

TECHNICAL NOTE

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| MHL Project Number: | 18137HD-MHL-Doc06-DMURS-Rev02_DMURS Statement |
| Project Title: | Statement of Consistency "Traffic and Transportation and Associated Infrastructure" |
| Author: | Mr. Brian Murphy, BE CEng MIEI, MHL & Associates Ltd. |
| Date: | 23/04/2024 |
| Subject: | Port Road, Inch/ Coollegrean, Co. Kerry |
| Planning NO. | |



Introduction

M.H.L. & Associates Ltd. Consulting Engineers have been engaged by Portal Asset Holdings Ltd. to produce a DMURS statement of consistency to supplement an LRD planning application for a Large-scale Residential Development at Coollegrean, Port Road, Killarney, Co. Kerry. Portal Asset Holdings Ltd is seeking planning permission for the construction of a new housing development at the site.

The following notes:

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 scope of the TTA was agreed with Kerry County Council's Local Area Engineer.

The TTA report incorporates traffic modelling of the local road junctions.

The TTA also references a Kerry County Council's "Killarney Town Traffic Study", carried out on the wider town and environs.

Traffic Generation:

Traffic Generation has been compiled for the proposed development using both local traffic counts and the TRICS software database for which MHL are a licensed holder.

A comparison of TRICS trip rate for housing was compared to the traffic generation figure derived from a count at the adjoining Millwood Estate housing development. This comparison determined that the trip rate figure arrived at from the Millwood Estate housing estate was more applicable than the TRICS trip rate and was used in the TTA. A trip rate for the creche, derived from TRICS was also employed. No reduction for modal shift in future years was assumed. TII Project Appraisal Guidelines growth rates were applied for all future year traffic models. Traffic distribution followed the existing traffic flow splits for the TTA study network.

Pedestrian and Cyclist Linkages and Safety:

MHL have undertaken an assessment of pedestrian connectivity to/from the applicant site. Whilst the pedestrian connectivity from the development site to the town centre is provided for the existing footpath along Port Road, it was found to provide an inconsistent quality of service along its route with varying footpath widths. The section of footpath from New Road onwards to the Town Centre provides an excellent quality of service, having been upgraded recently. The section between the development entrance and the junction with New Road however was found to be poorly served.

The applicant therefore proposes, as part of this application to carry out improvement works to the nearside footpath on the N71 Port Road. These upgrade works will consist of the widening of existing narrow footpath to a 3m wide shared (cycle/pedestrian) surface from the proposed development entrance as far as the junction with Port Road. As part of these improvements, it is proposed to install a new public lighting scheme along the extent of the works. Details of this proposal are included in the application.

The graphic (figure 1) below outlines the proposed development connectivity along Port Road.

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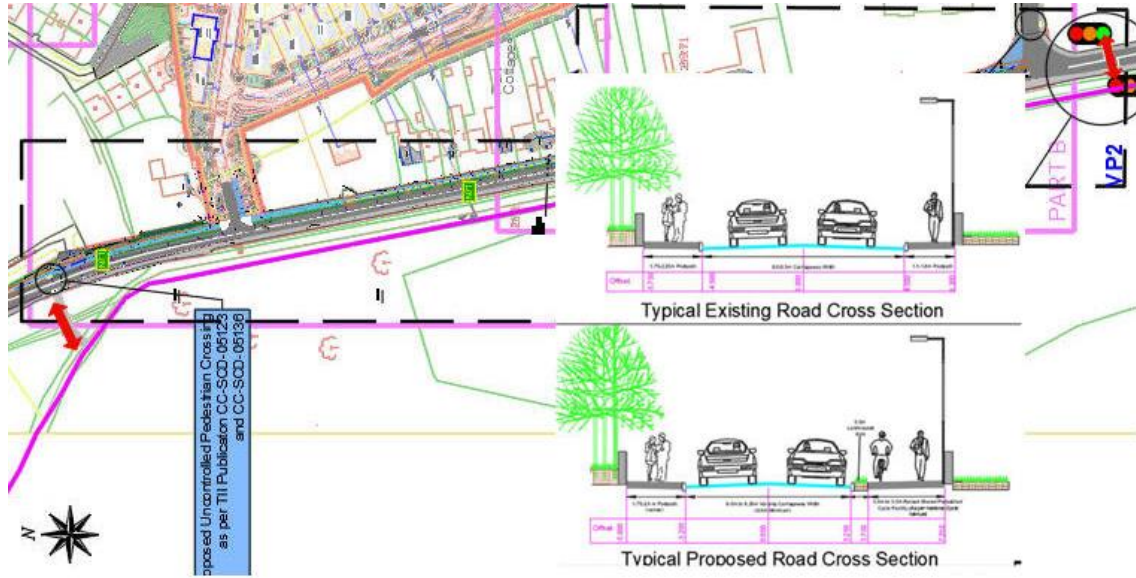


Figure 1 - Proposed Pedestrian Connectivity Improvement Measures along the N71

Additional pedestrian connectivity proposals are also outlined in the application to adjoining estate of Millwood to the north and also possible future connectivity to the adjoining school campus. See figure 2 below which shows the pedestrian connectivity proposals.



Figure 2 – Overall Pedestrian Connectivity

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Public Transport Availability and Capacity:

The TTA references the proximity of the site to the local bus station and train station. No local bus service currently serves the Killarney Town area however a number of inter-urban routes are highlighted linking the area to Tralee, Cork, Limerick, and Rosslare. A regular train service also links Killarney to Cork and Dublin (via Mallow)

Scoping of the TTA

MHL have had consulted with the local area engineer 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. All of the above traffic modelling and assessment data has been compiled in the TTA. Pedestrian connectivity of the site to the town centre and local schools was also discussed.

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The following statement, 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 and cycle facilities and is located just 400m from the town centre, within easy walking distance.

Footpaths are provided on both sides of Port Road where the development entrance is to be positioned. The footpaths link the proposed development to Killarney town centre to the east. All footpaths to be dishd 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 people safely through the development.

A number of proposed and potential pedestrian links are also identified in the site layout. These links will provide excellent connectivity between the site and the town centre, local schools local amenities and services.

An extensive cycle network is available to cyclists in the vicinity of the site. This cycle networks provides excellent connectivity to the town centre and also throughout the town. The application includes a proposal to construct a shared pedestrian cycle facility linking the sit to the nearby pedestrian and cycle facility further south along Port Road and also connecting to New Road. The improvements also connect the site to northwards on Port Road to the National Park and internal cycle paths and walkways.

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Internally within the scheme each developed area has multiple options of connectivity for each of the different modes of travel, maximising accessibility to the various amenities provided as part of the scheme, refer to Landscape Architect's drawings for further detail. 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 (refer to site layout drawing).

Public transport provision is currently catered by way of inter-urban service with no local town service available, excepting tourist buses. A number of bus stop locations are within a walking distance from the proposed scheme.

The train station is also located within two kilometres of this proposed development site at Port Road, allowing for sustainable transport modes to be availed of by future residents.

Vehicular access to the site is accommodated by means of a single access points onto Port Road. A comprehensive Traffic & Transportation Assessment has been carried out by MHL Consulting Engineers and is included as part of this application. The scope of this assessment has been agreed with the Local Authority.

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.

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

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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.

Evident from the proposed layout is the looped nature of all pedestrian facilities linking various internal amenities within the site. The design team are confident that this 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 principals are set out below together with a

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commentary setting out how 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. The proposed development is well connected to the surrounding primary roads network with access to adjoining cycle and pedestrian linkages. Its location alongside the town centre makes it very accessible to local amenities and services.

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 5.5m 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. An internal road safety audit, in accordance with DMURS principles has been carried out and is included in the application.

The Internal Audit recommends that tactile paving and dropped kerbs at the entrance junction and pedestrian crossing of the adjoining public road. The assessments make further recommendations pertaining to the internal junctions and traffic calming measures.

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 organics layout of Arterial and Link Streets, whilst respecting, in-so-far-as

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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 western shared surface, with a number of points of access from the respective perpendicular link streets. The frequent junctions along the arterial road also have been designed as an inherent traffic-calming a measure as drivers slow and show greater levels of caution at such conflict zones.

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 use of landscaping and particular "Columnar non-invasive tree planting" along the main arterial road, particularly at the entry to the estate will provide a strong sense of enclosure, promoting the area as a low speed, shared purpose space, promoting the road area as a pedestrian friendly space.

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 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 design of the proposed scheme has been developed through the design team working closely together. The proposed development design is led by Deady Gahan Architects Co Ltd working together with Brady Shipman Martin Landscape Design Services and MHP Planning Consultants. All team members are committed to delivering a high-quality development which complies with the recommendations of DMURS.

Your Sincerely

A handwritten signature in black ink that reads "Brian Murphy".

Mr. Brian Murphy

BE CEng MIEI

Director, MHL & Associates Ltd.