

Contents

Section 01 - Introduction

Section 02 - Policy Overview

Section 03 - Compliance with Sustainable Urban Housing Design Standards:

- Apartment Mix
- Apartment Design
- Apartment Floor Areas
- Safeguarding Higher Standards
- Dual Aspect Ratios
- North Facing Apartments
- Building Orientation
- Floor to Ceiling Height
- Lift and Stair Cores
- Internal Storage
- Private Amenity Space
- Security Considerations

Section 04 - Compliance with Sustainable Urban Housing Design Standards:

- Communal Facilities
- Access to services
- Communal facilities
- Resident Services & Amenities
- Creche
- Refuse Storage
- Communal Amenity Space
- Bicycle Parking
- Vehicle Parking

Appendices

- Appendix A: Housing Quality Assessment
- Appendix B: Apartment Type Drawings
- Appendix C: Overall Development Schedule

Document

Project Code	System	Spatial Zone	Level	File Type	Originator	Role Type	Number	Revision
LMR	02	SW	XX	RP	RAU	AR	1001	P3-S-01

Project Description

This document describes Reddy Architecture + Urbanism' proposals for Dairygold at the Parkmore Industrial Estate along The Long Mile Road.

The development will comprise a Large-Scale Residential Development (LRD) on a site at Parkmore Industrial Estate, Long Mile Rd, Robinhood, Dublin, 12. The proposed development will comprise the demolition of existing industrial units, and construction of a mixed use, residential-led development within 4 no. blocks ranging in height from 06 to 10 storeys over semi-basement. The development will comprise the following: 436 no. apartments (studios; 1 beds; 2 beds and 3 beds) with commercial/employment units, creche, café and library. Provision of car, cycle and motorbike parking. Vehicular accesses from Parkmore Estate Road and additional pedestrian/cyclist accesses from the Long Mile Road and Robinhood Road. Upgrade works to the estate road and surrounding road network. All associated site development works and services provision, open spaces, ESB substations, plant areas, waste management areas, landscaping and boundary treatments.

Development Statistics

Total Units				
Apartments	436			
Duplexes	0			
Total Units	436			

	1B1P	1B2P	2B4P	3B5P
Unit Mix	2	180	158	96
Mix (%)	0.5%	41.3%	36.2%	22.0%

Development Statistics						
Gross Site Area	1.91 Ha					
Net Site Area	1.50 Ha.					
Density	290 U/Ha.(Net)					
Building Height	6 - 10 Storeys					
Gross Internal Area	49,275 m ²					
Plot Ratio	1:3 (GIA excluding ABC undercroft/Net Site)					
Site Coverage	44% (excluding landscaped podium)					
Dual Aspect	59%					
Oversize Apartments	57%					

Amenity Space					
Public Open Space	1507 m ²				
POS as % of Site	10%				
External Communal Open Space	3489 m ² (23%)				
Internal Communal Open Space	375.3 m ² (Residential Amenity)				

Non Residential Net Internal Area m ²				
Creche	359.1			
Commercial	1226.6 (4 Units)			
Library	352.1			
Total	1937.8			
•				

227 m²

Creche External Play Area

Car Parking					
Residents	Standard	118			
	EV (20%)	32			
	DAC (5%)	8			
Total		158			
Ratio (Residential)		0.36 per unit			
Non Resident	Visitor & Set Down	12			

Non Resident	Visitor & Set Down	12
	Creche Staff	3
Total		15
Overall Total		173

Cycle Parking						
Long-Term	Residential	788				
	(Ratio Residential Parking = (1.8 per unit)					
	Creche Staff	2				
	Commercial Staff/Employee	26				
	Library Staff	6				
Total		822				
Short-Term	Visitor & Customer	218				
Overall Total		1040				



Project Team

Developer:

Watfore Limited Clonmel Road Mitchelstown Co. Cork P67 DD36



Project Management

Corcom 27-28 Herbert Place Dublin 2 D02 DC97



Project Architects

Reddy Architecture + Urbanism Dartry Mills, Dartry Road, Dublin 6



Planning Consultant:

McGill Planning 22 Wicklow St, Dublin 2, D02 VK22



Civil & Structural & Transport Engineer

Roughan & O'Donovan Arena House Arena Road Sandyford, Dublin 18 D18 V8P6



Cost Consultant:

KSNCC (Constructing Consultants)
Beech House
Beech Hill Rd
Belfield
Dublin 4



M&E Services:

EDC Consulting Engineers 4 Grand Canal Wharf South Dock Road Dublin 4, D04 X6P3



Landscape Architect:

NMP Landscaping 33 Rock Rd, Intake, Blackrock, Co. Dublin. A94 N5Y3



Fire Safety Consultant:

Daire Byrne & Associates 3 Bridgewater North Quay Arklow Co. Wicklow



Environmental Consultant:

Traynor Environmental Ltd Creeny, Bekturbet Business Park, Co. Cavan H14 AY94



Verified views:

Digital Dimensions 1Rathmines Rd Upper Rathmines Dublin 6



Daylight & Sunlight:

Chris Shackleton Consulting 19 Waterside Crescent Swords Road Malahide Co Dublin, K36 DF74



WInd:

BFluid The Studio, 55 C Maple Avenue, Stillorgan, Dublin, A94 HY83





01 Introduction



Figure 1 - Aerial View of the Site and its Surrounding town scape (Approximate outline of the application boundary shown in red).

The development site is part of the larger Parkmore Industrial area and the site area under consideration is 1.91 hectares of industrial lands. The site is bound by the Long Mile Road to the North, and a water course leading to Walkinstown Park to the South.

The development will be provide 436 homes located on regeneration zoned lands that are part of a wider City Edge Strategic Framework for the area.



02 Policy Overview

Housing Quality Assessment

This Housing Quality Assessment provides a framework which quantifies each of the criteria required by the 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities 2023 against the proposed apartment elements of the development.

The 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities' specify planning policy requirements for:

- Mix of Units
- Apartment Floor Areas
- Dual Aspect Ratios
- · Floor to Ceiling Height
- Lift and Stair Cores
- Internal Storage
- Private Amenity Space
- Security Considerations
- Communal Facilities

The guidelines have been 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 Pleanala are required to have regard to the guidelines and are also required to 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.

Accordingly, where SPPRs are stated in the guideline document, they take precedence over any conflicting, policies and objectives of development plans, local area plans and strategic development zone planning schemes. Where such conflicts arise, such plans should be amended by the relevant planning authority to reflect the content of these guidelines and properly inform the public of the relevant SPPR requirements.



Sustainable Urban Housing: Design Standards for New Apartments



Figure 2 - Sustainable Urban Housing: Design Standards for New Apartments



Apartment Mix

The mix of residential units within the entire scheme are outlined in the adjoining tables.

It is noted under the 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities' Specific Planning Policy Requirement 1, that residential schemes can avail of the following guidelines:

"Housing developments may include up to 50% one-bedroom or studio type units (with no more than 20-25% of the total proposed development as studios) and there shall be no minimum requirement for apartments with three or more bedrooms. Statutory development plans may specify a mix for apartment and other housing developments, but only further to an evidence-based Housing Need and Demand Assessment (HNDA), that has been agreed on an area, county, city or metropolitan area basis and incorporated into the relevant development plan(s). "

SPPR1 - Sustainable Urban Housing: Design Standards for new apartments

The adjoining table sets out the unit mix across the site to show compliance with SPPR1.

The SDCC 2022-2028 Development Plan sets out the following apartment mix criteria for developments in existing built up areas (Appendix 11, 8.3.1 Housing Mix):

Development comprising residential use will be required to provide a minimum of 30% 3-bedroom units as part of the proposed scheme. In recognition that each area has specific socio-economic differences and thus different housing demands, development proposals may justify any deviation from the minimum 3-bedroom mix, based on the socio economic and demographic context within a 10-minute walking distance from the site

The development proposes 22% 3 Beds which has been chosen based on demographic and housing stock in the immediate Walkinstown area.

			Block /	A (m2)			Block	B (m2)			Block (C (m2)			Block [O (m2)	
Le	vel	1B1P	1B2P	2B4P	3B5P	1B1P	1B2P	2B4P	3B5P	1B1P	1B2P	2B4P	3B5P	1B1P	1B2P	2B4P	3B5P
	Level 09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Level 08	-	1	5	1	-	8	2	4	-	4	4	-	-	-	-	-
	Level 07	-	1	7	2	-	8	2	7	-	4	5	-	-	-	-	-
	Level 06	-	1	7	2	-	8	2	7	-	4	6	-	-	-	-	-
	Level 05	-	1	7	2	-	8	2	7	-	4	6	-	-	13	7	5
	Level 04	-	1	7	2	-	8	2	7	-	4	6	-	-	13	7	5
	Level 03	-	1	7	2	-	8	2	7	-	4	6	-	-	13	7	5
	Level 02	-	1	7	2	-	8	2	7	-	4	6	-	-	13	7	5
	Level 01	-	1	7	2	-	8	2	7	-	4	6	-	2	11	6	5
Ground	Level 00	-	2	2	-	-	3	1	-	-	2	4	-	-	5	1	3
Lower Ground	Level 00	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Sub-	Total	0	10	56	15	0	67	17	53	0	35	50	0	2	68	35	28
Block	Total		8	1			1	37	85				133				
Schem	e Total					436											
Mix by E	Block (%)	0.0%	12.3%	69.1%	18.5%	0.0%	48.9%	12.4%	38.7%	0.0%	41.2%	58.8%	0.0%	1.5%	51.1%	26.3%	21.1%
Cycle store	requirement		16	67			2	60		135			224				
Visitor cycle	requirement		4	1			6	9			4	3			6	7	

Application Site Mix							
Apt. Type	1B1P	1B2P	2B4P	3B5P			
Totals	2	180	158	96			
Mix	0.5%	41.3%	36.2%	22.0%			
Total Mix	41.	.7%	58.	3%			

Figure 3 - Apartment Schedule and mix of typologies



Apartment Design

Apartment and multi-residential unit development design is constantly evolving, learning from best practice around the globe. New forms of homes are emerging that consider the emerging demographic household types and tenures. There is now a need for studio, one bedroom and two bedroom apartments for an emerging demographic within traditional urban centers.

The 2022 Census indicates that 1 and 2 person households now comprise a majority of households and this trend is set to continue, yet Ireland has only one-quarter the EU average of apartments as a proportion of housing stock. Ongoing demographic and societal changes mean there are expanding categories of households that may wish to be accommodated in apartments, these include young professionals or those looking to downsize from larger houses and who wish to avail of living in managed residential accommodation

The design and layout of unit types are also developing into open plan apartment layouts. These layouts are being made possible through the utilization of a sprinklered fire prevention strategy which is becoming more and more common in new apartment developments. The proposed layouts at Parkmore are being developed though consultation with the fire consultant for the project and are based on proven layouts.



Figure 4 - CGI View from The Long Mile Road looking West



Apartment Floor Area

The proposed design offers a unique response to the contextual restrictions of this key site which results in a variety of differing unit types across the development. We confirm that all units comply with the requirements of SPPR3 of the Sustainable Urban Housing: Design Standards for New Apartments, and a full schedule of all apartment areas is contained in Appendix A of this document with a plan layout of each apartment type included in Appendix B. All individual habitable rooms, floor areas and room widths comply or exceed the design guideline requirements.

Minimum apartment floor areas:

- Studio apartment (1 person) 37 m²
- 1 bedroom apartment (2 persons) 45m²
- 2 bedroom apartment (4 persons) 73m²
- 3 bedroom apartment (5 persons) 90m²

SPP3 - Sustainable Urban Housing Design Standards for New Apartments



Legend

Studio Apartment (1B1P)

1 Bedroom Apartment (1B2P)

2 Bedroom Apartment (2B4P)

3 Bedroom Apartment (3B5P)





Safeguarding Higher Standards

It is noted under the 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities' that all apartments should not be built to the minimum standards.

"Accordingly, it is a requirement that the majority of all apartments in any proposed scheme of 10 or more apartments exceed the minimum floor area standard for any combination of the relevant 1, 2 or 3 bedroom unit types, by a minimum of 10% (any studio apartments must be included in the total, but are not calculable as units that exceed the minimum by at least 10%).

The adjoining diagram shows the location of the oversized apartments on a typical floor across the development.



Figure 6 - Typical Floor Plan confirming number of apartments are oversized by 10%.



Apartments oversized by 10%



Dual Aspect Ratios

"Accordingly, it is a policy requirement that apartment schemes deliver at least 33% of the units as dual aspect in more central and accessible and some intermediate locations, i.e. on sites near to city or town centres, close to high quality public transport or in SDZ areas, or where it is necessary to ensure good street frontage and subject to high quality design".

Sustainable Urban Housing: Design Standards for new apartments

The scheme has been designed from the outset to provide good day light penetration into the individual apartment units, whilst simultaneously making considered efforts to protect the privacy and amenity of the adjacent properties.

The site is considered to be close to high quality Luas public transport system. It is therefore a requirement to achieve a minimum of 33% dual aspect in accordance with section 3.17 of the Design Standards for New Apartments 2023 and as set out in SPPR4.

The scheme achieves a dual aspect ratio of 59%. The diagram on this page shows a typical floor plan and highlights the location of the dual aspect units on what is a typical floor.

The apartment layouts have been carefully reviewed to establish the daylight levels reaching unit types. Through an iterative process with Chris Shackleton Consulting, who have acted as daylight and sunlight consultants for the project, each building and apartment has been optimised to achieve the recommended standards where possible. It should be noted that where buildings are in proximity to each other in order to define routes through the site or create enclosed courtyards, there will be a variation in the performance of similar unit types at varying locations within the building





Building	Dual Aspect	Non Dual Aspect	% Dual Aspect
А	56	25	69%
В	88	49	64%
С	36	49	42%
D	76	57	57%
Total	256	180	59%

Figure 8 - Dual Aspect Ratio Table.

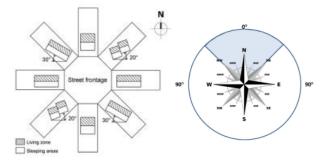
North Facing Apartments

There are no single aspect north facing apartments in the proposed scheme. The facade of buildings A and B fronting onto the Long Mile Road had the potential for single aspect North facing apartments to occur but the potential for these to occur has been designed out. It is of primary importance for this facade onto The Long Mile Road to present itself as an urban facade.

In order to design out single aspect north facing apartments and provide visual variety along the length of the Long Mile Road facade, a series of regular steps along its length have been created. The steps area a total of 5.3m deep which allows apartments at these locations to be dual aspect. The depth of the steps in the facade provides a significant return for each of these apartments where full windows can be placed on the return elevation.

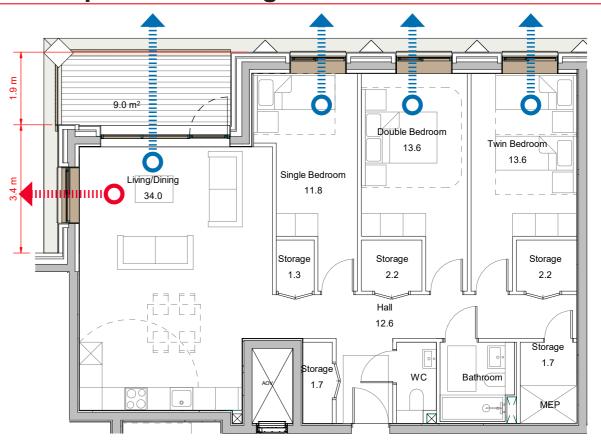
Building Orientation

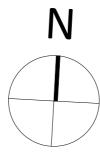
For the purposes of the guidelines north facing units are those which face predominantly north, north-west or north-east and fall within a 45 degree angle of 0 degrees (i.e. due north) as illustrated by the shaded area in the diagrams below.



* Over 50 per cent of the facade.

Figure 9 - Building Orientation Classification Diagram from previous version of the Apartment Guidelines







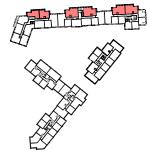


Figure 10 - Dual Aspect apartments orientated ont the Long Mile Road



Floor to Ceiling Height

In the sustainable Urban Housing: Design Standards for New Apartment guidelines 2023, section 3.21 requires a minimum floor to ceiling height of 2.4m. Where ground floor units exist, these units should look to achieve a minimum floor to ceiling height of 2.7m (SPPR 5).

The following compliant clearances are provided:

- Typical upper level apartments have 2.5m floor to ceiling heights in living room and bedroom areas, Stepping down to 2.4m in kitchens.
- Ground floor apartments and residential amenity spaces have floor to ceiling heights that meet or exceed 2.7m

Lift and Stair Cores

It is noted under the 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities' that residential schemes can have a maximum of 12 apartments per individual stair/lift core.

The four residential blocks in the Parkmore Scheme have a ratio of 7 to 10 apartments per core as shown in the diagram opposite.

Internal Storage

Apartment Storage requirements are provided entirely within each individual apartment. The storage provided either meets or exceeds that required for individual apartment types. The storage provided in each apartment is in addition to that provided in kitchen presses. Individual storage rooms within an apartment do not exceed 3.5 square meters. Please refer to the schedules in Appendix A for further details.



Figure 11 - Typical Floor Plan with cores identified.



Private Amenity Space

It is a policy requirement of the Sustainable Urban Housing Design Standards for New Apartments 2023 that private open space in the form of balconies, winter gardens or patio areas be provided.

"Balconies should adjoin and have a functional relationship with the main living areas of the apartments. In certain circumstances, glass-screened 'winter gardens' may be provided."

"A minimum depth of 1.5m is required for balconies, in one usable length to meet the minimum floor area requirement."

Sustainable Urban Housing Design Standards for New Apartments.

Appendix 1 of the Sustainable Urban Housing Design Standards for New Apartments sets out the following minimum floor areas for private amenity space as follows:

Studio:	4m2
One Bed Apartment:	5m2
Two Bed (3 person) Apartment:	6m2
Two Bed (4 person) Apartment:	7m2
Three Bed Apartment:	9m2

All of the proposed apartments in the scheme have their own private amenity space in the form of balconies or ground floor terraces. All balconies and terraces meet or exceed the minimum requirements of the guidelines and are scheduled in Appendix A.

Security Considerations

The buildings are designed so that the apartment layouts have excellent natural surveillance of the public realm and all the residents communal outdoor amenity spaces at ground floor level between the apartment buildings. Where ground floor apartments are provided with terraces that face onto the public realm then a landscaped buffer zone is provided around the terraces.



Figure 12 - CGI view looking into the Communal Courtyard of the northern urban block



Communal Facilities

This section of the report assesses the communal amenity elements of the development against the requirements of the Sustainable Urban Housing Standards for New Apartments listed below:

- Access and Services
- Communal Facilities
- Refuse Storage
- Communal Amenity Space
- · Children's Play
- Bicycle Parking
- Car Parking

Access and Services

The proposed scheme has been designed to Part M of the Building Regulations to ensure that buildings are accessible and usable by everyone, including children, people with disabilities and older people. The Part M guidelines have been considered for access to the buildings from disabled parking spaces at ground level and communal residents amenity spaces around the buildings, within the buildings and apartments and also along the public route linking the estate road to Robinhood Road. The creation of a new public link increases considerably the permeability of the locality and the route through the site opens up the wider area with new high quality pedestrian and cyclist links.

For access into buildings there are a number of disabled access parking spaces located at the ground floor level undercroft, or at the lower ground floor car park, all are within a short distance of each buildings primary or secondary entrances and the lift/stair cores. For residents with bikes all access points to their covered and secure storage areas are at grade and entered from the street or communal open space directly without the need to use steep access ramps or stairs.

The scheme is designed so that it is easy for people to use even when they experience changes in their abilities as they progress through the different stages of life. Movement within the apartment buildings is easily understandable with each building have a single or primary circulation core with good visibility along internal corridors.



Figure 13 - Ground Floor showing Resident Access Points to Apartment Buildings



The primary circulation stairs will be designed for ambulant disabled use. Hallways and shared circulation areas are a minimum of 1,500mm wide with a number of wider corridor sections of 1,800mm to facilitate ease of passing or turning for those who may be wheel chair users.

Primary service risers are located in common areas for ease of access with horizontal services distribution to individual apartment running along the common corridor before branching into individual apartments. There are no circumstances where the horizontal distribution of services feeding into an apartment needs to be accessed from another apartment or indeed run through another apartment.

Communal Facilities

The range of communal facilities being proposed will provide support to residents by providing facilities that enhance their quality of life whilst also helping to create a sense of community and enhance the quality of communal space.

The proposed design will provide an active ground level where communal facilities are provided such as the residents gym, entry lounge and co-working. The central courtyards provide spaces for residents to relax or socialise together.

In addition to communal facilities for residents, there is a series of strong active frontages overlooking the public realm. The creation of active streets with Creche and Commercial/Employment provides amenity for local residents both living in the scheme and around it.

Legend

- (1) Urban Boulevard
- (2) Neighbourhood Street
- 3 Public Route
- Communal Amenity
- 5 Creche
- 6 Arrival Pavilion
- Commercial/Employment
- 8 Planting buffer to Residential
- 9 Public Open Space

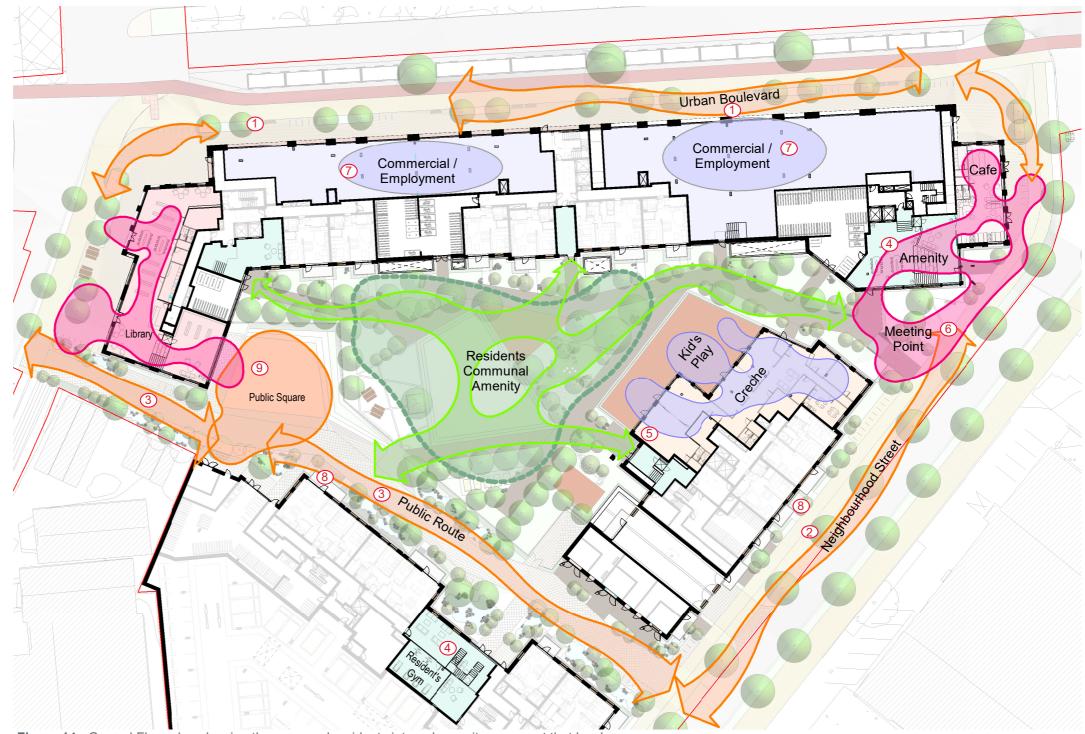


Figure 14 - Ground Floor plan showing the proposed residents internal amenity spaces at that level



Resident Services & Amenities:

An appropriately scaled range of resident services and amenities are provided to enhance the quality of living for occupants and to also assist in establishing a sense of community for the residents.

The aim is to create areas for the residents to use, either to relax, work or exercise. These spaces can be treated as an extension of their apartment home and comprise the following:

- Residents Lounge: The first component is a 'lounge style' space at the entrance to the development with comfortable hang out spaces and seating.
- Co-working Space: A second component is a co-working zone with a small number of seats for residents to work.
- A residents gym is also provided in Block D to allow residents access to convenient exercise facilities
- Community Cafe allowing a third space for both residents and the local community.

Within the development these services and amenities encourage active street frontage and passive surveillance over the public and semi public realms.







Figure 16 - 'Look & Feel', Concept for Cafe and Amenity Lobby

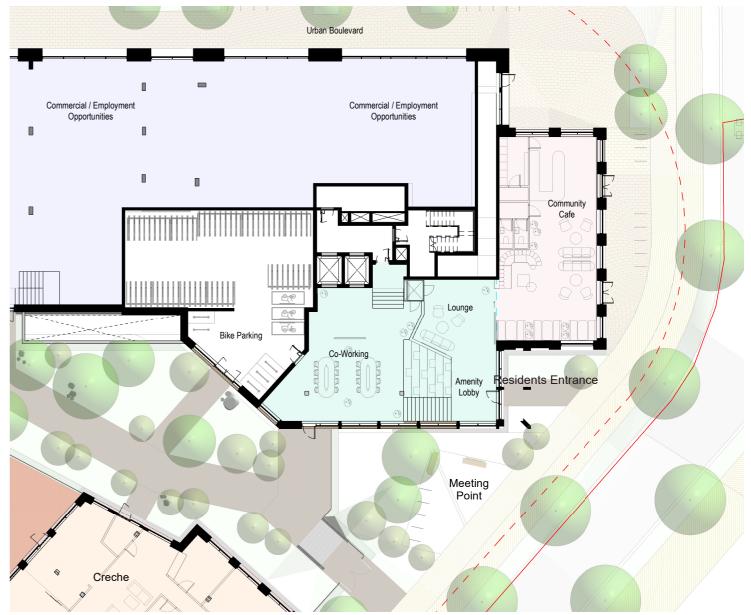


Figure 17 - Entrance Pavilion Plan Diagram



Figure 18 - Block D Amenity Plan Diagram



Creche:

The development has allowed for a Creche to accommodate childcare requirements.

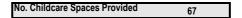
Reference to 'Universal Design Guidelines for Early Learning and Care Settings' has been made to ensure the Creche is suitable for providing a quality childcare facility as well as reference to 'Childcare Pre-School Services) (No2) Regulations 2006'.

A total of 67 childcare places have been designed for in line with 'Childcare Facilities: Guidelines for Planning Authorities, June, 2001' which sets out the recommended number of childcare places per number of residential units.

An allowance for class space has been made for each child derived from the listed above guidance documents with additional space for ancillary spaces accounted for as well.



Figure 20 - Crèche Plan



Minimum Indoor Playing Space Requirements

Age	No.	Area (m2) Per Place	Total Area	Staff Child/ratio	Staff Requirement
0-1	9	3.7	33	Ratio 1:3	3
1-2	12	2.8	34	Ratio 1:8	2
2-3	12	2.3	28	Ratio 1:8	1
3-6	34	2.3	79	Ratio 1:8	4
Sub-Total (NIA)	67		174		10

Notes.

- 1. To Creche operators requirements (Childcare Pre-School Services) (No2) Regulations 2006 & Child Care Act 1991
- 2. The areas given to eachroom are clear space dedicated to the actual number of children indicated.
- 3. Areas derived from 'Key Internal and External Spaces' Universal Design Standards

these areas exclude sleeping areas exclude sleeping areas, kitchens, stores, nappy changing areas etc

Ancillary / Support Spaces (non-net)	Area m2	Total Area
Sleeping Facilities for children under 2 (1.5m2 per child)	1.5	31.5
Laundry Facility	10	10
General Store	4	4
In-Class Storage (2m2 per space)	2	8
Sluice Room	5	5
Baby Changing Facilities	6.5	6.5
Shower/Bath/Washing Facility	10	10
Kitchen	8	8
Entrance Lobby / Waiting Area	10	10
Staff/Meeting Area	15	15
Sub-Total (GIA)		108

WC Provision		Area	Total Area
Acc. WC (counted as part of provision	1	3.3	3.3
Child WC's	4	4	16
Staff WC's	2	4	8
Sub-Total (GIA)			27

Circulation (@12.5%)	12.5%	35
Internal Walls (@4% Net)	4%	7
Plant (@1.5-3.5% Net)	2%	4
Minimum GIA Required		356
Total GIA Provided		359

Sanitary Provision	No. People	WHB	WC
Staff	10	2	2
Child	46	4	4

^{* 1} WC per 1WHB per 8 Staff Members



^{* 1} WC per 1WHB per 10 toilet trained children

Refuse Storage

Refuse storage shall be provided with the standards as set out in the Operational Waste Management Report by Traynor Environmental Itd.

Each residential unit shall have adequate storage provision to facilitate the recycling policies of South Dublin County Council. Each apartment building will have communal bin stores at lower ground floor or undercoft level that will contain facilities for streaming recyclable material.

Four bin collection systems will be provided for apartment buildings as outlined below, with 1100L reusable bins being the key means of storage.

- Dry Mixed Recyclables (DMR)
- Mixed Non-Recyclables (MNR)
- Organic (food and garden) waste
- Glass (segregated by colour)

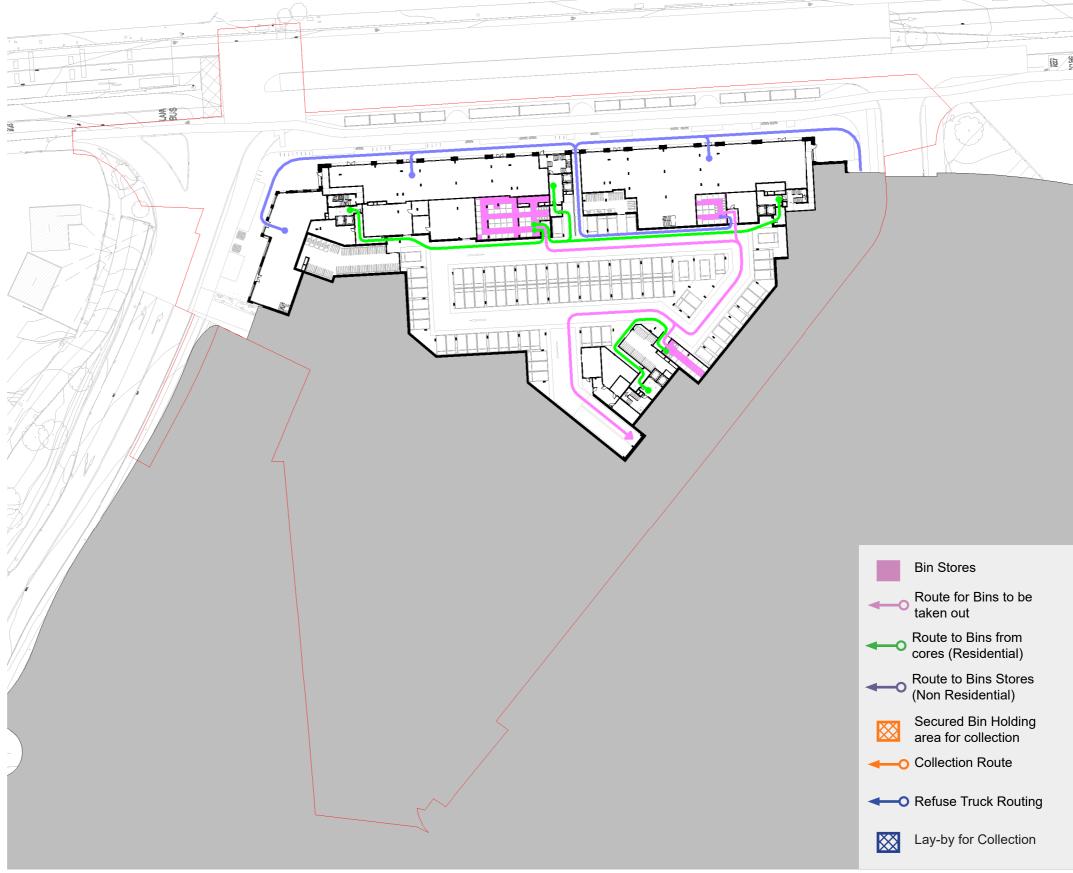


Figure 21 - Lower Ground Floor Plan showing waste storage areas for Buildings A, B & C



The waste areas are easily accessed by residents, management staff and refuse collectors. All residents have ease of access to a waste collector point close to the core serving their individual apartment so that residents do not have to walk a distance internally or externally. Waste from the ground floor waste stores can be taken at grade to collection points outside the buildings by either the management company or waste collection companies.

A dedicated holding area for bins to be collected has been allowed for within the curtilage of the site.

The waste storage facilities will be adequately ventilated to minimize odours and potential nuisance from vermin/flies thereby ensuring the avoidance of nuisance for habitable rooms above.

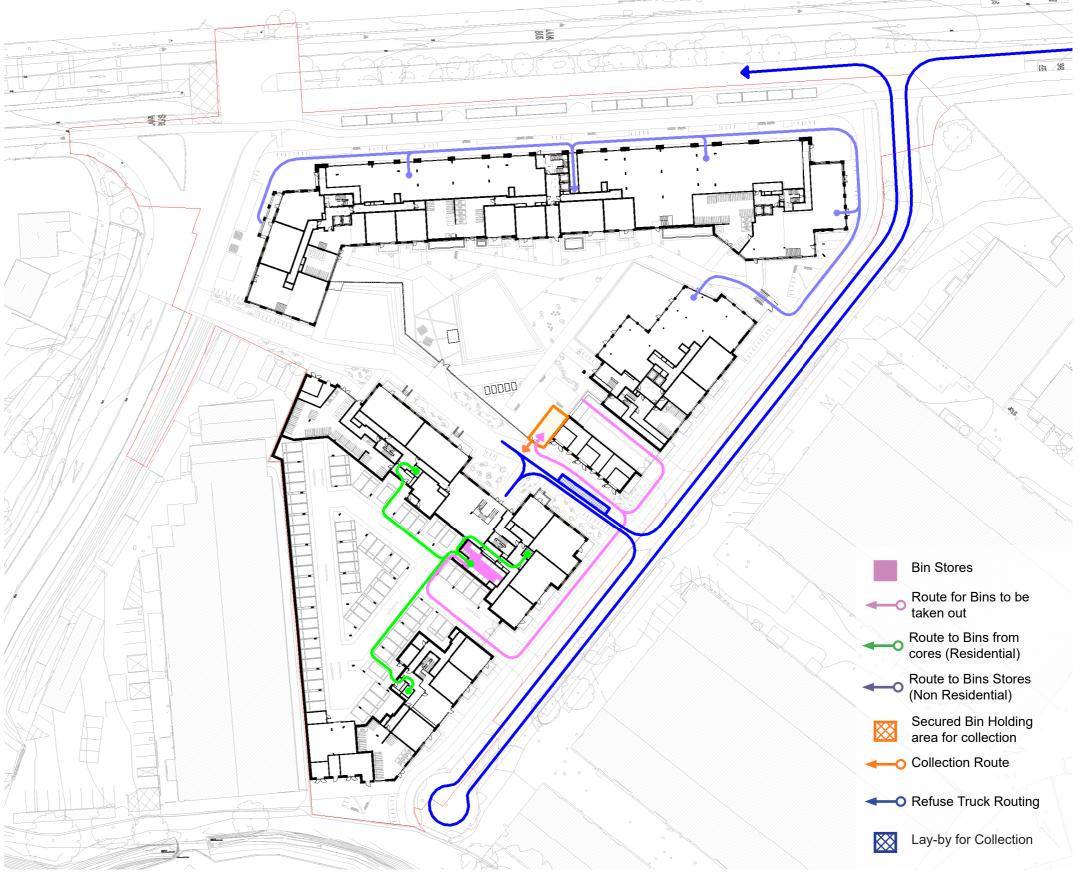


Figure 22 - Ground floor plan showing waste storage areas for building D and waste collection strategy.

