Henry J Lyons

SANDYFORD GP LIMITED
(acting in its capacity as general partner for
the Sandyford Central Partnership)

Architectural Design Statement

Planning Application for a Strategic Housing Development

November 2019

SANDYFORD CENTRAL

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1.0 INTRODUCTION

1.1. INTRODUCTION

This Design Statement was prepared by Henry J Lyons on behalf of Sandyford GP Limited (acting in its capacity as general partner for the Sandyford Central Partnership).

A planning permission was granted for the site on 17th July 2018 under Board Order ABP-301428-18), comprising 459 residential units and resident amenities across six blocks ranging in height from six to fifteen storeys above podium.

The proposed development, Sandyford Central, has been designed to provide 564no. Build-to-Rent apartments and associated communal facilities, carparking, café, créche and ancillary accommodation in line with the standards set out in the “Sustainable Urban Housing: Design Standdards for New Apartments (2018)”.

1.2 SUMMARY OF PROPOSED DEVELOPMENT

Sandyford GP Limited (acting in its capacity as general partner for the Sandyford Central Partnership) intend to apply to An Bord Pleanála for permission for a strategic housing development at a 1.54 ha site at the former Aldi Site, Carmanhall Road, Sandyford Business District, Dublin 18.

The development, which will have a Gross Floor Area of 49,342 sq m will principally consist of: the demolition of the existing structures on site and the provision of a Build-to-Rent residential development comprising 564 No. apartments (46 No. studio apartments, 205 No. one bed apartments, 295 No. two bed apartments and 18 No. three bed apartments) in 6 No. blocks as follows: Block A (144 No. apartments) is part 10 to part 11 No. storeys over basement; Block B (68 No. apartments) is 8 No. storeys over basement; Block C (33 No. apartments) is 5 No. storeys over lower ground; Block D (103 No. apartments) is part 16 to part 17 No. storeys over lower ground; Block E (48 No. apartments) is 10 No. storeys over semi-basement; and Block F (168 No. apartments) is 14 No. storeys over semi basement.

The development provides resident amenity spaces (1,095 sq m) in Blocks A, C and D including concierge, gymnasium, lounges, games room and a panoramic function room at Roof Level of Block D; a creche (354 sq m); café (141 sq m); a pedestrian thoroughfare from Carmanhall Road to Blackthorn Drive also connecting into the boulevard at Rockbrook to the west; principal vehicular access off Carmanhall Road with servicing and bicycle access also provided off Blackthorn Drive; 285 No. car parking spaces (254 No. at basement level and 31 No. at ground level); 21 No. motorcycle spaces; set-down areas; bicycle parking; bin storage; boundary treatments; hard and soft landscaping; lighting; plant; ESB substations and switchrooms; sedum roofs; and all other associated site works above and below ground

1.3 SUPPORTING REPORTS

In addition to the plans and particulars required under the regulations, this Architectural Report and drawings should be read in conjunction with the following technical reports prepared by the project team in relation to various aspects of the proposed development:

Consultant	Documents Prepared
Thornton O'Connor Town Planning No. 1 Kilmacud Road, Dundrum, Dublin 14.	→ Planning Report → Statement of Consistency → Material Contravention Statement → Response to the Opinion
Henry J. Lyons Architects Nos. 51-54 Pearse Street, Dublin 2.	→ Architectural Drawings → Architect's Design Statement → Response to the An Bord Pleanála Inspector's Report
Bernard Seymour Landscape Architects No. 4 Mary's Abbey, Dublin 7.	→ Landscape Drawings → Landscape Report
O'Connor Sutton Cronin Consulting Engineers No. 9 Prussia Street, Dublin 7.	→ Traffic Impact Assessment → DMURS Statement of Consistency → Mobility Management Plan → Engineering Services Report → Construction Management Plan → Drainage Drawings → Daylight/Sunlight Report → Site Lighting Report → Energy and Sustainability Statement
RPS No. 74 Boucher Road, Belfast, Co. Antrim.	→ Flood Risk Assessment → Stage 1 Stormwater Audit
The Tree File Ashgrove House, Kill Avenue, Dun Laoghaire.	→ Arboricultural Report → Tree Survey Drawings
Visual Lab Killary House No. 13 Father Griffith Road, Galway, Ireland.	→ Photomontages → CGI's
Openfield Ecology No. 12 Maple Avenue, Castleknock, Dublin 15.	→ Appropriate Assessment Screening
Future Analytics No. 23 Fitzwilliam Square (South), Dublin 2.	→ Schools and Creche Demand Assessment
Bruton Consulting Engineers Glaspistol, Clogherhead, Drogheda, Co. Louth.	→ Stage 1 Quality Audit
Hooke and McDonald No. 118 Lower Baggot Street, Dublin 2.	→ Operational Management Plan

In addition to the aforementioned documents, this planning submission is accompanied by a Lifecycle Report and Environmental Impact Assessment Report document. The EIAR has been prepared by a competent multidisciplinary team as set out below:

EIAR Table of Contents and Relevant Qualified Consultant		
Chapter	**Chapter Name**	**Consultant**
1.0	Introduction and Methodology	Thornton O'Connor Town Planning
2.0	Site Location and Urban Context	Thornton O'Connor Town Planning
3.0	Project Description	Thornton O'Connor Town Planning
4.0	Examination of Alternatives	Henry J Lyons Architects
5.0	Population and Human Health	Thornton O'Connor Town Planning
6.0	Archaeology and Cultural Heritage	Cathal Crimmins Architect
7.0	Biodiversity	Openfield Ecology
8.0	Landscape and Visual Impact	Mitchell + Associates Landscape Architects
9.0	Lands, Soils and Geology	O'Connor Sutton Cronin Engineers
10.0	Water-Hydrology	O'Connor Sutton Cronin Engineers
11.0	Air Quality and Climate	AWN
12.0	Noise and Vibration	AWN
13.0	Wind	B-Fluid
14.0	Material Assets Traffic and Transportation	O'Connor Sutton Cronin Engineers
15.0	Material Assets Waste Management	AWN
16.0	Material Assets Site Services (Civils)	O'Connor Sutton Cronin Engineers
17.0	Material Assets Site Services (Utilities)	O'Connor Sutton Cronin Engineers
18.0	Interactions and Cumulative Impacts	TOC/All
19.0	Mitigation and Monitoring	TOC/All
18.0	Difficulties Encountered	TOC/All

2.0 SITE CONTEXT

2.1. SITE LOCATION & DESCRIPTION

The subject site (fig.1) is a vacant site bound by Blackthorn Drive on the North and Carmanhall Road on the South and has an area of 15,426 sq m (1.542 Hectares). The wider surrounding area is referred to as the Sandyford Business District which comprises Stillorgan Business Estate, Sandyford Business Estate, South County Business Park, Central Park, Legionaries and Leopardstown Park Hospital.

Previously designed as the second phase of the partially completed Rockbrook development, the subject site was separated from the overall development due to financial circumstances triggered by the banking crisis of recent years.

As a result, the site is bound on its Western boundary by the gables of the existing Rockbrook block D (7) and a deep excavation intended to complete the Rockbrook carparking in its second phase (9). A recent planning permission was granted for the adjoining site under ABP order PL06D.304405 for a development known as RB Central.

The Boulevard (10) running through the Rockbrook development currently stops against the site hoarding. It is clear that Rockbrook Phase 1 and the subject site require a high level of integration.

The Sandyford Urban Framework Plan 2016 locates the site in a 'Mixed Core Area - Inner Core', with a maximum allowable plot ratio of 1:4 and a height designation of between 5 and 14 floors.

All the uses required to create a sustainable neighbourhood are currently provided in the immediate surroundings, including residential (6,7,13), retail (6,7,13) , offices(15,16,17,18), bars and restaurants(13), and cultural activities including a children's museum (14).

A series of new public open spaces are planned to supplement the existing development (19) and public transport is very well catered for through the provision of both Luas light rail and bus routes. A Light Rail/ Bus Transport Interchange is provided for in the SUFP and will be located immediately adjacent to the site on Blackthorn Drive to the north (5).

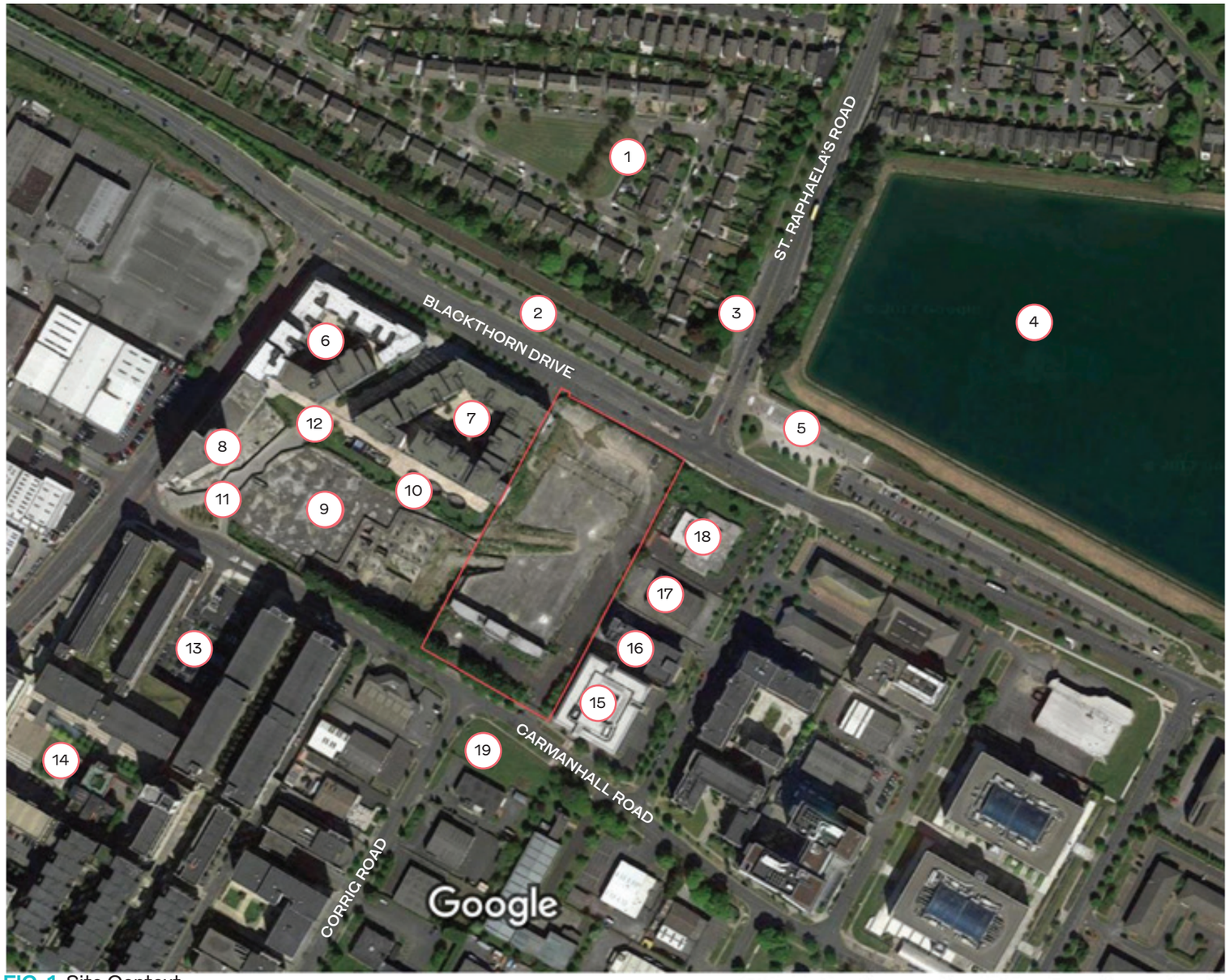


FIG. 1 Site Context

1. Lakelands Housing Estate
2. Luas Park & Ride Carpark
3. Bus Stop
4. Reservoir
5. Stillorgan stop (LUAS Green Line)
6. Rockbrook Grande Central (Phase I)
7. Rockbrook block D / South Central (Phase I)
8. The Sentinel (unfinished)
9. RB Central / Rockbrook Phase II (permission for strategic housing development granted under ABP Ref. PL06D.304405)
10. Rockbrook Boulevard
11. Pedestrian Link
12. Public Open Space
13. Beacon South Quarter - Retail
14. Children's Museum
15. Ballymoss House - offices
16. Silverstone house - offices
17. Grafton house (permission for development for temporary school Reg. Ref. D18A/1210)
18. Siemens Site (SUFP Objective: building of notable design)
19. Public Open Space (SUFP Objective)

2.2 SITE CONTEXT AND BOUNDARIES

The subject site measures 1.54 Ha and has a 4 metre crossfall from its Southern boundary on Carmanhall Road to its Northern boundary on Blackthorn Drive.

The Northern boundary fronting Blackthorn Drive (fig.2) is defined by the homogeneous 6 storey Rockbrook building which includes a tall ground floor level with retail uses and 5 levels of apartments above. The 5 to 8 storey over podium high gable ends of the existing Rockbrook development face the subject site along its Western boundary.

As previously mentioned, the Stillorgan green line Luas stop at the intersection of Blackthorn Drive and Raphaela's Road is a significant transport node, with Park & Ride facilities along Blackthorn Drive.

At the northern side of the light rail tracks west of Raphaela's Road lies the established Lakelands residential estate, and a large Reservoir on the East.

Along the Eastern boundary, there are 4 different buildings with their main entrances along Ballymoss Road as illustrated in figure 1, including a proposed temporary school granted permission under Reg. Ref. D18A/1210.

On the Southern side, Carmanhall Road (fig.2) is characterised by office buildings, including the recently redeveloped Ballymoss House adjoining the subject site to the East; the vacant site of Rockbrook phase II bounds the subject site to the West.

The mentioned Rockbrook phase II site (RB Central) is presently hoarded and has been granted planning permission for a strategic housing development under ABP order PL06D.304405.

A pedestrian thoroughfare referred to as The Boulevard (fig.4) runs through the existing Rockbrook development and is proposed to be continued into the proposed Sandyford Central scheme. When completed, it will provide an attractive and safe pedestrian connection with the Beacon South Quarter retail centre on Carmanhall Road on the southern end and the transport node on Blackthorn Drive at the northern end.

FIG. 2 Subject site on Blackthorn Drive viewed from Sandyford Luas stop. Image July 2019

FIG. 3 Rockbrook Boulevard looking towards the subject site. Image March 2018

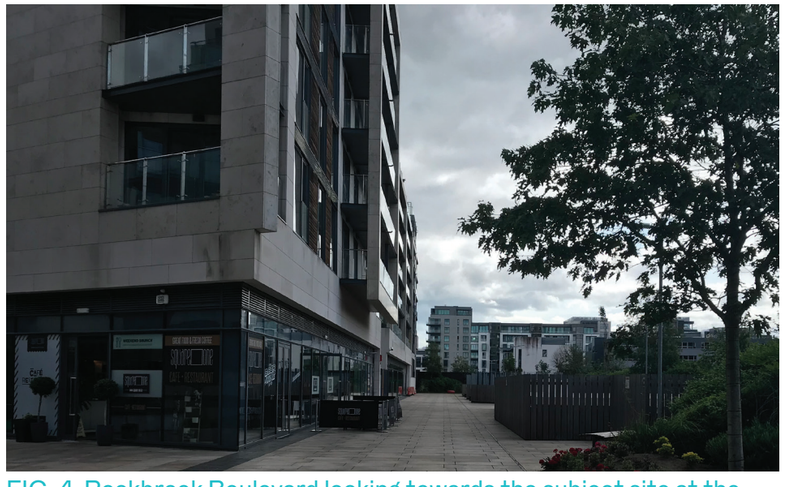


FIG. 4 Rockbrook Boulevard looking towards the subject site at the end of the Rockbrook Boulevard. Image July 2019

2.3. POLICY FRAMEWORK

The subject site is zoned 'MIC' (Mixed Inner Core) in the Dún Laoghaire Rathdown County Development Plan 2016- 2022, where the stated objective is 'to consolidate and complete the development of the mixed- use inner core to enhance and reinforce sustainable development'. The lands zoned MIC form Zone 2 within the SUFP.

A planning permission was granted for the subject site on 17th July 2018 under Board Order ABP-301428-18), comprising 459 residential units and resident amenities across six blocks ranging in height from six to fifteen storeys above podium.

Subsequent to the planning grant, new planning policy documents have been adopted, namely:

- *Sustainable Urban Housing: Design Standards for New Apartments (2018)*
- *Urban Development and Building Height Guidelines for Planning Authorities (2018)*

The 2018 residential guidelines promote the "Build to Rent" apartment as a new accommodation type, seeking to secure housing supply in highly accessible, sustainable sites and established urban areas.

The height guidelines state that "while achieving higher density does not automatically and constantly imply taller buildings alone, increased building height is a significant component in making optimal use of sites in urban locations where transport, employment, services or retail development can achieve a requisite level of intensity for sustainability. Accordingly, the development plan must include the positive disposition towards appropriate assessment criteria that will enable proper consideration of development proposals for increased height linked to the achievement of a greater density of development."

The Sandyford Central site proposal aspires to provide an exemplar high density residential development which fully accepts, embraces and capitalises on the latest Department of Housing, Planning and Local Government guidelines in respect of design standards for apartments, urban development and building height.

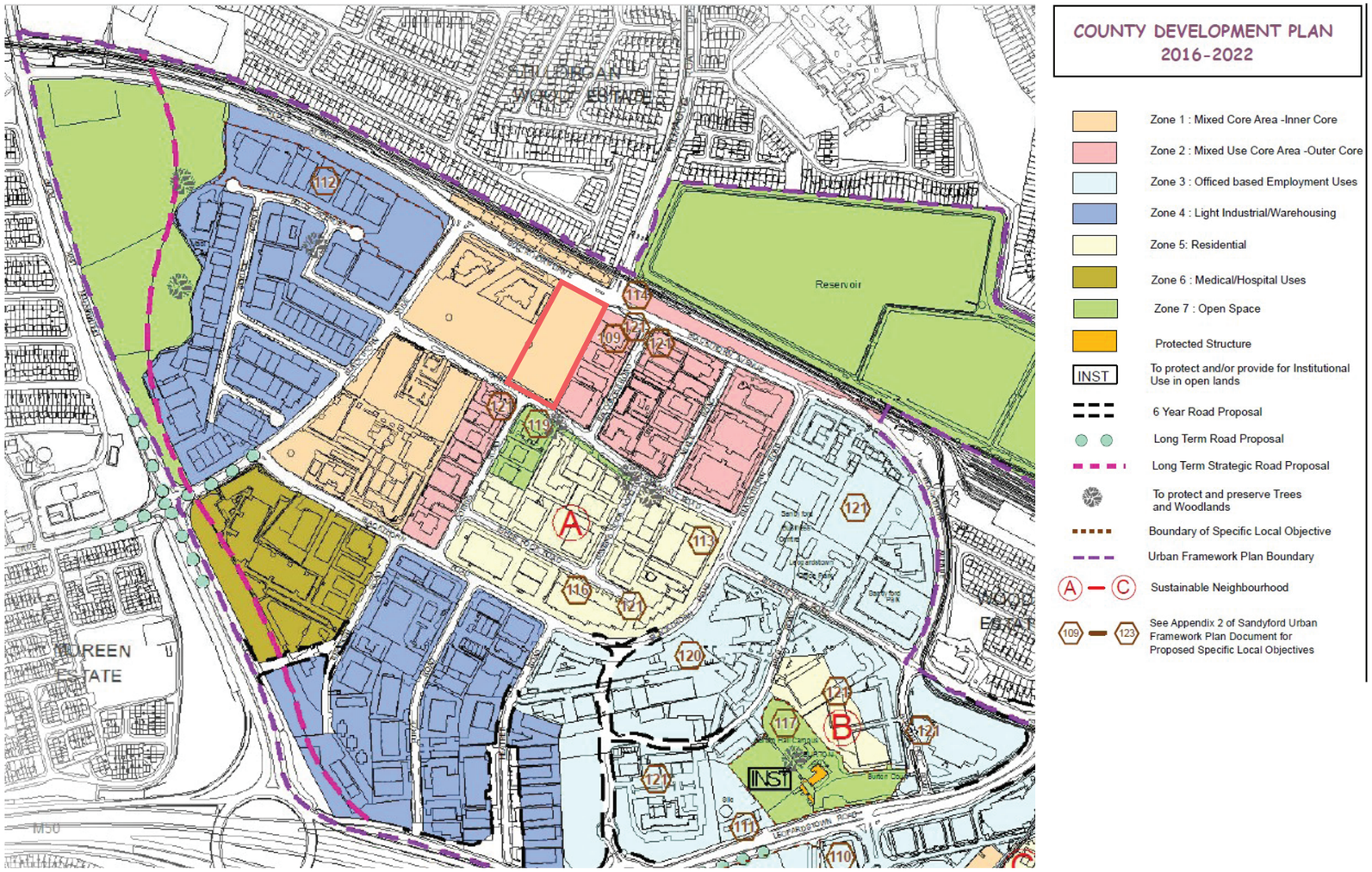


FIG.5 Land Use Map Extract (Map No. 1) from Dún Laoghaire - Rathdown County Development Plan 2016-2022

2.4 SANDYFORD URBAN FRAMEWORK PLAN 2016 OBJECTIVES

The proposed scheme has been designed to be consistent with the policies, objectives and standards set out in the Dun Laoghaire Rathdown County Council Development Plan 2016-2022 and the Sandyford Urban Framework Plan 2016-2022 which establishes a detailed framework for the appropriate development of the site and surroundings.

A detailed analysis of the relevant planning policies is contained within the Statement of Consistency prepared by Thornton O'Connor Town Planning. In addition, a Material Contravention Statement in respect of the height of the proposed block D is provided with this planning application.

The diagram (fig.6) illustrates the planning objectives contained in the Sandyford Urban Framework Plan (SUFP) 2016-2022 located in close proximity to the subject site and which have been considered throughout the design process:

119 To develop a Sandyford Business District Civic Park at the corner of Corrig Road and Carmanhall Road.

109 To seek the provision of a use that animates the street corners e.g. Hotel/Apart Hotel at north western end of Ballymoss Road at the junction with Blackthorn Avenue (Map 1). Building to be of notable design (Map 3).

114 To provide a Public Transport Interchange adjacent to the Stillorgan Luas Stop.

121 To ensure the provision of pocket parks and civic spaces in accordance with locations specified on Map 1 and Drawing no.10.

SANDYFORD CENTRAL SITE REFERENCES

A. Proposed Block A
B. Proposed Block B
C. Proposed Block C
D. Proposed Block D
E. Proposed Block E
F. Proposed Block F

a. Entrance Steps
b. Public Open Space
c. Playground
d. Communal Amenity Open Space
e. Boulevard
f. Pedestrian link

CONTEXT REFERENCES

1. Lakelands housing estate
2. Luas park & ride carpark
3. Bus stop
4. Reservoir
5. Stillorgan Luas Stop
6. Rockbrook Grande Central (Phase I)
7. Rockbrook South Central - Block D (Phase I)
8. The Sentinel
9. Proposed RB Central - ABP Ref. PL06D.304405 (Phase II)
10. Rockbrook Boulevard
11. Pedestrian Link to Blackthorn Drive
12. Public Open Space
13. Beacon South Quarter - Retail Centre
14. Ballymoss House (The Hive)
15. Silverstone House
16. Grafton House - Temporary School (planning permission DLRCC Reg. Ref. D18A/1210)
17. Siemens Site

FIG. 6 Contextual site plan showing SUFP Objectives

2.5 PERMITTED "TIVWAY" SCHEME

The subject site has an extant planning permission for a strategic housing development granted by An Bord Pleanála in July 2018 (Ref ABP-301428-18) comprising the demolition of all buildings and structures on the site and the construction of 459no. apartments distributed in 6 blocks ranging in height from 5 to 14 storeys above podium level; ancillary on-site facilities including gym, movie room, créche, lounge/café, games room, communal meeting room and supporting facilities; and a total of 499 carparking spaces and 516 bicycle spaces distributed over 2 basement levels.

The Tivway scheme (fig. 7) was one of the first schemes lodged with An Bord Pleanála under Section 4 of the Planning and Development (Housing) and Residential Tenancies Act 2016.

The permission was granted by the Bord after consideration of a wide range of matters, including inter alia:

- *The site location within the established area of Sandyford and adjacent to the Stillorgan Luas stop*
- *The policies and objectives in the Dún Laoghaire-Rathdown County Development Plan 2016-2022 and the Sandyford Urban Framework Plan 2016-2022*
- *The residential and urban planning policies relevant at the time of the grant*
- *The nature, scale and design of the proposed development and the availability in the area of a wide range of social and transport infrastructure*
- *The pattern of existing and permitted development in the area*
- *The planning history within the area*

The Tivway scheme was originally designed in accordance with the standards of the DoHPLG "Sustainable Urban Housing: Design Standards for New Apartments (2015)".

The adoption of the updated residential guidelines and the Height Guidelines for Planning Authorities both published in 2018 set the context for a revision of the extant permission, in particular the flexibility in respect of apartments per core, changes introduced for Build to Rent schemes and height parameters.

FIG.7 CGI Image of the permitted "Tivway" scheme on Blackthorn Drive

2.6. COMPARISON WITH EXTANT PERMISSION

The aspiration of the promoter is to recognise and retain the positive aspects of the permitted scheme while overlaying the opportunities and directives of the latest Residential Guidelines introduced in 2018 after the permitted scheme was designed.

To assist in understanding how the new proposal varies from the permitted scheme, we set out a schedule of the high level changes, which will be expanded in the following chapters of this report:

1. Build to Rent scheme

While Tivway was designed as a "Build to Sell" scheme, Sandyford Central is designed as a Build to Rent scheme.

2. Resident Amenities / Communal Facilities

The new proposal provides a higher quantum of resident amenities which are now split into 2 separate clusters in Block A and in blocks C-D, and seeks to elevate these shared facilities to a central community role. There are more, and better accessible communal facilities in the new proposal, spread across the neighbourhood.

3. Parking

The new proposal seeks to remove the basement car park which featured in the permitted scheme and extended over circa half of the site. The proposed new parking arrangement provides 285no cars (carparking ratio of 50.5%); 1,178 bicycle spaces; and 21no motorcycle spaces, as detailed in the accompanying schedules.

4. Revision to Plan Blocks E & F.

The plan configuration of blocks E & F has been modified from the Tivway arrangement of 2 symmetrical blocks to the Sandyford Central arrangement (fig. 8) where the gap between the blocks has been aligned centrally on axis with the east / west Boulevard, thus providing a superior relationship between the blocks and the boulevard and improving the daylight and sunlight delivery to the boulevard.

5. Height variations

Sandyford Central proposes to mirror the footprint and overall envelop of the Tivway scheme, while also adding 2no floors to block F and 3no floors to block D.

6. Character

The Sandyford Central proposal aspires to deliver a high-quality development, improving the design of building elevations and the public by the introduction of durable and robust materials.

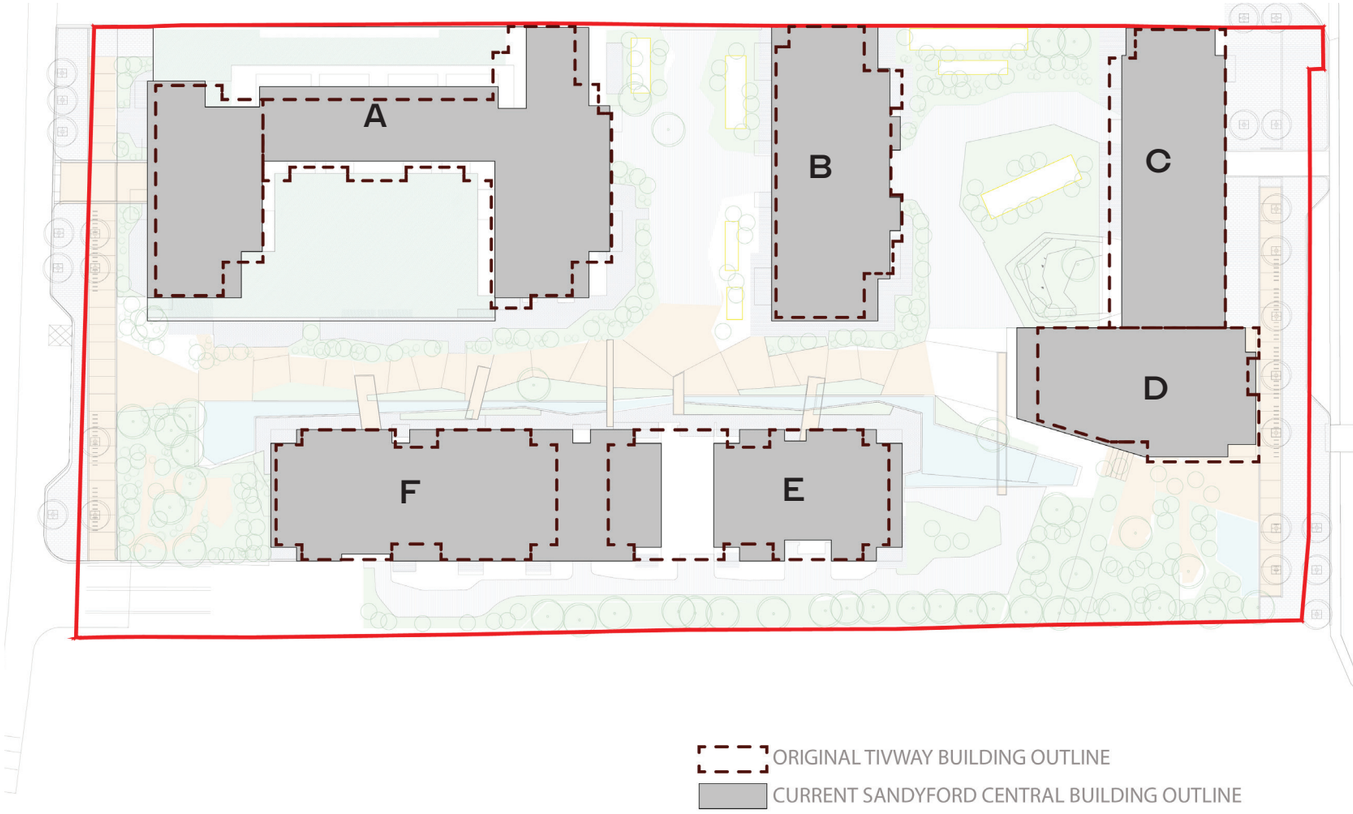


FIG.8 Site plan - overlay of proposed Sandyford Central outline on the permitted Tivway scheme

2.7 PRE-PLANNING MEETINGS

The proposed development has been discussed at 2no. Section 247 pre-planning meetings held with the Local Authority and a Section 5 Pre-Application Consultation meeting held at the offices of An Bord Pleanála, as per the summary provided below.

The response to the issues raised by the Inspector's Report is included with this application as separate documents prepared by Henry J Lyons and Thornton O'Connor Town Planning.

1. Dun Laoghaire-Rathdown Co. Council, 05.04.2019

- Proposed changes to the permitted Tivway scheme

- Alignment with 2018 residential guidelines

- Build to rent, unit mix & general accommodation

- Resident's Communal Facilities

- Carparking ratio

- Building heights

2. Dun Laoghaire-Rathdown Co. Council, 18.06.2019

- Approach to building heights & relation to Sentinel building

- Provision and detail of communal amenities

- Provision of studio units and private open space

- Elevational treatment

3. Section 5 Consultation meeting, An Bord Pleanála, 11.09.2019

- Building Height

- Quantum of Development - residential cap under objective MC4 of the SUFP

- Development Strategy - housing mix, amenity, residential support facilities/services/amenities, childcare and car parking

- Part V

- Drainage and flooding matters

- Any other matters (management, areas to be taken in charge, separation distances, phasing)

FIG.9 Photo of Scale model presented during the tripartite meeting. (c) Enda Cavanagh Photography.

2.8. INHERITED ADVANTAGES

The key urban objectives and opportunities which the permitted Tivway scheme ABP-301428-18 was designed to deliver are illustrated in Fig.10 and described below:

1. COMPLETE ROCKBROOK

To complete the Rockbrook phase 1 residential development, finishing the existing 'Boulevard' with a connection through the subject site on to Blackthorn Drive, and to complete the courtyard commenced by the Rockbrook Block D, extending the truncated gables at the north eastern corner of this development in a manner that created an appropriate context for both the established residential units and the new units.

2. PEDESTRIAN LINK

To provide a strong pedestrian connection linking the proposed objectives of the SUFP, namely the transport hub at Blackthorn Drive and the proposed new Urban Park at the junction of Carmanhall Road and Corrig Road.

3. BALANCE HEIGHT & DENSITY

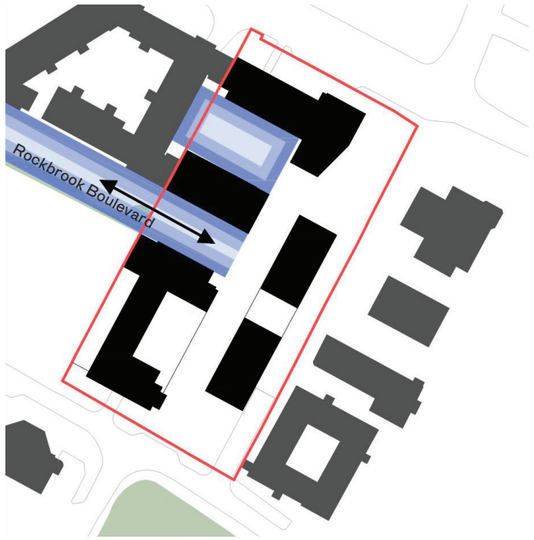
To balance the height and density allowances of the SUFP with an aspiration to maximise the quantity and quality of communal and public open space.

4. MAXIMISE EFFICIENCY

To maximize the efficiency of the development layout to meet the target of 8 units per core as allowed at the time in "Sustainable Urban Housing: Design Standards for New Apartment (2015)", thus reducing the overall building footprint. The new guildenes provided an opportunity to review and increase the unit per core provision for the new proposed scheme.

5. MASS DISTRIBUTION

To review the building mass distribution to increase solar penetration and maximise views whilst maximising the provision of dual aspect apartments.



1.

2.

3.

4.

5.

FIG.10 Key urban objectives and opportunities

This new Sandyford Central proposal inherits and provides for the implementation of the broad positive aspirations from the permitted scheme.

3.0 SANDYFORD CENTRAL

3.1. PROJECT DRIVERS & OBJECTIVES

While broadly keeping in line with the permitted scheme, the Applicant intends to introduce some changes as set out below:

3.1.1. ALIGNMENT WITH 2018 GUIDELINES

The new scheme was developed to align with the design criteria set out in the "Urban Design Manual- A Best Practice Guide (DoEHLG 2009)", and the "Design Manual for Urban Roads and Streets (DMURS, 2013)", while also meeting the criteria set out in "Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (Mar 2018)" and "Urban Development and Building Heights – Guidelines for Planning Departments", (Dec 2018)

3.1.2. PARKING & PUBLIC TRANSPORT

Located immediately adjacent to the Stillorgan Luas stop, Sandyford Central is positioned as an ideal location for further consolidation of higher density.

In addition to the established employment and retail uses in Sandyford, the availability of quality public transport extends the reach of the community to avail of rapid access to work, leisure and cultural pursuits.

These considerations are a key factor to endorse the proposed density and height at the subject site, while striking a balance in the provision of car parking to address the transitory nature of car usage in our current times.

DoHPLG "Sustainable Urban Housing: Design Standards for New Apartments (2018)" states that:

"In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimized"

Considering the nature of the Build to Rent development and the unit mix with an increased proportion of smaller units as compared to the extant permission, the Applicant therefore proposes a revised car parking ratio of 0,505 cars per unit.

The bicycle provision, however, was substantially increased to deliver 1,178 bicycle spaces, and motorcycle parking (21no) is also provided in excess of the requirements and recommendations set out in the residential guidelines and parking standards. Refer to fig. 11 for a comparative assessment of the proposed and the permitted Tivway proposal.

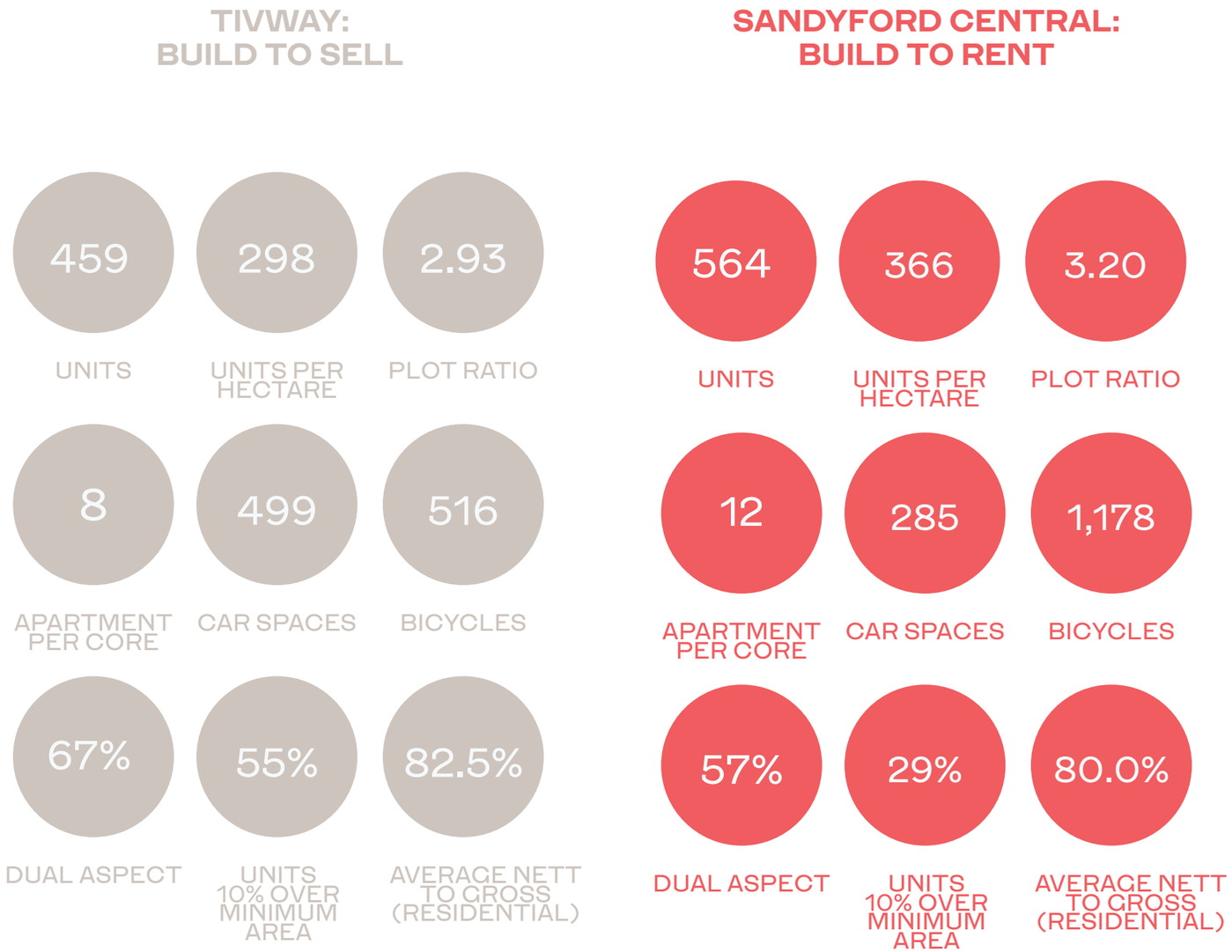


FIG.11 Key indicators of Tivway (permitted) and Sandyford Central (proposed)

3.1.3. SITE COVERAGE & OPEN SPACE PROVISION

The Dun Laoghaire / Rathdown Development Plan 2016 - 2022 and the Sandyford Urban Framework Plan 2016-2022 designate the subject site with a plot ratio of 1:4. The necessary public transport infrastructure is in place to facilitate this level of residential density. The proposal therefore builds on the potential for higher density, taking into account appropriate accessibility by public transport.

It was strongly considered that an oversupply of retail exists on the adjoining Rockbrook site. In addition, it was clear from both professional experience and further expert advice from property agents that there is no demand for office space located in isolation in a residential area.

These considerations informed the final architectural brief for the design of a primarily residential development, which would be fully compatible with, and significantly stimulate, consolidate and support the established social, leisure, commercial and cultural infrastructure of the area.

The aspiration for high density residential development was fixed in accordance with the statutory instruments of Development and Framework Plans. With a density of 366 units/ha, the subject proposal can be considered a high-density development in the Irish residential context.

The final number of homes proposed was arrived at through a series of massing studies to optimise daylight and amenity of the residential units and maximise the open amenity space quantum, quality and variety. By carefully adding verticality, open space was released in the public realm for the residents' amenity (fig.12).

The overall site coverage amounts to ca 41.3% of the site area.

Considering the communal use of the Level 2 podium over the carpark, it is worth noting that the site coverage notably reduces, equating to 31.6% of the site area (fig.13).

The emphasis in the design development of the proposed scheme was to optimise the quality, quantum and character of open space by carefully adding verticality.

Open space was therefore released in the public realm for the residents' amenity.

FIG.12 Open Space - Level 1 Ground floor

Note: For a detailed break-down please refer to the Open Space schedule provided as part of this application

COMMUNAL AMENITY OPEN SPACE
PUBLIC OPEN SPACE
PRIVATE OPEN SPACE

FIG.13 Site coverage

3.2. RESIDENTS' COMMUNAL FACILITIES

The Sandyford Central proposal is for the construction of 564 apartments and communal facilities (also referred to as resident amenities) under the Build to Rent figure to support the proposed new residential community, including:

- Conciérge & reception areas

- Gym

- Lounges & collaborative work spaces

- Study room & games room

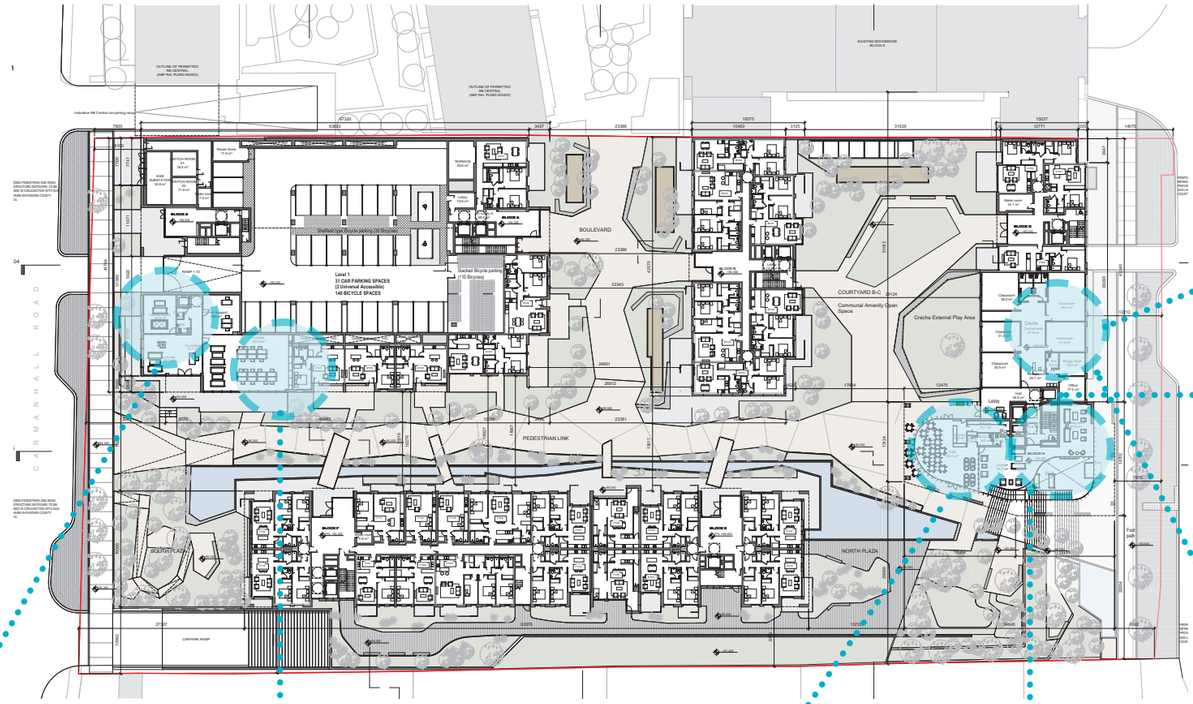
- Multi-purpose communal rooms

- Rooftop multi-function room

- Resident support services: post room, administration, maintenance

These important resident amenities (fig. 14) will be bi-located and in part replicated, at either end of the site on Blackthorn Drive to the north, and on Carmanhall Road to the south to ensure ease of access for all residential blocks and are further elaborated in Section 4 of this report.

The proposed childcare facilities and café are strategically located in the block C-D facilities cluste to facilitate and encourage social interaction between residents.



Créche

Universal Access Lift

Gym & fitness suite

Leisure / games room

Lounge & collaborative work space

Panoramic Communal room at rooftop

Conciérge, resident support services, deliveries & post room

FIG. 14 Amenities key plan

The development will benefit from a ‘Welcome’ reception office with concierge at its two main entrance points on Blacktorn Drive and Carmanhall Road.

These reception areas will be developed as the visible entry points to the neighborhood, clearly splitting the community facilities into two separate, identifiable urban zones within the overall Sandyford Central neighbourhood.

The communal facilities are strategically located at the entry levels of blocks A (fig. 15) and blocks C&D, marking the focal points of the scheme and providing different functions, including:

- **The welcoming face at either end of the pedestrian link where the scheme meets the road, creating an identifyable entry point to the Sandyford Central development.**
- **The reception and concierge where visitors, new residents and can orientate and familiarise themselves with their surroundings.**
- **An intimate community focus to consolidate social interaction and integration among the residents, framed by public open spaces.**
- **The two proposed communal facilities “cluster” will provide a different character to each urban zone, assisting with placemaking and wayfinding within the Sandyford Central development.**

FIG. 15 CGI Image of the proposed Block A resident amenities entrance (Level 1) and communal amenity open space (Level 2) on Carmanhall Road

3.3. BUILDING HEIGHT

3.3.1 CONTEXT

In line with the aspirations of the Sandyford Urban Framework Plan 2016-2022, a significant number of buildings have been granted planning permission and/or built in recent years (fig. 16).

Below is a list of some relevant buildings in the immediate context of the subject site and their number of storeys:

1.	Rockbrook Phase 1 (residential)	5-8 storeys
2.	The Sentinel (offices, unfinished)	14 storeys
3.	Rockbrook Phase 2 (permitted)	8-14 storeys

Beacon South Quarter:

4.	BSQ The Edges (mixed use w/retail)	7-8 storeys
5.	BSQ The Cubes 4/5/6 (residential)	9 storeys
6.	BSQ (tower at The Plaza)	14 storeys
7.	BSQ The Cubes 1/2/3 (residential)	10 storeys
8.	The Arcs (residential)	11 storeys

These buildings present a relatively high skyline with a new established average or “shoulder” height of ca. 10 storeys and “peaks” marked by the Sentinel (2) and the 14-storey over podium Beacon South Quarter (6), (fig. 17,18).

Fig. 16 Aerial view of context with subject site outlined in red. Source Google Maps (c) 2019

Fig.17 Photo from Kilmacud Luas stop entrance on Benildus Avenue showing the unfinished Sentinel building (1) and the 14 storey Beacon South Quarter residential building (2). Source: Henry J Lyons, August 2019

Fig. 18 Image showing the recently completed 11 storey residential development in the foreground and the Sentinel building in the background

On a macro neighbourhood scale, the overall height of the proposed Block D is comparable to the unfinished 14 storey office block known as “The Sentinel” (1) located diagonally opposite at the south western extreme corner of the Rockbrook neighbourhood.

Originally designed in 2005 as the tallest structure in the vicinity at the corner of Carmanhall Road and Blackthorn Drive, the Sentinel was intended as an urban marker to signify the pedestrian entrance to the Rockbrook opposite Beacon South Quarter. The economic downturn of 2008 meant this building could not be completed and has remained as an unfinished structure for over a decade (fig.19).

It is therefore considered appropriate to provide a comparable “marker” at the proposed location to announce the urban quarter from the Luas Station, reinforcing the concept of an ‘urban journey’ between the Luas stop at one end and the retail core at its other end, via the pedestian Boulevard linking the two developments (fig. 20), and assisting with urban wayfinding and place-making.

As stated in the accompanying height studies, Block D aims to **complement, re-signify** and provide **meaning** to the Sentinel (fig.20) by marking the principal entry points and routes into and through the neighbourhood.

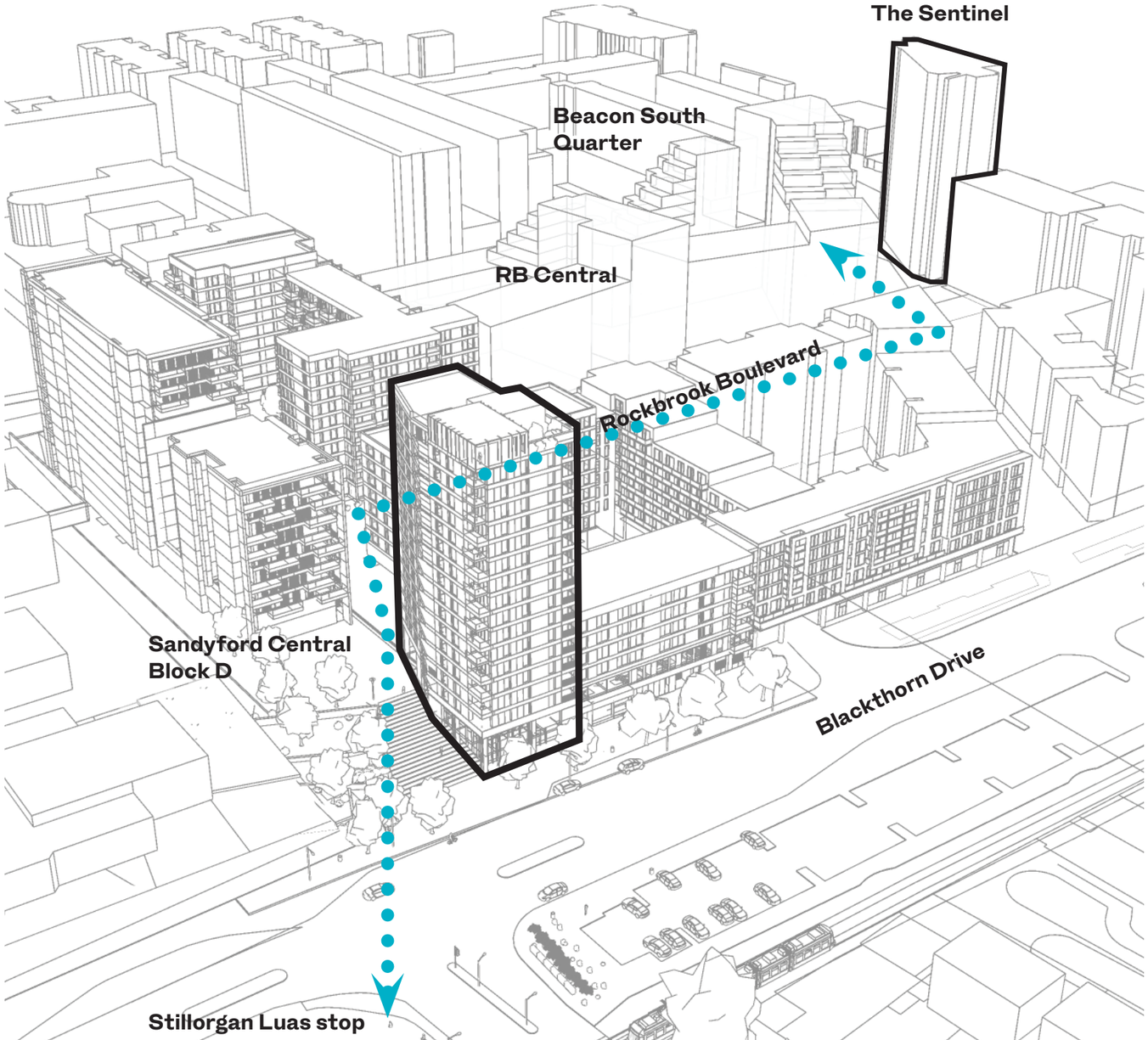


Fig. 20 Diagram: relationship of Block D and Sentinel building, showing the imaginary pedestrian journey from the transport node to Beacon South Quarter through the Sandyford Central development and connecting Rockbrook boulevard.

Fig. 19 The Sentinel building at the corner of Carmanhall Road marks the entrance to Rockbrook on Blackthorn Drive

3.3.2 PROPOSED REVISIONS TO APPROVED HEIGHT

The 2018 adopted guidelines on Height encouraged a review of the caps set out by the Sandyford Urban Framework Plan and DLRCC Development Plan, and our studies into daylight and sunlight access for homes in this new development indicate that the ground figure plan and established distances between buildings provide a robust template in this regard, with capacity for limited additional height.

Technical requirements driving the typical optimal floor to floor height were studied, establishing 3.0m being the optimum floor to ceiling height (fig. 22). This allowed for a slight reduction in the floor to floor height when compared with the extant scheme which allowed for 3.05m.

In addition, the extant scheme relied on a transfer slab with a depth of 1.1m which is no longer required in the current proposal and can be replaced with a traditional slab of ca 275mm.

The proposed massing revisions to the extant scheme include a height increase to Blocks D and F and a height decrease in Blocks A,B,C and E. As a result, the building block heights have been adjusted as compared to the permitted scheme(fig. 21):

1. Height reduction (Blocks A,B,C,E)

a) By the omission of the 1.1m deep transfer slab substituted by a 275mm floor slab
b) By 50mm per floor for every floor thereafter

2. Height increase (Blocks D, F)

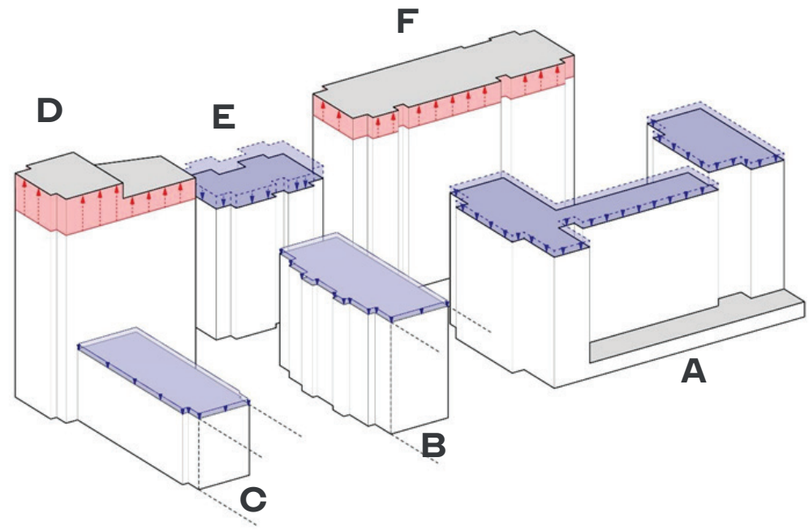
The reduction in the floor to floor height and the omission of the transfer slab prompted a reconsideration of the heights of Blocks D and F, as below:

a) Block F - Previously approved at 12 storeys. Now proposed at 14 Storeys
b) Block D - Previously approved at 14 storeys. Now proposed at part 16 and part 17 storeys

3. Internal ceiling heights

A minimum of 2.6m floor to ceiling height will be provided for living rooms in all apartments above ground (fig.17), with a reduced height of minimum 2.40m ceiling height over bedrooms and service zones to accommodate services.

A floor to floor height of 3.50m is being proposed for ground level homes; additionally, the entrance level 0 and 1 in block D feature double height spaces for the resident amenities foyer & reception area and over the café.



Block	Tivway Storeys	Tivway Parapet height (mm)	Sandyford Central Storeys	Sandyford Central Parapet height (mm)	Height difference (mm)
A	11	121,000	11	119,925	-1,075
	10	117,950	10	116,925	-1,025
B	8	111,300	8	110,925	-375
C	5	102,500	5	101,925	-575
D	14	132,000	16	134,925	2,925
			17	137,682	5,682
E	10	117,400	10	116,925	-475
F	12	123,500	14	128,925	5,425

FIG.21 Sketch and table indicating proposed height changes compared to extant scheme

FIG 22 Initial ceiling height study

The accompanying CGI images (fig. 23) illustrate the proposed part 17-storey compared with the permitted 14-storey schemes, suggesting an enhanced slenderness ratio in favour of the proposed scheme.

FIG. 23 CGI Image showing the proposed Block D and the extant scheme seen from the same viewpoint at the crossing of the Luas railway.

The red line indicated the outlines of the extant scheme.

The consideration of alternative height strategies for Block D are detailed in the "response to An Bord Pleanála inspector's report" document and within Chapter 4 of the Environmental Impact Assessment Report (EIAR) submitted with this application and summarised below, to be read in conjunction with Fig. 24.

Option No. 1 – 14 No. storey

An option with Block D with 14 storeys (which directly complies with the recommended height as provided in the Sandyford Urban Framework Plan 2016) was initially analysed by Henry J Lyons but was later discarded as a fundamental principle of the renewed design approach is to provide architectural interest and an exciting entry to the scheme.

It was considered that providing a 14 No. storey building at Block D would result in relatively monotonous building heights across the scheme which would fail to avail of the opportunity to appropriately announce the main access point to the urban quarter from the high capacity public transport interchange at the Luas.

Furthermore, with the reduction of floor to floor height (as described earlier), Block D would have seen an overall reduction in height if compared to the extant scheme.

As a result of this study it was decided to explore other options.

Option No.2 – Part 16, Part 17 No. storey

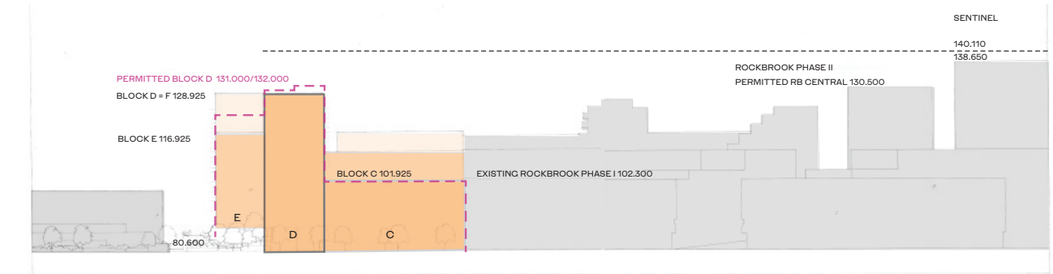
As presented and discussed with Dún Laoghaire – Rathdown County Council on the 30th April 2019 and 18th June 2019 (Section 247 meetings), the Design Team presented a scheme with increased heights (beyond the extant permission) of 16 No. storeys at Block D (presented at the first Section 247 pre-planning meeting) and later to part 17 No. storeys at Block D with the addition of the multi-function space (presented at the second Section 247 pre-planning meeting).

As illustrated in Fig. 21 and indicated in the table in Fig. 22, the reduction in the floor to floor height and the omission of the transfer slab mitigates against the overall height increase on Blocks D and F.

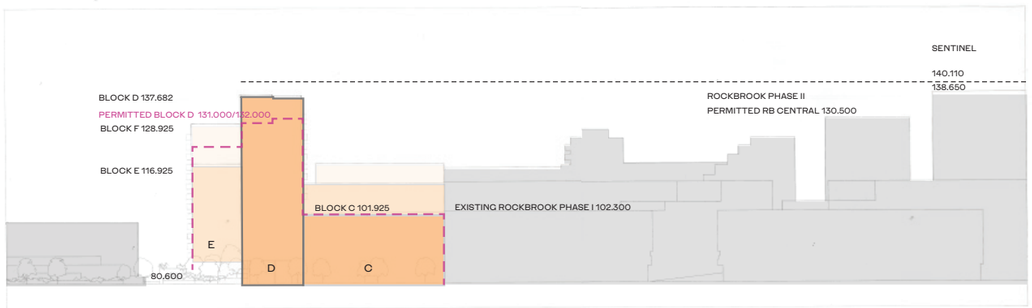
It is also worth considering the fact that the Sentinel was designed as an office block with floor heights of 3.75m, amounting to 52.5m plus plantroom, totalling 54.8m; while the proposed residential floor to floor height of 3m amounts to 51m over 17 storeys (including the communal multipurpose room).

From an architectural point of view, the revised proposed massing and architectural treatment of Block D, with the addition of the function room on Level 17 improves its slenderness ratio when compared with the extant scheme.

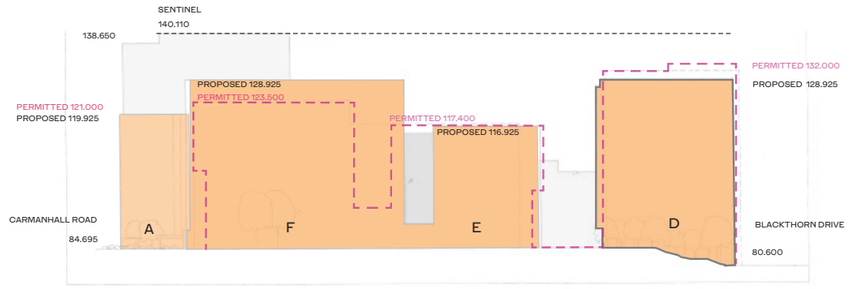
Having regard to the above considerations, the Applicant considers that the proposed revisions to the extant scheme are positive and should be taken into consideration when making a decision.



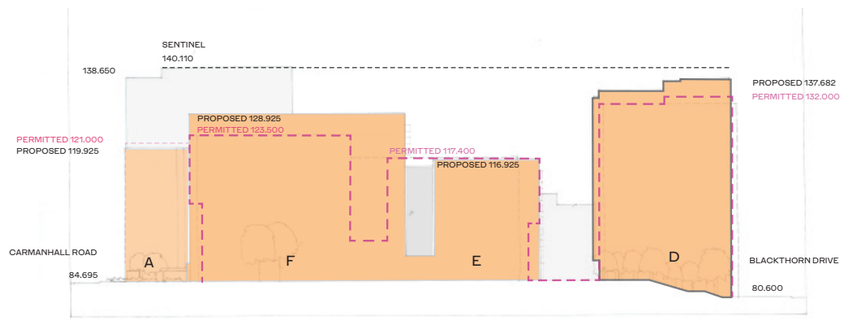
Option 1 - Elevation to Blackthorn Drive



Option 2 - Elevation to Blackthorn Drive



Option 1 - East Elevation



Option 2 - East Elevation

FIG.24 Extract from the early studies presented in the response to An Bord Pleanálas request for height justification comparing a 14-storey Block D (Option 1) with a 17 storey Block D (Option 2)

The justification for additional height to block D over the 14-storey blanket limit set in the SUFP 2016-2022 is further elaborated in the *Material Contravention Statement prepared by Thornton O'Connor* which is submitted with this application.

It is our opnion that the height studies presented clearly demonstrate that the building height of block D should be driven by **urban design principles**.

As stated in Urban Development and Building Height: Guidelines for Planning Authorities (December 2018):

Furthermore, while taller buildings will bring much needed additional housing and economic development to well-located urban areas, they can also assist in reinforcing and contributing to a sense of place within a city or town centre, such as indicating the main centres of activity, important street junctions, public spaces and transport interchanges. In this manner, increased building height is a key factor in assisting modern placemaking and improving the overall quality of our urban environments.

Some key urban design considerations driving Block D height are summarised below and illustrated in the scale model photos shown in fig. 25:

1. Located opposite the Stillorgan green line Luas stop, Block D assists with a wayfinding strategy as singular, memorable building of architectural interest.

2. At the end of Raphaela's Road, Block D marks the gateway entrance to the Sandyford Business District on approach from Stillorgan.

3. Block D provides a bookend to the monotonous 5&6 storey building height along Blackthorn Drive.

4. Seen from Corrig Road, it provides a focal point at the axis of the pedestrian link, complementing the objective for a future park the corner of Carmanhall Road and assisting with wayfinding towards the Luas.

1.

2.

3.

4.

FIG. 25 Key urban design considerations driving block D height. Photos of scale model (c) Enda Cavanagh, 2019

In conclusion, is is our opinion that the height studies presented herewith clearly demonstrate that the adopted height for block D is appropriate for the scheme, in line with the aspirations of the Urban Development and Building Height Guidelines for Planning Authorities (2018) .

The mentioned Height Guidelines encourage the provision of height in well-located urban areas, considering increased building height a key factor in assisting modern place-making and improving the overall quality of urban environments.

The reasons and justification for the adopted height of block D are summarised below:

- **Block D is located at an ideal spot for height at the intersection of two wide urban arteries and diagonally across the Stillorgan Luas stop, acting as an urban marker from different directions, reinforcing and contributing to a sense of place-making.**
- **Block D indicates the gateway to the residential quarter and the location of the transport interchange and the public spaces as provided in the Height Guidelines.**
- **At the end of Raphaela's Road it boldly announces the Sandyford Urban District as a modern, contemporary neighbourhood on approach from Stillorgan**
- **It provides a focal point of urban activity at the end of the pedestrian link from Carmanhall Road / Corrig Road, assisting in the wayfinding strategy to mark the location of the transport interchange.**
- **The proposed block D height complements and re-signifies the unfinished Sentinel building. While still lower than the Sentinel, these "twin beacons" at either end of the pedestrian Boulevard mark the start and the end of the pedestrian journey to and from the Luas stop.**
- **The established context height including existing and proposed 14-storey buildings in the immediate vicinity would see a similar structure blend with in the background, losing an opportunity to make a bold statement to the Sandyford skyline.**
- **A 14 No. storey option analysed at early design stages was considered to be monotonous in heights across the scheme, failing to avail of the opportunity to appropriately announce the main access point to the urban quarter.**
- **The footprint of the 17th storey occupies less than half the building footprint, reducing the height impact when compared with the extant scheme. Furthermore, the revisions to the building massing and materiality improve its slenderness ratio.**
- **The addition of a rooftop multifunction room adds architectural interest to block D, reinforcing its urban presence in its most visible corner.**

FIG. 26 View of Block D from the proposed pedestrian link road looking towards Blackthorn Drive

3.4. CONTEXT

3.4.1. BLACKTHORN DRIVE

On Blackthorn Drive, the proposed Block C is designed as a continuation of the height of the exsiting adjoining Rockbrook Phase I development.

Block D proposes a clear break to the monotonous height along Blackthorn Drive and provides a an appropriate scale and identity to mark the main access point to Sandyford Central and marks the location of the transport hub (fig.27).

It is located at the furthest point from Lakelands Close (fig. 28), and by virtue of its location, orientation and distance from this established suburban estate, the proposal substantially avoids impact on the privacy and daylight amenity of the Lakeland residents.

The resident amenities, gym and entrance to the créche are located at street level along Blackthorn Drive and are are visible from the street. The non-residential activity will provide the “urban life” activity, colour and vibrancy appropriate to a street frontage.

In addition, the multi function room located on Level 17 with panoramic views reinforces its urban presence and adds architectural interest to its most visible corner.

FIG. 28 Diagram showing distances and relationship between the proposed development and Lakelands residential development.

FIG.27 CGI Image of proposed Blocks C&D on Blackthorn Drive

3.4.2. EASTERN BOUNDARY AND SIEMENS SITE

The eastern boundary of the subject site extends to approx 175m in length and faces the rear of 4no office buildings (Ballymoss House, Silverstone house, Crafton house and Siemens Site), all of them accessed from Balymoss Road.

Recently, the site know as Crafton house was granted permission for development of a temporary school Reg. Ref. D18A/1210)

In addition, the Siemens site is identified in the SUFP 2016-2022 as an Objective for a “building of notable design”.

The proposed buildings (Blocks E&F) are set back from the boundary and confined to the central section of the subject site, with public spaces arranged as transition zones to the north and south fronting onto Blackthorn Drive and Carmanhall Road respectively.

Blocks E + F run north-south on the site along the Eastern boundary separated by an 8 m gap between in coincidence with the axis of the pedestrian Boulevard.

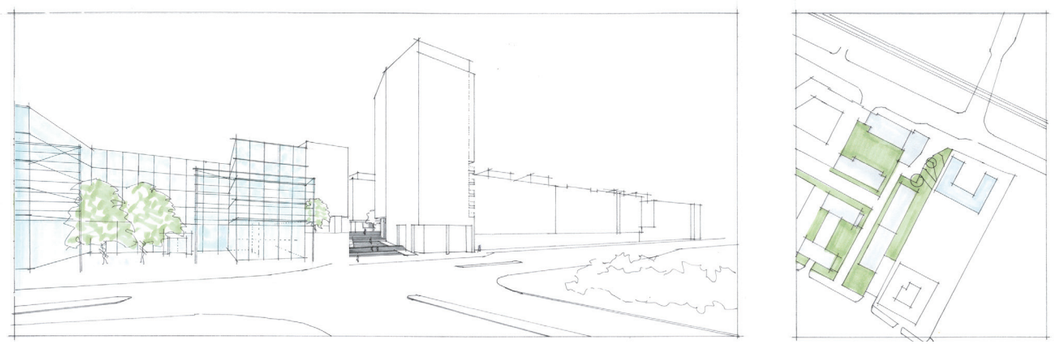
The site plan arrangement provides public open space and communal open space along the boundary for approximately 50% of its length. In addition, dense planting is proposed along a section of the boundary to provide visual mitigation for the carpark.

The subject proposal was concerned to establish a context for a respectful and mutually beneficial relationship with the site located in the northern part of the Eastern boundary known as the ‘Siemens’ site, which is designated for a building of ‘Notable Design’ in the Sandyford Urban Framework Plan 2011-2016.

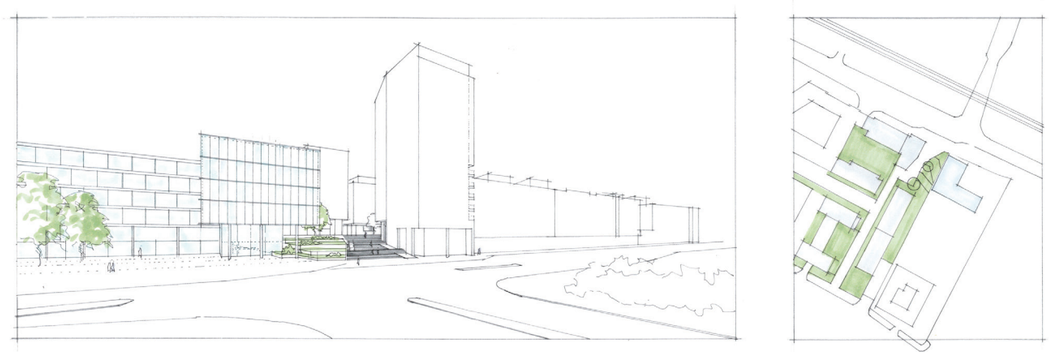
This approach is intended to provide a satisfactory and appropriate relationship between the tall element, Block D, and any future ‘Notable Building’, while also providing possibilities for extending the public ‘plaza’ entry of this proposal to integrate the 2 buildings into an armonic context.

A series of studies of possible relationships between the subject proposal and a potential redevelopment of the adjoining Siemens site are submitted with this application and illustrated in fig 29 for information.

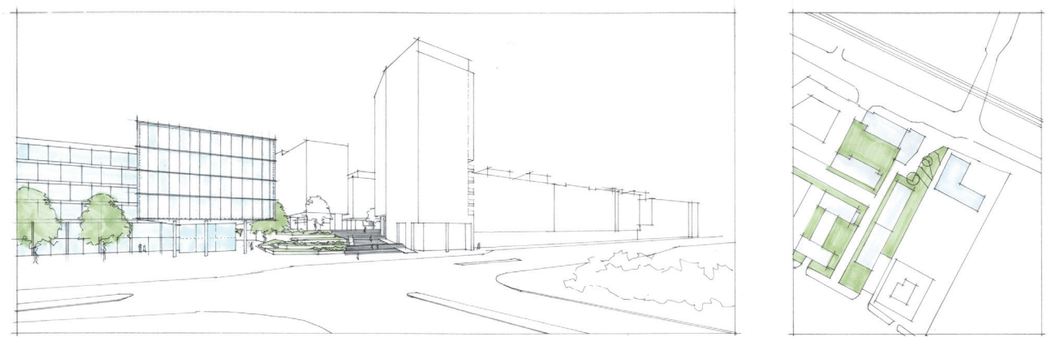
Neighbouring Site Study 1



Neighbouring Site Study 2



Neighbouring Site Study 3



Neighbouring Site Study 4

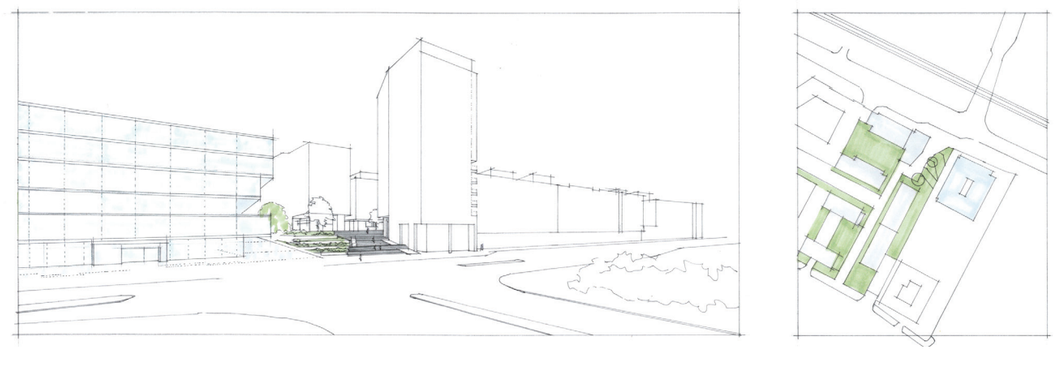


FIG. 29 Studies of relationship with adjoining Siemens site

3.4.3 CARMANHALL ROAD

The southern edge condition along Carmanhall Road (fig.30) is set back significantly from the road edge, providing a wide footpath with a landscaped treatment as a buffer zone in front of Block A.

At ground floor level, at the Southeast corner the Amenity Block A provides a focus of activity to mark the scheme's relationship with the road. An entrance to the building and the access to a covered ground level car park are also provided under Block A.

The southern entry point into the scheme is celebrated with the provision of a ca 40m x 40m south facing pocket park with dense vegetation, recreational equipment and seating areas.

The park again provides for a respectful and flexible relationship with a future development for the site to the east and will, in time, address the larger public park proposed in the SUFP to be located directly across Carmanhall Road at the junction with Corrig Road.

The South-North pedestrian thoroughfare linking the Sandyford Central development provides a new, exciting connection linking Carmanhall Road and Blackthorn Drive.

Positioned at the axis of this pedestrian link, block D dominates the skyline marking an important connection with the transport hub. The café, located at the end of this axis on Level 1 will add animation and urban life at the end of the pedestrian link.

FIG. 30 CGI image of proposed development from Carmanhall Road

3.4.4 WESTERN BOUNDARY

The Western boundary of the subject site faces the exsiting unfinished gables of Rockbrook Block D (Phase I) and the hoarded site intended to complete the Phase II development (now known as RB Central), which has been recently granted permission

The proposed development provides for the completion of the existing unfinished Rockbrook block D gables, with blocks B and C designed as a continuation of the existing Rockbrook buildings.

The exisitng Rockbrook Boulevard (fig. 31) is intended to be continued and integrated with the proposed new Sandyford Central Boulevard (fig. 32).

The proposed block A will provide a 10 storey gable wall over Boulevard level in coincidence with the permitted RB central scheme, and a one storey gable wall over Boulevard level along the vehicular access ramp proposed for the RB Central scheme. A landscaped roof garden is proposed on top of the Level 2 podium roof, with 2m. high boundary walls to prevent overlooking.

FIG. 31 Photo showing Rockbrook phase I to the left and the subject site at the end of the Boulevard

FIG. 32 CGI image of proposed development seen from the Rockbrook Boulevard

3.5. MICROCLIMATE CONSIDERATIONS

The revised massing configuration was tested with the microclimate consultants to asess the impact on Daylight/ Sunlight and Wind, and the conclusions are summarised below and illustrated in the accompanying figure 33:

Sunlight & Daylight

The Daylight & Sunlight Report prepared by O'Connor Sutton Cronin Consulting Engineers (enclosed as part of this application as a separate document) demonstrates that the reconfiguration of height does not result in adverse daylight and sunlight results when compared with the extant scheme.

Furthermore, the revised footprint with the gap between blocks E and F provided an enhancement in the sunlight availability along the Boulevard, and the addition of a rooftop open amenity space increases the available sunlit open spaces for the residents' amenity.

Wind microclimate

Wind studies prepared by B-Fluid (enclosed as part of the application as part of the EIAR document) suggest that the additional height in Block F could affect the wind pattern in a positive way when compared with the extant permission.

The increased height of block F provides additional shielding and reduces the risk of downdraft effects along the face of Block D.

In conclusion, the proposed new massing when compared to the extant scheme presents some opportunities to improve upon the many positive aspects of the extant scheme.

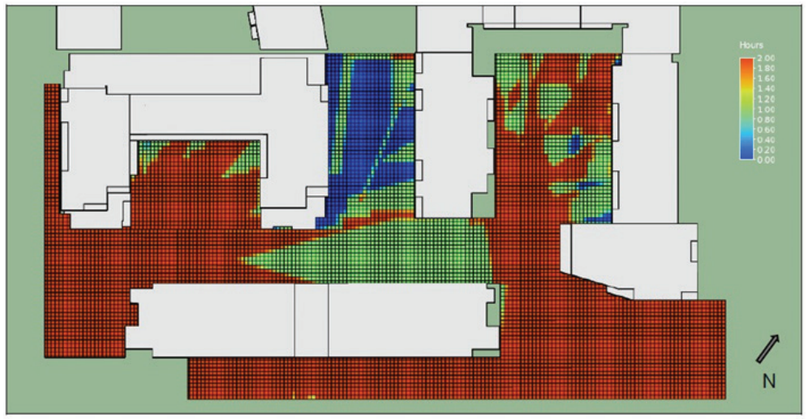


Figure 22 – Communal Amenity Spaces - Hours of Sunlight on March 21st – Permitted Development

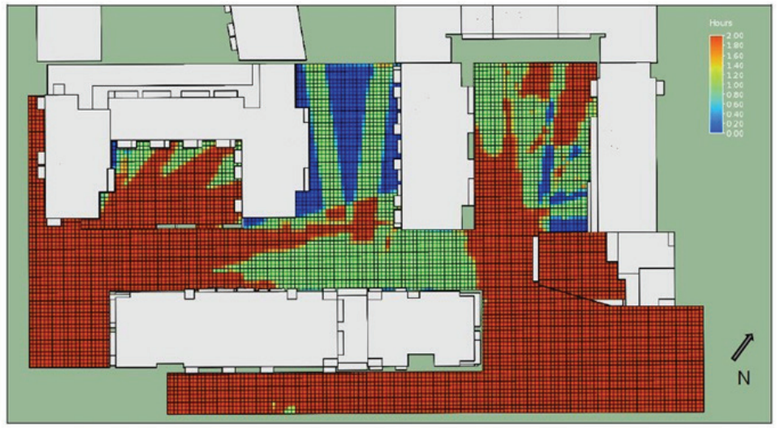
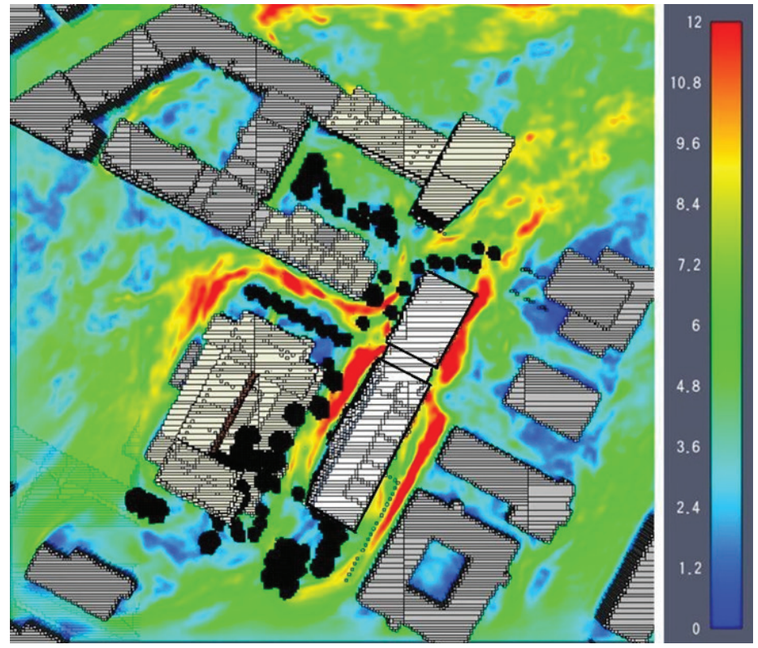


Figure 21 – Communal Amenity Spaces - Hours of Sunlight on March 21st – Proposed Development

Hours of Sunlight on March 21st – Comparison with extant scheme as per Daylight Sunlight Report prepared by O'Connor Sutton Cronin



CFD Results: Wind flow around the buildings at Sandyford Central Development for Wind from South-West - Slice at 1.5m as prepared by B-Fluid, Wind Microclimate Report

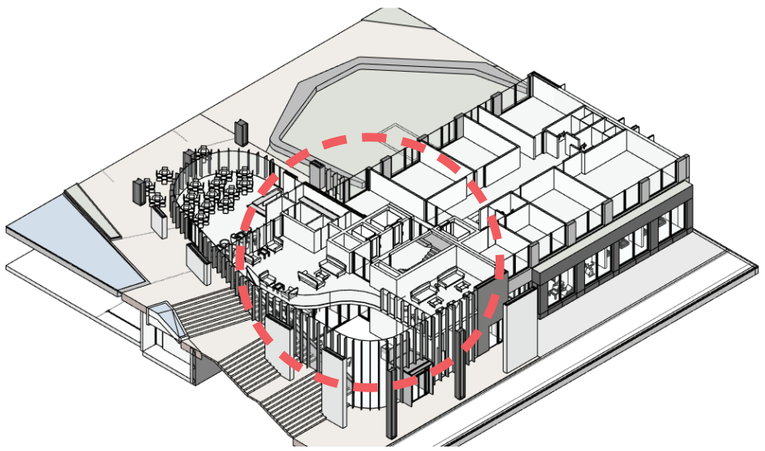
FIG.33 Microclimate: Daylight / Sunlight and CFD diagrams

4.0. BUILD TO RENT DESIGN

4.1. RESIDENT AMENITIES

Foyer & reception areas are designed as bright and ample welcoming spaces, coupled with communal and public open spaces for the residents' amenity.

Block C-D amenities spread over 2 levels and are directly linked to the créche and café. Resident amenities include the main reception desk and conciérge, a gym with access on Blackthorn Drive on Level 0, lounge spaces, study and co-working rooms on Level 1.



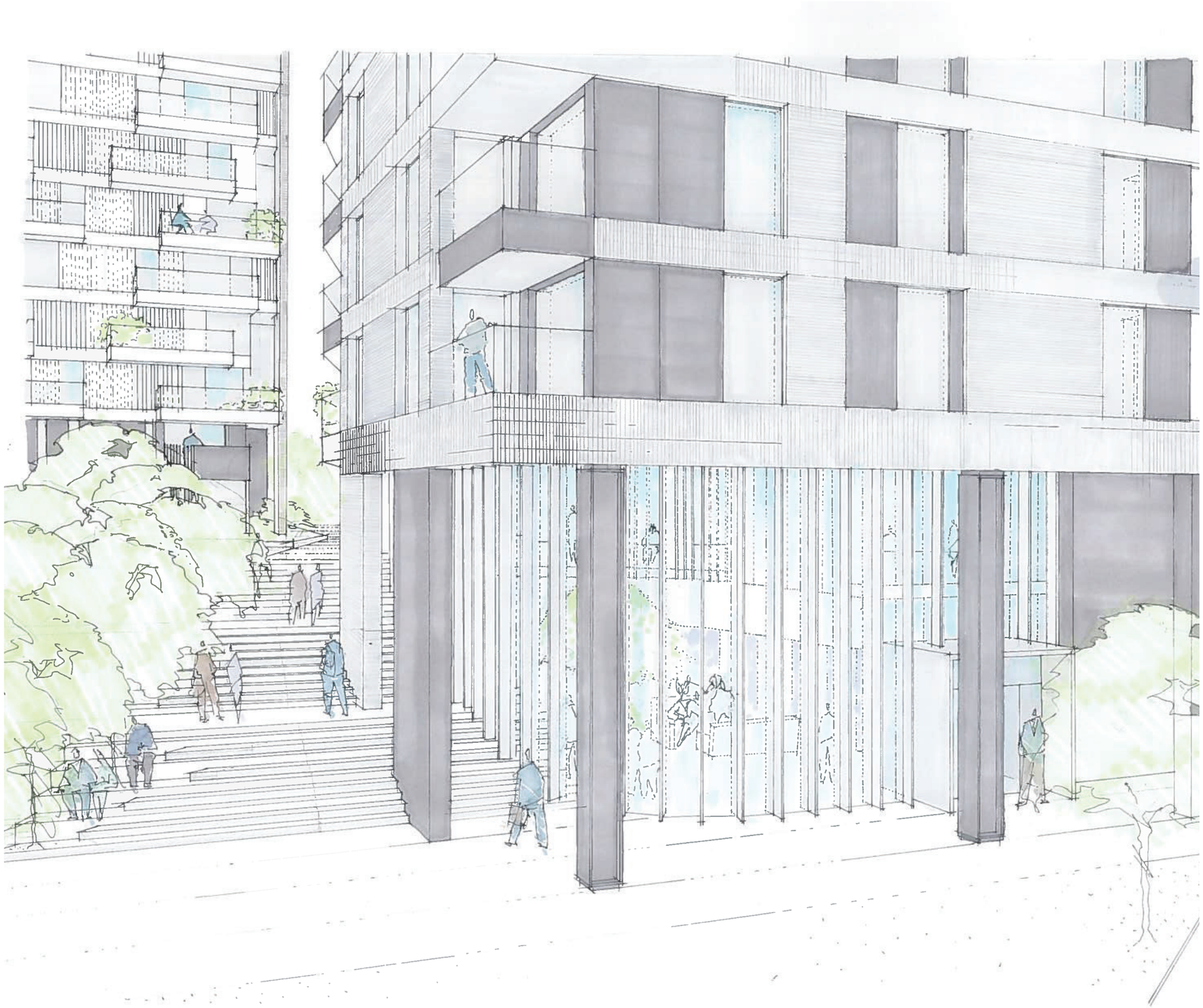


FIG. 34 Sketch of Block D entrance space

The resident amenities in Block A have been designed to provide a focus of activity on Carmanhall Road and along the pedestrian thoroughfare.

Amenity areas are provided with floor to ceiling glazing, encouraging the residents to engage in social interaction.

Block A amenities are spread over 2 levels including a double height lounge, games room and co-working space on Level 1 and a lounge and canteen space with an extensive communal amenity open space on Level 2.

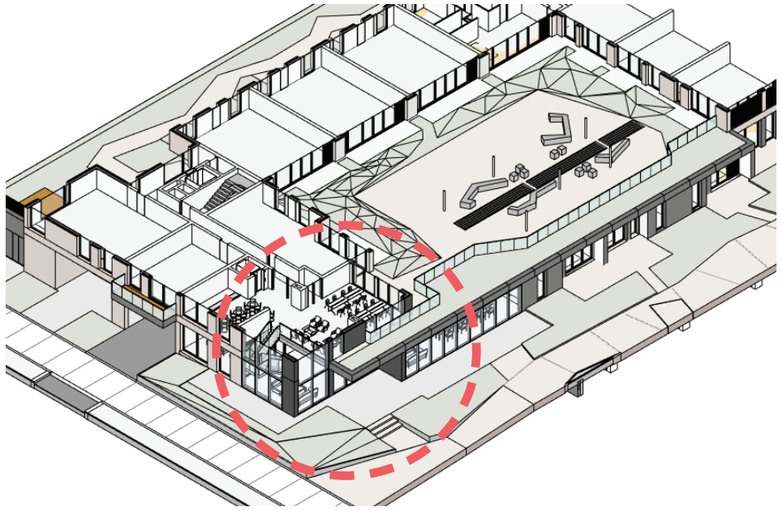


FIG. 35 Sketch of Block A entrance space

4.1.1. BLOCK C-D RESIDENT AMENITIES

The accompanying floor plan extracts (fig. 36 and 37) illustrate the proposed layout for the resident amenities shown in blue.

The resident amenities are located in block C and block D over Level 0 lower ground floor (Blackthorn Drive) and Level 1 ground floor (Boulevard).

Albeit not forming part of the resident amenities, the café and childcare facilities are also ilustrated as they share the same physical environment and a close interaction.

Level 0 (Blackthorn Drive level)

1. Reception & concierge
2. Lounge
3. Gym
4. Sanitary facilities
5. Lift to Level 1 (boulevard) and shared lobby with public access (*)
6. Administration
7. Post room / parcel delivery
8. Maintenance facilities
9. Personnel changing rooms
10. Carpark access (*)
11. Block D lift & stair core (*)

Level 1 (Boulevard level)

1. Lounge / hang out space
2. Study room / co-working lounge
3. Café (*)
4. Lift to Level 0 and shared lobby with public access (*)
5. Childcare facilities (*)
6. Enclosed external play area (*)

(*) reference provided for ease of reading. Not part of the resident amenities / communal facilities

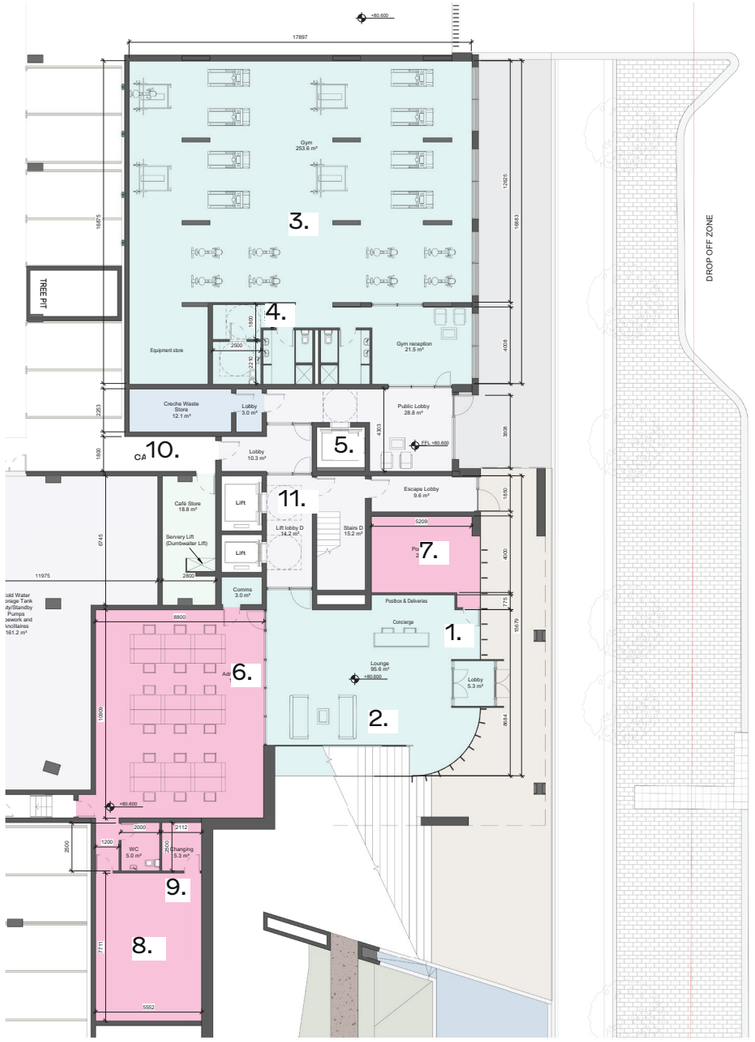


FIG.36 Amenity block C-D Level 0

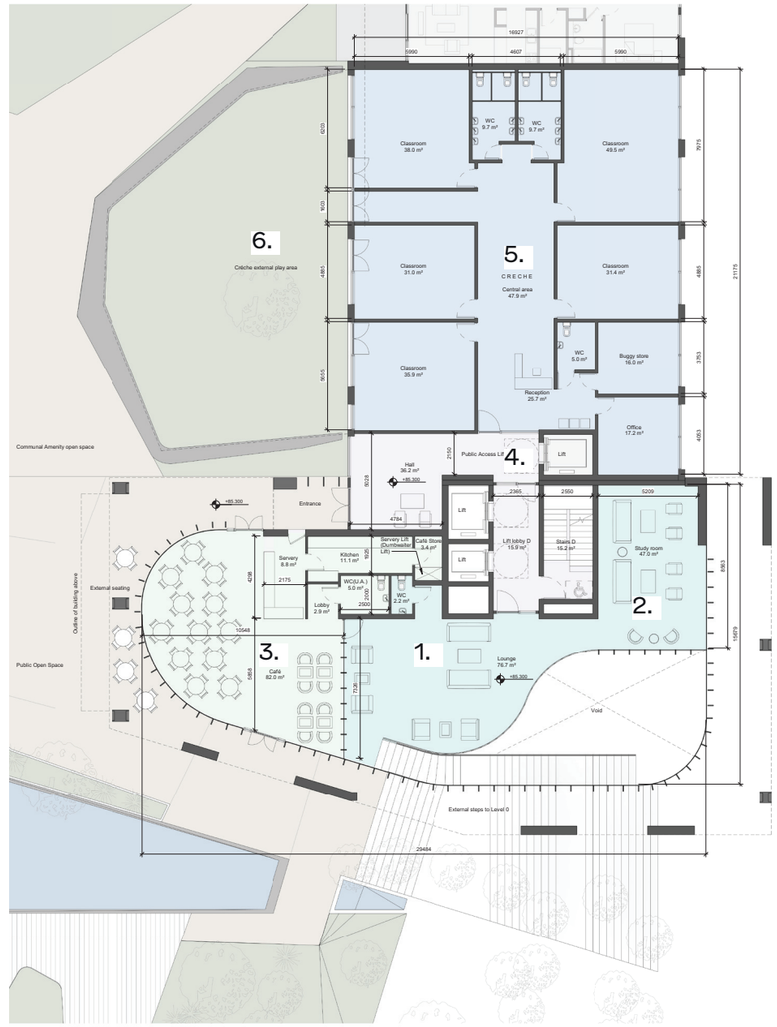


FIG. 37 Amenity block C-D Level 1

On the 17th floor of block D, a multi function room with panoramic views is proposed to “crown” the building.

Floor to ceiling glazing is proposed to maximise its unique views of the Irish Sea and the Wicklow mountains.

The propsoed floor plan (fig. 38) allows for different layouts to host a variety of uses allowing for community-building events (fig.39).

Level 17

1. Circulation core

2. Kitchen / sanitary facilities

3. Multi function room

4. Communal Amenity Open Space (see landscape architects’ drawings and details)

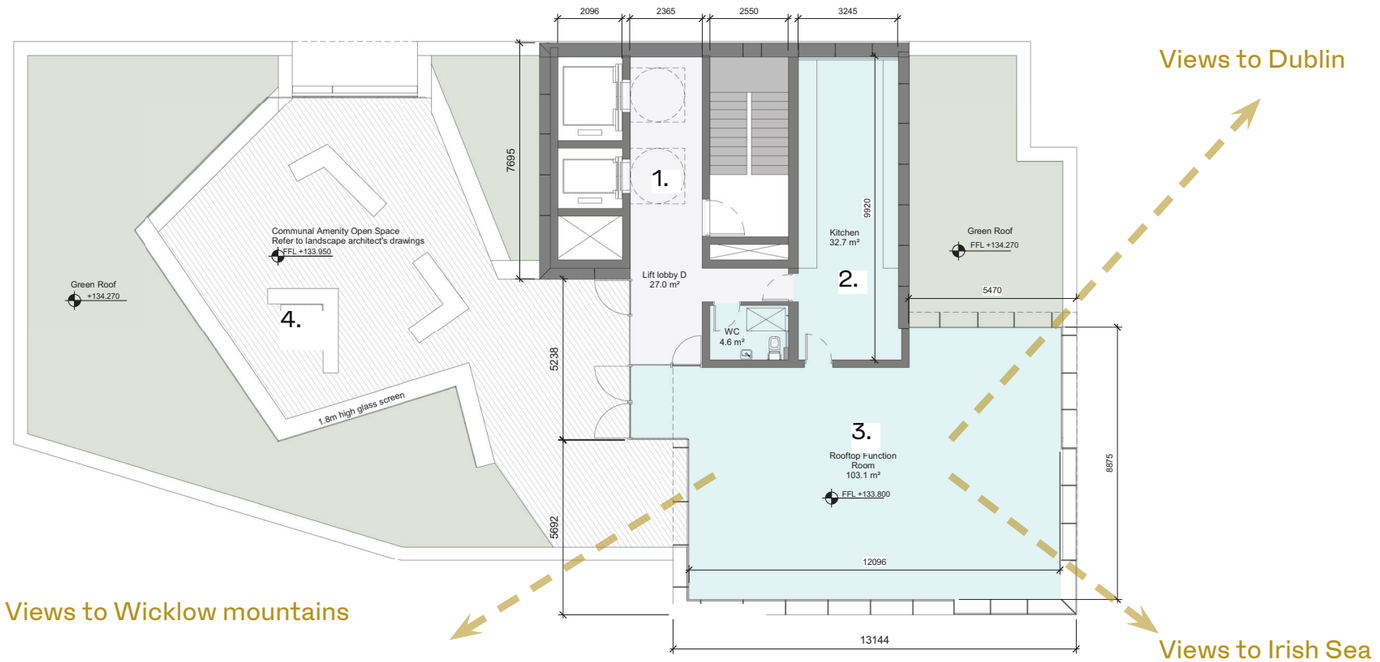


FIG. 38 Level 17 floor plan showing the rooftop function room and associated communal amenity open space

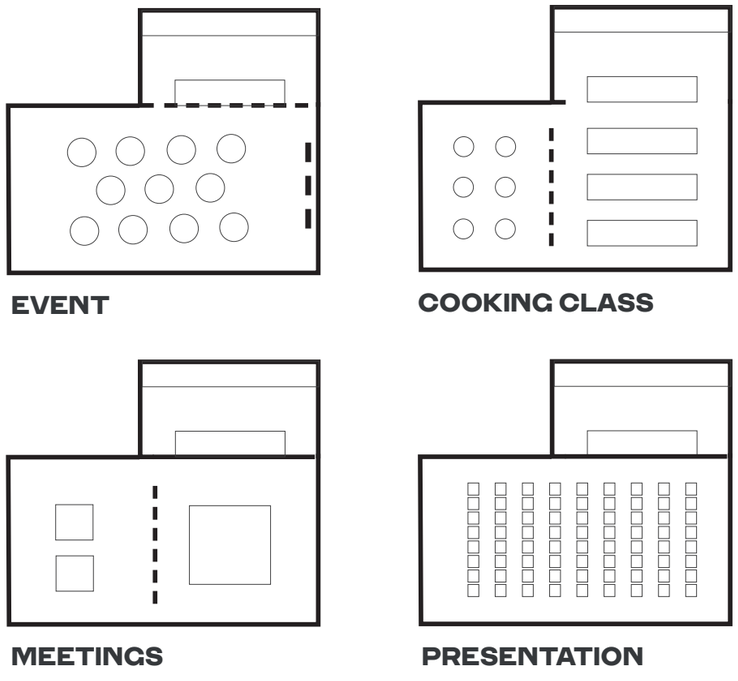


FIG. 39 Conceptual sketches and images ilustrating a variety of possible uses (reference images)

The resident amenities located in Levels 1 and 2 of block A provide a focus of non-residential activity, animating the proposed link road and the streetscape along Carmanhall Road.

The proposed amenities on Level 1 and Level 2 are shown in the accompanying floor plan extracts shaded in blue (fig. 40 and 41) including:

Level 1 (Boulevard level)

1. Entrance
2. Reception & concierge
3. Co-working lounge
4. Games room
5. Sanitary facilities
6. Lift to Level 2
7. Support office / meeting room
8. Communal Amenity Open Space

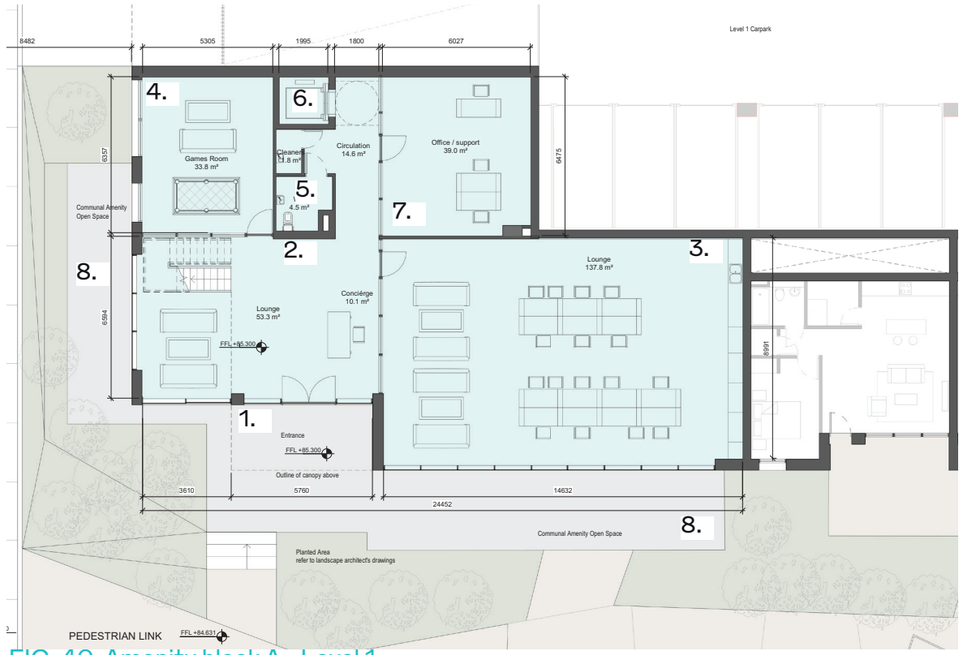


FIG. 40 Amenity block A - Level 1

Level 2

1. Lift to Level 1
2. Canteen / kitchenette
3. Lounge & hang out space
4. Communal Amenity Open space on Level 2 (refer to landscape architect's drawings for details)

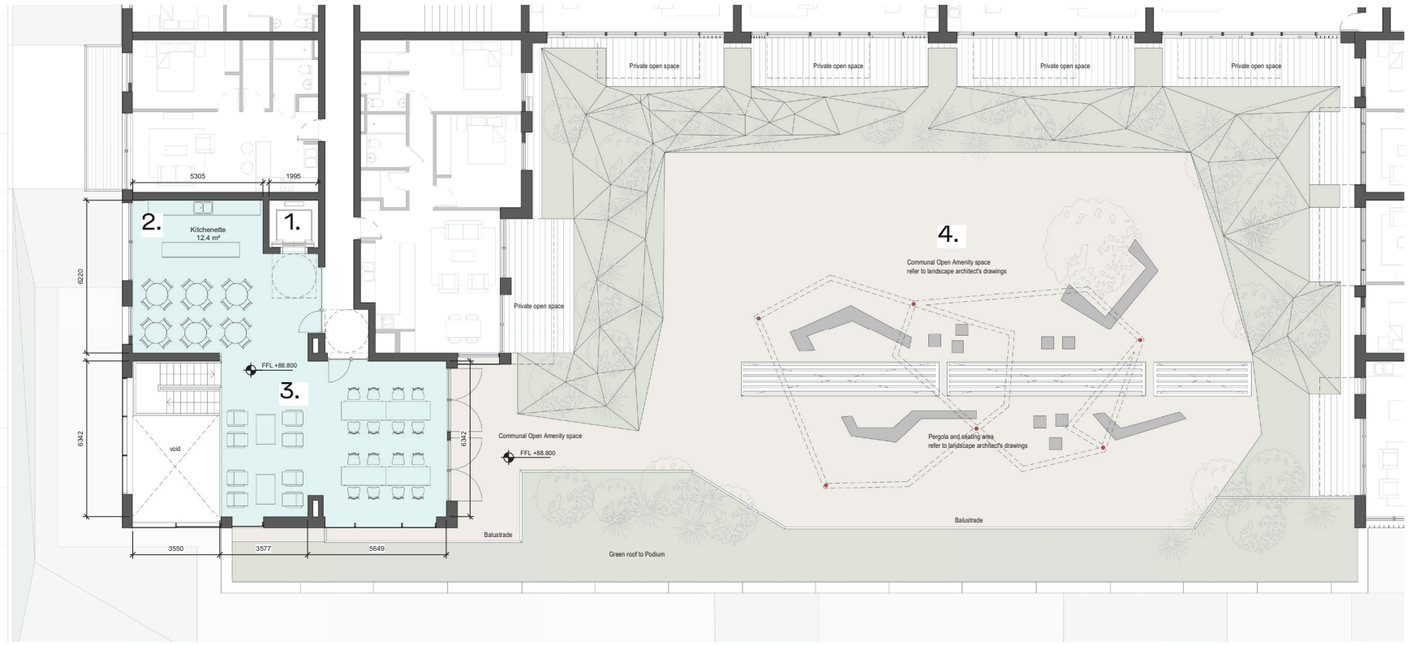


FIG.41 Amenity block A - Level 2

FIG. 42 CGI image of proposed main entrance space to resident amenities on Blackthorn Drive

FIG. 43 CGI image of proposed entrance space to resident amenities on Carmanhall Road and along the pedestrian link

4.2. OPEN SPACE

Designed as a car-free space and taking advantage of the level change in the site, the scheme benefits from a variety of public and communal amenity open spaces, providing character areas for residents in different age groups. The inclusion of a water feature and strategically planted large trees will provide a quality element to the public realm (fig. 44).

For further details please refer to the report prepared by Bernard Seymour landscape architects included as a separate document as part of this application.

LEGEND:

HARD LANDSCAPE

- High quality granite paving in 3 different tones in the semi private courtyards
- Exposed aggregate concrete surface with brass joints to the public areas
- Cobble setts in granite, 3 different tones to give the sense of more private terraces to the ground floor apartements
- Wetpour surfacing material in 3 different bright tones, to the crèche play area
- Concrete with aggregate upstand / seat used for soil mounding to achieve good planting
- Locally sourced rocks set in planting, in different sizes
- Raised metal edge of planting beds in Cor-ten type steel or similar
- Water feature edge in granite, natural finish to achieve a natural edge
- Water rill following the new proposed steps allong Blackthorn Avenue entrance to spill to the lower pool

SOFT LANDSCAPE

- New proposed semi mature street tree planted in a tree grille
- New proposed multi-stem trees on the Blackthorn Ave, new stepped access
- New proposed mature tree planted on podium in concrete pocket planters leading to basement
- Low planting beds along the water rill planted with ground cover and ornamental grasses for natural look
- Carmanhal road pocket park planted with plant species that require full sun
- Blackthorn Avenue pocket park with outdoor gymna and toddler play area planted with plant mixes and trees for partial shade
- Planting to semi private courtyards with shade tolerant species that thrive in shade conditions. soil mounted for good planting that can screen the vents
- Eastern boundary planting with rain garden species and trees that thrive in short periods of flooding
- Raised planting areas along the boulevard planted with multistem flowering trees and a mix of species for full sun

FIG. 44 Landscape masterplan (Level 1) prepared by Bernard Seymour Landscape Architects

In addition to the public and communal amenity open spaces provided on Level 1, the residents will benefit from dedicated communal amenity open spaces in block A on level 2 (fig.45) and in block D on level 17 (fig.46).

These spaces can be accessed by all residents through the communal facilities on block A and D.

For further details please refer to the report prepared by Bernard Seymour landscape architects included as a separate document as part of this application.

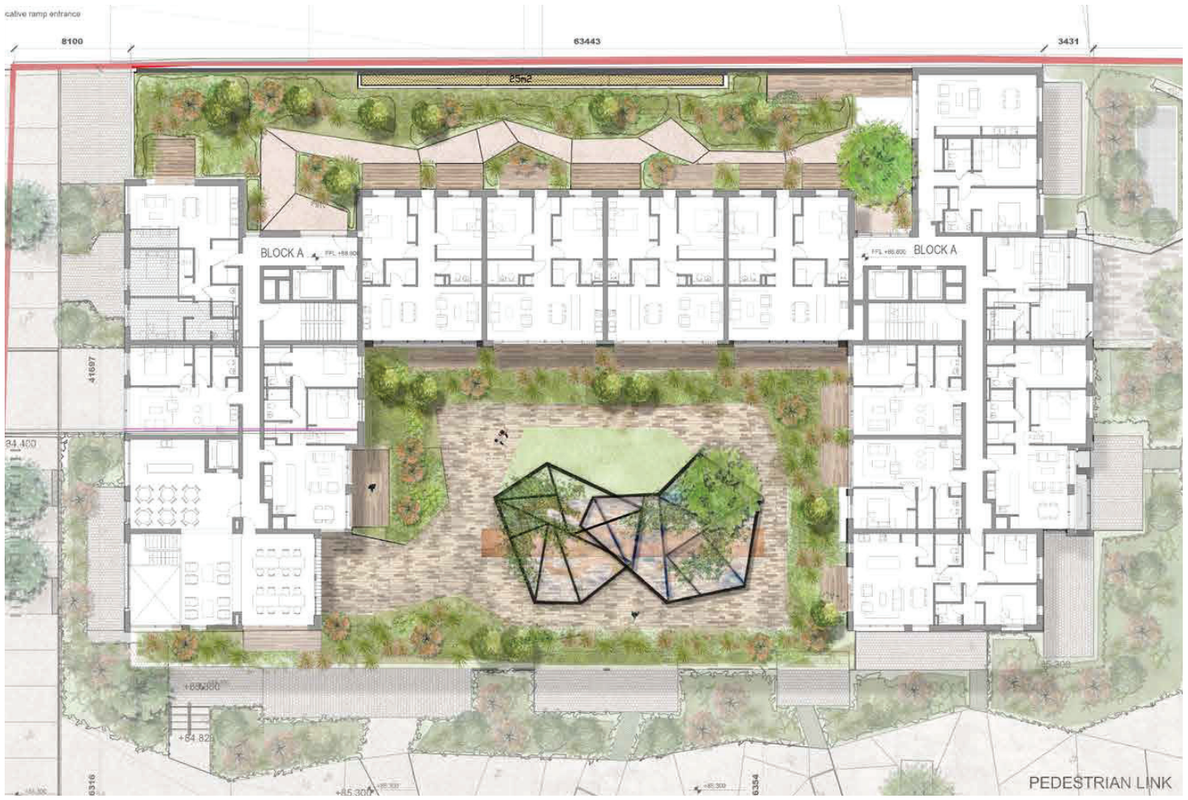


FIG. 45 Communal Amenity Open Space (Level 2) prepared by Bernard Seymour Landscape Architects

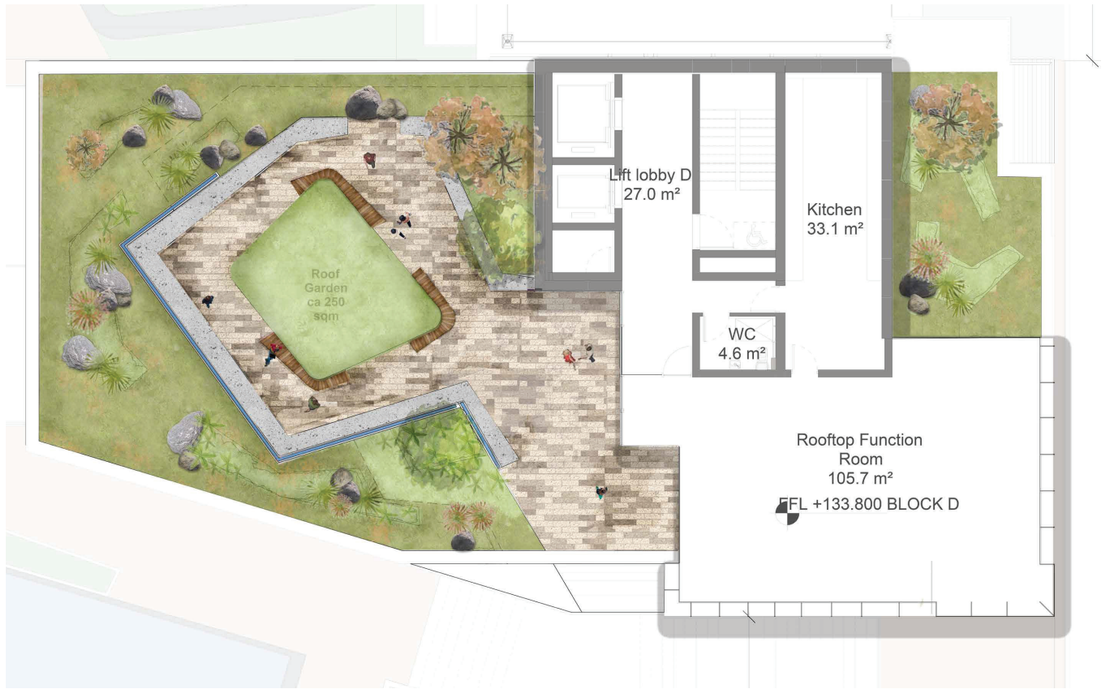


FIG. 46 Communal Amenity Open Space (Level 17) prepared by Bernard Seymour Landscape Architects

4.3. ACCESIBILITY

As illustrated in fig. 47, a lift (1) located in block C-D provides for universal access from Level 0 (Blackthorn Drive) to Level 1 (Boulevard).

This lift has multiple functions:

a. Provides universal access from and to Level 0 to Level 1 (and viceversa) for mobility impaired people (1,2,3)

b. Provides access to and from the créche on Level 1 (4)

c. Provides access to and from the café on Level 1 (5)

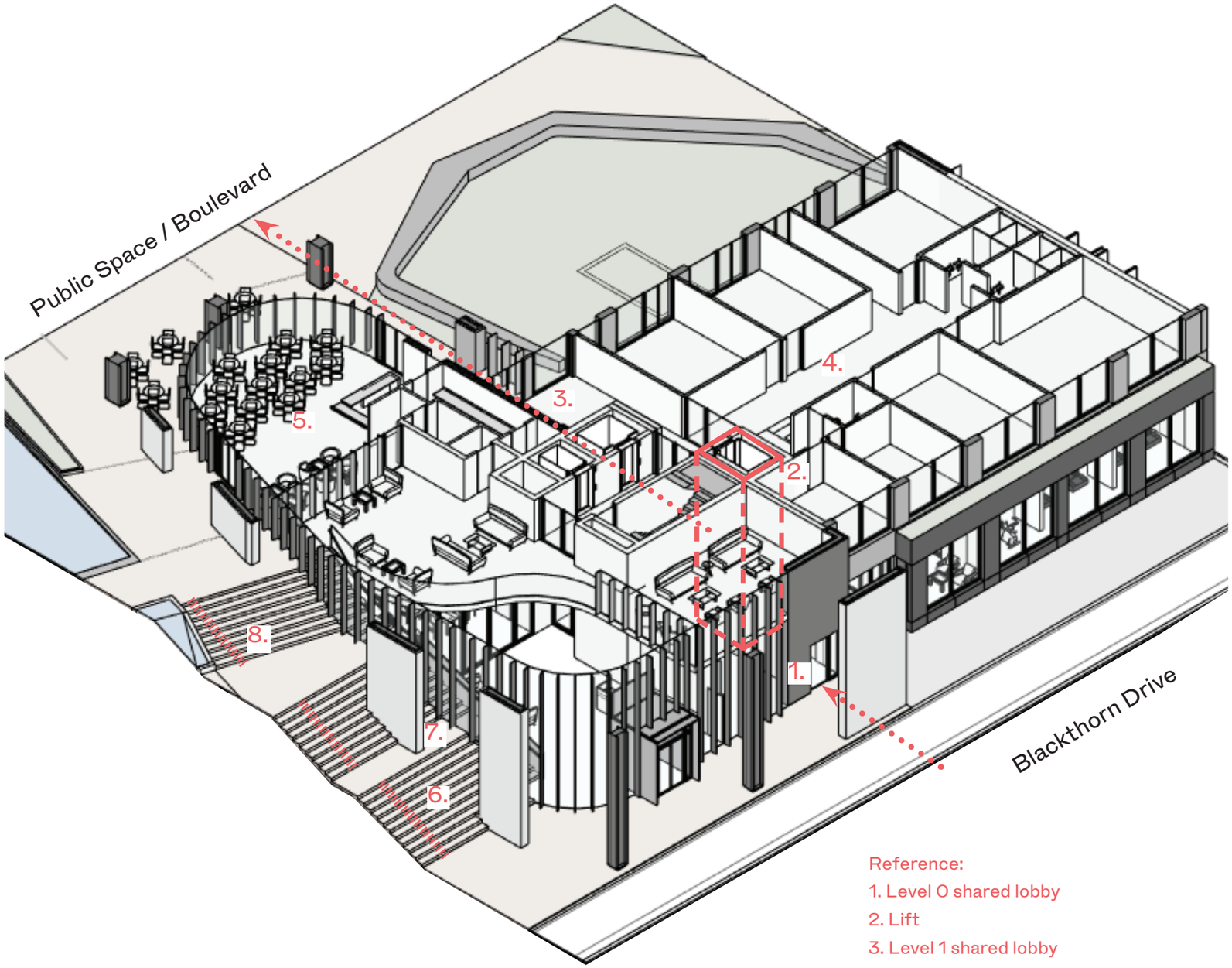
It is proposed to provide this lift in an enclosed environment within the building envelope and controlled by the management company to avoid antisocial behaviour.

The proposed steps for public access from Blackthorn Drive to the Boulevard level (6) are designed as ample steps to facilitate the movement of the residents and general public connecting with the Luas stop across the road on Blackthorn Drive.

The proposed steps will continue under the footprint of block D to provide an alternative sheltered and illuminated route, with accesibility requirements in line with best practice and building regulations (7).

Bicycle and pushchair users will avail of wedges and/or channels along the steps (8) to facilitate the transport of bicycles and/or pushchairs.

Signage and wayfinding strategies for optimum visibility require a dedicated study and will be developed by the Applicant and agreed with the local authority at the appropriate time.



Reference:
1. Level 0 shared lobby
2. Lift
3. Level 1 shared lobby
4. Créche / childcare facilities
5. Café
6. Steps / public open space
7. Part M stairs / railings
8. Bicycle & pushchair rails / wedges

FIG. 47 Diagram ilustrating the connection provided by a public lift in block C-D on Blackthorn Drive

4.4. RESIDENT ENTRANCE SPACES

The entrances to the residential blocks are generally double height spaces, distinctively clad in backpainted glass, introducing colour and signage (“branding”) to assist in the overall wayfinding strategy.

FIG. 48 3D visualisation of entrance spaces

4.5. CHILDCARE FACILITIES (CRECHE)

The créche (fig.49) is centrally located in Block C at Boulevard Level, close to the main public space and in direct connection with the café. It can also be accessed from Blackthorn Drive through a controlled lift.

The rationale and justification for the provision of childcare facilities and the appropriate size is further analised in a separate report. Notwithstanding this, following the section 5 pre-application consultation meeting, the Applicant increased the size of the proposed créche to 354 sqm in order to future-proof the development.

The proposed créche layout is indicative and will be suject to further design revisions once a créche operator is appointed.

A South facing external play area(fig. 50) is provided on courtyard A-B, screened by planting and a fence.

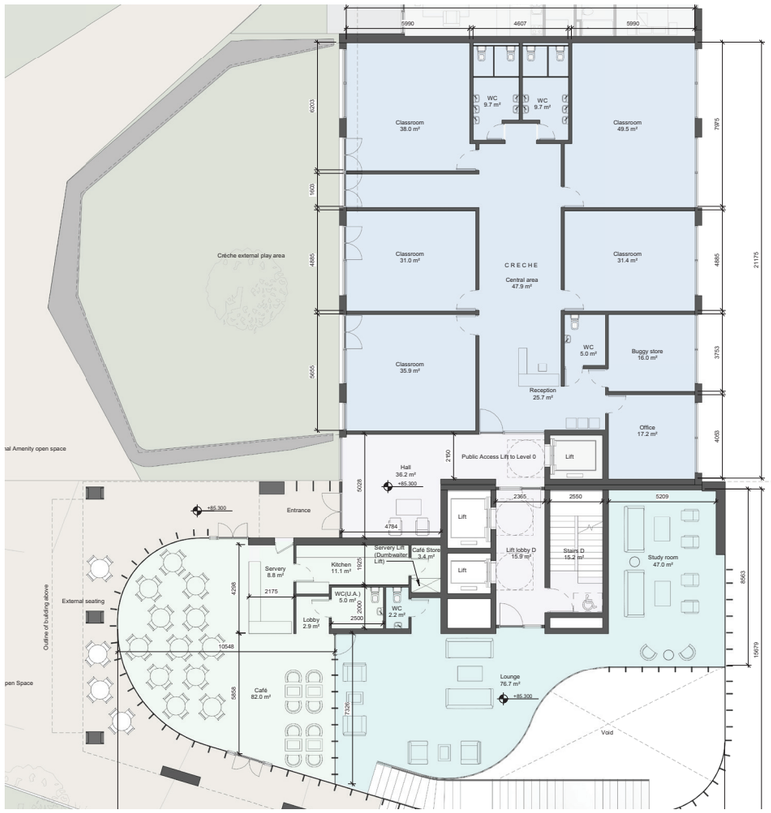


FIG. 49 Créche - key plan

FIG. 50 Sketch showing the enclosed external play area in front of the créche

4.6. CAFÉ

Located at the end of the south-north link on the pedestrian way to the Stillorgan Luas stop, the café becomes a natural extension of the public space (fig. 51).

It provides a focus of activity and passive surveillance in connection with the south facing public open space and encourages a sense of community within the scheme.

It is designed as a double height space to provide for an ample, bright space with a natural and direct visual connection with the public realm (fig.52).

A south facing, sheltered gallery provides external seating space, providing further activity and interaction with the public realm.

The café complements the use of the childcare facilities, doubling up as a place for social interaction between parents dropping or collecting their children at the créche.

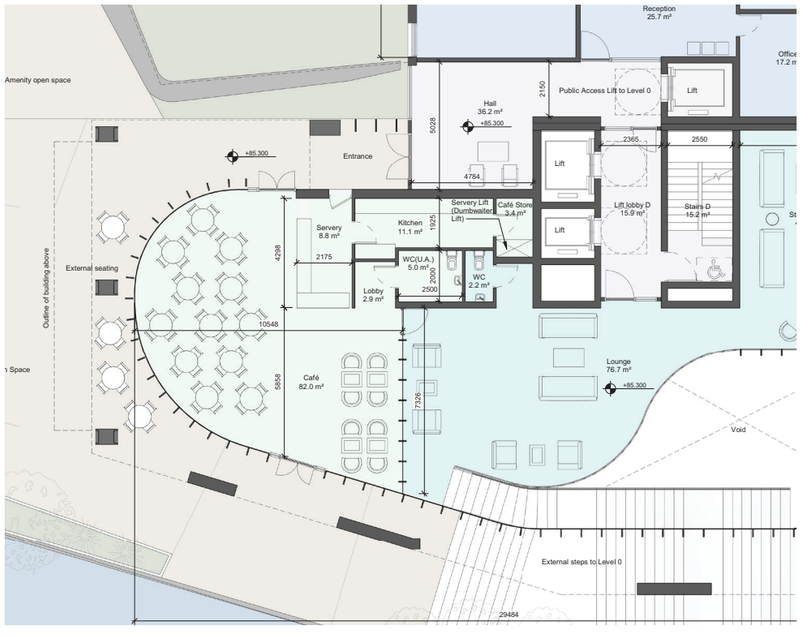


FIG. 51 Café - key plan

FIG. 52 Sketch showing the internal view from the double height café

4.7. RESIDENTS' PRIVATE AMENITY

DUAL ASPECT RATIO

Apartments have been designed in line with the 2018 Residential Guidelines based on an open plan arrangement.

The provision of dual aspect apartments has been maximised in the different buildings through building form and a careful consideration of the appropriate number of apartments per core in each block (fig.55).

The typical dual aspect units (fig. 54) can be categorised as:

1. Corner units

2. End of corridor units

3. Deck access (block A)

4. Duplex units (block C)

57% of the units are designed as dual aspect apartments (fig.53).

UNIT MIX	Qty	Avg	%	Dual Aspect	
Studio Units	46	39.1	8.2%	16	
1B Units	205	48.7	36.3%	58	
2B Units	295	78.5	52.3%	250	
3B Units	18	100.7	3.2%	2	
Total	564			326	57%

FIG. 53 Dual aspect apartment schedule

FIG. 54 Sample apartment types

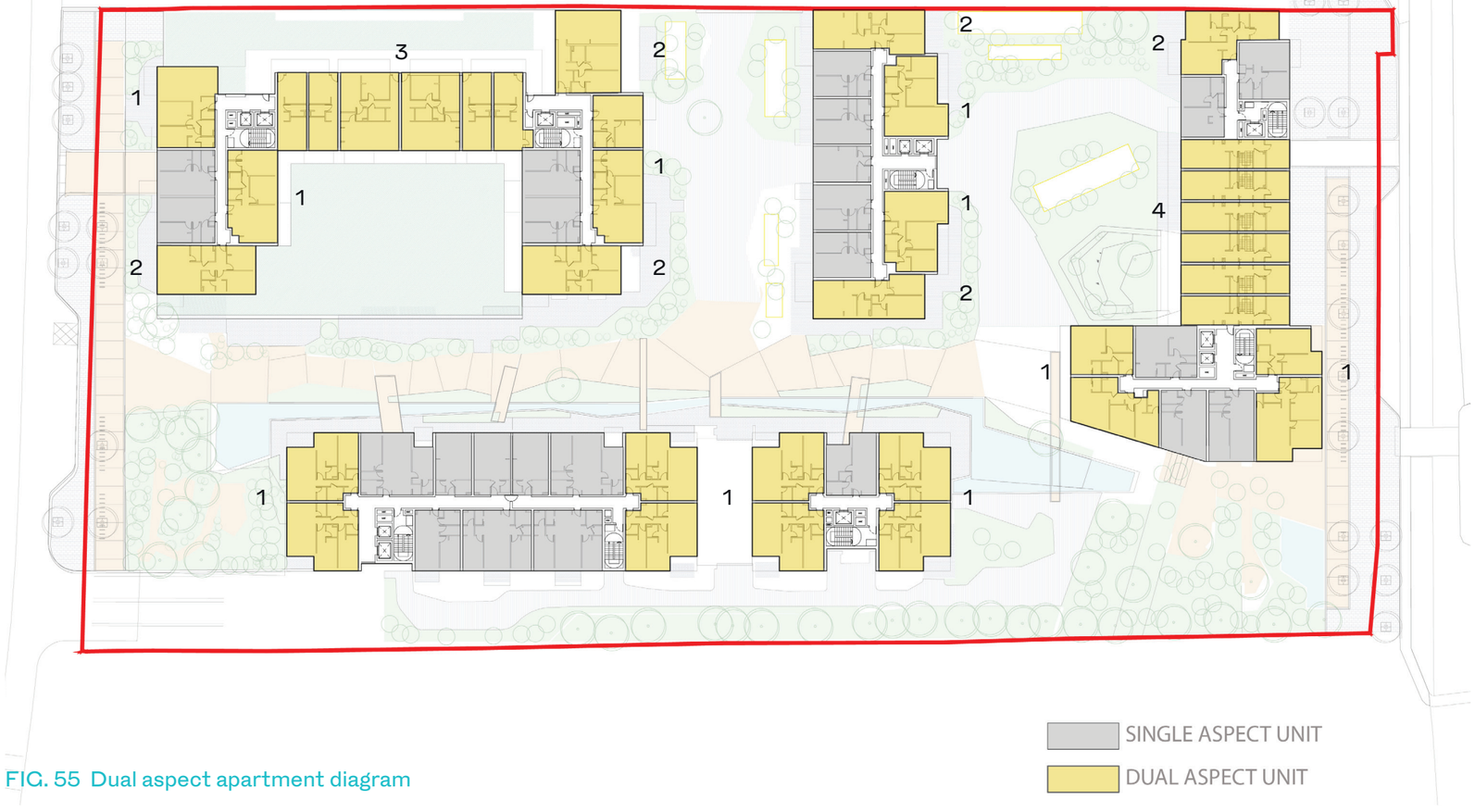


FIG. 55 Dual aspect apartment diagram

VERTICAL CIRCULATION CORES

The vertical circulation cores are located along external walls, allowing for daylight penetration into the common circulation spaces and providing external views from all the circulation cores (fig. 56).

Block D will avail of views from Level 6.

FIG. 56 Location of vertical circulation cores

BALCONIES

Balconies have been designed to project outside the building fabric and are used as a device to inject interest to the elevations.

Where possible, and in particular block E & F gable ends (fig. 58), the balconies have been arreanged around the unit's corner, with double or triple heights.

Vertical fins along the south face of block D (fig. 57) assist in bringing down the scale and add identity and "playfulness" to the most prominent building in the scheme.

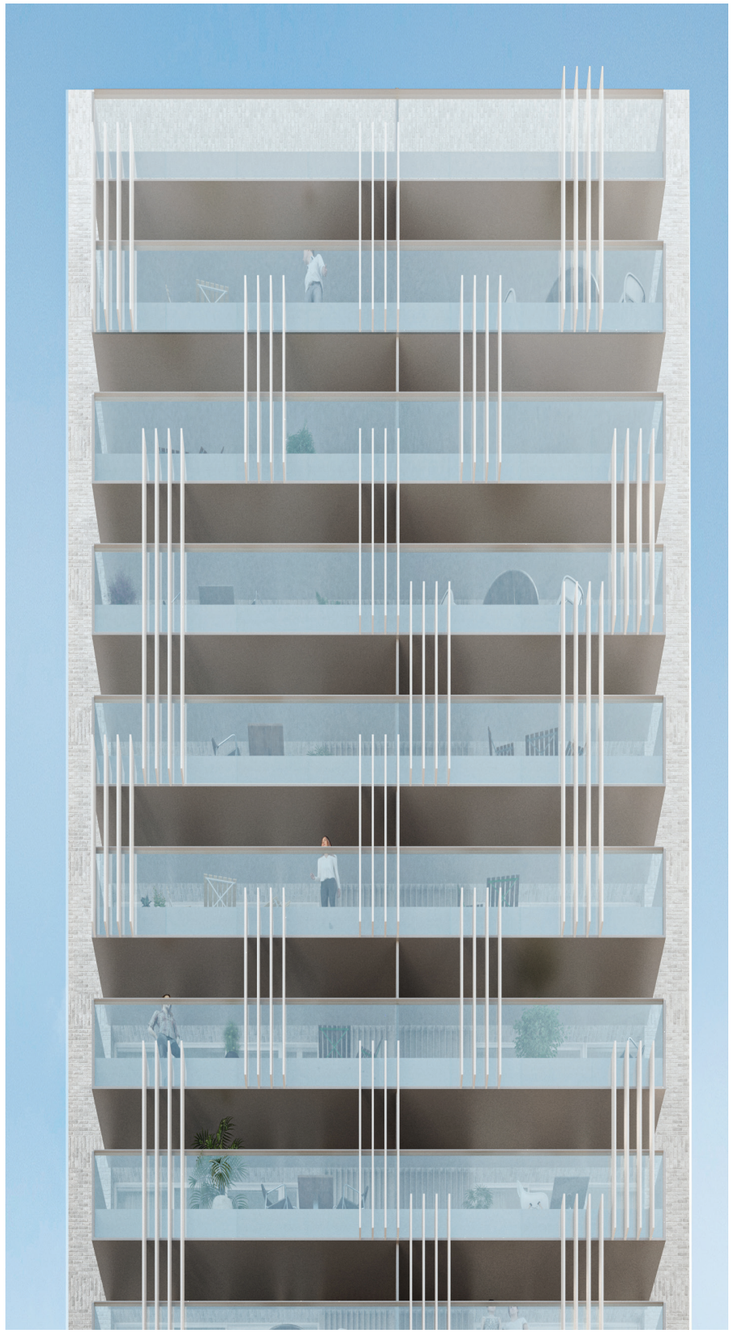


FIG. 57 Block D balconies

FIG. 58 Block F balconies

4.8. ANCILLARY ACCOMMODATION

The diagrams in fig. 59 below ilustrate movement diagrams:

1. Pedestrian
2. Bicycles
3. Cars
4. Access for emergency vehicles
5. Taxi / deliveries drop off
6. Waste

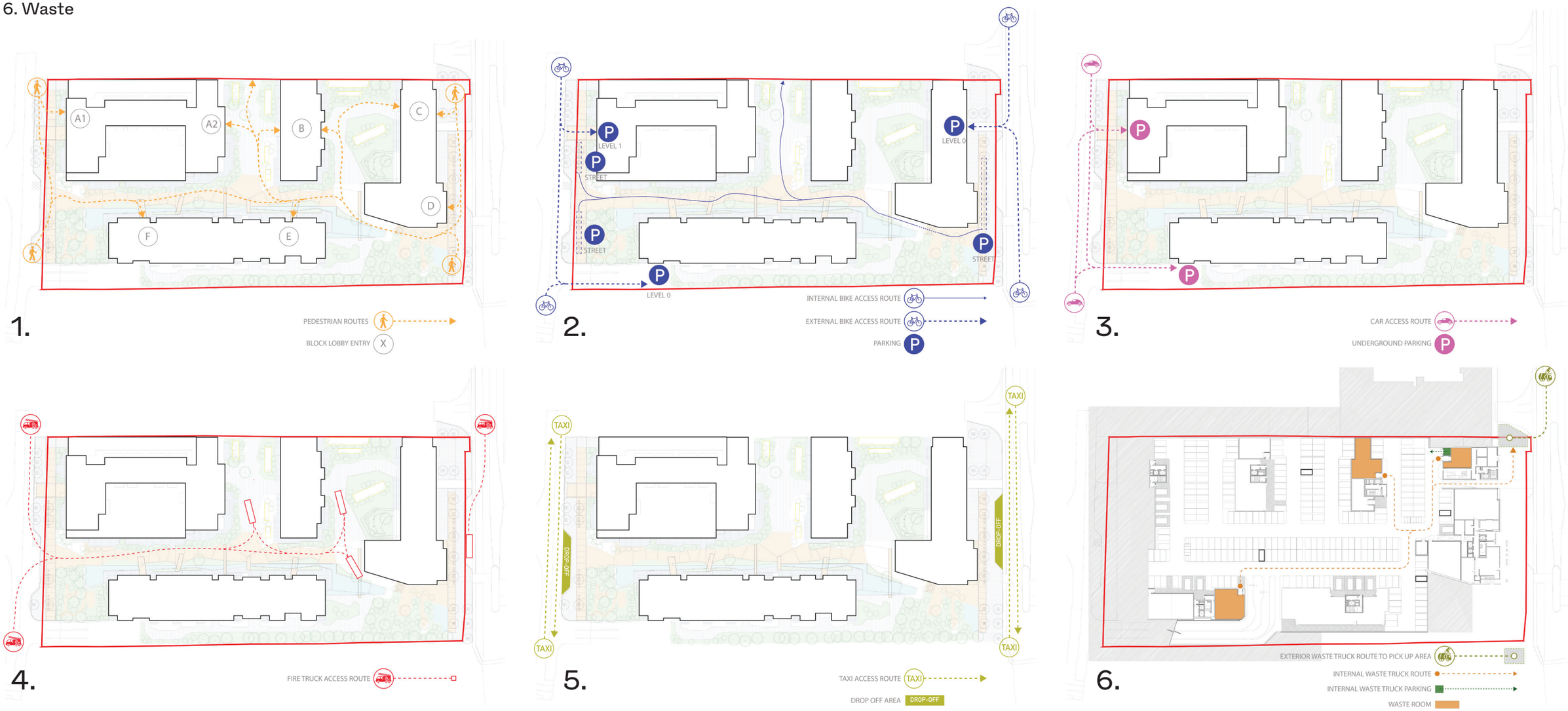


FIG. 59 Movement diagrams

4.9. PARKING

Car parking, bicycle parking and motorcycle parking will be provided over 2 levels of accommodation and in line with the residential guidelines published in 2018, taking into consideration:

- The existing transport infrastructure (Luas) in close proximity
- The Build to Rent nature of the development
- The unit mix

As previously discussed with the Local Authority and during the Section 5 Pre-planning consultation meeting, the Applicant considers that a car parking ratio of 0.5 is adequate for this type of development. The mobility management plan prepared by O'Connor Sutton Cronin further elaborates on this point.

In summary, the Applicant proposes a total car parking provision of 285no. cars which equals to a ratio of ca 0.505 car parking spaces per apartment.

For a detailed breakdown please refer to the below table and accompanying plans (fig.60,61,62).

CARPARKING						
	Standard	Stacked	e-car	U.A.	Subtotal	PROVIDED
Level 0	183	36	25	10	254	285
Level 1	29			2	31	
CARPARKING RATIO						50.5%
CARPARKING AREA	L.0	8,088	L.1	1,502		9,590

BICYCLE PARKING					
Requirement: 1per Bed + 1/2 units:	Residents: 895		Visitors : 282		1,177
PROVIDED SPACES	Stacked parking			Sheffield	Subtotal
Level 0	786			102	888
Level 1	110			30	140
Public Realm				150	150
Total provision	Residents: 896		Visitors: 282		1,178

MOTORCYCLE PARKING		
Motorcycle parking spaces required	1:25 cars	11
Motorcycle parking spaces provided	Level 0	21

FIG. 60 Schedule of required & provided parking spaces

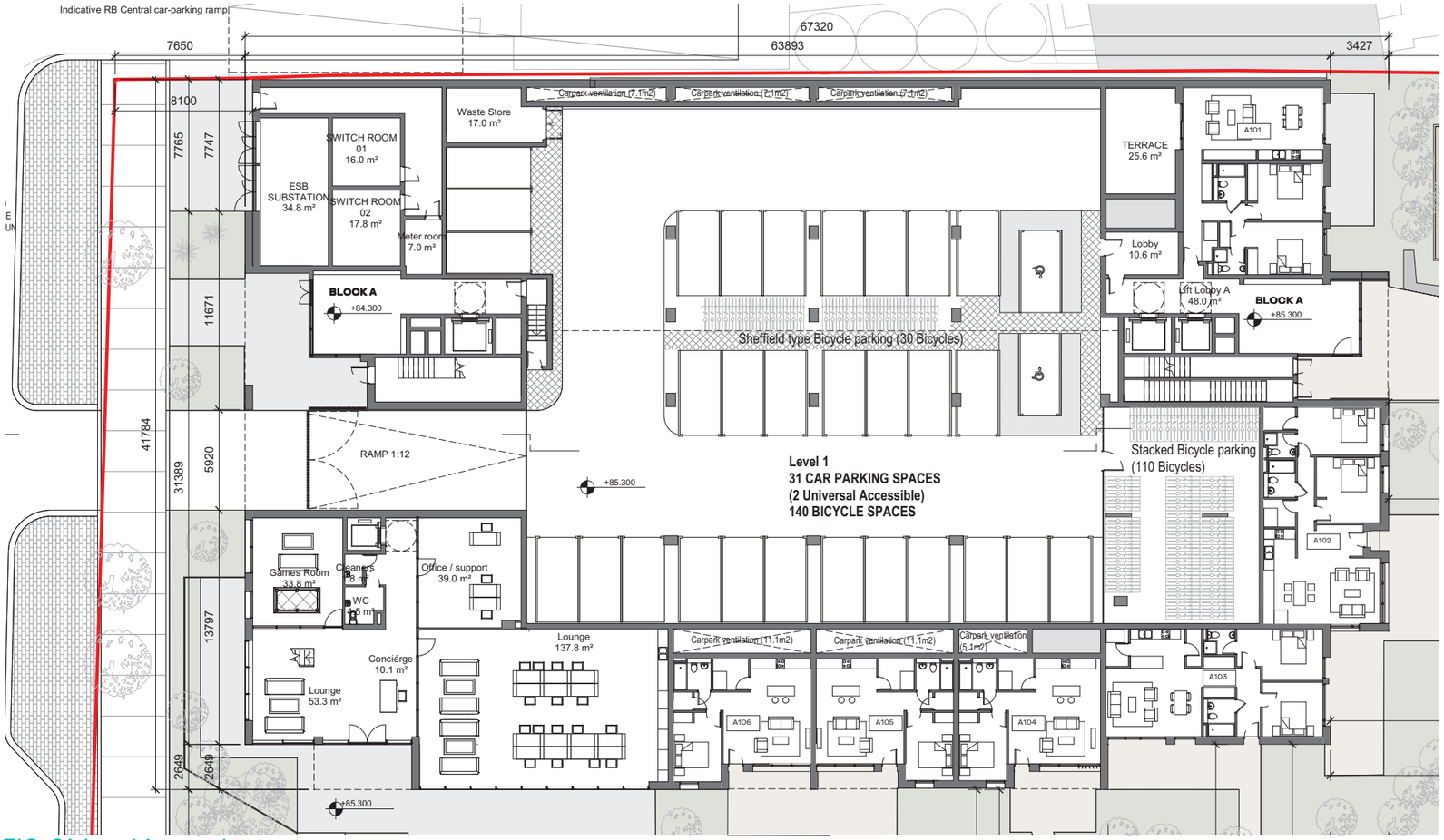


FIG. 61 Level 1 carpark

The car parking on Level 1 (fig. 61) accommodates 31 covered cars and bicycle spaces in stacked arrangement and fully covered by the podium slab on level 2 which is used to provide communal open amenity space for the residents.

Bicycle parking is supplemented by the provision ofSheffield stands proposed as part of the public realm in connection with the 2 main entrances to the resident amenities.

The car parking on Level 0 (fig. 62) is partially underground due to the existing site levels will be ventilated along its eastern boundary and protected vertical openings to achieve the required ventialtion rates for natural ventilation.

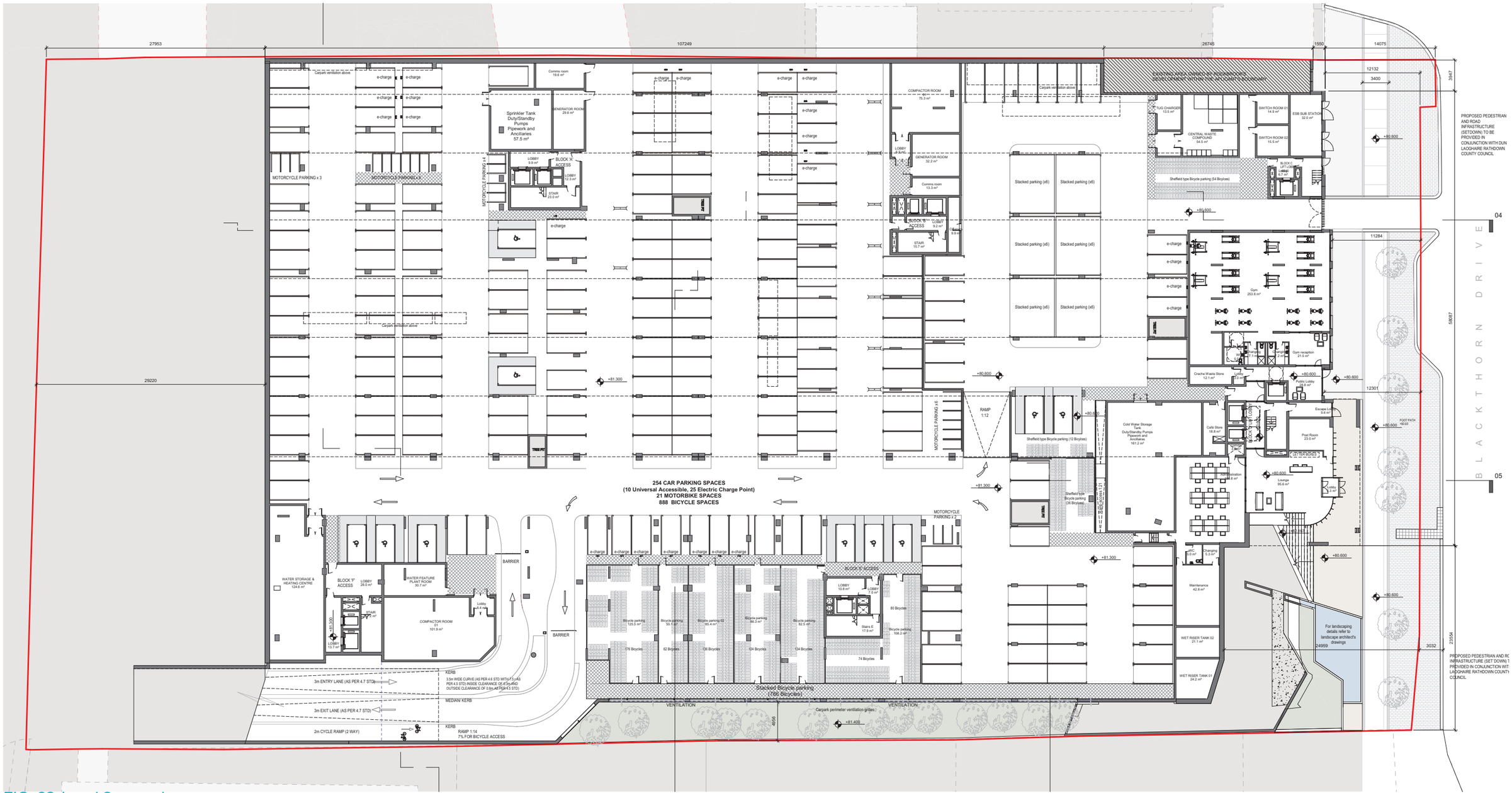


FIG. 62 Level 0 carpark

5.0. ELEVATIONAL TREATMENT

5.1 ELEVATIONAL STRATEGY

The extant scheme was the initial starting point when considering the elevational treatment. Designed with a different mix of units and based on a limited material palette, the extant scheme relied on the provision of colour for identity and wayfinding to the different building blocks.

The elevational treatment of the extant scheme was completely revised in responding to the changes introduced to the public realm, apartment layouts, the relocation of the resident amenities and generally, a vision to provide development of a perceived superior quality development, an opportunity arose to review and redesign the façades.

The initial step was defining an elevational treatment strategy (fig. 63), to include:

1. A material palette (fig. 67) to create a unified 'neighbourhood' feel, with brick in complementary tones being the primary material.

2. A sense of individual building identity is created through subtle changes in brick colour from block to block.

3. Brick becomes the material for the most public frontages on the boulevard and the north south route

4. Cables to Blocks E & F would be framed and treated as 'special' gables, marking the entrance off Carmanhall Road as well as the entrance from Blackthorn Drive

5. A contrasting material to be used within the courtyards (between Blocks A & B, and C & D)

6. At ground floor level of Blocks E & F, the water-based landscape proposal together with pergolas "popping out" and defining the open private space for ground floor apartments would be treated in a rainscreen cladding with a contrasting colour

7. Amenities which are located at ground level of Blocks A and Block D would be treated as clearly legible objects (fig. 64).

8. Robust materials for durability and ease of maintenance

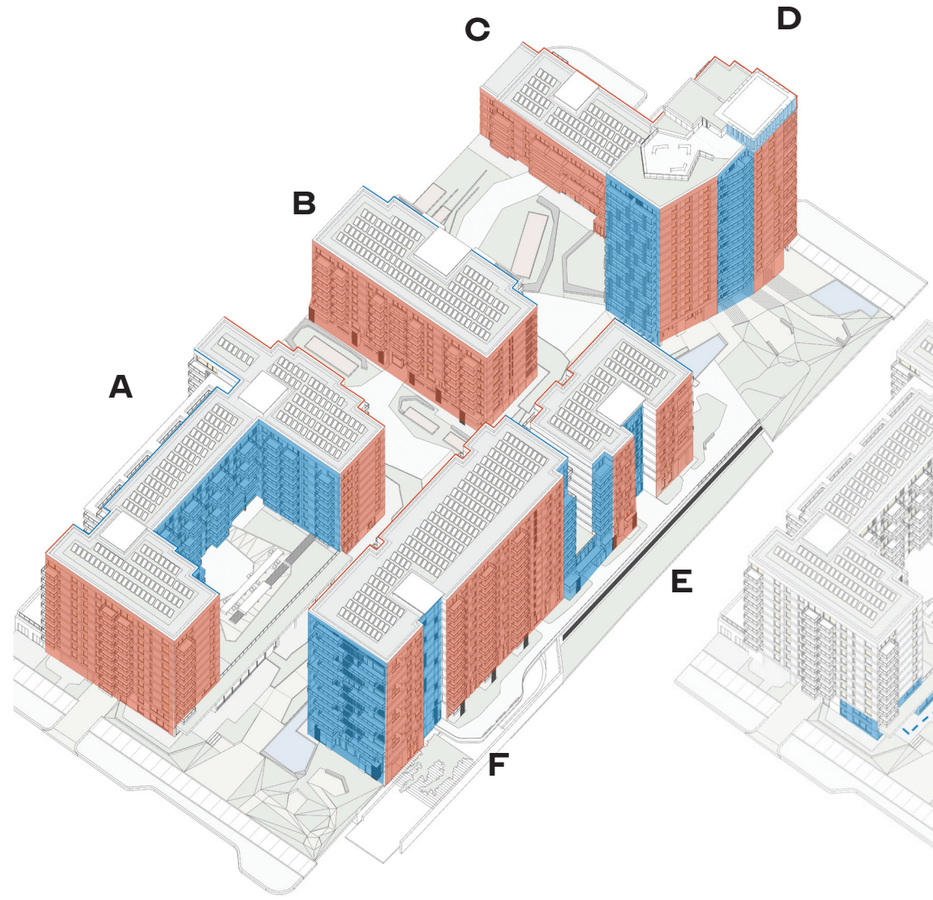


FIG. 63 Elevation treatment strategy

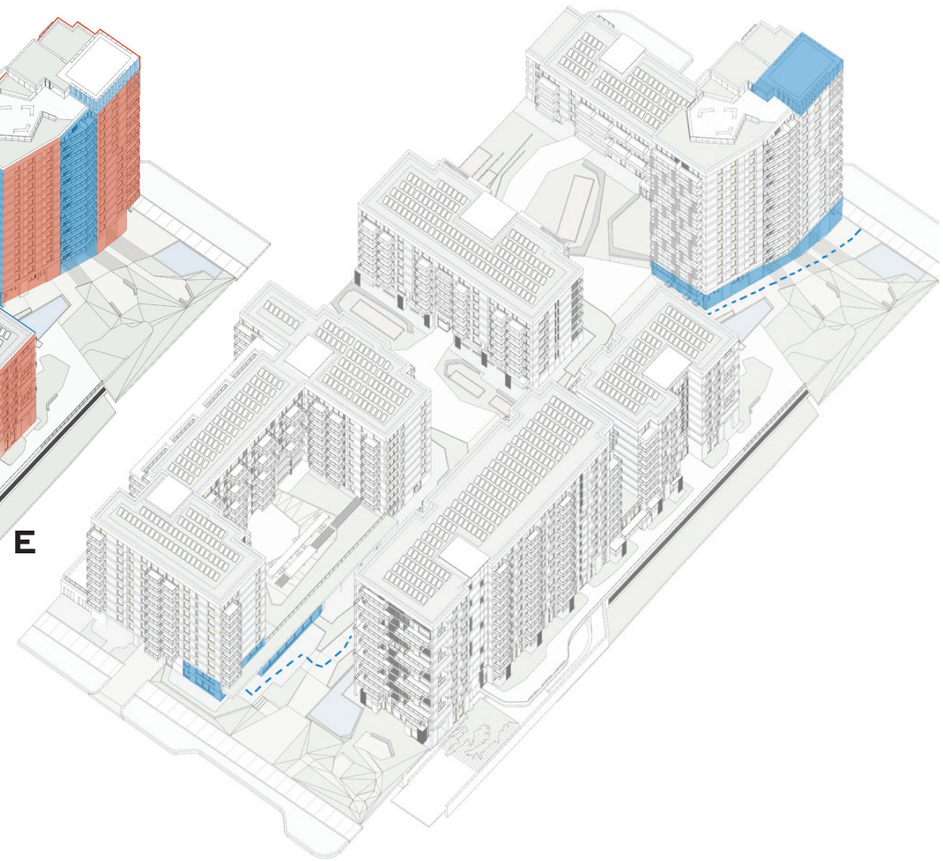


FIG. 64 Amenities location strategy

5.2. MATERIALITY

The proposed materials specified are simple, thoughtful and robust bringing a new dynamic of materials to the Sandyford neighbourhood. The predominant material used within the scheme is brick in an array of shades. The material palette is designed to create a unified ‘neighbourhood’ feel, with brick in complementary tones. Visual interest and a sense of individual building identity is created through subtle changes in brick colour from block to block, as well as alternating textures (fig. 65,66).

Brick is used due to its durability, robustness and grounds the scheme within its residential context.

The brick facades work in contrast, to the window frames, balustrades, copings and gates which are in tonal greys to tie these elements into the wider material strategy for the scheme.

The ground floor of the scheme is generally clad in a glass reinforced concrete (GRC) paneling system finished with a satin charcoal grey colour coating., offering residents and visitors an element of way-finding through the scheme.

The GRC cladding has been introduced at key nodes within the development (balcony fascia and soffits, set-backs ground floor units) due to its robustness and ease of maintenance.

The foyer and reception areas are designed as bright and welcoming spaces with floor to ceiling curtain wall glazing with metallic fins and backpainted glass in selected locations.

At ground floor level, the water-based landscape proposal together with virtual enclosures consisting of metallic fins ‘popping out’ of the building envelope, defines the private open space and provides privacy and screening for the ground floor apartments.

The material selection has been chosen with care to enhance the soft landscape elements and to create a distinctive neighbourhood within Sandyford.

The public and communal amenity spaces provide different character areas for varying age groups in the development. The material palette chosen for the landscaping elements is robust and durable and is described in detail in the landscaping section.

All materials outlined above will help create buildings that resist deterioration over time. The building and open space elements can be easily and safely maintained and managed by the future operators of the scheme.

FIG. 65 Reference image - Example of brick used in different formats

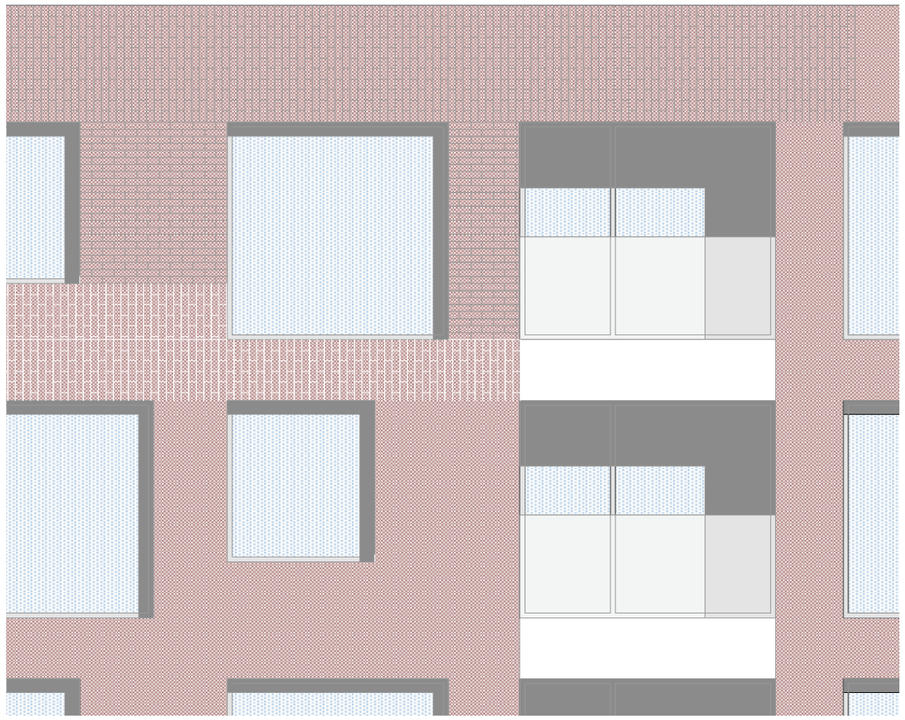


FIG. 66 Early elevation study for Block F: Brick is intended to be used horizontally and vertically to subtly emphasise “events” and articulate the elevations within a coherent and armonic composition.

BRICK

BLOCK A - LIGHT RED BRICK

Light colouredmortar joint to match , raked

Image reference: www.olivier.be. KARMA-WF7-MOKKA_6148

BLOCK B - WHITE / SAND BRICK

White/sand mortar joint, raked

Image reference: KARMA-White

BLOCK D - LIGHT GREY BRICK

Light grey / white mortar joints - raked

Image reference: KARMA-Grey-VB-WF

BLOCKS C,E,F - MEDIUM DARK GREY BRICK

Light grey mortar joint - raked

Image reference: KARMA Grey-VB-EF

RAINSCREEN CLADDING - GLASS REINFORCED CONCRETE PANELLING SYSTEM

Code CL-1

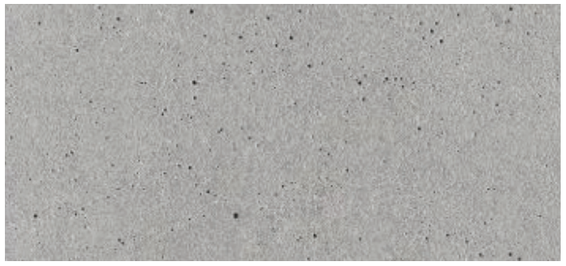
Polar White / Gloss finish

Block E/F gable ends. Refer to elevation & finishes drawings. Image references: https://www.rieder.cc

Code CL-2

Off White / Matt finish

Selected locations. Refer to elevation & finishes drawings



Code CL-3

Ivory / Ferro Light

Balconies generally. Refer to elevation & finishes drawings

Code CL-4

Liquid Black / Ferro Light

Ground Floor. Refer to elevation & finishes drawings

WINDOWS & METALWORK

Code MW-1

Polyester powder coated finish to aluminium windows, metallic railings & fins in a gloss white finish.

Code MW-2

Anodised aluminium in a Satin Silver Clear finish to aluminium windows, spandrel panels and opening sections.

Refer to drawings

Code MW-3

Anodised aluminium in a Satin Silver Grey finish to selected windows, railings

Refer to drawings

Code MW-4

Anodised aluminium in a Satin Charcoal Grey finish to selected windows, railings

Refer to drawings

FIG. 67 Material Palette

BLOCK A

BLOCK B

BLOCK E-F

FIG. 68 Varied tones of brick provide for identity to the different apartment blocks

5.3. BUILDING MATERIALS

Materials proposed for the individual blocks are illustrated in the following pages.

For ease of reference, 3D views of the different building blocks are provided along with the proposed material palette and reference images of similar materials, to be read in conjunction with the scaled elevation drawings provided with this planning application.

Details pertaining to the elevational strategy and the rationale for elevational treatment are further elaborated in the Architectural Design Statement as part of this planning application.

BLOCK A

The material palette proposed for block A comprises a pale-red brick as the principal material along its southern elevation, with the internal courtyard (East/West) and part of the elevation facing the Boulevard (North) in a light coloured brick in order to maximise the availability of natural daylight.

As the main structure facing Carmanhall Road (with the objective for a future park), the red brick was considered an appropriate response as a material traditionally associated with residential buildings.

The ground floor hosting the resident amenities feature a toggle-glazed curtain wall system with elements of dark grey back-painted glass to its entrance.

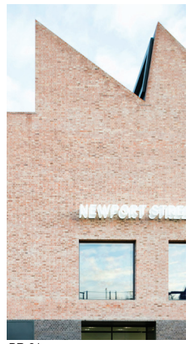
The residential units along the pedestrian link road are clad in a GRC dark grey rainscreen cladding system.

Fig. 69 3D visualisation of proposed Block A with material key and image references

VIEW 01

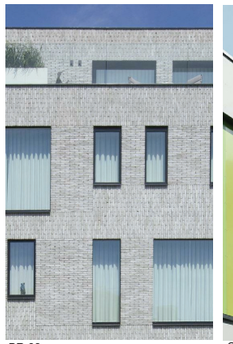
VIEW 02

VIEW 03



BR-01

BR-02



BR-03

CL-03

CL-01

CL-04

GL-01

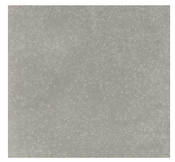
GL-01

BR_01
Selected Brick or brick panel system with natural tone colour, light colour mortar joint to match, raked

CL_02
Glass fibre reinforced concrete panels cladding system with off white colour and matt and textured finish

MW-02
Anodized Aluminium frame/spandrel panel with satin silver grey finish

BR-02
Selected Brick or brick panel system with white tone colour, light colour mortar joint to match, raked

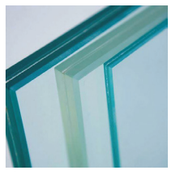


CL_03
Glass fibre reinforced concrete panels cladding system with Ivory colour and matt and textured finish

GL-01
Frameless back painted colour glass

BR-03
Selected Brick or brick panel system with a light grey tone colour, light colour mortar joint to

CL_04
Glass fibre reinforced concrete panels cladding system with liquid black colour

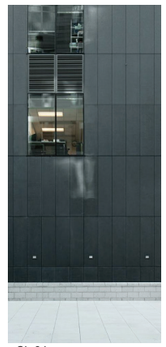


GL-02
Safety glass balustrade system

VIEW 01

VIEW 02

VIEW 03

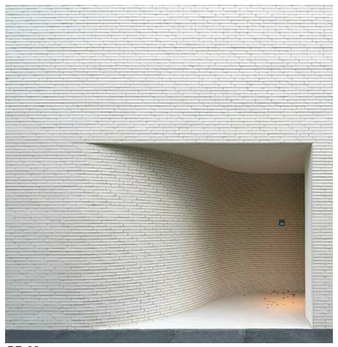


CL-04

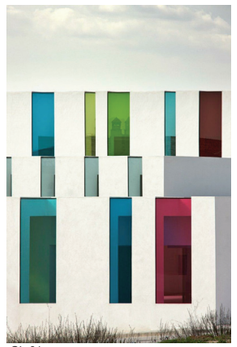
BR-02

CL-03

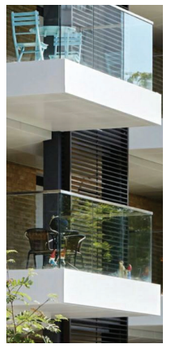
CL-03



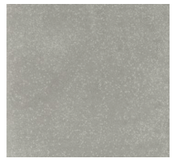
BR-02



GL-01



BR-02
Selected Brick or brick panel system with white tone colour, light colour mortar joint to match, raked



CL_03
Glass fibre reinforced concrete panels cladding system with Ivory colour and matt and textured finish

MW-02
Anodized Aluminium frame/spandrel panel with satin silver grey finish

GL-01
Frameless back painted colour glass

CL_04
Glass fibre reinforced concrete panels cladding system with liquid black colour and matt and textured finish

GL-02
Safety glass balustrade system

BLOCK B

Located along the Boulevard as a continuation of the existing Rockbrook Phase 1 development, Block B was conceived in a light coloured brick in response to its location in the centre of the proposed scheme.

The light coloured walls assist in reflecting natural daylight and sunlight to the surrounding open spaces.

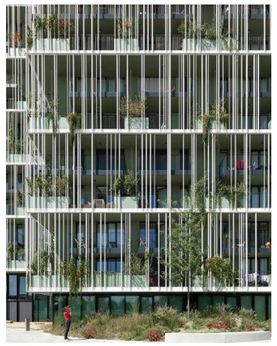
The ground floor comprises of a dark grey coloured GRC rainscreen cladding.

Fig. 70 3D visualisation of proposed Block B with material key and image references

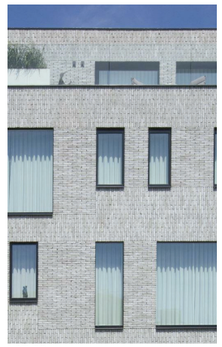
VIEW 01

VIEW 02

VIEW 03



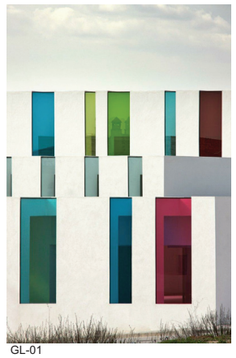
FINS



BR-03

CL-03

CL-03

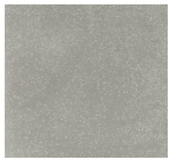


GL-01

GL-02

BR-03

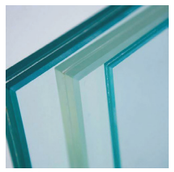
BR-03
Selected Brick or brick panel system with a light grey tone colour, light colour mortar joint to match, raked



CL_03
Glass fibre reinforced concrete panels cladding system with Ivory colour and matt and textured finish

MW-02
Anodized Aluminium frame/spandrel panel with spanish satin silver clear finish

GL-01
Frameless back painted colour glass



GL-02
Safety glass balustrade system

MW-03
Anodized Aluminium frame/spandrel panel with satin charcoal grey finish

BLOCK C-D

While the mass of block C is conceived as a continuation of the existing Rockbrook phase 1 development, the part 17 storey Block D provides a clear break in the streetscape, announcing the presence of the Sandyford Central development with main entrance to the resident amenity suite at its base.

A dark brick is proposed for block C as a transition between the Rockbrook phase 1 development and the proposed Block D.

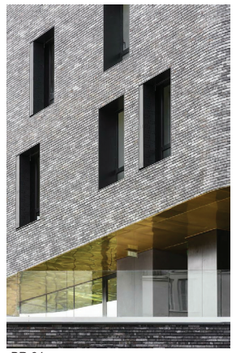
Block D in the other hand is proposed to be treated in a lighter shade of brick with selected indentations clad in a darker shade of GRC rainscreen cladding to emphasise its verticality.

The South elevation facing the pedestrian thoroughfare will feature a metallic cladding system with frameless glass, with metallic fins placed in an apparently “random” pattern to emphasise its verticality in contrast with the repetitive horizontal arrangement of the balconies.

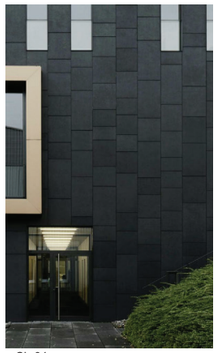
The ground floor level hosting the café and the resident amenities are proposed to be floor to ceiling glazing in a curtain wall system in deep mullions in anodised aluminium.

The proposed rooftop multi-function room will be provided with a floor to ceiling curtain wall system and deep metallic feature fins in a glossy dark grey finish. The external soffit cladding will be designed to provide a sharp edge detail.

Fig. 71 3D visualisation of proposed Blocks C-D with material key and image references

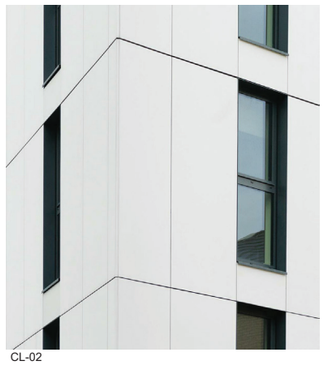

BR-04

MW-01


CL-04

GL-01

GL-02


CL-02

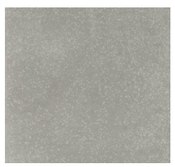
CL-01

BR-04
Selected Brick or brick panel system with dark grey tone colour, light colour mortar joint to match, raked

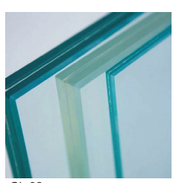
CL_01
Glass fibre reinforced concrete panels cladding system with polar white colour and matt and textured finish

MW-01
Anodized Aluminium frame / spandrel / fins panel with powder coated RAL 9003

GL-01
Frameless back painted colour glass


CL_03
Glass fibre reinforced concrete panels cladding system with Ivory colour and matt and textured finish

MW-02
Anodized Aluminium frame / spandrel / fins panel with spanish satin silver clear finish


GL-02
Safety glass balustrade system

CL_04
Glass fibre reinforced concrete panels cladding system whit liquid black colour

CL_02
Glass fibre reinforced concrete panels cladding system with off white colour

BLOCK E-F

The overall mass and proportions of Block F suggest that the facade treatment for block E and F should avoid a repetitive horizontal composition and be expressed as a solid wall framing the distinctive gables, as further elaborated in the Architectural Design Statement.

Brick in a dark grey colour is proposed for the East and West walls, with recessed indentations clad in a light grey coloured GRC rainscreen.

The proposed gable ends of block E and F provide an opportunity to present the main public spaces with a “special” facade that contrasts with the brick walls and are treated with a high gloss, off-white rainscreen cladding system.

At ground floor level along the Boulevard (levels 1 and 2), the apartments feature a double height GRC cladding system in a dark grey colour to ‘stitch’ the blocks together.

The private open space for the ground floor residential units is screened by metallic fins in a matching dark grey colour.

Fig. 72 3D visualisation of proposed Blocks E&F with material key and image references

5.4. ELEVATIONAL DESIGN STUDIES

Elevational studies for Blocks E-F and C-D are presented in this chapter.

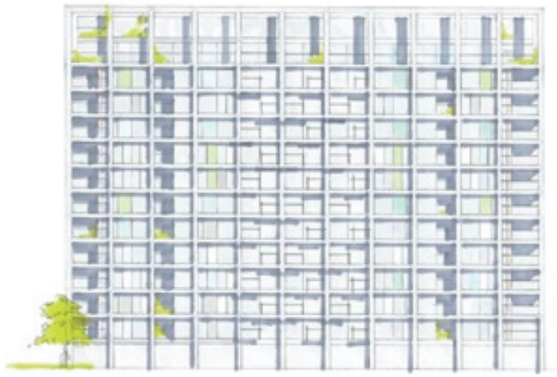
BLOCK E-F

The overall mass and proportions of Block F suggest that the facade treatment for block E and F should avoid a repetitive horizontal composition and be expressed as a solid wall framing the distinctive gables.

Balconies are grouped and displaced in some locations (fig.73), and framed at the gables (fig. 76). Initial design options also included the consideration of Juliette balconies for studio units to maintain a flat façade, but these were later deemed inappropriate as they would not provide the required private amenity space for the studio units.

The ground floor level presents an opportunity to ‘stitch’ the blocks together, introducing a different materiality. The resulting elevational treatment incorporates some elements of the different iterations presented below.

FIG. 73 Initial design sketch showing a “random” pattern arrangement for block E windows, with balconies stacked and displaced to provide a large scale gesture



Block F West Elevation Study 1

A grid approach was considered as a device to provide order and unify the form, with a setback on the top levels. This approach was discarded as it would have conflicted with the façade treatment of the entire scheme.

Block F West Elevation Study 2

A brick wall approach with a regular fenestration pattern was considered. Larger scale gestures such as the grouping and displacement of balconies and framing the gable ends found their way into the elevational treatment at this stage

Block F West Elevation Study 3

This alternative approach to materiality was considered arbitrary and lacking an overall coherence and deemed inappropriate.

Block F West Elevation Study 4

Alternative approach to fenestration pattern and introduction of a different treatment to the ground floor.

FIG. 74 Initial Block E/F elevational treatment studies

The design approach to the gable elevations on blocks E and F, as part of the overall design strategy, arises from the need for contrast within the overall design strategy at key points on the site.

The heavier character of the standard brick wall sides to blocks E and F rely on the play of solid to void to provide visual interest including the treatment of the recessed and external balconies. In contrast the approach to the gable ends is an opportunity for a ‘special’ facade treatment as a reflection of a softer inner core with freedom of expression of elements such as the use of lighter materials, glazed balcony design and a lighter gauze-like treatment over the windows so that the gables frame and announce the entry points to the scheme.

The gable ends of block E and F provide an opportunity to present the main public spaces with a “special” facade that contrasts with the brick walls (fig. 75,76).

FIG.. 75 Reference image: the white gable has a distinct architectural treatment to contrast with the black front elevation.

FIG. 76 Block F gable elevation

The unit layout with the living room in the corner and a projecting balcony system allows for different balcony configurations which can be exploited to provide double or triple height spaces and animate the gable elevation.

Additionally, the amenity of the balcony is increased as the potential overshadowing is reduced (fig.77,78).

On the “brick” side, windows are grouped into double or triple height arrangements to provide large scale gestures.

FIG. 77 Initial 3D visualisation exploring Block F gable treatment

FIG. 78 CGI Image on Carmanhall Road

BLOCK C-D

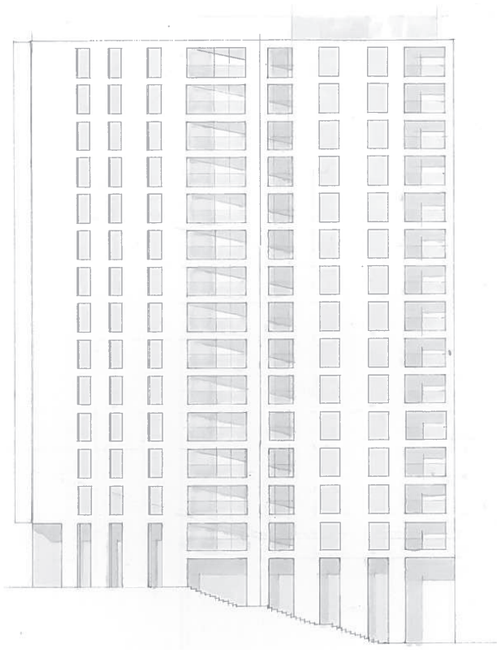
HJL carried out initial massing and height studies for block D considering the context and the extant scheme to arrive at the proposed height. This chapter is intended to elaborate on the design aspect only.

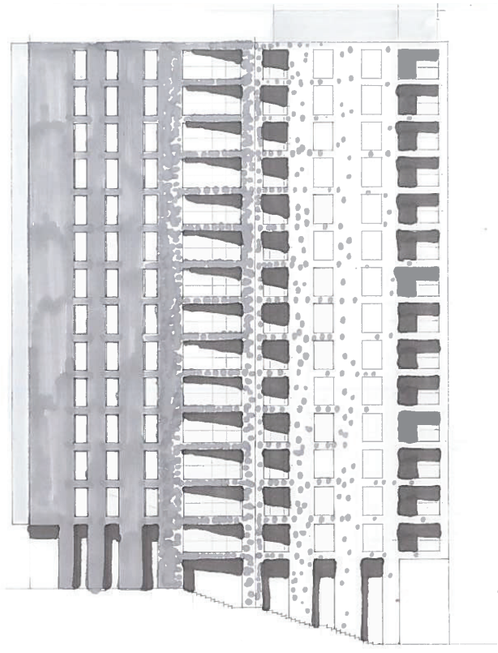
Block C is designed to match the height of the existing Rockbrook development as a continuation of the urban scale along Blackthorn Drive. The interface with the existing Rockbrook development is addressed through a setback and a change in materiality.

Block D on the other hand provides a bookend to the homogenous height along Blackthorn Drive and presents itself as the focal structure of the scheme, marking the main entrance to the Sandyford Central development.

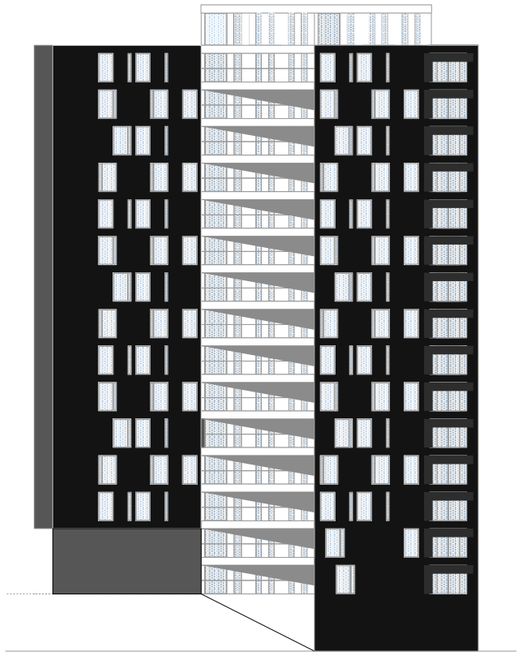
Different height, proportion and materiality studies were carried out to inform the design of Block D elevation as the dominant structure in the scheme (fig. 80,82).

While the northern elevation along Blackthorn Drive has a tall and elegant proportion (fig. 81), the east elevation is longer and suggests that some articulation is required to emphasise its verticality (fig. 79).





1-2. Initial form studies: solid and void



3-4. Design development: Balconies and rooftop communal room unified in their material treatment to articulate the brick walls in 2 volumes. Variations with aligned windows and with the windows displaced on the different levels, and the rooftop communal room acting as a device to crown the building.

FIG. 79 East Elevation: Initial form and materiality studies

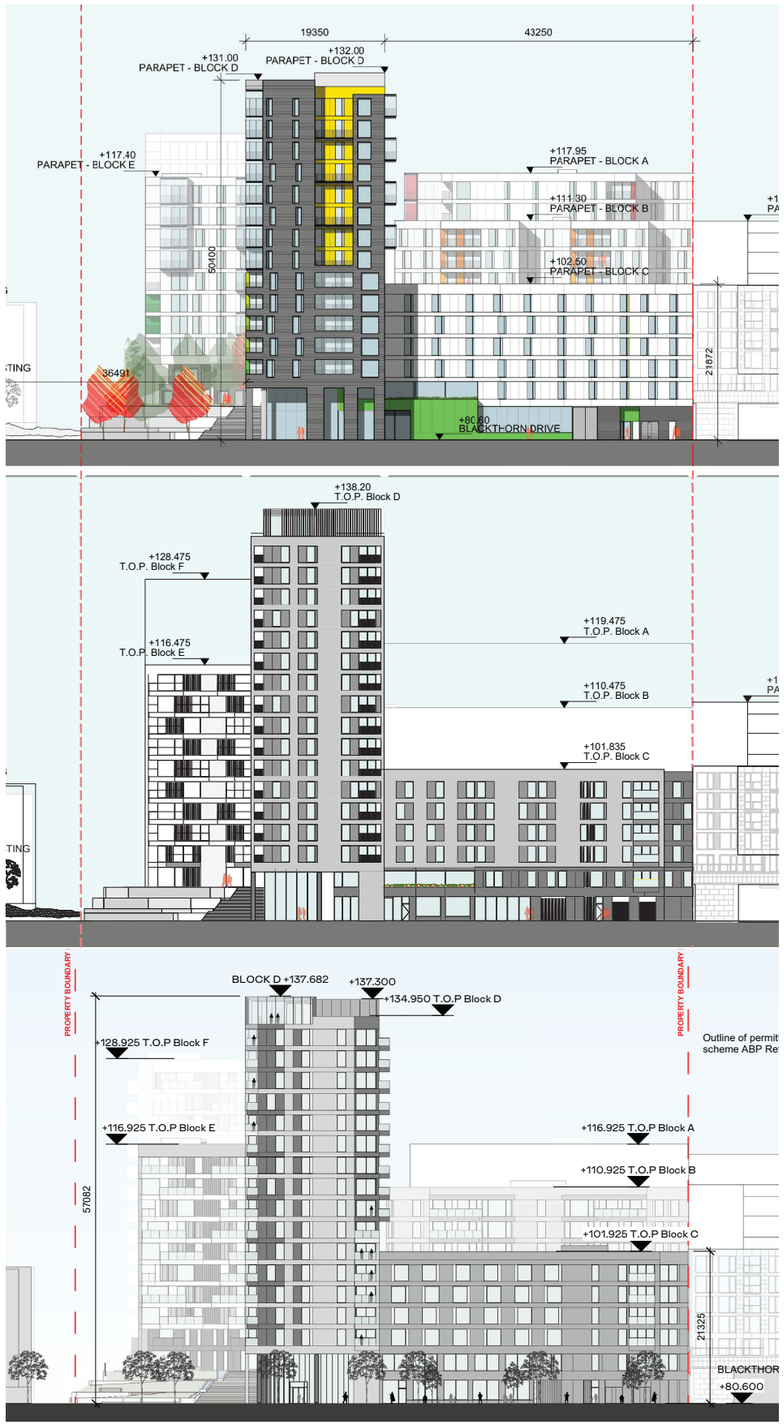


FIG. 80 North Elevation: design development studies with the extant scheme as starting point

FIG. 81 Block C-D: proposed North Elevation

Design alternatives studied as part of the design development of the proposed block D including the use of darker and lighter brick and the break-up of the massing with the introduction of spandrel panels as shown in the accompanying design development images (fig. 82).

Study 1: 3D visualisation showing an elevational treatment consisting of dark brick walls and columns in the corners . The communal multi function room at the top is set back. This option was discarded in favour of the approach shown in study 2.

Study 2: 3D visualisation showing a light coloured brick, with the communal room crowning the building at its corner. A double order treatment in the balcony cladding is used as a device to make the corners lighter, thus increasing the perception of slenderness.

FIG. 82 Block D seen from the Luas stop: design development alternatives

With its slender proportions, the Southern Elevation of Block D marks the end of the pedestrian link axis, acting as an urban marker (fig. 84).

The café with external seating area, the entrance to the amenity block and the créche are located at the base of the tower, providing a focus of urban activity and passive surveillance in direct connection with the public open space (fig.83).

FIG. 83 Block D southern elevation: relation with public open space

FIG. 84 Block D as an urban marker at the end of the North-South pedestrian link

6.0. SELECTED DRAWINGS, CGI'S & SCHEDULES

Disclaimer:

The following drawings represent a significative selection and as such some drawings submitted with this planning application may have been excluded from this selection.

Drawings portrayed in the following pages are **provided for information only** as they may have been annotated and/or fragmented for better legibility.

A set of full-size scaled planning drawings are provided for planning approval in line with the provisions of the Planning Regulations.

PROPOSED SUMMARY SCHEDULE OF ACCOMMODATION

RESIDENTIAL ACCOMMODATION								
LEVEL		By Block						Qty
FLOOR AREA (avg)		A	B	C	D	E	F	
Level	1	6	6	3	0	4	13	**32**
Level	2	13	8	12	5	4	11	**53**
Level	3	15	9	3	7	5	12	**51**
Level	4	15	9	12	7	5	12	**60**
Level	5	15	9	3	7	5	12	**51**
Level	6	15	9	0	7	5	12	**48**
Level	7	15	9	0	7	5	12	**48**
Level	8	15	9	0	7	5	12	**48**
Level	9	15	0	0	7	5	12	**39**
Level	10	15	0	0	7	5	12	**39**
Level	11	5	0	0	7	0	12	**24**
Level	12	0	0	0	7	0	12	**19**
Level	13	0	0	0	7	0	12	**19**
Level	14	0	0	0	7	0	12	**19**
Level	15	0	0	0	7	0	0	**7**
Level	16	0	0	0	7	0	0	**7**
Level	17	0	0	0	0	0	0	**0**
		144	68	33	103	48	168	**564**
TOTAL	Un.	144	68	33	103	48	168	**564**
Internal Nett Area								**36,731**

UNIT MIX	Qty	Avg	%	Dual Aspect		Area sqm.
Studio Units	**46**	39.1	**8.2%**	16		1,798
1B Units	**205**	48.7	**36.3%**	58		9,973
2B Units	**295**	78.5	**52.3%**	250		23,147
3B Units	**18**	100.7	**3.2%**	2		1,812
Total	**564**			326	**57%**	36,731

SUMMARY OF AREAS			
RESIDENTIAL NETT	sqm	36,731	
RESIDENTIAL GROSS (incl. risers)	sqm		45,937
NETT TO GROSS RESIDENTIAL		80.0%	
Resident Amenities (Communal Facilities)	sqm		1,095
Resident support facilities	sqm		185
Créche	sqm		354
Café	sqm		141
Plant	sqm		770
Waste stores & compactors	sqm		305
Ancillary	sqm		554
Subtotal GFA (excl. carpark)	sqm		49,342
CARPARK (L0 & L1)	sqm		9,590
TOTAL (incl. Carpark)	sqm		58,931

(to be read in conjunction with drawing SFC-HJL-00-00-DR-A-1900-1903)

INDICATORS				
PLOT RATIO	49,342	15,426	=	**3.20**
DENSITY (un/Ha)	564	1.54	=	**366**

OPEN SPACE (EXTERNAL)		Required	Provided
Public Open Space	Sqm		**4,117**
Communal Amenity Open Space	Sqm	3,436	**4,761**
Private Open Space	Sqm	3,436	**4,196**
Créche External Play Area	Sqm		239
Open Space Left over after planning	Sqm		1,195

(to be read in conjunction with drawing SFC-HJL-00-00-DR-A-1950)

CARPARKING						
	Standard	Stacked	e-car	U.A.	Subtotal	PROVIDED
Level 0	183	36	25	10	254	**285**
Level 1	29			2	31	
CARPARKING RATIO						**50.5%**
CARPARKING AREA	L.0	8,088	L.1	1,502		**9,590**

BICYCLE PARKING				
Requirement: 1per Bed + 1/2 units:	Residents: 895	Visitors : 282		1,177
PROVIDED SPACES	Stacked parking		Sheffield	Subtotal
Level 0	786		102	888
Level 1	110		30	140
Public Realm			150	150
Total provision	Residents: 896	Visitors:	282	**1,178**

MOTORCYCLE PARKING		
Motorcycle parking spaces required	1:25 cars	11
Motorcycle parking spaces provided	Level 0	**21**

Block	Apts	Type	Count	Mix	Area (nett)	Area Gross	
A	**144**	Studio	-	**0.0%**	**0**		
		1B	**49**	**34.0%**	**2306**		
		2B	**95**	**66.0%**	**7747**		
		3B	-	**0.0%**	**0**		
		Total	**144**	**100.0%**	**10053**	**12275**	**81.9%**

Block	Apts	Type	Count	Mix			
B	**68**	Studio	**6**	**8.8%**	**226**		
		1B	**28**	**41.2%**	**1316**		
		2B	**32**	**47.1%**	**2483**		
		3B	**2**	**2.9%**	**193**		
		Total	**68**	**100.0%**	**4218**	**5267**	**80.1%**

Block	Apts	Type	Count	Mix			
C	**33**	Studio	-	**0.0%**	**0**		
		1B	**16**	**48.5%**	**748**		
		2B	**17**	**51.5%**	**1303**		
		3B	-	**0.0%**	**0**		
		Total	**33**	**100.0%**	**2051**	**2671**	**76.8%**

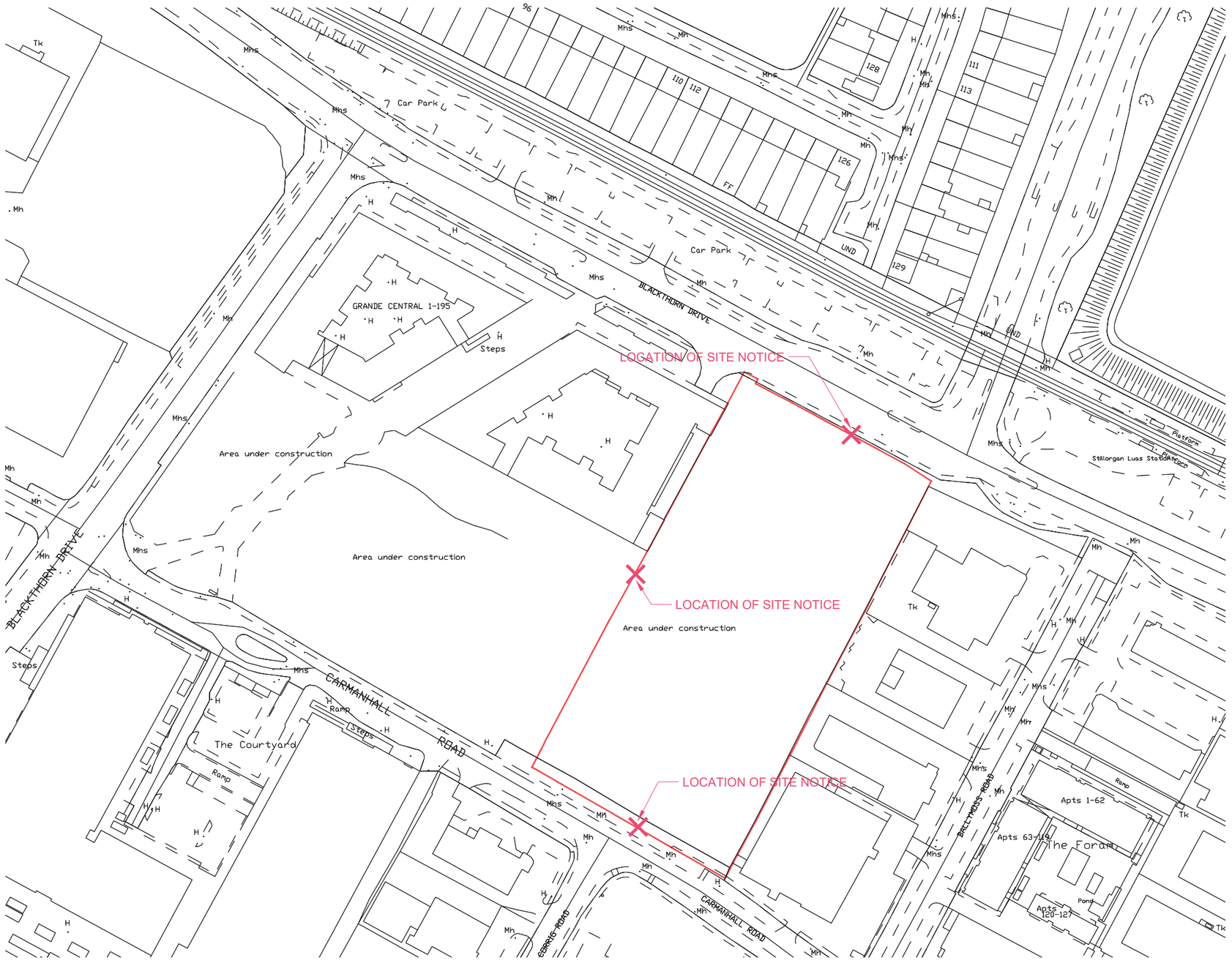
Block	Apts	Type	Count	Mix			
D	**103**	Studio	-	**0.0%**	**0**		
		1B	**74**	**71.8%**	**3718**		
		2B	**29**	**28.2%**	**2289**		
		3B	-	**0.0%**	**0**		
		Total	**103**	**100.0%**	**6006**	**7762**	**77.4%**

Block	Apts	Type	Count	Mix			
E	**48**	Studio	-	**0.0%**	**0**		
		1B	**8**	**16.7%**	**387**		
		2B	**40**	**83.3%**	**3063**		
		3B	-	**0.0%**	**0**		
		Total	**48**	**100.0%**	**3450**	**4206**	**82.0%**

Block	Apts	Type	Count	Mix			
F	**168**	Studio	**40**	**23.8%**	**1573**		
		1B	**30**	**17.9%**	**1499**		
		2B	**82**	**48.8%**	**6263**		
		3B	**16**	**9.5%**	**1619**		
		Total	**168**	**100.0%**	**10953**	**13757**	**79.6%**

ALL BLOCKS	Type	Count	Mix	Area (nett)		
564	Studio	**46**	**8.2%**	**1798**		
	1B	**205**	**36.3%**	**9973**		
	2B	**295**	**52.3%**	**23147**		
	3B	**18**	**3.2%**	**1812**		
	Total	**564**	**100.0%**	**36731**	**45937**	**80%**

SITE LOCATION



Output Format:
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DWG_FULL

Output File:
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V_00_25241027_00000002.DWG

Map Series:
==========
1:1000

3392-19
REVISION DATE = 06-Jun-2014
SURVEY DATE = 31-Dec-1988

3392-20
REVISION DATE = 07-Jul-2014
SURVEY DATE = 31-Dec-1988

Clip Extent:
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LLX,LLY = 718922,726732
LRX,LRY = 719405,726732
ULX,ULY = 718922,727108
URX,URY = 719405,727108

Projection:
==========
ITM

ITM Centre Point Co-ordinate:
==========
X,Y = 719164,726920

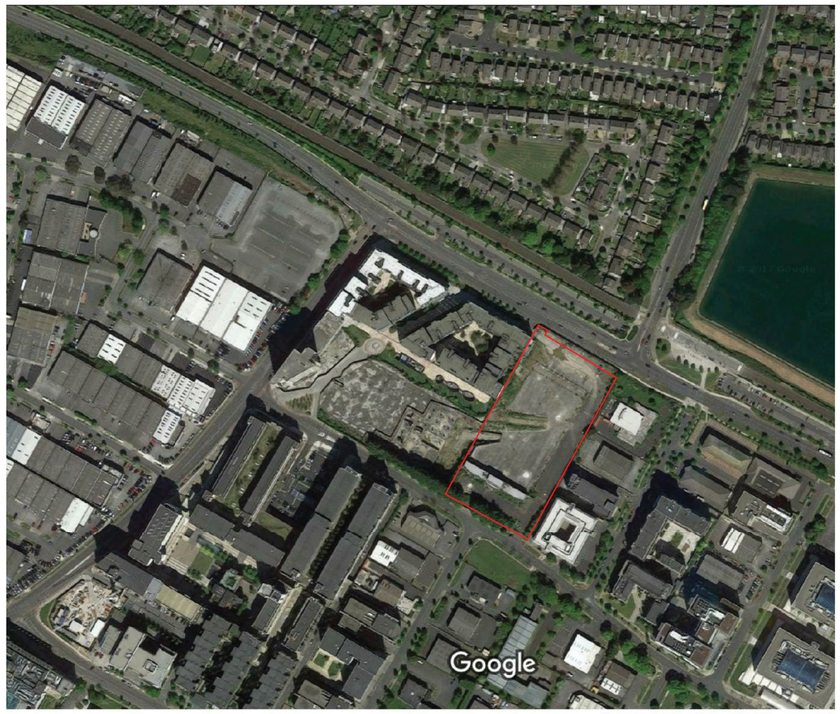
Extraction Date:
==========
24-Sep-2015

Copyright:
==========
© Suirbhéireacht Ordanáis Éireann, 2015
© Ordnance Survey Ireland, 2015

Copyright:
==========
© Suirbhéireacht Ordanáis Éireann, 2010
© Ordnance Survey Ireland, 2010

Location of site notice

CONTEXTUAL SITE PLAN



Aerial View - Source: Google Maps
Approx. Scale 1:2500

Imagery (C)2017 Google Map data (C) 2017 Google Ireland

50m

SANDYFORD CENTRAL SITE REFERENCES

- A. Proposed Block A
- B. Proposed Block B
- C. Proposed Block C
- D. Proposed Block D
- E. Proposed Block E
- F. Proposed Block F

- a. Entrance Steps
- b. Public Open Space
- c. Playground
- d. Communal Amenity Open Space
- e. Boulevard
- f. Pedestrian link

CONTEXT REFERENCES

1. Lakelands housing estate
2. Luas park & ride carpark
3. Bus stop
4. Reservoir
5. Stillorgan Luas Stop
6. Rockbrook Grande Central (Phase I)
7. Rockbrook South Central - Block D (Phase I)
8. The Sentinel
9. Proposed RB Central - ABP Ref. PL06D.304405 (Phase II)
10. Rockbrook Boulevard
11. Pedestrian Link to Blackthorn Drive
12. Public Open Space
13. Beacon South Quarter - Retail Centre
14. Ballymoss House (The Hive)
15. Silverstone House
16. Grafton House - Temporary School (planning permission DLRCC Reg. Ref. D18A/1210)
17. Siemens Site

SUFP 2016-2022 OBJECTIVES

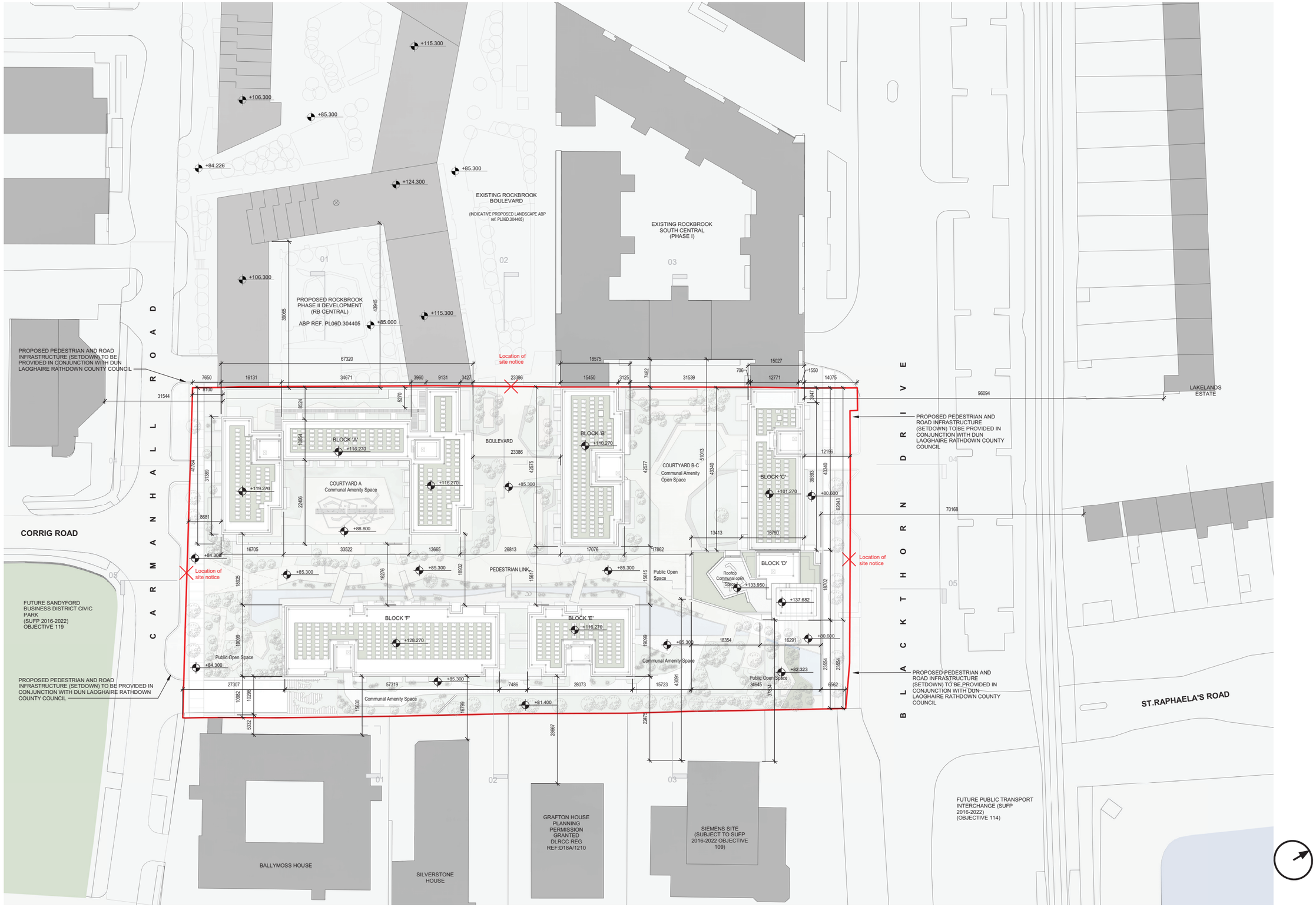
119 To develop a Sandyford Business District Civic Park at the corner of Corrig Road and Carmanhall Road.

109 To seek the provision of a use that animates the street corners e.g. Hotel/Apart Hotel at north western end of Ballymoss Road at the junction with Blackthorn Avenue (Map 1).
Building to be of notable design (Map 3).

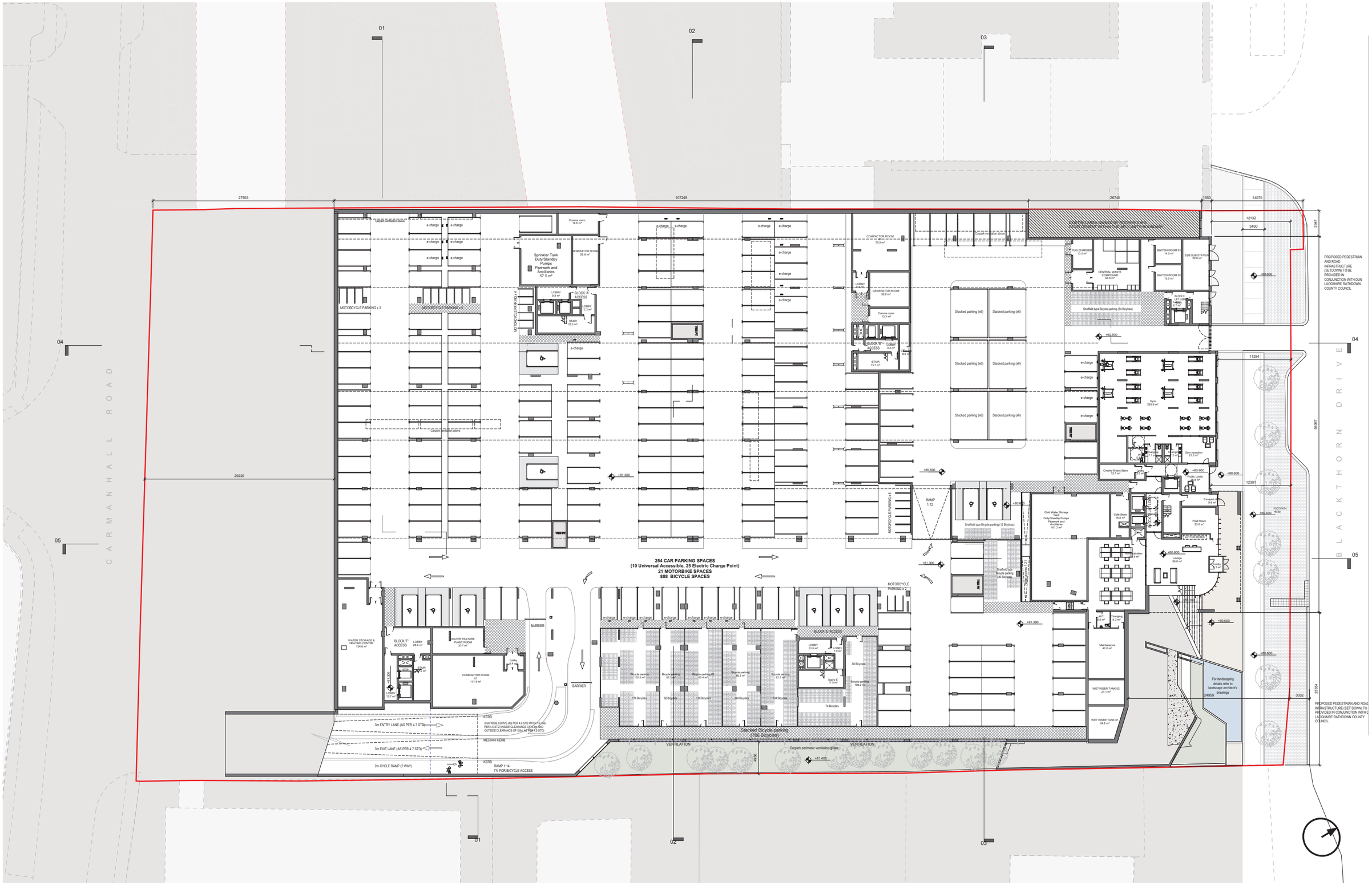
114 To provide a Public Transport Interchange adjacent to the Stillorgan Luas Stop.

121 To ensure the provision of pocket parks and civic spaces in accordance with locations specified on Map 1 and Drawing no.10.

PROPOSED SITE PLAN

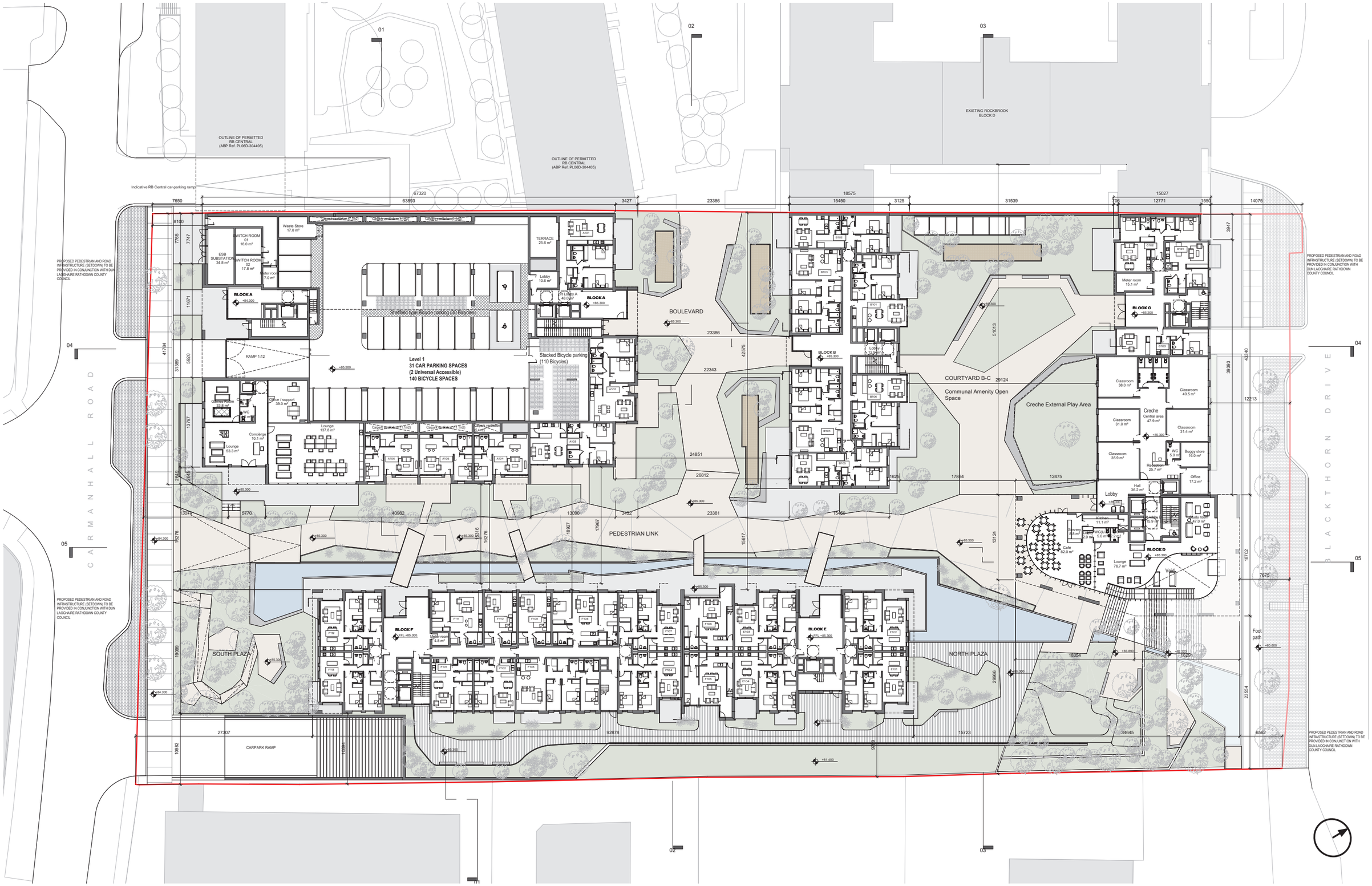


LEVEL 0 LOWER GROUND FLOOR PLAN

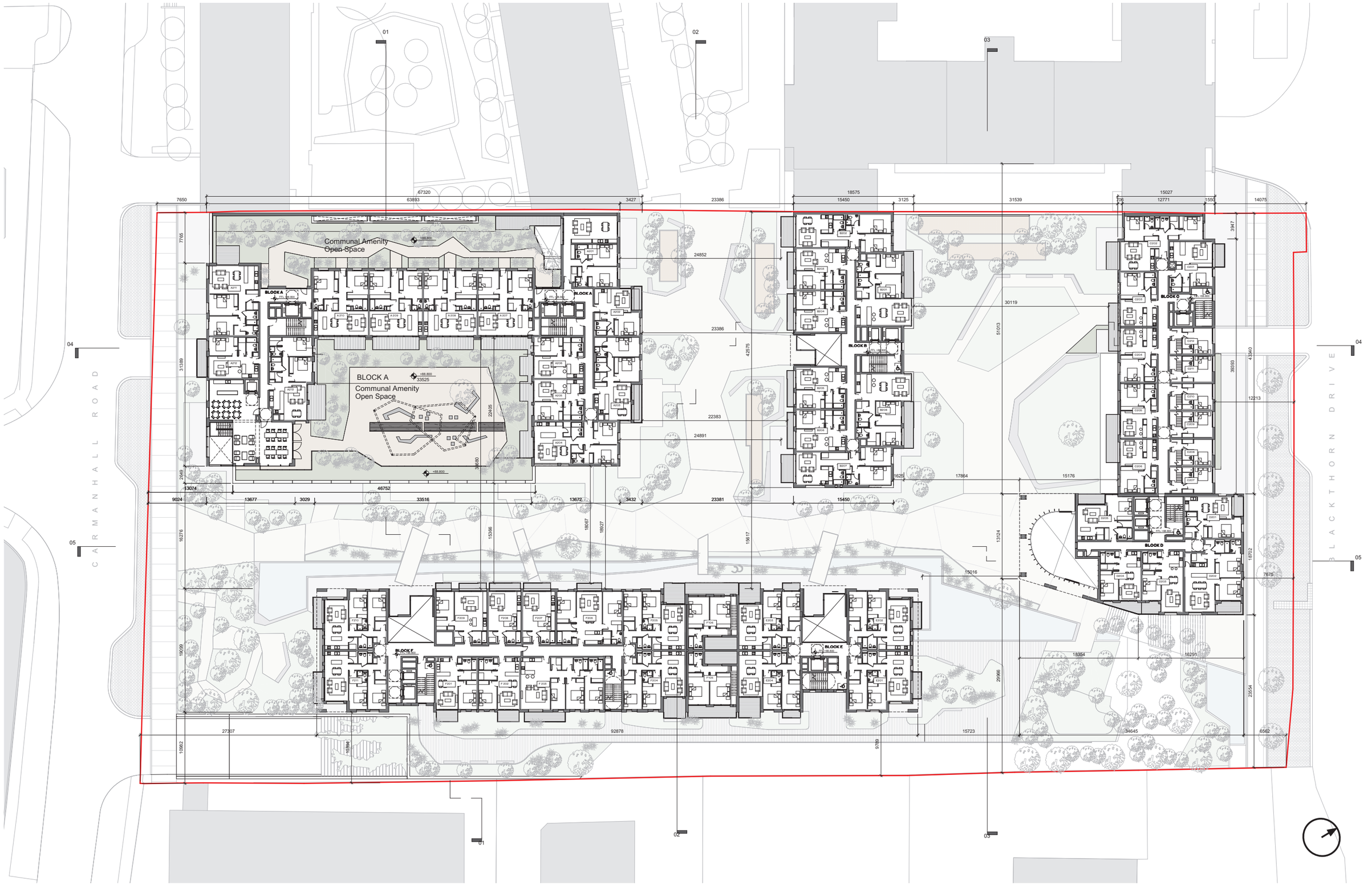


HJL

LEVEL 1 BOULEVARD GROUND FLOOR PLAN

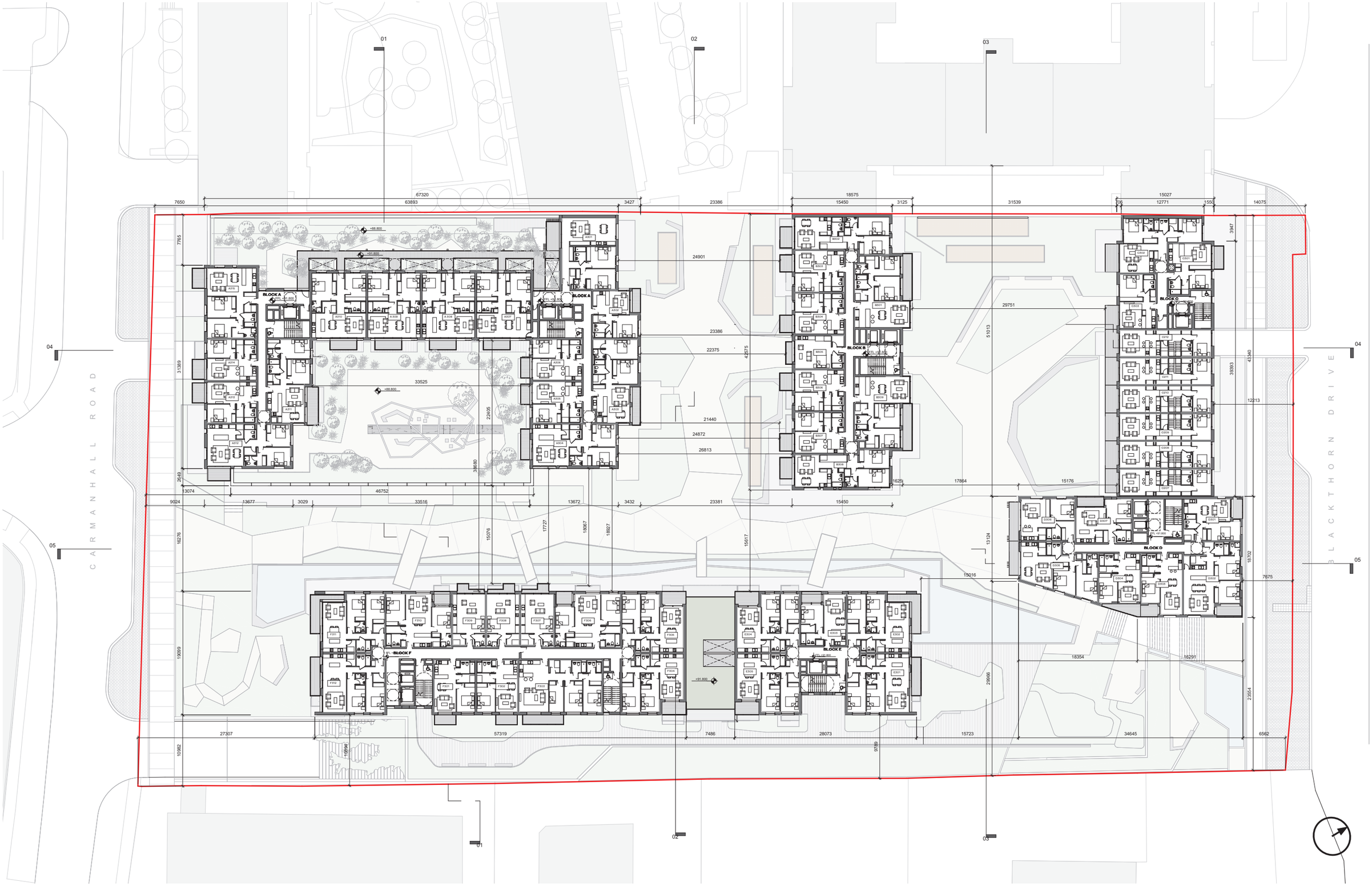


LEVEL 2 FLOOR PLAN

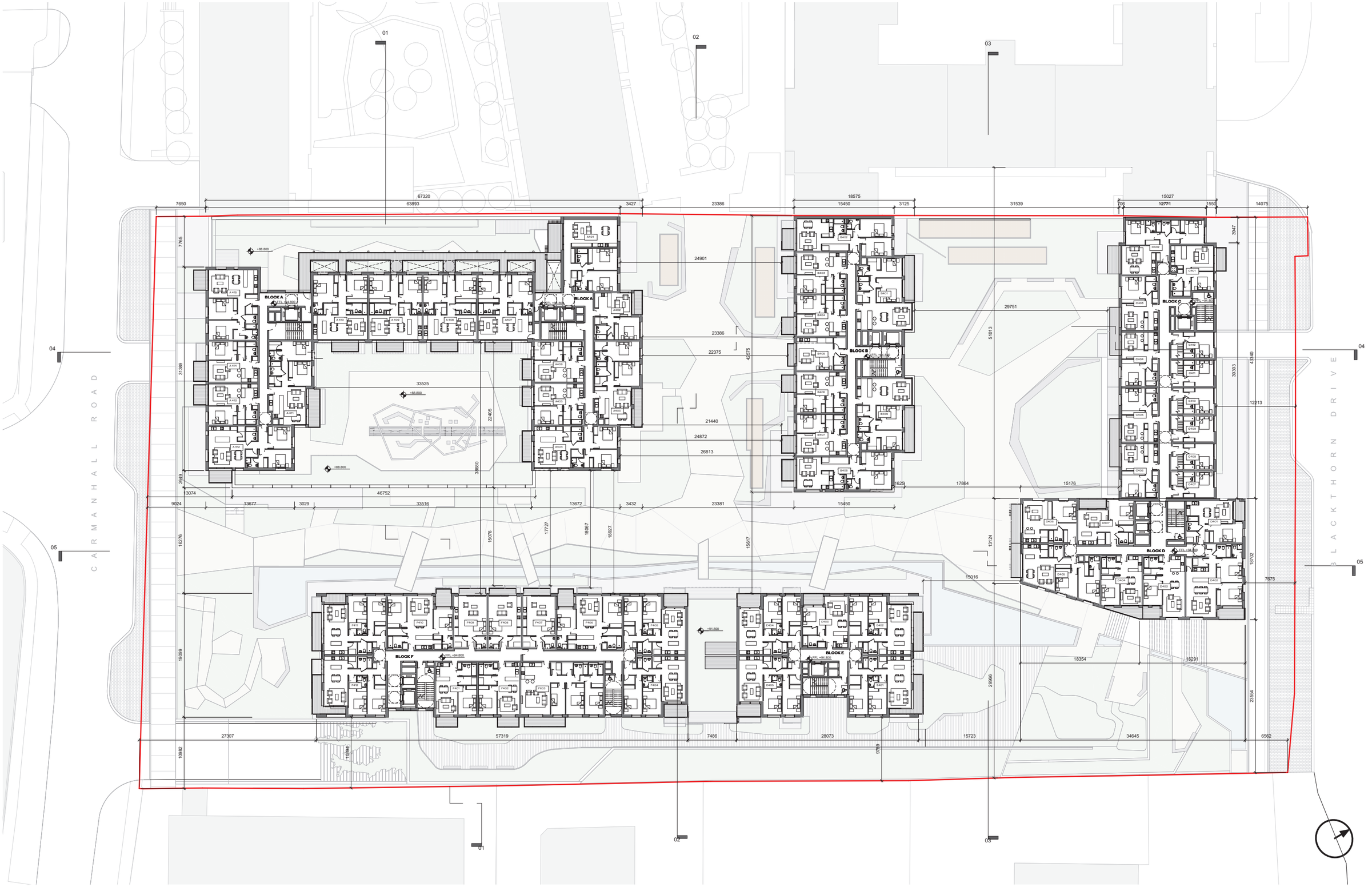


HJL

LEVEL 3 FLOOR PLAN

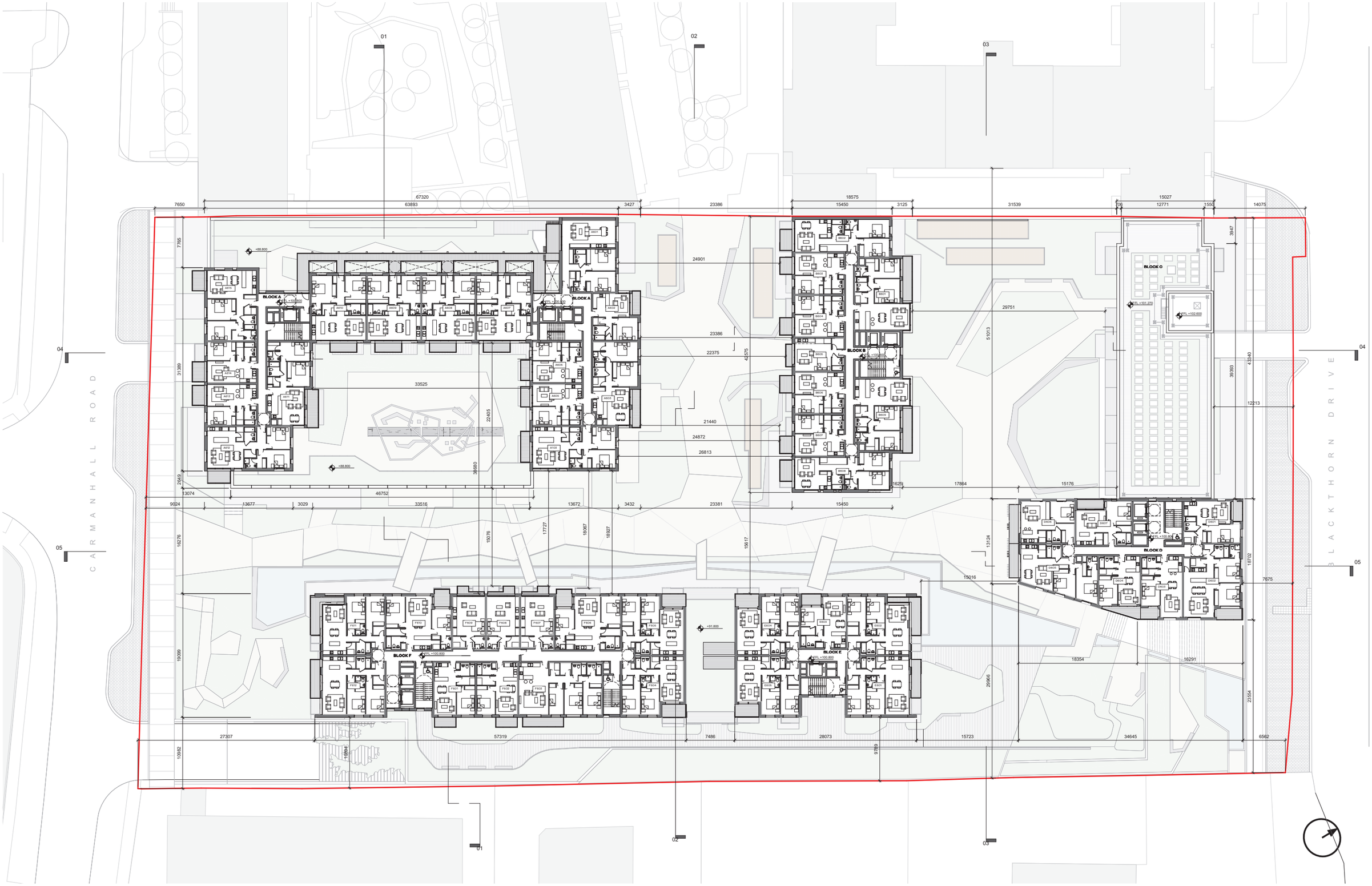


LEVEL 4 FLOOR PLAN

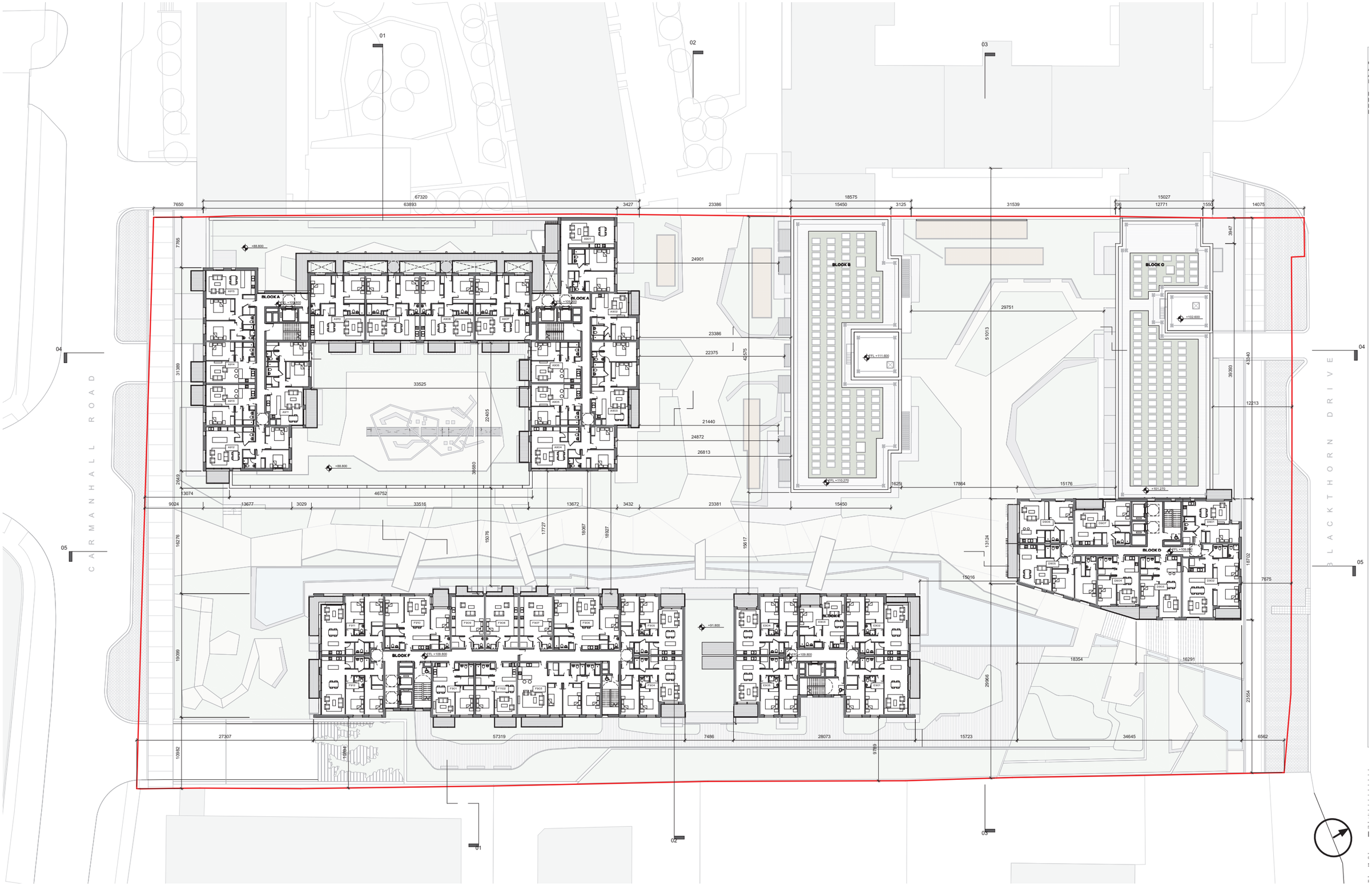


HJL

LEVEL 6 FLOOR PLAN

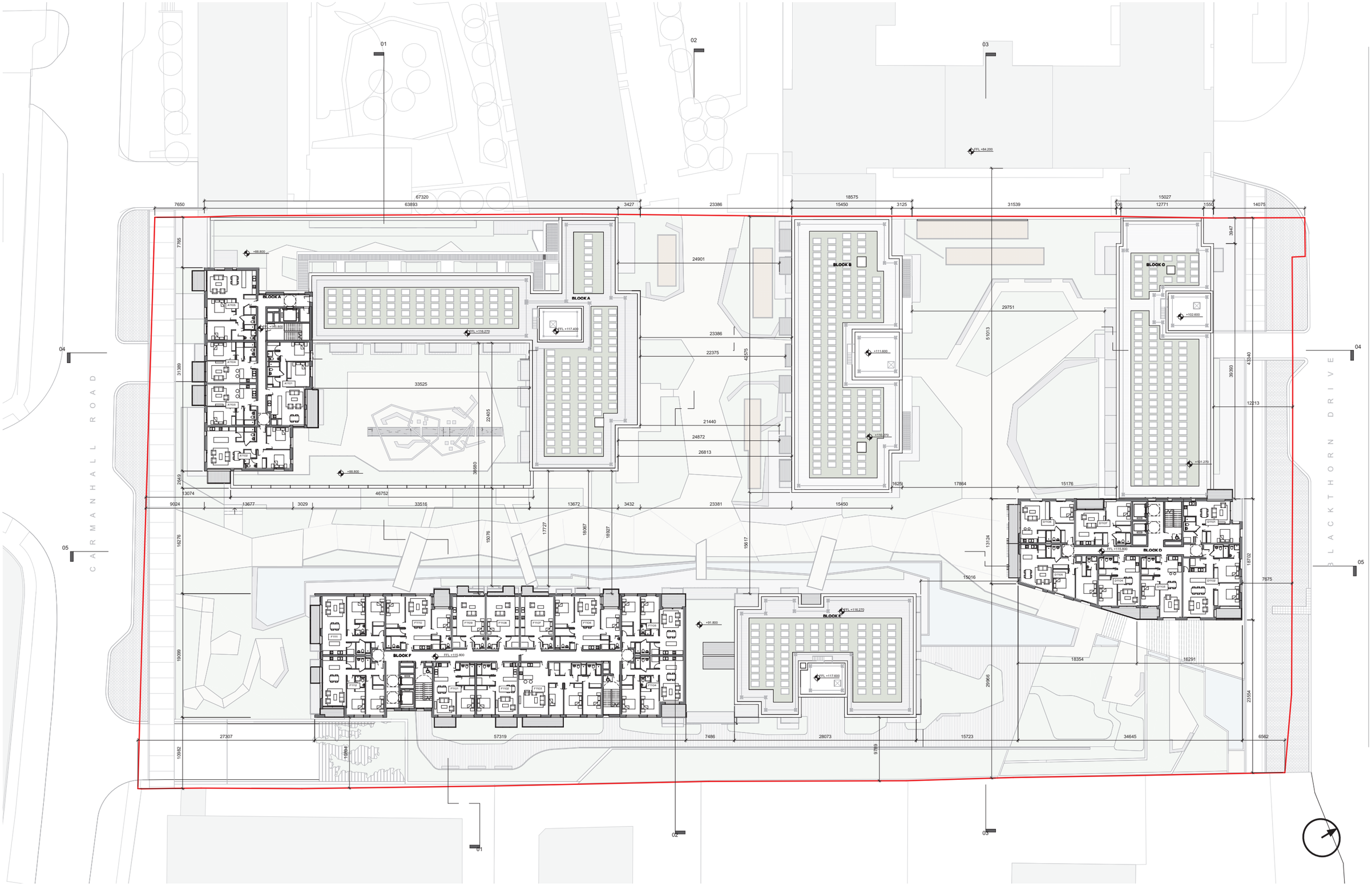


LEVEL 9 FLOOR PLAN

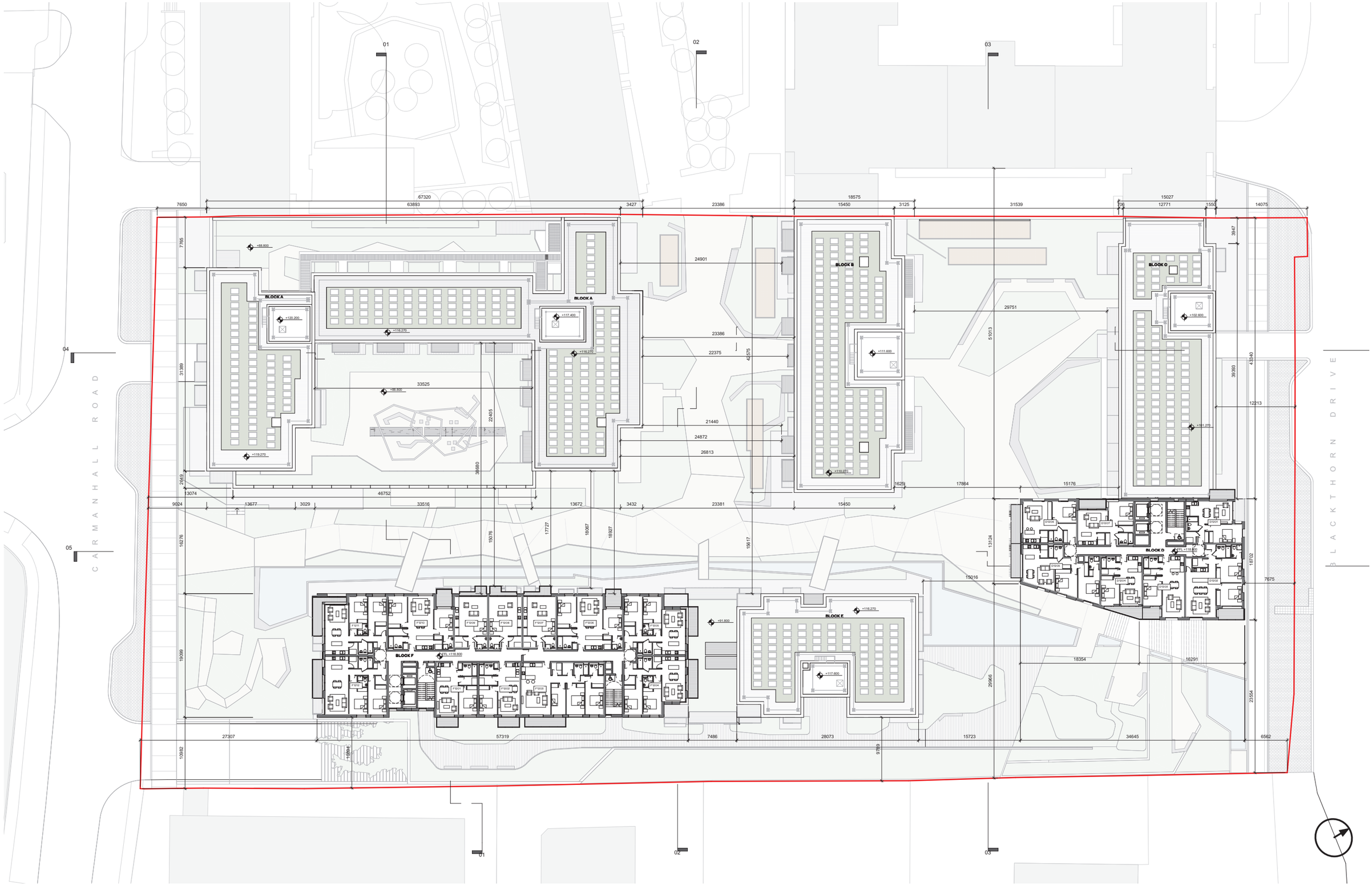


HJL

LEVEL 11 FLOOR PLAN

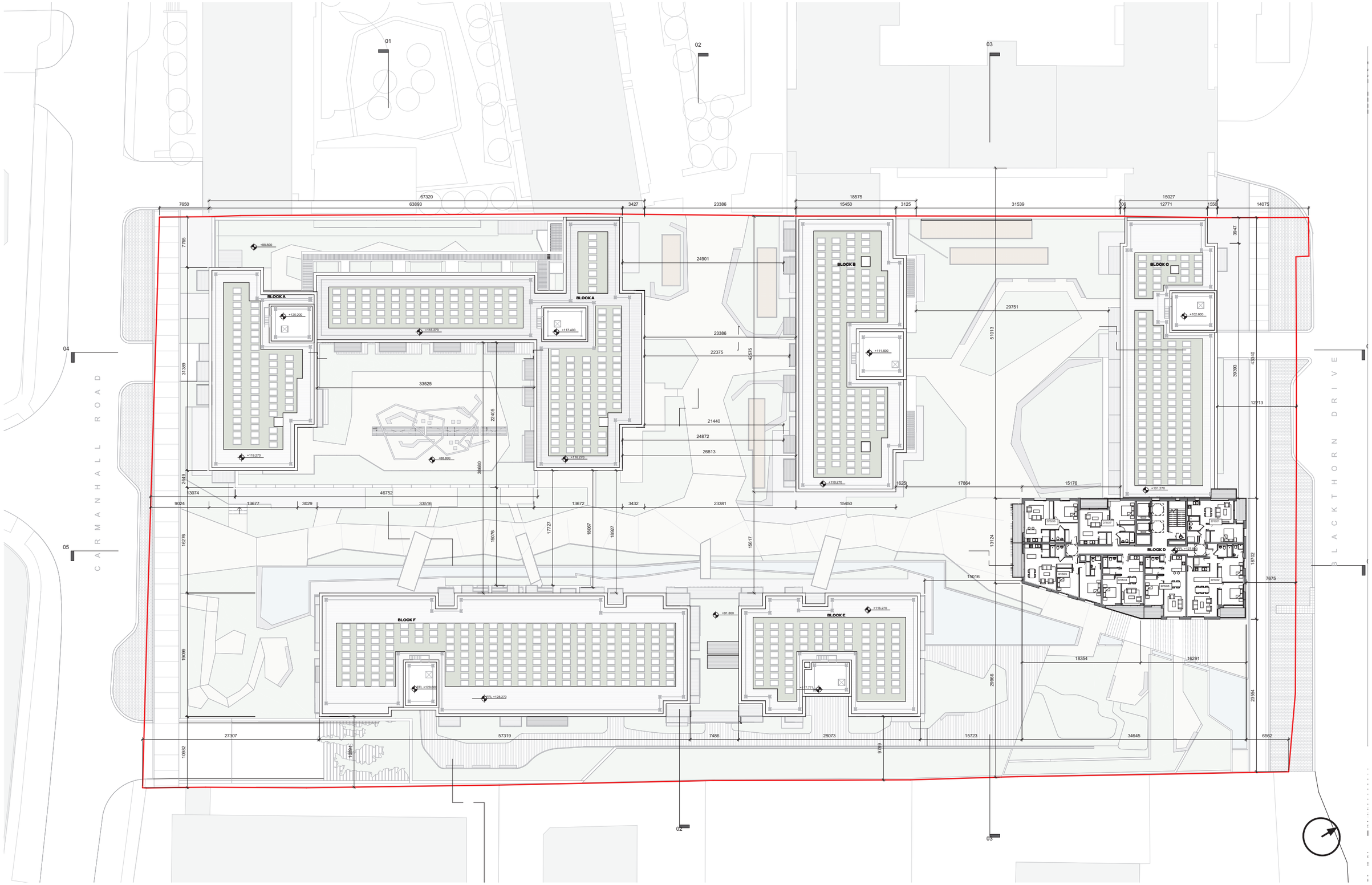


LEVEL 12 FLOOR PLAN

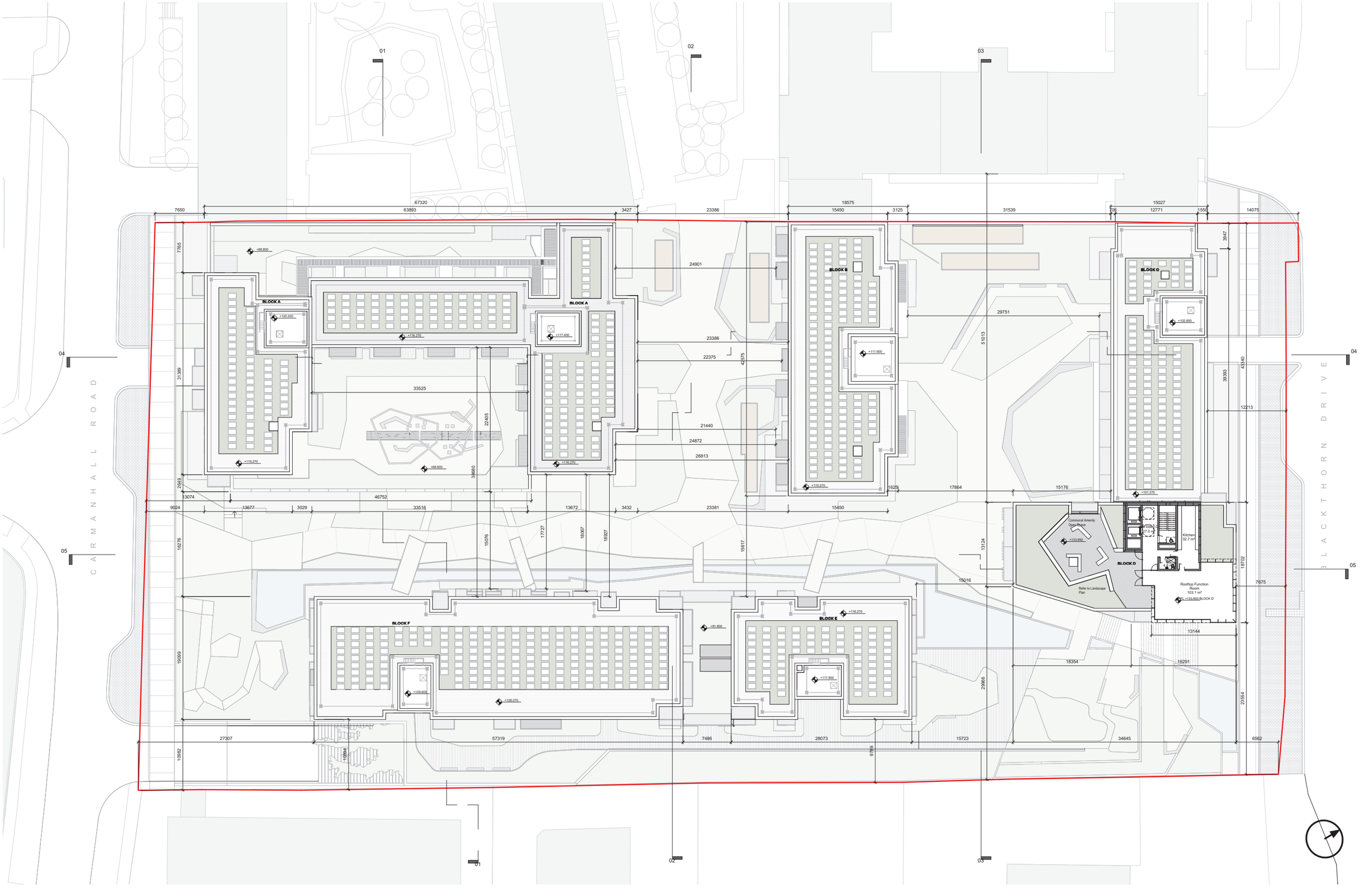


HJL

LEVEL 15 FLOOR PLAN

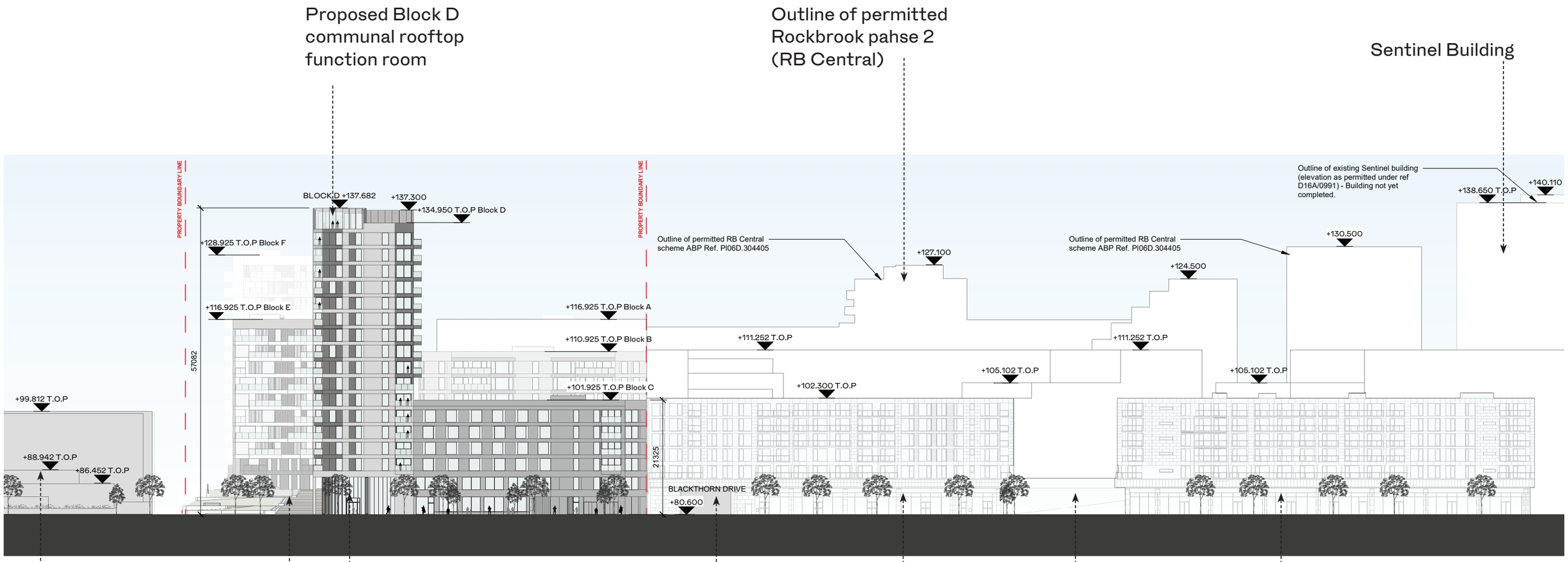


LEVEL 17 FLOOR PLAN



HJL

NORTHEAST ELEVATION - BLACKTHORN DRIVE



Siemens site:

SUFP 2016-2022
objective: Building
of notable design

Proposed Sandyford Central public open space and main entrance steps to Boulevard level

Proposed Block C&D
Resident amenities

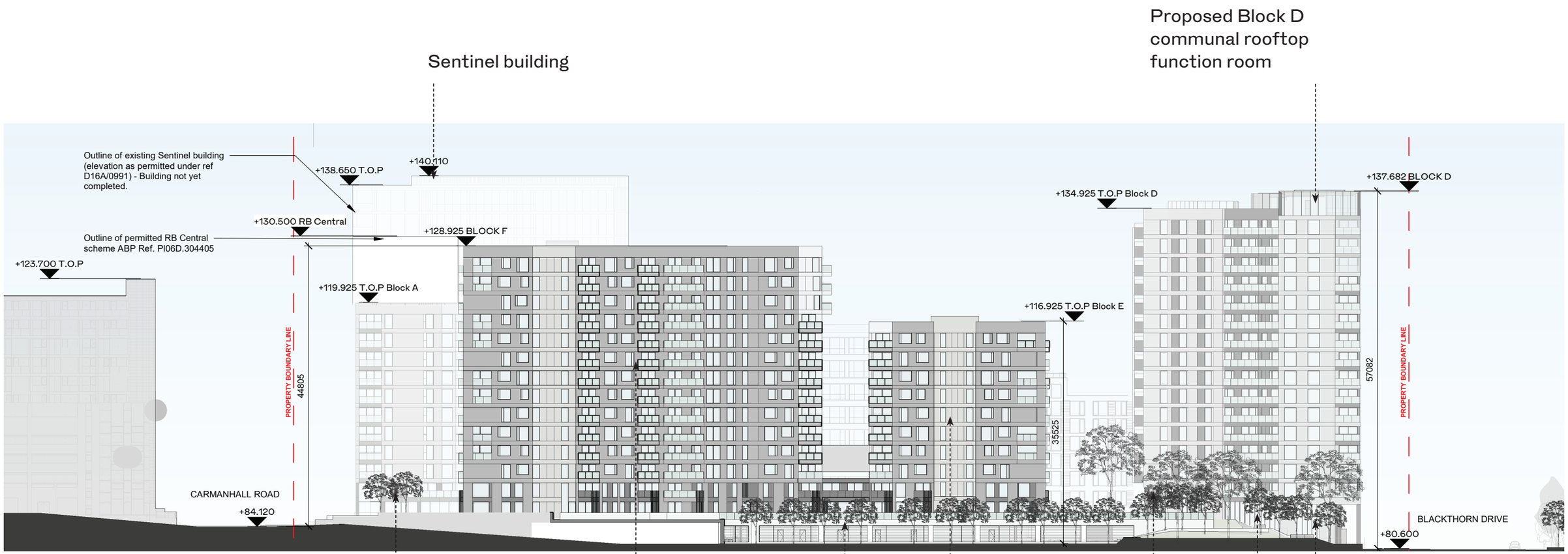
Exisiting Rockbrook
carpark entrance

Exisiting Retail
units

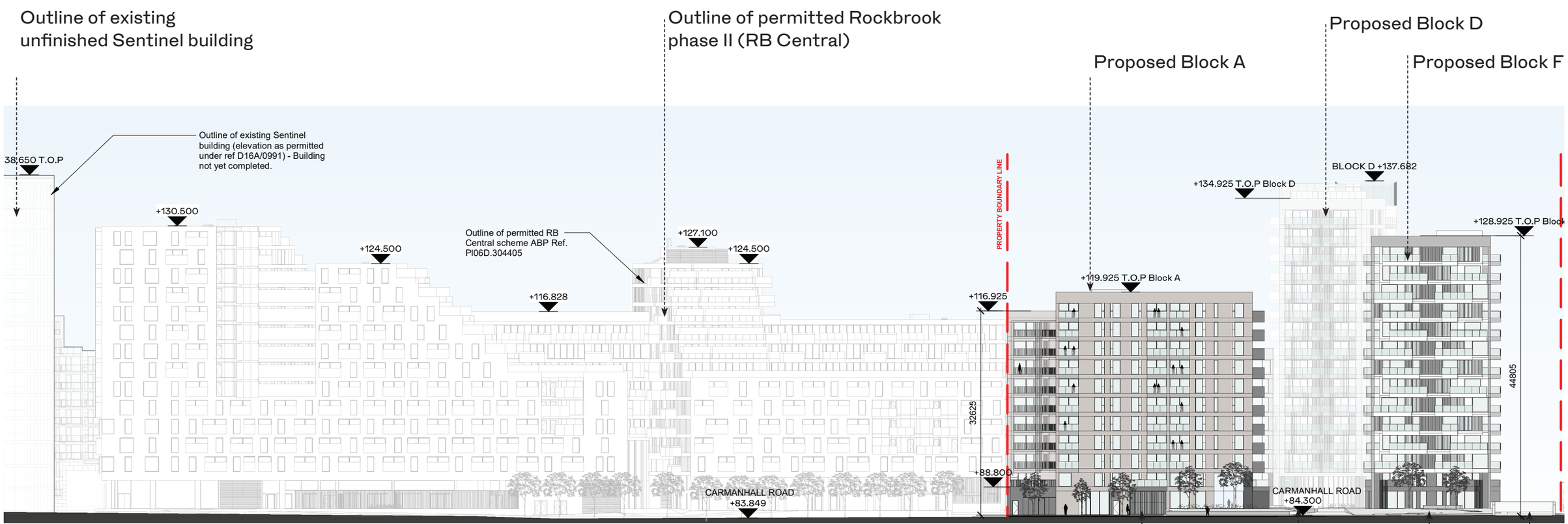
Existing Pedestrian
ramped access
to Boulevard
(Rockbrook phase 1)

Exisiting Retail
units

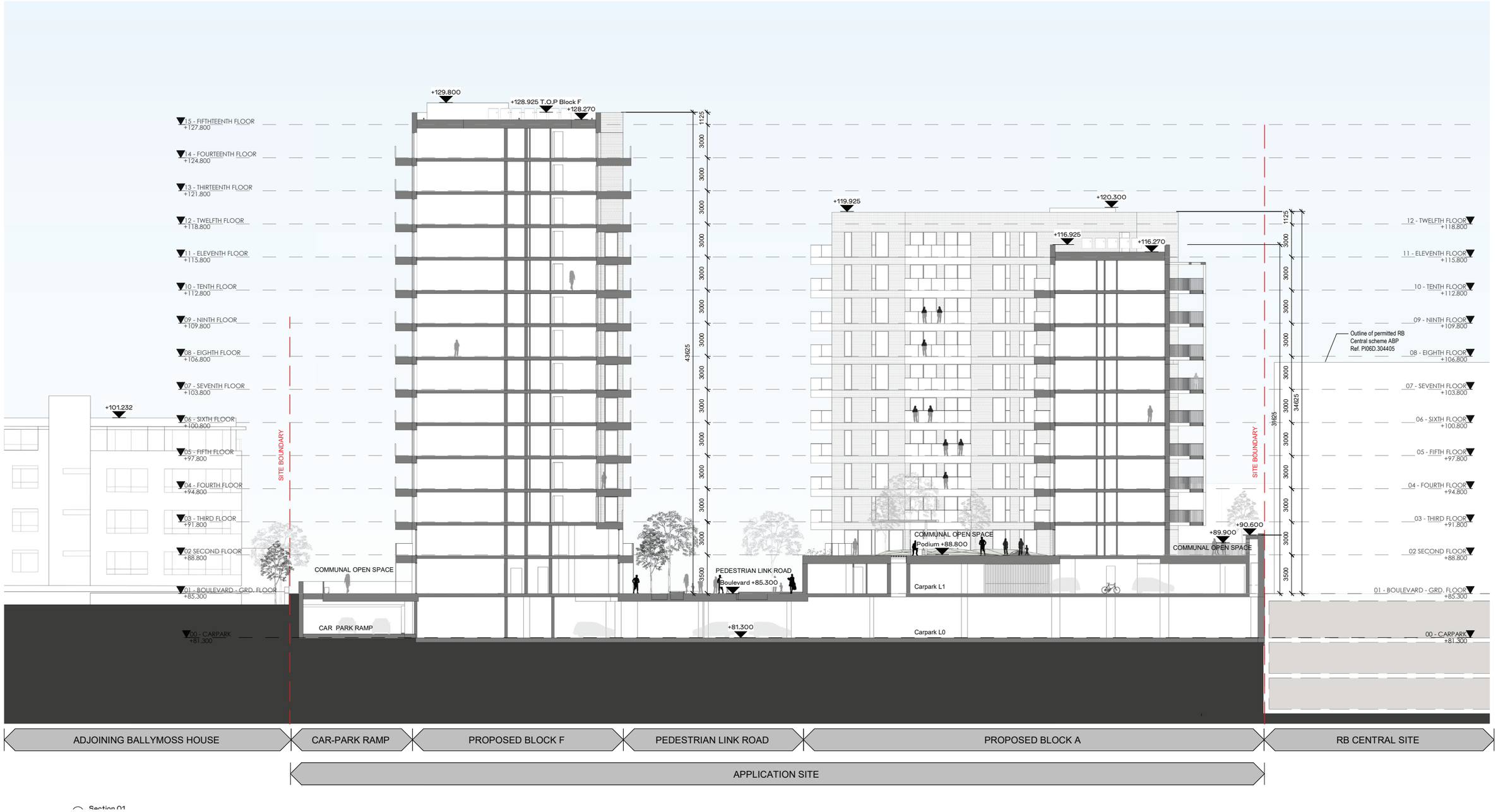
SOUTHEAST ELEVATION - BOUNDARY



SOUTHWEST ELEVATION - CARMANHALL ROAD



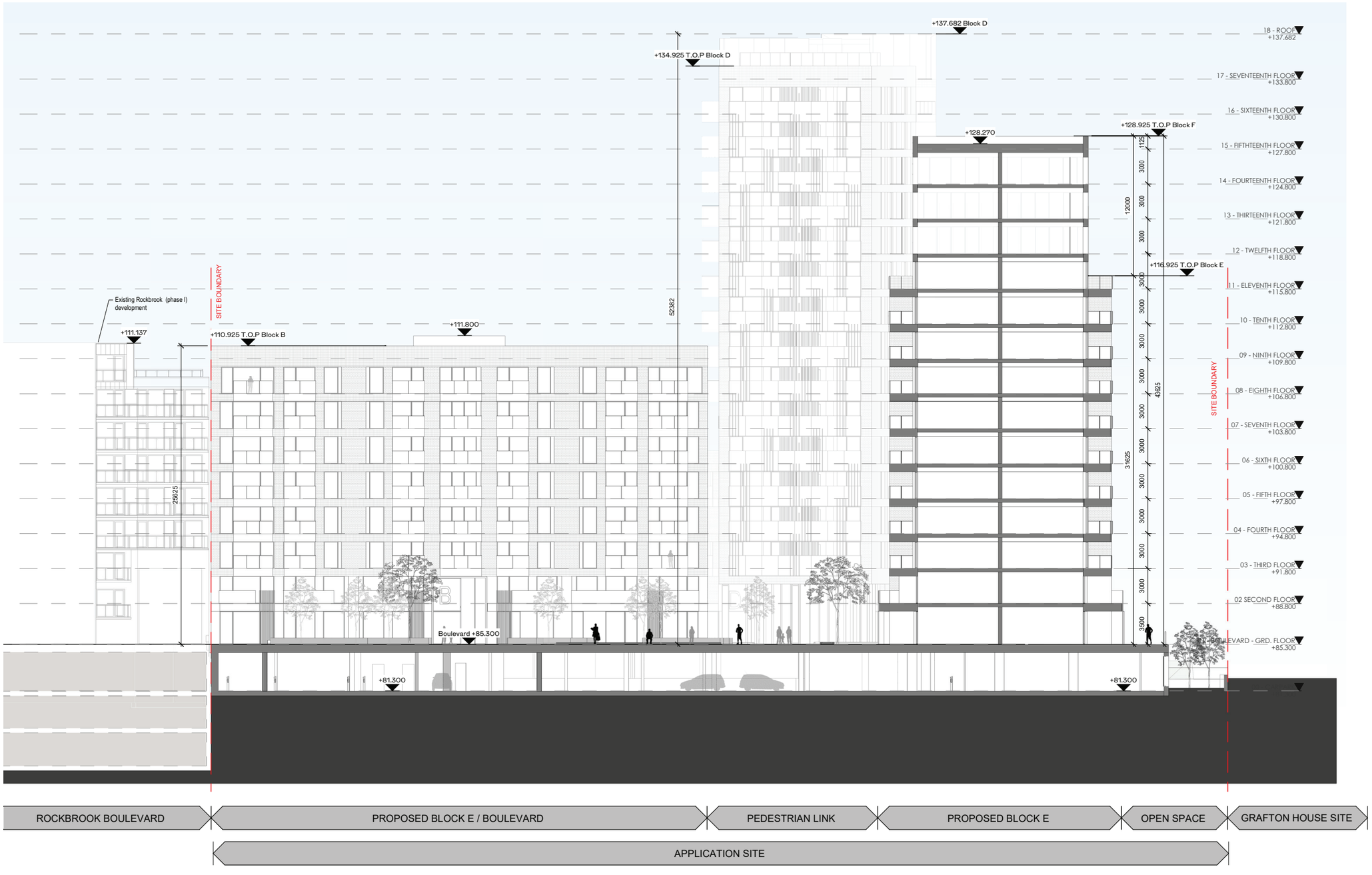
SECTION 01



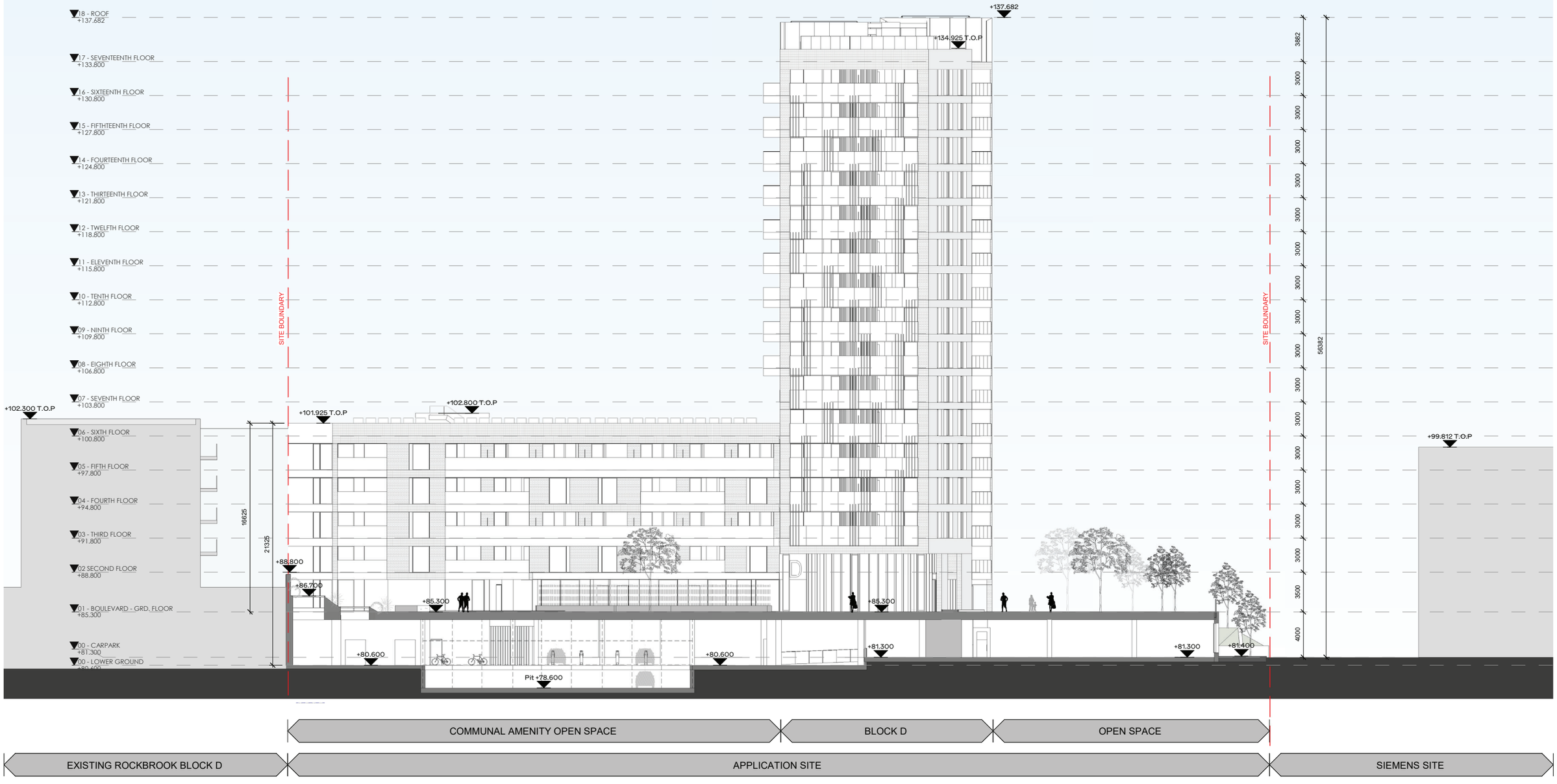
Section 01

HJL

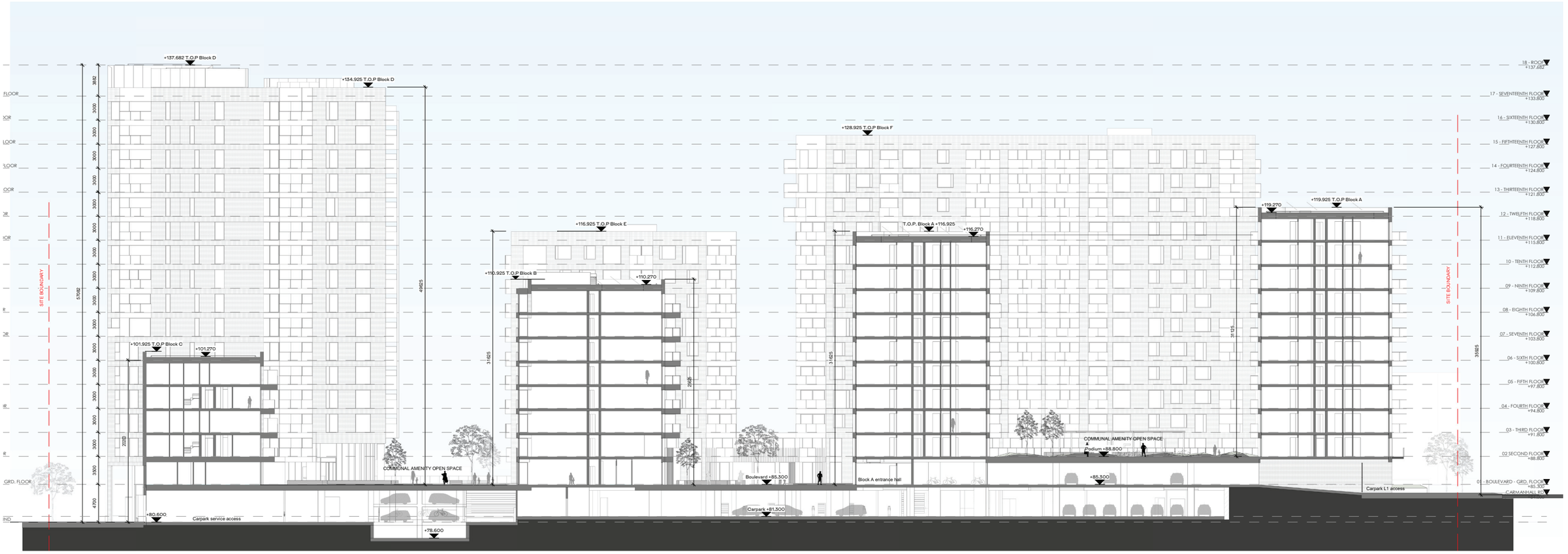
SECTION 02


+137.682 Block D
+134.925 T.O.P Block D
+128.925 T.O.P Block F
+128.270
+116.925 T.O.P Block E
+111.800
+111.137
+110.925 T.O.P Block B
Existing Rockbrook (phase I) development
SITE BOUNDARY
SITE BOUNDARY
52382
25625
31625
12000
1125
3000
3500
4325
18 - ROOF +137.682
17 - SEVENTEENTH FLOOR +133.800
16 - SIXTEENTH FLOOR +130.800
15 - FIFTHTEENTH FLOOR +127.800
14 - FOURTEENTH FLOOR +124.800
13 - THIRTEENTH FLOOR +121.800
12 - TWELFTH FLOOR +118.800
11 - ELEVENTH FLOOR +115.800
10 - TENTH FLOOR +112.800
09 - NINTH FLOOR +109.800
08 - EIGHTH FLOOR +106.800
07 - SEVENTH FLOOR +103.800
06 - SIXTH FLOOR +100.800
05 - FIFTH FLOOR +97.800
04 - FOURTH FLOOR +94.800
03 - THIRD FLOOR +91.800
02 SECOND FLOOR +88.800
01 - BOULEVARD - GRD. FLOOR +85.300
Boulevard +85.300
+81.300
+81.300
ROCKBROOK BOULEVARD
PROPOSED BLOCK E / BOULEVARD
PEDESTRIAN LINK
PROPOSED BLOCK E
OPEN SPACE
GRAFTON HOUSE SITE
APPLICATION SITE

SECTION 03


18 - ROOF
+137.682
17 - SEVENTEENTH FLOOR
+133.800
16 - SIXTEENTH FLOOR
+130.800
15 - FIFTHTEENTH FLOOR
+127.800
14 - FOURTEENTH FLOOR
+124.800
13 - THIRTEENTH FLOOR
+121.800
12 - TWELFTH FLOOR
+118.800
11 - ELEVENTH FLOOR
+115.800
10 - TENTH FLOOR
+112.800
09 - NINTH FLOOR
+109.800
08 - EIGHTH FLOOR
+106.800
07 - SEVENTH FLOOR
+103.800
06 - SIXTH FLOOR
+100.800
05 - FIFTH FLOOR
+97.800
04 - FOURTH FLOOR
+94.800
03 - THIRD FLOOR
+91.800
02 SECOND FLOOR
+88.800
01 - BOULEVARD - GRD. FLOOR
+85.300
00 - CARPARK
+81.300
00 - LOWER GROUND
+80.100
SITE BOUNDARY
+137.682
+134.925 T.O.P
+102.300 T.O.P
+101.925 T.O.P
+102.800 T.O.P
+99.612 T.O.P
16625
21325
+88.800
+86.700
+85.300
+85.300
+80.600
+80.600
+81.300
+81.300
+81.400
Pit +78.600
3882
3000
3000
3000
3000
3000
3000
3000
3000
3000
3000
3000
3000
3500
4000
56382
SITE BOUNDARY
COMMUNAL AMENITY OPEN SPACE
BLOCK D
OPEN SPACE
EXISTING ROCKBROOK BLOCK D
APPLICATION SITE
SIEMENS SITE

SECTION 04


+137.682 T.O.P Block D
+134.925 T.O.P Block D
+128.925 T.O.P Block F
+116.925 T.O.P Block E
+119.925 T.O.P Block A
+119.270
T.O.P. Block A +116.925
+116.270
+110.925 T.O.P Block B
+110.270
+101.925 T.O.P Block C
+101.270
COMMUNAL AMENITY OPEN SPACE
Podium +88.800
Boulevard +85.300
Block A entrance hall
Carpark L1 access
Carpark +81.300
+80.600
Carpark service access
+78.600
SITE BOUNDARY
18 - ROOF +137.682
17 - SEVENTEENTH FLOOR +133.800
16 - SIXTEENTH FLOOR +130.800
15 - FIFTEENTH FLOOR +127.800
14 - FOURTEENTH FLOOR +124.800
13 - THIRTEENTH FLOOR +121.800
12 - TWELFTH FLOOR +118.800
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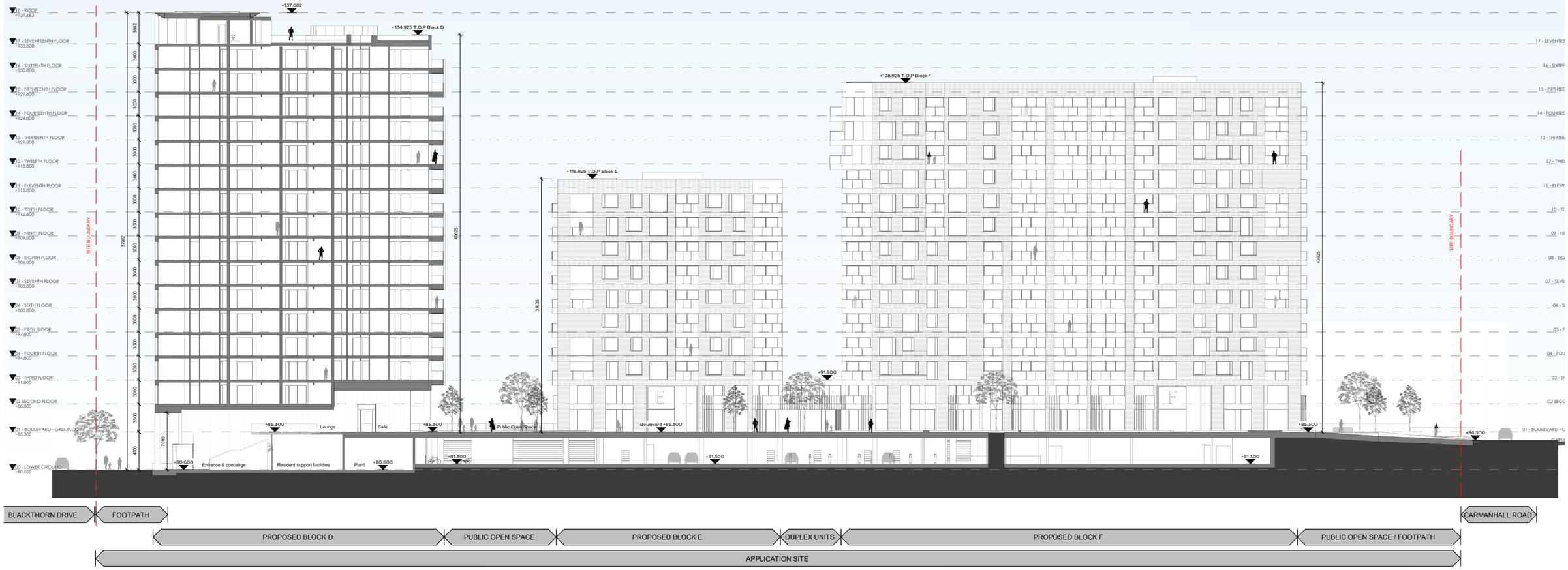
08 - EIGHTH FLOOR +106.800
07 - SEVENTH FLOOR +103.800
06 - SIXTH FLOOR +100.800
05 - FIFTH FLOOR +97.800
04 - FOURTH FLOOR +94.800
03 - THIRD FLOOR +91.800
02 SECOND FLOOR +88.800
01 - BOULEVARD - GRD. FLOOR +85.300
CARMANHALL RD
GRD. FLOOR
N DRIVE
FOOTPATH
PROPOSED BLOCK C
COMMUNAL AMENITY OPEN SPACE
PROPOSED BLOCK B
BOULEVARD
PROPOSED BLOCK A
FOOTPATH
CARMANHALL ROAD
APPLICATION SITE

SECTION 05



Section 05
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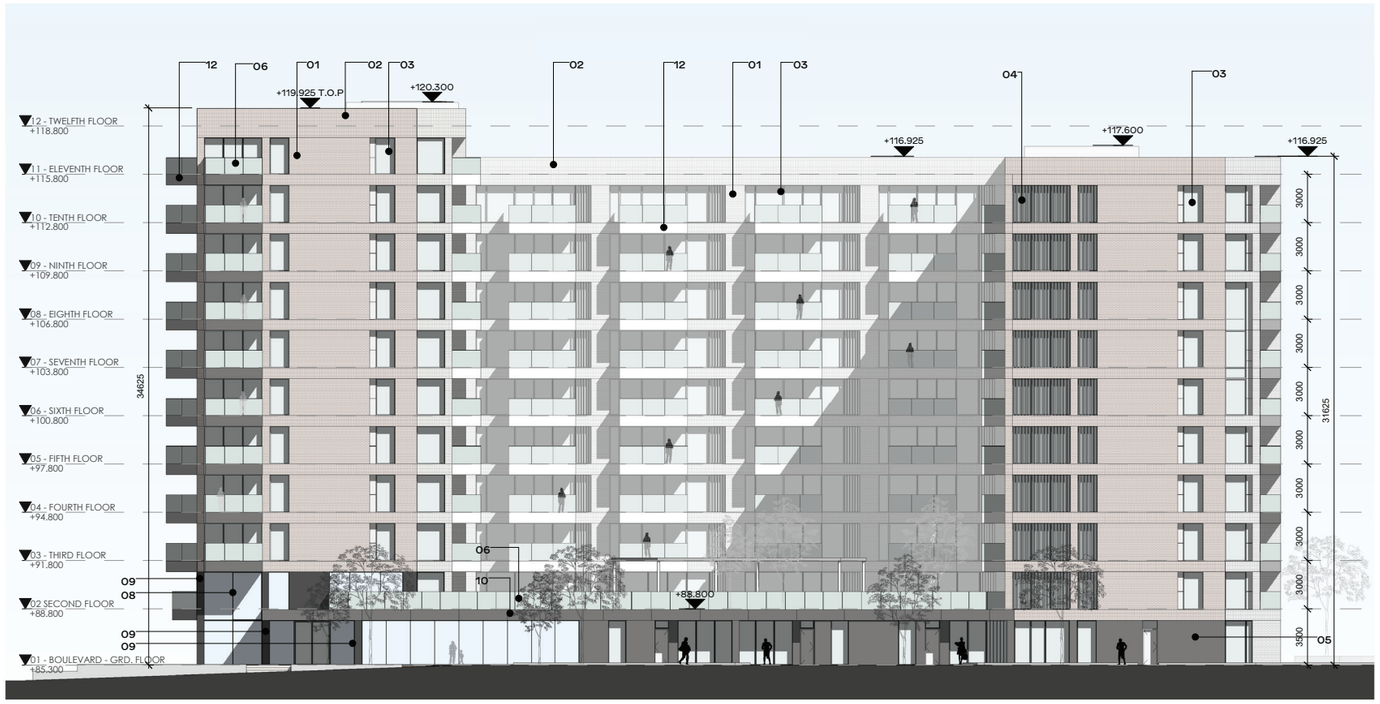
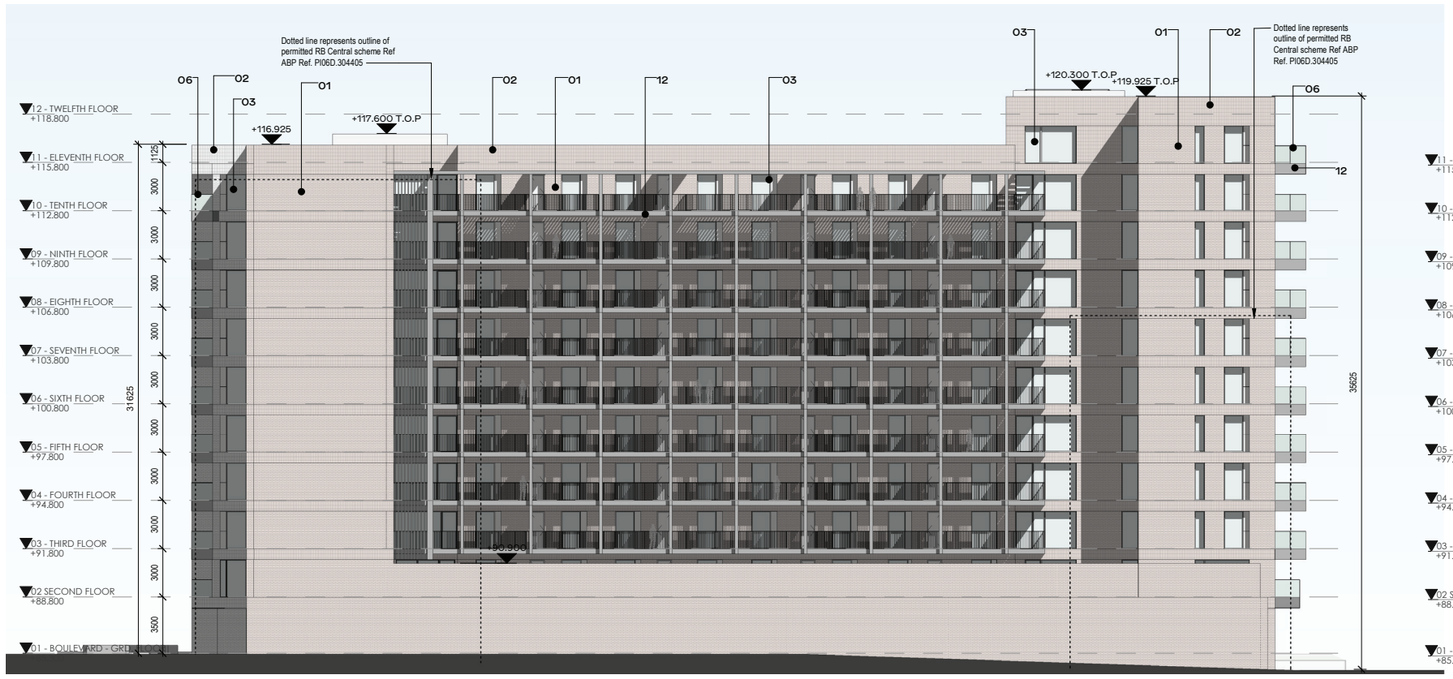
HJL

BLOCK A ELEVATIONS



Southeast Elevation - Pedestrian Link

Southwest Elevation - Carmanhall Road

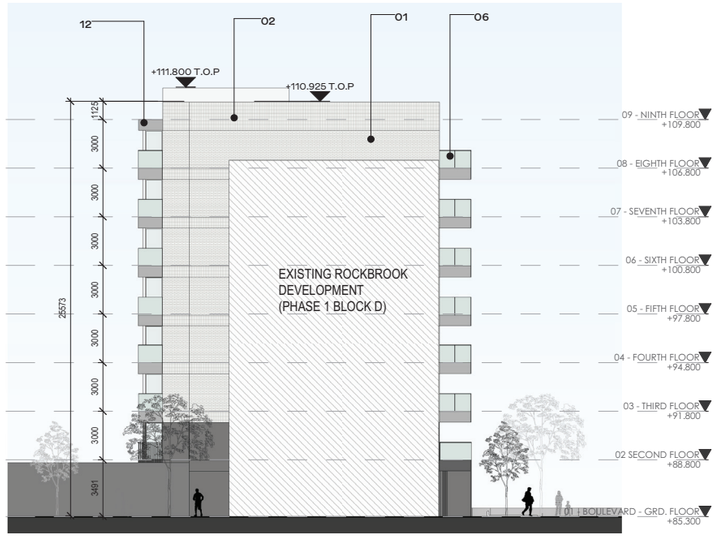


Northwest Elevation - Partly gable end to RB central

Northeast Elevation - Boulevard

BLOCK B ELEVATIONS

Southwest Elevation - Boulevard



Northwest Elevation - Gable End to Rockbrook blc D

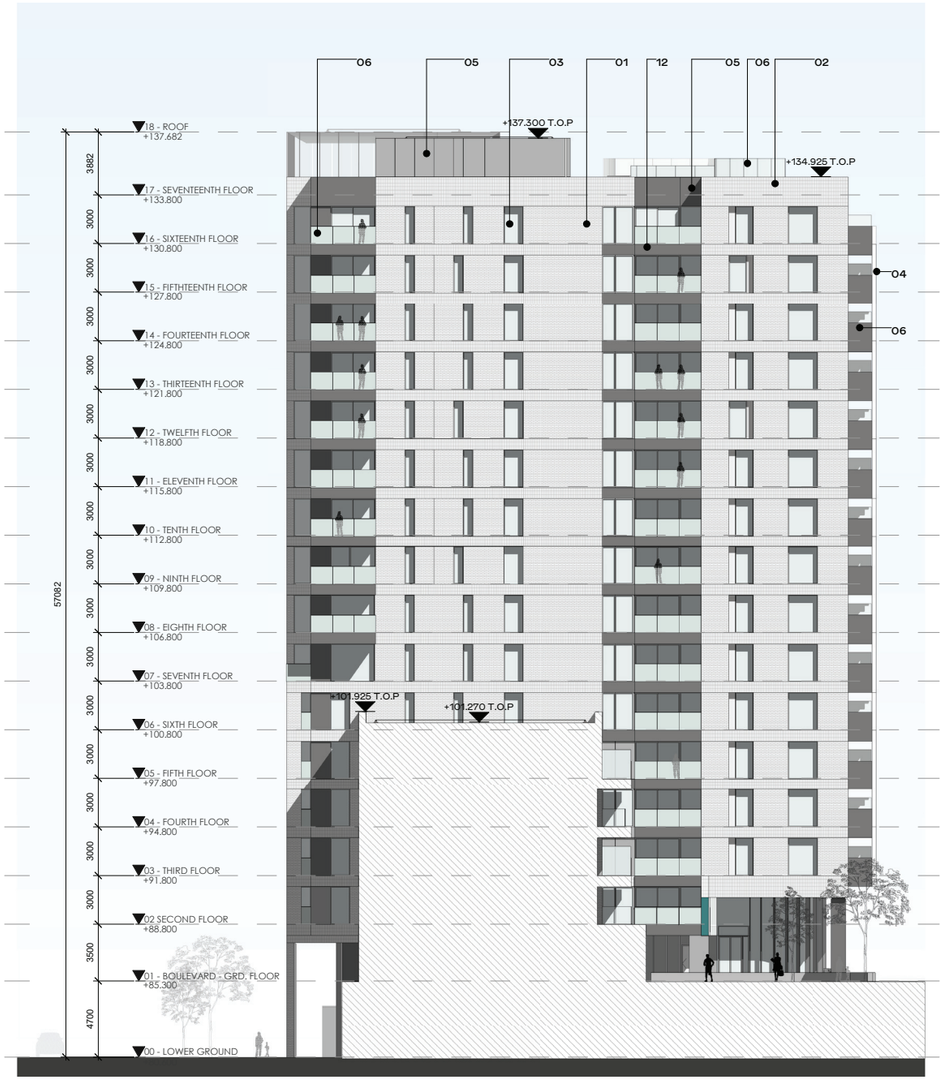
Northeast Elevation - Internal courtyard BC

Southeast Elevation - Gable End to pedestrian link

BLOCK C & D ELEVATIONS

Northeast Elevation

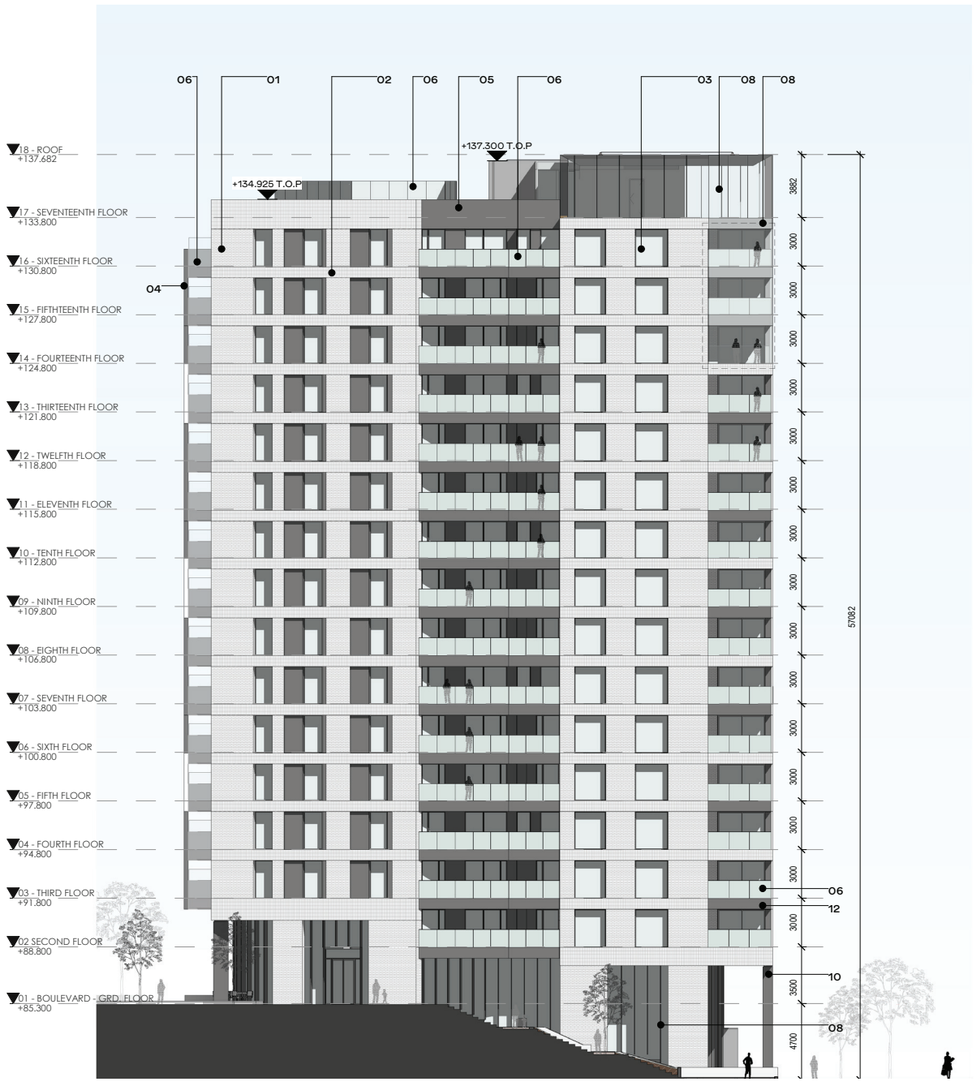
Blackthorn Drive



Northwest Elevation

[section through block C]

BLOCK C & D ELEVATIONS



Southeast Elevation

Section through public open space

Southwest Elevation

Internal Courtyard

BLOCK E & F ELEVATIONS

Northwest Elevation

Pedestrian Link

Southwest Elevation

Gable End to Carmanhall Road

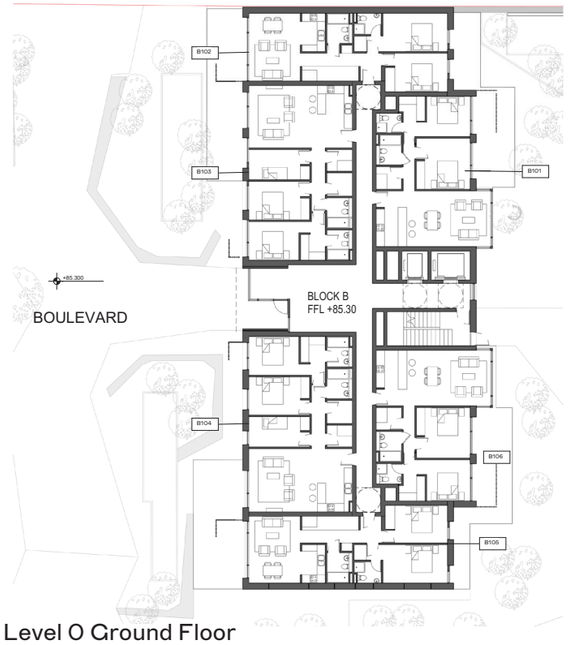
BLOCK E & F ELEVATIONS

Southeast Elevation

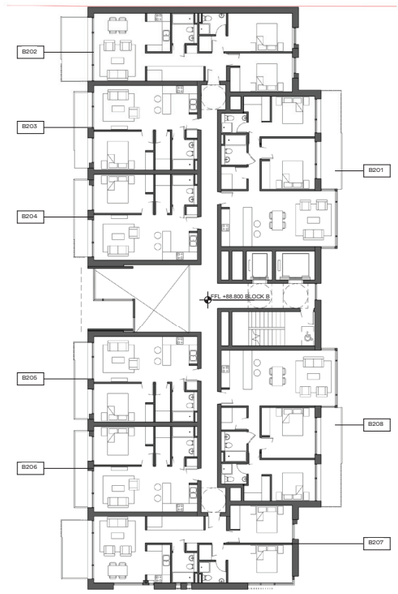
Northeast Elevation

Gable end to public space (Blackthorn Drive)

PROPOSED PART V PROVISION

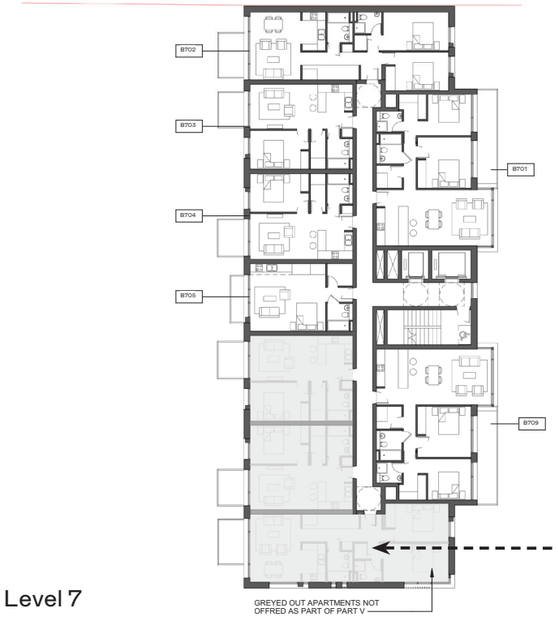


Level 0 Ground Floor



Level 1

Level 3,4,5,6

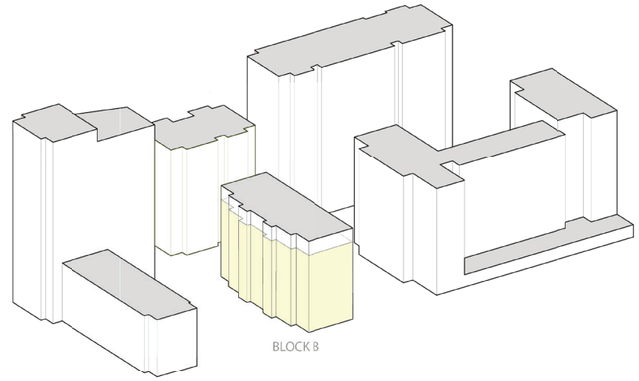


Level 7

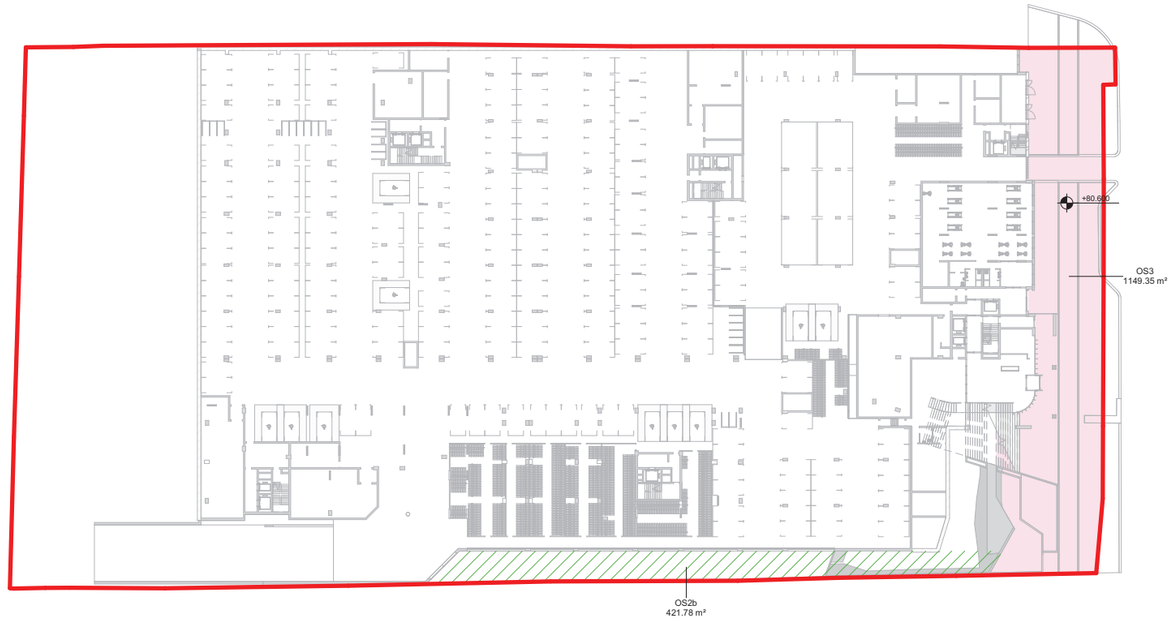
Note: Apartments shown grey and apartments on Level 8 of block B are not part of the Part V provision

54_ApartmentGroups_HQA_Part 5_Sheet View

Apartment Block	Level	Unit Number	Unit Type	No. of Bedrooms	Total Apartment Area	Required Apartment Area	Apartment Aspect	Apartment Orientation	Part V Allocation
B	01 - BOULEVARD - GRD. FLOOR	B101	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
B	01 - BOULEVARD - GRD. FLOOR	B102	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	01 - BOULEVARD - GRD. FLOOR	B104	B-3B-i	3	96.4	90.0 m²	SINGLE	SW	Yes
B	01 - BOULEVARD - GRD. FLOOR	B104	B-3B-i	3	96.4	90.0 m²	SINGLE	SW	Yes
B	01 - BOULEVARD - GRD. FLOOR	B105	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	01 - BOULEVARD - GRD. FLOOR	B106	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
01 - BOULEVARD - GRD. FLOOR: 6					503.2				
B	02 - SECOND FLOOR	B201	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
B	02 - SECOND FLOOR	B202	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	02 - SECOND FLOOR	B203	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	02 - SECOND FLOOR	B204	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	02 - SECOND FLOOR	B205	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	02 - SECOND FLOOR	B206	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	02 - SECOND FLOOR	B207	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	02 - SECOND FLOOR	B208	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
02 - SECOND FLOOR: 8					498.4				
B	03 - THIRD FLOOR	B301	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
B	03 - THIRD FLOOR	B302	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	03 - THIRD FLOOR	B303	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	03 - THIRD FLOOR	B304	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	03 - THIRD FLOOR	B305	B-ST-i	1_ST	37.6	37.0 m²	SINGLE	SW	Yes
B	03 - THIRD FLOOR	B306	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	03 - THIRD FLOOR	B307	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	03 - THIRD FLOOR	B308	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	03 - THIRD FLOOR	B309	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
03 - THIRD FLOOR: 9					536.0				
B	04 - FOURTH FLOOR	B401	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
B	04 - FOURTH FLOOR	B402	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	04 - FOURTH FLOOR	B403	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	04 - FOURTH FLOOR	B404	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	04 - FOURTH FLOOR	B405	B-ST-i	1_ST	37.6	37.0 m²	SINGLE	SW	Yes
B	04 - FOURTH FLOOR	B406	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	04 - FOURTH FLOOR	B407	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	04 - FOURTH FLOOR	B408	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	04 - FOURTH FLOOR	B409	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
04 - FOURTH FLOOR: 9					536.0				
B	05 - FIFTH FLOOR	B501	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
B	05 - FIFTH FLOOR	B502	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	05 - FIFTH FLOOR	B503	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	05 - FIFTH FLOOR	B504	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	05 - FIFTH FLOOR	B505	B-ST-i	1_ST	37.6	37.0 m²	SINGLE	SW	Yes
B	05 - FIFTH FLOOR	B506	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	05 - FIFTH FLOOR	B507	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	05 - FIFTH FLOOR	B508	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	05 - FIFTH FLOOR	B509	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
05 - FIFTH FLOOR: 9					536.0				
B	06 - SIXTH FLOOR	B601	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
B	06 - SIXTH FLOOR	B602	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	06 - SIXTH FLOOR	B603	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	06 - SIXTH FLOOR	B604	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	06 - SIXTH FLOOR	B605	B-ST-i	1_ST	37.6	37.0 m²	SINGLE	SW	Yes
B	06 - SIXTH FLOOR	B606	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	06 - SIXTH FLOOR	B607	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	06 - SIXTH FLOOR	B608	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	06 - SIXTH FLOOR	B609	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
06 - SIXTH FLOOR: 9					536.0				
B	07 - SEVENTH FLOOR	B701	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
B	07 - SEVENTH FLOOR	B702	B-2B-ii	2	75.4	73.0 m²	DOUBLE	SW & NE	Yes
B	07 - SEVENTH FLOOR	B703	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	07 - SEVENTH FLOOR	B704	A-1B-i	1	47.0	45.0 m²	SINGLE	SW	Yes
B	07 - SEVENTH FLOOR	B705	B-ST-i	1_ST	37.6	37.0 m²	SINGLE	SW	Yes
B	07 - SEVENTH FLOOR	B709	B-2B-i	2	79.8	73.0 m²	SINGLE	NE	Yes
07 - SEVENTH FLOOR: 6					366.6				
B: 56					3512.2				
Grand Total : 56					3512.2				

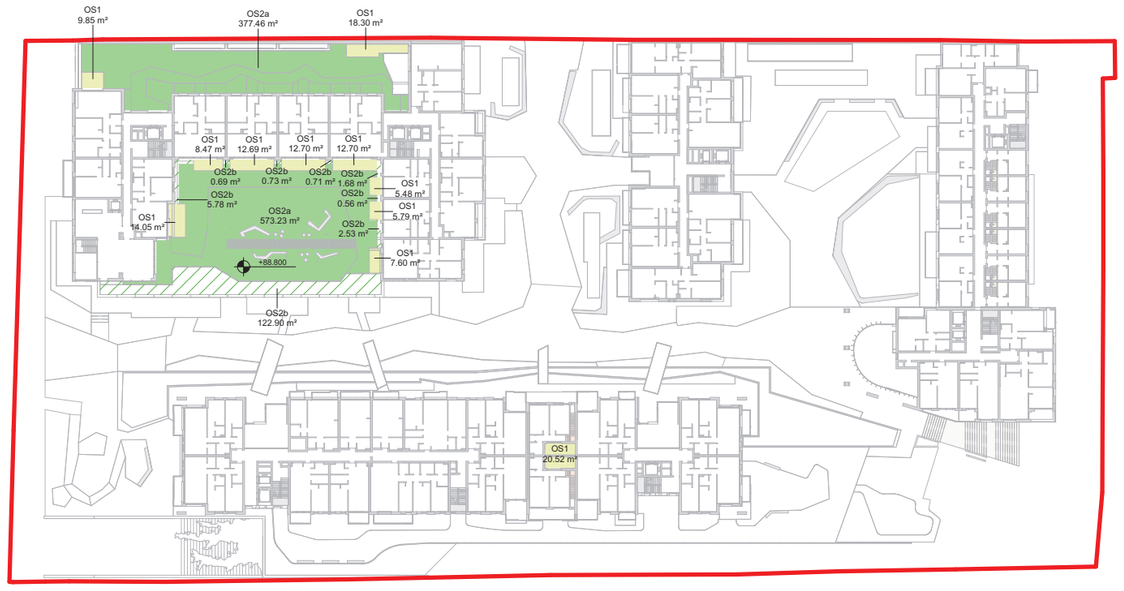


SCHEDULE OF OPEN SPACES



1 O0 Level 0 Lower Ground O.S.
1:500

2 O1 Level 1 Boulevard Grd. Floor O.S.
1:500



3 O2 - Level 2 O.S.
1:500

4 O17 - Level 17 O.S.
1:500

OPEN SPACE SCHEDULE

Name	Level	Comments	Area
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	25.4 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	16.4 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	9.7 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	5.9 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	23.9 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	9.4 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	5.0 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	5.0 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	15.7 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	20.2 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	31.2 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	34.5 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	49.8 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	42.3 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	24.9 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	29.8 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	16.5 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	21.3 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	9.9 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	14.6 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	23.2 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	19.1 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	20.2 m²
OS1	01 - BOULEVARD - GRD. FLOOR	Private Open Space	25.2 m²
OS1	02 SECOND FLOOR	Private Open Space	18.3 m²
OS1	02 SECOND FLOOR	Private Open Space	9.8 m²
OS1	02 SECOND FLOOR	Private Open Space	8.5 m²
OS1	02 SECOND FLOOR	Private Open Space	12.7 m²
OS1	02 SECOND FLOOR	Private Open Space	12.7 m²
OS1	02 SECOND FLOOR	Private Open Space	12.7 m²
OS1	02 SECOND FLOOR	Private Open Space	5.5 m²
OS1	02 SECOND FLOOR	Private Open Space	5.8 m²
OS1	02 SECOND FLOOR	Private Open Space	7.6 m²
OS1	02 SECOND FLOOR	Private Open Space	14.0 m²
OS1	02 SECOND FLOOR	Private Open Space	20.5 m²
OS1: 35			627.2 m²

(*) NOTE: Excludes balconies on upper levels. Refer to Housing Quality Assessment for Private open space figure

OPEN SPACE SCHEDULE

Name	Level	Comments	Area
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	1058.1 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	1724.5 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	175.3 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	132.4 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	139.0 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	47.6 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	38.5 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	140.1 m²
OS2a	01 - BOULEVARD - GRD. FLOOR	Communal Amenity Open Space	84.2 m²
OS2a	02 SECOND FLOOR	Communal Amenity Open Space	573.2 m²
OS2a	02 SECOND FLOOR	Communal Amenity Open Space	377.5 m²
OS2a	17 - SEVENTEENTH FLOOR	Communal Amenity Open Space	270.3 m²
OS2a: 12			4760.6 m²
OS2b	00 - LOWER GROUND	Other Open Space	421.8 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	20.4 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	29.9 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	16.5 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	15.9 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	52.1 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	27.8 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	11.9 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	40.7 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	49.5 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	10.1 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	7.1 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	6.5 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	10.2 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	285.6 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	4.1 m²
OS2b	01 - BOULEVARD - GRD. FLOOR	Other Open Space	9.4 m²
OS2b	02 SECOND FLOOR	Other Open Space	5.8 m²
OS2b	02 SECOND FLOOR	Other Open Space	0.7 m²
OS2b	02 SECOND FLOOR	Other Open Space	0.7 m²
OS2b	02 SECOND FLOOR	Other Open Space	0.7 m²
OS2b	02 SECOND FLOOR	Other Open Space	1.7 m²
OS2b	02 SECOND FLOOR	Other Open Space	0.6 m²
OS2b	02 SECOND FLOOR	Other Open Space	2.5 m²
OS2b	02 SECOND FLOOR	Other Open Space	122.9 m²
OS2b	17 - SEVENTEENTH FLOOR	Other Open Space	39.4 m²
OS2b: 26			1194.5 m²
OS3	00 - LOWER GROUND	Public Open Space	1149.4 m²
OS3	01 - BOULEVARD - GRD. FLOOR	Public Open Space	2967.3 m²
OS3: 2			4116.7 m²
OS4	01 - BOULEVARD - GRD. FLOOR	Creche	238.8 m²
OS4: 1			238.8 m²

OS1 Private Open Space (*)

OS2a Communal Amenity Open Space

OS2b Other Open Space (not included as part of Communal Amenity Open Space)

OS3 Public Open Space

OS4 Créche Open Space (enclosed)

HJL

SELECTED CGI 1 - BLACKTHORN DRIVE

SELECTED CGI 2 - CARMANHALL ROAD

SELECTED CGI 3 - CARMANHALL ROAD

SELECTED CGI 4 - BOULEVARD

SELECTED CGI 5 - PUBLIC SPACE / BLOCK D

SELECTED CGI 6 - BLOCK D ON BLACKTHORN DRIVE

SELECTED CGI 2 (*)- CARMANHALL ROAD

SELECTED CGI 5 (*) - BLOCK D