

New Residential Development, Harbour Road, Mullingar

Transport Statement

Document Reference: 26019-MHT-XX-ZZ-RP-T-0001

Issue P01 – 09 June 2026

Prepared For:

Westmeath County Council





NEW RESIDENTIAL DEVELOPMENT, HARBOUR ROAD, MULLINGAR

TRANSPORT STATEMENT

Quality Assurance Page

Issue	Date	Prepared By	Checked By	Approved By	Remarks
P01	09/06/2026	C. Dring	C. O'Brien	A. Lacey	Planning Issue

Table of Contents

1	Introduction.....	1
1.1	Background	1
1.2	Proposed Development	2
1.3	Report Structure	2
2	Guidance and Proposals	4
2.1	National Planning Framework	4
2.2	National Development Plan 2026-2042	5
2.3	Local Policy	5
2.4	Cycle Connects	6
2.5	Connecting Ireland Rural Mobility Plan	6
3	Existing Road Network	8
3.1	Harbour Road	8
3.2	Harbour Street	9
3.3	R394	9
3.4	R392	10
4	Site Accessibility	11
4.1	Context	11
4.2	Walking and Cycling	12
4.3	Public Transport	13
4.4	Vehicles	15
4.5	Accident History	15
4.6	Swept Path Analysis	15
4.7	Summary	15
5	Parking Provision	16
5.1	Car Parking Standards and Provision	16
5.2	Accessible Car Parking	16
5.3	EV Car Parking	16
5.4	Car Sharing	16
5.5	Cycle Parking Standards and Provision	17
6	Travel Demands.....	18
6.1	Introduction	18
6.2	Proposed People Trip Rates and Trip Generation	18
6.3	Proposed People Trip Generation	18
6.4	Summary	19
7	Traffic Assessment	21
7.1	Growth Rates	21
7.2	Junctions 11 Analysis	21
8	DMURS Statement of Compliance	23
8.1	Introduction	23
8.2	Site Entrance	23

8.3	Pedestrian Facilities and Access	23
8.4	Cyclist Facilities	24
8.5	Corner Radii	24
8.6	Car Parking	24
8.7	Swept Path Analysis	24
8.8	Sightlines	24
9	Framework Mobility Management Plan (MMP)	26
9.1	Aim and Introduction	26
9.2	Objectives	26
9.3	Benefits	26
9.4	Measures	26
9.5	Summary	27
10	Framework Construction Traffic Management Plan (CTMP)	28
10.1	Introduction	28
10.2	Working Hours	28
10.3	Transport Coordination	28
10.4	Delivery of Plant and Materials	28
10.5	Route Compliance	28
10.6	Vehicle Compound	29
10.7	Construction Staff Mobility Management	29
10.8	Dust and Dirt Control	29
10.9	Noise Control	29
10.10	Waste Management	29
10.11	Other Mitigation Measures	29
10.12	Summary	30
11	Conclusion	31
11.1	Summary	31
Appendix A – TRICS Outputs		
Appendix B – Junctions 11 Outputs		

1 Introduction

1.1 Background

Meinhardt has been commissioned by Westmeath County Council (the applicant) to prepare a Transport Statement (TS) in support of a Part 8 planning permission for a proposed residential development comprising a total of 50 residential units, consisting of 22 no. one- and two-bedroom duplex units, 16 no. two-bedroom houses, 9 no. three-bedroom houses, 1 no. three-bedroom medical needs adapted dwelling, and 2 no. one-bedroom dwelling, together with all associated site development and ancillary works.

The proposed development site is located in the town of Mullingar, Co. Westmeath. Mullingar is located in central Westmeath, approximately 42km northeast of Athlone town. The N4 and N52 national primary roads bypass Mullingar to the east, connecting the town to Longford, Sligo, Ardee and the M6 at Tyrrellspass. The site location is shown in Figure 1-1.



Figure 1-1: Site Location

This Transport Statement (TS) sets out the planning policy and guidance relevant to the proposed development, reviews the existing transport and accessibility context of the site, outlines the likely travel demands associated with the development, details the proposed parking provision, and identifies measures necessary to manage travel movements and mitigate any potential effects on the local transport network. The TS also includes a DMURS Statement of Compliance, a Framework Mobility Management Plan (MMP) and a Framework Construction Traffic Management Plan (CTMP).

The anticipated travel demands and trip generation associated with the proposed development are described within Section 6. This TS considers the potential impact of the proposed development on the surrounding transport network.

This TS should be read in conjunction with the Architectural Drawing Package prepared by Westmeath Housing Design Team, and the visibility splay analysis (26019-MHT-XX-ZZ-DR-T-0011) and swept path

drawings (26019-MHT-XX-ZZ-DR-T-0001, 26019-MHT-XX-ZZ-DR-T-0002 and 26019-MHT-XX-ZZ-DR-T-0003) prepared by Meinhardt.

1.2 Proposed Development

The proposed site layout is shown in Figure 1-2.



Figure 1-2: Proposed Site Layout (Source: Westmeath Housing Design Team)

1.3 Report Structure

The remainder of this report is structured as follows

- Section 2 – Sets out the planning policy and guidance relevant to the proposed development.
- Section 3 – Describes the existing road network surrounding the site.
- Section 4 – Incorporates an accessibility review of the proposed development site.
- Section 5 – Outlines the proposed parking arrangements for the development.
- Section 6 – Details the travel demands associated with the proposed development.
- Section 7 – Details the results of Junctions 11 modelling of the development junction.
- Section 8 – Details the DMURS compliance of the proposed development.
- Section 9 – Details a Framework Mobility Management Plan (MMP) for the proposed development.

- Section 10 – Details a Framework Construction Traffic Management Plan (CTMP) for the proposed development.
- Section 11 – Outlines the TS summary and conclusions.

2 Guidance and Proposals

2.1 National Planning Framework

The National Planning Framework (NPF) which was published in 2018 by the Department of Housing, Local Government and Heritage is defined as:

“The Government’s high-level strategic plan for shaping the further growth and development of our country out to the year 2040”

The NPF prioritises ten National Strategic Outcomes which are as follows:

1. *“Compact Growth*
2. *Enhanced Regional Accessibility*
3. *Strengthened Rural Economies and Communities*
4. *Sustainable Mobility*
5. *A Strong Economy supported by Enterprise, Innovation and Skills*
6. *High-Quality International Connectivity*
7. *Enhanced Amenity and Heritage*
8. *Transition to a Low Carbon and Climate Resilient Society*
9. *Sustainable Management of Water, Waste and other Environmental Resources*
10. *Access to Quality Childcare, Education and Health Services”*

Environmentally sustainable public transport is listed as one of the NPF’s strategic investment priorities. The location of new developments in areas that can support sustainable development is mentioned as an important factor in achieving this goal. South Dublin is part of the mid-east region which has a high level of population growth. In this area, the NPF states that:

“A more balanced and sustainable pattern of development, with a greater focus on addressing employment creation, local infrastructure needs and addressing the legacy of rapid growth, must be prioritised.”

The NPF includes a number of policies that are deemed particularly relevant to the proposed development site, these are:

- **National Policy Objective 1b:** *“Population growth targets for regions, encouraging balanced regional development beyond Dublin (supporting demographic stability and growth in towns and villages”.*
- **National Policy Objective 1c:** *“Employment growth targets for regions, which supports local jobs and reduce unsustainable commuting patterns”.*
- **National Policy Objective 27:** *“Ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments and integrating physical activity facilities for all ages”.*
- **National Policy Objective 28:** *“Plan for a more diverse and socially inclusive society that targets equality of opportunity and a better quality of life for all citizens, through improved integration and greater accessibility in the delivery of sustainable communities and the provision of associated services”.*
- **National Policy Objective 54:** *“Reduce Ireland’s carbon footprint by integrating climate action into the planning system in support of national targets for greenhouse gas emissions reductions - including through sustainable transport and compact development.”*

- **National Policy Objective 64:** *“Improve air quality and help prevent people being exposed to unacceptable levels of pollution in urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car.”*

2.2 National Development Plan 2026-2042

The National Development Plan 2026-2035 (NDP), published by the Department of Public Expenditure, NDP Delivery and Reform, sets out the Government’s investment strategy and budget for the period 2026-2035. *“It is an ambitious plan that balances the significant demand for public investment across all sectors and regions of Ireland with a major focus on improving the delivery of infrastructure projects to ensure speed of delivery and value for money.”*

The NDP puts an emphasis on sustainable mobility which it defines as:

- *“Comfortable and affordable journeys to and from work, home, school, college, shops and leisure;*
- *Travelling by cleaner and greener transport; and*
- *A shift away from the private car to greater use of active travel (walking and cycling) and public transport.”*

To achieve this objective, strategic land use planning and transport-led development are essential. A house in a location with convenient access to public transport links and active travel (cycling and walking) infrastructure will reduce greenhouse gas emissions. Along with investment in upgrading and decarbonising Ireland's public transport network and upgrading sustainable mobility infrastructure will reduce greenhouse gas emissions.

It is noted that the proposed development is well positioned to take advantage of surrounding existing and proposed active travel and public transport infrastructure.

2.3 Local Policy

2.3.1 The Westmeath County Development Plan 2021-2027

The proposed development is located within the administrative area of Westmeath County Council and is subject to the provisions of the Westmeath County Development Plan 2021–2027, which provides the statutory framework for the proper planning and sustainable development of the county. The Development Plan promotes compact, sustainable residential growth and the integration of land use and transport, with a strong emphasis on safe and accessible movement for pedestrians, cyclists, public transport users, and private vehicles. It also sets out development management standards relating to car parking, cycle parking, accessibility and electric vehicle infrastructure under Chapter 16.

2.3.2 Mullingar Settlement Area Plan 2025-2031

The Mullingar Settlement Area Plan 2025–2031 establishes a detailed strategic framework to guide the sustainable growth and development of Mullingar and its immediate environs, building on the broader policies of the Westmeath County Development Plan 2021–2027 and aligning with the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities. The Plan seeks to promote compact, accessible and resilient growth in Mullingar as a key town, balancing the protection and enhancement of the built and natural environment with the provision of housing, economic opportunities, regeneration and infrastructure. It supports sustainable mobility and transport integration, including walking, cycling and public transport accessibility, and aims to enhance connectivity, quality of life and well-being across the settlement area.

2.3.3 Mullingar Local Transport Plan

The Mullingar Local Transport Plan (LTP), adopted in October 2024, sets out a comprehensive strategy to support the sustainable movement of people within Mullingar by prioritising walking, cycling and public transport in line with national and regional policy. The Plan identifies an extensive programme of active travel interventions including segregated cycle tracks, new and improved footpaths, greenways, permeability links, quiet ways, traffic calming and enhanced public realm measures, with the objective of significantly improving connectivity between residential areas, the town centre, schools, employment areas and key trip attractors. A central element of the strategy is the delivery of a Town Core Active Travel Link to provide continuous east-west connectivity through the town centre, complemented by upgraded radial and orbital routes and potential new pedestrian and cycle bridges over the Royal Canal. The LTP also supports Safe Routes to School measures, expanded cycle parking, bike sharing, Park and Stride facilities and behavioural change initiatives, all aimed at reducing car dependency, improving safety and accessibility and enhancing the overall quality of the urban environment.

2.4 Cycle Connects

The CycleConnects initiative, led by the National Transport Authority, is developing a comprehensive cycle network for counties outside the Greater Dublin Area, including Westmeath. The network aims to connect towns, villages, and key destinations across the county, integrating existing and planned routes such as greenways, interurban links and urban cycle routes. The network provides a strategic framework for improving cycling accessibility in Mullingar and aligns with the objectives of the Westmeath County Development Plan 2021-2027 to promote sustainable and active travel.

The route network in the vicinity of the site comprises an Urban Primary passing directly along the southwestern boundary of the site. There is also a greenway route that runs along the bank of the River Brosna, through the town. The proposed cycle routes around the site are shown in Figure 2-1.

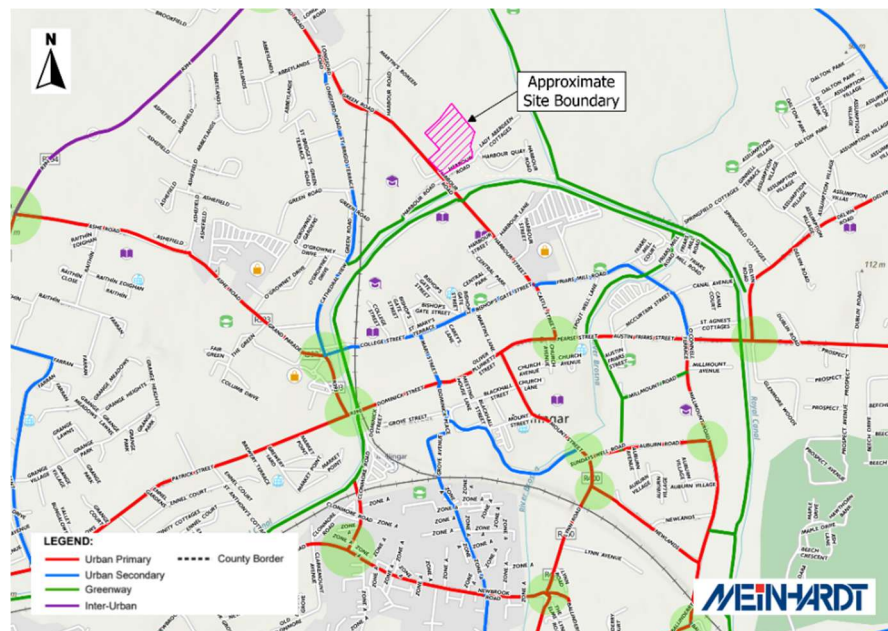


Figure 2-1: Proposed Cycle Network in the Vicinity of the Site (Source: County Cycle Network)

2.5 Connecting Ireland Rural Mobility Plan

The Connecting Ireland Rural Mobility Plan, implemented by the National Transport Authority through the TFI Local Link network, aims to enhance public transport in rural areas by introducing new and improved bus services connecting towns, villages, and key destinations. Mullingar has three regional corridors proposed to pass through or start/finish at the town, these are corridor 27, 51 and 29. The plan proposes additional services and improved integration along this corridor, enhancing connectivity for Mullingar

residents. In addition, four new routes, the A10, A81, A31 and 111A, are proposed to pass west of Mullingar, linking the town with Athlone, Edgeworthstown train station, Cavan, Portlaoise, and other locations. These enhancements support sustainable travel choices in Mullingar and contribute to reducing reliance on private cars in the rural context of County Westmeath.

Figure 2-2 shows the existing and proposed routes near the site.

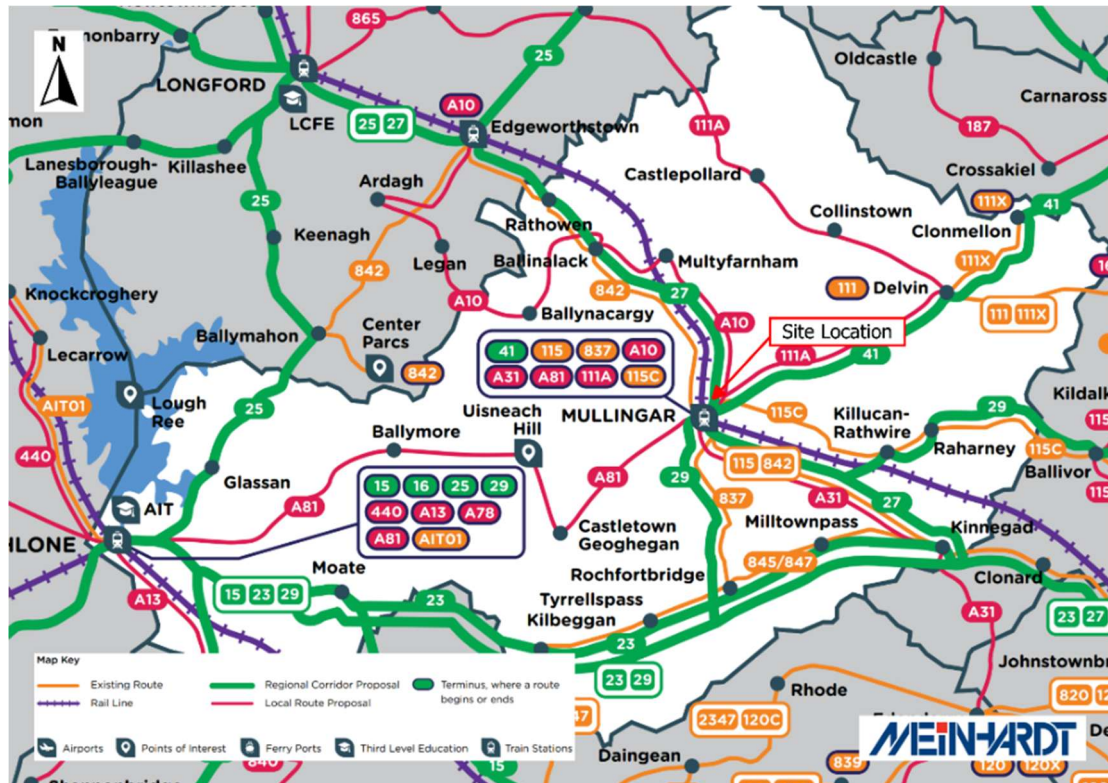


Figure 2-2 Westmeath Proposed Public Transport Network (Source: Connecting Ireland – National Transport Authority)

Table 2-1 shows a summary of the existing and proposed routes passing through Mullingar town as shown in Figure 2-2.

Table 2-1 Existing and Proposed Bus Routes

Bus Route Numbers	Monday – Friday	
	Route	Typical Weekday Frequency
115*	Mullingar to Dublin	30 minutes
837*	Tullamore to Mullingar	6 return services
115C*	Mullingar to Kilcock	7 return services
41	Mullingar to Dundalk (New Corridor)	2 hours
A10	Edgeworthstown to Mullingar	3 return services
A31	Mullingar to Portlaoise	3 return services
A81	Athlone to Mullingar	3 return services
111A	Mullingar to Cavan	4 return services

Bus Route Numbers	Monday – Friday	
	Route	Typical Weekday Frequency
<i>*Existing services</i>		

3 Existing Road Network

The proposed site location and the wider road network is detailed in Figure 3-1. A brief summary and a Streetview image of each of the roads are detailed in the sections below.

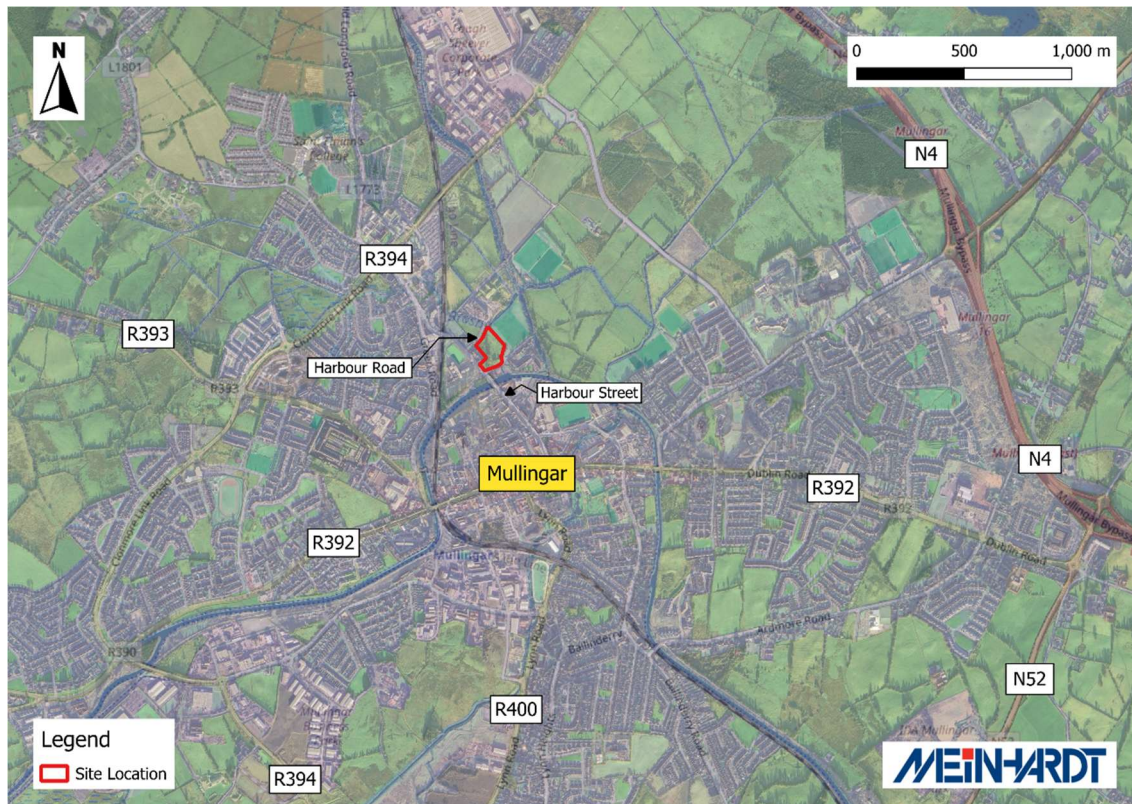


Figure 3-1 Proposed Site Boundary and Surrounding Road Network

3.1 Harbour Road

Harbour Road is a local road in Mullingar onto which the development will have vehicular access. It gives access to Mullingar Primary Care Centre and a residential development north of the proposed development. Harbour Road has a speed limit of 50km/h and is a single lane two-way carriageway with pedestrian and cyclist facilities provided on both sides of the carriageway along the full length of the road. Figure 3-2 shows the typical cross section of Harbour Road. It is proposed in Mullingar LAP that this road will be extended north to connect to Robinstown Link Road in order to open up lands for residential development.



Figure 3-2 Harbour Road (Looking North)

3.2 Harbour Street

Harbour Street runs along a portion of the southwest boundary of the site and comprises a two-way, single-carriageway road with pedestrian facilities on the eastern. The posted speed limit is 50km/h. The footpath provided on the eastern side of the road is significantly wide, and while a footpath is provided on the western side of the road, it is within the ground of Loreto College Secondary School and is separated from the road by a boundary wall. Figure 3-3 shows the typical cross section of Harbour Street.



Figure 3-3 Harbour Street (Looking Northwest)

3.3 R394

The R394 runs along the western outskirts of Mullingar, connecting to the N4 national road in the north and the N52 to the south. It comprises a two-way, single-carriageway road with a posted speed limit of 50km/h closer to the centre of Mullingar, increasing to 60km/h further from the town centre. Pedestrian facilities are provided on both side of the road. Figure 3-4 shows the typical cross section of the R394 at a location with pedestrian facilities.



Figure 3-4 R394 (Looking Northeast)

3.4 R392

The R392 forms the main street of Mullingar, connecting to the N52 national road in the east and Lanesborough to the west. It comprises a two-way, single-carriageway urban road with a posted speed limit of 50km/h closer to the centre of Mullingar, increasing to 60km/h further from the town centre. Pedestrian facilities are provided on both side of the road, with parking allowed in some areas and prohibited in other sections. Figure 3-5 shows the typical cross section of the R392 at a location with no parking allowed.



Figure 3-5 R392 (Looking West)

4 Site Accessibility

4.1 Context

This section evaluates the accessibility of the proposed site in relation to active travel facilities, the surrounding public transport network and the existing road network. QGIS software has been utilised to assess the areas that can be reached from the site within defined time periods using specific modes of transport. Figure 4-1 shows the context of the site in relation to relevant local amenities within walking distance.

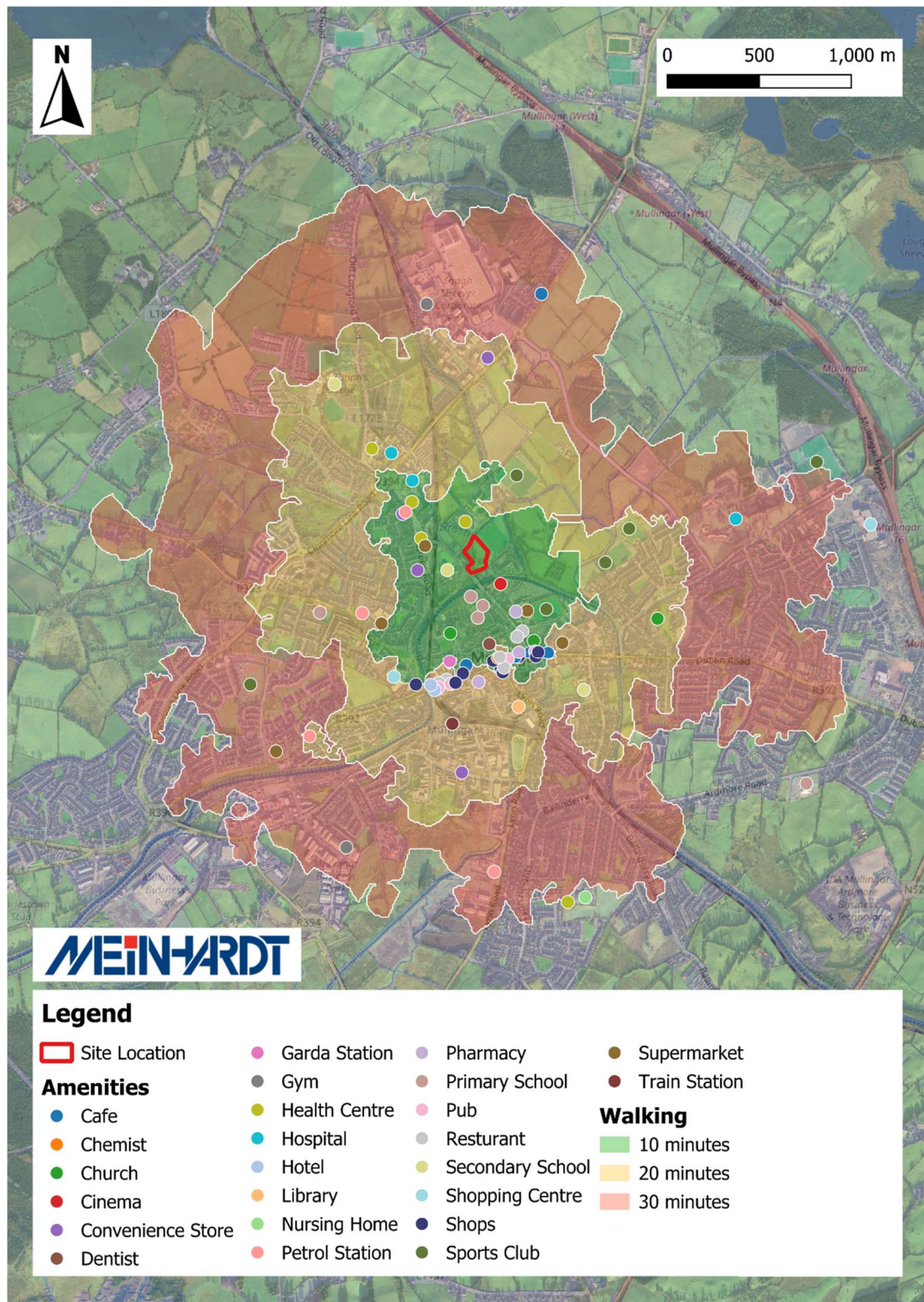


Figure 4-1: Site Context

4.2 Walking and Cycling

The proposed development is well positioned to access the full extent of the town both via walking and cycling. The existing active travel facilities in the village are of a good level, with footpaths on the majority of the roadways as well as dropped kerbs, dedicated crossing points and street lighting.

A walking accessibility assessment was carried out using QGIS modelling showing the surrounding areas that can be accessed from the proposed site within a 10-minute, 20-minute and 30-minute walk (approximately 2.5km) respectively. As shown in Figure 4-2, the majority of the town is accessible in a 30-minute walk from the site.

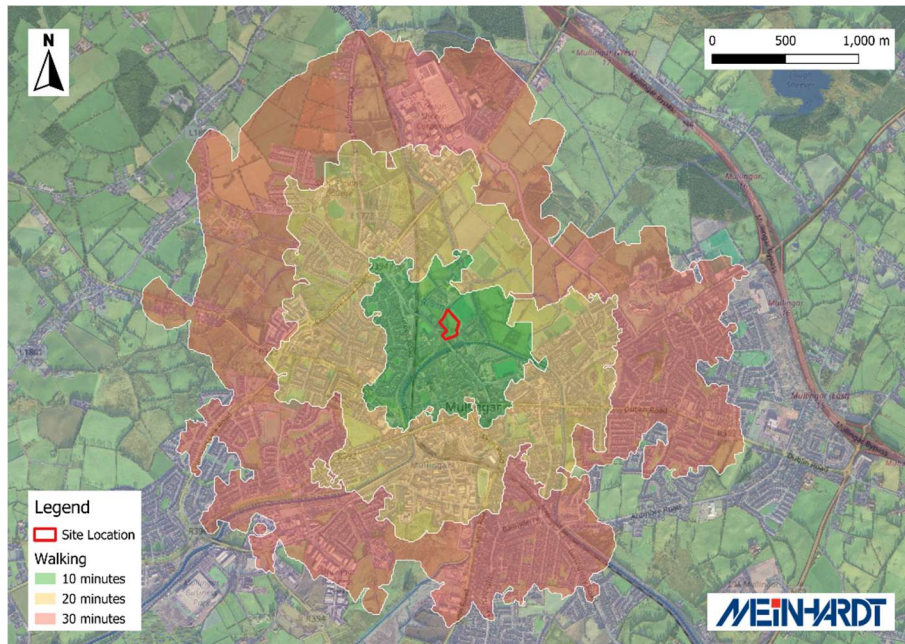


Figure 4-2: Walking Accessibility Travel Distances

A cycling accessibility assessment was carried out using QGIS modelling to identify the surrounding areas that can access the site within 10 minutes, 20 minutes and 30 minutes cycling. Figure 4-3 illustrates locations accessible within a 30-minute cycle (approximately 8km) from the site, including the village of Ballinea as well as Lough Owel and Lough Ennell.

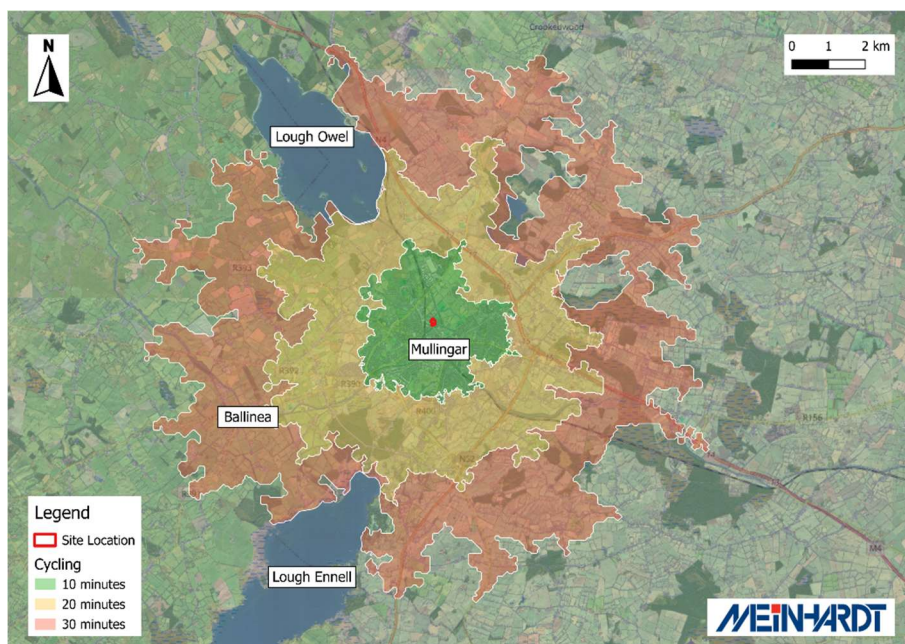


Figure 4-3: Cycling Accessibility Travel Distances

4.3 Public Transport

A public transport accessibility assessment was carried out using QGIS modelling showing the surrounding areas that can access the site within 15 minutes, 30 minutes, 45 minutes and 60 minutes using public transport. Figure 4-4 highlights the areas beyond Mullingar that are accessible by public transport within one hour of travel time from the proposed site at 8am. These accessible areas include Edgeworthstown, Correllstown and Killuca in 45 minutes and Longford, Kinnegad, Raharney and Ballivor in 60-minutes.



Figure 4-4: Public Transport Network Accessibility Travel Distances at 8am

Figure 4-5 shows the bus stops accessible within a 10-minute walk from the proposed site. There is a total of 15 bus stops, with Mullingar Train Station accessible within a 20-minute walk from the development. The routes that serve these stops are detailed in Table 4-1. Table 4-2 details all accessible bus services along with their first and last service of the day and general weekday frequency.

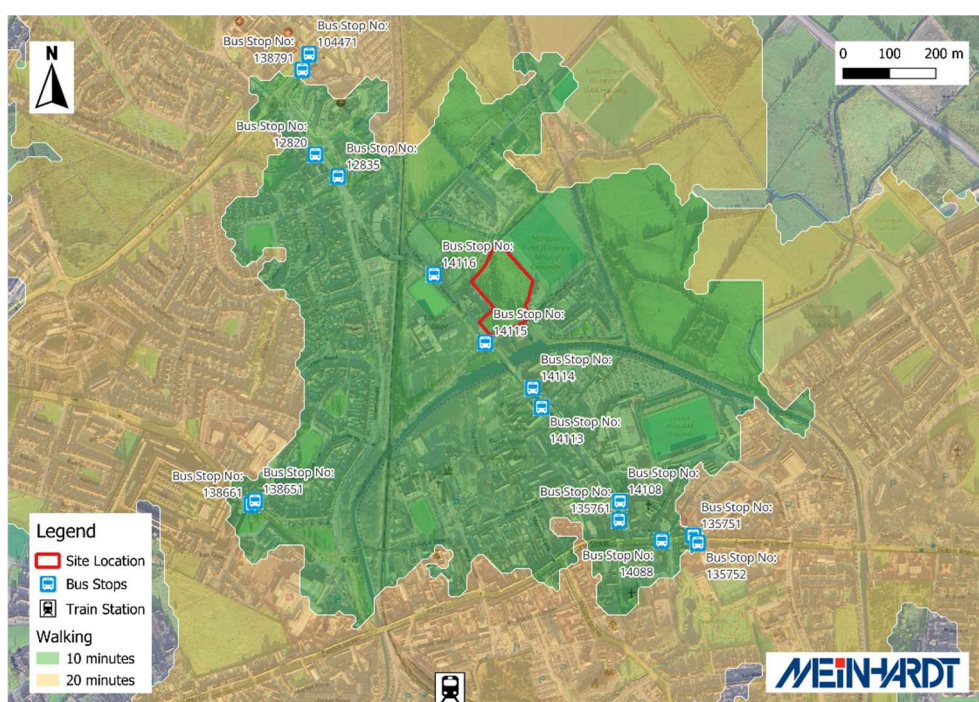


Figure 4-5: Public Transport Stops Within a 10 Minute Walk from the Proposed Site

Table 4-1: Bus Stops Within a 10 Minute Walk from the Proposed Site and their Routes

Route	Bus Stops Within 10-Minute Walk
MU1	104471, 138791, 12820, 12835, 14116, 14115, 14114, 14113, 14108, 135761
MU2	12820, 12835, 14116, 14115, 14114, 14113, 14108, 135761, 135751, 14088
23	104471, 138791, 135761, 135751
70	104471, 135761
115 / 115C / 115X	135761, 135751
167	135761, 135751
190	135761, 135751
447	104471, 138791, 135761, 135751
448	135761, 138651, 138661
816	12820, 12835, 14108, 135761
818	104471, 14108, 135761
819	12820, 12835, 135761, 135752
837	12835, 135761, 135751
MB01	12820, 12835, 135761, 135752

Table 4-2: Bus and Train Services, Routes, and Frequencies

Bus Number	Monday – Friday			
	Route	First Bus	Last Bus	Frequency
MU1	Ballinderry Road – Lough Sheever Corporate Park	07:20	23:20	30 minutes
MU2	Mullingar Business Park – Dublin Road	07:05	23:35	30 minutes
MB01	Ballymore - Moate	08:00	16:05	1 return service daily
23	Dublin Airport – Longford – Sligo	06:00	04:46 ⁺¹	6 return services daily
70	Galway – Mullingar - Dundalk	07:45	18:32	3 return services daily
115	Dublin - Mullingar	05:30	05:50 ⁺¹	30 minutes
115C	Enfield – Killucan – Mullingar	06:00	18:10	4 return services daily
115X	Connolly Station – Mullingar Station	06:00	23:30	4 return services daily
167	Dundalk – Louth – Ardee	06:30	21:15	60 minutes
190	Drogheda – Navan Trim	05:30	23:30	60 minutes
447	Finea – Castlepollard – Mullingar	10:00	13:30	1 return service daily
448	Shandonagh – Ballynacargy – Mullingar	09:35	13:30	1 return service daily
816	Longford – Mullingar	07:00	17:40	3 return services daily
818	Castlepollard – Mullingar	06:15	19:15	6 return services daily
819	Athlone – Mullingar	05:40	21:15	5 return services daily
837	Tullamore – Mullingar	07:10	22:30	6 return services daily
Train	Monday – Friday			
	Route	First Train	Last Train	Frequency
-	Mullingar – Dublin Connolly	06:10	20:51	3 hours

4.4 Vehicles

Vehicles will access the proposed development site from the Harbour Road, which bounds the site to the northwest. Harbour Road is a two-way road and currently has a Primary Care Centre and a separate residential development onto it. It is approximately 6.5m wide, dedicated cycle path and footpaths on both sides. The speed limit of Harbour Road is 50 km/h adjacent to the site. Harbour Road joins Harbour Street to the south and it is proposed to connect it to Robinstown Link Road to the north in the future.

4.5 Accident History

At present no site-specific road safety collision information is publicly available from the Road Safety Authority.

4.6 Swept Path Analysis

Refuse and emergency vehicle access is facilitated within the proposed site layout. Swept path analysis drawings have been produced demonstrating a refuse and emergency vehicle accessing, manoeuvring within and egressing the proposed development site, confirming the acceptability of the site to accommodate such vehicles.

For more details see drawings 26019-MHT-XX-ZZ-DR-T-0001, 26019-MHT-XX-ZZ-DR-T-0002 and 26019-MHT-XX-ZZ-DR-T-0003 submitted with this application.

4.7 Summary

The proposed development site is well-located with respect to sustainable accessibility. It benefits from existing pedestrian facilities, as well as convenient access to public transport stops and local amenities. These stops are served by frequent services, providing access to major areas, including Dublin City and Airport. Additionally, local areas, including Athlone, Longford and Tullamore, are also accessible through these services.

5 Parking Provision

5.1 Car Parking Standards and Provision

The site is located within the administrative area of Westmeath County Council. Car parking standards are set out in Chapter 16 'Development Management Standards' of Volume 1 as indicated in Table 5-1.

Table 5-1: Car Parking Standards, Requirements and Proposed Provision

Category	No. of Dwellings Proposed	Car Parking Standard	Minimum Parking Provision	Actual Parking Provision
House	28	min 1.3 per unit	36	36
Duplex	22	1 per unit	22	22
Duplex Visitor	22	1 per 3 units	7	7
Total	-	-	65	65

The proposed development includes a total of 65 no. car parking spaces, comprising 36 no. spaces for the housing units, 22 no. spaces for the duplex units, and 7 no. visitor spaces associated with the duplex units. It is assumed that visitors to the housing units will utilise the parking spaces allocated to those dwellings.

Parking provision for the housing units has been calculated at an average ratio of 1.3 spaces per unit, with individual dwellings allocated either one or two spaces. The duplex units have been allocated one space per unit, with additional visitor parking provided at a ratio of one space per three units. This results in a total provision of 7 no. visitor parking spaces for the duplex units.

5.2 Accessible Car Parking

The WCCDP supports the delivery of age-friendly and universally accessible facilities within new developments. In accordance with the Development Management Standards, a minimum of 6% of all car parking spaces should be provided as accessible parking bays, designed in line with universal design principles to ensure safe and convenient use for all users.

The proposed development provides a total of 65 parking spaces, which will include 4 accessible parking bays, in compliance with the minimum standard. These spaces are located in convenient positions to provide easy access to dwellings, supporting both positive ageing objectives and accessibility for all residents and visitors.

5.3 EV Car Parking

The WCCDP supports the transition to the provision of electric vehicle (EV) charging infrastructure within new developments. In accordance with the Development Management Requirements, new residential developments should accommodate at least one car parking space equipped with an EV charging point for every ten car parking spaces being provided.

The proposed development provides a total of 65 parking spaces. 7 no. fully functional EV charging spaces will be provided in accordance with the minimum requirement of the Development Plan, with ducting and passive provision included to allow for the future installation of EV charging facilities to serve more spaces, should demand increase over time.

5.4 Car Sharing

Car sharing aligns with the broader sustainable transport objectives for County Westmeath, which aim to reduce reliance on private vehicles and encourage alternative travel modes, including walking, cycling, public transport, and shared mobility. There are two dedicated GoCar locations in Mullingar, with one at Mullingar Shopping Centre approximately 700m south of the proposed development, the other location is

at the N4 Service Station West approximately 3.7km east of the proposed development. The availability of these options provides residents with the opportunity to utilise more sustainable transport modes and reduce reliance on private car travel.

5.5 Cycle Parking Standards and Provision

The Westmeath County Development Plan 2021-2027 requires that cycle facilities be provided with all new development proposals, with bicycle parking stands located in secure, safe, and convenient locations close to building entrances. This is intended to encourage cycling as a sustainable mode of travel and to support the wider objectives of reducing reliance on private car use. Table 5-2 sets out the cycle parking standards and provision for the development.

Table 5-2 Cycle Parking Standards, Requirements and Proposed Provision

Category	No. of Dwellings Proposed	Cycle Parking Standard	Minimum Cycle Provision	Actual Cycle Provision
Townhouse	8 (16 bed spaces)	1 per bed space	16	16
Duplex	22 (33 bed spaces)	1 per bed space	33	33
Visitor	50	1 per 2 units	25	25
Total	50	-	74	74

In line with this policy, the proposed development provides a total 74 cycle spaces. 49 of these spaces are for the residential units. The remaining 25 are to be provided for visitors. Bike storage outside the mid-terrace houses and duplexes units will be provided via external space to the front of the units, behind the bin stores. Houses that have external access to their rear gardens have only been included for the purposes of calculating visitor cycle parking and not long-term parking. This ensures convenient, secure and weather-protected storage for bicycles, promotes active travel, and supports sustainable transport within the community.

6 Travel Demands

6.1 Introduction

This section assesses the likely future vehicle travel demands to and from the proposed development. To estimate vehicle travel demands, the Trip Rate Information Computer System (TRICS) 8.25.12 database was consulted for the proposed land use types in a village / edge of town area / neighbourhood centre. The recommended trip rates from TRICS were extracted from the database and applied to the proposed development based on size and spatial parameters. The full TRICS output files are included in Appendix A.

Note that the peak hours extracted from TRICS reflect the busiest AM and PM periods on the local road network. For this people trip assessment, 08:00-09:00 AM and 17:00-18:00 PM have been selected, providing a robust analysis. It should be noted that rounding errors may apply to all trip generation calculations.

6.2 Proposed People Trip Rates and Trip Generation

Table 6-1 presents the anticipated weekday peak AM and PM people trip rates. As outlined above, the trip rate for each land use between 08:00-09:00 AM and 17:00-18:00 PM has been used for the people trip assessment, as these times are assumed to represent peak usage of the local road network. A multi-modal analysis was undertaken to illustrate the distribution of the trips generated by the development across various modes, including walking, cycling, public transport, vehicles and vehicle passengers.

Table 6-1: People Trip Rates by Land Use (per unit)

Land Use	Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		In	Out	Total	In	Out	Total
Houses Privately Owned	Walking	0.045	0.165	0.210	0.070	0.062	0.132
	Cycling	0.004	0.017	0.021	0.010	0.005	0.015
	PT	0.002	0.020	0.022	0.100	0.004	0.104
	Vehicles	0.147	0.401	0.548	0.354	0.180	0.534
	Vehicle Passengers	0.180	0.659	0.839	0.522	0.251	0.773
	Total	0.378	1.262	1.640	1.056	0.502	1.558
Land Use	Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		In	Out	Total	In	Out	Total
Flats Privately Owned	Walking	0.033	0.130	0.163	0.094	0.054	0.148
	Cycling	0.004	0.025	0.029	0.012	0.004	0.016
	PT	0.012	0.149	0.161	0.091	0.022	0.113
	Vehicles	0.064	0.195	0.259	0.167	0.076	0.243
	Vehicle Passengers	0.078	0.272	0.350	0.207	0.101	0.308
	Total	0.191	0.771	0.962	0.571	0.257	0.828

6.3 Proposed People Trip Generation

Table 6-2 presents the expected people trip generation for the development, along with the breakdown of trips generated by each mode of transport. These values are based on the people trip rates by mode as shown in Table 6-1.

Table 6-2: People Trips for the Proposed Development

Land Use	Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		In	Out	Total	In	Out	Total
Houses Privately Owned	Walking	2	7	9	3	3	6
	Cycling	0	1	1	0	0	1
	PT	0	1	1	4	0	5
	Vehicles	6	18	24	16	8	23
	Vehicle Passengers	8	29	37	23	11	34
	Total	17	56	72	46	22	69
Land Use	Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		In	Out	Total	In	Out	Total
Flats Privately Owned	Walking	0	1	1	1	0	1
	Cycling	0	0	0	0	0	0
	PT	0	1	1	1	0	1
	Vehicles	0	1	2	1	0	1
	Vehicle Passengers	0	2	2	1	1	2
	Total	1	5	6	3	2	5

Table 6-3 shows the total people trips for the houses and duplex units. It indicates that the proposed development would be expected to generate approximately 78 two-way people trips in the AM peak hour, and 74 two-way people trips in the PM peak hour. Most of these trips are vehicle based including vehicle passengers. In total 13no. AM and 13no. PM trips were undertaken using sustainable modes.

Table 6-3 Total People Trips for the Proposed Development

Land Use	Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		In	Out	Total	In	Out	Total
Total	Walking	2	8	10	4	3	7
	Cycling	0	1	1	1	0	1
	PT	0	2	2	5	0	5
	Vehicles	7	19	26	17	8	25
	Vehicle Passengers	8	31	39	24	12	36
	Total	18	60	78	50	24	74

6.4 Summary

The TRICS database was used to determine vehicle trip rates for the proposed development. Based on these rates, the site is anticipated to generate a modest number of total people trips, with approximately 78 trips during the AM peak (08:00–09:00) and 74 trips during the PM peak (17:00–18:00). This includes all modes of travel, such as walking, cycling, public transport and vehicle trips.

Of these, 26 two-way trips in the morning and 25 two-way trips in the evening are expected to be vehicle movements, representing the number of cars entering and leaving the site. Due to the nature of the surrounding area of the development, little to no traffic is expected to exit the development and turn north as this is a cul de sac at present; instead, most vehicles will travel south towards Mullingar.

A Traffic Count Survey was conducted by Westmeath County Council on Harbour Road where the development will access on to from Friday 23rd January to Friday 30th January 2026. The results of this survey show that in the AM peak 153 vehicles, and in the PM peak 130 vehicles pass the proposed development. The development is predicted to generate 26 two-way trips in the morning and 25 two-way trips in the evening, which equates to a 17% increase in the AM peak and a 19% increase in the PM peak

on the existing road adjacent to the development. The percentage increase experienced is above the 10% threshold set by TII however, as this road is a cul de sac with the only developments accessing onto it consisting of a primary care centre and a residential development that is not fully complete, the high percentage increase will not have a significant impact on Harbour Road. Junctions 11 modelling has been carried out on the proposed development junction to show how it will operate and is shown in Section 7 of this report.

Based on a traffic count carried out in November 2021, which shows an AM peak of 1006 and PM peak of 987 at the southern T-junction of Harbour Road, the percentage increase caused by the proposed development is 2.6% in the AM peak and 2.5% in the PM peak. As the survey is from 2021 this represents a worst-case scenario for the percentage increase as, if the 2021 figures were to be factored up using TII growth rates, this would result in the percentage increase reducing.

7 Traffic Assessment

7.1 Growth Rates

The Transport Infrastructure Ireland 2016 publication “Project Appraisal Guidelines for National Roads Units 5.3,” was used to calculate growth factors for the road network traffic. Table 7-1 below shows the calculated growth factors to convert from 2026 to 2028 to be 1.034, 2026 to 2033 to be 1.090 and from 2026 to 2043 to be 1.161 respectively.

Table 7-1 Future Growth Rates for Westmeath

Central Growth Rate	Cars/LGV	HGV	Combined
Vehicle Count %	96%	4%	
2026 to 2028	1.032	1.064	1.034
2026 to 2033	1.086	1.183	1.090
2026 to 2043	1.152	1.381	1.161
TII Publication - Project Appraisal Guidelines for National Roads			
Unit 5.2 - Travel Demand Projections			
Table 6.1 Link-Based Growth Rates: Metropolitan Area Annual Growth Rates			

7.2 Junctions 11 Analysis

In order to assess the proposed development junction, a junction model was produced using modelling software Junctions 11. The output movements from the models are based on the junction arms. The arms are designated A to C for T-Junctions as shown in Figure 7-1.

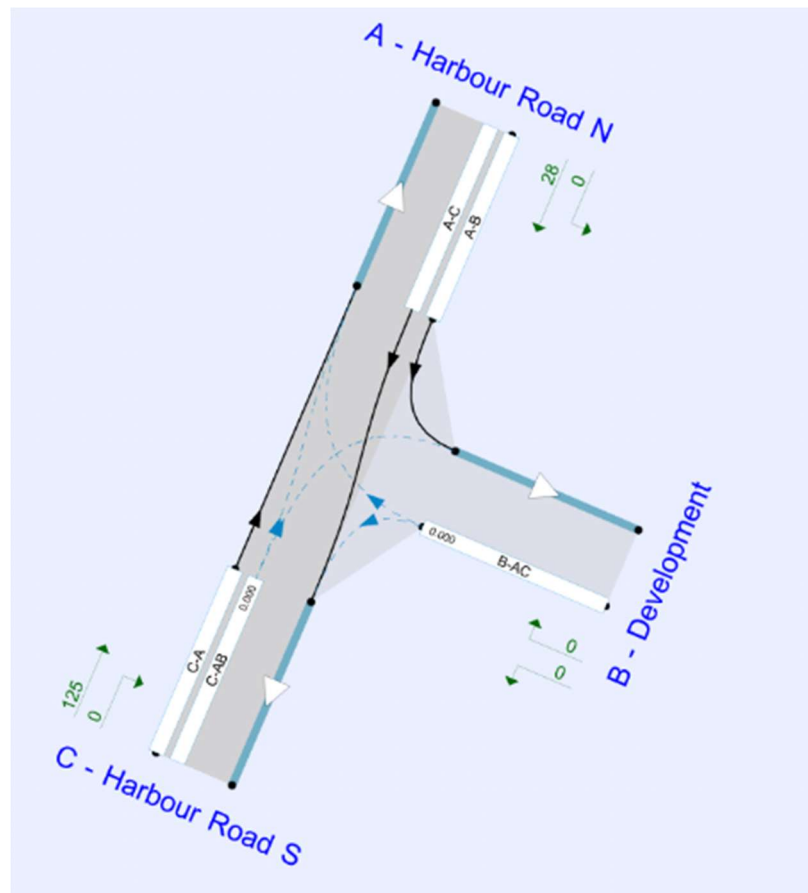


Figure 7-1 Development Junction Diagram

The output result sheets from JUNCTIONS 11 (PICADY 11) comprise tables of demand flows, capacities, queues and delays for each 15-minute interval within the peak hour analysis. These tables include the start

and finish times for each junction arm, traffic demand, the Ratio of Flow to Capacity (RFC), initial queue lengths and queuing delays.

The RFC provides the basis for assessing the operational performance and acceptability of both proposed and existing junction layouts. In general, an RFC value of 0.85 or less during peak periods is considered acceptable. An RFC of 0.85 indicates that, at peak times, the junction is operating at approximately 85% of its theoretical capacity, thereby retaining a practical reserve capacity to accommodate fluctuations in traffic demand, such as those that may occur during bank holiday periods or other atypical conditions.

The degree of saturation is a measure of how close a junction is operating to its practical capacity. Within the JUNCTIONS 11 methodology, a junction with an RFC of approximately 0.85 is typically considered to be operating at 100% of its practical capacity.

The following sections present the results of the traffic model analysis for the AM peak hour (08:00–09:00) for the base year and future opening year scenarios. Full Junctions 11 output data is provided in Appendix B.

7.2.1 Development Junction Results

Table 7-2 below shows the results table generated from the Junctions 11 analysis.

Table 7-2 Junction Analysis Results

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 - Base Year									
Stream B-AC	D1	0.0	0.00	0.00	A	D2	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2028 - Without Development									
Stream B-AC	D3	0.0	0.00	0.00	A	D4	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2028 - With Development									
Stream B-AC	D5	0.0	6.02	0.03	A	D6	0.0	6.10	0.01	A
Stream C-AB		0.0	5.79	0.01	A		0.0	6.53	0.03	A
	2033 - Without Development									
Stream B-AC	D7	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2033 - With Development									
Stream B-AC	D9	0.0	6.02	0.03	A	D10	0.0	6.12	0.01	A
Stream C-AB		0.0	5.76	0.01	A		0.0	6.53	0.03	A
	2043 - Without Development									
Stream B-AC	D11	0.0	0.00	0.00	A	D12	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2043 - With Development									
Stream B-AC	D13	0.0	6.03	0.03	A	D14	0.0	6.14	0.01	A
Stream C-AB		0.0	5.73	0.01	A		0.0	6.54	0.03	A

The results show a maximum RFC of 3% occurs in the AM and PM peaks for the 2043 With Development scenario. A maximum delay of approximately 6 seconds is experienced across the junction.

The analysis shows that the junction is operating well below capacity for all With Development scenarios up to and including 2043, and any queues or delays are negligible. Full results can be seen in Appendix B.

8 DMURS Statement of Compliance

8.1 Introduction

This section of the TS contains a statement that the proposed development has been designed in accordance with the DMURS (Design Manual for Urban Roads and Streets, May 2019). Compliance of key aspects of the proposed development layout with the principles of DMURS are outlined below with extracts from Drawing No 26019-MHT-XX-ZZ-DR-C-0100 produced by Meinhardt included in this application.

8.2 Site Entrance

The proposed site access has been designed in accordance with DMURS. It incorporates a 5.5m wide vehicular entrance with an uncontrolled pedestrian crossing across the junction. The pedestrian crossing has been designed in accordance with the Cycle Design Manual TL402 Partial Set Back. The design includes a dropped kerb, a stop line and associated signage and tactile paving to alert visually impaired users to the crossing point. For further details see Figure 8-1 and Meinhardt General Arrangement Drawing (26019-MHT-XX-ZZ-DR-C-0100) submitted with this application.

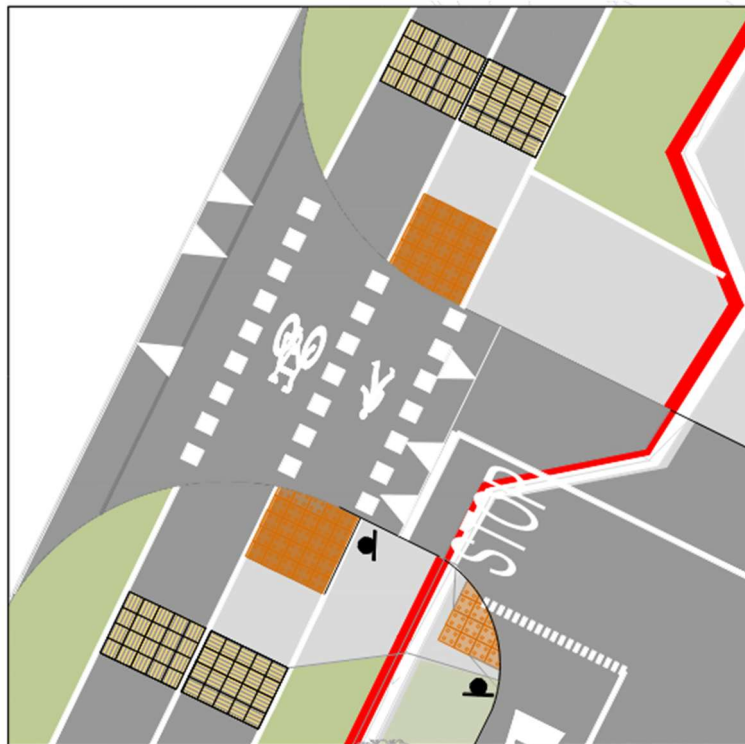


Figure 8-1 Proposed New Access Junction

8.3 Pedestrian Facilities and Access

A dedicated network of high-quality pedestrian facilities is provided throughout the proposed development site in the form of 2m wide DMURS-compliant footpaths. These are located primarily along the access roads, with an additional feature route provided through the public open space on the western boundary of the site.

Numerous uncontrolled pedestrian crossings are provided throughout the development at access road junctions along key desire lines. These crossings include dropped kerbs and tactile paving to assist visually impaired users. Dedicated pedestrian linkage is provided to the pedestrian facilities along Harbour Road in front of the development. These linkages and facilities enhance connectivity and permeability within developments and the local area, supporting active travel and facilitating pedestrian movement in all directions.

For further details on the pedestrian facilities, connections and access within the development see Meinhardt General Arrangement Drawing (26019-MHT-XX-ZZ-DR-C-0100) submitted with this application.

8.4 Cyclist Facilities

There are no dedicated cycle paths within the development layout, however, the low-speed environment proposed will be suitable for cyclists moving around the site. The development junction provides access to the dedicated cycling facilities on Harbour Road and the shared surface / greenway in the south of the site provides cyclist connection onto Harbour Street.

8.5 Corner Radii

As per Section 4.3.3 of DMURS, the corner radii at the proposed site access junction along Harbour Road have been minimised in order to reduce vehicular speeds, creating a safer environment for all road users. Internally within the development, corner radii range from 3m to 6m, reflecting the low frequency of large vehicle movements and supporting the objective of maintaining low vehicular speeds.

The site access has been analysed by way of swept path analysis to demonstrate that it is capable of accommodating the infrequent movement of large vehicles (i.e. refuse vehicles or emergency vehicles). For more information refer to Meinhardt Swept Path Analysis Drawings No. 26019-MHT-XX-ZZ-DR-T-0001, 26019-MHT-XX-ZZ-DR-T-0002 and 26019-MHT-XX-ZZ-DR-T-0003 submitted with this application.

8.6 Car Parking

The proposed development contains a mixture of on-street and in curtilage car parking. The in-curtilage parking occurs in the case of the housing units while the on-street parking is typically associated with visitor parking.

A total of 65 parking spaces are proposed as illustrated in 26019-MHT-XX-ZZ-DR-C-0100. The perpendicular spaces are designed with a width of 2.4m and a length of 5m, while the parallel car parking spaces measure 2.5m in width and 6m in length. This is in accordance with DMURS, minimum length of 4.8m and width of 2.4m for perpendicular spaces and 6m and 2.4m for parallel spaces.

It is proposed to include 4 no. accessible parking spaces within the development. Finally, it is proposed to provide 7 designated on-street EV parking spaces for the housing and visitor spaces in line with WMCC guidance. For further details on the proposed car parking provision within the development refer to the Section 5.

8.7 Swept Path Analysis

Refuse and emergency vehicle access is facilitated within the proposed site layout. Swept path analysis drawings have been produced demonstrating a large refuse vehicle manoeuvring within and egressing the proposed development site, confirming the acceptability of the site to accommodate such vehicles.

Additionally, swept path analysis has been completed for a standard fire tender vehicle to ensure it can pass through the entire development in the case of an emergency.

For further details see Meinhardt Drawing No's 26019-MHT-XX-ZZ-DR-T-0001 to 26019-MHT-XX-ZZ-DR-T-0003 submitted with this application.

8.8 Sightlines

The standard visibility splay for a junction with a 50km/h design speed on a bus route (as is the case on the GDDR) is 49 metres in both directions from a setback of 2.4 metres.

In relation to setback distance, DMURS states the following;

“priority junctions in urban areas should be designed as Stop junctions, and a maximum X distance of 2.4 metres should be used. In difficult circumstances this may be reduced to 2.0 metres where vehicle speeds

are slow and flows on the minor arm are low. However, the use of a 2.0 metre X distance may result in some vehicles slightly protruding beyond the major carriageway edge, and may result in drivers tending to nose out cautiously into traffic. Care should be taken to ensure that cyclists and drivers can observe this overhang from a reasonable distance and manoeuvre to avoid it without undue difficulty."

The standard visibility splay for a junction with a 50km/h design speed on the major arm (the L7419) is 49 metres in both directions from a setback of 2.4 metres. Visibility splays have been prepared for the proposed entrance.

Sightlines for the internal junctions have also been reviewed. Speed limits within the proposed development will be 30km/h. In accordance with DMURS, for 30km/h visibility should be 23m in both directions. Please refer to Meinhardt Drawing No. 26019-MHT-XX-ZZ-DR-T-0011 submitted with this application for further details.

9 Framework Mobility Management Plan (MMP)

9.1 Aim and Introduction

A Framework MMP is a package of measures tailored to the needs of individual sites and aimed at promoting greener, cleaner travel choices and reducing reliance on the private car. It involves the development of a set of mechanisms, initiatives and targets that together can enable the users of a development to reduce the impact of travel and transport on the environment, whilst also achieving a number of other benefits.

This Framework MMP provides the basis for the preparation of a detailed MMP for the proposed development. Should consent be granted it is expected that a detailed MMP will form part of the conditions of consent. Given the scale of the proposed development, the primary aim of the MMP would be to promote active travel among residents and users of other on-site facilities.

The MMP should be considered as a dynamic process where a package of measures and campaigns are identified, piloted, and monitored on an ongoing basis. The nature of the plan therefore changes during its implementation in that some measures prove successful and are therefore retained while others are not supported and are discarded. It is important that the plan retains the support of users and receives continuous monitoring. Feedback and active management of the plan is required for it to continue to be successful.

9.2 Objectives

The MMP shall assist in reducing the number of trips made to and from the proposed development by single occupancy private car. Residents and users of the development should be made aware of the MMP and encouraged to opt for more sustainable methods of transport, such as walking, cycling, public transport or car share where possible.

The overall MMP objectives for the development are:

- To promote the use of sustainable modes of transport i.e. walking, cycling and the use of public transport.
- To reduce the overall number of single occupancy vehicle trips for journeys to and from the development.
- To integrate mobility management into the development decisions, policies, and practices to work closely with governing bodies on means and use of transport services around the vicinity of the development site.

9.3 Benefits

The successful implementation of a MMP at the proposed development offers numerous benefits for residents and other users. These benefits may include:

- Improved health and fitness through increased levels of walking and cycling;
- Increased flexibility offered through wider travel choices;
- The social aspects of sharing transport with others; and
- A safer environment within the site and its immediate environs as vehicular movements are minimised.

9.4 Measures

In order to raise awareness of the MMP, a Travel Pack will be provided to residents. This pack will include details on site accessibility (as outlined in Section 4 of this report), the location of public transport stops, and links to journey planners.

To ensure effective results from any initial sustainable travel investment it is imperative to obtain the agreement of all the stakeholders and obtain the support of external partners where applicable. Ideally the MMP will be managed by a Mobility Manager or travel plan coordinator with a clear mandate to implement and evolve the plan. The Mobility Manager will also be best suited to monitor the results of the plan.

The MMP will endeavour to influence the modal split from the outset of the completed development. Due to the location of the site and the alternatives transport modes available then the historic reliance on the car can be challenged.

The document: *National Transport Authority Workplace Travel Plans - A Guide for Implementers* may be used as a reference. There is also a UK document: *Making Residential Travel Plans Work: Guidelines for new development* published by the UK Department of Transport 2005 which is relevant. Travel surveys should be carried out in the early stages and annually to monitor the initial success of the travel plan and to gain a better understanding of the users travel habits. These survey results can also serve as a sustainable travel performance benchmark to indicate how the Travel Plan is performing in comparison to previous years and the sustainable travel targets initially outlined in the plan.

9.5 Summary

This section of the report provides a framework on which a full MMP for the proposed development could be based, promoting sustainable transport options for residents and visitors of the development. The applicant is committed to delivering a sustainable development and is aware that the preparation and upkeep of a MMP is a key element to this with regards to transportation. As such it is expected that the requirement for a MMP would form a condition of any future planning consent.

10 Framework Construction Traffic Management Plan (CTMP)

10.1 Introduction

Should consent be granted for the proposed development the applicant and the appointed contractor will be responsible for setting out a CTMP to be finalised and agreed with Westmeath County Council. This Framework CTMP sets out indicative good practice measures which could be included in the final CTMP. The final CTMP is anticipated to form a condition of consent.

10.2 Working Hours

Potential working hours to manage impacts on the local community may be:

- Between the hours of 07:00 and 19:00 Monday to Friday; and
- Minimal construction activities may occur on Saturdays between the hours of 09:00 and 13:00; and
- No construction activities will occur on Sundays or any Bank and Public Holidays.

10.3 Transport Coordination

The appointed site manager will undertake the transport coordination role for the site. In this respect, their main responsibilities will include but not limited to:

- Managing the implementation of the CTMP.
- Vehicle scheduling.
- Scheduling refuse collections.
- Handling complaints.
- Acting as a point of contact for employees, contractors, the general public and with stakeholders; and
- Liaising with other developers / contractors in the area to mitigate against cumulative construction traffic impacts.

10.4 Delivery of Plant and Materials

The following measures should be implemented in relation to plant and materials:

- All materials relating to the development process will be stored within the footprint of the site.
- Skips and other plant machinery will be stored within the confinements of the site.
- A loading and unloading area for plant and machinery will be available within the site. It is expected that the majority of deliveries will be made via articulated goods vehicles.
- All car parking, both staff and others, will be within the site, not on the public road.

Given the scale of the proposed development, the number of daily site deliveries throughout the construction phases is anticipated to be moderate. Disruption would be minimised via the scheduling of deliveries and material removals, in addition, construction materials that are delivered will be stored on-site.

10.5 Route Compliance

Use of an agreed vehicle route will be included as a contractual requirement and communicated to all drivers. No temporary full closures of public roads are expected to be required for construction of the development, but should exceptional circumstances arise that would require such a closure KCC would be notified in advance and their consent sought to the statutory process required.

10.6 Vehicle Compound

The appointed contractor should provide car parking for staff members within the site, with car sharing promoted to reduce the number of vehicle trips made to the site. Further details should be provided in their detailed Construction Traffic Management Plan.

10.7 Construction Staff Mobility Management

To ensure the proper movement of construction staff on site, the appointed contractor should also prepare a Mobility Management Plan document for staff. This would set out measures to ensure the traffic impact of construction staff travelling to work is also minimised. This would include elements such as car sharing initiatives and information on public transport for staff who are able to travel by bus.

10.8 Dust and Dirt Control

Mud and loose gravel on the road are one of the main annoyances and safety issues arising from construction sites. In the unlikely event of dust becoming an issue, the contractor will use hoses to saturate bulk materials with water both during the process and whilst loading and unloading.

To keep smoke emission to a minimum, the burning of materials on site will be strictly prohibited.

The contractor will maintain the condition of the area around the site, including the public roadway, ensuring that it is regularly and adequately swept to prevent the accumulation of dust and dirt.

10.9 Noise Control

Noise generated by the construction process will be considered and its impact on surrounding properties mitigated. Suitable mitigation options include:

- Standard construction hours.
- The use of quieter alternative methods of construction, where is deemed reasonably practicable.
- Locate construction items and machinery, that will produce the most amount of noise, away from neighbouring properties. This includes site offices and facilities.
- Ensure to carry out and maintain proper procedure regarding operating all vehicles and equipment to keep noise and vibrations to a minimum.

10.10 Waste Management

The volume of earthworks arising from the development will be minimal and will be re-used where possible on site. Any waste material will be collated and stored in suitable storage facilities before being taken off site.

Waste materials will not be allowed to build up and accumulate due to the increase in risk of fire / vermin.

The waste will be separated and divided into various recycling types and general waste to maximise the percentage of waste recycled and reused.

10.11 Other Mitigation Measures

Earth works and concrete works will take place during periods of low anticipated rainfall, where practical, to reduce the run-off and potential siltation of watercourses.

All plant and machinery will be properly serviced before being mobilised to site. No plant maintenance will be done on site, and any broken plant will be taken off site and fixed remotely.

Procedures and contingency plans will be set up to deal with emergency accidents or spills. An emergency spill kit with oil boom, absorbers etc. will be kept on-site for use in the event of an accidental spill.

10.12 Summary

The Framework Construction Traffic Management Plan (CTMP) provides a set of measures to be included in the final CTMP for the proposed development. It covers aspects such as working hours, transport coordination, delivery of materials, route compliance, vehicle compound, dust and dirt control, noise control, waste management, and other mitigation measures. The plan aims to minimise disruption to the local community, ensure proper storage and disposal of waste, and address potential environmental concerns during the construction process.

11 Conclusion

11.1 Summary

This Transport Statement has been prepared in support of a Part 8 planning application for a proposed residential development at Harbour Road, Mullingar. The report has reviewed the relevant national, regional and local transport policy context, assessed existing transport conditions in the vicinity of the site and evaluated the likely transport and traffic impacts associated with the proposed development.

The assessment demonstrates that the site is well located in terms of accessibility, with good pedestrian and cycling connectivity, convenient access to a range of local amenities and strong public transport provision, including frequent local and regional bus services and rail services within walking distance. The proposed development aligns with the objectives of the National Planning Framework, National Development Plan, Westmeath County Development Plan, Mullingar Settlement Area Plan and the Mullingar Local Transport Plan by promoting sustainable travel choices and reducing reliance on the private car.

Trip generation analysis indicates that the development will generate a modest number of trips during peak periods. While the percentage increase in traffic on Harbour Road is above the TII screening threshold, the absolute increase in traffic volumes is low and occurs on a local cul-de-sac road with limited competing traffic movements. Junctions 11 modelling confirms that the proposed site access will operate well within capacity in all assessed scenarios, with negligible delays and no adverse impact on the surrounding road network.

The proposed access arrangements, internal layout and parking provision have been designed in accordance with DMURS principles, prioritising pedestrian safety, low vehicle speeds and high-quality public realm. Adequate car parking, accessible parking, EV charging infrastructure and cycle parking are provided in line with Development Plan standards. A Framework Mobility Management Plan and Framework Construction Traffic Management Plan have also been prepared to further support sustainable travel behaviour and manage construction-related impacts.

Overall, it is concluded that the proposed development can be accommodated safely and efficiently within the existing and planned transport network and that it represents a sustainable form of residential development in transport terms.

Appendix A – TRICS Outputs

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

01	GREATER LONDON	
	EN	ENFIELD
		2 days
02	SOUTH EAST	
	CT	CENTRAL BEDFORDSHIRE
		1 day
	ES	EAST SUSSEX
		11 days
	EX	ESSEX
		1 day
	HC	HAMPSHIRE
		11 days
	HF	HERTFORDSHIRE
		3 days
	KC	KENT
		5 days
	MW	MEDWAY
		1 day
	SC	SURREY
		5 days
	SP	SOUTHAMPTON
		1 day
	TK	THURROCK
		1 day
	WB	WEST BERKSHIRE
		1 day
	WS	WEST SUSSEX
		11 days
03	SOUTH WEST	
	BC	BOURNEMOUTH CHRISTCHURCH & POOLE
		1 day
	DC	DORSET
		2 days
	SM	SOMERSET
		1 day
	WL	WILTSHIRE
		1 day
04	EAST ANGLIA	
	CA	CAMBRIDGESHIRE
		1 day
	NF	NORFOLK
		15 days
	SF	SUFFOLK
		5 days
05	EAST MIDLANDS	
	DY	DERBY
		1 day
	LE	LEICESTERSHIRE
		1 day
	LN	LINCOLNSHIRE
		1 day
	NT	NOTTINGHAMSHIRE
		2 days
06	WEST MIDLANDS	
	SH	SHROPSHIRE
		1 day
	ST	STAFFORDSHIRE
		1 day
	TE	TELFORD & WREKIN
		1 day
	WK	WARWICKSHIRE
		1 day
	WM	WEST MIDLANDS
		2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY	NORTH YORKSHIRE
		3 days
08	NORTH WEST	
	BB	BLACKBURN WITH DARWEN
		1 day
	EC	CHESHIRE EAST
		2 days
	GM	GREATER MANCHESTER
		2 days
	LC	LANCASHIRE
		1 day
09	NORTH	
	CU	CUMBERLAND
		1 day
	DH	DURHAM
		1 day
	IM	ISLE OF MAN
		2 days
	TW	TYNE & WEAR
		1 day
10	WALES	
	CF	CARDIFF
		1 day
	VG	VALE OF GLAMORGAN
		1 day
11	SCOTLAND	
	AS	ABERDEENSHIRE
		1 day
	EA	EAST AYRSHIRE
		1 day
	FI	FIFE
		1 day
	HI	HIGHLAND
		2 days
13	MUNSTER	

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

14	TI	TIPPERARY	1 day
	WA	WATERFORD	1 day
15	LEINSTER		
	KK	KILKENNY	1 day
	ME	MEATH	1 day
16	GREATER DUBLIN		
	DL	DUBLIN	2 days
17	ULSTER (REPUBLIC OF IRELAND)		
	DN	DONEGAL	3 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	2 days
	AR	ARMAGH	1 day
	DE	DERRY	1 day
	DO	DOWN	1 day

This section displays the number of survey days per TRICS® sub-region in the selected set.

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Primary Filtering Selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	DWELLS
Actual Range:	4 to 1817 (units:DWELLS)
Range Selected by User:	4 to 1817 (units:DWELLS)
Parking Spaces Range:	6 - 2824

Public Transport Provision:	
Selection by:	All Surveys Included
Date Range:	05/05/87 to 30/06/25

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:	
Friday	9 days
Monday	19 days
Thursday	32 days
Tuesday	36 days
Wednesday	30 days

This data displays the number of selected surveys by day of the week.

Selected survey types:	
Manual count	126
Direction ATC Count	0

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines

Selected Locations:	
Edge of Town	126 days

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:	
Out of Town	6 days
Residential Zone	119 days
Village	1 days

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicle Counts:	
Servicing vehicles Excluded	6 days
Servicing vehicles Included	20 days
Servicing vehicles Unknown	100 days

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Secondary Filtering Selection:

Use Class:

C3	126 surveys
----	-------------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

300 - 4850

Population within 1 mile:

1,001 to 5,000	13 surveys
10,001 to 15,000	43 surveys
15,001 to 20,000	23 surveys
20,001 to 25,000	12 surveys
25,001 to 50,000	4 surveys
5,001 to 10,000	31 surveys

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

100,001 to 125,000	9 surveys
125,001 to 250,000	37 surveys
25,001 to 50,000	19 surveys
250,001 to 500,000	10 surveys
5,000 or Less	1 surveys
5,001 to 25,000	16 surveys
50,001 to 75,000	12 surveys
500,001 or More	4 surveys
75,001 to 100,000	18 surveys

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	37 surveys
1.1 to 1.5	82 surveys
1.6 to 2.0	7 surveys

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	67 surveys
Yes	59 surveys

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

1a (Low) - Very poor	1 surveys
1b - Very poor	1 surveys
No PTAL Present	124 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

1 CAIRNSHILL ROAD BELFAST CAIRNSHILL Edge of Town Residential Zone Number of dwellings: 370.00 DWELLS Survey date: Thursday 14/11/2002	AN-03-A-02	SEMI DETACHED	ANTRIM	Survey Type: Manual
2 KNOCKMORE ROAD LISBURN Edge of Town Residential Zone Number of dwellings: 86.00 DWELLS Survey date: Thursday 14/11/2002	AN-03-A-03	SEMI DETACHED	ANTRIM	Survey Type: Manual
3 BIRCHDALE MANOR LURGAN Edge of Town Residential Zone Number of dwellings: 153.00 DWELLS Survey date: Tuesday 15/06/2010	AR-03-A-01	MIXED HOUSES	ARMAGH	Survey Type: Manual
4 FARROCHIE ROAD STONEHAVEN Edge of Town Residential Zone Number of dwellings: 131.00 DWELLS Survey date: Wednesday 20/04/2022	AS-03-A-02	MIXED HOUSES	ABERDEENSHIRE	Survey Type: Manual
5 REVIDGE ROAD BLACKBURN FOUR LANE ENDS Edge of Town Residential Zone Number of dwellings: 185.00 DWELLS Survey date: Thursday 10/06/2004	BB-03-A-03	DETACHED/SEMI D.	BLACKBURN WITH DARWEN	Survey Type: Manual
6 HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST Edge of Town Residential Zone Number of dwellings: 28.00 DWELLS Survey date:	BC-03-A-02	BUNGALOWS	BOURNEMOUTH CHRISTCHURCH & POOLE	Survey Type: Manual
7 FALLOWFIELD CAMBRIDGE CHESTERTON Edge of Town Residential Zone Number of dwellings: 124.00 DWELLS Survey date: Tuesday 06/02/2001	CA-03-A-01	SEMI D./TERRACED	CAMBRIDGESHIRE	Survey Type: Manual
8 DROPE ROAD	CF-03-A-02	MIXED HOUSES	CARDIFF	

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

CARDIFF

Edge of Town

Residential Zone

Number of dwellings: 196.00 DWELLS

Survey date: Friday 05/10/2007

Survey Type: Manual

9 CT-03-A-03 MIXED HOUSES CENTRAL BEDFORDSHIRE

ARLESEY ROAD

STOTFOLD

Edge of Town

Residential Zone

Number of dwellings: 73.00 DWELLS

Survey date: Tuesday 27/06/2023

Survey Type: Manual

10 CU-03-A-02 SEMI DETACHED CUMBERLAND

HAWKSHEAD AVENUE

WORKINGTON

Edge of Town

Residential Zone

Number of dwellings: 40.00 DWELLS

Survey date: Thursday 20/11/2008

Survey Type: Manual

11 DC-03-A-10 MIXED HOUSES DORSET

ADDISON CLOSE

GILLINGHAM

Edge of Town

Residential Zone

Number of dwellings: 26.00 DWELLS

Survey date: Wednesday 09/11/2022

Survey Type: Manual

12 DC-03-A-13 MIXED HOUSES DORSET

ADDISON CLOSE

GILLINGHAM

Edge of Town

Residential Zone

Number of dwellings: 106.00 DWELLS

Survey date: Tuesday 10/06/2025

Survey Type: Manual

13 DE-03-A-04 SEMI-DETACHED & TERRACED DERRY

GREENHALL HIGHWAY

COLERAINE

Edge of Town

Residential Zone

Number of dwellings: 38.00 DWELLS

Survey date: Thursday 19/05/2022

Survey Type: Manual

14 DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM

PILGRIMS WAY

DURHAM

Edge of Town

Residential Zone

Number of dwellings: 57.00 DWELLS

Survey date: Friday 19/10/2018

Survey Type: Manual

15 DL-03-A-06 DETACHED DUBLIN

UPPER KILMACUD ROAD

DUBLIN

DUNDRUM

Edge of Town

Residential Zone

Number of dwellings: 147.00 DWELLS

Survey date: Friday 30/04/2010

Survey Type: Manual

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

16 R124 MALAHIDE SAINT HELENS Edge of Town Residential Zone Number of dwellings: 65.00 DWELLS Survey date: Wednesday 20/06/2018	DL-03-A-10	SEMI DETACHED & DETACHED	DUBLIN	Survey Type: Manual
17 THE GRANGE LETTERKENNY GLENCAR IRISH Edge of Town Residential Zone Number of dwellings: 50.00 DWELLS Survey date:	DN-03-A-03	DETACHED/SEMI-DETACHED	DONEGAL	Survey Type: Manual
18 GORTLEE ROAD LETTERKENNY GORTLEE Edge of Town Residential Zone Number of dwellings: 83.00 DWELLS Survey date: Friday 26/09/2014	DN-03-A-04	SEMI-DETACHED	DONEGAL	Survey Type: Manual
19 GLENFIN ROAD BALLYBOFEY Edge of Town Residential Zone Number of dwellings: 6.00 DWELLS Survey date: Wednesday 10/10/2018	DN-03-A-06	DETACHED HOUSING	DONEGAL	Survey Type: Manual
20 OLD MILL HEIGHTS BELFAST DUNDONALD Edge of Town Residential Zone Number of dwellings: 79.00 DWELLS Survey date: Wednesday 23/10/2013	DO-03-A-03	DETACHED/SEMI DETACHED	DOWN	Survey Type: Manual
21 RADBOURNE LANE DERBY Edge of Town Residential Zone Number of dwellings: 371.00 DWELLS Survey date: Tuesday 10/07/2018	DY-03-A-01	MIXED HOUSES	DERBY	Survey Type: Manual
22 TALISKER AVENUE KILMARNOCK Edge of Town Residential Zone Number of dwellings: 39.00 DWELLS Survey date: Thursday 05/06/2008	EA-03-A-01	DETACHED	EAST AYRSHIRE	Survey Type: Manual
23 SYDNEY ROAD CREWE	EC-03-A-04	DETACHED	CHESHIRE EAST	

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

SYDNEY

Edge of Town

Residential Zone

Number of dwellings: 17.00 DWELLS

Survey date: Tuesday 14/10/2008

Survey Type: Manual

24	EC-03-A-06	TERRACED HOUSES	CHESHIRE EAST
GREYSTOKE ROAD			
MACCLESFIELD			
HURDSFIELD			
Edge of Town			
Residential Zone			
Number of dwellings: 24.00 DWELLS			
Survey date:			

Survey Type: Manual

25	EN-03-A-01	TERRACED & SEMI-DETACHED	ENFIELD
BOLLINGBROKE PARK			
COCKFOSTERS			
Edge of Town			
Residential Zone			
Number of dwellings: 32.00 DWELLS			
Survey date: Wednesday 24/11/2021			

Survey Type: Manual

26	EN-03-A-02	DETACHED HOUSES	ENFIELD
DUCHY ROAD			
HADLEY WOOD			
Edge of Town			
Residential Zone			
Number of dwellings: 9.00 DWELLS			
Survey date: Wednesday 14/09/2022			

Survey Type: Manual

27	ES-03-A-01	MIXED HOUSES/FLATS	EAST SUSSEX
OLD MALLING WAY			
LEWES			
SOUTH MALLING			
Edge of Town			
Residential Zone			
Number of dwellings: 491.00 DWELLS			
Survey date: Thursday 29/03/2001			

Survey Type: Manual

28	ES-03-A-02	PRIVATE HOUSING	EAST SUSSEX
SOUTH COAST ROAD			
PEACEHAVEN			
Edge of Town			
Residential Zone			
Number of dwellings: 37.00 DWELLS			
Survey date: Friday 18/11/2011			

Survey Type: Manual

29	ES-03-A-03	MIXED HOUSES & FLATS	EAST SUSSEX
SHEPHAM LANE			
POLEGATE			
Edge of Town			
Residential Zone			
Number of dwellings: 212.00 DWELLS			
Survey date:			

Survey Type: Manual

30	ES-03-A-07	MIXED HOUSES & FLATS	EAST SUSSEX
NEW ROAD			
HAILSHAM			
HELLINGLY			
Edge of Town			
Residential Zone			
Number of dwellings: 91.00 DWELLS			



Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Survey date: Thursday 07/11/2019

Survey Type: Manual

31 WATERGATE BEXHILL-ON-SEA Edge of Town Residential Zone Number of dwellings: 139.00 DWELLS Survey date: Thursday 28/09/2023	ES-03-A-10	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: Manual
32 A265 HEATHFIELD Edge of Town Residential Zone Number of dwellings: 36.00 DWELLS Survey date:	ES-03-A-13	DETACHED HOUSES	EAST SUSSEX	Survey Type: Manual
33 RATTLE ROAD NEAR EASTBOURNE STONE CROSS Edge of Town Residential Zone Number of dwellings: 120.00 DWELLS Survey date: Tuesday 30/04/2024	ES-03-A-14	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: Manual
34 WRESTWOOD ROAD BEXHILL-ON-SEA Edge of Town Residential Zone Number of dwellings: 190.00 DWELLS Survey date: Wednesday 09/10/2024	ES-03-A-19	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: Manual
35 NEW ROAD HAILSHAM HELLINGLY Edge of Town Residential Zone Number of dwellings: 13.00 DWELLS Survey date: Wednesday 06/11/2024	ES-03-A-20	DETACHED & SEMI-DETACHED	EAST SUSSEX	Survey Type: Manual
36 PARK ROAD HAILSHAM HELLINGLY Edge of Town Residential Zone Number of dwellings: 160.00 DWELLS Survey date: Wednesday 26/03/2025	ES-03-A-21	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: Manual
37 THE FAIRWAY NEWHAVEN Edge of Town Residential Zone Number of dwellings: 85.00 DWELLS Survey date: Tuesday 22/04/2025	ES-03-A-22	MIXED HOUSES	EAST SUSSEX	Survey Type: Manual
38 KESTREL GROVE	EX-03-A-03	MIXED HOUSES	ESSEX	

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

RAYLEIGH Edge of Town Residential Zone Number of dwellings: 123.00 DWELLS Survey date: Survey Type: Manual			
39	FI-03-A-03	MIXED HOUSES	FIFE
WOODMILL ROAD DUNFERMLINE Edge of Town Residential Zone Number of dwellings: 155.00 DWELLS Survey date: Survey Type: Manual			
40	GM-03-A-08	SEMI DETACHED	GREATER MANCHESTER
ELM TREE ROAD STOCKPORT LOWER BREDBURY Edge of Town Residential Zone Number of dwellings: 247.00 DWELLS Survey date: Friday 12/10/2001 Survey Type: Manual			
41	GM-03-A-10	DETACHED/SEMI	GREATER MANCHESTER
BUTT HILL DRIVE MANCHESTER PRESTWICH Edge of Town Residential Zone Number of dwellings: 29.00 DWELLS Survey date: Wednesday 12/10/2011 Survey Type: Manual			
42	HC-03-A-21	TERRACED & SEMI-DETACHED	HAMPSHIRE
PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS Edge of Town Residential Zone Number of dwellings: 39.00 DWELLS Survey date: Tuesday 13/11/2018 Survey Type: Manual			
43	HC-03-A-22	MIXED HOUSES	HAMPSHIRE
BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Number of dwellings: 40.00 DWELLS Survey date: Wednesday 31/10/2018 Survey Type: Manual			
44	HC-03-A-26	MIXED HOUSES & FLATS	HAMPSHIRE
BOTLEY ROAD WHITELEY Edge of Town Out of Town Number of dwellings: 270.00 DWELLS Survey date: Thursday 24/06/2021 Survey Type: Manual			
45	HC-03-A-27	MIXED HOUSES	HAMPSHIRE
DAIRY ROAD ANDOVER Edge of Town Residential Zone			

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Number of dwellings: 73.00 DWELLS
Survey date: Tuesday 16/11/2021

Survey Type: Manual

46 **HC-03-A-28** **MIXED HOUSES & FLATS** **HAMPSHIRE**
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Number of dwellings: 125.00 DWELLS
Survey date:

Survey Type: Manual

47 **HC-03-A-34** **MIXED HOUSES & FLATS** **HAMPSHIRE**
STONEHAM LANE
EASTLEIGH
Edge of Town
Residential Zone
Number of dwellings: 243.00 DWELLS
Survey date: Tuesday 14/11/2023

Survey Type: Manual

48 **HC-03-A-35** **MIXED HOUSES & FLATS** **HAMPSHIRE**
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Number of dwellings: 289.00 DWELLS
Survey date: Tuesday 31/10/2023

Survey Type: Manual

49 **HC-03-A-36** **MIXED HOUSES & FLATS** **HAMPSHIRE**
HAVANT ROAD
EMSWORTH
Edge of Town
Residential Zone
Number of dwellings: 145.00 DWELLS
Survey date: Tuesday 12/09/2023

Survey Type: Manual

50 **HC-03-A-37** **MIXED HOUSES** **HAMPSHIRE**
REDFIELDS LANE
FLEET
CHURCH CROOKHAM
Edge of Town
Residential Zone
Number of dwellings: 50.00 DWELLS
Survey date: Wednesday 27/03/2024

Survey Type: Manual

51 **HC-03-A-39** **MIXED HOUSES & FLATS** **HAMPSHIRE**
KILN ROAD
LIPHOOK
Edge of Town
Residential Zone
Number of dwellings: 156.00 DWELLS
Survey date: Thursday 14/11/2024

Survey Type: Manual

52 **HC-03-A-41** **MIXED HOUSES & FLATS** **HAMPSHIRE**
CROW LANE
RINGWOOD
CROW
Edge of Town
Residential Zone
Number of dwellings: 195.00 DWELLS
Survey date:

Survey Type: Manual

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

53 HARE STREET ROAD BUNTINGFORD Edge of Town Residential Zone Number of dwellings: 160.00 DWELLS Survey date:	HF-03-A-03	MIXED HOUSES	HERTFORDSHIRE	Survey Type: Manual
54 HOLMSIDE RISE WATFORD SOUTH OXHEY Edge of Town Residential Zone Number of dwellings: 8.00 DWELLS Survey date:	HF-03-A-05	TERRACED HOUSES	HERTFORDSHIRE	Survey Type: Manual
55 A505 ROYSTON Edge of Town Residential Zone Number of dwellings: 180.00 DWELLS Survey date: Tuesday 28/11/2023	HF-03-A-06	MIXED HOUSES & FLATS	HERTFORDSHIRE	Survey Type: Manual
56 STEVENSON ROAD INVERNESS INSHES Edge of Town Residential Zone Number of dwellings: 85.00 DWELLS Survey date:	HI-03-A-11	BUNGALOWS	HIGHLAND	Survey Type: Manual
57 KINGSMILLS ROAD INVERNESS Edge of Town Residential Zone Number of dwellings: 9.00 DWELLS Survey date: Thursday 21/05/2009	HI-03-A-13	HOUSING	HIGHLAND	Survey Type: Manual
58 SCARLETT ROAD CASTLETOWN Edge of Town Residential Zone Number of dwellings: 45.00 DWELLS Survey date: Tuesday 21/05/2024	IM-03-A-05	MIXED HOUSES	ISLE OF MAN	Survey Type: Manual
59 MOORAGH PROMENADE RAMSEY Edge of Town Residential Zone Number of dwellings: 129.00 DWELLS Survey date: Thursday 23/05/2024	IM-03-A-06	MIXED HOUSES	ISLE OF MAN	Survey Type: Manual
60 KILN BARN ROAD AYLESFORD DITTON Edge of Town	KC-03-A-04	SEMI-DETACHED & TERRACED	KENT	

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Residential Zone

Number of dwellings: 110.00 DWELLS

Survey date: Friday 22/09/2017

Survey Type: Manual

61 RECVLVER ROAD HERNE BAY Edge of Town Residential Zone Number of dwellings: 288.00 DWELLS Survey date: Wednesday 27/09/2017	KC-03-A-07	MIXED HOUSES	KENT	Survey Type: Manual
--	-------------------	---------------------	-------------	---------------------

62 HEADCORN ROAD STAPLEHURST Edge of Town Residential Zone Number of dwellings: 106.00 DWELLS Survey date: Tuesday 09/05/2023	KC-03-A-10	MIXED HOUSES	KENT	Survey Type: Manual
--	-------------------	---------------------	-------------	---------------------

63 WESTERN LINK FAVERSHAM DAVINGTON Edge of Town Residential Zone Number of dwellings: 186.00 DWELLS Survey date: Tuesday 19/09/2023	KC-03-A-12	MIXED HOUSES & FLATS	KENT	Survey Type: Manual
--	-------------------	---------------------------------	-------------	---------------------

64 HEADCORN ROAD STAPLEHURST Edge of Town Residential Zone Number of dwellings: 167.00 DWELLS Survey date: Thursday 22/05/2025	KC-03-A-14	MIXED HOUSES	KENT	Survey Type: Manual
---	-------------------	---------------------	-------------	---------------------

65 FRESHFORD ROAD KILKENNY FRIARSINCH Edge of Town Residential Zone Number of dwellings: 70.00 DWELLS Survey date: Wednesday 26/11/2008	KK-03-A-03	MIXED HOUSING	KILKENNY	Survey Type: Manual
---	-------------------	----------------------	-----------------	---------------------

66 CLIFTON DRIVE NORTH BLACKPOOL Edge of Town Residential Zone Number of dwellings: 98.00 DWELLS Survey date: Tuesday 18/10/2005	LC-03-A-22	BUNGALOWS	LANCASHIRE	Survey Type: Manual
---	-------------------	------------------	-------------------	---------------------

67 REDWOOD AVENUE MELTON MOWBRAY Edge of Town Residential Zone Number of dwellings: 11.00 DWELLS Survey date: Tuesday 03/05/2005	LE-03-A-01	DETACHED	LEICESTERSHIRE	Survey Type: Manual
---	-------------------	-----------------	-----------------------	---------------------

68	LN-03-A-01	MIXED HOUSES	LINCOLNSHIRE	
-----------	-------------------	---------------------	---------------------	--

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

BRANT ROAD
LINCOLN
BRACEBRIDGE

Edge of Town
Residential Zone

Number of dwellings: 150.00 DWELLS
Survey date: Tuesday 15/05/2007

Survey Type: Manual

69 ME-03-A-01

R155

RATOATH

Edge of Town

Residential Zone

Number of dwellings: 42.00 DWELLS

Survey date: Wednesday 30/10/2024

Survey Type: Manual

70 MW-03-A-02

OTTERHAM QUAY LANE

RAINHAM

Edge of Town

Residential Zone

Number of dwellings: 19.00 DWELLS

Survey date:

Survey Type: Manual

71 NF-03-A-03

HALING WAY

THETFORD

Edge of Town

Residential Zone

Number of dwellings: 10.00 DWELLS

Survey date: Wednesday 16/09/2015

Survey Type: Manual

72 NF-03-A-05

HEATH DRIVE

HOLT

Edge of Town

Residential Zone

Number of dwellings: 40.00 DWELLS

Survey date: Thursday 19/09/2019

Survey Type: Manual

73 NF-03-A-06

BEAUFORT WAY

GREAT YARMOUTH

BRADWELL

Edge of Town

Residential Zone

Number of dwellings: 275.00 DWELLS

Survey date:

Survey Type: Manual

74 NF-03-A-09

ROUND HOUSE WAY

NORWICH

CRINGLEFORD

Edge of Town

Residential Zone

Number of dwellings: 984.00 DWELLS

Survey date: Tuesday 24/09/2019

Survey Type: Manual

75 NF-03-A-23

SILFIELD ROAD

WYMONDHAM

Edge of Town

Out of Town

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Number of dwellings: 514.00 DWELLS
Survey date: Wednesday 22/09/2021

Survey Type: Manual

76 **NF-03-A-25** **MIXED HOUSES & FLATS** **NORFOLK**
WOODFARM LANE
GORLESTON-ON-SEA
Edge of Town
Residential Zone
Number of dwellings: 55.00 DWELLS
Survey date: Tuesday 21/09/2021

Survey Type: Manual

77 **NF-03-A-28** **MIXED HOUSES & FLATS** **NORFOLK**
ATLANTIC AVENUE
NORWICH
SPROWSTON
Edge of Town
Residential Zone
Number of dwellings: 1146.00 DWELLS
Survey date: Thursday 22/09/2022

Survey Type: Manual

78 **NF-03-A-30** **MIXED HOUSES** **NORFOLK**
BRANDON ROAD
SWAFFHAM
Edge of Town
Residential Zone
Number of dwellings: 266.00 DWELLS
Survey date: Thursday 23/09/2021

Survey Type: Manual

79 **NF-03-A-33** **MIXED HOUSES** **NORFOLK**
LONDON ROAD
ATTLEBOROUGH
Edge of Town
Residential Zone
Number of dwellings: 143.00 DWELLS
Survey date: Thursday 29/09/2022

Survey Type: Manual

80 **NF-03-A-34** **MIXED HOUSES** **NORFOLK**
NORWICH ROAD
SWAFFHAM
Edge of Town
Out of Town
Number of dwellings: 80.00 DWELLS
Survey date: Tuesday 27/09/2022

Survey Type: Manual

81 **NF-03-A-35** **MIXED HOUSES & FLATS** **NORFOLK**
REPTON AVENUE
NORWICH
Edge of Town
Residential Zone
Number of dwellings: 116.00 DWELLS
Survey date: Wednesday 28/09/2022

Survey Type: Manual

82 **NF-03-A-37** **MIXED HOUSES** **NORFOLK**
GREENFIELDS ROAD
DEREHAM
Edge of Town
Residential Zone
Number of dwellings: 44.00 DWELLS
Survey date: Tuesday 27/09/2022

Survey Type: Manual

83 **NF-03-A-38** **MIXED HOUSES** **NORFOLK**
BEAUFORT WAY
GREAT YARMOUTH

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

BRADWELL

Edge of Town

Residential Zone

Number of dwellings: 537.00 DWELLS

Survey date: Tuesday 20/09/2022

Survey Type: Manual

84 NF-03-A-39 MIXED HOUSES NORFOLK

HEATH DRIVE

HOLT

Edge of Town

Residential Zone

Number of dwellings: 212.00 DWELLS

Survey date: Tuesday 27/09/2022

Survey Type: Manual

85 NF-03-A-46 MIXED HOUSES & FLATS NORFOLK

BURGH ROAD

AYLSHAM

Edge of Town

Residential Zone

Number of dwellings: 300.00 DWELLS

Survey date: Tuesday 14/09/2021

Survey Type: Manual

86 NT-03-A-03 SEMI DETACHED NOTTINGHAMSHIRE

B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD

Edge of Town

Residential Zone

Number of dwellings: 166.00 DWELLS

Survey date: Wednesday 28/06/2006

Survey Type: Manual

87 NT-03-A-08 DETACHED HOUSES NOTTINGHAMSHIRE

WIGHAY ROAD

HUCKNALL

Edge of Town

Residential Zone

Number of dwellings: 36.00 DWELLS

Survey date:

Survey Type: Manual

88 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE

HORSEFAIR

BOROUGHBRIDGE

Edge of Town

Residential Zone

Number of dwellings: 23.00 DWELLS

Survey date: Wednesday 18/09/2013

Survey Type: Manual

89 NY-03-A-14 DETACHED & BUNGALOWS NORTH YORKSHIRE

PALACE ROAD

RIPON

Edge of Town

Residential Zone

Number of dwellings: 45.00 DWELLS

Survey date: Wednesday 18/05/2022

Survey Type: Manual

90 NY-03-A-15 DETACHED & SEMI-DETACHED NORTH YORKSHIRE

MILBY ROAD

BOROUGHBRIDGE

MILBY

Edge of Town

Residential Zone

Number of dwellings: 145.00 DWELLS

Survey date: Thursday 19/09/2024

Survey Type: Manual

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

91 HIGH ROAD BYFLEET Edge of Town Residential Zone Number of dwellings: 71.00 DWELLS Survey date: Thursday 23/01/2014	SC-03-A-04	DETACHED & TERRACED	SURREY	Survey Type: Manual
92 FOLLY HILL FARNHAM Edge of Town Residential Zone Number of dwellings: 96.00 DWELLS Survey date: Tuesday 14/05/2024	SC-03-A-11	MIXED HOUSES	SURREY	Survey Type: Manual
93 AARONS HILL GODALMING Edge of Town Residential Zone Number of dwellings: 252.00 DWELLS Survey date: Wednesday 12/06/2024	SC-03-A-12	MIXED HOUSES & FLATS	SURREY	Survey Type: Manual
94 HOLLOWAY HILL CHERTSEY Edge of Town Residential Zone Number of dwellings: 186.00 DWELLS Survey date: Tuesday 22/10/2024	SC-03-A-14	MIXED HOUSES & FLATS	SURREY	Survey Type: Manual
95 REIGATE ROAD HORLEY Edge of Town Residential Zone Number of dwellings: 1177.00 DWELLS Survey date: Thursday 24/04/2025	SC-03-A-15	MIXED HOUSES	SURREY	Survey Type: Manual
96 STOKE PARK DRIVE IPSWICH MAIDENHALL Edge of Town Residential Zone Number of dwellings: 230.00 DWELLS Survey date: Thursday 24/05/2007	SF-03-A-02	SEMI DET./TERRACED	SUFFOLK	Survey Type: Manual
97 BARTON HILL BURY ST EDMUNDS FORNHAM ST MARTIN Edge of Town Out of Town Number of dwellings: 101.00 DWELLS Survey date:	SF-03-A-03	MIXED HOUSES	SUFFOLK	Survey Type: Manual
98 VALE LANE BURY ST EDMUNDS Edge of Town Residential Zone	SF-03-A-05	DETACHED HOUSES	SUFFOLK	

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Number of dwellings: 18.00 DWELLS
Survey date: Wednesday 09/09/2015

Survey Type: Manual

99 SF-03-A-10 TERRACED & SEMI-DETACHED SUFFOLK

LOVETOFTS DRIVE
IPSWICH
WHITEHOUSE
Edge of Town
Residential Zone

Number of dwellings: 149.00 DWELLS
Survey date: Tuesday 22/06/2021

Survey Type: Manual

100 SF-03-A-11 BUNGALOWS SUFFOLK

WHITTON CHURCH LANE
IPSWICH
WHITTON
Edge of Town
Residential Zone

Number of dwellings: 44.00 DWELLS
Survey date: Wednesday 06/11/2024

Survey Type: Manual

101 SH-03-A-06 BUNGALOWS SHROPSHIRE

ELLESMERE ROAD
SHREWSBURY
Edge of Town
Residential Zone

Number of dwellings: 16.00 DWELLS
Survey date: Thursday 22/05/2014

Survey Type: Manual

102 SM-03-A-01 DETACHED & SEMI SOMERSET

WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone

Number of dwellings: 33.00 DWELLS
Survey date: Thursday 24/09/2015

Survey Type: Manual

103 SP-03-A-03 MIXED HOUSES & FLATS SOUTHAMPTON

BARNFIELD WAY
NEAR SOUTHAMPTON
HEDGE END
Edge of Town
Out of Town

Number of dwellings: 250.00 DWELLS
Survey date: Thursday 03/10/2024

Survey Type: Manual

104 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE

BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone

Number of dwellings: 248.00 DWELLS
Survey date: Wednesday 22/11/2017

Survey Type: Manual

105 TE-03-A-03 SEMI-DETACHED/TERRACED TELFORD & WREKIN

SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone

Number of dwellings: 54.00 DWELLS

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Survey date: Thursday 24/10/2013

Survey Type: Manual

106 BRITTAS ROAD THURLES Edge of Town Out of Town Number of dwellings: 76.00 DWELLS Survey date: Thursday 17/06/2021	TI-03-A-01	MIXED HOUSES	TIPPERARY
---	-------------------	---------------------	------------------

Survey Type: Manual

107 MILTON ROAD STANFORD-LE-HOPE CORRINGHAM Edge of Town Residential Zone Number of dwellings: 237.00 DWELLS Survey date: Tuesday 13/05/2008	TK-03-A-01	SEMI-DET.	THURROCK
--	-------------------	------------------	-----------------

Survey Type: Manual

108 LEECHMERE ROAD SUNDERLAND HILLVIEW Edge of Town Residential Zone Number of dwellings: 81.00 DWELLS Survey date: Wednesday 18/09/2002	TW-03-A-01	SEMI DETACHED	TYNE & WEAR
--	-------------------	----------------------	------------------------

Survey Type: Manual

109 ARTHUR STREET BARRY Edge of Town Residential Zone Number of dwellings: 12.00 DWELLS Survey date:	VG-03-A-01	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN
---	-------------------	-------------------------------------	--------------------------

Survey Type: Manual

110 MAYPARK LANE WATERFORD Edge of Town Residential Zone Number of dwellings: 280.00 DWELLS Survey date: Tuesday 24/06/2014	WA-03-A-04	DETACHED	WATERFORD
--	-------------------	-----------------	------------------

Survey Type: Manual

111 DORKING WAY READING CALCOT Edge of Town Residential Zone Number of dwellings: 199.00 DWELLS Survey date: Thursday 12/09/2024	WB-03-A-04	MIXED HOUSES	WEST BERKSHIRE
--	-------------------	---------------------	-----------------------

Survey Type: Manual

112 DALEHOUSE LANE KENILWORTH Edge of Town Residential Zone Number of dwellings: 49.00 DWELLS Survey date: Friday 27/09/2019	WK-03-A-04	DETACHED HOUSES	WARWICKSHIRE
---	-------------------	------------------------	---------------------

Survey Type: Manual

113 MAPLE DRIVE	WL-03-A-01	SEMI D./TERRACED W. BASSETT	WILTSHIRE
---------------------------	-------------------	------------------------------------	------------------

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

WOOTTON BASSETT

Edge of Town

Residential Zone

Number of dwellings: 99.00 DWELLS

Survey date:

Survey Type: Manual

114 BASELEY WAY COVENTRY ROWLEYS GREEN Edge of Town Residential Zone Number of dwellings: 84.00 DWELLS Survey date:	WM-03-A-03	MIXED HOUSING	WEST MIDLANDS
---	-------------------	----------------------	----------------------

Survey Type: Manual

115 NARBERTH WAY COVENTRY POTTERS GREEN Edge of Town Residential Zone Number of dwellings: 17.00 DWELLS Survey date: Thursday 17/10/2013	WM-03-A-06	BUNGALOWS	WEST MIDLANDS
--	-------------------	------------------	----------------------

Survey Type: Manual

116 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH Edge of Town Residential Zone Number of dwellings: 151.00 DWELLS Survey date: Thursday 11/12/2014	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
---	-------------------	---------------------	--------------------

Survey Type: Manual

117 ROUNDSTONE LANE ANGMERING Edge of Town Residential Zone Number of dwellings: 180.00 DWELLS Survey date: Thursday 19/04/2018	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
--	-------------------	---------------------	--------------------

Survey Type: Manual

118 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone Number of dwellings: 918.00 DWELLS Survey date: Tuesday 02/04/2019	WS-03-A-11	MIXED HOUSES	WEST SUSSEX
--	-------------------	---------------------	--------------------

Survey Type: Manual

119 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON Edge of Town Residential Zone Number of dwellings: 197.00 DWELLS Survey date: Wednesday 23/06/2021	WS-03-A-13	MIXED HOUSES & FLATS	WEST SUSSEX
--	-------------------	---------------------------------	--------------------

Survey Type: Manual

120 TODDINGTON LANE LITTLEHAMPTON WICK	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
--	-------------------	---------------------	--------------------



Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Edge of Town Residential Zone Number of dwellings: 117.00 DWELLS Survey date: Wednesday 20/10/2021 Survey Type: Manual			
121	WS-03-A-22	MIXED HOUSES & FLATS	WEST SUSSEX
SHOPWHYKE ROAD CHICHESTER Edge of Town Residential Zone Number of dwellings: 129.00 DWELLS Survey date: Tuesday 19/03/2024 Survey Type: Manual			
122	WS-03-A-23	MIXED HOUSES & FLATS	WEST SUSSEX
TURNERS HILL ROAD EAST GRINSTEAD Edge of Town Residential Zone Number of dwellings: 197.00 DWELLS Survey date: Tuesday 14/05/2024 Survey Type: Manual			
123	WS-03-A-24	MIXED HOUSES	WEST SUSSEX
MADGWICK LANE CHICHESTER WESTHAMPNETT Edge of Town Village Number of dwellings: 300.00 DWELLS Survey date: Thursday 23/05/2024 Survey Type: Manual			
124	WS-03-A-26	MIXED HOUSES & FLATS	WEST SUSSEX
RUSPER ROAD HORSHAM NORTH HORSHAM Edge of Town Residential Zone Number of dwellings: 165.00 DWELLS Survey date: Tuesday 24/09/2024 Survey Type: Manual			
125	WS-03-A-27	MIXED HOUSES & FLATS	WEST SUSSEX
OCKLEY LANE HASSOCKS Edge of Town Residential Zone Number of dwellings: 160.00 DWELLS Survey date: Friday 20/09/2024 Survey Type: Manual			
126	WS-03-A-28	MIXED HOUSES & FLATS	WEST SUSSEX
SHOPWHYKE ROAD CHICHESTER Edge of Town Residential Zone Number of dwellings: 398.00 DWELLS Survey date: Wednesday 18/06/2025 Survey Type: Manual			

Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Total Vehicles

Calculation factor: 1 DWELLS

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	126	161	0.075	0.296	0.371
08:00-09:00	126	161	0.155	0.393	0.548
09:00-10:00	126	161	0.141	0.176	0.317
10:00-11:00	126	161	0.117	0.144	0.261
11:00-12:00	126	161	0.135	0.141	0.276
12:00-13:00	126	161	0.160	0.149	0.309
13:00-14:00	126	161	0.158	0.149	0.307
14:00-15:00	126	161	0.161	0.179	0.340
15:00-16:00	126	161	0.259	0.178	0.437
16:00-17:00	126	161	0.283	0.169	0.452
17:00-18:00	126	161	0.353	0.178	0.531
18:00-19:00	126	161	0.283	0.165	0.448
19:00-20:00	2	20	0.171	0.122	0.293
20:00-21:00	2	20	0.195	0.146	0.341
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			2.646	2.585	5.231

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP \times FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]



Audit Code: 925eed70-b38d-41cb-81ed-16b2cbb8fed1

Parameter Summary:

Trip rate parameter range selected:	4 - 1817 (units: DWELLS)
Survey date date range:	06/02/2001 - 30/06/2025
Number of weekdays (Monday-Friday):	126
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	25
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: C - FLATS PRIVATELY OWNED

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

01	GREATER LONDON	
	BN	BARNET 2 days
	HG	HARINGEY 1 day
	HO	HOUNSLOW 2 days
	NH	NEWHAM 1 day
02	SOUTH EAST	
	HF	HERTFORDSHIRE 3 days
	WS	WEST SUSSEX 1 day
03	SOUTH WEST	
	DC	DORSET 1 day
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	RI	EAST RIDING OF YORKSHIRE 1 day
09	NORTH	
	TW	TYNE & WEAR 1 day
10	WALES	
	DB	DENBIGHSHIRE 1 day
11	SCOTLAND	
	SR	STIRLING 1 day
14	LEINSTER	
	LU	LOUTH 1 day
15	GREATER DUBLIN	
	DL	DUBLIN 2 days
17	ULSTER (NORTHERN IRELAND)	
	AN	ANTRIM 1 day

This section displays the number of survey days per TRICS® sub-region in the selected set.

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

Primary Filtering Selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	DWELLS
Actual Range:	12 to 294 (units:DWELLS)
Range Selected by User:	6 to 300 (units:DWELLS)
Parking Spaces Range:	0 - 200

Public Transport Provision:	
Selection by:	All Surveys Included
Date Range:	19/07/91 to 24/06/25

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:	
Friday	4 days
Thursday	4 days
Tuesday	8 days
Wednesday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:	
Manual count	19
Direction ATC Count	0

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines

Selected Locations:	
Edge of Town	7 days
Neighbourhood Centre	12 days

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:	
Built-Up Zone	1 days
Residential Zone	18 days

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicle Counts:	
Servicing vehicles Excluded	1 days
Servicing vehicles Included	9 days
Servicing vehicles Unknown	9 days

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

Secondary Filtering Selection:

Use Class:

C3	19 surveys
----	------------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

1450 - 11269

Population within 1 mile:

1,001 to 5,000	2 surveys
10,001 to 15,000	1 surveys
15,001 to 20,000	1 surveys
20,001 to 25,000	5 surveys
25,001 to 50,000	8 surveys
5,001 to 10,000	1 surveys
50,001 to 100,000	1 surveys

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	6 surveys
250,001 to 500,000	1 surveys
50,001 to 75,000	5 surveys
500,001 or More	7 surveys

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	11 surveys
1.1 to 1.5	8 surveys

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	14 surveys
Yes	5 surveys

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

2 - Poor	1 surveys
3 - Moderate	3 surveys
4 - Good	1 surveys
5 - Very good	1 surveys
No PTAL Present	13 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

1 SUMMERHILL AVENUE BELFAST KNOCK Edge of Town Residential Zone Number of dwellings: 22.00 DWELLS Survey date: Friday 28/11/2014	AN-03-C-02	BLOCK OF FLATS	ANTRIM	Survey Type: Manual
2 VICTORIA ROAD NEW BARNET Neighbourhood Centre Residential Zone Number of dwellings: 33.00 DWELLS Survey date: Thursday 09/06/2022	BN-03-C-01	FLATS IN HOUSES	BARNET	Survey Type: Manual
3 OAKLEIGH ROAD WHETSTONE Neighbourhood Centre Residential Zone Number of dwellings: 115.00 DWELLS Survey date: Thursday 05/09/2024	BN-03-C-03	BLOCKS OF FLATS	BARNET	Survey Type: Manual
4 RHYL ROAD RHUDDLAN Neighbourhood Centre Residential Zone Number of dwellings: 16.00 DWELLS Survey date: Friday 07/10/2011	DB-03-C-01	FLATS IN HOUSES	DENBIGHSHIRE	Survey Type: Manual
5 FERNHILL AVENUE WEYMOUTH MELCOMBE REGIS Neighbourhood Centre Residential Zone Number of dwellings: 72.00 DWELLS Survey date: Tuesday 06/05/2025	DC-03-C-03	FLATS & TERRACED HOUSES	DORSET	Survey Type: Manual
6 WYCKHAM WAY DUBLIN DUNDRUM Neighbourhood Centre Residential Zone Number of dwellings: 96.00 DWELLS Survey date: Tuesday 10/09/2013	DL-03-C-11	BLOCK OF FLATS	DUBLIN	Survey Type: Manual
7 SANDYFORD ROAD DUBLIN Neighbourhood Centre Built-Up Zone Number of dwellings: 52.00 DWELLS Survey date: Tuesday 10/09/2013	DL-03-C-13	BLOCK OF FLATS	DUBLIN	Survey Type: Manual
8 FERNDOWN ROAD WATFORD SOUTH OXHEY	HF-03-C-06	BLOCKS OF FLATS	HERTFORDSHIRE	

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

Edge of Town

Residential Zone

Number of dwellings: 26.00 DWELLS

Survey date: Thursday 08/06/2023

Survey Type: Manual

9 OXHEY DRIVE WATFORD SOUTH OXHEY Neighbourhood Centre Residential Zone Number of dwellings: 84.00 DWELLS Survey date: Wednesday 07/06/2023	HF-03-C-07	BLOCKS OF FLATS	HERTFORDSHIRE	Survey Type: Manual
---	-------------------	------------------------	----------------------	---------------------

10 HAYLING ROAD WATFORD SOUTH OXHEY Edge of Town Residential Zone Number of dwellings: 22.00 DWELLS Survey date: Tuesday 06/06/2023	HF-03-C-08	BLOCKS OF FLATS	HERTFORDSHIRE	Survey Type: Manual
---	-------------------	------------------------	----------------------	---------------------

11 BREAM CLOSE TOTTENHAM HALE Neighbourhood Centre Residential Zone Number of dwellings: 255.00 DWELLS Survey date: Tuesday 18/06/2019	HG-03-C-01	BLOCKS OF FLATS	HARINGEY	Survey Type: Manual
---	-------------------	------------------------	-----------------	---------------------

12 LONDON ROAD ISLEWORTH Neighbourhood Centre Residential Zone Number of dwellings: 203.00 DWELLS Survey date: Tuesday 03/07/2018	HO-03-C-04	BLOCKS OF FLATS	HOUNSLOW	Survey Type: Manual
--	-------------------	------------------------	-----------------	---------------------

13 PARK LANE HOUNSLOW CRANFORD Edge of Town Residential Zone Number of dwellings: 14.00 DWELLS Survey date: Friday 06/03/2020	HO-03-C-05	BLOCK OF FLATS	HOUNSLOW	Survey Type: Manual
---	-------------------	-----------------------	-----------------	---------------------

14 RIVER COURT DROGHEDA Neighbourhood Centre Residential Zone Number of dwellings: 42.00 DWELLS Survey date: Wednesday 22/09/2021	LU-03-C-04	BLOCKS OF FLATS	LOUTH	Survey Type: Manual
--	-------------------	------------------------	--------------	---------------------

15 ARTHINGWORTH STREET STRATFORD Neighbourhood Centre Residential Zone Number of dwellings: 12.00 DWELLS Survey date: Thursday 14/11/2013	NH-03-C-01	BLOCK OF FLATS	NEWHAM	Survey Type: Manual
--	-------------------	-----------------------	---------------	---------------------

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

16 465 PRIORY ROAD HULL Edge of Town Residential Zone Number of dwellings: 20.00 DWELLS Survey date: Tuesday 13/05/2014	RI-03-C-01	FLATS	EAST RIDING OF YORKSHIRE	Survey Type: Manual
17 KERSEBONNY ROAD STIRLING CAMBUSBARRON Edge of Town Residential Zone Number of dwellings: 82.00 DWELLS Survey date: Tuesday 01/09/2020	SR-03-C-03	BLOCK OF FLATS & TERRACED	STIRLING	Survey Type: Manual
18 CAULDWELL AVENUE WHITLEY BAY MONKESEATON Edge of Town Residential Zone Number of dwellings: 45.00 DWELLS Survey date: Friday 15/10/2021	TW-03-C-01	BLOCKS OF FLATS	TYNE & WEAR	Survey Type: Manual
19 GORING ROAD WORTHING GORING-BY-SEA Neighbourhood Centre Residential Zone Number of dwellings: 18.00 DWELLS Survey date: Wednesday 11/05/2022	WS-03-C-01	BLOCKS OF FLATS	WEST SUSSEX	Survey Type: Manual

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Total Vehicles

Calculation factor: 1 DWELLS

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	19	65	0.031	0.167	0.198
08:00-09:00	19	65	0.072	0.195	0.267
09:00-10:00	19	65	0.068	0.080	0.148
10:00-11:00	19	65	0.070	0.090	0.160
11:00-12:00	19	65	0.075	0.085	0.160
12:00-13:00	19	65	0.086	0.101	0.187
13:00-14:00	19	65	0.081	0.081	0.162
14:00-15:00	19	65	0.082	0.073	0.155
15:00-16:00	19	65	0.111	0.089	0.200
16:00-17:00	19	65	0.108	0.081	0.189
17:00-18:00	19	65	0.175	0.072	0.247
18:00-19:00	19	65	0.139	0.075	0.214
19:00-20:00	3	111	0.084	0.051	0.135
20:00-21:00	3	111	0.048	0.033	0.081
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			1.230	1.273	2.503

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP \times FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Audit Code: 8ccd342c-2267-4b87-a3eb-2e861bc5098a

Parameter Summary:

Trip rate parameter range selected:	6 - 300 (units: DWELLS)
Survey date date range:	07/10/2011 - 06/05/2025
Number of weekdays (Monday-Friday):	19
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	4
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix B – Junctions 11 Outputs

Junctions 11	
PICADY 11 - Priority Intersection Module	
Version: 11.1.0.2307	
© Copyright TRL Software Limited, 2024	
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: Harbour Road Development Junction.j11

Path: J:\Projects\26019 - Harbour Road, Mullingar\1. MHT\Transport\Reports\Planning\Junctions 11

Report generation date: 09/02/2026 14:25:15

-
- »D1 - 2026 | Base Year | AM
 - »D2 - 2026 | Base Year | PM
 - »D3 - 2028 | Without Development | AM
 - »D4 - 2028 | Without Development | PM
 - »D5 - 2028 | With Development | AM
 - »D6 - 2028 | With Development | PM
 - »D7 - 2033 | Without Development | AM
 - »D8 - 2033 | Without Development | PM
 - »D9 - 2033 | With Development | AM
 - »D10 - 2033 | With Development | PM
 - »D11 - 2043 | Without Development | AM
 - »D12 - 2043 | Without Development | PM
 - »D13 - 2043 | With Development | AM
 - »D14 - 2043 | With Development | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 - Base Year									
Stream B-AC	D1	0.0	0.00	0.00	A	D2	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2028 - Without Development									
Stream B-AC	D3	0.0	0.00	0.00	A	D4	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2028 - With Development									
Stream B-AC	D5	0.0	6.02	0.03	A	D6	0.0	6.10	0.01	A
Stream C-AB		0.0	5.79	0.01	A		0.0	6.53	0.03	A
	2033 - Without Development									
Stream B-AC	D7	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2033 - With Development									
Stream B-AC	D9	0.0	6.02	0.03	A	D10	0.0	6.12	0.01	A
Stream C-AB		0.0	5.76	0.01	A		0.0	6.53	0.03	A
	2043 - Without Development									
Stream B-AC	D11	0.0	0.00	0.00	A	D12	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2043 - With Development									
Stream B-AC	D13	0.0	6.03	0.03	A	D14	0.0	6.14	0.01	A
Stream C-AB		0.0	5.73	0.01	A		0.0	6.54	0.03	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

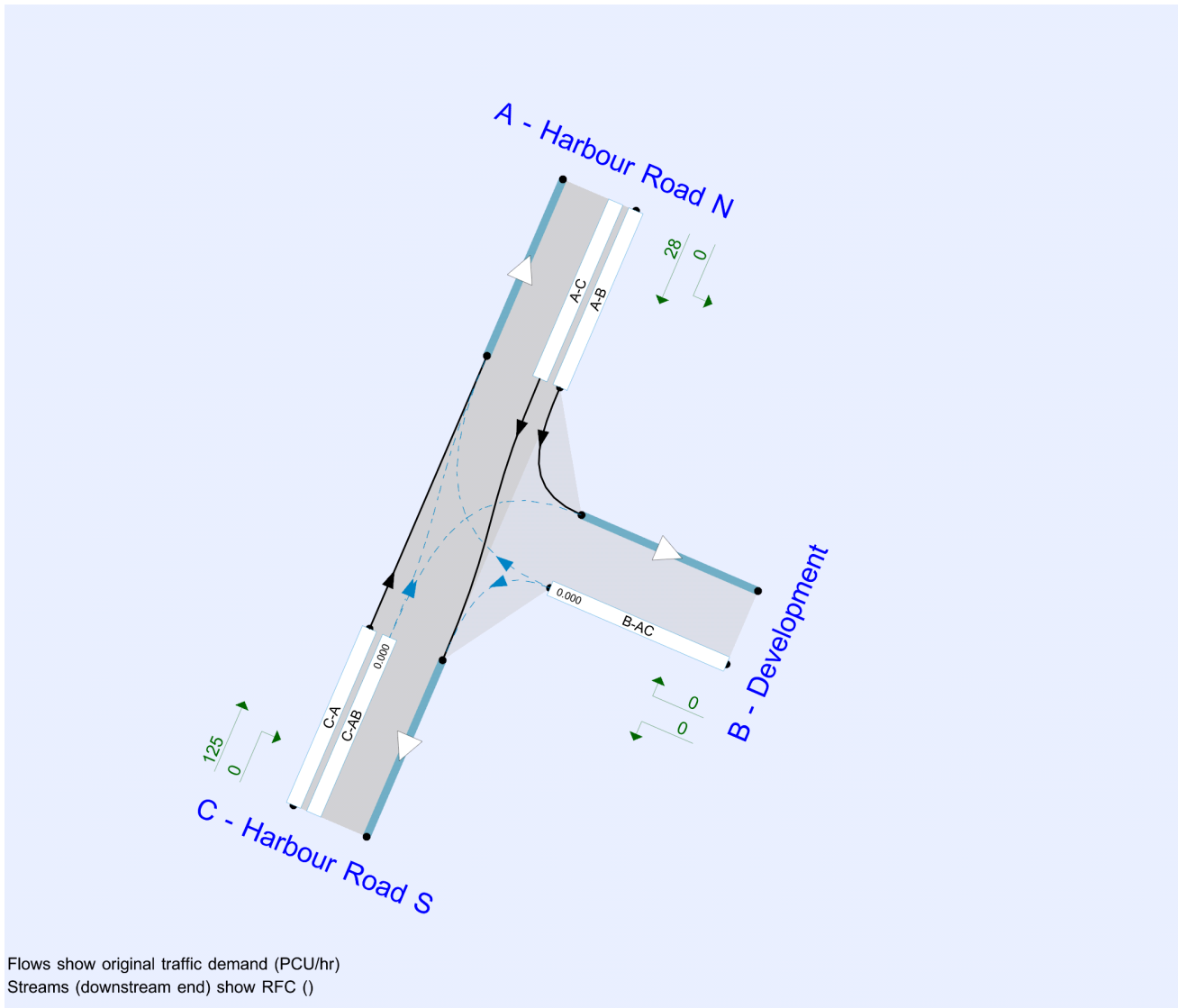
File summary

File Description

Title	Harbour Road Development Junction
Location	Mullingar, Westmeath
Site number	
Date	09/02/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	26019
Enumerator	MEINHARDT-UK\Christina.Dring
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

PICADY short flare model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 11.1			0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026	Base Year	AM	ONE HOUR	08:00	09:30	15
D2	2026	Base Year	PM	ONE HOUR	17:00	18:30	15
D3	2028	Without Development	AM	ONE HOUR	08:00	09:30	15
D4	2028	Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2028	With Development	AM	ONE HOUR	08:00	09:30	15
D6	2028	With Development	PM	ONE HOUR	17:00	18:30	15
D7	2033	Without Development	AM	ONE HOUR	08:00	09:30	15
D8	2033	Without Development	PM	ONE HOUR	17:00	18:30	15
D9	2033	With Development	AM	ONE HOUR	08:00	09:30	15
D10	2033	With Development	PM	ONE HOUR	17:00	18:30	15
D11	2043	Without Development	AM	ONE HOUR	08:00	09:30	15
D12	2043	Without Development	PM	ONE HOUR	17:00	18:30	15
D13	2043	With Development	AM	ONE HOUR	08:00	09:30	15
D14	2043	With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

D1 - 2026 | Base Year | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	Harbour Road N		Major
B	Development		Minor
C	Harbour Road S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Harbour Road S	7.00			100.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Development	One lane	3.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	561	0.098	0.247	0.155	0.353
B-C	687	0.101	0.255	-	-
C-B	632	0.234	0.234	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026	Base Year	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	28	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	125	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	28
	B - Development	0	0	0
	C - Harbour Road S	125	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	603	0.000	0	0.0	0.000	A
C-AB	0	0.00	627	0.000	0	0.0	0.000	A
C-A	94	0.00			94			
A-B	0	0.00			0			
A-C	21	0.00			21			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	600	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	112	0.00			112			
A-B	0	0.00			0			
A-C	25	0.00			25			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	596	0.000	0	0.0	0.000	A
C-AB	0	0.00	625	0.000	0	0.0	0.000	A
C-A	138	0.00			138			
A-B	0	0.00			0			
A-C	31	0.00			31			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	596	0.000	0	0.0	0.000	A
C-AB	0	0.00	625	0.000	0	0.0	0.000	A
C-A	138	0.00			138			
A-B	0	0.00			0			
A-C	31	0.00			31			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	600	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	112	0.00			112			
A-B	0	0.00			0			
A-C	25	0.00			25			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	603	0.000	0	0.0	0.000	A
C-AB	0	0.00	627	0.000	0	0.0	0.000	A
C-A	94	0.00			94			
A-B	0	0.00			0			
A-C	21	0.00			21			

D2 - 2026 | Base Year | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2026	Base Year	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	102	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	28	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	102
	B - Development	0	0	0
	C - Harbour Road S	28	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	596	0.000	0	0.0	0.000	A
C-AB	0	0.00	614	0.000	0	0.0	0.000	A
C-A	21	0.00			21			
A-B	0	0.00			0			
A-C	77	0.00			77			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	592	0.000	0	0.0	0.000	A
C-AB	0	0.00	610	0.000	0	0.0	0.000	A
C-A	25	0.00			25			
A-B	0	0.00			0			
A-C	92	0.00			92			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	586	0.000	0	0.0	0.000	A
C-AB	0	0.00	606	0.000	0	0.0	0.000	A
C-A	31	0.00			31			
A-B	0	0.00			0			
A-C	112	0.00			112			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	586	0.000	0	0.0	0.000	A
C-AB	0	0.00	606	0.000	0	0.0	0.000	A
C-A	31	0.00			31			
A-B	0	0.00			0			
A-C	112	0.00			112			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	592	0.000	0	0.0	0.000	A
C-AB	0	0.00	610	0.000	0	0.0	0.000	A
C-A	25	0.00			25			
A-B	0	0.00			0			
A-C	92	0.00			92			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	596	0.000	0	0.0	0.000	A
C-AB	0	0.00	614	0.000	0	0.0	0.000	A
C-A	21	0.00			21			
A-B	0	0.00			0			
A-C	77	0.00			77			

D3 - 2028 | Without Development | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	Without Development	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	29	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	129	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	29
	B - Development	0	0	0
	C - Harbour Road S	129	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	603	0.000	0	0.0	0.000	A
C-AB	0	0.00	627	0.000	0	0.0	0.000	A
C-A	97	0.00			97			
A-B	0	0.00			0			
A-C	22	0.00			22			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	600	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	116	0.00			116			
A-B	0	0.00			0			
A-C	26	0.00			26			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	596	0.000	0	0.0	0.000	A
C-AB	0	0.00	624	0.000	0	0.0	0.000	A
C-A	142	0.00			142			
A-B	0	0.00			0			
A-C	32	0.00			32			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	596	0.000	0	0.0	0.000	A
C-AB	0	0.00	624	0.000	0	0.0	0.000	A
C-A	142	0.00			142			
A-B	0	0.00			0			
A-C	32	0.00			32			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	600	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	116	0.00			116			
A-B	0	0.00			0			
A-C	26	0.00			26			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	603	0.000	0	0.0	0.000	A
C-AB	0	0.00	627	0.000	0	0.0	0.000	A
C-A	97	0.00			97			
A-B	0	0.00			0			
A-C	22	0.00			22			

D4 - 2028 | Without Development | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	Without Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	105	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	29	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	105
	B - Development	0	0	0
	C - Harbour Road S	29	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	595	0.000	0	0.0	0.000	A
C-AB	0	0.00	613	0.000	0	0.0	0.000	A
C-A	22	0.00			22			
A-B	0	0.00			0			
A-C	79	0.00			79			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	591	0.000	0	0.0	0.000	A
C-AB	0	0.00	610	0.000	0	0.0	0.000	A
C-A	26	0.00			26			
A-B	0	0.00			0			
A-C	94	0.00			94			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	585	0.000	0	0.0	0.000	A
C-AB	0	0.00	605	0.000	0	0.0	0.000	A
C-A	32	0.00			32			
A-B	0	0.00			0			
A-C	116	0.00			116			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	585	0.000	0	0.0	0.000	A
C-AB	0	0.00	605	0.000	0	0.0	0.000	A
C-A	32	0.00			32			
A-B	0	0.00			0			
A-C	116	0.00			116			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	591	0.000	0	0.0	0.000	A
C-AB	0	0.00	610	0.000	0	0.0	0.000	A
C-A	26	0.00			26			
A-B	0	0.00			0			
A-C	94	0.00			94			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	595	0.000	0	0.0	0.000	A
C-AB	0	0.00	613	0.000	0	0.0	0.000	A
C-A	22	0.00			22			
A-B	0	0.00			0			
A-C	79	0.00			79			

D5 - 2028 | With Development | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.89	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.89	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	With Development	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	29	100.000
B - Development		✓	19	100.000
C - Harbour Road S		✓	136	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	29
	B - Development	0	0	19
	C - Harbour Road S	129	7	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	6.02	0.0	A
C-AB	0.01	5.79	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	0.00	681	0.021	14	0.0	5.936	A
C-AB	6	0.00	690	0.009	6	0.0	5.789	A
C-A	96	0.00			96			
A-B	0	0.00			0			
A-C	22	0.00			22			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	0.00	680	0.025	17	0.0	5.970	A
C-AB	8	0.00	701	0.011	8	0.0	5.706	A
C-A	115	0.00			115			
A-B	0	0.00			0			
A-C	26	0.00			26			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	0.00	679	0.031	21	0.0	6.019	A
C-AB	10	0.00	717	0.013	10	0.0	5.596	A
C-A	140	0.00			140			
A-B	0	0.00			0			
A-C	32	0.00			32			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	0.00	679	0.031	21	0.0	6.019	A
C-AB	10	0.00	717	0.013	10	0.0	5.598	A
C-A	140	0.00			140			
A-B	0	0.00			0			
A-C	32	0.00			32			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	0.00	680	0.025	17	0.0	5.971	A
C-AB	8	0.00	701	0.011	8	0.0	5.708	A
C-A	115	0.00			115			
A-B	0	0.00			0			
A-C	26	0.00			26			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	0.00	681	0.021	14	0.0	5.936	A
C-AB	6	0.00	690	0.009	6	0.0	5.789	A
C-A	96	0.00			96			
A-B	0	0.00			0			
A-C	22	0.00			22			

D6 - 2028 | With Development | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		1.04	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.04	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	With Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	105	100.000
B - Development		✓	8	100.000
C - Harbour Road S		✓	46	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	105
	B - Development	0	0	8
	C - Harbour Road S	29	17	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.01	6.10	0.0	A
C-AB	0.03	6.53	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	0.00	667	0.009	6	0.0	5.992	A
C-AB	13	0.00	628	0.021	13	0.0	6.443	A
C-A	21	0.00			21			
A-B	0	0.00			0			
A-C	79	0.00			79			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	0.00	663	0.011	7	0.0	6.038	A
C-AB	16	0.00	627	0.025	16	0.0	6.479	A
C-A	25	0.00			25			
A-B	0	0.00			0			
A-C	94	0.00			94			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	0.00	657	0.013	9	0.0	6.104	A
C-AB	20	0.00	626	0.032	20	0.0	6.530	A
C-A	31	0.00			31			
A-B	0	0.00			0			
A-C	116	0.00			116			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	0.00	657	0.013	9	0.0	6.104	A
C-AB	20	0.00	626	0.032	20	0.0	6.533	A
C-A	31	0.00			31			
A-B	0	0.00			0			
A-C	116	0.00			116			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	0.00	663	0.011	7	0.0	6.039	A
C-AB	16	0.00	627	0.025	16	0.0	6.483	A
C-A	25	0.00			25			
A-B	0	0.00			0			
A-C	94	0.00			94			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	0.00	667	0.009	6	0.0	5.995	A
C-AB	13	0.00	628	0.021	13	0.0	6.444	A
C-A	21	0.00			21			
A-B	0	0.00			0			
A-C	79	0.00			79			

D7 - 2033 | Without Development | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033	Without Development	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	31	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	136	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	31
	B - Development	0	0	0
	C - Harbour Road S	136	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	602	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	102	0.00			102			
A-B	0	0.00			0			
A-C	23	0.00			23			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	599	0.000	0	0.0	0.000	A
C-AB	0	0.00	625	0.000	0	0.0	0.000	A
C-A	122	0.00			122			
A-B	0	0.00			0			
A-C	28	0.00			28			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	594	0.000	0	0.0	0.000	A
C-AB	0	0.00	624	0.000	0	0.0	0.000	A
C-A	150	0.00			150			
A-B	0	0.00			0			
A-C	34	0.00			34			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	594	0.000	0	0.0	0.000	A
C-AB	0	0.00	624	0.000	0	0.0	0.000	A
C-A	150	0.00			150			
A-B	0	0.00			0			
A-C	34	0.00			34			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	599	0.000	0	0.0	0.000	A
C-AB	0	0.00	625	0.000	0	0.0	0.000	A
C-A	122	0.00			122			
A-B	0	0.00			0			
A-C	28	0.00			28			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	602	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	102	0.00			102			
A-B	0	0.00			0			
A-C	23	0.00			23			

D8 - 2033 | Without Development | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033	Without Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	111	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	31	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	111
	B - Development	0	0	0
	C - Harbour Road S	31	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	594	0.000	0	0.0	0.000	A
C-AB	0	0.00	612	0.000	0	0.0	0.000	A
C-A	23	0.00			23			
A-B	0	0.00			0			
A-C	84	0.00			84			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	590	0.000	0	0.0	0.000	A
C-AB	0	0.00	609	0.000	0	0.0	0.000	A
C-A	28	0.00			28			
A-B	0	0.00			0			
A-C	100	0.00			100			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	583	0.000	0	0.0	0.000	A
C-AB	0	0.00	603	0.000	0	0.0	0.000	A
C-A	34	0.00			34			
A-B	0	0.00			0			
A-C	122	0.00			122			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	583	0.000	0	0.0	0.000	A
C-AB	0	0.00	603	0.000	0	0.0	0.000	A
C-A	34	0.00			34			
A-B	0	0.00			0			
A-C	122	0.00			122			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	590	0.000	0	0.0	0.000	A
C-AB	0	0.00	609	0.000	0	0.0	0.000	A
C-A	28	0.00			28			
A-B	0	0.00			0			
A-C	100	0.00			100			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	594	0.000	0	0.0	0.000	A
C-AB	0	0.00	612	0.000	0	0.0	0.000	A
C-A	23	0.00			23			
A-B	0	0.00			0			
A-C	84	0.00			84			

D9 - 2033 | With Development | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2033	With Development	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	31	100.000
B - Development		✓	19	100.000
C - Harbour Road S		✓	143	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	31
	B - Development	0	0	19
	C - Harbour Road S	136	7	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	6.02	0.0	A
C-AB	0.01	5.76	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	0.00	681	0.021	14	0.0	5.939	A
C-AB	6	0.00	693	0.009	6	0.0	5.763	A
C-A	101	0.00			101			
A-B	0	0.00			0			
A-C	23	0.00			23			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	0.00	680	0.025	17	0.0	5.974	A
C-AB	8	0.00	705	0.011	8	0.0	5.676	A
C-A	121	0.00			121			
A-B	0	0.00			0			
A-C	28	0.00			28			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	0.00	678	0.031	21	0.0	6.024	A
C-AB	10	0.00	722	0.013	10	0.0	5.561	A
C-A	148	0.00			148			
A-B	0	0.00			0			
A-C	34	0.00			34			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	0.00	678	0.031	21	0.0	6.024	A
C-AB	10	0.00	722	0.013	10	0.0	5.561	A
C-A	148	0.00			148			
A-B	0	0.00			0			
A-C	34	0.00			34			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	0.00	680	0.025	17	0.0	5.975	A
C-AB	8	0.00	705	0.011	8	0.0	5.676	A
C-A	121	0.00			121			
A-B	0	0.00			0			
A-C	28	0.00			28			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	0.00	681	0.021	14	0.0	5.942	A
C-AB	6	0.00	693	0.009	6	0.0	5.763	A
C-A	101	0.00			101			
A-B	0	0.00			0			
A-C	23	0.00			23			

D10 - 2033 | With Development | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.99	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2033	With Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	111	100.000
B - Development		✓	8	100.000
C - Harbour Road S		✓	48	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	111
	B - Development	0	0	8
	C - Harbour Road S	31	17	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.01	6.12	0.0	A
C-AB	0.03	6.53	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	0.00	666	0.009	6	0.0	6.003	A
C-AB	13	0.00	628	0.021	13	0.0	6.444	A
C-A	23	0.00			23			
A-B	0	0.00			0			
A-C	84	0.00			84			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	0.00	661	0.011	7	0.0	6.051	A
C-AB	16	0.00	627	0.026	16	0.0	6.480	A
C-A	27	0.00			27			
A-B	0	0.00			0			
A-C	100	0.00			100			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	0.00	656	0.013	9	0.0	6.120	A
C-AB	20	0.00	626	0.032	20	0.0	6.532	A
C-A	33	0.00			33			
A-B	0	0.00			0			
A-C	122	0.00			122			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	0.00	656	0.013	9	0.0	6.120	A
C-AB	20	0.00	626	0.032	20	0.0	6.535	A
C-A	33	0.00			33			
A-B	0	0.00			0			
A-C	122	0.00			122			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	0.00	661	0.011	7	0.0	6.054	A
C-AB	16	0.00	627	0.026	16	0.0	6.484	A
C-A	27	0.00			27			
A-B	0	0.00			0			
A-C	100	0.00			100			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	0.00	666	0.009	6	0.0	6.005	A
C-AB	13	0.00	628	0.021	13	0.0	6.447	A
C-A	23	0.00			23			
A-B	0	0.00			0			
A-C	84	0.00			84			

D11 - 2043 | Without Development | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2043	Without Development	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	33	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	145	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	33
	B - Development	0	0	0
	C - Harbour Road S	145	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	601	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	109	0.00			109			
A-B	0	0.00			0			
A-C	25	0.00			25			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	597	0.000	0	0.0	0.000	A
C-AB	0	0.00	625	0.000	0	0.0	0.000	A
C-A	130	0.00			130			
A-B	0	0.00			0			
A-C	30	0.00			30			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	593	0.000	0	0.0	0.000	A
C-AB	0	0.00	623	0.000	0	0.0	0.000	A
C-A	160	0.00			160			
A-B	0	0.00			0			
A-C	36	0.00			36			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	593	0.000	0	0.0	0.000	A
C-AB	0	0.00	623	0.000	0	0.0	0.000	A
C-A	160	0.00			160			
A-B	0	0.00			0			
A-C	36	0.00			36			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	597	0.000	0	0.0	0.000	A
C-AB	0	0.00	625	0.000	0	0.0	0.000	A
C-A	130	0.00			130			
A-B	0	0.00			0			
A-C	30	0.00			30			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	601	0.000	0	0.0	0.000	A
C-AB	0	0.00	626	0.000	0	0.0	0.000	A
C-A	109	0.00			109			
A-B	0	0.00			0			
A-C	25	0.00			25			

D12 - 2043 | Without Development | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2043	Without Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	118	100.000
B - Development		✓	0	100.000
C - Harbour Road S		✓	33	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	118
	B - Development	0	0	0
	C - Harbour Road S	33	0	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	593	0.000	0	0.0	0.000	A
C-AB	0	0.00	611	0.000	0	0.0	0.000	A
C-A	25	0.00			25			
A-B	0	0.00			0			
A-C	89	0.00			89			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	588	0.000	0	0.0	0.000	A
C-AB	0	0.00	607	0.000	0	0.0	0.000	A
C-A	30	0.00			30			
A-B	0	0.00			0			
A-C	106	0.00			106			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	581	0.000	0	0.0	0.000	A
C-AB	0	0.00	601	0.000	0	0.0	0.000	A
C-A	36	0.00			36			
A-B	0	0.00			0			
A-C	130	0.00			130			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	581	0.000	0	0.0	0.000	A
C-AB	0	0.00	601	0.000	0	0.0	0.000	A
C-A	36	0.00			36			
A-B	0	0.00			0			
A-C	130	0.00			130			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	588	0.000	0	0.0	0.000	A
C-AB	0	0.00	607	0.000	0	0.0	0.000	A
C-A	30	0.00			30			
A-B	0	0.00			0			
A-C	106	0.00			106			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0.00	593	0.000	0	0.0	0.000	A
C-AB	0	0.00	611	0.000	0	0.0	0.000	A
C-A	25	0.00			25			
A-B	0	0.00			0			
A-C	89	0.00			89			

D13 - 2043 | With Development | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.81	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.81	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2043	With Development	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	33	100.000
B - Development		✓	19	100.000
C - Harbour Road S		✓	152	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	33
	B - Development	0	0	19
	C - Harbour Road S	145	7	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	6.03	0.0	A
C-AB	0.01	5.73	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	0.00	681	0.021	14	0.0	5.942	A
C-AB	6	0.00	697	0.009	6	0.0	5.730	A
C-A	108	0.00			108			
A-B	0	0.00			0			
A-C	25	0.00			25			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	0.00	679	0.025	17	0.0	5.978	A
C-AB	8	0.00	710	0.011	8	0.0	5.637	A
C-A	129	0.00			129			
A-B	0	0.00			0			
A-C	30	0.00			30			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	0.00	678	0.031	21	0.0	6.029	A
C-AB	10	0.00	728	0.014	10	0.0	5.515	A
C-A	157	0.00			157			
A-B	0	0.00			0			
A-C	36	0.00			36			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	0.00	678	0.031	21	0.0	6.029	A
C-AB	10	0.00	728	0.014	10	0.0	5.518	A
C-A	157	0.00			157			
A-B	0	0.00			0			
A-C	36	0.00			36			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	0.00	679	0.025	17	0.0	5.981	A
C-AB	8	0.00	710	0.011	8	0.0	5.638	A
C-A	129	0.00			129			
A-B	0	0.00			0			
A-C	30	0.00			30			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	0.00	681	0.021	14	0.0	5.945	A
C-AB	6	0.00	697	0.009	6	0.0	5.732	A
C-A	108	0.00			108			
A-B	0	0.00			0			
A-C	25	0.00			25			

D14 - 2043 | With Development | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Harbour Road	T-Junction	Two-way	Two-way	Two-way		0.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.94	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2043	With Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Harbour Road N		✓	118	100.000
B - Development		✓	8	100.000
C - Harbour Road S		✓	50	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	0	0	118
	B - Development	0	0	8
	C - Harbour Road S	33	17	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - Harbour Road N	B - Development	C - Harbour Road S
From	A - Harbour Road N	10	10	10
	B - Development	10	10	10
	C - Harbour Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.01	6.14	0.0	A
C-AB	0.03	6.54	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	0.00	664	0.009	6	0.0	6.015	A
C-AB	13	0.00	627	0.021	13	0.0	6.447	A
C-A	24	0.00			24			
A-B	0	0.00			0			
A-C	89	0.00			89			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	0.00	660	0.011	7	0.0	6.066	A
C-AB	16	0.00	627	0.026	16	0.0	6.484	A
C-A	29	0.00			29			
A-B	0	0.00			0			
A-C	106	0.00			106			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	0.00	654	0.013	9	0.0	6.138	A
C-AB	20	0.00	626	0.032	20	0.0	6.536	A
C-A	35	0.00			35			
A-B	0	0.00			0			
A-C	130	0.00			130			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	0.00	654	0.013	9	0.0	6.138	A
C-AB	20	0.00	626	0.032	20	0.0	6.539	A
C-A	35	0.00			35			
A-B	0	0.00			0			
A-C	130	0.00			130			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	0.00	660	0.011	7	0.0	6.066	A
C-AB	16	0.00	627	0.026	16	0.0	6.485	A
C-A	29	0.00			29			
A-B	0	0.00			0			
A-C	106	0.00			106			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	0.00	664	0.009	6	0.0	6.015	A
C-AB	13	0.00	627	0.021	13	0.0	6.450	A
C-A	24	0.00			24			
A-B	0	0.00			0			
A-C	89	0.00			89			



www.meinhardt.ie
The Greenway,
Block C Ardilaun Court,
St Stephens Green,
Dublin 2,
D02 YX28,
Ireland