

Response to Kildare County Council LRD Opinion Document (Plg. Reg. Ref. No. LRD2025005)

Phase 2 of Proposed Residential Development at Southgreen, Co. Kildare

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Comments

A draft copy of this document was issued to KCC for comment in advance of the final planning submission. The final Issue No. 1 of this document is submitted as part of this application.

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Content

1. Introduction 1

2. Kildare County Council LRD Opinions & Engineering Responses 1

2.1 Inadequate Bridge Infrastructure to Accommodate the Scale of the Development 1

2.2 Landscaping/Parks Department Opinion 2

2.3 Transportation Department Opinion 2

1. Introduction

This report has been prepared by Waterman Moylan Engineering Consultants on behalf of Pousterle Limited in support of a planning application submitted to Kildare County Council for a proposed residential development at Southgreen, County Kildare (Planning Reference: LRD2025005).

An Opinion Document in respect of the proposed Large-scale Residential Development (LRD) at Southgreen, Co. Kildare was issued by Kildare County Council on 12 September 2025, following the LRD meeting held on 12 August 2025.

The civil engineering–related matters raised within the Opinion Document are identified and summarised in this report. A response to each civil engineering design issue is also provided herein.

2. Kildare County Council LRD Opinions & Engineering Responses

The LRD Opinions are listed in the document's original order, below.

2.1 Inadequate Bridge Infrastructure to Accommodate the Scale of the Development

Please note that there are concerns that there is inadequate bridge infrastructure to accommodate the scale of the development, without an investment in transport infrastructure to connect the development with the town centre. The increased amount of development is likely to lead to obstruction of the carriageways at junctions crossing the railway line where there is currently no two-way bridge over the railway line. The proposed development would therefore be premature pending proposals to upgrade the railway bridge in accordance with RD1 of the Kildare Town Local Area Plan 2023-2029 (RD1: Closure of Old Road Bridge to vehicular traffic and the replacement/upgrade of Southgreen Bridge to facilitate two-way traffic with improvements to approach roads (the upgrade must be delivered prior to the closure).

Response:

A full Traffic and Transport Assessment (TTA) has been prepared with a traffic assessment of the main junctions in the surrounding area, including an assessment of the signalised single-lane shuttle system at the Southgreen Road Railway Overpass. The results of the analysis demonstrate that all assessed junctions, as well as the shuttle link on Southgreen Road, will operate within their respective capacities for all forecast years and scenarios considered.

The TTA includes a comprehensive traffic assessment, analysing the likely impact of the subject site in combination with all committed and potential future developments at the assessed junctions.

In order to understand the existing traffic flow rates during peak hours, traffic flow surveys were carried out at three junctions providing access to existing neighbourhood. As results, inbound and outbound traffic flows were recorded. Based on the survey results and the number of existing housing units, real arrival and departure trip rates for the AM and PM peak hours were derived.

The TTA includes two traffic distribution scenarios:

- The current scenario, with Old Bridge open to traffic; and
- The future scenario, with Old Bridge closed and all traffic redistributed to the remaining open routes.

Both traffic distributions were assessed under each forecast year in accordance with the Transport Assessment Guidelines (May 2014).

In addition, a Stress Scenario was developed to assess the performance of the shuttle link by increasing the adopted trip rates by 50%. This stress scenario was also assessed under each forecast traffic flow, in line with the Transport Assessment Guidelines (May 2014).

The results of the analysis demonstrate that all assessed junctions, as well as the shuttle link on Southgreen Road, will operate within their respective capacities for all forecast years and scenarios considered.

Further information is provided in Waterman Moylan Consulting Engineer document No. 25-003r.003 – Traffic and Transport Assessment (Phase 2) included in the document package.

It is noted that significant road infrastructure upgrades are proposed as part of the proposed development that will assist in traffic movements whilst promoting and facilitating a modal shift towards sustainable modes including pedestrian and cycle links as part of the Southgreen Road upgrade that will also benefit the proposed public park north the site, pedestrian and cycle only links from the development to the south

and southeast and the 4m cycle and pedestrian only east-west link at the northern boundary of the site, abutting the proposed public park.

2.2 Landscaping/Parks Department Opinion

Item 1 – 'The proposed water network and site drainage indicate that public water is directed into tree pits/rain gardens located within private curtilage. These pits would not be accessible for future maintenance, which is not acceptable. Water from public space cannot drain into private space. Revisions are required.'

Response:

The drawings will be revised to ensure that all surface water runoff from public areas is directed solely to SuDS features located within public open space or the public realm. Tree pits and rain gardens located within private curtilage will be served by private drainage only and will not receive runoff from public areas.

Items 2 – 6 will be addressed by the Landscape Architect, Hayes Ryan Landscape Architecture.

2.3 Transportation Department Opinion

Item 1 - It is noted by the applicant that the figure of 0.339 trip rate departures is being used in the morning peak. The KCC Transportation report notes that the experience with residential developments in County Kildare is that a figure should be at least 1 should be used for the peak am flow; as the underestimation of the trip rate will result in an underestimation of the assigned traffic flows on the network and residual handling capacities of junctions prior to saturation. Further details would be required in a future application.

Response:

As indicated in Response 2.1 above; in order to understand the existing traffic flow rates during peak hours, traffic surveys were carried out at three junctions providing access to existing residential areas within Kildare Town, in close proximity to the subject site and for which the number of dwellings served is known. The results of the inbound and outbound traffic flows were recorded. Based on the survey results and the number of existing housing units, real arrival and departure trip rates for the AM and PM peak hours were derived.

The surveys were carried out by National Data Collection (NDC) on Tuesday 7th October 2025 for a period of 12 hours at 3 No. junctions detailed in **Figure 1** below.

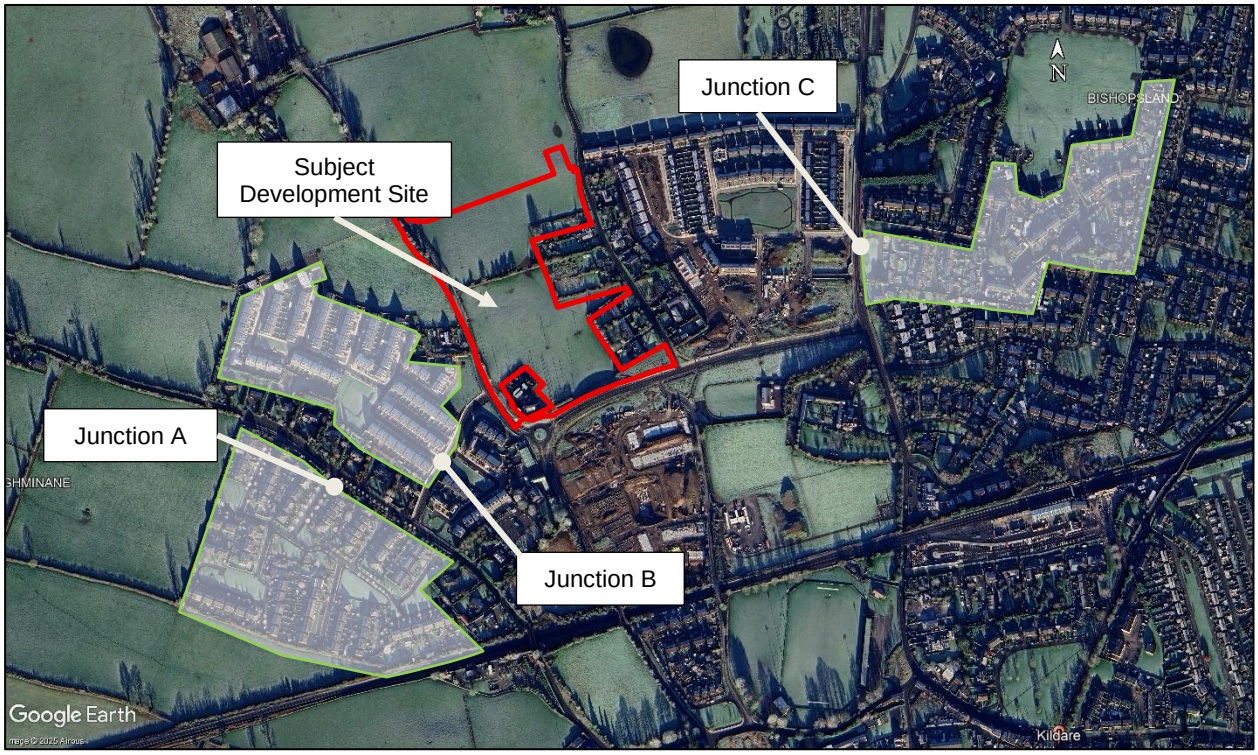


Figure 1 | *Surveyed junctions providing access to residential developments*

As presented in **Figure 1** above, the surveyed junctions provide access to existing residential neighbourhoods, with the following number of units:

- Residential Development A: 134 no. housing units.
- Residential Development B: 161 no. housing units.
- Residential Development C: 148 no. housing units.

The traffic survey results during each peak hours are presented in the **Table 1** below.

Junction	Residential Units	Trips			
		AM Peak Hour		PM Peak Hour	
		IN	OUT	IN	OUT
A	134	34	79	64	39
B	161	38	69	48	34
C	148	23	48	51	35

Table 1 | *Surveyed access to residential developments – Inbound and Outbound traffic flows during peak hours*

Based on the survey results and the number of existing housing units (refer to **Figure 1** above), arrival and departure trip rates for the AM and PM peak hours were established and indicated in **Table 2** below.

Location	AM Peak Hour		PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Junction A – 134 no. Units	0.254 per unit	0.590 per unit	0.478 per unit	0.291 per unit

Junction B – 161 no. Units	0.236 per unit	0.429 per unit	0.298 per unit	0.211 per unit
Junction C – 148 no. Units	0.155 per unit	0.324 per unit	0.345 per unit	0.236 per unit

Table 2 | *Trip Rates - Surveyed access to residential development results*

For the purpose of this report, the adopted trip rates are based on the average trip rates observed at Junctions A, B, and C, presented in **Table 3** below.

Location	AM Peak Hour		PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Average Trip Rates (A, B & C)	0.215 per unit	0.447 per unit	0.373 per unit	0.246 per unit

Table 3 | *Adopted Trip Rates - Surveyed access to residential developments*

To illustrate the difference between the adopted trip rates and those derived from approved TTA prepared by Waterman Moylan Consulting Engineers for the under construction Southern Development (Southgreen Development – Phase 1. Planning Application Reg. Ref. No. ABP-318401-23), **Table 4** below highlights the difference between the two sets of trip rates.

Land Use Category	AM Peak Hour		PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Approved Trip Rates **Source:** Southgreen Development -Phase 1- Pl. Apl. Reg. Ref. No. ABP-318401-23	0.117	0.339	0.32	0.174
Trip Rates from **Table 3**	0.215	0.447	0.373	0.246
Comparation	+84%	+32%	+17%	+42%

Table 4 | *AM & PM Peak Hours – Trip rates comparation*

As shown in the table above, the trip rates derived from the surveyed traffic flows indicate a higher value compared with those approved as part of the Southgreen Development – Phase 1 (Planning Application Reg. Ref. No. ABP-318401-23).

Further information is provided in Waterman Moylan Consulting Engineer document No. 25-003r.003 – Traffic and Transport Assessment (Phase 2) included in the document package.

It is noted that the high number of return trips recorded in the AM peak is most likely a consequence of return trips following school drop-off. The introduction of improved pedestrian and cycle infrastructure in the area together with active travel promotion in the area may assist in reducing these figures more in line with the TRICS data. It is noted pedestrian and cycle upgrades are currently under construction as part of the Southgreen Development – Phase 1. Planning Application Reg. Ref. No. ABP-318401-23 along South Green Road which will be further extended as part of the proposed development.

Item 2 - Please note that the KCC Transportation Department consider that the internal development is not yet fully in keeping with the objectives of the Design Manual for Urban Roads and Streets (DMURS). The straight sections of road, particularly on the main distributor, will increase the need for ramps in a new development. One of the purposes of the DMURS strategy was, at the design layout stage, to provide alternatives to placing ramps in new housing estates. This problem should be avoided in a realigned or reconfigured access arrangement. A concern is also raised that the roads with no footpaths will give rise to traffic hazard as it will be possible for vehicles to travel at speed. The hazard is increased by the lack of intervisibility between pedestrians emerging from between cars parked perpendicular to kerb and passing traffic.

The layout should be revised to include a footpath on both sides of the 5.5 metre carriageway. It should be noted that without a circulation aisle of 6 metres it may not be possible for drivers to access the perpendicular kerb bays. It is important for carriageways and footpaths to be of adequate width to accommodate services and utilities, such as lamp standards. At the same time a sufficiently side carriageway, to accommodate services without the need to encroach on private properties, should also have a kerb protected footpath which should ideally be 2 metres wide but an absolute minimum of 1.8 metres wide on both sides of the carriageway. Roads Layout and sight lines should be in accordance with DMURS.

Response:

We note the Department's observations regarding the internal road layout in relation to the objectives of the Design Manual for Urban Roads and Streets (DMURS). In response, the proposed internal road network has been revised as follows:

a) The main internal distributor road has been realigned to introduce gentle horizontal curvature in place of a long straight alignment. This approach reduces the potential requirement for additional speed control measures such as ramps or raised tables and is consistent with DMURS principles, which promote speed management through geometric design rather than reliance on vertical traffic calming alone.

b) However, the two raised tables at the entrance junctions have been retained, as they provide an appropriate traffic-calming measure at points of entry to the development. Should it be the Council's preference to omit one or both of these raised tables, this can be accommodated.

c) Homezones and Raised Tables: Localised homezones have been incorporated within the internal layout. Increased / enhanced pedestrian facilities are provided at these locations. Raised tables are provided at key junctions and pedestrian crossing points to enhance safety, improve visibility, and encourage low vehicle speeds consistent with DMURS guidance.

d) Footpaths and Carriageway Widths: The design ensures adequate provision for pedestrians. Footpaths of a minimum width of 2 m are provided along both sides of the 5.5 m and 6 m carriageways, with sufficient carriageway and circulation aisles to allow safe access to perpendicular parking bays. The layout accommodates utilities, lamp standards, and other services without encroaching on private property.

e) Sightlines and Visibility: The combination of curvilinear alignment, homezones, and raised tables ensures appropriate intervisibility between vehicles and pedestrians, including those emerging from between perpendicular parking spaces. This addresses the previously noted traffic hazard concerns.

We believe these revisions bring the internal layout fully in line with the objectives of DMURS, providing a safe, pedestrian-friendly, and visually coherent road network. Refer to Waterman Moylan Drawing No. SOU-WMC-PH2-XX-DR-C-P0100 - Proposed Site Layout for details of the updated roads network.

Item 3 - The applicant is requested to avoid "home zones" that do not have at least a dedicated 1.8-metre-wide kerb protected footpath to all of the residential units, on road safety grounds.

Response:

All side street "home zones" include a dedicated 2 m-wide kerb protected footpath to all residential units on both sides of the road. Refer to Waterman Moylan Drawing No. SOU-WMC-PH2-XX-DR-C-P0110 –

Proposed Road Levels and Kerbing Layout for details of the updated roads network and proposed kerbs throughout.

Item 4 - The applicant is requested to engage with third parties and provide a design for a 2-metre-wide concrete footpath on the Old Road. The footpath should be on the development side of the carriageway, and the applicant is requested to provide a drawing at a scale of 1:500 for review. The applicant was requested at pre-planning stage to include lamp standards at the back of the footpaths along the route. If the applicant is unable to carry out these works; the applicant will be requested to confirm that they are willing to make a special contribution to provide the footpath in accordance with the Development Contribution Scheme adopted by Kildare County Council on 19th December 2022 and in accordance with Section 48(2)(c) of the Planning and Development Act 2000 as amended.

Response:

A setback to facilitate 2 m-wide concrete footpath on the eastern edge of the Old Road has been provided along the subject site frontage.

Item 5 - In relation to cycle track design, the KCC Transportation Report notes that the Sustainable and Active Travel Team in Kildare County Council would have a preference of a unidirectional cycle track, on each side of the main Southgreen carriageway, rather than a bidirectional cycle track, which will connect to a Bidirectional Cycle Track south of the roundabout. It would be possible to match desire lines for future educational and community lands. However, it is not clear from the map of the land in the ownership of the applicant on the opposite side of the carriageway. One possible mechanism is to request a special development levy contribution to complete the work on the opposite side of the road. The alternative would be for the applicant to construct a bi-directional track on the development side of the road.

Response:

The recommendation for unidirectional cycle tracks on both sides of the Southgreen carriageway has been incorporated into the design.

Item 6 - It is noted that there are a number of problems that would need to be corrected in any future application, including:

- The cycle lane drawing provided does not show the full extent of the proposed cycle track of the proposed development. 60mm kerb should be bevelled.

- NTA spec, red SMA should be used for cycle track surface.

- Proposed crossings of main road and side roads would need further details and improvements to be acceptable.

- Existing cycle track towards the south of the site extents should be upgraded to provide segregation and colour contrast.

- No details on permeability accesses to cycle track provided.

- No details on tactiles provided.

Response:

Waterman Moylan Drawing No. SOU-WMC-PH2-XX-DR-C-P0110 – Proposed Road Levels and Kerbing Layout includes the full extent of the proposed cycle track of the proposed development and illustrates the proposed 60mm kerb along the cycle track.

The applicant confirms that the proposed cycle track surface will be designed in accordance with NTA specifications. It is noted that red SMA should be used for the cycle track surface, this detail will be included in the relevant engineering and landscape architect details.

Details of proposed crossings of the main and side roads such as surfacing details and signage can be found in Waterman Moylan Drawing No.'s SOU-WMC-PH2-XX-DR-C-P0111 - Typical Road Cross-Sections, SOU-WMC-PH2-XX-DR-C-P0110 – Proposed Road Levels and Kerbing Layout, and SOU-WMC-PH2-XX-DR-C-P0130 - Proposed Road Markings & Signage.

While the applicant acknowledges the comment regarding the upgrading of the existing cycle track to the south of the site, it is noted that this infrastructure lies outside the applicant's ownership and red line boundary

All tactile paving, crossings, and interface treatments will be designed in accordance with DMURS and TII/NTA standards. Details of tactile paving proposed can be found on Waterman Moylan Drawing No. SOU-WMC-PH2-XX-DR-C-P0112 – Proposed Typical Road Construction Details.

UK and Ireland Office Locations

