



STRATEGIC HOUSING DEVELOPMENT (SHD) APPLICATION	
Document Title:	Statement of Consistency “Traffic and Transportation and Associated Infrastructure” ‘DMURS Compliance’
Application Location:	Cloghroe, Cork.
Applicant:	Cloghroe Development Ltd
ABP Ref. No.	N/A
Date:	27/01/2022
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Please submit a statement on how the proposed development would address traffic and transportation issues, including road infrastructure, traffic generation, pedestrian and cyclist linkages and safety, public transport availability and capacity, and where applicable, issues regarding scoping of a Traffic / Transportation Impact Assessment

Road Infrastructure:

A detailed Traffic & Transport Assessment (TTA) has been prepared to consider the impact of the proposed development on the local road infrastructure. The TTA report incorporates traffic modelling of the local road junctions. The TTA also references future proposals as per CMATS (Cork Metropolitan Area Transport Strategy).

Traffic Generation:

Traffic Generation has been compiled for the proposed development using the TRICS software database for which MHL is a licence holder. An assessment of the existing modal shift in the Cloghroe Area was undertaken and a proposed target year increase included in the final traffic modelling figures. The increase in modal shift is predicted to occur in conjunction with the delivery of CMATS related proposals for the area as well as infrastructure provided as part of the development.

TII Project Appraisal Guidelines growth rates were applied for all future year traffic models.

Pedestrian and Cyclist Linkages and Safety:

MHL has undertaken an assessment of pedestrian/cycle connectivity to/from the proposed Cloghroe SHD site. Whilst the pedestrian connectivity from the development site to the village centre of Tower is provided for along an existing footpath on the opposite side of the R617, it was found to afford an inconsistent quality of service along its route with varying footpath widths. Pedestrian connectivity to Cloghroe Stores, the Church and Cloghroe National School is good, with a newly constructed pelican crossing having been recently installed. At present

there is no footpath on the development side of the R617, however, there is an existing hard shoulder which is used as a bus stop for the 215 Service. As part of the SHD, it is proposed to provide public realm works including a 2.0m footpath, 1.0m grass verge, a 2.0m cycle lane and a 3.25m reservation for a possible future bus lane to be provided as part of CMATS (Bus Connects). An off-road bus stop including bus shelter is also being proposed. It is expected that the provision of the above public realm improvement works will urbanise the area, resulting in a reduction in traffic speed in the area which will be a road safety gain.

As part of these improvements, it is proposed to install a new public lighting scheme along the extent of the works.

Figure 1 below outlines the proposed development connectivity along the R617.



Figure 1 - Proposed Pedestrian/Cycle Connectivity Improvement Measures along the R617

The scheme layout facilitates access to and permeability with adjoining land parcels that may be zoned and/or developed for residential use in the future. The proposed layout facilitates access to potential future development of lands to the north and west.

Internally within the development there are multiple pedestrian routes to the different neighbourhoods, utilising off-road green space paths as much as possible. The layout will promote walking and cycling to local facilities such as the school, Golf Club and retail store.



Figure 2 – Overall Site Layout showing Pedestrian Connectivity



Public Transport Availability and Capacity:

The TTA references the proximity of the site to the 215 and 235 Bus Service terminal which is adjacent to the site. The 215 currently operates on a half hour frequency and links to Mahon Point via Blarney and the City Centre. This service is set to be improved as part of CMATS with an increased frequency and will depend on an increased demand along its corridor.

Scoping of the TTA

MHL have consulted with the planning authority in order to agree the scope of the TTA. The scope set out the number of junctions to be modelled and where traffic counts should be undertaken, by independent traffic enumerators.

Traffic counts were undertaken on Tuesday 30th November 2021 for the analysis. With the presence of Covid-19 leading to an general decrease in traffic volumes, it is likely that the traffic survey results are less that what would be present in a normal scenario. To account for this reduction, a growth factor was applied to the traffic surveys undertaken. This growth factor was determined by comparing TII Traffic Data volumes from 2019 (pre-covid) to volumes in 2021. The factored volumes should better represent “normal” traffic volumes as would be typically experienced resulting in a more robust analysis of the traffic network.

Pedestrian connectivity of the site and future potential land requirements were agreed (3.25m reservation for a future Bus Corridor).



Please submit a statement indicating, in the prospective applicant's opinion, the proposal is consistent with the Design Manual for Urban Roads and Streets (Department of Transport, Tourism and Sport & Department of Environment, Community and Local Government, 2013).

- **Introduction**

The stated objective of DMURS is to achieve better street design in urban areas. This will encourage more people to choose to walk, cycle or use public transport by making the experience safer and more pleasant. It will lower traffic speeds, reduce unnecessary car use and create a built environment that promotes healthy lifestyles and responds more sympathetically to the distinctive nature of individual communities and places.

The implementation of DMURS is intended to enhance how we go about our business; enhance how we interact with each other and have a positive impact on our enjoyment of the places to and through which we travel.

- **Creating a Sense of Place**

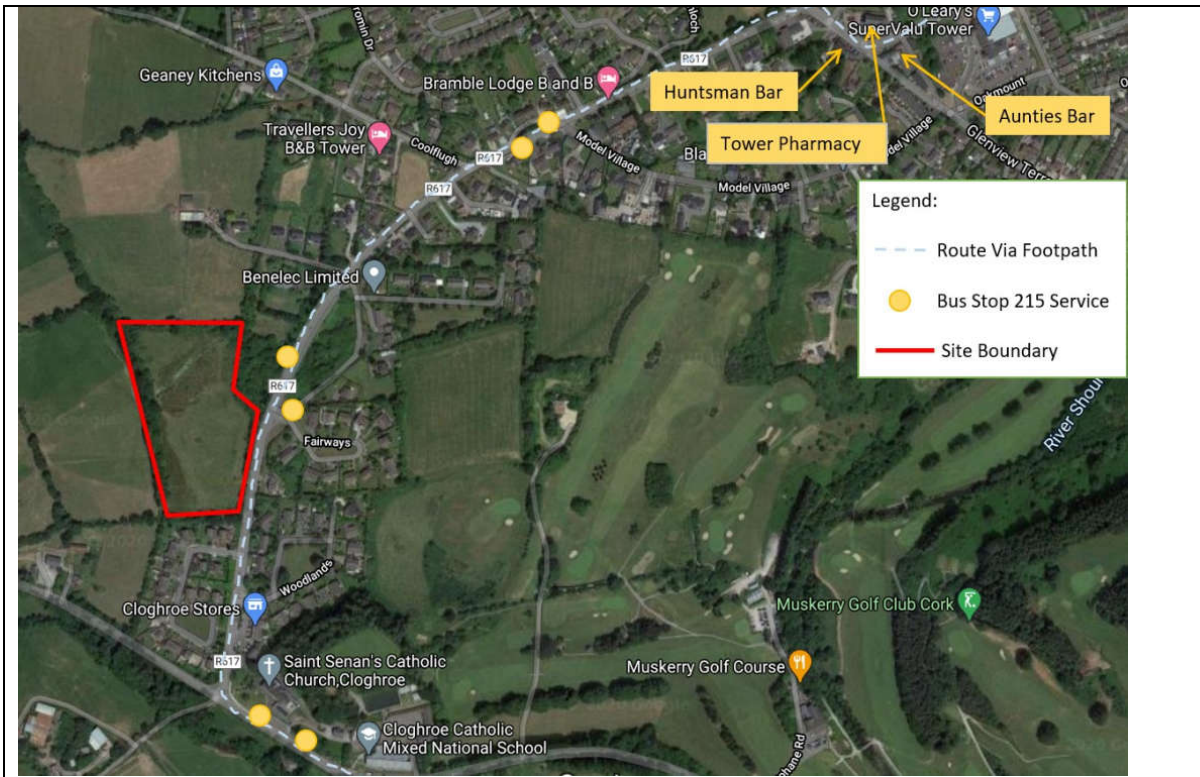
Four characteristics represent the basic measures that should be established in order to create people-friendly streets that facilitate more sustainable neighbourhoods. Each of these characteristics are set out in the sections below together with a commentary setting out how the proposed residential development complies with each of these characteristics.

1. Connectivity

"The creation of vibrant and active places requires pedestrian activity. This in turn requires walkable street networks that can be easily navigated and are well connected." In order of importance, DMURS prioritises pedestrians, cyclists, public transport then private cars. The proposed development has been designed with careful consideration for pedestrians and cyclists as well as facilitating ease of access for vehicular traffic.

The site is very well located in terms of connectivity to pedestrian footpaths which provide a link to public transport and local services such as retail stores, the Church, the Local National School and the Village Centre in Tower.

The following graphic demonstrates the sites position in relation to the above:



Currently a footpath is provided on the R617, opposite the development site, which connects as far as Blarney Village via Tower. Muskerry Golf Club is also accessible by footpath using a pedestrian entrance. It is proposed to provide a segregated footpath and cycle lane on the development side of the R617 to further enhance connectivity and create a safer environment for all road users.

All footpaths will be dished at all entrances and crossings with tapered/ dropped kerbs and tactile paving used on approaches in accordance with the design guidelines for use with tactile paving. This is to accommodate wheelchair access and guide the visually impaired safely through the development.

Future connectivity to adjoining lands is also proposed at a number of locations within the site. These will be provided to ensure future connectivity to the creche, and retail element of the scheme is available.

Internally within the scheme, each developed area will have multiple options of connectivity for each of the different modes of travel, maximising accessibility to the various amenities provided as part of the scheme, as set out in Landscape Architect's drawings. The quality of these routes has been carefully considered to ensure their viability in terms of desire lines and to ensure users will feel comfortable and safe when availing of these facilities. In line with planning policy access routes to adjacent lands are catered for at a number of locations, as shown on the site layout drawing).



Public transport provision is currently catered for on the R617 with the 215-service operating on a 30min frequency from 6:45 to 11:30 pm serving Blarney Village, Cork City Centre and Mahon Point Retail Park. The 233 and 235 are rural bus services that use this bus stop throughout the day.

Vehicular access to the residential site is accommodated by means of a single access point onto the R617 Tower Road. The retail element including the café and overhead apartments has its own priority-controlled access onto the R617.

A comprehensive Traffic & Transportation Assessment has been carried out by MHL Consulting Engineers demonstrating that both access points operate within capacity up to and including the design year 2039.

Both junctions will be constructed in accordance with the Design Manual for Roads and Bridges.

2. Enclosure

“A sense of enclosure spatially defines streets and creates a more intimate and supervised environment. A sense of enclosure is achieved by orientating buildings towards the street and placing them along its edge. The use of street trees can also enhance the feeling of enclosure.”

The proposed development has been designed so that residential units are overlooking the main access routes to the development, circulation areas within the development and the public open space. High quality landscaping and tree planting are proposed within the scheme with the retention of mature trees and hedge-grows along existing ditch lines.

The development of home-zones, areas overlooked by on-street housing, which include shared surfaces, active open spaces and traffic calming elements throughout the scheme will help to deliver sustainable neighbourhoods, instilling a sense of ownership for residents and encouraging visitors to respect speed limits, pedestrian/cycle facilities and parking areas.

The design team have ensured that all public open spaces and pedestrian/cycle links are overlooked by housing elements ensuring passive surveillance for individual areas are achieved.

3. Active Edge

“An active frontage enlivens the edge of the street creating a more interesting and engaging environment. An active frontage is achieved with frequent entrances and openings that ensure the street is overlooked and generate pedestrian activity as people come and go from buildings.”



The development has been designed so that the residential units front onto the circulation roads, with driveways and planting. The open spaces within the development will enhance activity and enliven the areas between the proposed buildings. As outlined in the attached Site Layout Drawings pedestrian movement between neighbourhoods is possible via multiple routes and in many instances in the absence of vehicular traffic. In addition to encouraging walking as a viable mode of travel the provision of these links ensures an 'Active Edge' is achieved in most locations. The proposed shared pedestrian/cycle pathway along the southern boundary provides particular benefit in this regard.

4. Pedestrian Activities/Facilities

"The sense of intimacy, interest and overlooking that is created by a street that is enclosed and lined with active frontages enhances a pedestrian's feeling of security and well-being. Good pedestrian facilities (such as wide footpaths and well-designed crossings) also makes walking a more convenient and pleasurable experience that will further encourage pedestrian activity."

As outlined in the items above, the proposed development has been designed to provide excellent pedestrian connectivity. The residential units are all located so that they front directly onto the active edges/open spaces, which will provide passive surveillance to enhance pedestrians feeling of safety and wellbeing. The public open spaces have been designed to cater for all age groups with a special emphasis on ensuring all areas are accessible for persons with varying degrees of mobility.

Throughout the site, pedestrian routes are generally 2.0m wide or greater which provide adequate space for two people to pass comfortably. DMURS identifies a 1.8m wide footpath as being suitable for areas of low pedestrian activity and a 2.5m footpath as being suitable for low to moderate pedestrian activity. It is considered that a 2m wide footpath is appropriate for the proposed development. Footpaths are designed to have a maximum gradient of 1:20. Where footpaths are combined with cycle routes a 3.0m combined facility is provided. Pedestrian crossings are located along identified desire lines at regular intervals and will be formed with the recommended dropped kerbs, signage, and tactile paving.

A comprehensive public lighting scheme has been designed in conjunction with the landscape architect to ensure all public areas meet the minimum requirements in terms of Lumens. Good quality public lighting will encourage the use of pedestrian facilities ensuring that walking is promoted within the scheme.

There is a network of inter-connecting footpaths on the public road network in the area around the site, providing access to the local transport links and amenities. These amenities include schools, shops, churches, and sports facilities.



It is evident from the proposed layout that all pedestrian facilities are of a looped nature, linking various internal amenities within the site, which will encourage users of all ages to avail of the network of paths to undertake regular exercise thus achieving one of the desired outcomes from a DMURS perspective.

- **KEY DESIGN PRINCIPLES**

DMURS sets out four core design principles which designers must have regard in the design of roads and streets. These four core principles are set out below together with a commentary setting out the manner in which these design principals have been incorporated into the design of the proposed residential development.

Design Principle 1: Pedestrian Activity/Facilities

“To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users and in particular more sustainable forms of transport.”

As described previously, the proposed development has been carefully designed to ensure that the focus on connectivity is centred on pedestrians and cyclists. The provision of high levels of connectivity for pedestrians and cyclists is intended to promote walking and cycling by making them a more attractive option to the private car.

Streets and roads within the scheme have been sized to create a definitive hierarchy, each with its own specific character and function, achieved using colour contrasted surfacing, raised traffic platforms and other traffic calming elements such as pedestrian crossings, signing and lining.

Design Principle 2: Multi-Functional Street

“The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment.”

The layout of roads and streets are designed to ensure that the design speed within the estate is a maximum 30kph with home-zones and local access areas designed to 15kph. Road cross sections proposed range from 6.0m on the main spine road to 5.5-5.0m on local access roads. Traffic calming is achieved by limiting forward visibility through chicanes, landscaping and on-street parking as well as raised colour contrasted platforms. The use of signage, tighter corner radii (3-5m radius), frequent pedestrian crossings and multiple junctions within the scheme achieve a self-regulating environment for all road users.

The benefit of creating a low-speed environment, in addition to road safety gains, is the minimisation of noise and air pollution within the development.

The presentation of a “Transition Zone” at the entry to the estate, incorporating landscaping, narrowed estate carriageway, pedestrian and cycle facilities and narrow also enforces the principals of DMURS by encouraging drivers to slow on entry to the estate and emphasising a changed urban space.



The road and street hierarchy set out in the estate aligns with the principles of DMURS by presenting an organic layout of Arterial and Link Streets, whilst respecting, in-so-far-as possible the overall topography of the site. The layout also presents an efficient and legible route (clear wayfinding) for drivers through the estate and for pedestrians and cyclists to the R617, with a number of points of access from the respective internal link streets.

The road network presents a number of pedestrian prioritisation areas by including raised junction tables at critical junctions. These shared areas, along with the removal of long straight roads will ensure traffic vehicular speeds are controlled.

The proposed scheme also incorporates a high-quality LED public lighting scheme, with lighting levels refined to the specific uses of carriageway and footpath and recreational areas. The scheme is compliant with relevant design standards.

Design Principle 3: Pedestrian Focus

“The quality of the street is measured by the quality of the pedestrian environment.”

The design of the scheme has placed a focus on the pedestrian with ramped crossings on all internal circulation roads. Connectivity throughout the scheme is heavily weighted towards the pedestrian. There are excellent pedestrian links, incorporating tactile paving where applicable in accordance with design guidelines, to the public road network, public transport services, and amenities. The open spaces have been designed to provide a sense of enclosure and to be active with good passive surveillance in order to enhance pedestrians’ sense of safety and well-being within this area.

Design Principle 4: Multi-disciplinary Approach

“Greater communication and co-operation between design professionals through promotion plan-led multidisciplinary approach to design.”

The proposed development design is led by HW Planning working together with Deady Gahan Architects and a full multidisciplinary team of engineers and professionals covering all required areas. The developer is committed to delivering a high-quality development which complies with the recommendations of DMURS.