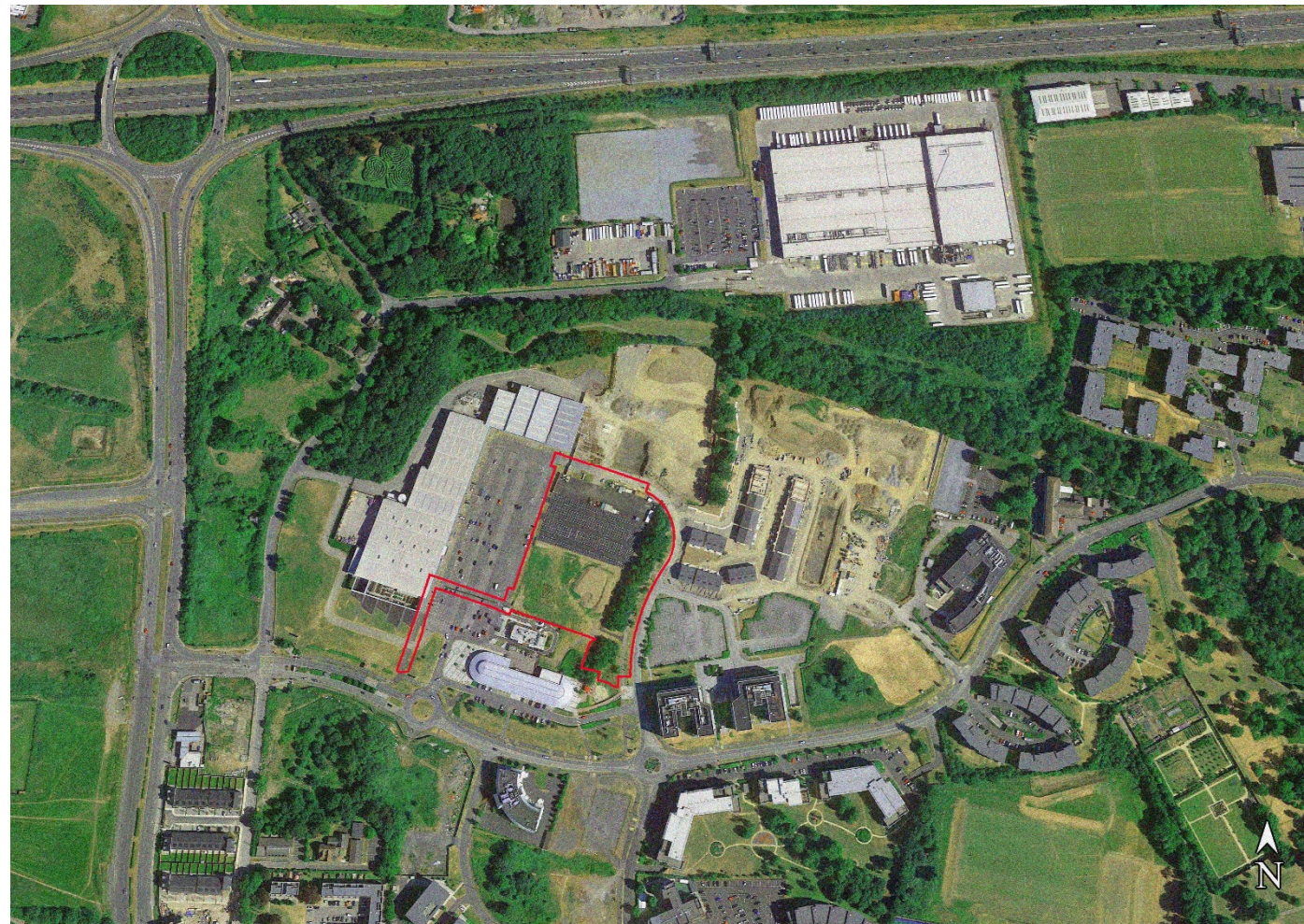


Architect's Design Statement

November 2019

An Bord Pleanála
Planning Application

For
Blackwood Square SHD development
Northwood Avenue,
Santry,
Dublin 9



Prepared by



MCCROSSAN O'ROURKE MANNING ARCHITECTS

On Behalf of
Cosgrave Developments.

CONTENTS

Introduction

followed by:

1. Context

2. Connections

3. Inclusivity

4. Variety

4a Distinctiveness and design & 4b Detailed Design

5. Efficiency

6. Layout

7. Public Realm

8. Adaptability

9. Privacy / Amenity

10. Parking

INTRODUCTION

McCrossan O' Rourke Manning Architects have been engaged by Cosgrave Developments to prepare a design for an apartment development on a site between Gulliver's Retail Park, Swift Square Office Carpark and the Santry Sports Surgery Clinic and residential development under construction all adjacent to Northwood Avenue, Santry, Dublin 9.

In conjunction with this Design Statement, RPS Planning Consultants have prepared a Planning Report and Statement of Consistency which outlines how the proposed development meets the Fingal Development Plan and other pertinent national, regional and local objectives.

The site of the proposed development is located to the north of Northwood Avenue, the main road through "Santry Demesne". The demesne lands were developed over the last decade and now comprise of apartments, offices, retail and recreation buildings, with large public spaces, parks and lakes, now generally known collectively as Northwood.

The site located at the western side of the demesne lands adjacent to the established Gullivers Retail Park. Santry River Amenity Walk is located to the North. An apartment and housing development immediately to the north and east of the subject site is under construction with first occupants anticipated later this year. Both elements are being constructed by the Applicant.

The proposed development will comprise 331 apartments in 4 buildings arranged around a central courtyard, over a large basement providing vehicle parking, cycle parking and various storage and ancillary facilities. The development also includes a childcare facility and commercial units, commercial street units or mixed use commercial units.



Fig. A: CGI from South West

01 CONTEXT

- General Neighbourhood Context

The subject site is bounded to the west and south by Gulliver's Retail Park and local centre which, in addition to larger retail outlets, accommodate neighbourhood shopping and café facilities. The site is bounded to the east by office accommodation (Swift Square). The apartment development, 'Bridgefield' and 'Pappan Grove', immediately to the north and the housing development 'Cedarview', directly east, are currently under construction with occupation due to take place over the coming months. The site is therefore located in an area where a mix of retail, commercial and residential uses coexist.

The wider hinterland of Santry and Ballymun comprises generally low to medium density semi-detached and terraced housing. It is the intention of the Applicant to deliver a well-designed high density apartment scheme which will sustainably optimise the available land resource and which will contribute towards providing tenure choice to those wishing to reside in this area.

The context of the proposed site presents a number of design opportunities and challenges. Opportunities include proximity to proposed Metro, bus, retail and employment facilities and access to large public parks, lakes and Santry River Amenity Walk.

Challenges include the integrating of the proposed scheme into the masterplan vision for the Northwood lands, the protecting of the large belt of mature trees to the east of the site and appropriately relating to the "Bridgefield & Pappan Grove" apartment scheme and the "Cedarview" housing scheme, currently under construction respectively to the north and east.

A SWOT Analysis was developed for the site in the **general neighbourhood context**.

This is presented in **Fig 1 & Fig 2**

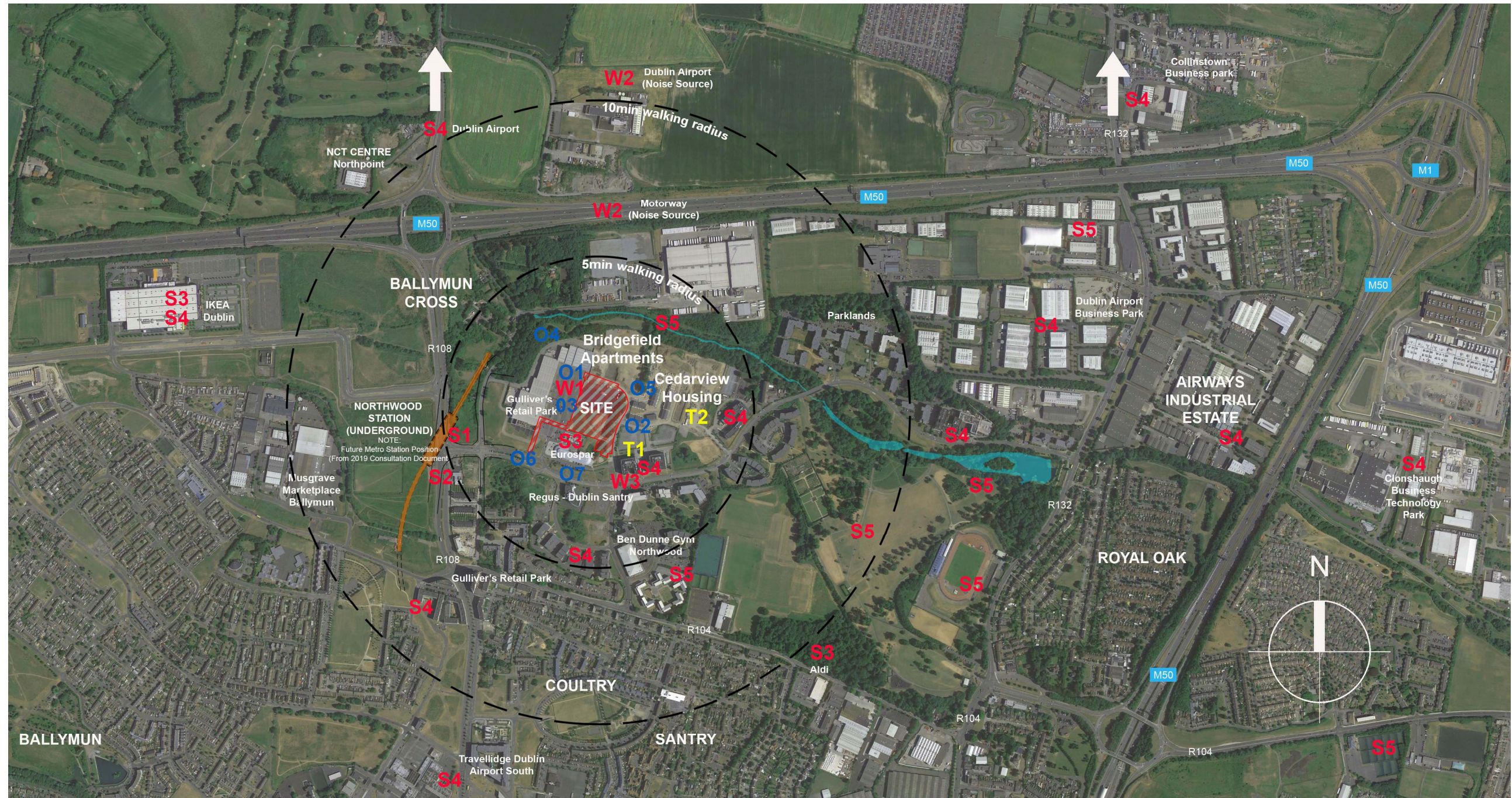


Fig. 1: SWOT ANALYSIS, On Satellite View Background (The development is designed to appropriately optimise the strengths of this unique site and to react appropriately to its challenges – see sections 02-10 of this Design Statement.)

SWOT NOTES

- S1:** Proximity to future metro station (per station positioning 2019 consultation)
- S2:** Proximity to bus links
- S3:** Proximity to retail facilities
- S4:** Proximity to employment facilities, Sports Surgery Clinic & Swift Sq.
- S5:** Proximity to leisure/ recreation/ parklands/natural vegetation

- W1:** Large carpark vista/ poor outlook / poor space enclosure
Solution proposed - tree groupings to form threshold and visual break (ref landscape drawings). Strong building facades to form street / square
- W2:** Adjacent noise sources (Motorway and Dublin Airport)
Solution proposed – acoustic analysis to determine any special provision required in building fabric, windows etc.
- W3:** Relatively featureless vista to south. Large “unframed” space
Solution proposed – strong height and termination featured at the south ends of the proposed southern blocks.

- O1** Opportunity to create a strong built street line (when viewed in conjunction with “Bridgefield & Pappan Grove” apartments to north)
- O2** Opportunity to create pleasant vista onto existing bands at mature trees and to utilise the trees as a visual buffer between proposed buildings and “Cedarview” housing
- O3** Opportunity to visually frame the large “leaky” car parking/ retail park space
- O4** Opportunity to link to and to add to the vitality of the existing Santry River Walkway/Park
- O5** Opportunity to link a new Linear Park along retained trees to the existing Linear Park to east of “Bridgefield & Pappan Grove” apartments
- O6** Opportunity to create natural “desire line” link towards future Metro station/ existing bus service, completing the permeability link east west through the Northwood scheme.
- O7** Opportunity for increased height / Landmark Building.

- T1** Threat to construction damage to existing bank at mature trees
Solution proposed - determine construction setback per Arborist report
- T2** Visual threat to existing “Cedarview” houses
Solution proposed - maintain generous set back. Retained trees/park form strong visual break

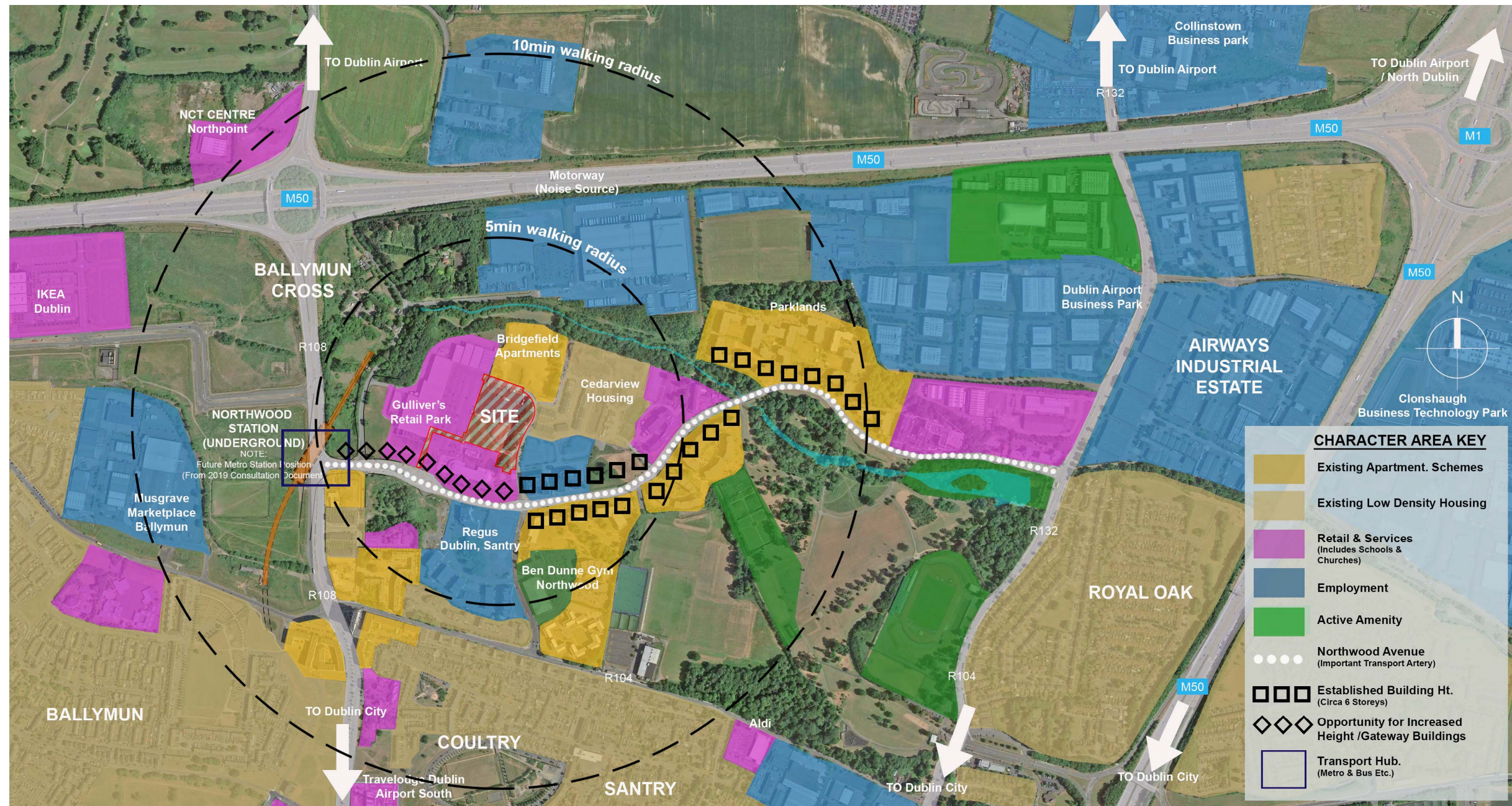


Fig. 2: SWOT Analysis on Graphics Background.

The site forms part of a larger Master Plan area of 19.8 hectares where planning permission was granted for a mixed use development in 2005 under Reg. Ref. F04A/1562. The appropriate period for this consent has been extended to 2020 under Reg. Ref. F04A/1562/E2. The permitted Master Plan comprised modern business, enterprise and commercial facilities consisting of c. 77,016 sq. m. Completed elements of the Master Plan include a retail park (Gulliver's Retail Park), 2 no. of the 4 no. business units (Swift Square Office Park) and the Local Centre. The subject site is located to the north and east of the completed elements of the Master Plan. Amendments to this parent planning permission, with respect to Gulliver's Retail Park and Swift Square Office Park to facilitate tenant requirements, have been granted and implemented over time. In addition the overall Master Plan was modified by Reg. Ref. F15A/0440 to include for the development of a new residential area. Bridgefield, Pappan Grove and Cedarview are all under construction. The Master Plan as now permitted (including the site at the proposed development) is illustrated on **Fig.3**.

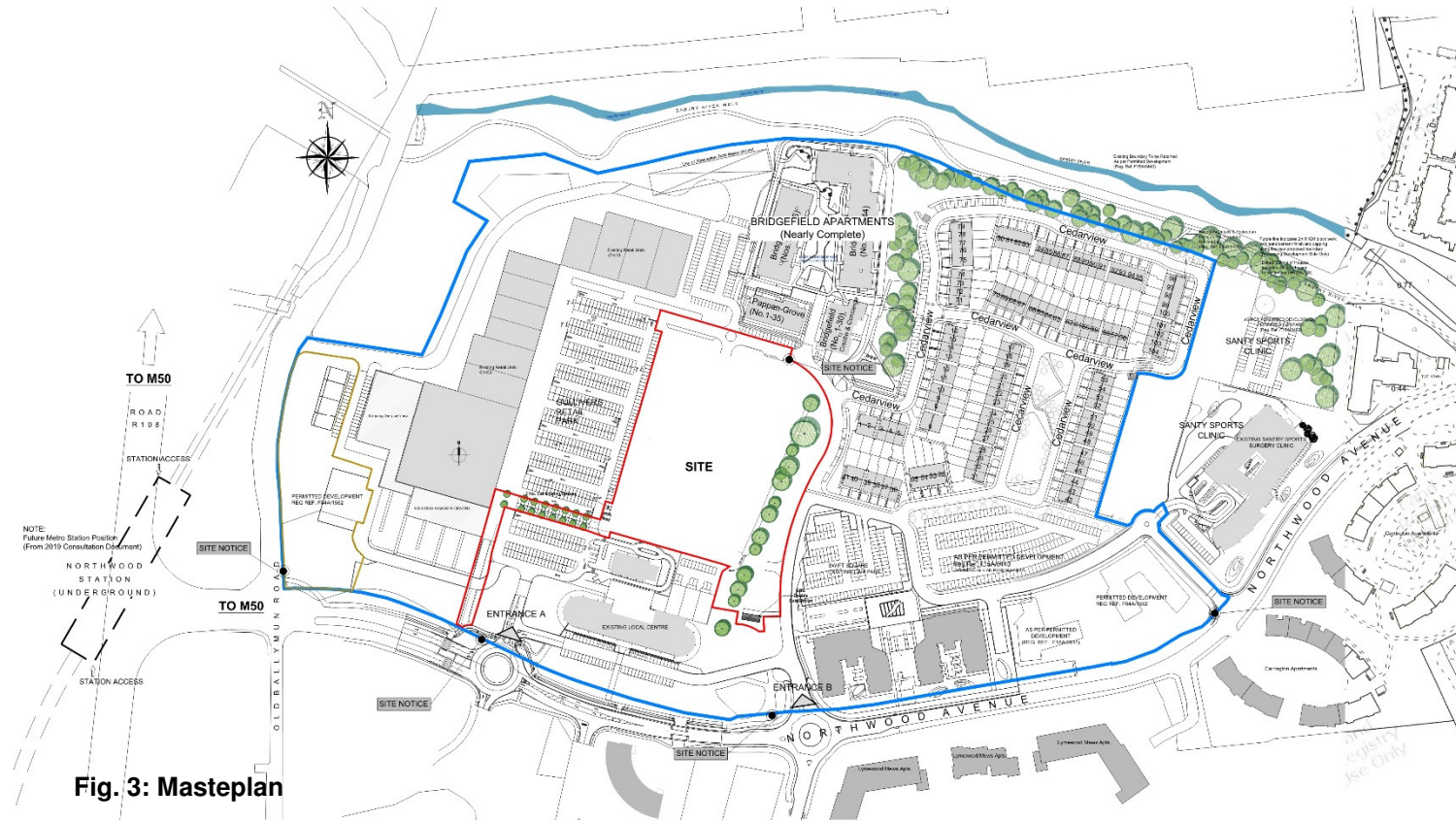


Fig. 3: Mastepplan

The sylvan nature of Northwood Avenue, Santry Park and Santry River Amenity Walk will be retained and augmented through the proposed development. Care has been taken in the design to maximise the benefit of existing trees and landscaping for residents of the new scheme. In particular, the scheme has been designed to enhance the woodland element of the site and to benefit from its close proximity to the Santry River Amenity Walk (see **Fig. 4**). The existing belt of impressive mature trees continues into the site as a spur of green which provides a mature amenity space between the existing houses to the east and the proposed apartment buildings.

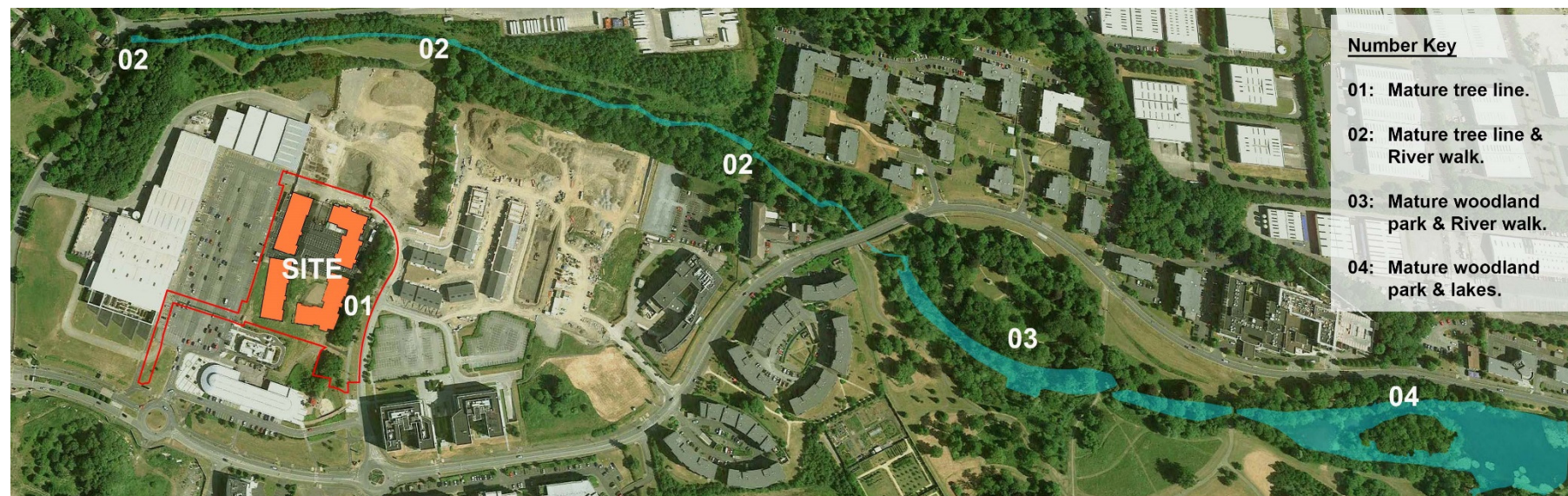


Fig. 4: Proposed Site Plan with Sylvan Context.

02 CONNECTIONS

The site is accessed from an existing access road off Northwood Avenue. This route provides direct access to the proposed apartments. The childcare facility within the proposed development is located at the north western end of the scheme and is readily accessible from adjacent housing, apartments and the parking serving Gullivers Retail Park. A fully permeable series of pedestrian and cycle links are also provided across this low traffic internal network.

The site forms part of a larger Master Plan area of 19.8 hectares and locates to the north and east of the completed elements of the Master Plan. The Detailed Site Plan Showing Links as now permitted (including the current proposal) as illustrated on **Figure 5**, which also indicates the east to west pedestrian route through the Masterplan area. This route delivers a legible permeable route from the east of the lands, via the south of the subject site, to the Metro station in the location indicated in the latest Metro consultation document.



Fig. 5: Detailed Site Plan, General Neighbourhood showing links northwards to the Santry River Amenity Walk.

03 INCLUSIVITY

Aspirations – people and households

The wider hinterland of Santry, Swords and Ballymun comprises generally low density semi-detached and terraced housing. With the exception of a small number of apartment schemes on the Santry Demesne / Northwood lands, there is an in-balance and bias in the local area towards two-storey, suburban housing typologies. It is the intention of the applicant to deliver a well-designed high density apartment scheme which will sustainably optimise the available land resource and which will serve to re-balance the wider residential tenure.

The majority of the proposed apartments comprises two bedroom units. Some one bedroom and three bedroom units are also proposed. It is envisaged that the proposed apartments will serve a social need for starter accommodation and for those in the wider hinterland trading down from houses.

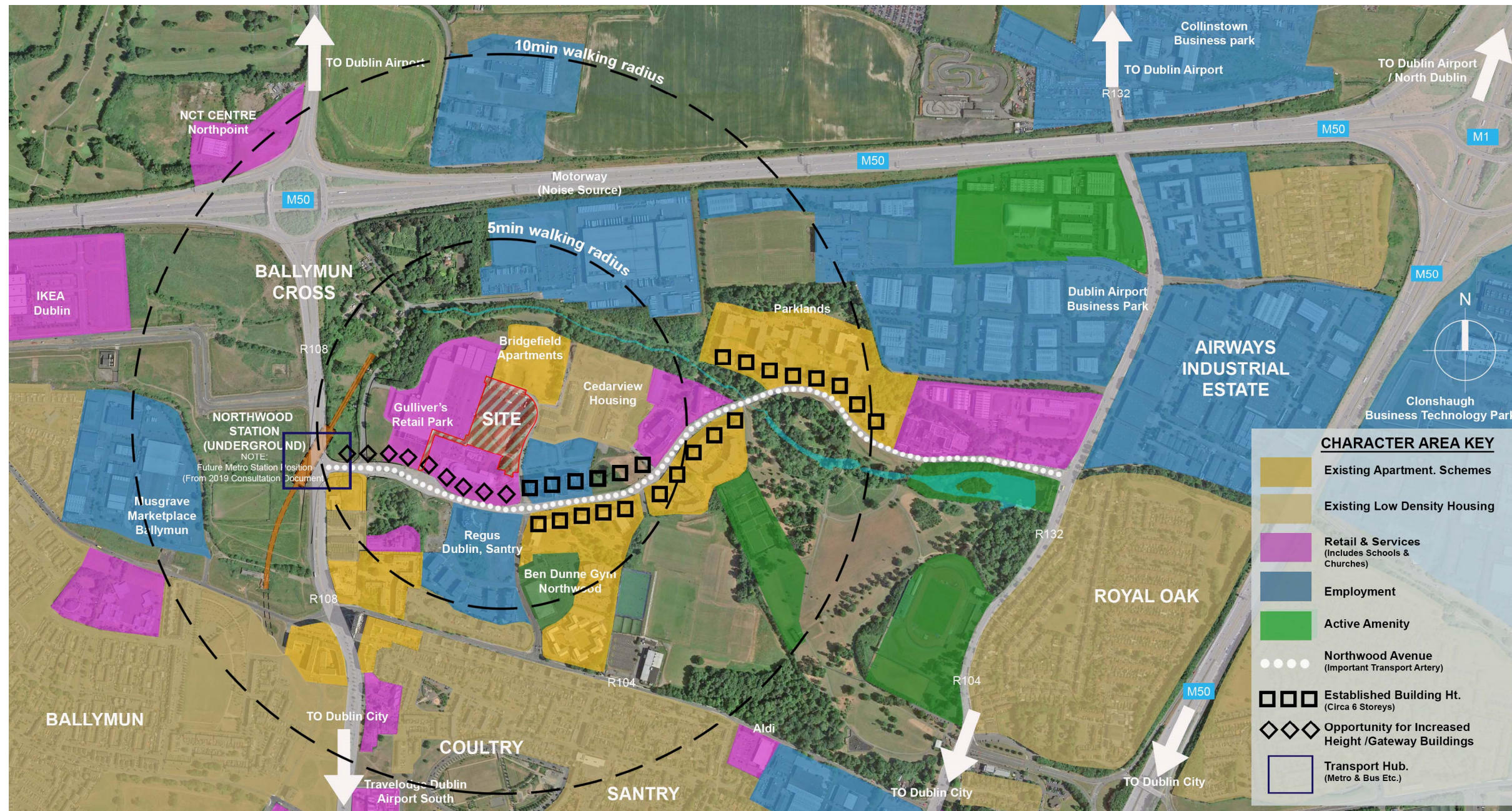


Fig. 6: Local Characteristics Plan

- Easy access – transport and arrival

The proposed development, by virtue of proximity to established employment hubs, will deliver easily accessed residential accommodation serving those employed in these hubs.

In addition, through the close proximity of bus routes, residents and those working further afield will have easy access to and from the development. Access will be enhanced in future by the arrival of the Metro line and the Metro station located to the west of the site.

Those living within the development will have walking access to retail and recreation areas and to public parks.

The proposed scheme is strongly linked to and from other parts of the Northwood area. A legible pedestrian link travels north-south from the sentry river amenity walk to Northwood Avenue, skirting the proposed development. Similarly, a pedestrian link travelling east-west from the eastern Northwood lands, housing, lake areas etc. towards the future Metro Station, this again skirting the proposed development.

The majority of the proposed parking spaces locates at basement level. Universal access spaces distributed evenly across the general parking area. The layout and circulation is clear and legible avoiding unnecessary physical and visual barriers. Provision is included for electric car charging. Three car-sharing spaces are proposed, at ground level, adjacent to the south-east corner of proposed Block B. A number of other car-sharing spaces locate in the immediate vicinity. Non-residents visiting the apartments or using the commercial facilities will be able to avail of the extensive Gullivers Retail parking immediately to the west of the proposed scheme. The J G Barry Engineers Traffic & Transport Assessment Report included with this application further elaborates on parking provisions.

Extensive bicycle parking is provided in basement and at ground level. The basement bicycle parking locates in secure shared corrals.

The user choice delivered by the above facilities, offering opportunities for standard car owners, electric car owners and those who do not use cars, will further foster inclusivity.

- Easy access – access around, into and through the proposed scheme

Easy resident and visitor access is provided throughout the proposed scheme. The apartment buildings are subdivided into distinct zones or “cores”, level access entrance into the stairs/lift area for each core provided from the perimeter footpaths. The apartments in each core will be served by stairs and by accessible lift, serving all floors and linking also to the basement carparking, binstores and ancillary areas.

The design of the proposed buildings is in accordance with Part M of the Buildings Regulations, fostering an inclusive approach to the design of the built environment. Provisions in each apartment building include level access entrances, suitably designed lift and stairs and accessible rooms and sanitary facilities.

Level access will be provided into the proposed commercial units and shared service spaces (concierge, multi-function, gym).

Generous communal private space is provided in the large central courtyard. Landscaping, footpaths and routes in this area are designed to eliminate changes in level in as far as practicable and to prioritize easy pedestrian movement, avoiding unnecessary physical and visual barriers. The central courtyard area can be accessed directly from the lift/stairs area of each apartment core and also directly from the footpaths which encircle the proposed scheme. Seating and recreation spaces will be provided, suitable for shared use by all ages.

- Public open space – accessible and inclusive

The scheme delivers a large meaningful public open space located around the bank of large trees retained along the eastern boundary. It is envisaged that this large public-access area, a linear parkland, linked to the similar space currently being delivered in the “Bridgefield & Pappan Grove” scheme to the north and connected northwards to the Santry River Amenity Walk, will create a popular destination area for the residents of the scheme and for the public,

fostering inclusivity and early integration of the scheme.

The plaza areas proposed at the south and south-west of the proposed buildings are designed to attract social gatherings of residents, visitors and others and to encourage shared activities and recreation. The shape, layout and orientation of these spaces, in particular the west facing plaza adjacent to the colonnade of Block B, lend themselves to the creation of intimate sun-trap seating areas and corrals.

Throughout the public open spaces landscaping, footpaths and routes area are designed to eliminate changes in level in as far as practicable and to prioritize easy pedestrian movement and connectivity, avoiding unnecessary physical and visual barriers.

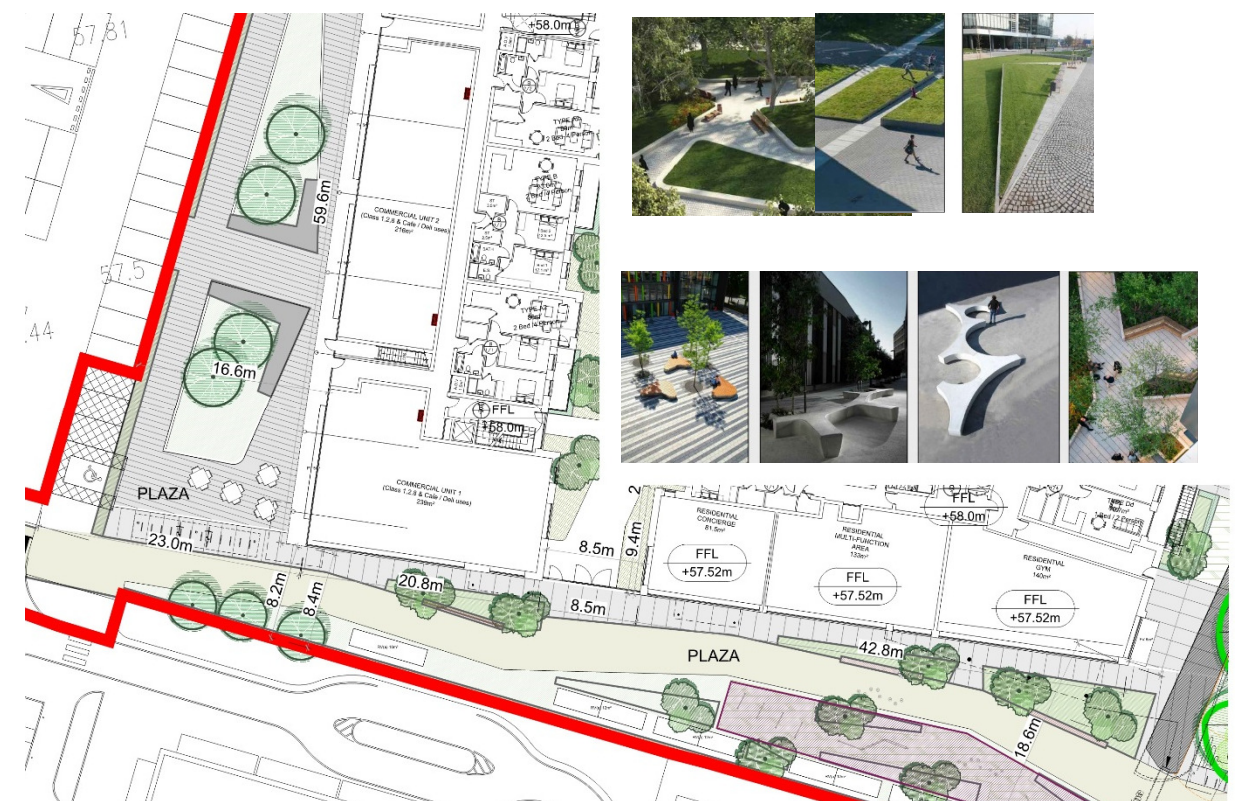


Fig. 7: Extract from Landscape Plaza

- Proposed buildings – positive aspect and presence

The built “Bridgefield & Pappan Grove” and the proposed buildings, will deliver a distinctive place-making composition of contemporary structures in the neighbourhood, a gathering of built volumes of scale and massing appropriate to address the spaces they face and, in the case of the west elevations, to frame and enclose the adjacent large retail space to the west. Design and detailing of the proposed buildings is clean and contemporary, acknowledging the recent origins of development in this area and looking to the future built evolution of the district.

The large white feature frames on the primary west and east elevations of the proposed buildings are introduced to act as memorable place-makers and as easily recognisable descriptors for the buildings for directing visitors and deliveries etc. The frame features and the upping of scale and massing will mark a transition from the residential enclave of Bridgefield & Pappan Grove southwards towards the evolving transport artery of Northwood Avenue.

In this way the built scheme will include itself positively and appropriately in what is a neighbourhood of quickly growing urban importance. This will, in turn, foster a sense of belonging in the residents and users, a pride and inclusiveness.



Fig. 8: Coloured West Context Elevation (Including a part elevation of “Bridgefield & Pappan Grove” to left of image)

04 VARIETY

Variety of Uses

The proposed development, while in itself predominantly residential, will be an appropriate addition to an area enjoying an established variety of local activities and uses (employment, retail, recreation, public parks etc.). By delivering needed residential units, the development will support this variety of uses by housing prospective workers (employment hubs) and patrons of the retail and recreation facilities.

The SWOT analysis included in section 1 of this document indicates the various activities and uses in the local area. The new development will contribute strongly to the sustainability and ongoing viability of these local uses.

Variety of Tenure

The development will deliver 1-bed, 2-bed and 3-bed units providing a variety of accommodation choices for singles, couples and small families. National population projections have identified a demographic trend towards smaller family units which is expected to accelerate into the future. As much of the housing in the wider area around the subject site is three, four or five bedroom, the delivery of the smaller units in the proposed development will add to the variety of available tenure in the area and will contribute to a general re-balancing of tenure.

Those who wish to move into or commence family life the area will have access to the proposed smaller more cost effective start units. The proposed units will also offer opportunities for those living in larger neighbouring houses, where children will have moved away, to downsize into the scheme, thereby maintaining their local social links while enjoying more manageable accommodation.

The construction of the proposed buildings will, in general, incorporate structural loadbearing walls forming the perimeter of each apartment. The walls within each apartment will typically be lightweight and non-structural. Therefore, while the overall footprint of each particular apartment is set by structure, the construction of the walls within apartments could offer flexibility for internal layout changes in the future (subject to required consents). As an example, a two-bedroom unit might offer potential to be adapted to create an enlarged main bedroom for a special needs occupant and a reduced second bedroom for a visiting carer.

04a DISTINCTIVENESS OF DESIGN

The proposal delivers four apartment buildings of meaningful scale and placemaking impact.

Continuing southwards from the built "Bridgefield/Pappan Grove" apartments directly north, the proposed buildings will develop a continuous street aesthetic, a strong built line moving north-south. Materials (brickwork, framed features, metal roof edges etc.) are brought through from the "Bridgefield & Pappan Grove" buildings to support the visual continuity of the urban line. Marking the closer-to-urban-hub location of the proposed buildings, the scale of the frames on the elevations is increased and the southern ends of the south blocks are terminated by zones of upgraded detailing and modelling as described below.

Height and massing

The height and massing the proposed buildings, as they move southwards from the existing Bridgefield & Pappan Grove apartments, have been considered in the context of the built Bridgefield & Pappan Grove and also in the context of future development which could reasonably be anticipated on the lands directly to the south of the subject site, i.e. between the subject site and Northwood Avenue. Northwood Avenue is already an important transport artery, flanked by buildings establishing a built height of circa 6 residential storeys – see **Fig 9** below.

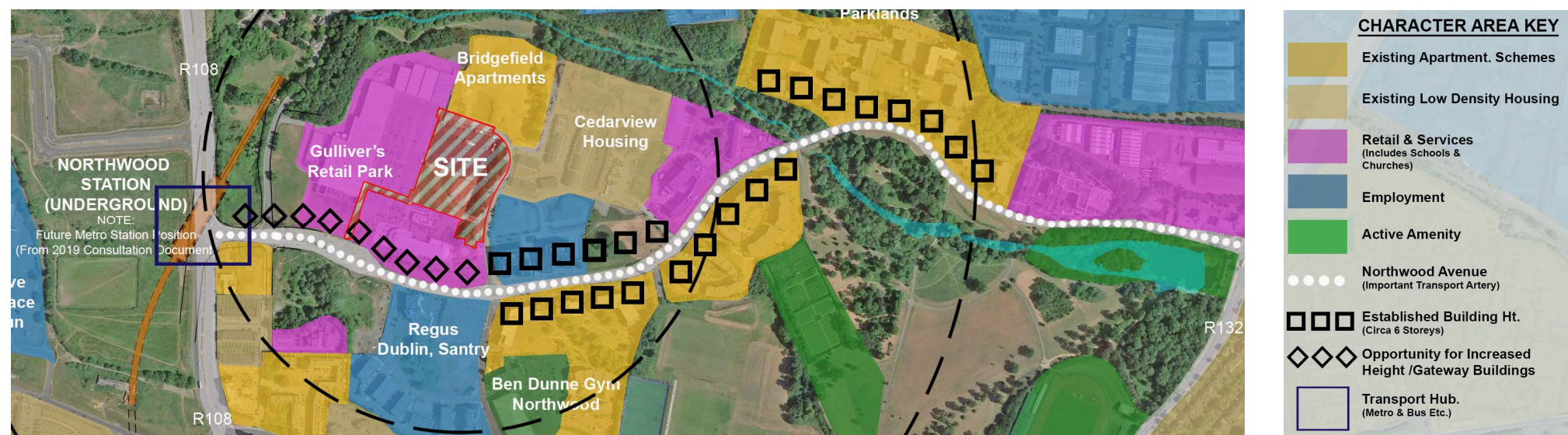


Fig. 9: Extract from Local Characteristics Plan

The already primary status of Northwood Avenue will be substantially increased by the arrival of Metro and the Metro Station immediately west and future buildings fronting Northwood Avenue proximate to this transport hub can be expected to be of landmark status, substantially exceeding 6 storeys in height. That will include future buildings on the lands between the subject site and the Avenue. The massing of the subject buildings therefore grows from that established in the built Bridgefield & Pappan Grove to anticipate the further increased massing of future landmark buildings to the south.

Figure 10 below shows the west elevations of the proposed buildings in the context of the built Bridgefield & Pappan Grove and also in the context of an anticipated future landmark building to the south. The context view illustrates the controlled build-up of massing and height from north to south across this vista. The built Bridgefield & Pappan Grove establishes a generally consistent massing along its entire length and delivers a constant horizontal architectural featuring to which the eye is drawn. The proposed scheme increases the massing and again delivers a constant horizontal architectural featuring along its entire length, this featuring locating at a higher level than Bridgefield & Pappan Grove and subtly rising at the southern end in anticipation of future taller buildings to the south. In the proposed scheme the “constancy” of feature height is retained across the elevations. This is a conscious design approach, devised to calmly establish the up-scaled massing through repetition and to deliver a relatively quiet visual arrival at the anticipated southern landmark. The drama and visual “event” of a stepped up landmark building could be diluted if the silhouette of those buildings arriving at it were to be overly gapped or profiled or if those buildings were to incorporate competing quasi-landmarking features. The generally constant horizontals of the proposed buildings deliver a visual “rest” before the strong announcing of the anticipated landmark.

Light penetration into the central courtyard and daylighting, are addressed in section 6, LAYOUT, below



Fig. 10: Proposed West Context Elevation (Indicating proposed building height hierarchy with context plan below)



Architectural featuring

The main architectural features incorporated in the west (and east) elevations of the built Bridgefield & Pappan Grove and again in west (and east) elevations of the proposed scheme to reduce visual bulk are the large white frames. **Figure 11** below shows the west elevations of the proposed buildings in the context of the built Bridgefield & Pappan Grove and also in the context of an anticipated future landmark building to the south, each with frame features highlighted. The Bridgefield & Pappan Grove frames anchor into the ground and terminate above the fifth storey. The frames in the proposed scheme sit above a strong horizontal base storey and are a storey higher than the Bridgefield & Pappan Grove frames. The frames suggested in the anticipated building to the south sit above a possible two storey base and rise further in height. In the proposed scheme the 4 frames are consciously set at the same level across the elevations to calmly establish the increased height by repetition. This is again a conscious design approach, devised to deliver a relatively quiet visual arrival at the anticipated southern landmark and proportioned not to detract from the visual incident of the future landmark.



Fig. 11: Proposed West Context Elevation (Indicating proposed Architectural Features with context plan below)



Placemaking

The built "Bridgefield & Pappan Grove" and the proposed buildings, will deliver a distinctive place-making composition of structures in the neighbourhood, a gathering of built volumes of scale and massing appropriate to address the spaces they face and, in the case of the west elevations, to frame and enclose the adjacent large retail space to the west. The large white feature frames will act as memorable place-makers and as easily recognisable descriptors for the buildings for directing visitors and deliveries etc. Extra articulation and focus is provided on the southern elevations facing the plaza by way of a projecting 5 storey bay in the south-east building, locating above the proposed concierge and by a subtle upping of the detailing and projection of the stacked balconies in the south-west building

To the east, the proposed buildings will benefit from the existing bank of retained mature trees, both as an amenity for the residents and as a visual softener towards the built Cedarview houses to the east. The eastern faces of the proposed buildings (and also of the "Bridgefield & Pappan Grove" buildings) are positioned to deliver an appropriate setback from and to flow with the soft massing of these mature trees. To the west, trees are to be planted in the area between the west facades and the existing retail carparking to soften this interface



Fig. 12: CGI from South West



Fig. 13: CGI from South East



Fig.14: CGI from East with the completed Cedarview Houses in foreground

4b DETAILED DESIGN

Internal Areas and Spaces

1. The layout of the new buildings and the design of the particular residential units have regard to Sustainable Urban Housing: Design Standards for New Apartments (March 2018).
2. All apartments are accessed via common circulation spaces, incorporating disabled access stairs and lifts, the latter providing access to the communal basement containing bicycle parking, car parking and refuse storage.
3. All apartments have large windows and considered orientations to take advantage of available vistas and light.
4. A separate Daylight/Sunlight analysis document will be included with this Application

Floor Areas

The proposed units are in 3-bed, 2-bed and 1-bed configuration. The floor areas of the units equal or exceed the Design Standards floor area requirements of 90sqm, 73sqm and 45sqm respectively. In addition, in excess of 50% of the units exceed, by 10% or more, the minimum floor areas noted in the Design Standards. Aggregate living/dining/kitchen areas and aggregate bedroom areas equal or exceed the Design Standards requirements.

Storage

The storage provision within each the units equals or exceeds the Design Standards requirements of 9sqm, 6sqm and 3sqm respectively.

Private Amenity Space

Private balcony/terrace areas are in accordance with or exceed the Design Standards area requirements of 9sqm, 7sqm and 5sqm respectively. All balconies/terraces are 1.5m deep or greater.

Aspect

In excess of 50% of the units are dual aspect.

A Quality Housing Assessment document indicating compliance with each of the above for each proposed apartment will be included with the Application.

Floor to ceiling heights

In accordance with paragraphs 3.20 to 3.25 of the Sustainable Urban Housing: Design Standards for New Apartments (March 2018) floor to ceiling heights in the proposed buildings are as follows:

Ground floor apartments	2.7m
Apartments first floor and over	2.4m min
Ground floor commercial	3.5m

Communal/ Semi-Private Open Space and Public Open Space

Communal/Semi-private Open Space is provided within the courtyard formed by the four perimeter blocks. The overall area provided, at substantially in excess of 3000sqm, comfortably exceeds that required by applying the Design Standards requirements of 9sqm, 7sqm and 5sqm respectively to the proposed 331 apartments. Public Open Space is circa 25% of the overall site area.

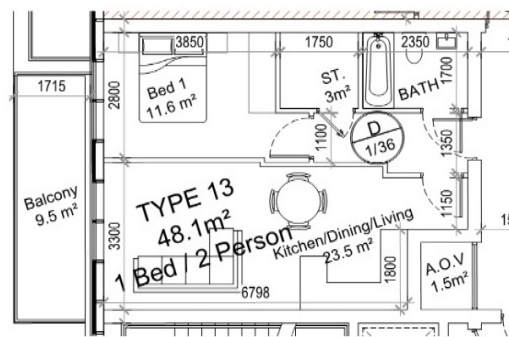


Fig. 15: Typical 1 Bed Apartment

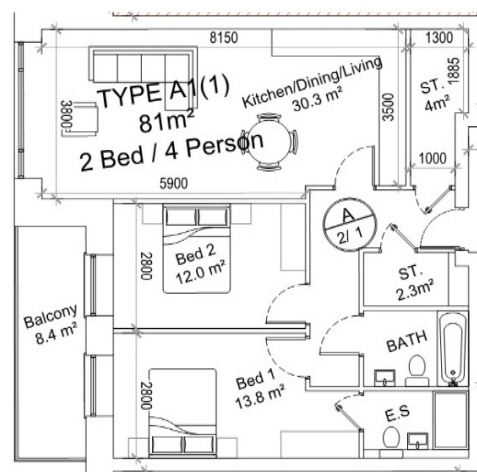


Fig. 16: Typical 2 Bed Apartment



Fig. 17: Open Space Diagram

- Design Language and Materials

The proposed buildings employ a controlled palette of materials

It is envisaged that the brickwork will match that of the adjacent "Bridgefield & Pappan Grove" apartments, a soft muted buff.

It is acknowledged that an un-considered use of a single colour brick for the entirety of the elevations of the built Bridgefield & Pappan Grove and the proposed buildings combined could lead to a stark institutional monotony.

The balance of brick to other materials in the proposed buildings differs substantially however from that in the built Bridgefield & Pappan Grove.

Figure 18 below indicates the proposed buildings in context with the built Bridgefield & Pappan Grove.

While the ratio of brick to other materials in Bridgefield & Pappan Grove is circa 50% to 50%, the ratio of brick to other materials in the proposed buildings is circa 25% to 75%. The brick in the proposed buildings is therefore visually subservient, the taut glazed planes of the projecting bay windows and the clean white feature frames robustly dominating the façades. The function of the repeating of the same brickwork in the facades of the proposed buildings is that of a quiet linker of the long vista. The dominance of the other materials and the confidence of the white frames on the proposed buildings combine to deliver facades of a more urban nature drawing the eye away from the backdrop of brickwork and thereby avoiding monotony of finish.



Fig. 18: Coloured West Context Elevation (Including a part elevation of "Bridgefield & Pappan Grove" to left of image)

Window, balcony and cladding material and detail will also carry through from "Bridgefield & Pappan Grove".

Continuous vertical planes of bay windows will contrast with and visually break the general brickwork – taut technical planes set against the warm buff masonry.

The top floor of each building is clad with visually lighter materials - glazed curtain walling or zinc. As a consequence the proposed buildings will read as predominantly 7 storeys of masonry with a visually and materially lighter sky reflecting attic storey over. Balconies at this level will be punched into the curtain walled volume, retaining a clean un-broken parapet line

Form and detailing is intentionally sharp-lined, taut and edited, a series of flat planes of material interfacing cleanly, a precise engineered aesthetic against the brickwork backdrop.



Fig. 19: Image of Curtain Walling



Fig. 20: White Frame & Balcony Balustrade



Fig. 21: Typical Ground Floor Commercial Unit



Fig. 22: Extra Articulation, South East End of Block A



Fig. 23: Extra Articulation, South West End of Block B

05 EFFICIENCY

Land use

The site area of the proposed scheme is 2.1 hectares (5.2 acres).

The proposed scheme delivers a density of circa 158 units per hectare (circa 64 units per acre). It is proposed that this density is appropriate for this accessible location and represents an efficient use of the available lands.

The proposed development is appropriate to the zoning and the settlement strategy of the County Development Plan, regional and national development strategy.

In conjunction with this Design Statement, RPS Planning have prepared a planning report and Statement of Consistency which outlines how the proposed development meets the Fingal Development Plan and other pertinent national, regional and local objectives.

Built fabric

The new buildings will be constructed with an emphasis on build, procurement and service life efficiency. Methodologies for consideration will include:

- pre-fabricated floor slabs
- pre-fabricated steel roof structures.
- low maintenance building fabric materials and detailing (natural clay brickwork, stone, self-coloured render, low maintenance window frames etc.)
- efficient heating and energy provisions

A Building Life Cycle Report, which elaborates further on the above, is included in this Application.

Conservation of Energy

Building Fabric

The subject buildings will incorporate floor, wall and roof insulation to deliver U-values superior to the Maximum Fabric Insulation U-value performances set out in Building Regulations Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings (or updated/revised version that document if relevant at time of construction).

Windows will be double or triple glazed to deliver insulation performance in accordance with that set out in the Technical Guidance Document. Glazing with solar resistance will be provided where required to control solar heat build-up.

Construction detailing around window and door opes, at floor edges etc. will incorporate the provisions of the document "Limiting Thermal Bridging and Air Infiltration – Acceptable Construction Details", published by Department of Environment, Heritage and Local Government. This detailing limits heat loss and also limits the air permeability of the envelope of the buildings.

Building Services and Renewable Technologies

The use of Heat Pumps, designed to capture heat from external air, is included for consideration in the design of the subject buildings. Other energy efficient technologies will also be considered.

Lighting points will be suitable for the use of low energy lighting.

The building fabric, detailing and services/renewables requirements set out in Building Regulations Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings combine to deliver NZEB (Near Zero Energy Building) standards. The proposed buildings will be constructed to achieve these required standards and will therefore be NZEB. NZEB standard is equivalent to BER (Building Energy Rating) for each apartment of generally A2.

Vehicle Charging Points

Provision will be made in the development for the fitting of car charging points to all proposed car spaces (those in basement car-park and those at ground level). The parking layout and circulation is clear and legible avoiding unnecessary physical and visual barriers. Three car-sharing spaces are adjacent to the south-east corner of proposed Block B. A number of other car-sharing spaces already locate in the immediate vicinity, in Gullivers Retail Park immediately west and in the recently completed Bridgefield and Pappan Grove apartment scheme immediately north. Extensive bicycle parking is provided in basement and at ground level. This wide variety of facilities, in association with existing local public transport and future Metro, will offer environmentally friendly transport choices for the future occupants and users of the proposed development.

Storm Water Management

The proposed drainage designs will incorporate SUDS measures (embedded mitigation) to ensure the runoff from the site (and also from the recently completed Bridgefield and Pappan Grove apartments due north) to the Santry River will not exceed greenfield runoff rates. Consequently, there will be no increase in risk of flooding in the receiving waters.

At the tripartite meeting at the offices of An Bord Pleanála, Fingal County Council noted that the previous proposal to infill the existing ditch with a Stormtech attenuation/infiltration system was not acceptable. It was subsequently agreed that the existing ditch will be infilled with single sized stone to act as a natural watercourse. The existing natural function of the ditch remains unchanged by these works.

The surface water drainage will be designed to incorporate SuDS devices, in the form of permeable paving and a Green Roof system over 60% of the apartment roof and central courtyard areas to limit any potential pollutants in runoff prior to discharge to the Santry River. Stormwater runoff from the development will drain via the Green Roof system to the proposed surface water network prior to discharge to the existing surface water infrastructure (including the existing attenuation tank) prior to discharging to the Santry River in the north-east corner of the existing development.

All surface water discharge from the proposed site will pass through suitably sized hydrocarbon interceptors. The incorporation of hydrocarbon interceptors will ensure that any spill is contained before reaching the Santry River.

Following implementation of mitigation, the significance of the impact on water quality will be imperceptible

Documentation by J G Barry Consulting Engineers submitted with this application provides detail on Storm Water Management.

A Building Life Cycle Report, which elaborates further on the above, is included in this Applicatio

06 LAYOUT

The 4 proposed buildings form a framed composition around a large central courtyard. The alignment of the western faces of the proposed buildings is orthogonal and formal, set to run parallel with the opposing Gullivers Retail buildings and the “Bridgefield & Pappan Grove” apartments to the north. This continuity of alignment delivers an immediate visual integration and a sense of place – the street line and the square enclosure.

The eastern faces of the proposed buildings combined with the built “Bridgefield & Pappan Grove” buildings are positioned to deliver appropriate setback from and to flow with the natural ease of the belt of large retained trees on the eastern flank of the site. The combined eastern faces therefore form a more appropriately organic line than the western elevations, albeit still combining to form a streetlike composition. The belt of large retained trees will form the spine for a wide linear park linking northwards to a similar park at Bridgefield & Pappan Grove and thereafter to Santry River Amenity Walk. This belt of trees provides a visual buffer between the proposed buildings and the Cedarview housing to the east.

The southern faces of the composition incorporate strong enriched detailing and features as noted in section 6 above defining these areas as the more active arrival zones of the scheme. The open space to the south and also along the west of the south-west block are designed to deliver meaningful urban recreational spaces and robust active frontages. The south plaza is designed as a strong pedestrian arrival area for the scheme, providing direct access to concierge, residents’ gym, general use social space and the south-west commercial units. The south plaza also forms part of a strong east-west pedestrian link across the wider Northwood neighbourhood. To protect the pedestrian bias and the “urban-gathering” focus, access to the basement carparking is consciously located remote from this southern space.

While site topography favoured locating the access ramp along the eastern side of the basement, biased towards the south-east, the proposed location at the far north end of the development moves the vehicle arrival and departure activity away from the belt of retained trees thereby protecting the tranquillity and limiting threats to the trees associated with traffic movement and ramp construction. The basement ramp descends between two gables, minimising its external visual impact.

The 4 block configuration provides enclosure for a large courtyard of in excess of 3000sqm (circa 0.75 acre) for the use of the residents of the apartments. The configuration also allows gaps between buildings for light penetration into the courtyard (further addressed in section 9, PRIVACY AND AMENITY, below). The courtyard is accessible to all residents in the scheme.

Daylight and sunlight

An initial daylight and sunlight analysis was carried out early in the design development by Geraghty Energy Consultants Ltd. The report on this analysis identified some areas where daylight and sunlight performance could be improved. On foot of the findings of the initial report a number of design changes were made to improve daylight and sunlight levels. The design changes which are now made to the scheme to maximise daylight and sunlight levels for both the existing apartments to the north (Bridgefield / Pappan Grove) and proposed scheme are summarised below and illustrated on Figures 26 to 29 overleaf.

1. Blocks A, B & D have moved 2m to the west. The roots of the existing bank of trees to the east do not travel further west than the adjacent open ditch and the proposed buildings, as initially located, were comfortably set back from that ditch thereby providing for appropriate root protection. Notwithstanding this, the moving of Blocks A and D has the effect of increasing the setback distance at Block A from the proposed building to the nearest zone of the tree root protection area by circa 25%. The movement westwards of Blocks A & D increases the setback distance from the bank of existing trees. This contributes to improving daylight and sunlight penetration to the apartments on the east facades. The report by Geraghty Energy Consultants included in this application takes account of this footprint adjustment.
2. Block C has moved 1m to the west.
3. Block B has additionally rotated on its most NW point by 1m to enlarge the gap between itself and Block A.
4. Block A has been adjusted to align with block B’s south elevation / axis having the effect of enlarging the Gym and units in the floors directly above.
5. Unit A1/47 (Penthouse unit block A) has been moved to the south of the block which in turn has affected unit A1/49.
6. Block B has been recessed at GF level by 1.6m (on the west facade) to limit the reduction in the plaza size to the west of Block B which would have resulted from the movement westwards of Block B noted at 1 above.



Fig. 24: Boundaries Context Plan



Fig. 25: Basement Ramp Section.

7. Level 6 of block D has been set back by 8 metres in order to minimise the impact of the proposed scheme on existing neighbouring Block A1 & A4 of the completed Bridgefield/Pappan Grove apartments.
8. A number of windows have been increased in size and additional windows have been incorporated in gable units.
9. All ground floor apartment windows have been increased in height by circa 200mm to improve daylight penetration.

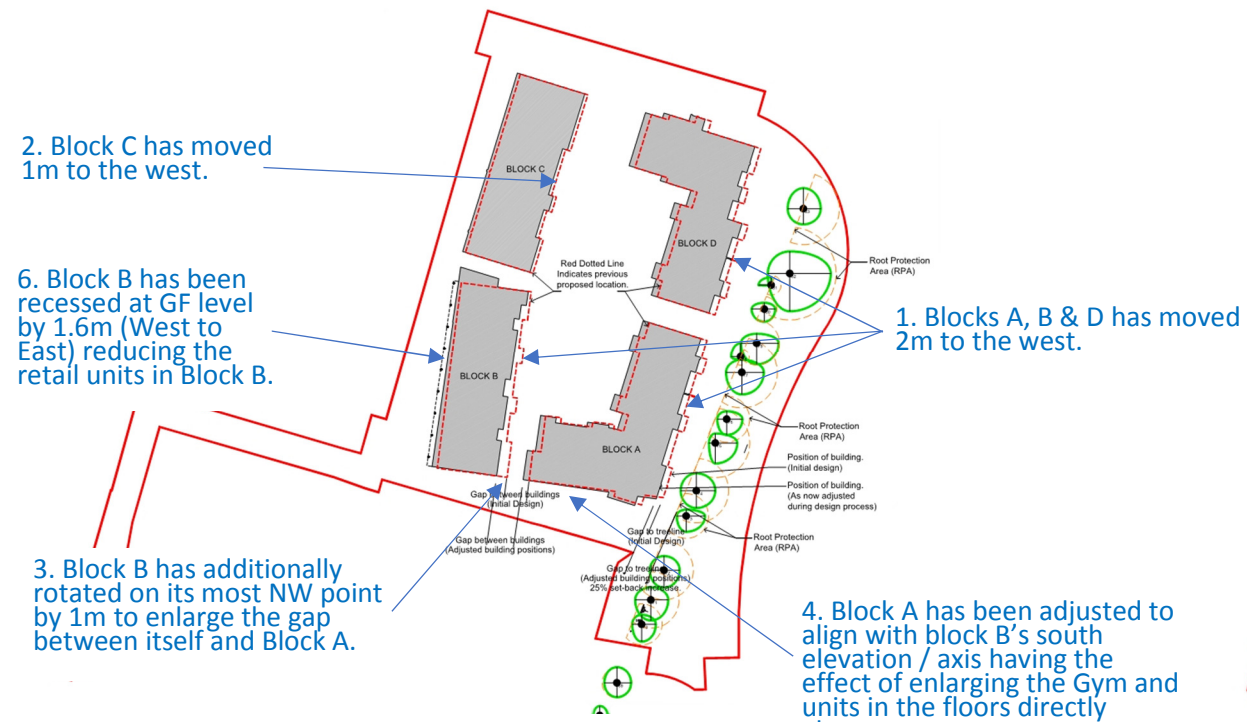


Fig. 26: Current and Previous Block Position Ground Floor

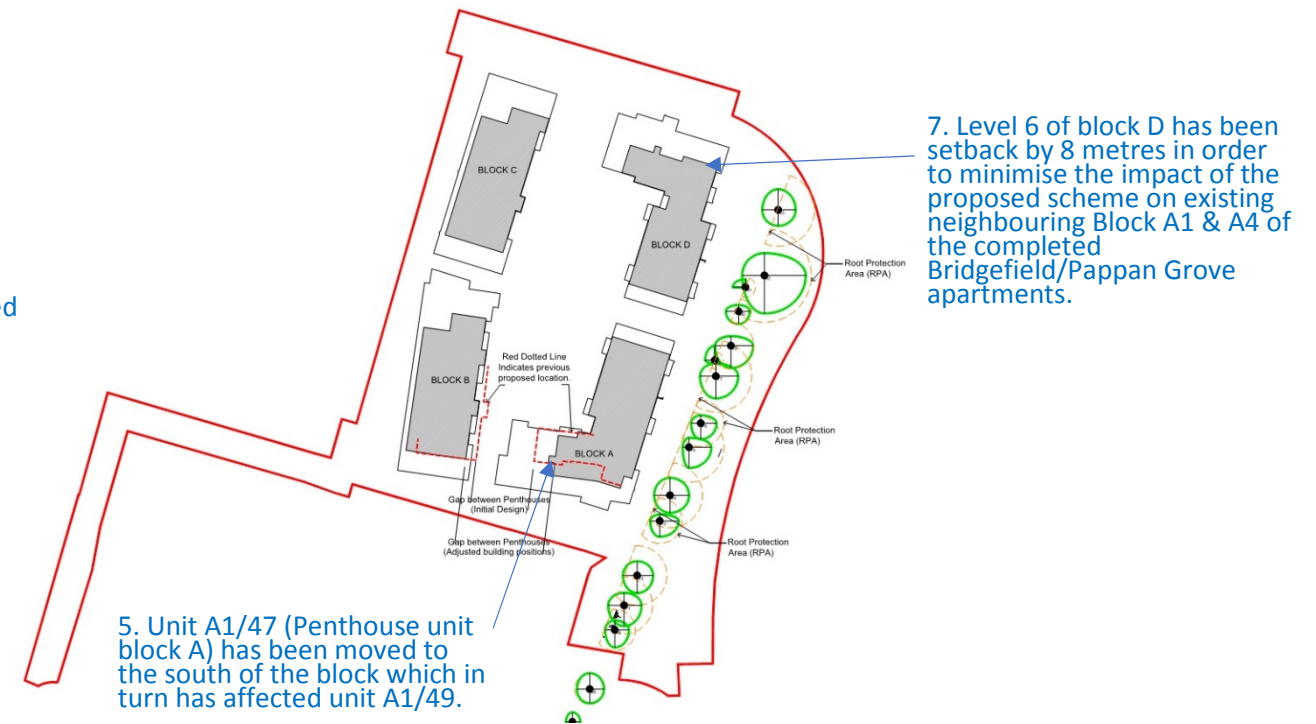


Fig. 27: Current and Previous Block Position Top Floor Plan



Fig. 28: Locations of Revised

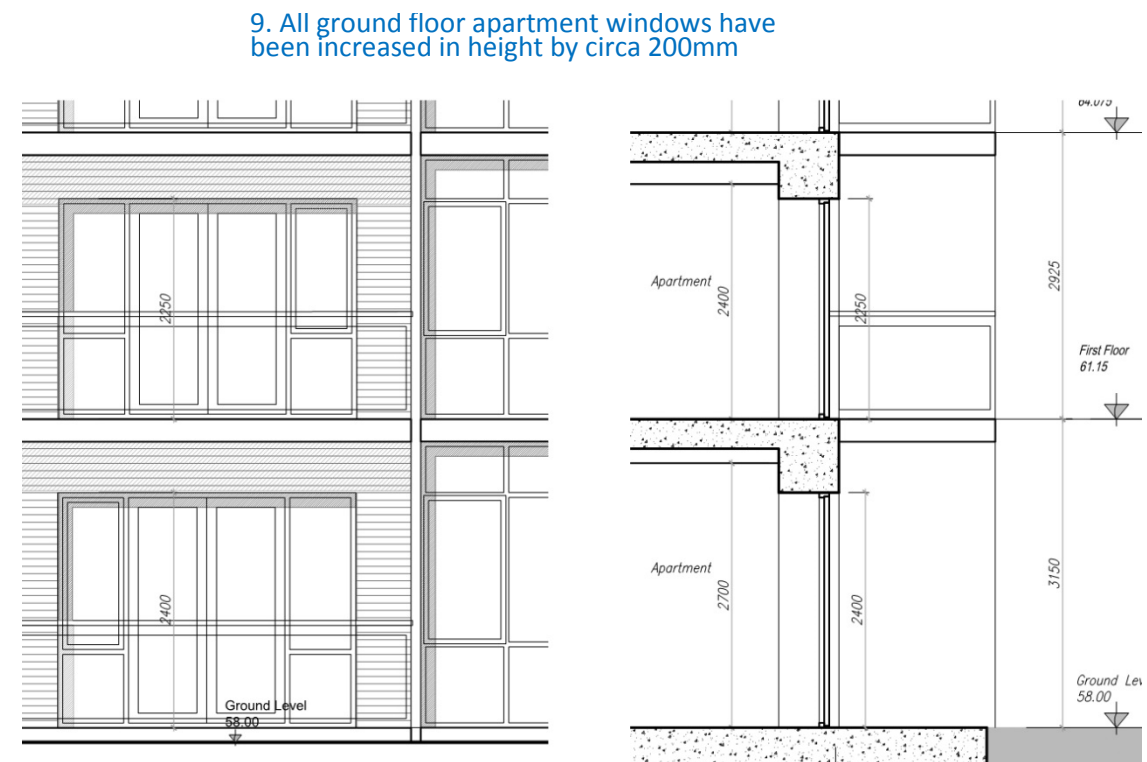


Fig. 29: Part Elevation & Section Indicating 2.4m High doors and windows.

The Geraghty Energy Consultants Ltd report included in this application is based on this adjusted design

It is noted that the residential units will enjoy a number of favourable daylighting and environmental characteristics including:

- Orientation in many cases towards generous landscaped courtyard.
- Gaps between buildings located centrally along the west, south, east and north flanks of the development, that at the south flank now increased as noted above.
- Light coloured internal walls, floors and ceilings and light coloured external wall finishes on opposing structures across courtyard (generally light buff brick).
- Majority of windows almost full height with cills at floor level, optimising the available view and opening visually onto large private balconies / sit-out areas, the balustrading to these areas to be predominantly clear glazing.

These characteristics have also contributed to the favourable results in the Geraghty Energy Consultants Ltd report.

On foot of concerns raised by Fingal County Council Planning in relation to the effect on daylighting of the retained trees to the east, the report also includes analysis of daylighting with this in mind and finds that there will be an acceptable level of daylighting in the units facing these trees.

The Geraghty Energy Consultants Ltd report further extends to an analysis of the effect of the proposed buildings on the built Bridgefield/Pappan Grove apartment buildings to the north

Waste storage and collection

A Waste Management Plan by Messrs KEYWASTE is included in this application. This document deals in detail with storage capacity, management, renewables and collection

The waste management strategy is generally as follows:

Binstores to serve the residential units are located in the basement area. These binstores are distributed evenly around the basement area, proximate to the lift cores serving the floors above. The filled bins will be taken via the vehicular ramp to the layby locating at the north of the proposed buildings for collection on designated days. Not all bins will be collected on a single day. The Waste Management Plan proposes collection staggered across a number of days to limit the bins volume on any particular day.

The binstore serving the ground floor commercial units and the childcare facility is located within the courtyard, immediately inside the western entrance gate. This ground level location is seen as that most convenient for the commercial units and avoids the carrying of waste from these units down a level to the basement. At an earlier point of the design development this binstore located more centrally within the courtyard, however, on foot of concerns raised, the location was altered to beside the western gate as now indicated. This location minimises the distance bins will have to be rolled within the courtyard on collection days thereby maintaining the quietness of the shared open space and protecting the privacy and amenity of the residents.

07 PUBLIC REALM

General Design Approach

The proposed design delivers the following public areas:

The extensive linear park along the eastern flank of the site, structured by the belt of large retained trees.

It is envisaged that this large public park area, linked with the similar space currently being delivered in the "Bridgefield & Pappan Grove" scheme to the north and thereafter connected northwards to the Santry River Amenity Walk will create a popular destination area for the residents of the scheme and for the public, fostering inclusivity and early integration of the scheme. Seating and play areas are included in the public areas.



Fig. 30: Open Space Diagram

In response to issues raised by Fingal County Council Planning Department around the proximity of the proposed buildings to the retained bank of trees to the east and also in response to the request from Fingal County Council Planning Department that the linear park along the tree line be made as wide as possible, the initial positioning of the 4 proposed buildings was adjusted during the planning consultation period.

Figure 31 shows the current adjusted positioning with the earlier positioning dotted.



Fig. 31: Current and Previous Block Position Ground Floor Plan.

Blocks A, B & D have moved 2m to the west. The movement westwards of Blocks A & D increases the setback distance from the bank of existing trees. This contributes to improving daylight and sunlight penetration to the apartments on the east facades. In addition, the linear park is increased in width and the vista of the eastern apartments towards the bank of trees is expanded.

The adjustment of the position of the eastern buildings increases the setback distance of the proposed buildings from the root protection area of the retained trees by circa 25% and widens the linear park by circa 2m

Public realm finishes, play areas, planting etc are further addressed in the Landscape consultant's (KFLA) drawings and documentation submitted with this application.

The adjusting of the positions of the proposed buildings retains the tilt off-orthogonal of Block B. By tilting the axis of Block B and aligning the tilt along the south facades of Blocks A and B, two triangular plaza spaces are created. The southern space doubles as plaza/arrival area for the scheme and as part of the east to west permeability route through the wider masterplan area. The scheme Concierge space opens to this area. The second plaza area, immediately west of the south-west building, is envisaged as an area which could in future incorporate external seating for a coffee shop or similar. These plaza areas will have quality landscaping and paving, the latter area presenting the taut urban aesthetic facing the existing retail park (Ref: Fig 32-34).

The ground floor commercial unit glazed line of the south-west building is set back by circa 1.5m behind the face of the building over. This collonaded set-back, combined with the structured landscaping of the west plaza, will create opportunities for intimate west facing suntrap seating areas and gathering zones adding to the vitality of the space.

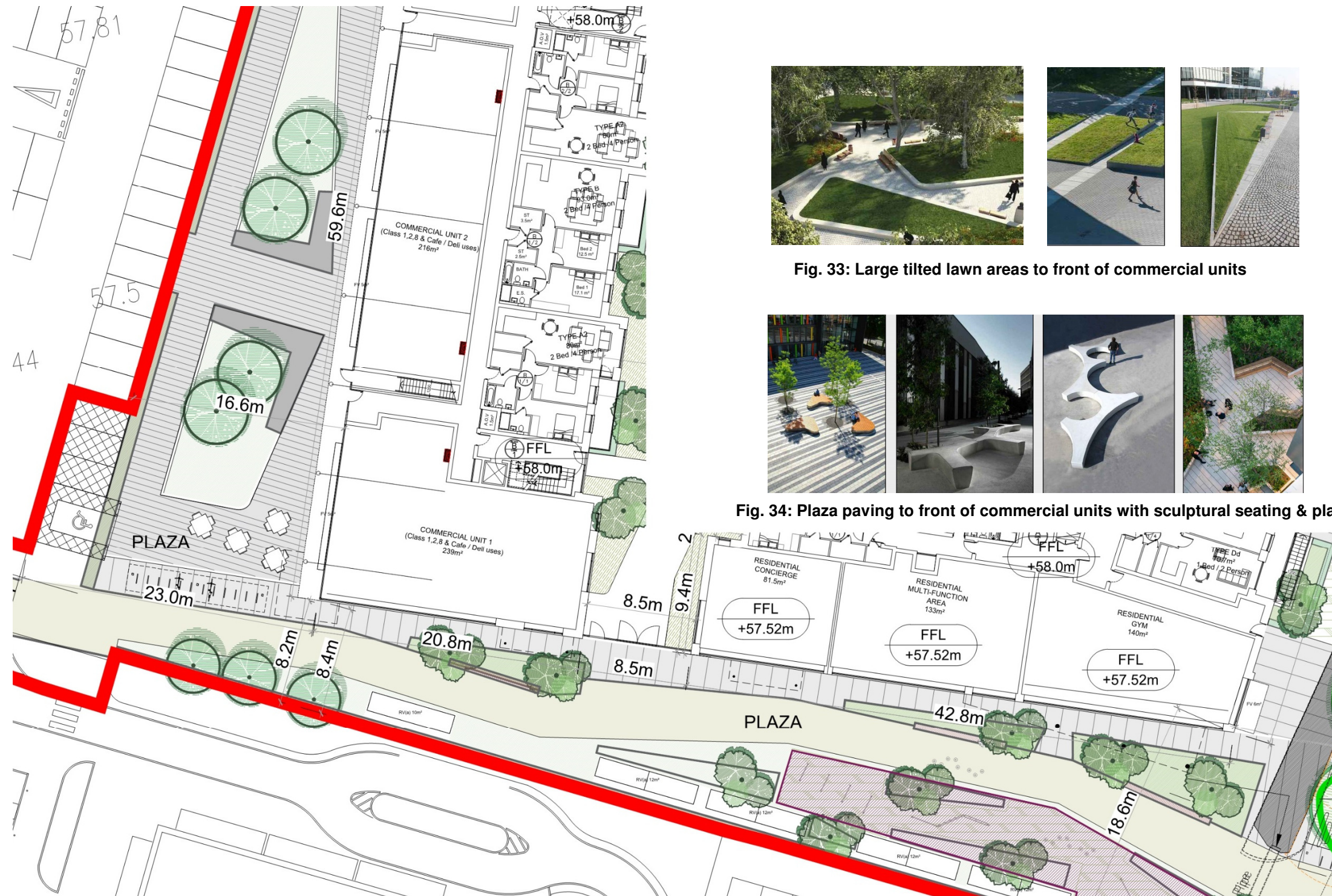


Fig. 33: Large tilted lawn areas to front of commercial units

Fig. 34: Plaza paving to front of commercial units with sculptural seating & planters

Fig. 32 Extract from Landscape Plaza..

Public realm finishes, play areas, planting etc are further addressed in the Landscape consultant's (KFLA) drawings and documentation submitted with this application.

A number of public park areas, lakes and recreation facilities which will also offer leisure opportunities for the residents of the proposed scheme are located within walking distance.

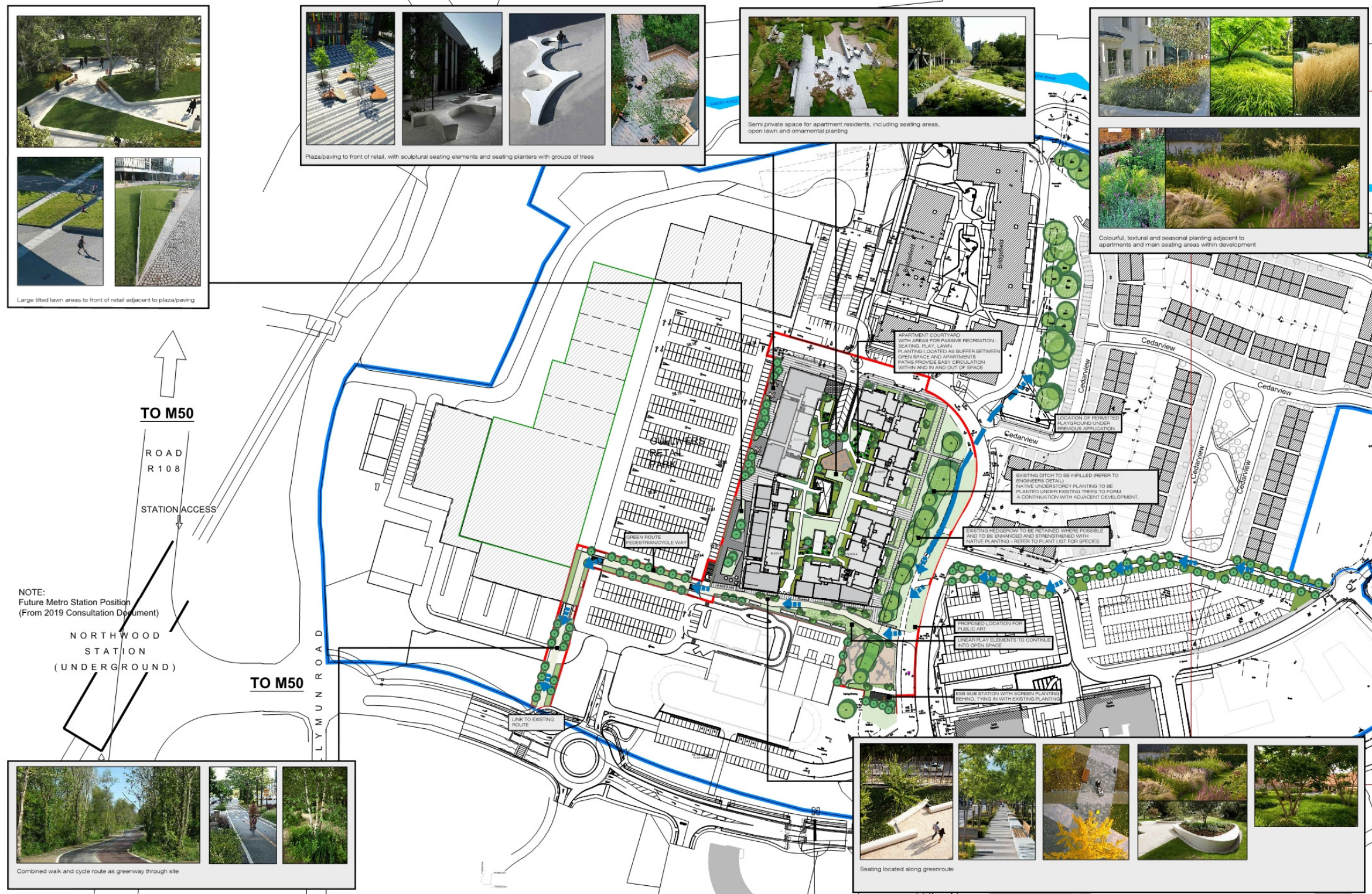


Fig 35 Landscaping Layout

Public Realm. Consideration of Utility Facilities - Waste storage and collection

A Waste Management Plan by Messrs KEYWASTE is included in this application. This document deals in detail with storage capacity, management, renewables and collection. The waste management strategy is generally as follows:

Binstores to serve the residential units are located in the basement area with each residential unit having easy access to the basement via the lift in each residential core. The filled bins will be taken by the waste management company via the vehicular ramp to the layby locating at the north of the proposed buildings for collection on designated days. Not all bins will be collected on a single day. The Waste Management Plan proposes collection staggered across a number of days to limit the bins volume on any particular day. By virtue of the basement location and the controlled collection plan, any impact on public realm amenity will be very limited

The binstore serving the ground floor commercial units and the childcare facility is located within the courtyard, immediately inside the western entrance gate. This ground level location is seen as that most convenient for the commercial units and avoids the carrying of waste from these units down a level to the basement. This location also minimises the distance bins will have to be rolled within the courtyard on collection days thereby maintaining the quietness of the shared open space and protecting the privacy and amenity of the residents.

Public Realm. Consideration of Utility Facilities – ESB sub-station location

The proposed sub-station is sized by McElligott Consulting Engineers (M&E). Having regard to the likely energy demand of the proposed scheme, including an appropriate provision for vehicle charging, the McElligott Engineers advice is that a double sub-station is required and this must be accessed via a hard surfaced approach. **Figure 36** indicates the location proposed for the sub-station prior to the tripartite meeting (September 2nd) at the offices of An Bord Pleanala.

On foot of concerns raised at the tripartite meeting around the possible visual threat of a utility building of this size, the positioning of the sub-station was again reviewed.

Figure 37 indicates the zones initially considered for locating the sub-station. These zones were again considered subsequent to the tripartite meeting. While the applicant has control of lands more remote from the proposed buildings than the indicated Zones A to F, it is not feasible, as advised by McElligott Engineers, to locate the sub-station in these remote areas because of limitations around primary power cabling sizes, distances etc.

- Zone A The basement extends for the entire footprint of the buildings and courtyard. Not feasible location as ESB will not allow sub-station above or within basement
- Zone B The built Bridgefield/Pappan Grove apartments. Not feasible location as this area is complete and open spaces etc are dedicated
- Zone C Existing restaurant, coffee shop, yards etc. to south. Not feasible location as this area is likely to be developed in the short to medium term as a prominent building addressing Northbrook Avenue and sub-station de-commissioning at later stage to facilitate that development would be impractical and could be disruptive to local area power supply.
- Zone D The built Cedarview houses. Not feasible location as this area is complete and open spaces are dedicated.
- Zone E The linear park. Not feasible as visually prominent and threats to existing tree roots from construction and supply cabling and ducting.
- Zone F The south-east corner. On review, it was concluded that Zone F remains the most practical of the available zones to locate the sub-station. This zone, while containing the last southern trees in the mature bank, is quietly divided from the main bank/linear park by the existing gap in the tree run and by the east-west path arriving crossing adjacent to the southern facades of the proposed Blocks A & B.

The following design measures are now incorporated to limit the visual impact of the sub-station:

- The structure is re-orientated so that the minor gable now presents to the arrival road, this gable set back to allow screening planting space **Figure 38**
- The structure reads as a pavilion connected to the proposed play area directly north, disguising its use
- Access doors are positioned to present away from the arrival road
- External walls are high quality, low maintenance, brick finish
- Extensive tree and dense shrub planting is provided to south and east elevations to screen the building from the arrival road.
- Dense shrub planting is provided to east, south and west elevations to limit direct access to this zones

Figure 39 is an image of the proposed buildings from the arrival road showing the sub-station treatment



32

Fig. 36: Previous Sub-Station Location.

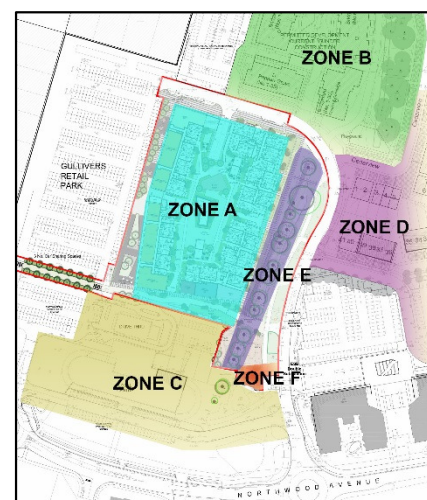


Fig. 37: Sub-Station Considered Zones.



Fig. 38: Proposed Sub-Station Location.



Fig. 39: Image of Proposed Sub-Station in CintextLocation.

8 ADAPTABILITY

The proposed development, by virtue of its connectivity and links to local retail, employment and recreational hubs, positions itself to benefit from and to contribute to the evolution and vitality of the area, to become an appropriate organic extension of the established residential hinterland and to visually and socially adapt to its surroundings.

Adaptability in initial design

All proposed residential units are designed to be readily accessed, without the need for altering or adapting, by people with disabilities. This builds in an automatic adaptability providing for the changing needs of occupants as they age or become impaired, without the need for adjusting building approaches, entrances or internal circulation. The design of the proposed buildings is in accordance with Part M of the Buildings Regulations, fostering an inclusive approach to the design of the built environment. Provisions in each apartment building include level access entrances, suitably designed lift and stairs and accessible rooms and sanitary facilities.

Flexibility for future adaptability – coping with change

The structure and build method of the proposed buildings is envisaged to comprise concrete floors spanning between concrete/masonry external walls and concrete/masonry inter-apartment walls. While such build methods may not readily lend to extending and adapting the footprints of particular apartments, it is envisaged that the internal walls of individual units will be mostly non loadbearing providing for easy future re-configuration making the apartments individually adaptable for the changing needs of occupants.

The open plan layouts of the ground floor units along the west side of both western blocks will offer flexibility for future uses and the potential for sub-division (subject to any required consents). A number of extract vent shafts rise internally from these units, continuing up to roof level, to avoid possible visual or environmental nuisance associated with air handling.

Transport choices – adapting to greener travel

The parking layout and circulation is clear and legible avoiding unnecessary physical and visual barriers. Provision is included to each parking space for electric car charging. Three car-sharing spaces are proposed adjacent to the south-east corner of proposed Block B. A number of other existing car-sharing spaces locate in the immediate vicinity. Extensive bicycle parking is provided in basement and at ground level. This wide variety of facilities, in association with existing local public transport and future Metro, will provide for car owners, electric car owners and those who do not own cars. The public transport and car-sharing provisions will offer the opportunity for those trading down into the scheme to abandon established private car use and for younger residents to adopt a lifestyle not dependent on car ownership.

Adapting to anticipated climate change

The proposed buildings will be energy-efficient and equipped for anticipated climate change challenges.

The buildings will incorporate floor, wall and roof insulation to deliver U-values superior to the Maximum Fabric Insulation U-value performances set out in Building Regulations Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings (or updated/revised version that document if relevant at time of construction).

The use of Heat Pumps, designed to capture heat from external air, is included for consideration in the design of the subject buildings. Other energy efficient technologies will also be considered. Lighting points will be suitable for the use of low energy lighting.

The building fabric, detailing and services/renewables requirements set out in Building Regulations Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings combine to deliver NZEB (Near Zero Energy Building) standards. The proposed buildings will be constructed to achieve these required standards and will therefore be NZEB. NZEB standard is equivalent to BER (Building Energy Rating) for each apartment of generally A2, requiring very limited energy for space heating, water heating and ventilation.

Provision will be made in the development for the fitting of car charging points to all proposed car spaces (those in basement car-park and those at ground level).

The proposed drainage designs will incorporate SUDS measures (embedded mitigation) to ensure the runoff from the site (and also from the recently completed Bridgefield and Pappan Grove apartments due north) to the Santry River will not exceed greenfield runoff rates. Consequently, there will be no increase in risk of flooding in the receiving waters.

9 PRIVACY AND AMENITY

General

The scale of the central common courtyard and the set-back distance between buildings provides good privacy for residents of the units fronting the public open space at the centre of the scheme. The central courtyard area will incorporate extensive planting, seating and play areas. Many of the proposed units will have balconies or terraces overlooking the central space, the large spacing between opposing buildings delivering good light penetration into the area while maintaining privacy.

Apartments along the eastern flank of the scheme will enjoy the vista of the belt of large retained trees. The trees will deliver visual pleasure and a sense of privacy and protection

New tree planting is proposed along the western flank of the site. The aim is to soften the vista from the apartments and to suggest a semi-private setback while retaining the urban tautness necessary on this side of the scheme

All apartments are provided with private balconies, terraces or patios.

Parking and ancillary facilities locate convenient to the residential units (see 11 Parking), with provision for spaces for people with disabilities.

Other amenity provisions:

- Apartments have been designed with an extensive internal courtyard measuring in excess of 3,000 sq. m. A series of breaks in the perimeter built form allows good sunlight penetration into the courtyard.
- Aspect and orientation of the apartment units have been designed to maximise the favourable south and west aspects.
- In excess of 50% of the proposed apartments are dual aspect
- Single aspect units facing north have been limited to the south zone only, a total of only 7 units, each of which overlooks the landscaped central courtyard
- The majority of living areas of the apartments have been located to enjoy south and west aspects or the vistas of the bank of mature trees along the east flank

The apartments at ground level on the eastern faces and those on the north face are set behind "defensible" private landscaped areas defined by structured hedging – see **Figs 40 & 42** below

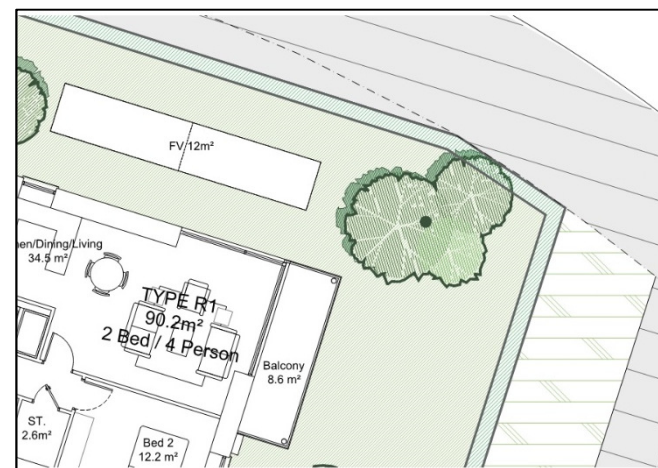


Fig. 40: Defensible Private Open Space Plan.

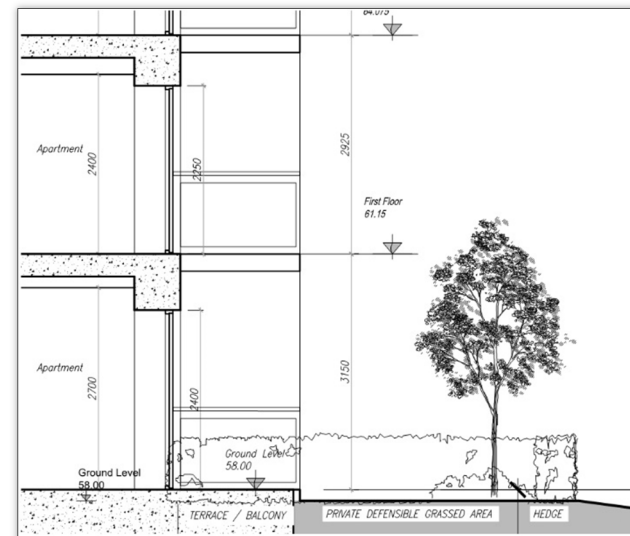


Fig. 41: Defensible Private Open Space Section.



Fig. 42: Open Space Diagram

Shared services

The southern flank of the proposed scheme includes three areas providing shared services and amenities for residents:

Concierge Space: It is now common for apartment schemes to include Concierge provision. The Concierge will typically act as arrival contact, liaison for deliveries etc. In tandem with the growth in internet generated deliveries (Amazon etc.) Concierge spaces increasingly require storage for parcel deliveries which might occur while a resident is at work, these to be collected at a later stage from the Concierge. The proposed Concierge area will include storage provision.

Multi-function Area: Initially introduced in some apartment schemes as small areas where residents could meet informally, use wi-fi etc., these areas are developing as larger, broader use - "break-out" zones for residents to get some time away from their apartment, to work in a quiet environment or to interact socially. These facilities can be particularly valuable for residents in shared-rental apartments. Typically a resident might wish to use the space to meet a visitor where the visitor might not ultimately proceed to the apartment. Equally, a small group of residents might use the space to meet informally or a larger group might gather to discuss common issues. In the proposed plan, the Multi-function Area is adjacent to the Concierge area. This juxtapositioning is intentional as there are obvious synergies.

Gym: Again, it is increasingly common for residents' Gym facilities to be provided in apartment schemes. The proposed Gym will include a range of light-use exercise machines. It is not envisaged that heavy training equipment will be provided. Because of the close proximity to the apartments it is expected that Gym users will change and shower in their homes, therefore the Gym will not include showering/changing areas.

Commercial and other uses at ground floor locating below residential

Commercial units, childcare facility, gym and other uses locate at ground floor level under residential above.

The reinforced concrete construction of the floors/ceilings directly above these units will deliver sound reduction performances of 60 to 65 dB, comfortably exceeding the requirements of Building Regulations TGD E 2014, Sound.

The proposed Gym is for the use of the residents of the scheme. The applicant has confirmed that the training activities in the Gym WILL NOT INCLUDE weight training or other such activities likely to cause nuisance associated with hard impact. The applicant has also confirmed that any sound systems or TV sets will operate at background sound level only (allowing normal conversation). The Gym is envisaged as a light exercise area.

Possible negative effects of the activity associated with the commercial and other uses on the quiet enjoyment of the apartments directly above have been considered. It is the intention of the applicant that heat recovery or a similar mechanical ventilation system is to be provided in each apartment in the proposed scheme. Other than at times where a large immediate amount of natural ventilation might be required (e.g. to quickly remove unwanted cooking smells or similar), these mechanical ventilation systems can provide a level of continuous ventilation adequate for comfort without opening windows (the windows will be double or triple glazed, delivering circa 35dB R sound reduction, which exceeds that of normal double glazed units). In this way a level of protection from the sounds possibly associated with the ground floor uses is provided.

If occupants of the apartments directly above the ground floor uses are using their balconies, the external noise levels arriving at this level will not vary greatly from the noise levels from the general retail park which will arrive at the balconies on the storeys above.

Extract vents from the commercial units are located internally in masonry surrounded vertical ducts discharging through roof located outlets, Noise pollution risk is thereby limited.

An acoustic report by Messrs AWN Consulting is included in this application and elaborates further on the above

Proximity of subject site to Dublin Airport Zone

Noise risk associated with the proximity of the subject site to Dublin Airport Zone is addressed by AWN Consulting in the EIAR included with this application,

10 PARKING

Bicycle parking, car parking, and bin storage for residents are located in the basement which extends under almost the entire site. Each residential core has direct lift access to the basement. The vehicular access to the basement is positioned at the northern flank of the scheme. While site topography favoured locating the access ramp along the eastern side of the basement, biased towards the south-east, the proposed location moves the vehicle arrival and departure activity away from the belt of retained trees thereby protecting the tranquillity and limiting threats to the trees associated with traffic movement and ramp construction.

It was also considered inappropriate to locate repeating vehicle movements at the zone of the southern plaza which is the primary visitor arrival area for the scheme.

Bicycle parking in the basement area is located within communal locked cage enclosures. Additional covered bicycle parking, envisaged to cater in most cases for short-stay use, is located at ground level/on-street. It is envisaged that the covered bicycle parking stands will be "Sheffield" or of similar design. Sheffield and similar stands, located in public access areas and streets, are accepted by bicycle sharing providers (Bleper Bicycles etc.) as suitable for securing their bicycles.

Part of the car parking for the scheme, visitor, commercial unit and childcare unit car set-down areas are located in the extensive established parking zone to the west and in the area to the north of the proposed buildings. The traffic report prepared by JG Barry Engineers included in this application addresses this and the scale of car parking provision in more detail.

A childcare facility set-down and collection parking area locates immediately north of the childcare facility. This parking area provides for parallel parking on foot of concerns around orthogonal nose-to-kerb parking raised by Fingal County Council Roads and Traffic.

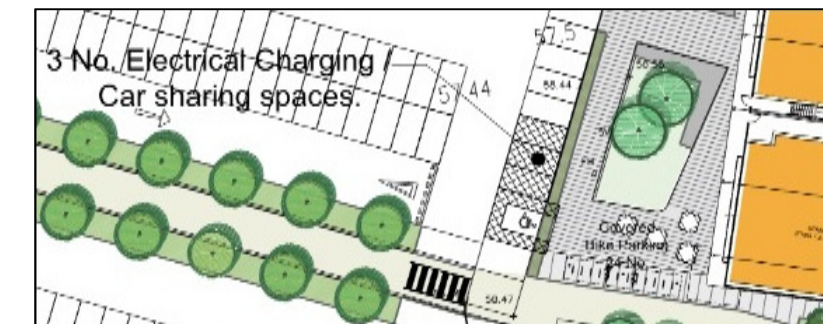


Fig. 43: Car Sharing Spaces, Surface

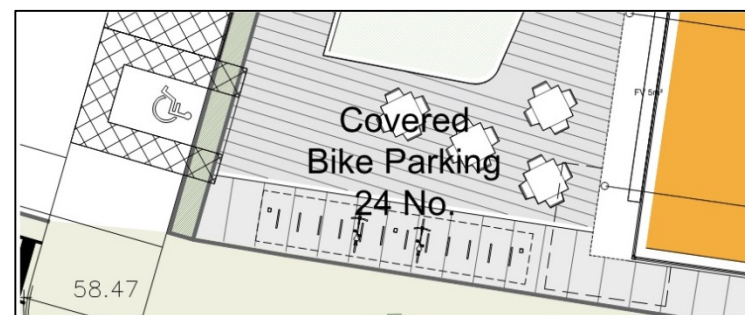


Fig. 44: Covered Bike Stand, Surface.

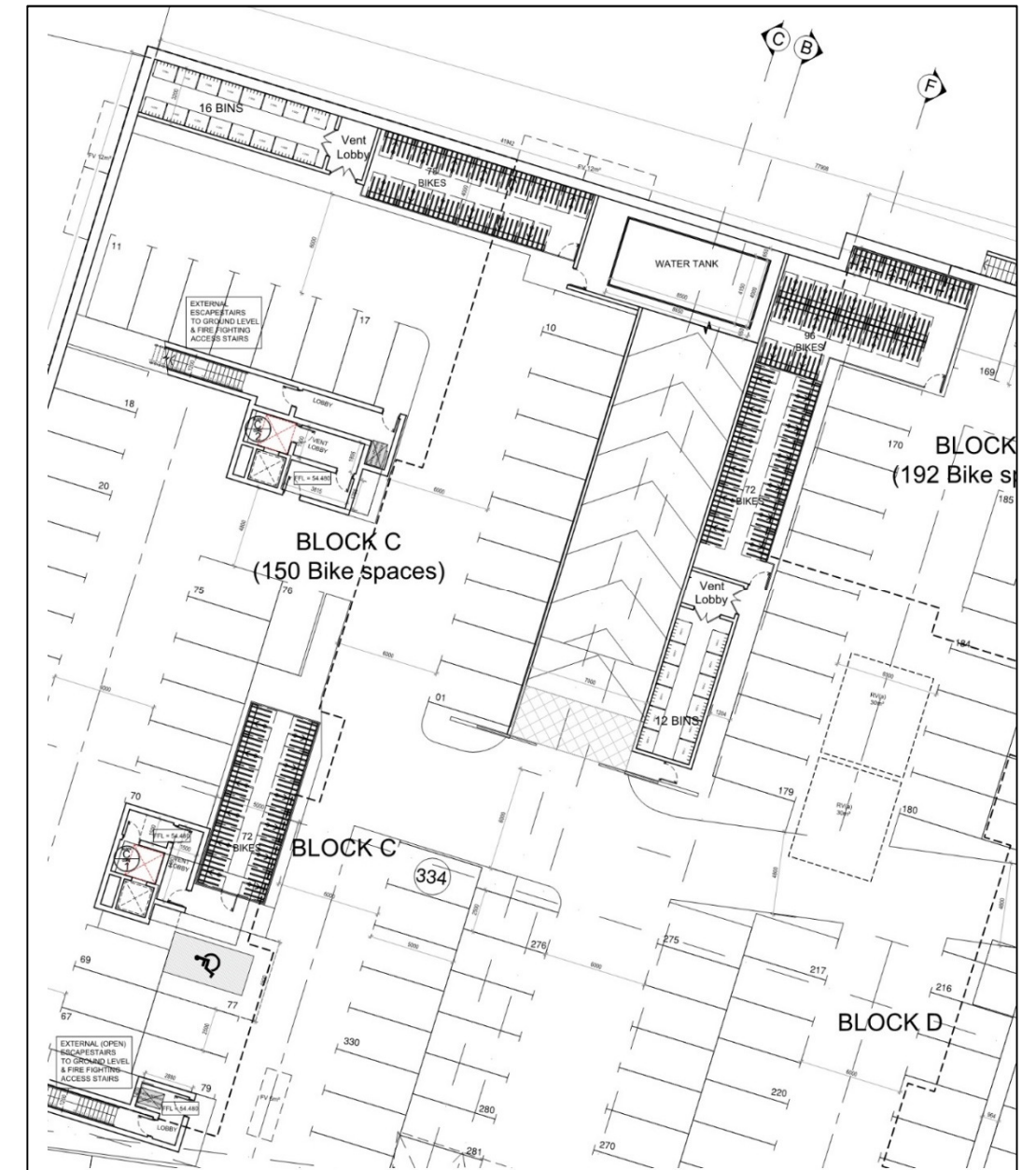


Fig. 45: Extract of Basement Plan showing Car & Bicycle Parking.

END