



brian connolly associates
CONSULTING ENGINEERS

***THIS PROJECT CONSISTS OF AN APPLICATION FOR A STRATEGIC HOUSING DEVELOPMENT BY WESTAR INVESTMENTS LIMITED (THE APPLICANT) FOR A NEW RESIDENTIAL DEVELOPMENT ON LANDS MEASURING APPROXIMATELY 10.36 HECTARES AT CAPDOO & ABBEYLANDS, CELBRIDGE ROAD, CLANE, CO. KILDARE. THE APPLICATION IS FOR A DEVELOPMENT THAT INCLUDES 333 DWELLINGS CONSISTING OF:
121 NO. 2, 3 & 4 BEDROOM HOUSING UNITS,
144 NO. 1, 2 & 3 BEDROOM APARTMENTS,
68 NO. 1, 2 & 3 BEDROOM DUPLEX & MAISONETTE TYPE UNITS,
A CRÈCHE AND A PUBLIC PARK ADJACENT TO THE RIVER LIFFEY WITH 3 NO. VEHICULAR/PEDESTRIAN ACCESSES AND SITE, LANDSCAPING AND ASSOCIATED INFRASTRUCTURAL WORKS.
THE SUBJECT SITE IS SITUATED ON THE EASTERN SIDE OF REGIONAL ROAD R403 IN THE EASTERN ENVIRONS OF CLANE TOWN, C. 650M FROM THE TOWN CENTRE'***

**STATEMENT OF
CONSISTENCY WITH
DMURS**

November 2020

1.0 INTRODUCTION

The Design Manual for Urban Roads and Streets (DMURS), 2013 sets out design guidance and standards for constructing new and reconfiguring existing urban roads and streets in Ireland. It also outlines practical design measures to encourage more sustainable travel patterns in urban areas. It is BCA's opinion that the proposed development is consistent with both the principles and guidance outlined within the DMURS. The scheme proposals are the outcome of an integrated design approach that incorporates traditional road design along with elements of urban design and landscaping to create lower traffic speeds and thereby facilitate a safer road environment for pedestrians and cyclists. BCA along with the rest of the design team have interrogated the DMURS principles to ensure that the final layout provides for a package of self-regulating design measures providing a high quality urban extension in proximity to Clane Town Centre.

The proposals incorporate a hierarchy of internal streets which are firmly set within the context of the local Clane environment. The existing road network in Clane includes Arterial links such as the R403 and R407. Local streets bordering the site will provide the connections between the proposed development, the regional roads, the local neighborhood centres and community facilities. In contrast, the internal road network within the site has been designed to deliver a hierarchy of link and local streets that provide appropriate access within / across the proposed new residential communities and the road network external to the site.

The movement function and design of each internal street network has sought to respect the different levels of motorized traffic whilst optimizing access to/from public transport and prioritizing the movement of higher number of pedestrians and cyclists. In parallel the adopted DMURS design philosophy has sought to consider the context / place status of each residential local street in terms of level of connectivity provided, quality of the proposed design, level of pedestrian / cyclists activity and vulnerable users requirements whilst identifying appropriate "transition" solution between different street types.



Figure 1. Street Typology.

The street layout was derived from several factors which include the shape of the site, boundary conditions, internal hedgerows and Clane Local Area Plan, see Figure 2 below. This has led to the creation of a street network comprising of elements of orthogonal and organic layout in specific areas.

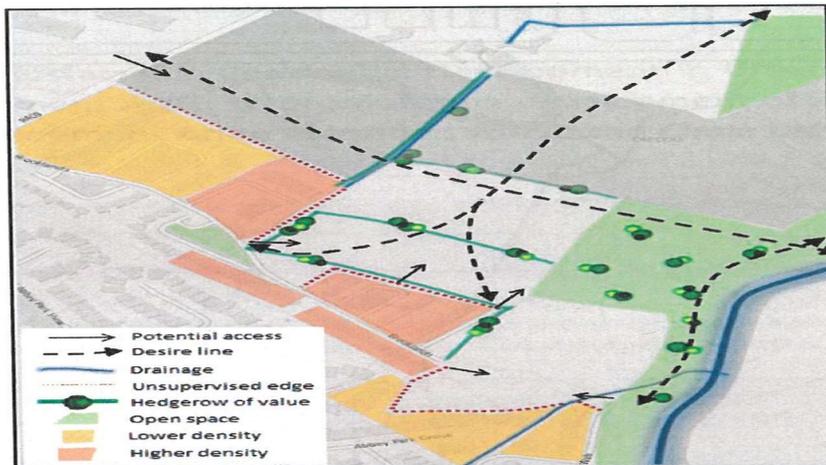


Figure 12.2(b): KDA 1 Analysis Map

Figure 2. (figure 12.2(b):KDA1 Analysis Map).

As part of the design and development of the street network, cycle and pedestrian linkages were prioritized around the development to link existing developments. Below is a table of the proposed external linkages which could be facilitated by the development.

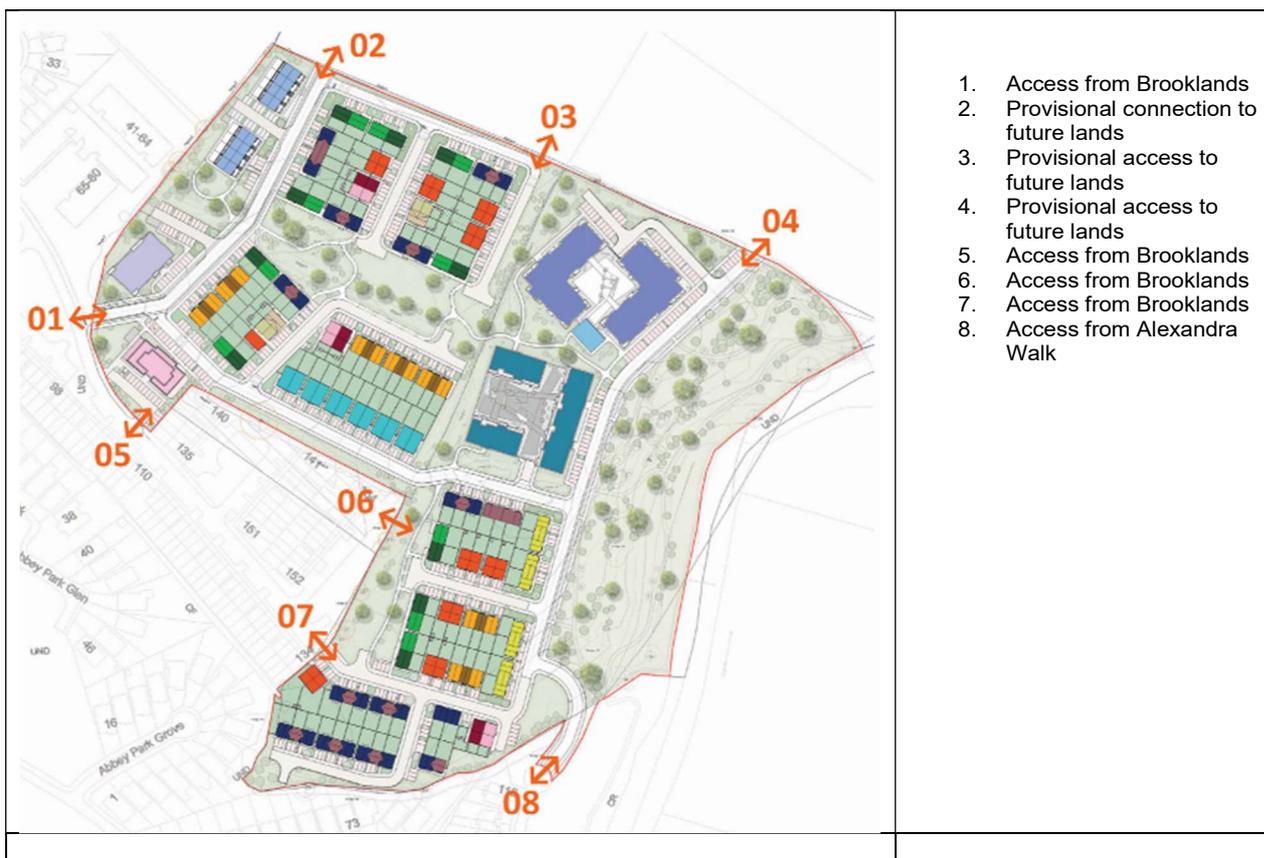


Figure 3.

The linkages detailed above demonstrate that permeability has been considered from an early stage in the design and all links that can be provided by the applicant has been accommodated.

Design Parameters and Development Compliance

Reference	Relevant policy / Principle / Guideline	Statement of Consistency
Integrated Street Networks	<ul style="list-style-type: none"> Does the development create connected centres that prioritise pedestrian movement and access to public transport? 	<p>Yes - good quality network of footpaths and shared cycle-ways within the proposed layout. Strong links to existing footpaths and bus routes on Dublin Road via Brooklands</p> <p>New dedicated cycle paths along the entrance road and the Liffey linear Park</p>
Movement and Place	<ul style="list-style-type: none"> Does the development create a legible street hierarchy that is appropriate to its context? Are the proposed streets connected, maximizing the number of walkable / cycle routes between streets as well as specific destinations (i.e. community centre, shops, crèche, schools etc.)? 	<p>Yes – the street hierarchy for the proposed development is as follows:</p> <p>A main spine road from Brooklands running from South to North to future development lands with local roads connecting to residential character areas.</p> <p>Pedestrian cycle routes providing for strong permeability to public footpaths / cycle-ways and to provide for easy access towards the town and amenities accessed from both Dublin Road and Alexandra Walk (Schools; Hotel, Supermarket and Primary Healthcare Centre)</p>
Permeability and Legibility	<ul style="list-style-type: none"> Has the street layout been well considered to maximize permeability for pedestrians and cyclists? Are the streets legible with maximum connection opportunities? Are blocks of a reasonable size and permeability, with consideration to the site constraints? 	<p>Yes – Layout provides for safe and permeable pedestrian / cycle routes facilitating connection within the proposed development and to external amenities.</p>
Management	<ul style="list-style-type: none"> Is the layout designed to self-regulate vehicle speeds and traffic congestion? Does the proposed layout minimize noise / air pollution wherever possible? 	<p>Yes – Layout designed to naturally calm traffic and ensure low driving speeds within the development, minimizing noise and air pollution.</p> <p>The frequent number of junctions promote slow driving and increase the level of caution of drivers.</p>
Movement, Place and Speed	<ul style="list-style-type: none"> Does the proposed development balance speed management with the values of place and reasonable expectations of appropriate speed? Does the design promote a reasonable balance of both physical and psychological measures to regulate speed? 	<p>Yes – layout and proposed road finishes are designed to regulate speed within the development in accordance with DMURS Table 4-1.</p> <p>Psychological and physical measures have been adopted in the layout to balance the functional needs of different users. Frequent crossing points and junctions, horizontal deflections, tighter corner radii and shared surfaces have been adopted to reduce speeds within the proposed development. In addition, the use of street trees along the main link road can also provide a traffic calming effect.</p>
Streetscape	<ul style="list-style-type: none"> Does the scheme create an appropriate sense of enclosure in addition to a strong urban / suburban structure? Has street trees and areas of planting been provided where appropriate? Has active street edges been provided where appropriate? Is a palette of high quality surface materials and finishes provided? 	<p>The proposed scheme provides a strong urban structure, with 2 main character areas. Streets and open spaces are well overlooked and landscaped to promote a sense of enclosure and provide active streetscapes.</p> <p>The palette of materials and finishes will provide a clear demarcation between public and private spaces and emphasise pedestrian / cycle zones.</p>
Pedestrian and Cyclist Environment	<ul style="list-style-type: none"> Are footways of appropriate width provided so as to ensure pedestrian safety? Are verges provided adjacent to larger roadways so as to provide a buffer between vehicular routes and pedestrian paths? Have pedestrian crossings, whether controlled or uncontrolled, been provided at appropriate locations? 	<p>Yes – the proposed footpaths are 2.0m wide in compliance with Figure 4.34 of DMURS recommended minimum space for two people to pass comfortably for areas of low pedestrian activity.</p> <p>A landscaped verge is provided between the footpath and road along the main spine route including street trees which act as a buffer.</p>

	<ul style="list-style-type: none"> • Are shared surfaces located appropriately in areas where an extension of the pedestrian domain is required? • Have cycle facilities been factored into design? 	<p>Raised tables are provided for pedestrian crossing</p> <p>Shared surfaces have been located on local streets opening onto green open spaces to promote more livable streets. Reduced corner radii and carriage widths promote lower speed on the shared surfaces.</p>
<p>Carraigeway Conditions</p>	<ul style="list-style-type: none"> • Are vehicular carriageways sized appropriately for their function / location? • Are surface materials appropriate to their application in order to inform drivers of the expected driving conditions? • Are junctions designed to balance traffic concerns with the needs of pedestrians / cyclists? • Have adequate parking / loading areas been provided? 	<p>Yes – No distributor roads are proposed through the development. The main spine link roads to continue to Strategic Reserve lands will be 6m wide due to lower design speeds being applied and only occasional access required for larger vehicles with a designated footpath and cycle track on at least one side. Local streets off the main spine link roads will be 5.5m wide with additional room to allow for perpendicular parking included within the parking bay.</p> <p>A change of surface materials will inform drivers of a change in the hierarchy and notify drivers of shared surfaces.</p> <p>Corner radii have been reduced at junctions in conjunction with raised speed tables to reduce speeds and address the needs of pedestrians and cyclists crossing the junctions.</p>