4. CONSIDERATION OF ALTERNATIVES

This Chapter provides 'an outline of the main alternatives studied by the developer and an indication of the main reasons for his or her choice, taking into account the effects on the environment' as required by Schedule 6 of the Planning and Development Regulations, 2001-2015.

The preparation of this Chapter has had regard to the Revised Guidelines on the Information to be Contained in Environmental Impact Statements (Draft), September 2015 and the Advice Notice for Preparing Environmental Impact Statements (Draft), September 2015. Regard was also had to the previous EPA Guidance, to the European Commission Impact Assessment Guidelines, 2009, and the new EIA Directive 2014/52/EU, which states that information for the Environmental Impact Assessment Report should include:

'a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer.'

The Guidelines note that alternatives may be described at a number of levels (alternative locations, layouts, designs and processes) and reference that specific site issues may also be a factor in the examination of alternatives, including the need for the project to accommodate site-specific demands or opportunities.

The principle rationale for the development proposal is outlined in this section, including consideration of effects on the environment and related planning and development matters of alternative options considered.

4.1 Rationale for Proposed Development

Since the economic collapse in 2008, very low levels of housing have been constructed, especially in the main cities and urban areas where they have continued to be needed. The recovery of the economy and increasing population and employment is resulting in a significant increase in demand for new homes to support a growing and working economy, and to address the significant level of social housing need. Under-provision of housing is one of the last significant legacies of the economic downturn to be tackled. Accelerating delivery of housing for the private, social and rented sectors is a key priority for the Government.

Construction 2020 - A Strategy for a Renewed Construction Sector and the *Social Housing Strategy 2020*, both of which were published in 2014, contain measures to address issues and constraints in the construction and development sectors and in the provision of a range of social housing outcomes respectively. The Governments *Action Plan for Housing and Homelessness, Rebuilding Ireland*, July 2016 seeks to ramp up the delivery of housing from its current under-supply across all tenures to help individuals and families meet their housing needs.

The proposed development provides for the delivery of high-quality residential development on available, serviced and appropriately zoned lands, which will contribute towards Clane fulfilling its role as a Small Town as designated under the Kildare County Development Plan 2017-2023. The application site has been specifically designated under the Clane Local Area Plan 2017-2023 as a Key Development Area (KDA), which is to be prioritised over the lifetime of the Plan in order to meet the housing allocation. The proposed development will have facilitated the sustainable growth of Clane in a coherent, plan-led, manner; protecting

and maximising opportunities presented by the unique natural and built environment of the town; and delivering an exemplar quality of life for its residents.

4.2 Consideration of Alternatives

4.2.1 Alternative Locations

The lands on which the application is made are zoned for New Residential/Infill in the Clane Local Area Plan, 2017-2023, which was the subject of a Strategic Environmental Assessment (SEA).

The issue of alternatives is a critical function of the Strategic Environmental Assessment (SEA) process and is necessary to evaluate the likely environmental consequences of a range of alternative development strategies for the settlement within the constraints imposed by environmental conditions. In this respect, the SEA for the Clane LAP 2017-2023 considered alternatives at an early stage of the process and through an iterative process with the Local Area Plan, SEA and AA teams; the most appropriate scenario was selected.

The preferred strategy of the SEA provided for adopting the 'New Residential/Infill' zoning of the site. Section 7.6 of the SEA outlined that 'this approach would meet a large number of policies and objectives of the LAP as it supports the consolidation of the town centre by encouraging the development of vacant and underutilised sites whilst including infrastructural improvements...Alternative 1 would support the intensification of the town centre of Clane and reinforce its urban core.'

The development of the lands for residential use is also consistent with the detailed advice contained in the Key Development Area (KDA) criteria within the LAP, and as such, represents a plan-led development.

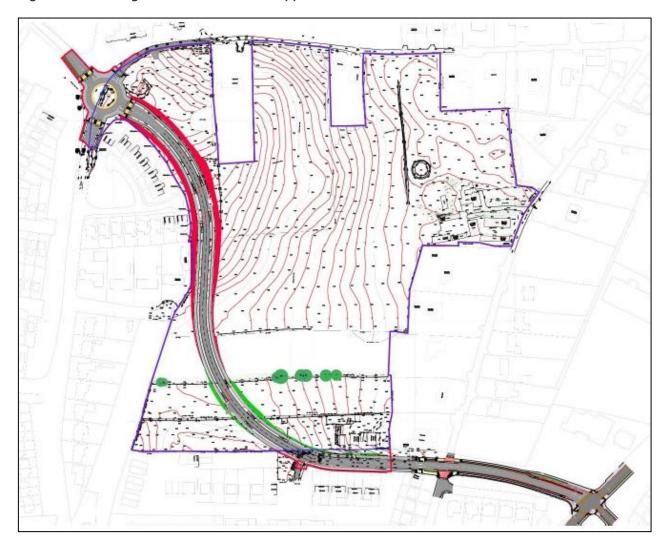
The site provides opportunities for the coherent integration, consolidation and sustainable development of the established urban area of Clane as designated in the LAP, and provides opportunities for improved permeability in the area. The site and proposed development provide significant opportunities to deliver a substantial quantum of housing in the form of a sustainable urban extension to Clane town and thereby contribute in a sustainable manner to meet strategic planning objectives at a local and regional level.

On the basis of the foregoing, no alternative sites were considered or assessed for the purposes of preparing this EIS, nor is it considered necessary to do so.

4.2.2 Alternative Layouts & Designs

A number of alternative layouts for the proposed development were considered over the design process. In addition, the proposals for the development were subject to detailed discussion with the Planning Authority prior to the principles of the proposed layout being finalised.

The alignment of the link road, as provided for in the Clane LAP and the approved Part 8, is a principal driver of the design concept and overall layout. The curvature of the route of the link road creates two distinct development parcels, the larger being to the east and north and the smaller to the southwest.





The significant environmental issues and potential effects which informed the proposed layout included protection of natural features and biodiversity, landscape and visual impact and impact on amenity of adjoining properties. Other factors which were fundamental to informing and directing detailed design included the design brief established under KDA2 in the Clane Local Area Plan.

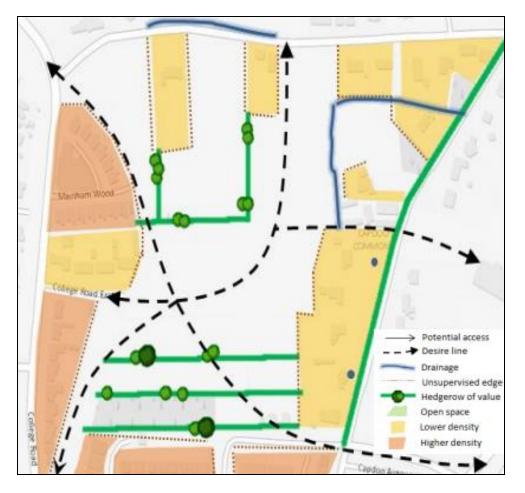


Figure 4.2 Design Principles established under Clane Local Area Plan for KDA2

In this respect, the design team considered a number of options in terms of overall layout as follows:

Initial Design Proposals

Early studies of the site set the basis of locating the principal open space areas and street network. For example, Fig 4.3, below, an early study 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 was further 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.

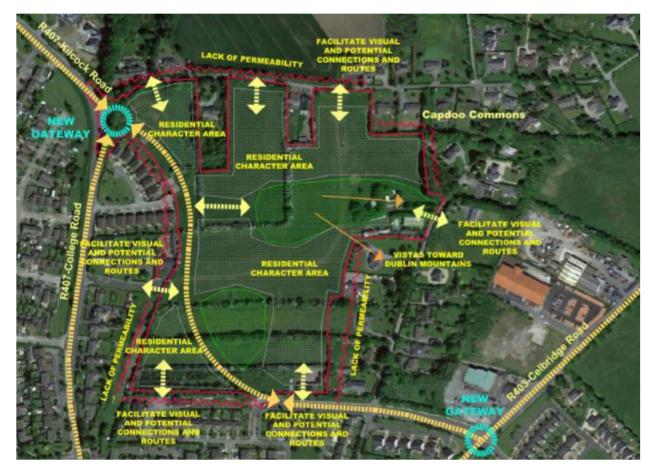


Figure 4.3 Initial Design Proposals

As additional land parcels were added to the overall site, key design principles were extended to the larger site to ensure an appropriate response to the immediate surrounding context. Key considerations which informed the detailed layout are illustrated in Figure 4.4 below.

Further site survey and investigation works established that the north-west corner of the site would need to be serviced separately, both in terms access (via the local road to the north) and waste water services.

4.4 Key Design Considerations

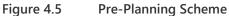


Pre-Planning Scheme

Iteration 4 comprised of the scheme submitted to An Bord Pleanála as part of the pre-planning consultation request. The proposal provided for 322 no. units providing a mixture of 16 no. apartments; 50 no. apartments with 50 no. duplex units above and 206 no. houses.

A series of open spaces were proposed, 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. There was a series of smaller open spaces dispersed throughout the site.





The pre-application consultation opinion from An Bord Pleanála in relation to the proposed strategic housing development states that An Bord Pleanála '*is of the opinion that the documents submitted with the request to enter into consultations require further consideration and amendment to constitute a reasonable basis for an application for strategic housing development*'. The option further identifies specific issues which need to be addressed in the documents submitted in order for them to constitute a reasonable basis for an application for strategic housing development. The issues listed included the following:

- Increasing Residential Density
- Arrangement & hierarchy of streets
- Creation of a defined urban edge alone the Link Road;
- Connectivity with adjoining land s
- Provision of quality useable open space
- Housing mix

Preferred Option

For the purposes of the alternatives section of the EIAR the following summarises the key changes to the proposed scheme.

- Total number of units have been increased from 322 no. dwellings to 366 no. dwelling by increasing the number of apartments and duplex units proposed, principally along the Link Street.
- The introduction of apartments and duplex units results in greater variation in unit types and sizes and to assist in creating a sense of enclosure along the proposed Link Street.
- Further consideration of the location of three and four storey elements towards the northern and southern end of the link road provide bookends of an appropriate scale while protecting residential amenity.
- Open green spaces have been rationalised to provide a larger central pocket park (Open Space 6) and reoriented/relocated to avoid long stretches along the Link Road (Open Space 2 and 3).



Figure 4.6 Preferred Option

4.2.3 Alternative Mitigation Measures

The mitigation measures outlined in this EIS, where appropriate, have been developed by competent experts relevant to the aspect of the environment under consideration and represent best practice with a view to avoiding or otherwise minimising potential impacts on the environment.

There are no predicted residual impacts once mitigation measures have been successfully applied and as such, alternative mitigation is not considered necessary.

4.2.4 "Do Nothing" Alternative

A 'do-nothing' scenario is considered an inappropriate and unsustainable approach that would result in the inefficient use of a strategically located and serviced landbank of zoned residential lands. A 'do nothing' scenario would also frustrate the delivery of the strategic planning objectives for the area and the region.

With the mitigation measures proposed in this EIS, and having regard to the findings that no significant effects on the environment are expected with such measures in place, the comparative environmental impacts are not considered sufficient to rule out proceeding with the proposed development.

4.3 Conclusion

The proposed development provides for new residential development on lands zoned for residential use within the Clane LAP 2017-2023, which was itself subject to the SEA process. As such, consideration of alternative sites for the construction of houses and apartments proposed in this residential development proposal was not considered necessary.

During the design process, the layout and design of the proposed development evolved in response to architectural, landscape and environmental requirements and several iterations of the site layout and alternative designs were considered. Any difficulties from an architectural, landscape or environmental viewpoint were assessed and, where necessary, the design was amended to address the issues encountered.

The evolution of the current scheme was informed by consideration of a number of environment aspects; vehicular and pedestrian movements; maximisation of pedestrian connectivity through the site; protection of adjoining residential amenity and retention of existing mature trees. Furthermore, the final scheme has been directly influenced by the specific issues raised in the Board's Opinion.