ARCHITECTURAL DESIGN STATEMENT

Commissioned by AAI PALMERSTOWN LTD

RIAI RIBA

SHiPSEYBARRY

MASTERPLANNING | URBANISM | ARCHITECTURE

contents

introduction

a broad overview | site environs | site analysis | planning context | masterplan

introduction

A BROAD OVERVIEW

SHiPSEYBARRY were appointed by AAI Palmerstown in October 2019 to develop design proposals for a new build–to-sell apartment complex at the former warehousing units 64 & 65, Cherry Orchard Industrial Estate Ballyfermot, Dublin 10. The site is located at the Western gateway to 'REGEN' zoned landbank and represents the first site to come on stream in this zoning location. Early appraisals of the site suggested the quantum of development would establish the planning route under the Strategic Housing Development route with initial S247 engagement with South Dublin County Council (SDCC) taking place in May 2020 .

Initial feedback of SDCC in 2020 on preliminary design concept approaches presented the design team with particular aspects to the site, a request to increase local heights with a gateway feature requested at the Western junction would be required to meet a sustainable design solution to the Local Authority's ambition in its regen objective for the site. The proposal contained with this document is the 3rd generation of the design within the design team, with the proposal endeavouring the set a bench mark in quality for one of the first regen projects to come on stream at the Western Edge of the Regen Lands in Palmerstown.

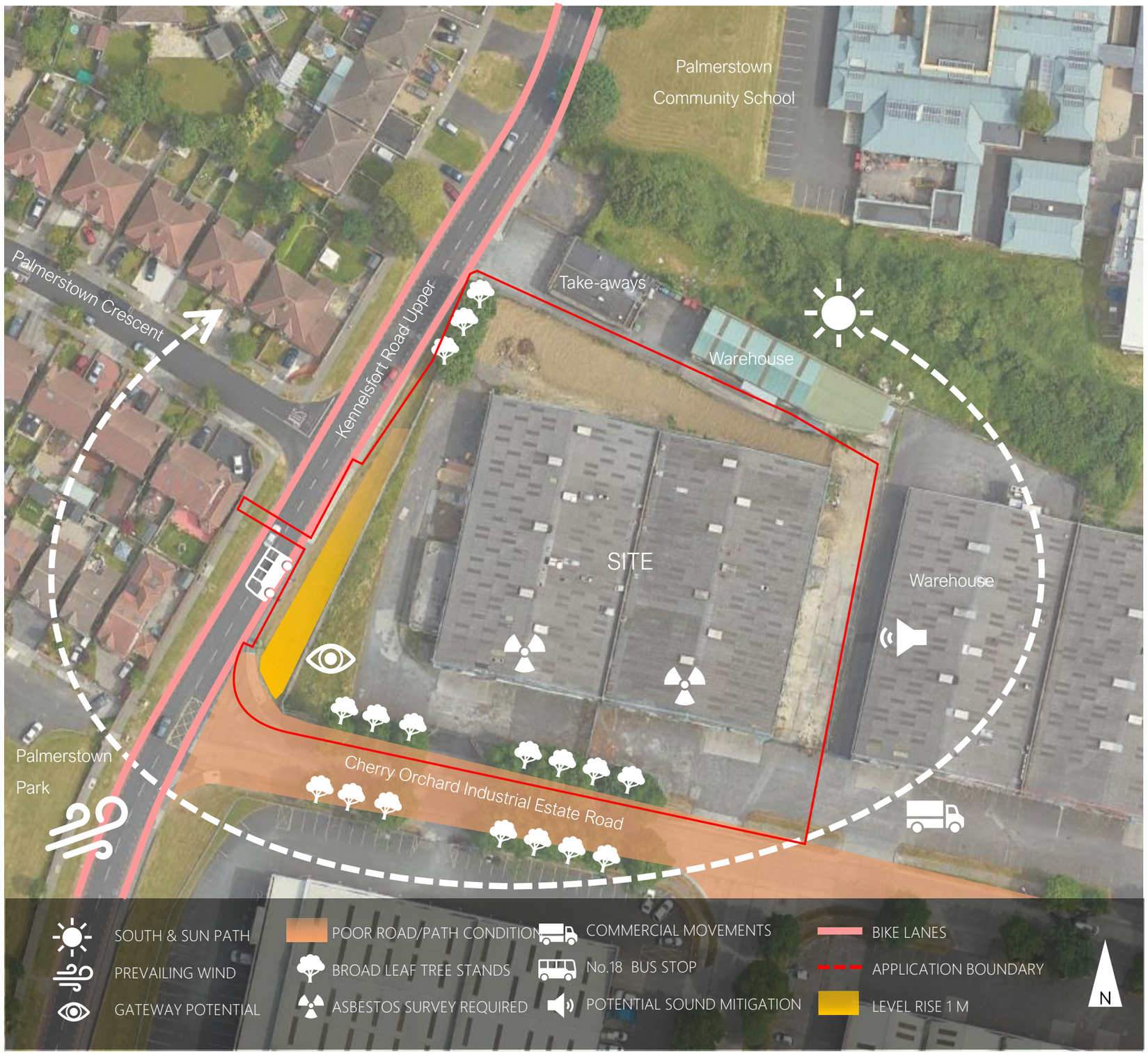
The proposal is set out with around 4 buildings enclosing a high quality landscaped courtyard amenity space. Buildings are generally at 5 storeys with setbacks/step downs at scale transition points to nearby built environments. A feature 9 storey element defines the gateway element at the junction of Cherry Orchard Industrial Estate Road and Kennelsfort Road Upper. The parking element, at 44% ratio, is contained on surface with landscaped residents amenity podium over. Public open space is provided to South and West with upgrades to streetscapes/landscape buffer improvements to Kennelsfort Road Upper and Cherry Orchard Road Industrial Estate. Apartment sizes are to build to sell standard with 72 1 bed units & 72 2 bed units totalling 144 apartments. 58% of apartments have dual aspects across the scheme. Communal facilities are contained along the south facing new streetscape to Cherry Orchard Industrial Estate Road .

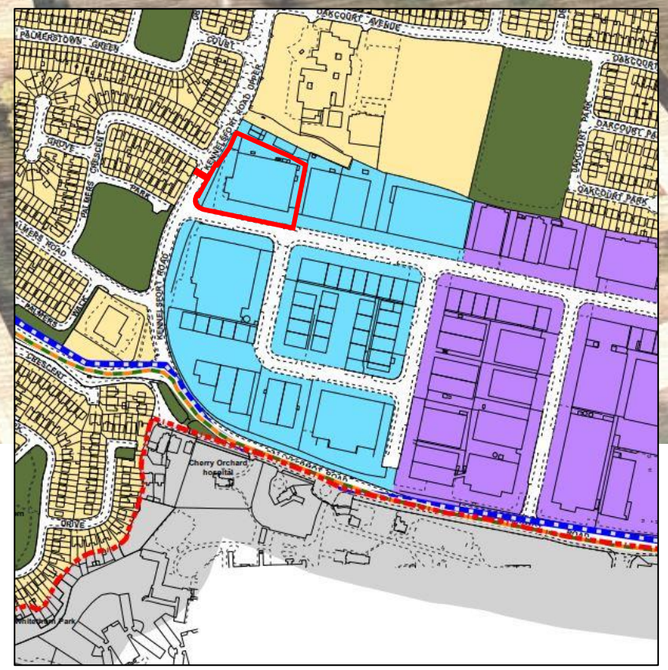
SHiPSEYBARRY

SITE ENVIRONS

THE SITE ANALYSIS

The site today currently is in disused vacant warehousing. The site is bounded by the Kennelsfort Road Upper to the West and Cherry Orchard Industrial Estate Road to the South. Cherry Orchard Industrial Estate Road represents the main artery to the Cherry Orchard Industrial Estate beyond to the South and West. The site is generally level with a modest level rise of I meter at the South Western corner. To the East existing warehousing is in operation with a 2m boundary palisade fence to its extent. To the North are 2 single storey fast-food takeaway outlets fronting onto Kennelsfort Road Upper with a small warehouse to the rear. Mature trees are located to the South and North West of the site which are captured in a tree survey and Arborist report. A general observation of the urban environment once approaching the site on Kennelsfort Road Upper from the South is that the urban grain is dissolved and poor generally, typical of warehousing set back well off the street. The proposal seeks to address this environment with a more urban streetscape approach and set a high standard of urban intervention in this location zoned for regeneration.





PLANNING CONTEXT

The ambition of the REGEN land is to see renewal of this land bank in either enterprise and/or residential led regeneration to provide a new 'quarter' of sustainable development at this location. This scale of development will need to happen in a sequential orderly manner to avoid new development occurring at conflicting or more central points along the landbank, that neither serves new users or existing land uses to co-exist comfortably. The proposal site occupies the furthest North West corner of the land bank at the primary entrance to the land bank. Sequentially this presents an opportunity to 'commence' the regeneration in a sequentially satisfactory manner while also leading new regeneration in the optimal West to East / North to South phasing. This location further provides a gateway opportunity to announce the new renewal lands beyond and we propose will set a precedent in quality in how the next phases may be perceived .

ZONING OBJECTIVES

🟦	OBJECTIVE REGEN	to facilitate enterprise and/or residential–led regeneration
🟪	OBJECTIVE EE	to provide enterprise and employment related uses

MASTERPLAN CONTEXT

Consideration of what may follow this development is key in arriving at the appropriate design solution for the site . The Junction of Kennelsfort Road Upper and Cherry Orchard Industrial Estate will mark the gateway to the new regeneration and modest height increase may be appropriate North and South of this at this Gateway junction. Given the sites location at the Northern Boundary of the regen lands, no through transition is to the North is considered necessary. Northern boundary sites main dialogue with the regen lands is to the South and for this reason the proposal seek to offer a clear access point at this location. More permeable / through routed desire lines are required to the deeper land banks to the South of the proposal.

The proposal also considers the redevelopment of the site to the immediate East by way of offering a road (and boundary condition) to be taken in charge by SDCC in the future to facilitate a shared and orderly set between these sites, and reduce junction demands to Cherry Orchard Industrial Estate Road.

- PRIMARY ROUTES
- LINKAGES
- REGEN BOUNDARY SITE LINKAGES - PEDESTRIAN
- REGEN BOUNDARY RELATIVE TO SITE
- PROPOSAL SITE
- ROAD TO BE OFFERED FOR TAKING IN CHARGE

proposal overview

Palmerstown Community School

Take away

Warehouse

Palmerstown Crescent

BUILDING D

BUILDING C

PODIUM

NEW ROADWAY TO BE OFFERED TAKEN IN CHARGE

Warehouse

BUILDING A

BUILDING B

Kennelsfort Road Upper

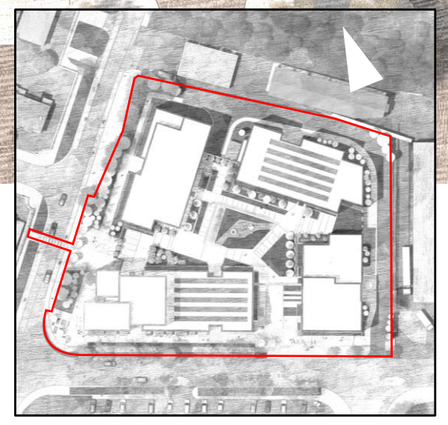
Cherry Orchard Industrial Estate Road

RESIDENT ACCESS –STREET LEVEL

RESIDENTS ACCESS – PODIUM LEVEL

CAR ACCESS

SERVICE POINT



Warehouse

Warehouse

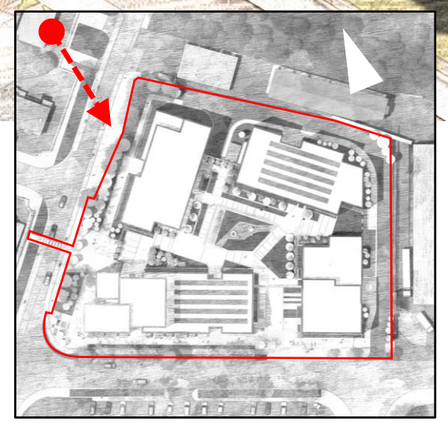
Cherry Orchard Industrial Estate Road

Kennelsfort Road Upper

Take aways

Palmerstown Community School

ROAD TO BE OFFERED TAKEN IN CHARGE | EMERGENCY/SERVICE ACCESS | TURNING AREA | | UPGRADE PUBLIC REALM | GATEWAY ELEMENT



Palmerstown Community School

Warehouse

Warehouse

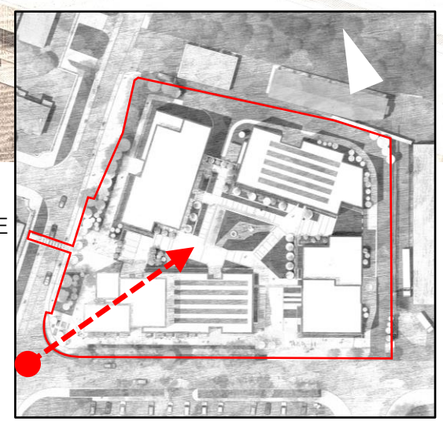
Take Aways

Palmerstown Crescent

Kennelsfort Road Upper

Cherry Orchard Industrial Estate Road

| UPGRADE PUBLIC REALM | GATEWAY ELEMENT | LIVE STREET FRONTAGES | PODIUM ACCESS | PUBLIC REALM UPGARDE



Palmerstown Crescent

Kennelsfort Road Upper

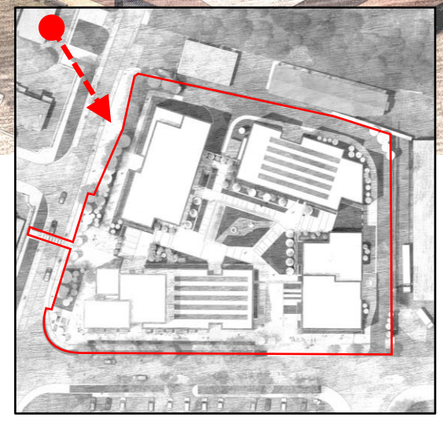
Cherry Orchard Industrial Estate Road

Take aways

Warehouse

Palmerstown Community School

Warehouse



| UPGRADE PUBLIC REALM | LIVE STREET FRONTAGES | PODIUM ACCESS | NEW SERVICE ROAD (TO BE OFFERED TAKEN IN CHARGE)

FUNCTIONS

- ENTRANCE
- MANAGEMENT
- CORE
- COMMUNAL ZONES
- PODIUM LIFT
- PODIUM STEPS
- INCUBATER UNITS
- REFUSE TRUCK & DELIVERY TURNING MANOUVRE AREA
- CAR SHARE
- CAR PARK ACCESS
- ESB SUB STATION
- SWITCH ROOM
- RESIDENTS BIKE STORES
- VISITOR BIKES
- REFUSE /DELIVERIES COLLECTION
- SYSTEMS SERVICE

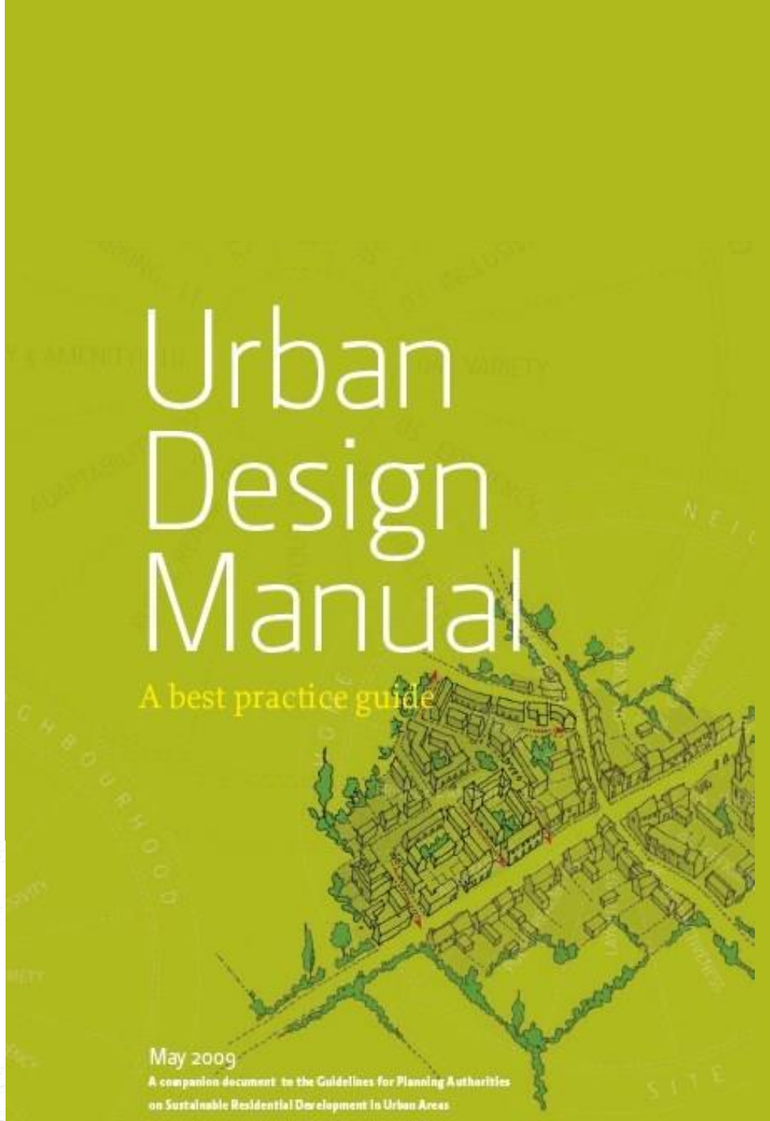
THE 12 PRINCIPLES OF QUALITY URBAN DESIGN

From inception the design has been considered in its response to sustainable place making with the 12 key principles of design (Urban Design Manual 2009) as central generators for the proposal. The 12 key criteria are briefly set out below :

CONTEXT

The proposed has been carefully considered at a macro and micro level with-in its surrounding context given the edge of regen lands context. By careful sectional and visual analysis of the surrounding scale and urban grain. The development was originally conceived as a 5 storey courtyard development at the edge of the regen lands and with SDCC guidance a landmark gateway element was introduced to the South West corner. Scale relationship to Palmerstown Crescent, while of note, have been assessed in proximities, shadow analysis and the new urban renewal of the regen zoning to present a sustainable density at this transformative location. The development seeks to -

- Make an improved and appropriate contribution to the South and West street edges with high quality landscaping and considered treatments for varying uses that present at these locations.
- Massing breakups broken and stepped across the development reacting to varying boundary and context settings.
- Present a new contemporary aesthetic to identify the lead for future phases to the East on the regen lands.



CONNECTIONS

The new residents benefit from the nearby district centre (250m) to the North. Public realm has been provided to give a high quality streetscape to Kennelsfort Road Upper with the existing no.18 (stop 4888) at the West entrance to the site. This stop has been upgraded to allow seating areas and visitor bike parking for commuters. Kennelsfort Road Upper has an existing bike lane bounding the site to the South. The proposal extends this from the junction onto Cherry Orchard Industrial Estate Road, designed to have separation from pedestrians and traffic. The development is permeable via access routes off Cherry Orchard Industrial Estate Road and provision is made for future development to the East lands by way of a new roadway to the Eastern boundary to be given in charge. As explored in the masterplan section of this document, it is noted that the site represents the North boundary of the regen lands with no through continuation of circulation available to the North. This informs the main pedestrian linkage on to Cherry Orchard Industrial Estate Road to the South boundary for access to the development.

The density of the scheme with these linkages provides support for a more efficient public transport model at this location.

NEW CYCLE LANE (Cherry Orchard Industrial Estate Road)

NO.18 BUS STOP + PEDESTRIAN CROSSING UPGRADE (Kennelsfort Road Upper)

INCLUSIVITY

Live frontages are provided for along Cherry Orchard Industrial Estate Road with the main access route provided to the main semi public space within the proposal. A management company will be established to upkeep all the landscape areas with a taken in charge area provided on Kennelsfort Road Upper and to the new street on the Eastern boundary. All open areas are designed to have passive supervision and visibility. Communal spaces are provided for residents, accessible off Kennelsfort Road Upper offering further supervision and activity at street level. A play area is provided central to the courtyard to enhance community and activity central to the scheme. Buildings are set out to have an open aspect to the streets they serve with landscape buffers provided to ground floor units. A series of 4 lifts are provided to access the podium area with the main visitor access via a concierge in Building A to the South West. Public access to the podium is provided by way of ambulant steps and street lift access.

ACTIVE STREET

PLAY AREA CENTRAL TO SCHEME

PUBLIC MEETING PLACE (Cherry Orchard Industrial Estate Road)

PUBLIC MEETING PLACE (Kennelsfort Road Upper)

DISTINCTIVE CONTEMPORARY AESTHETIC (Kennelsfort Road Upper)

DISTINCTIVE CONTEMPORARY AESTHETIC (Kennelsfort Road Upper)

VARIETY

The development provides for a mix of apartments types with 50% 2 bed, 50% 1 bed. This mix is accommodated across a range of different apartment formats providing for a diverse choice of unit type. The high ratio of 1 bedroom unit provided an alternative to the predominantly 2 & 3 bedroom semi detached typology provided locally.

EFFICIENCY

- The proposal replaces the now derelict former warehouse facility with the development delivering a proposed plot ratio of 2.13 and site coverage of 58%. This is a highly efficient regeneration of the land use while maintaining sensitivity's around scale and light within its context.
- The building is designed to current NZEB standards with green roofs and PV energy combined in the sustainable design.
- Orientation of kitchen/dining/living areas, internal and external communal spaces have been organised to maximise solar aspect for comfort with over 58% dual aspect achieved on apartments.
- All waste management on the facility has designated recycling areas for residents and will be actively promoted and monitored by management.

DISTINCTIVENESS

The building is the first of the regen lands at this location to be proposed setting a benchmark for further development to the East. High quality urban design has been applied to building forms and streetscapes to provide a distinctive new regeneration aesthetic for this emerging location. The building has a high glazing percentage in a formal gridded urban arrangement offering a distinctive high quality aesthetic impression..

NEW STREETSCAPE (Cherry Orchard Industrial Estate Road)

LAYOUT

The design allows for an active relationship on Cherry Orchard Industrial Estate Road and at the junction to Kennelsfort Road Upper. The building formation creates a protective elevated enclosure around the central amenity space of the scheme to enhance acoustic tranquillity from the roadway & potentially more problematic future noise intensification from the warehousing to the East. This internal landscape area provides for a four sided amenity space giving a more tranquil retreat from Kennelsfort Road Upper carriage way.

PUBLIC REALM

All public areas are designed to have a good quality interconnectivity, active street frontage and supervision through out the scheme. Limited apartments are located on street level at busier frontages and are provided with landscape buffers where this occurs. The Street exposed podium edges are designed to active frontages or open access points .Kennelsfort Road Upper and Cherry Orchard Industrial Estate Road is given a green buffer for pedestrian comfort with high quality paving and street furniture provided. Attention is given to detail material use and design in the landscape plan that accompanies the proposal.

ADAPTABILITY

The ground floor street frontage areas which accommodate communal areas the proposed building structure has been designed to be an open grid with non intermediary bearing wall supports required, offering a flexible open structural grid should internal modification be required from the current layout into any possible future requirements. Internal apartments have been design to have service risers at the edge of plans to allow internal modification of non load bearing walls where required in the future . An amount of employment areas are provided to the Eastern street area with a flexible ceiling height .

PRIVACY AND AMENITY

The building is set out to have appropriate distances between new residents to offer privacy and maintain private amenity standards.

Privacy of the gardens to residents of Palmerston Crescent is dealt with by appropriate setback of the scheme to provide adequate distances from their amenity spaces. Adjoining sites are considered by set back of adequate distances for orderly future development.

Within the development all access level apartments are provided with green buffers to their amenity spaces. The majority of apartment's enjoy recessed 'loggia' style balconies for added privacy between neighbours amenity.

PARKING

Residents parking is under croft with a landscape podium over. Residents have 65 parking spaces, with 2 car share spaces provided for E.V. and motorbike parking are also provided for with the development. Secure covered stacked bike spaces are provided for residents to current standards within the development with visitor bike parking located at various access points throughout the scheme .

DETAILED DESIGN

Consideration has been given to the detailed design of the development from materials maintenance to glazing elements design. The materials are complimentary with a simple palette of materials proposed to give a clear defined aesthetic with crisp rigour to a formal contemporary presentation to the environment. Maintenance and access arrangements have been allowed for in all aspects of façade & landscaping upkeep .

urbanism

gateway | heights & context

massing | public realm

streetscape I next phase

GATEWAY

The proposed Gateway element is a 9 storey pop-up expression to the furthest South West corner of the site. Care has been taken to express the breakup with a vertical breakup of materials and plan stepping to offer a distinctive vertical expression to separate it from what is generally a five storey height across the rest of the scheme. High order public realm is also concentrated at this junction to mark the beginning of the new zone beyond.

. Approach for North on Kennelsfort Road Upper

. Indicative gateway composition to junction

. View down Cherry Orchard Industrial Estate road

HEIGHTS AND CONTEXT

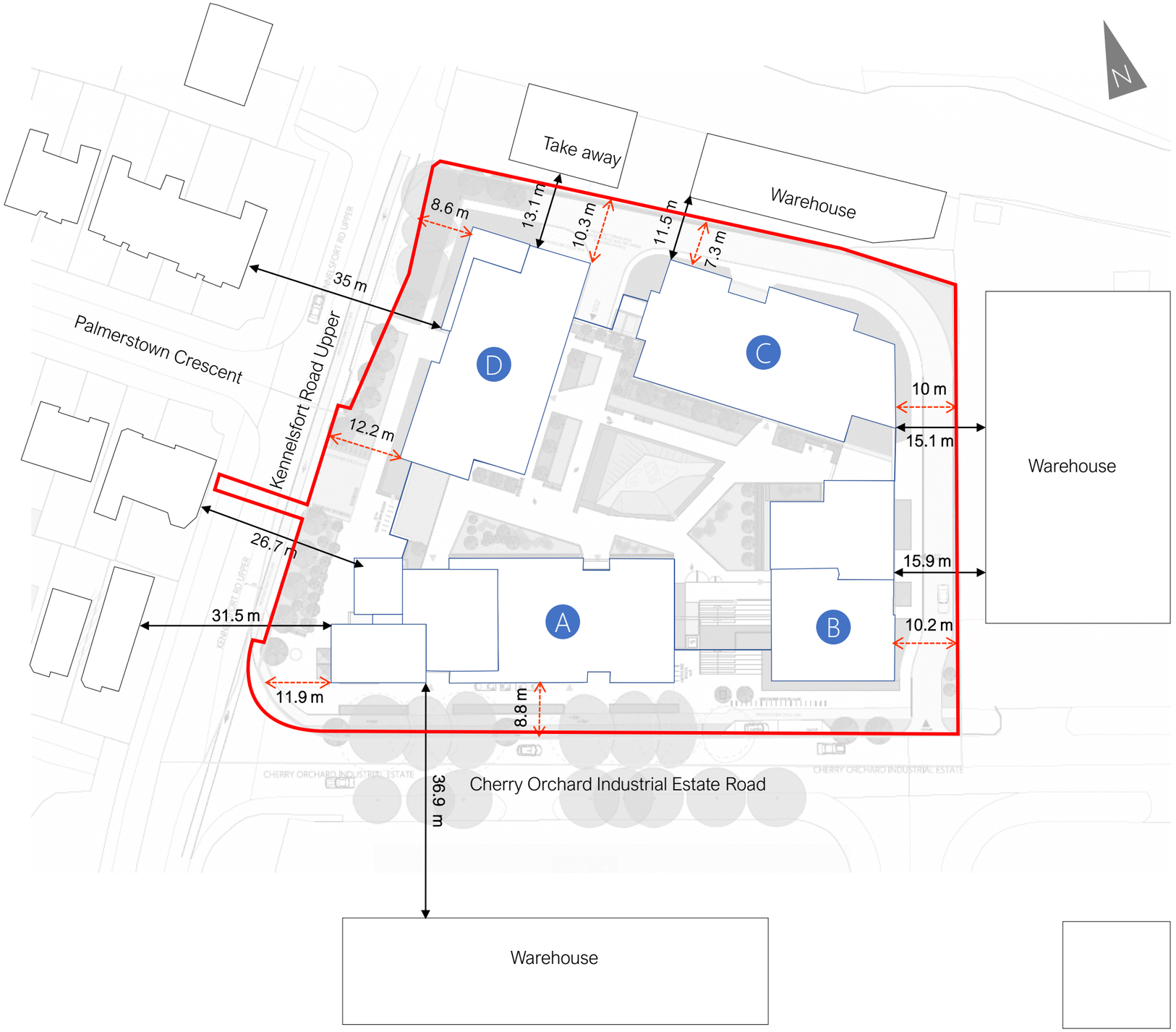
storey heights

KEY

9
8
7
6
5
4
3
2
1

HEIGHTS AND CONTEXT

building distances



HEIGHTS AND CONTEXT

sectional relationships

A:A

C:C

27

HEIGHTS AND CONTEXT

sectional relationships

B1:B1

B2:B2

28

HEIGHTS AND CONTEXT

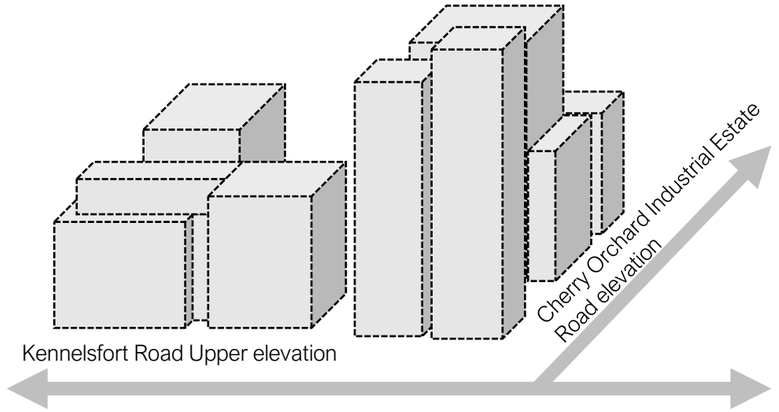
sectional relationships

MASSING

plan & height stepping

The scheme generally is set out at 5 storeys with blocks stepped or notched in plan form at location to provide a variation of street edge forms (red left). The recessed elements are further highlighted with a material change while upper setback are also given a separate treatment to further breakup the mass. Massing to the lower 4 storey elements at the edge of scheme provide a gradual stepping of the new development scale to North and East street edges.

Kennelsfort Road Upper elevation



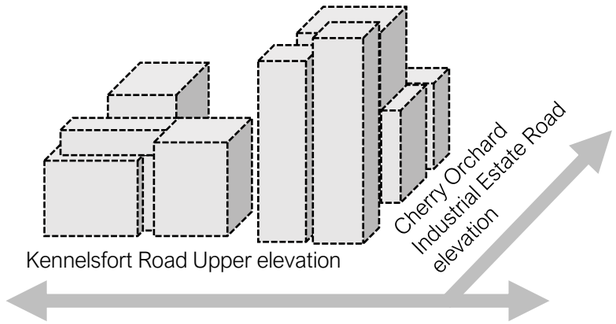
Cherry Orchard Industrial Estate Road elevation

Kennelsfort Road Upper elevation

Cherry Orchard Industrial Estate Road elevation

MASSING

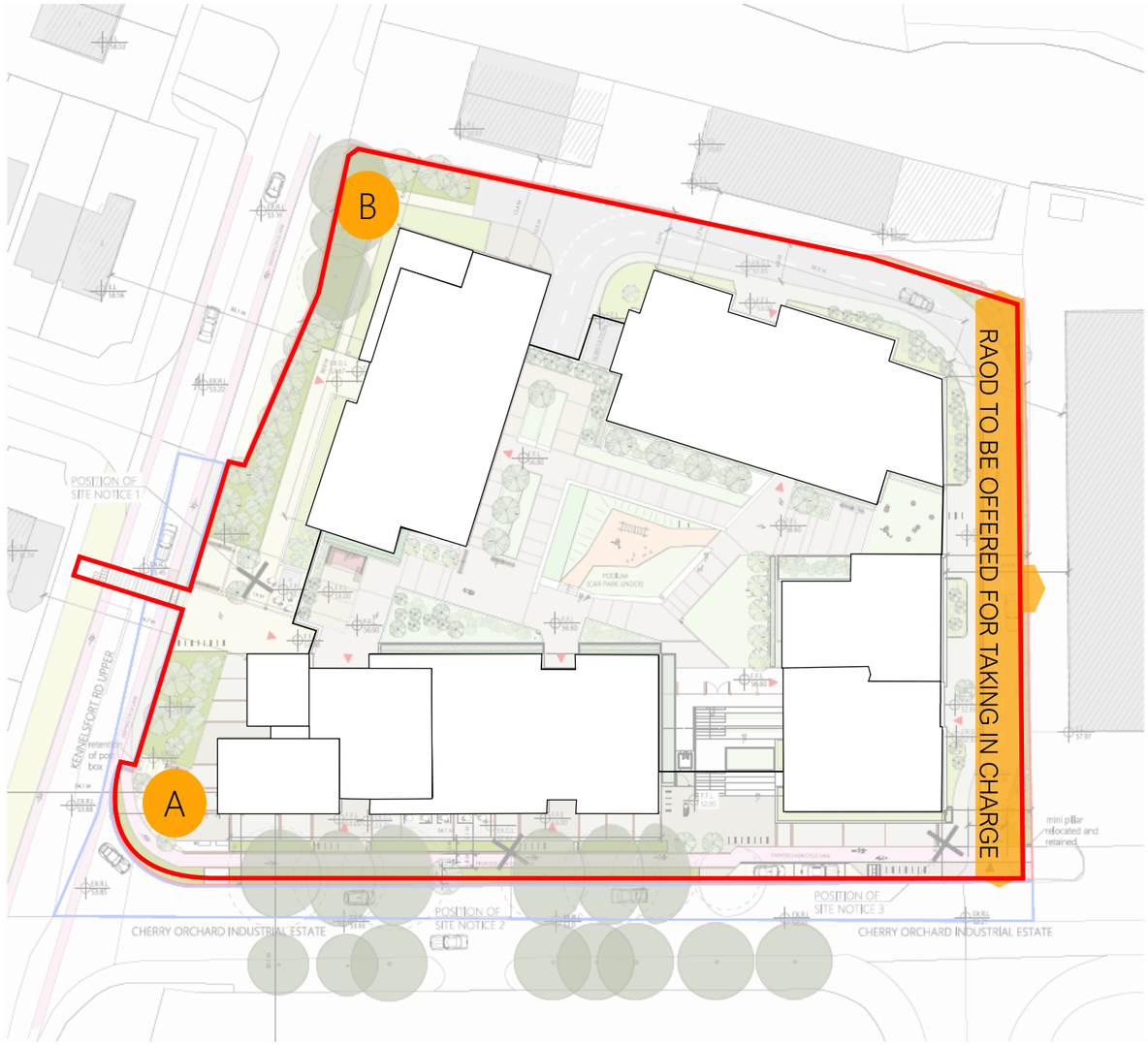
plan & height stepping



A Cherry Orchard Industrial Estate Road has active frontages with clear separation for different users

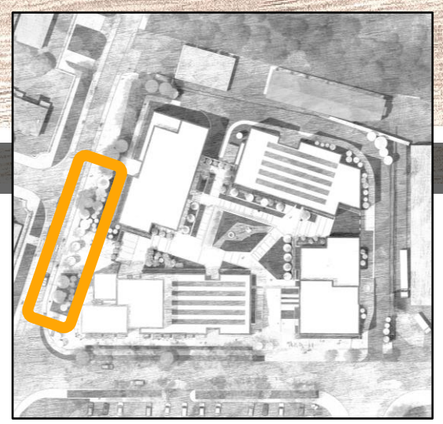
B Kennelsfort Road Upper has well distanced buffer zones to the building edge.

PUBLIC REALM AND STREETSCAPE



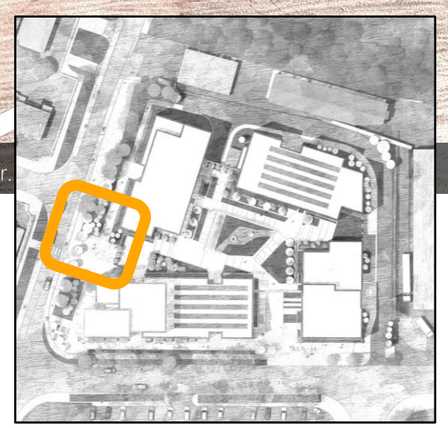
Public realm upgrades are proposed at Kennelsfort Road Upper and Cherry Orchard Industrial Estate road to offer further separation of pedestrians from road traffic. Green buffers and landscape areas provide for a high quality public realm to Kennelsfort Road Upper with the additional breakout seating area at the No.18 Bus stop. Informal public seating and resting areas are provided to both streets with high quality street furniture proposed. Existing tree stands are maintained along Cherry Orchard industrial estate road with a new street path and separated cycleway introduced. Large sections of Cherry Orchard Industrial Estate Road is offered as an active street front with residential amenity uses interacting with the streetscape. Public open space includes all public realm elements to offer a combined 1,356 sqm (16% of site area) over the site.

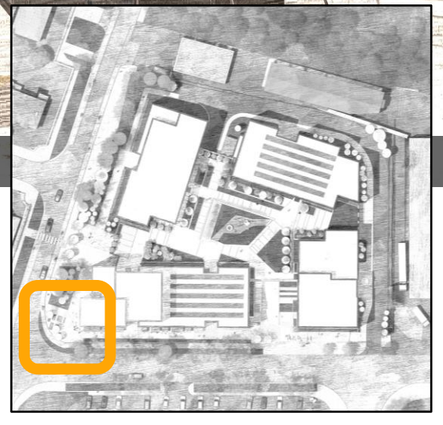
KENNELSFORT ROAD UPPER



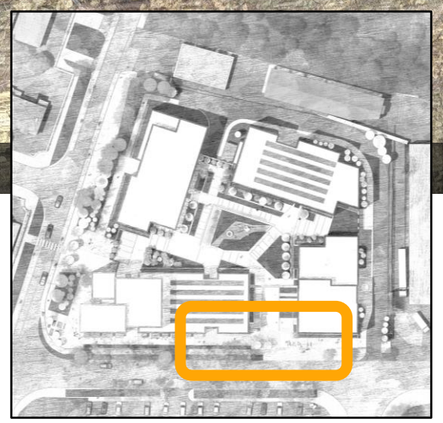
Kennelsfort Road Upper new streetscape with existing trees retained, new bike lane, pedestrian crossing ,new green buffer and separation for the pedestrians on an active streetscape.

Public open spaces and urban realm are integrated with green planting zones to allow for a mixture of experience zones with clear delineation. Above is a new bus stop waiting area to Kennelsfort Road Upper.





The residents lounge area presents onto the streetscape with external seating areas to offer activity to the street (Cherry Orchard Industrial Estate Road above)



Inviting and highly visible access points to the development are created with more intimate rest areas created off the streetscape for the public enjoyment.

amenity

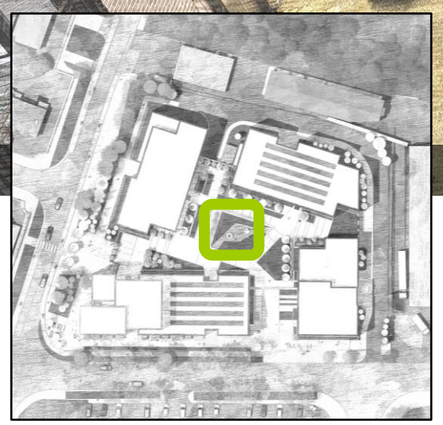
The central amenity space is primarily provided on a landscaped podium measuring 1303 sqm of usable space with a central play area. A large stepped seating area facing South is also provided to open the courtyard to southern light, announce the access to the amenity area beyond and also offer a pleasant social area for all.

Additional sunlight is gained by reducing block B to two storeys onto the podium . High landscape value treatments are proposed to the central space offering a tranquil green lung to the development.

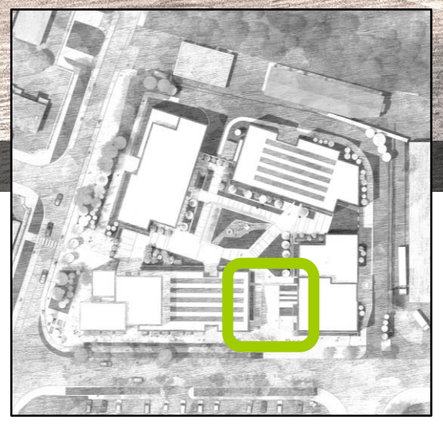
All private amenity spaces to ground floor units enjoy extensive green buffers and raised planters for added privacy. Upper balconies are set out in 'Loggia' format for added privacy between new residents. Private amenity standards are generally well exceeded over the minimum standards across the apartment types with all storage requirements are also met within units for residents needs.

Residents enjoy a dual aspect ratio of 58% across the scheme.

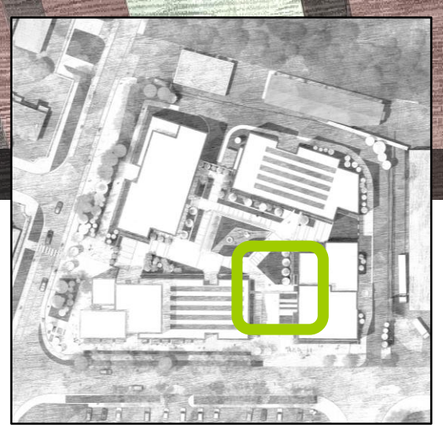
Semi –Private open space 1,303sqm



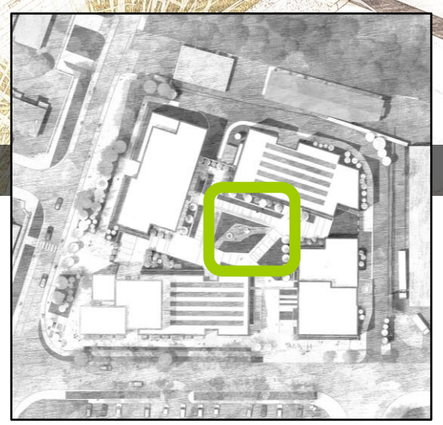
Central well overlooked play area at the centre of the amenity space



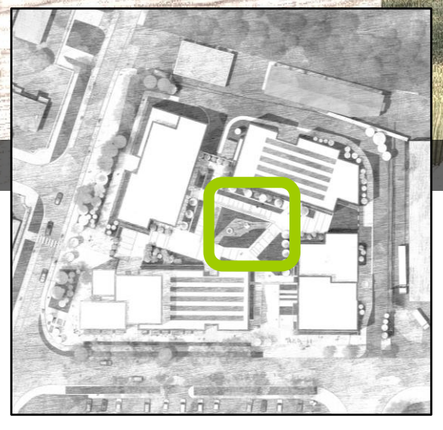
Main amenity entrance area to landscaped podium beyond.



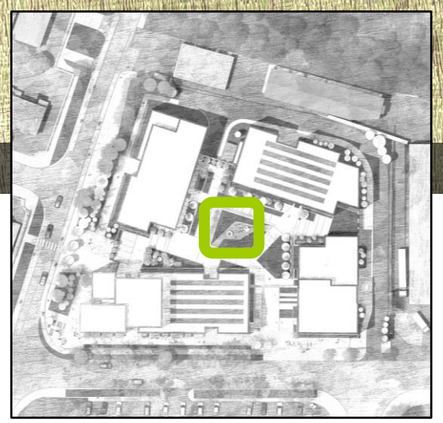
Amenity access point with South facing stepped terrace feature.



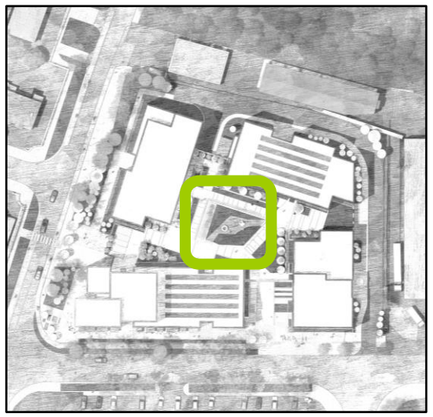
The large opening to the South of the courtyard with the reduced scale of building B (right of image) offers sunlight to the central amenity space.



High levels of ‘greening ‘ to the central space offers a tranquil quality to the amenity.



Central well overlooked play area at the centre of the amenity space



Loggia style balconies offer added privacy between residents.

Raised planters and green buffers offer ground floor units additional privacy to their private amenity spaces.

ASPECT RATIO

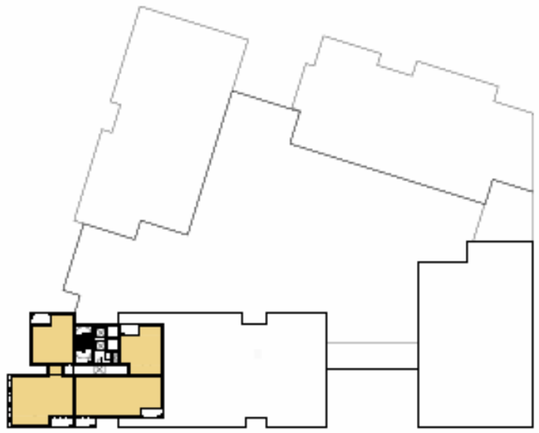
1 GROUND FLOOR PLAN
SCALE 1:500

2 FIRST FLOOR PLAN
SCALE 1:500

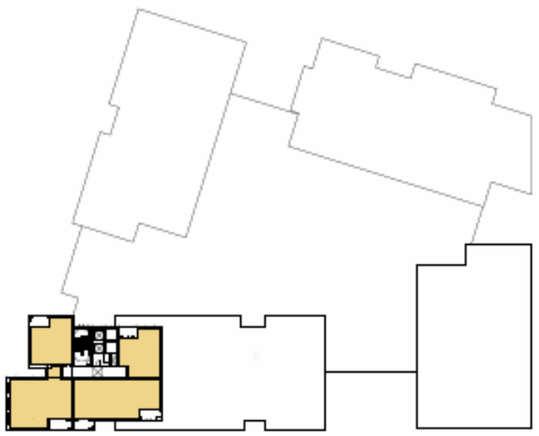
3 SECOND FLOOR PLAN

4 THIRD FLOOR PLAN

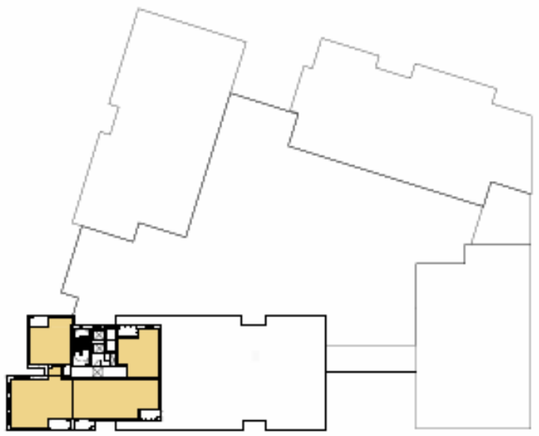
5 FOURTH FLOOR PLAN



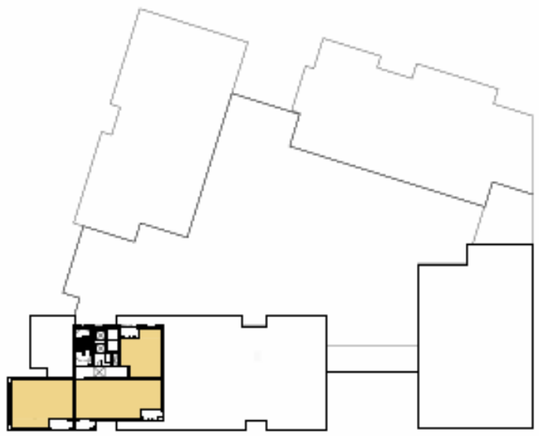
6 FIFTH FLOOR PLAN



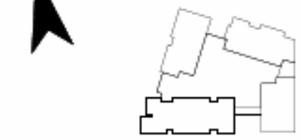
7 SIXTH FLOOR PLAN



8 SEVENTH FLOOR PLAN



9 EIGHTH FLOOR PLAN



KEY

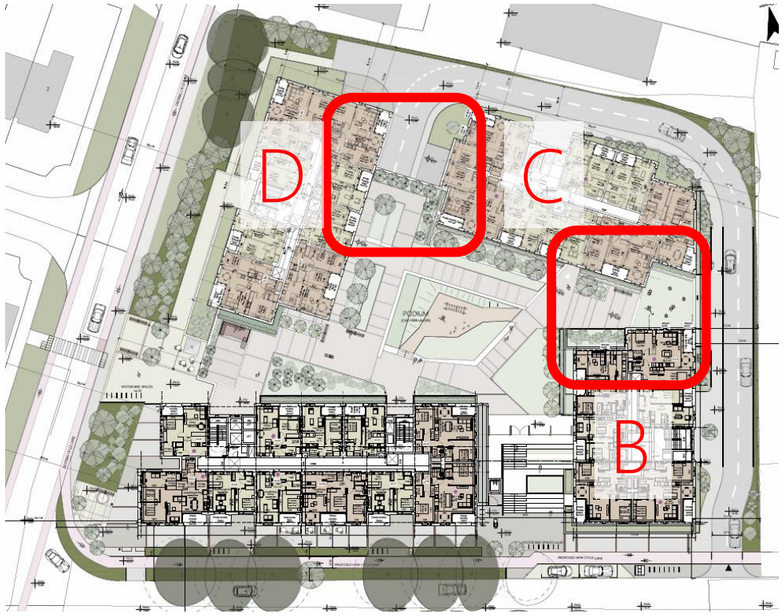
ASPECT	NO.	%
DUAL	84	58.3
SOUTH	28	19.4
EAST/WEST	20	14
NORTH	12	8.3
TOTAL NO.	144	100%

LEGEND

- DUAL ASPECT
- SOUTH ASPECT
- EAST/WEST ASPECT
- NORTH ASPECT - WITH AMENITY

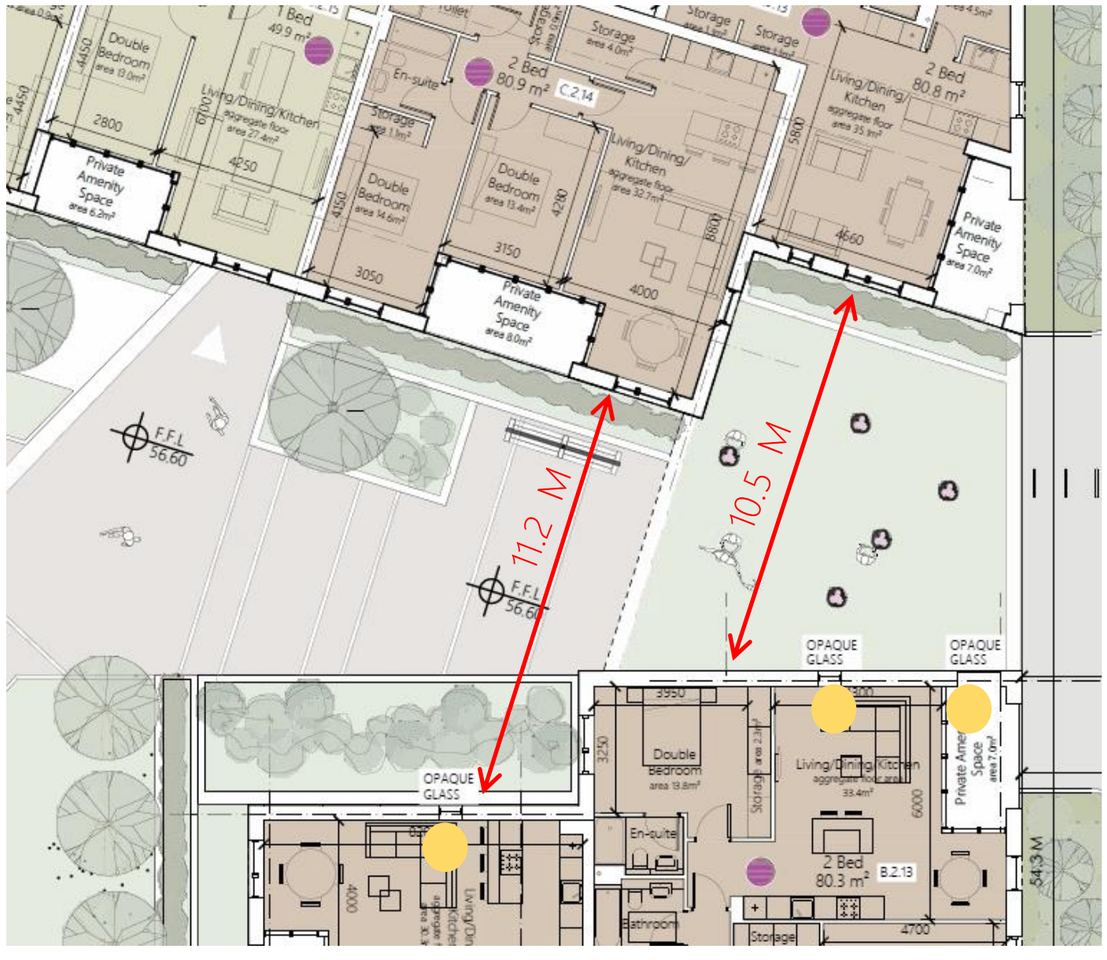
Proximities mitigation

internal proximities mitigation | external proximities mitigation

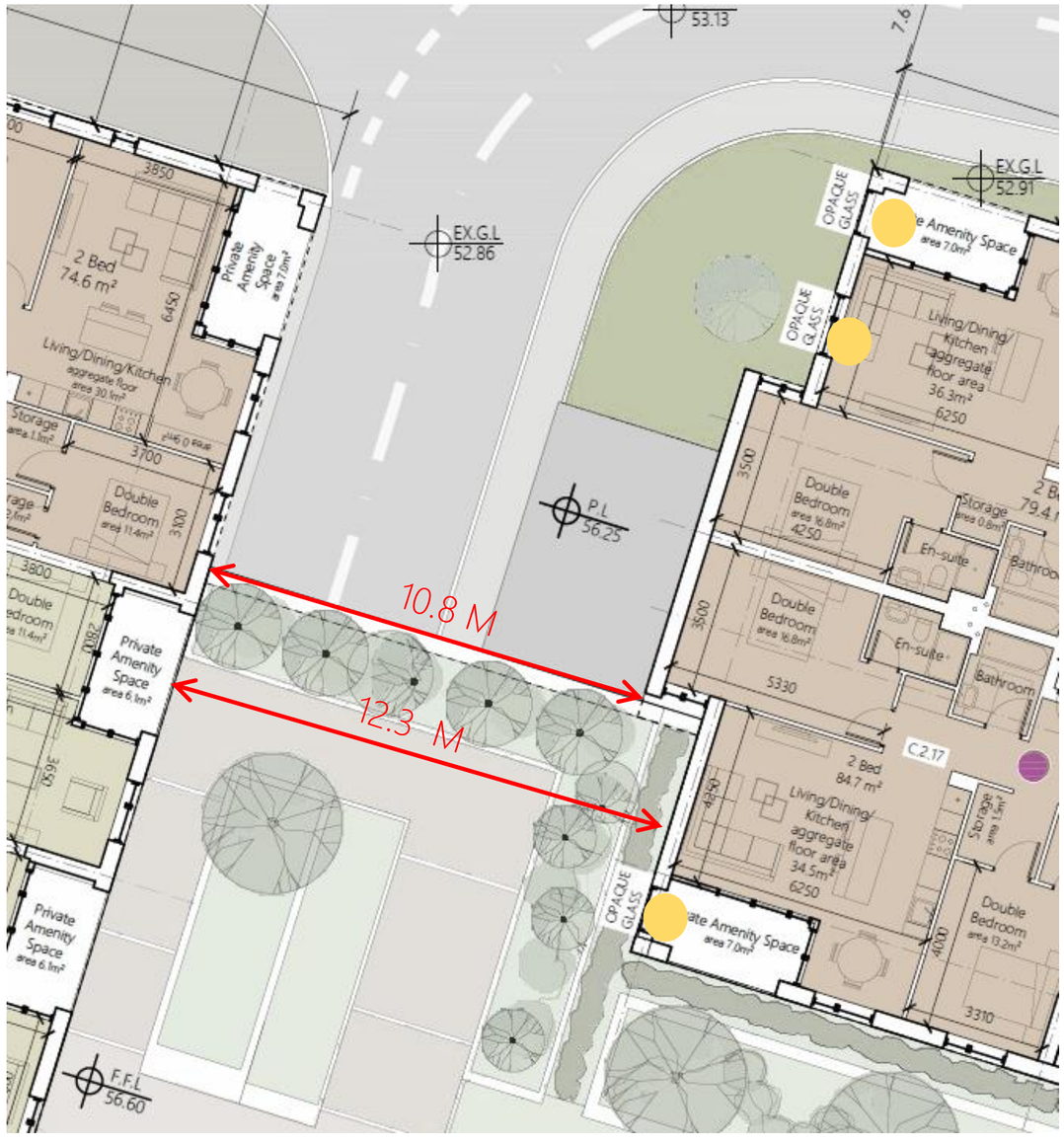


DISTANCE

OPAQUE GLAZING

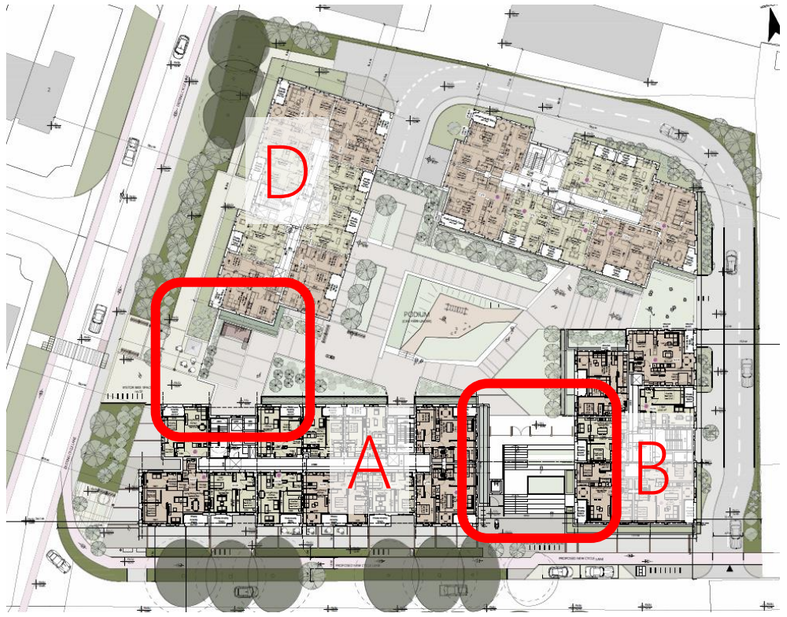


BUILDING C & B



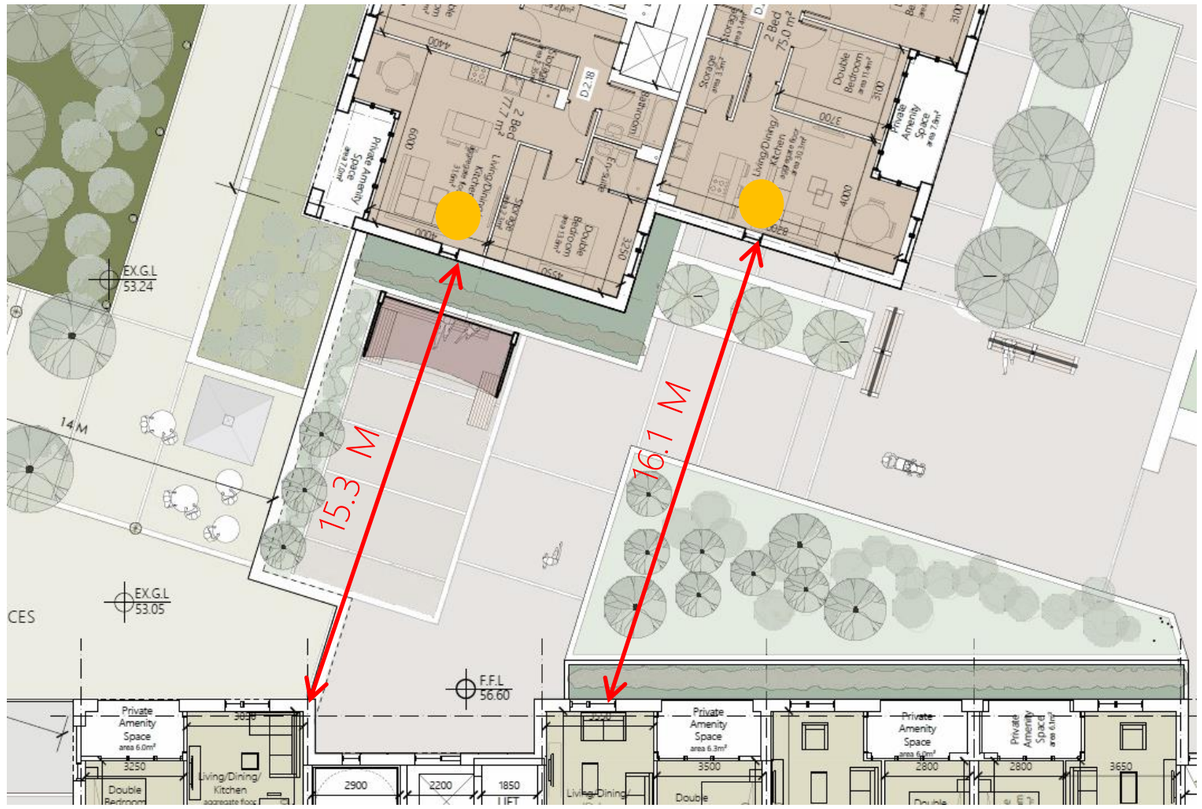
BUILDINGS D & C

INTERNAL PROXIMITY MITIGATION

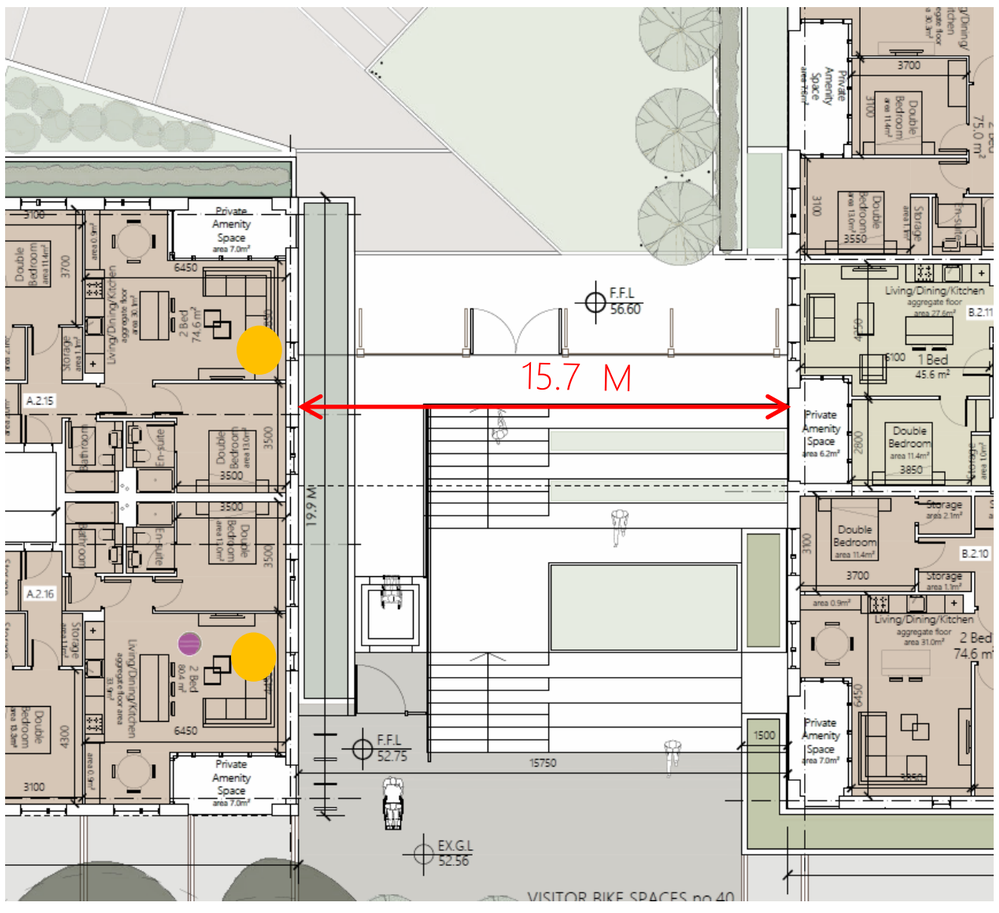


DISTANCE

OPAQUE GLAZING



BUILDINGS A & D

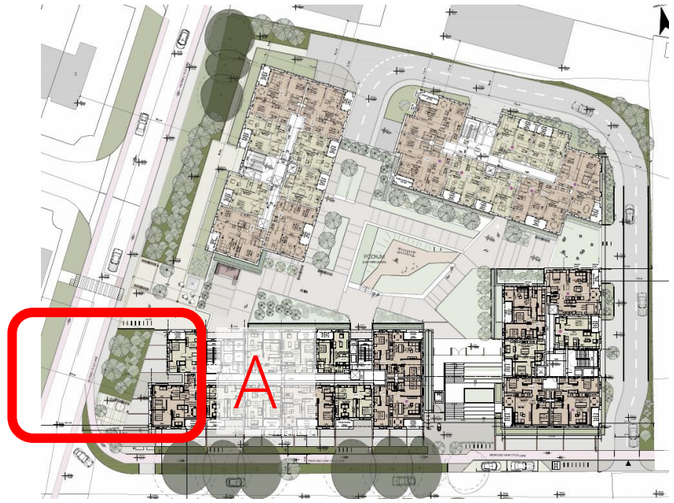


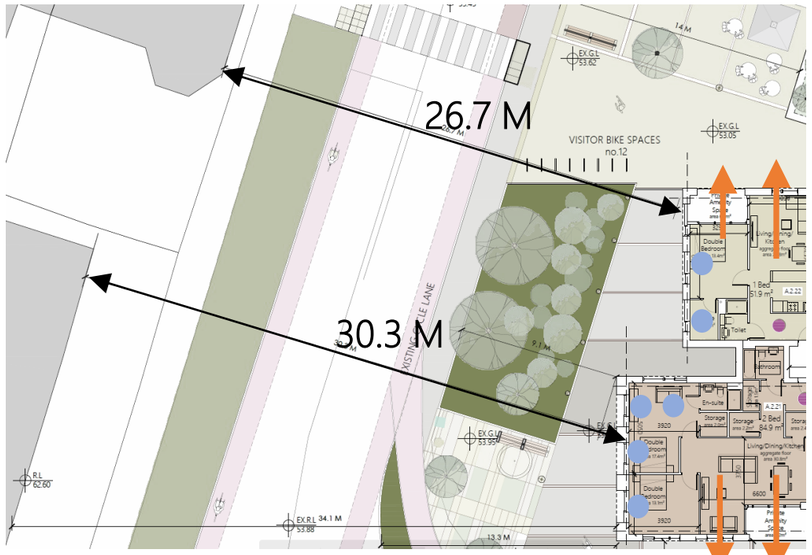
BUILDING A & B

INTERNAL PROXIMITY MITIGATION

EXTERNAL PROXIMITY MITIGATION

GATE WAY BUILDING A WEST





BUILDING A & Palmers Park / Crescent

S.247 gateway location at junction

S.247 view from Palmers Park

The development of building A evolved through the design process from a 5 storey with set back at initial Section 247 to Gateway feature element as requested by SDCC. The design as presented at Tri Party was for a 9 storey element at this junction which required significant redesign form SDCC Feedback .

The Proposal seeks to mitigate the proximity to Palmers Park and Palmers Crescent through strategic locations of bedrooms on these facades. All balconies and living rooms are re-orientated to avoid Western aspects to these areas. The Northern redbrick element has vertical slot windows to further address the closer boundary condition. While the Southern buff brick element has a greater distance, bedroom windows are increased in size.

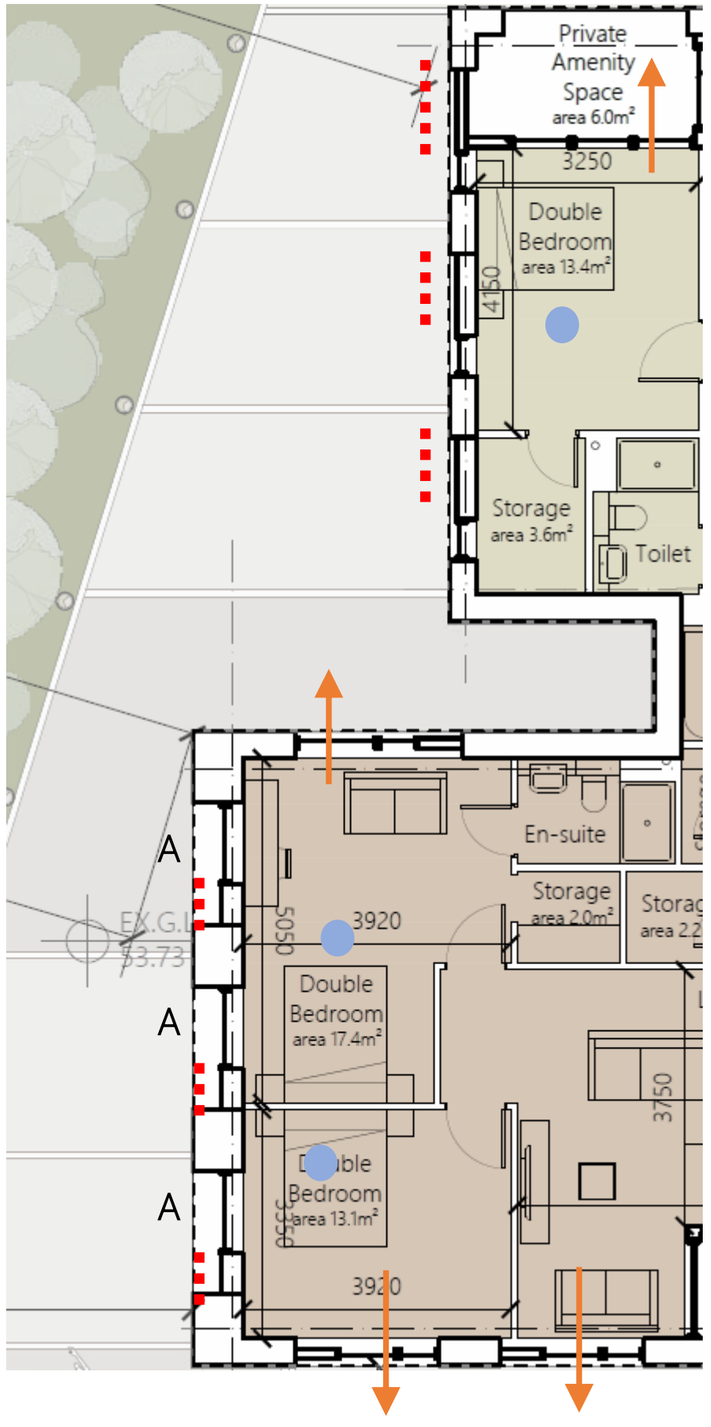
The design approach on the western façade was further tested through use of a vertical louvre system on upper floors. Ultimately, it was considered this additional design feature was not necessary having regard to the site's urban location, setback distances to the existing properties to the west and inclusion of other above referenced focused design measures.

gateway proposal at junction

BEDROOM WINDOW

PRINCIPAL ASPECT

SOLID PANEL



PALMERSTOWN COMMUNITY SCHOOL (TO NORTH)

Palmerstown Community School to the North has a green buffer zone to the South with distances to the development in excess of 65 meters. The school is set out with East / West facing classrooms generally with a service area and sports complex to the south. Playing fields are located further East of the main school building. Its is our opinion that the scale, distance and relationship of the proposal will not negatively impact the School

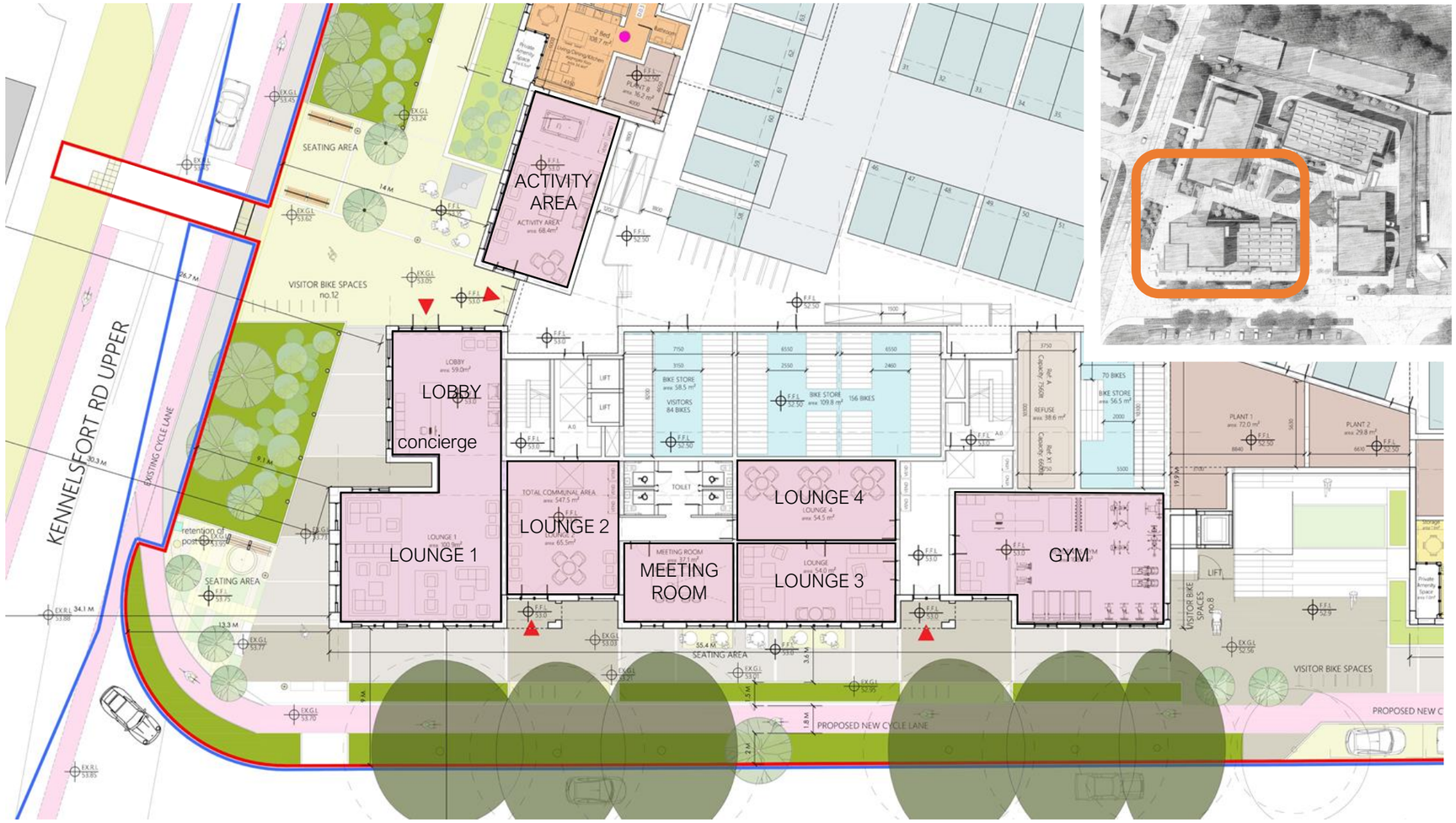
Overshadowing to School Amenity areas has been considered due to the Northern location relative to the proposal. The 2 immediate green areas (28 & 29)to the north were studied by DKP Partnership arriving at the below conclusions

*'.....Receptor 28 and 29 (**Palmerstown Community School** – green areas): receptor 28 resulted in change factor of 1.00 meaning*
the new proposed has no effect on this amenity space shadow/sunlight. receptor 29 resulted in change factor of
0.97 meaning the new proposed development has a small effect on the amenity space shadow/sunlight. This effect happens in the late afternoon hours of 16.00-18.00. The results are comfortably within BRE guidelines...'

28	1500	874800	9.72	10	874800	9.72	10	1.00	no change in shadow/sunlight
29	800	442560	9.22	10	426720	8.89	9	0.97	change factor well within acceptable guidelines

Table 6.2: Summary table of results

COMMUNAL AREAS



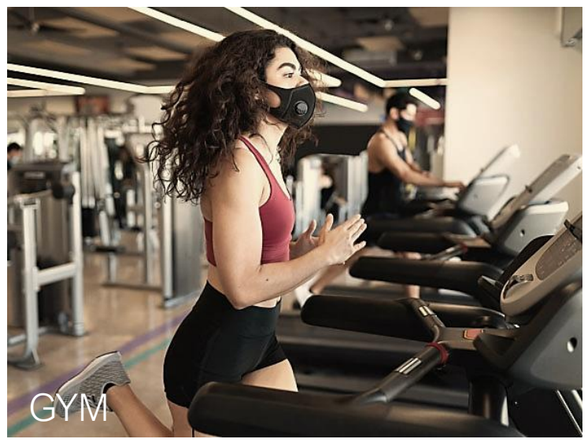
Communal areas are located at the base of Building A with the main entrance concierge also located here. This space is considered to be highly active and the proposed uses have the opportunity to interact with the street and offer live frontages with on street seating areas.

A range of uses are provided for from alternative lounge areas to a games rooms area. A residents gym and meeting room is also provided.


GAMES ROOM


LOUNGE 1


LOUNGE 2

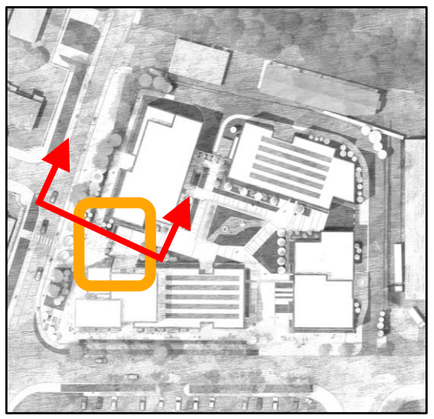

GYM

MEETINGS

Podium edge study

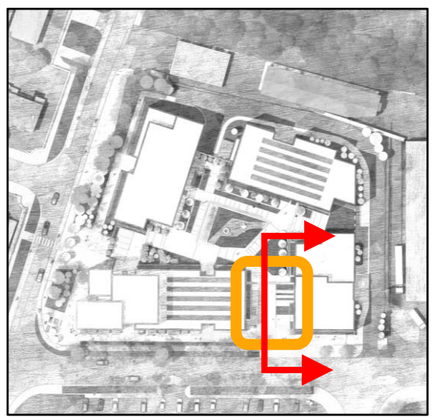
human scale analysis

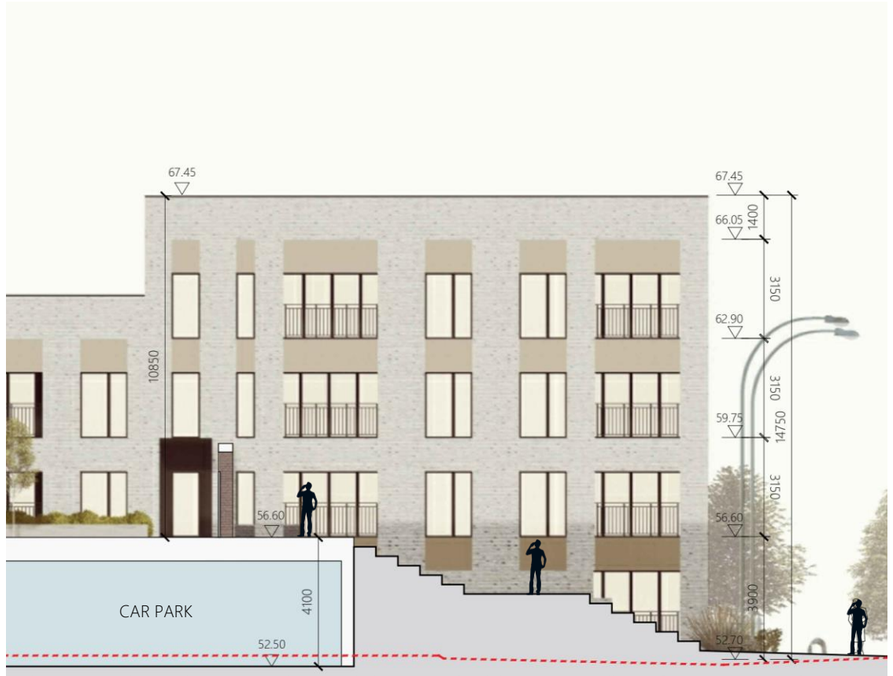
PODIUM WEST



ACTIVITY ROOM FACING STREET

PODIUM SOUTH

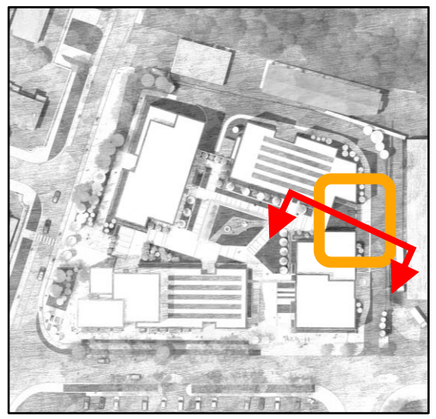




The stepped social space to the south between building A & B allows for an intimate human scale to be achieved

SOUHT FACING SOCIAL AREA / PUBLIC REALM FEATURE

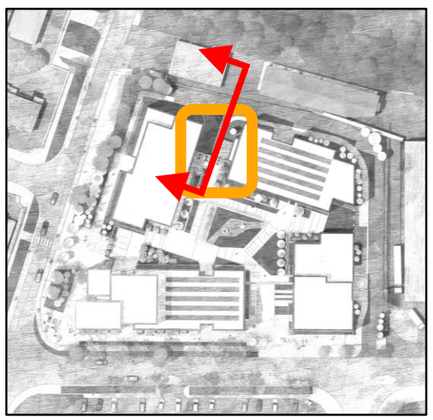
PODIUM EAST



The introduction of live uses to the East of the proposal between buildings B & C conceals the podium edge to enhance the human scale experience and add variation to the massing scale

EMPLOYMENT USES FACING NEW STREET

PODIUM NORTH (REAR)



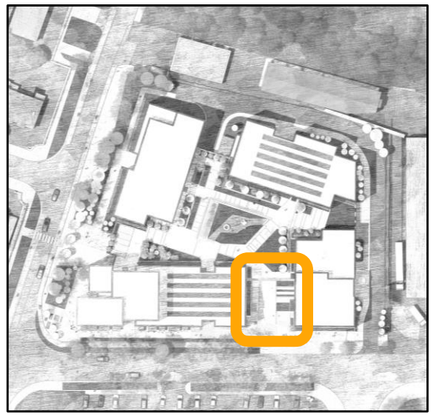
The relocation of the carpark access point to the rear of the development is the only location where the podium is revealed without active uses. This edge is stepped in from the building lines of D & C to reduce the visual impact

CAR PARKING ACCESS POINT LOCATED TO REAR

Podium access

ramp and steps analysis | lift and steps proposal

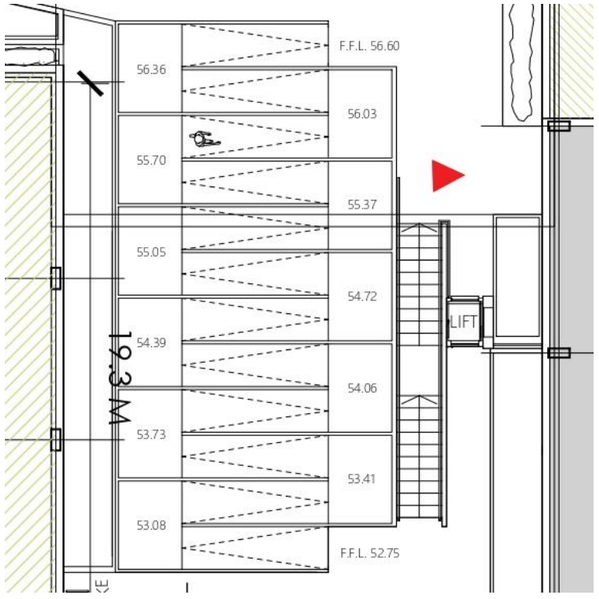
RAMP & STEPS ANALYISIS



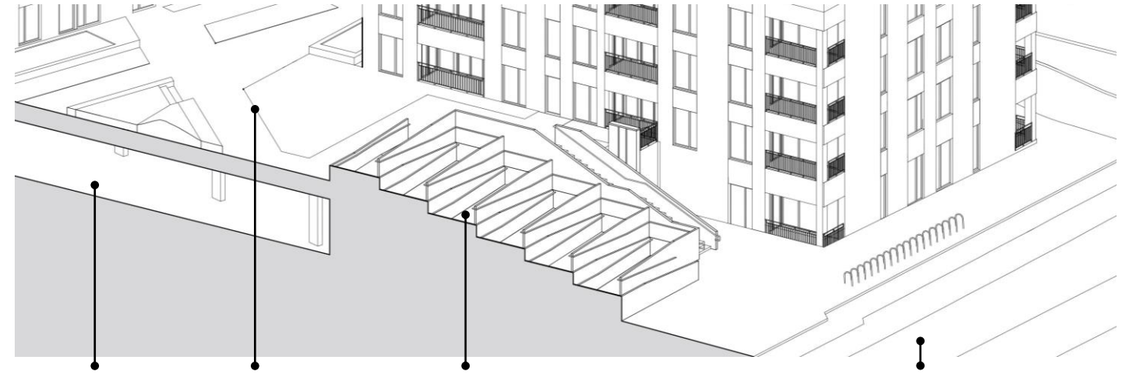
At the Tri-Party meeting the design team were requested to analyse the potential for ramp access over lift access at the main podium access point between buildings A & B. The transition is almost 4 meters which in our opinion is excessive for a ramp access solution under current regulations. On analysis, the effect is 2 fold with the ramp being excessively long it almost deters the user while also security issues arise once you enter the transition element, visual navigation is impaired and may be difficult to exit quickly. Visually it presents as overbearing and un appealing. For these reasons an alternative compliant access arrangement is proposed.

The proposal is to provide an external secure lift for residents managed by the management company with adjoining stepped access and a large over looked south facing social area – see over leaf.

RAMP ELEVATION

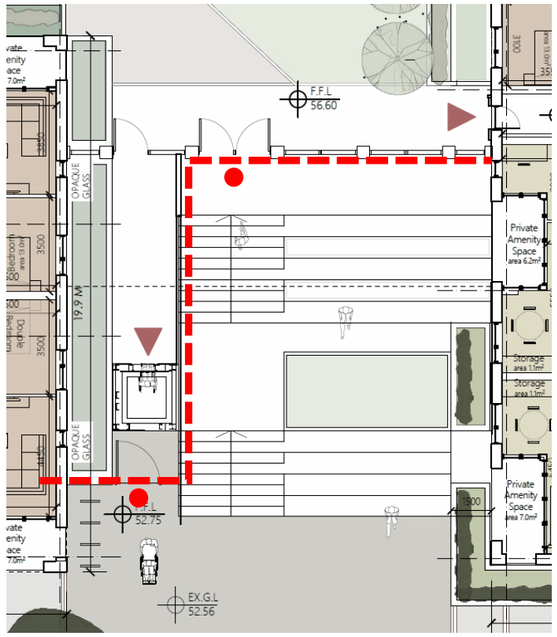


RAMP PLAN



| CAR PARK & PODIUM LEVEL | RAMPED ACCESS | CHERRY ORCHARD INDUSTRIAL ESTATE ROAD

EXTERNAL LIFT AND STEPS PROPOSAL



SECURE AREA

SWIPE ACCESS

ACCESS SECURITY

Access to the external lift is provided for by way of security swipe card provided by the management company to all residents. Swipe card administration is provided by agreement with subcontracted security contractor typically that also manage CCTV monitoring services. Swipe cards are issued and replaced for residents through a strict logging protocol to ensure secure administration. 24 hour CCTV monitoring is provided at all main entrance points including the external list access point.

LIFT PROPOSAL WITH SOUTH FACING SOCIAL AREA

EXTERNAL LIFT MAINTENANCE & SPECIFICATION

Key the success of the above arrangement is how the specification, management and upkeep of the external lift element is proposed. The management company will adhere to standards and maintenance regimes as required by law and the lift will be specified to work effectively in its receiving environment. Below are the main parameters required for an external lift specification and management in such a location.

The Safety, Health and Welfare at Work (General Application) Regulations 2007. [S.I.No.299 of 2007] place a duty on all employers responsible for the operation of lifts (these regulations apply retrospectively to all lifts). The main points under the act to consider are:

Maintenance

Employers and/or persons in control of lifts are required to have their lift adequately maintained. They should also be in possession of a log-book where details of any repairs or checks have been recorded, this service will be provided by the maintenance provider to the management company in place

Thorough examination

Lifts (passenger, goods or both) are subject to a 6 monthly thorough examination by a competent person (these thorough examinations may be carried out by insurance companies or surveyor/independent inspection companies & must not be confused with normal maintenance activities).

The competent person must issue a report of the examination which contains all the information prescribed in the Regulations.

Where the report sets out conditions for the safe working of the lifts, these conditions must be adhered to.

References

The Health and Safety Authority guidance document on 2007 act Sections 31, 45, 46 & 52 .Guidance to the Safety, Health and Welfare at Work (General Application) Regulations 2007. Chapter 2 of Part 2: Use of work equipment.

Due to the external nature of the lift the following items will be added to the specification.

The lift will be rated as IP 54 for all fixtures including landing pushes and indicators, as well as landing doors. The external lift will comply with EN81-71 (Vandal resistance) in full, this will ensure components such as the landing door panels, car and landing fixtures including pushes and indicators are vandal resistant and less prone to damage and down time, this is common on the Dart line with Irish Rail currently upgrading a large number of their lifts to a similar spec to ensure greater reliability and ultimately less down time.

The lift will be maintained on a quarterly basis due to the external nature and environment, this is in line with similar external lifts and ensures adequate maintenance should be provided.

The lifts will also in accordance with EN81-28 have a 24/7 manned communication system in place in the unlikely event someone becomes trapped .

accessibility statement

The proposed Strategic Housing Development seeks to comply with the principles of Universal Design (to encourage access and use of the development regardless of age, size, ability or disability).

The proposed development must meet the requirements of Part M of the Building Regulations.

Part M 2010 came into operation on the 1st January 2012 and the requirements of Part M 2010 must be followed subject to certain Transitional arrangements.

The Design Team recognises that since the introduction of the Disability Act in 2005 Irish Building Regulations (See Figure 1 above) have been revised with Universal Design in mind and a more comprehensive technical guidance document is now in place. This document is known as the Building Regulations 2010 Technical Guidance Document M - Access and Use' or alternatively TGD M 2010.

TGD M 2010 provides guidance in relation to meeting the requirements of Part M of the Second Schedule to the Regulations and focuses on Access and Use. It is important to note that the introduction of TGD M 2010 states:

"The materials, methods of construction, standards and other specifications (including technical specifications) which are referred to in this document are those which are likely to be suitable for the purposes of the Regulations. Where works are carried out in accordance with the guidance in this document, this will, prima facie, indicate compliance with Part M of the Second Schedule to the Building Regulations (as amended). However, the adoption of an approach other than that outlined in the guidance is not precluded provided that the relevant requirements of the Regulations are complied with.

Those involved in the design and construction of a building may be required by the relevant building control authority to provide such evidence as is necessary to establish that the requirements of the Building Regulations are being complied with".

The Design Team notes that TGD M 2010 is the minimum guidance to show compliance with the requirements of the Part M of the Building Regulations. The Design Team is also firmly committed to achieving universal access in the building and are committed to ensuring equal access for all. All people regardless of ability can approach and gain independent easy access to the proposed works (e.g. sloped access routes; and level access routes, stepped access routes, common areas .

People can circulate within the building and use the facilities (e.g. Lifts; Part M compliant stairwells; door design and surface finishes in common areas).

People can access the main facilities provided within the development.

The proposals will be subject to a DAC application (Disability Access Certificate) to the local BCA (Building Control Authority). The requirements of the application as well as any additional requirements/conditions raised by the BCA will be implemented in full in the course of construction of the proposal.

user mobility


KENNELSFORT RD UPPER
CHERRY ORCHARD INDUSTRIAL ESTATE
PROPOSED TURNING FOR REFUSE VEHICLES AND FIRE TENDER (PERMISABLE)
PROPOSED BIN COLLECTION
EXISTING CYCLE LANE
PROPOSED NEW CYCLE LANE
SEATING AREA
VISITOR BIKE SPACES
LOBBY
LIFT
LOUNGE 1
LOUNGE 2
LOUNGE 3
LOUNGE 4
MEETING ROOM
RESIDENT'S GYM
PLANT 1
PLANT 2
REMOTE WORKING SPACE
MEETING ROOM
Bike lanes
Public bus
Resident bike circulation
Resident car circulation
E.V. Charging points
Expansion E.V. Charging points
Care share spaces
accessible spaces
Resident lift access

materials & facades

PRIMARY MATERIALS

01 Brick type 1 (1A)
Pale grey Buff Clay Brick, horizontal stretcher course, bedded in white bright mortar – Buildings A,B,C & D

01 Brick type 2 (1B)
Blue grey engineering type Brick, horizontal stretcher course, bedded in pale mustard tones mortar– Building C , Building A & Recessed elements

01 Brick type 2 (1C)
Pale Red Clay Brick, horizontal stretcher course, bedded in white bright mortar– GATE WAY ELEMENT

01 Brick type 3 (1D)
Pale Cream Buff Clay Brick, horizontal stretcher course, bedded in white bright mortar– GATE WAY ELEMENT

SECONDARY ELEMENTS

02 Windows
Composite timber/ aluminium windows with Aluminium External Framing, colour graphite Grey

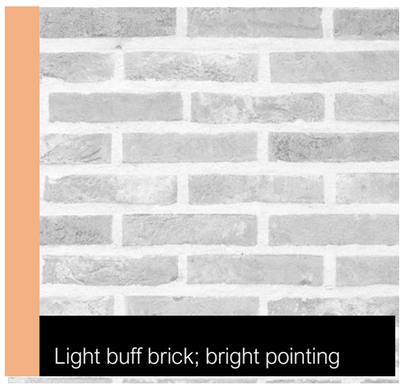
03 Window opening vent detail
Feature window vent openings to be provided in solid aluminium panel, within-window fabrication

04 Handrails and Balustrades
Handrails and balustrades in black painted mild steel circular section vertical rails, with flat plate black painted
OR
Glass handrails to tower element

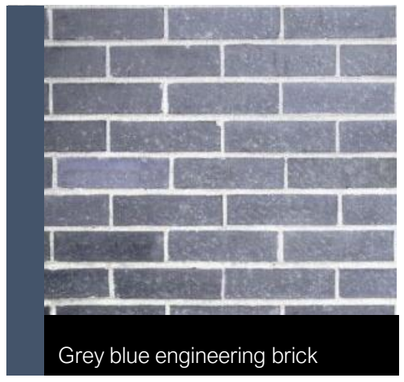
06 Trims & Flashing
Parapets, copings & flashings in powder coated aluminium to match window colour

PRIMARY MATERIALS

04 – 1A


Light buff brick; bright pointing

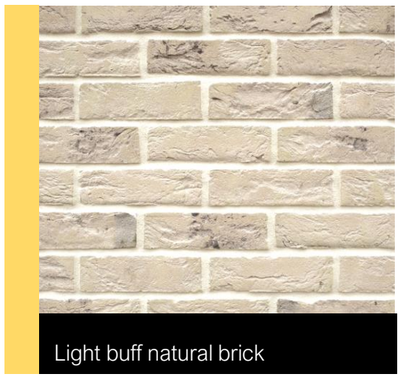
03 – 1B


Grey blue engineering brick

01 - 1C


Pale red brick

02 -1D

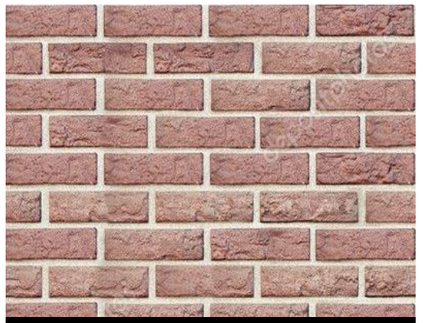

Light buff natural brick

MATERIALS LIFE CYCLE

Brickwork facade	Primary facade cladding material used. Lifecycle of 100+ years. Mortar pointing has shorter lifecycle of 25-50 years.	Extremely durable, with low maintenance requirements. Preventative maintenance by monitoring mortar joint deterioration ensures longevity of material.
Metal Cladding	Metal facade panels on galvanised metal rainscreen support system above glazing openings and with typical life expectancy of 25 years.	Aesthetic impact, durability and weathering. Annual inspection and cleaning every 5 years.

Light buff natural brick

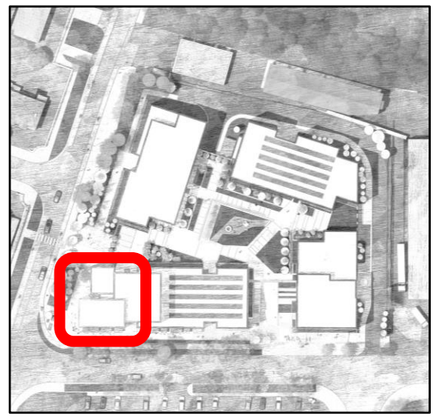
Aluminium coloured spandrel panels



Pale red brick

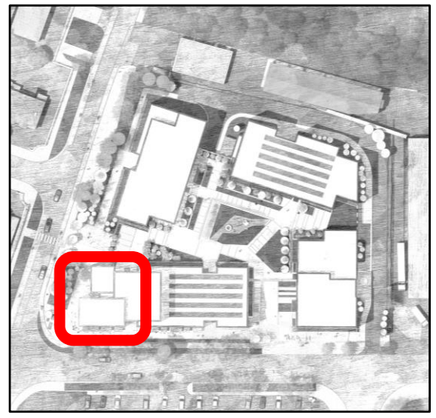
Glass handrails

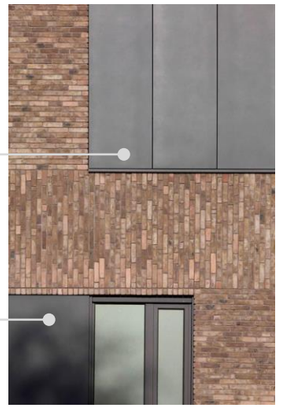
GATEWAY BUILDING (BUILDING A)



A combination of long life high quality materials are given through the proposal . Individual massing elements are picked out with a complimentary tone of brick finishes. Further massing demarcation is reinforced by slight alterations to fenestration rhythms and proportional arrangements on the gateway element to the south west corner.

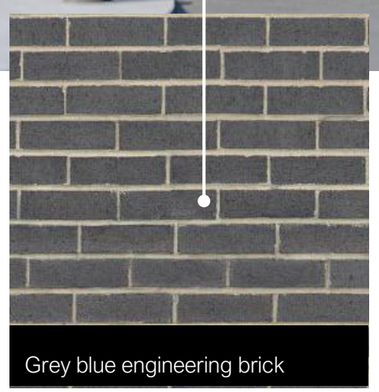
GATEWAY BUILDING (BUILDING A)



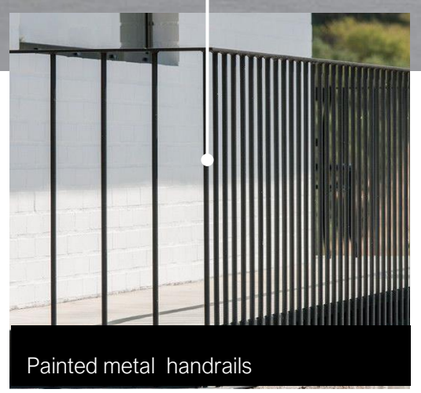


MATERIAL REFERNECE IMAGERY

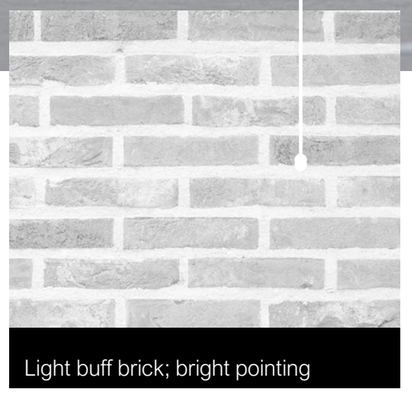
BUILDINGS A B & D



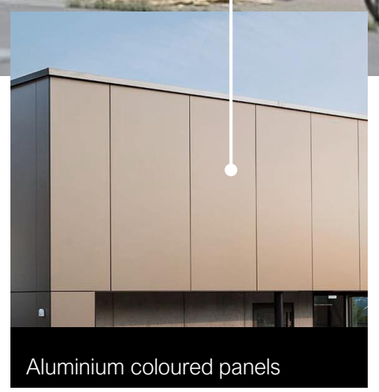
Grey blue engineering brick



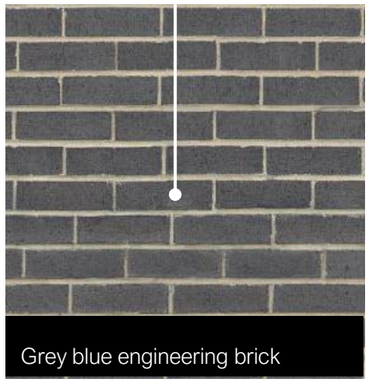
Painted metal handrails



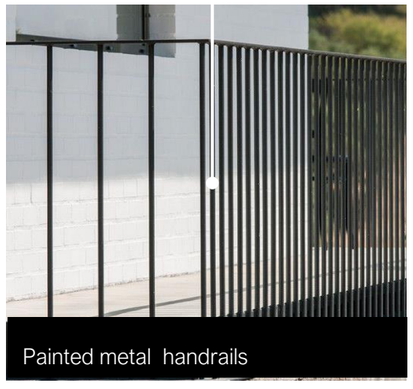
Light buff brick; bright pointing



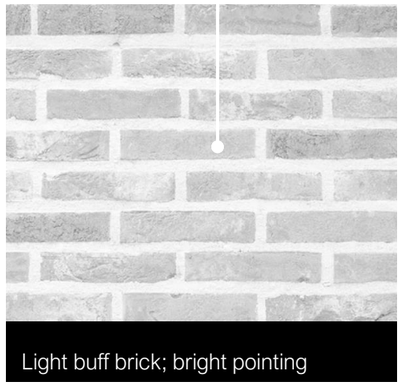
Aluminium coloured panels



Grey blue engineering brick



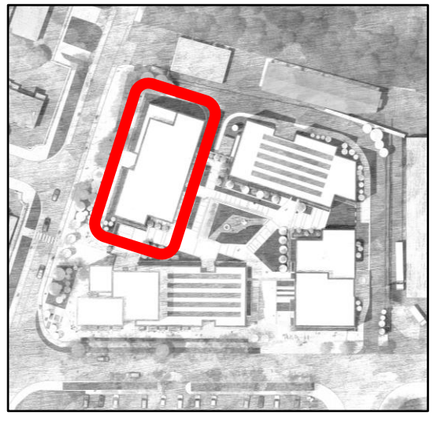
Painted metal handrails



Light buff brick; bright pointing

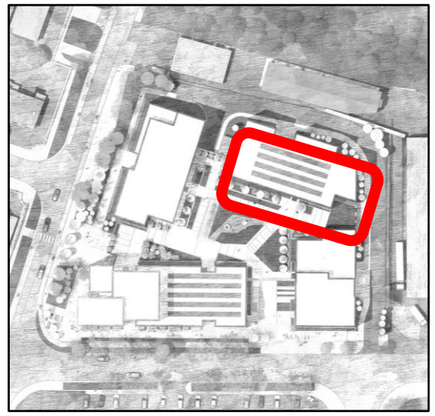
Aluminium coloured panels

REFERENCE IMAGES SHOWING MATERIAL PALLETTE



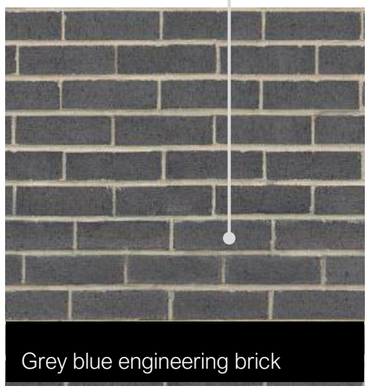
BUILDING D KENNESFORT ROAD UPPER

BUILDING C

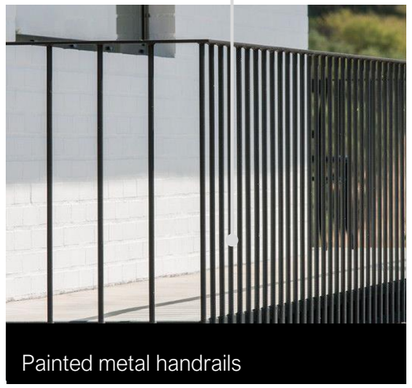


The central block with in the development is picked out by a darker brick detail to give interest & breakup . A complimentary flush aluminium panel detail will contrast with the note/tone of the brick to give a coherent composition of elements. Brick will be a smooth engineering brick with low colour variation offering a sharp clean aesthetic.

Building C South elevation

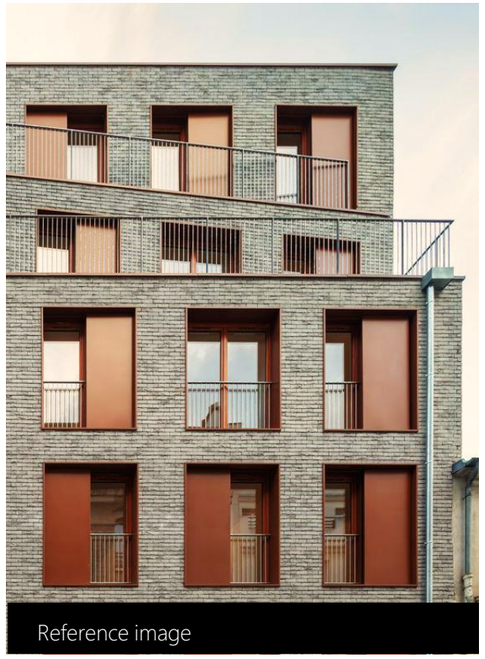


Grey blue engineering brick



Painted metal handrails

Aluminium coloured panels



Reference image

building life cycle

INTRODUCTION

This Building Life Cycle Report has been prepared for the proposed residential development 'ORCAHRD GATE' at Palmerston road D20 in accordance with the planning guidelines *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) 2020*.

Section 6.13 of the guidelines requires that apartment applications shall:

"include a building lifecycle report which in turn includes an assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application, as well as demonstrating what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of the residents."

This Building Life Cycle Report document sets out to address the requirements of Section 6.13 of the Apartment Guidelines. The report is broken into two sections as follows:

Section 1: An assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application.

Section 2: Measures specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents.

0.1 DESCRIPTION OF PROPOSED DEVELOPMENT

The development is located at the former warehouse facility at units 54 & 65, Cherry Orchard Industrial Estate. The site presents a gateway location at the Western junction of Kennelsfort Road Upper and the Eastern industrial estate. This location represents the start of the lands zoned regen continuing to the East.

The proposal is for 144 build to sell apartments and associated facilities with a mix of 72 no. one bedroom apartments and 72 no. 2 bedroom apartments. The development is set out in 4 no. five storey buildings enclosing a raised podium courtyard with the Eastern junction building have a 9 storey gateway feature element. On site parking of 65 spaces is contained within a landscaped podium element with 2 on street go-car spaces provided.

SECTION 1

ASSESSMENT OF LONG-TERM RUNNING AND MAINTENANCE COSTS

Management of the Owners' Management Company's assets

A licensed Property Service Provider (PSP) will be contracted to the Owners Management Company (OMC) that will be formed for the residents. The PSP will ensure that the interests of the residents are protected by executing the block management plans efficiently. The PSP will be responsible for the good management of other support services to include finance, administration, insurance, emergency assistance support, company secretarial and communications. As governed by the Multi Unit Development Act 2011, an OMC shall not enter into a contract in excess of 3 years with any supplier. The OMC, by good practice, will re-tender the services received at least each 3 years.

The assets to be transferred to the OMC in accordance with the Act will include the common areas and external fabric of the multi-unit buildings, as well as landscaped areas in their vicinity.

The OMC's operational budgets will benefit from the utilisation of a Planned Preventative Maintenance (PPM) programme. The PPM will be completed annually for each apartment and duplex apartment building to include the shared internal and external common areas. Consideration will be given to the ongoing maintenance of the buildings assets in an effort to protect the asset lifecycle and to identify when replacements/upgrades are required. Items covered will guide which services are required, the timing and number of occurrences of same. Typical PPM programmes will detail the timing of the visits for fire alarm maintenance, lift maintenance, the landscaping specification, waste management protocols, along with day to day cleaning requirements.

Service Charge Budget

A service charge budget will be compiled to put in place funding requirements as costed in the Planned Preventative Maintenance programme and also in the Building Investment Fund report. The budget will be apportioned to unit owners in a fair and equitable way in accord ance with the MUDs Act, with the collection of fees into dedicated Owners' Management Company (OMC) bank accounts.

The OMC will promote competitive tendering of running and maintenance services to help minimize charges for residents. The service suppliers will be discharged the payment for their services from these bank accounts. Monthly reports of operational and financial matters will be provided to the OMC executives and annual to the members at the general meeting.

2.0 MEASURES TO MANAGE AND REDUCE COSTS FOR THE BENEFIT OF RESIDENTS

The proposed layouts make efficient use of the land. The buildings have been designed with a low number of stair and lift cores in order to increase efficiencies and ensuring that service charges and maintenance costs faced by residents into the future are kept at reasonable levels.

The apartment design has followed the principles of the BRE guide - "Site Layout Planning for Daylight and Sunlight". Good levels of sunlight will also be available in the development's amenity areas. When this guidance is followed the end result is generally a site which is positioned and laid out in such a way which will provide adequate levels of sun lighting and daylighting while creating an ambience that will appeal to any building occupant and reduce the lighting costs.

Lifecycle costs are also determined by the durability and maintenance requirements of materials. We have selected the very highest standard of finishes across the project. Low maintenance cladding materials such as brick finishes are proposed to minimise the impact of façade maintenance. Balconies are designed to be capable of fabrication offsite, resulting in higher standard of finish, reducing damage during construction and improved durability. Building materials proposed for use on apartment block elevations and in the public realm achieve a durable standard of quality that will not need regular fabric replacement or maintenance outside general day-to-day care. The choice of high quality and long-lasting materials such as brickwork, aluminium , steel and zinc cladding as well as hardscape in the semi-public and private realms will contribute to lower maintenance costs for future residents and occupiers.

This report reflects the outline material descriptions and examples of typical materials and systems used for schemes of this nature and their associated lifespans and maintenance requirements. All information is therefore indicative subject to detailed design development.

As the building design develops this document will be updated and a schedule will be generated from the items below detailing maintenance and replacement costs over the lifespan of the materials and development constituent parts. This will enable a robust schedule of building component repair and replacement costs which will be available to the property management company so that running and maintenance costs of the development are kept within the agreed annual operational budget. A general outline of the primary materials used in the scheme can be found below.

Measures are addressed under following headings:

- (2.1) Building Design
- (2.2) External Building Fabric Material Selection
- (2.3) Internal Building Fabric Material Selection
- (2.4) Energy and Building Services
- (2.5) Landscape Material Selection
- (2.6) Waste Management Plan
- (2.7) Human Health and Well-being
- (2.8) Transport and Accessibility

2.1 BUILDING DESIGN

Measure	Description	Benefit
Daylighting to units	As outlined in 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (December 2020)': to have regard for quantitative performance approaches to daylight provisions 'outlined in guides like the BRE guide 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting' when undertaken by development proposers which offer the capability to satisfy minimum standards of daylight provision'. Please refer to Daylight Assessment Report prepared by DKP Consulting Engineers submitted with this application.	Reduces the requirement for continuous daylighting, thus reducing the expense of artificial lighting
Daylighting to circulation areas	Natural lighting provided via tall windows at circulation cores.	Reduces the requirement for continuous artificial lighting.
External Lighting	External lighting will comply with the latest standards and achieve: □Low-level lighting □Utilise low voltage LED lamps □Minimum upward light spill Each light fitting is to be controlled via an individual Photoelectric Control Unit (PECU). The operation of the lighting shall be on a dusk-dawn profile.	Lighting will be designed to achieve the required standards, provide a safe environment for pedestrians, cyclists, and vehicular traffic, provide surveillance and limit the impact on the artificial lighting on surrounding existing flora and fauna.

2.2 EXTERNAL BUILDING FABRIC MATERIAL SELECTION

Measure	Description	Benefit
Brickwork facade	Primary facade cladding material used. Lifecycle of 100+ years. Mortar pointing has shorter lifecycle of 25-50 years.	Extremely durable, with low maintenance requirements. Preventative maintenance by monitoring mortar joint deterioration ensures longevity of material.
Metal Cladding	Metal facade panels on galvanised metal rainscreen support system above glazing openings and with typical life expectancy of 25 years.	Aesthetic impact, durability and weathering. Annual inspection and cleaning every 5 years.
Flat Roofs	TPO or similar roofing membrane with 22- 30 year lifespan installed to manufacturer's proven details. Appropriate protection for access to ensure maintenance of any roof equipment will be carried out without any damage to the membrane. Regular maintenance checks by property maintenance team.	Proven roofing system with regular maintenance prevents needs for repairs and additional cost to residents.
Sedum Roof	Extensive Green Roof System. Average life cycle of 13-35 years. Life cycle extended with robust proven detailing and appropriate regular maintenance quarterly every year.	Attenuation for storm water run off and less burden and maintenance of rainwater goods. Increased thermal and sound insulation to the building, aesthetic appeal and increased biodeversity.
Windows and Doors	All units double glazed with thermally broken frames in uPVC or Aluminium.	Minimal ongoing maintenance
Steel Balconies	Prefinished powder-coated and capability to be manufactured off site	Minimal ongoing maintenance.
Steel and Glass Balustrades	Powder coated steel finish	Requires minimal ongoing maintenance

2,3 INTERNAL BUILDING FABRIC MATERIAL SELECTION

Measure	Description	Benefit
Floors – apartment stair cores and entrances	Selected anti-slip porcelain or ceramic floor tile with inset mat well at entrancedoors as required. Life span of 20-25 years.	Low maintenance and easilycleaned.
Floors – lobbies/corridors	Selected carpet inlay on underlay. 13 years life span typically. Regular cleaningby property maintenance team.	Attractive aesthetic for residents and flexibility tochange in the future.
Walls	Selected contract vinyl wallpaper feature or selected paint finish with primer. Wall protection at heavy traffic areas with plasterboard substrate adjacent to lift cores where furniture moving will damage wall fabric. Finish lifespan of 2- 10 years, regular maintenance required.	Attractive aesthetic for residents and flexibility to change appearance in thefuture.
Ceilings	Selected paint finish with primer to skimmed plasterboard ceiling.	Decorative and durable finish.
Internal balustrades and handrails	Painted metal balustrade or proprietary glazed panel system face fixed to stair stringer/landing edge with polished stainless-steel brackets and clamps to manufacturers installation details.	Durable finish.
Internal Doors and Frames	Selected primed and painted solid internal doors. Glass and aluminum doorsystem to glazed entrances.	Durable finish with regular inspection and maintenance.

2.4 ENERGY AND BUILDING SERVICES

Measure	Description	Benefit
Nearly Zero Energy Building specifications (nZEB)	The dwellings will be nearly-Zero Energy dwellings.	Reduce primary energy demand by 70% viz. 2005 standards.
BER targets	A2	Reduce primary energy demand by 70% viz. 2005 standards.
Highly insulated building fabric	Ground floors: U<= 0.12 W/m^{2}K External walls: U<= 0.15 W/m^{2}K Roof: U<= 0.11 W/m^{2}K Windows: U<=1.3 W/m^{2}K Solar transmittance >= 0.70	Effective reduction of thermal energy demand
Thermal bridging	Acceptable Construction Details employed. Thermal bridging measured, with resultant values lower than the default.	Effective reduction of thermal energy demand
Airtightness	3 to 3.5 m^3/m^2.h @ 50 Pa maximum	Effective reduction of thermal energy demand
General ventilation	Demand-controlled mechanical extract system or mechanical heat recovery system	Effective reduction of thermal energy demand
Heating / hot-water controls	Time clocks and thermostats for each heating / hot-water zone	Effective reduction of thermal energy demand
Pumping	Variable speed pumps	Effective reduction of thermal energy demand
Lighting	100% LED lighting	Effective reduction of electrical energy demand

2.5 LANDSCAPE MATERIAL SELECTION

Measure	Description	Benefit
Paving and Decking Materials	Use of robust high-quality materials and detailing to be durable for bikes, play, etc.	Ensures the longevity of materials.
Site Layout & Landscaping Design	High quality landscaping both hard surface (for the cycle /car parking and pavements) and soft landscaping with planting and trees. The landscaping will be fully compliant with the requirements for Part M / K of the Technical Guidance Documents and will provide level access and crossings for wheelchair users and pedestrians with limited mobility. Designated car parking including accessible & visitor car parking reduces the travel distances for visitors with reduced mobility. The landscape design approach is to provide a variety of high- quality durable communal recreation areas for residents within the blocks which feature a range of quality tree, shrub and herbaceous planting. Hard landscape paving and decking materials will be robust and durable and installed using proven details to minimise maintenance requirements.	Plenty of room for cycles and pedestrians along with car spaces provide a good balance between pedestrians and car users. Wheelchair user-friendly. A landscape maintenance company will be retained by the OMC(s) to ensure regular maintenance improves the quality of the living environment for all residents.
Balconies & openable windows	Use of balconies & openable windows allow individuals to clean windows themselves.	Reduces the cost and reliance on 3rd party cleaning & maintenance.

2.6 WASTE MANAGEMENT

Measure	Description	Benefit
Construction Waste Management Plan	The application is accompanied by a Construction Waste Management Plan by the applicants.	The report demonstrates how the scheme complies with best practice.
Storage of Non-Recyclable Waste and Recyclable Household Waste	Domestic waste management strategy: Grey, brown and green bin distinction Competitive tender for waste management collection who will prepare an operational waste management plan for the site.	Helps reduce potential waste charges.
Composting	Organic waste bins to be provided throughout.	Helps reduce potential waste charges

2.7 HUMAN HEALTH AND WELL-BEING

How human health and well-being is been considered:

Measure	Description	Benefit
Natural / day light	The design, separation distances and layout of the apartment blocks have been designed to optimise the ingress of natural daylight/ sunlight to the proposed dwellings to provide good levels of natural light.	Reduces reliance on artificial lighting, thereby reducing costs
Accessibility	All units will comply with the requirements of Building Regulations, Technical Guidance Documents Parts K and M.	Reduces the level of adaptation, and associated costs potentially necessitated by residents' future circumstances.
Security	The scheme is designed to incorporate passive surveillance with the following security strategies likely to be adopted: • CCTV monitoring details • Secure bicycle stands • Overlooked communal open space in the form of a courtyard.	Helps to reduce potential security/ management cost
Natural Amenity	The site has a very high quality of natural amenity space. Existing mature treeson Cherry Orchard industrial estate road and Kennelsfort road upper (save one that is classed as requiring removal) have been preserved and will offer ecologically diverse routes for residents to enjoy in addition to the principal public open space onto the front of the development to the West, additional pockets throughout the site as well as communal amenity spaces adjacent to the apartment blocks. Play areas have been provided in the communal amenity centrally located.	Facilitates community interaction, socialising and play- resulting in improved well being

2.8 TRANSPORT & ACCESSIBILITY

Transport considerations for increasing the update of the use of public transport, cycling and walking and reducing the ownership of private cars and reducing oil dependency:

Measure	Description	Benefit
Access to Public Transport	The development is located on the no. 18 bus route to the city centre with a stop located at its boundary to the West. The site is located next to the nearby district centre 5 minutes walk away . Additional bike infrastructure is provide by way a new bike lane to Cherry Orchard Industrial Estate Road connecting to existing bike lanes on Kennelsfort Road Upper. 2 Car Share spaces are also provided to the south of the scheme for public use.	Availability, proximity to bus services reduces the reliance on the private motor.
Storage of Non-Recyclable Waste and Recyclable Household Waste	Domestic waste management strategy: Grey, brown and green bin distinction. Competitive tender for waste management collection.	Helps reduce potential waste charges.
Composting	Organic waste bins to be provided throughout	Helps reduce potential waste charges.

3.0 Building Investment Fund

In accordance with the MUDs Act, the OMC(s) will allocate a certain portion of funds towards a sinking fund, in order to adequately resource long-term replacement of components.
The Building Investment Fund table below illustrates what could be incorporated in the calcu- lation of a Sinking Fund:

Element	Life Expectancy
Roofs	
Replacement felt roof covering incl. insulation to main roofs	18
Replacement parapet, fascia details	18
Replace roof access hatches	25
Specialist Roof Systems - Fall arrest	25
Waterproofing details to penthouse paved areas	12
Elevations	
Brick Re-pointing	80
Metal Panels - recoating	25
Minor repairs to render areas	18
Replace exit/entrance doors	25
Replace rainwater goods	25
Replace balcony floor finishes	25
External Areas/Car Parking	
External handrails and guarding	18
Surface finishes	18
Check drains for accumulation of debris and other sediments	6
Repaint parking spaces and numbering	7
Replace bike stands	25
Replace access control at entrances	12
M&E Services	
Internal re-lamping common areas	7
Replace internal light fittings	18
Replace external light fittings	18
Replace smoke detector heads	18
Replace manual break glass units	18
Replace fire alarm panel	18
Replace lift car and controls	25
Replace AOVs	25
Emergency lighting	20
External mains water connection	20

key development data

AREA SCHEDUELS

KEY DEVELOPMENT DATA

SITE AREA	8,544.0
G.D.A.	18,165.9
PLOT RATIO	2.13
SITE COVERAGE (INC.PODIUM)	58%
HEIGHT RANGE	1-9 STOREYS

GROSS DEVELOPMENT AREA

LEVEL	NEW BUILT AREA (INC. BALCONIES) (sqm)	parking	substation	block a	block b	block c	block d
G	4,970.6	2035.4	26.7	1137	589.6	535.4	646.7
1	3,110.0			1016	606.8	762.8	724
2	3,110.0			1016	606.8	762.8	724
3	2,840.8			1016	337.6	762.8	724
4	2,436.5			1016	0	762.8	657.3
5	443.4			443			
6	443.4			443			
7	443.4			443			
8	367.8			368			
TOTAL	18,165.9						

GROSS FLOOR SPACE (COMBINED)	AREA (sqm)
APARTMENTS	9293.8
BALCONIES	987.8
CIRCULATION	1,171.6
STAIR CORES	715.6
PLANT	294.0
BINS	145.6
BIKE STORES	224.8
COMMUNAL	547.5
LOCAL EMPOYMENT USES	133.3
TOILETS	41.1
SUBSTATION	19.6
CAR PARK	2,035.4
BALANCE*	2,555.8
TOTAL	18,165.9

*(all risers, shafts , internal walls , external walls)

COMMUNAL AREA

LOCATION	AREA (sqm)
LOBBY	59
LOUNGE 1	100.9
LOUNGE 2	65.5
LOUNGE 3	54
LOUNGE 4	54.5
MEETING ROOM	37.1
RESIDENT'S GYM	108.1
ACTIVITY AREA	68.4
TOTAL	547.50

OTHER USES

LOCAL EMPLOYMENT USES	AREA (sqm)
LOCAL EMPLOYMENT ROOM	37.5
WORKSHOP	31.20
HOME OFFICE	47.30
MEETING ROOM	17.30
TOTAL	133.30

PUBLIC- RESIDENT'S AMENITY

TYPE	APART NO.	MIN. AMENITY AREA / APT (sqm)	TOTAL PUBLIC AMENITY AREA REQUIRED (sqm)
1 BED 2 PERSON	72	5	360
2 BED 4 PERSON	72	7	504
	144		864

PUBLIC AMENITY ACHIEVED 1303 (PODIUM USABLE AMENITY AREA)

Communal gardens and play space at Podium Level

*(excluding vents, planters, water features, mounded tree stands, flower beds & buffers)

PARKING FACILITIES

TYPE	NUMBER	
RESIDENT'S CAR PARK	65	45.14%
MOTORBIKE STANDS	8	
Go Car	2	
RESIDENT'S BIKE STANDS	226	min 216 required
VISITORS BIKE STANDS	84	

LANDSCAPE

LOCATION	AREA (sqm)
PODIUM (USABLE AMENITY)	1303

APARTMENT MIX

TYPE	NUMBER	%
1 BED 2 PERSON	72	50.0
2 BED 4 PERSON	72	50.0
TOTAL	144	100

APARTMENT FLOOR AREAS & STANDARDS

APARTMENT FLOOR AREAS ACTUAL

BLOCK	AREA (sqm)
BLOCK A	3689.7
BLOCK B	1131.8
BLOCK C	2340.5
BLOCK D	2131.8
TOTAL	**9293.8**

TYPE	NO	CUMULATIVE FLOOR AREA (sqm)
1 BED 2 PERSON	74	3512.7
2 BED 4 PERSON	71	5781.1
		9293.8

APARTMENT DESIGN STANDARDS-MIN.FLOOR AREAS

TYPE	%	NO	MIN. AREA REQUIRED (sqm)/APT	CUMULATIVE MIN. FLOOR AREA (sqm)	
1 BED 2 PERSON	50.0%	72	45	3240	50.0%
2 BED 4 PERSON	50.0%	72	73	5256	50.0%
		144		8496	

REALLOCATION OF +10% OF MAJORITY

1 BED 2 PERSON

72	X	7.3	=	525.6 sqm

TOTAL REQUIRED MINIMUM FLOOR AREA

8496	+	525.6	=	*9021.6* sqm

NOTE:

9293.8	-	*9021.6*	=	272.2 sqm ACHIEVED ABOVE MIN. REQ.

NUMBER OF UNITS WITH 10% AREA OVER MINIMUM STANDARD AREA = 74 UNITS / 51. % (see quality assessment)

ASPECT RATIO

ASPECT	NO	%
DUAL	84	58.3%
SOUTH	28	19.4%
EAST/WEST	20	13.9%
NORTH WITH AMENITY	12	8.3%
	144	100.0%

DETAILED AREA BREAKDOWN

LEVEL 0

GROSS FLOOR AREA

BUILDING A		BUILDING B		BUILDING C		BUILDING D	
Apartments net	0.00	Apartments net	132.80	Apartments net	263.20	Apartments net	233.30
Balconies net	0.0	Balconies net	14	Balconies net	25.2	Balconies net	26.2
Circulation net	49.5	Circulation net	95.3	Circulation net	56	Circulation net	53.3
Stair core net	67.9	Stair core net	31.8	Stair core net	20.6	Stair core net	22.3
Plant	101.8	Plant	30.7	Plant	48	Plant	113.5
Bins	38.6	Bins	39.5	Bins	35.2	Bins	32.3
Bikes	224.8	Local empl.uses	133.3			Activity Area	68.4
Access. WC	24.2	Access. WC	16.9		448.20		549.30
*Communal	479.1		494.30				
	985.9						

*lobby, lounge 1, lounge 2, lounge 3, lounge 4, meeting room, resident's gym,

* Balance	150.90	* Balance	95.30	* Balance	87.20	* Balance	97.40
Gross	1136.8	Gross	589.6	Gross	535.4	Gross	646.7

PARKING	(Gross)	2035.40		
	(Net)	2035.40		
SUBSTATION	(Gross)	26.7	* Balance	7.1
	(Net)	19.6		

* Balance (all risers, shafts , internal walls , external walls)

DETAILED AREA BREAKDOWN

LEVEL 1

BUILDING A		BUILDING B		BUILDING C		BUILDING D	
Apartments net	660.90	Apartments net	387.80	Apartments net	507.40	Apartments net	477.40
Balconies net	70.5	Balconies net	40.9	Balconies net	47.9	Balconies net	48.2
Circulation net	73.8	Circulation net	55.9	Circulation net	74.3	Circulation net	59.5
Stair core net	59.3	Stair core net	26	Stair core net	20.6	Stair core net	27.7
	864.50		510.60		650.20		612.80
* Balance	151.90	* Balance	96.20	* Balance	112.60	* Balance	111.20
Gross	1016.4	Gross	606.8	Gross	762.8	Gross	724

* Balance (all risers, shafts , internal walls , external walls)

LEVEL2

BUILDING A		BUILDING B		BUILDING C		BUILDING D	
Apartments net	660.90	Apartments net	405.50	Apartments net	523.30	Apartments net	489.50
Balconies net	70.5	Balconies net	40.9	Balconies net	53.5	Balconies net	53
Circulation net	73.8	Circulation net	39.6	Circulation net	53.3	Circulation net	41.3
Stair core net	55.6	Stair core net	26	Stair core net	20.6	Stair core net	27.7
	860.80		512.00		650.70		611.50
* Balance	155.60	* Balance	94.80	* Balance	112.10	* Balance	112.50
Gross	1016.4	Gross	606.8	Gross	762.8	Gross	724

DETAILED AREA BREAKDOWN

LEVEL3

BUILDING A		BUILDING B		BUILDING C		BUILDING D	
Apartments net	660.90	Apartments net	205.70	Apartments net	523.30	Apartments net	489.70
Balconies net	70.5	Balconies net	20.2	Balconies net	53.5	Balconies net	53
Circulation net	73.8	Circulation net	28.5	Circulation net	53.3	Circulation net	41.3
Stair core net	55.6	Stair core net	11.9	Stair core net	20.6	Stair core net	27.7
	860.80		266.30		650.70		611.70
* Balance	155.60	* Balance	71.30	* Balance	112.10	* Balance	112.30
Gross	1016.4	Gross	337.6	Gross	762.8	Gross	724

LEVEL4

BUILDING A		BUILDING B		BUILDING C		BUILDING D	
Apartments net	660.90	Apartments net		Apartments net	523.30	Apartments net	441.90
Balconies net	70.5	Balconies net		Balconies net	53.5	Balconies net	55.5
Circulation net	73.8	Circulation net		Circulation net	53.3	Circulation net	42.5
Stair core net	43.8	Stair core net		Stair core net	8.2	Stair core net	13.7
	849.00				638.30		553.60
* Balance	167.40	* Balance		* Balance	124.50	* Balance	103.70
Gross	1016.4	Gross	0	Gross	762.8	Gross	657.3

LEVEL5

BUILDING A	
Apartments net	276.50
Balconies net	31.5
Circulation net	20
Stair core net	35
	363.00
* Balance	80.40
Gross	443.4

LEVEL6

BUILDING A	
Apartments net	276.50
Balconies net	31.5
Circulation net	20
Stair core net	35
	363.00
Balance	80.40
Gross	443.4

LEVEL7

BUILDING A	
Apartments net	276.00
Balconies net	31.5
Circulation net	20
Stair core net	35
	362.50
Balance	80.90
Gross	443.4

LEVEL8

BUILDING A	
Apartments net	217.10
Balconies net	25.8
Circulation net	19.5
Stair core net	23
	285.40
Balance	82.40
Gross	367.8

* Balance (all risers, shafts , internal walls , external walls)

housing quality assessment

Building A

BUILDING	UNIT NUMBER	FLOOR LEVEL	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	DUAL ASPECT	UNIT OVER MINIMUM +10%EXTRA AREA	APARTMENT TYPE	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	MAIN LIVING ROOM WIDTH ACHIEVED (m)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY SPACE REQUIRED (m2)	PRIVATE AMENITY SPACE ACHIEVED (m2)
A	1	1	A.1.1	1 BEDROOM APARTMENT	45.0	51.00		•	1B2P A	1	2	2.5	11.4	12.2	3.5	23.0	32.2	3.0	3	5.0	6.3
A	2	1	A.1.2	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.0
A	3	1	A.1.3	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.1
A	4	1	A.1.4	2 BEDROOMS APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.1	6.0	6.1	7.0	7.0
A	5	1	A.1.5	2 BEDROOMS APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.5	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
A	6	1	A.1.6	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	7	1	A.1.7	2 BEDROOMS APARTMENT	73.0	78.10			2B4P O	2	4	2.5	24.4	26.3	4.00	30.0	31.5	6.0	6.0	7.0	7.6
A	8	1	A.1.8	1 BEDROOM APARTMENT	45.0	53.00		•	1B2P A	1	2	2.5	11.4	12.6	3.55	23.0	33.5	3.0	3.3	5.0	6.1
A	9	1	A.1.9	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	10	1	A.1.10	2 BEDROOMS APARTMENT	73.0	84.90	YES	•	2B4P P	2	4	2.5	24.4	30.5	3.75	30.0	30.8	6.0	8.1	7.0	7.2
A	11	1	A.1.11	1 BEDROOM APARTMENT	45.0	51.90	YES	•	1B2P D	1	2	2.5	11.4	13.4	3.85	23.0	23.8	3.0	3.6	5.0	6.0
A	12	2	A.2.12	1 BEDROOM APARTMENT	45.0	51.00		•	1B2P A	1	2	2.5	11.4	12.2	3.5	23.0	32.2	3.0	3	5.0	6.3
A	13	2	A.2.13	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.0
A	14	2	A.2.14	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.1
A	15	2	A.2.15	2 BEDROOMS APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.1	6.0	6.1	7.0	7.0
A	16	2	A.2.16	2 BEDROOMS APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.5	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
A	17	2	A.2.17	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	18	2	A.2.18	2 BEDROOMS APARTMENT	73.0	78.10			2B4P O	2	4	2.5	24.4	26.3	4.00	30.0	31.5	6.0	6.0	7.0	7.6
A	19	2	A.2.19	1 BEDROOM APARTMENT	45.0	53.00		•	1B2P A1	1	2	2.5	11.4	12.6	3.55	23.0	33.5	3.0	3.3	5.0	6.1
A	20	2	A.2.20	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	21	2	A.2.21	2 BEDROOMS APARTMENT	73.0	84.90	YES	•	2B4P P	2	4	2.5	24.4	30.5	3.75	30.0	30.8	6.0	8.1	7.0	7.2
A	22	2	A.2.22	1 BEDROOM APARTMENT	45.0	51.90	YES	•	1B2P D	1	2	2.5	11.4	13.4	3.85	23.0	23.8	3.0	3.6	5.0	6.0
A	23	3	A.3.23	1 BEDROOM APARTMENT	45.0	51.00		•	1B2P A	1	2	2.5	11.4	12.2	3.5	23.0	32.2	3.0	3	5.0	6.3
A	24	3	A.3.24	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.0
A	25	3	A.3.25	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.1

BUILDING	UNIT NUMBER	FLOOR LEVEL	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	DUAL ASPECT	UNIT OVER MINIMUM +10%EXTRA AREA	APARTMENT TYPE	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	MAIN LIVING ROOM WIDTH ACHIEVED (m)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY SPACE REQUIRED (m2)	PRIVATE AMENITY SPACE ACHIEVED (m2)
A	26	3	A.3.26	2 BEDROOMS APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.1	6.0	6.1	7.0	7.0
A	27	3	A.3.27	2 BEDROOMS APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.5	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
A	28	3	A.3.28	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	29	3	A.3.29	2 BEDROOMS APARTMENT	73.0	78.10			2B4P O	2	4	2.5	24.4	26.3	4.00	30.0	31.5	6.0	6.0	7.0	7.6
A	30	3	A.3.30	1 BEDROOM APARTMENT	45.0	53.00		•	1B2P A1	1	2	2.5	11.4	12.6	3.55	23.0	33.5	3.0	3.3	5.0	6.1
A	31	3	A.3.31	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	32	3	A.3.32	2 BEDROOMS APARTMENT	73.0	84.90	YES	•	2B4P P	2	4	2.5	24.4	30.5	3.75	30.0	30.8	6.0	8.1	7.0	7.2
A	33	3	A.3.33	1 BEDROOM APARTMENT	45.0	51.90	YES	•	1B2P D	1	2	2.5	11.4	13.4	3.85	23.0	23.8	3.0	3.6	5.0	6.0
A	34	4	A.4.34	1 BEDROOM APARTMENT	45.0	51.00		•	1B2P A	1	2	2.5	11.4	12.2	3.5	23.0	32.2	3.0	3	5.0	6.3
A	35	4	A.4.35	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.0
A	36	4	A.4.36	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.1
A	37	4	A.4.37	2 BEDROOMS APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.1	6.0	6.1	7.0	7.0
A	38	4	A.4.38	2 BEDROOMS APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.5	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
A	39	4	A.4.39	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	40	4	A.4.40	2 BEDROOMS APARTMENT	73.0	78.10			2B4P O	2	4	2.5	24.4	26.3	4.00	30.0	31.5	6.0	6.0	7.0	7.6
A	41	4	A.4.41	1 BEDROOM APARTMENT	45.0	53.00		•	1B2P A1	1	2	2.5	11.4	12.6	3.55	23.0	33.5	3.0	3.3	5.0	6.1
A	42	4	A.4.42	1 BEDROOM APARTMENT	45.0	48.40			1B2P C	1	2	2.5	11.4	13.2	4.20	23.0	26.8	3.0	3.1	5.0	5.6
A	43	4	A.4.43	2 BEDROOMS APARTMENT	73.0	84.90	YES	•	2B4P P	2	4	2.5	24.4	30.5	3.75	30.0	30.8	6.0	8.1	7.0	7.2
A	44	4	A.4.44	1 BEDROOM APARTMENT	45.0	51.90	YES	•	1B2P D	1	2	2.5	11.4	13.4	3.85	23.0	23.8	3.0	3.6	5.0	6.0
A	45	5	A.5.45	1 BEDROOM APARTMENT	45.0	49.50	YES	•	1B2P J	1	2	2.5	11.4	11.6	3.70	23.0	24.9	3.0	4.1	5.0	6.1
A	46	5	A.5.46	2 BEDROOMS APARTMENT	73.0	90.20	YES	•	2B4P T	2	4	2.5	24.4	25.2	4.3	30.0	37.5	6.0	8.8	7.0	12.2
A	47	5	A.5.47	2 BEDROOMS APARTMENT	73.0	84.90	YES	•	2B4P P	2	4	2.5	24.4	30.5	3.75	30.0	30.8	6.0	8.1	7.0	7.2
A	48	5	A.5.48	1 BEDROOM APARTMENT	45.0	51.90	YES	•	1B2P D	1	2	2.5	11.4	13.4	3.85	23.0	23.8	3.0	3.6	5.0	6.0
A	49	6	A.6.49	1 BEDROOM APARTMENT	45.0	49.50	YES	•	1B2P J	1	2	2.5	11.4	11.6	3.70	23.0	24.9	3.0	4.1	5.0	6.1
A	50	6	A.6.50	2 BEDROOMS APARTMENT	73.0	90.20	YES	•	2B4P T	2	4	2.5	24.4	25.2	4.3	30.0	37.5	6.0	8.8	7.0	12.2
A	51	6	A.6.51	2 BEDROOMS APARTMENT	73.0	84.90	YES	•	2B4P P	2	4	2.5	24.4	30.5	3.75	30.0	30.8	6.0	8.1	7.0	7.2
A	52	6	A.6.52	1 BEDROOM APARTMENT	45.0	51.90	YES	•	1B2P D	1	2	2.5	11.4	13.4	3.85	23.0	23.8	3.0	3.6	5.0	6.0
A	53	7	A.7.53	1 BEDROOM APARTMENT	45.0	49.50	YES	•	1B2P J	1	2	2.5	11.4	11.6	3.70	23.0	24.9	3.0	4.1	5.0	6.1
A	54	7	A.7.54	2 BEDROOMS APARTMENT	73.0	89.70	YES	•	2B4P T	2	4	2.5	24.4	25.2	4.3	30.0	37.5	6.0	8.8	7.0	12.2
A	55	7	A.7.55	2 BEDROOMS APARTMENT	73.0	84.90	YES	•	2B4P P	2	4	2.5	24.4	30.5	3.75	30.0	30.8	6.0	8.1	7.0	7.2
A	56	7	A.7.56	1 BEDROOM APARTMENT	45.0	51.90	YES	•	1B2P D	1	2	2.5	11.4	13.4	3.85	23.0	23.8	3.0	3.6	5.0	6.0

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A	57	8	A.8.57	1 BEDROOM APARTMENT	45.0	49.50	YES	•	1B2P J	1	2	2.5	11.4	11.6	3.70	23.0	24.9	3.0	4.1	5.0	6.1
A	58	8	A.8.58	2 BEDROOMS APARTMENT	73.0	87.10	YES	•	2B4P T1	2	4	2.5	24.4	25.1	5.02	30.0	33.7	6.0	10.0	7.0	12.5
A	59	8	A.8.59	2 BEDROOMS APARTMENT	73.0	80.50	YES	•	2B4P P1	2	4	2.5	24.4	27.4	4.12	30.0	32.2	6.0	6.3	7.0	7.2
	59				3327.0	3689.70	31	35													402.3

Building B

B	1	0	B.0.1	2 BEDROOM APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.85	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
B	2	0	B.0.2	1 BEDROOM APARTMENT	45.0	52.40		•	1B2P E	1	2	2.85	11.4	12.6	3.85	23.0	28.0	3.0	3.2	5.0	7
B	3	1	B.1.3	2 BEDROOM APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.5	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
B	4	1	B.1.4	1 BEDROOM APARTMENT	45.0	52.40	YES	•	1B2P E	1	2	2.5	11.4	12.6	3.85	23.0	28.0	3.0	3.2	5.0	7
B	5	1	B.1.5	1 BEDROOM APARTMENT	45.0	50.10		•	1B2P F	1	2	2.5	11.4	11.6	4.45	23.0	30.6	3.0	3	5.0	6.2
B	6	1	B.1.6	2 BEDROOM APARTMENT	73.0	75.00	YES		2B4P O	2	4	2.5	24.4	28.2	4.00	30.0	32.7	6.0	6.0	7.0	7.8
B	7	1	B.1.7	2 BEDROOM APARTMENT	73.0	80.30	YES	•	2B4P N	2	4	2.5	24.4	26.9	4.3	30.0	33.4	6.0	6.6	7.0	7
B	8	1	B.1.8	1 BEDROOM APARTMENT	45.0	49.60		•	1B2P B1	1	2	2.5	11.4	13.7	3.65	23.0	28.7	3.0	3.6	5.0	5.9
B	9	2	B.2.9	2 BEDROOM APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.5	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
B	10	2	B.2.10	2 BEDROOM APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.3	6.0	6.1	7.0	7.0
B	11	2	B.2.11	1 BEDROOM APARTMENT	45.0	45.60			1B2P H	1	2	2.5	11.4	11.4	4.25	23.0	27.6	3.0	3.1	5.0	6.2
B	12	2	B.2.12	2 BEDROOM APARTMENT	73.0	75.00	YES		2B4P O	2	4	2.5	24.4	28.2	4.00	30.0	32.7	6.0	6.0	7.0	7.8
B	13	2	B.2.13	2 BEDROOM APARTMENT	73.0	80.30	YES	•	2B4P N	2	4	2.5	24.4	26.9	4.3	30.0	33.4	6.0	6.6	7.0	7
B	14	2	B.2.14	1 BEDROOM APARTMENT	45.0	49.60		•	1B2P B1	1	2	2.5	11.4	13.7	3.65	23.0	28.7	3.0	3.6	5.0	5.9
B	15	3	B.3.15	2 BEDROOM APARTMENT	73.0	80.40	YES	•	2B4P K	2	4	2.5	24.4	26.3	4.45	30.0	33.9	6.0	6.1	7.0	7.0
B	16	3	B.3.16	2 BEDROOM APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.3	6.0	6.1	7.0	7.0
B	17	3	B.3.17	1 BEDROOM APARTMENT	45.0	50.70		•	1B2P H	1	2	2.5	11.4	11.4	4.25	23.0	24.8	3.0	3.6	5.0	6.2
	17				1045.0	1131.80	12	12													116

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Building C																					
C	1	0	C.0.1	1 BEDROOM APARTMENT	45.0	46.90	YES		1B2P A2	1	2	2.85	11.4	11.4	3.3	23.0	28.5	3.0	3	5.0	5.6
C	2	0	C.0.2	2 BEDROOM APARTMENT	73.0	80.80	YES	•	2B4P L	2	4	2.85	24.4	29.5	4.66	30.0	35.1	6.0	6.7	7.0	7
C	3	0	C.0.3	2 BEDROOM APARTMENT	73.0	84.50	YES	•	2B4P M	2	4	2.85	24.4	28.3	3.75	30.0	31.5	6.0	6.8	7.0	7.0
C	4	0	C.0.4	1 BEDROOM APARTMENT	45.0	51.00	YES	•	1B2P A2	1	2	2.85	11.4	11.4	3.3	23.0	28.5	3.0	3	5.0	5.6
C	5	1	C.1.5	1 BEDROOM APARTMENT	45.0	46.90	YES		1B2P A2	1	2	2.5	11.4	11.4	3.3	23.0	28.5	3.0	3	5.0	5.6
C	6	1	C.1.6	2 BEDROOM APARTMENT	73.0	80.80	YES	•	2B4P L	2	4	2.5	24.4	29.5	4.66	30.0	35.1	6.0	6.7	7.0	7
C	7	1	C.1.7	2 BEDROOM APARTMENT	73.0	80.90	YES	•	2B4P O2	2	4	2.5	24.4	28	4.00	30.0	32.7	6.0	6.0	7.0	8.0
C	8	1	C.1.8	2 BEDROOM APARTMENT	73.0	83.70		•	2B4P R1	2	4	2.5	24.4	27.8	4.48	30.0	34.3	6.0	6	7.0	7.7
C	9	1	C.1.9	2 BEDROOM APARTMENT	73.0	84.70		•	2B4P M1	2	4	2.5	24.4	30	4.25	30.0	34.5	6.0	6.2	7.0	7.0
C	10	1	C.1.10	2 BEDROOM APARTMENT	73.0	79.40	YES		2B4P M	2	4	2.5	24.4	28.3	3.75	30.0	36.3	6.0	6.8	7.0	7.0
C	11	1	C.1.11	1 BEDROOM APARTMENT	45.0	51.00	YES	•	1B2P A2	1	2	2.5	11.4	11.4	3.3	23.0	28.5	3.0	3	5.0	5.6
C	12	2	C.2.12	1 BEDROOM APARTMENT	45.0	46.90	YES		1B2P A2	1	2	2.5	11.4	11.4	3.3	23.0	28.5	3.0	3	5.0	5.6
C	13	2	C.2.13	2 BEDROOM APARTMENT	73.0	80.80	YES	•	2B4P L	2	4	2.5	24.4	29.5	4.66	30.0	35.1	6.0	6.7	7.0	7
C	14	2	C.2.14	2 BEDROOM APARTMENT	73.0	80.90	YES	•	2B4P O2	2	4	2.5	24.4	28	4.00	30.0	32.7	6.0	6.0	7.0	8.0
C	15	2	C.2.15	1 BEDROOM APARTMENT	45.0	49.90		•	1B2P H1	1	2	2.5	11.4	13	4.25	23.0	27.4	3.0	3.1	5.0	6.2
C	16	2	C.2.16	1 BEDROOM APARTMENT	45.0	49.70		•	1B2P I	1	2	2.5	11.4	13.1	3.65	23.0	25.8	3.0	3.5	5.0	6.5
C	17	2	C.2.17	2 BEDROOM APARTMENT	73.0	84.70		•	2B4P M1	2	4	2.5	24.4	30	4.25	30.0	34.5	6.0	6.2	7.0	7.0
C	18	2	C.2.18	2 BEDROOM APARTMENT	73.0	79.40	YES		2B4P M	2	4	2.5	24.4	28.3	3.75	30.0	36.3	6.0	6.8	7.0	7.0
C	19	2	C.2.19	1 BEDROOM APARTMENT	45.0	51.00	YES	•	1B2P A	1	2	2.5	11.4	12.2	3.5	23.0	32.2	3.0	3	5.0	6.2
C	20	3	C.3.20	1 BEDROOM APARTMENT	45.0	46.90	YES		1B2P A2	1	2	2.5	11.4	11.4	3.3	23.0	28.5	3.0	3	5.0	5.6
C	21	3	C.3.21	2 BEDROOM APARTMENT	73.0	80.80	YES	•	2B4P L	2	4	2.5	24.4	29.5	4.66	30.0	35.1	6.0	6.7	7.0	7
C	22	3	C.3.22	2 BEDROOM APARTMENT	73.0	80.90	YES	•	2B4P O2	2	4	2.5	24.4	28	4.00	30.0	32.7	6.0	6.0	7.0	8.0
C	23	3	C.3.23	1 BEDROOM APARTMENT	45.0	49.90		•	1B2P H1	1	2	2.5	11.4	13	4.25	23.0	27.4	3.0	3.1	5.0	6.2
C	24	3	C.3.24	1 BEDROOM APARTMENT	45.0	49.70		•	1B2P I	1	2	2.5	11.4	13.1	3.65	23.0	25.8	3.0	3.5	5.0	6.5
C	25	3	C.3.25	2 BEDROOM APARTMENT	73.0	84.70		•	2B4P M1	2	4	2.5	24.4	30	4.25	30.0	34.5	6.0	6.2	7.0	7.0
C	26	3	C.3.26	2 BEDROOM APARTMENT	73.0	79.40	YES		2B4P M	2	4	2.5	24.4	28.3	3.75	30.0	36.3	6.0	6.8	7.0	7.0

BUILDING	UNIT NUMBER	FLOOR LEVEL	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	DUAL ASPECT	UNIT OVER MINIMUM +10%EXTRA AREA	APARTMENT TYPE	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	MAIN LIVING ROOM WIDTH ACHIEVED (m)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY SPACE REQUIRED (m2)	PRIVATE AMENITY SPACE ACHIEVED (m2)
C	27	3	C.3.27	1 BEDROOM APARTMENT	45.0	51.00	YES	•	1B2P A	1	2	2.5	11.4	12.2	3.5	23.0	32.2	3.0	3	5.0	6.2
C	28	4	C.4.28	1 BEDROOM APARTMENT	45.0	46.90	YES		1B2P A2	1	2	2.5	11.4	11.4	3.3	23.0	28.5	3.0	3	5.0	5.6
C	29	4	C.4.29	2 BEDROOM APARTMENT	73.0	80.80	YES	•	2B4P L	2	4	2.5	24.4	29.5	4.66	30.0	35.1	6.0	6.7	7.0	7
C	30	4	C.4.30	2 BEDROOM APARTMENT	73.0	80.90	YES	•	2B4P O2	2	4	2.5	24.4	28	4.00	30.0	32.7	6.0	6.0	7.0	8.0
C	31	4	C.4.31	1 BEDROOM APARTMENT	45.0	49.90		•	1B2P H1	1	2	2.5	11.4	13	4.25	23.0	27.4	3.0	3.1	5.0	6.2
C	32	4	C.4.32	1 BEDROOM APARTMENT	45.0	49.70		•	1B2P I	1	2	2.5	11.4	13.1	3.65	23.0	25.8	3.0	3.5	5.0	6.5
C	33	4	C.4.33	2 BEDROOM APARTMENT	73.0	84.70		•	2B4P M1	2	4	2.5	24.4	30	4.25	30.0	34.5	6.0	6.2	7.0	7.0
C	34	4	C.4.34	2 BEDROOM APARTMENT	73.0	79.40	YES		2B4P M	2	4	2.5	24.4	28.3	3.75	30.0	36.3	6.0	6.8	7.0	7.0
C	35	4	C.4.35	1 BEDROOM APARTMENT	45.0	51.00	YES	•	1B2P A	1	2	2.5	11.4	12.2	3.5	23.0	32.2	3.0	3	5.0	6.2
	35				2107.0	2340.50	25	26													233.6

Building D

D	1	0	D.0.1	1 BEDROOM APARTMENT	45.0	47.10			1B2P B2	1	2	2.85	11.4	12.7	3.65	23.0	27.4	3.0	3.6	5.0	6.7
D	2	0	D.0.2	2 BEDROOM APARTMENT	73.0	77.50	YES		2B4P K1	2	4	2.85	24.4	25.3	4.15	30.0	31.9	6.0	6.1	7.0	7.0
D	3	0	D.0.3	2 BEDROOM APARTMENT	73.0	108.70		•	2B4P U	2	4	2.85	24.4	35.1	4.35	30.0	34.4	6.0	6.6	7.0	12.5
D	4	1	D.1.5	1 BEDROOM APARTMENT	45.0	47.10			1B2P B2	1	2	2.5	11.4	12.7	3.65	23.0	23.0	3.0	3.6	5.0	6.7
D	5	1	D.1.6	2 BEDROOM APARTMENT	73.0	77.50	YES		2B4P K1	2	4	2.5	24.4	25.3	4.15	30.0	31.9	6.0	6.1	7.0	7.0
D	6	1	D.1.7	2 BEDROOM APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.3	6.0	6.1	7.0	7.0
D	7	1	D.1.8	2 BEDROOM APARTMENT	73.0	78.40			2B4P R	2	4	2.5	24.4	26	4.25	30.0	30.9	6.0	6.1	7.0	7.4
D	8	1	D.1.9	2 BEDROOM APARTMENT	73.0	75.00	YES		2B4P O	2	4	2.5	24.4	28.2	4.00	30.0	32.7	6.0	6.0	7.0	7.8
D	9	1	D.1.10	2 BEDROOM APARTMENT	73.0	77.70	YES		2B4P N1	2	4	2.5	24.4	26.1	4.3	30.0	31.6	6.0	6.6	7.0	7
D	10	1	D.1.11	1 BEDROOM APARTMENT	45.0	47.10			1B2P B2	1	2	2.5	11.4	12.7	3.65	23.0	23.0	3.0	3.6	5.0	6.7
D	11	2	D.2.12	1 BEDROOM APARTMENT	45.0	46.90			1B2P B2	1	2	2.5	11.4	12.7	3.65	23.0	27.4	3.0	3.6	5.0	6
D	12	2	D.2.13	2 BEDROOM APARTMENT	73.0	77.50	YES		2B4P K1	2	4	2.5	24.4	25.3	4.15	30.0	31.9	6.0	6.1	7.0	7.0
D	13	2	D.2.14	2 BEDROOM APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.3	6.0	6.1	7.0	7.0
D	14	2	D.2.15	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.0
D	15	2	D.2.16	1 BEDROOM APARTMENT	45.0	45.60			1B2P H	1	2	2.5	11.4	11.4	4.25	23.0	27.6	3.0	3.1	5.0	6.2
D	16	2	D.2.17	2 BEDROOM APARTMENT	73.0	75.00	YES		2B4P O	2	4	2.5	24.4	28.2	4.00	30.0	32.7	6.0	6.0	7.0	7.8
D	17	2	D.2.18	2 BEDROOM APARTMENT	73.0	77.70	YES		2B4P N1	2	4	2.5	24.4	26.1	4.3	30.0	31.6	6.0	6.6	7.0	7

BUILDING	UNIT NUMBER	FLOOR LEVEL	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	DUAL ASPECT	UNIT OVER MINIMUM +10%EXTRA AREA	APARTMENT TYPE	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	MAIN LIVING ROOM WIDTH ACHIEVED (m)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY SPACE REQUIRED (m2)	PRIVATE AMENITY SPACE ACHIEVED (m2)
D	18	2	D.2.19	1 BEDROOM APARTMENT	45.0	47.10			1B2P B2	1	2	2.5	11.4	12.7	3.65	23.0	23.0	3.0	3.6	5.0	6.7
D	19	3	D.3.20	1 BEDROOM APARTMENT	45.0	47.10			1B2P B2	1	2	2.5	11.4	12.7	3.65	23.0	23.0	3.0	3.6	5.0	6.7
D	20	3	D.3.21	2 BEDROOM APARTMENT	73.0	77.50	YES		2B4P K1	2	4	2.5	24.4	25.3	4.15	30.0	31.9	6.0	6.1	7.0	7.0
D	21	3	D.3.22	2 BEDROOM APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.3	6.0	6.1	7.0	7.0
D	22	3	D.3.23	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.0
D	23	3	D.3.24	1 BEDROOM APARTMENT	45.0	45.60			1B2P H	1	2	2.5	11.4	11.4	4.25	23.0	27.6	3.0	3.1	5.0	6.2
D	24	3	D.3.25	2 BEDROOM APARTMENT	73.0	75.00	YES		2B4P O	2	4	2.5	24.4	28.2	4.00	30.0	32.7	6.0	6.0	7.0	7.8
D	25	3	D.3.26	2 BEDROOM APARTMENT	73.0	77.70	YES		2B4P N1	2	4	2.5	24.4	26.1	4.3	30.0	31.6	6.0	6.6	7.0	7
D	26	3	D.3.27	1 BEDROOM APARTMENT	45.0	47.10			1B2P B2	1	2	2.5	11.4	12.7	3.65	23.0	23.0	3.0	3.6	5.0	6.7
D	27	4	D.4.28	2 BEDROOM APARTMENT	73.0	76.80	YES		2B4P S	2	4	2.5	24.4	24.9	4.8	30.0	30.5	6.0	6	7.0	15.5
D	28	4	D.4.29	2 BEDROOM APARTMENT	73.0	74.60	YES		2B4P K2	2	4	2.5	24.4	24.4	3.85	30.0	30.3	6.0	6.1	7.0	7.0
D	29	4	D.4.30	1 BEDROOM APARTMENT	45.0	45.10			1B2P B	1	2	2.5	11.4	11.4	3.65	23.0	23.0	3.0	3.1	5.0	6.0
D	30	4	D.4.31	1 BEDROOM APARTMENT	45.0	45.60			1B2P H	1	2	2.5	11.4	11.4	4.25	23.0	27.6	3.0	3.1	5.0	6.2
D	31	4	D.4.32	2 BEDROOM APARTMENT	73.0	75.00	YES		2B4P O	2	4	2.5	24.4	28.2	4.00	30.0	32.7	6.0	6.0	7.0	7.8
D	32	4	D.4.33	2 BEDROOM APARTMENT	73.0	77.70	YES		2B4P N1	2	4	2.5	24.4	26.1	4.3	30.0	31.6	6.0	6.6	7.0	7
D	33	4	D.4.34	1 BEDROOM APARTMENT	45.0	47.10			1B2P B2	1	2	2.5	11.4	12.7	3.65	23.0	23.0	3.0	3.6	5.0	6.7
					2017.0	2131.80	17	1													

Buildings A, B, C, D

TOTAL APARTMENTS FLOOR AREA			8496.0	9293.80	74 of 144 no. over minimum area

Part V allocation

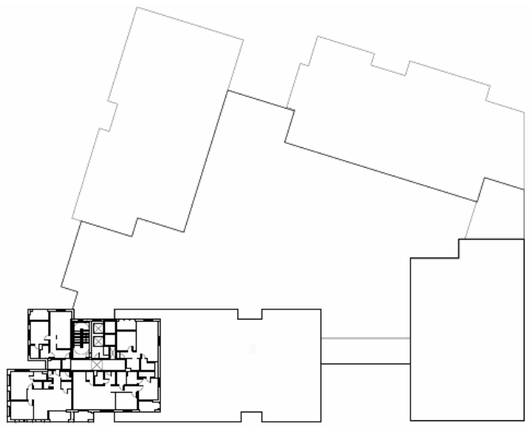
1 GROUND FLOOR PLAN
SCALE 1:500
PART V APARTMENT REF.NO.
C.0.1
D.0.3

2 FIRST FLOOR PLAN
SCALE 1:500
PART V APARTMENT REF.NO.
A.1.7
C.1.5
D.1.7
D.1.11

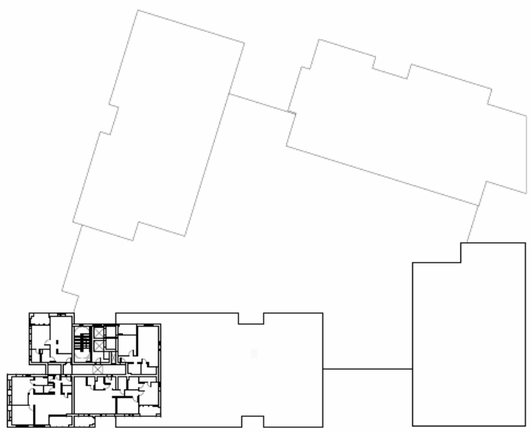
3 SECOND FLOOR PLAN
PART V APARTMENT REF.NO.
A.2.18
C.2.12
D.2.14
D.2.19

4 THIRD FLOOR PLAN
PART V APARTMENT REF.NO.
C.3.20
D.3.22

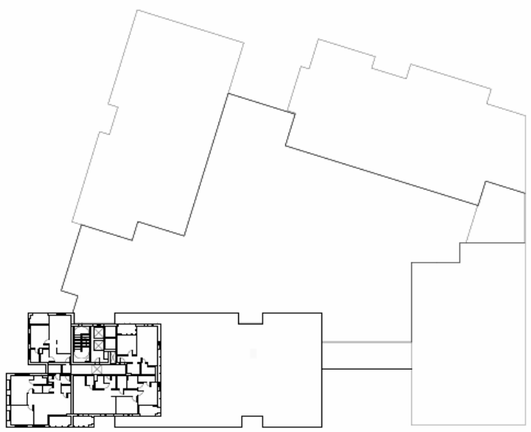
5 FOURTH FLOOR PLAN
PART V APARTMENT REF.NO.
C.4.28
D.4.29



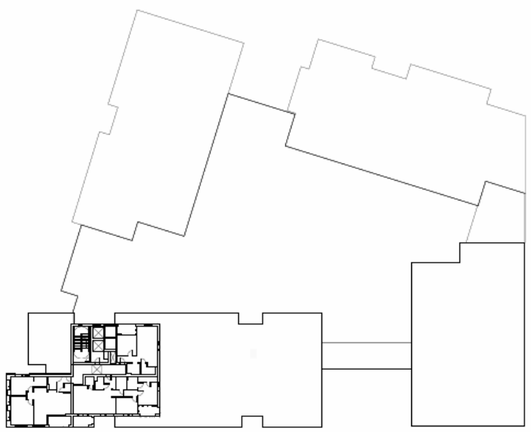
6 FIFTH FLOOR PLAN



7 SIXTH FLOOR PLAN



8 SEVENTH FLOOR PLAN



9 EIGHTH FLOOR PLAN

LEVEL	1 BEDR. AP.	2 BEDR. AP.	NO.
G	1	1	2
1ST	2	2	4
2ND	2	2	4
3RD	1	1	2
4TH	1	1	2
5TH	0	0	0
6TH	0	0	0
7TH	0	0	0
8TH	0	0	0
TOTAL	7	7	14

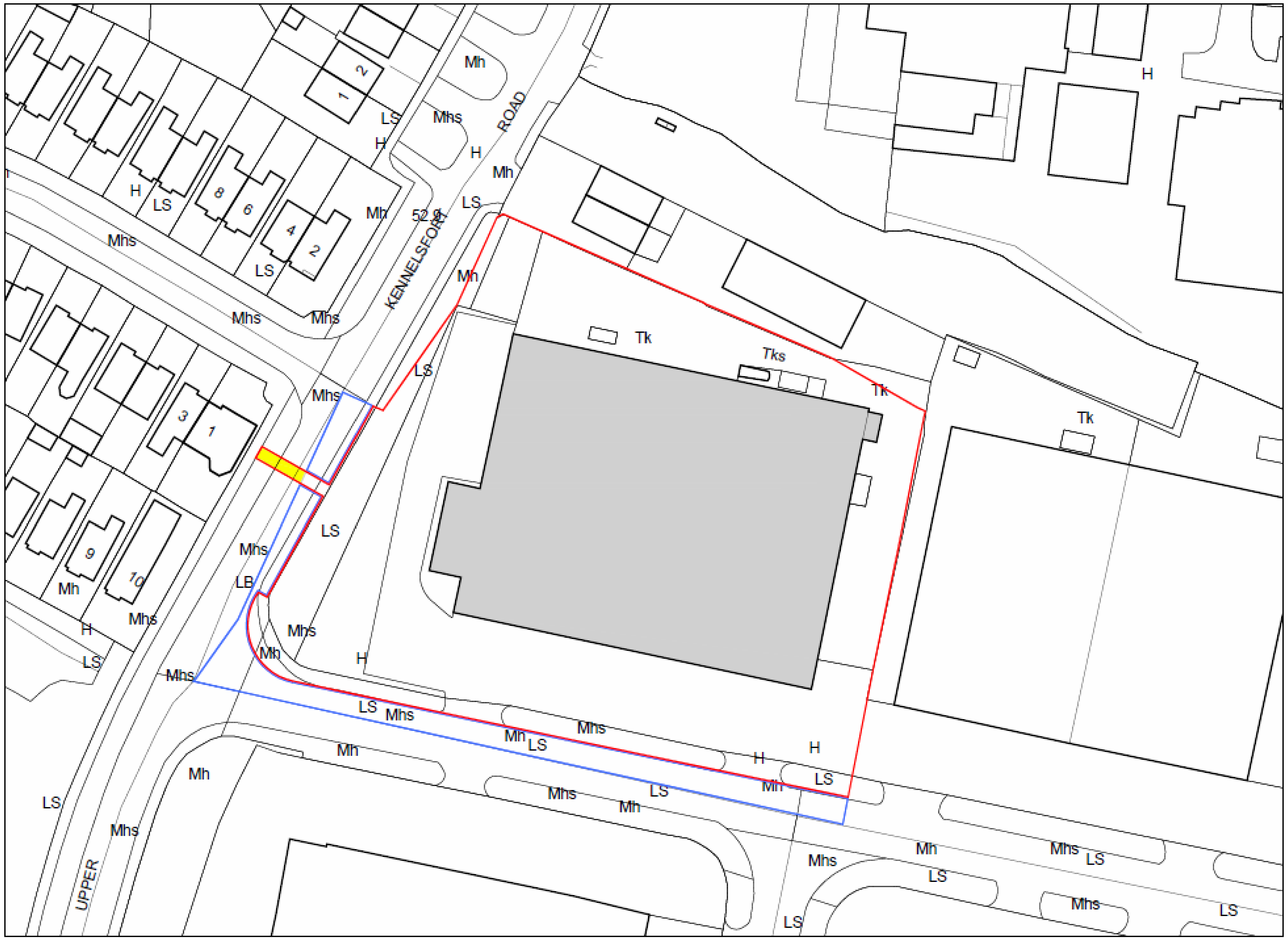
NOTE:
14 FROM 144 FOR PART V ALLOCATION

LEGEND

1BEDROOM APARTMENT

2BEDROOMS APARTMENT

appendices



ORDNANCE SURVEY MAP

Ordnance Survey Ireland

Description:
Digital Cartographic Model (DCM)

Publisher / Source:
Ordnance Survey Ireland (OSI)

Data Source / Reference:
PRIME2

File Format:
Autodesk AutoCAD (DWG_R2013)

File Name:
v_50069099_1.dwg

Clip Extent / Area of Interest (AOI):
LLX,LLY= 707715.5,734044.0
LRX,LRY= 708298.5,734044.0
ULX,ULY= 707715.5,734474.0
URX,URY= 708298.5,734474.0

Projection / Spatial Reference:
Projection= IRENET95_Irish_Transverse_Mercator

Centre Point Coordinates:
X,Y= 708007.0,734259.0

Reference Index:
Map Series | Map Sheets
1:1,000 | 3261-10
1:1,000 | 3262-01
1:1,000 | 3262-06
1:1,000 | 3261-05

Data Extraction Date:
Date= 14-Oct-2019

Source Data Release:
DCLMS Release V1.122.106

Product Version:
Version= 1.3

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NORTH POINT

1:1000 A4

AREA UNDER SOUTH DUBLIN COUNTY COUNCIL CONTROL & SUBJECT OF LETTER OF CONSENT REQUEST

APPLICATION RELEVANT BOUNDARY

ADJOINING LANDS UNDER APPLICANT'S CONTROL

SITE LOCATION MAP

SHIPSEYBARRY

SHiPSEYBARRY

MASTERPLANNING | URBANISM | ARCHITECTURE

RIAI

RIBA