CONTENTS

INTRODUCTION

General

14.1 This Chapter describes the existing road network and provides an assessment of the receiving road network traffic conditions and an assessment of likely traffic effects arising from the development including a 'baseline' scenario. It identifies the prevention, mitigation and monitoring measures that will be implemented to reduce the significance of the effects and assesses the residual effects. The aim of this Chapter is to provide sufficient roads and traffic related information to determine the baseline and likely future traffic effects arising from the proposed development.

14.2 Trafficwise Ltd. is familiar with the receiving road network having carried out a previous traffic study in relation to application Reg. Ref. TA161227 which was a development for permission for continued use of the site previously permitted which included existing quarry, stone extraction and processing, an extension to the overall extraction footprint all for a period of 23 years. That application was ultimately refused permission on appeal (ref. ABP-PL.249132).

14.3 A series of junction traffic turning counts and automatic traffic counter surveys were undertaken in October 2022 to inform the current traffic study and thus the preparation of this Chapter. The survey data set provides a base from which to evaluate traffic patterns on the receiving road network and also provides a sound baseline upon which to evaluate likely future effects arising from the proposed development.

14.4 This Chapter is structured generally in accordance with TII Publication PE-PDV-02045 '*Traffic and Transport Assessment Guidelines*' (2014) and also has regard to the advises of the Chartered Institution of Highways & Transportation (CIHT) document '*Guidelines for Traffic Impact Assessment*' (September 1994). This Chapter describes the receiving roads environment and reports upon past, present and forecast future traffic conditions arising at the site and on the receiving road network. The quantum of traffic generated by the development has been reviewed together with network traffic survey data which provides a frame of reference with respect to present, baseline and future forecast traffic flows on the receiving road network.

14.5 The comprehensive appraisal of the existing and future receiving road network in this EIAR is intended as a desktop aid to the Planning Authority in assessing the receiving roads environment. This Chapter of the EIAR provides an assessment of the current and forecast traffic generation arising at the existing Kilsaran quarry development at Rathcore. This Chapter assesses and evaluates the likely effects of the proposed development on the existing transportation system in the vicinity of the site. It also identifies proposed mitigation measures to minimise effects arising from the proposed development. The material assets considered in this Chapter include transport infrastructure and associated services.

Competency of Chapter Author

14.6 This Chapter has been prepared by Julian Keenan an Engineer in practice and a director of Trafficwise Ltd. holding the degree of Bachelor of Engineering (Hons.) in civil engineering conferred by University College, Galway, in 1990. Mr Keenan is a member of the Institution of Engineers of Ireland and a member of the Chartered Institution of Highways and Transportation. Mr Keenan has over 30 years engineering experience, including approximately seven years in local government in the United Kingdom and over 25 years of private engineering consultancy services in Ireland, of which 22 years are with Trafficwise Ltd. He has specialised in roads design and traffic and transportation planning for approximately 25 years. Consultancy experience includes advising clients in relation to road schemes, residential, commercial, industrial and leisure developments for which the key work

involves provision of professional services in the design and appraisal of schemes, including the preparation of planning applications and appeals. Mr Keenan has represented clients at An Bord Pleanála oral hearings for commercial development, strategic infrastructure development and represented landowners and stakeholders in relation to various road schemes and infrastructural works. He has given sworn evidence before the Property Arbitrator, including in relation to road schemes, and has provided expert witness testimony to the High Court.

Legislation, Policy & Guidance

14.7 The scope of the traffic and transport assessment was developed having regard to the following legislation.

- The requirements of EU Directives and national legislation (primary and secondary) concerning Environmental Impact Assessment (especially having due regard to the revised provisions of Directive 2014/52/EU);
- EPA (2002) Guidelines on the Information to be Contained in Environmental Impact Statements;
- EPA (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports;
- EPA (2003) Advice Notes on Current Practice in the Preparation of Environmental Impact Statements;
- EPA (September 2015) Advice Notes for Preparing Strategic Environmental Assessments;
- EPA (May 2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports;
- DHPCLG (15/05/17) Circular Letter PL 1/2017 Implementation of Directive 2014/52/EU on the effects of certain public and private projects on the environment (EIA Directive): Advice on Administrative Provisions in Advance of Transposition;
- DHPCLG (May 2017) Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems: Key Issues Consultation Paper;
- Meath County Development Plan 2021-2027;
- Department of Transport, Tourism and Sport (2019) '*Traffic Signs Manual*';
- Transport Infrastructure Ireland (TII) (May 2014) PE-PDV-02045 '*Traffic and Transport Assessment Guidelines*', referred to hereafter as the TTA Guidelines;
- TII (Oct 2016) PE-PAG-02039 Project Appraisal Guidelines for National Roads '*Unit 16.1 – Expansion Factors for Short Period Traffic Counts*';
- TII (Oct 2021) PE_PE-PAG-02017 Project Appraisal Guidelines for National Roads '*Unit 5.3 – Travel Demand Projections*';
- TII (Oct 2016) PE_PE-PAG-02016 Project Appraisal Guidelines for National Roads '*Unit 5.2 – Data Collection*';
- TII (May 2023) '*Rural Road Link Design*' DN-GEO-03031;
- TII (May 2023) '*Geometric Design of Junctions*' (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions) DN-GEO-03060-02; and
- Other relevant TII Publications (Standards).

Planning Authority Policies and Objectives

General

14.8 In summarising current transportation policies and future objectives for the general area, reference has been made to the Meath County Development Plan 2021-2027 which sets out the vision, policies, strategies and objectives for planning and sustainable development of County Meath. Some general policies and objectives together with specific Traffic and Transport related policies and objectives considered relevant to the location of the proposed development are summarised below.

14.9 Meath County Development Plan 2021-2027, '**Rural Development Strategy**', Section 9.11 sets out policy relating to '*Extractive Industry and Building Materials Production*' the underlying goal of which is stated as *"To facilitate adequate supplies of aggregate resources to meet the future growth needs of the County and the wider region while addressing key environmental, traffic and social impacts and details of rehabilitation."* The most relevant policy relating to traffic and transportation are summarised as follows:

RD POL 25: To ensure that the extractive industry and associated development minimises adverse impacts on the road network in the area and that the full cost of road improvements, including during operations and at time of closure, which are necessary to facilitate those industries are borne by the industry itself.

14.10 Meath County Development Plan 2021-2027, '*Development Management Standards and Land Use Zoning Objectives'*, Section 11.6.9 sets out policies and objectives relating to '*Extractive Industry'*. The most relevant policies and objectives relating to traffic and transportation are summarised as follows:

DM OBJ 64: (Partial) All applications for extractive industry development shall comprehensively address the following criteria as part of a pre-application discussion and/or planning application proposal: Transportation impacts with particular reference to details of all haul routes, trip movements etc (A special contribution may be attached to a grant of permission in accordance with Section 48 of the Planning and Development Act, as amended).

DM OBJ 89: Car parking shall be provided in accordance with Table 11.2 and associated guidance notes.

DM OBJ 90: The dimension of parking bays shall comply with Table 11.3.

DM OBJ 91: Car parking provision shall normally be provided within the curtilage of the development site. Where, in the opinion of the Council, it would be impracticable for individual developers to provide for on-site parking, a contribution may be required.

DM OBJ 94: All car parks shall include the provision of necessary wiring and ducting to be capable of accommodating future Electric Vehicle charging points, at a rate of 20% of total space numbers.

DM OBJ 95: In any car park in excess of 20 spaces where public access is available, four fully functional charging points for Electric Vehicles shall be provided in accordance with IEC 61851 Standard for Electric Vehicle Conductive Charging Systems.

DM OBJ 96: To require the provision of cycle parking facilities in accordance with the Design Standards for New Apartments (March 2018) and Table 11.4 Cycle Parking Standards.

DM OBJ 97: Cycle parking facilities shall be conveniently located, secure, easy to use, adequately lit and well sign posted. All long-term (more than three hours) cycle racks shall be protected from the weather.

14.11 Meath County Development Plan 2021-2027 sets out the following requirements and thresholds with respect to Traffic and Transport Assessments and Road Safety. *"Traffic and Transport Assessment (TTA), Road Safety Audits (RSA) and Road Safety Impact Assessments are required to accompany planning applications for major developments with significant potential to generate traffic and or which could create a significant hazard or safety performance impact on a major road, particularly national roads. When preparing the TTA's regard should be had to the provision of the 'Design Manual for Urban Roads and Streets and the 'Traffic Management Guidelines, 2012'. Where a Transport and Traffic Assessment identifies necessary on and off-site improvements for the development to be able to proceed, the developer will be required to fund the improvements by entering into a formal agreement with the Council."*

14.12 The requirement for a TTA is at the discretion of the Council but the following thresholds can be used for guidance purposes only:

- Traffic to and from the proposed development exceeds 10% of the traffic flow on the adjoining road;
- Traffic to and from the proposed development exceeds 5% of the traffic flow on the adjoining road where congestion exists;
- Residential development in excess of 100 dwellings (Applications for 100 or more dwellings are decided by An Bord Pleanála as an SHD);
- Retail and leisure development in excess of 1,000 sq.m;
- Industrial development in excess of 5,000 sq.m, and; and
- Distribution and warehousing in excess of 10,000 sq.m.

14.13 Meath County Development Plan 2021-2027, Table 11.2 sets out Car Parking Standards. The following Meath County Development Plan 2021-2027 Objectives relate to Car Parking Standards and are of relevance to the proposed development:

DM OBJ 94: All car parks shall include the provision of necessary wiring and ducting to be capable of accommodating future Electric Vehicle charging points, at a rate of 20% of total space numbers.

14.14 Meath County Development Plan 2021-2027, Table 11.4 sets out Cycle Parking Standards. Relevant development plan guidance notes are also set out:

- Employment, Offices, 10% of employee numbers subject to minimum of 10 bicycle places or one bike space for every car space, whichever is the greatest.
- Other, 1 bike space per car space, or 10% of employee numbers in general

Study Scope

14.15 Based upon consultation with Meath County Council and by reference to the previous application under Planning Reg. Ref. TA161227 the scope for the key transportation items to be addressed within this assessment includes the requirement for identifying the haul routes and accessibility of the site. In addition, the methodology adopted in preparing the TTA will accord with published Transport Infrastructure Ireland (TII) Publication PE-PDV-02045 '*Traffic and Transport Assessment Guidelines*' and will have regard to the Chartered Institution of Highways & Transportation (IHT) Guidelines.

14.16 Traffic surveys and junction assessments include;

- **Site 1**: L6226 Junction with Rathmolyon Road / Summer Hill Road in Rathcore (Boggan's Bar)
- **Site 2**: L6226 Kilsaran Site Access

- **Site 3**: L6226 Longwood Road Junction
- **Site 4**: R148 Dublin Road / L6226 Junction

Future year roads network capacity assessment scenarios to include;

- Opening Year
- Opening Year +5 years
- Opening Year +15 years

Traffic Study Methodology

14.17 The purpose of this assessment is to quantify traffic flows on the existing receiving transport environment and to detail the results of assessment work undertaken to identify the potential traffic and transport effects generated as a result of the proposed development.

- **Background Review**: This important exercise incorporated three parallel tasks which included:

  (a) an examination of the local regulatory and development management documentation;

  (b) an analysis of previous 'transport' related, strategic and site specific studies of development and transport infrastructure proposals at the application site, and

  (c) a review of planning applications to establish the legal status of relevant various third party development schemes that were either considered within the strategic 'transport' studies or which have emerged and received full planning permission since.

- **Site Audit**: A site audit was undertaken to quantify existing road network characteristics and identify local infrastructure management arrangements, in addition to establishing the level of accessibility to the site.

14.18 This assessment has been completed in accordance with Transport Infrastructure Irelands' '*Traffic and Transport Assessment Guidelines*' PE-PDV-02045 (May 2014). Information from the Meath County Council Development Plan 2021-2027 was used to describe the development location and its local context in relation to transportation objectives.

14.19 The general methodology adopted for this report is summarised as follows:

- **Traffic data** – 12-hour classified vehicular traffic count surveys were undertaken in October 2022 by Traffinomics Transportation Surveys. The surveys cover 07:00 and 19:00hrs at 4 no. sites on the receiving road.
- **Trip Generation** – A development trip generation assessment has been carried out using the first principles and the comparison methods which is underpinned by reference to empirical data for the subject site and similar sites and by reference to weighbridge records so as to determine the existing and potential future vehicular trips to and from the proposed development.
- **Trip Distribution** – Based upon existing traffic characteristics on the surrounding road network, an appropriate distribution has been assigned to site development vehicular trips across the road network.
- **Future Road Network Assessments** – Future year traffic forecasts have been derived from the application of TII PAG growth factors to baseline survey data. Traffic generation arising from development is included in the future year road network assessments. Network traffic flows and the effects of development traffic upon the performance of the receiving road network are

modelled for the proposed year of opening, 5 years after opening and 15 years after opening and a further design year or horizon year (when extraction ceases). Assessments are undertaken both with and without the proposed development to assess the incremental effects arising directly form the construction and operation of the proposed development.

14.20 Based upon weighbridge records together with vehicle records and statistics relating to this and other similar sites operated by Kilsaran, this chapter provides a review of traffic generation rates for various traffic streams arising from the current permitted and the future proposed development.

14.21 Classified turning count surveys undertaken on the receiving road network identify baseline traffic conditions. The traffic surveys were carried out by Traffinomics Ltd. (formerly Abacus Transportation Surveys). In the interest of a comprehensive appraisal of the receiving road traffic characteristics the report provides an assessment of the traffic flow variations recorded on the receiving roads network that includes the current haul routes to the existing development at Rathcore. The current haul route is principally the Local Road L6226 to the north and to a greater extent to the south of the site where L6226 connects to Regional Road R148 (former N4).

14.22 This chapter provides an evaluation of the potential traffic generation of the permitted development at the existing site and this is compared with the existing operation and with the forecast potential traffic scenario arising from the proposed development; all assessment scenarios consider the site operating at comparative rates of material extraction.

14.23 This chapter identifies how existing and future traffic associated with the development is accommodated on the existing local road network. Where considered appropriate, measures are discussed regarding the management of traffic generated by the proposed development together with local signing improvements and road maintenance.

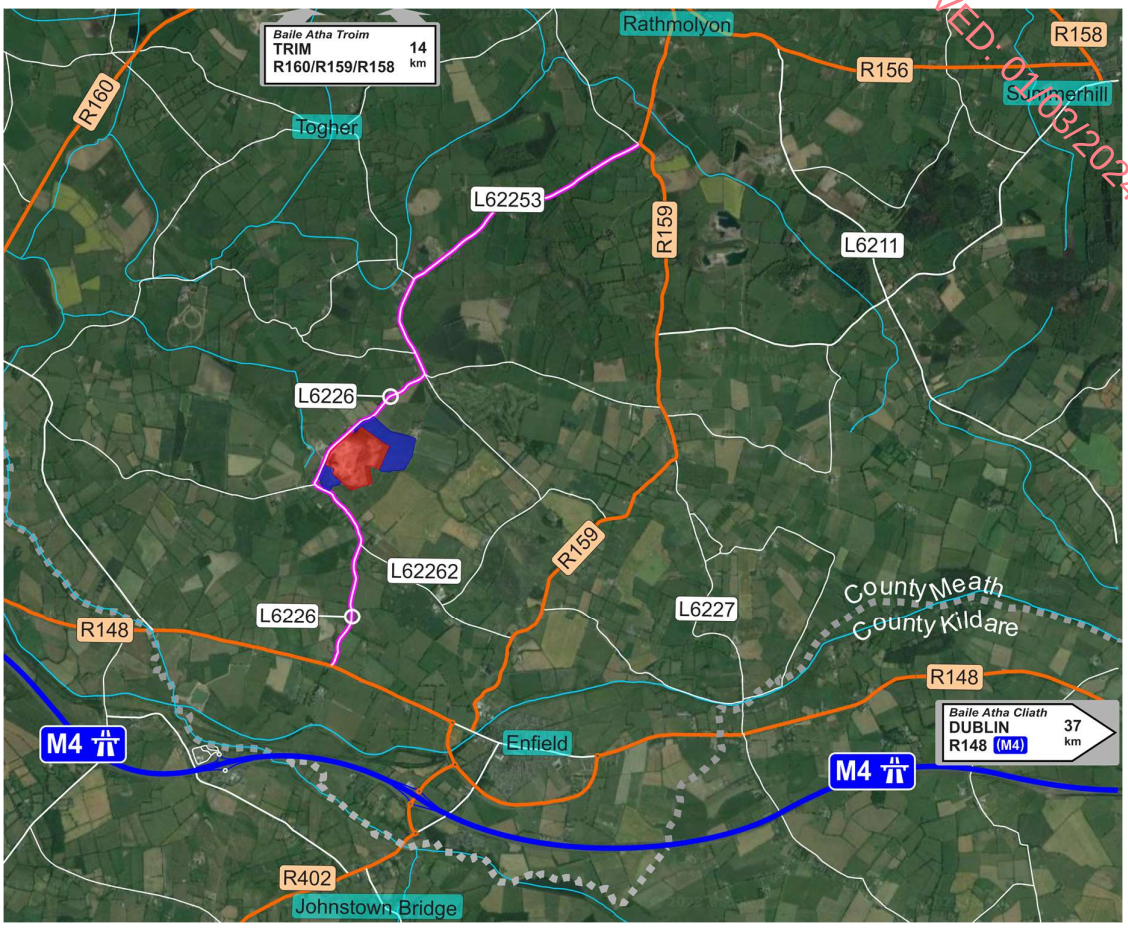
14.24 The advice to local authorities in Spatial Planning and National Roads (Guidelines for Planning Authorities - January 2012), Chapter 3, '*Development Management and Roads*' is to make sure that development located close to national roads and their junctions can be catered for by the design assumptions underpinning such roads and junctions thereby avoiding potentially compromising the capacity and efficiency of the national road. The assessments provided in this traffic study show that the traffic generated by the proposed development will not give rise to a premature or unacceptable reduction in the level of service available to road users on national roads or their junctions in the vicinity of the existing development.

RECEIVING ENVIRONMENT

Site Location

14.25 Rathcore Quarry is an existing operational quarry lying approximately 1 kilometre southwest of the village of Rathcore, and 3.0 kilometres northwest of the town of Enfield. The village of Rathcore comprises of a handful of houses and a public house, grouped around the intersection of roads leading north to Rathmolyon (L62253) and Trim, east to Summerhill, southeast to Enfield and south past the quarry site (L6226) and on to the R148 (former N4 National Primary Road). The location of the application site is identified 'red' in **Figure 14-1** whilst the greater landholding of the applicant is highlighted 'blue'.

Figure 14-1
Site Location in Context of Receiving Road Network



14.26 The site enjoys frontage along Local Road L6226 and direct vehicular access via a single simple priority entrance located on the eastern side of the road.

14.27 Travelling by road the site access is located approximately 1.2km southwest of Rathcore Village via L6226 and approximately 4.7km northeast of the centre of Enfield town via R148/L6226.

14.28 Travelling south from the site access via Local Road L6226 the R148 (former N4) is reached in approximately 2.7km. This route to the south is the principal haul route to and from the site. Given the relative location of the R148 and M4 Motorway in general the site can be considered well served by the greater strategic road network.

14.29 Local Road L6226 is a single lane road. The metalled carriageway surface varies in width but measures approximately 5.6m in width. Accommodating a verge varying in width from 1-2m on either side, there are no centreline or edge road markings. The road is subject to a posted speed limit of 80kph.

14.30 The road surface of the L6226 Local Road in the vicinity of the existing site access was observed to be in good condition during a recent site visit showing no major signs of wear.

14.31 The road is straight or nearly straight to the south of the access. There is a bend in the road on the southbound approach to the site access. The bend is located approximately 100m to the north. Visibility from the existing access is excellent to the south. The bend in the road to the north reduces sightlines to 100m but by the same token also reduces the approach speed of vehicles considerably thus reducing the requirement for stopping sight distance.

Overview of Existing Development

14.32 The existing quarry site is described fully in EIAR Chapter 2 '*Project Description*' with details of the existing site layout shown on **Figure 2-1**. The planning application covers an area of approximately 31.1 hectares within the Kilsaran landholding of 53.8 hectares.

14.33 The main entrance to the site is directly from Local Road L6226 and opens into a large open yard with a group of buildings located to the north (left upon entry). These buildings include a small office and associated weighbridge, canteen, service shed, truck washing facility and storage tanks. To the north of this area is the main stone processing and screening facility. The fixed processing plant comprising a generator, various conveyor belts and crushing equipment, together with a screening house. Adjacent to this processing facility is the stockpile of processed stone. The active quarry is located to the south of the processing plant. The existing permitted quarry operates under a number of planning permissions, Planning Reg. Ref. P91/970, Ref. P95/1416 and Ref. 01/1018. The quarry operations comprise extraction of the limestone using blasting techniques and processing of the fragmented rock to produce aggregates for road construction and site development works, and for use in concrete and asphalt manufacturing plants operated at other Kilsaran sites, along with the production of agricultural lime products.

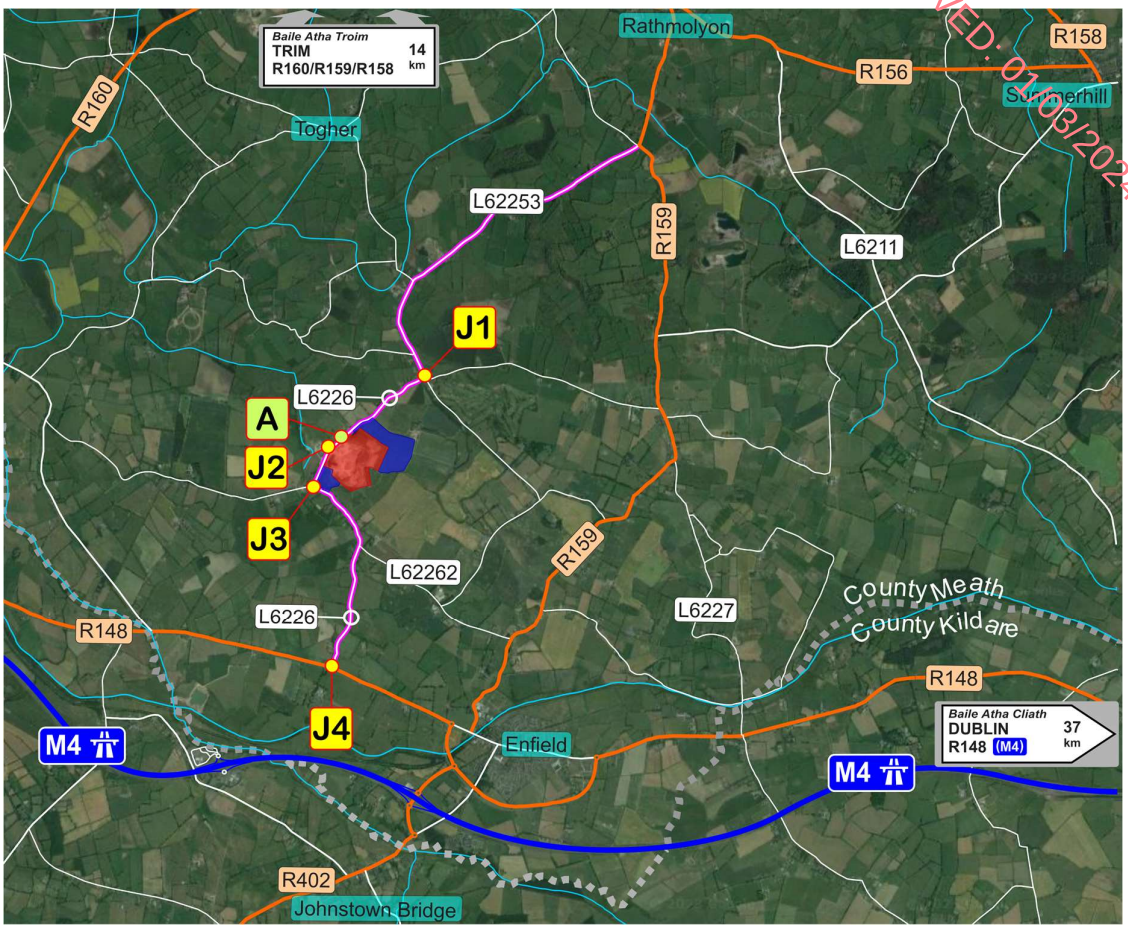
14.34 There is no pedestrian, cycle of public transport provision on the local road network serving the exiting site. The exiting site is a commercial quarry so there is limited accessibility for pedestrian and cyclists and there are no bus services available to staff or visitors to the site.

Traffic Surveys

14.35 In establishing the scope of the study, it was estimated that the influence of traffic generated by the proposed development was not likely to be significant beyond the immediate haul route serving the site. The existing principal haul route is highlighted 'magenta' in **Figure 14-1** and includes Local Road L6226. The majority of site generated commercial traffic travels to/from the south and Regional Road R148 and north to/from Rathmolyon and Summerhill.

14.36 In the interest of a comprehensive assessment of traffic patterns on the local roads network in the vicinity of the proposed development classified traffic turning count surveys have been commissioned at the entrance to the existing site, at the R148/L6226 junction to the south and other key junctions on the identified haul route. The surveys also include a 7-day automatic traffic counter (ATC) survey to the north of the exiting site access on Local Road L6226. The manual traffic surveys were carried out by Traffinomics Ltd. during school term on Wednesday 26-Oct-2022 and covered the period 07:00-19:00hrs. The ATC survey commenced at midnight on Friday 21-Oct-2022. A copy of the base survey data including location mapping is provided in **Appendix 14-1.** Traffic data was collected for the following locations identified in **Figure 14-2**.

Figure 14-2
Traffic Survey Locations



14.37 Traffic data was collected for the following locations identified in **Figure 14-2** where 'J' signifies a classified junction turning count and 'A' signifies an Automatic Traffic Count.

- **Site 1**: L6226 Junction with Rathmolyon Road / Summer Hill Rd in Rathcore village (Boggan's Bar)
- **Site 2**: L6226 Kilsaran Site Access
- **Site 3**: L6226 Longwood Road Junction
- **Site 4**: R148 Dublin Road / L6226 Junction

14.38 Covid-19 Pandemic measures did not include for travel restrictions during the traffic surveys. TII traffic statistics for the M4 motorway show that ordinary traffic characteristics in 2022 had returned to pre-Covid levels before October. It is considered likely that any changes in travel patterns arising from changes in work practices and work-from-home policies that may have taken effect on network traffic flows were embedded in travel patterns by late 2022. Examining the 5-day moving average traffic flow statistics for M4 shows no significant fluctuations and on the basis of this assessment against TII records the October 2022 traffic data is considered valid for use in these analyses.

14.39 Based upon the characteristics of the traffic flows and trends on M4 the survey data is considered a valid baseline for the purposes of the assessments provided in this chapter. **Appendix 14-2**, Figures 1 through 9 show in network flow diagram format the surveyed local roads traffic flows and identify

separately that portion of network traffic attributable to traffic generated at the existing development. **Appendix 14-2** shows the following:

- Figure 1 Daily Network Traffic Flows (07:00-19:00hrs)
- Figure 2 Morning Peak Hour Network Traffic Flows (08:00-09:00hrs)
- Figure 3 Development Peak Hour Network Traffic Flows (10:00-11:00hrs)
- Figure 4 Evening Peak Hour Network Traffic Flows (17:00-18:00hrs)
- Figure 5 Development Traffic Distribution (07:00-19:00hrs)
- Figure 6 Daily Development Traffic Flows (07:00-19:00hrs)
- Figure 7 Morning Peak Hour Development Traffic Flows (08:00-09:00hrs)
- Figure 8 Development Peak Hour Development Traffic Flows (10:00-11:00hrs)
- Figure 9 Evening Peak Hour Development Traffic Flows (17:00-18:00hrs)

14.40 As is standard industry practice, the surveys were carried out on a 'neutral' day of the week. Generally, traffic flows manifest on a neutral day are considered more likely to be representative of typical traffic conditions on the local roads network.

14.41 The traffic flow data from the October 2022 surveys forms the basis of the assessments of road network capacity and the assessment of the likely effect of the proposed development on the operation of the receiving road network.

14.42 Daily traffic flows recorded on the receiving road network over the course of the Wednesday-26-Oct-2022 survey are shown in **Appendix 14-2**, Figure 1 '*Surveyed Daily Traffic Flows 07:00-19:00hrs*', which presents the traffic flow data in network flow diagram format. **Table 14-1** provides a summary of the recorded traffic flows at Survey Sites 1 through Site 4 over the course of the survey. The Road Link numbers used in the table correspond to those used in the network flow diagrams provided in **Appendix 14-2**. **Table 14-1** shows the recorded traffic flow and the number and percentage HGV content enumerated between 07:00 and 19:00hrs and also shows the estimated Annual Average Daily Traffic flow (AADT). The AADT is estimated by deriving a factor from the Automatic Traffic Counter to convert 12hr data for Wednesday-26-Oct-2022 to a 24-hour equivalent[1] which is then multiplied by a monthly index[2] derived from TII PE-PAG-02039 Project Appraisal Guidelines for National Roads '*Unit 16.1 – Expansion Factors for Short Period Traffic Counts*'. The network flow diagrams in **Appendix 14-1** provide a schedule of the link numbers and each link is identified on the diagrams. **Table 14-1** also provides a summary of the recorded two-way existing daily development generated traffic flows on the receiving road network on the weekday. The corresponding network flow diagram for daily site traffic generation is provided in network flow diagram format in **Appendix 14-2**, Figure 6 '*Daily Development Traffic 07:00-19:00hrs*'.

[1] Link 4 24hr 2-way (ATC) flow 425, 12hr (Count) flow 324, conversion factor 1.312
[2] §35, Monthly Flow Index – Mid East Region for October 0.99

Table 14-1
Study Area Network Link Road Traffic – Daily Flows (Two-way)

ROAD LINK		DAILY TRAFFIC 07:00-19:00hrs		AADT	Existing Development Surveyed Traffic 26-Oct-2022		
		Total	HGV		LV	HGV	Total
1	Rathmolyon Road	698	71	906 (10%)	5	12	17
2	Summerhill Road	410	29	532 (7%)	2	2	4
3	Enfield Road	520	24	675 (5%)	2	0	2
4	L6226 (North of Quarry)	324	42	421 (13%)	12	14	26
5	L6226 (South of Quarry)	383	96	497 (25%)	17	68	85
6	Longwood Road	234	17	304 (7%)	5	0	5
7	L6226 South of Longwood Rd.	435	101	565 (23%)	12	68	80
8	L6226 North of R148	493	106	640 (21%)	12	68	80
9	R148 West	7461	953	9689 (12%)	5	21	26
10	R148 East	7562	991	9820 (13%)	7	47	54

14.43 It is generally best practice in preparing TTA to assess the effect of the proposed development during periods when the effect of development traffic flows on the receiving road network are likely to be greatest. The peak hours and associated traffic flows recorded in the October 2022 surveys are as follows:

- Weekday Morning Network Peak Hour 08:00-09:00hrs
- Weekday Development Peak Hour 10:00-11:00hrs
- Weekday Evening Network Peak Hour 17:00-18:00hrs

14.44 **Table 14-2** provides a summary of the recorded two-way peak hour traffic flows on the receiving road network in the weekday morning and evening peak hours together with the development peak hour. Recorded peak hour traffic flows are provided in network flow diagram format in **Appendix 14-2**, Figure 2 '*Morning Peak Hour Traffic Flows 08:00-09:00hrs*', Figure 3 '*Development Peak Hour Traffic Flows 10:00-11:00hrs'* and Figure 4 *'Evening Peak Hour Traffic Flows 17:00-18:00hrs*'. As per **Table 14-1** the Road Link numbers used in the table correspond to those used in the network flow diagram provided in **Appendix 14-2**.

14.45 **Table 14-3** also provides a summary of the recorded two-way development generated peak hour traffic flows on the receiving road network in the weekday morning and evening peak hours together with the development peak hour. Recorded peak hour site generated traffic flows are provided in network flow diagram format in **Appendix 14-2**, Figure 7 '*Morning Peak Hour Development Traffic 08:00-09:00hrs*', Figure 8 '*Development Peak Hour Development Traffic 10:00-11:00hrs*' and Figure 9 '*Evening Peak Hour Development Traffic 17:00-18:00hrs*'.

Table 14-2
Study Area Network Link Road Traffic – Peak Hour Flows (Two-way)

ROAD LINK		AM Peak		Dev. Peak		PM Peak	
		Total	HGV	Total	HGV	Total	HGV
1	Rathmolyon Road	73	4	38	7	74	4
2	Summerhill Road	51	0	18	2	45	2
3	Enfield Road	43	2	26	0	54	0
4	L6226 (North of Quarry)	35	2	18	5	27	4
5	L6226 (South of Quarry)	42	9	27	14	27	4
6	Longwood Road	38	4	11	1	28	5
7	L6226 South of Longwood Rd.	48	11	32	15	31	3
8	L6226 North of R148	45	10	36	13	35	4
9	R148 West	715	104	414	82	891	47
10	R148 East	720	100	422	91	904	47

Table 14-3
Study Area Network Link Road Traffic – Peak Hour Development Traffic Flows (Two-way)

ROAD LINK		AM Peak		Dev. Peak		PM Peak	
		Total	HGV	Total	HGV	Total	HGV
1	Rathmolyon Road	-	-	4	2	2	-
2	Summerhill Road	-	-	-	-	-	-
3	Enfield Road	-	-	-	-	-	-
4	L6226 (North of Quarry)	-	-	4	2	2	-
5	L6226 (South of Quarry)	7	7	13	11	2	-
6	Longwood Road	-	-	-	-	-	-
7	L6226 South of Longwood Rd.	7	7	13	11	2	-
8	L6226 North of R148	7	7	13	11	2	-
9	R148 West	2	2	3	3	-	-
10	R148 East	5	5	10	8	2	-

14.46 Corresponding to the above **Table 14-3** the following **Figure 14-3** shows the surveyed daily HGV traffic generation of the site from October 2022 whilst **Figure 14-4** shows the generation of light vehicles.

Figure 14-3
Traffic Survey Recorded HGV Movements at Access

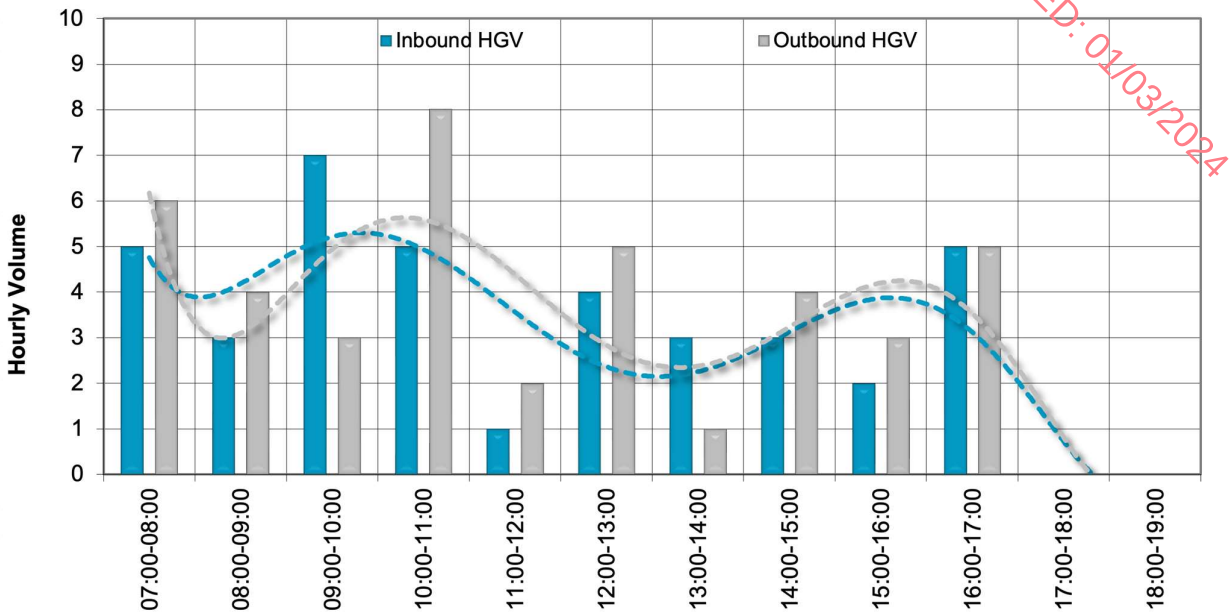
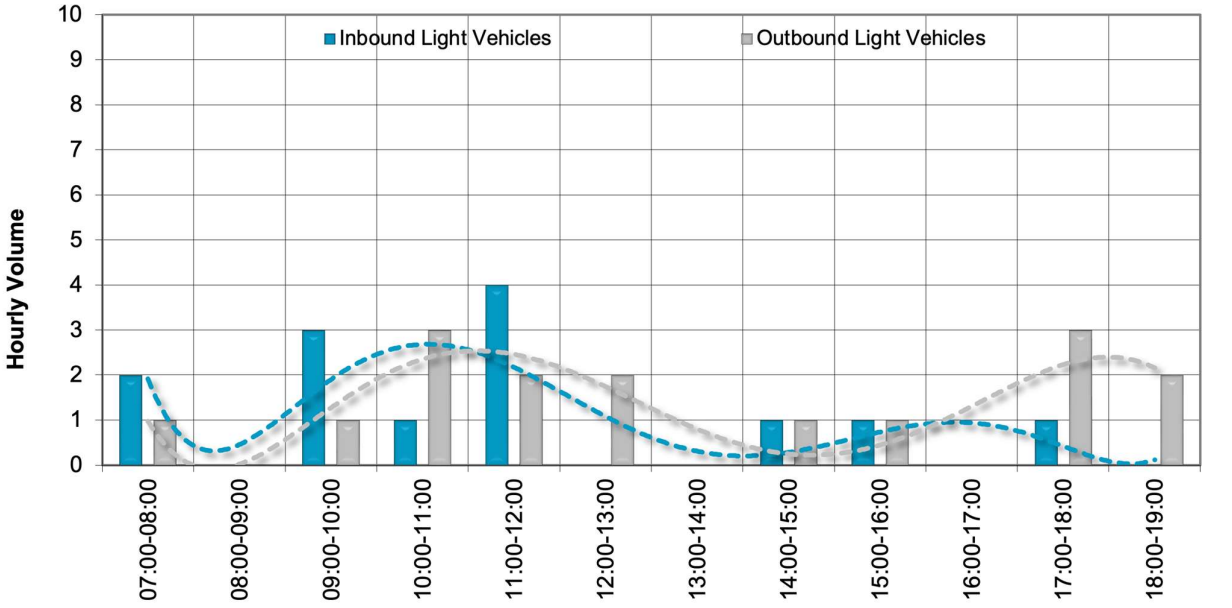


Figure 14-4
Traffic Survey Recorded Light Vehicle Movements at Access



14.47 **Figure 14-3** show that there was no pronounced development peak hour during the October traffic turning count survey. The daily profile shows an average of 4 no. HGV arriving and 4 HGV no. departing per hour over the course of the surveys. The maximum flow occurs around mid-morning with 5 no. HGV arrivals and 8 no. departures. After midday the average HGV traffic generation is 3 no. vehicle trips per hour comprising 3 no. vehicle movements in and 2 no. vehicle movements out. On the day of the traffic surveys in October 2022 in total 43 no. HGV trips were recorded.

Existing Development Traffic Generation

Hours of Operation

14.48 Normal quarry operations (i.e. extraction and processing) do not commence before 08:00hrs and do not continue after 18:00 Monday – Friday, and 14:00hrs on Saturday. Truck loading activities can be undertaken between the hours 07:00 and 08:00, Monday to Saturday. No work takes place on Sunday or Bank Holidays.

14.49 It is proposed to maintain these hours of operation under the current planning application.

Transport of Aggregate

14.50 The quarry provides aggregates and stone derived products. Product is delivered to a broad spectrum of construction projects in correspondingly diverse quantities. Product is delivered in the quantity prescribed by the various purchasers and clients. There are projects which by their nature may require many loads and logistical efficiency is typically the objective in those cases. Such efficiency is achieved by ensuring that in the case of multiple loads as many as practicable are full loads. Equally there are smaller deliveries arising from specific demands relating to finite activities on larger sites or simply arising on smaller jobs or works such as house extensions and the like.

14.51 Ordinarily the generation of HGV and indeed the volume of product transported by each vehicle leaving a quarry site is not only product dependent but is commercially driven accordingly the rate of extraction fluctuates throughout the year.

14.52 In the case of providing aggregates to other manufacturing plants the operators of the quarry strive to have aggregates delivered in as economical loads as feasible. Given that manufacturing sites typically have aggregate storage facilities such supply is not directly driven by demand and it follows therefore that aggregates are exported in fully laden vehicles, which in the case of rigid HGV is 20t per vehicle and for articulated HGV is 29t.

14.53 A guide to the carrying capacity of the typical HGV used by the quarrying industry to transport aggregates is provided hereunder in **Table 14-4**.

14.54 Based upon an assessment of weighbridge data relating to the haulage of aggregate from this and similar sites, the average payload of aggregate transport is not typically a full load. Surveys at the site and inspection of weighbridge data shows that the average payload of vehicles leaving the quarry site with aggregates is in the order of 22 tonnes. The aggregate vehicles in the Kilsaran fleet are predominantly the eight-wheeler and articulated types. It can nonetheless be appreciated that on occasion third party vehicles can also haul materials both to and from the site.

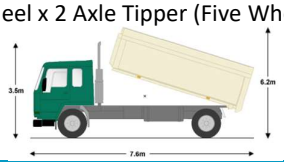
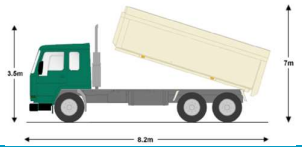
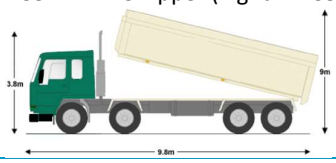
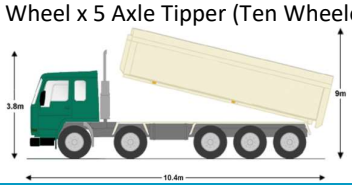
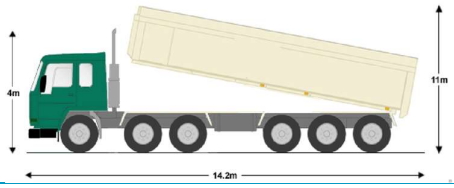
14.55 Five and a half working days per week would indicate 278 working days per year.

14.56 As with most similar sites permitted to operate on Saturdays, the existing quarry does not generate traffic every Saturday. For instance, most sites are closed on the Saturday of a Bank Holiday. Counting as a half day those Saturdays when the site is likely to be operational would give a practical number of 268 operational days per year.

14.57 Counting only Monday to Friday a site would be operational for 245 days per annum.

14.58 Based upon records at similar sites the volume of material transported on Saturdays is typically a fraction of typical weekday operation. In the interest of a practical assessment, it is assumed that the volume of material transported on Saturdays is approximately 10-20% of that transported on a typical weekday. For the purposes of this assessment therefore it is assumed that the total number of working days per year equates to 250 full days.

Table 14-4
Aggregate Transportation Vehicle Statistics

VEHICLE TYPE	LENGTH	MAX WEIGHT	CAPACITY
4 Wheel x 2 Axle Tipper (Five Wheeler) 	7.6m	24.5t	14.5t
6 Wheel x 4 Axle Tipper (Six Wheeler) 	8.2m	26t	16t
8 Wheel x 4 Axle Tipper (Eight Wheeler) 	9.8m	32t	20t
10 Wheel x 5 Axle Tipper (Ten Wheeler) 	10.4m	36t	22t
Articulated Tipper 	14.2m	44t	29t

14.59 The current permissions for the operation of the site do not limit production volumes to a particular annual rate.

14.60 The upper value of overall production at the existing Rathcore site is currently estimated to be approximately 350,000t per annum.

14.61 Given 250 working days per year together with an average payload of 22t per vehicle the average traffic generation potential at the existing site is estimated to be 64 HGV trips per day.

14.62 During the traffic surveys undertaken in October 2022 the site generated 39 inbound HGV and 43 outbound. The results of the traffic survey are summarised in **Table 14-1**, **Table 14-2** and **Table 14-3**.

14.63 The HGV traffic generation recorded in the October 2022 surveys is equivalent to approximately 67% of the average traffic generation potential of the quarry when operating at the estimated average of 350,000t per annum. The potential average HGV traffic generation of the exiting development is summarised in **Table 14-5**.

Table 14-5
Study Area Network Link Road Traffic – Daily Flows (Two-way)

ROAD LINK		DAILY TRAFFIC 07:00-19:00hrs		AADT	Existing Development Potential Traffic 350,000t/a		
		Total	HGV		LV	HGV	Total
1	Rathmolyon Road	698	71	906 (10%)	5	18	23
2	Summerhill Road	410	29	532 (7%)	2	3	5
3	Enfield Road	520	24	675 (5%)	2	0	2
4	L6226 (North of Quarry)	324	42	421 (13%)	12	21	33
5	L6226 (South of Quarry)	383	96	497 (25%)	17	101	118
6	Longwood Road	234	17	304 (7%)	5	0	5
7	L6226 South of Longwood Rd.	435	101	565 (23%)	12	101	113
8	L6226 North of R148	493	106	640 (21%)	12	101	113
9	R148 West	7461	953	9689 (12%)	5	31	36
10	R148 East	7562	991	9820 (13%)	7	70	77

Employment & Sundry Traffic Movements

14.64 The traffic surveys undertaken in October 2022 show that the site generates 13 no. inbound light vehicle movements and 16 no. outbound light vehicle movements on a daily basis. The imbalance of entry and exit numbers is due to some vehicles having arrived before the start of the traffic survey at 07:00hrs.

14.65 This total light vehicle movement figure includes for both staff and sundry vehicle movements associated with the day to day running of the site. The daily and various peak hour distribution of light vehicle traffic is summarised in **Table 14-2** and **Table 14-3**. It is unlikely that light vehicle traffic would fluctuate significantly from that recorded in the traffic surveys which are shown in network traffic flow format in **Appendix 14-2**.

14.66 Upon inspection the traffic surveys show 2 no. cars/vans entering in the morning between 07:00-09:00hrs and 5 no. leaving in the evening between 17:00-19:00hrs. The existing site requires a workforce of fourteen personnel which includes for HGV drivers, accordingly not all staff movements are by car or van and this is borne out in the traffic surveys. Based upon the survey data the number of sundry traffic movements (not including morning and evening movements of staff) which includes for staff going for lunch, visitors, services such as postman and the general day to day running of the site is approximately equal to the number of combined staff movements in the morning and evening.

CHARACTERISTICS OF PROPOSED DEVELOPMENT

Overview of Proposed Development

Construction and Operational (Extraction, Processing and Export) Phases

14.67 The application site is indicated on an extract from the 1:50,000 scale Ordnance Survey Discovery series map in EIAR Chapter 1, **Figure 1-1**.

14.68 The proposed development consists of:

- Permission for continued use of the previously permitted developments under P. Reg. Ref. No's. 01/1018 (PL17.127391); 95/1416 (PL17.099325) and 91/970 (PL17.089787) to include the existing quarry, drilling, blasting, crushing and screening of rock and related ancillary buildings and facilities;
- Permission for continued use of the previously permitted developments under P. Reg. Ref. No. TA/120923 consisting of a discharge water treatment facility comprising two lagoons (30m x 13m), an oil interceptor, a reed bed (27m x 10m) and a concrete canal with "V" notch weir;
- Permission for a small lateral extension of c.0.9 hectares from the existing quarry area of c.9.7 hectares as permitted under P. Ref. 01/1018 (PL17.127391) to give an overall extraction footprint of c.10.6 hectares;
- Permission for the deepening of the overall extraction area (c.10.6 hectares) by 2 no. 15m benches to a final depth of c.45m AOD from the current quarry floor level of c.75m AOD as permitted under P. Ref. P. Ref. 01/1018 (PL17.127391);
- Permission for a proposed new rock milling plant to be enclosed within a steel-clad building (c.575m² with roof height of 22.5m and exhaust stack height of 28.2m);
- Replacement of existing septic tank with a new wastewater treatment system and constructed percolation area;
- Restoration of the site to a beneficial ecological after-use;
- All associated site works within an overall application area of 31.1 hectares. The proposed operational period is for 20 years plus 2 years to complete restoration (total duration sought 22 years).

Restoration (Reinstatement to Agricultural Use and Nature Conservation Habitat Areas)

14.69 Upon the cessation of extraction operations, it is proposed to return the lands within the planning application area to a beneficial natural habitat area, refer to EIAR Chapter 2 and **Figure 2-4**.

14.70 The only material requirements in respect of the planned restoration scheme are those topsoils and subsoils already present on site, having been stripped and stockpiled within the existing operational site area. There is no requirement to import any materials to the site as part of the proposed restoration works.

Proposed Development Traffic

Traffic Generation – During Construction Phase

14.71 There will be some elements of the proposal that will require construction and these principally comprise the proposed rock milling plant building and replacement of the existing septic tank. The

construction phase effects will be short-term. It is expected that the overall construction period will be in the region of 3 months. It is proposed that construction traffic will access the site via the identified haul routes and chiefly from the R148 Dublin Road in the case of deliveries of steel, concrete, cladding etc. The average complement of construction staff is estimated to be in the region of 20 persons during peak construction activities. Based upon an expected car occupancy of 1.8 persons per vehicle is expected that light vehicle traffic generation during the construction phase will be on average approximately 18 trips per day allowing for staff arrivals in the morning, sundry trips in the day and departures in the evening.

14.72 Normal site working construction working hours are 07:00-19:00hrs on weekdays and 08:00-14:00hrs on Saturdays with no working on Sundays or Public Holidays. It is acknowledged that from time to time some construction activities might potentially need to be carried out beyond the prescribed hours and on such occasions, it is understood that the Planning Authority will be contacted and the appropriate consents secured.

14.73 Construction traffic will typically arrive at site prior to the traditional commuter peak hour in the morning and after the evening peak hour.

14.74 Average HGV traffic generation arising during construction activities is expected to be in the region of 1 no. HGV or less per day. It is understood that the construction will require no movement of abnormal or accompanied loads to or from the site. It is anticipated that the generation of HGV's during the construction period will be practically imperceptible and will not have a significant effect on network capacity during the peak periods. An appropriate routing strategy for HGVs will be agreed and implemented as part of the CEMP. Construction traffic is not considered likely to give rise to reduced operational performance of the local road network.

Traffic Generation – During Operational Phase

14.75 The current permissions set out above permit the extraction of aggregates but do not limit the annual extraction rate.

14.76 Based upon the current reserves and the market for aggregates it is forecast that the future rate of extraction will be 350,000t per annum.

14.77 The current proposal seeks permission for continuance of extraction of aggregates at the same estimated rate of 350,000t per annum. It follows therefore that the traffic generation arising from the proposed future operation of the site will be the same as currently manifest. The average daily HGV trip generation will be maintained at similar levels shown in **Table 14-5**.

14.78 For the purposes of assessment, it is assumed that the total volume of HGV traffic generated in the future by extraction and processing activities will be on average 64 trips per day. The extractive industry is acknowledged to be market or demand driven and this gives rise to fluctuations in the weekly and monthly volumes of material extracted, processed and transported to and from the development site. The volume of product transported from a quarry site is commercially driven accordingly the rate of production and extraction can fluctuate throughout the year and this is borne out in a review of weighbridge data that indicates a typical variance in HGV trip generation in the order of approximately ±15 trips per day to address certain demands when required. The day of the traffic surveys in October 2022 is an example of such fluctuation where the total HGV trip generation was 43 no. which is 22 no. less than the typical average when operating at 350,000t annual rate of extraction.

14.79 The HGV traffic generation rate forecast under the current application equates to an average of 6 no. HGV trips per hour over the course of a weekday. Based upon the daily profile recorded in the traffic surveys and set out in **Figure 14-3** the upper value traffic generation is likely to occur around mid-

morning with 9 no. HGV trips per hour. After midday the average HGV traffic generation is forecast to reduce to 4 no. HGV trips per hour.

14.80 The current proposals will extend the duration of quarrying. It is not proposed however to increase the overall extraction rate from the current estimated rate of 350,000t per annum accordingly the day-to-day traffic flows arising on the local road network from the existing site will remain at the current levels. It follows therefore that the effects upon the receiving road will not increase from current levels and that existing users of the receiving road should not experience a perceptible change in the day-to-day traffic generation of the site. Save for the duration of extractive operations the impact of the proposed development at the existing Rathcore Quarry can be considered neutral.

Haul Routes

14.81 It is proposed to maintain the same haul route regime for transporting aggregates described above and shown in **Figure 14-1**.

Light and Private Vehicle Generation

14.82 The typical traffic generation arising from employee vehicles is estimated from the turning count survey of 26-October-2022 to be in the order of 16 no. trips per day by private car. Given the working hours at the site, employee trips are generally manifest on the road network outside the typical morning peak with the majority arriving before 07:00hrs. Employees departing the site do so generally in the evening commuter peak hour period where **Figure 14-4** shows 3 no. vehicles recorded as leaving the site between 17:00-18:00hrs. The volume of private cars is not considered significant in the context of the carrying capacity of the receiving road network and the connected greater regional and national network.

14.83 As highlighted in **Figure 14-4** other non-HGV related trips arise from sales and technical staff and also from sundry visitors involved with the day-to-day operation of the site including maintenance staff, meter readers, sales people, the postman etc. These trips are generally distributed throughout the day with typically less than 1 no. trip per hour.

Traffic Generation during Restoration Period

14.84 Where feasible, restoration of exhausted and redundant areas will be carried out at the earliest opportunity. However, it is envisaged that the majority of restoration proposals at the quarry will only be carried out after extraction operations at the site have ceased whereupon it is proposed to return the worked lands to a natural habitat setting including a lake feature.

14.85 The only material requirements in respect of the planned restoration scheme are those topsoils and subsoils already present on site and have been previously stripped and stockpiled within the existing operational site area. The traffic generation arising during the restoration period will be chiefly by site operatives and little or no material will be transported to or from the site. It follows therefore that traffic impact arsing during the restoration period is not likely to be significant and thus the impact upon the receiving road network can reasonably be considered likely to be negligible.

PREDICTED EFFECTS OF THE PROPOSED DEVELOPMENT

Construction Phase

14.86 Average HGV traffic generation arising during construction activities is expected to be in the region of 1 no. HGV or less per day. It is understood that the construction will require no movement of abnormal or accompanied loads to or from the site. It is anticipated that the generation of HGV's

during the construction period will be practically imperceptible and will not have a significant effect on network capacity during the peak periods.

Operational Phase

Overview

14.87 The capacity of any road network is dictated by the operation of the links and junctions within that network. Capacity assessments of the key junctions in the vicinity of the site are modelled for base and future year scenarios in order to provide a comparative basis upon which to evaluate the incremental impact of the proposed development and to appraise the overall performance of the road network under future assumed network traffic flow criteria. To prepare a traffic network model various base assumptions are made with respect to the future growth of traffic on the receiving road network.

Scope of Assessment

14.88 Regarding the choice of appropriate assessment years the Transport Infrastructure Ireland (TII) publication PE-PDV-02045 '*Traffic and Transport Assessment Guidelines'*, referred to hereafter as the TTA Guidelines, advises that assessments should incorporate an analysis of the road network traffic flows for the base year, opening year and forecast scenarios which include opening year +5yrs and opening year +15yrs. The applicant aspires to have the development operational by the end of 2024. For the purposes of this traffic assessment the year 2024 has therefore been selected as the opening year. In line with the guidance provided in the TTA Guidelines, modelling analyses of the capacity of the receiving road network have been carried out for the following:

- Baseline (2023);
- Opening Year (Assumed 2024);
- Opening Year + 5yrs (2029);
- Opening Year + 15yrs (2039); and
- Horizon or Design Year (2044).

14.89 The following junctions have been included in the scope of the modelling assessments:

- **Site 1**: L6226/R148 Dublin Road.

Traffic Growth Rates

14.90 For the purposes of the traffic assessment traffic generation arising directly from the proposed development has been assumed not to grow over time. Background traffic flows on the public road network (R148 and L6226) have been assumed to grow in accordance with the latest growth factors published by Transport Infrastructure Ireland (TII) in Oct 2021 in the publication PE-PAG-02017 '*Project Appraisal Guidelines for National Roads Unit 5.3 Travel Demand Projections'*.

14.91 Central growth rate factors have been used in the derivation of the future traffic flows from the surveyed 2022 flows. The forecast central growth rate factors for Meath (excluding Metropolitan Area) assume traffic growth rates of 1.73% per annum for light vehicles and 3.65% for heavy vehicles between 2016 and 2030 and 0.70% per annum for light vehicles and 1.86% for heavy vehicles between 2030 and 2040 and 0.59% per annum for light vehicles and 2.07% for heavy vehicles thereafter to 2050.

14.92 Existing traffic flows are as surveyed and will be used as a baseline for comparison of the analyses for future year junction performance. The growth indices used to derive Opening Year (2024) and; Opening Year +5ys (2029) and Opening Year +15yrs (2039) flows from the surveyed (2022) flows are as follows. An additional assessment is included for the Horizon or Design Year of 2044 (opening year +20yrs).

14.93 National Primary Road Medium Growth Rates (Applied to All Roads)

- 2022-2024 (Opening Year) 1.035 (Cars) 1.074 (HGV)
- 2022-2029 (Opening Year + 5yrs) 1.128 (Cars) 1.285 (HGV)
- 2022-2039 (Opening Year + 15yrs) 1.221 (Cars) 1.572 (HGV)
- 2022-2044 (Opening Year + 20yrs) 1.259 (Cars) 1.739 (HGV)

14.94 TII growth factors have been applied directly to peak hour traffic data. Growth factors are not always directly applicable to peak hour periods (the peak hour generally spreads out as opposed to intensifying). Ignoring this factor and adding growth directly to the peak hour generally results in robust calculations favoured by traffic experts in the assessment of road networks.

14.95 No substantial permitted developments have been identified locally that might be considered likely to give rise to significant increases on the local receiving road network in the short-term. The application of TII growth rates to the receiving network is considered likely to account for the cumulative traffic arising as a result of economic growth and development locally over the specified assessment period.

Scenarios Analysed

14.96 The main corridor upon which the continued traffic generated by the development will have an impact on is L6226 and R148 Dublin Road accordingly the scope of future year capacity assessments focuses on the operation of R148/L6226 junction. The assessments aim to show that the infrastructure provided by the receiving road network including the strategic Regional Road network is suitable to accommodate the forecast traffic arising from the proposed development.

14.97 The various 'Do-Nothing' and 'Do-Something' traffic flow scenarios have been assessed for the Opening Year 2024, Opening Year + 5yrs, Opening Year + 15yrs and the Design Year or Horizon Year of 2044.

14.98 As shown in **Figure 14-3** and **Figure 14-4** the volume of development traffic trails off in the evening peak hour. The period of greatest impact is the morning network peak hour where the combination of network and development traffic flow is highest. The assessments examine impact on capacity in the morning peak hour.

14.99 A baseline assessment using the October 2022 surveyed flows is provided.

14.100 The future year assessments include for scenarios both with and without the proposed development so that the incremental impact of development traffic can be evaluated.

14.101 The TRL Junctions 10 suite of programs has been used to assess network junction performance in the identified peak hours. The 'Do-Something' scenarios include for the forecast assessment morning peak hour upper value development traffic flows set out in the network traffic flow diagrams provided in **Appendix 14-2.** The figures provided in **Appendix 14-2** show network traffic without traffic arising from the development, they show development generated traffic separately and show total traffic flows with the proposed development operating at a rate of extraction of 350,000t/a. Figures are provided for daily traffic flows as well as for the peak hour flows used in the assessment of junction capacity and include the following:

- Figure 10 Baseline Daily Traffic Flows – No Quarry Traffic
- Figure 11 2024 Year of Opening Daily Traffic Flows – No Quarry Traffic
- Figure 12 2029 Year of Opening +5yrs Daily Traffic Flows – No Quarry Traffic
- Figure 13 2039 Year of Opening +15yrs Daily Traffic Flows – No Quarry Traffic
- Figure 14 2044 Horizon/Design Year Daily Traffic Flows – No Quarry Traffic
- Figure 15 Daily Development Generated Traffic – Extraction Rate 350,000t/a
- Figure 16 Baseline Daily Traffic Flows – With Quarry Traffic
- Figure 17 2024 Year of Opening Daily Traffic Flows – With Quarry Traffic
- Figure 18 2029 Year of Opening +5yrs Daily Traffic Flows – With Quarry Traffic
- Figure 19 2039 Year of Opening +15yrs Daily Traffic Flows – With Quarry Traffic
- Figure 20 2044 Horizon/Design Year Daily Traffic Flows – With Quarry Traffic
- Figure 21 Baseline Peak Hour Traffic Flows – No Quarry Traffic
- Figure 22 2024 Year of Opening Peak Hour Traffic Flows – No Quarry Traffic
- Figure 23 2029 Year of Opening +5yrs Peak Hour Traffic Flows – No Quarry Traffic
- Figure 24 2039 Year of Opening +15yrs Peak Hour Traffic Flows – No Quarry Traffic
- Figure 25 2044 Horizon/Design Year Peak Hour Traffic Flows – No Quarry Traffic
- Figure 26 Peak Hour Development Generated Traffic – Extraction Rate 350,000t/a
- Figure 27 Baseline Peak Hour Traffic Flows – With Quarry Traffic
- Figure 28 2024 Year of Opening Peak Hour Traffic Flows – With Quarry Traffic
- Figure 29 2029 Year of Opening +5yrs Peak Hour Traffic Flows – With Quarry Traffic
- Figure 30 2039 Year of Opening +15yrs Peak Hour Traffic Flows – With Quarry Traffic
- Figure 31 2044 Horizon/Design Year Peak Hour Traffic Flows – With Quarry Traffic

Modelling Software

14.102 Transport Research Laboratory (TRL) Junctions 10 computer modelling suite of junction modelling programs has been used to assess relative junction performance and the likely incremental impact arising from development generated traffic as forecast. Junctions 10 (formerly PICADY Priority Intersection Capacity And DelaY) has been used to assess the future performance of the priority junction between R148/L6226 on the network. Junctions 10 is primarily intended as a means of assessing junction performance and the outputs provide performance indicators for roads designers and planners with regards to capacity, queuing and delay.

14.103 An 85% level of saturation corresponding to a Ratio of Flow to Capacity (RFC) of 0.850 is generally accepted at priority junctions in urban areas, and 0.75 in rural areas, although these figures should not be considered in isolation and should be viewed together with queuing and delay information.

14.104 In the following we provide a summary of the salient output results for each assessment. The output results of the analyses should primarily be viewed as a performance indicator facilitating a comparative assessment between the various traffic flow scenarios from which to assess the impact of the development.

14.105 The infrastructure upon which the proposed development relies is already in place so an assessment of existing infrastructure at 2022 (Baselines) using the surveyed existing traffic flows has been provided to afford a means by which to calibrate (through observation of the existing scenario) the models of future assessment value traffic scenarios.

14.106 The modelling analyses of the receiving road network include various traffic flow scenarios aimed at providing a comprehensive assessment of the capacity of the existing infrastructure under various assumptions and various development scenarios between the forecast year of opening 2024 and the Design Year or Horizon Year of 2044 when extraction operations are proposed to cease 20 years after the opening. The criteria for each assessment and each of the scenarios is specifically set out and clearly detailed.

14.107 The various assessment traffic flow scenarios are as follows.

- Scenario 1 (S1): Baseline assessment of the existing infrastructure using only the traffic flows recoded in the traffic surveys with quarry traffic removed (ref. **Appendix 14-2**, Fig. 21).
- Scenario 2 (S2): Baseline assessment of the existing infrastructure using only the traffic flows recoded in the traffic surveys with quarry traffic added for existing extraction rate of 350,000t/a. (ref. **Appendix 14-2**, Fig. 27).
- Scenario 3 (S3): 2024 Year of Opening assessment which includes for the TII forecast growth in network traffic flows. No flows from specific developments are included (ref. **Appendix 14-2**, Fig. 22).
- Scenario 4 (S4): 2024 Year of Opening assessment which includes for the TII forecast growth in network traffic flows. With development traffic included at extraction rate of 350,000t/a. (ref. **Appendix 14-2**, Fig. 28).
- Scenario 5 (S5): 2029 Year of Opening +5yrs assessment which includes for the TII forecast growth in network traffic flows. No flows from specific developments are included (ref. **Appendix 14-2**, Fig. 23).
- Scenario 6 (S6): 2029 Year of Opening +5yrs assessment which includes for the TII forecast growth in network traffic flows. With development traffic included at extraction rate of 350,000t/a. (ref. **Appendix 14-2**, Fig. 29).
- Scenario 7 (S7): 2039 Year of Opening +15yrs assessment which includes for the TII forecast growth in network traffic flows. No flows from specific developments are included (ref. **Appendix 14-2**, Fig. 24).
- Scenario 8 (S8): 2039 Year of Opening +15yrs assessment which includes for the TII forecast growth in network traffic flows. With development traffic included at extraction rate of 350,000t/a. (ref. **Appendix 14-2**, Fig. 30).
- Scenario 9 (S9): 2044 Horizon Year assessment which includes for the TII forecast growth in network traffic flows. No flows from specific developments are included (ref. **Appendix 14-2**, Fig. 25).
- Scenario 10 (S10): 2044 Horizon Year assessment which includes for the TII forecast growth in network traffic flows. With development traffic included at extraction rate of 350,000t/a. (ref. **Appendix 14-2**, Fig. 31).

14.108 The relative traffic generation and distribution flows arising from the proposed development are shown in **Appendix 14-2** Figure 21 through 25 and 27 through 31 whilst Figure 26 shows the forecast development traffic arising when the rate of extraction is 350,000t/a. It is assumed for the purposes of the traffic assessments that the entire development will be operational in 2024.

14.109 The results of Junctions 10 modelling analyses of the existing R148/L6226 priority junction subject to the baseline network traffic flows and the forecast 2024, 2029, 2039 and 2044 peak hour network traffic flow scenarios are summarised in **Table 14.6.** The results in **Table 14-6** highlighted 'blue' are for the various Do-Nothing Scenarios in which only network traffic is considered and for ease of reference the figures show highlighted 'green' are for the corresponding Do-Something scenario assessments which includes the traffic generated by the quarry operating at the current 350,000t/a extraction rate which is the rate of extraction proposed for continuance.

14.110 The results of the analyses serve to confirm that the existing priority junction on the R148 Dublin Road has sufficient capacity to accommodate the traffic arising from the proposed development. Considering forecast network traffic growth and the development of the proposed site the existing junction is shown to operate with a level of service 'A' and enjoys considerable residual capacity in both the year of opening and future years both with and without traffic arising at the quarry.

14.111 Comparing the figures for the Do-Nothing and Do-Something scenarios, **Table 14-6** shows that the inclusion of development traffic results in no increase in queues at the existing junction. The forecast increase in delay shows that in the peak hour for traffic entering R148 from L6226 is on average delayed by 1.36 seconds. Traffic turning right from R148 into L6226 is forecast in the peak hour to experience increased delay in the order of 2.49 seconds. The level of service remains 'A' in all scenarios whilst the residual capacity remains significant. The forecast average impact upon the Ratio of Flow to Capacity (RFC) is 0.02 or approximately 2%. Based upon these results the forecast impact of development traffic on the operation of the junction is shown not to be significant and it is clear that the incremental impact of development generated traffic does not have a significant impact upon network capacity.

Table 14-6
Capacity Modelling Assessment Results R148/L6226

SCENARIO	STREAM	QUEUE		DELAY	RFC	LOS	JUNCTION		RESIDUAL CAPACITY
		Ave	95%				Delay	LOS	
Baseline **2022 (S1)** Do Nothing	B-AC	0.1	0.5	8.93	0.07	A	0.39	A	174% B-AC
	C-B	0.0	0.5	8.02	0.02	A			
Baseline **2022 (S2)** Do Something	B-AC	0.1	0.5	10.24	0.09	A	0.65	A	164% B-AC
	C-B	0.0	0.5	10.60	0.03	A			
Opening **2024 (S3)** Do Nothing	B-AC	0.1	0.5	9.09	0.07	A	0.39	A	163% B-AC
	C-B	0.0	0.5	8.13	0.02	A			
Opening **2024 (S4)** Do Something	B-AC	0.1	0.5	10.51	0.10	A	0.66	A	151% B-AC
	C-B	0.0	0.5	10.66	0.03	A			
+5yrs **2029 (S5)** Do Nothing	B-AC	0.1	0.5	9.99	0.08	A	0.43	A	133% B-AC
	C-B	0.0	0.5	8.42	0.02	A			
+5yrs **2029 (S6)** Do Something	B-AC	0.1	0.5	11.16	0.11	A	0.68	A	126% B-AC
	C-B	0.0	0.5	10.87	0.04	A			
+15yrs	B-AC	0.1	0.5	10.89	0.10	A	0.46	A	109%

SCENARIO	STREAM	QUEUE		DELAY	RFC	LOS	JUNCTION		RESIDUAL CAPACITY
		Ave	95%				Delay	LOS	
2039 (S7)	C-B	0.0	0.5	8.75	0.02	A			B-AC
+15yrs **2039 (S8)** Do Something	B-AC	0.1	0.5	12.31	0.13	A	0.72	A	102% B-AC
	C-B	0.0	0.5	11.23	0.04	A			
Horizon Year **2044 (S9)** Do Nothing	B-AC	0.1	0.5	11.46	0.11	A	0.48	A	98% B-AC
	C-B	0.0	0.5	8.92	0.02	A			
Horizon Year **2044 (S10)** Do Something	B-AC	0.2	0.5	12.95	0.14	A	0.74	A	91% B-AC
	C-B	0.0	0.5	11.36	0.04	A			

Arm A: R148 (West) **Arm B:** L6226 **Arm C:** R148 (East)

Projected Trip Generation without the Current Proposals

14.112 Without the current proposed development, background traffic flows on the public road network can be expected to grow in response to general economic development. Traffic flows are typically assumed to grow in accordance with the growth factors published by Transport Infrastructure Ireland (TII) the latest release of which was in October 2021 in the document PE-PAG-02017 *'Project Appraisal Guidelines: Unit 5.3 Travel Demand Projections'*. In determining a baseline for road network assessment without the current proposed development in place central growth rate factors have been used in the derivation of the future traffic flows from the surveyed 2022 flows.

14.113 TII growth factors have been applied directly to peak hour traffic data. Growth factors are not always directly applicable to peak hour periods (the peak hour generally spreads out as opposed to intensifying). Ignoring this factor and adding growth directly to the peak hour generally results in robust calculations favoured by traffic experts in the assessment of road networks.

14.114 The application of TII growth rates to the receiving network is considered likely to account for the cumulative traffic arising as a result of economic growth and development locally over the specified assessment period in the absence of the proposed development.

'Do Nothing' Scenario

14.115 The above Projected Trip Generation without the Current Proposals is the 'Do-Nothing' Scenario for each of the future year scenarios assessed in this Chapter. The Do-Nothing scenarios are specifically set out as Scenario 1, Scenario 3, Scenario 7, and Scenario 9 described above.

Decommissioning and Reinstatement Phase

14.116 Upon cessation of operations the site will be decommissioned in accordance with the current proposal. The potential effects of decommissioning the site on the capacity and operation of the receiving road network are not considered to be potentially significant effects.

Description of Likely Significant Effects

Construction Phase

14.117 Average HGV traffic generation arising during construction activities is expected to be in the region of 1 no. HGV or less per day. It is understood that the construction will require no movement of abnormal or accompanied loads to or from the site. It is anticipated that the generation of HGV's during the construction period will be practically imperceptible and will not have a significant effect on network capacity during the peak periods. **Table 14-7** below summarises the identified likely effects during the construction phase of the proposed development before mitigation measures are applied.

Table 14 - 7
Summary of Construction Phase Likely Effects in the Absence of Mitigation

LIKELY EFFECT	QUALITY	SIGNIFICANCE	EXTENT	PROBABILITY	DURATION	TYPE
Construction Traffic	Negative	Not Significant	Local	Likely	Short-term	Direct

Operational Phase

14.118 The existing access and the receiving road are lightly trafficked and will continue to be lightly trafficked in the context of the ultimate capacity of the simple priority access arrangement. The relatively low levels of network and development traffic can be appreciated from a review of the traffic count data together with the survey data and network flow analyses presented in **Appendix 14-1** and **Appendix 14-2** respectively. The existing quarry traffic does not give rise to capacity issues at local junctions and there are unlikely to be capacity issues arising at the existing site access or the junctions on the haul route as a result of the proposed development.

14.119 The above figures suggest that the average hourly traffic generation rate of 6 HGV trips for the proposed development will be equal to the current average as derived from the 2022 weighbridge data. The assessment shows that the proposed development has the same potential to generate traffic as the exiting development. The network capacity assessments confirm that the R148/L6226 junction will operate satisfactorily with the proposed development in place. The level of service and operation of the junction will be comparable to the current operation as assessed under Scenario 1 and Scenario 2 of **Table 14-6**.

14.120 Overall, the proposed development at Rathcore, with an annual extraction rate of 350,000t will generate similar levels of traffic as currently arise. In practice the proposed extraction rate is equivalent to that recorded in 2022 and would likely be experienced in present day post-pandemic. It follows that in practice the current proposal insofar as it relates to traffic generation is equivalent to a continuance of operations at the current levels and in practice there will be no change in the current volumes of traffic generated on a day-to-day basis.

14.121 Similarly, the traffic volumes described above and associated with the proposed continuance of extraction would continue to use the same haul route chiefly heading south to R148. Given the maintenance of existing traffic generation levels at the site it follows that there will be no significant impact on the local roads network over that currently manifest. **Table 14-8** below summarises the identified likely effects during the operational phase of the proposed development before mitigation measures are applied.

Table 14-8
Summary of Construction Phase Likely Effects in the Absence of Mitigation

LIKELY EFFECT	QUALITY	SIGNIFICANCE	EXTENT	PROBABILITY	DURATION	TYPE
Operational Traffic	Negative	Not Significant	Local	Likely	Long-term	Direct

Decommissioning and Reinstatement Phase

14.122 Upon cessation of operations the site will be decommissioned in accordance with the current proposal. The potential effects of decommissioning the site on the capacity and operation of the receiving road network are not considered to be potentially significant effects.

DESCRIPTION OF MITIGATION MEASURES

Construction Stage

14.123 A Construction Environmental Management Plan (CEMP) will be prepared, including measures to provide information to affected parties, including advising land and property owners in advance of any diversions. Local access shall be maintained at all times. In addition, it is proposed that temporary signage shall be put in place to minimise disruption and ensure all road users understand that construction works are in progress.

14.124 The CEMP will detail the allowable working day, construction traffic, parking arrangements and will incorporate environmental protection measures. Provisions to reduce the environmental effect of the construction activities will include the following:

- Requiring contractors to ensure that no pollution or obstruction of ground water and watercourses is caused by their operations;
- Requiring contractors to take reasonable precautions to ensure that all wastewater discharged shall not be harmful to or cause obstruction or deposit in drains and to prevent oil, grease or other objectionable matter being discharged into drains;
- Requiring contractors, during the execution of works, to keep all plant and materials and all equipment connected with the construction of the works in good order and clean and tidy;
- Requiring contractors to remove any waste materials from the site to a licensed waste facility;
- Requiring contractors to ensure that the public roads in the vicinity of the site are maintained free from all mud, dirt and rubbish, which may arise from or by reason of the execution of the works. To facilitate this, the Contractor could be required to provide a wheel washing facility to an approved standard within the construction site;
- Prohibiting the disposal of excess concrete on any part of the construction site;
- Requiring the contractor to provide a designated bin for washing down the chutes of concrete lorries on site;
- Requiring the contractors to keep the construction compounds free and clear of excess dirt, rubbish piles and scrap wood etc. at all times. Requiring the contractors to keep the designated parking area and other common areas clear and free of rubbish and debris;
- Requiring contractors to be responsible for the disposal of all wood, food, food packaging and paper generated during the construction phase and requiring them to furnish containers and

vehicles to collect and haul these items and dispose of them to a licensed waste facility. Dumping of these items within the construction site will be prohibited;

- Requiring scrap materials, rubbish, etc. to be hauled out of the work areas (daily) and disposed of by the Contractor on a daily basis to a licensed waste disposal facility;
- Requiring the contractor to obtain any necessary permits from the Local Authority or Environmental Protection Agency for the disposal of waste;
- Requiring individual contractors to provide sanitary facilities that would be adequate for their construction personnel. Sanitary facilities should include proper wash down WC's with sewer connections, or if this is impractical, chemical closets;
- Requiring that all temporary buildings associated with construction of the development comply with the Safety, Health and Welfare Regulations. On completion of the works, contractors should remove them entirely with all slab, drains and water mains and restore the surface of the land to its original condition or other reasonable conditions.

Operational Stage

14.125 Aggregate haulage lorries will continue to predominantly turn left out of the existing site entrance and will use the prescribed haul route along L6226 to R148. Haulage vehicles will be regularly maintained, serviced and replaced at intervals.

14.126 In order to prevent transport of soil and dirt out of the site onto public roads, a wheelwash facility is provided for all HGV's exiting the site. All the aggregates haulage vehicles are required to pass through the wheelwash prior to leaving the site. Any accidentally spilled material will be removed from the public road by Kilsaran in a safe and timely manner.

14.127 There are currently no advance warning signs on the approaches to the site access. It is proposed that new advance signs are erected with the agreement of the Local Authority. The suggested layout will show a standard junction ahead warning sign which indicates to drivers which side of the road the entrance is on. It is proposed to augment the sign with an information plate reading 'Quarry Entrance 200m'. If the Planning Authority considers it worthwhile a second set of similar signs can be placed at 100m distance from the site access. The size of the signs and the details of legend size etc. will be designed in accordance with the Traffic Signs Manual and the precise location agreed with the planning authority. The following **Image 14-1** provides a suggested layout.

Image 14-1
Proposed Advance Signage

14.128 The primary haul route is between the site and the greater roads network is the L6226 which connects directly to R148 to the south and to R159 and R156 to the north. From a walk-over inspection of the haul route it is generally considered to be in a good state of repair with no significant evidence of structural failure. There are some localised surface defects which require routine maintenance. All roads require a schedule of ongoing maintenance in order to remain serviceable. Notwithstanding the extended period of operation, there is no proposed increase in the volume of traffic using the local road accordingly current annual maintenance costs are unlikely to increase since no additional traffic means there will be no additional wear and tear arising from the activities of the quarry. Given the historic use of the L6226 route by the existing development it is unlikely that any specific road strengthening works would be required for the proposed continuance of development traffic at the same levels. Similarly, over the extended life of the quarry no additional maintenance works would arise on an annual basis over and above those that currently manifest. It is however acknowledged that the current proposal will result in the extension of time over which the haul route is subject to development traffic. It must be acknowledged that inherent in the proposed effective continuance of quarrying activity is the extension of contributions and payments to the planning authority, a proportion of which is allocated to the county schedule of ongoing road maintenance.

MONITORING

Construction Phase

14.129 During the construction stage the operator of the site will monitor construction vehicle movements in and out of the site to ensure the guidance set out in the site CEMP and Traffic Management Plan is being followed. The implementation and performance of traffic management and haul route management measures and initiatives including any ongoing revisions or new initiatives will be monitored and evaluated throughout the Construction Phase.

Operational Phase

14.130 The implementation and performance of traffic management and haul route management measures and initiatives including any ongoing revisions or new initiatives will be monitored and evaluated throughout the Operational Phase. Monitoring of vehicle haul routes for debris and monitoring of condition of advance warning signage. Monitoring performance of site management measures including timing of arrivals and departures and effectiveness of wheelwash facility.

RESIDUAL IMPACT ASSESSMENT

14.131 This section assesses potential significant environmental impacts which remain after mitigation measures are implemented.

Construction Phase

14.132 There will be no residual impact arising.

Operational Phase

14.133 Any residual impacts on traffic capacity on the receiving road network can be categorised as imperceptible.

Decommissioning and Reinstatement Phase

14.134 There will be no residual impact arising.

Cumulative Residual Effects

14.135 There will be no cumulative residual impact arising.

INTERACTIONS AND POTENTIAL CUMULATIVE EFFECTS

Interactions

Human Health

14.136 There are no significant interactions during the operational phase. Traffic related effects on human health are considered in Chapter 4 of this EIAR.

Noise and Vibration

14.137 Traffic related noise and vibration is considered in Chapter 10 of this EIAR. The significance of impact upon local noise and vibration conditions have been assessed to be minor to none without mitigation measures in place, reducing to none with mitigation measures.

Air Quality and Climate

14.138 Traffic related effects on air quality and climate are considered in Chapters 8 and 9 of this EIAR respectively. There will be no significant contribution from the proposed development to climate change or greenhouse gas emissions during construction and operational phases. Possible effects from the operation of the development will be long-term in nature and will comprise of emissions from vehicular sources. The magnitudes of all predicted alterations to air quality are considered negligible during the construction phase and there will would be no significant adverse air quality effects for the operational phase. It is therefore concluded that the effects on air quality from traffic arising from the operation of the proposed development are not significant.

Potential Cumulative Effects

14.139 The road network assessments do not include for specific local developments other than the proposed development. Other future development that may give rise to the generation of new traffic on the receiving roads network is included for by the application of TII published growth rates to existing surveyed traffic flows on the receiving road in the study area. The additional traffic generation arising on the receiving road network assumed in this Chapter through the application of the TII growth rates is as follows:

- 2022-2024 (Opening Year) 1.035 (Cars) 1.074 (HGV)
- 2022-2029 (Opening Year +5yrs) 1.128 (Cars) 1.285 (HGV)
- 2022-2039 (Opening Year +15yrs) 1.221 (Cars) 1.572 (HGV)
- 2022-2044 (Opening Year +20yrs) 1.259 (Cars) 1.739 (HGV)

14.140 The cumulative traffic arising from the future economic growth and development of the area and the resulting potential traffic growth on the receiving network are included for in both the 'do-nothing' and 'do-something' road network assessment scenarios. It is reasonable to expect that

traffic arising from the proposed development would by definition be included or at least included in part in the TII growth rates. This factor is disregarded in the traffic assessments which considers all future traffic to the proposed development as totally new to the road network for the proposed period of operation assumed to commence in 2024.

APPENDICES

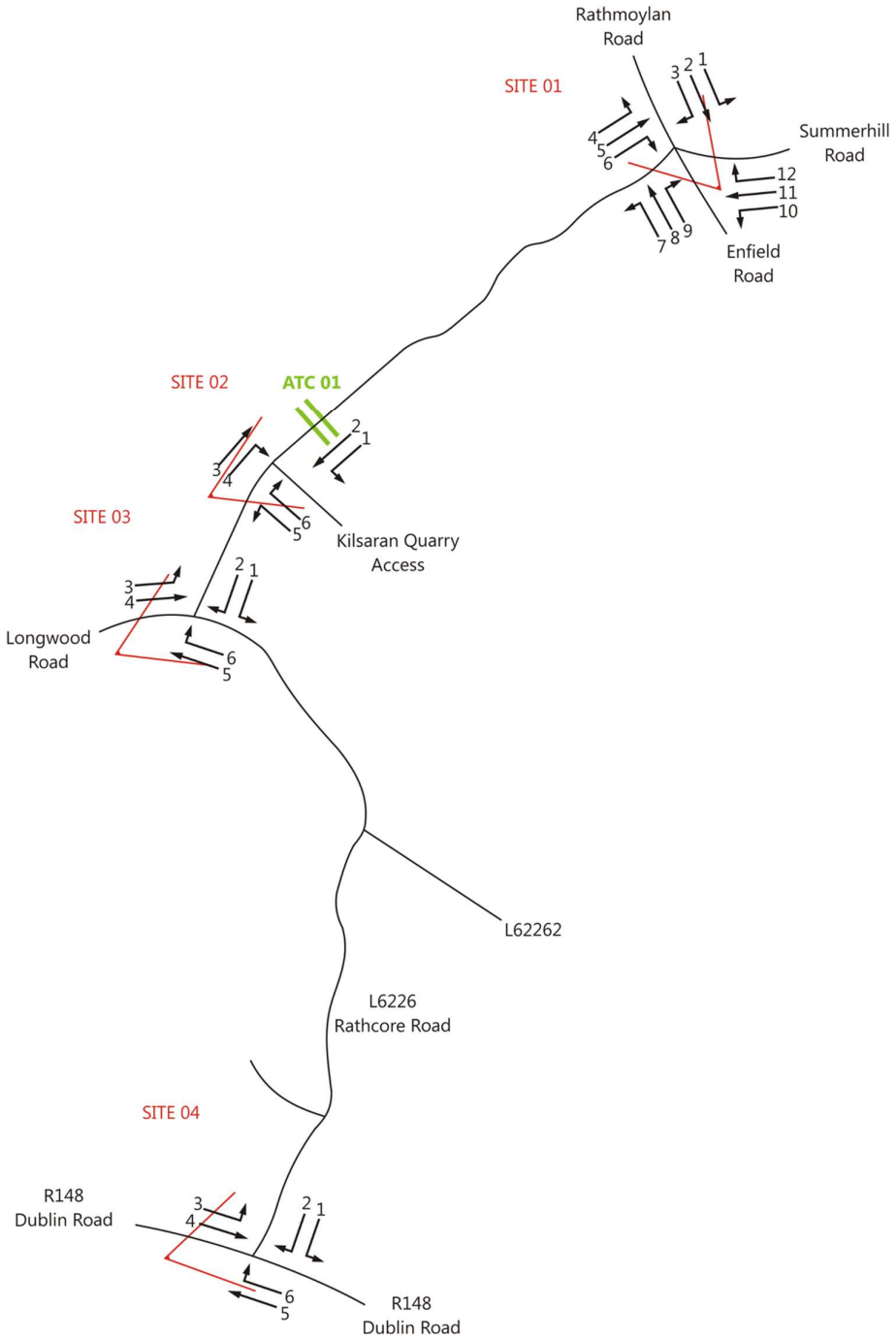
Appendix 14-1
Traffic Survey Data

Appendix 14-2
Network Traffic Flow Diagrams

Appendix 14-1
Traffic Survey Data

Turning Count Survey – 26-Oct-2022

Site Locations/Movement Numbering



	Job number: TRA/21/079	Job Date: 26th Oct 2022	Drawing No: TRA/22/079-02	traffinomics.ie
	Client: Trafficwise	Job Day: Wednesday	Author: SPW	

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	0	2	0	0	0	2	2	2	0	0	0	0	2	2	0	0	0	0	0	0	0
7:15	1	1	1	0	0	3	4	3	0	0	0	0	3	3	2	0	0	0	0	2	2
7:30	4	0	0	0	0	4	4	3	1	0	0	0	4	4	1	0	0	0	0	1	1
7:45	3	1	0	0	0	4	4	0	0	1	0	0	1	2	1	0	0	0	0	1	1
H/TOT	8	4	1	0	0	13	14	8	1	1	0	0	10	11	4	0	0	0	0	4	4
8:00	1	0	0	0	0	1	1	3	1	0	0	0	4	4	2	1	0	0	0	3	3
8:15	5	2	0	0	0	7	7	5	0	0	0	0	5	5	3	0	0	0	0	3	3
8:30	6	0	0	0	0	6	6	5	1	1	0	1	8	10	2	0	0	0	0	2	2
8:45	4	0	0	0	0	4	4	2	0	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	16	2	0	0	0	18	18	15	2	1	0	1	19	21	9	1	0	0	0	10	10
9:00	0	0	0	0	0	0	0	3	1	0	0	0	4	4	1	1	0	0	0	2	2
9:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	1	0	0	1	2
9:30	2	0	0	0	0	2	2	3	2	1	0	0	6	7	0	0	0	1	0	1	2
9:45	1	0	0	0	0	1	1	0	1	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	4	0	0	0	0	4	4	7	4	1	0	0	12	13	3	1	1	1	0	6	8
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10:15	2	0	0	0	0	2	2	3	0	0	0	0	3	3	0	1	0	0	0	1	1
10:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2	0	1	1	0	0	2	3
10:45	1	1	1	0	0	3	4	2	0	0	0	0	2	2	0	0	0	1	0	1	2
H/TOT	6	1	1	0	0	8	9	7	0	0	0	0	7	7	0	2	1	2	0	5	8
11:00	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0
11:15	1	0	0	0	0	1	1	3	0	1	0	0	4	5	3	0	0	0	0	3	3
11:30	5	0	0	0	0	5	5	3	0	1	0	0	4	5	1	0	0	1	0	2	3
11:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	8	0	0	0	0	8	8	13	0	2	0	0	15	16	5	0	0	1	0	6	7
12:00	2	0	0	0	0	2	2	4	0	0	0	0	4	4	1	1	0	2	0	4	7
12:15	2	1	0	0	0	3	3	2	0	0	0	0	2	2	1	0	0	0	0	1	1
12:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2	1	0	1	0	0	2	3
12:45	1	0	0	0	0	1	1	3	1	0	0	0	4	4	2	0	0	0	0	2	2
H/TOT	6	1	0	0	0	7	7	11	1	0	0	0	12	12	5	1	1	2	0	9	12

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
7:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	1	1	0	0	0	2	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1
7:45	1	1	0	0	0	2	2	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	4	2	0	0	0	6	6	4	0	0	0	0	4	4	2	0	0	0	0	2	2
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8:15	2	0	0	0	1	3	4	0	0	0	0	0	0	0	3	0	0	0	0	3	3
8:30	0	0	0	0	0	0	0	5	0	0	0	0	5	5	1	0	0	0	0	1	1
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9:45	0	1	0	0	0	1	1	1	0	0	0	0	1	1	0	1	0	0	0	1	1
H/TOT	2	1	0	0	0	3	3	3	1	0	0	0	4	4	1	1	0	0	0	2	2
10:00	1	0	0	1	0	2	3	1	0	0	0	0	1	1	1	0	0	0	0	1	1
10:15	1	1	0	1	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0	0	1	1
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	3	2	0	2	0	7	10	1	0	0	0	0	1	1	2	2	0	0	0	4	4
11:00	1	0	0	1	0	2	3	0	0	0	0	0	0	0	1	0	0	0	0	1	1
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11:30	0	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	0	0	0	1	1
11:45	2	0	0	0	0	2	2	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	3	3	1	1	0	8	10	3	0	0	0	0	3	3	2	0	0	0	0	2	2
12:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
12:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
12:30	0	1	0	1	0	2	3	0	0	1	0	0	1	2	0	0	0	0	0	0	0
12:45	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	2	0	1	0	5	6	2	0	1	0	0	3	4	0	0	0	0	0	0	0

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **MAY 2021**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/21/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 7							MOVEMENT 8							MOVEMENT 9						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	3	0	1	0	1	5	7	0	1	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	8	1	1	0	1	11	13	0	1	0	0	0	1	1
8:00	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	1	0	0	0	1	1
8:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:30	0	0	0	0	0	0	0	1	1	0	0	0	2	2	3	0	0	0	0	3	3
8:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	3	3	0	0	0	6	6	4	1	0	0	0	5	5
9:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
9:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
9:45	0	1	0	0	0	1	1	3	0	0	0	0	3	3	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	2	2	7	0	0	0	0	7	7	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	0	0	2	2
10:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
10:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	2	2	0	0	0	4	4	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	6	3	0	0	0	9	9	1	1	0	0	0	2	2
11:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
11:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2	1	0	0	0	0	1	1
11:30	1	0	0	0	0	1	1	1	1	0	0	0	2	2	1	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	0	0	0	0	1	1
H/TOT	2	0	0	0	0	2	2	4	1	1	0	0	6	7	4	0	0	0	0	4	4
12:00	0	1	0	0	0	1	1	1	2	0	0	0	3	3	1	0	0	0	0	1	1
12:15	0	1	0	0	0	1	1	2	0	0	0	0	2	2	1	0	0	0	0	1	1
12:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3	1	0	1	0	0	2	3
12:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4	1	0	0	0	0	1	1
H/TOT	1	2	0	0	0	3	3	10	2	0	0	0	12	12	4	0	1	0	0	5	6

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 10							MOVEMENT 11							MOVEMENT 12						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:15	0	2	0	0	0	2	2	0	0	0	0	0	0	0	2	0	0	0	0	2	2
7:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	1	2
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	2	0	0	0	2	2	2	0	0	0	0	2	2	3	0	1	0	0	4	5
8:00	0	2	0	0	0	2	2	0	1	0	0	0	1	1	1	0	0	0	0	1	1
8:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0	3	1	0	0	0	4	4
8:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1	4	0	0	0	0	4	4
8:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1	3	1	0	0	0	4	4
H/TOT	5	2	0	0	0	7	7	2	1	0	0	0	3	3	11	2	0	0	0	13	13
9:00	0	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0
9:15	1	0	0	0	0	1	1	0	0	1	0	0	1	2	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	0	0	2	2
9:45	4	0	0	0	0	4	4	2	0	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	5	0	0	0	0	5	5	4	1	1	0	0	6	7	4	0	0	0	0	4	4
10:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	2	0	0	0	0	2	2	0	1	0	0	0	1	1	1	0	0	0	0	1	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
10:45	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	0	2	0	0	0	2	2	1	0	1	0	0	2	3
11:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
11:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0	5	0	0	0	0	5	5
H/TOT	2	0	0	0	0	2	2	4	0	0	0	0	4	4	5	0	0	0	0	5	5
12:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	2
12:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:45	0	1	1	0	0	2	3	1	0	0	0	0	1	1	2	0	1	1	0	4	6
H/TOT	2	3	1	0	0	6	7	1	0	0	0	0	1	1	3	0	2	1	0	6	8

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	2	0	0	0	0	2	2	4	1	0	0	0	5	5	0	0	0	0	0	0	0
13:15	5	0	0	0	0	5	5	0	0	0	0	1	1	2	0	0	0	0	1	1	2
13:30	1	0	1	0	0	2	3	2	0	0	0	0	2	2	1	1	0	0	0	2	2
13:45	0	2	0	1	0	3	4	2	1	0	0	0	3	3	2	0	1	0	0	3	4
H/TOT	8	2	1	1	0	12	14	8	2	0	0	1	11	12	3	1	1	0	1	6	8
14:00	1	1	1	0	0	3	4	3	0	0	0	0	3	3	1	0	0	0	0	1	1
14:15	2	1	0	0	0	3	3	3	0	0	0	0	3	3	0	1	0	0	0	1	1
14:30	1	1	0	0	0	2	2	1	0	1	0	0	2	3	0	0	0	0	0	0	0
14:45	1	0	0	0	0	1	1	5	0	0	0	0	5	5	0	1	0	0	0	1	1
H/TOT	5	3	1	0	0	9	10	12	0	1	0	0	13	14	1	2	0	0	0	3	3
15:00	3	0	0	0	0	3	3	0	0	0	0	1	1	2	2	0	1	1	0	4	6
15:15	0	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	4	0	0	0	0	4	4	1	0	1	1	0	3	5
15:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	6	1	0	0	1	8	9	4	0	2	2	0	8	12
16:00	5	0	0	0	0	5	5	2	1	0	0	0	3	3	1	0	0	1	0	2	3
16:15	1	1	0	0	1	3	4	4	1	0	0	0	5	5	3	0	1	0	0	4	5
16:30	1	1	0	0	0	2	2	4	0	0	0	0	4	4	1	0	0	0	0	1	1
16:45	3	0	0	0	0	3	3	1	1	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	10	2	0	0	1	13	14	11	3	0	0	0	14	14	8	0	1	1	0	10	12
17:00	3	0	0	0	0	3	3	4	1	0	0	0	5	5	1	0	1	0	0	2	3
17:15	1	0	0	0	0	1	1	2	1	0	0	0	3	3	2	1	0	0	0	3	3
17:30	0	0	0	0	0	0	0	1	1	0	0	0	2	2	1	0	0	0	0	1	1
17:45	2	1	0	0	0	3	3	2	2	0	0	0	4	4	3	0	0	0	0	3	3
H/TOT	6	1	0	0	0	7	7	9	5	0	0	0	14	14	7	1	1	0	0	9	10
18:00	1	1	0	0	0	2	2	9	0	0	0	0	9	9	1	1	0	1	0	3	4
18:15	4	0	0	0	0	4	4	6	0	0	0	0	6	6	2	0	0	0	0	2	2
18:30	1	0	0	0	0	1	1	4	0	0	0	0	4	4	0	0	1	0	0	1	2
18:45	3	1	1	0	0	5	6	3	1	0	0	1	5	6	1	0	0	0	0	1	1
H/TOT	9	2	1	0	0	12	13	22	1	0	0	1	24	25	4	1	1	1	0	7	9
P/TOT	89	18	5	1	1	114	119	129	20	6	0	4	159	166	53	10	9	10	1	83	102

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2	1	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:30	1	0	0	0	0	1	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0
13:45	3	1	0	0	0	4	4	1	0	0	0	0	1	1	0	1	1	0	0	2	3
H/TOT	5	1	0	0	0	6	6	3	1	0	0	0	4	4	2	1	1	0	0	4	5
14:00	1	0	1	0	0	2	3	0	0	0	0	0	0	0	0	1	0	0	0	1	1
14:15	3	0	0	0	0	3	3	1	2	0	0	0	3	3	1	0	0	0	0	1	1
14:30	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	6	1	1	0	0	8	9	1	2	0	0	0	3	3	1	2	0	0	0	3	3
15:00	1	1	0	0	0	2	2	2	0	0	0	0	2	2	3	0	0	0	0	3	3
15:15	2	0	0	1	0	3	4	0	0	0	0	0	0	0	4	1	0	0	0	5	5
15:30	2	1	0	0	0	3	3	1	0	0	0	0	1	1	1	1	0	0	0	2	2
15:45	3	1	0	1	0	5	6	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	8	3	0	2	0	13	16	3	0	0	0	0	3	3	10	2	0	0	0	12	12
16:00	1	1	1	0	0	3	4	1	0	0	0	0	1	1	0	1	0	0	0	1	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
16:30	0	1	0	2	0	3	6	0	1	0	0	0	1	1	2	0	0	0	0	2	2
16:45	1	0	0	0	0	1	1	0	0	0	1	0	1	2	2	0	0	0	0	2	2
H/TOT	2	2	1	2	0	7	10	1	1	0	1	0	3	4	5	2	0	0	0	7	7
17:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	3	0	0	1	0	4	5	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:30	1	0	1	0	0	2	3	0	0	1	0	0	1	2	1	0	0	0	0	1	1
17:45	3	0	0	0	0	3	3	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	9	0	1	1	0	11	13	1	0	1	0	0	2	3	4	0	0	0	0	4	4
18:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	6	1	0	0	0	7	7
18:15	3	0	0	0	0	3	3	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:30	4	2	0	0	0	6	6	1	0	0	0	0	1	1	1	0	0	0	0	1	1
18:45	2	0	1	0	0	3	4	1	0	0	2	0	3	6	3	0	0	0	0	3	3
H/TOT	10	2	1	0	0	13	14	2	0	0	2	0	4	7	11	1	0	0	0	12	12
P/TOT	59	19	5	9	2	94	110	29	5	2	3	0	39	44	45	11	1	0	0	57	58

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 7							MOVEMENT 8							MOVEMENT 9						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	1	0	0	0	0	1	1	5	0	0	0	0	5	5	1	1	0	0	0	2	2
13:15	3	0	0	0	0	3	3	5	0	0	0	0	5	5	1	0	0	0	0	1	1
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	14	1	0	0	0	15	15	2	1	0	0	0	3	3
14:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	3	0	0	0	0	3	3
14:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2	4	0	0	0	0	4	4
14:30	0	0	0	0	0	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0
14:45	2	0	0	0	0	2	2	0	1	1	0	0	2	3	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	5	2	1	0	0	8	9	7	0	0	0	0	7	7
15:00	2	2	0	0	0	4	4	1	0	0	0	0	1	1	1	0	0	0	0	1	1
15:15	1	0	0	0	0	1	1	3	1	1	0	0	5	6	2	0	0	0	0	2	2
15:30	0	0	0	0	0	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0
15:45	0	1	0	0	0	1	1	3	0	0	0	1	4	5	0	0	0	0	0	0	0
H/TOT	3	3	0	0	0	6	6	9	2	1	0	1	13	15	3	0	0	0	0	3	3
16:00	1	0	0	0	0	1	1	5	0	1	0	0	6	7	0	0	0	0	0	0	0
16:15	1	1	0	0	0	2	2	2	1	1	0	0	4	5	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0
16:45	1	1	0	0	0	2	2	4	0	0	0	0	4	4	0	1	0	0	0	1	1
H/TOT	3	2	0	0	0	5	5	20	2	2	0	0	24	25	0	1	0	0	0	1	1
17:00	3	0	0	0	0	3	3	4	0	0	0	0	4	4	1	2	0	0	0	3	3
17:15	1	0	0	0	0	1	1	3	2	0	0	0	5	5	1	0	0	0	0	1	1
17:30	1	0	0	0	0	1	1	1	1	0	0	0	2	2	1	0	0	0	0	1	1
17:45	1	0	0	0	0	1	1	5	1	0	0	0	6	6	0	1	0	0	0	1	1
H/TOT	6	0	0	0	0	6	6	13	4	0	0	0	17	17	3	3	0	0	0	6	6
18:00	2	1	0	0	0	3	3	7	1	0	0	0	8	8	1	0	0	0	0	1	1
18:15	1	0	0	0	0	1	1	2	1	0	0	1	4	5	1	0	0	0	0	1	1
18:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2	1	2	0	0	0	3	3
18:45	0	0	0	0	0	0	0	5	2	0	0	0	7	7	2	0	0	0	0	2	2
H/TOT	4	1	0	0	0	5	5	16	4	0	0	1	21	22	5	2	0	0	0	7	7
P/TOT	29	10	0	0	0	39	39	115	25	6	0	3	149	155	33	10	1	0	0	44	45

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 01 DATE: 26th October 2022

LOCATION: Rathmoylan Road/Enfield Road/Summerhill Road DAY: Wednesday

	MOVEMENT 10							MOVEMENT 11							MOVEMENT 12						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	1	0	0	0	0	1	1	0	1	0	0	0	1	1	1	1	1	0	0	3	4
13:15	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	5	0	0	0	0	5	5
13:45	5	0	0	0	0	5	5	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	10	0	0	0	0	10	10	0	1	0	0	0	1	1	8	1	1	0	0	10	11
14:00	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	1	0	0	0	1	2	3	0	0	0	0	0	0	0	4	0	0	0	0	4	4
14:30	1	1	0	0	0	2	2	1	0	0	0	0	1	1	2	0	0	0	0	2	2
14:45	1	1	0	0	0	2	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	4	3	0	0	1	8	9	2	0	0	0	0	2	2	7	0	0	0	0	7	7
15:00	1	1	0	0	0	2	2	2	0	0	0	0	2	2	1	0	0	0	0	1	1
15:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1	3	0	0	0	0	3	3
15:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	0	0	0	0	2	2
15:45	2	1	0	0	0	3	3	0	0	1	0	0	1	2	1	1	0	0	0	2	2
H/TOT	4	2	0	0	0	6	6	5	0	1	0	0	6	7	7	1	0	0	0	8	8
16:00	4	0	0	0	0	4	4	1	0	0	0	0	1	1	2	1	1	0	0	4	5
16:15	0	1	0	0	1	2	3	0	0	0	0	0	0	0	4	0	0	0	0	4	4
16:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	0	0	0	2	2
16:45	0	1	0	0	0	1	1	1	0	0	1	0	2	3	2	0	0	0	0	2	2
H/TOT	4	2	0	0	1	7	8	3	0	0	1	0	4	5	9	2	1	0	0	12	13
17:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	1	1	0	0	3	4
17:15	5	0	0	0	0	5	5	2	0	0	0	0	2	2	3	2	0	0	0	5	5
17:30	0	1	0	0	0	1	1	1	0	0	0	0	1	1	2	2	0	0	0	4	4
17:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2	3	1	0	0	0	4	4
H/TOT	6	1	0	0	0	7	7	7	0	0	0	0	7	7	9	6	1	0	0	16	17
18:00	2	0	0	0	0	2	2	0	1	0	0	0	1	1	4	1	0	0	0	5	5
18:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1
18:30	1	1	0	0	0	2	2	0	0	0	0	0	0	0	3	0	0	0	0	3	3
18:45	3	0	0	0	0	3	3	1	0	0	1	0	2	3	2	0	1	0	0	3	4
H/TOT	8	1	0	0	0	9	9	2	1	0	1	0	4	5	10	1	1	0	0	12	13
P/TOT	53	16	1	0	2	72	75	32	6	2	2	0	42	46	77	13	8	1	0	99	104

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 02 DATE: 26th October 2022

LOCATION: Kilsaran Quarry Access DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2	1	0	0	0	0	1	1
7:30	0	0	0	0	0	0	0	3	0	0	0	0	3	3	2	0	0	0	0	2	2
7:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	4	1	0	0	0	5	5
H/TOT	2	0	0	0	0	2	2	6	0	0	0	0	6	6	8	1	0	0	0	9	9
8:00	0	0	0	0	0	0	0	2	2	0	0	0	4	4	3	1	0	0	1	5	6
8:15	0	0	0	0	0	0	0	4	0	0	0	0	4	4	4	0	0	0	1	5	6
8:30	0	0	0	0	0	0	0	5	1	0	0	0	6	6	5	0	0	0	0	5	5
8:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	15	3	0	0	0	18	18	14	1	0	0	2	17	19
9:00	0	1	0	0	0	1	1	2	1	0	0	0	3	3	3	1	0	0	0	4	4
9:15	0	0	0	0	0	0	0	1	0	1	0	0	2	3	1	0	0	0	0	1	1
9:30	0	0	0	1	0	1	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1
9:45	0	0	0	0	0	0	0	3	1	0	0	0	4	4	0	2	0	0	0	2	2
H/TOT	0	1	0	1	0	2	3	7	2	1	0	0	10	11	5	3	0	0	0	8	8
10:00	0	0	0	1	0	1	2	0	0	0	0	0	0	0	3	0	0	0	0	3	3
10:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	1	0	2	3
10:30	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	2	0	0	0	2	2
10:45	0	0	0	0	0	0	0	0	2	0	1	0	3	4	1	1	0	0	0	2	2
H/TOT	0	0	0	1	0	1	2	0	3	1	1	0	5	7	5	3	0	1	0	9	10
11:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	1	0	3	4
11:15	1	0	0	0	0	1	1	4	1	0	0	0	5	5	0	1	1	0	0	2	3
11:30	0	0	0	0	0	0	0	3	0	0	1	0	4	5	3	2	0	0	0	5	5
11:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	1	0	0	0	0	1	1	9	1	0	1	0	11	12	8	3	1	1	0	13	15
12:00	0	0	0	1	0	1	2	1	2	0	0	0	3	3	1	0	0	0	0	1	1
12:15	0	0	0	1	0	1	2	3	1	0	0	0	4	4	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	1	0	0	0	2	2
12:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	1	1
H/TOT	0	0	0	2	0	2	5	7	3	0	0	0	10	10	3	2	0	0	0	5	5

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 02 DATE: 26th October 2022

LOCATION: Kilsaran Quarry Access DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	1	0	1	2	0	0	0	4	0	4	9	0	0	0	0	0	0	0
7:30	0	0	0	2	0	2	5	0	0	0	3	0	3	7	0	1	0	0	0	1	1
7:45	0	0	0	2	0	2	5	0	0	0	1	0	1	2	0	0	0	0	0	0	0
H/TOT	0	0	0	6	0	6	14	0	0	0	8	0	8	18	0	1	0	0	0	1	1
8:00	0	0	0	1	0	1	2	0	0	0	2	0	2	5	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0
8:30	0	0	0	2	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0
H/TOT	0	0	0	3	0	3	7	0	0	0	4	0	4	9	0	0	0	0	0	0	0
9:00	0	0	0	1	0	1	2	0	0	0	1	0	1	2	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0
9:30	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	2	0	4	0	6	11	1	0	0	1	0	2	3	0	0	0	0	0	0	0
H/TOT	0	2	0	6	0	8	16	1	0	0	3	0	4	8	0	0	0	0	0	0	0
10:00	0	0	0	1	0	1	2	0	1	0	0	0	1	1	0	0	0	1	0	1	2
10:15	1	0	0	1	0	2	3	0	0	0	1	0	1	2	0	1	0	0	0	1	1
10:30	0	0	0	1	0	1	2	0	0	0	5	0	5	12	1	0	0	0	0	1	1
10:45	0	0	0	1	0	1	2	0	0	0	1	0	1	2	0	0	0	0	0	0	0
H/TOT	1	0	0	4	0	5	10	0	1	0	7	0	8	17	1	1	0	1	0	3	4
11:00	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	2	0	2	5	0	1	0	0	0	1	1
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	1	0	0	1	0	2	3	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	2	0	1	0	4	5	0	0	0	2	0	2	5	1	1	0	0	0	2	2
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	1	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:30	0	0	0	1	0	1	2	1	0	0	2	0	3	6	0	0	0	1	0	1	2
12:45	0	0	0	0	0	0	0	0	0	0	2	0	2	5	0	0	0	0	0	0	0
H/TOT	0	0	0	2	0	2	5	1	0	0	4	0	5	10	1	0	0	1	0	2	3

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 02 DATE: 26th October 2022

LOCATION: Kilsaran Quarry Access DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	0	0	0	0	0	0	0	2	1	0	0	0	3	3	4	0	0	0	0	4	4
13:15	0	0	0	0	0	0	0	5	0	0	0	1	6	7	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	3	0	0	0	0	3	3	1	2	0	0	0	3	3
13:45	0	0	0	0	0	0	0	1	0	1	0	0	2	3	3	1	1	0	0	5	6
H/TOT	0	0	0	0	0	0	0	11	1	1	0	1	14	16	8	3	1	0	0	12	13
14:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	1	1	0	0	3	4
14:15	0	0	0	0	0	0	0	1	1	0	0	0	2	2	5	1	0	0	0	6	6
14:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	1	1
14:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	1	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	5	1	0	0	0	6	6	8	4	1	0	0	13	14
15:00	0	0	0	1	0	1	2	4	2	0	0	0	6	6	2	1	0	0	0	3	3
15:15	0	0	0	0	0	0	0	1	2	1	0	0	4	5	5	3	0	0	0	8	8
15:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	5	1	0	0	0	6	6
15:45	0	0	0	1	0	1	2	0	0	1	0	0	1	2	4	0	0	0	0	4	4
H/TOT	0	0	0	2	0	2	5	7	4	2	0	0	13	14	16	5	0	0	0	21	21
16:00	0	0	0	1	0	1	2	3	0	1	0	0	4	5	1	3	1	0	0	5	6
16:15	0	0	0	0	0	0	0	2	0	1	0	0	3	4	0	2	0	0	0	2	2
16:30	0	0	0	1	0	1	2	3	0	0	0	0	3	3	3	0	0	0	0	3	3
16:45	0	0	0	0	0	0	0	3	2	0	0	0	5	5	2	0	0	1	0	3	4
H/TOT	0	0	0	2	0	2	5	11	2	2	0	0	15	16	6	5	1	1	0	13	15
17:00	0	0	0	0	0	0	0	3	0	1	0	0	4	5	2	0	0	0	0	2	2
17:15	0	1	0	0	0	1	1	3	0	0	0	0	3	3	3	0	0	1	0	4	5
17:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	2	0	0	3	4
17:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2	6	0	0	0	0	6	6
H/TOT	0	1	0	0	0	1	1	9	0	1	0	0	10	11	12	0	2	1	0	15	17
18:00	0	0	0	0	0	0	0	8	0	0	1	0	9	10	8	1	0	0	0	9	9
18:15	0	0	0	0	0	0	0	1	2	0	0	0	3	3	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	2	1	1	0	0	4	5	7	1	0	0	0	8	8
18:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2	5	1	1	2	0	9	12
H/TOT	0	0	0	0	0	0	0	13	3	1	1	0	18	20	21	3	1	2	0	27	30
P/TOT	3	2	0	8	0	13	23	100	23	9	3	1	136	145	114	33	7	6	2	162	175

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 02 DATE: 26th October 2022

LOCATION: Kilsaran Quarry Access DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	2	0	2	5	0	0	0	1	0	1	2	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	3	0	3	7	0	0	0	1	0	1	2	0	0	0	0	0	0	0
14:00	0	0	0	1	0	1	2	0	0	0	2	0	2	5	0	0	0	0	0	0	0
14:15	0	1	0	1	0	2	3	0	1	0	1	0	2	3	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0
14:45	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	3	0	4	8	0	1	0	4	0	5	10	0	0	0	0	0	0	0
15:00	0	1	0	0	0	1	1	0	1	0	1	0	2	3	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
H/TOT	0	1	0	0	0	1	1	0	1	0	1	0	2	3	0	0	0	2	0	2	5
16:00	0	0	0	3	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	2	0	2	5	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	0	2	5
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	3	0	3	7	0	0	0	3	0	3	7	0	0	0	2	0	2	5
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	2	0	0	0	2	2	1	0	0	0	0	1	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	2	0	0	0	2	2	1	0	0	0	0	1	1
18:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0
P/TOT	2	6	0	31	0	39	79	3	6	0	37	0	46	94	4	3	0	6	0	13	21

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 03 DATE: 26th October 2022

LOCATION: Rathcore Road/Longwood Road/L6226 DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	2	0	0	4	0	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	2	0	0	3	0	5	9	1	0	0	0	0	1	1	0	0	0	0	0	0	0
7:45	0	0	0	1	0	1	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	4	0	0	8	0	12	22	2	0	0	0	0	2	2	1	0	0	0	0	1	1
8:00	1	1	0	2	0	4	7	1	1	0	0	0	2	2	1	0	0	0	0	1	1
8:15	4	0	0	1	0	5	6	0	0	0	0	0	0	0	3	0	0	0	1	4	5
8:30	3	1	0	0	0	4	4	2	0	0	0	0	2	2	3	0	0	0	0	3	3
8:45	1	0	0	1	0	2	3	3	0	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	9	2	0	4	0	15	20	6	1	0	0	0	7	7	8	0	0	0	1	9	10
9:00	1	0	0	1	0	2	3	1	1	0	0	0	2	2	2	1	0	0	0	3	3
9:15	1	0	1	1	0	3	5	0	0	0	0	0	0	0	1	0	0	0	0	1	1
9:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
9:45	2	1	0	1	0	4	5	2	0	0	0	0	2	2	0	2	0	0	0	2	2
H/TOT	5	1	1	3	0	10	14	3	1	0	0	0	4	4	4	3	0	0	0	7	7
10:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:15	0	0	0	1	0	1	2	0	1	0	0	0	1	1	0	0	0	0	0	0	0
10:30	0	0	1	5	0	6	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	1	0	2	0	3	6	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	0	2	1	8	0	11	22	0	2	0	0	0	2	2	1	0	0	0	0	1	1
11:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
11:15	2	1	0	2	0	5	8	2	0	0	0	0	2	2	0	0	0	0	0	0	0
11:30	2	0	0	1	0	3	4	1	0	0	0	0	1	1	1	0	0	0	0	1	1
11:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	5	1	0	3	0	9	13	4	0	0	0	0	4	4	2	0	0	0	0	2	2
12:00	0	2	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	3	1	0	0	0	4	4	1	0	0	0	0	1	1
12:30	2	0	0	2	0	4	7	1	0	0	0	0	1	1	0	1	0	0	0	1	1
12:45	1	0	0	2	0	3	6	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	3	2	0	4	0	9	14	5	1	0	0	0	6	6	1	2	0	0	0	3	3

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 03 DATE: 26th October 2022

LOCATION: Rathcore Road/Longwood Road/L6226 DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	0	0	1	0	2	3
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	3
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	7
7:45	0	1	0	0	0	1	1	0	2	0	0	0	2	2	3	1	0	2	0	6	9
H/TOT	0	1	0	0	0	1	1	0	2	1	0	0	3	4	7	1	0	6	0	14	22
8:00	1	0	0	0	0	1	1	2	0	0	0	1	3	4	2	1	0	1	1	5	7
8:15	1	0	0	1	1	3	5	1	0	0	0	0	1	1	1	0	0	0	0	1	1
8:30	5	0	0	0	0	5	5	3	1	0	0	0	4	4	2	0	0	2	0	4	7
8:45	2	0	0	0	0	2	2	2	1	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	9	0	0	1	1	11	13	8	2	0	0	1	11	12	6	1	0	3	1	11	16
9:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	1	0	2	3
9:15	2	1	0	0	0	3	3	2	0	0	0	0	2	2	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
9:45	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	2	0	4	0	6	11
H/TOT	2	1	0	0	0	3	3	8	0	0	0	0	8	8	1	2	0	6	0	9	17
10:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	1	0	3	4
10:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2	2	0	0	2	0	4	7
10:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	2	0	1	0	3	4
10:45	1	0	1	0	0	2	3	0	0	0	0	0	0	0	1	1	0	1	0	3	4
H/TOT	3	0	1	0	0	4	5	4	0	0	0	0	4	4	5	3	0	5	0	13	20
11:00	2	0	0	0	0	2	2	3	0	0	0	0	3	3	1	2	0	1	0	4	5
11:15	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	1	1	0	0	2	3
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
11:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1	4	0	0	1	0	5	6
H/TOT	3	0	0	0	0	3	3	4	0	1	0	0	5	6	7	5	1	2	0	15	18
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:15	1	0	0	0	0	1	1	3	1	0	0	0	4	4	0	0	0	1	0	1	2
12:30	3	0	0	0	0	3	3	1	0	0	0	0	1	1	1	0	0	1	0	2	3
12:45	3	0	0	0	0	3	3	3	1	0	0	0	4	4	0	0	0	0	0	0	0
H/TOT	7	0	0	0	0	7	7	7	2	0	0	0	9	9	2	0	0	2	0	4	7

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 03 DATE: 26th October 2022

LOCATION: Rathcore Road/Longwood Road/L6226 DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	1	0	0	0	0	1	1	1	1	0	0	0	2	2	2	0	0	0	0	2	2
13:15	3	0	0	1	1	5	7	2	0	0	0	0	2	2	0	0	0	0	0	0	0
13:30	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	2	0	0	0	2	2
13:45	1	0	1	0	0	2	3	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	8	0	1	1	1	11	14	3	1	0	0	0	4	4	3	3	0	0	0	6	6
14:00	2	0	0	2	0	4	7	0	0	0	0	0	0	0	0	0	1	0	0	1	2
14:15	1	2	0	1	0	4	5	0	0	0	0	0	0	0	2	0	0	0	0	2	2
14:30	0	0	0	1	0	1	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0
14:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	4	2	0	4	0	10	15	1	0	0	0	0	1	1	2	1	1	0	0	4	5
15:00	3	1	0	1	0	5	6	1	2	0	0	0	3	3	0	1	0	0	0	1	1
15:15	1	2	1	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:45	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	6	3	2	1	0	12	14	1	2	0	0	0	3	3	1	1	0	0	0	2	2
16:00	3	0	0	0	0	3	3	0	0	1	0	0	1	2	1	0	0	0	0	1	1
16:15	2	0	1	2	0	5	8	0	0	0	0	0	0	0	0	1	0	0	0	1	1
16:30	1	0	0	1	0	2	3	2	0	0	0	0	2	2	0	0	0	0	0	0	0
16:45	3	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	9	2	1	3	0	15	19	2	0	1	0	0	3	4	1	1	0	0	0	2	2
17:00	2	0	0	0	0	2	2	1	0	1	0	0	2	3	0	0	0	0	0	0	0
17:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0
17:30	1	1	0	0	0	2	2	0	1	0	0	0	1	1	1	0	2	0	0	3	4
17:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1	4	0	0	0	0	4	4
H/TOT	6	1	0	0	0	7	7	3	1	1	0	0	5	6	5	0	2	0	0	7	8
18:00	7	0	0	1	0	8	9	2	0	0	0	0	2	2	2	0	0	0	0	2	2
18:15	1	1	0	0	0	2	2	0	1	0	0	0	1	1	0	0	0	0	0	0	0
18:30	2	2	1	0	0	5	6	0	0	0	0	0	0	0	0	1	0	0	0	1	1
18:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	12	3	1	1	0	17	19	2	1	0	0	0	3	3	2	1	0	0	0	3	3
P/TOT	71	19	7	40	1	138	195	32	10	2	0	0	44	45	31	12	3	0	1	47	50

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 03 DATE: 26th October 2022

LOCATION: Rathcore Road/Longwood Road/L6226 DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	3	1	0	0	0	4	4	0	0	0	0	0	0	0	2	0	0	1	0	3	4
13:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	2	0	2	5
13:30	0	0	0	0	0	0	0	0	1	0	0	1	2	3	1	0	0	0	0	1	1
13:45	2	0	0	0	0	2	2	1	1	0	0	0	2	2	2	0	1	0	0	3	4
H/TOT	7	1	0	0	0	8	8	2	2	0	0	1	5	6	5	0	1	3	0	9	13
14:00	4	0	0	0	0	4	4	1	1	0	0	0	2	2	1	1	0	1	0	3	4
14:15	4	0	0	0	0	4	4	0	0	0	0	0	0	0	3	2	0	1	0	6	7
14:30	1	1	0	0	0	2	2	2	0	0	0	0	2	2	0	1	0	0	0	1	1
14:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	1	0	3	4
H/TOT	9	1	0	0	0	10	10	4	1	0	0	0	5	5	6	4	0	3	0	13	17
15:00	0	1	0	0	0	1	1	1	0	0	0	0	1	1	2	1	0	0	0	3	3
15:15	1	1	0	0	0	2	2	0	1	0	0	0	1	1	5	3	0	0	0	8	8
15:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1	4	1	0	0	0	5	5
15:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2	4	0	0	0	0	4	4
H/TOT	2	2	0	0	0	4	4	3	2	0	0	0	5	5	15	5	0	0	0	20	20
16:00	1	1	1	0	1	4	6	0	0	0	0	0	0	0	0	3	1	3	0	7	11
16:15	1	0	0	0	0	1	1	1	1	0	0	0	2	2	0	1	0	0	0	1	1
16:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	3	0	0	0	0	3	3
16:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4	2	0	0	1	0	3	4
H/TOT	2	1	1	0	1	5	7	6	1	0	0	0	7	7	5	4	1	4	0	14	20
17:00	2	0	2	0	0	4	5	1	0	0	0	0	1	1	2	0	0	0	0	2	2
17:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3	3	0	0	1	0	4	5
17:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3	0	0	0	0	0	0	0
17:45	2	0	0	0	0	2	2	0	1	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	6	0	2	0	0	8	9	7	1	0	0	0	8	8	7	0	0	1	0	8	9
18:00	3	0	0	0	0	3	3	2	1	0	0	0	3	3	6	1	0	0	0	7	7
18:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	7	0	0	0	0	7	7
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	1	2	0	9	12
H/TOT	5	0	0	0	0	5	5	3	1	0	0	0	4	4	19	2	1	2	0	24	27
P/TOT	55	7	4	1	2	69	74	56	14	2	0	2	74	77	85	27	4	37	1	154	205

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 04 DATE: 26th October 2022

LOCATION: L6226 Rathcore Road/R148 Dublin Road DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
7:15	1	0	0	2	0	3	6	0	0	0	0	0	0	0	0	0	0	1	0	1	2
7:30	2	0	0	3	0	5	9	0	0	0	0	0	0	0	0	0	0	2	0	2	5
7:45	1	0	0	0	0	1	1	0	1	0	3	0	4	8	0	0	0	1	0	1	2
H/TOT	5	0	0	5	0	10	17	1	1	0	3	0	5	9	0	0	0	4	0	4	9
8:00	1	1	0	0	0	2	2	2	1	0	1	0	4	5	0	0	0	1	0	1	2
8:15	1	0	0	0	0	1	1	3	0	0	1	0	4	5	3	1	0	0	1	5	6
8:30	6	2	1	0	0	9	10	0	0	0	2	0	2	5	0	1	0	1	0	2	3
8:45	4	0	0	0	0	4	4	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	12	3	1	0	0	16	17	6	1	0	4	0	11	16	4	2	0	2	1	9	13
9:00	1	0	0	1	0	2	3	2	0	0	1	0	3	4	1	0	0	0	0	1	1
9:15	2	0	1	0	0	3	4	2	0	0	0	0	2	2	0	0	0	0	0	0	0
9:30	2	1	0	1	0	4	5	1	0	0	0	0	1	1	0	0	0	0	0	0	0
9:45	1	0	0	0	0	1	1	1	0	0	1	0	2	3	0	3	0	1	0	4	5
H/TOT	6	1	1	2	0	10	13	6	0	0	2	0	8	11	1	3	0	1	0	5	6
10:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	0	0	2	2
10:15	1	0	0	1	0	2	3	0	1	0	0	0	1	1	0	0	0	1	0	1	2
10:30	3	0	0	4	0	7	12	0	0	1	0	0	1	2	1	4	0	0	0	5	5
10:45	1	2	1	1	0	5	7	1	0	0	0	0	1	1	1	1	0	0	0	2	2
H/TOT	5	2	1	6	0	14	22	2	1	1	0	0	4	5	4	5	0	1	0	10	11
11:00	2	0	0	1	0	3	4	0	0	0	1	0	1	2	1	2	0	1	0	4	5
11:15	1	2	0	1	0	4	5	2	0	0	0	0	2	2	0	0	0	0	0	0	0
11:30	2	1	1	1	0	5	7	2	0	0	1	0	3	4	1	0	0	0	0	1	1
11:45	2	0	0	0	0	2	2	4	0	0	0	0	4	4	1	0	0	0	0	1	1
H/TOT	7	3	1	3	0	14	18	8	0	0	2	0	10	13	3	2	0	1	0	6	7
12:00	1	0	0	0	0	1	1	1	1	0	0	0	2	2	0	0	0	0	0	0	0
12:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1
12:30	0	1	0	1	0	2	3	0	0	0	0	0	0	0	4	1	0	0	0	5	5
12:45	5	0	0	2	0	7	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	8	1	0	3	0	12	16	2	1	0	0	0	3	3	5	1	0	0	0	6	6

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 04 DATE: 26th October 2022

LOCATION: L6226 Rathcore Road/R148 Dublin Road DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
7:00	95	35	4	11	2	147	165	32	8	0	6	1	47	56	0	0	1	1	0	2	4
7:15	83	32	3	5	0	123	131	31	6	1	6	0	44	52	1	0	0	0	0	1	1
7:30	87	33	3	9	2	134	149	25	6	2	3	3	39	47	1	0	1	0	0	2	3
7:45	79	26	4	7	2	118	131	40	8	3	6	1	58	68	1	2	0	1	0	4	5
H/TOT	344	126	14	32	6	522	577	128	28	6	21	5	188	223	3	2	2	2	0	9	13
8:00	70	23	2	12	3	110	130	39	7	3	9	2	60	75	1	1	0	0	1	3	4
8:15	99	25	3	6	4	137	150	42	8	2	7	1	60	71	0	0	0	0	0	0	0
8:30	76	12	0	3	1	92	97	50	6	4	5	2	67	78	2	1	0	1	0	4	5
8:45	78	19	7	10	1	115	133	38	6	3	7	0	54	65	2	0	0	0	0	2	2
H/TOT	323	79	12	31	9	454	509	169	27	12	28	5	241	288	5	2	0	1	1	9	11
9:00	58	11	5	7	0	81	93	43	3	3	5	0	54	62	2	0	0	1	0	3	4
9:15	59	11	1	11	1	83	99	35	3	2	9	0	49	62	1	0	0	0	0	1	1
9:30	50	13	6	10	0	79	95	37	5	1	6	1	50	59	0	0	0	1	0	1	2
9:45	45	9	4	10	0	68	83	35	9	3	4	1	52	60	3	0	0	3	0	6	10
H/TOT	212	44	16	38	1	311	369	150	20	9	24	2	205	243	6	0	0	5	0	11	18
10:00	35	9	3	6	1	54	64	30	3	0	9	0	42	54	1	1	0	2	0	4	7
10:15	34	12	3	4	2	55	64	34	3	2	9	0	48	61	0	0	0	0	0	0	0
10:30	33	10	4	6	1	54	65	26	7	3	5	2	43	53	1	0	0	1	0	2	3
10:45	35	10	2	8	0	55	66	31	8	4	6	0	49	59	1	0	0	1	0	2	3
H/TOT	137	41	12	24	4	218	259	121	21	9	29	2	182	226	3	1	0	4	0	8	13
11:00	48	7	2	5	0	62	70	42	6	2	6	0	56	65	1	1	0	0	0	2	2
11:15	43	8	2	6	1	60	70	46	7	1	7	1	62	73	1	1	2	0	0	4	5
11:30	35	12	3	8	0	58	70	38	11	3	9	1	62	76	3	0	0	0	0	3	3
11:45	46	10	1	12	0	69	85	31	11	5	5	1	53	63	1	1	0	1	0	3	4
H/TOT	172	37	8	31	1	249	294	157	35	11	27	3	233	277	6	3	2	1	0	12	14
12:00	31	3	1	9	1	45	58	41	5	3	8	0	57	69	7	1	0	0	0	8	8
12:15	49	10	1	6	1	67	76	33	5	0	4	2	44	51	2	0	0	1	0	3	4
12:30	43	10	2	5	1	61	70	45	4	2	1	4	56	62	2	0	0	1	0	3	4
12:45	41	10	6	7	1	65	78	50	7	1	8	1	67	79	2	0	0	0	0	2	2
H/TOT	164	33	10	27	4	238	282	169	21	6	21	7	224	261	13	1	0	2	0	16	19

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 04 DATE: 26th October 2022

LOCATION: L6226 Rathcore Road/R148 Dublin Road DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	2	0	0	1	0	3	4	0	1	0	0	0	1	1	2	1	0	0	0	3	3
13:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2	1	0	0	0	0	1	1
13:30	1	0	0	1	0	2	3	1	0	0	0	0	1	1	1	0	0	0	0	1	1
13:45	1	1	0	0	0	2	2	0	0	0	0	0	0	0	2	0	1	0	0	3	4
H/TOT	6	1	0	2	0	9	12	3	1	0	0	0	4	4	6	1	1	0	0	8	9
14:00	2	0	0	0	0	2	2	3	1	0	0	1	5	6	1	3	0	0	1	5	6
14:15	5	0	0	2	0	7	10	1	1	0	0	0	2	2	1	3	0	0	0	4	4
14:30	1	0	0	2	0	3	6	1	1	0	0	0	2	2	1	0	0	0	1	2	3
14:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	10	0	0	4	0	14	19	8	3	0	0	1	12	13	4	6	0	0	2	12	14
15:00	3	1	0	0	0	4	4	2	0	0	0	0	2	2	3	1	0	0	0	4	4
15:15	1	0	1	1	0	3	5	2	3	1	0	0	6	7	4	0	0	0	0	4	4
15:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3	3	0	0	0	0	3	3
15:45	1	1	2	0	0	4	5	3	0	0	0	0	3	3	1	1	1	0	0	3	4
H/TOT	6	2	3	1	0	12	15	10	3	1	0	0	14	15	11	2	1	0	0	14	15
16:00	2	1	1	0	0	4	5	2	0	0	0	0	2	2	0	0	0	0	0	0	0
16:15	3	0	0	0	0	3	3	2	1	0	0	0	3	3	1	0	0	0	0	1	1
16:30	0	0	0	3	0	3	7	0	0	1	0	0	1	2	4	0	0	0	0	4	4
16:45	1	2	0	0	0	3	3	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	6	3	1	3	0	13	17	5	1	1	0	0	7	8	6	0	0	0	0	6	6
17:00	3	1	2	0	0	6	7	1	0	0	0	0	1	1	2	0	0	0	0	2	2
17:15	3	0	0	0	0	3	3	2	0	0	0	0	2	2	1	0	0	1	0	2	3
17:30	1	0	0	0	0	1	1	0	1	0	0	1	2	3	1	0	0	0	0	1	1
17:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	8	1	2	0	0	11	12	4	1	0	0	1	6	7	4	0	0	1	0	5	6
18:00	4	0	0	0	0	4	4	3	2	0	1	0	6	7	5	0	0	0	1	6	7
18:15	4	1	0	0	0	5	5	2	0	0	0	0	2	2	4	1	0	0	0	5	5
18:30	2	2	0	0	0	4	4	1	0	0	0	0	1	1	1	1	0	0	0	2	2
18:45	0	1	0	0	0	1	1	1	0	0	0	0	1	1	3	0	0	1	0	4	5
H/TOT	10	4	0	0	0	14	14	7	2	0	1	0	10	11	13	2	0	1	1	17	19
P/TOT	89	21	10	29	0	149	192	62	15	3	12	2	94	113	61	24	2	11	4	102	121

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNTS **OCTOBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/079**

SITE: 04 DATE: 26th October 2022

LOCATION: L6226 Rathcore Road/R148 Dublin Road DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
13:00	45	10	2	8	1	66	78	39	5	3	2	1	50	55	1	0	0	1	0	2	3
13:15	36	7	2	6	4	55	68	35	5	5	6	1	52	63	0	0	1	0	0	1	2
13:30	39	6	2	8	2	57	70	40	12	0	10	1	63	77	2	0	0	2	0	4	7
13:45	55	7	0	5	0	67	74	60	13	7	8	0	88	102	3	0	0	0	0	3	3
H/TOT	175	30	6	27	7	245	290	174	35	15	26	3	253	297	6	0	1	3	0	10	14
14:00	36	13	1	8	0	58	69	49	7	1	4	0	61	67	1	0	0	1	0	2	3
14:15	42	11	1	9	1	64	77	58	7	4	10	0	79	94	1	0	0	1	0	2	3
14:30	58	7	5	6	1	77	88	57	9	4	9	2	81	97	1	0	0	0	0	1	1
14:45	36	9	3	4	1	53	61	41	12	3	10	1	67	83	3	0	0	1	0	4	5
H/TOT	172	40	10	27	3	252	295	205	35	12	33	3	288	340	6	0	0	3	0	9	13
15:00	24	10	1	6	0	41	49	64	11	6	5	0	86	96	2	3	0	0	0	5	5
15:15	38	13	2	3	1	57	63	71	9	2	4	1	87	94	2	1	0	0	0	3	3
15:30	33	8	1	4	2	48	56	66	17	0	6	3	92	103	1	2	0	0	0	3	3
15:45	33	6	2	5	2	48	58	76	17	3	8	0	104	116	2	2	0	0	0	4	4
H/TOT	128	37	6	18	5	194	225	277	54	11	23	4	369	408	7	8	0	0	0	15	15
16:00	57	9	4	3	0	73	79	87	19	2	5	0	113	121	1	2	1	3	0	7	11
16:15	29	11	2	7	1	50	61	95	25	3	3	3	129	137	4	2	0	0	0	6	6
16:30	38	11	2	6	0	57	66	79	23	1	4	0	107	113	4	0	0	0	0	4	4
16:45	53	7	2	5	3	70	81	97	29	4	5	2	137	148	3	0	0	1	0	4	5
H/TOT	177	38	10	21	4	250	286	358	96	10	17	5	486	518	12	4	1	4	0	21	27
17:00	35	9	2	3	0	49	54	142	45	1	2	2	192	197	4	0	0	0	0	4	4
17:15	48	13	1	4	0	66	72	96	47	2	3	2	150	157	5	0	0	0	0	5	5
17:30	41	7	1	1	1	51	54	112	34	3	7	1	157	169	3	0	0	0	0	3	3
17:45	56	6	1	0	0	63	64	118	26	3	1	4	152	159	1	0	0	0	0	1	1
H/TOT	180	35	5	8	1	229	243	468	152	9	13	9	651	681	13	0	0	0	0	13	13
18:00	66	9	1	4	0	80	86	126	21	4	2	2	155	162	4	1	0	0	0	5	5
18:15	62	4	1	6	1	74	83	104	24	2	2	2	134	140	0	0	0	0	0	0	0
18:30	53	3	1	3	1	61	66	92	15	4	5	1	117	127	3	1	0	0	0	4	4
18:45	42	5	0	3	2	52	58	75	21	1	9	4	110	126	4	1	0	1	0	6	7
H/TOT	223	21	3	16	4	267	293	397	81	11	18	9	516	554	11	3	0	1	0	15	16
P/TOT	2407	561	112	300	49	3429	3924	2773	605	121	280	57	3836	4318	91	24	6	26	1	148	186

Appendix 14-1
Traffic Survey Data

Automatic Traffic Counter Survey – Week Commencing 21-Oct-2022

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNT/SPEED SURVEY **SUMMARY** **WEEK COMMENCING:** **Friday 21 October 2022**
AUTOMATIC TRAFFIC COUNT **TRA/22/079**

SITE 01

LOCATION: Local Road, Rathcore - Immediately North of Kilsaran Quarry Access (Google Maps Ref: 53.443818, -6.860920)

SPEED SURVEY SUMMARY:

NORTHBOUND	85% Speed = 65.97 km/h, 95% Speed = 71.19 km/h, Median = 56.79 km/h	Maximum = 80.1 km/h, Minimum = 6.6 km/h, Mean = 55.4 km/h
SOUTHBOUND	85% Speed = 69.75 km/h, 95% Speed = 75.99 km/h, Median = 58.77 km/h	Maximum = 101.1 km/h, Minimum = 8.1 km/h, Mean = 58.0 km/h

VOLUMETRIC VEHICLE COUNTS:

Direction	Time	Friday 21 October 2022	Saturday 22 October 2022	Sunday 23 October 2022	Monday 24 October 2022	Tuesday 25 October 2022	Wednesday 26 October 2022	Thursday 27 October 2022	No. Vehicles	7 day Mean
NORTHBOUND	**07-19**	179	141	70	158	169	188	169	1074	153
SOUTHBOUND	**07-19**	176	138	70	152	169	156	163	1024	146
NORTHBOUND	**00-00**	209	174	84	186	198	211	197	1259	180
SOUTHBOUND	**00-00**	211	173	92	187	205	214	202	1284	183

PEAK FLOW SUMMARY:

Peak	AM	IP	PM
Most Frequent Peak Hour	0800	1400	1800
Average Vehicles per Peak Hour	20	15	19

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNT/SPEED SURVEY Friday 21 October 2022
AUTOMATIC TRAFFIC COUNT TRA/22/079

SITE 01
NORTHBOUND

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	1	1
0500	0	1	0	0	0	0	1	1
0600	0	2	1	0	0	0	3	3
0700	0	7	2	0	0	0	9	9
0800	0	22	1	2	3	0	28	33
0900	0	10	2	0	1	0	13	14
1000	0	11	6	0	1	0	18	19
1100	0	10	0	0	2	0	12	15
1200	0	5	3	1	3	0	12	16
1300	0	7	3	0	0	0	10	10
1400	0	8	4	0	0	0	12	12
1500	0	6	4	0	1	0	11	12
1600	0	10	1	0	1	0	12	13
1700	0	16	4	0	0	0	20	20
1800	0	19	3	0	0	0	22	22
1900	0	9	0	0	0	0	9	9
2000	0	5	1	0	0	0	6	6
2100	0	2	1	0	2	0	5	8
2200	0	4	0	0	1	0	5	6
2300	0	0	0	0	0	0	0	0
07-19	0	131	33	3	12	0	179	196
06-22	0	149	36	3	14	0	202	222
06-00	0	153	36	3	15	0	207	228
00-00	0	155	36	3	15	0	209	230

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNT/SPEED SURVEY Friday 21 October 2022
AUTOMATIC TRAFFIC COUNT TRA/22/079

SITE 01
SOUTHBOUND

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	1	0	1	2
0600	0	4	2	0	0	0	6	6
0700	0	2	1	0	3	0	6	10
0800	0	20	0	0	1	0	21	22
0900	0	9	2	1	2	0	14	17
1000	0	10	3	0	2	0	15	18
1100	0	10	3	0	2	0	15	18
1200	0	12	4	0	1	0	17	18
1300	0	9	3	0	2	0	14	17
1400	0	11	4	0	0	0	15	15
1500	0	8	3	0	1	0	12	13
1600	0	12	3	0	1	1	17	19
1700	0	9	2	0	2	0	13	16
1800	1	14	2	0	0	0	17	16
1900	0	9	1	0	0	0	10	10
2000	0	5	2	0	0	0	7	7
2100	0	5	0	0	1	0	6	7
2200	0	2	1	0	0	0	3	3
2300	0	1	0	0	0	0	1	1
07-19	1	126	30	1	17	1	176	199
06-22	1	149	35	1	18	1	205	229
06-00	1	152	36	1	18	1	209	233
00-00	1	153	36	1	19	1	211	236

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNT/SPEED SURVEY **Saturday 22 October 2022**
AUTOMATIC TRAFFIC COUNT **TRA/22/079**

SITE 01
NORTHBOUND

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	3	0	0	0	0	3	3
0500	0	0	0	0	0	0	0	0
0600	0	1	0	0	0	0	1	1
0700	0	5	1	0	0	0	6	6
0800	2	5	0	0	0	0	7	5
0900	0	11	1	1	0	0	13	14
1000	0	12	4	0	0	0	16	16
1100	0	9	2	1	0	0	12	13
1200	0	12	4	0	0	0	16	16
1300	0	11	3	0	0	0	14	14
1400	0	7	0	0	0	0	7	7
1500	0	12	1	0	1	0	14	15
1600	0	6	1	0	0	0	7	7
1700	0	16	0	1	1	0	18	20
1800	0	8	2	1	0	0	11	12
1900	0	11	0	0	0	0	11	11
2000	0	8	1	0	0	0	9	9
2100	0	2	1	0	0	0	3	3
2200	0	1	1	0	0	0	2	2
2300	0	1	0	0	0	0	1	1
07-19	2	114	19	4	2	0	141	144
06-22	2	136	21	4	2	0	165	168
06-00	2	138	22	4	2	0	168	171
00-00	2	144	22	4	2	0	174	177

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNT/SPEED SURVEY **Saturday 22 October 2022**
AUTOMATIC TRAFFIC COUNT **TRA/22/079**

SITE 01
SOUTHBOUND

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	1	0	0	0	0	1	1
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	1	1
0500	0	1	0	0	0	0	1	1
0600	0	2	0	0	1	0	3	4
0700	0	3	2	0	0	0	5	5
0800	0	8	0	0	0	0	8	8
0900	1	11	0	0	1	0	13	14
1000	0	5	2	0	0	0	7	7
1100	0	7	2	0	0	0	9	9
1200	1	10	4	1	0	0	16	16
1300	1	9	3	0	0	0	13	12
1400	1	14	2	1	0	0	18	18
1500	0	13	1	0	1	0	15	16
1600	0	6	1	0	0	0	7	7
1700	0	11	2	0	0	0	13	13
1800	1	10	3	0	0	0	14	13
1900	0	9	1	0	0	0	10	10
2000	0	6	1	0	0	0	7	7
2100	0	5	0	0	0	0	5	5
2200	0	3	1	0	0	0	4	4
2300	0	2	0	0	0	0	2	2
07-19	5	107	22	2	2	0	138	138
06-22	5	129	24	2	3	0	163	164
06-00	5	134	25	2	3	0	169	170
00-00	5	138	25	2	3	0	173	174

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNT/SPEED SURVEY **Sunday 23 October 2022**
AUTOMATIC TRAFFIC COUNT **TRA/22/079**

SITE 01
NORTHBOUND

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0
0700	0	2	0	0	0	0	2	2
0800	0	4	0	0	0	0	4	4
0900	0	7	0	0	0	0	7	7
1000	0	10	1	0	0	0	11	11
1100	0	5	0	0	0	0	5	5
1200	0	6	2	0	0	0	8	8
1300	0	3	0	0	0	0	3	3
1400	0	7	2	0	0	0	9	9
1500	0	7	0	0	0	0	7	7
1600	0	4	1	0	0	0	5	5
1700	0	2	0	0	0	0	2	2
1800	0	6	1	0	0	0	7	7
1900	0	5	0	0	1	0	6	7
2000	0	2	0	0	0	0	2	2
2100	0	2	0	0	0	0	2	2
2200	0	4	0	0	0	0	4	4
2300	0	0	0	0	0	0	0	0
07-19	0	63	7	0	0	0	70	70
06-22	0	72	7	0	1	0	80	81
06-00	0	76	7	0	1	0	84	85
00-00	0	76	7	0	1	0	84	85

TRAFFINOMICS LIMITED

KILSARAN RATHCORE TRAFFIC COUNT/SPEED SURVEY **Sunday 23 October 2022**
AUTOMATIC TRAFFIC COUNT **TRA/22/079**

SITE 01
SOUTHBOUND

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	3	0	0	0	0	3	3
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0
0700	1	1	0	0	0	0	2	1
0800	0	2	0	0	0	0	2	2
0900	0	7	0	0	0	0	7	7
1000	0	7	0	0	0	0	7	7
1100	0	8	0	0	0	0	8	8
1200	0	9	3	0	0	0	12	12
1300	0	10	0	0	0	0	10	10
1400	0	2	0	0	0	0	2	2
1500	1	4	1	0	0	0	6	5
1600	0	3	0	1	0	0	4	5
1700	0	4	0	0	0	0	4	4
1800	0	5	0	0	1	0	6	7
1900	0	7	1	0	0	0	8	8
2000	0	4	1	0	0	0	5	5
2100	0	1	0	0	0	0	1	1
2200	0	2	0	0	0	0	2	2
2300	0	2	1	0	0	0	3	3
07-19	2	62	4	1	1	0	70	70
06-22	2	74	6	1	1	0	84	84
06-00	2	78	7	1	1	0	89	89
00-00	2	81	7	1	1	0	92	92