

Figure 28. CGI view of character area 1. Source: 3DDB



Figure 29. CGI view of character area 2. Source: 3DDB



Figure 30. CGI view of character area 3. Source: 3DDB

The proposed buildings employ a controlled palette of materials with a mix of traditional and contemporary typologies.

The primary materials for the development will be a mix of high-quality brick textures with complementary stone details in selected areas to the street elevations. The material choice will ensure that the buildings proposed are durable as well as being of high visual quality.

Each one of the 4 proposed character areas has legible unique features that will create a sense of identity and place, while applying a coherent architectural language through the use of repeating elements such as complementary brick types, window types, balcony treatments, stone surrounds and metal canopies.

The use of these high quality, durable and low maintenance materials within the scheme will contribute to the longevity, appearance and character of the proposed development. The landscaped podium, defensible spaces/paving and soft landscaping have been detail designed by NMP Landscape Architects with the full report accompanying this planning application



Figure 31. CGI view of character area 4. Source: 3DDB



# 4 SUNLIGHT, DAYLIGHT & OVERSHADOWING



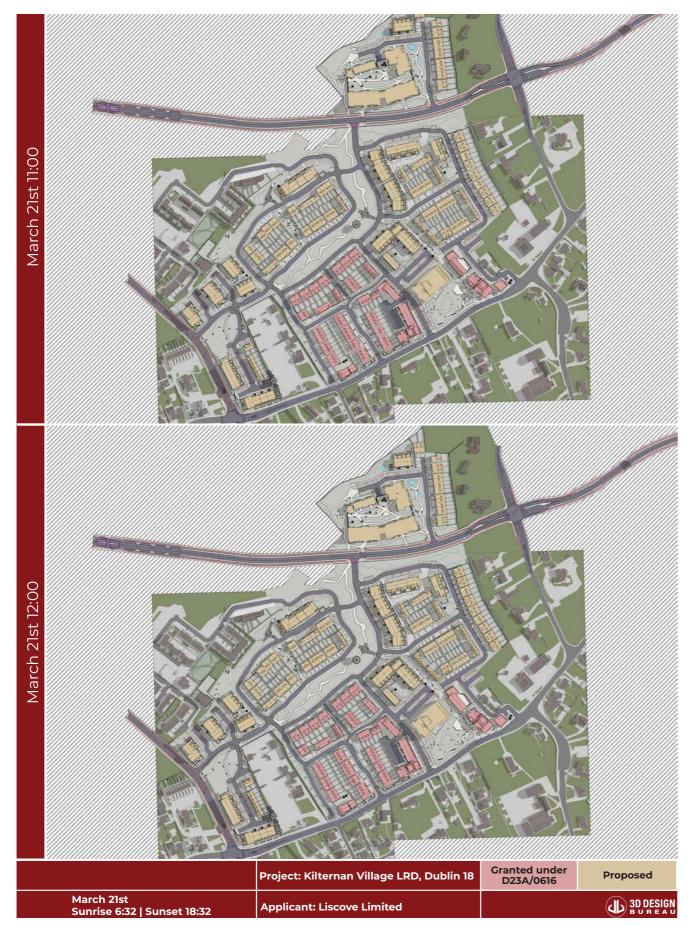


Figure 32. Extract 3DDB Report - Shadow analysis

For detailed assessment of Daylight and Sunlight for the proposed development, we refer to the report prepared by 3DDB. The assessment is summarised below:

### **VERTICAL SKY COMPONENT (VSC) ANALYSIS**

**Rockville Woods, Rockville Hall Apartments & Rockville Mews:** The effect to VSC on 32 no. of the windows (or rooms if an average of multiple windows has been taken) would be considered 'negligible' and 5 no. 'minor adverse'. It is the opinion of 3DDB, that these results demonstrate a favourable layout, where the proposed dwellings maintain an adequate separation distance from the existing properties, particularly those across the north-eastern boundary. None of the existing properties would experience a noticeable effect on their current levels of sunlight provision

### **SUNLIGHT AND AMENITY SPACES**

<u>Proposed Amenity space:</u> This study has assessed the level of sunlight on March 21st within the proposed amenity areas.

In total 17 no. spaces have been assessed, 10 no. public open spaces and 7 no. communal open spaces. All of them would meet the criteria as set out in the BRE Guidelines.

This result further demonstrates that the site layout allows for adequate separation distances between the proposed dwellings. Consequently, all the proposed amenity spaces display excellent levels of sunlight.

### SUNLIGHT TO EXISTING BUILDINGS

Both the annual (APSH) and the winter (WPSH) results have shown that the proposed development would not cause any existing window/room to experience an adverse level of effect, demonstrating an adequate separation distance of the proposed structures from the existing properties.

# SUNLIGHT TO PROPOSED DEVELOPMENT

The Sunlight Exposure (SE) assessment has shown very high levels of compliance for the units assessed. The favourable orientation of the apartment blocks and the dual aspect of the duplex units allows for the majority of units to have access to direct sunlight.

The results for Sun on Ground (SOG) show that the future occupants will enjoy very well performing open amity areas, in terms of sunlight access, across the entire scheme. This demonstrates that careful consideration has been given to the layout and orientation of the open spaces.

#### DAYLIGHT TO PROPOSED DEVELOPMENT

The SDA in the proposed units assessed has yielded very favourable results, with compliance rates of c. 94% (summer) and c. 96% (winter). The additional study with no trees has shown that the trees are responsible for the non-compliance of more than the half of the rooms not meeting the guideline value. However, considering the importance of trees for a well balanced scheme, these results should be considered highly favourable.





# C.5.2 Sun On Ground in Proposed Outdoor Amenity Areas - Communal Open Spaces

Table No. C.5.2 - SOG in Proposed Communal Open Spaces Results:									
Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines*	Meets BR 209 Criteria*				
11	Communal Open Space 1	99.09%	50.00%	BRE Compliant	Yes				
12	Communal Open Space 2	91.14%	50.00%	BRE Compliant	Yes				
13	Communal Open Space 3	97.98%	50.00%	BRE Compliant	Yes				
14	Communal Open Space 4	88.33%	50.00%	BRE Compliant	Yes				
15	Communal Open Space 5	98.51%	50.00%	BRE Compliant	Yes				
16	Communal Open Space 6	97.34%	50.00%	BRE Compliant	Yes				
17	Communal Open Space 7	69.61%	50.00%	BRE Compliant	Yes				

\* The BRE Guidelines recommend that for a garden or amenity to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on March 21st.



Figure C.4: Indication of the amenity areas that have been analysed

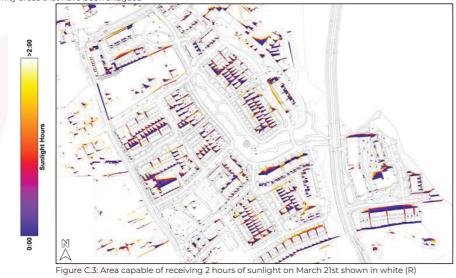


Figure 33. Extract 3DDB Report - Sunlight to amenity spaces chapter

# MCORM ARCHITECTURE AND URBAN DESIGN

## **COMPENSATORY MEASURES**

Design features have been incorporated into the development where rooms do not achieve the daylight provision targets in accordance with the standards they were assessed against. These design features again help to balance off and compensate the lower levels of daylight measured in the applicable spaces and are summarised as follows:

- 80% of the apartments & duplexes have a floor area 10% greater than the minimum floor area requirements as required by the Design Standards (July 2023). Larger floor areas make it more difficult to achieve the recommended daylight levels. However, larger windows have been incorporated into the design which also improves the view out for the building occupants.
- 83% of the apartments &duplexes are dual aspect which is above the 50% minimum requirement as required by the Design Standards (July 2023). As a result, more apartment units than the recommended minimum will achieve quality daylight from dual-aspect orientations.
- The proposed scheme provides 4363sq.m of communal amenity space for the apartments & duplexes, thus exceeding the 2183 sq.m required pursuant to the Design Standards (July 2023).

# 5 OTHER DESIGN PARTICULARS



# 21009.2 - Kilternan SCHEDULE OF ACCOMMODATION **M**CORM 18 no. units 1 Storey 96 no. units 1 Storey 87 no. units 2 Storey 35 no. units 1 Storey 16 no. units 1 Storey 39 no. units 1 Storey 196 no. units 1 Storey 1 bed Duplex 2 bed Duplex 3 bed Duplex 1 bed Apartment 2 bed Apartment 3 bed Apartment Houses 3 Bed TOT % 53 10.9 150 30.8 236 48.5 48 9.9 **487 100** SIFE ANALYTICS: 1- SITE AREA: 1a- GROSS AREA: 1b- NET AREA: 1c- NET AREA on net site area 2- DENSITY: 2a- GROSS DENSITY on gross 3 2b- NET DENSITY on net site are 2c- NET DENSITY on net site are 3- DUPLEX SUMMARY 14.2 Ha 13.2 Ha 11.08 Ha 41.27 unit/Ha 4- HOUSE TYPE SUMMARY GROSS FLOOR AREA 3 BED TOTAL GROSS FLOOR AREA (residential only) Bin, Bike & External Stores Plant & Ancillary DUAL ASPECT 332 sqm

Figure 34. Summary of Accommodation. Source: MCORM, 2024

# 5.1 SUMMARY OF ACCOMMODATION

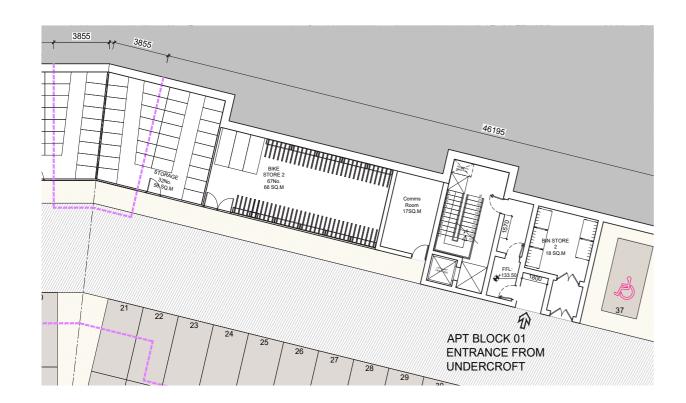
B- PUBLIC OPEN SPACE:								
	Village Green		T				2722	sam
	Dingle Way	-					2001	
	P.O.S 1		$\neg$				5874	
	P.O.S 2	-					2081	
	P.O.S 3		$\neg$				1020	
	P.O.S 4	-						sgm
	P.O.S 5						1892	
	P.O.S 6		$\neg$				2270	
	P.O.S 7		$\neg$				1472	
	P.O.S 8		$\neg$					sqm
	P.O.S 9	-					2379	
		-						
	TOTAL						23636	sqm
- BICYCLE PARKING PROVISION								
	Duplex						469	no.
	Duplex - Visitor		$\neg$				48	no.
	Apartment		$\neg$				184	
	Apartment - Visitor		$\neg$					no.
	Creche		-					no.
	Retail (Anchor Store)		$\neg$					no.
	Commercial/ Retail		$\neg$					no.
	Café		$\neg$					no.
	Community		$\neg$				7	no.
	TOTAL	-					841	no.
D- CAR PARKING	•					•		
	Houses						354	no
	Duplex Blocks	-					255	no
	Duplex Vistor		$\neg$				20	no
	Apartment Blocks		$\neg$				129	no
	Apartment Visitor						9	no
	Creche						7	no
	Community						6	no
	Commercial/ Retail						71	no
	Café							no
	TOTAL						854	no.
I-MOTOR BIKE PARKING								
	Duplex Blocks							no
	Apartment Blocks			-				no
	Retail							no
	TOTAL		$\neg$				24	no.

12-SITE AREA CALCULATIONS				13. PLOT RATIO		14. SITE COVERAGE	
TOTAL SITE AREA :	141820	14.2 Ha		Total Site Area	141820	Total Developable Site Area	14182
Total Developable Site Area	134502	13.5 Ha	*total site area excluding drainage works,	Total Developable Site Area	134502	Total Developable Site Area	13450
Exclusions:			and Juctions 1,2,3 &4 and road works	Net Site Area	132131	Net Site Area	13213
Orainage works	1846						
nternal Link street	2371			Duplex Gross Floor Area	19747	Duplex	1037
Enniskerry Road works	2770			Apartment Gross Floor Area	9189	Apartments	274
				House Gross Floor Area	24386	Houses	1352
lunction no.1 (Glenamuck rd)	616			Undercroft Area (Bin/Bike/Store/Plant/Car parking)	4485		
lunction no. 3 (Rockville)	634			Bin/Bike/Ancillary/Plant (Surface)	973		
lunction no.4 (GLRD)	523					Bin/Bike/storage	96
				Commercial/retail Floor Area	6125	Creche	45
Orainage works	761			Substations x 5	84	Commercial/retail	155
lunction no.2 (GLDR)	168			Total Gross Floor Area	64989	Total Site Coverage Area	2962
				Total Site Area Plot Ratio	0.46	% Site Coverage Total Site Area	20.89
NET SITE AREA :	132131	13.2 Ha		Total Developable Site Area Plot Ratio		% Site Coverage Developable Site Area	22.02
				Net Site Area Plot Ratio		% Site Coverage Net Site Area	22.42
15-Demolition Works				16- Density Calculations		•	
				Net Site Area	132131		
Country Market Structure	167 sc	q.m		GFA overall	57431		
Farmyard Buildings	573 sc	a.m		GFA Residential	51306		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				GFA Commercial	6125		
Total Demolition Area	740 sc	a.m					
				<u> </u>	-		
				Residential GFA as portion of dev.	89%		
				Site area for density purposes	118039.27	11.80 HA	
				Residential Density	41		
				nesidental Bensity	7.		
				1			
				+			
				1			
				+			
				+			
				+			
						1	



# 5.2 DETAILS OF BIKE, BIN & EXTERNAL STORAGE

- Apartment block 1-3:3 no. Bin stores, 3 no. Long-stay cycle parking stores and 3 no external stores are provided close to the cores of each block within the undercroft area as shown in PL-371 Apartment block and Duplex block U Lower Ground Floor Plan.
- Duplexes: 19 no. bin/bike/external storage stores are proposed adjacent the proposed Communal Open Spaces and directly adjacent the proposed Duplexes blocks depending on the location on the site. Please also refer to drawings PL-608-611, Bin, Bike and External Storage Details for further information.
- Houses: the majority of houses have rear access for bin and bike storage, where there is limited access to rear gardens a quantum of bin and bike storage has been allocated within an external store in close proximity to the houses.





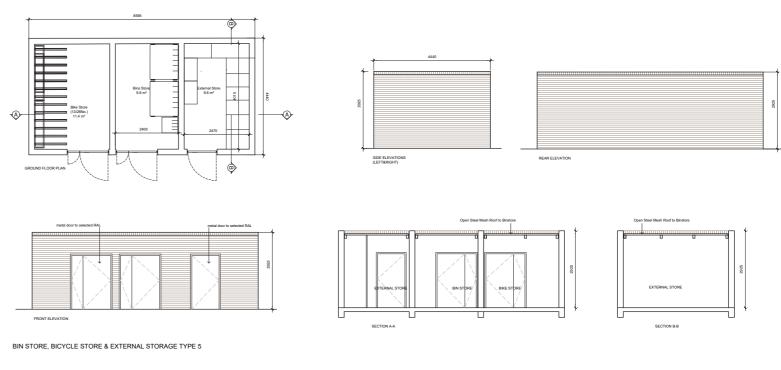


Figure 36. Example of bin/bike/external stores for duplex blocks . Source: MCORM, 2024



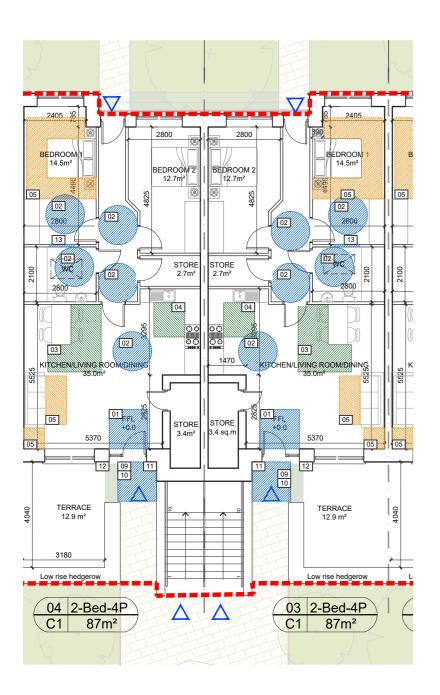


Figure 37. UD unit layouts - Duplex Block J. Source: MCORM, 2024

### **LEGEND**

- Clear entrance 1500mm x1500mm and 300mm clear area beside each door on leading edge
- 2. Clear space for a turning circle of 1500mm
- At least two consecutive clear 1200mmx1200mm around dinning table
- 4. Provide a clear space in front of laundry machines of at least 1200mm.
  - 5. Provide clear access space of 800mm around furniture
- Bathroom sized 2100x2700mm minimum sized, including bath/level access shower
- 7. 400mm transfer space at end of shower/bath
- 8. Path to access minimum 900mm
- 9. Entrance provided with weather protection
- 10. 1500x1500mm clear landing to front of entrance
- 11. Entrances to have an external light
- 12. Install doorbells no higher than 1200mm above ground level
- 13. Soft spot for door to bathroom at accessible bedroom (min13sqm in area)

# 5.3 APPLICATION OF PRINCIPLES OF UNIVERSAL DESIGN

In the proposed Duplex blocks J & R, 5no. units (10% of the overall total Part V units) are designed in accordance with the requirements of the 'Universal Design Guidelines for Homes in Ireland' developed by the Centre for Excellence in Universal Design (National Disability Authority). Accessible parking spaces are located proximate to the front door of the units and universally designed to be accessible to all users with a range of disabilities.

The criteria addressing the design of the internal unit layout are summarised as shown below:

# A.Kitchen/ Dining/ Living Room

- · Large and flexible room with ample unobstructed space to access all areas for everyone with ease of movement thought the kitchen
- · (4) Minimum 800mm wide clear route between furniture and in front of windows and routes between doors
- · (3) 1200mm clear space on three consecutive sides of a table
- ·Kitchen is not a thoroughfare. Cooker / hob and sink are in the same run of worktop.
- $\cdot$  The kitchen space located next to the dining area to ease access for carrying food and crockery.

# B.Kitchen/ Dining/ Living Room

- · Large and accessible family bathroom (minimum 2100 mm x 2500 mm) door opens outwards, sufficient space is allowed for the future adaptation to a shower room.
- $\cdot$  (5) Bathroom adjacent to the main bedroom with flexibility to provide direct access from the bedroom.

### C.Bedroom

- · (4) clear access space of 800mm on both sides and at the end of the double bed.
- · (2) Provide a clear space for a turning circle of 1500mm in the double bedroom.

### Other

- · Utility room with space for washer and dryer adjacent to kitchen.
- · Doors open into rooms (such as living rooms, bedrooms and kitchens) with hinge-side of the door is adjacent to a return wall and approx. 300mm clear space on the leading edge of doors
- · No single steps internally provided

