

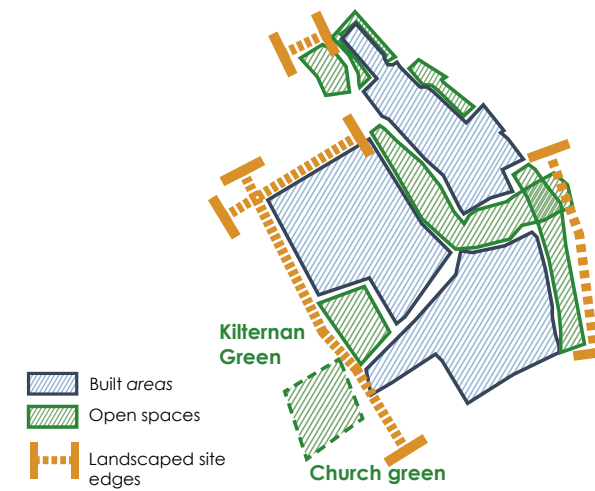
4.2 CONNECTIONS AND PERMEABILITY

The retention, enhancement and integration of existing natural site assets and amenities, including mature trees and hedgerows informed the final layout. The site strategy will therefore exploit the natural features of the site to deliver a ready made sylvan and nature - integrated setting.

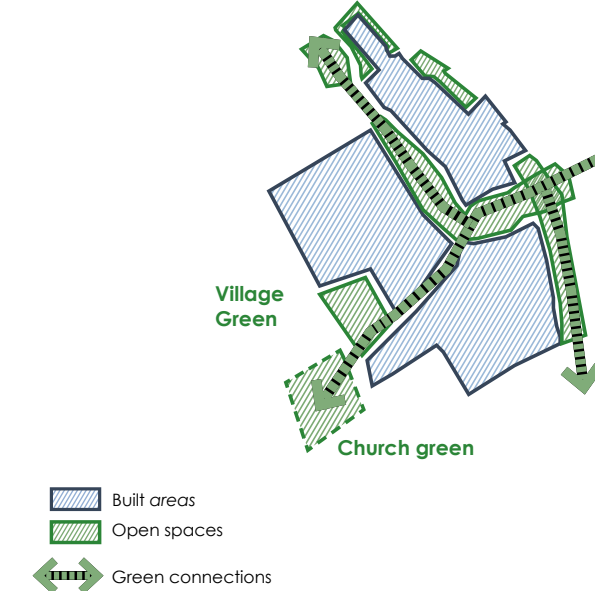
The scheme will be accessed both from the Glenamuck Road and Enniskerry Road. A new West to East connection (distributor road) from the Enniskerry Road to the proposed GLDR link Road is also proposed. The linkage will accommodate all forms of movement, pedestrian, cycling and vehicular. The delivery of the envisaged GLDR will lead to a downgrading of Enniskerry Road in terms of its role within the overall road network. It will become a village street promoting slower traffic within the village. The delivery of the GLDR will also benefit the scheme by limiting traffic through the new neighbourhood. People from outside the development will most likely access the Neighbourhood Centre from the GLDR.

The overall rational is to design contained vehicular entrances for the aim of dissuading foreign traffic to circulate across the scheme and foment that most of vehicle traffic uses the planned GLDR for journeys to external destinations.

1. OPEN SPACES AND LANDSCAPED SITE BORDERS



2. PERMEABLE LINKED GREEN INFRASTRUCTURE



3. BLUE STRATEGY

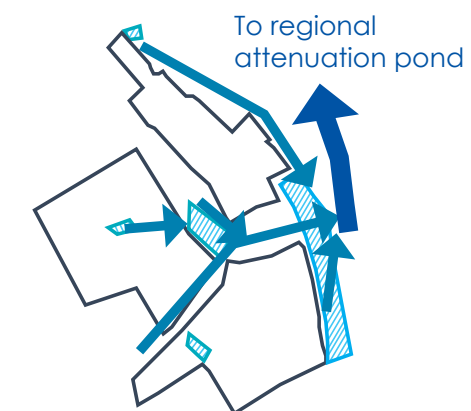


Figure 12. Landscape integration strategy plan and conceptual diagrams.

PEDESTRIAN PERMEABILITY

The site strategy facilitates multiple clear and accessible links to the adjacent lands. Pedestrian links will be formed within openings in the low new stone wall along Enniskerry Road bounding the scheme. Pedestrian access points will be also created from Glenamuck Road, in the north, and with the Rockville development, in the north east.

As shown in figure 15, pedestrian movement to external locations will be promoted by means of providing high permeability along all scheme edges, with exception of the southern boundary due to the impermeable nature of this already developed area which adjoins the R116 Ballycorus road.

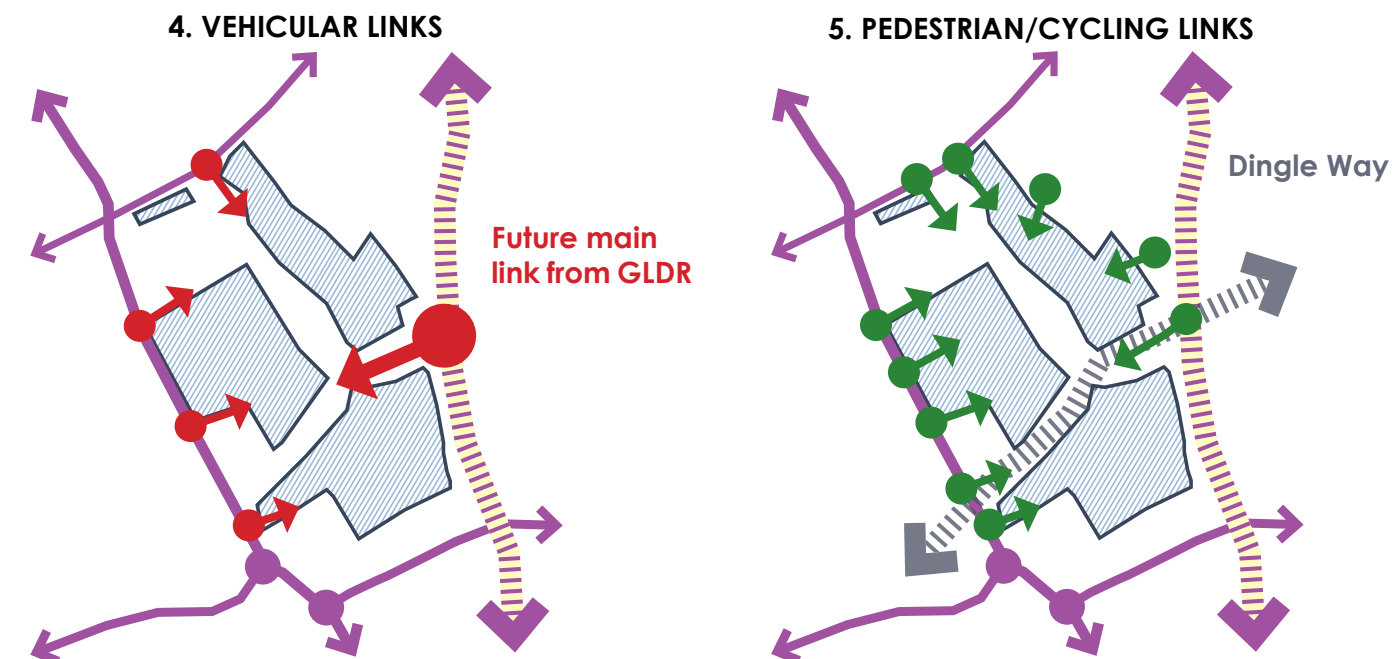


Figure 14. Diagrams of vehicular and pedestrian links.

Legend (also applies on diagrams for 4 & 5)

- Planned distributor road (GLDR)
- Site surrounding connections
- Vehicular accesses
- Pedestrian links
- Dingle Way



Figure 13. Site connections strategy.

4.3 EFFICIENCY AND DENSITY

Achieving a sustainable density is one of the scheme's key drivers. A balance between integrating a legible and efficient residential scheme into the site constraints and the delivery of an efficient urban structure has been achieved. The combination of housing, duplex and apartment typologies allows for a varied mix of unit types and sizes, while delivering an average net density of c. 44.5 units per hectare. The net density proposed is appropriate for the location of the scheme within Kilternan, and fulfils the objective of delivering a compact, active and sustainable neighbourhood.

A significant landscaped buffer has been retained as a continuous linear amenity space running from north to south through the centre of the scheme as well as the Dingle way. These areas serves as pleasant walk-able parklands. It also provides an attractive break in building between the proposed cells of development and character areas. Along the eastern boundary, a second linear park is proposed beneath the power lines which also serves as a buffer between the GLDR and the proposed development.

Net density has been calculated in line with the "Guidelines for Sustainable Residential Development in Urban Areas". The following areas have been excluded from the overall gross site area outlined in order to calculate the net density proposed:



Exclusions	Area (m2)	
O.S 1 - Linear Tree line		5451
O.S 4 - Linear Tree line		903
O.S 5 - Linear Tree line		1247
O.S 6 - Linear Tree line		313
Linear Park - Area under power lines		3077
Village Green		4186
O.S 9 - Tree Area adjacent Glenamuck Road		2732
Internal link street		2587
Dingle way		1572
Total Exclusions		22068
Gross Site Area	107625	10.8 Ha
Red line site Area inclusive of drainage connections	111532	11.2 Ha
Net Site Area (Total site area - Exclusions)	85557	8.6 Ha

Figure 15. Table and diagram of site exclusions for net density calculation ..

Red line site area including	11.2 ha
Application Gross Area	10.8 ha
Net site area	8.6 ha
Total residential units	383 units
Net Density	44.5.0 units per ha

4.4 VARIETY

The proposed residential development addresses the existing context and scales surrounding the site with a variety of unit types. The concentration of higher density apartment development is located adjacent to the Glenamuck road entrance with undercroft and surface car parking. Overall, the site is made up of a strong mix of housing and higher density apartments to achieve a sustainable density of 44.5.0 units per hectare. A mix of 43% Housing, 31% Duplex and 26% Apartments is proposed delivering a varied mix of typology throughout the scheme. Throughout the development there are 6 no. principle house types proposed and 13 variants depending on which of the 4 proposed character areas they are located. These vary in form and are detached, terraced & semi-detached. The apartments proposed in the northern portion and within the Neighbourhood Centre of scheme which will provide a total of 100 units in a mix of 1, 2 and 3 Bed apartments. The mix of dwelling type and size will allow for the community to remain together over time. For example should older people need to down size at any stage, they can move within their own development into a small dwelling if and when their space requirements change. Similarly younger owners can trade up to larger units later in life as the need arises. A crèche is also proposed as part of the development with direct access to its own play area. Overall the proposed development provides a mix as outlined below:

This residential mix comprises the following dwelling provision:

Dwelling typology	Totals	1-bed	2-bed	3-bed	4-bed
Houses	165 units		0	105	57
Apartments	100 units	19	78	3	0
Duplexes	118 units	8	50	60	0
Overall totals	383 units	27	128	171	57
		7%	33%	45%	15%

The dwelling mix proposed will bring a considerable diversity of people and households to Kiltarnan Village, thus enriching the existing community.

In addition to the residential component of the scheme, diversity has been achieved within the Neighbourhood Centre and Duplex block D1. A variety of uses have been incorporated within these 2 elements. These consist of retail, medical, crèche, office and community uses on the ground floor.

The schedule below summarises the variety of uses included within the Neighbourhood Centre and Block D1:

Use	Area
Creche	439 sqm
Office	317 sqm
Medical	147 sqm
Retail	857 sqm
Retail/convenience	431 sqm
Community	321 sq.m



Figure 16. Unit type diagram ..

Legend	
Apartments	
Duplexes	
3 bed houses	
4 bed houses	

4.5 INCLUSIVITY

A wide range of dwelling types and sizes are proposed. The needs of a variety of households will therefore be met. 1 Bedroom, 2 Bedroom, 3 Bedroom and 4 Bedroom units are all proposed, with the range of typologies split between houses, duplexes and apartments. The range of different typologies will cater for different/emerging living requirements and in terms of flexibility, the option to downsize or extend is provided for. This advantage of the adaptability of the proposed scheme will form a strong community within the development for many years to come.

We have proposed a 39 no. (10%) Part V units which consist of Duplex and Houses to cater for a variety of needs.

A total of 383 units will be provided.

Easy resident and visitor access is provided for throughout the scheme. The apartment buildings are subdivided into distinct zones, with level access for each core provided from the perimeter footpaths. In each apartment core there is a stairs and an accessible lift, serving all floors and linking car parking, bin stores and ancillary areas.

The design of the buildings are all in accordance with Part M of the Building Regulations and will also have regards to the principles of universal access. This will foster an inclusive approach to the design of the built environment.

The public open spaces, landscaping, footpaths and routes are designed to minimize changes in level in as far as practical and to prioritize easy pedestrian & cycle movement, avoiding unnecessary physical and visual barriers. This network of varied public open spaces has been designed to provide access to people of all ages. A detailed Landscape Masterplan proposed by RMD Landscape Architects has been provided as part of this submission. The proposed linear Public Parks together with the proposed open spaces located in various areas of the site particularly the Village Green will provide a visually attractive amenity both for residents of the proposed scheme and the wider adjoining residential zones.

In addition a community building, childcare facility, retail, medical and office spaces are proposed to satisfy the needs within the scheme and adjacent residential developments. Located centrally within the scheme (see figure 18), this new community hub will be fully accessible from all locations and it enhances the existing community and commercial amenities that are situated in the surrounding area.

The Public Open Spaces proposed will cater for a range of activities to meet the needs of all age groups as they provide a range of play areas and outdoor equipment.



Figure 17. Neighbourhood centre and Duplex block D1 commercial unit locations

4.6 PUBLIC REALM

The Village Green itself, a landmark landscaped open space, provides a community amenity that can be used for a variety of neighbourhood events, in addition to being the main entrance of the scheme. The Crèche located on the northern side of the Neighbourhood Centre fronts onto the mature tree line and Dingle Way. The Dingle way will also be overlooked by houses, and duplex blocks along its entire length. Various activities will be possible across the network of well distributed landscaped open spaces provided. From casual play opportunities for children to community events on the Village Green, the scheme will be a place where residents of the neighbourhood can arrive safely, meet comfortably and use enjoyably.

Within this environment of landscaped open spaces, nature and biodiversity will play an active role, particularly in the Village Green and central green spine. They will suppose a continuity and enhancement of existing ecosystems within the rural context of the scheme. In all cases, including the lower scale housing cells, the perimeter configuration of the buildings mean windows and doors provide activity onto every street and public realm area. All open spaces including the "Dingle Way" will be fully overlooked to ensure passive surveillance and safety for the user. The juxtaposition of the buildings proposed to existing and proposed landscaped features, makes way-finding throughout the development easy and logical.

We respectfully state that the layout proposed will be well connected and integrated with its surrounding context which has been designed to be attractive and safe for residents and the expanding community at Kiltarnan. The retention of the North- South existing trees/ hedgerow line and the inclusion of the "Village Green and green route along the Dingle Way in the design results in a high percentage of the overall lands being provided as a public open space, reaching the c.17% of the application site area.

Although reducing the total amount of land available on the site for buildings, the sylvan setting created by the retention of existing trees and hedgerows will contribute to the distinctiveness of the layout and create a very particular "sense of place", along with the design of four character areas that are presented in this document. Notwithstanding the significant landscaping provision, a strong residential density has still been achieved.

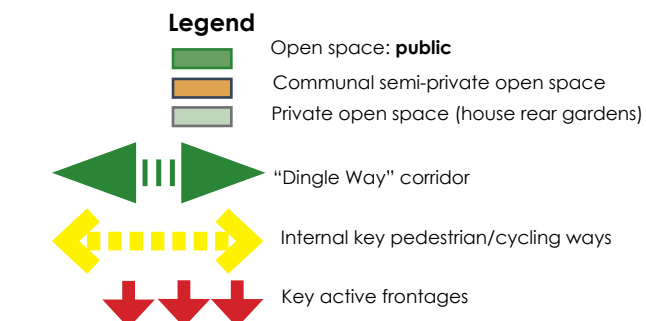


Figure 18. Open space diagram



4.7 LAYOUT

The neighbourhood concept applied is developed by means of three key proposals consisting of a permeable shared-space street network, an interconnected system of liveable landscaped open spaces and an efficient layout with distinct areas. The built environment conceived is well integrated within the overall context, supposes a positive contribution to Kiltarnan as it will bring a vibrant heart for the village and create a unique sense of place. These principles are developed below.

A network of streets and pedestrian/cycle links with an identifiable hierarchy is proposed. Routes for the exclusive use of pedestrians and cyclists have been provided along the "Dingle way" and through the central North - South public open space. The horizontal alignment of all internal streets has been designed in line with DMuRs objectives to slow down vehicular traffic.

Permeability and multiple access points will mean choice for users and therefore limit traffic movement at any one location. This permeable site layout generates a variety of spaces, which will offer a high connectivity in between individual cells with attractive linkages, but yet having their own individual character to provide strong diversity and act as way-finders within the neighbourhood, in conjunction with the built fabric proposed.

A singular traffic-calming area around the neighbourhood centre cell (see Figure 20) is designed for a safe and useable space that serves both the retail and residential elements of this new neighbourhood centre for Kiltarnan. The perimeter configuration of this block maximises active frontage and creates public street spaces that are fully overlooked and safe at this location. Maximum diversity of uses have been concentrated within this cell. A variety of uses have been incorporated into the Neighbourhood centre facility & Duplex block D1, including retail, medical, crèche, community and residential. As a result, a mix of retail and residential uses will overlook the village green and provide passive surveillance. Modifications to these uses may be possible over time subject to planning permission.

Car parking is also integrated in the overall layout. It is provided within the landscaped curtilage of the houses so as to avoid a car dominated streetscape. In addition, apartment block C&D and the Neighbourhood centre will benefit from undercroft car parking and minimise the impact of vehicles on the public realm.

Duplex units will also have adequate parking solutions, delivered in a communal basis, with a ratio of c.1 to 1.25 spaces per unit. Particularly, parking for the retail, medical and crèche facilities in the Neighbourhood Centre will be provided using a combination of undercroft parking beneath the landscaped courtyard and on street parking. Bike parking and bin storage are provided within safe and secure facilities in various locations around the site.

The existing topography of the site has influenced the overall street and built fabric arrangements, particularly in the eastern portion of the lands where the streets and houses have been configured parallel to the prevailing contours. This enables Part M access to the achieved and easy gradients along streets and footpaths to be maintained.



Figure 19. Street hierarchy.

4.8 DISTINCTIVENESS

A total of 4 no. character areas are proposed across the scheme to give each area an identifiable sense of place. Building typology, materials and finishes, individual unit design proportion and open space design are all used to develop an individual sense of place for each separate character area.

The proposed development is bisected by the existing central green belt running north / south and tree line that runs east to west which separates the site into three distinct architectural zones with the Neighbourhood Centre and Duplex block D1 creating the fourth distinct character area. The building typology within each of these zones has been carefully considered within the individual character areas and is further described in the next section of the design rationale. These areas have been designed with individual design styles, varied unit types and a mix of materials and finishes that gives each of these areas a discernible 'sense of place'.

The primary external finish for the development will be brick across all typologies. Depending upon the character areas within the site the materials vary. Between character areas there will be distinct differences between brick types and material choice, elevation treatment and building form in order to create variety and visual interest across the scheme. This material choice will ensure that the buildings proposed are durable as well as being of high quality visually. High quality planting in conjunction with existing mature trees, site features and native vegetation will establish a strong character and identity for the scheme. This material choice is detailed at subsection 4.12 "Detailed Design".

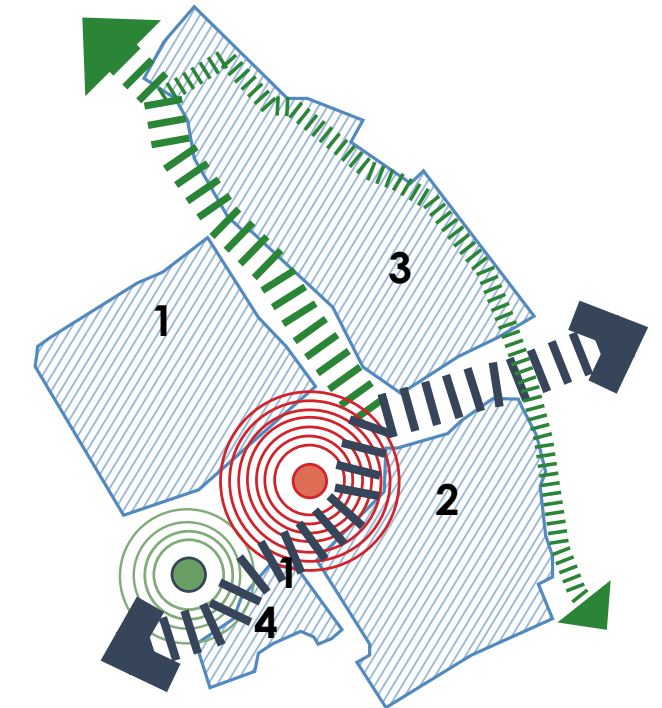
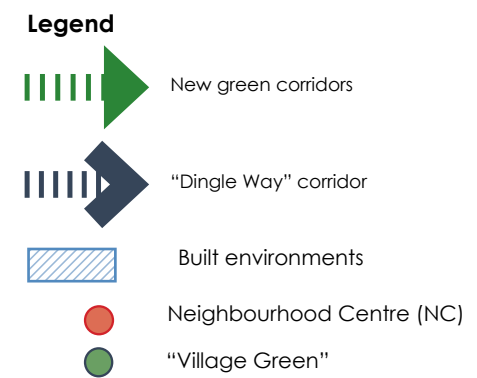


Figure 20. Conceptual diagram of distinctiveness and focal points including landscape feature..



Figure 21. CGI view looking south along the retained mature tree line.



Figure 22. CGI view of the village Green and Neighbourhood centre from the Enniskerry Road

Four distinctive character areas are proposed across the scheme, grouping the cells bounding the central landscaped spine in the north west in character area 1, the traditional housing cells to the south-east and units fronting the Enniskerry road and wrapping around to front onto the village green in character area 2. The northern-eastern portion adjacent to Glenamuck Road and Rockville development in character area 3 and the Neighbourhood Centre and Duplex Block D1 in character area 4. These precincts are defined by differences in building design and finishes /materials and naturally subdivided by the retention of existing site features/ landscaping, therefore integrating and enhancing natural assets within the overall urban design of the scheme.

The palette of materials for the architectural finishes chosen is shown below, comprising a combination of two buff types, a grey brick and a red brick type throughout the scheme, with stone or render band details in window and door surroundings. Rendered walls are also considered and metal cladding is applied in some upper façades of apartment blocks. Please refer to architect's drawings for detailed information about materials and elevation treatments.

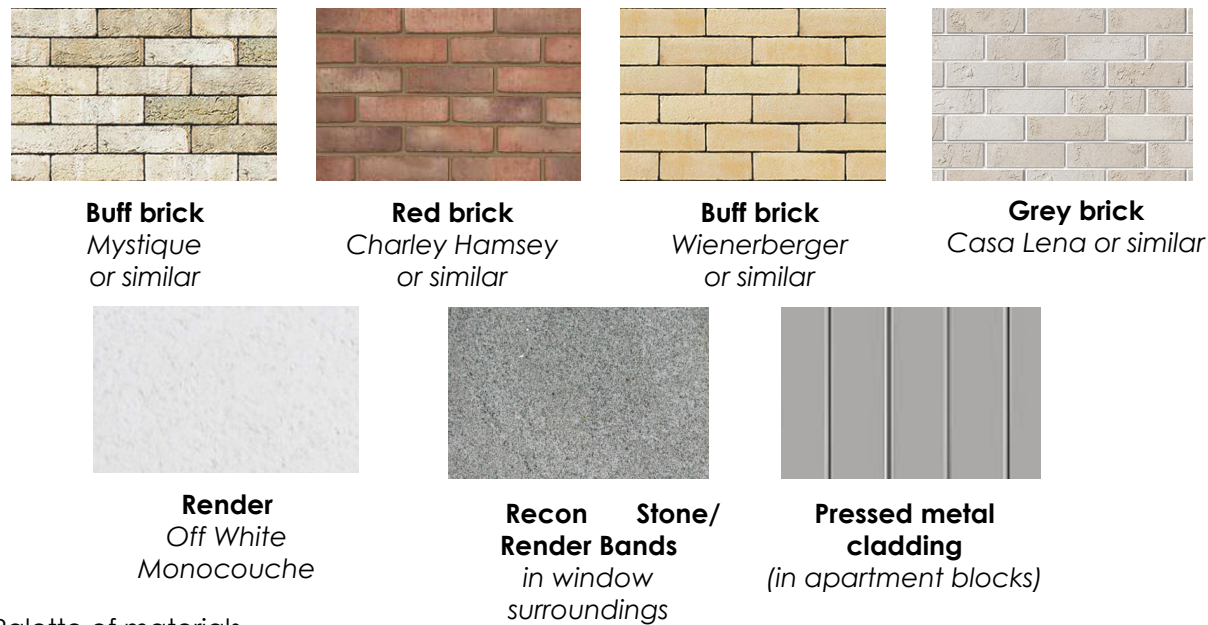


Figure 23. Palette of materials.

This palette of materials is complemented with public realm finishes, in which granite will be incorporated in boundary walls and screen walls within the scheme. Please refer to Landscape architect's drawings (RMDA) for complete information.



Figure 25. Site sections.



Figure 24. Key plan of character areas.

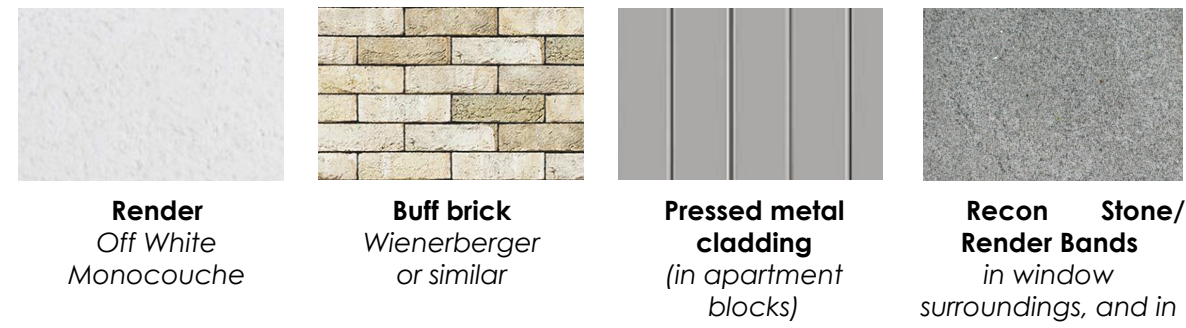


Figure 26. Palette of materials, character area 1.

CHARACTER AREA 1 located in the north western part of the site facing the central green spine that runs from north to south and adjoining the existing village features, namely the existing village market to the north-west, as indicated in the key plan in the right.

The buildings proposed include a mix of 3-storey duplex blocks and 2 storey houses. This character area will benefit from the retained tree line which incorporates play spaces and walking paths along its eastern edge as well as a pocket park in the centre of this character area. Primary access to this character area is from the Enniskerry road connecting secondary and shared-surface streets, which prioritise pedestrian/cycling journeys and will therefore boost vehicle free movement from inner locations to the bounding landscaped network of public open spaces.

The typological diversity proposed will be unified by sharing the same brick type, buff *mystique* or similar. Houses will also present render walls and stone or render expressed bands around external openings and lintels, as indicated in architectural drawings and in detailed elevations below.



HOUSE TYPE C1 & DUPLEX BLOCK A1
NORTH WEST ELEVATION

Figure 27. Elevation of character area 1.



Figure 28. Key plan of character area 1.



Figure 29. Artist's impression of character area 1.