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CORNELSCOURT
RESIDENTIAL DEVELOPMENT

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CORNEL LIVING LTD.

Building Height Report - Rev A

CORNELSCOURT



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INTRODUCTION





1.1 Introduction / Policy Background

This Building Height Report has been prepared in support of an application submitted on behalf of Cornel Living Ltd (the applicant) for a new Strategic Housing Development at Cornelscourt Village off the N11. The proposal is for the provision of 468 apartments across 8 residential buildings and assorted houses, ranging in height from 1 to 12 storeys.

This report is a response to An Bord Pleanála's (ABP) specific information request:

Item 1; “A report demonstrating compliance with the guidelines for Planning Authorities on Urban Development and Building Heights issued by the minister in December 2018 in accordance with SPPR3 of these guidelines.”

These guidelines are issued by the Minister for Housing, Planning and Local Government under Section 28 of the Planning and Development Act 2000 (as amended). Planning Authorities and An Bord Pleanála are required to have regard to the guidelines and apply any specific planning policy requirements (SPPRs) of the guidelines, within the meaning of Section 28 (1C) of the Planning and Development Act 2000 (as amended), in carrying out their functions.

SPPR 3 (A) states:

“It is a specific planning policy requirement that where; (A) 1. An applicant for planning permission sets out how a development proposal complies with the criteria above;

And 2. The assessment of the planning authority concurs, taking account of the wider strategic and national policy parameters set out in the National Planning Framework and these guidelines; then the planning authority may approve such development, even where specific objectives of the relevant development plan or local area plan may indicate otherwise.”



Fig. 1.1.1: Proposed Residential Development at Cornelscourt - Bird's Eye View

This Report has been prepared to demonstrate how the development proposal complies with the performance criteria contained in the Guidelines. It will establish that the scheme performs exceptionally well when tested against the criteria.

As set out in the enclosed Planning Reports, the delivery of quality residential development on this prime, infill, underutilised site in a compact form, is wholly consistent with the policies and intentions of the National Planning Framework, Rebuilding Ireland and Regional Spatial and Economic Strategy.

There are limited sites in the Dun Laoghaire Rathdown functional area that can accommodate development of the scale proposed in this case. It is critically important that this valuable land is developed to maximise the efficiency of the site and contribute positively to housing supply.

The Guidelines state that in relation to the assessment of individual planning applications and appeals, it is Government policy that building heights must be generally increased in appropriate urban locations. There is therefore a presumption in favour of buildings of increased height in our town/city cores and in other urban locations with good public transport accessibility. Planning authorities must apply the following broad principles in considering development proposals for buildings taller than prevailing building heights in urban areas in pursuit of these guidelines:

- Does the proposal positively assist in securing National Planning Framework objectives of focusing development in key urban centres and in particular, fulfilling targets related to brownfield, infill development and in particular, effectively supporting the National Strategic Objective to deliver compact growth in our urban centres?
- Is the proposal in line with the requirements of the development plan in force and which plan has taken clear account of the requirements set out in Chapter 2 of these guidelines?



Fig. 1.1.1: Proposed Residential Development at Cornelscourt - View along the N11 Corridor

- Where the relevant development plan or local area plan pre-dates these guidelines, can it be demonstrated that implementation of the pre-existing policies and objectives of the relevant plan or planning scheme does not align with and support the objectives and policies of the National Planning Framework?

As a response to the above criteria, we note the following:

- As set out in the accompanying planning report, the proposal secures the relevant objectives of the National Planning Framework.
- As set out in the Material Contravention Statement, the Council's Development Plan has conflicting objectives in relation to height for the subject site. The Council's Height Strategy places numerical limits on the heights of new buildings, which is not in accordance with national planning policy and the Section 28 Guidelines.



Fig. 1.1.1: Proposed Residential Development at Cornelscourt - Bird's Eye View Along the N11 Corridor



RESPONDING TO THE SCALE





2.1 At The Scale of The City/Town

2

The key criteria identified by the Guidelines are:

“The site is well served by public transport with high capacity, frequent service and good links to other modes of public transport.”

The N11 Corridor is a key access and transit route (Fig. 2.1.1) in and out of the city. The site is situated immediately adjacent to this well served public bus transport infrastructure with high capacity and is within walking distance (i.e. up to 3 minutes or 200m) to and from this high capacity urban mode of public transport.

There are alternative high capacity public transport infrastructures such as DART and LUAS within 30 - 40 minute walk from the location of the proposed development..

There are several tall buildings located along this important public transport corridor and the proposed development is in keeping with both the prevailing heights of existing developments along the N11 and the nature of the topography of site. We note specifically the following developments:

- Thornwood
- Booterstown Wood
- Merrion Hall Apartments
- Beechwood Court
- The Grange Apartments
- Blakes Development

The residential development at Cornelscourt seeks to respond to this nature of development along the N11 corridor; establishing an attractive landmark to Cornelscourt and enhancing the character of the area.

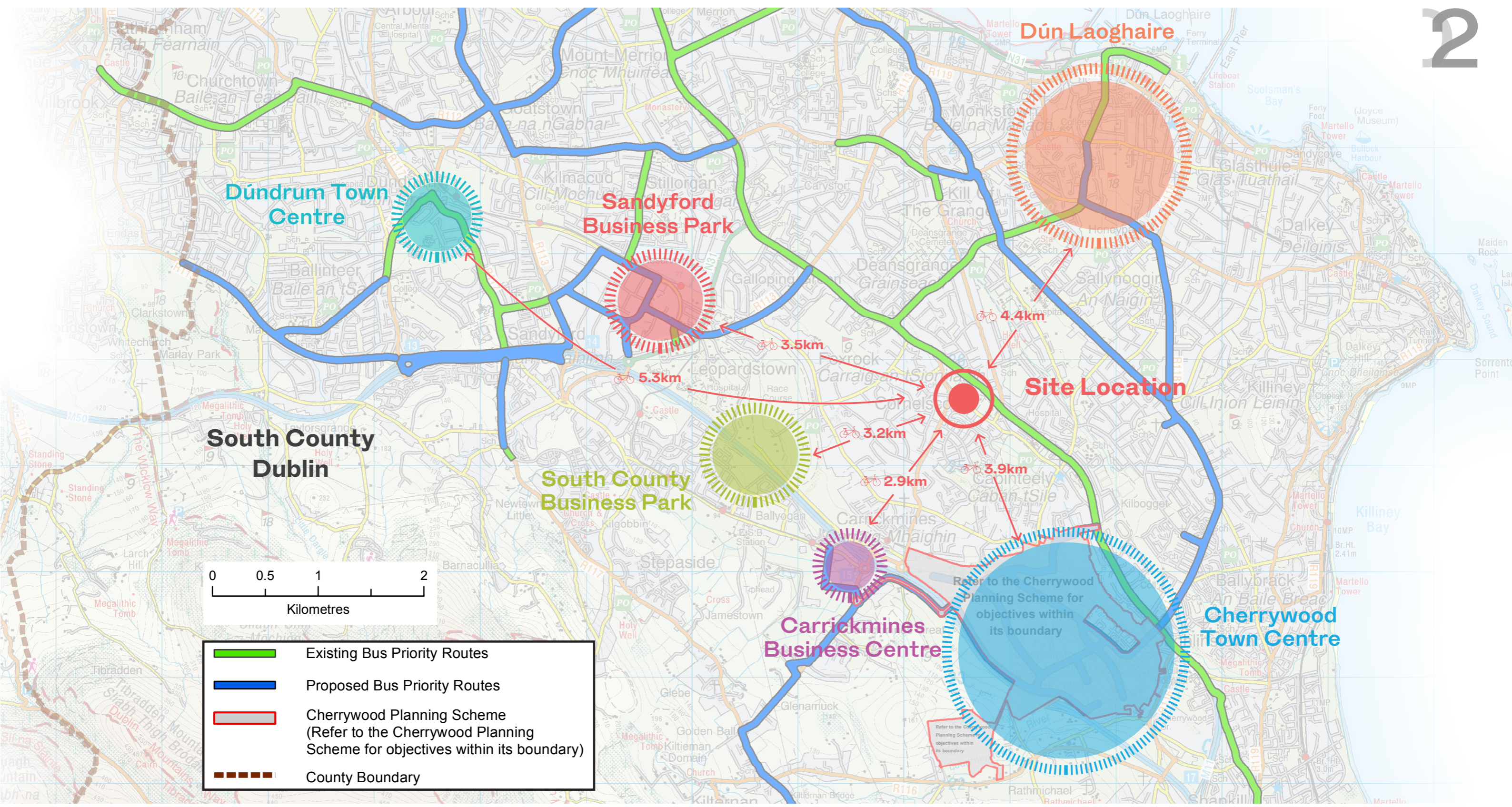


Fig. 2.1.1: Dún Laoghaire Rathdown County Development Plan - Proposed Bus Priority Network & Key Employment Centres / Towns

“On larger urban redevelopment sites, proposed developments should make a positive contribution to place-making, incorporating new streets and public spaces, using massing and height to achieve the required densities but with sufficient variety in scale and form to respond to the scale of adjoining developments and create visual interest in the streetscape.”

The nature of south Dublin and the area administered by Dún Laoghaire-Rathdown County Council has been traditionally low-rise in character. The prevailing building height in the mature suburban areas seldom exceeds two or three storeys. The established residential areas in the vicinity of the site include Kerrymount, The Park and South Park across the N11 corridor. These estates are low density in character, with 2 storey dwellings located on generous plots of land. In response to Government policy, there is a clear requirement to increase the density of development in areas such as Cornelscourt, which are established as low density but have easy access to quality public transport. The subject site is a rare opportunity to deliver high quality, high density development of a comprehensive scale that will accord with all strategic planning policies.

Recent developments in the wider area have tended to be higher, in response to an evolution of national planning policy and Guidelines. In the larger development sites of Carrickmines, Cherrywood, Sandyford and along the N11 corridor (Fig. 2.1.2) heights greater than six storeys have been permitted. This trend reflects the change in national policy, driven by the Residential Density Guidelines (1999) and the subsequent Sustainable Residential Development in Urban Areas (2008) which required local authorities to promote higher residential densities in appropriate locations.



Fig. 2.1.2: Map extract showing buildings along the N11 Corridor taller than 6 Stories



“On larger urban redevelopment sites, proposed developments should make a positive contribution to place-making, incorporating new streets and public spaces, using massing and height to achieve the required densities but with sufficient variety in scale and form to respond to the scale of adjoining developments and create visual interest in the streetscape.”

Careful consideration has been given to the successful integration of the scheme into the existing character and topography of the site and area. The additional height is only proposed along the N11; ascending in height the development will establish a distinctive identity along the N11 Corridor and provide a visual landmark. Elsewhere in the site the development’s height is intentionally sensitive at locations adjacent to the existing Willow Grove and the cottages along Old Bray Road.

While acknowledging the scale of the city and the immediate context of the N11 Corridor, the proposed residential development also makes a positive contribution to place-making. The scheme incorporates a sequence of central garden spaces and pedestrian streets which are defined by a series of apartment buildings. These apartment buildings are carefully considered in terms of massing and orientation to provide ‘people friendly’ external spaces; emphasising one of the proposal’s key design concepts; place making.

The proposal offers the potential to complete street frontage along Old Bray Road. The addition of a café and concierge service at this location will deliver activity at street level and will encourage pedestrian footfall both towards the N11 via the new development and to Cornelscourt village from the proposal and beyond.



Fig. 2.1.2: Proposed Residential Development at Cornelscourt - View along the N11 Corridor

2.2 At The Scale of The Neighbourhood/Street

At this level, the Guidelines criteria are:

“The proposal responds to its overall natural and built environment and makes a positive contribution to the urban neighbourhood and streetscape.”

The site is located between two defining contexts: the N11 Corridor to the north and the village of Cornelscourt to the south.

Beginning with the village of Cornelscourt, the proposed residential development responds to the low-rise nature of Old Bray Road with the introduction and integration of a two storey structure (Fig. 2.2.1) containing a mix of uses; a cafe, tenant office space and concierge service / reception space. The introduction of a high quality palette of durable materials and the articulation of the form establishes an appropriate and considerate connection within the fabric of the village of Cornelscourt.

Along the south boundary (Fig. 2.2.2) of the proposed residential development, single storey dwellings have been introduced to provide a sympathetic transition of scale between the existing neighbours and the proposal. To the east of the boundary, two storey semi-detached dwellings have been situated to present an appropriate transitional scale towards the houses of Willow Grove.

Buildings F, E and D (Fig. 2.2.3) ascend in scale carefully considering distance and height to allow light and ventilation into the central garden space and considerably responding to the scale and privacy of the neighbouring dwellings. Coupled with the single and two storey dwellings their scale, massing and composition positively integrate to the scale of the suburban neighbourhood.

Rising away from the suburban context that defines the village of Cornelscourt the proposed residential development ascends in scale to appropriately respond to the context of the N11 Corridor. Buildings C, B and A range from six storeys to twelve storeys (Fig. 2.2.4). Their heights ascend in multiples of three to establish a distinctive identity; contributing positively to the existing trend of taller buildings along the N11 Corridor.



Fig. 2.2.1: Proposed Residential Development at Cornelscourt - Cafe and Concierge Along Old Bray Road

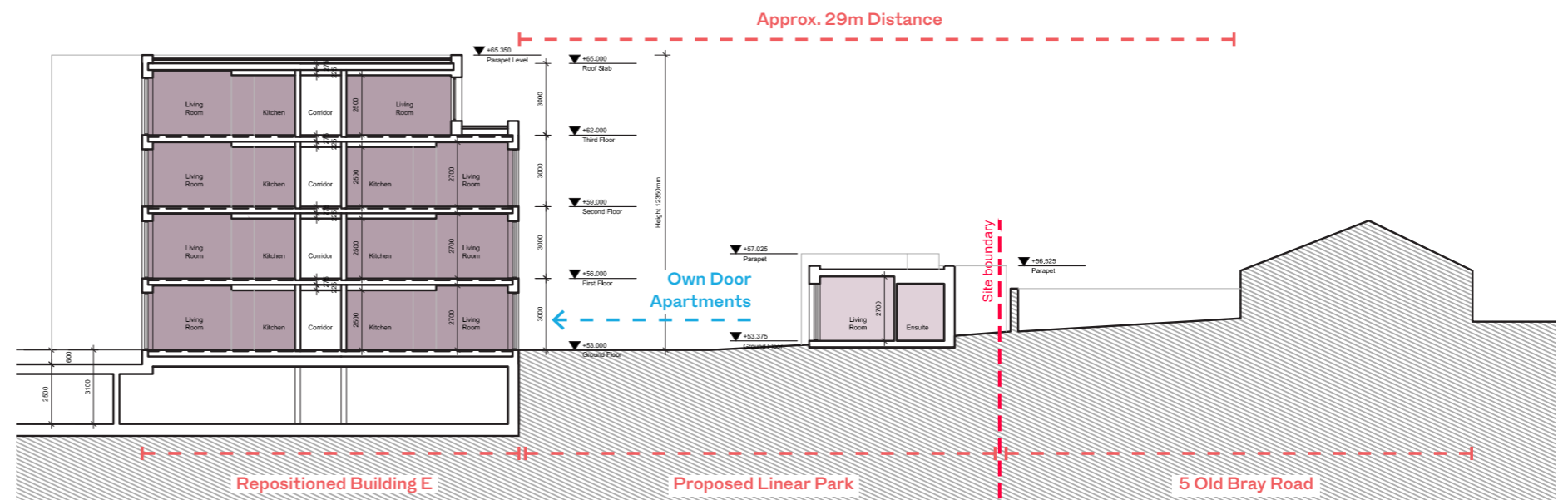


Fig. 2.2.3: Proposed Residential Development at Cornelscourt - Scale and Massing of Building E Adjusted and the Introduction of Single Storey Bugalows to Improve Interaction Between Proposed Site and Old Bray Road

“The proposal is not monolithic and avoids long, uninterrupted walls of building in the form of slab blocks with materials / building fabric well considered.”

The material palette for Cornelscourt has been chosen to create an overall order between the elements while also establishing clear visual identities between the taller and curved building buildings of the proposed development. The composition of the buildings, articulation of form and use of considered materials creates a positive environment for residents.

The arrangement of buildings are composed to create visual permeability (Fig. 2.2.4) to the residents and wider context. Between each building there is provision of permeable pedestrian routes which allow residents to easily walk or cycle across the development (Fig. 2.2.6).

In the taller elements, Buildings A, B, and C (Fig. 2.2.6), along the N11 corridor, the façade is composed of a curtain walling glazing system with external natural anodized aluminium mullions and transoms and pale brick panels. This facade is framed in a bronze anodised aluminum edge element to the east and west that adds richness and detail to the scheme

For Buildings D, E, and F, the materials include brick, render, and architectural concrete balconies with extensive glazing and feature elements of bronze anodised aluminium bay windows. Building F has plaster render façades which are complemented by bronze anodised aluminium parapet cappings and window cills.

The materials have been chosen as part of the scheme design, maintaining continuity of finishes and integration with the existing fabric. The projecting bronze anodised aluminium bay windows (Fig. 2.2.5) introduce an architectural quality increasing the uniqueness to the scheme reinforcing the concepts of placemaking and creating a sense of ownership for residents of the development.

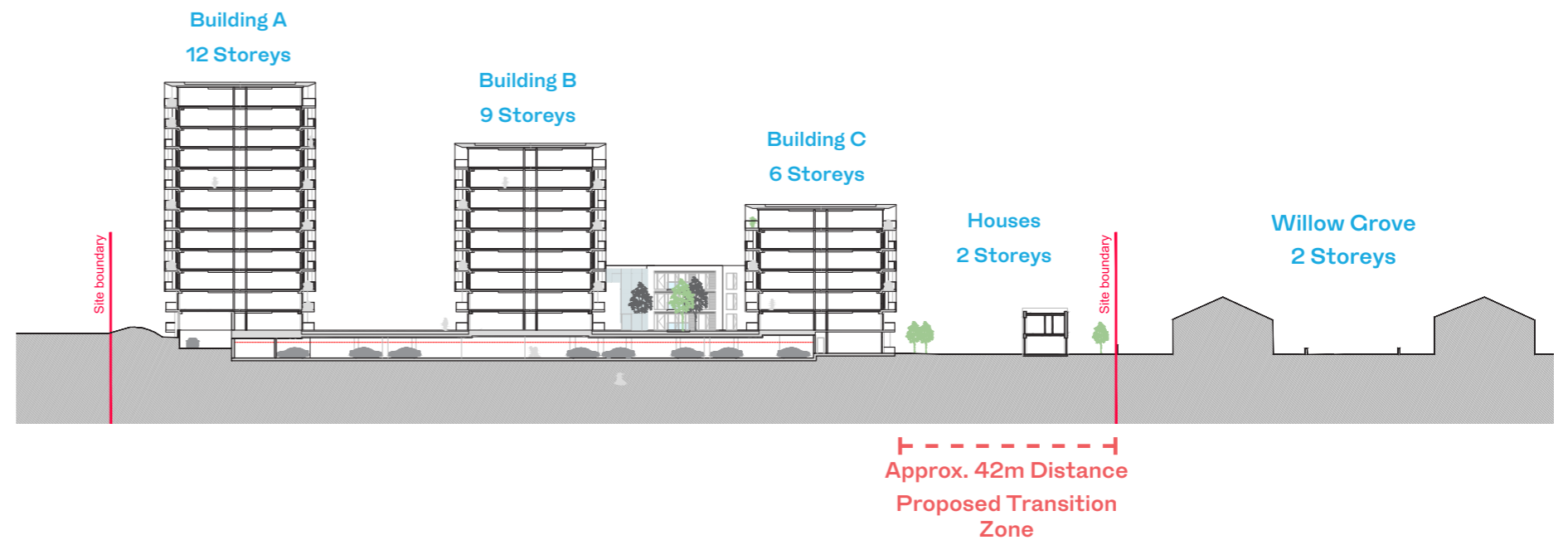


Fig. 2.2.4: Proposed Residential Development at Cornelscourt - Building Heights Section



Fig. 2.2.5: Proposed Residential Development at Cornelscourt - Pedestrian Link Between Building D and Building E

“The proposal enhances the urban design context for public spaces and key thoroughfares and inland waterway/ marine frontage, thereby enabling additional height in development form to be favourably considered in terms of enhancing a sense of scale and enclosure while being in line with the requirements of “The Planning System and Flood Risk Management – Guidelines for Planning Authorities” (2009).“

One of the key concepts to the development is the creation of a clearly defined hierarchy of public, semi-public, and private spaces which provide legibility, permeability, and connectivity and make it easy for residents and visitors to find their way around and enjoy the significant open spaces contained within the scheme (Fig. 2.2.6).

Along the Old Bray Road, a tenant amenity/cafe is introduced, linking the new development with the existing context (Fig.2.2.7) through the use of common materials found in the existing village and at a scale appropriate to the village setting. Within the scheme, a central tenant amenity provides areas for relaxation and socialising between tenants, the amenity space is integrated within the central garden and acts as a point of focus within the courtyard.

The scheme is exemplary in minimising the need for cars by providing attractive paths and cycle routes that facilitate safe access by users of all ages and degrees of personal mobility. The proposed layout has been developed to encourage permeability within site, providing pedestrian and bicycle path routes from the Central Garden Space and Linear Park. These routes could further enhance the permeability and connectivity within the scheme.

There is no inland waterway or marine frontage within the current proposal. We can confirm that a Flood Risk Assessment prepared by DBFL Consulting Engineers has been prepared. This document concludes that the proposal is appropriate for the site’s flood zone category C.



Fig. 2.2.6: Proposed Residential Development at Cornelscourt - Pedestrian Permeability

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“The proposal makes a positive contribution to the improvement of legibility through the site or wider urban area within which the development is situated and integrates in a cohesive manner.”

The development utilises a strategic site along the N11, improving the streetscape and sense of place of the area (Fig.2.2.6). Internally, the site provides potential pedestrian linkages to the surrounding area, connecting to the N11 and Willow Grove. These linkages could significantly improve the permeability of the site and immediate area .

“The proposal positively contributes to the mix of uses and/ or building/ dwelling typologies available in the neighbourhood.”

A broad mix of studio, 1, 2 and 3 bed apartments together with bungalow and semi – detached houses are delivered in this scheme. As set out in the Planning Reports, the applicant has undertaken significant research into the national demographic profile and the mix delivered is a direct reflection of current and future forecast market demands.



Fig. 2.2.7: Proposed Residential Development at Cornelscourt - Cafe and Tenant Amenity Along Old Bray Road

2.3 At The Scale of The Site/Building

At this level, the Guideline's Criteria are:

“The form, massing and height of proposed developments should be carefully modulated so as to maximise access to natural daylight, ventilation and views and minimise overshadowing and loss of light. “

The proposed residential development at Cornelscourt is informed by careful analysis of the context and consideration of natural daylight, ventilation, views and minimising loss of light. The analysis has informed:

- Arranging buildings to give structure and form to the principal spaces (Fig. 2.3.1) and vistas (Fig. 2.3.2)
- Modulation of the building forms to take maximum advantage of the views and orientation
- Using variety and distinctiveness in the architecture to create a sense of place by means of a range of building sizes, shapes, heights, materials and character (Fig. 2.3.3)
- Providing appropriately scaled, well orientated and ‘people friendly’ external spaces (Fig. 2.3.2) including landscaped streets, courtyards, gardens and pedestrian streets (Fig.2.3.4).
- Creating a clearly defined hierarchy of public, semi-public and private spaces which provide legibility, permeability and connectivity and make it easy for residents and visitors to find their way around. Giving priority to walking, cycling and public transport, minimising the need for cars by providing attractive paths and cycle routes which facilitate safe access by users of all ages and degrees of personal mobility



Fig. 2.3.1: Proposed Residential Development at Cornelscourt - View Along Boundary with Old Bray Road



Fig. 2.3.2: Proposed Residential Development at Cornelscourt - View Along Willow Grove Boundary

“Appropriate and reasonable regard should be taken of quantitative performance approaches to daylight provision outlined in guides like the Building Research Establishment’s ‘Site Layout Planning for Daylight and Sunlight’ (2nd edition) or BS 8206-2: 2008 – ‘Lighting for Buildings - Part 2: Code of Practice for Daylighting’.”

“Where a proposal may not be able to fully meet all the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, in respect of which the planning authority or An Bord Pleanála should apply their discretion, having regard to local factors including specific site constraints and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution.”

This application is accompanied by a Daylight and Sunlight Analysis, which confirms that there are exemplary levels of access to natural daylight and that overshadowing is minimised.

The height, scale, and massing of each building have been carefully designed to correspond with the orientation of the site. By leaving taller elements of the development to the north adjacent the N11, with low-level units to the south, daylight and sunlight are invited into the courtyards and public amenity spaces. As a result of this design strategy, the level of daylight access to apartments has achieved a 95% pass rate which is significantly well above the required criteria.

The composition and articulation of the proposed development has also ensured that there is no significant overshadowing to existing adjoining properties or internally within the scheme.

On the 21st March, the existing amenity rear gardens of properties at Willow Grove and Bray Road currently receiving 2 hours of sunlight for over half their area, will continue to do so with the proposed development operational. With regard to proposed amenity spaces, the analysis confirms that over half of the amenity spaces would receive at least 2 hours sunlight in line with BRE recommendations on 21st March.



Fig. 2.3.3: Proposed Residential Development at Cornelscourt - Central Garden



Typical Studio Unit Typical 1 Bed Unit Typical 2 Bed Unit Typical 3 Bed Unit

Fig. 2.3.4: Proposed Residential Development at Cornelscourt - Typical Open Plan Units

2.3 At The Scale of The Site / Building

With regard to daylight factors, 95% of the rooms tested in the new development are achieving Average Daylight Factor above BRE guidelines. It is evident therefore from the above that there are no issues with overshadowing associated with the proposal and there is no requirement for compensatory design solutions.

For further information on the architectural design of the proposal please refer to the attached Architect's Design Report by Henry J Lyons.

All apartments comply with Sustainable Urban Housing: Design Standards for New Apartments - Guidelines for Planning Authorities (2018). All units meet or exceed minimum standards. The majority of units are 10% larger than the required standards.

As stated within the "Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2018)"; "(i) A minimum of 33% of dual aspect units will be required in more central and accessible urban locations, where it is necessary to achieve a quality design in response to the subject site characteristics and ensure good street frontage where appropriate."

The design of the scheme has sought to maximise the quantity of Dual Aspect units; achieving 55.3% Dual Aspect Units. Naturally high density multi-storey development with perimeter block patterns partially curtails the quantity of dual aspect units that can be achieved. In an attempt to maximise the provision, we have employed a variety of mechanisms including;

- Provision of Dual Aspect Units at all corners of the built form;
- Providing large rebates, in particular along north facing facades in order to activate dual aspect views.

A key feature to the design concept is to provide open living units (Fig. 2.3.4), where living room and kitchens are contiguous, connected and sometimes tied in with the foyer. This approach allows for larger spaces and the possibility for natural light and views to stretch in to internal spaces like kitchens (Fig. 2.3.5). Kitchen islands reinforce this layout strategy - placing common and active design elements in a central location.

The current proposal is accompanied by a Daylight and Sunlight Analysis, which confirms levels of natural daylight and that overshadowing is minimised. In this regard, appropriate consideration has been given to the relevant guidance documents and specifically 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 'Lighting for Buildings - Part 2: Code of Practice for Daylighting'.

For further information on the architectural design of the proposal please refer to the attached Architect's Design Report by Henry J Lyons.



Fig. 2.3.5: Inspirational Reference of Open Plan Apartment



SPECIFIC ASSESSMENTS





3.1 Specific Assessments

The guidelines set out that to support proposals at some or all of these scales, specific assessments may be required and these may include:

“Specific impact assessment of the micro-climatic effects such as down-draft”. Such assessments shall include measures to avoid/ mitigate such micro-climatic effects and, where appropriate, shall include an assessment of the cumulative micro-climatic effects where taller buildings are clustered.“

A full and comprehensive microclimate assessment is included in the EIAR. The following conclusions are notable from Chapter 11 of the EIAR:

Standing Criterion:

“The standing criteria applies to locations where leisure standing can occur for a long duration of time. Major locations for such criteria are balconies and public amenity spaces. Activities that would fall under standing would be waiting while walking the dog and conversations between residents”.

Most of the locations – balconies and public amenity spaces show good compliance. Marginal compliance was observed in the space between buildings A and F, and between building H and the semi-detached houses. These locations experience slight acceleration of wind due to the reduction in width of the passage as air travels through. However, it is below 10% of the year, so the locations remain usable for a major proportion of the year.”

Sitting Criterion:

“The sitting criterion applies to locations where prolonged seating will occur. Such locations include public gardens, cafes and roof terraces. Sitting activities also are likely to occur in warmer conditions like spring to autumn rather than winter. Further popular times for sitting activities are the afternoon and evenings rather than early mornings or late night”.

As such we have looked at these most optimum sitting times for the analysis. The balconies of all buildings show excellent compliance with the requirements of the sitting criterion. Most of the courtyard also shows good compliance with the sitting criterion.

“In development locations in proximity to sensitive bird and / or bat areas, proposed developments need to consider the potential interaction of the building location, building materials and artificial lighting to impact flight lines and / or collision.”

The appointed ecologists, Openfield have confirmed that the matter of collision for bird or bat species is not a significant phenomenon known in Ireland.“

An assessment that the proposal allows for the retention of important telecommunication channels, such as microwave links.

OCSC has advised that microwave links used by the telecoms companies use direct “line-of-sight” to connect from one point to another, so if a tall building is placed along that line it could building the signal path. In this case, this matter is not considered to pose a risk.

OCSC further advised that there are two types of links, the main trunk routes which typically use tall masts and high sites to avoid obstructions, and the smaller mini-links that connect from one mobile phone site to another and are at lower levels.

It is more likely that buildings would interfere with a mini-link, but this wouldn’t be regarded as an “important telecommunication channel” as it can be re-directed and an alternative route found.

The most likely interference with a main microwave link would be in the city where there are a smaller number of tall masts operating.

It is in consideration of the above, we are satisfied that the proposal allows for the retention of telecommunications channels.

An assessment that the proposal maintains safe air navigation.

The applicant has contacted the Irish Aviation Authority (IAA) and the Dublin Airport Authority (DAA) to ensure that the current proposal maintains safe air navigation. The following advice was issued from the IAA in respect of the proposed development:

“I can confirm that from an Air Traffic Management(ATM) perspective, the proposed project at Cornelscourt does not have an impact on air navigation.”

The following advice was issued from the DAA in respect of the proposed development:

“I can confirm that the proposed development does not give rise to any concerns for DAA in relation to Dublin Airport.”

An urban design statement including, as appropriate, impact on the historic built environment.

A Design Statement has been prepared by Henry J Lyons Architects. It is worth highlighting the there is no sensitivities associated with the site in terms of built heritage.

Relevant environmental assessment requirements, including SEA, EIA, AA and Ecological Impact Assessment, as appropriate.”

An Appropriate Assessment Screening Report has been prepared and submitted by Openfield.



CONCLUSION





4.1 Conclusion

This Report has demonstrated that the development proposal complies with the performance criteria contained in the Guidelines. The scheme has been designed by award winning architects to respond to the site context, national policy and international examples of BTR developments.

The issue of appropriate building height has been carefully considered from the outset of the design process, with increased heights being carefully modulated and tested for impact. The result is a scheme that offers an exceptional level of residential amenity and an attractive visual landmark for Cornelscourt.



Fig. 2.3.2: Proposed Residential Development at Cornelscourt - Vista

