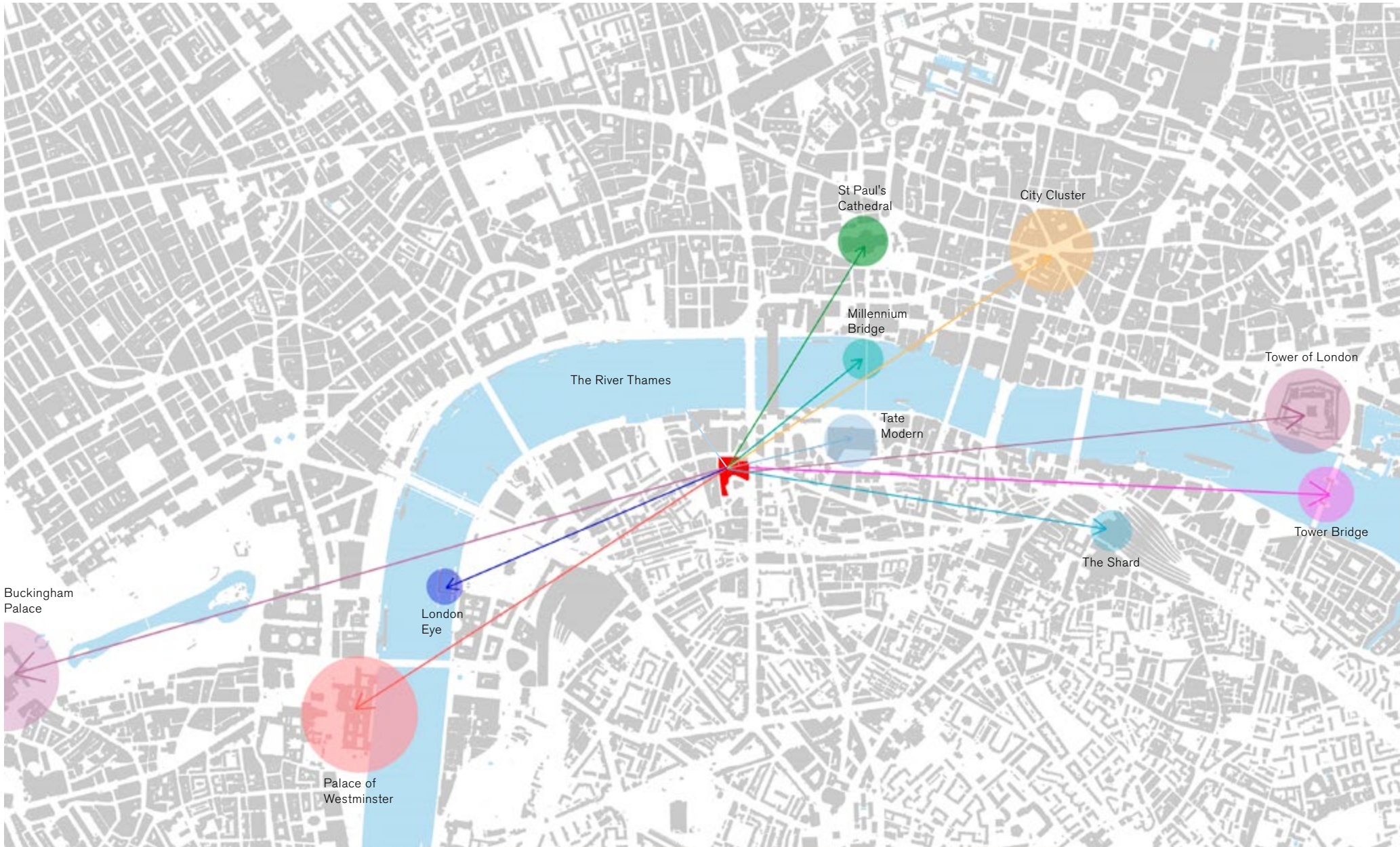
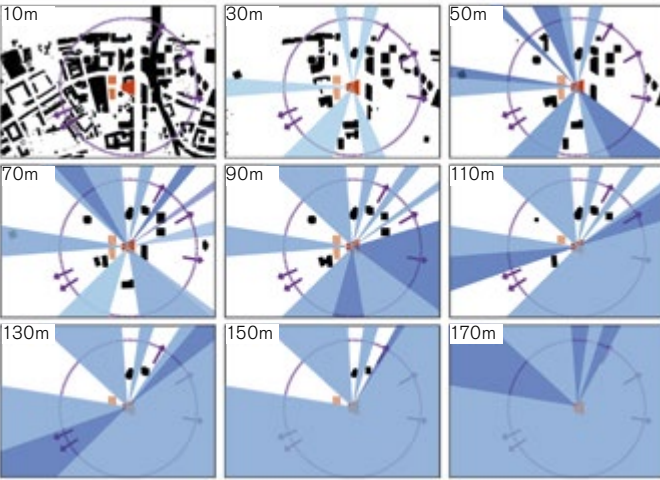
Right:
Typical plan of low-rise office levels highlighting the location of the Office Building and key design principles of the plan.



6.1.2 Office Building Massing and Design
Sky Garden Positioning

Sky Garden amenities have been carefully positioned to provide an array of external amenity spaces with a clear visual connection to a range of London's most prominent places.

View analysis has been carried out throughout the design process to analyse the quality of views from Sky Gardens and to assess the number of key London landmarks visible. This analysis has helped inform the positioning of the Sky Gardens and resultantly the massing.



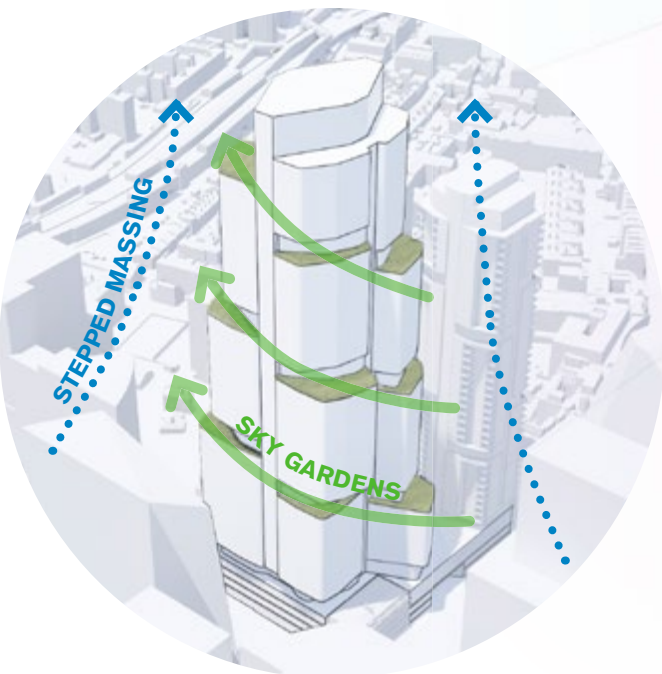
Above:
Views analysis towards London landmarks at varying heights from the Site.
Right:
View analysis towards London landmarks from the Site.

6.1.2 Office Building Massing and Design
Sky Garden Positioning

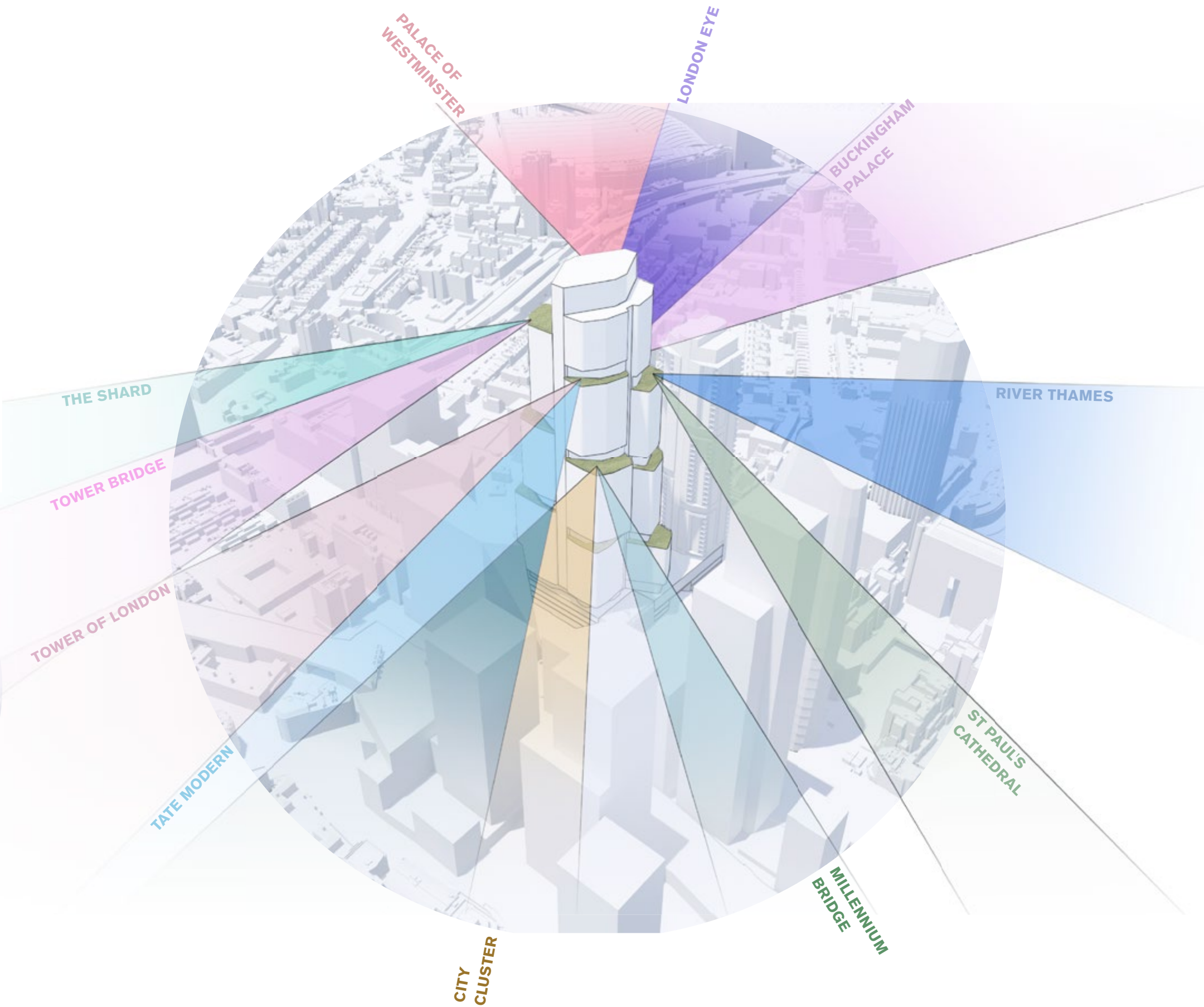
The Sky Gardens have been positioned to form a legible spiral wrapping around the Office Building, evenly distributed throughout the floorplates. The proportions of the massing have been carefully developed to optimise sky garden usable area.

The spiralling Sky Gardens also define set backs in the Office Building massing. The massing steps in towards the top of the building, resulting in less impact on townscape views and providing a variety of floorplates throughout the Office Building.

The Sky Gardens and stepped form of the Office Building present an inclusive and sustainable development in the heart of the emerging Blackfriars cluster.



Above:
The Sky Gardens create a distinctive spiral and help taper the massing towards the top of the building.



Right:
Views to London Landmarks have informed the massing approach.

6.1.2 Office Building Massing and Design

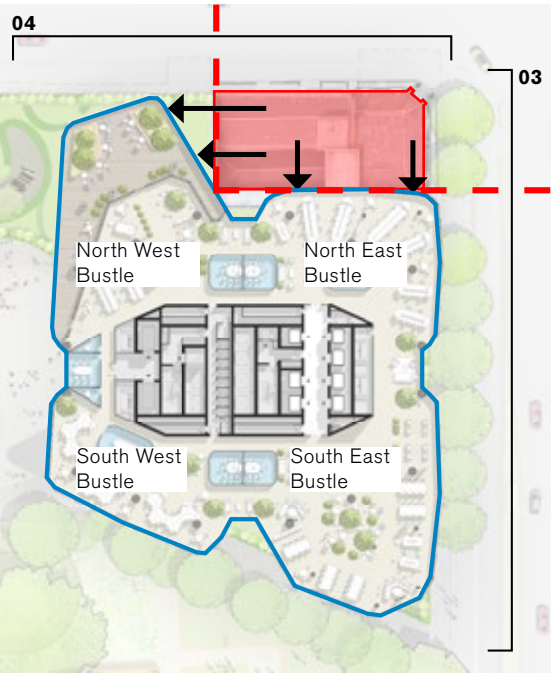
Massing Response to Listed Buildings and Streetscapes

The massing of the Office Building responds sensitively to adjacent listed buildings and streetscapes in the Blackfriars Road and Stamford Street neighbourhoods.

The Site currently stands empty, aside from preserved listed buildings, 1 and 3-7 Stamford Street, at the corner of Blackfriars Road and Stamford Street. The original use, architecture and form of these buildings has earned them listing and a reputation as important local heritage assets. Furthermore, they occupy a highly visible corner position.

One of the principles of the design of the Office Building massing and facades is to respond to the setting of these listed buildings. This has been achieved by recessing the office massing beyond the perimeter of the listed buildings. The use of massing 'bustles', a term used to describe the massing volumes defined by the Sky Gardens and vertical slots, allows the proposal to respond to 1 and 3-7 Stamford Street whilst retaining a regular structural grid.

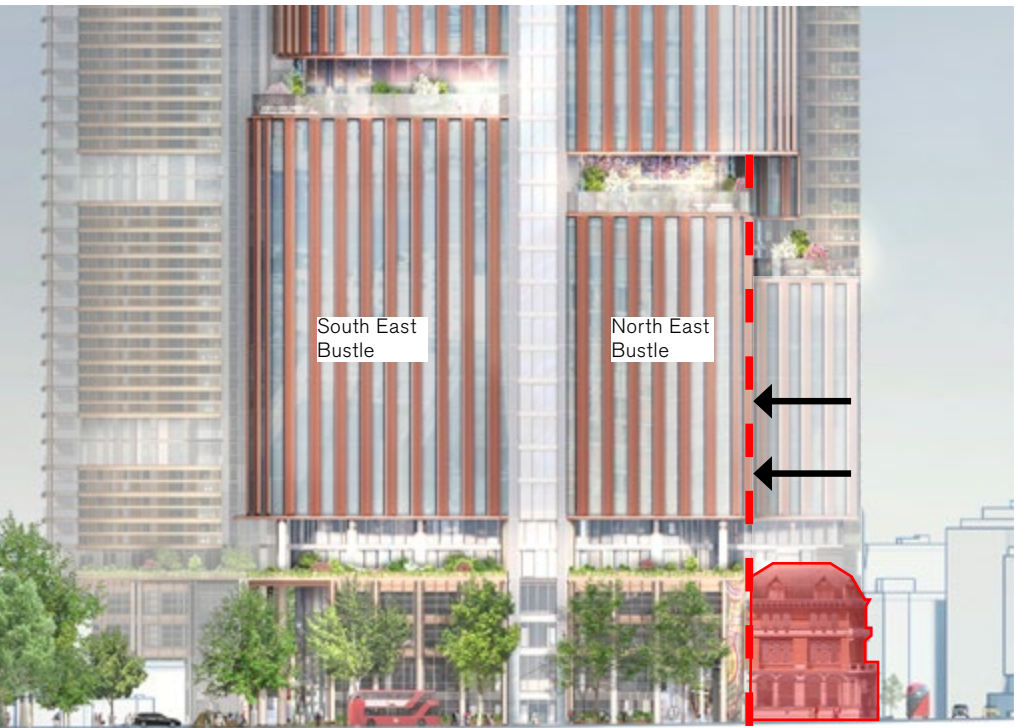
For further information on 1 and 3-7 Stamford Street, refer to Heritage chapter 5.



01 - Low Rise plan
Office north east and north west bustles recessed beyond the boundary line of 1 and 3-7 Stamford Street.



02 - Contemporary photograph of the listed buildings, 1 and 3-7 Stamford Street



03 - East Elevation Zoom in
Office north east low-rise bustle recessed beyond the boundary line of 1 and 3-7 Stamford Street.



04 - North Elevation Zoom in
Office north west low-rise bustle angled away from the listed buildings.

6.1.2 Office Building Massing and Design

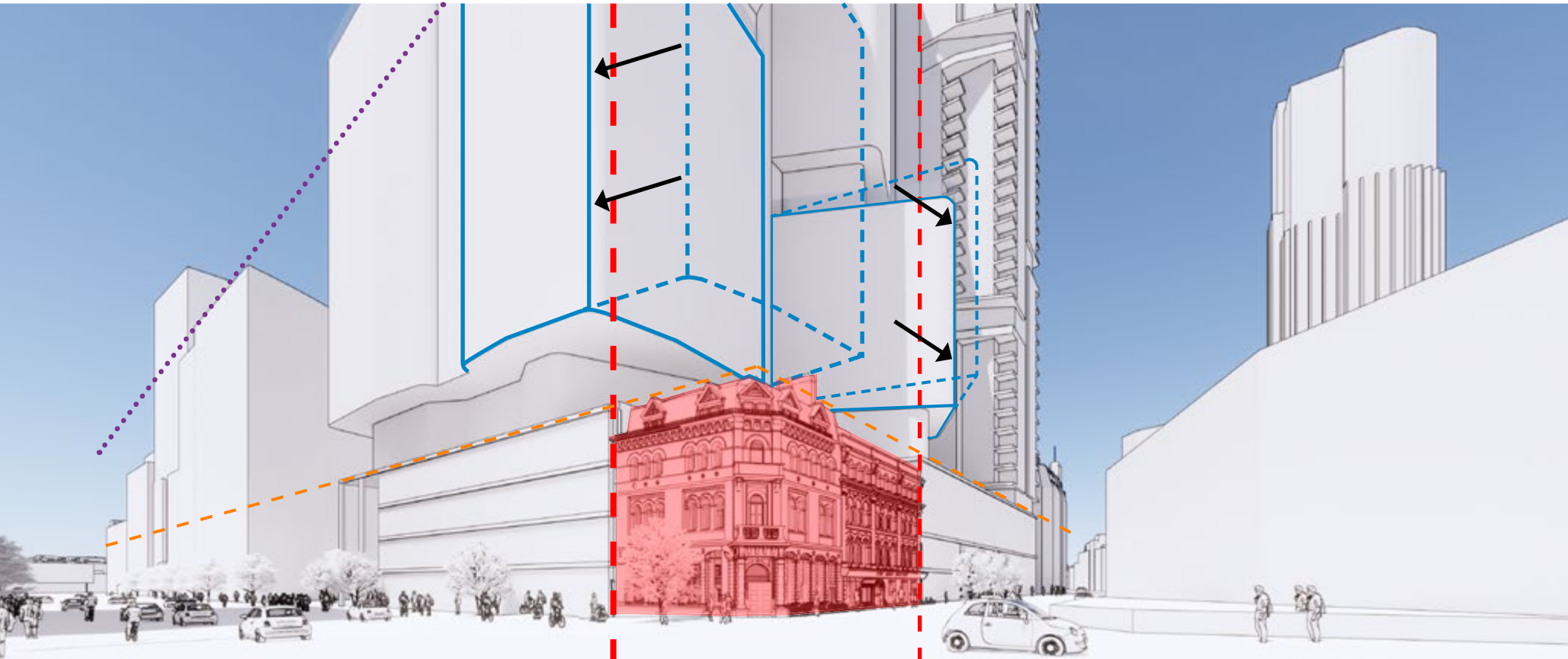
Massing Response to Listed Buildings and Streetscapes

The listed buildings: an urban corner defined by heritage.

The Office Building's north east low rise bustle is offset behind the boundary line of 1 and 3-7 Stamford Street, to ensure these listed buildings remain prominent as a defining corner building. The low rise north west bustle is also recessed behind the boundary line of 1 and 3-7 Stamford Street.

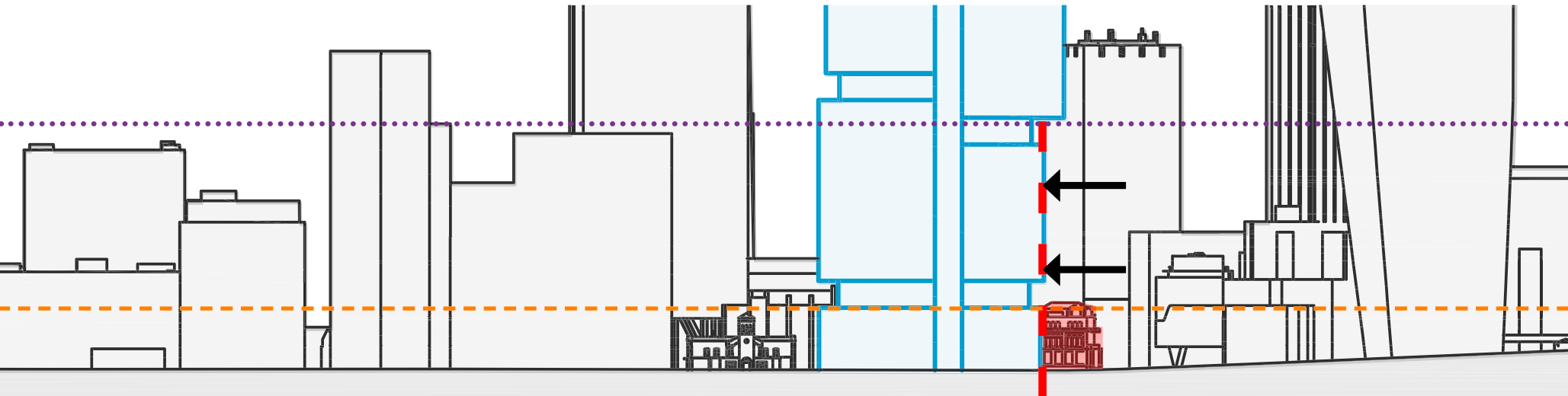
Blackfriars Road: a prominent metropolitan thoroughfare.

As the Blackfriars cluster develops, Blackfriars Road is emerging as a prominent metropolitan thoroughfare. The Office Building massing will enhance the legibility of this key streetscape: the low rise east bustles are reduced in height, in order to reinforce the proportion established by existing and consented schemes along Blackfriars Road.



01 - Blackfriars Road/ Stamford Street Corner View
Corner view showing massing response to listed buildings: Office north east and north west low-rise bustles recessed beyond the boundary line of 1 and 3-7 Stamford Street.

- Key**
- Office Building key bustles outlines
 - Reducing the massing to respect listed buildings
 - Listed buildings boundary line
 - Listed buildings roof line proportion
 - Blackfriars Road approximate streetfront proportion
 - Recessed Bustles
 - Listed buildings



02 - East elevation
East elevation showing massing response to 1 and 3-7 Stamford Street and surrounding Blackfriars Road streetscape.

6.1.3 Townscape Views

Refining an Enhanced Townscape: Building Heights

The building heights within the Proposed Development have been continually refined in response to key townscape views. In particular, the height of the Office Building has been tested in collaboration with a variety of interested stakeholders to ensure an optimum solution is reached which preserves the special qualities of the Blue Bridge view and other key townscape views.

The images on this page show a height comparison, which substantiates the proposed 199.28m AOD height of the Office Building. The Proposed Development avoids overbearance in the Blue Bridge view, whilst maintaining slender proportions.

For further information, refer to the Townscape Visual Impact Assessment.



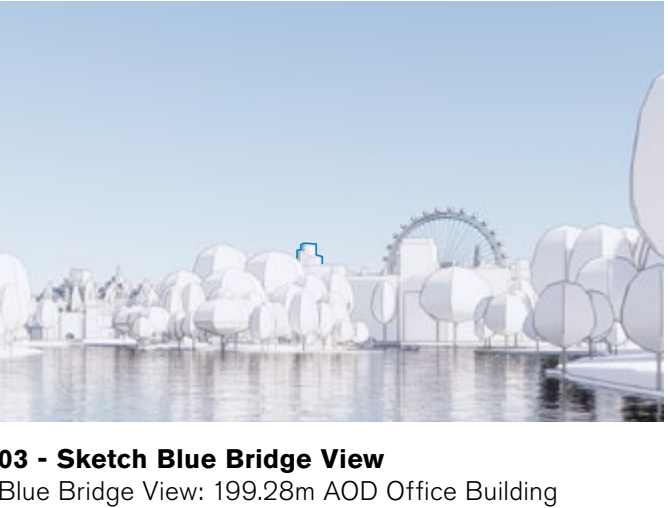
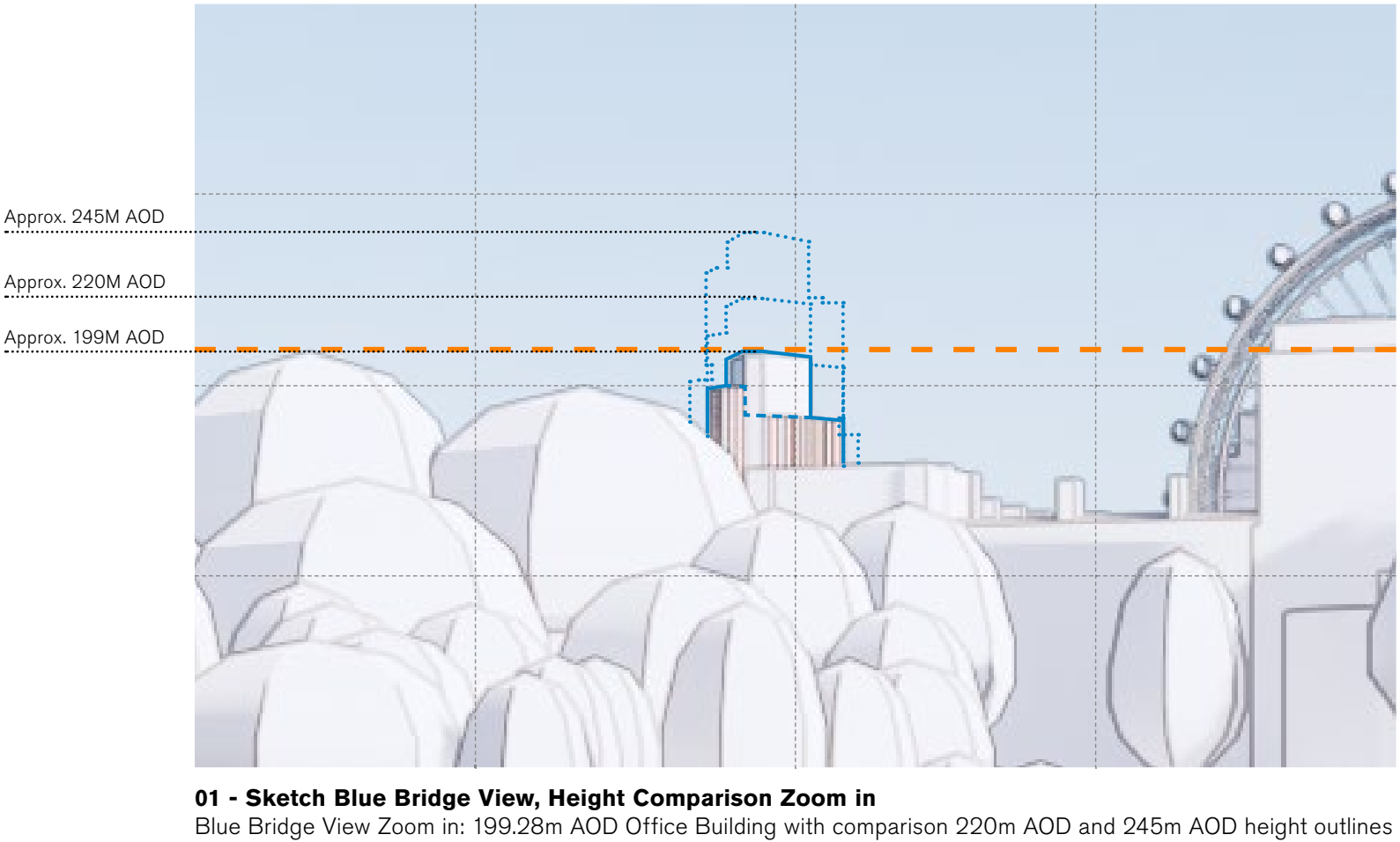
Key

- Office Building outline
- Primary massing bustles with partially solid facades
- Other studied building heights
- Foreign & Commonwealth Office (FCO) building cornice datum in Blue Bridge View

Above:
Blue Bridge view in summer.

Right:
Indicative Blue Bridge view building height analyses.

Note: images are indicative only.



6.1.3 Townscape Views

Top of the Office Building and Vertical Slots

The top of the Office Building and vertical slots serve a number of functions including enhancing townscape views. The 'vertical slots' are the four vertical inset elements, as labelled in the diagram on this page.

The top of the Office Building is a crucial element of the design which has been developed through a detailed, explorative design process. The goal of the top of the Office Building is to enhance townscape views whilst providing an efficient housing for sustainable building systems and plant contained within.

The top of the Office Building will feature:

- Refined massing which creates a calm and composed focal point at the top of the towers.
- Symmetrical massing which brings symmetry to the building and Blackfriars cluster as seen from townscape views.



Key

- Building outlines
- Vertical slots: Office Building

Above:
Hungerford Bridge view in summer.

Right:
Indicative Hungerford Bridge view analyses showing the top of building, lowering of top bustle 'shoulders' and the vertical slots.

Note: images are indicative only.

- Massing which has been minimised to provide the optimum floor area required for sustainable building systems and plant contained within it.
- Responsive facade of vertical louvres which increases the vertical emphasis of this part of the Office Building.

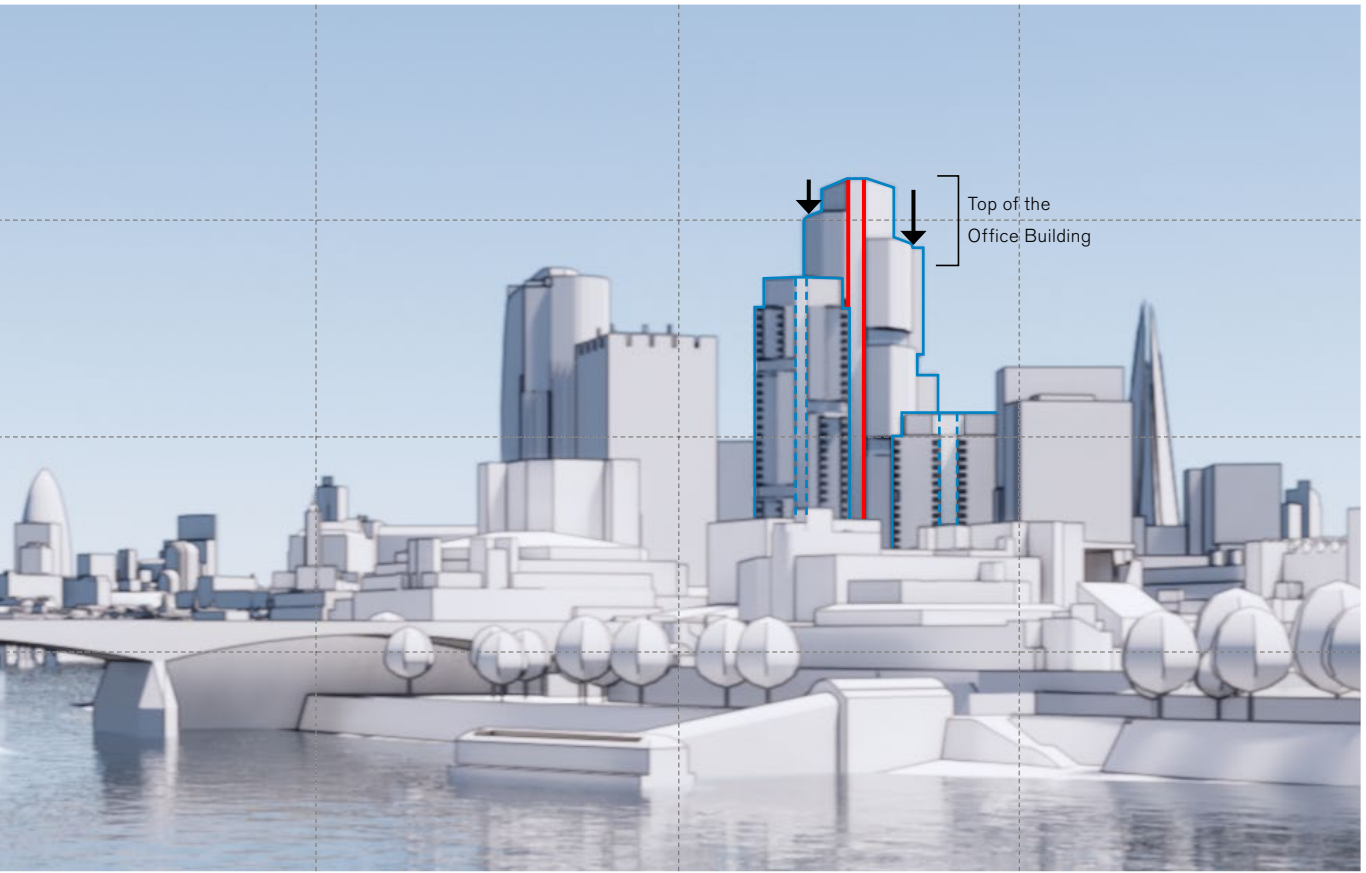
The top bustles or 'shoulders' of the Office Building have been lowered, as indicated by the arrows in the adjacent image. The effect of this massing decision is:

- To emphasise the top of the Office Building element.
- To reduce the visibility of primary massing bustles in townscape views.
- To create an exceptional Sky Garden terrace above the south bustles, accessible from the office space.

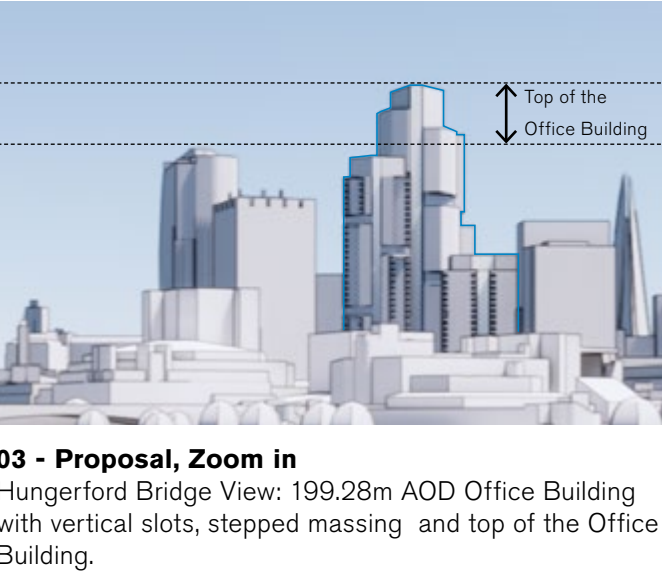
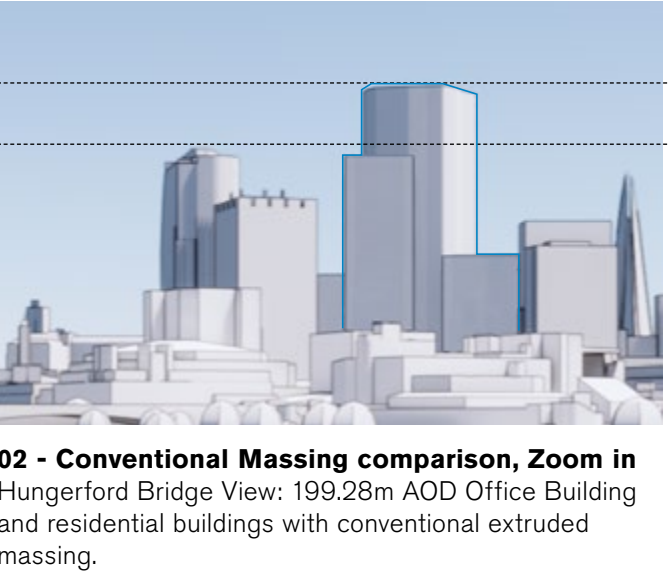
The vertical slots help to break down the massing of the Office Building, improving and better articulating the townscape views. They ensure the scale of the building relates to the context of the Blackfriars cluster, and help to increase the vertical emphasis of the building as seen from distant views and nearby street views.

The colour and material of solid panels have been selected to respond to the local context. Reflective finishes help the top of the Office Building to dissolve into the sky. For further information on Office Building materiality, refer to chapter 6.2.

For further information, refer to the Townscape Visual Impact Assessment.



01 - Proposal
Hungerford Bridge View: 199.28m AOD Office Building with vertical slots, stepped massing and top of the Office Building.





Indicative view of the Office Building from the Millennium Bridge, north east of the Site, showing consented schemes.

6.1.4 Office Lobby
Office Lobby Design and Activities

The office lobby, which forms part of the Podium, is a key design element of the Proposed Development. It is the primary point of contact with the Office Building, and can be accessed from both Blackfriars Road and The Rotunda.

The Blackfriars Road entrance is characterised by a recessed facade signalling a clear entry point. It connects the building with the thoroughfare of Blackfriars Road, which leads to a variety of nearby public transportation nodes.

The Rotunda entrance is formed from a projecting glazed entry with an overhanging canopy to create a clear entrance and point of reference in The Rotunda. It helps connect the building to the local neighbourhood and Stamford Street. The entrance for cyclists is located on Blackfriars Road.

All entrances as well as the internal layout of the office lobby have been informed by analysis of pedestrian and cyclist routes in the neighbourhood, undertaken by Space Syntax. The office lobby would feature a direct route between the Blackfriars Road thoroughfare and The Rotunda. This would be enhanced by the double height quality of the office lobby, which forms part of the overall site strategy to enhance a vibrant public realm at street level.

A key design principle of the office lobby is to increase its permeability and accessibility, both through visual connections between inside and outside, and for pedestrian and cyclist accessibility.

- Key**
- Office Cycle parking entrance
 - Office Lobby
 - Primary cyclist entrance
 - Primary pedestrian entrances

Right:
Indicative plan diagram showing the types of spaces and activities intended for the office lobby.



6.1.4 Office Lobby
Office Lobby Access and Circulation

The office lobby would serve as a welcoming, flexible space; and provide a clear visual connection to the public streetscape. The vitality and diversity of the Blackfriars Road neighbourhood will be reflected in a contemporary, high quality office lobby offering a diversity of spaces aimed at attracting a mix of users.

The office lobby provides direct access to double decker lifts serving the Office Building, from both Ground Floor and Level 01. These lifts are accessed via two central lift lobbies. At the east side of the office lobby, a further waiting area provides access to lifts serving level 01 and office amenities on level 02.

The cyclist entrance on Blackfriars Road provides access to dedicated cycle lifts and a stair with cycle gully which lead to cycle storage and facilities in the basement.

To provide a safe and secure working environment, lobby turnstiles have been included forming a clear security line. This integrates and aligns with the security strategy implemented throughout the entire site.

- Key**
- Office Lobby
 - Office cycle parking lobby
 - Cycle lifts
 - Office Lobby and amenities lifts
 - Office high rise lifts
 - Office low rise lifts
 - Primary cyclist entrance
 - Primary office entrance
 - Fire escape exit point

Right:
Office lobby Ground Floor Plan highlighting different uses, vertical circulation and entrance points.

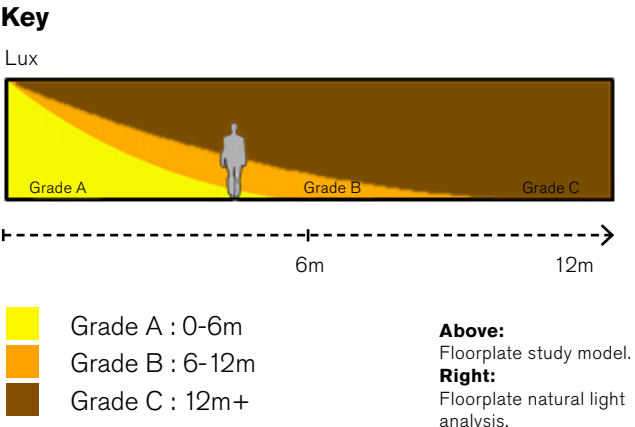


6.1.5 Office Building Layouts

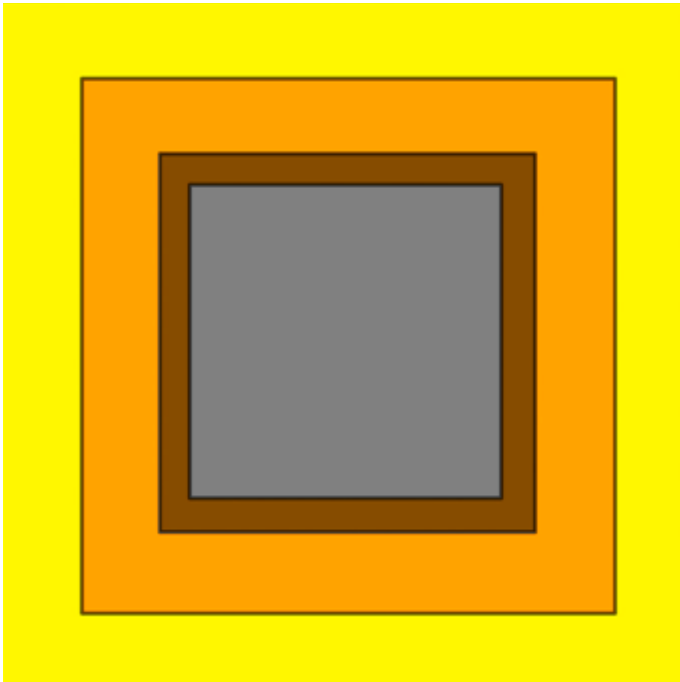
Floorplate Indoor Environmental Quality: Natural Light Analysis

The form and massing of the building has been tailored to enhance the occupant experience by ensuring a high percentage of the internal area has access to natural light and views. Studies have shown that natural light can have a positive effect on occupant engagement, collaboration and focus whilst working.

The solar analysis comparison of a traditional floorplate versus the proposal demonstrates the effectiveness of the proposal in minimising areas of the floorplate which receives Grade C natural light or lower, as defined in the below diagram.



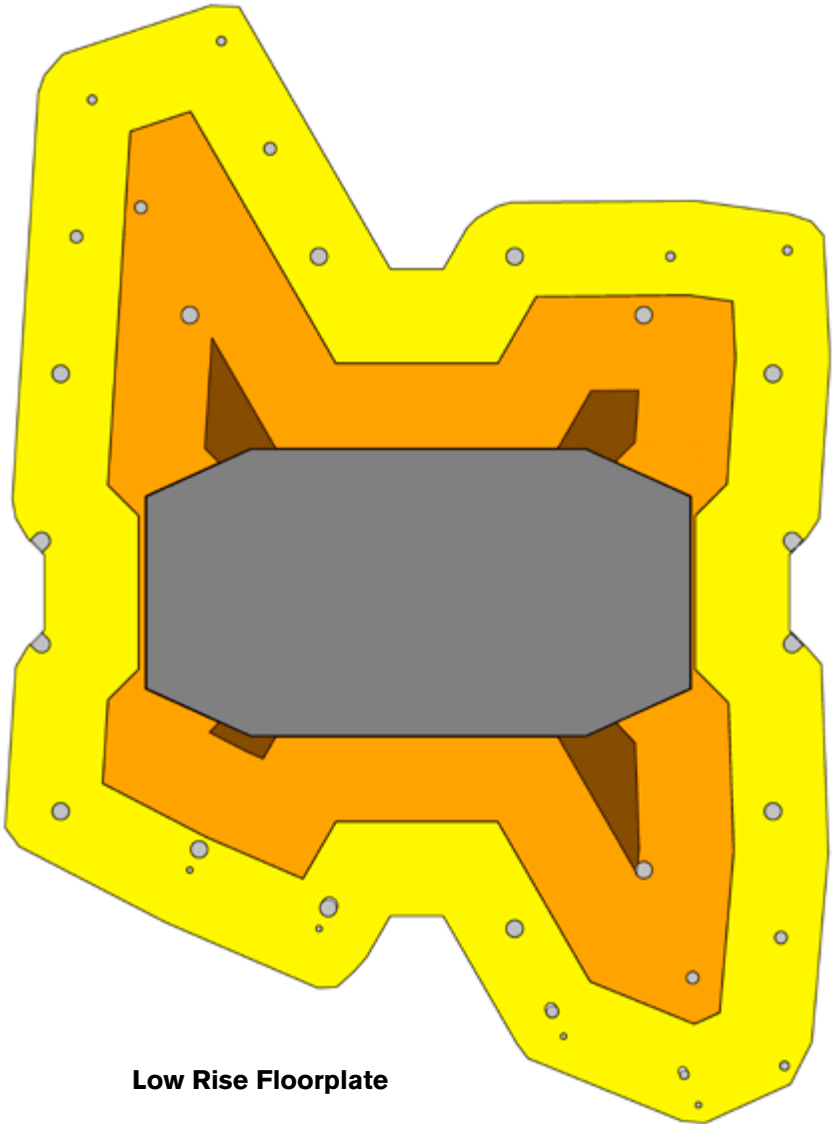
Conventional Office Building



Typical Floorplate

- A: 49%
- B: 37%
- C: 13%

18 Blackfriars Road Office Building



Low Rise Floorplate

- A: 60%
- B: 37%
- C: 3%

6.1.5 Office Building Layouts

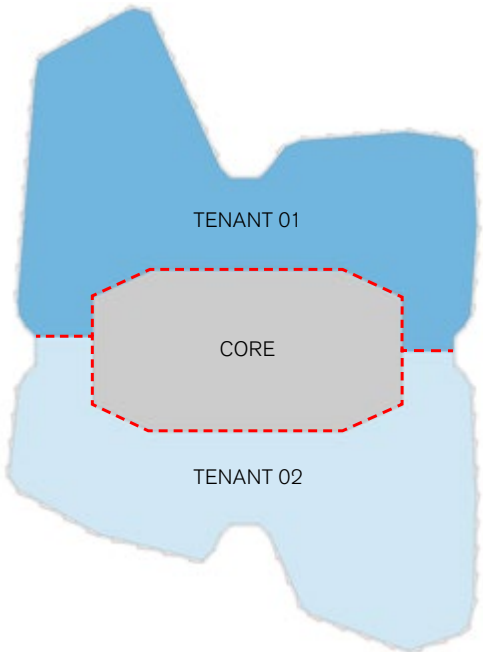
Typical Floorplate: Low Rise with Potential Workspace Layout

The following pages show test fits of low, mid and high rise floorplates within the Office Building, demonstrating the flexibility and variety of floorplates offered.

Key floorplan design principles articulated in the test fit plans include:

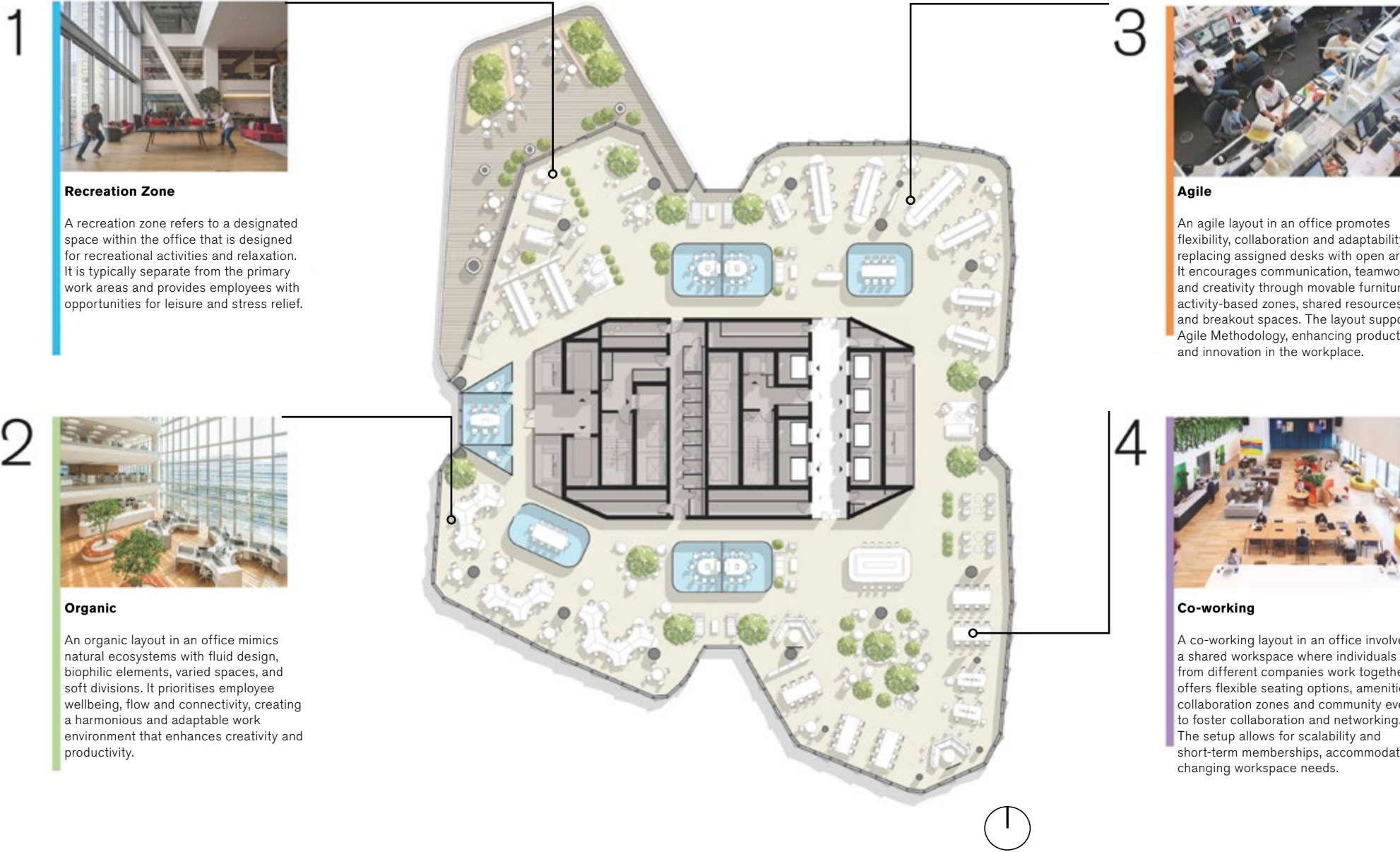
- Improved daylight.
- The ability to provide multiple 'neighbourhoods' per floor.
- More desks adjacent to facade for better views.
- Generous structural grid for floorplate flexibility.

With the space and flexibility provided by the larger low rise floorplates, tenants have the opportunity to expand and develop over time, incorporating a wide variety of potential layouts to best suit their needs. Low rise floorplates have been designed to allow for split tenancies on a single level, further increasing the flexibility of the Office Building. A number of these larger floorplates include landscaped terraces.



Above:
Low rise floorplan with tenancy split with two tenants.

Right:
Low rise floorplan test fit internal layout showing a variety of workplace types. Approx. 2400m² GIA.

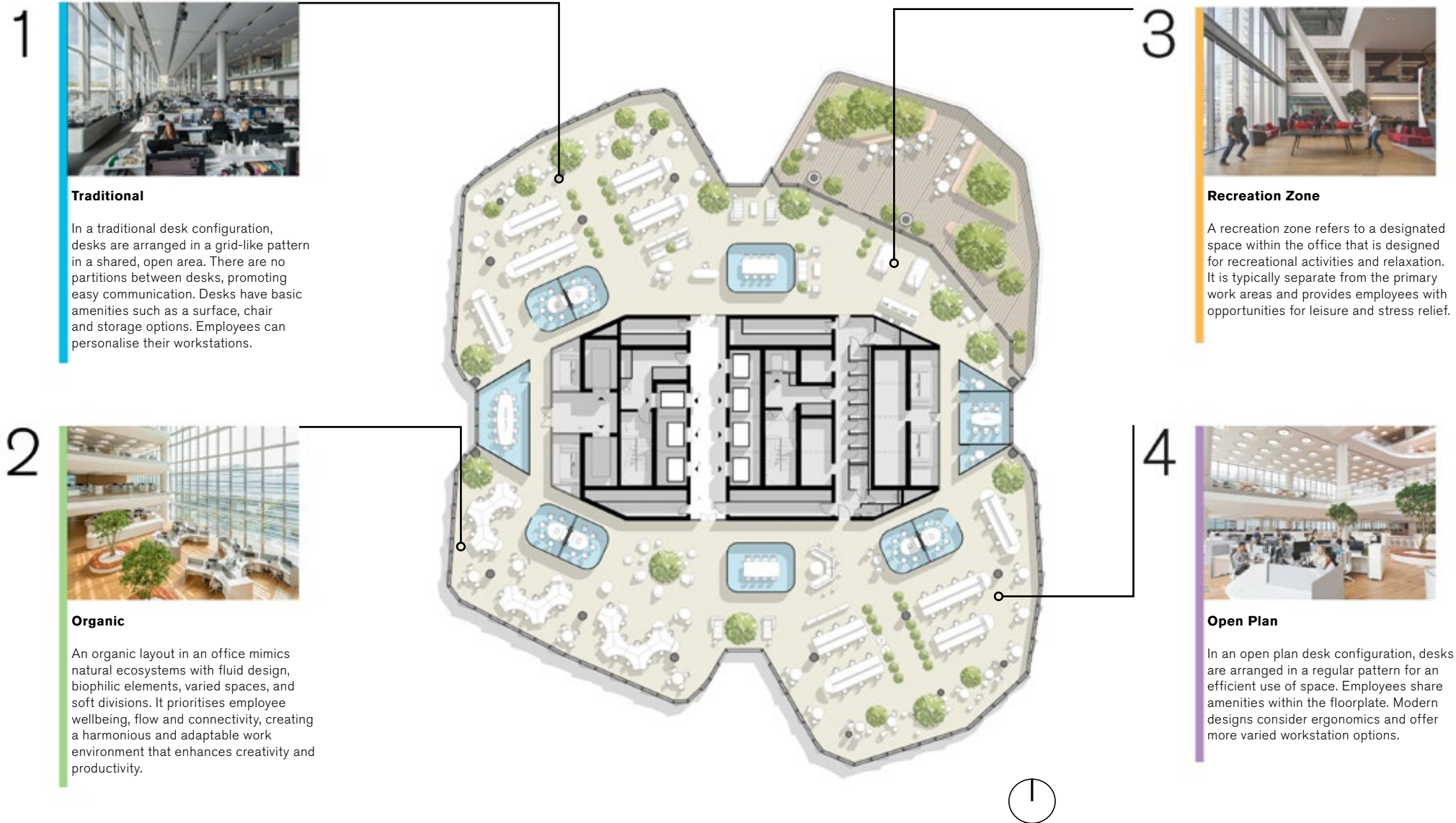


6.1.5 Office Building Layouts

Typical Floorplate: Mid Rise with Potential Workspace Layout

The mid rise floorplates are located at the centre of the Office Building. This floorplate typology allows for a number of potential layouts, containing plenty of space for both workstations, breakout and flexible space where required.

These floorplates allow for good light levels and broad views out to Southwark and beyond as the building rises. Landscaped terraces at the mid rise levels offer generous and flexible external spaces with excellent views to the city.



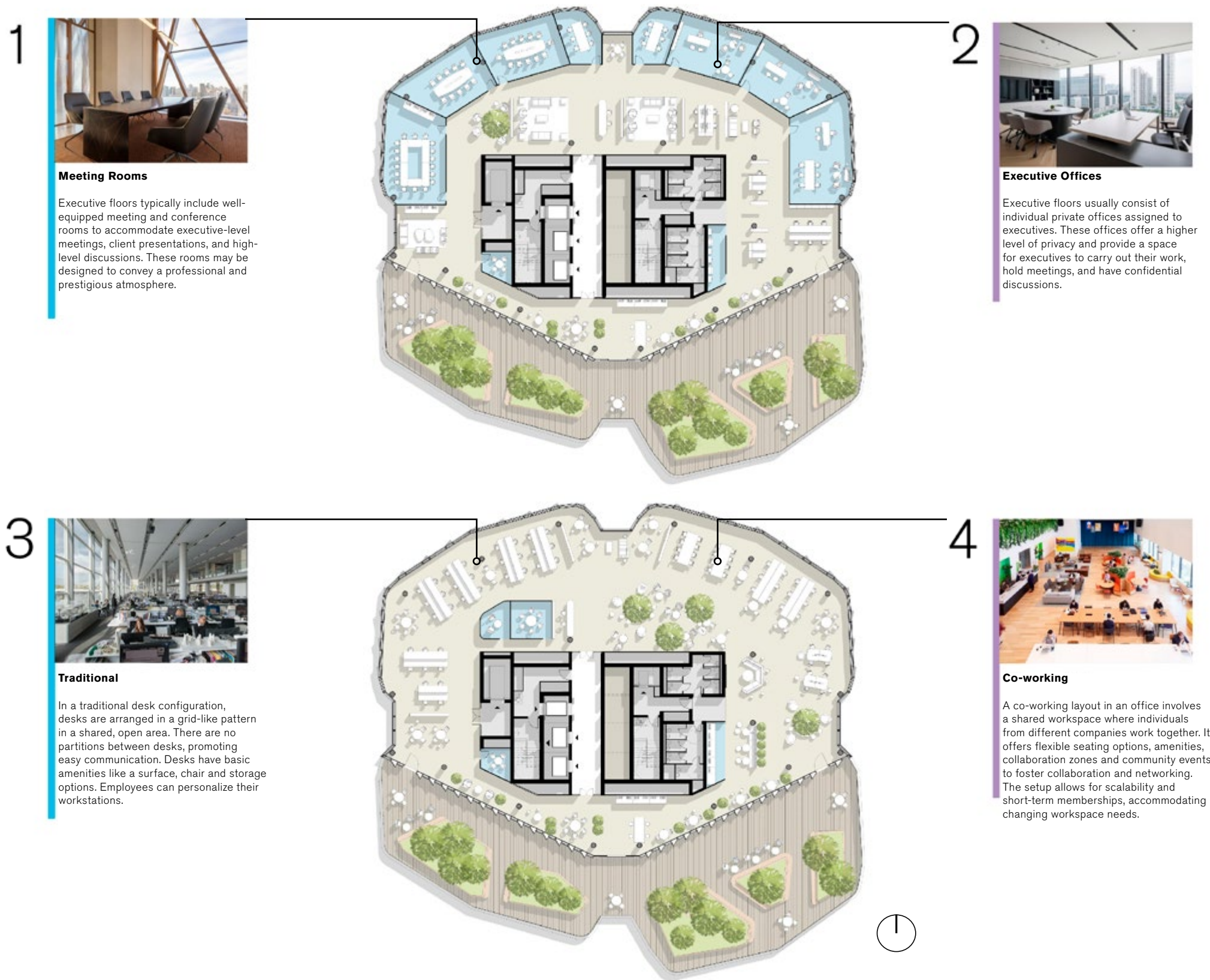
Right: Mid rise floorplan test fit internal layout showing a variety of workplace types. Approx. 2200m² GIA.

6.1.5 Office Building Layouts

Typical Floorplate: High Rise with Potential Workspace Layout

The upper levels of the Office Building house the high rise floorplate typology. This floorplate is the most compact in the building, allowing for flexible layouts including cellular and open plan or collaborative layouts.

Dedicated workspace and meeting rooms can sit alongside breakout and wellbeing spaces. These levels have a large proportion of workspaces which will benefit from high levels of daylight and exceptional views across London.



Right Top: High rise floorplan test fit internal layout showing a variety of workplace types with executive offices.
Right: High rise floorplan test fit internal layout showing a variety of workplace types with open plan offices. Approx. 1400m² GIA.

6.1.5 Office Building Layouts

Office Building Fire Strategy Summary

These pages give an overview of key elements of the Office Building fire strategy.

The evacuation strategy for the Office Building will be a phased evacuation strategy. Only the floor or zone of fire origin will evacuate in the first phase and after that, two floors at a time, starting above the affected floor, working up the building and then cascading down in phases of two floors at a time. Specific fire safety measures required for phased evacuation approaches by the standard BS 9999: 2017 *Fire safety in the design, management and use of buildings – Code of practice* (BS 9999: 2017) Section 12.2.2 will be followed.

Two escape stairs each with protected lobbies are provided throughout the occupied levels of the Office Building. Both stairs are available for use during the evacuation in accordance with BS 9999 Section 17.3.2.

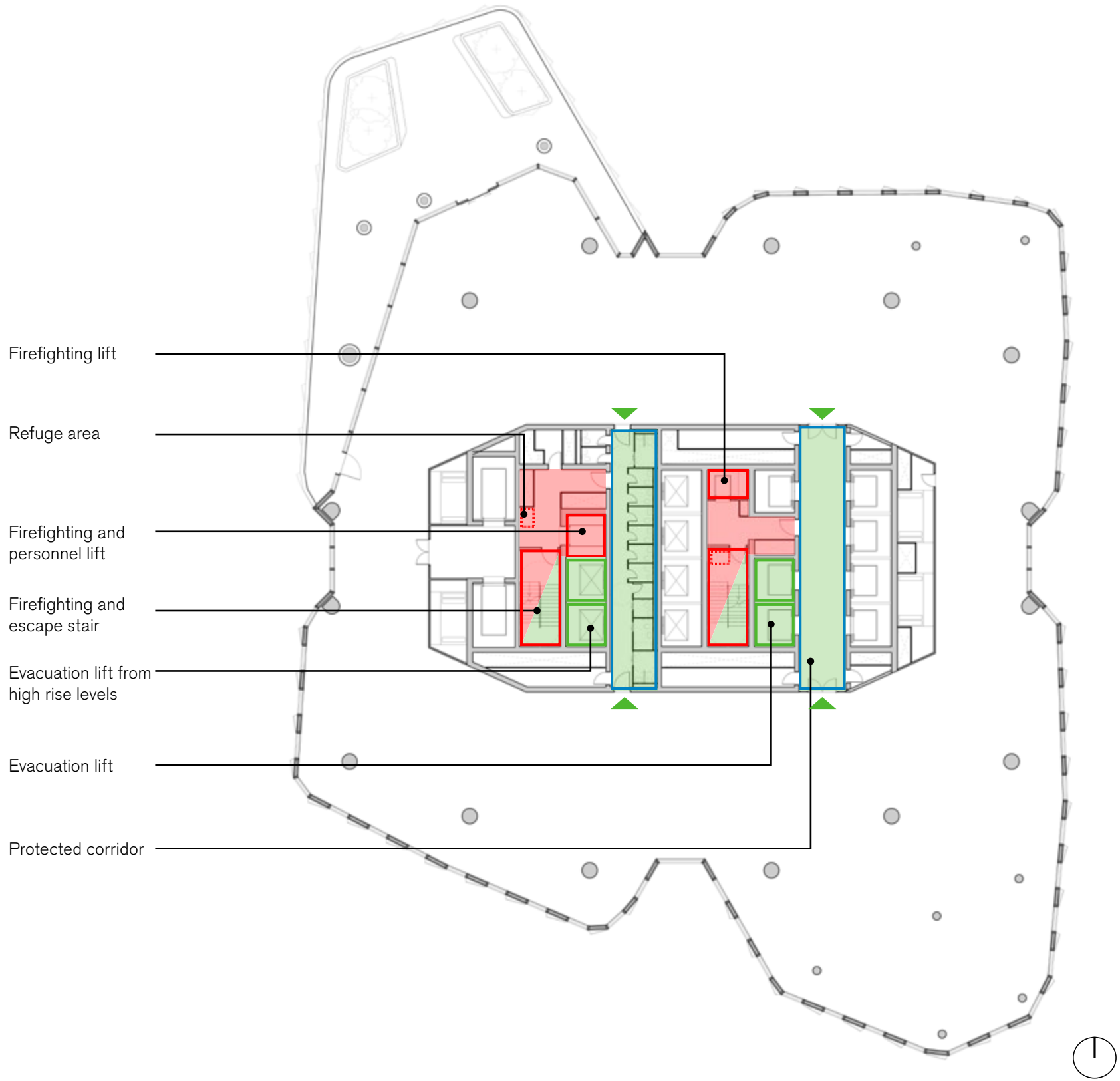
In addition to the two fire fighter lifts, two evacuation lifts will be provided on each floorplate to assist evacuation of occupants with disabilities. In addition, refuges shall also be provided.

Travel distances are limited based on risk profiles in accordance with BS 9999 and measured to the nearest storey exit or stair lobby. Where a floor is to be split between two or more tenants, every tenancy shall be provided with a minimum of two escape routes and all occupants shall have independent access to both stairs.

For further information, refer to Arup Fire Statement.

Key

- Fire fighting
- Evacuation
- Exit from floorplate



Right:
Fire strategy markup
plan: low rise levels.

6.1.5 Office Building Layouts

Office Building Fire Strategy Summary

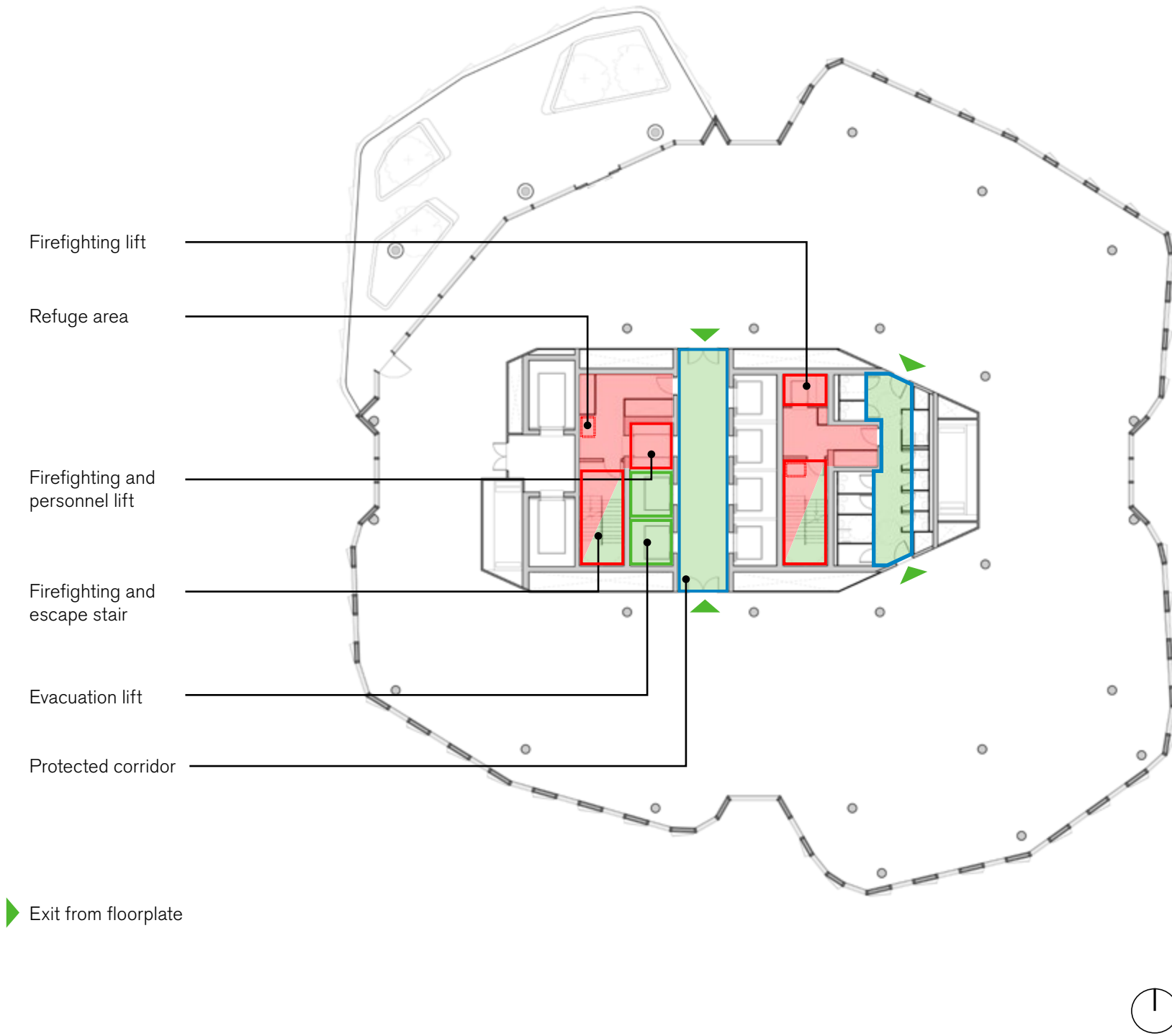
Fire tender vehicle access to the building is available via Blackfriars Road and The Rotunda. A protected corridor is provided to the firefighting shaft at the eastern and western core in accordance with BS 9999.

A Fire Control Centre (FCC) is to be provided on the Ground Floor of the building in accordance with BS 9999 Section 24. Two firefighting shafts are to be provided in the Office Building, each of which will comprise a firefighting stair and fire fighter lift, a firefighting lobby with smoke ventilation and a wet riser with outlets on all floors.

For further information, refer to Arup Fire Statement.

Key

- Fire fighting
- Evacuation
- Exit from floorplate



Right:
Fire strategy markup
plan: high rise levels.

6.1.5 Office Building Layouts
Typical Floorplate - Internal Air Quality

The Office Building is served with decentralised ventilation systems. On floor Air Handling Units (AHUs) and an underfloor air distribution strategy are aimed at providing tenants with flexibility and allow for high ventilation rates and cooling with reduced operational energy.

Fresh air will be fed into the occupied office spaces via floor grilles distributed throughout the floorplate. The location of the air distribution grilles will be flexible, providing tenants with the ability to adjust floorplate layouts. The underfloor air distribution strategy aims to remove the need for excessive ductwork within the ceiling zone.

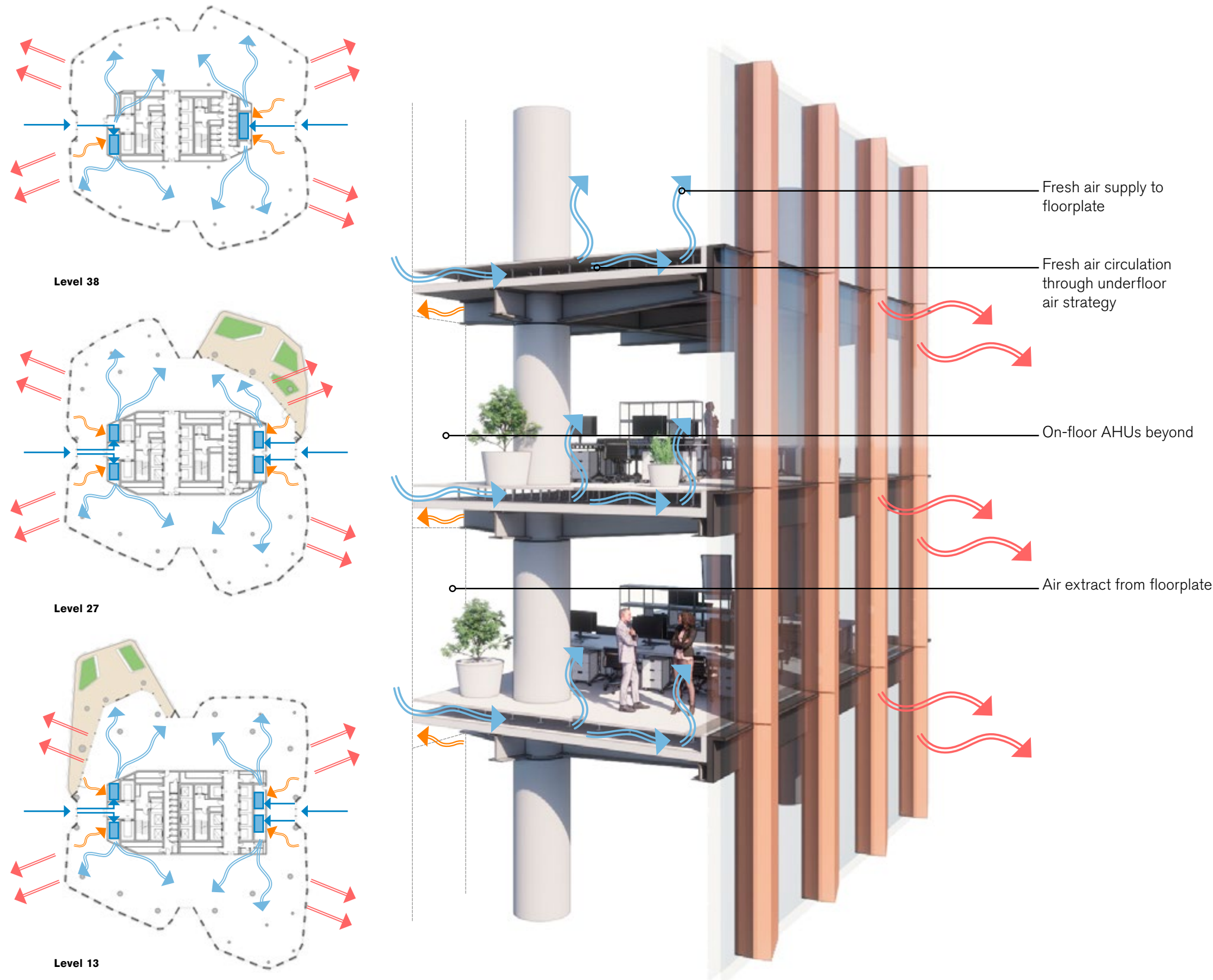
Further detail is set out in the accompanying technical documents prepared by Arup.

Key

- On-floor AHU locations
- Fresh air intake from vertical slots
- Fresh air distribution within underfloor plenum
- Exhaust air return to AHU from occupied space
- Exhaust air from AHU through facade

Centre: High, mid and low rise floorplans highlighting locations of on-floor AHUs and intake and extract ducts.

Right: Sectional perspective highlighting the integrated underfloor air circulation strategy.



6.1.5 Office Building Layouts
Typical Floorplate - Exposed Soffit and Structure

The Office Building has been designed to allow for exposed internal soffits and structure, which maximises the potential floor to ceiling height, while exposing the thermal mass of the soffit.

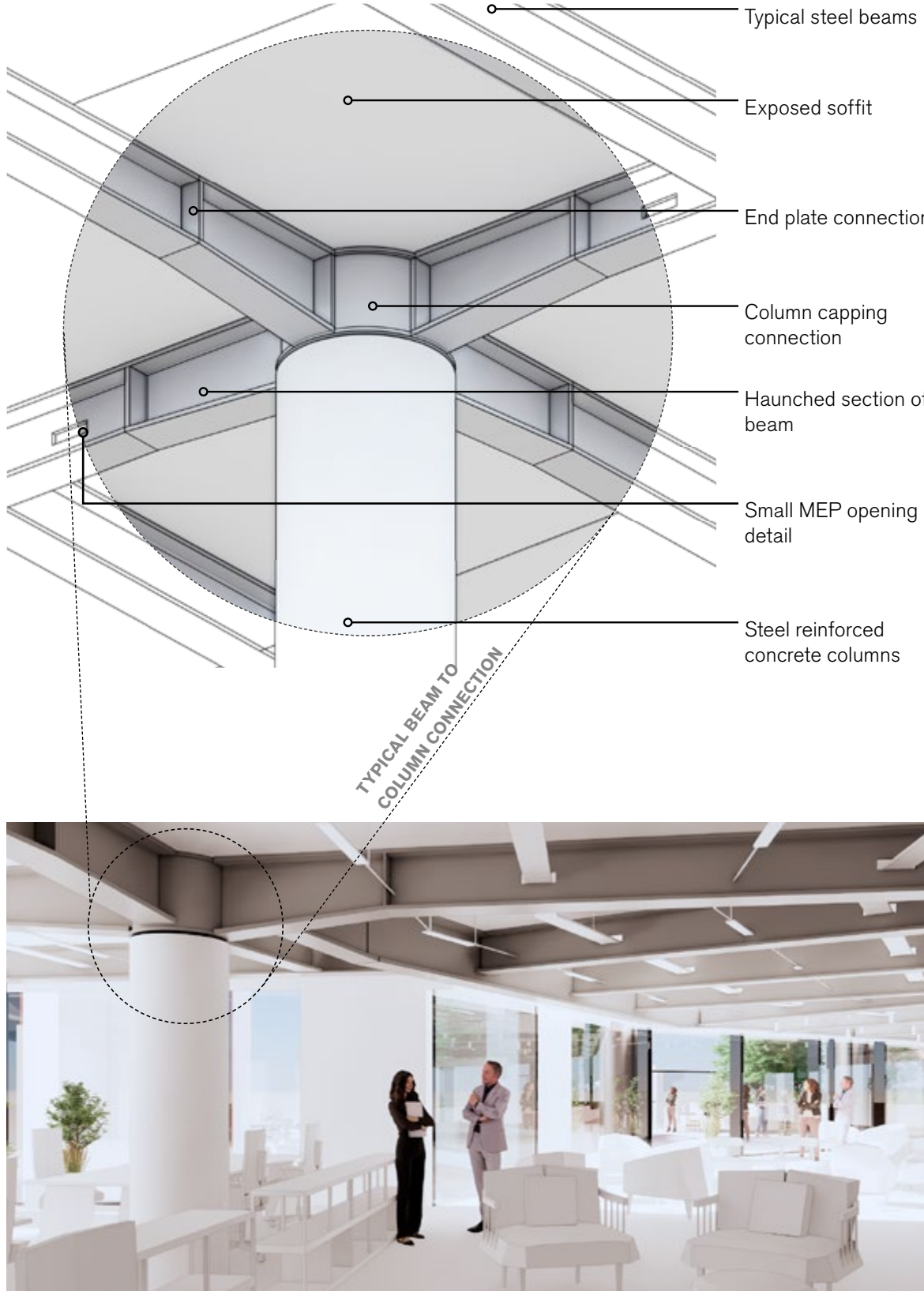
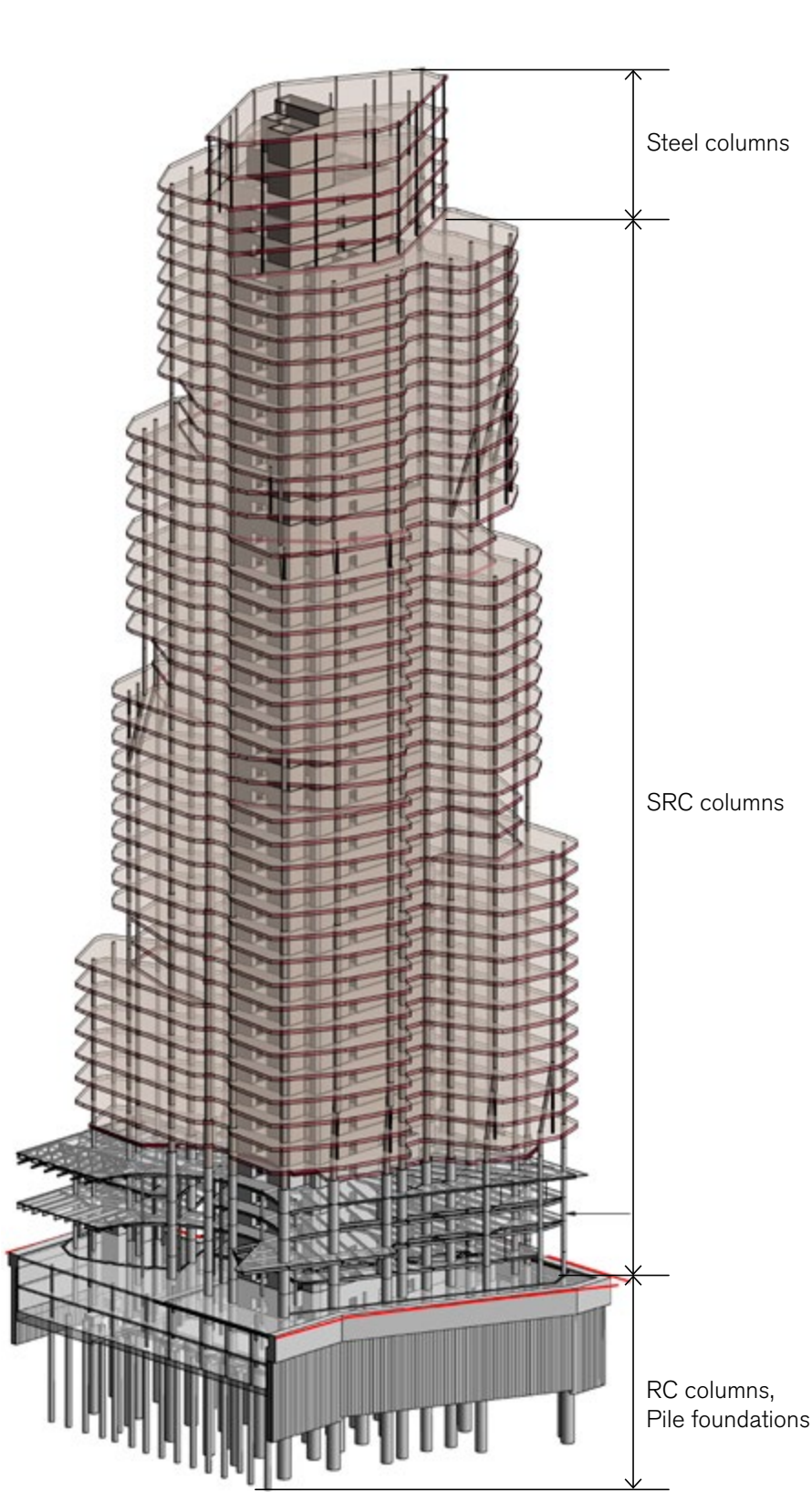
Steel structural beams and connection details with steel reinforced concrete columns have been designed to provide high quality interior spaces. Frame connections have been designed with increased repetition to achieve greater flexibility in the floorplate layout.

Key structural principles aim to reduce embodied and operational carbon and include:

- Reduced embodied carbon for the sub and superstructure.
- Optimised floor sandwich depth and column grid.
- Increased structural repetition and standardisation to improve internal space planning efficiency.
- Buildability and cost efficiency.

Further detail is set out in the accompanying technical documents prepared by Arup.

Centre: 3D structural diagram of the Office Building.
Top Right: Axonometric diagram describing an indicative structural beam to column connection.
Lower Right: Indicative interior view showing the increased ceiling height with exposed soffit.

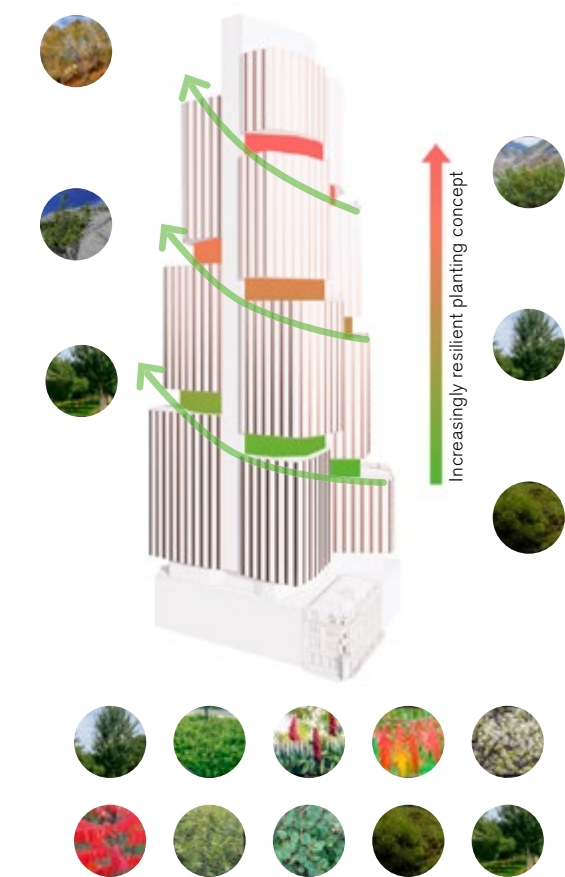


6.1.6 Sky Garden Amenities

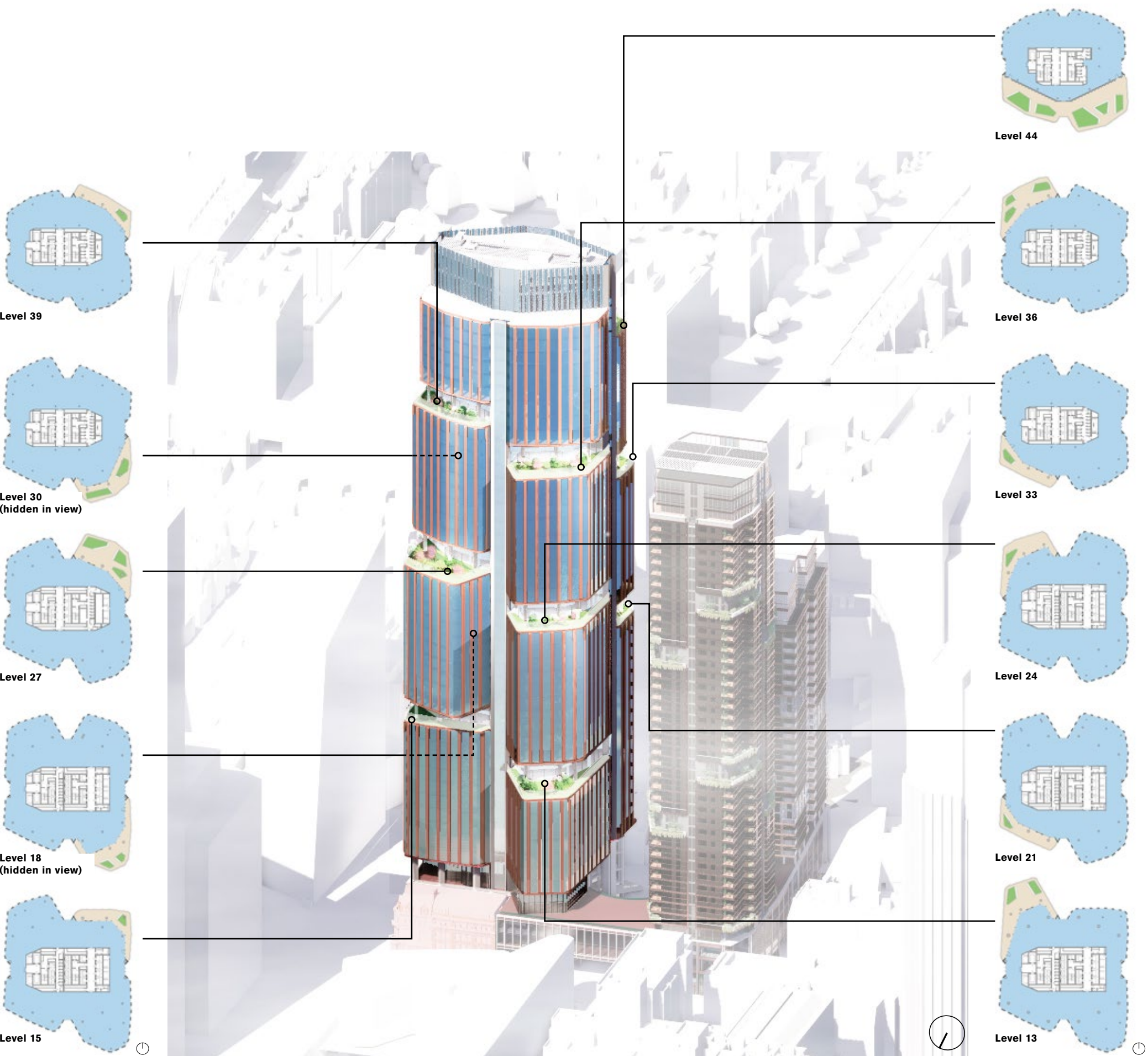
Variety of Terraces

The consistent distribution of generous Sky Gardens throughout the building is an integral part of the design of the Office Building. The Sky Gardens will increase the biodiversity and sustainability credentials of the Proposed Development, whilst biophilic external amenity has also been demonstrated to help increase the productivity and well-being of building occupants.

As the building rises, the Sky Gardens vary in shape and size to ensure they are tailored to their height, orientation within the context, and floorplate typology. Sky Gardens are provided every three floors throughout the majority of the building, ensuring many occupants have access to high quality external amenity space.



Above:
Variety of alpine species adapted to different building heights.
Right:
Axonometric Office Building view illustrating locations of the Sky Gardens.



6.1.6 Sky Garden Amenities

Landscape Design

The Sky Gardens function as biophilic amenity spaces for occupants, accessible throughout the year. The layout of each Sky Garden provides a number of different types of external space. These include:

- Seating areas with benches integrated into the planters, these seating areas offer an environment with close proximity to natural landscaping.
- Larger paved, open social areas adjacent to the building facade, which can be used for social functions or external seating. These areas offer the flexibility for tenants to use as required.
- Viewing areas at the perimeter of the sky gardens, designed to capitalise on the excellent quality views.
- Adjacent to the facade is a zone that provides for access and maintenance of the Sky Garden facade.

Wind conditions will be mitigated with planting and tall glass balustrades. For further information, refer to Landscape Design Chapter 8.



Above:
Typical Sky Garden indicative terrace level view.

Right
Indicative view: planting foregrounds city views and frames flexible terraced areas.





Indicative view of a sky garden, looking east.

