

5.9 SUSTAINABILITY

OVERALL STATEMENT

All of the units will be subject to the NZEB (Nearly Zero Energy Building) requirements of the updated Part L Regulations, from 2021 that are in effect. In terms of energy ratings all of the units on site will have a Building Energy Rating (BER) of A2 / A3.

The measure of compliance with Part L of the Regulations is demonstrated using the Dwelling Energy Assessment Procedure (DEAP) software.

RENEWABLE ENERGY

Since 2008 and the introduction of the European Performance of Building Directive it has been mandated that each dwelling unit must generate a portion of their energy demand. The proposed buildings supply the renewable energy contribution in order to meet the Energy Performance Criteria of 0.3 as compliance hinges around either the ability to generate hot water (for sanitary purposes) using a heat pump with a related COP of over 230% or providing sufficient photovoltaic capacity to lower the imported energy into the unit.

A summary of the renewable solutions to be adopted on site are:

- Solar Photovoltaic (PV)
- Combined Heat and Power
- Heat pumps

All components proposed to achieve the renewable energy requirements were considered from the early stages of the design process and incorporated within the landscaping and built fabric to minimise any negative visual impact.

U-PVC WINDOWS

PVC framing is proposed at Kilternan for its energy efficiency and low maintenance characteristics compared with aluminium windows.

When assessing the energy efficiency of a window the frame has a bigger impact on the U value than the glass, effectively it is the weakest link in the thermal performance of the overall assembly. PVC framing material performs better than aluminium, having improved insulation qualities. At the point of manufacture the embodied energy of uPVC is 80 MJ/kg whereas the equivalent aluminium figure is 170 MJ/kg, a reduction of over 50%. Although the lifespan of both aluminium and PVC is similar at circa 35 years, aluminium frames depend on their paint cover, minimum of 70 microns, for protection whereas the PVC frame material is designed to be exposed and does not require an outer protective layer, and therefore require less up-keeping.

BUILDING FABRIC

The building fabric elements that will be used in the construction of the dwellings will achieve a high level of performance meeting the current Part L standards.

The specified air tightness for the unit is to achieve an air tightness level of 3 air changes an hour or better. Based on previous project experience with Liscove Limited we expect that this figure will be comfortably exceeded within the houses and duplex types proposed.

GREEN ROOFS

We are providing green Sedum roof on all flat roofs. This type of green roof requires little maintenance compared to other green roofs as they have shallow roots and only need a small amount of rain water and nutrients to survive. Upkeeping is mostly related to periodic gutters and edge cleaning but the meadow itself requires little attention.

Sedum roof systems have been shown to have benefits for a range of insects. Sedum flowers do provide foraging for pollinators, especially bees in late June, providing much needed habitats and food sources for wildlife and insects.



Figure 47. Sample image of similar building finishes. Comparable development delivered by Liscove Ltd.. Source MCORM 2024.



Figure 48. Sample image of biodiversity at sedum roof. Source MCORM 2024.



Figure 49. Sample image of biodiversity. Source MCORM 2024.

6 CONCLUSION



We respectfully submit that the scheme presented will positively respond to its context and carefully integrate within the village of Kilternan. This layout has been designed with careful consideration of the existing site topography and to retain most of the existing natural features. We have taken this as an opportunity to preserve the continuity of hedgerows and tree lines within a development of unique character and views to its sylvan setting, in addition to providing a number of future potential pedestrian and cycling links to the proximate Kilternan village and surrounding existing developments. The additional amenities proposed within the Neighbourhood centre, Duplex block A & D, the Creche, Cafe, Restaurant, Community centre and the new built environment proposed in this submission will result in an inclusive and diverse neighbourhood and will present an overall aesthetic architectural style of high quality and durability with a strong sense of place whilst delivering a variety of liveable streetscapes and high quality usable landscaped open spaces.







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APPENDIX A. RESPONSE TO LRD OPINION

Please refer to the submitted Thornton O'Connor's Planning Report for the complete response to the LRD opinion. Commentary regarding Architectural and Urban Design items are provided below:

Item 1 Planning

MIX OF USES

Insufficient evidence has been provided to demonstrate that the overall site and its individual phases are capable of providing the required quantum and mix of use in a timely fashion in spatially integrated way. Whilst the documentation submitted shows a positive progress towards delivering what could be considered as a satisfactory Neighbourhood Centre capable of complying with relevant development Plan Policy, it is up to the Applicant to satisfactorily demonstrate that the extent of non-residential uses is adequate having regard to relevant planning policy (Policy Objectives RET7 PHP3, PHP4 and MFC1 of the Dún Laoghaire Rathdown County Development Plan 2022-2028, inter alia) and the findings of the ‘Retail and Non-Retail Floorspace Capacity Assessment’ by Braniff Associates (included as an Appendix herein). The Braniff Associates report was already brought to bear in the context of the current live application Ref. D23A/0616 and is considered relevant in the context of the subject LRD given the overlap between the proposals, albeit with the LRD referring to a much larger development. Insufficient evidence has been provided to demonstrate how the proposed public open space interfaces with and is bound by appropriate uses. Further details and justification are also required regarding the phased delivery of the neighbourhood centre and also its integration with the public realm.

RESPONSE: At the outset, we note that the provision of non-residential uses has increased by 1 602 sq m since the stage 2 scheme was lodged, principally provided with a significant increase in the quantum of commercial/retail space. The following is a breakdown of the respective uses as follows:

- Anchor retail : 1310 sq.m
- Commercial/ Retail : 3284 sq.m
- Community Centre 332 sq.m
- Creche :691 sq.m
- Cafe: 326 sq.m
- Restaurant : 182 sq.m

We note that the commercial/ retail uses of 3284 sqm are subject to future tenant agreement and will be dependent on market conditions at the time of construction. The flexibility will ensure that a viable scheme can be provided which is important for the village centre site

Please see adjacent the table which sets out the proposed non residential uses compliance with the Braniff Report. Overall, the additional services provided within the scheme will be a significant benefit for the future residents of the proposed development and the wider Kilternan community.

Land use	Minimum	Maximum	Indicative potential use	Appendix 1 -GFA		Proposed - Phase 1 Application	Proposed LRD Application- NFA
Retail	2104	2237	Convenience store	Convenience retail	1316	0 693	1310
			Newsagent	Comparison retail	921		693
			Pharmacy				152
			Garden centre/Nursery				
			Service garage/ station				
			Shop neighbouthood				
			Shop Specialist				
			Shop District				
Subtotal	2104	2237				693	2155
Land use	Minimum	Maximum	Indicative potential use	Appendix 1 -GFA			
Services	1823	1914	Estate agent	Retail Services	344	0	213
			Public house	F&B	615		
			Betting Office	Leisure	615	0	619
			Funeral home	Financial & Professional	340	0	
			Office>300 sqm				450
			Restaurant			183	183
			Tea room/ Cafe			326	326
			Nightclub				
			Off-licence				
Subtotal	1823	1914				509	1791
Land use	Minimum	Maximum	Indicative potential use				
Other	873	873	Doctor's surgery			0	271
			Community & Youth hub			332	332
			Health Centre				
			Public Services				301
			Veterinary Surgery				
			Cash & Carry/ Wholesale Outlet				
			Aparthotel/Hotel/Motel				
			Household Fuel Depot				
			Motor sales Outlet				
			Office based Industry				
			Office<300sqm				297
			Creche		691	691	
Subtotal	873	873				1023	1892
Subtotal	4800	5024				2225	5838
							***6125 m2 Gross Floor Area of all Non- Residential units
Subtotal *excluding creche	4800	5024				1534	5147

Figure 50. Comparison table Braniff report vs proposed non residential uses. (** Indicative uses only, Uses are subject to future tenant agreement)



VIEW 1



VIEW 2



VIEW 3



Layout as proposed for this application

Item 3 Planning

ROAD FRONTAGE

Road Frontage: Insufficient evidence has been provided to demonstrate how the scheme's western boundary along Enniskerry Road achieves adequate activation and presents an adequate interface with Enniskerry Road. As currently proposed it is not clear what is the difference in character between the interface with Enniskerry Road and that of any of the proposed internal streets. Whilst it is acknowledged that the character of Enniskerry Road is likely to evolve with the delivery of the Glenamuck District Road Scheme, it is the Planning Authority's opinion that the scheme should adequately relate with Enniskerry's main access and provide an interface that is consistent with its character and provides adequate levels of activation. In that regard further details and justification is required, including details of the proposal at the corner with Enniskerry Road into the proposed Neighbourhood Centre as a focal point to bring activity onto the proposed commercial and public areas.

The interface with the Enniskerry road has been reinforced using a three storey contemporary duplex typology to strengthen the built edge along the Enniskerry road north of the village green. This announces the scheme as one travels south from the Golden Ball with a more compact form of development. A pair of three storey feature houses either side of the first vehicular entrance along the western frontage form a strong set piece announcing the entry point.

Feature stone boundary walls are set back from the foot path allowing for small pocket park arrangements with local feature seating and a widening of the footpath at these locations. Duplex block A contains commercial/retail on its entire ground floor activating the Enniskerry road frontage and the main entrance to the scheme. The extension of the red line to the south of the village green includes additional commercial units as well as the creche and the community centre. A compact civic plaza is proposed at this location immediately opposite our lady of wayside church.

This important piece of high quality public realm serves as a connecting node linking the village green, dingle way and the newly proposed village commercial area with the landmark church. Please see the views adjacent showing the relationship with the Enniskerry Road frontage and the drawing overleaf for the stage 2 Enniskerry road context elevation and the newly proposed context elevation for this stage 3 application.

It should be noted that this area along the Enniskerry road has a granted planning permission under Reg. Ref.:D23A/0616.

CONTEXT ELEVATIONS | COMPARISON



PREVIOUSLY SUBMITTED CONTEXT ELEVATION ALONG ENNISKERRY ROAD

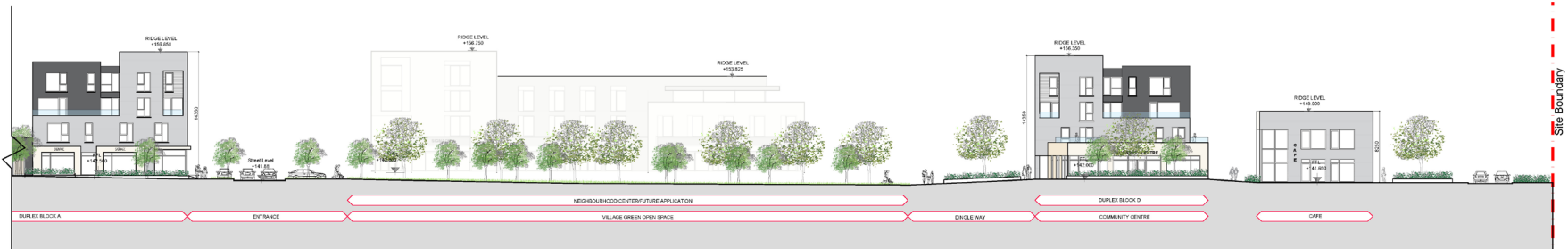


PREVIOUSLY SUBMITTED CONTEXT ELEVATION ALONG ENNISKERRY ROAD CONT'



PROPOSED CONTEXT ELEVATION ALONG ENNISKERRY ROAD

SITE SECTION A
SCALE:1/200



PROPOSED CONTEXT ELEVATION ALONG ENNISKERRY ROAD CONT'



Item 7 Planning

COMPACT SETTLEMENT GUIDELINES

Details should be providing (sic) demonstrating compliance of the proposed development scheme with the relevant parameters of the ‘Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities’ 2024. Consideration should be given to car parking provision in line of the provisions of the Guidelines.

RESPONSE: Please refer to Section 5. of this document which demonstrates compliance with the relevant parameters of the ‘Sustainable Residential Development and Compact Settlements Guidelines’. The proposed car parking quantum has taken account of the compact settlement guidelines

Please refer MCORM Drawing PL 601 - Car Parking Plan, Section 5 of this document and Atkins Engineers traffic and transport report for further details

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