



ARCHITECTURAL DESIGN STATEMENT

PROPOSED RESIDENTIAL DEVELOPMENT

Capdoo, Clane, Co. Kildare

On behalf of

Ardstone Homes, 48 Fitzwilliam Square, Dublin D02 EF89

Ref: 16016

May 2019

INTRODUCTION

ARCHITECTURAL DESIGN STATEMENT

This design statement has been prepared in support of a full planning application by Ardstone Homes Limited (the applicant) for a new residential development on lands measuring approximately 11.442 hectares at Capdoo, Clane, Co. Kildare.

The application is for the a development consisting of 366 dwellings consisting of-

- 12 no. 1 bedroom apartments
- 16 no. 1 bedroom apartments
- 82 no. 2 bedroom apartments
- 36 no. 2 bedroom own door apartments
- 36 no. 3 bedroom own door duplexes
- 20 no. 2 bedroom houses
- 75 no. 3 bedroom houses
- 77 no. 4 bedroom houses
- 12 no. 5 bedroom houses

The development also includes a one-storey childcare facility; associated car parking; surface water attenuation, landscaping and all associated site development works.

The proposed development is situated in the northern environs of Clane town on what is current a greenfield site consisting of a network of fields and hedgerows.

The scheme takes account of a new link link road that is to run from the R407 Kilcock Road in the northwest of the site to connect to that which has already been constructed in the southeast connecting to the R403 Celbridge Road.

The proposed development takes cognisance of this as well as-

- The parameters set out in the Clane Local Area Plan (2017-2023) for these lands.
- Opinion received from An Bord Pleanála (case reference no. ABP-302840-18) dated 12th December 2018 following the pre-application consultation meeting held on 30th November 2018.

The purpose of this design report is to describe the development in detail including information relating to the context, design, access.

The report is divided into the following sections-

- Section 1- Context and Site Analysis
- Section 2- Design Statement and Methodology
- Section 3- Consideration of Alternatives



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SECTION 1- Context and Site Analysis

1.1 Introduction

The site, measuring approximately 11.442 hectares, is located in the northern environs of Clane, Co. Kildare and consists of a number of undeveloped small fields defined by hedgerows. There is also an existing house and cluster of former agricultural out buildings located to the east of the site with an access from the lane serving Capdoo Commons. Access is limited to a further gate located at College Road at the northwest corner of the site.

The site is irregular in shape due to a number of plots that have been developed as one-off housing along the northern boundary. The lands are located in the transition between the suburban development of the town to the south and rural hinterland to the north.

A number of hedgerows running east-west are located in the southern portion which would have historically formed part of the property lines of various dwellings facing the Capdoo Commons lane to the east.

The site is identified as a “Key Development Area” (KDA No. 2) in the Clane Local Area Plan (2017-2023).

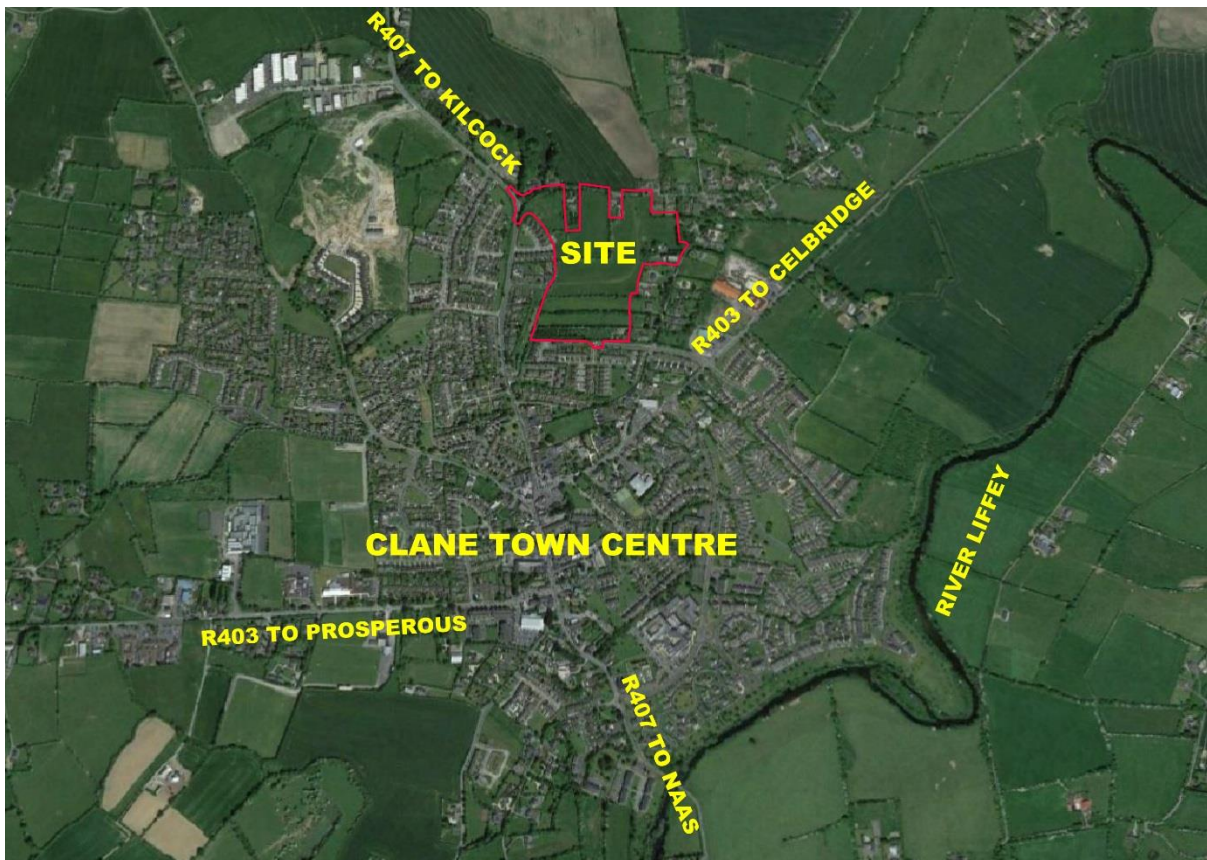


Fig 1.1 Application site shown outlined in red in context of Clane, Co. Kildare

1.2 Relevant Planning Context- Clane Local Area Plan (2017-2023)

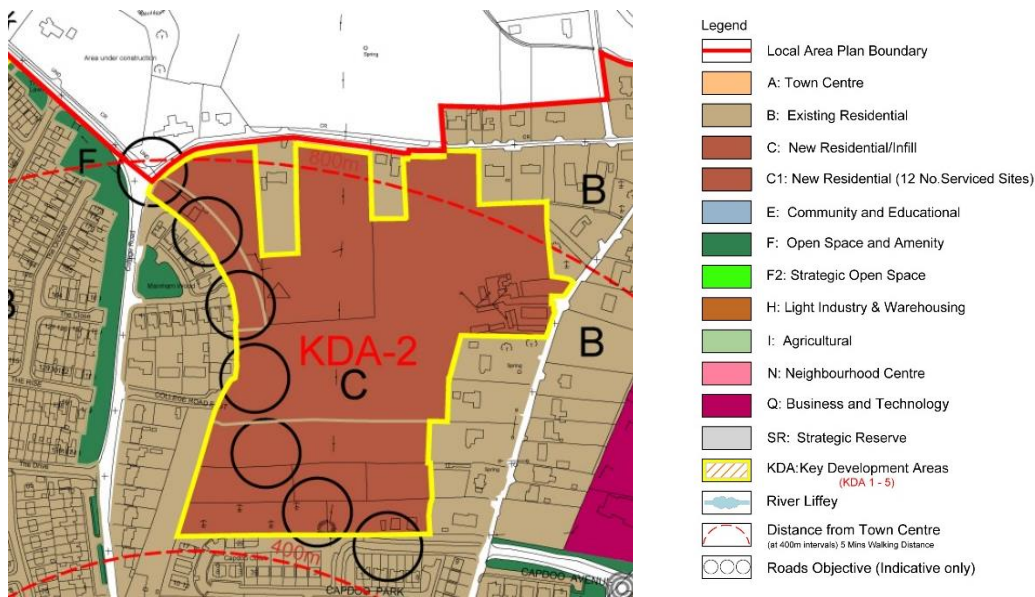


Fig 1.2 Land Use Zoning Map Clane Local Area Plan (2017-2023)

Land Use Zoning C-“To provide for New Residential Development/ Infill.”

The site is identified “Key Development Area 2” (KDA) in the Clane Local Area Plan (2017-2023).

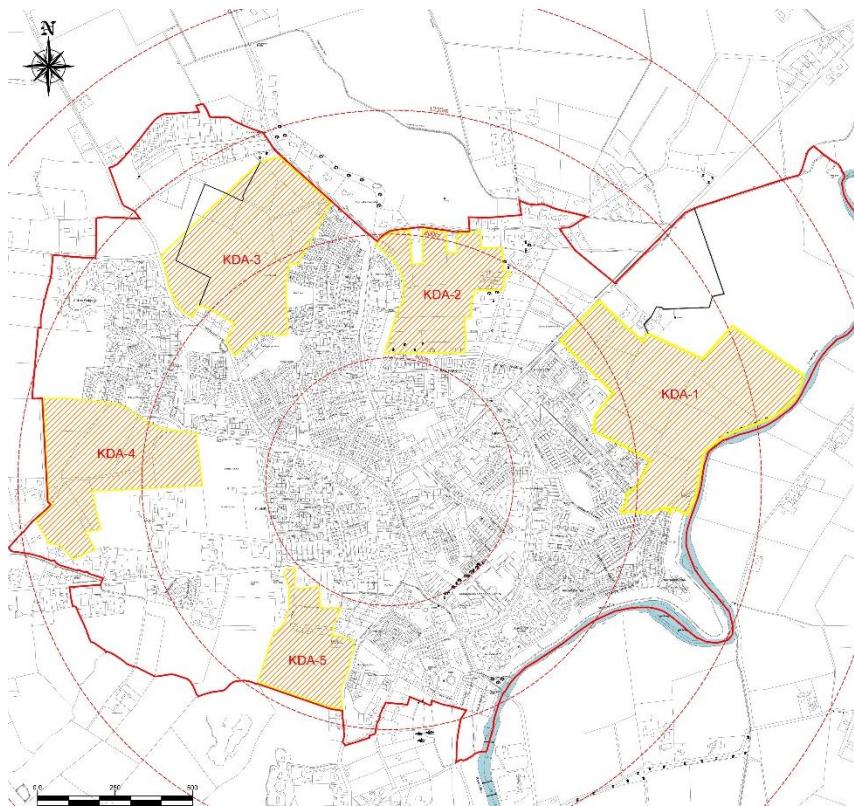


Fig 1.3 Context Map KDA 2 Clane Local Area Plan (2017-2023)

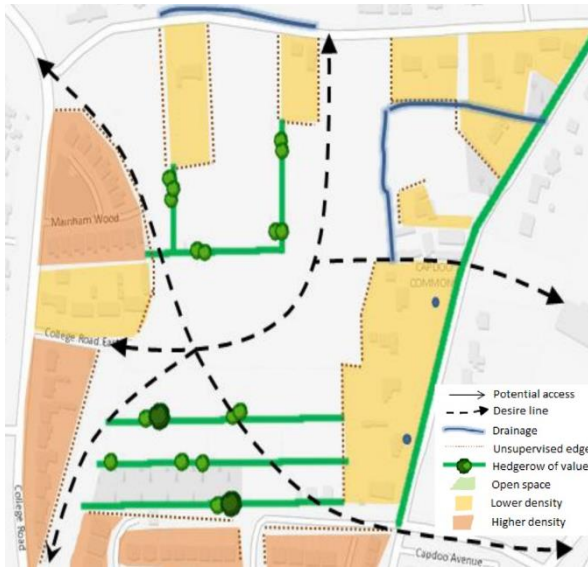


Fig 1.4 Analysis Map KDA 2 Clane Local Area Plan (2017-2023)

Key Development Plan definitions, Section 12 Clane Local Area Plan (2017-2023)-

- To ensure that best practice urban design principles are applied to all new development, based on the principle that well planned and integrated development enhances the sustainability, attractiveness and quality of an area.
- This LAP seeks to establish a framework for the provision of housing including focusing new development and associated facilities into a number of key areas within the town (Key Development Areas (KDAs) and masterplan areas.
- KDA sites are 10ha or greater and will extend the urban area of Clane at appropriate locations having regard to existing patterns of development and potential for connectivity. These will be the focus for new residential development during the early plan period.

Specific Objectives-

Vision

Vision: The consolidation of the urban area of Clane through new residential development, with a high quality permeable urban form, which delivers important connectivity for the town between the Kilcock and Celbridge Regional Roads.

Connectivity/ Movement

Provide road link between Kilcock Road and Celbridge Road. Achieve vehicular, pedestrian and cyclist permeability throughout the development area, with main accesses off proposed link road and potential access points from College Road East, Capdoo Road and local road north of development area. Facilitate potential future links through adjacent lands to destinations including local shops (Lidl) and the town centre. Design all roads and streets in accordance with the Design Manual for Urban Roads and Streets.

Built Form

Provide passive surveillance of roads and open spaces and address existing unsupervised edges, predominantly through the use of the perimeter block in built form. Create legible development with sense of place. Have regard to residential amenity of existing dwellings at the perimeter. Buildings 2 – 3 storey height with transition in scale from existing residential development. This KDA is likely to accommodate lower to medium density residential development in the order of 25 – 30 units per hectare. Buildings shall not exceed 2 storeys in height along the southern, eastern and western perimeters of the site where they adjoin existing residential properties.

Landscape and Spaces

Provide min. 15% of area as public open space. Retain natural heritage and Green Infrastructure features through incorporation into areas of open space and boundaries of residential development. Incorporate natural heritage and Green Infrastructure features in addressing flood risk and preparation of SuDs strategy

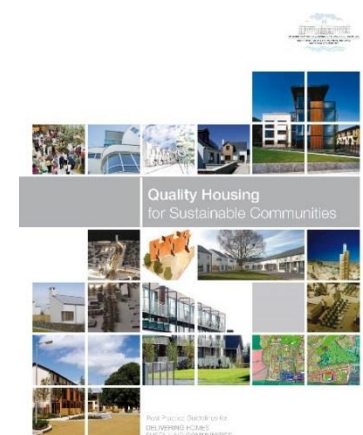
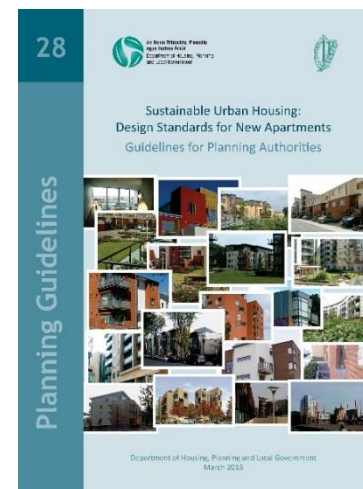
Schedule of Phasing-

Type of Infrastructure	Description	Phasing
Road Upgrade	Junction upgrade between Capdoo Link Road and Brooklands.	To be completed prior to commencement of development.
New Road	Capdoo Link Road from Kilcock Road to Dublin Road.	To be completed prior to the commencement of dwelling no. 101 KDA2.
Childcare	Pro-rata childcare provision at a rate of 0.13 childcare spaces per dwelling	Pro-rata provision for dwellings 1-100 to be completed prior to the commencement of dwelling no. 101 in KDA2. Pro-rata provision for remainder to be completed prior to the completion of development in KDA2.

1.3 Technical Context- Residential Design Standards

The proposed scheme has been developed in a manner which employs best practice in urban design and having regard to the following policy documents:

- 'Best Practice Guidelines for Delivering Homes Sustaining Communities'
- 'Sustainable Residential Development in Urban Areas'
- 'Quality Housing for Sustainable Communities' 2007
- 'Design Standards for New Apartments- Guidelines for Planning Authorities' 2018
- 'Urban development and Building Heights Guidelines for Planning Authorities' December 2018
- 'Design Manual for Urban Roads and Streets'
- 'Urban Design Manual – A Best Practice Guide May 2009'
- 'Kildare Council Development Plan 2017-2023'
- Clane Local Area Plan (2017-2023)



1.4 Existing Building/ Structures

An existing complex of structures consisting of a two storey house and associated farm buildings (barns/ stables) are located on the eastern edge of the site accessed via an existing avenue from the Capdoo Commons Lane. At the southeastern corner of the lands are a pair of disused sheds and a greenhouse.



Fig 1.5 Aerial view of application site shown highlighted in red within the immediate context of the northern environs of Clane.

1.5 Existing Adjacent Uses

Adjacent uses consist of residential developments completed at various times over the past 50 years. Capdoo Park to the south consists of housing and own door apartments; the Capdoo link road forms part of this development terminating at the southern boundary of the lands- predominantly 2 storey heights.

One-off detached housing is situated to the east (Capdoo Commons) and north- predominantly 1-2 storey heights.

A number of small estates are located to the west accessed from College Road, such as Mainham Woods- predominantly 2 storey heights.

1.8 Site Constraints and Opportunities informing Design

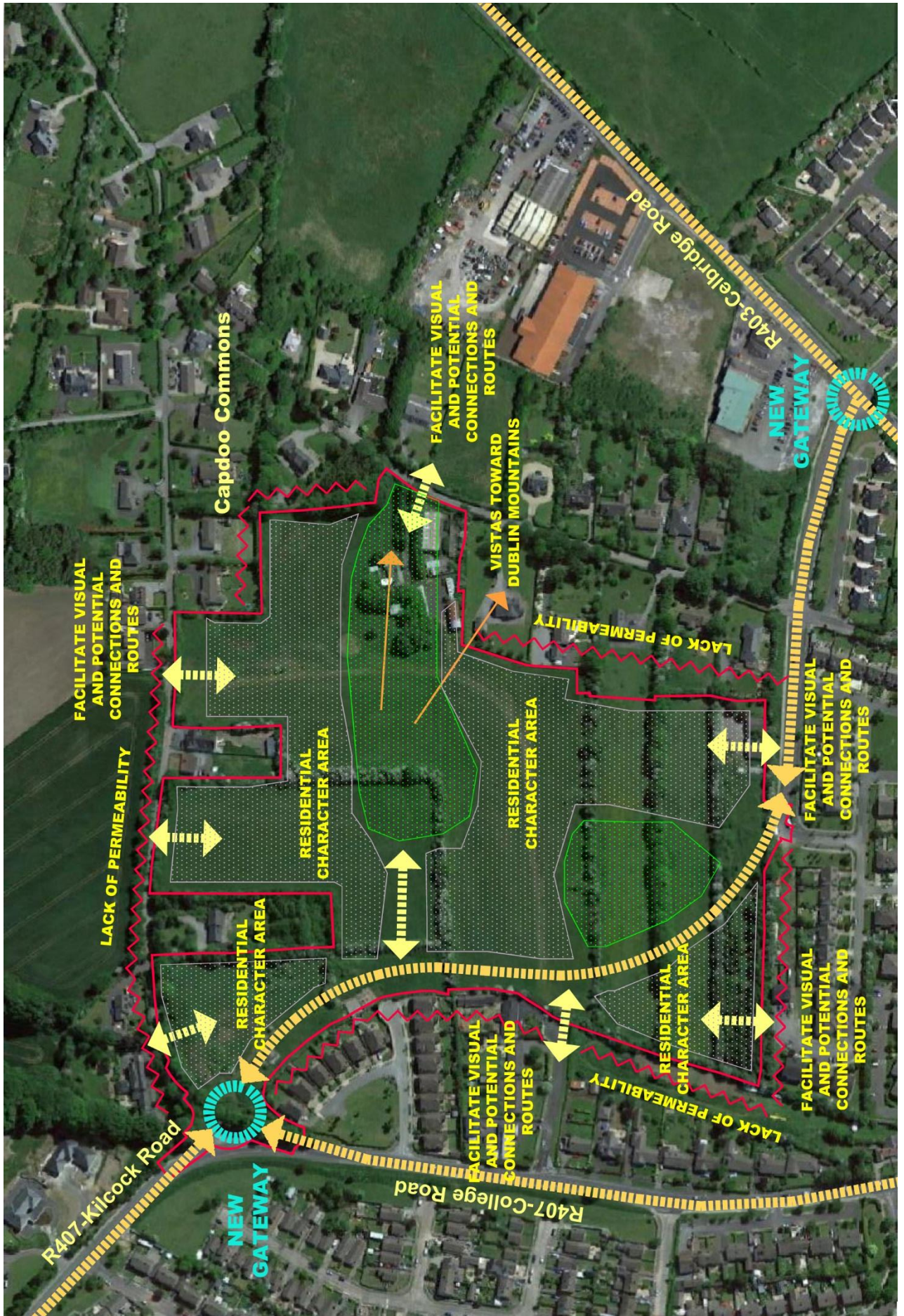
Currently the lands consist of a network of fields behind existing peripheral and sporadic residential development on the northern edge of Clane with poor connectivity and permeability. New development will be informed and defined by the creation of the new link road as well as cognisance of the existing hedgerow layout and topography and providing for future connections at key points on its perimeter.

The design of the new link road was fixed prior to the design of the residential development. It will provide a direct route between the Celbridge Road R403 to the southeast from an as-built spur currently terminating at Capdoo Park, and Kilcock Road R407 to the northwest where College Road bends westward at the edge of Clane. Its design presents challenges for creating a cohesive urban edge.

The levels of the road were designed to maximise its own efficiency- minimise gradients and curvature to minimise blind spots and maximise vision splays, resulting in what will be a series of cuts and embankments into the undulating existing levels/ topography. The survey plan below illustrates the impact of the link road on the site and its topography. The fill is highlighted in green and the cuts are highlighted in red- these cuts are more pronounced toward the northwest of the site- with a differential of 2m metres in a number of areas. The road alignment also creates 2 parcels of developable land, the majority of which is on the east side. A smaller triangular pocket is created in the southwest corner. Also the road follows tightly against the western boundary of the site where existing residential development accessed off College Road east is located. This will ultimately become a boundary wall to rear gardens on a raised embankment.



Figure 1.6 (above) showing the cut and fill and site configuration by the link road on the existing topography of the lands. Figure 1.7 (rotated view overleaf) shows an aerial view of the site identifying key constraints and opportunities presented by the site, both existing and proposed.



SECTION 2- Design Statement Methodology

The design rationale outlined below outlines the key criteria considered in the design process for the proposed residential scheme on the site under the 12 criteria set out in the *Urban Design Manual – A Best Practice Guide 2009*.



2.1 Context

How does the development respond to its surroundings?

2.2 Connections

How well connected is the new neighbourhood?

2.3 Inclusivity

How easily can people use and access the development?

2.4 Variety

How does the development promote a good mix of activities?

2.5 Efficiency

How does the development make appropriate use of resources, including land?

2.6 Distinctiveness

How do the proposals create a sense of place?

2.7 Layout

How does the proposal create people friendly streets and spaces?

2.8 Public Realm

How safe, secure and enjoyable are the public areas?

2.9 Adaptability

How will the buildings cope with change?

2.10 Privacy and Amenity

How does the scheme provide a decent standard of amenity?

2.11 Parking

How will the parking be secure and attractive?

2.12 Detailed Design

How well thought through is the building and landscape design?

2.1 Context

How does the development respond to its surroundings?

The context of the site has been carefully considered with its unique constraints and opportunities informing the design such as-

Link Road- A principle driver of the design concept parameters, the curvature of the route of the new link road creates two distinct development parcels the larger being to the east and north and the smaller to the southwest. As described in section 1, the alignment of this new road due to its design carves the lands into 2 parcels, and creates level differences between the developable land and the road itself. A further challenge is the poor urban edge that will be created along its western side where it runs tightly against the rear boundary walls of adjoin existing development on College Road. Where development is possible within the site, a new urban edge has been formed with added emphasis at both the northern and southern ends to identify this as an identifiable part of Clane.

Existing Hedgerows/ Trees- Both the Local Area Plan and Tree Survey identifies a number of hedgerows of reasonable value; these have been integrated where possible into the principal open spaces within the scheme.

Creating appropriate urban edges- Opportunity for appropriate height and scale in particular at the principal gateway to Clane at the northwest at which the new link road meets the existing Kilcock Road.

An appropriate density allowable on these zoned 'C' lands. The proposed residential density (net 37.82/ gross 32.82) would stitch in with the adjacent residential developments.

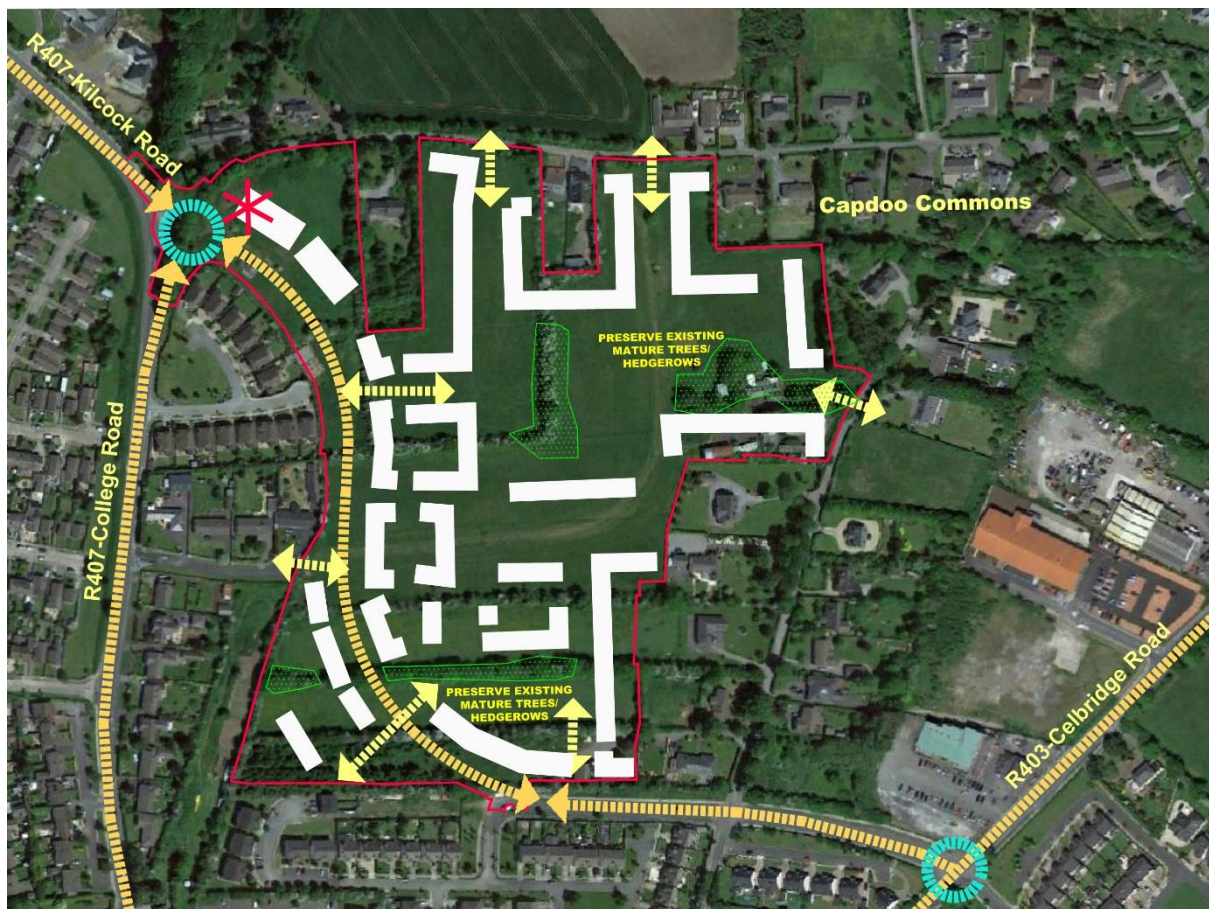


Fig 2.1 Context Guiding Principles

2.2 Connections

How well connected is the new neighbourhood?

It is acknowledged in the Local Area Plan that many of the existing neighbourhoods have weak connections with poor permeability to other parts of the town. Opportunities exist for the new neighbourhood to become very well connected with the broader context of Clane.

The new link road will open up the lands providing for a number of access points into the heart of the development. This will provide access to all the quiet residential streets in the development.

Fig 2.2 Reconfigured Entrance



There are a number of points along the site's perimeter that can act as entry points from adjoining neighbourhoods-

Two points along the northern boundary for cycle and pedestrian access into the scheme.

The entrance gateway from Capdoo Commons currently serving the existing farm complex to the east, again for pedestrian and cycle access.

A further point of entry can be facilitated from College Road to the east toward the link road in the development lands and to the centre of the scheme.

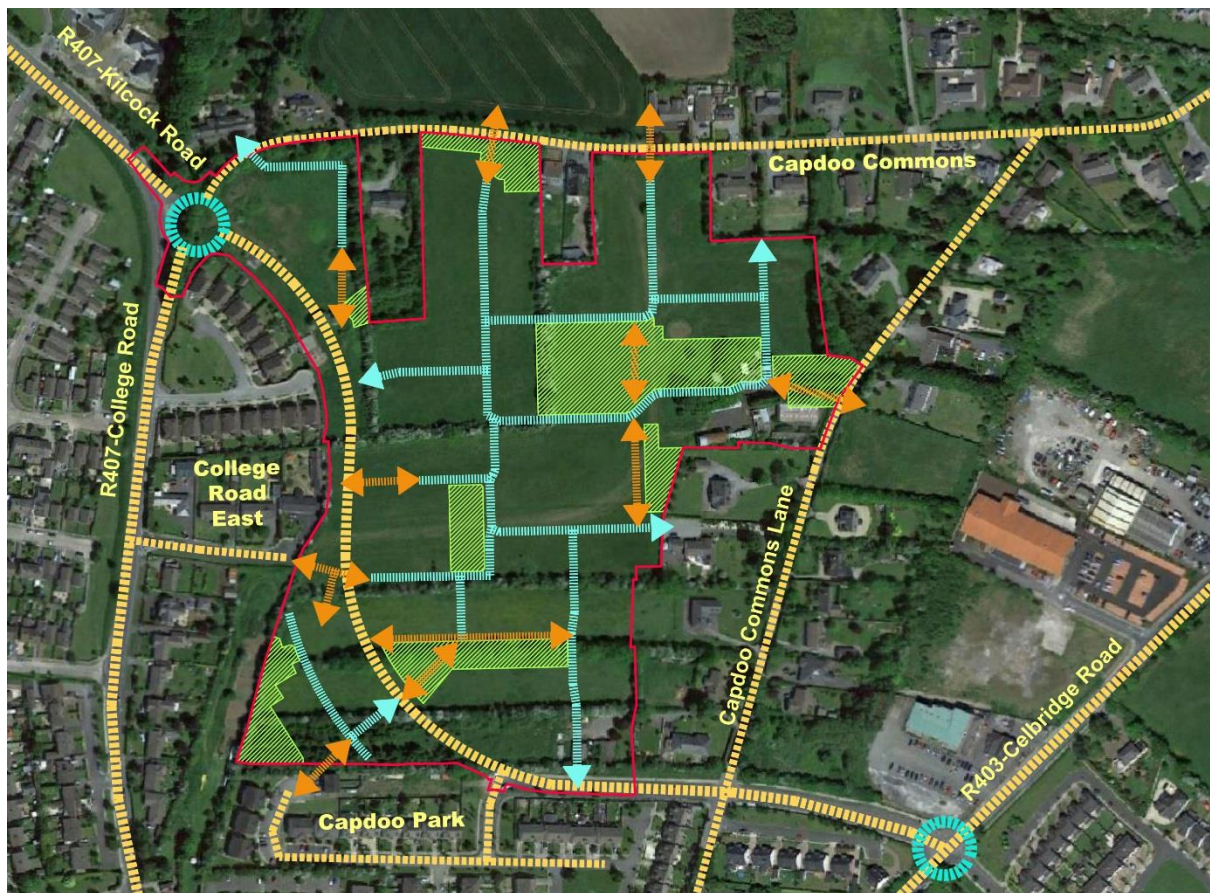


Fig 2.3 Connections created by the development

2.3 Inclusivity

How easily can people use and access the development?

The proposed development has been designed with due regard to the principles of DMURS, universal design, including the 'Building for everyone' publications.

Main features as follows-

All homes have level access and inaccessible areas have been eliminated as far as possible. The public realm is designed ensure accessibility on equal terms for people of a range of ages and physical mobility notwithstanding the sloping nature of the site.

A range of house types have been proposed in terms of both size and design meeting the aspirations of a range of people and households. These range in gross floor area from 53.1 m² (1 bedroom apartment type 1B1) to 195.2m² (5 bedroom house type G) with a variety of 1, 2, 3, and 4 bedroom designs.

The proposed housing presents a positive aspect to passers-by, avoiding unnecessary physical and visual barriers.

Future connections to adjacent lands both developed and subject to future development have been proposed. The network of roads, paths and cycle routes ensure full permeability throughout the scheme.

2.4 Variety

How does the development promote a good mix of activities?

Across the scheme there are-

12 no. principal house types are proposed and 27 variants depending on which of the 2 proposed character areas and configurations (these vary in form and are detached, terraced & semi-detached) within which they are located.

2 apartment/ duplex types arranged in 6 blocks, located in character areas 2 (open space 1) and 3 (south west corner of site fronting the link road).

3 apartment blocks located along the spine route also part of the 3rd character area typology.

The crèche facility also provide additional variety in the typology proposed.

The overall summary of dwelling types is set out overleaf....

Type		CHARACTER AREA	AREA	Quantity	Mix	%		
	HOUSE TYPES							
A3	2 bedroom mid terraced house	1	86.6	16	20	5.46		
A3	2 bedroom mid terraced house	2	86.6	3				
C1	2 bedroom semi detached house	1	99.2	1				
A	3 bedroom end of terrace house	1	113.5	13	75	20.5		
A	3 bedroom end of terrace house	2	113.5	9				
A1	3 bedroom mid terrace house	2	104.3	9				
A2	3 bedroom end of terrace house	1	115.3	1				
A2	3 bedroom end of terrace house	2	115.3	1				
B1	3 bedroom semi detached house	1	123.2	4				
B2	3 bedroom semi detached house	2	120.3	12				
B3	3 bedroom semi detached house	1	125	2				
B4	3 bedroom semi detached house	2	122.1	2				
C	3 bedroom detached house	1	112.3	1				
C	3 bedroom semi detached/ end of terrace house	1	112.3	5				
C	3 bedroom mid terrace house	1	112.3	5				
C	3 bedroom semi detached/ end of terrace house	2	115.2	11				
D	4 bedroom semi detached/ end of terrace house	1	128.4	12			77	21.0
D	4 bedroom semi detached/ end of terrace house	2	131.4	13				
E	4 bedroom semi detached house	1	137.1	2				
E	4 bedroom semi detached house	2	138.2	14				
E1	4 bedroom semi detached house	1	137.1	10				
E1	4 bedroom semi detached house	2	138.2	10				
E2	4 bedroom semi detached house	1	138.9	4				
E2	4 bedroom semi detached house	2	140	2				
F	4 bedroom semi detached house	1	142.2	2				
F	4 bedroom semi detached house	2	139.4	8				
G	5 bedroom semi detached house	2	195.2	12	12	3.3		
	HOUSE TYPES			184				
	APARTMENT TYPES							
1B1	1 Bedroom Lower Level Own Door	1	53.1	6	28	7.65		
1B2	1 Bedroom Upper Level Own Door	1	59.2	6				
1B3	1 Bedroom Apartment	3.0	58.4	4				
1B4	1 Bedroom Apartment	3.0	48.9	12				
2B1	2 Bedroom Lower Level Own Door	3	83.7	36	118	32.2		
2B2	2 Bedroom Apartment	3	81.5	4				
2B3	2 Bedroom Apartment	3	84.4	4				
2B4	2 Bedroom Apartment	3	86.5	4				
2B5	2 Bedroom Apartment	3	79.6	21				
2B6	2 Bedroom Apartment	3	80.6	14				
2B7	2 Bedroom Apartment	3	80.1	3				
2B8	2 Bedroom Apartment	3	79.6	12				
2B9	2 Bedroom Apartment	3	79.6	6				
2B10	2 Bedroom Apartment	3	79.1	8				
2B11	2 Bedroom Apartment	3	79.4	6				
3B1	3 Bedroom Own Door Duplex	3	119.2	28	28	7.7		
3B2	3 Bedroom Own Door Duplex end of terrace special	3	120.4	8	8	2.2		
	APARTMENT / DUPLEXES			182				
	OVERALL TOTAL			366	366	100.00		

2.5 Efficiency

How does the development make appropriate use of resources, including land?

The proposed scheme provides a total of 366 much needed dwelling units in this location. The houses are generally designed in a deep plan format which allow for an efficient and sustainable use of land while also providing for an efficient thermal envelope. The houses will be constructed to current building regulation standards delivering a minimum A3 energy rating.

At a macro level, the proposed development constitutes an efficient use of the development land, zoned for residential use, within the area, consolidating the town core of Clane, its amenities and proximity to major transportation nodes. The proposed development is appropriate to the zoning and the settlement strategy of the County Development Plan, which in turn is guided by regional and national development strategy.

2.6 Distinctiveness

How do the proposals create a sense of place?

Three character areas are proposed across the scheme to create a series of distinctive neighbourhoods which will sit appropriately into the context of the surrounding area. Each of these are focussed on its own cluster of streets giving a sense of identity and place and are linked by a number of open spaces and pocket parks.



Fig 2.4 Character Area Layout- 3 character areas are proposed

The housing is split into 2 distinct character areas (1 & 2) within the large parcel of land to the east of the link road. These are mixed so that the three character areas are expressed around the principal open space providing a variety of types.

Character Area 3 consists of the apartment development at the northern and southern ends of the link road- These comprise 3 and 4 storey blocks ; it is considered that an opportunity exists here to form bookends/ gateways as well as creating a sense of urban enclosure along the link road.

Each of the three character areas contributes towards the frontage and urban edge along the new link road; thus providing a variety in both form, material and height.

Character Area 1-

Character Area 1 consists of the housing located to the south of public open space 1. A robust and simple traditional style is proposed to create a strong sense of an established neighbourhood; the composition consisting of brick gables of predominately red/ stock brickwork



Figs 2.5 above- typical elevation and 2.6 below- Reference images below of similar typologies-



Character Area 2-

Character Area 2 comprises the housing mostly to the north of the lands. This consists of buff brick with white brick/ rendered projecting bays. Character Area 4 comprises a mix of terraced, semi-detached and detached units.



Fig 2.7 Character area 2- typical elevations



Fig 2.8 View of Street 5, north of Open Space 1

2.9 below- Reference images below of similar typologies



2.10- Character Area 1 and 2 interface below-



Character Area 3-

Character Area 3 consists of a series of apartment blocks and terraces of duplex units located along the curvature of the link road.



Fig 2.11 Apartment blocks 1 and 2 below located at the new junction of the Kilcock Road and Link Road, are intended to act as a gateway into Clane. The palette of materials consists of a mix of buff brick with white brick/ render and stone details.



Fig 2.12 View of Apartment Blocks 1 and 2 from the roundabout at the junction of the link road and Kilcock Road looking south



Fig 2.13 Apartment Block 3 is situated at the southern end of the Link Road, using the same palette of materials.



Fig 2.14 The duplex blocks form a frontage along the western side of the Link Road facing Apartment Block 3 adjacent to the crèche block.



Fig 2.15 View looking south along Link Road showing housing of character areas 1 and 2 on the left and duplexes in the distance on the right

2.7 Layout

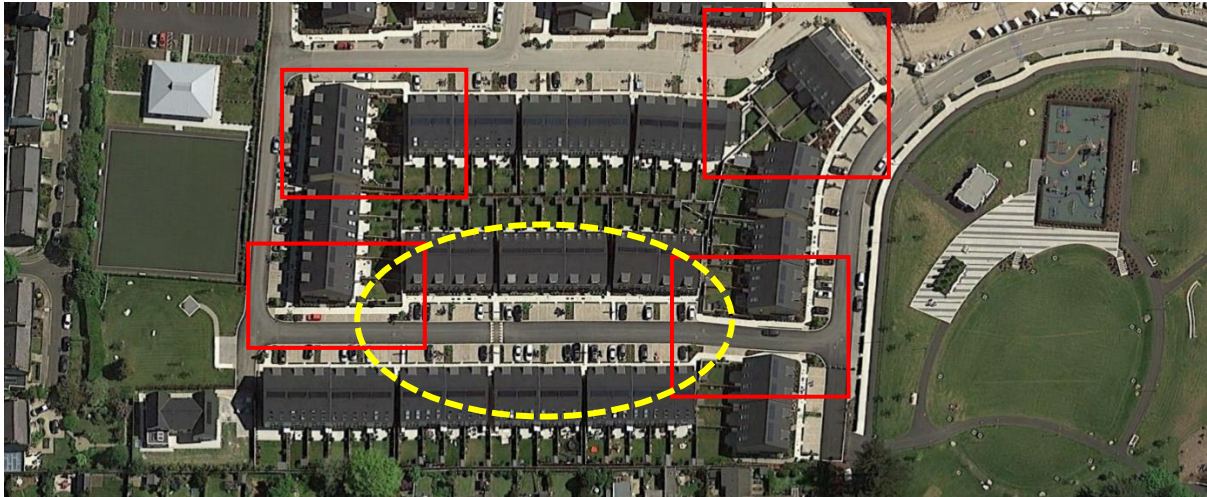
How does the proposal create people friendly streets and spaces?

The layout forms a distinctive sense of place through the following devices-

The creation of distinctive character areas to create a sense of place and orientation.

The creation of a hierarchy of open spaces and pocket parks all connected and easily accessible by foot or bicycle.

Corner sites that have specialty designed house types that provide an active frontage and passive supervision on two outward looking facades.



Figs 2.16/ 2.17 Design Reference- Dual fronted "gateway" housing at street corners facing open spaces- Cualanor, Dun Laoghaire, above and Pakside, below.



Secondary streets and home zones serving the more intimate housing areas and clusters. These streets are smaller in scale and incorporate tree species and landscaping different from the primary streets.

Housing clusters are carefully considered and respond to their context. The house facades overlooking, supervising and defining the edges of streets and public landscaped areas.

Gardens back onto rear gardens of existing adjoining properties providing legible urban blocks, eliminating previously exposed unsupervised rear walls and boundaries and clearly defining passively supervised public and private realm.

Careful consideration has been given to the layout of the streetscapes in relation to the termination of vistas within the development. Houses and duplexes have been centred on certain streets to provide such terminations, for example-

Fig 2.18 Duplex block centred on Street 2, one of the main entry points into the development below-



Fig 2.19 House nos. 14.13 and 14.15 centred on the termination of Street 15, below-



2.8 Public Realm

How safe, secure and enjoyable are the public areas?

Landmarking and progression through the development through the public realm is defined by hard and soft landscaping. Movement through the scheme is marked by distinctive pocket & linear parks of varying size and configuration each serving the 3 residential character areas.

All public realm areas will be landscaped to a high standard in a combined hard/soft landscaped plan.

Car parking has been provided within the landscaped curtilage of the majority of houses in configuration so as to avoid a car dominated streetscape.

All public areas proposed are clearly defined by facades, providing clarity between public and private realm, ensuring full passive surveillance and a safe environment for residents. The use of screen walls have been minimised



Fig 2.20 above- Open Spaces are distributed around the scheme, taking advantage of existing mature trees and hedgerows. The plan above shows the network of the public open spaces and pedestrian connections



Fig 2.21 Above, Open Spaces 1 and 4 above at the heart of the development- Many of the pedestrian routes converge on these. Fig 2.22 Below, Open Space 2 focussed on the existing hedgerow line, connected both visually and physically to Open Space 6 to the north, which provides for a play area and is bounded and fully supervised by housing.



2.9 Adaptability

How will the buildings cope with change?

All house types are designed to meet the requirements 'Quality Housing for Sustainable Communities' (2007) and apartments in accordance with 'Design Standards for New Apartments- Guidelines for Planning Authorities' 2018 and in many instances more generous internal spaces are proposed to increase the quality of the unit types.

The buildings will be constructed of traditional construction, heavily insulated with internal layouts that can be easily adapted in the future. There is also potential for future expansion into the roof spaces of certain dwellings or into the rear gardens which have been generously sized in some cases.

The houses will be constructed to current building regulation standards delivering a minimum A3 energy rating.

2.10 Privacy and Amenity

How does the scheme provide a decent standard of amenity?

Each residential unit proposed in this scheme is served by an exclusive area of private open space in accordance with Table 17.5 Private Open Space Requirements for Dwelling Houses of the County Development Plan extract below. Each area is set out in the Housing Quality Assessment document accompanying this application.

Unit Type (House)	Floor Area
Two Bedroom	55 m ²
Three Bedroom	60 m ²
Four Bedroom or more	75m ²

Formal planting and on curtilage parking areas are provided to the front of the dwellings proposed creating a defensible space between the public road and the built edge.

Wide fronted house types are provided with bedrooms orientated to the front of the house to prevent overlooking of private rear gardens.

Internal storage is provided in accordance with-

Table 17.4 Minimum Floor Area and Storage Requirements for Dwelling Houses of the County Development Plan-

Unit Type (House)	Floor Area	Storage Area
Two Bedroom	85 ²	6m ²
Three Bedroom	100 m ²	9m ²
Four Bedroom	110m ²	10m ²

2.11 Parking

How will the parking be secure and attractive?

All 184 houses are provided with 2 no. on curtilage car parking spaces. The apartments and duplexes are provided with on street parking in close proximity to the blocks.

All car parking spaces are located to the front of each dwelling and these together with grouped parking areas are fully supervised.

2.12 Detailed Design

How well thought through is the building and landscape design?

The proposed houses predominately two storeys, and the apartment/ duplex blocks are three and four storeys, all built of traditional construction. There is a mix of elevation treatments to create distinct character areas and visual interest within the development. The housing layout proposed ensures that dwellings relate appropriately to each other in terms of scale, access and detailed design as well as the wider context.

The units in the duplex blocks have dual or triple aspect with the roof terraces orientated toward the south/ west sunlight where possible and/ or overlooking adjacent areas of public open space.

The units in apartment blocks 1, 2 and 3 are mostly dual aspect. These along with single aspect units are identified in the HQA accompanying this application as well as the orientation of the single aspect units. These face east, south or west. Also in order to maximise natural light into the apartments and duplexes, large, full height glazing is proposed for all habitable rooms.

As with the public realm areas, the proposed houses will be finished to a high standard in materials suitable for the context/location of the scheme. Walls will be finished to a high standard in materials suitable for the context/location of the scheme.

Walls will be finished in selected brickwork to public areas and exposed gables and coloured render with traditional tiled pitched roofs. The 3 character areas offer variations on the brickwork and render combinations. The colour palette chosen will be sympathetic to the existing residential properties adjacent the development.

Car parking forms an integral part of the public realm and will be understated so as not to dominate as previously mentioned.

Where bin stores are required to mid-terrace housing it is proposed to locate them to the front of the dwellings for ease of access. Care has been taken to integrate bin storage into the defensible areas of each terraced dwelling. These will be built from matching brick and the openings & lid will be clad from hardwearing treated timber.

Reference Image-As built example mid terrace bin store- approx. 2 metres depth

Details of the refuse storage serving the mid terrace housing as well as the own-door duplex units are illustrated on drawing no. PL72.

It is proposed that Apartment Blocks 1, 2 and 3 be served by communal bin stores in the form of sheltered enclosures. There is space provided for bins on the basis of 1 1100 litre bin for every 15 bed spaces. These are illustrated on drawing no. PL73.



Communal secure bicycle storage enclosures are distributed around all the apartment blocks and duplex blocks, with 1 cycle space per bed space- also shown on drawing no. PL73.

We refer the Planning Authority to the accompanying architectural plans and site plan that illustrate the general relationship between houses, accessibility, design quality of street and footpaths, permeability between amenities, passive surveillance of the public realm. This results in a housing scheme that is well connected and integrated with its built and natural surroundings, and which has been designed to be attractive and safe for residents and members of the existing community.

SECTION 3- Consideration of Alternatives

3.1 Introduction

The scheme proposed has undergone rigorous appraisal and through a number of changes as part of the design development process, while taking into account the parameters of the local area plan and other statutory requirements.

The scheme being submitted takes cognisance of the opinion received from An Bord Pleanála (case reference no. ABP-302840-18) dated 12th December 2018 following the pre-application consultation meeting held on 30th November 2018.

Set out below is the design development and earlier iteration of the scheme that illustrates the evolution of the concept to this final stage.

Early studies of the site set the basis of locating the principal open space areas and street network. For example, Fig 3.1, below, an early study below set out how to reconcile the irregular nature of the site in terms of various ownerships as well as the link road alignment with the creation of a legible street pattern and principal open space. This layout would be refined during the detail design process- especially as other parcels of the site came into the applicant's ownership and more information regarding the retention of particular trees became available, which would increase the area of open space 1.



3.2 Iteration 1

Iteration 1 shown rotated overleaf is the scheme submitted to An Bord Pleanála, which was the subject of the opinion issued dated 30th November 2018.

The layout comprises 322 no. dwellings consisting of-

- 8 no. 1 bedroom apartments
- 8 no. 2 bedroom apartments
- 50 no. 2 bedroom own door apartments
- 50 no. 3 bedroom own door duplexes
- 108 no. 3 bedroom houses
- 86 no. 4 bedroom houses
- 12 no. 5 bedroom houses

The link road is shown connecting the Kilcock Road R407 to the north west of the lands to the Celbridge Road R403 to the south east.

A series of open spaces are set out, the principal space in the centre of the scheme between character areas 1 and 2, with a line of hedgerow defining the western side of this opens space and a duplex block.

The second open space is located along the link road encompassing a number of existing trees along a hedgerow line.

Fig 3.2 Site Layout as originally submitted overleaf



3.3 Iteration 2

The second and final iteration responds to the opinion received from An Bord Pleanála (case reference no. ABP-302840-18) dated 12th December 2018 following the pre-application consultation meeting held on 30th November 2018.

The proposed site plan can be seen on the last page of this report.

The response to Opinion of An Bord Pleanála in terms of architectural-related items are set out as follows-

Item 1 in the Board’s opinion states: *‘Further considerations of the documents as they relate to the density proposed in the proposed development. This consideration and justification should have regard to, inter alia, the minimum densities provided for in the ‘Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas’ (May 2009) in relation to such outer suburban/ green field sites.*

Particular regard should be had to need to develop at a sufficiently high density to provide for an acceptable efficiency in serviceable land usage given the proximity of the site to Clane town centre, with its established social and community services. The further consideration of the issues may require an amendment to the documents and/or design proposals submitted.’

To achieve increased density appropriate for the subject site, further apartment units have been introduced within the scheme. These units comprise a mix of own-door access (3 no. semi-detached units consisting of 4 no. 1 bedroom own door apartments, and 6 blocks consisting of 3 bedroom own-door duplex units over a ground floor own-door 2 bedroom apartment unit) and 3 apartment blocks of three and four stories consisting of a mix of 1 and 2 bedroom units. This has resulted in greater variation of in the range of unit types and sizes, which also includes units appropriate for the purposes of Part V provision, following detailed consultation with the local authority. The change of mix and quantum of units is summarised in the table below-

Dwelling Type	Quantity at Pre-planning stage	Change in Quantity following pre-planning consultation	Resulting Total of Current Proposed Development	Resulting % of overall mix
2 bedroom house	0	+20	20	5.5%
3 bedroom house	108	(-33)	75	20.5%
4 bedroom house	86	(-9)	77	21%
5 bedroom house	12		12	3.3%
Total Houses	206	(-22)	184	50.3%
1 bedroom own-door apartment	0	+12	12	3.3%
2 bedroom own-door apartment	50	(-14)	36	9.8%
3 bedroom own-door duplex	50	(-14)	36	9.8%
1 bedroom apartment	8	+8	16	4.4
2 bedroom apartment	8	+74	82	22.4
Total Apartments/ Duplexes	116	+66	182	49.7%
Overall Total	322	+44	366	100%

Fig 3.3 Tracker of Residential Mix Comparison of Proposed Scheme against earlier iteration

Careful consideration has been given to the location of the three storey and four elements in the context of adjoining existing residential development. Most of the height is focussed on the length of the link road, in particular towards its northern and southern ends to providing bookends and an appropriate urban scale. The four storey apartment block at the new junction with the Kilcock Road will create a distinctive landmark gateway to Clane.

Item 2 in the Board's opinion states: *'Further consideration/ justification of the documents as they relate to the layout of proposed development particularly in relation to the 12 criteria set out in the Urban Design Manual which accompanies the above-mentioned guidelines and the Design Manual for Urban Roads and Streets. The matters of arrangement and hierarchy of streets; the creation of a defined urban edge along the new link road; connectivity with adjoining lands; provision of quality, usable open space and the creation of character areas within a high quality scheme should be given further consideration. In addition, further consideration / justification of the documents as they relate to the proposed housing mix, having regard to the proportion of the three bed and larger units within the overall proposed scheme. The further consideration of these issues may require an amendment to the documents and/ or design proposals submitted.'*

The current scheme has been described against the 12 criteria set out in the Urban Design Manual in Chapter 2 of this document, and the change in residential mix has been set out above in Fig 3.2.

As part of the increase in density as described above, the built edge along the Link Road has been augmented to create a more urban environment. Two apartment blocks replace the earlier smaller block and duplex units at the north western entrance into the scheme along the Link Road.



Figs 3.4/ 3.5 Iteration 1, left and current version, right. The 3-4 storey apartment blocks are now focussed on the curvature of the Link Road.

To the south of the scheme, the relationship of the built edge to the Link Road has been reconfigured, again to create a more robust street frontage. The open spaces have been reorganised so that they are mainly behind building frontages.



Fig 3.6- Iteration 1, above and current version, Fig 3.7 below. Three storey apartment block introduced to the eastern side of the Link Road, which is faceted to follow its curvature. The open space (No. 2) has been rotated 90 degrees, which facilitates preservation of more of the existing tree and hedgerow line running east-west. More open space is provide for north of the tree line (Open Space 6). Parking serving the apartment block is located behind the building line. The duplex blocks on the western side have been aligned with the Link Road again with parking and open space to the rear.



The current site plan below (figure 3.7) has been stripped down to illustrate better the street network, hierarchy and pedestrian linkages that the scheme facilitates.

Vehicular access to the internal street network is accessed from 4 points illustrated by light blue arrows.

Apartment Blocks 1 and 2 have their own independent access to serve the associated parking.

Streets 2 to 16 inclusive are served by 2 points of access and the duplexes and crèche on the western side of the link road has one point of access (Street 17).

The site plan illustrates the hierarchy of the street network by colour-

The purple being the link road.

The red being a 5.5m link street and the turquoise streets, which are spurs from the link street being homezone areas. These home zones are typically cul de sacs for vehicles, but provide links for pedestrians and cyclists to adjoining roads and to the link road itself.

It should also be pointed out that where cul de sacs occur against the ownership boundary, the street runs right up to the boundary and eliminates any potential for so called ransom strips. These can then serve to facilitate future connections should adjoining lands be developed.

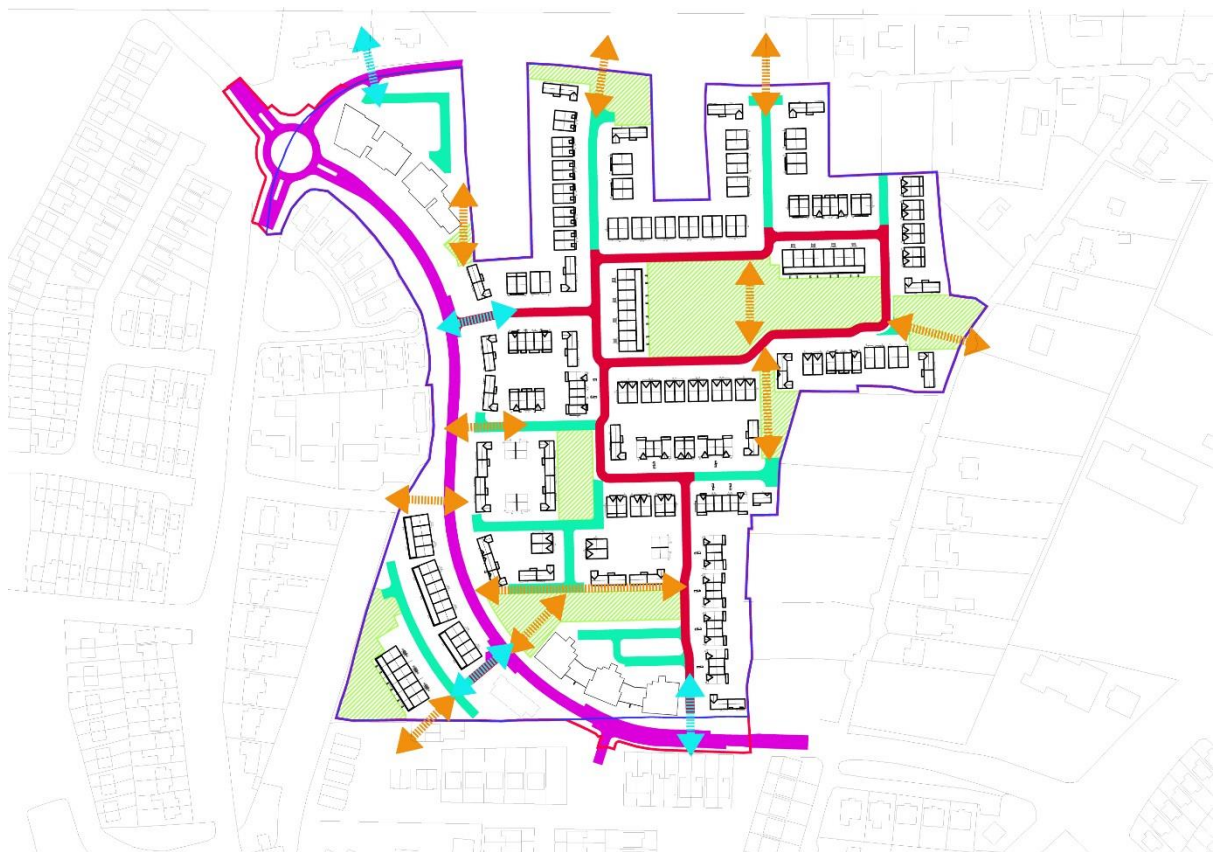


Fig 3.8 Street Network, Hierarchy and Connections

The following series of cross sections below illustrate the relationship between the built edge and the Link Road and is cognisant of-

- The varying height differential resulting from the design of the road through the existing topography
- The need to create a sense of place, enclosure and height along the road given its width, and the poor urban edge created along the rear of adjoin residential development.

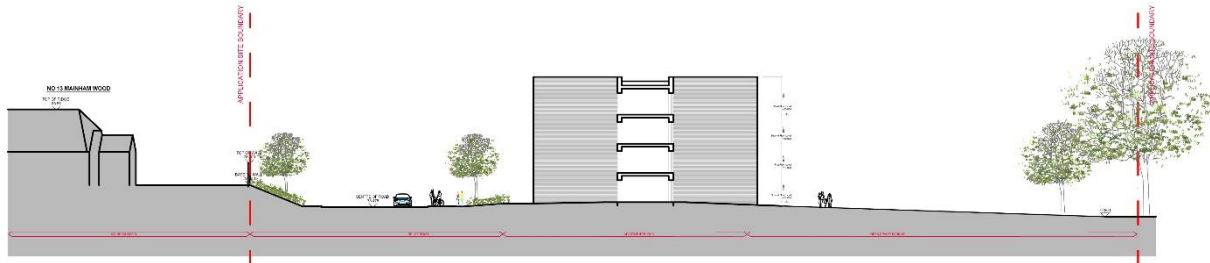


Fig 3.9 Cross Section through Apartment Block 1 and Link Road. Nearby housing in Mainham Wood shown in context

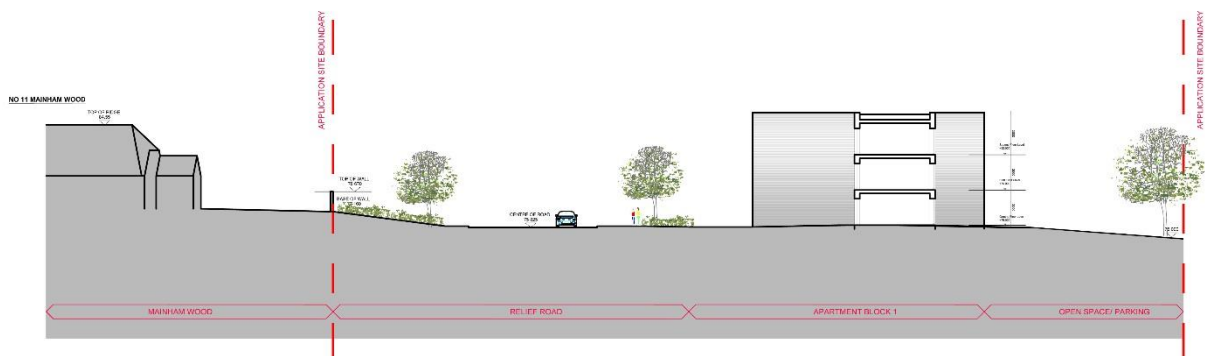


Fig 3.10 Cross Section through Apartment Block 2 and Link Road. Nearby housing in Mainham Wood shown in context

The eastern edge of the link road from Street 2 southward to Street 13 is bounded by house types C and D. These are 2 storeys in height and are located on what is to become an embankment created by the cut required to construct the link road. The level difference varies here between 600mm and 1.5 metres. All parking associated with these houses fronting the Link Road is situated on the side streets (Streets 2, 11, 12 and 13), ensuring that these house types are set back 2 metres from the footpath providing access.

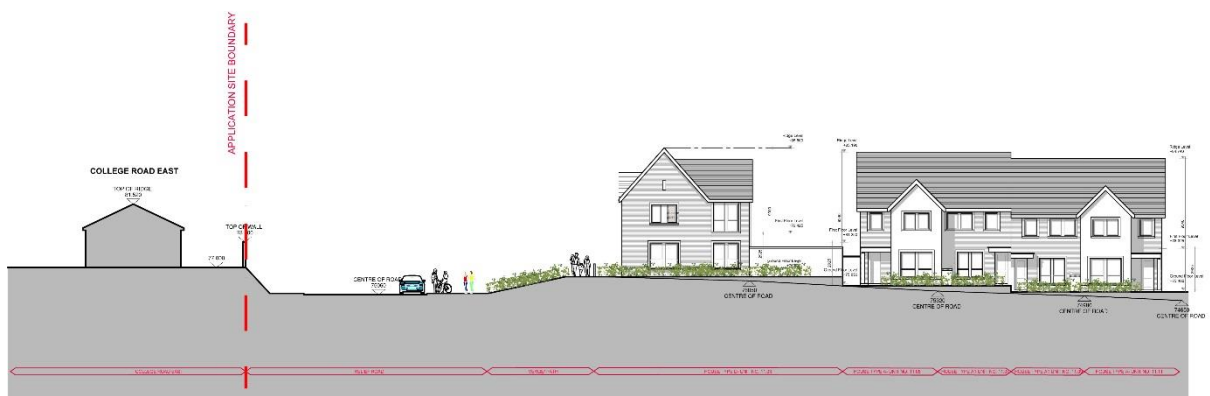


Fig 3.11 Cross Section through link road at Street 11. House on College Road East to the left. Note that the frontage along the eastern section of the link Road consists of rear boundary walls.

The outer curvature of the link road is bounded at the south east corner by three duplex blocks each 3 storeys in height set out in line with the outer curve.



Fig 3.12 Cross Section through Duplex Nos. 17.19 on left and Link Road. House No. 13.10 is on the opposite right hand side, with the retained line of existing trees/ hedgerow in the foreground.

Apartment Block 3 is 2-3 storeys in height and is located toward the southern end of the site. Each of the blocks are faceted to follow the curvature of the link road and maintain a strong urban edge. These blocks essentially bookend the entry point into the development lands at either end of the link road.

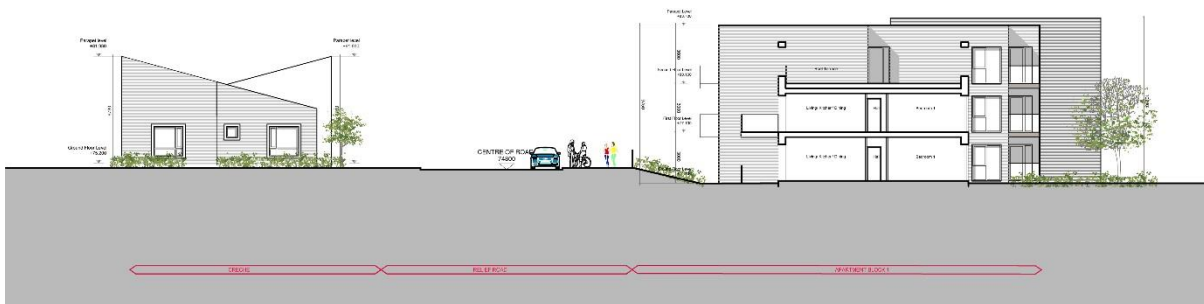


Fig 3.13 Cross Section through Apartment Block 3 and Link Road. Creche on opposite (western) side of link road shown in context. Section is taken through the 2 storey element of Block 3

