Richard Murphy
Architects

Hotel and Office Development

Justice Mill Lane
Aberdeen

"...in Richard Murphy we have found an architect who is innovative yet commercially-aware ...the development would be a welcome addition to the city"

Chief Executive,

Hazledene Group Ltd

The Press and Journal. 15 August 2006

Justice Mill Lane, Aberdeen, Scotland

Contents

Office and Hotel Construction cost
£45 million

Client
Hazledene Group Ltd

Contract Type
Design and Build

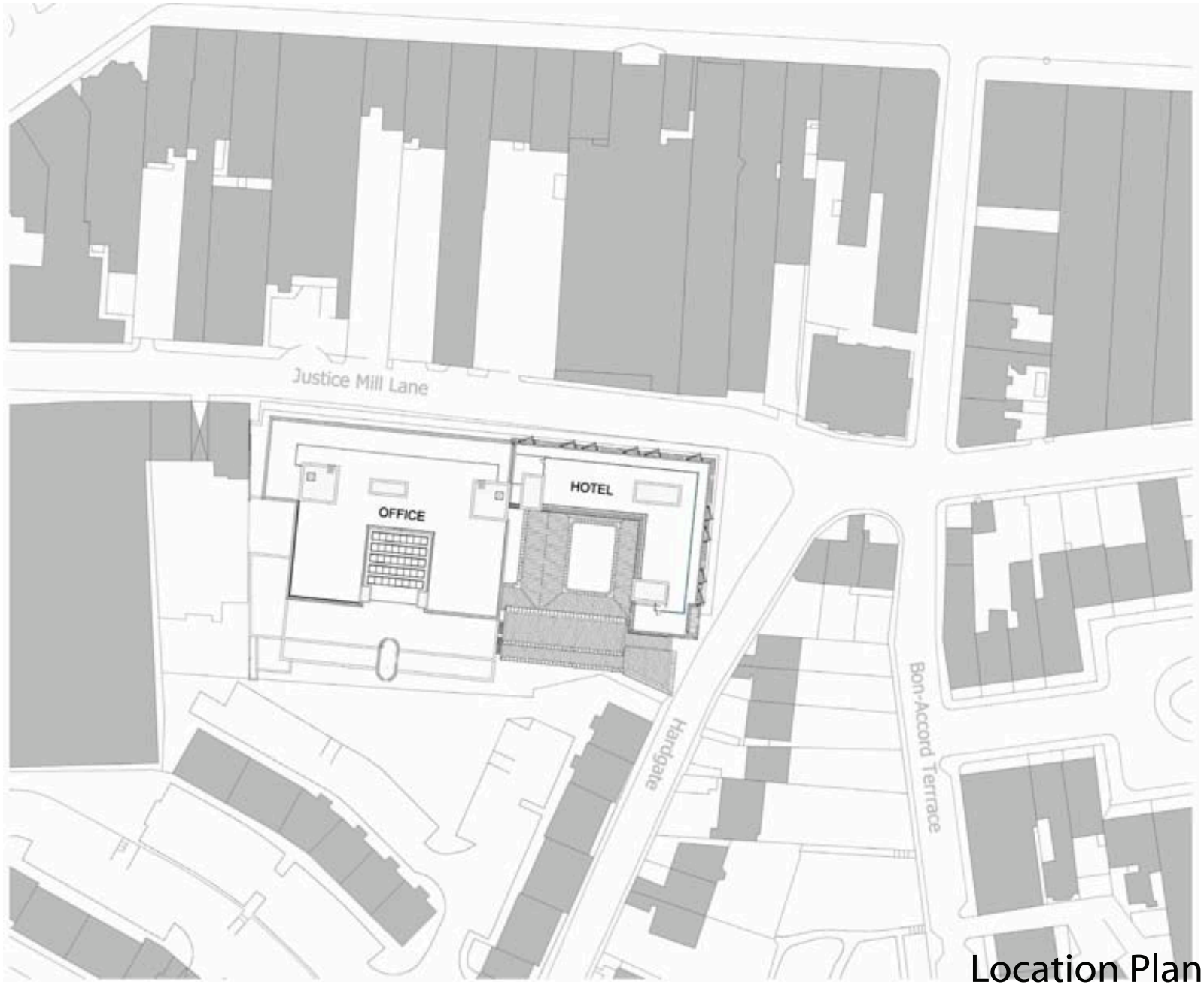
Construction Period
June 2008- June 2010

Hotel and Office Development

Won in competition in June 2006, our major mixed use inner city site unites both the commercial building and the hotel, making a single composition around the public edge of the site.

The scheme is split between Grade A office space and a Park Inn Hotel for The Rezidor Hotel Group.

This hotel comprises 185 bedrooms plus all associated public and service facilities. The total office floor area (gross) is 13,766m^2. The Office and Hotel are significant buildings, but it is also a new part of the dense urban centre of Aberdeen, the energy capital of Europe.



Location Plan

Office Development

The holistic design approach for the offiice building utilises well insulated facades, solar shading exposed concrete soffits and an underfloor displacement ventilation environmental control strategy to create a building 30% more energy efficient than- current building regulations require.

Planned around a central atrium the six floor of offices allow natural light to flood in to all areas.

To the south the multi-terraced configuration adds another dimension to the working environment bringing together the interior and exterior space affording stunning views across the city.

Key:

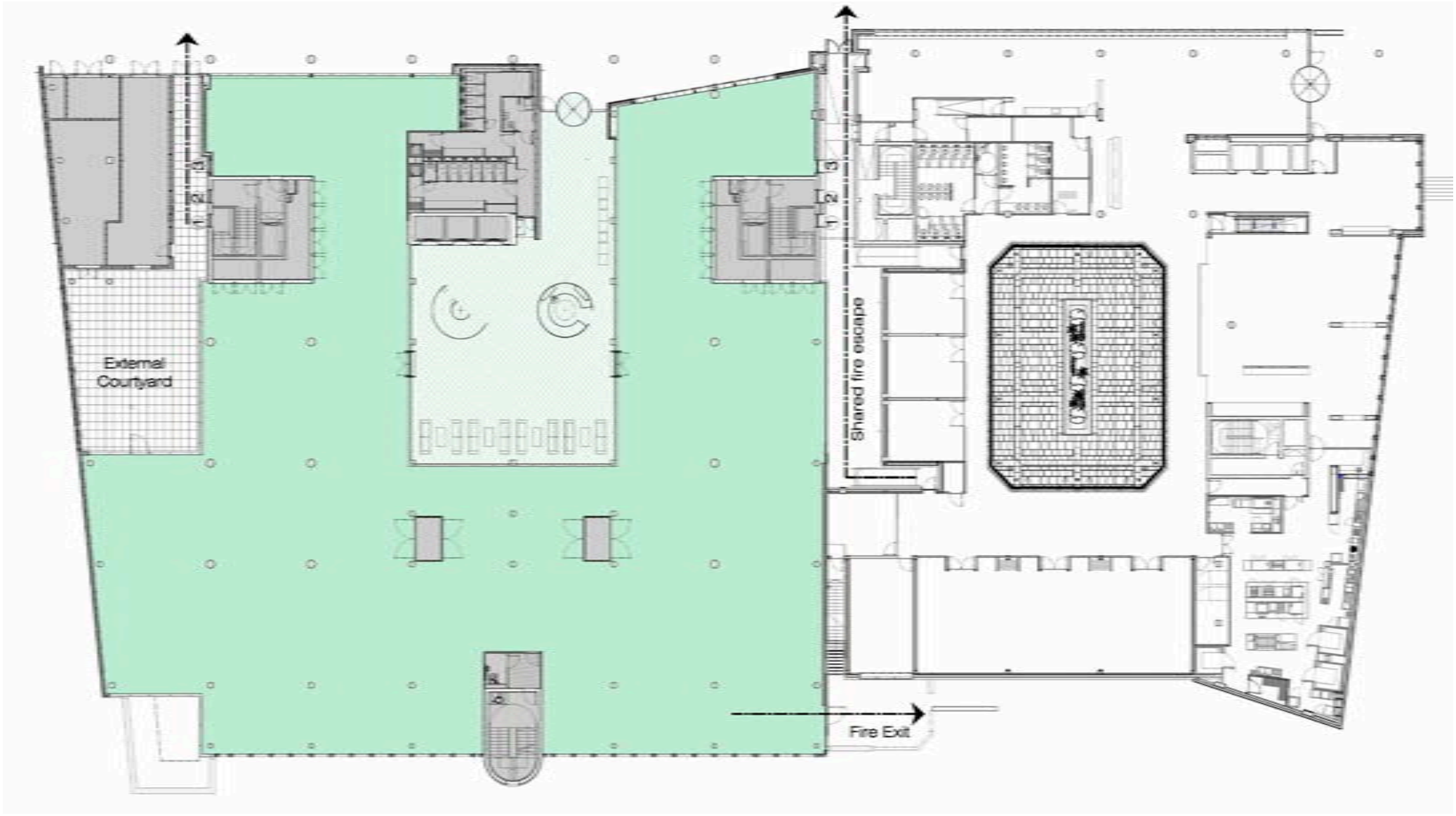
Landlords area

Tenants Terrace

Tenants Area

Car Park Operator

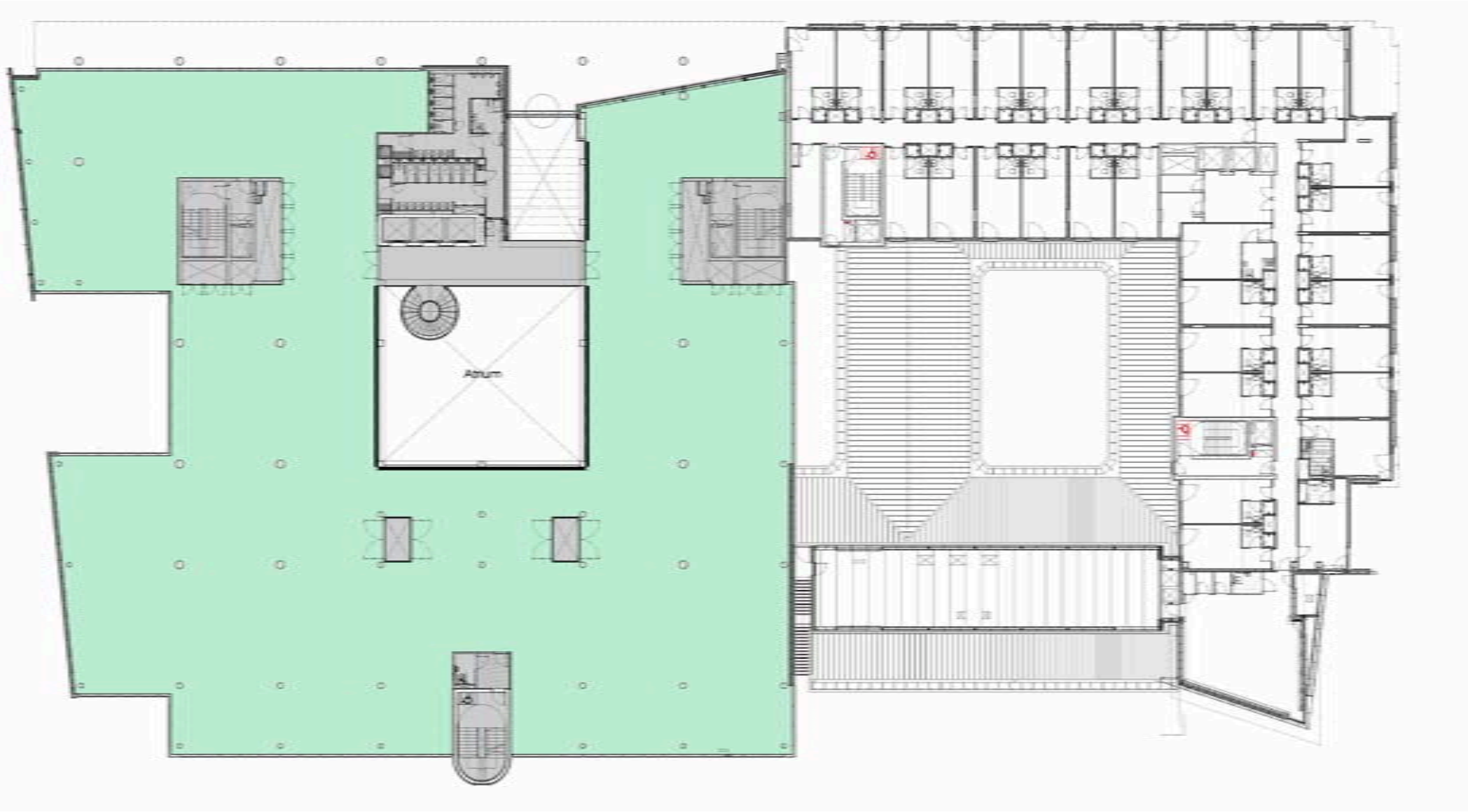
Ground Floor Plan



First Floor Plan

Key:

- Landlords area
- Tenants Terrace
- Tenants Area
- Car Park Operator



Key:

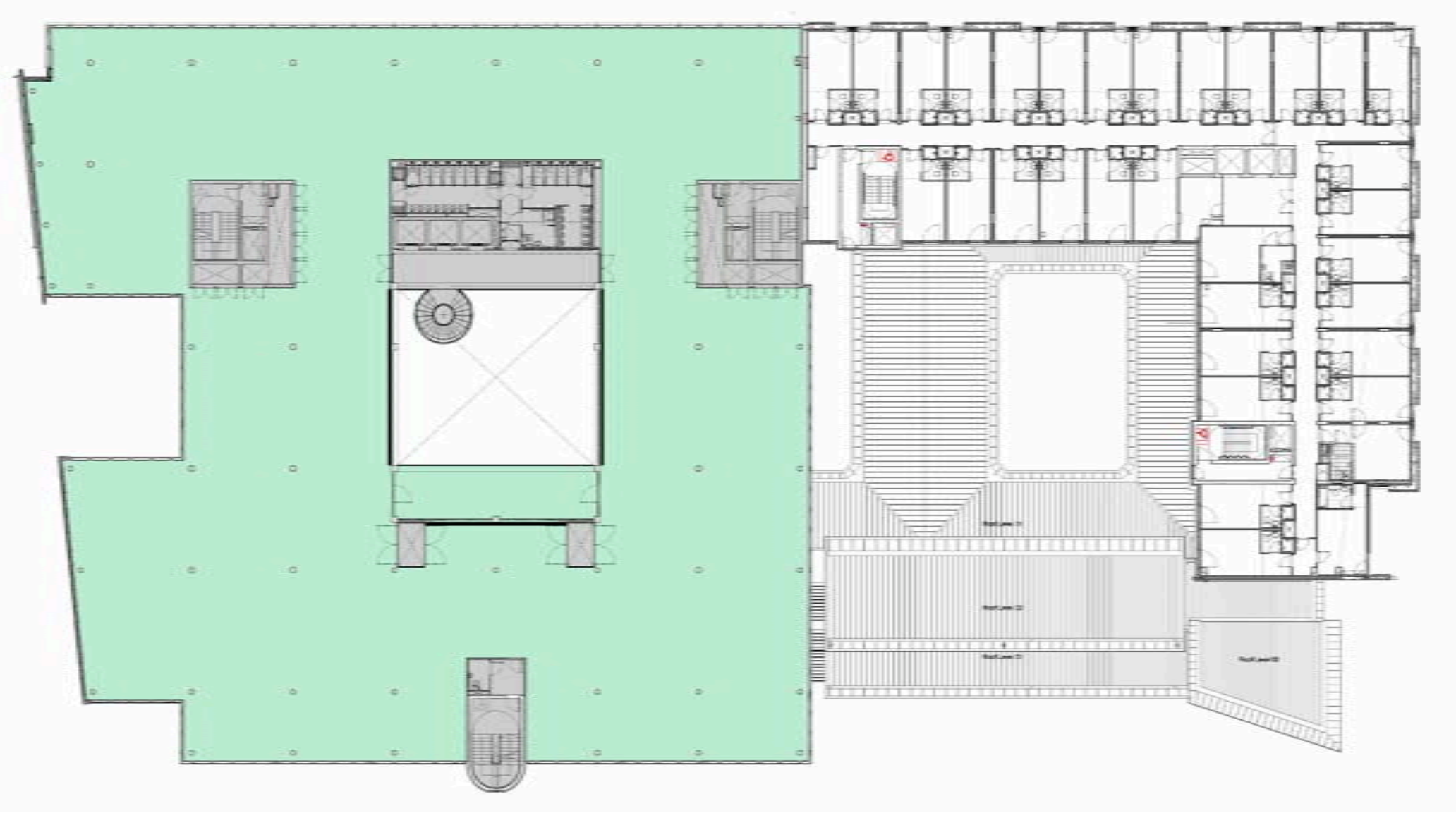
Landlords area

Tenants Terrace

Tenants Area

Car Park Operator

Second Floor Plan



Third Floor Plan

Key:

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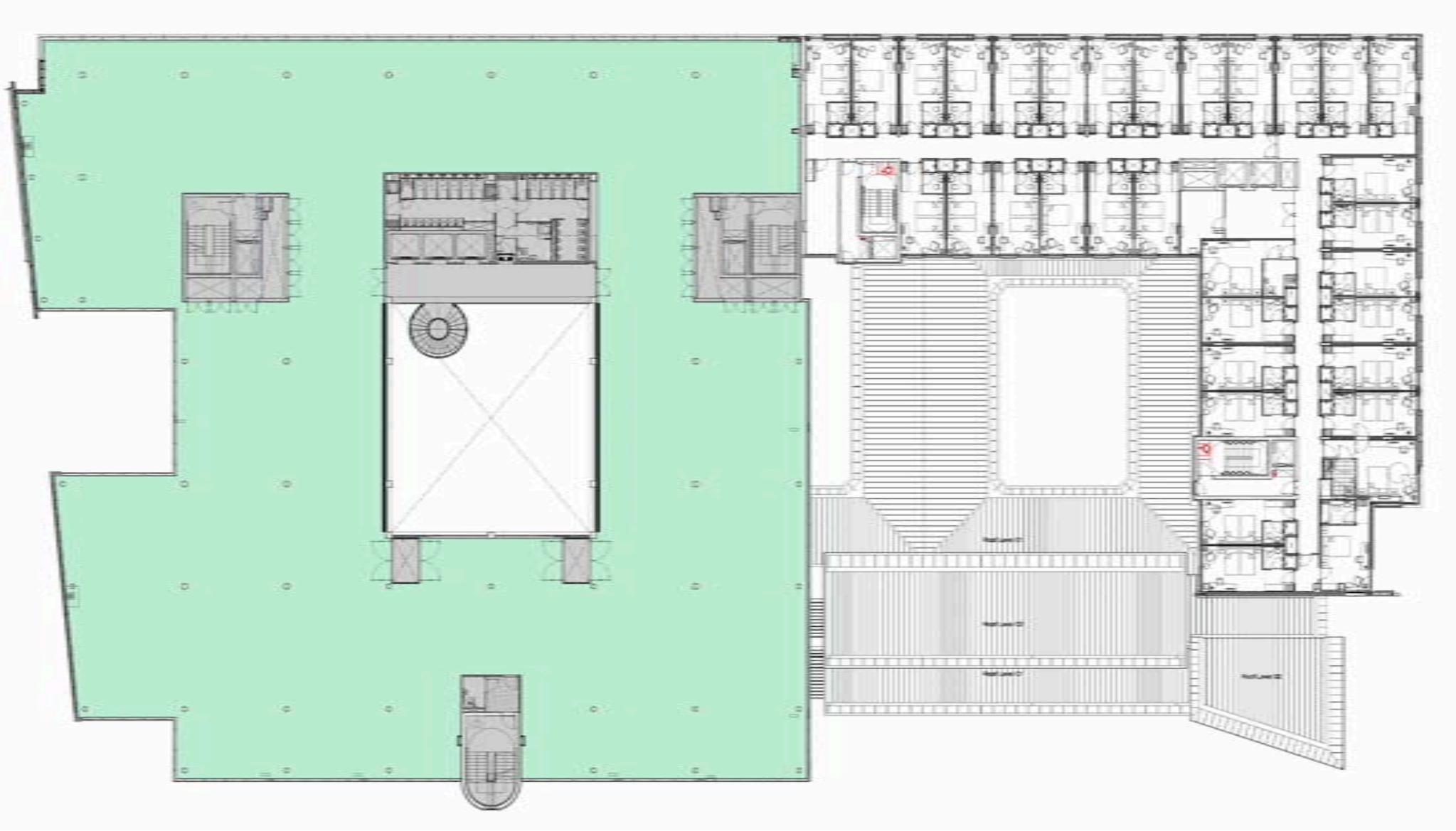
- Tenants Terrace
- Tenants Area
- Car Park Operator



Key:

Landlords area

Tenants Terrace

Tenants Area

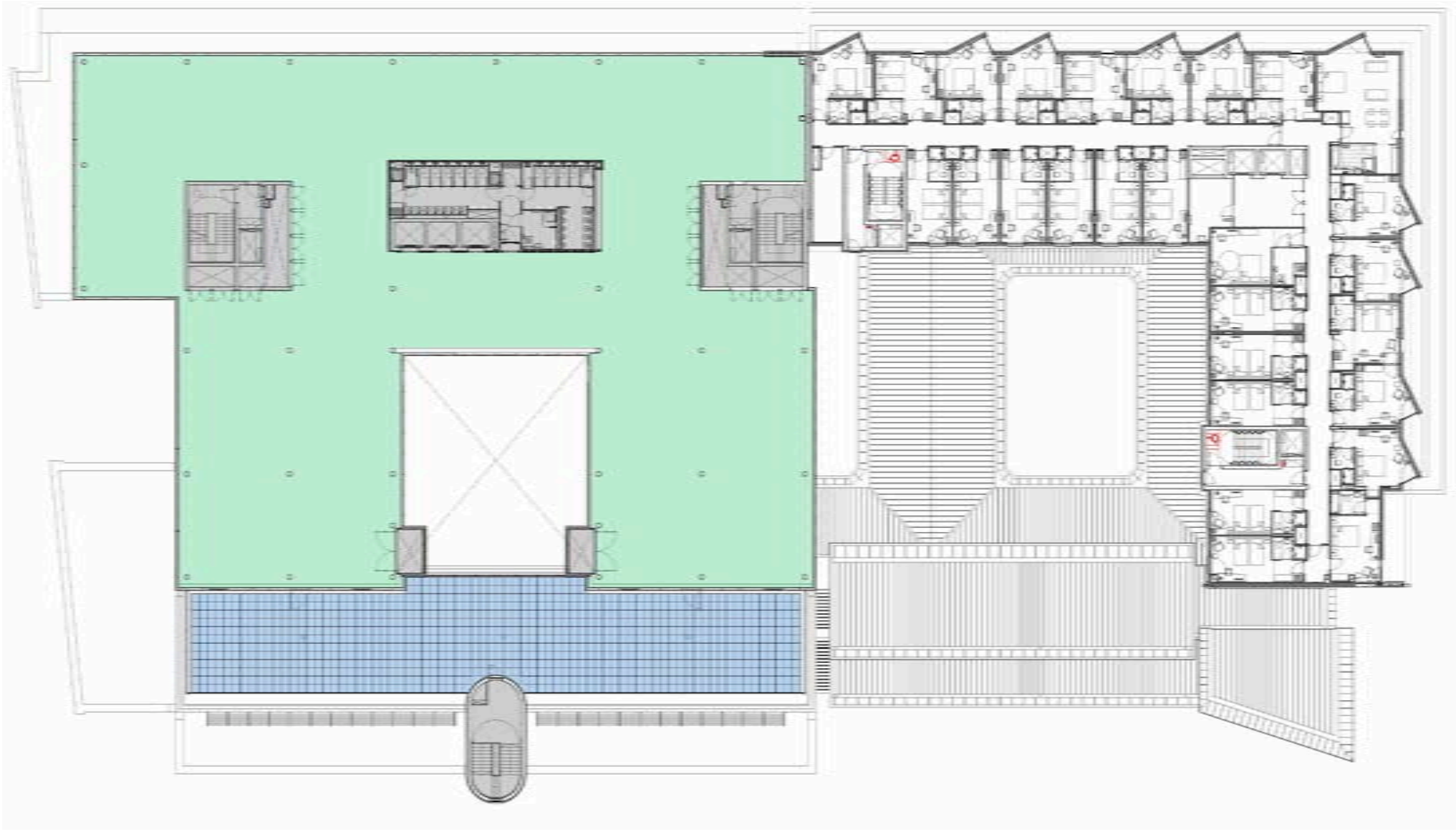
Car Park Operator

Fourth Floor Plan

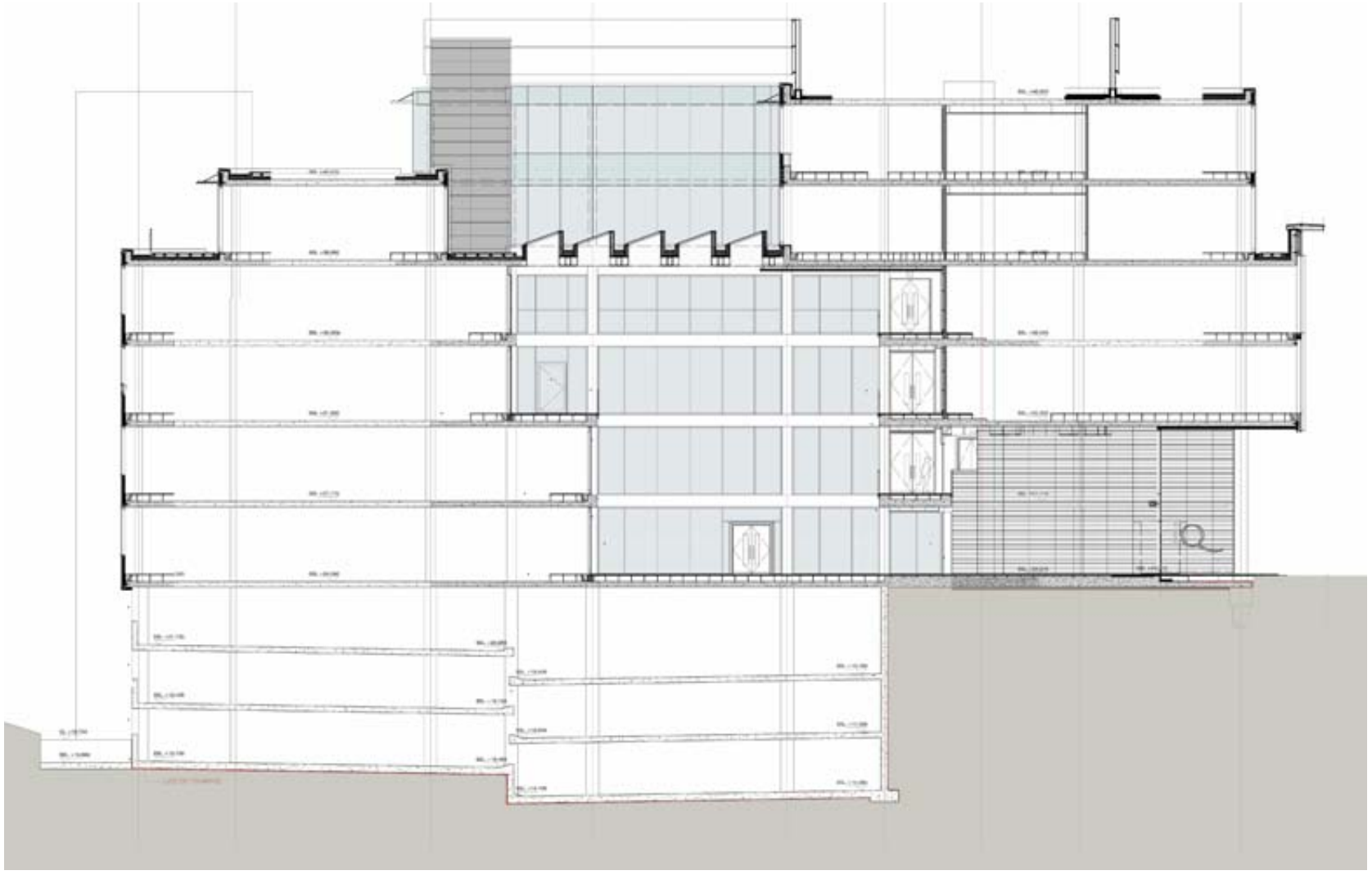
Fifth Floor Plan

Key:

- Landlords area
- Tenants Terrace
- Tenants Area
- Car Park Operator



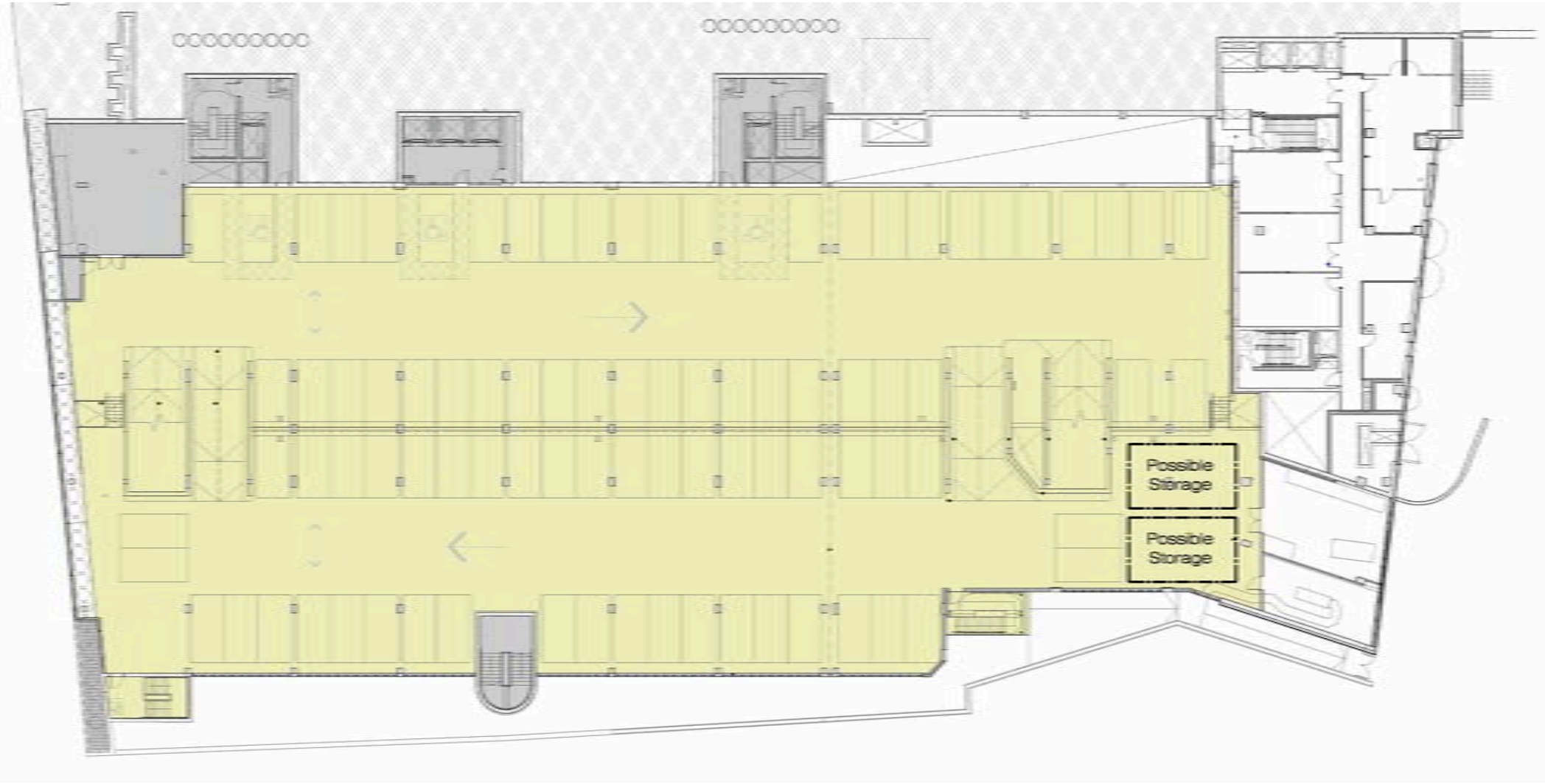
Section through atrium



Carpark L-01

Key:

- Landlords area
- Tenants Terrace
- Tenants Area
- Car Park Operator



Key:

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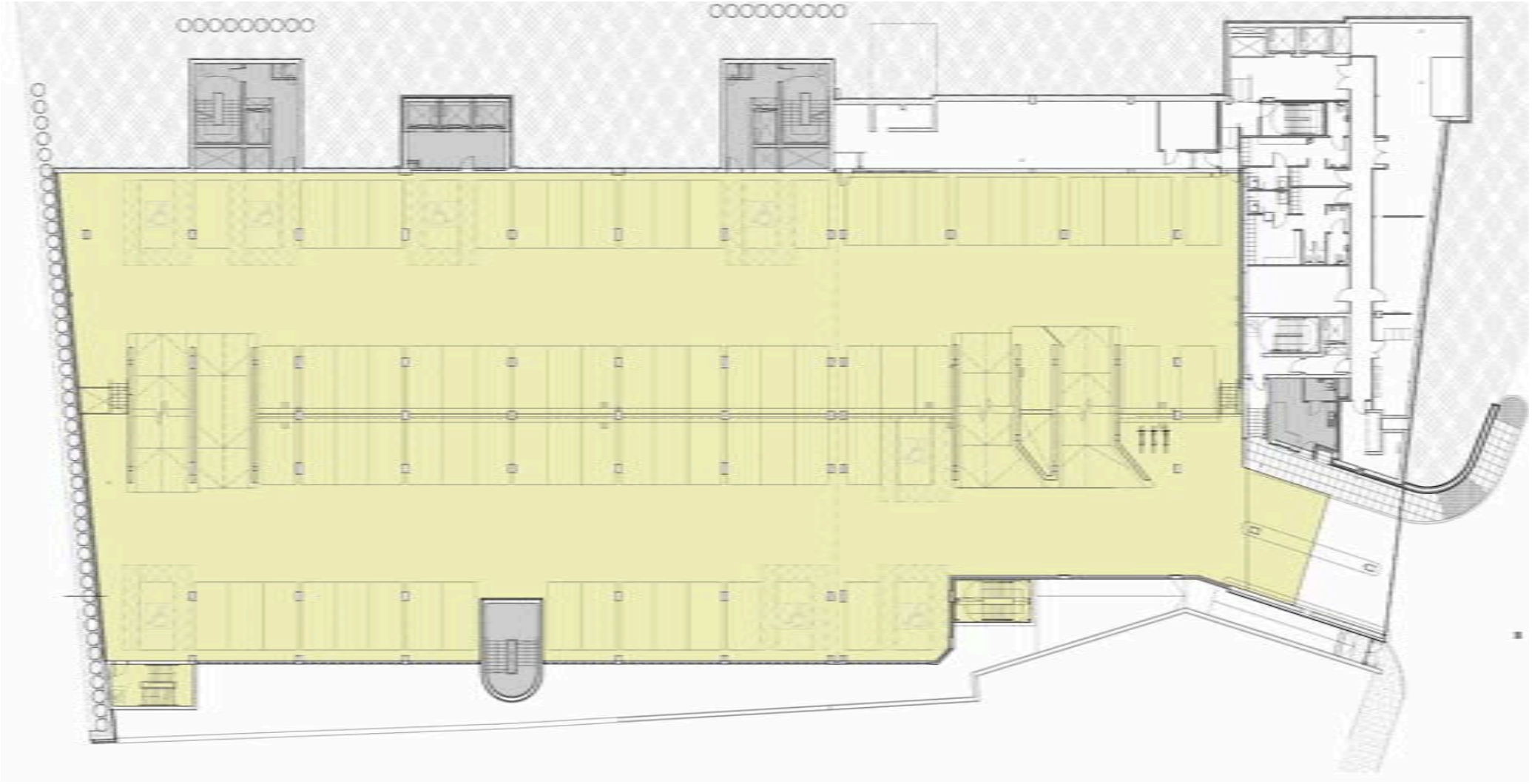
- Tenants Area
- Car Park Operator

Carpark L-02



Carpark L-03

Key:

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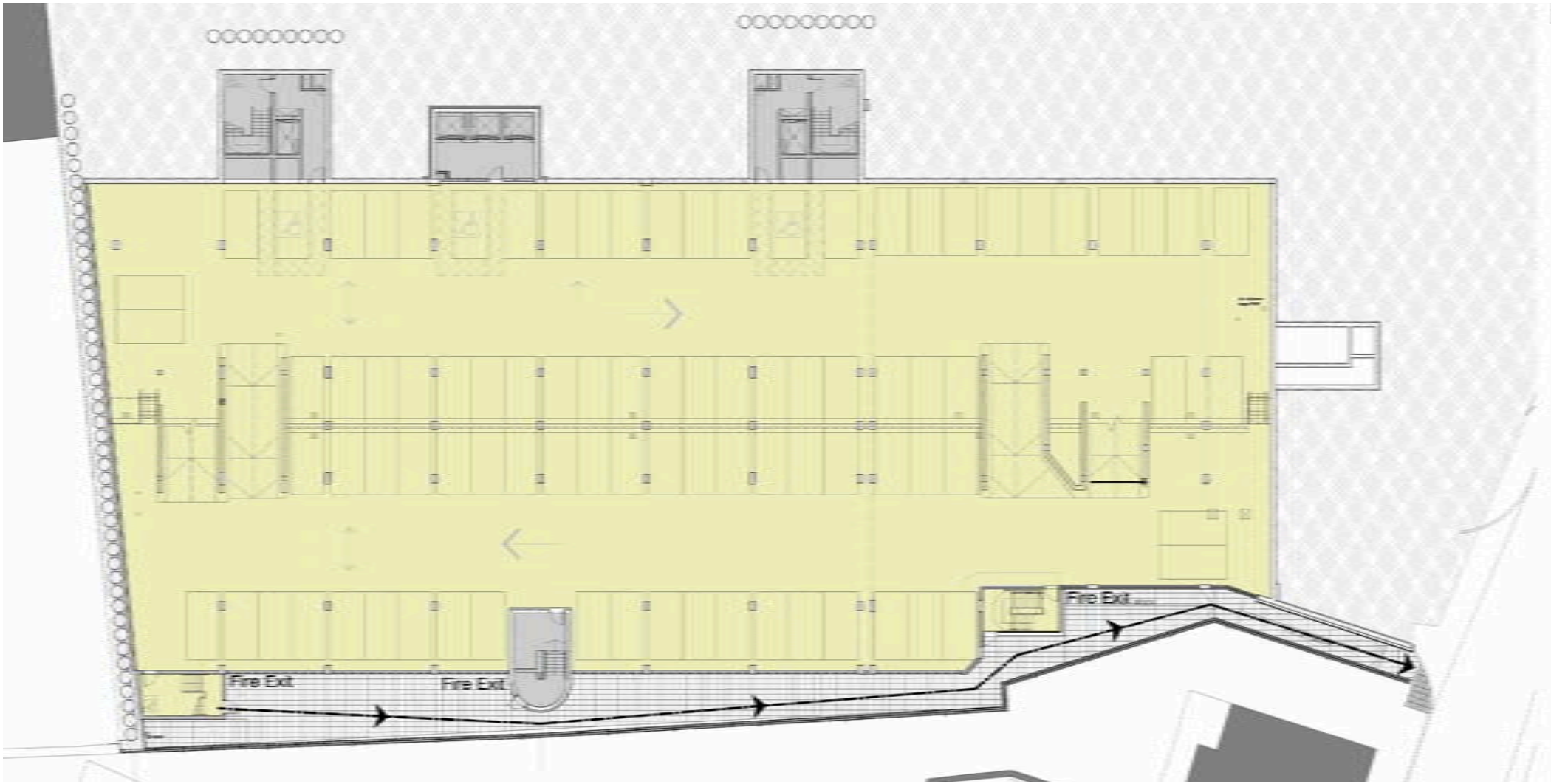
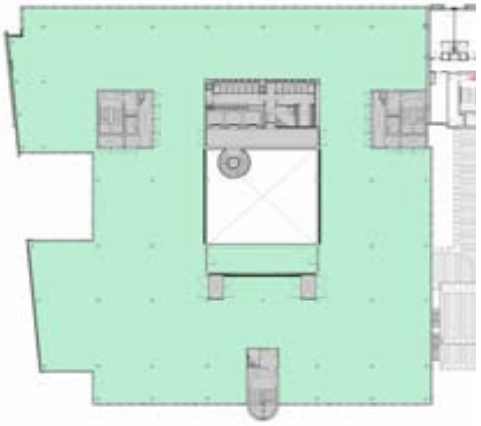
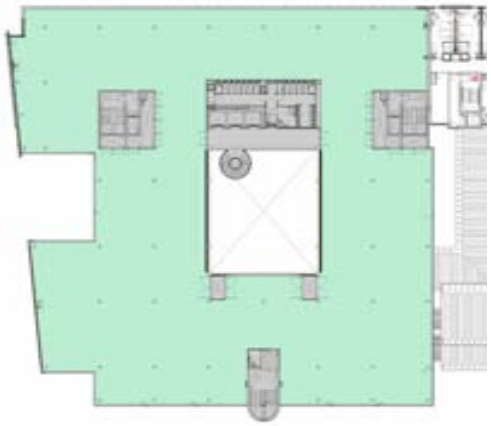
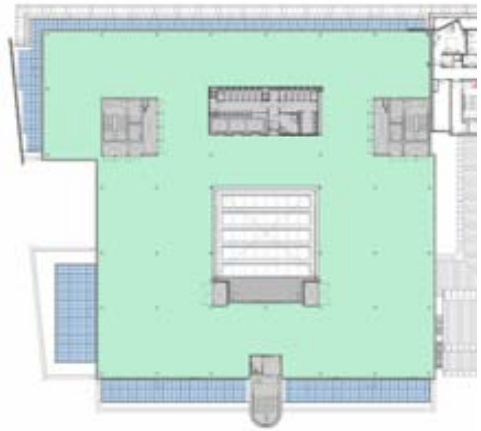
- Tenants Terrace
- Tenants Area
- Car Park Operator






Landlord Efficiency

Net internal area as a percentage of Gross Internal Area provides the building efficiency for the landlord

Excellent	NIA 84-87%
Good	NIA 80-83%
Poor	NIA Below 80% and above 87%*

*Where landlord efficiency figures exceed 87% this usually indicates that core provision is too low.

Note: Atrium has been included in the Ground floor NIA, this could become lettable area if a single tenant was to occupy the entire building.

Level	GIA	NIA	Landlord Efficiency	L.E. Rating
L00	2414	2091	86%	Excelllent
L01	2348	1997	85%	Excelllent
L02	2634	2227.5	85%	Excelllent
L03	2561	2227.5	86%	Excelllent
L04	2122	1826.5	86%	Excelllent
L05	1697	1416.5	83.5%	Good
TOTAL	**13776**	**11786**	86%	Excelllent

Tenant Efficiency

Net Usable Area as a percentage of Net Internal Area provides the building efficiency for the tenant.

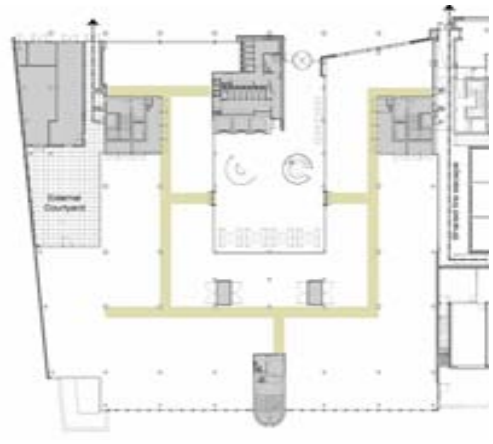
Excellent NUA 85% of NIA

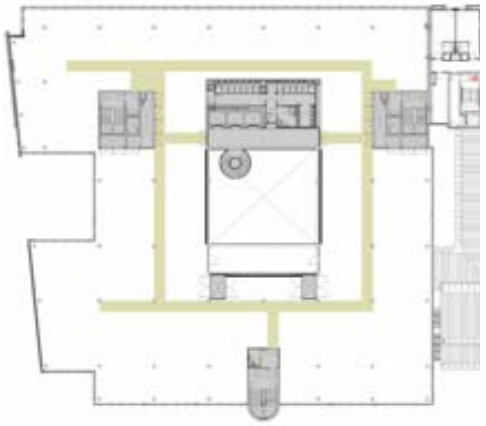
Good NUA 80-84% of NIA

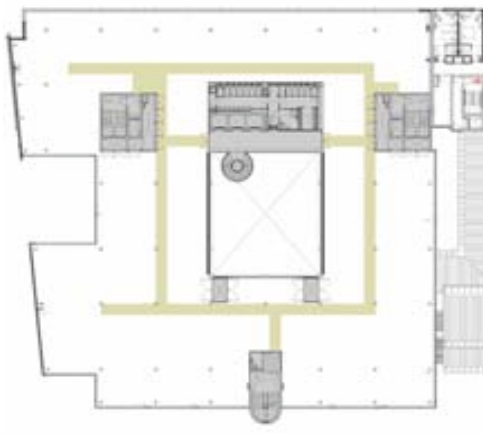
Fair NUA 75%-79% of NIA

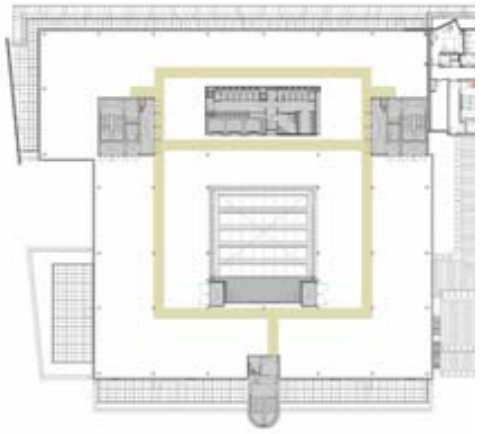
Poor NUA less than 75% of NIA

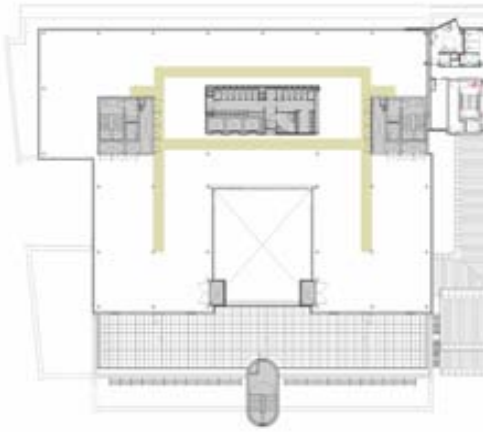
Level	NIA	NUA	Tenant Efficiency	T.E. Rating
L00	2091	1895	91%	Excelllent
L01	1997	1797	90%	Excelllent
L02	2227.5	1979.5	89%	Excelllent
L03	2227.5	1979.5	89%	Excelllent
L04	1826.5	1588.5	87%	Excelllent
L05	1416.5	1253.5	88%	Excelllent
TOTAL	**11786**	**10493**	89%	Excelllent











Potential Sub Division

The Fire strategy for the building allows each floor to be let separately. Subsequent to this each floor can easily be subdivided into 2 areas, creating a possible 12 different tenant spaces over the entire building.

By introducing additional fire corridors, L02-L05 can be subdivided into 3 different tenant spaces bring the maximum number of tenant spaces to 16.

Generally the 60% 40% split per floor will offer a good variety of possible size spaces. This variety is further increased by the incrementally decreasing floor plates.

The following Table highlights some of the possible areas achievable.

Level	NIA	Tenant 1 Sqm	Tenant 1 Percentage	Tenant 2 sqm	Tenant 2 Percentage
L00	1803	1012	56%	791	44%
L01	1997	1207	60%	790	40%
L02	2227.5	1311	59%	916.5	41%
L03	2227.5	1311	59%	916.5	41%
L04	1826.5	973	53%	853.5	47%
L05	1416.5	766	54%	650.5	46%

Note: L00 excludes 288 sqm of Atrium Space

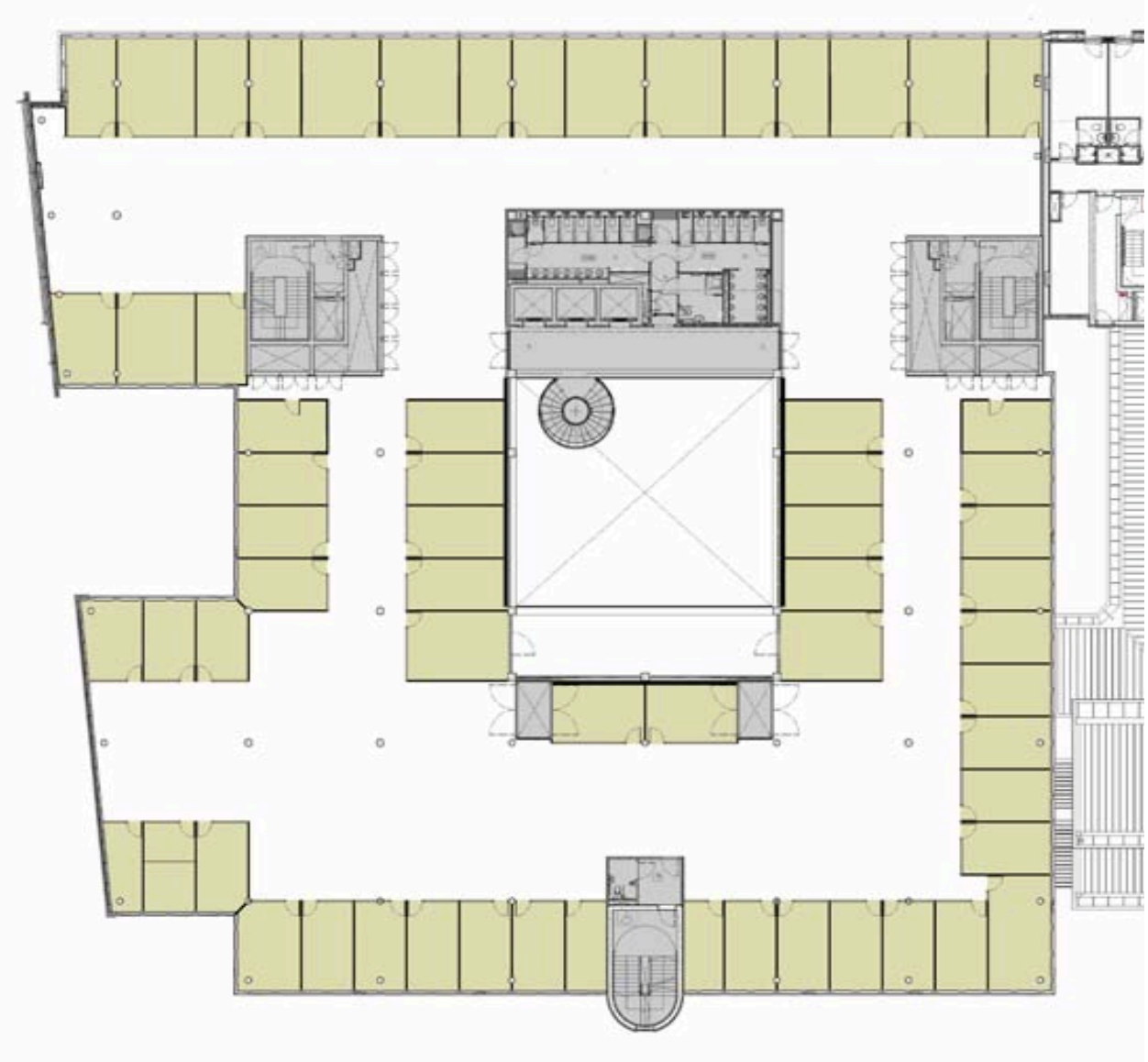
Cellularisation Potential

The cellularisation potential is expressed as a percentage of the NUA.

The office is based on a 1.5m planning grid. Offices sizes are based as closely as possible on the optimum 3.0m wide by 4.5m single person office and 3.0m wide x 6.0m deep 2 person office.

The proportion of NUA capable of being cellularised should be at least 40% satisfying low to medium Cellularisation requirements.

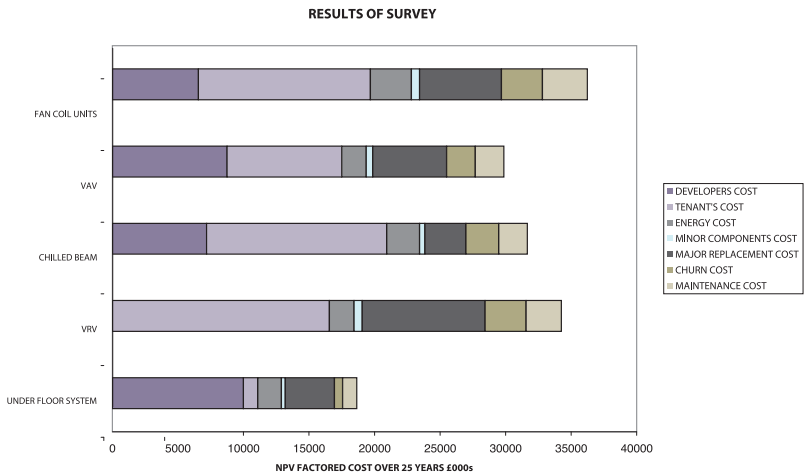
The cellularisation potential for a typical floor (L02) is 63 offices (1096sqm of NUA) which equates to 55% of the floor plate.

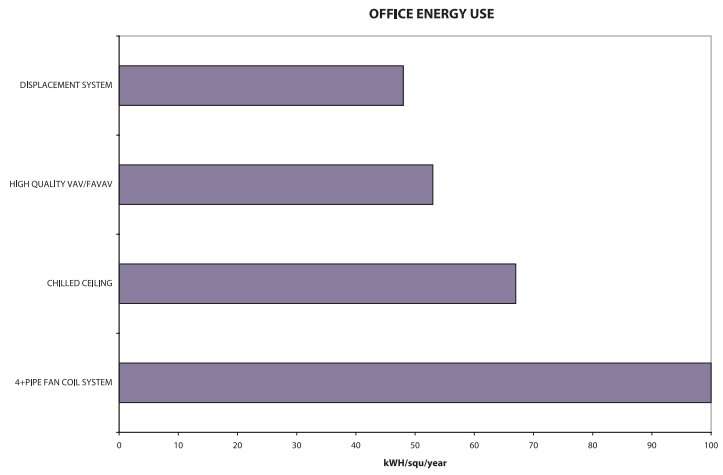


iQ JUSTICE MILL LANE – EFFICIENT AND INTELLIGENT

THE BENEFITS OF THE UNDERFLOOR AIRCONDITIONING DISPLACEMENT SYSTEM

- High indoor air quality due to direct removal of contaminants from the space – four air changes per hour
- Energy efficient – significant free cooling – 40% less energy consumption than fan coil system
- Reasonable temperature control
- Less expensive than ceiling based systems to fit-out and significantly lower churn costs
- Very low noise level
- Greatly reduced maintenance and disturbance of occupied offices
- Reduced waste from disposable maintenance parts





References: BCO Best practice in the specification for offices
Sustainable buildings are better business, can we deliver them together?', Arup Associates and the British Council for Offices (BCO)

Sustainability is now a political and business issue and climate change has become a central aspect of energy policy. Achieving global emission reductions requires major technical innovation and the move to clean and low carbon technologies, to improve performance on energy efficiency, has been widely adopted.

In Europe, 40% of our energy is consumed in buildings and the building industry has acknowledged its role in achieving lower emissions targets. In this context in relation to iQ, Hazledene embraced the challenge of designing a building with a high energy efficiency that was healthy and sustainable. After a thorough review of all current servicing and ventilation strategies, it was decided to proceed with a displacement ventilation system which is innovative yet established as a low energy solution.

In adopting a displacement ventilation system, the exposed mass of the building becomes an important factor. Large quantities of low velocity air are supplied at 19oC at low level within the occupied zone. As the supply air is denser than the existing room air, it displaces the room air, forming a reservoir of cool air at low level. Buoyancy forces cause the cool, clean air to be drawn up over any heat sources to be extracted at high level. Separate perimeter heating is provided.

In the summer evenings, when the outside temperature drops, the building can by purged with cool fresh air which will lower the temperature of the exposed concrete soffits thus helping to keep the office spaces at comfortable temperatures during the day.

The holistic design approach at iQ, incorporating well insulated facades, solar shading, exposed concrete soffits and the underfloor displacement ventilation environmental control strategy creates a building that is

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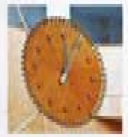
"[illegible]"

A fruitful restoration

Inskip & Jenkins returns Strawberry Hill to its former gothic splendour P.18

Time for Asplund

Tim Ronalds on the Gothenburg Law Courts extension P.14



BUILDING DESIGN ARCHITECTS' FAVOURITE WEEKLY

Lightning deal rescues Archial from the brink

Up to 20 firms bid to buy stricken firm before knot tied with Canadian company Ingenium

Will Hurst & Andrea Klettner

Archial was rescued from the brink of total collapse thanks to a lightning quick deal, with up to 20 potential buyers being whittled down to one in just three days.

The firm announced on Tuesday that it had been bought for an undisclosed sum by privately owned Canadian business Ingenium, a move which Chris Littlemore, who has been retained as Archial chief executive, claimed would result in a "bright future" for the company.

The remarkable level of interest shown in Archial means that, in less than a week, it has gone from the peril of being in administration with [illegible] millions of pounds worth of debts to being part of a bigger international multi-disciplinary firm, with all its UK staff retained on existing contracts.

But the deal [illegible] by administrator PricewaterhouseCoopers will not be such good news for creditors, and shareholders — who received an upbeat trading update from Archial in May — will not receive a penny.

Partner at PwC and joint administrator, David Chubb, revealed he had been handling "up to 20" companies bidding to buy Archial last Thursday with the parties involved working through Sunday night to close the deal with Ingenium, the latest in a string of Canadian firms to buy up British practices.

"We had terrific interest... a really good range of industry players"
David Chubb

"We had terrific interest," he said [illegible]. "It was a really good range of industry players. On Sunday evening we had a shortlist of five. We later brought that down to two bidders which we [illegible] through the weekend.

"Circumstances dictated the speed but I would say this couldn't have gone much better. We had immense challenges last week keeping the business alive in administration."

It also emerged this week that the founder of Archial's predecessor SMC Group sold his shares at the beginning of the year.

Stewart McColl had a [illegible] stake in Archial, but sold all [illegible] shares on January 28. At the time, the share price was 7 pence, giving his sale a value of £[illegible].

At its peak in 2007, Archial shares traded at [illegible] but had fallen to [illegible] when they were suspended earlier this month.

Prior to going into administration, Archial was involved in at least four legal claims against debtors over unpaid fees, including one against [illegible].

The one part of Archial not acquired by Ingenium is the Spanish Arcadia, which employs around 60 people.

MORE ON ARCHIAL AT BDONLINE

Aberdeen ensemble

Richard Murphy Architects has completed work on the £45 million Justice Mill Lane Park Inn hotel and office development in Aberdeen.

Although the office and hotel are two separate entities, they are unified by a common palette of materials including a granite base and zinc and glass cladding at the upper levels.

Curtainwalling with "floating" panels covers the facade of the seven-storey 8,775sq m hotel, which is arranged around a central day-lit space and includes 115 bedrooms, a gym, restaurant and meeting rooms.

The six-storey 13,716sq m office building features a central atrium, [illegible] and a café. The structure also steps down to the south of the site, creating roof terraces.

Guide to Key Criteria in Comparison to BCO standards

	BCO	JML
OCCUPANCY		
Work place Density 1 person per:	8-13 m2	10m2 (base build upgradeable to 1 per 6m2)
Means of Escape	6m2	6m2
Core Elements (lifts)	12m2	12m2
On floor Services	10m2	10m2
PLAN EFFICIENCY		
Low rise buildings up to 9 floors	80-85%	86%
PLAN AND CEILING HEIGHT		
Window to window	15-21m	5-18m
Window to core	6-12m	9m
FFL to underside of ceiling	2.6-3.0	3.125m
GRIDS		
Planning Grid	1.5mx1.5m	1.5mx1.5m
Column Grid	7.5m, 9.0m, 12.0m	7.5m, 9.0m
Percentage of primary Circulation to NIA	<22%	11%
Lifts (based on 3 x 13 person wide car lifts)		
Car Loading 80%		
Handling Capacity	15%	16.3%
Time to destination	<90 seconds	89.5s
Raised Floors		
Raised Access Floor depth	300-500mm	350mm (overall)

	BCO	JML
Structural loadings		
Live:		
Ground Floor	3.0kN/m2	4.0kN/m2
Above Ground	2.5kN/m2	4.0kN/m2
High Load areas	7.5kN/m2	4.0kN/m2
Dead:		
Partitions	0.5-1.2kN/m2	1.0kN/m2
Floors Ceilings and Services	0.85kN/m2	1.5kN/m2

Lighting

Day Lighting 2% Average, 0.8% minimum is easily achieved through large 3.125m floor to ceiling height and extensive glazing.

VDU use 300-500 Lux 300 Lux

(Task lighting to be provided by tenant for paper based tasks. All lighting is controlled through the BMS with strategically placed PIR sensors).

ENVIRONMENTAL STRATEGY

Low energy Displacement Ventilation system working in conjunction with the thermal mass of the exposed concrete soffits with perimeter trench heating

Outdoor Air 12-16l/s per person 50l/s per person

(Based on 1 person per 10m2. 3-4 times the amount of fresh air is supplied by the choice of displacement ventilation system, creating a healthier working environment).

Mixed mode Air Conditioned space design criteria

Not to exceed 25 deg C for more than 5% of occupied hours.

Not to exceed 28 deg C for more than 1 % of occupied hours.

BREEAM Rating: Very Good

Energy Performance Certificate Rating (EPC) B

Architects	Richard Murphy, Bill Black, Jamie McCutcheon and Core Team
Engineers	Buro Happold Ltd
M&E Engineers	Fulcrum Consulting
Quantity Surveyor	Davis Langdon LLP
Acoustic Engineers	Fulcrum Consulting
Planning Supervisor	Summers Inman
Traffic Consultants	WSP Development and Transportation
Access Consultants	Buro Happold Ltd
Client	Hazledene Estates Ltd
Client Advisor	T B Stewart Ltd
Contractor	Miller Construction
Construction System:	In-situ Concrete Frame with Post-Tensioned Slabs
Time on Site:	24 months
Construction Cost	£45m
Office Cost per sqm	£1300
Car park cost per sqm	£950
Hotel Cost per sqm	£1800

Hotel Development

The hotel is designed to optimise the available site by modelling the facade with a series of projections and recesses to accommodate 185 bedrooms within the permissible planning envelope of this prominent corner plot.

Public facilities of a street front restaurant and separate bar, meeting rooms with natural daylight and a subdividable function suite are all arranged around a south facing, landscaped courtyard with sliding glass walls. A gym sits in an elevated corner position offering guests a unique view over historic Aberdeen.

Overlapping,rendered,'floating'panels sit in front of four floors of bedrooms, with the upper two floors clad in zinc, characterised by angled bay windows focused on selected distant views.

Operated by the Rezidor Hotel Group this high quality business hotel marks a milestone as the one hundredth Park Inn. It is served by an underground car park for the convenience of visitors

Ground Floor Plan

Entrance Foyer 200m²

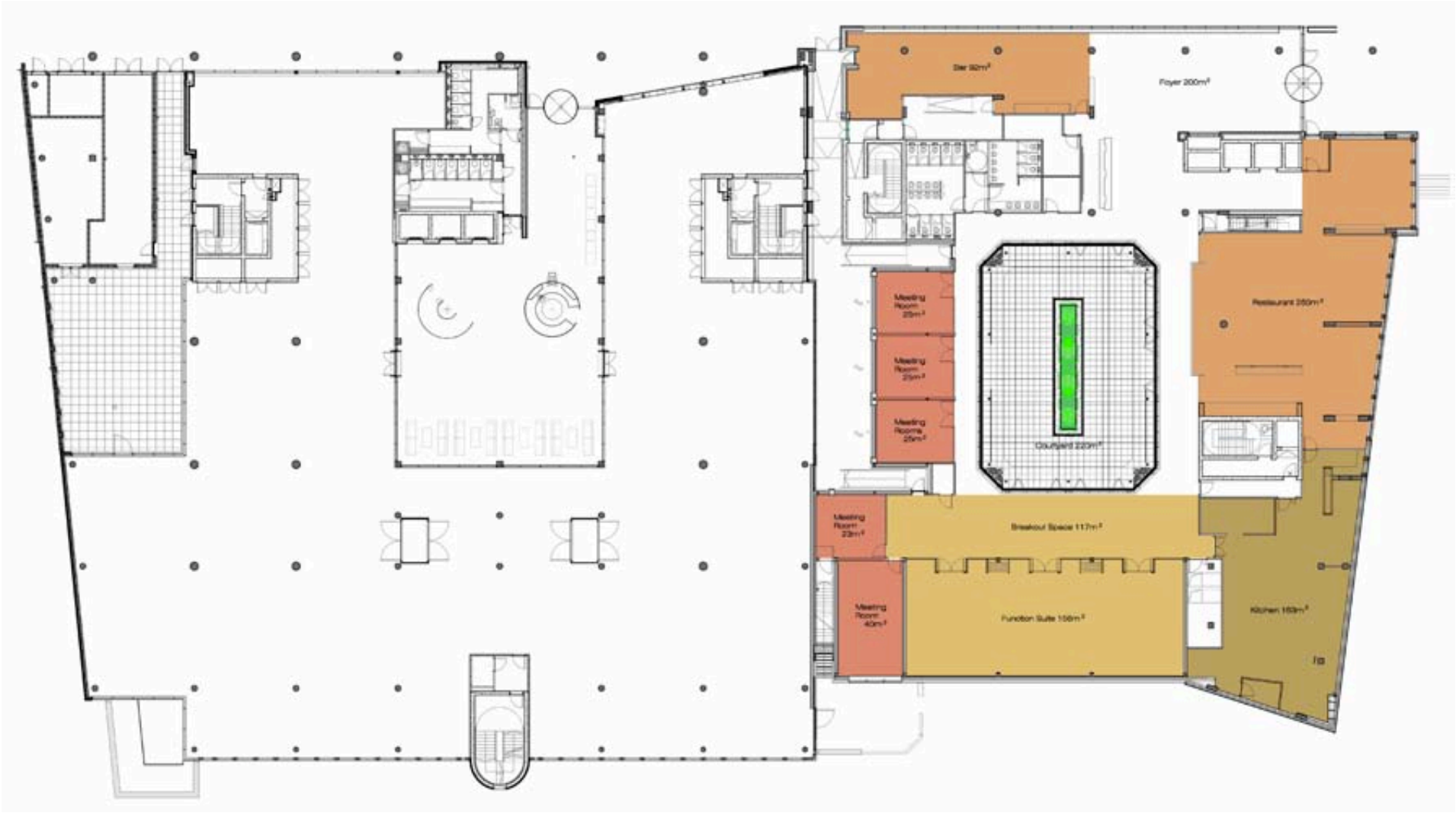
Courtyard 220m²

Bar 92m²
Restaurant 250m²

Kitchen 163m²

Breakout Space 117m²
Function Suite 156m²

Meeting Rooms 138m²

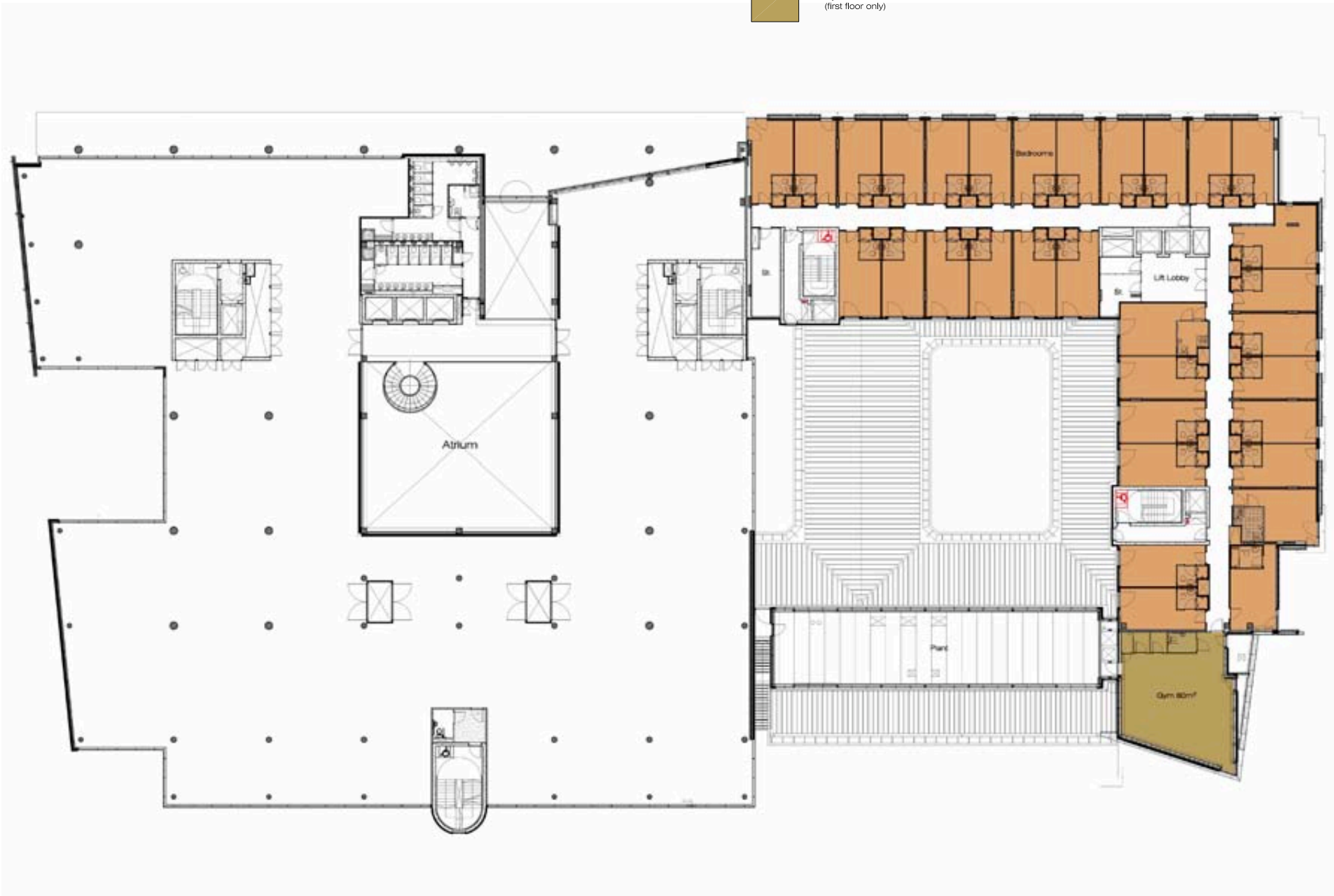


First Floor Plan

(Floors 01-04 similar)

Bedrooms 747m²

Gym 80m²
(first floor only)



Sixth Floor Plan

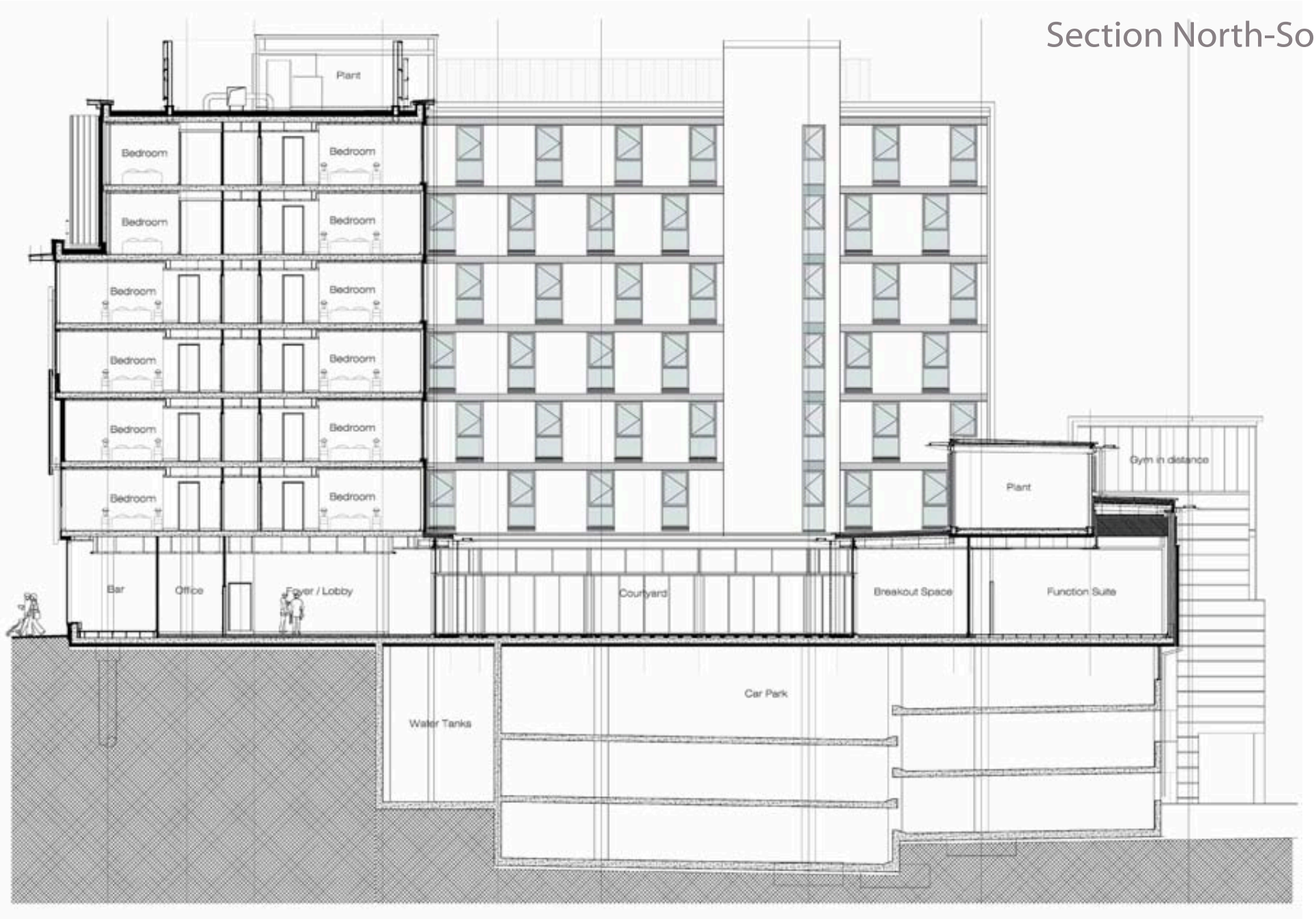
(Floors 05-06 similar)

Bedrooms 665m²

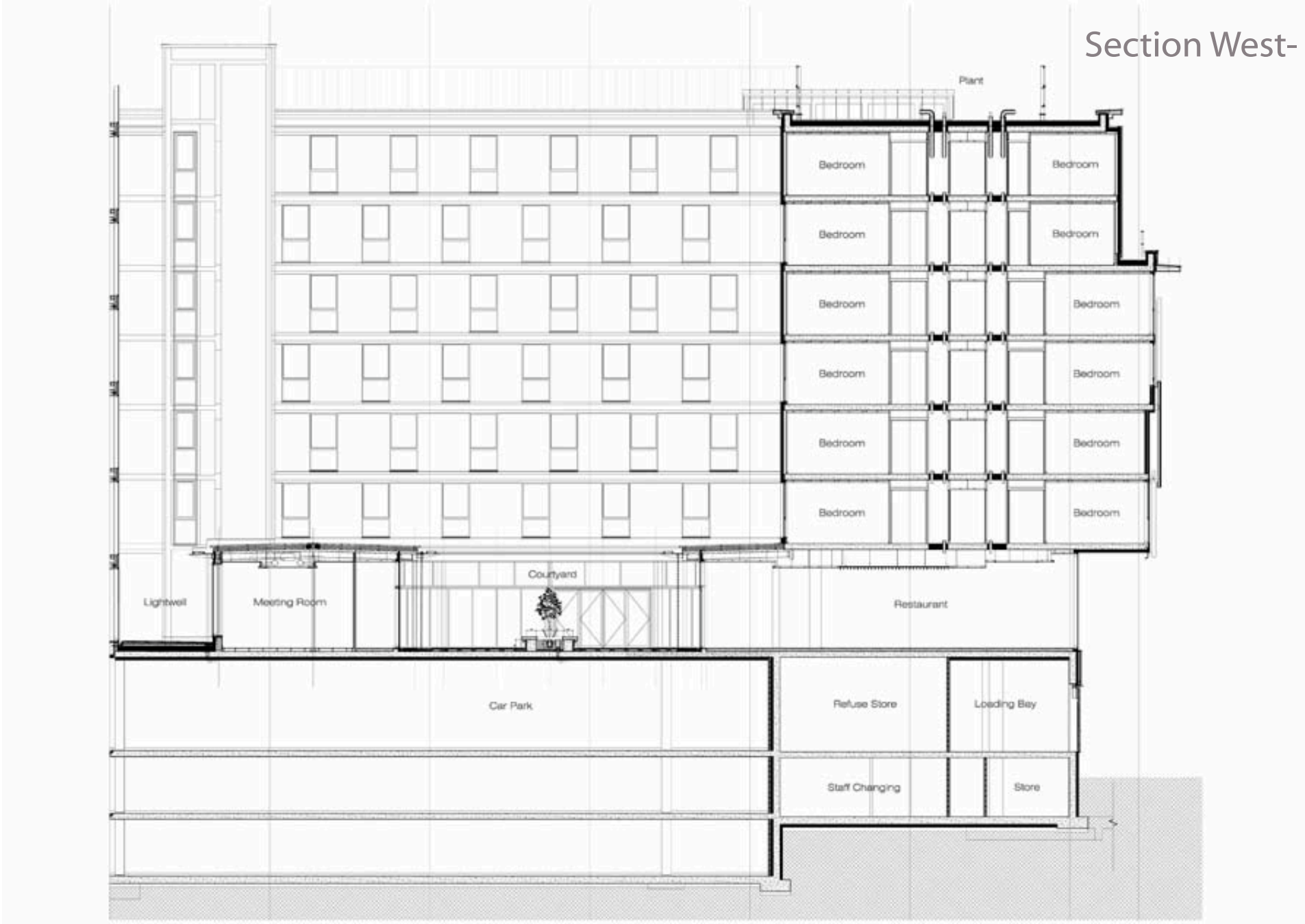
Junior Suite 46m²

Basement Plans

Section North-South



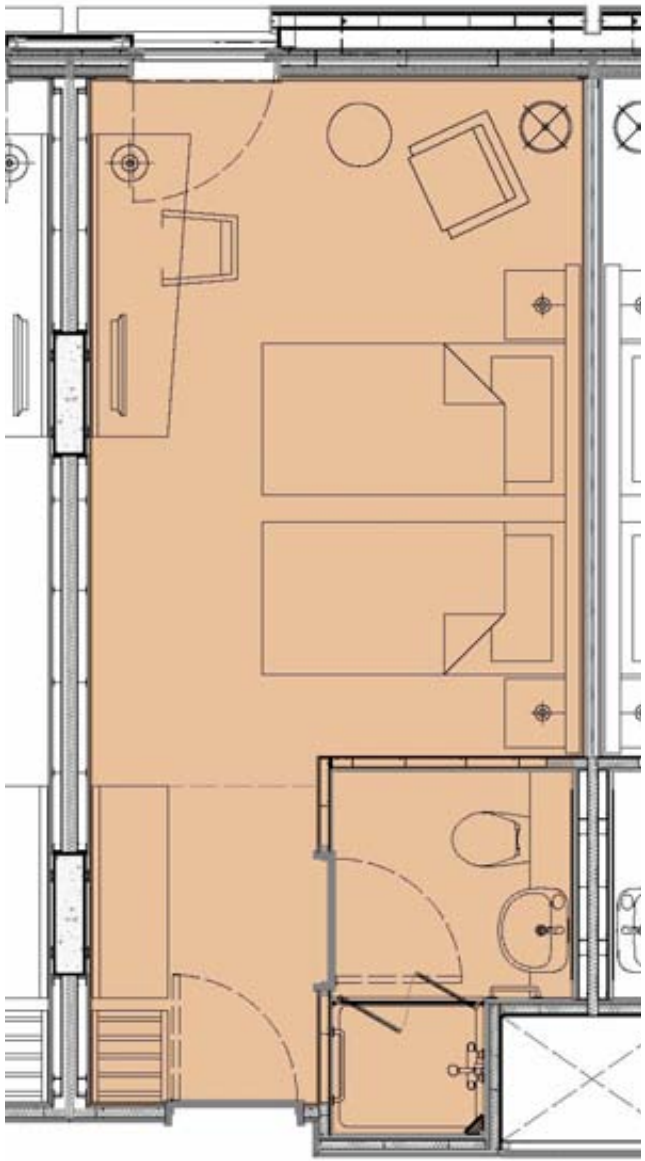
Section West- East



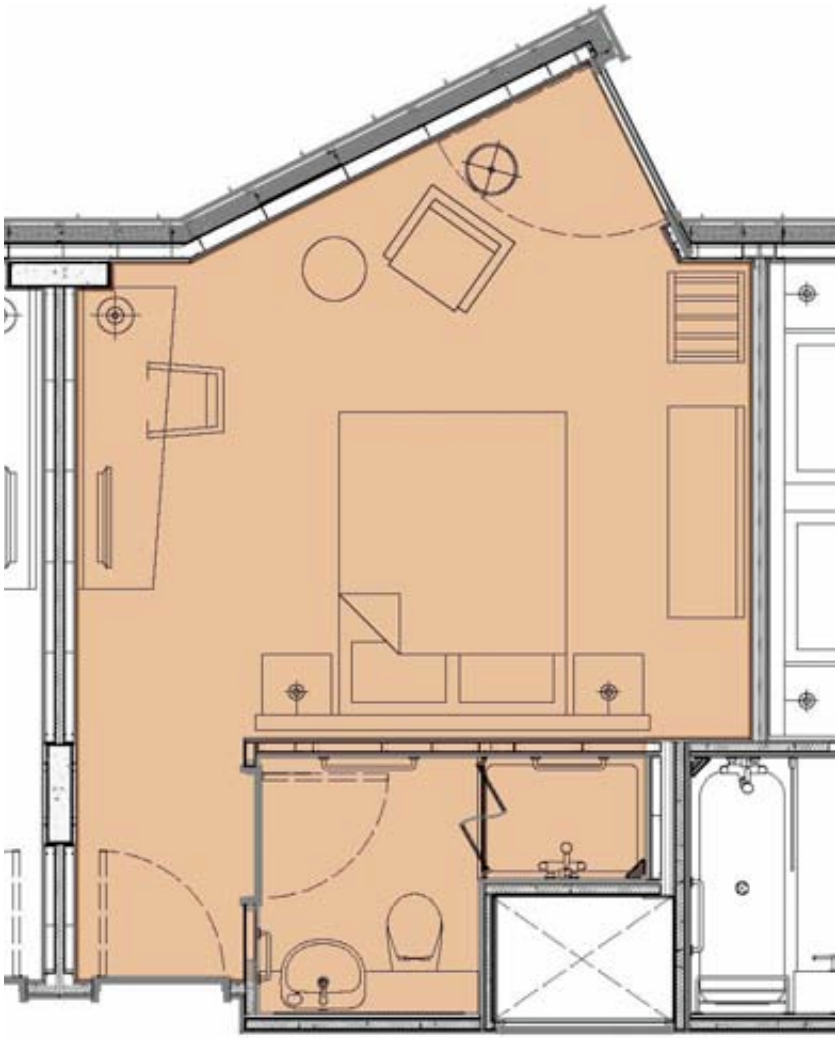
Hotel Bedroom Types

Zinc Twin Room (with bath) 22.5m2

Junior Suite 46m2



Standard Twin Room 21 m2



Zinc Bay Room 21m2

Hotel Bedroom Types

CLIMATE CONTROL

Heating and cooling is achieved through a VRV air conditioning system with individual room temperature control.

ARTIFICIAL LIGHTING

Energy saving bulbs are installed in all bedrooms. Controls are located by the door and integrated into the bed head.

NATURAL DAYLIGHTING AND VENTILATION

All rooms have openable windows. Most windows are full height from floor to ceiling to maximise daylight.

SANITARY PROVISION

Bathrooms are pre-plumbed pods produced in factory controlled conditions, to ensure a consistent standard of finish throughout.

ACOUSTICS

Walls between bedrooms are acoustically rated to Rw58dB.

INTERNET

Wireless internet is available in all rooms. The IT hubs are concealed adjacent to the main lift core with routers above the corridor ceiling.

ACCESS

Secure access is via a Vingcard system.

Hotel Key Criteria

BEDROOMS

Standard Room	21.0m2	140no
Zinc Bay Room	21.0m2	18no
Zinc Twin Room	22.5m2	8no
Park View Room	23.5m2	6no
L Shape Room	26.0m2	1no
Accessible Room	26.0m2	10no
Junior Suite	46.0m2	2no
Total Rooms	185no	

BREAKDOWN OF 185 ROOMS

Twin Rooms:	121no
Double Rooms:	64no
Total:	185no
Individual Rooms:	157no
Connecting Rooms:	28no
Total:	185no
Shower cubicles:	169no
Bath tubs:	14no
Suites with both:	2no
Total:	185no

HOTEL, GENERAL

Area	8,775m2
Cost	£16M
Bedrooms	185
Area / Bedrooms	47.4m2 (less than 50m2 is efficient)

VERTICAL CIRCULATION

Public Lifts	2no 12 person lifts
Service Lifts	2no 08 person lifts
Public Stairs	2no from ground to top floor

FIRE SAFETY

An automatic sprinkler system is installed throughout.

The fire alarm system has a 3 minute delay period.

PUBLIC AREAS

Bar	92m2	Licensed to serve 92 people
Restaurant	250m2	Licensed to serve 104 people. Has street front public entrance
Function Suite	156m2	Licensed to serve 180 people. Seats 120 for a wedding banquet Subdividable into 3no additional meeting rooms Integrated AV projection facilities
Breakout Space	117m2	Opens directly onto the courtyard.
Meeting Rooms	138m2	5no Meeting rooms, all with natural daylight. Each has a flat screen television for

Architects	Richard Murphy, Bill Black, Kris Grant and Core Team
Engineers	Buro Happold Ltd
M&E Engineers	Fulcrum Consulting
Quantity Surveyor	Davis Langdon LLP
Acoustic Engineers	Fulcrum Consulting
Planning Supervisor	Summers Inman
Traffic Consultants	WSP Development and Transportation
Access Consultants	Buro Happold Ltd
Client	Hazledene Estates Ltd
Client Advisor	T B Stewart Ltd
Contractor	Miller Construction
Construction System:	In-situ Concrete Frame with Post-Tensioned Slabs
Time on Site:	24 months
Construction Cost	£45m
Office Cost per sqm	£1300
Car park cost per sqm	£950
Hotel Cost per sqm	£1800