



Redsun Projects Ltd

East Hub, Knowsley Transport Assessment

November 2022



Redsun Projects Ltd

East Hub, Knowsley

Transport Assessment

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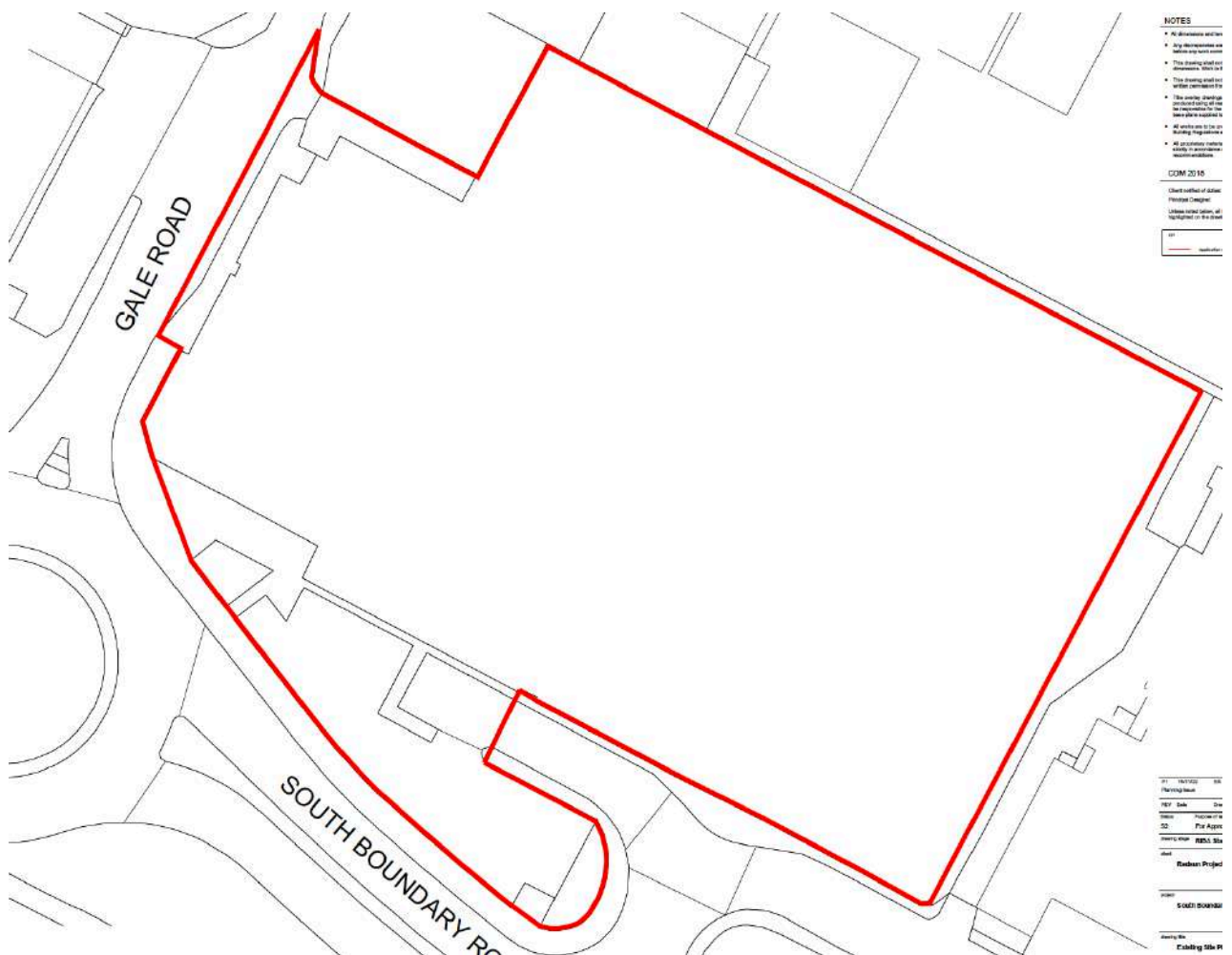
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1. Introduction

1.1 Preamble

- 1.1.1 Mode Transport Planning ('Mode') has been appointed by Redsun Projects Ltd (the 'Applicant') to provide transport planning and highways advice in relation to a planning application for an industrial development on the East Hub site, located on South Boundary Road on Knowsley Business Park.
- 1.1.2 The proposed development will comprise a single 4,645sqm industrial unit (Use Class B2/ B8), with on-site car parking provision, cycle parking and a service yard. Vehicular access to the site is proposed via an upgraded access junction on Gale Road, and the existing access from Admin Road, via South Boundary Way.
- 1.1.3 The development site, including the existing area of car parking accessed via Admin Road, is under the ownership and control of the Applicant. The development site red line boundary is shown in Figure 1.1.

Figure 1.1 : Development Site Boundary (source: AEW Architects)



1.2 Methodology

- 1.2.1 This Transport Assessment (TA) has been prepared to assess the development proposals, with consideration to expected trip generation and traffic impact, access and servicing arrangements, on-site parking provision and accessibility by sustainable modes of travel.
- 1.2.2 The methodology for the TA adopts the guidance set out within the Ministry of Housing, Communities & Local Government document, *'Transport Evidence Bases in Plan Making and Decision Taking'* (2014), which superseded the Department for Transport's (DfT) *'Guidance on Transport Assessment'* (2007). Whilst the 2014 guidance places a focus on agreeing a scope of works with the Local Highway Authority, the 2007 guidance remains instructive and has been used to inform the overall structure of the TA.
- 1.2.3 The TA has been produced following detailed pre-application discussions with the Local Highway Authority, Knowsley Metropolitan Borough Council (KMBC) Highways, which included a detailed assessment of the proposed access junction on Gale Road. Based on the information provided as part of the pre-application consultation, the proposed access junction on Gale Road has been accepted, in principle, by KMBC Highways.
- 1.2.4 The proposed relocation of the existing bus stop on Gale Road has also been discussed and agreed with Merseytravel during pre-application consultation.
- 1.2.5 The TA pre-application correspondence with KMBC Highways and Merseytravel is attached in [Appendix A](#).
- 1.2.6 A separate Framework Travel Plan (FTP) has also been produced to accompany the planning application, which sets out a framework to encourage sustainable travel and reduce single occupancy vehicle trips to and from the site by employees and visitors.

1.3 BREEAM Sustainability Assessment

- 1.3.1 The scheme is intended to be a BREEAM rated development that will create a more sustainable environment and will enhance the well-being of the people who work and visit the development site. Accordingly, this TS will assess the site in accordance with 'BREEAM 2018'.

1.4 Report Structure

- 1.4.1 Following this introduction, the TA has been structured as follows:
- [Chapter 2](#) sets out the relevant national and local transport policy and guidance context;
 - [Chapter 3](#) describes the site location, local highway network and collision data;
 - [Chapter 4](#) outlines the development proposals, vehicular access, servicing and parking;

- Chapter 5 details accessibility by non-car modes, including public transport, cycle and on foot;
- Chapter 6 details the expected trip generation and traffic impact;
- Chapter 7 summarises and concludes the findings of the report.

2. Policy Consideration

2.1 Introduction

2.1.1 This chapter of the TA considers key current national, regional and local transport policy as they relate to the development proposals. The following relevant documents have been reviewed:

- National Planning Policy Framework (2021);
- Merseyside Local Transport Plan (LTP3) (2011);
- Knowsley Local Plan Core Strategy (2016); and
- KMBC Ensuring a Choice of Travel SPD (2006).

2.1.2 Legislation and policy play an important role in shaping and guiding a new development. As such, the purpose of this chapter is to outline the relevant transport-related policies which influence the proposed development from a national and local level.

2.2 National Transport Planning Policy

National Planning Policy Framework

2.2.1 The revised National Planning Policy Framework (NPPF) was published in July 2021 and sets out the government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for development can be produced. The revised NPPF replaces the previous NPPF published in February 2019.

2.2.2 Paragraph 2 of the NPPF states *"Planning law requires that application for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. The National Planning Policy Framework must be taken into account in preparing the development plan and is a material consideration in planning decisions."*

2.2.3 Paragraph 7 of the NPPF states *"The purpose of the planning system is to contribute to the achievement of sustainable development."*

2.2.4 Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives), as detailed in paragraph 8 of the NPPF:

- *"an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*

- *a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations... and support communities' health, social and cultural well-being;*
- *an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land... and mitigating and adapting to climate change, including moving to a low carbon economy; and*
- *an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."*

2.2.5 Chapter 9 of the NPPF, 'Promoting Sustainable Transport', sets out the important role that transport issues and policies have in facilitating sustainable development. Paragraph 105 states that:

"Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."

2.2.6 Specifically, Paragraph 110 states that when assessing applications for development, it should be ensured that:

- *'appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *safe and suitable access to the site can be achieved for all users;*
- *the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
- *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.'*

2.2.7 In terms of highways impact and safety, Paragraph 111 states that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impact on the road network would be severe."

2.2.8 Within this context, Paragraph 112 goes on to state that applications for development should:

- *"give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

- *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *Create places that are safe, secure and attractive—which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- *allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible, and convenient locations.”*

2.3 Regional Transport Planning Policy

Merseyside Local Transport Plan (LTP3)

2.3.1 The Merseyside Local Transport Plan (LTP3) is a statutory plan prepared by the five Metropolitan Councils on Merseyside.

2.3.2 The LTP3 for Merseyside became active from 1st April 2011. The LTP3 set out the implementation plans in the short term to 2015, and looks to the long-term strategy for 2024 on how to improve transport in Merseyside. The LTP3 has the following vision;

“A city region committed to a low carbon future, which has a transport network and mobility culture that positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice”.

2.3.3 The LTP3 has six main goals, all with equal importance and status:

- 1 - Help create the right conditions for sustainable economic growth by supporting the priorities of the Liverpool City Region, the Local Enterprise Partnership and the Local Strategic Partnerships.
- 2 - Provide and promote a clean, low emission transport system which is resilient to changes to climate and oil availability.
- 3 - Ensure the transport system promotes and enables improved health and wellbeing and road safety.
- 4 - Ensure equality of travel opportunity for all, through a transport system that allows people to connect easily with employment, education, healthcare, other essential services and leisure and recreational opportunities.
- 5 - Ensure the transport network supports the economic success of the city region by the efficient movement of people and goods.
- 6 - Maintain our assets to a high standard.

2.4 Local Transport Planning Policy

Knowsley Local Plan Core Strategy

- 2.4.1 The 'Knowsley Local Plan Core Strategy' written in 2016 sets out the vision, objectives and policy that will guide development in Knowsley until 2028.
- 2.4.2 Policy CS7 focuses on the Knowsley transport network, with the Local Plan aiming to *'support a sustainable transport system and geographical pattern of development which minimises the need to travel and will help grow the borough's economy, ensuring that jobs, shops and services are accessible to all, leading to a lesser reliance on the car for travel. This will help to improve the environment and the health and wellbeing of residents.'*
- 2.4.3 Policy CS7 states that all new developments will be required to be:
- *'Located and designed to prioritise accessibility and sustainable modes of travel through a choice of walking, cycling, public transport, and incorporate access for private vehicles. Where deficiencies are identified, developer contributions will be required to improve the accessibility of the location';*
 - *'Located and designed to ensure that larger scale proposals (attracting a lot of visitors, customers and/or employees) are located in the most accessible locations';*
 - *'In compliance with adopted cycle, car, disabled and service vehicle parking standards for different types and scales of new development'; and*
 - *'Inclusive of measures that will mitigate carbon emissions and improve air quality where appropriate'.*

KMBC Ensuring a Choice of Travel SPD

- 2.4.4 The 'Ensuring a Choice of Travel' SPD for Knowsley was adopted in 2006 in advance of the Local Plan, and supplements the policies outlined in the Knowsley Replacement Unitary Development Plan (UDP).
- 2.4.5 The SPD's aim is to encourage new developments, specifically larger developments, to be located in areas that are accessible via sustainable transport modes of transport including walking, cycling, and public transport.
- 2.4.6 Policy T6 highlights the need for appropriate accessibility via a range of transport methods, with larger developments expected to be more accessible. New developments should be provided with:
- *'Well lit, safe, convenient and clearly sign-posted footways and cycle routes both within the site and linking to the surrounding area and to public transport facilities;*
 - *Cycle parking facilities in accordance with the Council's minimum standards;*

- *Car parking facilities which do not exceed the Council's maximum standards;*
- *Parking facilities for the less mobile, delivery and other service vehicles within the site in accordance with the Council's minimum standards;*
- *Safe and convenient vehicular access to and from the highway and within the site;*
- *Good provision of public transport to the site. In the case of major developments, and any other developments likely to generate a significant amount of travel demand, the provision of additional public transport facilities such as bus stops, bus layover bays, taxi bays or other facilities may be required within or adjacent to the site.'*

2.4.7 Similarly, Policy T7 further highlights KMBC's desire to promote sustainable transport methods, stating that *'new development should preserve and where possible enhance the walking and cycling network.'*

2.4.8 Merseyside authorities have developed a standardised accessibility assessment scoring system for large or major developments. Assessment scores are compared to minimum accessibility scores for different land uses in different locations, with scores expected to exceed the minimum before a planning application is submitted. Points are awarded in relation to walking, cycling, public transport and vehicular access/ parking.

2.4.9 It is clear that the primary aim of the 'Ensuring a Choice of Travel' SPD for Knowsley is to encourage a range of sustainable transport methods.

2.5 Summary

2.5.1 In accordance with the national, regional and local policy, this planning application is supported by a TA which demonstrates the site's accessibility by sustainable modes of travel ([Chapter 5](#)), and that the proposed development will not have a severe impact on the local highway network ([Chapter 6](#)).

3. Existing Conditions

3.1 Existing Site

- 3.1.1 The site is located in a primarily industrial area known as Knowsley Business Park, on a parcel of brownfield land to the north of South Boundary Road, accessible via Gale Road.

3.2 Site Location and Existing Use

- 3.2.1 As shown in [Figure 3.1](#), the development site is located c.2.5km to the southeast of Kirkby Town Centre, c.3.3km northeast of Gillmoss and c.5.7km west of Windle.

Figure 3.1 : Site Location Plan

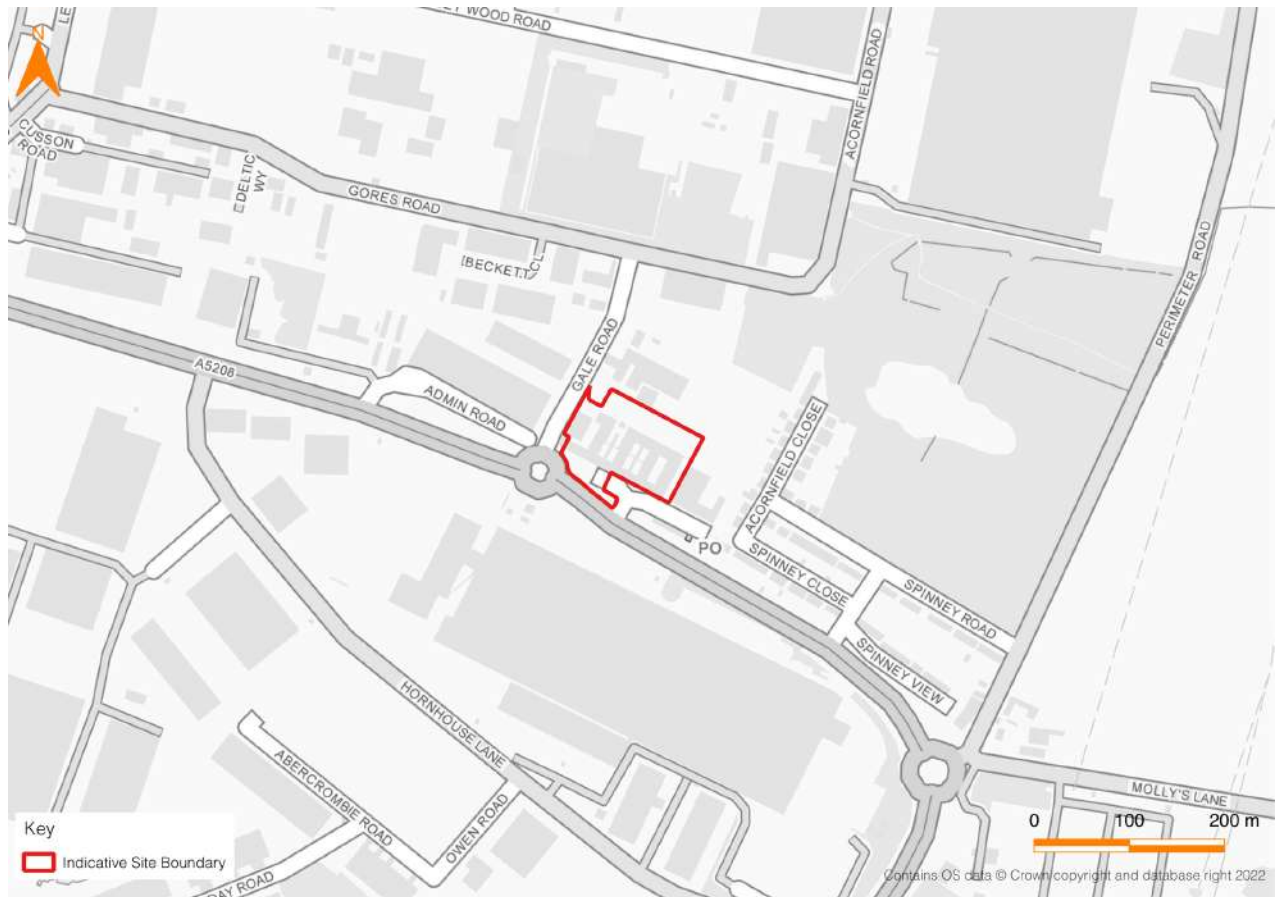


- 3.2.2 The development site is bound to the west by Gale Road, and to the south by the Admin Road and South Boundary Road (A5208). To the north and east, the development site is bounded by an existing industrial area.
- 3.2.3 According to KMBC's Local Plan Policies Map, the site is classed as a 'Primarily Industrial Area' and previously accommodated industrial units and businesses. Relatively recently the existing units have been demolished and the site has been cleared.

3.3 Local Highway Network

3.3.1 The location of the development site in the context of the local highway network is shown in Figure 3.2.

Figure 3.2 : Local Highway Network



South Boundary Road (A5208)

- 3.3.2 South Boundary Road extends in a broadly east-west alignment, forming a three-arm roundabout with Gale Road to the southwest corner of the site.
- 3.3.3 From the roundabout, South Boundary Road continues for c.500m and forms a roundabout junction with Perimeter Road and Coopers Lane. To the west, South Boundary Road continues for c.700m and forms a roundabout junction with Lees Road and Moorgate Road North.
- 3.3.4 In the vicinity of the site, South Boundary Road has a speed limit of 40mph with a carriageway width of c.18m providing two lanes in each direction. This includes a 3.0m wide kerbed central reservation.
- 3.3.5 A shared pedestrian footway/ cycleway is provided on either side of South Boundary Road with a width of c.2.5 - 3.0m.

- 3.3.6 The site access road benefits from tactile paving with dropped kerbs, while a signalised pedestrian crossing is located across South Boundary Road. The crossing benefits from tactile paving, dropped kerbs, guard railings and a pedestrian refuge island to aid safe pedestrian use.
- 3.3.7 Adjacent to the site, 3no. bus stops are located on a layby on the eastbound carriageway of South Boundary Road, and a bus stop is also located on the westbound carriageway. The bus stops benefit from a seating area, shelter and bus timetable information. A network of street lighting columns is provided along South Boundary Road.
- 3.3.8 **Photograph 3.1** shows the extent of South Boundary Road along with the 3no. bus shelter facilities, while **Photograph 3.2** shows the signalised pedestrian crossing across South Boundary Road.

Photograph 3.1 : South Boundary Road - Westbound



Photograph 3.2 : South Boundary Road - Signalised Pedestrian Crossing



Admin Road

- 3.3.9 An existing vehicular access is available at the site's southern boundary from Admin Road, which serves a small area of existing car parking (Photograph 3.3) and connects with South Boundary Road via a left in/ left out arrangement (Photograph 3.4).

Photograph 3.3 : Admin Road – Existing Car Parking



Photograph 3.4 : Admin Road / South Boundary Road



3.3.10 The development site includes the existing area of car parking accessed via Admin Road, which is now under the ownership and control of the Applicant.

3.3.11 Admin Road had previously routed through the site, and although the route has been removed the road still forms part of the adopted highway boundary. The adopted highway boundary information for the local highway network has been obtained from KMBC, as shown in Figure 3.3.

Figure 3.3: Local Adopted Highway Network (source : KMBC)



3.3.12 To enable the development to be carried out, following planning consent, the intention is for the relevant sections of Admin Road to be stopped-up under Section 247 of the Town and Country Planning Act 1990.

Gale Road

3.3.13 Gale Road abuts the development site's western boundary and provides access into wider Knowsley Business Park to the north and to South Boundary Road (A5208) via a three-arm roundabout to the south. An existing access to the site is taken from Gale Road via a simple priority arrangement.

3.3.14 Gale Road has a carriageway width of c.9.5m, providing one lane in each direction and is subject to a 30mph speed limit, as shown in [Photograph 3.5](#). On-street parking restrictions are applied through the use of double yellow road markings along Gale Road.

3.3.15 Pedestrian footways, approximately 2m wide, are provided on either side of Gale Road, with a network of street lighting columns. An existing southbound bus stop layby is located immediately to the south of the existing site access.

Photograph 3.5: Gale Road (northbound)



South Boundary Road (A5208) / Gale Road Roundabout

3.3.16 The South Boundary Road / Gale Road Roundabout is a three-arm roundabout located on the southeast boundary of the site. Gale Road creates the north arm while South Boundary Road creates the east and west arms.

- 3.3.17 Gale Road has one lane plus a flare on the approach to the roundabout, while South Boundary Road has a two-lane on the approach from both directions.
- 3.3.18 A shared pedestrian footway / cycleway is provided on either side of South Boundary Road, with an unsignalised pedestrian crossing across Gale Road. The pedestrian crossing benefits from tactile paving, dropped kerbs and a refuge island.
- 3.3.19 **Photograph 3.6** shows the extent of the South Boundary Road / Gale Road roundabout and pedestrian crossing facilities across Gale Road.

Photograph 3.6: South Boundary Road / Gale Road Roundabout



Gores Road

- 3.3.20 Gores Road runs in a broadly east-to-west alignment to the north of the site. It features a c.7m single carriage travelling in both directions, with c.3.4m footways on each side. Gale Road is subject to 30mph speed limits.
- 3.3.21 Gores Road benefits from a network of streetlighting and features double yellow lines to prevent on road parking. To the west, c.640m from the junction with Gale Road, Gores Road joins Lees Road at a priority junction, with Lees Road forming the major arm.
- 3.3.22 To the east, c.195m from the junction with Gale Road, Gores Road becomes Acornfield Road and continues north.

Wider Highway Network

3.3.23 The M57 motorway is accessible from the site via the A5208 (South Boundary Street) and the A5207 (Moorgate Road North).

3.3.24 The M57, known as the Liverpool Outer Ring Road, provides links between the Liverpool City Region area, as well as the M62 and M58 motorways.

3.4 Road Safety

3.4.1 Personal Injury Collision (PIC) data in the vicinity of the development site has been obtained from KMBC for the most recent available five-year period. The full road safety data is attached in [Appendix B](#).

3.4.2 The study area includes the South Boundary Road/ Gale Road roundabout junction, Gale Road and the Gale Road/ Gores Road priority junction.

3.4.3 [Figure 3.3](#) shows the location of PICs on the local highway network that have occurred within the past five years. [Table 3.1](#) provides a breakdown of the PICs reported.

Figure 3.3 : Road Safety Data (source: KMBC)



Table 3.1 : PIC Data Analysis

Date	Location	Severity	Vehicles Involved	Weather
March 2019	Gale Road	Slight	1 HGV, 1 pedestrian	Dry
Dec 2019	South Boundary Road	Slight	1 car, 1 cyclist	Rain and wind
Nov 2020	Gale Road/ Gores Road	Slight	1 car, 1 cyclist	Rain

- 3.4.4 As shown in [Table 3.1](#), 3no. PICs occurred on the local highway network within the vicinity of the site, all of which were classified as 'slight' in severity.
- 3.4.5 1no. collision on Gale Road occurred between an HGV and a pedestrian within the Texaco service station as the HGV reversed. The other 2no. collisions on South Boundary Road and the Gale Road/ Gores Road junction occurred between a car and a cyclist. In both instances the car collided with the moving cyclist.
- 3.4.6 Analysis of the PIC data demonstrates that there are no significant collision clusters within proximity of the site. Based on the frequency of collisions recorded, there is no evidence to suggest that the highway layout, design or condition are significant factors in PIC records on the local highway network.
- 3.4.7 There is also no evidence to suggest that the proposed development would increase risks of PICs in the surrounding area or have a detrimental impact on highway safety.

3.5 Traffic Speed Survey Data

- 3.5.1 At the request of KMBC Highways during pre-application discussions, traffic surveys were undertaken on Gale Road to record existing traffic speeds over a 7-day period, from Friday 8th – Thursday 14th July 2022.
- 3.5.2 Automatic Traffic Counter (ATC) surveys were carried out at two locations on Gale Road; north of the existing access junction, and further to the south close to the roundabout with South Boundary Road where the speed limit changes from 40mph to 30mph.
- 3.5.3 The traffic speeds at both locations are summarised in [Table 3.2](#) and [Table 3.3](#) respectively, with the full ATC survey outputs included in [Appendix C](#).

Table 3.2 : ATC Traffic Speed Data – Gale Road (near the existing access junction)

Date	Average Speeds	85 th Percentile Speeds
Northbound	24.5 mph	31.4 mph
Southbound	23.6 mph	31.4 mph

Table 3.3 : ATC Traffic Speed Data – Gale Road (close to South Boundary Road)

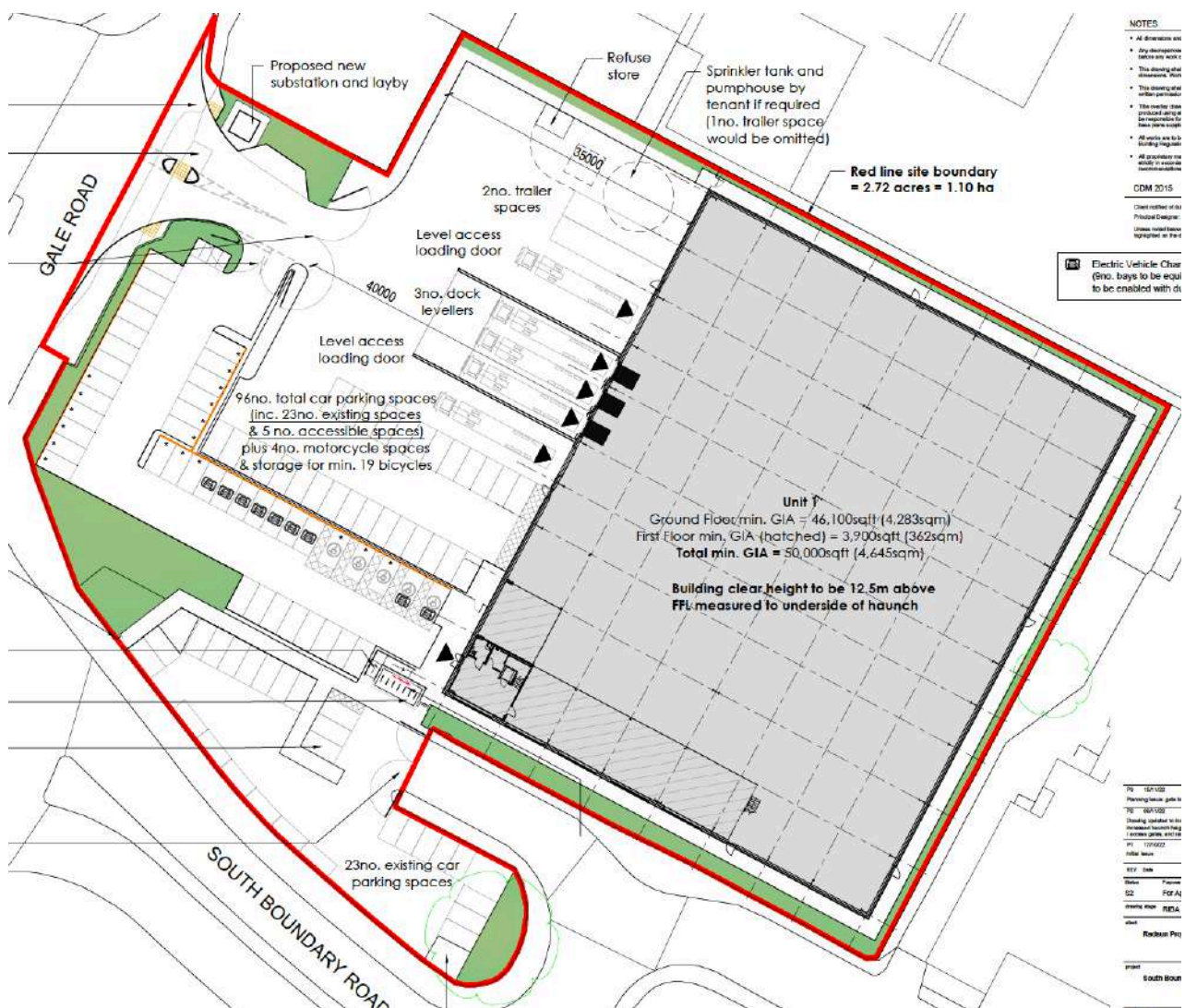
Date	Average Speeds	85 th Percentile Speeds
Northbound	25.3 mph	29.6 mph
Southbound	20.5 mph	24.6 mph

4. Development Proposals

4.1 Proposed Use

- 4.1.1 The proposed development will comprise a single 4,645sqm industrial unit (Use Class B2/ B8) located at the East Hub site on South Boundary Road in Knowsley Business Park. The proposals include on-site car parking provision, cycle parking and a service yard.
- 4.1.2 The development site, including the existing area of car parking accessed via Admin Road, is under the ownership and control of the Applicant.
- 4.1.3 The proposed site layout is shown in [Figure 4.1](#), with the full layout drawing attached in [Appendix D](#).

Figure 4.1 : Proposed Site Layout (source : AEW Architects)



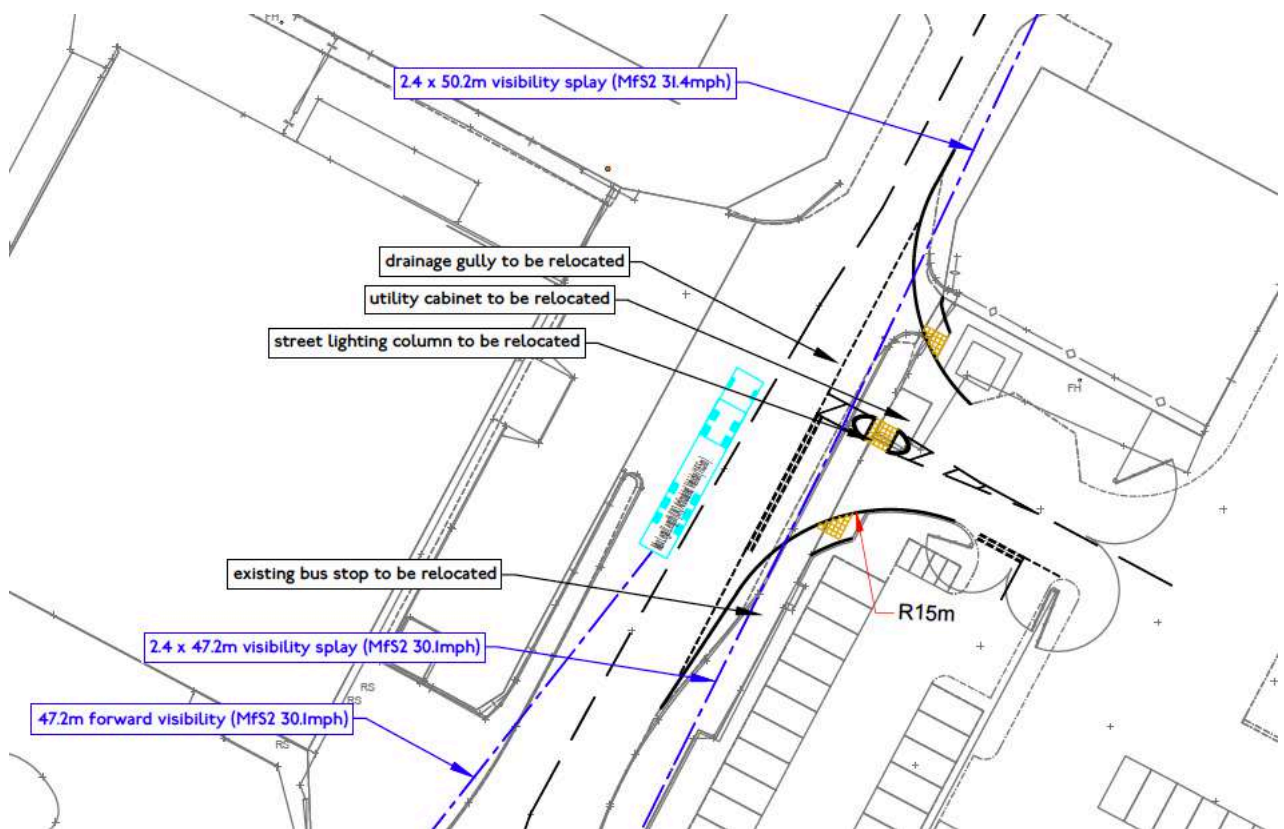
4.2 Site Access Arrangement

4.2.1 Vehicular access to the development site is proposed via an upgraded access junction on Gale Road, and the existing access from Admin Road, via South Boundary Way.

Gale Road Access

4.2.2 The upgraded access junction on Gale Road is shown in [Figure 4.2](#), with the full access junction drawing shown in **Drawing No. J32-6156-PS-001** and attached in [Appendix E](#).

Figure 4.2 : Proposed Site Access Junction – Gale Road

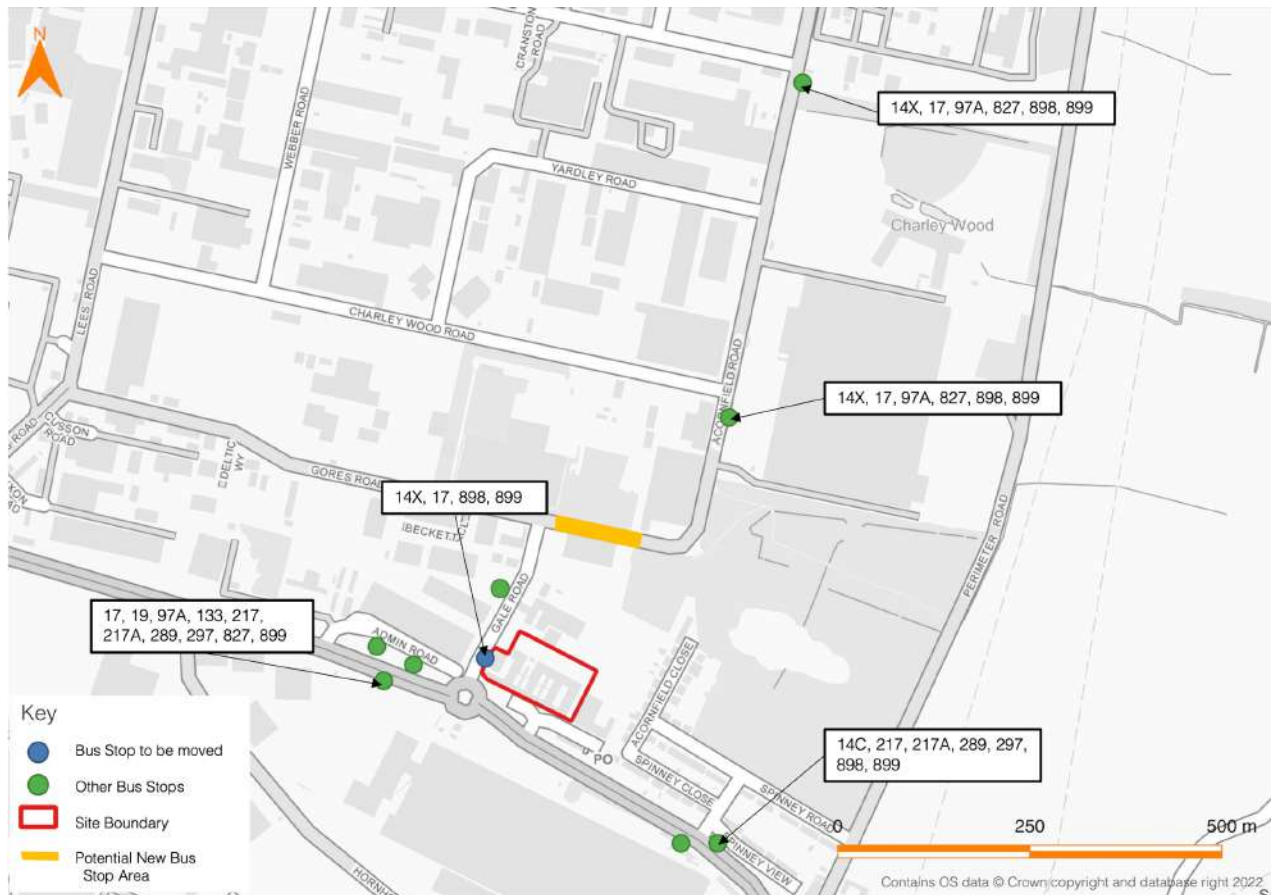


4.2.3 As shown in [Figure 4.2](#), the upgraded access junction on Gale Road comprises a 7.3m wide carriageway, 15m kerb radii and pedestrian crossing including tactile paving and central refuge island.

4.2.4 Horizontal visibility splays of 2.4m x 50.2m and 2.4m x 47.2m can be achieved to the north and south respectively along Gale Road from the access junction, in accordance with Manual for Streets 2 (MfS2) guidance for roads with >5% HGV movements and recorded 85th percentile speed.

- 4.2.5 Following pre-application comments from KMBC Highways, it has also been demonstrated that forward visibility to a stationary right-turning HGV can be achieved in accordance with MfS2 and the 85th percentile speed for the fastest HGV vehicle type (3 Axle Rigid) recorded by the ATC survey.
- 4.2.6 This additional assessment of visibility demonstrates that larger vehicles approaching from the roundabout to the south, where the speed limit changes from 40mph to 30mph, have sufficient forward visibility of a stationary HGV waiting to turn right into the development, in accordance with MfS2 standards.
- 4.2.7 During the pre-application consultation with KMBC Highways, a detailed capacity impact assessment of the proposed access junction on Gale Road has been undertaken, as shown in Technical Note (TN01), dated 27th July 2022, attached in [Appendix A](#). The capacity assessment modelling demonstrated that the proposed access junction on Gale Road will operate comfortably within capacity and with negligible queuing on all arms, including the right-turn movement into the development site.
- 4.2.8 Based on the information provided as part of the pre-application consultation, the proposed access junction on Gale Road has been accepted, in principle, by KMBC Highways.
- 4.2.9 The proposed access junction on Gale Road has been subject to a Stage 1 Road Safety Audit (RSA), undertaken by a fully qualified and independent auditor. The Stage 1 RSA, dated 11th November 2022, concluded that *“the Stage 1 Road Safety Audit Team was unable to identify any items of concern regarding the road safety of the scheme”*. The Stage 1 RSA report and Designer’s Response is attached in [Appendix F](#).
- 4.2.10 As described previously, there is an existing bus stop layby on Gale Road at the location of the proposed access junction. To facilitate the upgraded access junction, it is proposed that the bus stop is relocated to Gores Road, as indicatively shown in [Figure 4.3](#).

Figure 4.3 : Bus Stop Relocation



4.2.11 The proposed relocation of the existing bus stop on Gale Road to Gores Road has been reviewed and approved, in principle, by Merseytravel during pre-application correspondence, as detailed in [Appendix A](#).

Admin Road Access

4.2.12 The area of parking to the south of the site will be served via Admin Road. The access arrangement from Admin Road will remain largely as existing, but with the inclusion of inward opening gates at the boundary of the site.

4.2.13 As described previously, there is a section of Admin Road within the development site that still forms part of the adopted highway. To enable the development to be carried out, following planning consent, the intention is for this section of Admin Road to be stopped-up under Section 247 of the Town and Country Planning Act 1990.

Pedestrian Access

4.2.14 A separate 2m wide pedestrian access is proposed close at the south-east corner of the site, providing convenient traffic-free access through the site.

- 4.2.15 To overcome a change in levels near the unit's main entrance, steps and a ramp are proposed. The ramp complies with Building Regulations (Approved Document M, Volume 2 – Buildings Other Than Dwellings).

4.3 Servicing and Delivery Arrangements

- 4.3.1 Swept path analysis has been undertaken for a 16.5m articulated HGV, which is the largest vehicle expected to regularly visit the site. The analysis shows that a 16.5m articulated HGV can access and egress via the access junction on Gale Road in a forward gear, and safely manoeuvre with in the service yard.
- 4.3.2 Swept path analysis for a 16.5m articulated HGV at the access junction on Gale Road, and within the service yard is shown in **Drawing No. J32-6156-PS-002** and **Drawing No. J32-6156-PS-003** respectively, attached in **Appendix G**.

4.4 Proposed Parking Provision

- 4.4.1 Local parking standards are specified in KMBC's Supplementary Planning Document '*Ensuring a Choice of Travel (2010)*' and have been summarised in **Table 4.1**.

Table 4.1 : KMBC's Local Parking Standards

Development Type	Car Parking (Max)	Disabled Parking (Min)	Motorcycle (Min)	Cycle Parking (Min)
B2 'General Industry'	1 space per 45 sqm	Individual bays for each disabled employee plus 2 bays or 5% of total capacity	1 space per 1,000m (minimum 2 spaces)	1 space per 450 sqm (minimum of 2 spaces)
B8 'Storage and Distribution'	1 space per 100 sqm	Individual bays for each disabled employee plus 2 bays or 5% of total capacity	1 space per 2,000m (minimum 2 spaces)	1 space per 850 sqm (minimum of 2 spaces)

- 4.4.2 In total, the development proposals will provide 96no. car parking spaces, which complies closely with KMBC's maximum standard for B2 Use (maximum 103no. spaces based on 4,645 sqm floor area).
- 4.4.3 The proposed car parking provision includes 5 disabled spaces, which is equivalent to a 5.2% provision, in accordance with KMBC's minimum standard. The disabled spaces are located close to the main entrance to the unit and include L-shaped hatched markings to improve vehicle accessibility.
- 4.4.4 As sufficient disabled parking will be provided close to the main entrance, the 2 existing disabled spaces within the exiting area of parking have been replaced with 3 standard spaces.

- 4.4.5 Electric Vehicle Charging Point (EVCP) infrastructure is proposed within the car park, including 9no. full EVCP spaces and a further 18 'cable-enabled' spaces.
- 4.4.6 The car park includes 4no. motorcycle parking spaces, which complies reasonably closely with KMBC's minimum standard for B2 Use.
- 4.4.7 Cycle parking is proposed within a secure and covered store located close to the main entrance to the unit. The store will accommodate 7no. Sheffield stands each, providing a total of 14no. secure cycle parking spaces, which exceeds KMBC minimum cycle parking standard for B2 use. The 3 existing cycle parking stands within the existing car park will also be retained.

5. Sustainable Accessibility

5.1 Introduction

- 5.1.1 Current Government policy and guidance places significant emphasis on the promotion of sustainable transport modes for all new developments. This forms part of a long-term strategy to reduce the reliance on private car trips.
- 5.1.2 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and outlines the important role that transport policies have to play in facilitating sustainable development.
- 5.1.3 Paragraph 105 states that *"significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making"*.
- 5.1.4 The 'Ensuring a Choice of Travel' SPD for Knowsley aims to encourage major developments to be located in areas that are accessible via sustainable transport methods including walking, cycling, and public transport.
- 5.1.5 Similarly, Policy CS7 in the 'Knowsley Local Plan Core Strategy' states that new developments should be: *'Located and designed to prioritise accessibility and sustainable modes of travel through a choice of walking, cycling, public transport'*.
- 5.1.6 This chapter considers accessibility via sustainable modes of transport to the proposed development site, including access by public transport, cycle and on foot.

5.2 Pedestrian Accessibility

- 5.2.1 Guideline walking distances provided in the Chartered Institution of Highways and Transportation (CIHT) document *'Guidelines for Providing for Journeys on Foot (2000)'* are shown in [Table 5.1](#).

Table 5.1 : CIHT Guideline Acceptable Walking Distances

Criteria	Town Centre	Commuting/Sight Seeing	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1,000m	800m
Preferred Maximum	800m	2,000m	1,200m

- 5.2.2 The CIHT guidelines shown in [Table 5.1](#) suggest that for commuting purposes, up to 500m is a desirable walking distance, up to 1,000m is considered an acceptable walking distance and 2,000m is the preferred maximum walking distance.
- 5.2.3 Appropriate walking distances are dependent upon the location of the specific development; in more remote locations, people will be more likely to be prepared to walk further to their end destination. Similarly, appropriate walking distances are also dependent upon the standard of existing pedestrian infrastructure provision, with further walking distances achievable in locations with extensive and high-quality pedestrian footways, crossings and pedestrianised areas.
- 5.2.4 As described previously, a network of existing footways are included on the local highway network surrounding the site, providing pedestrian access for all users, accounting for varying levels and types of disability.
- 5.2.5 [Photograph 5.1](#) and [Photograph 5.2](#) shows the pedestrian infrastructure surrounding the development site.

Photograph 5.1: Existing Footway Provision – South Boundary Road / Gale Road

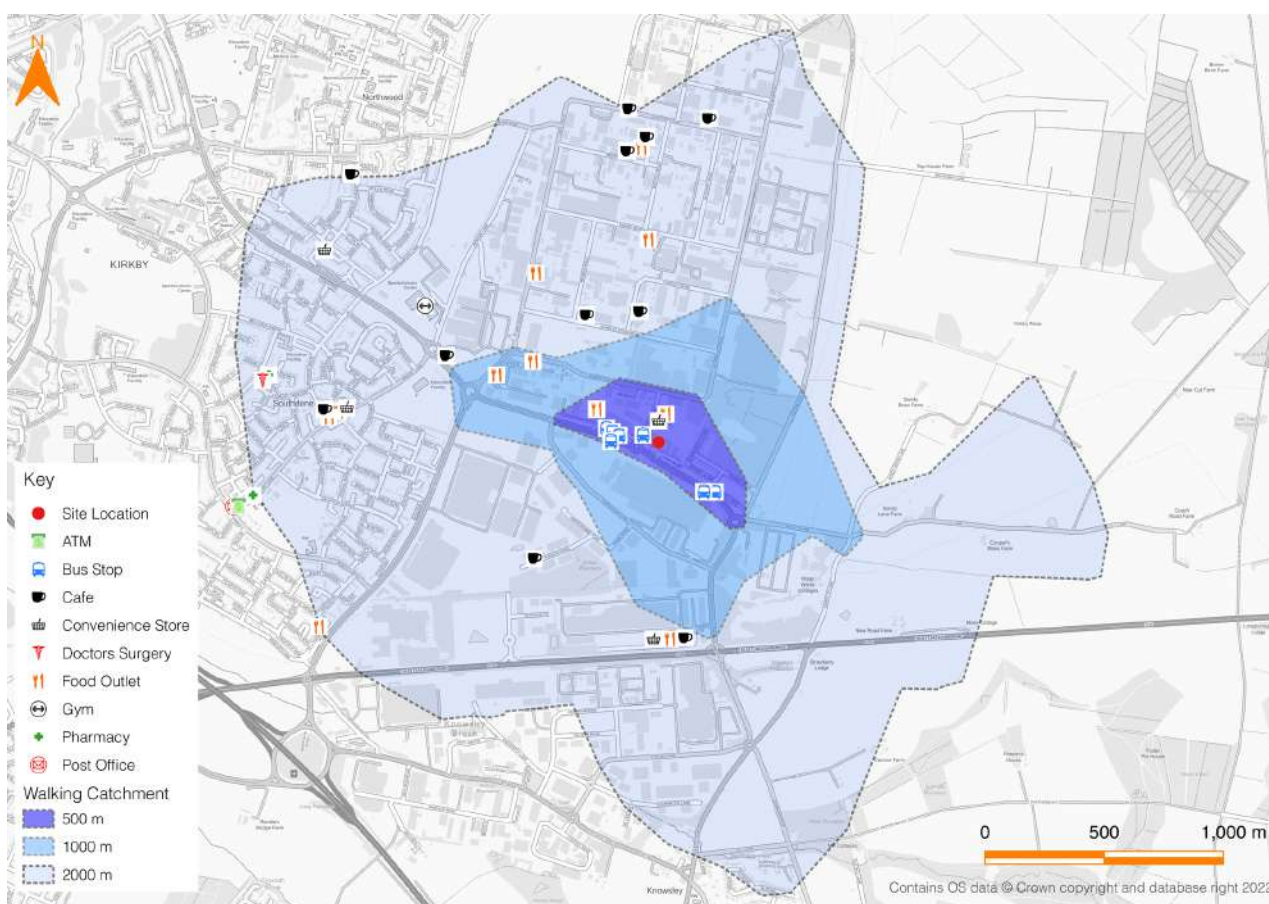


Photograph 5.2: Existing Footway Provision – South Boundary Road



5.2.6 Figure 5.1 presents the local amenities accessible within 500m and 1,000m walking catchments from the site, as specified in CIHT guidance for commuting purposes.

Figure 5.1 : Walking Catchment Area and Local Amenities



5.2.7 As shown in Figure 5.1, several bus stops are located within a 500m walking catchment, as well as food outlets and a convenience store. Additional food outlets are available within a 1,000m walking catchment from the site, with a 2,000m walking catchment providing cafes, a gym and a doctor's surgery.

5.2.8 Table 5.2 provides an indication of the distances and approximate walking times to a selection of local amenities. The distances have been measured from the access to the site; the times are based on an average walking speed of 1.4 metres per second and do not allow for waiting time to cross junctions. All distances were measured from the centre of the site.

Table 5.2 : Local Amenities – Distances and Walking Times

Amenity	Distance	Average Walking Time
Bus stop on Gale Road (s/b)*	30m	<1 minute
Bus stop on Gale Road (n/b)	100m	1 minute
Bus stop on South Boundary Road w/b	100m	1 minute
SPAR Convenience Shop**	110m	1 minute
Post Office at SPAR Convenience Shop**	110m	1 minute
ATM at SPAR Convenience Shop**	110m	1 minute
The Healthy Kitchen Takeaway**	160m	2 minutes
Bus stop on South Boundary Road e/b	240m	3 minutes
Subway Sandwich Shop	850m	10 minutes
Costa Coffee Shop	900m	11 minutes
David Lloyd Gym Knowsley	1.1km	13 minutes
<i>*Bus stop to be relocated to Gores Road</i> <i>**Key amenity identified within BREEAM 2018 standards</i>		

5.2.9 As shown in Table 5.2, a range of amenities are accessible within a 500m walking catchment from the site. These including the northbound bus stop on Gale Road within c.100m (1-minute walk), a convenience store and Post Office within c.110m (1-minute walks) and several bus stops on South Boundary Road within c.240m (3-minute walk).

5.2.10 Several food outlets and cafes are accessible within a reasonable walking catchment, including the Healthy Kitchen Takeaway within c.160m (2-minute walk), Subway sandwich shop within c.850m (10-minute walk) and a Costa coffee shop within c.900m (11-minutes).

5.2.11 The development is connected to local amenities via a network of good quality footways with dropped kerbs, signalised crossing points and good quality surfaces. This provides sufficient access to all uses, including those with various forms of disability. It has therefore been demonstrated that the site is well-placed in terms of pedestrian connectivity, with walking representing a realistic alternative to car trips.

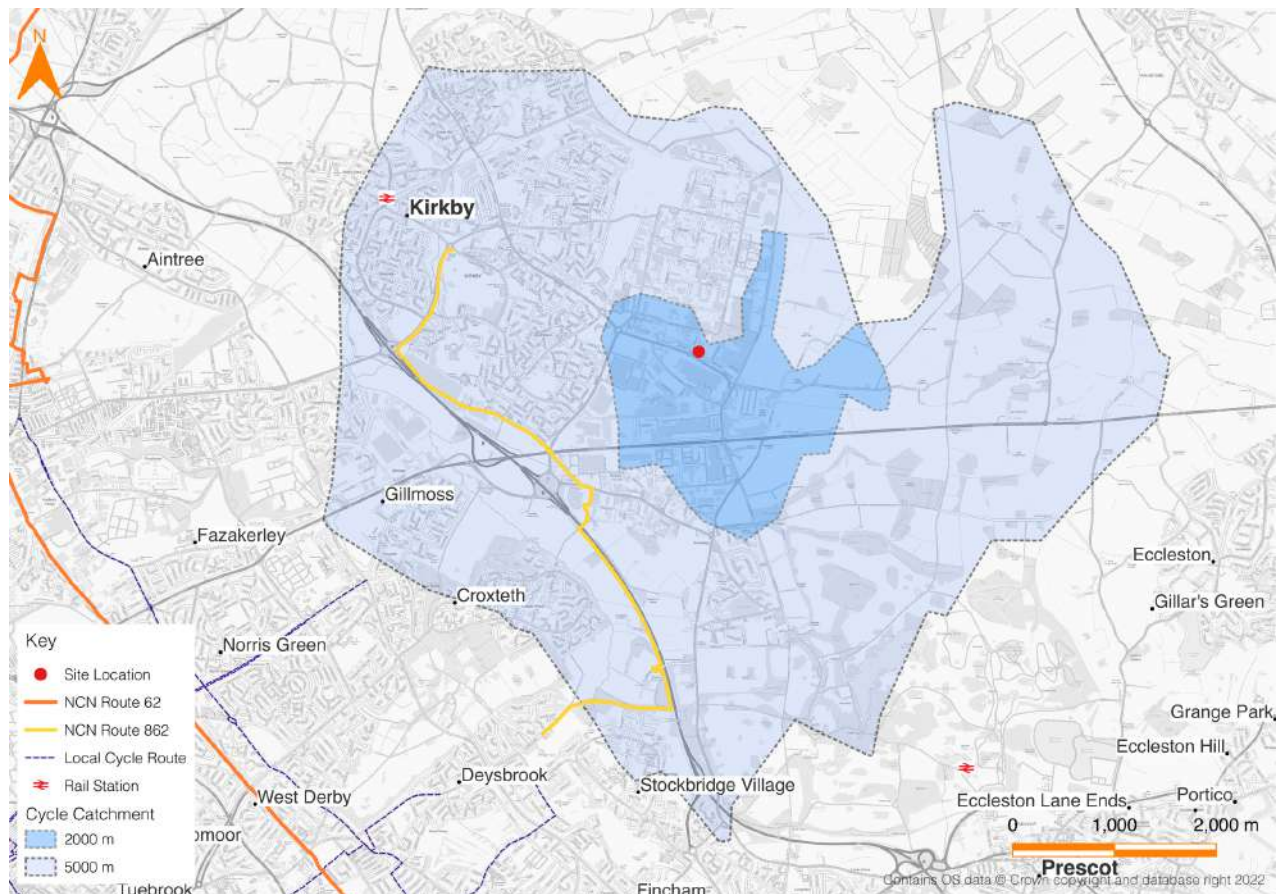
5.3 Cycle Accessibility

5.3.1 As with pedestrian accessibility, the level of a site's cycle accessibility depends upon a combination of the distance from local amenities and the standard of existing cycle infrastructure. It should, however, be noted that that cycle infrastructure can include facilities shared with vehicles and pedestrians as well as dedicated cycle infrastructure.

5.3.2 In respect of acceptable cycle distances, 'Local Transport Note 1/20: Cycle Infrastructure Design', published by the DfT, states that *'two out of every three personal trips are less than five miles in length - which is an achievable distance to cycle for most people'*.

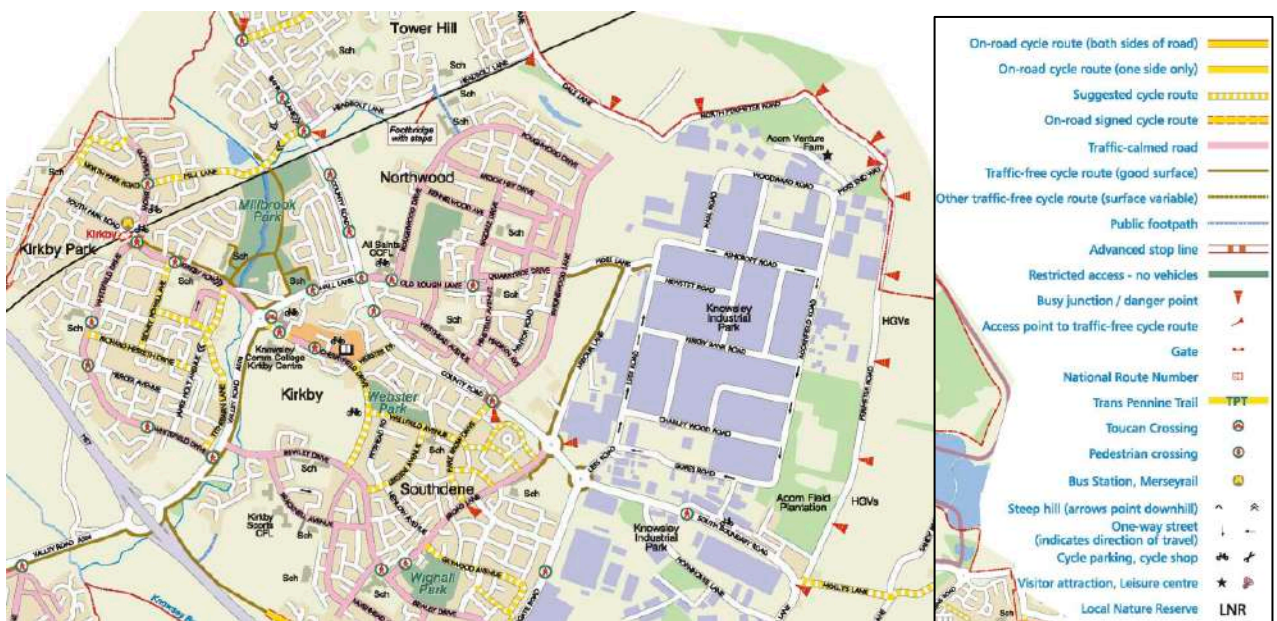
5.3.3 Figure 5.2 presents the cycling catchment area around the proposed development site for 2km and 5km.

Figure 5.2 : Cycling Catchment Area



- 5.3.4 As shown in **Figure 5.2**, Kirkby Town Centre and Gillmoss are located within the 5km cycling catchment. Kirkby Rail Station is also within a 5km cycling catchment, c.3.4km northwest of the development site.
- 5.3.5 NCN Route 862 is accessible within a 5km cycling catchment, providing a cycle route between Kirkby and Deysbrook to the west of the site.
- 5.3.6 In addition to NCN cycle routes, there are also local cycle routes available in the area, as shown in **Figure 5.3**.

Figure 5.3 : Local Cycle Routes (source: KMBC)



- 5.3.7 As discussed previously, a shared pedestrian footway/ cycleway is available along South Boundary Road which can be easily utilised by staff and visitors at the development site.
- 5.3.8 In addition, as described previously, 20 secure cycle parking spaces are proposed at the site which will be available to staff and visitors.
- 5.3.9 Considering the close proximity of local cycle routes, accessibility to local areas and proposed secure on-site cycle parking, cycling could be a reasonable method of travel for staff, particularly as an alternative to private car trips.

5.4 Public Transport Services

Local Bus Services

- 5.4.1 The CIHT document *'Buses in Urban Developments'* (2018) recommends a maximum walking distance of up to 300m to bus stops on 'less frequent routes' (< 12-minute frequency), which is equivalent to a 4-minute walk based on 1.4m/s walking speed.

5.4.2 The existing bus stops on South Boundary Road are located within 300m from the development site. As described previously, the closest existing bus stop to the site on Gale Road will be relocated to Gores Road to facilitate the upgraded access junction.

5.4.3 Table 5.3 provides a summary of routes and times of local bus services accessible from South Boundary Road.

Table 5.3 : Local Bus Services – South Boundary Road

Service No.	Route	Approx. Frequency (buses / hour)				
		AM	Off-Peak	PM	Sat	Sun
17	Liverpool City Centre – Knowsley Industrial Park	2	1	2	1	1
19	Knowsley Industrial Park - Kirkby - Liverpool City Centre	<1	No services	No services	<1	<1
97A	Kirkby – Knowsley Industrial Park (circular)	<1	No services	<1	No services	No services
133	Kirkby - Waterloo	<1	0	1	<1	No services
217/217A	Kirkby - Halewood	3	3	2	2	1
289	St. Helens - Kirkby	No services	No services	No services	1	No services
297	Kirkby - St. Helens	<1	<1	<1	No services	No services
827	Old Swan – Gale Road	<1	No services	No services	No services	No services
897	Huyton Industrial Estate – Knowsley Industrial Estate	<1	No services	No services	No services	No services
899	Page Moss – Kirkby (circular)	1	1	1	No services	No services

5.4.4 As shown in Table 5.3, regular bus services are available from South Boundary Road, providing access to Liverpool City Centre, Halewood, St. Helens and Kirkby.

5.4.5 The number and frequency of services throughout the week demonstrates that bus travel is a realistic method of travel for future employees, particularly as an alternative to private car trips.

Rail Services

- 5.4.6 The closest rail station to the site is Kirkby Station c.3.4km northwest of the site, and within the 5km cycle catchment.
- 5.4.7 Kirkby Rail Station is also accessible via the local bus route network, including the 97/97A, 133 and 217 all from South Boundary Road. The bus journey takes approximately 20 minutes.
- 5.4.8 A summary of the direct rail services from Kirkby Station are highlighted in [Table 5.4](#).

Table 5.4 : Direct Rail Services – Kirkby Station

Destination	Approx. Frequency	Approx. Journey Time
Liverpool Central	4 services / hour	20 minutes
Blackburn (via Manchester Victoria)	1 service / hour	2 hours 30 minutes

- 5.4.9 As shown in [Table 5.4](#), up to 4 services per hour (a train every 15 minutes) are available from Kirkby Station to Liverpool City Centre, Blackburn and Manchester Victoria. More local stations are also accessible via these routes, including Fazakerley, Kirkdale and Orrell stations.
- 5.4.10 This demonstrates the high accessibility of the site via rail, specifically as an alternative to private car trips.

5.5 Minimum Accessibility Standard Assessment (MASA)

- 5.5.1 In accordance with KMBC's '*Ensuring a Choice of Travel*' SPD, a Minimum Accessibility Standard Assessment (MASA) has been undertaken for the site.
- 5.5.2 A summary of the MASA results is shown in [Table 5.5](#) and the full questionnaire is attached in [Appendix H](#).

Table 5.5 : MASA Assessment

Mode	Minimum Score Required	Score Achieved
Access on Foot	2	2
Access by Cycle	2	4
Access by Public Transport	4	3
Vehicle Access and Parking	1	3
Total	9	12

5.6 Promoting Sustainable Travel via Travel Plans

5.6.1 It should be noted that this TA has been produced in parallel with a Framework Travel Plan (FTP) report, which outlines initial strategies and measures for encouraging employees and visitors to travel by sustainable modes, rather than single occupancy car trips.

5.7 Summary

5.7.1 In summary, it has been shown that the site is highly accessible via sustainable modes of travel, including walking, cycling and public transport - thereby offering a realistic and convenient alternative to single occupancy car trips. This includes the following:

- Existing footways on the local highway network, providing safe and direct walking routes to local bus services and local amenities;
- The development site is located within close proximity of local amenities, including food outlets, cafes and convenience stores;
- Access to national and local cycle routes, providing designated routes to a range of local destinations;
- The nearest bus stops are located on South Boundary Road and Gale Road, which provide regular weekday bus services to and from the site;
- Kirkby Rail Station is located c.3.4km from the site, providing direct train services to Liverpool Central, Manchester Victoria and Blackburn with intermediate stops at local destinations; and
- The site earns a MASA score of 12, which exceeds the minimum requirements.

5.7.2 Overall, the development site benefits from accessibility to a range of sustainable modes of travel, including walking routes, cycle routes and public transport services, which collectively offer an alternative to private car trips.

5.7.3 The site is therefore compliant with the (NPPF) which states in paragraph 110 that: *'in assessing sites that may be allocated for development in plans, or specific application for development, it should be ensured that: a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location'.*

5.7.4 Furthermore, the proposals accord with paragraph 112 of the NPPF which states that: *'applications for development should: a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use'.*

6. Trip Generation and Traffic Impact

6.1 Trip Generation

- 6.1.1 To quantify the traffic impact of the proposed development on the local highway network, a trip generation exercise has been undertaken for the proposed development. Vehicle trip rates have been derived from the TRICS database (v7.9.3) for 'total vehicles' and 'OGVs' during the network peak hours.
- 6.1.2 The network AM peak hour (08:00 – 09:00) and PM peak hour (16:00 – 17:00) have been derived from the ATC survey data recorded on Gale Road.
- 6.1.3 In order to assess both B2 and B8 uses at the proposed unit, separate trip generation exercises have been undertaken for each use, based on the '*Employment - Industrial Unit*' and '*Employment – Warehousing (Commercial)*' land use category respectively.
- 6.1.4 TRICS surveys undertaken in Ireland and during the COVID-19 pandemic have been removed from the datasets, as the request of KMBC Highways.

Industrial Unit

- 6.1.5 Based on the '*Employment - Industrial Unit*' land use category, the trip rates during the network peak hours are summarised in [Table 6.1](#), with the full TRICS outputs attached in [Appendix I](#).

Table 6.1 : TRICS Trip Rates – Industrial Unit (vehicles)

	AM Peak Hour (08:00-09:00)			PM Peak Hour (16:00-17:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles (per 100 sqm)	0.382	0.077	0.459	0.060	0.313	0.373
OGVs (per 100 sqm)	0.033	0.016	0.049	0.008	0.011	0.019

- 6.1.6 The peak hour trip generation for the proposed development (4,645 sqm) is summarised in [Table 6.2](#).

Table 6.2 : Trip Generation – Industrial Unit (vehicles)

	AM Peak Hour (08:00-09:00)			PM Peak Hour (16:00-17:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles (4,645 sqm)	18	4	22	3	15	18
OGVs (4,645 sqm)	2	1	3	1	1	2

6.1.7 As shown in [Table 6.2](#), when assessed using '*Employment - Industrial Unit*' trip rates, the proposed development is expected to generate a total of **22** two-way trips in the AM peak including 3 OGV trips, and a total of **18** two-way trips in the PM peak including 2 OGV trips.

Warehousing (Commercial)

6.1.8 Based on the '*Employment – Warehousing (Commercial)*' land use category, trip rates during the network peak hours are summarised in [Table 6.3](#), with the full TRICS outputs attached in [Appendix J](#).

Table 6.3 : TRICS Trip Rates – Warehousing (vehicles)

	AM Peak Hour (08:00-09:00)			PM Peak Hour (16:00-17:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles (per 100 sqm)	0.207	0.122	0.329	0.123	0.191	0.314
OGVs (per 100 sqm)	0.044	0.061	0.105	0.055	0.043	0.098

6.1.9 The peak hour trip generation for the proposed development (4,645 sqm) is summarised in [Table 6.4](#).

Table 6.4 : Trip Generation – Warehousing (vehicles)

	AM Peak Hour (07:00-08:00)			PM Peak Hour (16:00-17:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles (4,645 sqm)	10	6	16	6	9	15
OGVs (4,645 sqm)	2	3	5	3	2	5

6.1.10 As shown in [Table 6.4](#), when assessed using '*Employment – Warehousing (Commercial)*' trip rates, the proposed development is expected to generate a total of **16** two-way trips in the AM peak including 5 OGV trips, and a total of **15** two-way trips in the PM peak including 5 OGV trips.

6.2 Traffic Impact

- 6.2.1 Based on the worst-case '*Employment - Industrial Unit*' trip rates, the proposed development is expected to generate a total of **22** two-way vehicle trips in the AM network peak and a total of **18** two-way trips in the PM network peak, equivalent to approximately 1 trip every 3-minutes when average over the peak hours.
- 6.2.2 Therefore, it can be reasonably concluded that the proposed development will have a low impact on the local highway network, and not a '*severe*' impact which is the threshold stated by NPPF (Paragraph 111) under which development should not be refused on highways grounds.
- 6.2.3 To provide further evidence that the proposed development will have low impact on the local highway network, a detailed capacity impact assessment of the proposed access junction on Gale Road has previously been undertaken during the pre-application consultation with KMBC Highways, as shown in Technical Note (TN01), dated 27th July 2022, attached in [Appendix A](#).
- 6.2.4 The capacity assessment modelling demonstrated that the proposed access junction on Gale Road will operate comfortably within capacity and with negligible queuing on all arms, including the right-turn movement into the development site. The PICADY modelling results attached in [Appendix K](#).
- 6.2.5 The capacity assessment is considered robust as it has assessed slightly more development trips and has also assumed that all trips will route via the Gale Road access, whereas some trips may route via the Admin Road access.

7. Summary and Conclusion

7.1 Summary

- 7.1.1 Mode Transport Planning has been appointed by Redsun Projects Ltd to provide transport planning and highways advice in relation to a planning application for an industrial development on the East Hub site, located on South Boundary Road on Knowsley Business Park.
- 7.1.2 The proposed development will comprise a single 4,645sqm industrial unit (Use Class B2/ B8), with on-site car parking provision, cycle parking and a service yard. Vehicular access to the development site is proposed via an upgraded access junction on Gale Road, and the existing access from Admin Road, via South Boundary Way.
- 7.1.3 The development site, including the existing area of car parking accessed via Admin Road, is under the ownership and control of the Applicant.
- 7.1.4 The analysis in this report has been carried out in accordance with current policy, guidance, and best practice. The results demonstrate that:
- In accordance with local and national policy, the site is accessible by a range of sustainable modes of transport, including walking, cycling, public transport. These travel options provide a realistic alternative to single occupancy car travel, particularly for commuting trips;
 - Following a review of the most recent PIC records, there is no evidence to show that the proposed development will have a detrimental impact on highway safety;
 - The proposed on-site parking provision complies closely with KMBC's adopted parking standards;
 - The upgraded access junction on Gale Road and visibility splays comply with the relevant highway design standards;
 - Swept path analysis demonstrates that a 16.5m articulated HGV can enter and exit the site in a forward gear, and manoeuvre safely within the service yard;
 - The proposed development is expected to generate **22** two-way trips during the AM network peak period and **18** two-way trips during the PM network peak hour. This equates to 1 trip every 3 minutes when averaged over the peak hours;
 - Overall, it can be concluded that the proposed development will not have a severe impact, which is the threshold stated by NPPF (Paragraph 111) under which development should not be refused on highways grounds.

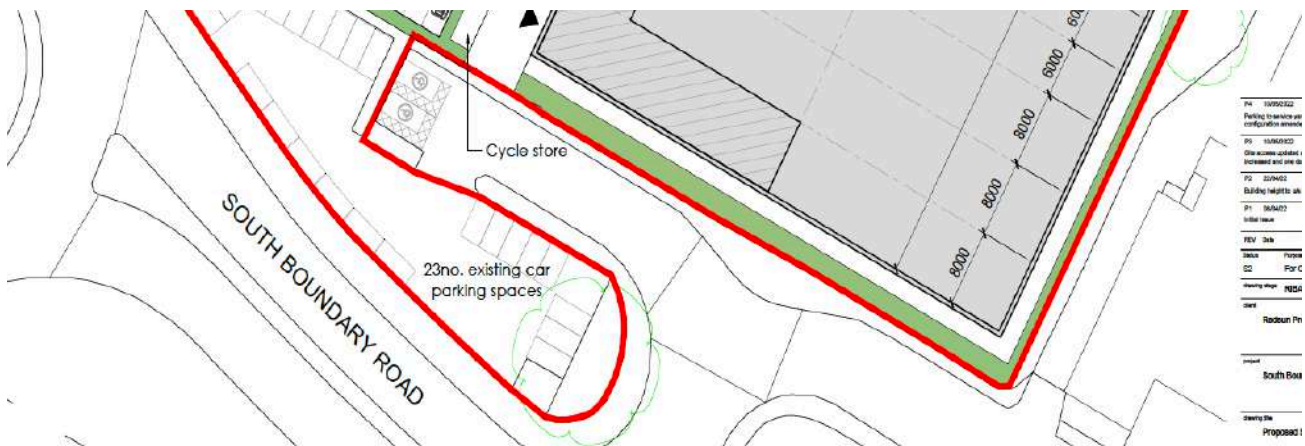
7.2 Conclusion

- 7.2.1 In conclusion, based on the evidence and analysis within this report, there should be no highways or transport planning reasons that prevent this planning application from being approved.

APPENDICES

APPENDIX A

KMBC Highways & Merseytravel Pre-Application Correspondence



The proposed development currently comprises a 4,645 sqm unit, with on-site parking provision and service yard, and vehicular access from Gale Road. Although the site has been cleared, there has relatively recently been a previous industrial use at the site.

Based on scale of development, and as set out in KMBC's pre-app comments (attached), it is our intention to produce a Transport Assessment and Framework Travel Plan to accompany the planning application. I have set out the scope of the Transport Assessment below for your approval:

Existing conditions and accident data – description of the site location and local highway network, review of personal injury collision data based on the most recent 5 year period (data will be obtained from KMBC, as instructed in pre-app);

Development Proposals – full description of the development proposals, vehicular access arrangement (including visibility splays based on recorded 85th percentile speeds), internal traffic operation and impact on the existing bus stop (following discussions with Merseytravel);

Sustainable accessibility – review of existing access opportunities to the site by walking, cycling and public transport, including an accessibility assessment (MASA) as detailed in Knowsley's SPD 'Ensuring a Choice Travel';

Car Parking – assess car and cycle parking standards against adopted parking standards set out in Knowsley's SPD 'Ensuring a Choice Travel';

Swept Path Analysis – swept path analysis for a 16.5m HGV at the site access junctions and internally within the site including the service yard;

Trip Generation – trip generation exercise will be undertaken for the proposed use, based on trip rates derived from the TRICS database, specifically using the 'Industrial Unit' and 'Warehousing (Commercial)' land use category. The TRICS output is attached for approval. These are consistent with the trip rates used to assess the Gale Road access junction previously.

Traffic Impact Assessment – the proposed access junction on Gale Road will be assessment using PICADY (following the same methodology used in TNO1 (dated 27th July 2022) submitted to KMBC Highways. Given the previous industrial uses at the site, it is not expected that the development will warrant the need for any off-site traffic impact modelling.

In addition to the TA, a separate Framework Travel Plan document will be produced to promote travel by sustainable modes (walking, cycling and public transport) and reduce single-occupancy car trips.

I would be grateful if you could provide confirmation that the TA scope is acceptable. If you have any queries or need any further information please let me know.

Kind regards

Michael.

Michael Anthony MCIHT
Associate Director

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📠 07841 572 743
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From: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Subject: RE: External Mail: East Hub, Knowsley (22/00028/PREAPP)
Date: 7 September 2022 at 15:13
To: Michael Anthony <michaelanthony@modetransport.co.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>, Morley, Anthony <Anthony.Morley@knowsley.gov.uk>



Hi Michael,

We have been discussing this again this morning to consider your latest email. In short, we are of the opinion that the access is not the right location, and we haven't been given any indication as to why the other highway frontage cannot be used. However, on the basis of the information provided thus far we wouldn't object to the access proposal in principle.

I trust this is the response you were hoping for.

Kind regards
Jon

From: Michael Anthony <michaelanthony@modetransport.co.uk>
Sent: 07 September 2022 14:53
To: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>
Subject: Re: External Mail: East Hub, Knowsley (22/00028/PREAPP)

Hi Jon,

Apologies for chasing you on this, but have you had an opportunity to consider the further information set out in my email below?

Our client is looking to resolve this matter and so we would be grateful if you could provide your further thoughts.

Any queries please let me know.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director

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mode transport planning

106 Albert Mill, 10 Hulme Hall Road, Manchester, M15 4LY

keep up with mode:



Icon Description automatically generated

Mode Transport Planning (Manchester) Limited | Registered in England number 10228306

From: Michael Anthony <michaelanthony@modetransport.co.uk>

From: Michael Anthony <michaelanthony@modetransport.co.uk>

Date: Wednesday, 31 August 2022 at 12:36

To: "Parry, Jon" <Jon.Parry@knowsley.gov.uk>

Cc: "Morley, Anthony" <Anthony.Morley@knowsley.gov.uk>, "richard@langtondevelopmentservices.co.uk" <richard@langtondevelopmentservices.co.uk>, Mark Edwards <markedwards@modetransport.co.uk>

Subject: Re: External Mail: East Hub, Knowsley (22/00028/PREAPP)

Hi Jon,

Thank you for your further comments. The access junction drawing has been updated accordingly (Drawing No. J32-6156-PS-001 Rev C), and now shows the following:

- 2.4m x 50.2m visibility splay to the north, in accordance with MfS2 for an 85th percentile speed of 31.4mph;
- 2.4m x 47.2m visibility splay to the south, in accordance with MfS2 for an 85th percentile speed of 30.1mph (3 Axle Rigid);
- 47.2m stopping sight distance from a stationary HGV waiting at the access junction centreline, in accordance with MfS2 for an 85th percentile speed of 30.1mph (3 Axle Rigid).

Please note that the access drawing is based on topographical survey data collected along Gale Road.

The analysis shows that stopping sight distances can be achieved in both directions from the access junction and also from a stationary right-turning HGV, including for the fastest 85th percentile speed recorded for an HGV on the exit arm to the roundabout. It may also be worth reiterating that negligible right-turn queuing is expected at the junction, as indicated by the junction modelling.

I would be grateful if you could review the further data presented, and if satisfied confirm that the proposed access junction from Gale Road is acceptable, in principle.

If you have any queries please let me know.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director



0161 464 9495



07841 572 743



michaelanthony@modetransport.co.uk

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From: "Parrv. Jon" <Jon.Parry@knowsley.gov.uk>

Date: Tuesday, 30 August 2022 at 09:57

To: Michael Anthony <michaelanthony@modetransport.co.uk>

Cc: "Morley, Anthony" <Anthony.Morley@knowsley.gov.uk>, "richard@langtondevelopmentservices.co.uk" <richard@langtondevelopmentservices.co.uk>

Subject: RE: External Mail: East Hub, Knowsley (22/00028/PREAPP)

Hi Michael,

I note all of the new information you provide below and whilst I have witnessed a number of HGVs travelling well in excess of 30mph into Gale Road from South Boundary Road, it is a matter of fact that the data you have provided show that on balance the majority of the traffic is travelling at or about the speed limit with an overall weekly average 85th %ile of 31.4mph at one ATC location, and one of the HGV classes exceeding 30mph at the other.

The data also show that at this location, approximately 25% of traffic is HGV, which is unsurprising in such a location. As you will be aware from Manual for Streets 2, HGV stopping distances should be considered specifically when they account for greater than 5% of traffic. Using the recommended HGV deceleration rates of 3.75m/s/s, the stopping distance at 30mph is 50.8m which exceeds the distance available to the back of a stationary large HGV vehicle, regardless of whether they wait at the location shown in your swept path, or, more likely, at or prior to the proposed centreline of the site access road markings.

I'm afraid I still therefore remain to be convinced that the access proposal is safe and appropriate.

Kind Regards
Jon

From: Michael Anthony <michaelanthony@modetransport.co.uk>

Sent: 25 August 2022 17:08

To: Parry, Jon <Jon.Parry@knowsley.gov.uk>

Cc: Mark Edwards <markedwards@modetransport.co.uk>; Tom Booton <Tom@redsunprojects.co.uk>; Hunt, Andrew <Andrew.Hunt@knowsley.gov.uk>; Dan O'Hara <DOhara@aeoarchitects.com>; Nick Wightman <nick@redsunprojects.co.uk>; Morley, Anthony <Anthony.Morley@knowsley.gov.uk>; Richard Tipping <richard@langtondevelopmentservices.co.uk>

Subject: Re: External Mail: East Hub, Knowsley (22/00028/PREAPP)

Hi Jon,

Thanks again for your further comments.

As requested, a further ATC survey has been undertaken on Gale Road which has been located as close as is possible to the roundabout with South Boundary Road (see image below) to accurately record vehicle speeds. The survey company advised that this is closest the tubes could be positioned to the roundabout to get valid results. Any closer and vehicles would be travelling over the tubes at an angle and the results would be less reliable.





The full ATC survey output is attached for reference, but in summary the data shows that the overall northbound 85th percentile speed is 29.6mph. As requested, 85th percentile speeds classified according to vehicle type have also been provided – see below table:

Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified							Double Road Train
					3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic		
16.2	32.2	30	27	29	30.1	28.8	-	29.5	26	24.3	-	

The data shows that the 85th percentile speeds on the exit arm to the roundabout are at or below 30mph for all vehicle types (except motorcycles). The survey data shows that large HGVs are traveling below 30mph (e.g. 6 axle articulated HGV has an 85th percentile speed of 24.3mph).

On this basis, it is reasonable to expect that if an HGV is traveling at less than 30mph within a 30mph speed limit, they wouldn't be traveling at a higher speed before this point and then decelerating on the exit arm of a roundabout to below the speed limit. Instead, vehicles will be accelerating as they exit the roundabout and the previous ATC survey confirms this as the speeds increase along the site frontage to an 85th percentile speed of 31.4mph just north of the proposed access junction.

The comparison between the two ATC surveys confirm that vehicles are, or have, accelerated along Gale Road when exiting the roundabout at the point of the original ATC location. Based on these results, it is reasonable to conclude that vehicles are not travelling at 40mph through the roundabout and then decelerating at the change in speed limit to 30mph. They would actually be travelling at speeds below what has been recorded at the latest ATC location.

Based on the recorded speeds, achievable forward visibility from the roundabout northbound along Gale Road and negligible queuing expected at the junction, the evidence further confirms that proposed access junction location and arrangement is acceptable.

I would be grateful if you could review the further data presented, and if satisfied confirm that the proposed access junction from Gale Road is acceptable, in principle. A Stage 1 Road Safety Audit will be undertaken as part of the planning application.

Your comments regarding the centreline are noted. We have obtained topographical survey data which accurately shows the centreline markings, and our drawings will be updated accordingly.

If you have any queries please let me know.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director

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☐ 07841 572 743

☐ michaelanthony@modetransport.co.uk

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From: "Parry, Jon" <Jon.Parry@knowsley.gov.uk>
Date: Friday, 12 August 2022 at 11:51
To: Richard Tipping <richard@langtondevelopmentservices.co.uk>, Michael Anthony <michaelanthony@modetransport.co.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>, Tom Booton <Tom@redsunprojects.co.uk>, "Hunt, Andrew" <Andrew.Hunt@knowsley.gov.uk>, Dan O'Hara <DOhara@aewarchitects.com>, Nick Wightman <nick@redsunprojects.co.uk>, "Morley, Anthony" <Anthony.Morley@knowsley.gov.uk>
Subject: RE: External Mail: East Hub, Knowsley (22/00028/PREAPP)

Hi Richard,

Thanks for your email. I am happy to continue the dialogue as highways is fully committed to supporting development within the Borough, which includes trying to solve such challenges. However, unfortunately this isn't simply a case of ticking the boxes to address my queries so that we can move on to a full application. At this stage I have raised a genuine safety concern, and therefore further assessment is required before we could consider accepting the proposals. Michael and his team will be doing everything they can to assist your scheme proposals, and to this end, as you know, they have suggested a further, more appropriately located, speed survey, which I support. Added to this, I would go further to say that they/you may wish to consider a stage 1 safety audit to flush out any further issues and offer an independent third party examination of the proposed access arrangements.

Michael, I note your swept path drawing, however, you will see that the centreline shown does not reflect that which exists on site. The approach lane deflection for traffic arriving at the roundabout means that the centreline is pushed west which reduces the width of the opposing lane.

We note that you have already proceeded to put a new traffic counter in place, although it should have been position close to the roundabout, at the point the decision would be made to commence braking for a stationary vehicle in the carriageway ahead waiting to turn into the site. When you present the data, we would like to see the 85th %ile speeds classified according to vehicle type please.

I look forward to hearing from you.

Kind Regards
Jon

From: Richard Tipping <richard@langtondevelopmentservices.co.uk>
Sent: 10 August 2022 16:22
To: Michael Anthony <michaelanthony@modetransport.co.uk>; Parry, Jon <Jon.Parry@knowsley.gov.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>; Tom Booton <Tom@redsunprojects.co.uk>; Hunt, Andrew <Andrew.Hunt@knowsley.gov.uk>; Dan O'Hara <DOhara@aewarchitects.com>; Nick Wightman <nick@redsunprojects.co.uk>; Anthony Morley <Anthony.Morley@knowsley.gov.uk>

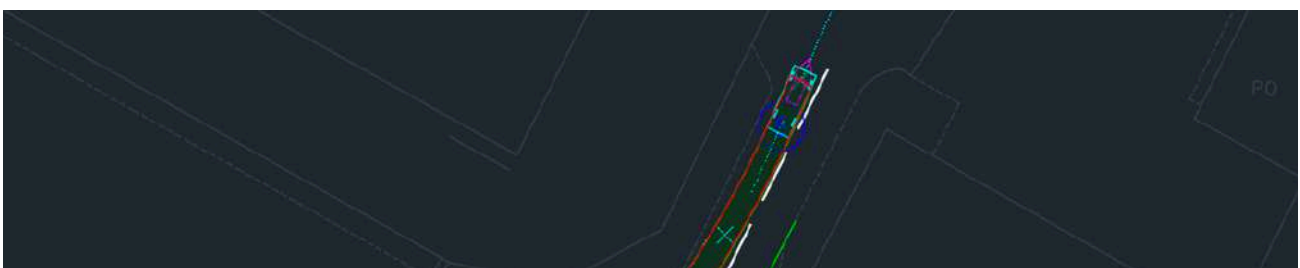
Subject: RE: External Mail: East Hub, Knowsley (22/00028/PREAPP)

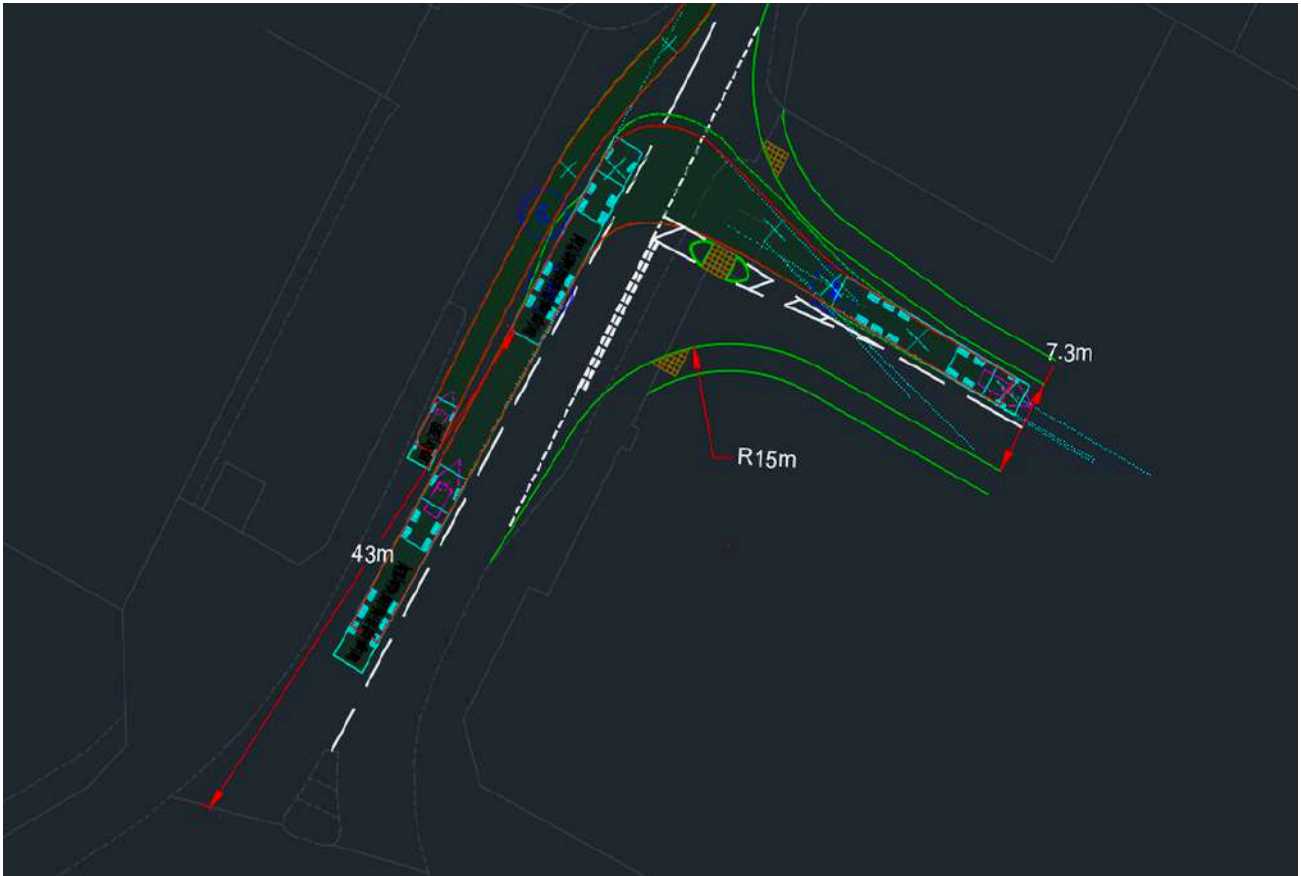
In support of Michael's e-mails please can you confirm if this approach as outline is agreeable and will fully satisfy your remaining queries. If we need to do anything else in support of your review before proceeding with the pre-app please do let us know at the earliest opportunity.

Regards,

M: 07368 379226

Regarding the queuing capacity on Gale Road while an HGV is waiting to turn right into the site – we have measured this at approximately 47m from the back of the HGV to the roundabout (see screenshot below). It is not expected that an HGV will give way to a vehicle turning right out of the site. The proposed junction design (including central island) and tracking provided in our Technical Note shows that this is not necessary for the junction to operate. Therefore queuing capacity along Gale Road has been assessed on the basis that the junction (and driver behaviour) operates normally. The tracking below also shows that a car can pass a stationary HGV waiting to turn right into the site.





We will wait to see the results of the speed survey closer to the roundabout, but it should be reiterated that visibility splays in accordance with MfS can be achieved in both directions from the proposed access junction.

I trust this further analysis will be acceptable to inform further discussions, but if you have any other comments or queries please let me know.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director



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From: "Parry, Jon" <Jon.Parry@knowsley.gov.uk>
Date: Tuesday, 9 August 2022 at 16:23
To: Michael Anthony <michaelanthony@modetransport.co.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>, Richard Tipping <richard@langtondevelopmentservices.co.uk>, Tom Booton <Tom@redsunprojects.co.uk>, "Hunt, Andrew" <Andrew.Hunt@knowsley.gov.uk>, Dan O'Hara <DOhara@aeoarchitects.com>, Nick Wightman <nick@redsunprojects.co.uk>, "Morley, Anthony" <Anthony.Morley@knowsley.gov.uk>
Subject: RE: External Mail: East Hub, Knowsley (22/00028/PREAPP)

Hi Michael,

Thanks for providing your technical note. It is clear from what you have sent that there would not be a highway capacity issue with the proposed access from Gale Road. If my comments weren't clear, I must apologise for this, but, my concerns were primarily around highway safety. The vehicles, particularly the HGVs, travelling along South Boundary Road (west), turning left into Gale Road often do so at considerable speed as they leave the 40mph speed limit and enter the 30mph road. The ATC data you provided recorded the 85th percentile speeds at or just below 30mph, however, this was situated after the proposed access point location, by which point they have tended to slow down somewhat, particularly as the road narrows and frontage activity increases towards the PFS. My concern is that the rear of a 16.5m HGV waiting to turn right into the site is situated approximately would be less than 30m from the circulatory carriageway (if, say, waiting to let a vehicle turn right out of the proposed site access), with laden HGVs visiting the wider Industrial Park turning into Gale Road approaching at or close to 40mph.

Once again, I would recommend exploring access options from Admin Road.

Kind Regards
Jon

On behalf of Knowsley MBC Highways.

From: Michael Anthony <michaelanthony@modetransport.co.uk>
Sent: 27 July 2022 16:01
To: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>; Richard Tipping <richard@langtondevelopmentservices.co.uk>; Tom Booton <Tom@redsunprojects.co.uk>; Hunt, Andrew <Andrew.Hunt@knowsley.gov.uk>; Dan O'Hara <DOhara@aeoarchitects.com>; Nick Wightman <nick@redsunprojects.co.uk>
Subject: External Mail: East Hub, Knowsley (22/00028/PREAPP)

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Hi Jon,

Thank you for providing your pre-application comments in relation to the proposed industrial/ warehouse development at East Hub, Knowsley.

The attached Technical Note has been produced by Mode to specifically address concerns raised by KMBC Highways in relation to the proposed access from Gale Road. As detailed in the note, we have undertaken an ATC survey on Gale Road to record existing vehicle movements, a trip generation exercise for the proposed use and produced a PICADY model to assess the performance of the proposed access junction.

In summary, the junction modelling at the proposed site access confirms that there will be negligible queuing by right turning vehicles into the site during the peak hour periods and there is minimal potential for blocking back to South Boundary Road. Full details of the access junction assessment are set out in the attached note.

Based on the evidence set out in the note, it is respectfully requested that KMBC Highways reconsider the proposed access junction from Gale Road and provide confirmation that the concerns raised in pre-application comments have been satisfactorily addressed.

If you need any further information or have any queries please let me know.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director

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☎ 07841 572 743

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Mode Transport Planning (Manchester) Limited | Registered in England number 10228306

Date:	15 th June 2022
To:	Andrew Hunt
Planning App. No:	22/00028/PREAPP
Proposal:	CONSTRUCTION OF 2NO. NEW INDUSTRIAL WAREHOUSES WITH ASSOCIATED OFFICE, CAR PARKING AND SERVICE YARD
Location:	Land Formerly Admin Buildings, South Boundary Road, Knowsley Industrial Park, Kirkby, Knowsley,

☒ Highway Pre-application Advice

Consideration is given to Land at South Boundary Road, Knowsley Business Park. According to the Pre-application Advice form, the proposals are said to be for a warehouse, which is taken to mean a building suitable for storage/distribution within Use Class B8.

In highway terms, when reviewing such a submission, assessment is given, but not limited to, the following considerations: adequacy of parking, loading and turning facilities associated with the proposed development; traffic generation from the development proposed, road access to the site of the development and the impact on Highway safety.

The main site access is shown to be located on Gale Road, which is a short, but busy stretch of road serving as one of the main accesses into Kirkby Industrial Park, and which as a result has a high proportion of HGVs. The proposed location of the access is coincident with a narrowing of the carriageway of Gale Road and is considered to be too close to the roundabout junction of South Boundary Road with Gale Road to prevent safety concerns. The site would attract slow moving or stationary HGVs waiting to perform the right turn manoeuvre into the site which could cause a hazard for vehicles entering Gale Road from South Boundary Road and/or backing up of traffic onto the circulatory carriageway of the roundabout itself. For this reason, it is considered that access should be taken from Admin Road, which in turn is served from South Boundary Road.

The applicant's attention is drawn to the Highway Adoption Records (<https://highways.knowsley.gov.uk/>) which shows that a portion of the proposed site is currently adopted highway. To develop this area of land, the highway would need to be stopped up under a s247 application (Town and Country Planning Act 1990), which is a process outside of the control of the Council. The process should be understood by the applicant, and further information can be found at the National Transport Casework Team. Ordinarily statutory undertakers will seek to have any equipment diverted, and it is recommended for enquiries to be made in this regard.

Adequacy of parking and turning facilities associated with the proposed development

The amount of parking required for industrial / business sites are set out in the Supplementary Planning Document (SPD) titled Ensuring a Choice of Travel. This document can be viewed by following the link below: <http://www.knowsley.gov.uk/pdf/TravelSPDLowRes.pdf>

B8 standards in this location would result in parking standards of 1 space per 45sqm being applied. This would result in circa 95 parking spaces being required for a total unit GFA of 4800 sqm. The proposals demonstrate 90 spaces can be provided, albeit with some shown in what is currently

adopted highway, including a number which served the former units on this site, and which are to be retained.

Turning areas within the service yard will need to be tracked using swept path software to ensure that 16.5m HGVs can turn around safely within the site. Swept path plans will also need to be provided to demonstrate that 16.5m HGVs can safely pass each at the site access / car park accesses, as well as on the internal carriageway.

Redundant accesses will be required to be closed.

An area for cycle parking is shown on the plans and based upon the floor area shown it will need to accommodate a minimum of 6 cycle spaces, which are covered and secure.

Transport Assessment

A Transport Assessment, will need to be provided with a planning application, the scope of which should be set out in a formal note provided to highways in advance for agreement.

Any accident data submitted with the Transport Assessment should be provided for the latest 5 years' worth of data and be purchased from Knowsley Council. Other 3rd party sources of accident data do not have the same level of detail which Knowsley Council data will provide to the applicant and as such they will not be accepted.

A MASA assessment, as found in Appendix B of the Supplementary Planning Document (SPD) Ensuring a Choice of Travel, will need to be completed as part as any accessibility assessment.

A Travel plan will also be required.

Informative

This pre-application highway advice does not indicate any formal support or decision by the Local Highway Authority. Any views or opinions are given without prejudice to the formal consideration of any planning application and are based on the details submitted and other available information sources. A formal highway decision on a proposal can only be given on the submission of a planning application after its full consideration in consultation with other interested parties as deemed appropriate by the Local Highway Authority. Please bear in mind that any subsequent changes to highway legislation, highway design guidance or highway policies may affect the advice given.

East Hub, Knowsley

Proposed Access Junction Assessment

Client:	Redsun Projects	Job No:	326156
Date:	27 July 2022	File Name:	TN01
Prepared by:	MA	Approved by:	ME

1. Introduction

1.1 Preamble

- 1.1.1 This Transport Note (TN01) has been prepared by Mode Transport Planning in response to pre-application comments raised by Knowsley Council (KMBC) Highways in relation to a proposed industrial development (Use Class B2/ B8) on the East Hub site off South Boundary Road on Knowsley Business Park (Ref: 22/00028/PREAPP).
- 1.1.2 KMBC Highways' pre-application consultation response, dated 15th June 2022, is attached in **Appendix A**. This note specifically addresses comments from KMBC Highways relating to the proposed site access on Gale Road.
- 1.1.3 The proposed access arrangement includes upgrading the existing access junction to provide a 7.3m wide access road, 15m kerb radii at the bell-mouth and pedestrian refuge island. The access junction centreline is located c.50m from the roundabout junction to the south, providing southbound queuing capacity on Gale Road for around 8 cars (based on 6m per car) on the approach to South Boundary Road. The proposals will require the existing bus stop layby on Gale Road to be relocated. The proposed access junction, including swept path analysis for a 16.5m HGV, is attached in **Appendix B**.
- 1.1.4 KMBC Highways' pre-application comments relating to the proposed access junction states:

"The main site access is shown to be located on Gale Road, which is a short, but busy stretch of road serving as one of the main accesses into Kirkby Industrial Park, and which as a result has a high proportion of HGVs. The proposed location of the access is coincident with a narrowing of the carriageway of Gale Road and is considered to be too close to the roundabout junction of South Boundary Road with Gale Road to prevent safety concerns. The site would attract slow moving or stationary HGVs waiting to perform the right turn manoeuvre into the site which could cause a hazard for vehicles entering Gale Road from South Boundary Road and/or backing up of traffic onto the circulatory carriageway of the roundabout itself. For this reason, it is considered that access should be taken from Admin Road, which in turn is served from South Boundary Road."

- 1.1.5 This TN provides further data and analysis to support the proposed access junction on Gale Road and address the concerns raised by KMBC Highways,

2. Traffic Impact

2.1 Background Traffic

- 2.1.1 An Automatic Traffic Counter (ATC) survey has been undertaken on Gale Road over a 7-day period from Friday 8th July to Thursday 14th July 2022. The survey recorded two-way 24-hour classified vehicle movements and speeds.
- 2.1.2 The location of the ATC survey is shown in [Figure 2.1](#), and the raw ATC survey data is attached in [Appendix C](#).

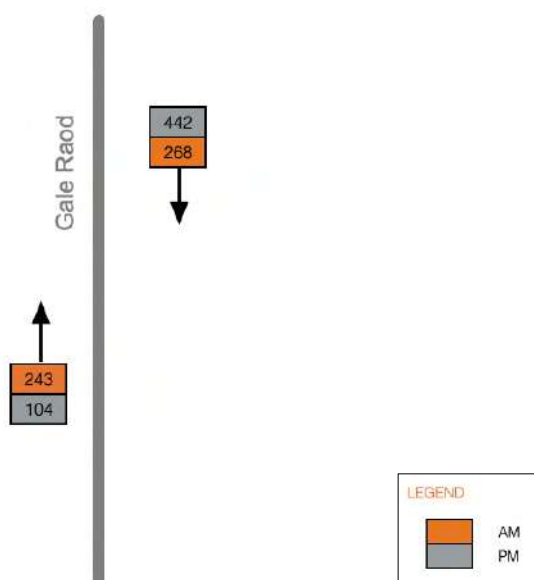
[Figure 2.1 : ATC Survey Location on Gale Road](#)



- 2.1.3 AM (08:00-09:00) and PM (16:00-17:00) peak traffic flows (based on ATC results) were recorded on Tuesday 12th July 2022. The traffic flows have been converted to PCUs, based on the following factors:
- Pedal cycle = 0.2 PCU;
 - Motorcycle = 0.4 PCU;
 - Car / Van = 1 PCU; and
 - HGVs (OGV1, OGV2 and PSV) = 2 PCUs.

2.1.4 The peak hour traffic flows (in PCUs) are shown in [Figure 2.2](#).

Figure 2.2 : Peak Hour Traffic Flows



2.2 Trip Generation

2.2.1 In order to assess both B2 and B8 use at the proposed unit, separate trip generation exercises have been undertaken for each use, as detailed below:

Industrial Unit

2.2.2 Trips generated by the proposed development have been estimated using the industry standard TRICS (Trip Rate Information Computer System) database, based on the '*Employment – Industrial Unit*' land use category. Trip rates have been derived for 'total vehicles' and 'OGVs'. The peak hour trip rates are summarised in [Table 2.1](#), with the full TRICS outputs attached in [Appendix D](#).

Table 2.1 : TRICS Trip Rates – Industrial Unit

Vehicle Type	AM Peak Hour (07:00-08:00)			PM Peak Hour (16:00-17:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles (per 100 sqm)	0.490	0.050	0.540	0.073	0.428	0.501
OGVs (per 100 sqm)	0.006	0.006	0.012	0.008	0.011	0.019

2.2.3 The peak hour trip generation for the proposed development (4,645 sqm) is summarised in [Table 2.2](#).

Table 2.2 : Trip Generation – Industrial Unit (Vehicles)

Vehicle Type	AM Peak Hour (07:00-08:00)			PM Peak Hour (17:00-18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles	23	2	25	4	20	24
OGVs	1	1	2	1	1	2

2.2.4 The trip generation has been converted to PCUs by applying a factor of 2 to the expected OGV movements. The resulting PCU trip generation is summarised in [Table 2.3](#).

Table 2.3 : Trip Generation – Industrial Unit (PCUs)

Vehicle Type	AM Peak Hour (07:00-08:00)			PM Peak Hour (17:00-18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles	24	3	27	5	21	26
OGVs	2	2	4	2	2	4

2.2.5 As shown in [Table 2.3](#), when assessed using 'industrial unit' trip rates, the proposed development is expected to generate a total of **27** two-way PCU trips in the AM peak including 4 OGV trips, and a total of **26** two-way PCU trips in the PM peak including 4 PCU trips.

Warehousing (Commercial)

2.2.6 Based on the '*Employment – Warehousing (Commercial)*' land use category, TRICS trip rates have been derived for 'total vehicles' and 'OGVs'. The peak hour trip rates are summarised in [Table 2.4](#), with the full TRICS outputs attached in [Appendix E](#).

Table 2.4 : TRICS Trip Rates – Warehousing

Vehicle Type	AM Peak Hour (06:00-07:00)			PM Peak Hour (16:00-17:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles (per 100 sqm)	0.281	0.122	0.403	0.128	0.245	0.373
OGVs (per 100 sqm)	0.035	0.073	0.108	0.059	0.045	0.104

2.2.7 The peak hour trip generation for the proposed development (4,645 sqm) is summarised in [Table 2.5](#).

Table 2.5 : Trip Generation – Warehousing (Vehicles)

Vehicle Type	AM Peak Hour (06:00-07:00)			PM Peak Hour (17:00-18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles	13	6	19	5	12	17
OGVs	2	4	6	3	2	5

2.2.8 The trip generation has been converted to PCUs by applied a factor of 2 to the expected OGV movements. The resulting PCU trip generation is summarised in [Table 2.6](#).

Table 2.6 : Trip Generation – Warehousing (PCUs)

Vehicle Type	AM Peak Hour (06:00-07:00)			PM Peak Hour (17:00-18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles	15	10	25	8	14	22
OGVs	4	8	12	6	4	10

2.2.9 As shown in [Table 2.6](#), when assessed using 'warehousing (commercial)' trip rates, the proposed development is expected to generate a total of **25** two-way PCU trips in the AM peak including 12 OGV trips, and a total of **22** two-way PCU trips in the PM peak including 10 OGV trips.

2.3 Trip Distribution

2.3.1 The trip distribution has been calculated based on the existing proportion of northbound and southbound movements on Gale Road. The proportions are shown in [Figure 2.3](#), and the development trip movements for both the 'industrial unit' and 'warehousing (commercial)' uses are shown in [Figure 2.4](#) and [Figure 2.5](#) respectively.

Figure 2.3 : Existing Flow Proportions

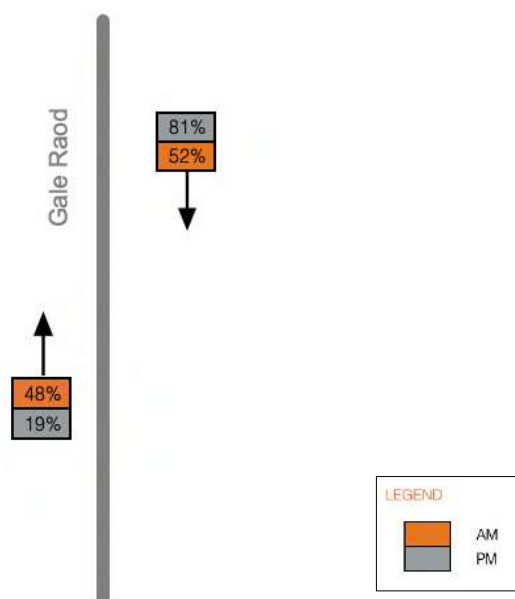
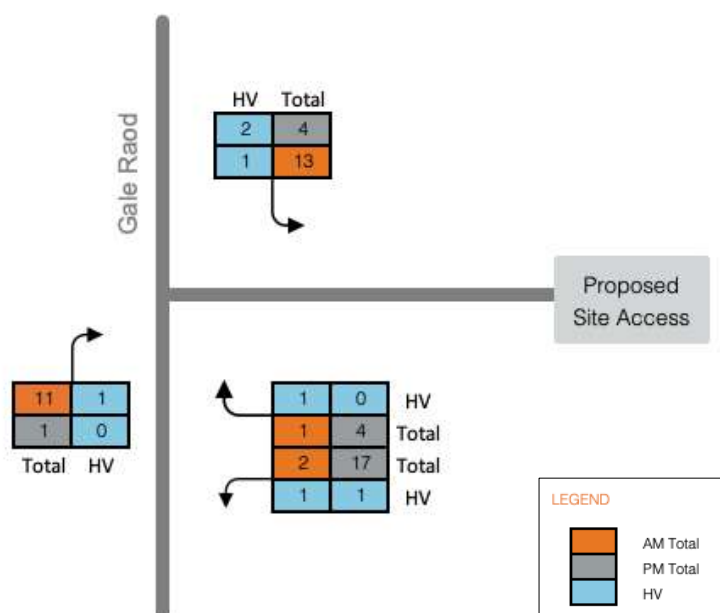
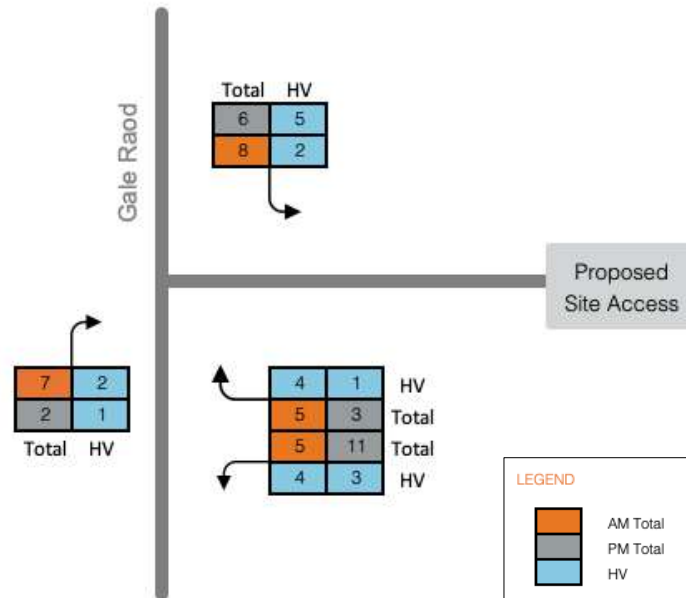


Figure 2.4 : Proposed Development Flows - Industrial Unit



2.3.2 The trip distribution in Figure 2.4 for the industrial unit use demonstrates that in the worst-case AM peak hour there are anticipated to be 11 PCUs right turning into the site, which is equivalent to less than 1 PCU every 5 minutes. The trip distribution also shows that during the peak hour there is 1 HGV right turn movement into the site from Gale Road.

Figure 2.5 : Proposed Development Flows – Warehousing (Commercial)



2.3.3 The trip distribution [Figure 2.5](#) for the warehousing (commercial) use demonstrates that in the worst-case AM peak hour there are anticipated to be 7 PCUs right turning into the site, which is equivalent to less than 1 PCU every 8 minutes. The trip distribution also shows that during the AM peak hour there is 1 HGV (i.e. 2 PCUs) right turn movement into the site from Gale Road.

2.4 Junction Modelling

- 2.4.1 In order to provide a robust assessment of the development traffic impact at the proposed access junction, the trips generated by the 'industrial unit' use and 'warehousing (commercial) use have been assessed.
- 2.4.2 The industry standard Junctions 9 (PICADY) traffic software package have been used to model the proposed site access junction. In terms of Junction 9 outputs, a Ratio of Flow to Capacity (RFC) value of 0.85 or less typically demonstrates that a junction arm or turning movement is operating within practical capacity and is therefore unlikely to experience regular queuing.
- 2.4.3 The traffic flow has been inputted into the PICADY model in PCUs, and heavy vehicle percentage inputted for all movements, including background traffic and development trips.
- 2.4.4 The 2022 base year with 'industrial unit' and 'warehousing (commercial)' development flows (PCUs) are shown in [Figure 2.6](#) and [Figure 2.7](#).

Figure 2.6 : 2022 Base + Development Traffic Flows (PCUs) – Industrial Unit

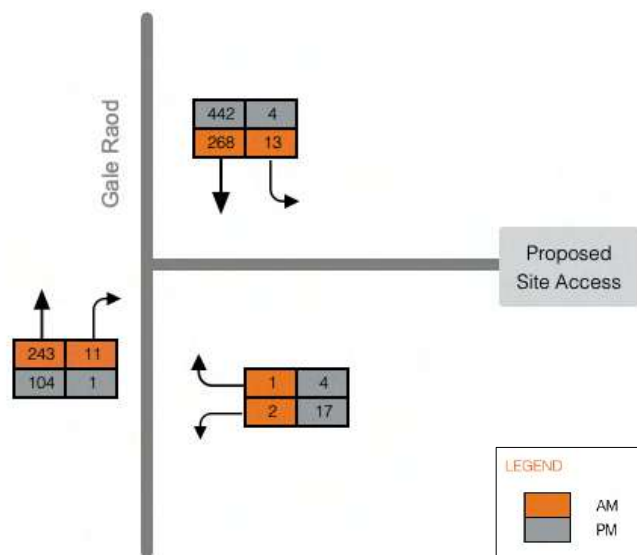
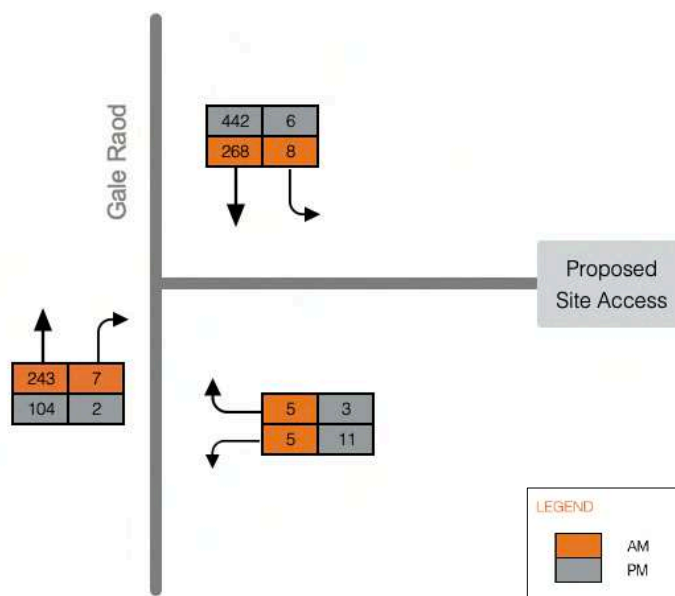


Figure 2.7 : 2022 Base + Development Traffic Flows (PCUs) – Warehousing (Commercial)



2.4.5 The results of the capacity assessments for the 'industrial unit' and 'warehousing (commercial)' use are summarised in [Table 2.7](#) and [Table 2.8](#) respectively, with full PICADY outputs attached in [Appendix F](#).

Table 2.7 : Proposed Access Junction PICADY Results – Industrial Unit

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Site Access	0.0	0.00	0.00	0.0	7.58	0.04
Gale Road	0.0	5.65	0.03	0.0	7.56	0.00

Table 2.8 : Proposed Access Junction PICADY Results – Warehousing (Commercial)

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Site Access	0.0	12.33	0.02	0.0	8.40	0.03
Gale Road	0.0	6.04	0.02	0.0	9.27	0.00

- 2.4.6 As shown in [Table 2.7](#) and [Table 2.8](#), the proposed priority access junction is expected to operate comfortably below capacity and with no queuing expected on Gale Road or on the Access Road.
- 2.4.7 Based on the modelling results, it can be concluded that the proposed development and junction on Gale Road will not result in any significant queuing that will detrimentally impact drivers approaching from the south or result in queuing back to South Boundary roundabout junction.

3. Summary and Conclusion

3.1 Summary

- 3.1.1 This Transport Note has been prepared by Mode Transport Planning in response to pre-application comments raised by Knowsley Council Highways in relation to a proposed warehouse development on the East Hub site off South Boundary Road on Knowsley Business Park.
- 3.1.2 The data and analysis in this note demonstrate that:
- The proposed development is expected to generate a low number of vehicle trips, including HGV trips, when assessed using TRICS as an 'industrial unit' or 'warehouse (commercial) use'.
 - The trip distribution exercise shows that in the worst-case AM peak (industrial unit) it is anticipated that there will be 11 right turning vehicles into the site (including 1 HGV movement), equivalent to less than 1 vehicle every 5 minutes.
 - Junction modelling at the proposed site access confirms that there will be negligible queuing for right turning vehicles into the site during the peak hour periods and there is therefore minimal potential for blocking back to South Boundary Road.

3.2 Conclusion

- 3.2.1 In conclusion, data and analysis shows that the proposed access junction on Gale Road will operate comfortably within capacity and with negligible queuing on all arms. The proposed development will therefore not have a detrimental impact on the operation of the existing local highway network, including Gale Road.
- 3.2.2 Based on this evidence, it is respectfully requested that KMBC Highways reconsider the proposed access junction and provide confirmation that the concerns raised in pre-application comments have been satisfactorily addressed.

From: Pattison, Vicky vicky.pattison@liverpoolcityregion-ca.gov.uk
Subject: RE: East Hub, Knowsley (22/00028/PREAPP)

Date: 5 October 2022 at 14:02

To: Michael Anthony michaelanthony@modetransport.co.uk

Cc: Mark Edwards markedwards@modetransport.co.uk, Morley, Anthony Anthony.Morley@knowsley.gov.uk, Jon.Parry@knowsley.gov.uk

VP

Hi Michael,

Merseytravel are agreeable to the relocation of the stop to Gores Road, providing KMBC highways approve it. The stop would need to be brought up to 'countrywide standard', e.g. Kassel kerbs and also a shelter installing if it was to be relocated to Gores Road.

Thanks
Vicky

Vicky Pattison

Highways and Bus Stop Infrastructure Officer | 1 Mann Island, Liverpool, L3 1BP
Office: 0151 330 1675 | Mobile: 07789 602024 | Email: vicky.pattison@liverpoolcityregion-ca.gov.uk



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From: Michael Anthony <michaelanthony@modetransport.co.uk>

Sent: 04 October 2022 17:34

To: Pattison, Vicky <vicky.pattison@liverpoolcityregion-ca.gov.uk>

Cc: Mark Edwards <markedwards@modetransport.co.uk>; Hamilton, Anthony <tony.hamilton@liverpoolcityregion-ca.gov.uk>; Morley, Anthony <Anthony.Morley@knowsley.gov.uk>

Subject: Re: East Hub, Knowsley (22/00028/PREAPP)

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Hi Vicky,

We are only at the pre-app stage (ref: 22/00028/PREAPP). The planning application has not yet been submitted.

We have been engaging in a pre-application consultation with Jon Parry (Jon.Parry@knowsley.gov.uk) and Anthony Morley (Anthony.Morley@knowsley.gov.uk) at KMBC Highways. They may be able to advise on any potential conditions.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director

☐ 0161 464 9495
☐ 07841 572 743
☐ michaelanthony@modetransport.co.uk
www.modetransport.co.uk

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From: "Pattison, Vicky" <vicky.pattison@liverpoolcityregion-ca.gov.uk>

Date: Tuesday, 4 October 2022 at 17:19

To: Michael Anthony <michaelanthony@modetransport.co.uk>

Cc: Mark Edwards <markedwards@modetransport.co.uk>, "Hamilton, Anthony" <tony.hamilton@liverpoolcityregion-ca.gov.uk>

Subject: RE: East Hub, Knowsley (22/00028/PREAPP)

Hi Michael,

Apologies for the delay on this. Do you have a planning application number, or do you know if there is a condition within in to upgrade the current infrastructure (bus stop)

infrastructure (bus stop).

Thanks
Vicky

Vicky Pattison

Highways and Bus Stop Infrastructure Officer | 1 Mann Island, Liverpool, L3 1BP
Office: 0151 330 1675 | Mobile: 07789 602024 | Email: vicky.pattison@liverpoolcityregion-ca.gov.uk



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From: Michael Anthony <michaelanthony@modetransport.co.uk>
Sent: 04 October 2022 12:03
To: Pattison, Vicky <vicky.pattison@liverpoolcityregion-ca.gov.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>; Hamilton, Anthony <tony.hamilton@liverpoolcityregion-ca.gov.uk>
Subject: Re: East Hub, Knowsley (22/00028/PREAPP)

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Hi Vicky,

Further to my email below, I was wondering if you have had an opportunity to review the development scheme proposed at Gale Road, Knowsley and the relocation of the existing bus stop?

If you have any queries or need any further information please let me know.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director

☐ 0161 464 9495
☐ 07841 572 743
☐ michaelanthony@modetransport.co.uk
www.modetransport.co.uk

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From: "Hamilton, Anthony" <tony.hamilton@liverpoolcityregion-ca.gov.uk>
Date: Friday, 16 September 2022 at 15:07
To: "Pattison, Vicky" <vicky.pattison@liverpoolcityregion-ca.gov.uk>, Michael Anthony <michaelanthony@modetransport.co.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>
Subject: FW: East Hub, Knowsley (22/00028/PREAPP)

Hello Michael,

I have forwarded this to my colleague Vicky Pattison who deals with this area now Ian Mcdermott has changed jobs.

Vicky – can you progress this with Michael please.

Thanks

Anthony Hamilton

Technical Matrix Resource Officer | 1 Mann Island, Liverpool, L3 1BP
Office: 0151 330 1874 | Mobile: 07711 474 336 | Email: tony.hamilton@liverpoolcityregion-ca.gov.uk



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From: Michael Anthony <michaelanthony@modetransport.co.uk>
Sent: 16 September 2022 14:58
To: Hamilton, Anthony <tony.hamilton@liverpoolcityregion-ca.gov.uk>
Cc: Mark Edwards <markedwards@modetransport.co.uk>
Subject: East Hub, Knowsley (22/00028/PREAPP)

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Hi Tony,

We are currently providing initial highways advice at a proposed industrial development site on the East Hub site off Gale Road on Knowsley Business Park. We have been given your contact details by Anthony Morley at KMBC Highways, as we would like to consult with Merseytravel on the development proposals during the pre-application stage.

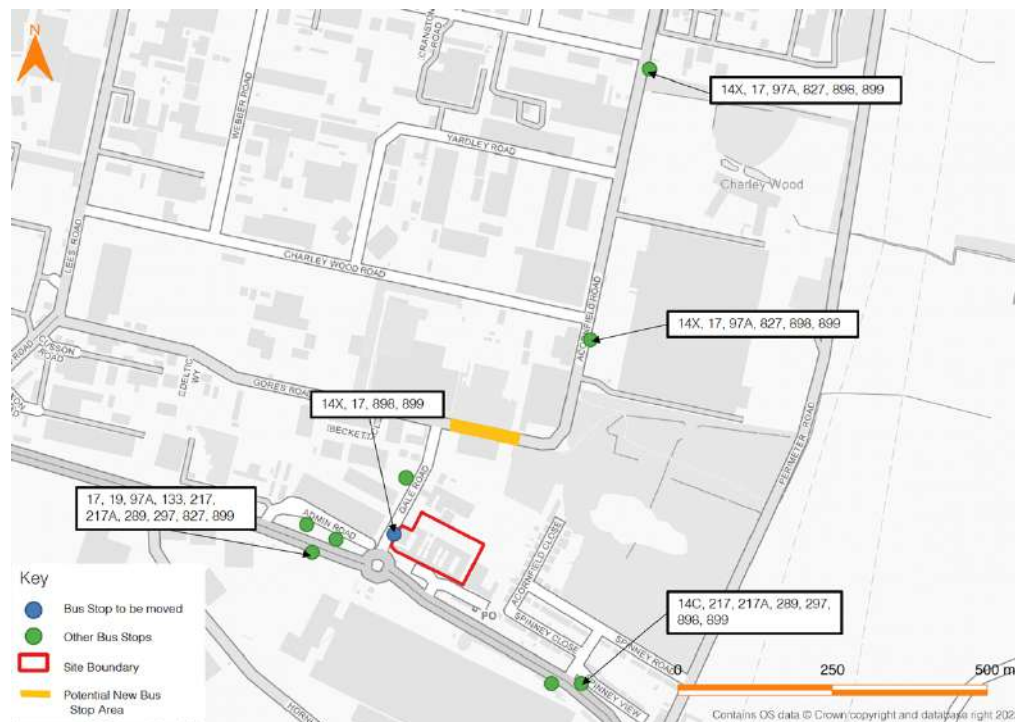
The development scheme comprises a 4,645 sqm industrial unit (Use Class B2/ B8), including car parking provision and service yard. The proposed site layout drawing (still subject to change) is attached.

The proposed vehicular access arrangement comprises the upgrade of the existing access junction on Gale Road to provide a 7.3m wide access road, 15m kerb radii at the bell-mouth and pedestrian refuge island. The proposed access junction drawing and swept path analysis drawing for a 16.5m HGV are attached for reference.

We are currently also engaging in a pre-application consultation with Jon Parry and Anthony Morley at KMBC Highways. They have reviewed the proposed access arrangement and confirmed that it is acceptable, in principle.

The proposed access arrangement will require the existing bus stop on Gale Road to be relocated. At this early stage in the planning process, we are seeking a view from Merseytravel on the relocation of the bus stop.

The bus stop is served by Service No. 14X, 17, 898, 899. The location of this bus stop (marked as blue in the plan below), other nearby bus stops on the local highway network, and existing bus routes are shown on the plan below (also attached).



As also shown, we have identified a section of Gores Road as a potential location for the relocated bus stop (identified as yellow in the above plan). The section of Gores Road is c.200m from the existing bus stop, and 300m from the preceding bus stop on Acornfield Road.

I would be grateful if you could review the bus stop relocation and provide an in principle view if this would be acceptable.

If you have any queries about the proposals, please let me know.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director

☐ 0161 464 9495
☐ 07841 572 743
☐ michaelanthony@modetransport.co.uk
www.modetransport.co.uk

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APPENDIX B

Personal Injury Collision (PIC) Data

Gale Road - 5 Year

No.	Area	L/A	Reference	Severity	Day	Date	Time	Grid Coords	Link/Node	Street			
1		E08000011	1910762	Slight	Friday	15/03/2019	16:06	343299/397876					
Location: TEXACO SERVICE STATION GALE ROAD 1st Rd: U 2nd Rd:													
Speed	C'Way		Jct Det/Ctrl	Lighting		Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard		
30MPH	Single c'way		NotJCT	Daylight		Fine	Dry	None	None	None	None		
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway	Hit obj off	Sex	Age	B/
1	Van/Goods < 3.No		Reversing	S N	On main	Not at	No	None		None	Untra.	-1	N/
Cas No	Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil			
1	1	Pedestrian	Male	59	Slight	No	Unknown	Unknown	Unknown or o	Other			
Description: VEHICLE ON GARAGE FORECOURT REVERSES AND COLLIDES WITH PEDESTRIAN WHO IS CROSSING TO THE REAR OF IT.													
User Information:													
2		E08000011	1913272	Slight	Wednesday	11/12/2019	15:35	343216/397713					
Location: SOUTH BOUNDARY ROAD SEGMENT SOUTH BOUNDARY ROAD 1st Rd: 2nd Rd:													
Speed	C'Way		Jct Det/Ctrl	Lighting		Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard		
30MPH	0.00		T/Stag Give	Daylight		Rain Wind	Wet	None	None	None	None		
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway	Hit obj off	Sex	Age	B/
1	Car	No	Left turn	S W	On main	Enter main	No	None		None	Untra.	-1	N/
2	Pedal Cycle	No	Going ahead	Uk Uk	On main	Mid junction	No	None		None	Male	50	N/
Cas No	Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil			
1	2	Drv/Rider	Male	50	Slight	No	Not ped	Not ped	Not ped	Other			
Description: V001 TURNS LEFT OUT OF WORKS EXIT JUNCTION AND COLLIDES WITH CYCLIST WHO IS CROSSIN MAIN ROAD.													
User Information:													
3		E08000011	2002306	Slight	Monday	02/11/2020	18:05	343316/397966					
Location: GALE ROAD and GORES ROAD 1st Rd: U 2nd Rd: U													
Speed	C'Way		Jct Det/Ctrl	Lighting		Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard		
30MPH	Single c'way		T/Stag Give	Dark/unknown		Rain	Wet	None	None	None	None		
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway	Hit obj off	Sex	Age	B/
1	Car	No	Going ahead	N E	On main	Mid junction	No	None		None	Untra.	-1	N/
2	Pedal Cycle	No	Going ahead	E W	On main	Junt cleared	No	None		None	Male	39	N/
Cas No	Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil			
1	2	Drv/Rider	Male	39	Slight	No	Not ped	Not ped	Not ped	Other			
Description: V001 PULLS OUT FROM A JUNCTION AND COLLIDES WITH A PASSING CYCLIST CAUSING DAMAGE TO THE BICYCLE AND BRUISING TO THE HIP OF THE CYCLIST.													
User Information:													

APPENDIX C

Automatic Traffic Counter (ATC) Survey Data

Report Id	361/22
Site Name	Site 1 of 1
Description	Gale Road, 80m north of A5208 South Boundary Road
Direction	Northbound

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-85	Average Speed	Standard Deviation	
		00-15	15-30	30-45	45-60					2 Axle Van Rigid	4 Axle Rigid	4 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph				MPH 65 <140mph
0000-0100	12	2	1	3	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.7	24.7	3.9	
0100-0200	13	5	1	6	1	0	0	10	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.4	24.5	3.8		
0200-0300	10	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	4	2	3	0	0	0	0	0	0	0	0	32.0	26.5	5.3			
0300-0400	12	4	1	2	5	0	1	5	0	0	0	0	0	2	1	0	6	1	23	0	1	0	0	0	0	0	0	0	30.8	27.8	6.7		
0400-0500	14	2	3	6	3	0	0	10	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	40.9	31.2	9.3		
0500-0600	9	15	31	9	15	60	4	60	4	6	1	1	27	13	5	1	0	0	0	0	0	0	0	0	0	0	0	27.8	26.5	8.5			
0600-0700	111	19	27	18	47	2	2	87	0	13	2	1	0	0	2	5	24	26	36	11	6	1	0	0	0	0	0	0	31.7	24.8	6.7		
0700-0800	191	23	53	52	63	2	3	148	0	32	3	1	0	0	1	1	0	25	35	69	38	13	1	0	0	0	0	0	33.4	26.7	6.4		
0800-0900	190	54	13	16	53	169	4	13	36	3	4	19	34	2	4	19	34	54	34	7	1	0	0	0	0	0	0	0	32.2	24.7	7.2		
0900-1000	142	34	33	38	37	3	0	109	0	21	2	1	0	0	5	1	11	39	35	34	18	3	1	0	0	0	0	0	30.4	23.7	6.5		
1000-1100	103	31	19	71	26	3	0	71	0	21	8	0	0	0	1	18	25	29	14	0	0	0	0	0	0	0	0	0	22.9	20.9	6.6		
1100-1200	126	30	23	43	30	3	2	80	3	26	3	0	0	2	2	10	33	40	28	9	4	4	0	0	0	0	0	0	29.4	23.0	6.2		
1200-1300	145	37	30	31	47	0	1	102	2	32	1	2	0	0	5	0	10	35	59	28	8	3	1	0	0	0	0	0	28.9	23.0	5.7		
1300-1400	144	35	34	36	44	1	1	125	86	34	0	0	0	0	2	11	34	29	16	3	0	0	0	0	0	0	0	0	33.3	22.8	6.2		
1400-1500	135	38	35	27	35	0	0	87	3	36	3	0	0	0	1	5	34	48	32	10	5	0	0	0	0	0	0	0	29.7	23.7	5.7		
1500-1600	104	22	29	27	26	1	0	70	1	23	3	1	0	2	1	2	0	13	34	34	11	4	0	0	0	0	0	0	31.2	24.8	6.2		
1600-1700																																	

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed										P.85	Average Speed	Standard Deviation				
		00-15	15-30	30-45	45-60	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	5 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph				MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph
0000 - 0100	12	7	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	28.2	23.8	4.2
0100 - 0200	10	1	1	2	4	0	0	8	0	1	0	0	0	0	1	0	0	0	0	0	0	2	3	0	1	0	0	0	0	0	0	31.6	25.5	5.9
0200 - 0300	5	4	1	0	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	32.7	23.0	9.4	
0300 - 0400	8	4	1	0	3	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	30.4	24.9	5.3	
0400 - 0500	13	3	2	1	7	1	1	7	0	3	1	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0	34.8	26.5	8.0	
0500 - 0600	31	1	15	21	15	1	1	21	7	2	2	4	6	8	4	5	1	0	0	2	2	4	6	8	5	1	1	0	0	0	33.2	26.6	8.6	
0600 - 0700	44	6	7	14	17	1	1	32	0	5	4	1	0	0	0	0	0	0	1	2	12	12	5	11	1	0	0	0	0	0	31.5	24.3	7.0	
0700 - 0800	45	6	14	11	14	2	1	32	0	9	0	0	0	0	0	0	0	0	1	1	6	10	16	11	0	0	0	0	0	0	32.2	26.0	6.0	
0800 - 0900	77	19	24	19	24	1	1	64	15	19	6	11	6	1	0	0	0	0	0	1	2	28	5	21	3	5	1	0	0	0	30.3	28.3	6.1	
0900 - 1000	72	11	18	18	25	2	0	56	1	12	0	0	0	0	1	0	0	0	0	2	4	26	25	11	3	1	0	0	0	0	32.3	26.6	5.5	
1000 - 1100	63	14	16	16	17	1	0	52	8	17	1	0	0	0	0	0	0	0	0	3	5	17	21	14	2	1	0	0	0	0	33.1	26.8	6.1	
1100 - 1200	63	25	13	8	16	0	0	53	0	13	8	2	0	0	0	0	0	0	0	8	11	17	24	0	0	0	0	0	0	0	30.5	24.6	5.7	
1200 - 1300	62	13	17	14	18	0	4	44	0	4	4	0	0	0	0	0	0	0	3	17	22	14	3	2	0	0	0	0	0	0	30.2	23.6	6.3	
1300 - 1400	44	10	7	14	14	0	0	22	0	6	3	0	0	0	0	0	0	0	1	0	6	10	16	6	1	0	0	0	0	0	32.6	26.3	6.1	
1400 - 1500	31	7	8	5	11	0	0	22	0	0	0	0	0	0	1	0	0	0	0	6	7	11	4	0	0	1	0	0	0	0	34.0	24.9	6.9	
1500 - 1600	40	9	9	10	12	0	0	1	36	0	3	0	0	0	0	0	0	0	0	1	10	18	8	3	0									

Time	Hourly Totals	Vehicle Bin Drops				Cycles	Motor Cycles	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-85	Average Speed	Standard Deviation			
		00-15	15-30		30-45			45-60	2 Axle Van Rigid	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph				MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph
0000-0100	13	8	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26.0	23.0	2.9	
0100-0200	5	3	1	1	0	0	0	5	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	23.8	21.0	2.7	
0200-0300	7	2	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	23.6	20.9	2.7	
0300-0400	9	2	1	2	4	1	0	7	0	1	0	0	0	0	1	0	1	0	3	2	1	1	0	0	0	0	0	0	0	33.6	24.7	8.7	
0400-0500	3	1	2	0	0	0	0	2	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	32.0	23.0	8.7	
0500-0600	3	3	0	0	0	0	0	14	0	0	0	0	0	0	0	0	2	9	1	0	0	0	0	0	0	0	0	0	0	28.3	22.0	6.1	
0600-0700	15	4	5	2	4	0	1	11	0	2	0	0	0	1	0	0	2	0	6	4	1	2	0	0	0	0	0	0	0	33.2	25.7	7.3	
0700-0800	16	3	2	7	4	0	0	12	0	0	0	0	0	1	0	0	1	2	4	7	2	0	0	0	0	0	0	0	0	30.9	25.2	5.5	
0800-0900	4	32	4	7	26	1	0	35	0	7	0	0	0	0	0	0	2	9	27	3	0	0	0	0	0	0	0	0	0	34.4	27.4	4.7	
0900-1000	41	7	12	13	9	1	0	31	0	8	0	0	0	0	1	0	0	8	7	11	9	4	0	1	0	0	0	0	0	35.1	27.4	7.4	
1000-1100	9	33	9	9	9	0	0	37	0	9	0	0	0	0	0	0	2	14	10	6	1	0	0	0	0	0	0	0	0	31.4	26.5	4.8	
1100-1200	34	9	11	6	8	0	0	28	0	5	0	1	0	0	0	0	1	8	14	6	5	0	0	0	0	0	0	0	0	28.4	23.9	5.8	
1200-1300	39	12	6	7	14	0	0	36	0	0	0	0	0	0	0	0	2	8	13	9	6	0	0	1	0	0	0	0	0	31.8	24.8	6.7	
1300-1400	38	12	11	3	33	0	0	32	0	1	0	0	0	0	0	0	1	9	15	2	0	0	0	0	0	0	0	0	0	24.6	21.1	6.3	
1400-1500	38	14	5	11	8	0	0	35	0	1	1	1	0	0	0	0	0	1	5	19	7	4	2	0	0	0	0	0	0	0	30.5	24.8	5.5
1500-1600	31	6	10	7	8	0	0	21	0	7	2	0	0	0	0	0	0	4	9	12	3	0	0	0	0	0	0	0	0	0	32.5	26.7	5.6
1600-1700																																	

Monday 11 July 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-60	Cycles	Motor Cycles	Car Van	Car Van Towing	Vehicle Classes ARX Scheme												Double Road Train	Triple Road Train	Vehicle Speed												P-Title 0.85	Average Speed	Standard Deviation
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph			MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph							
0000-0100	8	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	2	0	0	0	0	0	0	0	26.9	23.6	3.2				
0100-0200	6	2	1	2	1	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1	1	0	0	0	0	34.8	26.3	8.2				
0200-0300	4	2	1	1	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3	2	0	1	0	0	0	0	0	30.7	25.5	5.0				
0300-0400	9	1	1	4	3	0	0	7	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3	3	1	4	0	0	0	0	0	33.5	27.4	5.8				
0400-0500	12	1	1	8	2	0	2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2	0	2	1	0	0	0	0	36.0	26.3	9.4				
0500-0600	72	4	10	22	36	12	3	51	0	3	1	0	0	0	1	1	0	5	6	13	13	13	12	8	0	2	0	0	0	0	34.9	25.2	9.4					
0600-0700	83	17	15	23	28	0	1	61	0	15	1	2	0	0	0	0	2	1	0	0	0	2	16	22	23	16	3	0	0	0	0	32.6	26.0	6.4				
0700-0800	195	32	37	62	64	6	2	147	2	30	2	1	0	0	4	0	1	19	44	51	50	21	5	4	0	1	0	0	0	0	31.1	24.0	6.9					
0800-0900	184	63	38	34	49	1	1	135	2	40	0	3	1	0	1	0	0	2	19	35	36	52	33	5	2	0	0	0	0	0	32.0	24.7	7.1					
0900-1000	147	39	43	33	32	4	1	106	0	32	2	2	1	0	0	0	1	0	0	0	0	2	10	29	44	36	20	5	1	0	0	31.2	24.4	6.6				
1000-1100	117	31	28	26	32	0	0	83	1	23	2	1	0	0	4	0	0	2	3	17	32	38	20	5	2	0	0	0	0	0	32.5	25.7	6.5					
1100-1200	114	33	30	26	25	0	0	70	0	39	1	1	0	0	3	0	0	1	3	21	30	46	12	1	0	0	0	0	0	0	30.4	24.9	5.3					
1200-1300	142	35	33	44	30	1	0	105	0	33	0	1	2	0	5	1	0	8	25	27	46	18	14	4	0	0	0	0	0	0	29.0	21.5	7.2					
1300-1400	117	32	35	23	27	2	0	86	0	25	2	1	0	0	1	0	0	2	18	18	35	27	12	2	3	0	0	0	0	0	31.0	23.4	7.3					
1400-1500	131	35	34	27	35	1	1	86	0	31	3	3	4	1	0	4	0	0	1	13	18	48	32	17	2	0	0	0	0	0	30.3	24.0	6.1					
1500-1600	110	27	29	33	21	2	0	62	0	31	8	3	0	1	2	1	0	3	6	23	27	36	12	3	0	0	0	0	0	0	30.8	24.1	6.4					
1600-1700	89	26	18	25	20	0	2	52	1	21	3	2	1	0	5	2	0	0	5	13	21	34	10	3	2	0	1	0	0	0	33.2	26.0	6.9					
1700-1800	55	15	9	18	13	2	1	47	0	4	0	0	0	0	1	0	0	1	5	15	12	14	8	0	0	0	0	0	0	0	29.9	23.2	6.5					
1800-1900	42	10	16	9	7	0	0	33	0	6	2	0	0	0	0	0	0	0	1	8	17	10	3	3	0	0	0	0	0	0	30.8	24.8	5.8					
1900-2000	33	11	4	6	12	1	1	27	0	3	0	0	0	0	0	0	0	0	4	12	8	6	1	2	0	0	0	0	0	0	28.9	22.1	6.5					
2000-2100	39	7	9	11	12	1	1	30	0	5	1	0	0	0	0	0	0	0	2	6	17	7	3	2	0	0	0	0	0	0	32.5	25.2	7.1					
2100-2200	23	5	7	5	6	1	0	19	0	2	1	0	0	0	0	0	0	1	6	6	5	3	2	0	0	0	0	0	0	0	32.1	25.0	6.9					
2200-2300	25	5	12	6	2	2	0	13	0	6	3	0	0	0	0	0	0	4	6	9	3	2	0	1	0	0	0	0	0	0	29.8	22.4	7.1					
2300-0000	11	2	2	6	1	0	0	10	0	1	0	0	0	0	0	0	0	0	0	3	4	0	3	1	0	0	0	0	0	0	33.2	25.7	7.2					
0700-1900	1443	378	350	360	355	19	8	1012	6	309	26	22	3	3	2	29	6	1	0	23	127	260	405	385	182	38	14	0	0	0	0	31.1	24.2	6.7				
0600-2200	1621	418	385	405	413	22	11	1149	7	334	29	24	3	3	2	32	7	1	0	23	136	308	438	426	205	47	16	1	1	0	0	31.2	24.2	6.7				
0600-0000	1657	425	399	417	416	24	11	1172	7	341	32	24	3	2	32	8	1	0	23	140	317	372	471	429	210	48	17	1	1	0	0	31.2	24.2	6.8				
0000-0000	1768	439	413	450	459	36	16	1254	7	349	33	24	3	2	33	10	1	0	28	147	337	496	449	228	59	18	3	1	0	0	0	31.4	24.3	6.9				

Tuesday 12 July 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-60	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme						Double Road Train	Triple Road Train	Vehicle Speed												P-Title 0.85	Average Speed	Standard Deviation		
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic			6 Axle Artic	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph	MPH 65 <140mph
0000-0100	6	3	1	0	2	3	1	0	3	0	0	0	0	0	2	0	0	0	1	0	3	1	1	0	0	0	0	0	0	0	25.7	18.8	6.6	
0100-0200	9	3	1	1	3	2	0	1	2	0	4	0	0	0	1	1	0	0	0	2	3	3	1	3	0	0	0	0	0	0	32.3	24.8	6.2	
0200-0300	8	3	2	1	2	0	0	5	0	1	0	0	0	0	0	1	0	0	0	0	4	2	2	0	0	0	0	0	0	0	31.3	26.8	4.4	
0300-0400	7	2	0	0	2	3	0	0	4	0	1	1	0	0	0	1	0	0	0	1	2	3	1	0	0	0	0	0	0	0	30.9	25.9	4.9	
0400-0500	18	6	2	5	5	0	0	12	0	0	5	4	0	0	0	1	0	0	0	0	4	6	3	2	1	2	0	0	0	0	35.3	26.9	8.1	
0500-0600	74	9	12	22	31	14	5	51	1	2	0	0	0	0	1	0	0	5	11	13	15	14	13	0	3	0	0	0	0	0	32.0	23.1	8.6	
0600-0700	91	20	16	22	33	2	0	68	0	16	5	3	1	0	0	1	1	0	1	5	24	19	23	13	5	0	0	1	0	0	32.5	24.8	7.4	
0700-0800	30	187	30	38	56	63	3	0	187	30	138	6	3	0	0	1	0	0	1	38	32	21	3	5	2	0	0	0	0	0	32.2	26.2	5.9	
0800-0900	196	61	51	45	39	1	1	146	0	41	0	3	0	0	4	0	0	10	37	45	56	40	4	4	0	0	0	0	0	0	32.5	25.7	6.5	
0900-1000	131	34	29	27	41	2	0	92	0	27	1	4	0	0	2	3	0	1	6	28	40	35	18	3	0	0	0	0	0	0	30.6	24.4	6.0	
1000-1100	124	30	34	35	25	1	0	124	0	34	26	3	0	1	2	0	0	0	12	24	26	12	5	0	0	0	0	0	0	0	30.2	23.6	6.2	
1100-1200	98	30	24	23	21	0	0	63	2	25	3	1	0	0	0	1	0	0	5	20	27	29	15	1	0	0	0	0	0	0	30.7	24.5	6.0	
1200-1300	143	48	24	29	42	0	1	100	0	34	3	3	0	0	0	1	0	0	8	37	35	20	29	10	3	0	1	0	0	0	28.6	20.6	7.8	
1300-1400	142	36	44	36	34	0	1	142	0	36	34	28	0	0	0	1	0	0	11	19	29	44	26	7	0	0	0	0	0	0	29.2	21.6	7.4	
1400-1500	121	27	37	32	25	0	2	75	0	31	2	5	0	0	4	2	0	0	2	5	26	35	28	23	0	0	2	0	0	0	31.4	24.7	6.5	
1500-1600	103	38	22	20	23	0	1	62	0	25	7	4	0	0	0	3	0	0	1	8	20	30	26	9	8	1	0	0	0	0	31.9	24.6	7.0	
1600-1700	80	19	16	23	22	0	2	52	0	21	2	0	0	0	1	1	0	0	2	7	17	18	21	8	5	1	0	0	0	1	33.6	24.7	8.6	
1700-1800	73	22	17	20	14	0	1	56	0	12	0	0	0	1	1	2	0	0	3	4	25	29	11	7	1	1	0	0	0	0	34.7	27.9	6.6	
1800-1900	40	27	7	12	0	0	0	40	0	7	0	3	0	0	0	0	0	0	0	6	5	3	0	5	0	0	0	0	0	0	28.9	23.1	6.1	
1900-2000	29	8	0	9	4	1	0	22	0	5	0	0	0	0	0	0	0	0	0	0	11	8	5	1	0	0	0	0	0	0	32.0	25.2	6.5	
2000-2100	13	3	2	5	3	1	1	8	0	3	0	0	0	0	0	0	0	0	2	4	3	3	1	1	0	0	0	0	0	0	28.2	21.8	6.2	
2100-2200	26	5	0	8	1	0	22	22	0	1	0	0	0	0	0	0	0	0	1	6	3	3	1	0	0	0	0	0	0	0	30.7	24.5	6.3	
2200-2300	27	12	5	2	8	2	1	20	0	3	0	0	0	0	0	0	0	0	0	2	8	8	5	0	0	0	0	0	0	0	29.9	23.4	6.3	
2300-0000	12	4	1	0	0	0	0	12	0	2	0	0	0	0	0	0	0	0	0	0	2	3	5	5	2	0	0	0	0	0	0	31.1	25.9	5.0
0700-1800	978	1438	390	340	356	352	9	12	1895	215	27	23	9	12	4	1895	268	22	9	12	260	390	380	1	46	12	312	249	1	0	0	24.3	21.3	6.9
0600-2200	1597	426	374	395	402	14	13	1115	6	338	30	24	1	4	28	23	1	0	0	132	302	431	421	21	53	12	2	1	0	0	0	31.6	24.3	6.9
0600-2200	1597	426	374	395	402	14	13	1115	6	338	30	24	1	4	28	23	1	0	0	132	302	431	421	21	53	12	2	1	0	0	0	31.6	24.3	6.9
0600-2200	1597	426	374	395	402	14	13	1115	6	338	30	24	1	4	28	23	1	0	0	132	302	431	421	21	53	12	2	1	0	0	0	31.6	24.3	6.9

Thursday 14 July 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 0.85	Average Speed	Standard Deviation			
			15-30	30-45					2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph	MPH 65 <140mph	
0000-0100	5	1	0	2	2	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26.3	24.0	2.2	
0100-0200	8	2	3	2	1	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31.3	29.8	4.4	
0200-0300	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34.2	30.5	3.5	
0300-0400	7	2	0	3	2	0	0	2	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33.6	27.3	6.1	
0400-0500	3	4	7	3	0	0	0	15	0	1	0	0	0	0	0	1	0	0	0	0	0	3	2	6	4	1	1	0	0	0	0	35.5	28.3	7.0
0500-0600	66	11	12	14	29	9	5	68	43	0	4	3	0	0	1	0	0	0	1	8	12	14	12	21	11	6	5	1	0	0	32.6	24.2	8.1	
0600-0700	87	21	13	15	38	1	1	66	1	7	4	3	0	0	1	3	0	0	0	4	22	18	27	10	4	2	0	0	0	0	32.1	25.1	6.8	
0700-0800	33	176	33	1	3	176	33	1	3	140	33	1	2	0	0	140	33	0	0	6	15	30	46	16	2	1	0	0	0	0	32.4	25.1	7.0	
0800-0900	188	52	39	51	46	2	2	139	0	38	3	0	1	0	1	1	1	0	2	15	37	54	46	28	4	1	1	0	0	0	31.3	24.3	6.7	
0900-1000	122	27	25	37	33	0	1	90	0	26	2	1	0	0	1	1	0	0	0	11	25	24	40	17	5	0	0	0	0	0	31.5	24.7	6.5	
1000-1100	135	30	35	33	37	5	0	95	0	27	0	3	0	1	3	1	0	0	7	25	33	33	20	13	4	0	0	0	0	0	28.5	21.3	7.3	
1100-1200	84	18	24	13	29	0	0	56	0	23	3	0	0	0	2	0	0	0	3	10	20	17	25	7	1	1	0	0	0	0	30.1	22.8	7.0	
1200-1300	132	30	29	30	43	0	0	90	0	33	1	2	0	0	0	3	3	0	9	14	32	30	28	11	6	1	0	0	0	0	31.1	22.7	8.1	
1300-1400	144	34	41	36	43	2	3	94	1	37	1	3	0	1	2	0	0	0	4	13	28	43	32	19	4	1	0	0	0	0	30.9	23.7	6.9	
1400-1500	128	31	30	37	30	0	1	78	0	40	3	1	1	0	1	3	0	0	1	13	41	39	22	9	2	1	0	0	0	0	28.6	22.2	6.1	
1500-1600	97	23	23	22	29	1	0	53	0	33	1	5	0	0	3	1	0	0	1	5	14	24	32	12	6	2	0	1	0	0	33.7	26.1	7.3	
1600-1700	105	35	27	22	21	1	1	76	1	18	2	1	0	0	4	1	0	0	1	6	15	24	40	16	2	1	0	0	0	0	31.9	25.5	6.2	
1700-1800	73	21	12	20	20	3	0	52	0	10	1	2	0	2	2	2	1	0	0	1	7	9	30	18	5	3	0	0	0	0	30.1	23.8	6.2	
1800-1900	52	13	15	12	12	0	1	44	1	5	0	0	0	0	0	1	0	0	0	2	10	19	11	9	1	0	0	0	0	0	30.7	24.7	5.8	
1900-2000	48	16	11	14	7	1	0	35	0	9	1	0	0	0	1	0	0	0	0	1	0	10	12	20	5	0	0	0	0	0	30.3	24.8	5.3	
2000-2100	37	12	6	11	8	1	2	26	0	4	2	0	0	0	0	2	0	0	0	3	14	10	8	1	0	1	0	0	0	0	28.5	22.2	6.1	
2100-2200	25	7	8	4	6	1	0	20	0	3	1	0	0	0	0	0	0	0	0	2	3	9	9	2	0	0	0	0	0	0	29.7	24.2	5.3	
2200-2300	23	6	7	3	7	2	0	16	0	7	1	0	0	0	0	0	0	0	0	3	5	9	4	2	0	0	0	0	0	0	28.3	22.3	5.7	
2300-0000	8	1	4	1	2	0	0	8	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	0	1	0	0	0	0	0	38.9	27.4	11.2	
0700-1900	1438	347	335	362	392	15	12	1007	3	316	18	20	2	4	25	13	1	0	29	137	294	383	360	172	47	11	1	2	0	0	0	31.1	23.9	7.0
0600-2200	1608	403	373	406	451	19	15	1154	4	339	26	24	2	5	28	16	1	0	30	146	343	432	424	190	51	14	1	2	0	0	0	31.1	23.9	6.9
0600-0000	1664	410	384	410	460	21	15	1178	4	341	28	24	2	5	29	16	1	0	30	150	349	443	430	192	52	14	2	2	0	0	0	31.1	23.9	6.9
0000-0000	1769	430	404	438	497	30	20	1246	4	343	31	24	2	6	31	15	1	0	31	158	365	476	452	208	58	16	3	2	0	0	0	31.2	24.0	6.9

Virtual Day (7.00)

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	MPH Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 0.85	Average Speed	Standard Deviation		
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph	MPH 65 <140mph
0000-0100	9	3	1	2	3	0	0	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	
0100-0200	9	3	2	3	1	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-		
0200-0300	5	2	1	1	1	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-		
0300-0400	8	2	1	2	3	0	0	5	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	
0400-0500	12	2	2	2	5	3	0	9	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36.3	27.9	8.1	
0500-0600	61	6	11	18	26	9	3	44	0	2	1	0	0	0	0	1	0	0	3	6	11	14	12	9	5	1	0	0	0	0	32.8	24.4	8.1	
0600-0700	76	15	15	17	29	1	1	57	0	9	2	1	0	0	0	1	2	0	0	1	3	16	19	21	11	4	0	0	0	0	32.2	25.1	6.8	
0700-0800	139	21	30	41	47	2	1	106	0	22	2	2	0	0	0	2	1	0	0	1	9	22	33	44	22	5	2	0	0	0	32.1	25.6	6.4	
0800-0900	150	44	33	34	39	1	1	113	0	29	2	1	0	0	0	2	0	0	0	2	11	27	35	42	27	5	2	0	0	0	32.4	25.7	6.5	
0900-1000	113	27	29	28	29	2	0	84	0	22	1	1	0	0	0	1	1	0	0	1	7	22	32	32	16	4	0	0	0	0	31.6	25.1	6.3	
1000-1100	98	23	25	24	26	2	0	69	1	21	2	2	0	0	0	2	1	0	0	2	10	19	29	21	13	3	0	0	0	0	30.7	24.2	6.3	
1100-1200	89	24	21	22	22	1	0	59	1	22	2	1	0	0	0	2	1	0	0	1	6	19	25	26	9	2	0	0	0	0	30.2	23.9	6.1	
1200-1300	114	30	24	27	33	0	1	81	0	24	2	2	0	0	0	2	1	0	0	4	16	26	32	23	9	3	0	1	0	0	29.9	22.7	7.0	
1300-1400	104	30	25	27	32	1	1	71	0	24	1	1	0	0	0	2	1	0	0	3	10	21	32	24	9	3	1	0	0	0	30.6	23.8	6.6	
1400-1500	102	27	26	24	25	0	1	66	0	26	2	2	0	0	0	1	6	2	0	1	6	23	34	24	12	2	1	0	0	0	30.7	24.4	6.1	
1500-1600	87	23	22	21	21	1	0	53	0	24	1	2	2	0	0	1	1	0	0	1	4	14	25	27	11	4	1	0	0	0	31.6	25.2	6.2	
1600-1700	75	17	20	21	21	0	0	46	0	17	1	0	0	0	0	1	0	0	0	1	2	17	24	9	3	1	0	0	0	0	32.3	25.2	6.9	
1700-1800	60	16	14	16	14	1	0	45	0	9	1	0	0	0	0	2	0	0	0	1	3	9	19	17	7	3	1	0	0	0	31.6	25.0	6.4	
1800-1900	39	11	9	9	9	0	0	31	0	9	0	0	0	0	0	0	0	0	0	0	2	9	4	1	0	0	0	0	0	0	30.2	24.3	6.0	
1900-2000	31	10	7	7	7	0	0	25	0	4	0	0	0	0	0	0	0	0	0	0	2	7	10	9	3	1	0	0	0	0	29.7	23.6	5.9	
2000-2100	29	8	6	7	7	1	0	23	0	3	1	0	0	0	0	0	0	0	0	0	1	7	11	6	2	1	0	0	0	0	29.8	23.4	6.1	
2100-2200	21	6	5	7	6	0	0	17	0	3	0	0	0	0	0	0	0	0	0	0	1	7	10	6	2	1	0	0	0	0	31.0	24.6	6.2	
2200-2300	20	7	7	5	5	0	0	17	0	3	1	0	0	0	0	0	0	0	0	0	0	2	5	8	4	3	1	0	0	0	29.1	22.9	5.9	
2300-0000	12	3	3	3	3	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	30.6	24.2	6.2	
0700-0800	255	281	280	304	12	8	1170	241	11	828	129	2	89	1220	330	313	148	128	112	248	18	112	248	18	112	248	18	112	248	18	112	248	6.4	
0800-0800	328	334	314	327	353	16	10	901	2	239	23	16	0	0	0	22	13	0	0	0	21	99	281	377	396	166	45	9	1	0	0	31.0	24.5	6.3
0900-0800	336	334	324	335	361	17	10	900	2	232	26	16	0	0	0	21	99	281	389	166	45	9	9	289	384	169	45	9	1	0	0	30.9	24.4	6.3
1400-1400	362	366	367	368	27	13	1333	342	10	1023	2	42	0	0	0	24	105	278	417	184	23	114	289	311	11	1	0	0	0	0	31.1	24.7	6.3	

Knowles ATCs

Report Id 36122
 Site Name Site 1 of 1
 Description Gale Road, 80m north of AS208 South Boundary Road
 Direction Southbound

Friday 08 July 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 0.85	Average Speed	Standard Deviation		
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph	MPH 65 <140mph
0000-0100	10	4	2	0	4	0	0	8	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.5	19.5	5.8
0100-0200	14	5	2	4	3	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.4	18.9	5.3
0200-0300	14	4	0	4	6	0	0	12	0	1	0	0	0	0	0	1	0	0	0	3	3	1	2	4	1	0	0	0	0	0	0	33.6	24.4	8.9
0300-0400	19	3	5	3	8	1	0	10	0	7	0	0	0	0	0	0	0	0	0	2	2	1	9	1	4	0	0	0	0	0	0	35.6	27.5	7.8
0400-0500	17	1	4	5	7	1	0	9	0	1	0	0	0	2	1	3	0	0	0	0	4	2	3	6	1	1	0	0	0	0	0	31.2	23.3	7.6
0500-0600	58	12	13	14	23	2	0	44	0	7	2	1	0	1	1	0	0	0	1	4	11	8	19	12	3	0	0	0	0	0	0	32.9	25.6	7.1
0600-0700	135	44	21	35	35	0	0	110	0	21	2	1	0	0	1	0	0	0	0	15	33	19	39	21	5	3	0	0	0	0	0	32.3	24.7	7.4
0700-0800	132	32	28	30	42	1	0	74	0	46	2	7	0	0	1	1	0	0	0	17	24	24	22	41	17	3	0	0	0	0	0	30.7	23.3	7.1
0800-0900	185	53	48	44	46	0	0	112	1	49	4	8	1	1	6	2	1	0	3	36	42	47	42	11	3	1	0	0	0	0	0	28.7	21.8	6.7
0900-1000	179	44	46	44	45	0	0	113	0	40	4	8	1	1	7	4	1	0	0	33	35	49	41	15	6	0	0	0	0	0	0	29.6	22.7	6.7
1000-1100	219	41	40	49	49	1	0	105	1	52	2	6	1	1	7	3	0	0	5	19	41	45	53	14	1	1	0	0	0	0	0	29.5	22.8	6.4
1100-1200	209	44	55	59	51	0	1	153	1	34	4	4	0	2	5	5	0	0	3	31	47	50	55	18	3	2	0	0	0	0	0	29.8	22.8	6.8
1200-1300	226	73	58	49	46	4	2	154	1	44	2	3	0	3	11	2	0	0	3	38	35	52	67	26	3	2	0	0	0	0	0	30.6	23.4	7.0
1300-1400	250	73	61	49	67	2	1	179	2	45	3	3	1	0	12	2	0	0	2	44	48	50	70	29	6	1	0	0	0	0	0	30.5	23.2	7.1
1400-1500	309	96	55	83	75	9	1	228	1	50	2	2	0	0	8	6	0	0	4	41	53	77	86	43	4	1	0	0	0	0	0	30.6	23.7	6.7
1500-1600	297	89	70	75	63	2	0	226	1	51	1	3	0	0	7	6	0	0	3	35	32	58	106	51	8	4	0	0	0	0	0	32.6	25.3	7.0
1600-1700	278	95	29	70	54	2	0	233	0	34	3	1	0	1	2	0	0	0	33	41	40	84	64	11	3	1	0	0	0	0	0	33.8	25.9	7.6
1700-1800	260	102	38	38	28	3	2	172	0	22	2	0	0	0	3	2	0	0	0	15	39	22	81	36	10	2	1	0	0	0	0	33.3	26.1	6.9
1800-1900	129	73	17	16	23	1	0	119	0	6	0	0	0	0	2	1	0	0	0	20	26	19	33	21	10	0	0	0	0	0	0	32.5	24.5	7.7
1900-2000	56	21	12	8	15	0	0	47	0	5	2	0	0	0	0	2	0	0	0	11	18	9	5	9	4	0	0	0	0	0	0	30.8	22.6	7.9
2000-2100	35	10	7	11	7	0	0	28	1	4	0	0	0	0	2	0	0	0	7	9	4	4	8	3	0	0	0	0	0	0	0	32.7	23.9	8.5
2100-2200	25	11	6	3	5	0	0	19	0	4	1	0	0	0	1	0	0	0	1	3	6	2	7	5	0	1	0	0	0	0	0	33.0	24.2	8.5
2200-2300	49	29	8	6	1	2	0	39	0	3	2	0	0	1	0	1	0	0	1	8	12	1	9	12	4	2	0	0	0	0	0	34.9	25.2	9.4
2300-0000	24	7	7	7	3	0	0	22	0	0	0	0	0	0	1	0	0	0	0	7	7	15	1	1	0	0	0	0	0	0	0	20.8	17.2	3.5
0700-1900	2578	815	569	606	589	25	9	1868	8	475	29	45	4	12	70	32	2	0	24	369	463	531	759	345	68	17	2	0	0	1	0	31.3	23.9	7.1
0600-2200	2630	901	615	663	651	25	9	2072	9	509	34	46	4	12	74	34	2	0	25	405	529	565	814	388	80	21	2	0	1	0	0	31.3	23.9	7.2
0600-0000	2993	937	630	676	660	26	11	2133	9	512	37	46	4	14	74	35	2	0	26	420	536	567	824	400	84	23	2	0	1	0	0	31.3	23.9	7.2
0000-0000	3035	966	656	702	711	30	11	2230	9	528	39	47	4	17	76	42	2	0	27	443	582	582	864	418	93	23	2	0	1	0	0	31.4	23.9	7.2

Saturday 09 July 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops			45-00	Axle Cycles	Motor Cycles	Car Van 13	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 0.85	Average Speed	Standard Deviation		
			15-30	30-45							2 Axle Van Lorry	3 Axle Rigid	4 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph				MPH 65 <140mph	
0000-0100	13	7	3	2	1	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.2	18.0	5.0		
0100-0200	7	1	4	2	0	1	0	5	0	0	0	0	0	1	0	0	0	0	1	1	1	2	2	0	0	0	0	0	0	0	0	28.0	20.1	7.6	
0200-0300	5	3	1	0	1	0	0	4	0	1	0	0	0	0	0	0	0	0	0	1	2	0	1	14	0	0	0	0	0	0	0	39.5	25.0	14.0	
0300-0400	8	2	2	1	3	0	0	6	0	1	0	0	0	0	0	0	0	0	1	4	0	1	2	0	0	0	0	0	0	0	0	25.4	17.4	7.8	
0400-0500	10	1	2	4	3	1	0	3	0	4	0	0	0	0	1	1	0	0	0	2	2	1	2	2	1	0	0	0	0	0	0	33.7	24.5	8.8	
0500-0600	18	0	15	5	0	0	0	15	0	8	0	0	0	0	0	0	0	0	0	15	3	4	2	3	4	0	0	0	0	0	0	34.0	24.9	8.8	
0600-0700	70	41	6	11	12	1	0	63	0	3	1	1	1	0	0	0	0	0	0	1	13	11	4	23	15	2	1	0	0	0	0	0	33.0	24.6	8.1
0700-0800	33	12	5	7	9	0	0	21	0	10	7	9	1	0	0	0	0	0	0	2	12	4	7	7	1	0	0	0	0	0	0	0	31.4	24.2	7.0
0800-0900	43	5	10	15	13	0	0	29	1	10	11	2	0	0	0	0	0	0	0	1	11	12	8	3	6	2	0	0	0	0	0	0	29.3	21.1	7.9
0900-1000	74	24	14	19	17	0	1	54	0	17	1	0	1	0	0	0	0	0	0	1	15	19	11	14	7	4	3	0	0	0	0	0	31.9	23.0	8.6
1000-1100	100	20	14	19	25	2	0	59	1	12	1	1	0	0	2	0	0	0	0	0	17	21	10	14	5	6	4	0	1	0	0	0	33.4	23.6	9.5
1100-1200	95	36	28	11	20	1	0	81	1	12	0	0	0	0	0	0	0	0	0	1	20	18	15	25	9	6	1	0	0	0	0	0	31.5	23.2	8.0
1200-1300	105	27	31	27	20	2	0	93	0	8	0	1	0	1	0	0	0	0	0	0	22	26	16	25	8	8	0	0	0	0	0	0	30.7	22.8	7.6
1300-1400	61	18	18	10	15	1	0	51	1	8	0	0	0	0	0	0	0	0	0	1	12	19	6	12	11	0	0	0	0	0	0	0	32.0	22.0	7.3
1400-1500	68	28	13	9	18	1	0	56	0	10	0	0	1	0	0	0	0	0	0	0	11	13	14	17	9	3	1	0	0	0	0	0	30.7	24.0	7.5
1500-1600	61	16	17	14	14	1	0	49	0	8	0	0	0	0	0	0	0	0	0	0	16	19	9	6	6	3	0	0	0	0	0	0	28.8	20.9	7.6
1600-1700	7	35	7	12	8	0	0	31	8	12	8	0	0	0	0	0	0	0	0	0	8	7	4	5	0	0	0	0	0	0	0	0	23.9	18.5	8.5
1700-1800	67	12	17	21	17	0	2	53	0	9	0	0	0	1	2	0	0	0	0	0	14	16	5	6	17	6	2	0	1	0	0	0	35.3	25.1	9.9
1800-1900	47	7	7	9	7	0	0	37	0	11	7	0	0	0	0	0	0	0	0	0	1	17	10	24	15	1	0	0	0	0	0	0	33.2	24.1	8.8
1900-2000	31	10	5	8	8	0	0	26	1	1	1	0	0	0	1	0	0	0	0	0	8	7	4	6	4	1	1	0	0	0	0	0	31.4	22.7	8.5
2000-2100	19	4	7	5	3	0	0	18	0	1	0	0	0	0	0	0	0	0	0	0	4	8	2	2	1	2	0	0	0	0	0	0	29.4	21.4	8.0
2100-2200	15	4	3	13	6	0	0	13	0	3	13	6	0	0	0	0	0	0	0	0	1	3	2	2	4	0	0	0	0	0	0	0	31.3	22.3	8.6
2200-2300	17	5	3	4	5	0	1	13	0	2	1	1	0	0	0	0	0	0	0	1	4	6	2	2	1	1	0	0	0	0	0	0	28.3	20.1	7.9
2300-0000	26	8	8	6	4	1	0	24	0	0	0	0	0	0	0	0	0	0	0	0	6	10	2	3	4	1	0	0	0	0	0	0	27.6	20.7	6.7
0000-0000	7187	232	193	242	193	112	108	648	5	163	199	112	12	12	12	12	12	12	12	12	12	228	228	184	134	45	15	1	3	9	9	0	31.8	23.2	8.3
0000-0000	932	311	214	193	214	115	5	788	4	110	7	5	3	4	5	1	0	0	0	7	191	228	124	184	134	45	15	1	3	9	9	0	31.8	23.2	8.3
0000-0000	975	324	225	203	224	125	6	805	4	118	8	5	3	4	5	1	0	0	0	8	201	244	129	190	138	46	15	1	3	9	9	0	31.6	23.1	8.2
0000-0000	1038	342	238	215	239	13	8	851	10	127	138	9	5	10	10	10	10	10	10	10	217	250	136	201	136	46	15	1	3	9	9	0	31.6	23.0	8.3

Monday 11 July 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme												Double Road Train	Triple Road Train	Vehicle Speed												P-Title 0.85	Average Speed	Standard Deviation
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph			MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph							
0000-0100	14	7	5	1	1	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	3	1	0	0	2	0	0	0	0	0	0	25.4	18.7	6.5				
0100-0200	6	3	1	0	2	0	0	5	0	4	0	0	0	0	0	0	0	0	0	0	3	1	0	0	2	0	0	0	0	0	0	30.7	20.5	9.9				
0200-0300	6	2	4	0	0	0	0	4	0	2	1	0	0	0	0	0	0	0	0	0	1	1	1	2	1	0	0	0	0	0	0	31.5	23.8	7.4				
0300-0400	13	4	1	4	1	0	0	7	1	3	3	0	0	0	0	0	0	0	0	0	3	2	3	2	2	1	0	0	0	0	0	32.0	23.4	8.3				
0400-0500	25	4	6	6	9	3	0	11	0	6	1	0	0	0	0	0	0	0	0	0	3	3	5	7	3	1	0	0	0	0	0	31.4	22.6	8.5				
0500-0600	56	5	5	21	25	1	0	56	5	45	0	0	0	0	0	0	0	0	0	0	7	18	12	7	8	4	0	0	0	0	0	30.9	23.3	7.4				
0600-0700	86	35	13	9	29	2	1	67	1	12	0	0	0	0	1	2	0	0	0	0	15	14	14	19	12	7	4	0	0	0	0	34.1	24.9	8.8				
0700-0800	130	24	23	41	42	1	1	71	0	47	3	0	0	0	0	0	0	0	0	0	23	19	37	32	15	2	0	0	0	0	0	29.9	22.9	6.8				
0800-0900	222	46	67	64	64	2	1	133	3	64	6	2	0	0	8	3	0	0	0	0	62	71	48	32	12	5	0	0	0	0	0	27.2	20.5	6.5				
0900-1000	177	47	30	50	50	3	1	115	0	48	3	1	0	0	3	3	0	0	0	0	5	32	27	44	46	17	5	0	0	0	0	30.4	22.8	7.3				
1000-1100	174	52	35	41	46	1	0	105	2	49	1	5	0	1	5	5	0	0	0	0	29	32	48	52	27	4	1	0	0	0	0	31.5	24.1	7.1				
1100-1200	193	50	55	45	43	1	1	121	1	49	3	1	0	0	13	3	0	0	0	0	2	31	38	49	55	13	5	0	0	0	0	29.5	22.7	6.6				
1200-1300	218	53	57	60	48	0	0	143	1	51	2	3	1	2	8	5	2	0	0	0	3	43	49	51	53	18	1	0	0	0	0	28.6	21.8	6.5				
1300-1400	212	49	57	51	55	1	2	141	1	43	2	3	1	1	3	11	4	0	0	0	1	33	43	48	52	27	3	1	0	0	0	30.2	23.0	7.0				
1400-1500	285	99	62	53	71	6	3	182	1	71	3	0	2	1	13	3	0	0	0	0	2	27	52	75	86	37	6	0	0	0	0	30.7	24.2	6.3				
1500-1600	251	81	54	59	57	3	1	166	1	53	1	2	0	1	18	5	0	0	0	0	2	29	44	63	71	37	4	0	0	0	0	31.0	24.1	6.7				
1600-1700	373	97	81	106	89	3	4	300	1	53	3	1	0	1	5	2	0	0	0	0	3	31	57	62	130	73	18	0	0	0	0	32.7	25.7	6.7				
1700-1800	270	128	64	45	33	4	4	232	0	25	0	0	1	0	4	0	0	0	0	0	2	30	31	36	92	64	14	1	0	0	0	33.6	26.1	7.2				
1800-1900	142	63	36	26	17	2	3	120	0	9	0	0	0	0	3	1	4	0	0	0	1	18	22	22	33	28	14	4	0	0	0	34.5	26.0	8.3				
1900-2000	65	22	14	14	15	1	1	53	0	5	1	0	0	0	1	3	0	0	0	0	1	16	15	5	10	15	3	0	0	0	0	31.7	22.9	8.5				
2000-2100	52	20	15	12	5	2	1	42	0	7	0	0	0	0	0	0	0	0	0	0	1	12	13	7	9	6	3	1	0	0	0	31.2	22.4	8.4				
2100-2200	37	10	8	9	10	0	1	26	0	7	0	0	0	0	2	1	0	0	0	0	8	8	6	10	4	1	0	0	0	0	0	30.1	22.6	7.2				
2200-2300	58	36	7	12	3	0	2	50	0	5	0	0	0	0	1	0	0	0	0	0	12	13	8	11	10	3	1	0	0	0	0	32.1	23.6	8.2				
2300-0000	16	7	3	5	1	0	0	11	0	0	0	0	0	0	2	1	0	0	0	0	0	3	1	7	4	1	0	0	0	0	0	28.8	22.7	5.9				
0700-1900	2647	739	618	644	568	27	20	1429	9	560	22	24	24	7	12	84	2	0	0	0	29	374	432	568	736	368	12	8	1	0	0	31.1	23.8	7.0				
0600-2200	2887	876	688	688	630	32	24	2017	10	591	23	24	7	15	99	43	2	0	0	0	32	423	532	600	784	405	93	13	1	0	0	0	31.2	23.8	7.2			
0600-0000	2861	919	678	705	659	32	26	2078	10	598	23	24	7	18	100	43	2	0	0	0	32	440	546	615	799	416	98	14	1	0	0	0	31.2	23.8	7.2			
0000-0000	3081	944	696	739	700	37	26	2161	11	619	25	24	7	22	102	45	2	0	0	0	36	462	572	641	819	432	104	14	1	0	0	0	31.2	23.7	7.2			

Tuesday 12 July 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme												Double Road Train	Triple Road Train	Vehicle Speed												P-Title 0.85	Average Speed	Standard Deviation
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20	MPH 20 <25mph	MPH 25 <30mph			MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65	MPH 65 <140mph							
0000-0100	5	1	1	1	2	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	25.9	20.0	5.7				
0100-0200	7	1	1	2	3	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	29.9	19.9	13.5				
0200-0300	6	1	2	1	2	0	0	6	5	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	29.1	21.3	7.5				
0300-0400	12	1	3	4	4	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	30.7	23.0	7.4				
0400-0500	18	5	8	1	4	0	0	13	0	3	0	0	0	0	0	0	2	0	0	0	4	3	0	4	6	0	0	0	0	0	0	35.1	25.5	9.3				
0500-0600	60	12	12	17	19	0	0	39	1	10	1	0	0	0	5	4	0	0	0	1	13	9	10	19	8	0	0	0	0	0	0	30.2	22.8	7.2				
0600-0700	103	35	27	16	25	2	2	69	0	23	3	1	0	1	1	1	0	0	1	17	17	21	21	28	14	4	1	0	0	0	0	31.6	23.9	7.5				
0700-0800	131	29	31	29	42	2	0	67	0	64	3	3	0	0	2	0	0	0	0	67	33	42	33	34	13	4	0	0	0	0	0	30.2	23.0	6.9				
0800-0900	189	44	50	40	55	0	0	106	4	50	5	2	0	2	12	3	0	0	5	32	38	53	38	20	3	0	0	0	0	0	0	29.3	22.2	6.8				
0900-1000	127	31	30	52	44	0	0	83	0	53	2	4	0	2	10	3	0	0	3	19	32	37	43	19	4	0	0	0	0	0	0	30.5	23.4	6.8				
1000-1100	183	38	36	55	54	1	0	183	38	56	55	2	1	1	7	6	0	0	0	31	35	37	64	14	1	0	0	0	0	0	0	29.5	22.9	6.4				
1100-1200	189	46	41	47	55	1	1	107	2	54	1	4	0	2	13	4	0	0	3	34	47	52	33	18	1	1	0	0	0	0	0	28.6	21.7	6.6				
1200-1300	187	46	42	48	51	0	0	123	1	39	3	2	0	0	14	2	0	0	0	35	27	49	51	22	3	0	0	0	0	0	0	30.1	23.2	6.7				
1300-1400	215	59	42	48	66	0	0	215	59	42	48	3	2	0	13	4	0	0	0	43	26	48	34	25	6	0	0	0	0	0	0	30.0	23.1	6.7				
1400-1500	251	80	55	50	66	9	3	170	1	51	1	2	1	1	10	2	0	0	2	35	33	52	55	35	6	3	0	0	0	0	0	31.8	24.5	7.0				
1500-1600	236	71	52	44	69	3	2	160	0	22	1	2	3	5	9	4	0	0	0	32	35	53	48	28	9	9	0	0	0	0	0	32.1	24.8	7.0				
1600-1700	247	74	57	47	72	0	0	160	0	28	0	7	2	5	5	4	1	0	0	34	36	60	122	74	13	7	0	0	0	0	0	32.6	24.0	6.8				
1700-1800	287	124	77	47	39	0	0	252	0	32	0	1	0	0	0	2	0	0	0	16	31	47	110	65	12	0	0	0	0	0	0	33.1	27.1	6.3				
1800-1900	167	71	34	8	55	5	0	135	0	34	8	0	0	0	1	0	0	0	0	24	28	39	32	30	2	0	0	0	0	0	0	34.3	25.8	8.8				
1900-2000	64	23	14	11	16	0	0	1	53	0	6	0	1	0	0	0	2	1	0	2	15	15	5	3	8	4	0	0	0	0	0	31.5	22.6	8.6				
2000-2100	34	12	7	10	5	0	0	28	0	4	2	0	0	0	0	0	0	0	0	5	11	5	13	9	4	2	1	0	0	0	0	32.2	23.7	8.2				
2100-2200	38	10	10	6	10	0	0	38	10	6	10	0	0	0	0	0	0	0	0	11	6	9	29	2	0	0	0	0	0	0	0	29.2	21.3	7.6				
2200-2300	18	5	6	13	3	0	0	5	43	0	0	0	0	0	0	2	0	0	0	1	10	17	6	11	5	4	4	0	0	0	0	33.4	23.8	9.3				
2300-0000	16	5	2	2	0	0	0	10	0	3	0	0	0	0	0	0	0	0	0	7	7	3	1	3	0	0	0	0	0	0	0	27.1	18.6	8.1				
0000-0100	745	259	174	213	244	27	13	844	259	174	213	27	13	348	584	576	26	11	338	538	11	28	113	285	14	1	0	0	0	0	0	24.2	24.2	8.0				
0600-0700	2795	825	625	639	766	30	16	1934	11	577	26	28	1	21	110	40	0	0	0	28	396	456	665	797	416	84	19	0	0	0	0	31.4	24.1	7.1				
0800-0900	4281	861	728	678	766	33	21	3131	861	728	678	26	28	423	876	816	17	8	423	816	17	8	423	89	89	19	0	0	0	0	0	31.5	24.1	7.2				
2200-2300	2777	884	661	674	758	33	22	2059	12	605	27	28	1	23	29	119	41	0	0	29	435	497	623	844	438	84	14	0	0	0	0	31.4	24.0	7.1				

Time	Hourly Totals	00-15			15-30			30-45			45-60			Number Vehicle Classes ARX Scheme												Vehicle Speed												P.85	Average Speed	Standard Deviation
		Cycles	Motor Cycles	Car Van 12	Car Van Towing	2 Axle Van Lorry	4 Axle Rigid	4 Axle Rigid	4 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <70mph													
0000 - 0100	19	10	4	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32.4	24.3	7.8						
0100 - 0200	12	1	8	3	0	0	0	1	0	0	0	1	2	0	0	1	2	2	1	4	1	1	0	0	0	0	0	0	0	0	0	32.0	23.0	9.0						
0200 - 0300	11	4	1	1	5	1	0	1	4	0	0	1	2	0	0	1	1	1	1	1	2	3	0	0	0	0	0	0	0	0	32.5	23.9	8.3							
0300 - 0400	15	7	3	6	4	0	0	0	7	0	0	1	1	0	0	2	2	1	1	3	4	5	0	0	0	0	0	0	0	0	26.7	24.9	7.8							
0400 - 0500	24	5	8	7	4	0	0	0	13	6	0	0	0	1	3	1	0	0	4	2	6	9	1	2	0	0	0	0	0	0	31.9	24.5	7.1							
0500 - 0600	6	81	46	27	0	8	46	27	0	46	27	0	1	17	11	9	14	6	3	3	3	3	3	3	3	3	3	3	3	3	21.9	20.9	7.9							
0600 - 0700	108	53	17	18	20	2	2	2	76	1	2	3	0	0	3	0	0	0	1	20	21	9	30	25	1	0	0	0	0	0	29.3	24.1	7.9							
0700 - 0800	133	22	26	33	52	0	1	86	0	36	1	2	2	2	2	2	2	34	31	16	1	0	0	0	0	0	0	0	0	0	29.5	22.6	6.6							
0800 - 0900	200	44	17	54	64	1	1	110	1	54	1	1	1	1	1	1	1	37	47	42	5	0	0	0	0	0	0	0	0	0	29.3	21.8	7.2							
0900 - 1000	170	45	31	48	46	0	0	112	0	42	2	2	2	0	1	8	3	0	34	18	44	43	25	3	0	0	0	0	0	0	29.7	23.2	7.2							
1000 - 1100	33	185	53	55	30	57	1	119	3	61	2	2	2	0	2	8	32	33	67	42	12	1	0	0	0	0	0	0	0	0	28.3	21.7	6.4							
1100 - 1200	200	43	42	53	82	1	1	125	1	47	2	2	2	0	2	16	3	0	38	25	38	27	4	0	0	0	0	0	0	0	28.8	23.4	7.1							
1200 - 1300	210	57	43	59	51	3	1	147	0	40	2	2	2	0	2	8	51	0	41	52	48	28	6	3	0	0	0	0	0	0	31.1	23.7	7.2							
1300 - 1400	67	227	69	77	59	53	2	169	5	53	2	2	2	1	151	37	2	31	37	32	23	6	1	0	0	0	0	0	0	0	23.6	20.6	6.6							
1400 - 1500	271	87	49	55	80	7	2	166	1	61	7	1	1	0	1	16	9	0	43	48	72	72	29	5	1	0	0	0	0	0	30.1	23.2	6.6							
1500 - 1600	25																																							

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-60	Axle 1 Cycles	Motor Cycles	Car Van 9	Car Van Towing	2 Axle Van Lorry	Vehicle Speed Classes ARX Scheme										P-85	Average Speed	Standard Deviation							
			Rigid	30-45							Axle 2 Rigid	Axle 3 Rigid	Axle 4 Rigid	Axle 5 Rigid	Axle 6 Rigid	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph				MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph
0000 - 0100	12	5	3	2	2	0					0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	27.8	20.3	7.2	
0100 - 0200	8	2	3	2	1	0		6		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-		
0200 - 0300	6	3	1	2	3	0		6		3	0	0	0	0	1	2	2	2	2	0	0	0	0	0	0	-	-	-		
0300 - 0400	13	3	3	4	3	0		7		4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	31.1	22.9	7.9		
0400 - 0500	17	3	5	4	5	1		0		0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	31.8	23.6	7.9		
0500 - 0600	48	7	9	36	5	1		9		13	0	0	0	0	7	9	8	33	7	2	0	0	0	0	0	31.6	23.6	7.4		
0600 - 0700	94	40	16	16	22	2	1	1		14	2	1	0	0	1	1	16	17	13	24	17	4	1	0	0	0	33.1	24.7	8.1	
0700 - 0800	99	22	20	24	33	1	0	56		33	1	3	0	0	0	1	16	17	25	26	11	2	0	0	0	0	30.2	23.0	6.9	
0800 - 0900	36	19	39	39	36	3	0	39		36	4	3	86	44	3	34	28	3	34	31	12	5	0	0	0	0	31.2	21.5	7.3	
0900 - 1000	136	35	27	39	35	1	0	86		34	2	2	2	2	5	2	25	23	32	33	14	4	1	0	0	0	30.2	22.6	7.3	
1000 - 1100	149	34	39	39	42	1	0	91		43	2	2	2	2	4	2	29	32	41	35	14	1	0	0	0	0	30.7	23.2	7.2	
1100 - 1200	162	41	27	39	43	1	1	107		37	2	2	2	2	0	1	9	3	28	31	40	19	3	1	0	0	0	30.3	22.8	7.2
1200 - 1300	179	50	44	45	40	2	0	126		33	2	2	2	2	0	0	30	38	41	45	19	4	1	0	0	0	30.3	22.9	7.1	
1300 - 1400	176	48	12	36	42	3	0	176		42	2	2	2	2	0	0	29	34	41	45	23	5	1	0	0	0	30.4	23.1	7.1	
1400 - 1500	213	70	43	45	55	5	2	146		3	1	0	1	8	4	0	30	37	51	62	26	5	1	0	0	0	30.5	23.4	6.9	
1500 - 1600	203	59	46	47	51	2	1	143		1	2	0	0	8	4	0	1	24	35	42	59	33	6	1	1	0	0	31.4	23.8	7.3
1600 - 1700	250	170	74	55	58	3	3	257		74	55	207	60	0	0	0	1	26	36	45	53	25	2	0	0	0	30.5	25.2	7.3	
1700 - 1800	211	92	49	39	31	1	2	181		0	22	0	0	1	2	0	0	29	29	29	6									

Time	Hourly Totals	00-15	15-30		30-45	45-60	Number Vehicle Classes ARX Scheme																P-85	Average Speed	Standard Deviation									
			Cycles	Motor Cycles			Car Van	Car Van Towing	2 Axle Van	1 Axle Rigid				4 Axle Rigid	5 Axle Rigid	6 Axle Rigid	Double Road Train	Triple Road Train	Vehicle Speed															
										MPH 0	MPH 10	MPH 15	MPH 20						MPH 25	MPH 30	MPH 35	MPH 40				MPH 45	MPH 50	MPH 55	MPH 60	MPH 65				
Mun	2091	944	698	739	700	37	21	1518	25	641	2	8	432	102	1	641	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph				
Tue	2987	884	661	674	758	33	22	2059	12	605	27	28	1	29	119	41	1	0	435	497	623	844	439	89	19	0	1	0	0	0	31.2	23.7	7.2	
Wed	3119	987	722	720	680	40	24	2150	13	626	26	36	0	0	27	407	555	677	880	454	103	10	5	1	0	0	0	0	0	0	31.5	24.2	7.1	
Thurs	3127	917	637	661	742	35	22	2200	13	657	25	39	0	0	24	358	19	34	528	518	112	78	19	0	0	0	0	0	0	0	31.5	24.2	7.4	
Fri	3035	966	656	702	711	30	11	2230	9	528	39	47	4	17	76	42	2	0	443	582	582	864	418	93	23	2	0	1	0	0	0	31.4	23.9	7.2
Sat	1308	338	342	217	239	19	6	851	4	126	8	5	3	5	3	0	0	0	217	258	136	202	144	47	15	2	3	0	0	0	0	31.4	23.0	8.3
Sun	659	219	178	196	219	19	7	79	2	66	0	0	0	0	0	0	0	0	115	204	122	116	86	7	0	0	0	0	0	0	0	31.6	22.0	8.3
17184	5327	2819	3944	4049	206	120	12337	60	3198	168	161	17	128	551	232	6	0	170	2820	3225	3402	4533	2177	587	103	17	8	2	0	0	0	31.4	23.6	7.5

Knowles ATC

Report Id 397/22
 Site Name Site 1 of 1
 Description Gale Road, 20m north of A5208 South Boundary Road
 Direction Northbound

Monday 15 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 85%	Average Speed	Standard Deviation	
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph
0000-0100	6	2	0	1	3	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	1	0	0	0	0	28.8	5.2	
0100-0200	5	1	2	2	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	25.3	2.4	
0200-0300	5	2	0	1	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4	2	1	0	0	0	0	0	0	19	5.8	
0300-0400	6	2	1	0	3	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	21.4	4.6	
0400-0500	11	0	3	4	4	0	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3	4	2	0	0	0	0	31.6	25.1		
0500-0600	75	6	9	27	33	6	6	53	0	8	1	0	0	0	0	0	0	0	2	6	4	21	36	6	0	0	0	0	0	28.9	24.3	5.7	
0600-0700	90	13	15	22	40	0	1	75	0	10	1	0	0	0	0	0	0	2	1	0	0	5	28	48	6	2	0	0	0	0	29.2	25.8	4.2
0700-0800	202	38	41	55	68	4	0	160	4	24	1	1	0	0	0	0	0	3	4	0	1	19	61	92	16	2	1	0	0	0	29.1	24.8	5
0800-0900	164	56	40	35	33	0	0	123	0	36	4	1	0	0	0	0	0	0	0	0	0	3	12	49	75	21	2	0	0	0	30.5	26	4.5
0900-1000	120	32	25	27	36	0	0	86	1	25	4	3	0	0	0	0	1	0	0	0	0	4	6	13	44	45	7	1	0	0	28.4	23.5	5.4
1000-1100	115	29	33	27	26	0	0	68	4	35	3	1	0	0	0	0	3	1	0	0	0	10	27	38	30	9	0	1	0	0	27.8	23	5.3
1100-1200	94	25	21	25	23	0	0	60	0	26	2	1	0	0	0	2	2	1	0	0	0	2	18	35	29	10	0	0	0	0	29.3	24	4.9
1200-1300	146	29	37	30	50	0	0	105	0	35	1	1	0	0	1	3	0	0	0	0	0	23	69	47	7	0	0	0	0	0	27.8	23.8	3.9
1300-1400	120	35	21	35	29	0	0	81	0	34	2	0	0	0	0	2	1	0	0	0	0	1	13	61	36	9	0	0	0	0	27.5	24.2	3.7
1400-1500	137	35	35	36	31	0	0	85	0	41	6	0	0	0	0	0	0	0	0	0	1	23	63	40	8	2	0	0	0	0	27.3	23.6	4.2
1500-1600	89	30	23	23	13	0	0	63	0	24	0	1	0	0	0	1	0	0	0	0	0	7	36	37	8	1	0	0	0	0	28.9	25.1	3.9
1600-1700	92	28	24	26	14	1	0	64	0	21	1	1	0	0	0	0	0	0	0	0	0	6	32	43	6	0	0	0	0	0	28.3	24.8	4.4
1700-1800	79	19	16	24	20	2	0	66	1	3	2	0	1	1	1	1	1	2	0	0	0	5	33	30	8	1	0	0	0	0	28.7	24.8	4.8
1800-1900	43	10	15	10	8	0	0	36	1	4	0	0	0	0	0	0	0	0	0	0	0	2	13	20	7	1	0	0	0	0	30.6	26.2	4
1900-2000	27	6	8	7	0	0	0	21	0	3	0	0	0	0	0	0	0	0	0	0	0	2	8	13	3	1	0	0	0	0	30.2	26.4	3.8
2000-2100	30	8	7	8	7	1	0	23	0	6	0	0	0	0	0	0	0	0	0	0	1	2	6	12	5	3	0	1	0	0	34.7	27.8	6.4
2100-2200	14	5	4	2	3	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	5	0	0	0	0	0	33.5	28.1	7.2
2200-2300	23	6	8	6	3	2	0	17	0	2	0	0	0	0	0	0	0	0	0	0	0	6	12	2	0	0	0	0	0	0	28.2	24.5	4.6
2300-0000	15	8	4	2	1	0	0	12	0	0	1	0	0	0	0	0	0	0	0	0	0	9	2	2	2	2	0	0	0	0	34.8	26.8	5.5
0700-1900	1401	366	331	353	351	7	0	997	11	308	26	10	1	2	22	13	7	0	37	168	534	524	116	10	4	0	0	0	0	0	28.7	24.4	4.6
0600-2200	198	398	365	391	408	9	1	1127	11	329	27	10	1	2	23	17	2	3	8	39	179	578	601	135	16	5	1	0	0	0	28.9	25.2	4.7
0900-1000	1600	412	377	399	412	11	1	1156	11	332	28	10	1	2	23	20	2	3	8	41	190	593	615	139	18	5	1	0	0	0	28.9	24.6	4.7
0600-0000	1708	425	392	435	456	17	7	1234	11	345	29	10	1	2	24	23	2	3	10	48	189	626	662	148	19	5	1	0	0	0	28.9	24.6	4.8

Tuesday 16 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 85%	Average Speed	Standard Deviation
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph			
0000-0100	10	1	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.2	5
0100-0200	6	3	1	1	1	0	0	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.4	1.9
0200-0300	11	4	4	4	1	0	0	5	1	0	0	0	0	0	1	1	0	0	0	0	0	3	8	0	0	0	0	0	0	0	27.4	23.6
0300-0400	3	2	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	23.9	7.7
0400-0500	14	3	4	1	6	0	0	9	0	1	0	0	0	0	1	0	3	0	0	0	0	1	5	5	3	0	0	0	0	0	32.4	26.2
0500-0600	60	4	10	19	27	1	6	60	47	5	3	0	0	0	0	1	2	3	20	25	8	1	30	25	8	1	0	0	0	0	30	25.5
0600-0700	70	14	13	15	28	0	1	59	0	6	0	0	0	0	0	0	0	3	23	31	12	1	0	0	0	0	0	0	0	0	30.3	26.2
0700-0800	192	30	47	53	62	1	1	158	2	25	0	2	0	0	1	2	0	0	0	3	10	70	78	26	4	1	0	0	0	0	30.2	26
0800-0900	161	30	45	52	34	0	0	161	0	52	30	12	3	0	0	1	0	0	0	3	12	33	65	22	4	1	0	0	0	0	30.2	25.9
0900-1000	117	31	31	29	26	1	0	83	1	28	2	1	0	0	0	1	0	0	0	0	1	15	35	54	11	1	0	0	0	0	29	25.1
1000-1100	109	32	27	25	21	0	0	105	64	1	26	4	3	0	0	3	4	0	0	0	5	8	44	41	7	0	0	0	0	0	27.4	24.1
1100-1200	109	22	18	31	38	0	0	109	66	18	3	0	0	0	0	34	1	0	0	0	2	10	39	47	8	0	0	0	0	0	29.4	25.1
1200-1300	133	18	33	39	43	0	1	96	0	30	1	1	0	0	0	2	2	0	0	0	3	21	42	49	17	1	0	0	0	0	29.9	24.5
1300-1400	124	32	38	26	28	1	2	85	1	27	2	0	0	0	0	5	1	0	0	0	4	15	49	39	14	1	0	0	0	0	29.5	24.9
1400-1500	105	34	17	28	26	0	0	69	1	27	2	0	0	0	0	1	5	0	0	0	7	19	26	46	8	0	0	0	0	0	28.2	23.3
1500-1600	117	30	33	20	34	0	1	76	1	29	1	1	0	0	0	5	3	0	0	0	3	8	44	54	8	0	0	0	0	0	29	25
1600-1700	92	36	20	21																												

Thursday 18 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops			Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 85%	Average Speed	Standard Deviation		
			15-30	30-45	45-00					2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph	MPH 65 <70mph
0000 - 0100	14	7	2	3	2	0	0	11	1	1	0	0	0	0	0	1	0	0	0	0	0	5	8	1	0	0	0	0	0	0	28.4	26.1	3.2	
0100 - 0200	3	0	1	2	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.7	45.4	5	
0200 - 0300	7	0	4	2	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	4	1	2	0	0	0	0	0	0	26.2	2.9	0	
0300 - 0400	7	1	2	0	4	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	1	0	0	0	0	0	0	26.8	3.2	0	
0400 - 0500	16	5	3	4	4	0	0	12	0	1	0	0	0	0	0	1	2	0	0	0	3	0	8	4	1	0	0	0	0	0	31.6	27.8	5.4	
0500 - 0600	81	4	18	25	34	7	6	59	0	4	2	1	0	0	0	2	0	0	0	0	1	29	9	2	0	0	0	0	0	0	29.9	24.2	6.4	
0600 - 0700	84	14	16	18	36	2	2	65	0	9	1	0	0	0	3	2	0	0	0	1	6	30	31	13	3	0	0	0	0	0	30.6	26.1	4.5	
0700 - 0800	166	26	35	57	9	1	1	155	1	24	0	0	0	0	1	6	0	0	0	0	1	82	27	4	0	0	0	0	0	0	30.2	26.1	4.2	
0800 - 0900	166	55	42	36	33	1	0	130	0	30	3	0	0	0	0	1	1	0	0	0	3	6	42	73	35	7	0	0	0	0	0	31.5	27	4.8
0900 - 1000	135	33	37	29	36	3	1	96	1	28	0	2	0	0	2	1	1	0	0	2	10	9	55	45	12	2	0	0	0	0	28.6	24.2	5.3	
1000 - 1100	110	26	25	22	37	0	1	71	0	33	3	0	0	0	0	2	0	0	0	0	5	19	37	33	13	3	0	0	0	0	29.3	24.4	5.2	
1100 - 1200	125	23	38	26	38	0	0	89	0	33	0	0	0	0	1	2	0	0	0	0	14	68	29	12	1	0	0	0	0	0	0	28.7	24.2	4.2
1200 - 1300	147	31	30	32	54	0	0	107	1	30	3	2	0	0	0	2	2	0	0	0	3	19	58	57	9	1	0	0	0	0	0	28.4	24.3	4.1
1300 - 1400	152	25	38	51	38	1	1	111	0	31	4	0	0	0	0	3	1	0	0	0	3	23	95	57	12	1	0	0	0	0	0	28.5	24.1	4.4
1400 - 1500	142	37	40	25	40	0	0	103	0	27	4	1	0	0	0	2	3	0	0	0	0	3	53	62	11	4	0	0	0	0	0	29.2	25.4	4.4
1500 - 1600	113	32	31	28	22	0	0	80	0	24	0	2	0	0	0	4	2	1	0	0	0	15	35	53	7	1	0	0	0	0	0	29.3	25.4	4.7
1600 - 1700	114	31	37	22	24	0	1	91	1	17	1	2	0	0	0	1	1	0	0	0	0	37	54	14	2	0	0	0	0	0	0	29.7	25.7	4.2
1700 - 1800	65	20	16	18	11	1	0	52	0	7	1	0	0	0	0	3	0	1	0	0	9	12	37	4	2	0	0	0	0	0	29.2	25.5	4.7	
1800 - 1900	54	14	13	10	17	0	0	44	0	4	1	0	0	0	0	3	2	0	0	0	6	12	26	7	3	0	0	0	0	0	31.8	26.3	4.9	
1900 - 2000	28	6	9	8	5	0	0	25	0	2	0	0	0	0	0	0	1	0	0	0	0	5	12	10	1	0	0	0	0	0	0	32.4	28.8	3.7
2000 - 2100	32	9	4	13	6	0	0	29	0	2	0	0	0	0	0	1	0	0	0	0	1	7	16	6	0	0	0	0	0	0	0	30.5	26.8	5.2
2100 - 2200	15	9	1	3	2	2	0	12	0	0	0	0	0	0	0	1	0	0	0	0	1	6	6	0	1	0	0	0	0	0	0	27.5	24.5	5.6
2200 - 2300	23	5	6	8	4	0	0	20	0	1	0	0	0	0	0	0	0	0	0	0	0	9	9	1	2	0	0	0	0	0	0	31.4	25.7	7.6
2300 - 0000	18	4	3	8	3	1	1	12	0	0	1	0	0	0	0	2	0	0	0	0	0	7	6	2	1	1	0	0	0	0	0	31.6	24.5	5.5
0700 - 1900	1509	353	382	356	418	7	5	1269	3	288	20	10	8	3	27	14	7	5	21	142	527	688	163	31	27	2	0	0	0	0	0	29.5	25.2	4.7
0800 - 2200	1608	391	412	398	467	11	7	1260	3	412	31	21	10	0	3	32	17	3	0	8	34	150	575	873	192	36	2	1	0	0	0	29.7	25.2	4.9
0900 - 0000	1709	400	421	414	474	12	10	1292	3	302	22	10	0	5	32	18	3	0	7	35	151	591	688	195	39	2	1	0	0	0	0	29.8	25.3	4.7
0000 - 0000	1837	417	451	450	519	19	16	1387	4	310	24	11	0	5	35	23	3	0	10	41	158	632	739	212	42	2	1	0	0	0	0	29.8	25.3	4.8

Friday 19 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops			45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 85%	Average Speed	Standard Deviation			
			15-30	30-45	45-00						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph	MPH 65 <70mph	
0000 - 0100	12	1	1	5	5	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	34.6	26.8	5.6	0		
0100 - 0200	5	1	0	2	2	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	22.6	6.2	0		
0200 - 0300	7	3	1	3	0	0	0	0	1	0	3	0	0	0	1	2	1	0	0	0	1	3	2	0	0	0	0	0	0	0	0	-	22.5	4.6	0	
0300 - 0400	10	2	1	0	7	0	0	0	8	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	27.2	4.7	0	
0400 - 0500	22	5	6	2	9	0	0	0	16	0	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32.1	28	5	0	
0500 - 0600	73	8	10	23	32	5	5	58	0	32	5	0	0	0	0	0	0	0	0	0	0	13	58	34	11	0	0	0	0	0	0	30.2	25.4	4.9	0	
0600 - 0700	91	15	17	27	32	0	1	77	1	7	1	0	0	0	0	0	2	2	0	0	0	5	21	52	8	5	0	0	0	0	0	30	26.7	3.9	0	
0700 - 0800	208	39	44	57	68	4	1	162	1	33	0	2	0	0	0	1	4	0	0	3	14	21	56	74	34	3	3	0	0	0	0	30.6	24.9	6.2	0	
0800 - 0900	180	40	47	40	63	0	0	180	0	36	3	1	0	0	0	3	12	34	0	3	12	24	68	67	14	0	0	0	0	0	0	28.4	23.8	5.3	0	
0900 - 1000	122	19	29	31	43	0	1	83	0	31	1	1	0	0	3	1	1	0	0	0	1	0	5	15	41	45	12	3	1	0	0	29.2	24.9	5.2	0	
1000 - 1100	121	26	31	32	32	0	0	88	1	25	0	0	0	0	0	1	5	1	0	0	0	2	9	50	39	19	2	0	0	0	0	30.3	25.1	4.6	0	
1100 - 1200	138	29	38	35	36	1	0	138	0	38	3	1	0	0	1	3	5	0	0	1	3	3	19	36	31	2	1	0	0	0	0	27.3	26.3	3.7	0	
1200 - 1300	133	33	25	37	38	1	0	98	1	29	2	0	0	0	0	2	0	0	0	0	0	1	13	44	61	13	1	0	0	0	0	0	28.7	25.1	4.1	0
1300 - 1400	144	37	33	38	36	1	2	144	0	37	3	1	0	2	1	3	0	0	0	1	3	13	55	46	20	4	1	0	0	0	0	0	30.7	25.5	5.6	0
1400 - 1500	134	40	25	34	35	0	0	77	2	40	3	3	2	0	0	2	4	4	0	0	0	0	8	46	66	14	0	0	0	0	0	0	29.1	25.7	3.6	0
1500 - 1600	112	29	27	33	23	2	0	72	1	26	3	1	2	0	0	3	2	0	0	0	0	2	6	49	37	16	1	0	0	0	0	0	29.1	25.4	5.1	0
1600 - 1700	99	37	24	17	21	0	1	73	0	24	17	21	0	1	0	3	2	0	0	0	0	3	20	63	32	12	2	0	0	0	0	28.6	26.2	3.3	0	
1700 - 1800	62	18	19	13	12	1	0	43	0	13	0	0	0	0	0	1	1	3	7	32	14	5	3	1	0	0	0	0	0	0	0	31.8	27.6	5.4	0	
1800 - 1900	183	20	1	43	43	0	0	183	0	20	1	0	0	0	0	0	0	0	0	0	0	25	20	25	5	3	1	0	0	0	0	29.3	25.5	5.5	0	
1900 - 2000	41	18	6	10	7	0	0	33	0	4	1	0	0	0	0	2	1	0	0	0	0	1	2	8	25	0	0	0	0	0	0	0	29.8	26.2	4	0
2000 - 2100	29	11	7	2	3	0	0	1	24	0	3	0	0	0	0	1	0	0	0	0	0	0	7	16	2	1	0	0	0	0	0	0	29.2	26.3	4.2	0
2100 - 2200	15	5	0	0	0	0	0	14	5	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	7	3	0	0	0	0	0	32	27.5	3.9	0	
2200 - 2300	20	2	9	3	6	0	0	17	0	1	0	0	0	0	1	1	0	0	0	0	0	0	7	10	3	0	0	0	0	0	0	0	31.7	26	4.2	0
2300 - 0000	18	6	4	6	2	0	0	15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6	8	3	0	0	0	0	0	0	31.1	26.3	4.2	0	
0000 - 0008	1508	380	517	517	12	12	7	1508	1057	380	22	391	12	10	124	13	22	338	576	676	1175	21	138	538	576	2	2	0	0	0	0	28	28	6	5	
0008 - 0020	1883	429	382	421	451	12	9	1203	11	338	24	9	2	9	32	31	0	1	8	44	149	578	676	192	28	6	0	0	0	0	0	29.7	25.2	4.9	0	
0020 - 0040	1721	437	395	450	458	12	9	1237	11	341	24	9	2	9	34	32	0	1	8	44	150	591	694	198	28	6	0	0	0	0	0	29.8	25.2	4.9	0	
0040 - 0052	1890	457	398	457	477	17	14	1320	11	330	26	9	2	9	33	28	0	1	8	43	159	588	682	216	28	6	0	0	0	0	0	29.8	25.2	4.9	0	

Sunday 21 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Double Road Train	Triple Road Train	Vehicle Speed														P-Title 85%	Average Speed	Standard Deviation	
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	MPH 0	MPH 10	MPH 15			MPH 20	MPH 25	MPH 30	MPH 35	MPH 40	MPH 45	MPH 50	MPH 55	MPH 60	MPH 65								
0000 -0100	8	2	3	2	1	0	0	6	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	-	29.1	6.6
0100 -0200	8	2	4	1	1	0	0	8	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	-	29.8	4.5
0200 -0300	7	3	3	0	1	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	27.7	5.1
0300 -0400	2	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	29.9	6.2
0400 -0500	3	0	1	0	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	28.9	3.4
0500 -0600	22	1	8	3	10	2	1	18	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	29.4	24.8	4.8
0600 -0700	15	2	6	3	4	0	0	12	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	27.4	25.1	2.2
0700 -0800	22	4	6	5	6	0	0	20	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	31.3	27.6	4.5
0800 -0900	17	4	6	6	1	0	0	13	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	30	25.6	3.8
0900 -1000	20	4	6	3	7	0	1	17	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	29.6	26.4	4
1000 -1100	30	7	6	5	12	1	0	21	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	31.5	26.7	4.1
1100 -1200	38	8	9	8	13	0	0	32	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	29.3	26.2	3.4
1200 -1300	45	4	13	10	18	0	3	38	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	30.7	27.5	3.8
1300 -1400	36	7	5	9	15	0	0	30	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	31.6	27.6	4.5
1400 -1500	29	10	5	6	8	0	0	26	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	34.7	28.3	4.1
1500 -1600	25	6	6	7	6	0	0	24	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	34.7	26.9	6.7
1600 -1700	44	13	13	8	10	0	2	38	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	30.7	27.3	5
1700 -1800	47	11	12	8	16	1	0	42	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	31.7	26.2	4.8
1800 -1900	30	12	7	4	7	1	2	24	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	30.9	26.5	5.1
1900 -2000	21	6	8	2	5	0	0	19	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	30.3	26.1	3.5
2000 -2100	26	4	6	8	8	3	0	20	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	30.4	24.7	6.4
2100 -2200	16	8	2	2	4	1	0	11	0	1	0	0	0	0	1	11	4	2	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	30.2	26.4	4.4
2200 -2300	19	8	5	3	3	1	0	16	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	31.8	25.6	5
2300 -0000	8	2	5	2	0	0	0	8	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	-	27	2.8
0700 -1900	383	90	94	81	118	3	8	325	1	39	3	1	0	0	0	6	11	107	177	67	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	31.2	26.9	4.5	
0600 -2200	461	110	116	96	139	7	8	487	1	46	4	1	0	0	0	1	8	16	127	217	76	13	0	0	0	0	0	0	0	0	0	0	0	0	0	31	26.7	4.6	
0600 -0000	488	123	123	99	143	8	8	458	1	48	4	1	0	0	0	1	8	17	140	223	82	14	3	0	0	0	0	0	0	0	0	0	0	0	0	30.9	26.7	4.6	
0000 -0000	538	131	143	106	158	10	10	454	1	48	4	1	0	0	0	5	5	0	0	0	1	9	20	153	245	91	15	4	0	0	0	0	0	0	31	26.7	4.6		

Virtual Day (7.00)

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Double Road Train	Triple Road Train	Vehicle Speed														P-Title 85%	Average Speed	Standard Deviation			
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	MPH 0	MPH 10	MPH 15			MPH 20	MPH 25	MPH 30	MPH 35	MPH 40	MPH 45	MPH 50	MPH 55	MPH 60	MPH 65	<10mph	<15mph	<20mph	<25mph				<30mph	<35mph	<40mph
0000 -0100	10	2	2	4	3	0	0	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	32.1	26	5.4		
0100 -0200	6	2	2	2	1	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	25.6	4		
0200 -0300	7	2	2	2	1	0	0	3	0	2	0	0	0	1	1	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	24.5	6.4		
0300 -0400	6	1	1	1	3	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	24.9	4.9		
0400 -0500	12	2	3	2	4	0	0	9		1	0	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	24.3	5.1		
0500 -0600	4	4	10	18		58	3	58	44	3	1	0	0	0	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	26.9	30		
0600 -0700	67	11	14	17	25	1	1	55	0	1	0	0	0	0	1	3	22	31	8	2	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30	26.1		
0700 -0800	24	15	11	22	44	0	1	151	120	1	22	10	49	0	0	0	0	20	3	2	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30.2	25.6		
0800 -0900	132	41	34	28	29	1	0	101	1	25	2	1	0	0	0	1	4	11	41	18	3	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30.2	25.6	
0900 -1000	97	23	25	23	26	1	0	70	0	21	1	1	0	0	0	1	1	11	35	37	8	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	28.8	24.4	
1000 -1100	123	25	23	21	25	1	0	96	62	21	1	0	0	0	0	1	4	21	31	10	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	28.9	24.3		
1100 -1200	96	21	23	24	27	0	0	64	0	25	2	1	0	0	0	0	1	11	44	30	8	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	28.6	24.4	
1200 -1300	113	23	27	27	28	35	0	1	83	0	24	1	1	0	0	0	2	12	41	47	10	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	29	24.9	
1300 -1400	130	28	26	26	28	0	0	1	108	26	1	0	0	0	0	0	2	11	43	37	11	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	29.1	24.8	
1400 -1500	102	28	23	24	26	0	0	67	1	25	2	1	3	0	0	0	3	2	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	29.1	24.8		
1500 -1600	88	24	24	22	18	0	0	61	0	20	7	1	1	0	0	0	2	1	1	9	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	29.5	25.1		
1600 -1700	167	17	17	60	26	0	0	81	60	1	0	0	0	0	0	0	2	1	17	38	9	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	26	40	
1700 -1800	146	17	17	15	15	1	0	45	34	6	1	0	0	0	0	0	1	1	4	16	32	8	2	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30	25.8
1800 -1900	145	14	12	37	14	0	0	42	12	4	0	0	0	0	0	0	0	2	6	1	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30.1	26.1		
1900 -2000	29	10	7	6	7	0	0	24	0	3	0	0	0	0	0	0	1	7	16	4	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30.3	26.7		
2000 -2100	27	7	6	7	6	1	0	22	0	0	0	0	0	0	0	0	1	2	7	12	4	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30.4	26.7	
2100 -2200	6	2	3	6	3	0	0	16	13	0	0	0	0	0	0	0	0	7	5	3	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	31.5	26.2		
2200 -2300	20	5	6	5	5	0	0	16	0	2	0	0	0	0	0	0	1	8	8	3	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	30.3	25.5		
2300 -0000	13	4	4	3	2	0	0	8	14	0	1	1	0	0	0	0	0	5	4	2	1	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	31.8	25.5		
0700 -0800	284	317	304	287		7	6	1174	854	236	1	1	0	0	0	0	28	27	108	410	118	473	128	18	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	28.4	25.2
0800 -0900	1313	328	317	321	347	9	7	989	6	249	19	10	1	3	0	5	29	116	451	538	146	22	4	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	29.6	25.3	
0900 -1000	1346	337	329	326	354	18	8	1049	395	6	327	254	10	8	19	1	39	117	464	558	151	24	24	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	29.6	25.3	
1000 -1100	1444	351	347	350	382	14	13	1068	7	289	19	10	1	4	28	22	1	8	24	124	496	991	164	26	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	0	-	29.6	25.3

Knowles ATC

Report Id 39722
 Site Name Site 1 of 1
 Description Gale Road, 20m north of AS208 South Boundary Road
 Direction Southbound

Monday 15 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 85%	Average Speed	Standard Deviation	
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph				MPH 60 <65mph
0000-0100	12	3	3	1	5	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	2	0	0	0	0	0	25.5	20.1	3.5
0100-0200	6	3	2	1	0	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	4	1	1	0	0	0	0	0	0	21	3.7	
0200-0300	7	3	0	2	2	0	1	4	0	2	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	-	21.8	5.9	
0300-0400	11	3	0	5	3	0	0	8	0	2	1	0	0	0	0	0	0	0	0	0	0	22	0	1	0	0	0	0	0	26.1	20.7	3.8	
0400-0500	22	2	1	6	13	0	2	9	0	9	0	0	0	1	1	0	0	0	0	0	0	2	6	13	0	1	0	0	0	24.3	20.7	3.6	
0500-0600	61	5	14	15	27	0	5	36	0	16	3	0	0	0	0	0	0	0	0	0	4	22	28	7	0	0	0	0	0	24.3	20.7	3.6	
0600-0700	131	49	25	18	39	1	4	98	0	27	1	0	0	0	0	0	0	0	0	0	1	9	35	53	28	4	1	0	0	0	26.7	21.8	4.8
0700-0800	141	21	23	48	49	1	2	87	0	23	4	3	0	0	0	0	0	0	0	0	1	13	51	60	13	3	0	0	0	0	24.2	20.4	4.1
0800-0900	219	44	60	54	61	0	1	128	1	77	3	3	1	4	1	0	0	0	0	0	3	40	74	89	13	0	0	0	0	0	23.3	19	4.1
0900-1000	193	50	46	45	52	0	0	110	1	73	5	2	0	0	0	2	0	0	0	0	5	17	70	89	12	0	0	0	0	0	23.9	19.7	4
1000-1100	168	49	48	31	40	0	2	102	2	59	2	4	0	0	0	1	0	0	0	0	1	22	46	79	20	0	0	0	0	0	24.2	20.4	4.3
1100-1200	191	43	53	47	48	0	1	109	0	71	5	2	0	0	0	1	2	0	0	0	0	15	83	80	11	2	0	0	0	0	23.6	20	3.7
1200-1300	197	46	47	40	64	1	1	131	2	54	3	4	0	0	0	0	0	0	0	0	1	12	82	79	22	1	0	0	0	0	24	20.2	3.9
1300-1400	212	62	51	50	49	0	3	141	1	59	2	4	0	0	0	0	2	0	0	0	1	22	87	88	14	0	0	0	0	0	23.6	19.7	3.8
1400-1500	244	83	47	56	58	4	2	171	0	56	7	2	0	0	0	0	2	0	0	0	3	25	82	114	19	1	0	0	0	0	23.9	20	4
1500-1600	261	83	59	53	66	3	3	180	2	62	5	4	0	0	0	0	0	0	0	0	0	14	104	119	23	1	0	0	0	0	24.2	20.4	3.5
1600-1700	382	110	90	99	83	5	4	301	1	59	7	2	0	0	0	0	0	0	0	0	15	54	114	158	38	3	0	0	0	0	24.2	19.5	4.7
1700-1800	319	128	94	63	34	0	2	287	1	25	2	1	1	0	0	0	0	0	0	0	15	39	89	133	42	1	0	0	0	0	24.7	19.8	5.1
1800-1900	158	87	25	33	13	2	3	134	0	18	1	0	0	0	0	0	0	0	0	0	0	5	38	89	22	3	1	0	0	0	25.3	22	3.5
1900-2000	55	21	14	9	0	1	1	48	0	6	1	0	0	0	0	0	0	0	0	0	0	3	11	26	14	1	0	0	0	0	26.7	22.6	4
2000-2100	40	15	9	11	5	1	0	32	0	6	1	0	0	0	0	0	0	0	0	0	0	1	9	23	7	0	0	0	0	0	25.2	21.6	3.1
2100-2200	29	8	5	6	10	0	1	26	0	2	0	0	0	0	0	0	0	0	0	0	0	2	9	14	4	0	0	0	0	0	25	21.1	3.9
2200-2300	48	27	4	11	7	2	3	36	0	8	0	0	0	0	0	0	0	0	0	0	0	4	8	12	15	10	4	0	0	0	27.2	21.4	5.5
2300-0000	21	13	3	2	3	0	1	14	0	5	1	0	0	0	0	0	0	0	0	0	0	1	7	9	4	0	0	0	0	0	27.3	21.5	4.1
0700-1900	2685	806	643	619	617	16	24	1881	11	656	46	27	2	6	8	8	0	0	45	278	920	1177	249	15	1	0	0	0	0	0	24	20	4.2
0600-2200	2940	899	696	686	680	18	30	2095	11	697	48	27	2	6	8	8	0	0	48	293	984	1293	302	20	2	0	0	0	0	0	24.3	20.2	4.3
0600-0000	3910	939	783	678	690	20	34	2135	11	710	49	27	2	7	9	9	0	0	46	302	1093	1317	316	24	2	0	0	0	0	0	24.3	20.2	4.3
0000-0000	3129	958	723	708	740	20	42	2206	11	743	53	27	2	7	9	9	0	0	46	309	1047	1371	327	27	2	0	0	0	0	0	24.3	20.2	4.3

Tuesday 16 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme						Vehicle Speed												P-Title 85%	Average Speed	Standard Deviation			
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph				MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph
0000-0100	15	5	1	7	2	0	2	10	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.9	20.7	3.8	
0100-0200	9	2	4	2	1	0	1	4	0	3	1	0	0	0	0	0	0	0	0	0	1	3	3	2	0	0	0	0	0	0	20.9	4.8	0
0200-0300	13	4	3	1	5	0	0	6	0	3	4	4	2	0	0	0	0	0	0	0	1	5	5	2	0	0	0	0	0	27.4	20.8	4.2	
0300-0400	10	4	2	2	2	1	0	5	0	4	0	0	0	0	0	0	0	0	0	0	2	4	6	3	0	0	0	0	0	21.3	5	0	
0400-0500	21	6	5	2	8	0	2	12	0	5	1	1	0	0	0	0	0	0	0	0	2	5	10	3	1	0	0	0	0	25.8	21.2	4.6	
0500-0600	58	9	7	19	3	1	4	32	1	7	16	9	0	0	0	0	0	0	0	4	19	29	9	4	0	0	0	0	0	25.5	20.9	3.7	
0600-0700	110	45	16	24	25	1	1	79	0	22	2	1	0	0	1	2	0	0	0	0	6	27	53	22	2	0	0	0	0	25.7	21.8	4.1	
0700-0800	146	25	33	41	47	0	1	94	3	41	2	3	0	0	0	2	0	0	0	0	12	66	59	8	1	0	0	0	0	23.4	19.8	3.5	
0800-0900	195	48	52	43	52	0	1	121	3	62	43	52	0	3	1	0	0	0	0	0	2	63	62	13	2	0	0	0	0	23	20	4	
0900-1000	170	58	39	40	33	0	0	96	0	64	5	2	0	0	1	2	0	0	0	0	1	6	56	89	17	1	0	0	0	0	24.3	20.9	3.6
1000-1100	170	55	35	40	40	1	0	100	2	57	3	4	0	0	0	0	0	0	0	0	1	16	52	87	14	0	0	0	0	0	24.6	20.5	3.8
1100-1200	168	40	56	40	56	1	2	168	10	32	60	56	1	0	0	0	0	0	0	0	2	67	66	1	2	0	0	0	0	0	24.4	20.5	3.9
1200-1300	206	55	51	46	54	3	3	132	0	58	6	3	0	0	0	0	0	0	0	4	22	63	100	16	1	0	0	0	0	24.1	20.1	4	
1300-1400	209	64	45	43	57	0	4	136	2	53	9	5	0	0	0	0	0	0	0	2	10	75	94	24	2	0	0	0	0	24.7	21	5.2	
1400-1500	240	79	60	66	49	4	3	174	3	60	5	3	0	1	1	0	0	0	0	34	2	60	98	37	28	3	1	0	0	24.7	20.2	4.3	
1500-1600	265	83	53	57	72	1	4	196	2	50	5	2	0	1	3	1	0	0	0	7	15	73	136	32	2	0	0	0	0	24.7	20.8	4.3	
1600-1700	378	95	86																														

Thursday 18 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van 17	Car Van Towing	Number Vehicle Classes ARX Scheme										Double Road Train	Triple Road Train	Vehicle Speed														P.Title 85%	Average Speed	Standard Deviation
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	5 Axle Artic	6 Axle Artic	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph			MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph									
0000 - 0100	20	8	5	4	3	0	0	17	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.2	21.4	3.6	
0100 - 0200	6	1	1	2	2	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	3	0		
0200 - 0300	11	0	3	8	3	0	0	8	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.4	22.3	4.7			
0300 - 0400	15	4	1	3	7	0	0	12	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.3	21.5	3.1			
0400 - 0500	26	7	3	9	7	0	0	17	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26.1	22.8	3.3			
0500 - 0600	72	7	13	20	32	0	0	51	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7	19.6	4.4		
0600 - 0700	124	47	19	24	34	0	1	96	0	21	3	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.5	21.7	3.4		
0700 - 0800	148	27	22	51	48	0	1	111	1	16	2	3	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	19.8	3.8		
0800 - 0900	181	46	45	46	46	0	1	107	1	65	2	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.6	19.8	3.9		
0900 - 1000	177	43	45	43	46	1	5	108	0	58	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	19.7	3.3		
1000 - 1100	194	54	49	33	58	0	3	125	0	57	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.6	20.6	3.9		
1100 - 1200	213	63	55	41	54	1	1	136	0	63	7	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	20.1	4		
1200 - 1300	255	60	59	69	67	0	5	184	2	58	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	20.1	4		
1300 - 1400	237	54	53	73	57	0	4	170	2	53	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.5	19.9	3.8		
1400 - 1500	274	88	63	60	63	6	4	200	1	58	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.3	21.3	7.8		
1500 - 1600	276	101	55	59	61	1	4	208	0	58	4	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.2	20.6	3.9		
1600 - 1700	388	113	93	92	90	2	2	332	2	45	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27.3	22.2	4.8		
1700 - 1800	336	141	76	78	41	1	4	286	0	40	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	17.7	6.1		
1800 - 1900	170	79	40	19	32	3	2	142	0	19	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.1	20.7	4.1		
1900 - 2000	71	21	22	14	14	0	2	58	0	8	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.6	21.2	3.8		
2000 - 2100	55	17	16	10	12	1	2	43	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.4	21.1	3.4		
2100 - 2200	27	8	7	3	9	0	0	21	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.7	21.2	5		
2200 - 2300	61	31	7	10	13	1	3	51	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27.3	22.2	4.8		
2300 - 0000	25	14	4	6	1	0	2	17	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.7	21.9	3.7		
0700 - 1900	2849	869	655	662	663	15	32	2109	9	602	42	18	3	3	11	5	0	0	0	0	0	110	262	942	1262	258	11	0	0	0	0	0	0	3	24	19.9	5	
0800 - 2200	3126	962	719	713	732	16	37	2327	8	646	47	19	3	5	11	6	8	0	0	0	0	110	274	1028	1391	304	15	0	1	0	0	0	0	3	24.2	20	4.8	
0900 - 0000	3212	1007	730	729	746	17	42	2385	9	655	49	19	3	6	11	6	0	0	0	0	0	110	279	1050	1431	320	18	0	1	0	0	0	0	3	24.3	20.1	4.8	
0000 - 0000	3362	1034	756	773	799	17	46	2503	9	686	54	21	3	6	11	6	0	0	0	0	0	112	287	1099	1500	341	19	0	1	0	0	0	0	3	24.3	20.1	4.9	

Friday 19 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van 15	Car Van Towing	2 Axle Van Lorry	Number Vehicle Classes ARX Scheme										Double Road Train	Triple Road Train	Vehicle Speed														P-Title 85%	Average Speed	Standard Deviation
			15-30	30-45							4 Axle Rigid	3 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph			MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <70mph								
0000 - 0100	19	5	3	7	4	0	0	15	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.9	19.8	2.6			
0100 - 0200	7	2	1	3	1	0	0	4	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.3	5.3				
0200 - 0300	7	3	3	4	0	0	0	7	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	4.8				
0300 - 0400	12	3	4	0	5	0	0	10	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.7	21.6	2.7			
0400 - 0500	31	4	9	5	13	0	0	23	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	23.7	2.5			
0500 - 0600	64	7	11	21	0	0	0	64	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	23.5	2.5			
0600 - 0700	126	51	24	21	30	1	1	103	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.5	22.6	3.1			
0700 - 0800	168	32	36	40	58	1	1	124	0	34	1	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.2	20	4.3			
0800 - 0900	182	45	166	51	40	0	0	182	0	56	2	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	20	3.8			
0900 - 1000	178	37	47	41	53	1	1	108	0	56	8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.9	20.3	3.7			
1000 - 1100	175	41	108	42	61	0	0	108	0	60	3	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	16	3.6			
1100 - 1200	218	45	56	61	53	0	4	122	0	75	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7	20.4	3.8			
1200 - 1300	264	74	62	67	61	3	1	193	1	58	4	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	20.7	4.2			
1300 - 1400	292	77	61	67	56	2	2	217	1	67	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	19	4.6			
1400 - 1500	267	92	43	76	56	6	2	195	2	55	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.2	20.6	3.8			
1500 - 1600	318	80	69	93	76	1	1	241	3	61	4	2	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	20.5	5.2			
1600 - 1700	317	97	80	93	57	0	0	317	0	80	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	16	4.1			
1700 - 1800	205	90	47	37	31	3	3	171	0	25	3	0	0	0	0	6	16	42	145	41	1	0	0	0	0	0	0	0	0	0	0	0	0	28	21.3	4.9			
1800 - 1900	135	17	10	18	10	0	0	118	0	10	4	0	0	0	0	1	8	41	61	22	0	0	0	0	0	0	0	0	0	0	0	0	0	25.3	21	3.1			
1900 - 2000	53	16	10	13	14	0	1	44	0	8	0	0	0	0	0	0	4	20	20	9	0	0	0	0	0	0	0	0	0	0	0	0	0	25.4	20.7	4.1			
2000 - 2100	48	18	13	6	11	0	0	43	0	0	0	0	0	0	0	0	0	12	26	8	0	0	0	0	0	0	0	0	0	0	0	0	0	25.2	21.7	3.7			
2100 - 2200	31	12	4	27	4	0	0	21	0	4	0	0	0	0	0	0	0	2	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.4	13.8	3.8			
2200 - 2300	45	21	12	7	5	0	0	41	0	3	0	0	0	0	0	0	0	16	15	10	0	0	0	0	0	0	0	0	0	0	0	0	0	25.4	20.7	4.6			
2300 - 0000	22	7	6	5	4	0	0	21	0	1	0	0	0	0	0	0	0	2	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	18.1	4.5			
0000 - 0000	2497	783	608	608	608	18	26	1922	608	508	508	18	26	1922	608	508	508	1238	233	19	18	18	18	18	18	18	18	18	18	18	18	18	18	85.6	43	6.6			
0600 - 0200	2935	880	609	703	693	21	28	2139	6	642	708	21	28	2139	6	642	708	926	1402	336	20	0	0	0	0	0	0	0	0	0	0	0	0	24.6	20.7	4.2			
0600 - 0800	3082	908	612	708	696	21	28	2201	6	646	710	21	28	2201	6	646	710	952	1423	347	0	0	0	0	0	0	0	0	0	0	0	0	0	24.6	20.7	4.3			
0600 - 0000	2142	932	708	732	730	21	32	2306	7	674	732	21	32	2306	7	674	732	983	1507	366	26	0	0	0	0	0	0	0	0	0	0	0	0	24.7	20.7	4.2			

Sunday 21 August 2022

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	Number Vehicle Classes ARX Scheme										Vehicle Speed										P-Title 85%	Average Speed	Standard Deviation		
			15-30	30-45						2 Axle Van Lorry	3 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph				MPH 65 <140mph	
0000 - 0100	12	1	4	4	3	0	0	10	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.7	20.2	4.6	
0100 - 0200	9	1	6	1	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.8	19.9	4.1	
0200 - 0300	6	1	4	0	1	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	3.1	0.1	
0300 - 0400	8	2	2	2	2	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	3.7	0.1	
0400 - 0500	3	1	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	2.6	0.1	
0500 - 0600	30	4	5	7	14	0	0	28	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	4.2	0.1	
0600 - 0700	55	29	14	10	2	3	4	42	0	6	0	0	0	0	0	0	0	0	0	0	4	12	25	13	1	0	0	0	0	0	25.9	21.9	4.1	
0700 - 0800	34	9	7	6	4	0	1	26	1	7	1	1	0	1	0	0	0	0	0	0	2	14	16	2	0	0	0	0	0	0	23.9	19.8	3.2	
0800 - 0900	24	4	9	5	6	0	0	19	0	5	0	0	0	0	0	0	0	0	0	0	0	8	12	3	1	0	0	0	0	0	26.9	21.3	4	
0900 - 1000	25	3	7	3	12	0	1	20	0	3	0	1	0	0	0	0	0	0	0	0	1	6	14	2	1	0	0	0	0	0	25	21.1	4.7	
1000 - 1100	65	17	8	17	23	0	1	51	0	11	2	0	0	0	0	0	0	0	0	0	4	24	27	10	0	0	0	0	0	0	25.5	20.9	4	
1100 - 1200	71	16	18	17	20	1	0	51	2	13	2	1	0	1	0	0	0	0	0	2	5	21	33	8	2	0	0	0	0	0	24.9	20.9	4.7	
1200 - 1300	68	20	15	17	0	0	1	56	1	7	2	0	0	1	0	0	0	0	0	0	2	18	41	6	1	0	0	0	0	0	24.6	21.5	3.2	
1300 - 1400	57	12	13	15	0	0	0	41	0	11	4	0	0	0	0	0	0	0	0	0	3	17	30	7	0	0	0	0	0	0	24.1	21.1	3.1	
1400 - 1500	63	21	15	16	11	1	1	56	0	5	0	0	0	0	0	0	0	0	0	0	4	7	40	11	1	0	0	0	0	0	25.4	22.3	3.4	
1500 - 1600	41	11	8	9	13	0	1	36	0	3	1	0	0	0	0	0	0	0	0	0	2	10	22	6	1	0	0	0	0	0	25.9	21.7	4.2	
1600 - 1700	62	15	15	15	17	0	1	54	2	5	0	0	0	0	0	0	0	0	0	0	4	19	28	10	1	0	0	0	0	0	26.1	21.4	4.3	
1700 - 1800	68	18	14	16	20	0	4	56	0	8	0	0	0	0	0	0	0	0	0	0	2	23	24	16	3	0	0	0	0	0	26.6	22.2	4.3	
1800 - 1900	95	48	18	17	12	1	5	82	0	5	1	0	0	0	1	0	0	0	0	0	4	18	46	20	7	0	0	0	0	0	27.2	23	4.4	
1900 - 2000	56	10	10	13	13	0	1	40	1	4	0	0	0	0	0	0	0	0	0	0	1	16	21	7	1	0	0	0	0	0	25.6	21.7	3.7	
2000 - 2100	28	5	6	7	10	0	0	25	0	3	0	0	0	0	0	0	0	0	0	0	0	8	14	6	0	0	0	0	0	0	25.9	22.4	3.3	
2100 - 2200	22	7	6	4	5	0	1	19	0	1	1	0	0	0	0	0	0	0	0	0	0	9	10	3	0	0	0	0	0	0	25	21.7	3	
2200 - 2300	24	13	3	2	6	1	1	19	0	3	2	1	0	0	0	0	0	0	0	0	0	7	12	3	2	0	0	0	0	0	26.9	22.5	4.1	
2300 - 0000	13	7	4	1	1	0	0	11	0	1	1	0	0	0	0	0	0	0	0	0	0	3	10	0	0	0	0	0	0	0	24.7	22.4	2.5	
0700 - 1900	873	194	147	158	174	3	16	548	5	80	13	3	1	2	1	1	0	0	3	33	185	333	101	18	0	0	0	0	0	0	0	25.5	21.6	4.1
0600 - 2200	824	245	183	192	204	6	22	874	6	94	16	3	1	2	1	1	0	0	3	38	238	403	130	28	0	0	0	0	0	0	0	26.8	21.7	4
0600 - 0600	861	265	190	195	211	7	23	704	6	97	16	3	1	2	1	1	0	0	3	38	240	425	133	22	0	0	0	0	0	0	0	25.3	21.7	4
0000 - 0000	929	275	213	209	232	7	24	767	6	101	16	3	1	2	1	1	0	0	4	40	257	463	143	22	0	0	0	0	0	0	0	25.4	21.7	4

Virtual Day (7.00)

Time	Hourly Totals	00-15	15 Minute Bin Drops		45-00	Cycles	Motor Cycles	Car Van Towing	2 Axle Van Lorry	Number Vehicle Classes ARX Scheme				4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	Vehicle Speed														P-Title 85%	Average Speed	Standard Deviation
			15-30	30-45						3 Axle Rigid	3 Axle Artic	4 Axle Rigid	4 Axle Artic						MPH 0	MPH 10	MPH 15	MPH 20	MPH 25	MPH 30	MPH 35	MPH 40	MPH 45	MPH 50	MPH 55	MPH 60	MPH 65				
0000 - 0100	15	4	3	4	4	0	1	12	0	2	0	0	0	0	0	0	0	0	<10mph	<15mph	<20mph	<25mph	<30mph	<35mph	<40mph	<45mph	<50mph	<55mph	<60mph	<65mph	<140mph	23.6	20.4	3.7	
0100 - 0200	8	2	2	2	1	0	0	6	0	2	0	0	0	0	0	0	0	0	0	1	2	4	1	0	0	0	0	0	0	0	0	-	21.5	4.2	
0200 - 0300	10	2	3	3	2	0	0	6	0	2	1	0	0	0	0	0	0	0	0	1	3	4	2	0	0	0	0	0	0	0	0	-	21.3	4.4	
0300 - 0400	10	2	2	2	4	0	0	7	0	2	0	0	0	0	0	0	0	0	0	1	3	5	2	0	0	0	0	0	0	0	0	-	21.5	3.8	
0400 - 0500	20	4	4	5	7	0	1	12	0	6	1	0	0	0	0	0	0	0	0	1	5	11	3	1	0	0	0	0	0	0	0	25.6	22	3.7	
0500 - 0600	63	7	9	15	23	0	3	37	0	10	2	1	0	0	0	0	0	0	0	3	17	26	6	0	0	0	0	0	0	0	0	24.5	20.8	4	
0600 - 0700	108	46	18	19	25	2	3	84	0	17	1	0	0	0	0	0	0	0	0	4	27	53	21	2	0	0	0	0	0	0	0	25.7	22	4	
0700 - 0800	117	20	22	36	39	0	1	81	1	27	2	2	0	0	0	0	0	0	0	9	47	50	9	1	0	0	0	0	0	0	0	23.7	20.1	3.8	
0800 - 0900	154	36	40	38	40	0	1	97	1	49	2	2	0	1	1	0	0	0	0	2	16	56	68	12	1	0	0	0	0	0	0	23.8	20	4	
0900 - 1000	144	38	35	33	38	0	1	88	0	47	4	2	0	0	1	0	0	0	0	2	11	52	67	11	1	0	0	0	0	0	0	23.9	20.1	3.9	
1000 - 1100	156	42	37	36	41	0	1	101	1	47	3	2	0	0	1	0	0	0	0	1	11	47	79	17	1	0	0	0	0	0	0	24.5	20.7	3.9	
1100 - 1200	160	38	40	39	44	1	2	99	0	50	4	2	0	0	1	1	0	0	0	2	9	58	76	14	1	0	0	0	0	0	0	24.2	20.4	3.8	
1200 - 1300	186	49	44	44	49	1	2	132	1	43	3	2	0	0	0	0	0	0	0	2	14	58	92	20	2	0	0	0	0	0	0	24.4	20.6	3.9	
1300 - 1400	184	51	43	45	45	1	2	127	1	45	4	2	0	0	0	1	0	0	0	2	14	66	81	20	1	0	0	0	0	0	0	24.4	20.4	4.4	
1400 - 1500	206	68	42	49	47	5	2	148	1	42	4	2	0	0	0	0	0	0	0	2	18	65	98	20	1	0	0	0	0	0	0	24.3	20.5	5	
1500 - 1600	213	62	46	50	55	1	2	156	1	44	4	2	0	0	2	0	0	0	0	4	13	69	102	23	1	0	0	0	0	0	0	24.5	20.6	4.3	
1600 - 1700	277	80	65	70	61	2	2	228	1	39	3	0	0	0	1	0	0	0	0	10	31	80	122	32	2	0	0	0	0	0	0	24.6	20	4.7	
1700 - 1800	243	99	60	69	49	36	1	3	213	1	24	1	0	0	0	0	0	0	0	24	31	61	98	29	1	0	0	0	0	0	24.6	19.1	5.8		
1800 - 1900	160	72	28	31	34	1	3	121	0	68	8	2	0	0	0	0	0	0	0	8	22	38	35	3	0	0	0	0	0	0	25.7	21.7	4.2		
1900 - 2000	56	17	15	12	12	0	2	48	0	6	1	0	0	0	0	0	0	0	0	2	17	26	10	1	0	0	0	0	0	0	25.6	21.6	3.8		
2000 - 2100	42	12	11	10	9	0	0	36	0	0	0	0	0	0	0	0	0	0	0	2	12	21	8	0	0	0	0	0	0	0	25.4	21.6	3.7		
2100 - 2200	25	9	5	6	5	0	0	28	0	1	0	0	0	0	0	0	0	0	0	2	6	13	4	0	0	0	0	0	0	0	25.3	21.2	4.3		
2200 - 2300	44	22	6	7	9	1	2	36	0	5	0	0	0	0	0	0	0	0	0	2	12	19	7	0	0	0	0	0	0	0	25.6	21.9	4.7		
2300 - 0000	3	19	9	4	4	2	1	15	0	0	3	3	0	0	0	0	0	0	0	1	7	8	3	3	0	0	0	0	0	0	0	25.7	21.2	4.7	
0700 - 0800	656	1180	656	502	510	14	22	1593	656	471	38	1	0	0	0	0	0	0	0	186	691	1001	231	16	16	0	0	0	0	0	0	24.4	20.3	4.5	
0800 - 0900	2415	1400	551	557	567	16	28	1763	9	563	38	18	2	4	4	0	0	0	0	44	196	726	1113	274	19	0	0	0	0	0	0	24.6	20.4	4.5	
0900 - 1000	2478	1711	561	567	578	16	31	1833	16	511	38	18	2	4	4	0	0	0	0	54	208	775	1141	285	22	0	0	0	0	0	0	24.6	20.5	4.5	
1000 - 1100	2480	1711	561	567	578	16	31	1833	16	511	38	18	2	4	4	0	0	0	0	55	205	811	1117	274	22	0	0	0	0	0	0	24.6	20.5	4.5	
1100 - 1200	2393	1782	364	380	420	18	36	1913	9	520	43	19	2	3	4	0	0	0	0	55	205	811	1117	274	22	0	0	0	0	0	0	24.6	20.4	4.5	

Knowsley ATC

Report Id 397/22
 Site Name Site 1 of 1
 Description Gale Road, 20m north of A5208 South Boundary Road
 Direction Northbound

Monday 15 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified								Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic				
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	29.9	-	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	29	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	29.5	-	27.4	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	31.2	-	27.7	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	28.7	-	25.7	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	28.7	-	26.2	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	29.5	-	29	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	28	-	27.6	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	28.5	-	26	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	27.3	-	27.8	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	28.9	-	29.2	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	28.5	-	30.4	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	29.3	-	-	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	30.2	-	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	30.5	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	34.8	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	34.3	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	28.9	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	36.9	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	-	-	28.9	26.6	27.6	28.8	-	-	-	22.4	22.5	-	-	-	-
0600 - 2200	-	-	29.1	26.6	27.9	28.7	-	-	-	22.8	21.9	-	-	-	-
0600 - 0000	15.3	-	29.2	26.6	27.9	28.6	-	-	-	22.8	22.6	-	-	-	-
0000 - 0000	15.3	-	29.2	26.6	27.9	28.5	-	-	-	23.6	22.5	-	-	-	-

Tuesday 16 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified								Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic				
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	30.7	-	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	30.4	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	30.2	-	32	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	31.2	-	28.1	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	28.8	-	29.4	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	27.6	-	27.2	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	29.6	-	29.6	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	30.4	-	28.8	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	29.9	-	28.4	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	29.4	-	28.6	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	28.9	-	30.7	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	31.4	-	33	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	27.5	-	-	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	28.6	-	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	31.3	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	33.6	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	31.1	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	31.8	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	-	-	29.6	28.5	29.3	29.4	28.8	-	-	25.4	24.1	-	-	-	-
0600 - 2200	-	35.3	29.8	28.5	29.3	30.4	28.8	-	-	25.2	24	-	-	-	-
0600 - 0000	-	35.3	29.8	28.5	29.4	30.2	28.8	-	-	25.2	24.1	-	-	-	-
0000 - 0000	-	31.7	29.8	28.5	29.4	30.2	28.5	-	-	25.2	24.4	-	-	-	-

Wednesday 17 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified								Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic				
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	32.4	-	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	30.1	-	30.7	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	28.4	-	27.6	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	28.7	-	27.7	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	28.4	-	27.3	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	28	-	30.5	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	28.2	-	28.2	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	28.8	-	29.5	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	28.4	-	28.8	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	28.9	-	28.8	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	29.8	-	29.2	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	31.1	-	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	28.9	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	30.1	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	35.7	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	31.9	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	-	-	29.3	-	28.7	31.8	28.2	-	-	26.6	25	-	-	-	-
0600 - 2200	22.9	-	29.4	-	28.7	31.7	28.1	-	-	26.5	24	-	-	-	-
0600 - 0000	22.9	-	29.5	-	28.7	31.7	28.1	-	-	26.5	23.9	-	-	-	-
0000 - 0000	21.1	33.8	29.6	-	28.8	31.1	28.1	-	-	26.5	24.2	-	-	-	-

Time	Percentage of Vehicles										Double Road Train	Triple Road Train
	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	5 Axle Artic	4 Axle Artic	5 Axle Artic		
0000 - 0100	-	-	29.1	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	31.5	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	30.9	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	30.8	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	30.4	-	29.1	-	-	-	-	-	-	-
0800 - 0900	-	-	31.4	-	32.3	-	-	-	-	-	-	-
0900 - 1000	-	-	28.7	-	29.7	-	-	-	-	-	-	-
1000 - 1100	-	-	30.5	-	28.7	-	-	-	-	-	-	-
1100 - 1200	-	-	29.4	-	28.5	-	-	-	-	-	-	-
1200 - 1300	-	-	29	-	27.6	-	-	-	-	-	-	-
1300 - 1400	-	-	28.5	-	28.3	-	-	-	-	-	-	-
1400 - 1500	-	-	29.4	-	28.9	-	-	-	-	-	-	-
1500 - 1600	-	-	29	-	31.7	-	-	-	-	-	-	-
1600 - 1700	-	-	29.6	-	29.3	-	-	-	-	-	-	-
1700 - 1800	-	-	29.3	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	33.2	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	32.5	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	30.4	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	28.1	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	32.3	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	27.9	-	-	-	-	-	-	-	-	-
0000 - 0600	-	-	24.8	-	29.2	29.7	-	-	-	27	25.2	-
0600 - 0800	18.8	-	29.9	-	29.2	29.7	-	-	-	26	24.6	-
0800 - 0900	18.5	-	29.9	-	29.2	29.6	-	-	-	26	24.3	-
0900 - 0000	15.8	34.5	30	-	29.3	29.7	26.6	-	-	27.4	24.3	-

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	50mm Percentile Figures - Classified					4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
					3 Axle Rigid	4 Axle Rigid	5 Axle Rigid	6 Axle Rigid						
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	-	-	31.9	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	-	-	30.3	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	-	-	30.7	-	3.1	-	-	-	-	-	-	-
0900 - 1000	-	-	-	-	29.2	-	27.2	-	-	-	-	-	-	-
1000 - 1100	-	-	-	-	29.4	-	29.5	-	-	-	-	-	-	-
1100 - 1200	-	-	-	-	30.5	-	32.2	-	-	-	-	-	-	-
1200 - 1300	-	-	-	-	28	-	27.1	-	-	-	-	-	-	-
1300 - 1400	-	-	-	-	29.3	-	28.7	-	-	-	-	-	-	-
1400 - 1500	-	-	-	-	31.4	-	28.6	-	-	-	-	-	-	-
1500 - 1600	-	-	-	-	29.1	-	30.1	-	-	-	-	-	-	-
1600 - 1700	-	-	-	-	29.8	-	30.1	-	-	-	-	-	-	-
1700 - 1800	-	-	-	-	30.4	-	29.4	-	-	-	-	-	-	-
1800 - 1900	-	-	-	-	33.3	-	29.4	-	-	-	-	-	-	-
1900 - 2000	-	-	-	-	29.3	-	29.3	-	-	-	-	-	-	-
2000 - 2100	-	-	-	-	30.3	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	-	-	29	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	-	-	32.1	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	-	-	32.5	-	-	-	-	-	-	-	-	-
0700 - 1800	18.2	-	30	-	28.9	30.4	-	-	-	27	23.9	-	-	-
0600 - 2200	18.2	-	30	26.3	29	31	-	-	-	21.1	25.6	-	-	-
0000 - 0000	18.2	-	30	26.3	29.1	31	-	-	-	27.6	25.5	-	-	-
0000 - 0000	18.3	32.6	30	26.3	29.3	31.2	-	-	-	27.1	25	-	-	-

Time	Cycles	Motor Cycles	Car Van 32.2	Car Van Towing	85th Percentile figures - Classified			4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
					3 Axle Rigid	4 Axle Rigid	5 Axle Rigid					
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	31.5	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	34.6	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	32.1	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	31.4	32	-	-	-	-	-	-	-	-
0900 - 1000	-	-	29.7	-	33	-	-	-	-	-	-	-
1000 - 1100	-	-	29.9	-	28.5	-	-	-	-	-	-	-
1100 - 1200	-	-	31.3	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	31.3	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	29.8	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	32.8	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	32.6	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	34.7	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	31.7	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	31.9	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	30.1	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	30.4	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	31.2	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	-	-	31.3	-	30.2	-	-	-	-	-	-	-
0600 - 2200	-	-	31.1	-	29.8	-	-	-	-	-	-	-
0600 - 0000	-	-	31.1	-	30	-	-	-	-	-	-	-
0600 - 0000	-	-	31.2	-	29.9	-	-	-	-	-	-	-

Sunday 21 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified					5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic					
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	29.2	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	27.8	-	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	31.4	-	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	30.8	-	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	30.3	-	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	31.6	-	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	28.9	-	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	30.6	-	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	32.4	-	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	34.7	-	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	34.4	-	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	30.7	-	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	31.1	-	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	30.9	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	28.4	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	30.5	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	31.8	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	32.3	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	-	-	31.1	-	31.9	-	-	-	-	-	-	-	-	-
0600 - 2200	-	-	30.9	-	31.8	-	-	-	-	-	-	-	-	-
0600 - 0600	-	-	30.8	-	31.8	-	-	-	-	-	-	-	-	-
0000 - 0000	-	-	31.1	-	31.7	-	-	-	-	-	-	-	-	-

Virtual Day (7.00)

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified					5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic					
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	30.3	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	30.2	-	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	30.3	-	29.9	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	30.6	-	28	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	28.9	-	28.2	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	29.4	-	28.4	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	28.9	-	28.6	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	29.4	-	28.6	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	29.3	-	28.1	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	29.3	-	28.9	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	29.3	-	30.5	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	30	-	30.3	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	30.3	-	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	30.3	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	30.6	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	30.4	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	31.7	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	30.9	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	-	-	29.8	-	28.9	29.7	-	-	-	26	24.1	-	-	-
0600 - 2200	-	-	29.9	-	28.9	30	-	-	-	26.1	24.1	-	-	-
0600 - 0600	-	-	29.9	-	29	29.8	-	-	-	26	24.3	-	-	-
0000 - 0000	16.2	32.2	30	-	29	30.1	28.8	-	-	26	24.3	-	-	-

Virtual Week (1.00)

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified					5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic					
Mon	15.3	-	29.2	26.5	27.9	28.5	-	-	-	23.6	22.5	-	-	-
Tue	-	31.7	29.8	28.5	29.4	30.2	28.5	-	-	25.2	24.4	-	-	-
Wed	21.1	33.8	29.6	-	28.8	31.1	28.1	-	-	26.5	24.2	-	-	-
Thu	15.8	34.5	30	-	29.3	29.7	26.6	-	-	27.4	24.3	-	-	-
Fri	16.5	32.6	30	26.3	29.3	31.2	-	-	-	27.1	25	-	-	-
Sat	-	-	31.2	-	29.9	-	-	-	-	-	-	-	-	-
Sun	-	-	31.1	-	31.7	-	-	-	-	-	-	-	-	-
	16.2	32.2	30	27	29	30.1	28.8	-	29.5	26	24.3	-	-	-

Knowsley ATC

Report Id 397/22
 Site Name Site 1 of 1
 Description Gale Road, 20m north of A5208 South Boundary Road
 Direction Southbound

Monday 15 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified								Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic				
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	25.9	-	22.8	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	27.4	-	23.5	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	25.6	-	22.8	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	24.2	-	22.4	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	24.2	-	23	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	25.3	-	23.7	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	24.2	-	23.6	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	24.6	-	23.4	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	24.1	-	22.6	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	24.2	-	23	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	24.4	-	23.1	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	24.2	-	23.9	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	25	-	24.1	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	25.4	-	24.2	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	26.9	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	25.5	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	25.7	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	27.2	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	27.3	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	20.4	19.7	24.5	22.7	23.2	21.1	23	-	-	-	-	-	-	-	-
0600 - 2200	19.2	20.2	24.7	22.7	23.2	21.2	23	-	-	-	-	-	-	-	-
0600 - 0000	18.4	22.5	24.8	22.7	23.2	21.2	23	-	-	-	-	-	-	-	-
0000 - 0000	18.4	20.1	24.8	22.7	23.2	21.1	23	-	-	-	-	-	-	-	-

Tuesday 16 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified								Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic				
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	26.9	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	26.2	-	24.1	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	27	-	23.4	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	23.7	-	23.1	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	24.8	-	22.3	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	24.7	-	24.1	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	24.9	-	23.5	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	25.1	-	22.5	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	24.4	-	23.1	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	25.3	-	21.9	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	25.2	-	23.1	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	24.9	-	24.4	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	24.8	-	24.2	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	24.3	-	24.6	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	26.7	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	25.2	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	26.1	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	26.2	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	26.5	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	16.9	26.1	24.8	24.6	23.2	20.6	22.8	-	-	20.4	-	-	-	-	-
0600 - 2200	16.6	25.4	25	24.6	23.3	20.3	22.7	-	-	20.4	-	-	-	-	-
0600 - 0000	16.3	25.8	25	24.6	23.3	20.5	22.7	-	-	20.4	-	-	-	-	-
0000 - 0000	15.8	24	25.1	24.6	23.4	21.6	23	-	-	20.4	-	-	-	-	-

Wednesday 17 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified								Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic				
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	28.9	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	25.4	-	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	26.5	-	21.5	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	24.7	-	22.4	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	24.1	-	22.2	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	24.4	-	22.7	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	25	-	22.6	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	24.6	-	23.5	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	24.9	-	24	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	25.4	-	23	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	24.7	-	23	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	25.1	-	23.7	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	24.5	-	23	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	24.2	-	24.6	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	26.1	-	25.7	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	25.1	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	26.3	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	27.5	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	27.2	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	17.4	23.2	24.8	22.3	23.3	21	21.9	-	-	-	-	-	-	-	-
0600 - 2200	16.7	24.3	24.9	22.3	23.3	20.9	21.9	-	-	-	-	-	-	-	-
0600 - 0000	16.6	24	25	22.3	23.3	20.9	21.9	-	-	-	-	-	-	-	-
0000 - 0000	16.6	23.9	25.1	22.3	23.3	21.5	22.2	-	-	23.5	-	-	-	-	-

Time	Cycles	Motor Cycles	Car Van	Car Van Towling	2 Axle Van Lorry	Percentage of Vehicles			4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	5 Axle Rigid					
0000 - 0100	-	-	24.4	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	25.7	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	27.1	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	24.2	-	23.5	-	-	-	-	-	-	-	-
0600 - 0700	-	-	26.2	-	22.5	-	-	-	-	-	-	-	-
0700 - 0800	-	-	23.6	-	22	-	-	-	-	-	-	-	-
0800 - 0900	-	-	24.2	-	23.5	-	-	-	-	-	-	-	-
0900 - 1000	-	-	23.2	-	23.3	-	-	-	-	-	-	-	-
1000 - 1100	-	-	25.2	-	23.5	-	-	-	-	-	-	-	-
1100 - 1200	-	-	24.7	-	23.4	-	-	-	-	-	-	-	-
1200 - 1300	-	-	24.3	-	23.4	-	-	-	-	-	-	-	-
1300 - 1400	-	-	23.8	-	23.2	-	-	-	-	-	-	-	-
1400 - 1500	-	-	25	-	23.3	-	-	-	-	-	-	-	-
1500 - 1600	-	-	24.4	-	23.5	-	-	-	-	-	-	-	-
1600 - 1700	-	-	24.8	-	24.4	-	-	-	-	-	-	-	-
1700 - 1800	-	-	24.1	-	24.4	-	-	-	-	-	-	-	-
1800 - 1900	-	-	25.2	-	24.6	-	-	-	-	-	-	-	-
1900 - 2000	-	-	25.7	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	25.6	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	27.2	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	27.8	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	26.5	-	-	-	-	-	-	-	-	-	-
0700 - 1800	18.4	20.1	24.4	-	23.3	21.4	21.5	-	-	18.6	-	-	-
0600 - 2200	18.6	20.3	24.6	-	23.3	21.4	21.3	-	-	18.6	-	-	-
0000 - 0000	18.5	21.1	24.6	-	23.3	21.5	21.3	-	-	18.6	-	-	-
0000 - 0000	18.5	21.4	24.7	-	23.3	22.1	21.6	-	-	18.6	-	-	-

Time	Cycles	Motor Cycles	Car Van	Car Van Towling	2 Axle Van Lorry	80th Percentile figures - Classified			4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
						3 Axle Rigid	4 Axle Rigid	5 Axle Rigid					
0000 - 0100	-	-	21.5	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	25.5	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	25.6	-	22.9	-	-	-	-	-	-	-	-
0600 - 0700	-	-	25.5	-	25.4	-	-	-	-	-	-	-	-
0700 - 0800	-	-	24.7	-	21.3	-	-	-	-	-	-	-	-
0800 - 0900	-	-	24.5	-	22.5	-	-	-	-	-	-	-	-
0900 - 1000	-	-	24.6	-	23.2	-	-	-	-	-	-	-	-
1000 - 1100	-	-	24.8	-	23.4	-	-	-	-	-	-	-	-
1100 - 1200	-	-	24.4	-	23.5	-	-	-	-	-	-	-	-
1200 - 1300	-	-	25.2	-	24.4	-	-	-	-	-	-	-	-
1300 - 1400	-	-	24	-	22.4	-	-	-	-	-	-	-	-
1400 - 1500	-	-	24.2	-	23.8	-	-	-	-	-	-	-	-
1500 - 1600	-	-	25.3	-	23.8	-	-	-	-	-	-	-	-
1600 - 1700	-	-	24.9	-	23.8	-	-	-	-	-	-	-	-
1700 - 1800	-	-	26.1	-	23	-	-	-	-	-	-	-	-
1800 - 1900	-	-	25.4	-	23	-	-	-	-	-	-	-	-
1900 - 2000	-	-	25.2	-	23	-	-	-	-	-	-	-	-
2000 - 2100	-	-	25.6	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	24.5	-	24.5	-	-	-	-	-	-	-	-
2200 - 2300	-	-	28.4	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	21.7	-	-	-	-	-	-	-	-	-	-
0700 - 1800	19.7	23.6	24.8	-	23.4	22.6	23.1	-	-	18.7	-	-	-
0600 - 0200	19.4	23.4	24.9	-	23.4	22.6	23.1	-	-	18.7	-	-	-
0600 - 0000	19.4	23.9	24.9	-	23.4	22.6	23.1	-	-	18.7	-	-	-
0000 - 0000	19.4	23.5	24.9	-	23.5	22.8	23.1	-	-	18.7	-	-	-

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	85th Percentile Figures - Classified		4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
					3 Axle Rigid	3 Axle Rigid					
0000 - 0100	-	-	23.8	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	24.2	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	24.2	-	-	-	-	-	-	-	-
0600 - 0700	-	-	25.9	-	-	-	-	-	-	-	-
0700 - 0800	-	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	25.4	-	24.2	-	-	-	-	-	-
0900 - 1000	-	-	25.8	-	25.6	-	-	-	-	-	-
1000 - 1100	-	-	25.2	-	25.4	-	-	-	-	-	-
1100 - 1200	-	-	24.7	-	24.6	-	-	-	-	-	-
1200 - 1300	-	-	25.4	-	25.2	-	-	-	-	-	-
1300 - 1400	-	-	26.4	-	26.1	-	-	-	-	-	-
1400 - 1500	-	-	24.7	-	-	-	-	-	-	-	-
1500 - 1600	-	-	24.6	-	-	-	-	-	-	-	-
1600 - 1700	-	-	26.2	-	-	-	-	-	-	-	-
1700 - 1800	-	-	24.9	-	-	-	-	-	-	-	-
1800 - 1900	-	-	27.2	-	-	-	-	-	-	-	-
1900 - 2000	-	-	25.1	-	-	-	-	-	-	-	-
2000 - 2100	-	-	23.9	-	-	-	-	-	-	-	-
2100 - 2200	-	-	25.9	-	-	-	-	-	-	-	-
2200 - 2300	-	-	25.1	-	-	-	-	-	-	-	-
2300 - 0000	-	-	25.5	-	-	-	-	-	-	-	-
0700 - 1800	-	-	25.1	-	24.2	-	-	-	-	-	-
0600 - 2200	15.2	25.8	25.4	-	24.2	-	-	-	-	-	-
0600 - 0800	10.1	23.8	23.4	-	24.2	-	-	-	-	-	-
0900 - 0900	15.1	25.5	25.3	-	24.1	-	-	-	-	-	-

Sunday 21 August 2022

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified						4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
0000 - 0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	26.1	-	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	21.6	-	-	-	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	27.2	-	-	-	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	25.3	-	-	-	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	26.5	-	22.3	-	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	25.7	-	24.5	-	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	24.8	-	-	-	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	24.8	-	24.3	-	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	25.2	-	-	-	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	25.9	-	-	-	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	26.2	-	-	-	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	26.8	-	-	-	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	27.3	-	-	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	25.7	-	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	26.3	-	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	25.2	-	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	28.5	-	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	24.8	-	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	-	25.5	25.6	-	24.2	24.8	-	-	-	-	-	-	-	-	-	-
0600 - 2200	-	25.5	25.7	-	24	24.7	-	-	-	-	-	-	-	-	-	-
0600 - 0600	-	25.5	25.7	-	23.9	24.5	-	-	-	-	-	-	-	-	-	-
0000 - 0000	-	25.4	25.6	-	23.9	24.5	-	-	-	-	-	-	-	-	-	-

Virtual Day (7.00)

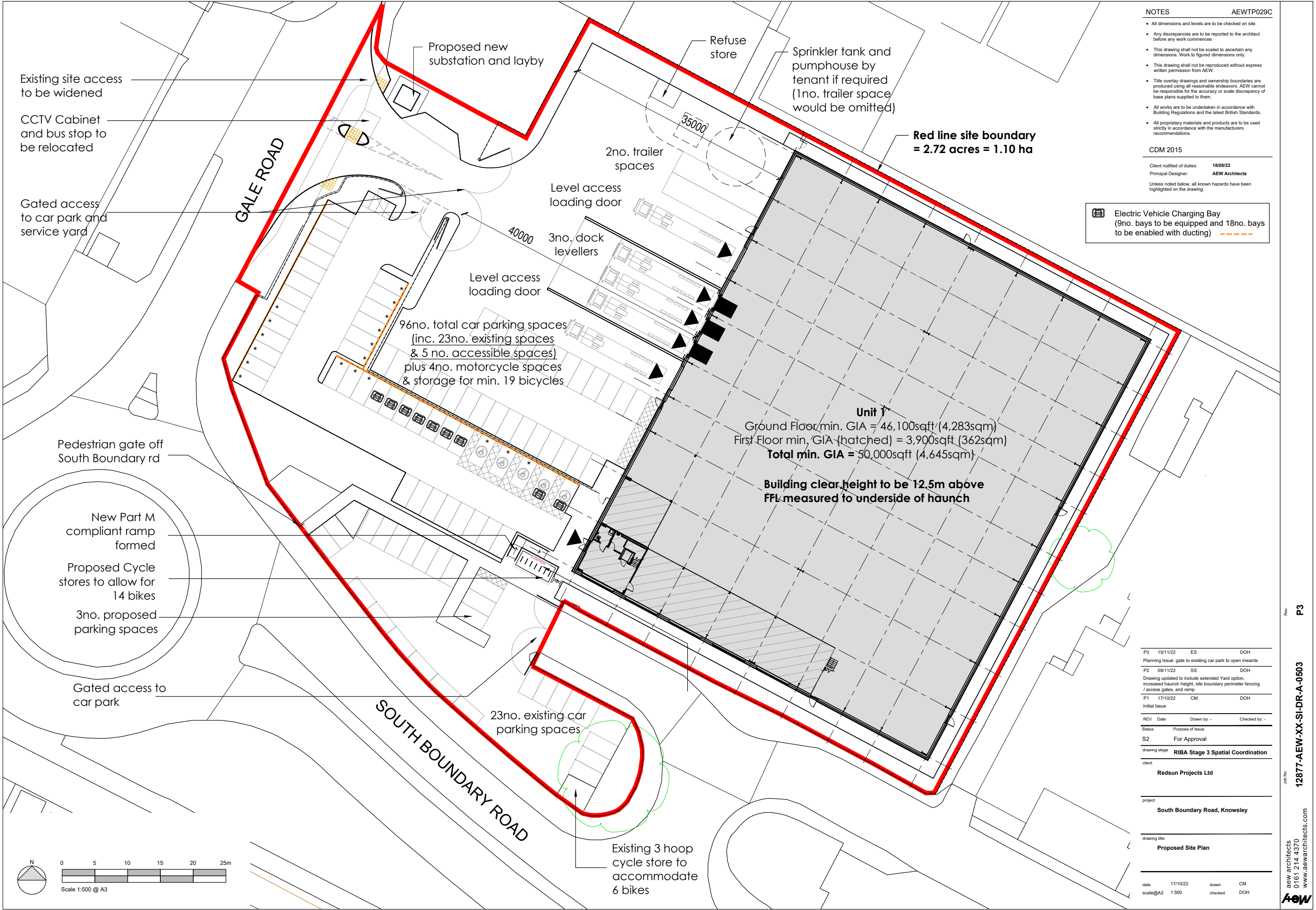
Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified						4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
0000 - 0100	-	-	24.1	-	-	-	-	-	-	-	-	-	-	-	-	-
0100 - 0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0200 - 0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0300 - 0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0400 - 0500	-	-	26.2	-	-	-	-	-	-	-	-	-	-	-	-	-
0500 - 0600	-	-	25.1	-	22.7	-	-	-	-	-	-	-	-	-	-	-
0600 - 0700	-	-	26.4	-	22.7	-	-	-	-	-	-	-	-	-	-	-
0700 - 0800	-	-	24.4	-	22.6	-	-	-	-	-	-	-	-	-	-	-
0800 - 0900	-	-	24.5	-	22.9	-	-	-	-	-	-	-	-	-	-	-
0900 - 1000	-	-	24.4	-	23.3	-	-	-	-	-	-	-	-	-	-	-
1000 - 1100	-	-	25.1	-	23.2	-	-	-	-	-	-	-	-	-	-	-
1100 - 1200	-	-	24.6	-	23.4	-	-	-	-	-	-	-	-	-	-	-
1200 - 1300	-	-	24.9	-	23.7	-	-	-	-	-	-	-	-	-	-	-
1300 - 1400	-	-	24.9	-	22.8	-	-	-	-	-	-	-	-	-	-	-
1400 - 1500	-	-	24.6	-	23.3	-	-	-	-	-	-	-	-	-	-	-
1500 - 1600	-	-	24.7	-	23.7	-	-	-	-	-	-	-	-	-	-	-
1600 - 1700	-	-	24.7	-	23.9	-	-	-	-	-	-	-	-	-	-	-
1700 - 1800	-	-	24.7	-	24.2	-	-	-	-	-	-	-	-	-	-	-
1800 - 1900	-	-	25.9	-	24	-	-	-	-	-	-	-	-	-	-	-
1900 - 2000	-	-	25.7	-	-	-	-	-	-	-	-	-	-	-	-	-
2000 - 2100	-	-	25.6	-	-	-	-	-	-	-	-	-	-	-	-	-
2100 - 2200	-	-	25.5	-	-	-	-	-	-	-	-	-	-	-	-	-
2200 - 2300	-	-	27.1	-	-	-	-	-	-	-	-	-	-	-	-	-
2300 - 0000	-	-	25.7	-	-	-	-	-	-	-	-	-	-	-	-	-
0700 - 1900	17.8	24.3	24.8	-	23.4	21.5	22.2	-	-	-	-	-	-	-	-	-
0600 - 2200	17.6	24.5	24.9	-	23.3	21.5	22.1	-	-	-	-	-	-	-	-	-
0600 - 0600	17	24.7	25	-	23.4	21.6	22.1	-	-	-	-	-	-	-	-	-
0000 - 0000	17.2	24.2	25	-	23.4	22	22.3	-	-	-	-	-	-	-	-	-

Virtual Week (1.00)

Time	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	85th Percentile figures - Classified						4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train
Mon	18.4	20.1	24.8	22.7	23.2	21.1	23	-	-	-	-	-	-	-	-	-
Tue	15.8	24	25.1	24.6	23.4	21.6	23	-	-	20.4	-	-	-	-	-	-
Wed	16.8	23.9	25.1	22.3	23.3	21.5	22.2	-	-	23.5	-	-	-	-	-	-
Thu	18.5	21.4	24.7	-	23.3	22.1	21.6	-	-	19.6	-	-	-	-	-	-
Fri	19.4	23.5	24.9	-	23.5	22.8	23.1	-	-	18.7	-	-	-	-	-	-
Sat	-	25.5	25.3	-	24.1	-	-	-	-	-	-	-	-	-	-	-
Sun	-	25.4	25.6	-	23.9	24.5	-	-	-	-	-	-	-	-	-	-
	17.2	24.2	25	23.5	23.4	22	22.3	22.1	21.4	19.5	20.7	-	-	-	-	-

APPENDIX D

Proposed Site Layout Drawing



NOTES AEWTP029C

- All dimensions and levels are to be checked on site.
- Any discrepancies are to be reported to the architect before any work commences
- This drawing shall not be scaled to ascertain any dimensions. Work to figured dimensions only.
- This drawing shall not be reproduced without express written permission from AEW.
- Title overlay drawings and ownership boundaries are produced using all reasonable endeavors. AEW cannot be responsible for the accuracy or scale discrepancy of base plans supplied to them.
- All works are to be undertaken in accordance with Building Regulations and the latest British Standards.
- All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.

CDM 2015

Client notified of duties: 18/08/22
Principal Designer: AEW Architects

Unless noted below, all known hazards have been highlighted on the drawing:

Electric Vehicle Charging Bay
(9no. bays to be equipped and 18no. bays to be enabled with ducting)

P3 15/11/22 ES DOH

Planning Issue: gate to existing car park to open inwards

P2 09/11/22 SS DOH

Drawing updated to include extended Yard option, increased haunch height, site boundary perimeter fencing / access gates, and ramp

P1 17/10/22 CM DOH

Initial Issue

REV Date Drawn by: - Checked by: -

Status Purpose of Issue

S2 For Approval

drawing stage RIBA Stage 3 Spatial Coordination

client

Redsun Projects Ltd

project

South Boundary Road, Knowsley

drawing title

Proposed Site Plan

date 17/10/22 drawn CM

scale@A3 1:500 checked DOH

Rev

P3

12877-AEW-XX-SI-DR-A-0503

Job No

aew architects
0161 214 4370
www.aewarchitects.com

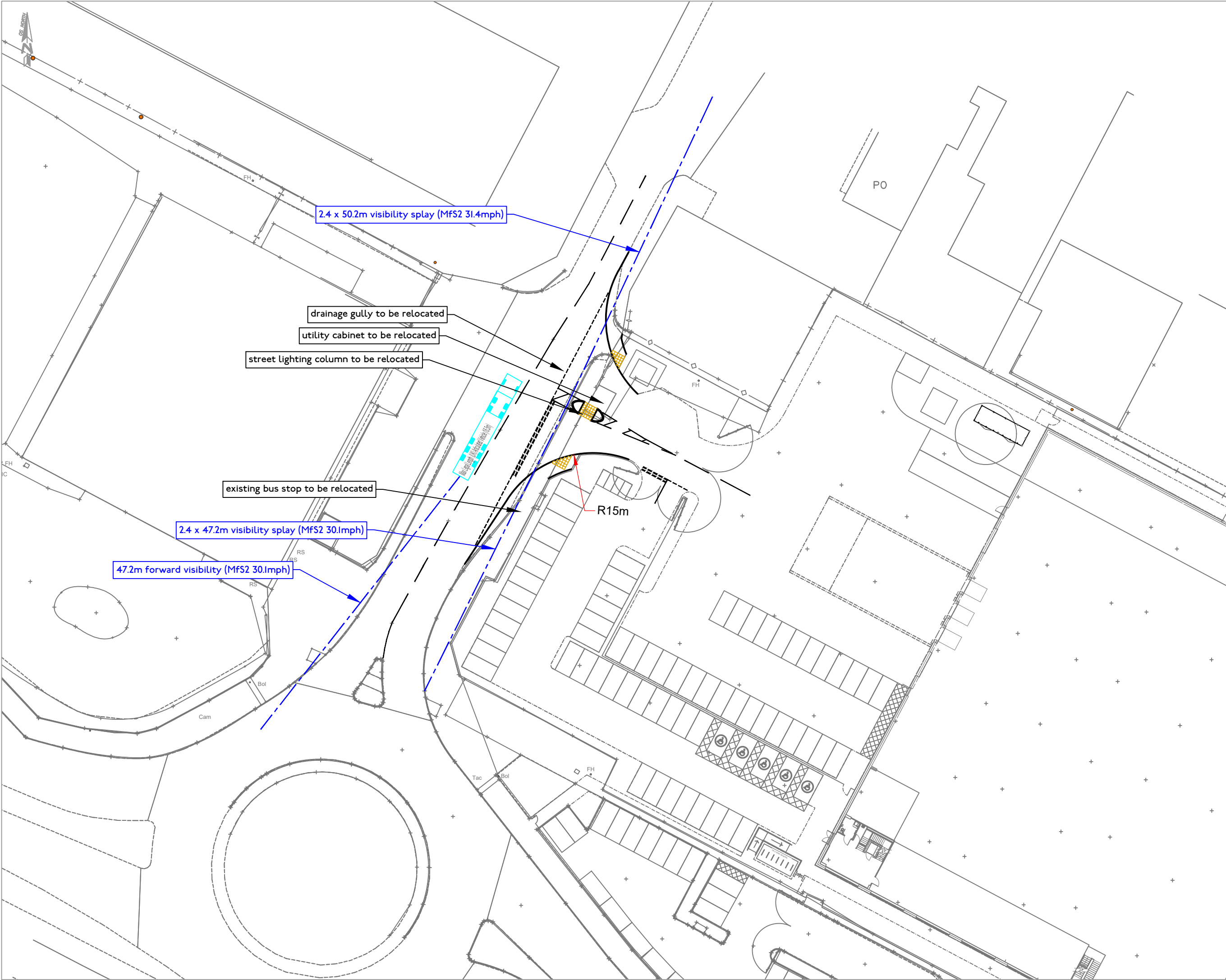
AEW

APPENDIX E

Proposed Access Junction Drawing – Gale Road

File name: \\MAC\HOME\DROPBOX (MODE)\PROJECT\MANCHESTER\2. PROJECTS\J326156_EAST HUB, KNOWLES\5. GRAPHICS\2. CAD\2. SHEETS\J32-6156-PS-001 REV D.DWG
Last saved by: LUKE WHEELER Last plotted: 2022-11-23

ISO A3 297mm x 420mm
Approved: ME
Checked: MA
Designer: LCW
Project Management Initials:



transport planning

t 0161 464 9495
e info@modetransport.co.uk
w www.modetransport.co.uk

- notes:
1. this drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
 2. all dimensions to be checked before commencement of work on site.
 3. all dimensions in metres unless otherwise stated.
 4. the design is subject to approval of knowlesley council.
 5. drawing based on topographical survey.

issue/revision		
D	23/11/2022	issued
C	30/08/2022	issued
B	21/07/2022	issued
A	27/04/2022	issued
-	25/04/2022	issued
l/r	date	description

client: redsun projects ltd
project: east hub, knowlesley
project number: J326156
scale: 1:500@A3
drawing title:
preliminary site access
drawing number:
J32-6156-PS-001

APPENDIX F

Stage 1 Road Safety Audit and Designer's Response



roadsafetyinitiatives
Developing your roads for a safer future

EAST HUB, GALE ROAD, KNOWSLEY – PROPOSED ACCESS ALTERATIONS

Stage 1 Road Safety Audit
Client: Redsun Projects Ltd

11/11/2022

Quality Management

Issue Record

ISSUE	REVISION	DESCRIPTION	DATE	PREPARED BY	CHECKED
1	-	Final	11 November 2022	<i>M Hedley</i>	<i>M Morley</i>
Document number - RSI-MM-1122-001 Issue 1.0					

East Hub, Gale Road, Knowsley – Proposed Access Alterations

Stage 1 Road Safety Audit

11/11/2022

Overseeing Organisation

Knowsley Metropolitan Borough Council

Client

Redsun Projects Ltd

Design Organisation

mode transport planning

Road Safety Audit Team Organisation

Road Safety Initiatives LLP

www.roadsafetyinitiatives.co.uk

Registered Address

Road Safety Initiatives LLP
OC380991
c/o One Two One Accounts Limited
44 Astley Road,
Seaton Delaval,
Northumberland. NE25 0DG

Enquiries regarding this audit should be made to

M Hedley

Partner

Road Safety Initiatives LLP

Tel: +44 (0)7960 798075

[mailto: mark@roadsafetyinitiatives.co.uk](mailto:mark@roadsafetyinitiatives.co.uk)

Table of Contents

1	Introduction.....	5
2	Items Raised at previous Road Safety Audits	6
3	Items raised at this Stage 1 Road Safety Audit.....	7
4	Audit Team Statement	8
	Appendices, Figures and Tables.....	9

APPENDIX A – Scheme Documents Issued for Road Safety Audit

APPENDIX B – Location Plan

1 Introduction

- 1.1.1 This report results from a Stage 1 Road Safety Audit carried out on the proposed access alterations for the East Hub, Gale Road, Knowsley scheme. This is at the request of Michael Anthony, mode transport planning (Design Organisation) on behalf of Knowsley Metropolitan Borough Council (Overseeing Organisation).
- 1.1.2 The terms of reference of the Road Safety Audit are as described in DMRB GG 119. The Road Safety Audit Team has examined and reported only on the road safety implications in the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.1.3 The Road Safety Audit Team membership consisted of:
- | | |
|--------------------|--|
| Team Leader | Mark Hedley , IEng, MCIHT, MSoRSA, FIHE, RegRSA(IHE)
Certificate of Competency in Road Safety Audit gained in Nov 2013
Partner, Road Safety Initiatives LLP |
| Team Member | Martin Morley , BSc (Hons), MCIHT, MSoRSA
Certificate of Competency in Road Safety Audit gained in Feb 2013
Partner, Road Safety Initiatives LLP |
- 1.1.4 The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief provided by Michael Anthony, mode transport planning (Design Organisation). The Road Safety Audit comprised an examination of the documents provided and listed in **Appendix A**.
- 1.1.5 The Road Safety Audit Team visited the site together on Tuesday 8 November 2022 between 11:40 and 11:50 hours. The weather was cloudy, and the road surfaces were damp at the time of the site visit. During the site visit, traffic flows were light, and a few pedestrians and no cyclists were observed.
- 1.1.6 Matters which the Terms of Reference exclude from this report, but which the Road Safety Audit Team wishes to draw to the attention of the Overseeing Organisation, will be supplied in a separate document in the covering email to this Road Safety Audit Report.
- 1.1.7 All Road Safety problems are referenced to the design drawings and the locations have been indicated on the plans supplied with the Road Safety Audit Brief in **Appendix B**.
- 1.1.8 This Road Safety Audit will review the road safety aspects of the proposed access alterations on Gale Road.
- 1.1.9 The objectives of the scheme are to improve access to/from Gale Road as part of the proposed 4,645sqm industrial unit, with car park and service yard development.
- 1.1.10 The Road Safety Audit Team was not informed of any strategic decision made and agreed by the Overseeing Organisation.
- 1.1.11 The Road Safety Audit Team was not informed of any Departures from Standards.

2 Items Raised at previous Road Safety Audits

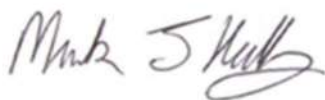
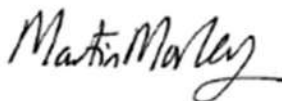
2.1.1 No previous Road Safety Audit has been undertaken on this scheme.

3 Items raised at this Stage 1 Road Safety Audit

- 3.1.1 Following careful consideration of the information provided, together with the site visit, the Stage 1 Road Safety Audit Team was unable to identify any items of concern regarding the road safety of the scheme.

4 Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

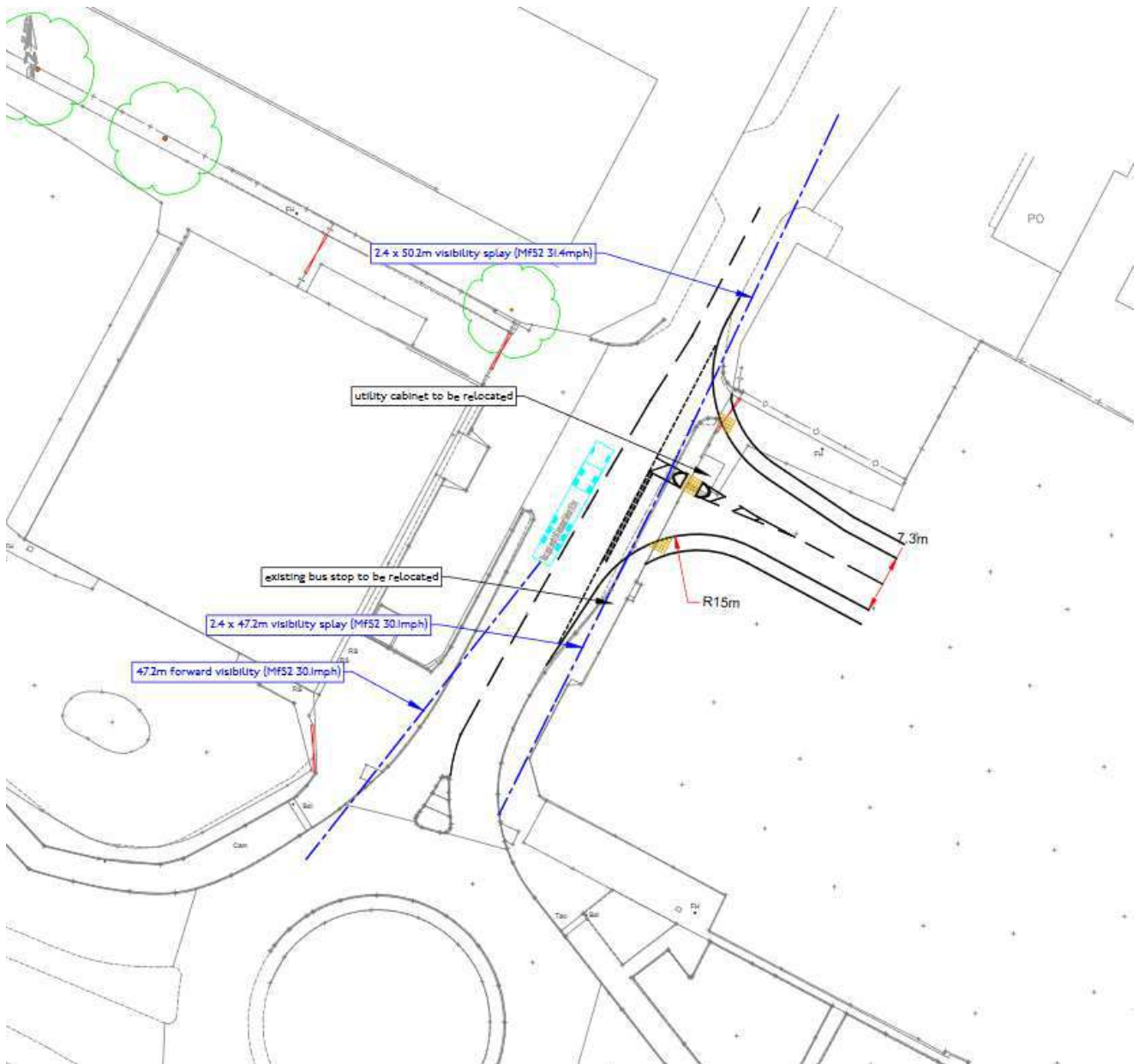
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Mark Hedley
Signed:	
Position:	Partner
Organisation:	Road Safety Initiatives LLP
Date:	11 November 2022
ROAD SAFETY AUDIT TEAM MEMBER	
Name:	Martin Morley
Signed:	
Position:	Partner
Organisation:	Road Safety Initiatives LLP
Date:	11 November 2022

Appendices, Figures and Tables

Appendix A: Scheme Documents Issued for Road Safety Audit

DRAWING/DOCUMENT REFERENCE	REV	TITLE
-	P01	Proposed site plan
J32-6156-PS-001	C	Preliminary site access
J32-6156-PS-002	C	Swept path analysis
-	-	Automatic Traffic Counts
325861	21/10/22	Stage 1 RSA Brief

Appendix B: Location Plan



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Road Safety Initiatives LLP
c/o One Two One Accounts Limited
44 Astley Road, Seaton Delaval
Northumberland
NE25 0DG
www.roadsafetyinitiatives.co.uk

East Hub, Knowsley - Stage 1 Road Safety Audit Designer Response

Project No: J326156

Date: 24th November 2022

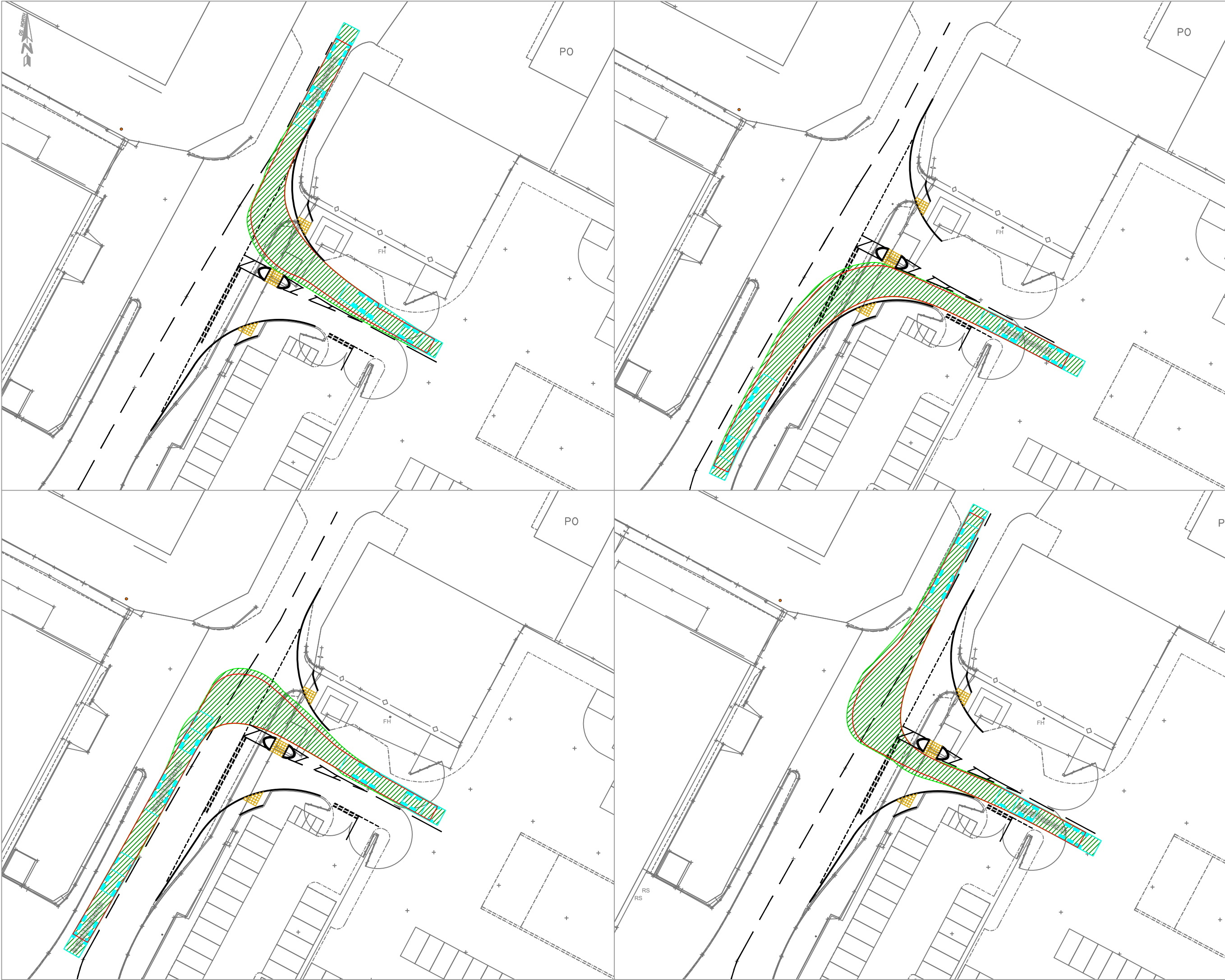


No.	Problem	Problem Accepted?	Recommendation	Recommendation Accepted?	Action
The Stage 1 Road Safety Audit Team was unable to identify any items of concerns regarding the road safety of the scheme.					

APPENDIX G

Swept Path Analysis – 16.5m Articulated HGV

ISO A3 297mm x 420mm
Approved: ME
Checked: MA
Designer: LCW
Project Management Initials:
Filename: \\MAC\HOME\DROPBOX (MODE)\PROJECT\MANCHESTER\2. PROJECTS\J326156_EAST HUB, KNOWLES\5. GRAPHICS\2. CAD\2. SHEETS\J32-6156-PS-001 REV D.DWG
Last saved by: LUKEWHEELER
Last Printed: 2022-11-23



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e info@modetransport.co.uk
w www.modetransport.co.uk

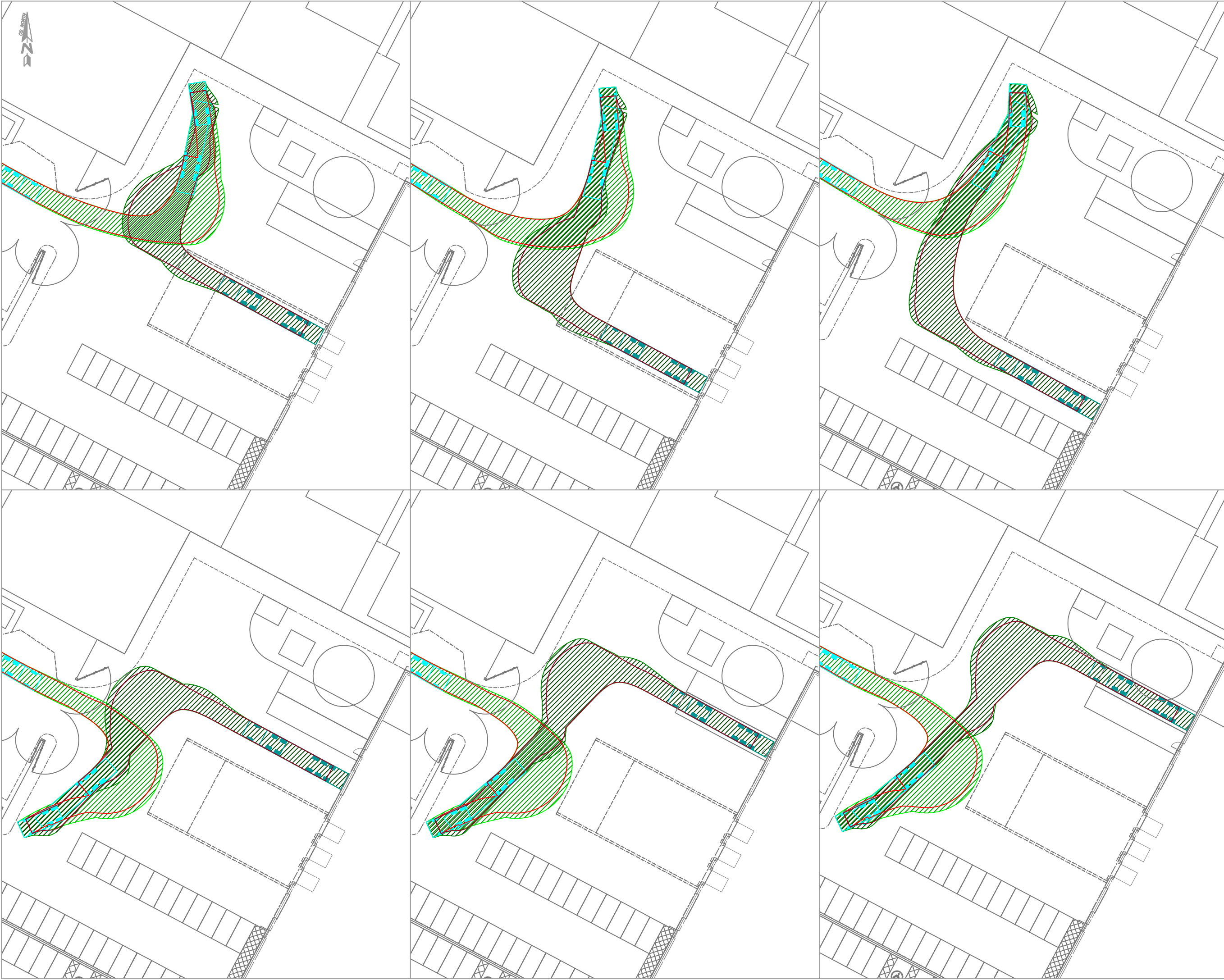
- notes:
1. this drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
 2. all dimensions to be checked before commencement of work on site.
 3. all dimensions in metres unless otherwise stated.
 4. the design is subject to approval of knowsley council.
 5. drawing based on topographical survey.

issue/revision		
D	23/11/2022	issued
C	30/08/2022	issued
B	21/07/2022	issued
A	27/04/2022	issued
-	25/04/2022	issued
l/r	date	description

client: redsun projects ltd
project: east hub, knowsley
project number: J326156
scale: 1:500@A3
drawing title:
swept path analysis
drawing number:
J32-6156-PS-002

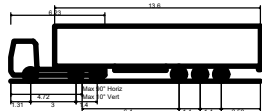
Filename: \\MAC\HOME\DROPBOX\MODE\PROJECT\MANCHESTER\2. PROJECTS\J326156_EAST HUB, KNOWLES\5. GRAPHICS\2. CAD\2. SHEETS\J32-6156-PS-003 REV B.DWG
Last saved by: LUKEWHEELER Last Potted: 2022-12-23

Project Management Initials: Designer: LCW Checked: MA Approved: ME ISO A3 297mm x 420mm



transport planning

t 0161 464 9495
e info@modetransport.co.uk
w www.modetransport.co.uk



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.632m
Min Body Ground Clearance 0.396m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.870m

- notes:
1. this drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
 2. all dimensions to be checked before commencement of work on site.
 3. all dimensions in metres unless otherwise stated.
 4. the design is subject to approval of knowlesley council.
 5. drawing based on os mapping.

issue/revision			
B	23/11/2022	issued	
A	27/10/2022	issued	
-	13/05/2022	issued	
l/r	date	description	

client: redsun projects ltd
project: east hub, knowlesley
project number: J326156
scale: 1:500@A3
drawing title:
swept path analysis
drawing number:
J32-6156-PS-003

APPENDIX H

Minimum Accessibility Standard Assessment (MASA)

Minimum Accessibility Standard Assessment (MASA)

Address: East Hub, Knowsley

Completed by: Mode Transport Planning

Based on the proposed floor area and location, the development is classified in the MASA standards as a 'medium' development, located in an 'Other Urban'.

Criteria	Description	Score
Access Diagram		
Access Diagram	Has a diagram been submitted which shows how people move to and through the place and how this links to surrounding roads, footpaths and sight lines?	Yes
Access on Foot		
Location	Is the density of existing local housing (i.e. within 800m) more than 30 houses per hectare?	No (0 points)
Internal Layout	Does 'circulation' and access inside the site reflect direct, safe and easy to use pedestrian routes for all, with priority given to pedestrians when they have to cross roads or cycle routes?	Yes (1 point)
External Layout	Are there barriers between the site and local facilities or housing, which restrict pedestrian access?	No (1 point)
Other	The development links to identified recreational walking network	Yes
Section Summary	Minimum Score Required	2 points
	Actual Score	2 points
Access by Cycle		
Location	Is the development within 1 mile of a district or local centre?	Yes (2 points)
Internal Layout	Does the 'circulation' and access inside the site reflect direct and safe cycle routes, with priority given to cyclists where they meet motor vehicles?	Yes (1 point)
External Layout	The development is within 400m of an existing or proposed cycle route?	Yes (1 point)
Other	Development include shower facilities and lockers for cyclists?	No (0 points)
Section Summary	Minimum Score Required	2 points
	Actual Score	4 points
Access by Public Transport		
Location and access to public transport	Is the site within a 200m walk of a bus stop and/ or 400m of a rail station?	Yes (2 points)

Criteria	Description	Score
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations?	No (1 point)
Frequency	Low (2 or more buses an hour)	0 points
Other	N/A	0 points
Section Summary	Minimum Score Required	4 points
	Actual Score	3 points
Vehicle Access and Parking		
Parking	Off-street parking provided is advised in Section 4 for that development type	Yes (1 point)
	The off-street parking less than 75% of recommended	Yes (2 points)
Section Summary	Minimum Score Required	1 point
	Actual Score	3 points

APPENDIX I

TRICS Output - Industrial Unit

mode transport limited Lombard House, 145 Great Charles Street Birmingham, B3 3LP

Licence No: 754101

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT

TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
03	SOUTH WEST	
	BR BRISTOL CITY	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
	BP BLACKPOOL	1 days
	EC CHESHIRE EAST	1 days
	LC LANCASHIRE	1 days
09	NORTH	
	CB CUMBRIA	2 days
11	SCOTLAND	
	SR STIRLING	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 260 to 9216 (units: sqm)
 Range Selected by User: 150 to 67459 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 21/04/22

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

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	2 days
Thursday	4 days
Friday	1 days

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

Selected survey types:

Manual count	11 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town 11

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

Selected Location Sub Categories:

Industrial Zone	10
Development Zone	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village,

Secondary Filtering selection:Use Class:

Not Known

11 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	5 days
10,001 to 15,000	2 days
20,001 to 25,000	2 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	9 days

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

Travel Plan:

No

11 days

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

PTAL Rating:

No PTAL Present

11 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AC-02-C-02	INDUSTRIAL MATERIALS	CHESHIRE WEST & CHESTER
	JUPITER DRIVE		
	CHESTER		
	CHESTER W. EMP. PARK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	8100 sqm	
	Survey date: WEDNESDAY	19/11/14	Survey Type: MANUAL
2	BP-02-C-01	POWDER COATINGS	BLACKPOOL
	CHORLEY ROAD		
	BLACKPOOL		
	LITTLE CARLETON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1010 sqm	
	Survey date: THURSDAY	20/06/19	Survey Type: MANUAL
3	BR-02-C-02	STAINLESS FITTINGS	BRISTOL CITY
	SOUTH LIBERTY LANE		
	BRISTOL		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1475 sqm	
	Survey date: TUESDAY	22/09/15	Survey Type: MANUAL
4	CB-02-C-01	DOMINO'S PIZZA	CUMBRIA
	COWPER ROAD		
	PENRITH		
	GILWILLY IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2950 sqm	
	Survey date: TUESDAY	10/06/14	Survey Type: MANUAL
5	CB-02-C-02	STEEL FABRICATION	CUMBRIA
	BLACKDYKE ROAD		
	CARLISLE		
	KINGSTOWN IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	715 sqm	
	Survey date: FRIDAY	15/10/21	Survey Type: MANUAL
6	EC-02-C-01	OFFICE FURNITURE	CHESHIRE EAST
	BRUNEL ROAD		
	MACCLESFIELD		
	LYME GREEN BUS. PARK		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	6658 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL
7	HC-02-C-01	ENGINEERING COMPANY	HAMPSHIRE
	JAYS CLOSE		
	BASINGSTOKE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3000 sqm	
	Survey date: THURSDAY	16/06/16	Survey Type: MANUAL
8	LC-02-C-06	STEEL FABRICATION	LANCASHIRE
	TOLLGATE ROAD		
	BURSCOUGH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	700 sqm	
	Survey date: THURSDAY	21/04/22	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	NF-02-C-03	SHEET METAL CONTRACTOR	NORFOLK
	ELVIN WAY		
	NORWICH		
	HELLESDON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	260 sqm	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
10	SR-02-C-01	SPECIALIST MODEL MAKING	STIRLING
	BORROWMEADOW ROAD		
	STIRLING		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2350 sqm	
	Survey date: MONDAY	16/06/14	Survey Type: MANUAL
11	WK-02-C-01	MACHINE ENGINEERING	WARWICKSHIRE
	CASTLE MOUND WAY		
	RUGBY		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	9216 sqm	
	Survey date: WEDNESDAY	10/11/21	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BO-02-C-01	COVID-19
EC-02-C-02	COVID-19
GS-02-C-02	COVID-19
LC-02-C-05	COVID-19
VG-02-C-01	COVID-19

mode transport limited Lombard House, 145 Great Charles Street Birmingham, B3 3LP

Licence No: 754101

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	4289	0.093	3	4289	0.000	3	4289	0.093
06:00 - 07:00	4	3804	0.092	4	3804	0.013	4	3804	0.105
07:00 - 08:00	11	3312	0.414	11	3312	0.060	11	3312	0.474
08:00 - 09:00	11	3312	0.382	11	3312	0.077	11	3312	0.459
09:00 - 10:00	11	3312	0.222	11	3312	0.134	11	3312	0.356
10:00 - 11:00	11	3312	0.198	11	3312	0.159	11	3312	0.357
11:00 - 12:00	11	3312	0.088	11	3312	0.124	11	3312	0.212
12:00 - 13:00	11	3312	0.162	11	3312	0.178	11	3312	0.340
13:00 - 14:00	11	3312	0.189	11	3312	0.231	11	3312	0.420
14:00 - 15:00	11	3312	0.110	11	3312	0.140	11	3312	0.250
15:00 - 16:00	11	3312	0.088	11	3312	0.198	11	3312	0.286
16:00 - 17:00	11	3312	0.060	11	3312	0.313	11	3312	0.373
17:00 - 18:00	11	3312	0.052	11	3312	0.316	11	3312	0.368
18:00 - 19:00	11	3312	0.038	11	3312	0.170	11	3312	0.208
19:00 - 20:00	3	4289	0.047	3	4289	0.054	3	4289	0.101
20:00 - 21:00	3	4289	0.023	3	4289	0.031	3	4289	0.054
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.258			2.198			4.456

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

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

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Parameter summary

Trip rate parameter range selected:	260 - 9216 (units: sqm)
Survey date range:	01/01/14 - 21/04/22
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	5

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

mode transport limited Lombard House, 145 Great Charles Street Birmingham, B3 3LP

Licence No: 754101

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

OGVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	4289	0.000	3	4289	0.000	3	4289	0.000
06:00 - 07:00	4	3804	0.020	4	3804	0.007	4	3804	0.027
07:00 - 08:00	11	3312	0.019	11	3312	0.016	11	3312	0.035
08:00 - 09:00	11	3312	0.033	11	3312	0.016	11	3312	0.049
09:00 - 10:00	11	3312	0.027	11	3312	0.022	11	3312	0.049
10:00 - 11:00	11	3312	0.049	11	3312	0.038	11	3312	0.087
11:00 - 12:00	11	3312	0.019	11	3312	0.030	11	3312	0.049
12:00 - 13:00	11	3312	0.016	11	3312	0.022	11	3312	0.038
13:00 - 14:00	11	3312	0.027	11	3312	0.016	11	3312	0.043
14:00 - 15:00	11	3312	0.005	11	3312	0.005	11	3312	0.010
15:00 - 16:00	11	3312	0.016	11	3312	0.019	11	3312	0.035
16:00 - 17:00	11	3312	0.008	11	3312	0.011	11	3312	0.019
17:00 - 18:00	11	3312	0.005	11	3312	0.005	11	3312	0.010
18:00 - 19:00	11	3312	0.000	11	3312	0.003	11	3312	0.003
19:00 - 20:00	3	4289	0.000	3	4289	0.047	3	4289	0.047
20:00 - 21:00	3	4289	0.000	3	4289	0.023	3	4289	0.023
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.244			0.280			0.524

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

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

APPENDIX J

TRICS Output – Warehousing (Commercial)

Calculation Reference: AUDIT-754101-221103-1110

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : F - WAREHOUSING (COMMERCIAL)

TOTAL VEHICLESSelected regions and areas:

01	GREATER LONDON	
	BE BEXLEY	1 days
	HD HILLINGDON	1 days
02	SOUTH EAST	
	EX ESSEX	1 days
	HC HAMPSHIRE	1 days
	MW MEDWAY	1 days
03	SOUTH WEST	
	TB TORBAY	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	BG BRIDGEND	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 190 to 31000 (units: sqm)
 Range Selected by User: 190 to 80100 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 22/11/21

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

Selected survey days:

Monday	3 days
Thursday	3 days
Friday	5 days

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

Selected survey types:

Manual count	11 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	11
--------------	----

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

Selected Location Sub Categories:

Industrial Zone	10
Commercial Zone	1

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

Secondary Filtering selection:

Use Class:

n/a	2 days
B8	9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	2 days

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

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	3 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	6 days

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

Travel Plan:

Yes	1 days
No	10 days

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

PTAL Rating:

No PTAL Present	9 days
1a (Low) Very poor	1 days
2 Poor	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BE-02-F-01 THAMES ROAD CRAYFORD	FRESH FRUIT DISTRIBUTOR	BEXLEY
	Edge of Town Industrial Zone Total Gross floor area: 20400 sqm Survey date: THURSDAY 20/09/18		Survey Type: MANUAL
2	BG-02-F-01 PARC CRESCENT BRIDGEND WATERTON IND. EST.	LOGISTICS COMPANY	BRIDGEND
	Edge of Town Industrial Zone Total Gross floor area: 3050 sqm Survey date: MONDAY 13/10/14		Survey Type: MANUAL
3	EX-02-F-01 BRUNEL WAY COLCHESTER SEVERALLS INDUSTRIAL PK	SPORTS SUPPLEMENTS	ESSEX
	Edge of Town Industrial Zone Total Gross floor area: 6560 sqm Survey date: FRIDAY 18/05/18		Survey Type: MANUAL
4	HC-02-F-03 WARSASH ROAD PARK GATE	PPE DISTRIBUTION	HAMPSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 3665 sqm Survey date: MONDAY 27/09/21		Survey Type: MANUAL
5	HD-02-F-01 NINE ACRES CLOSE HAYES	FOOD DISTRIBUTOR	HILLINGDON
	Edge of Town Industrial Zone Total Gross floor area: 8673 sqm Survey date: THURSDAY 27/09/18		Survey Type: MANUAL
6	MW-02-F-02 MILLS ROAD AYLESFORD QUARRY WOOD	COMMERCIAL WAREHOUSING	MEDWAY
	Edge of Town Industrial Zone Total Gross floor area: 11200 sqm Survey date: FRIDAY 22/09/17		Survey Type: MANUAL
7	SF-02-F-03 CENTRAL AVENUE IPSWICH WARREN HEATH	ROAD HAULAGE	SUFFOLK
	Edge of Town Industrial Zone Total Gross floor area: 4700 sqm Survey date: FRIDAY 18/09/15		Survey Type: MANUAL
8	TB-02-F-01 ALDERS WAY PAIGNTON	OPTICS WAREHOUSE	TORBAY
	Edge of Town Industrial Zone Total Gross floor area: 190 sqm Survey date: FRIDAY 29/03/19		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	TW-02-F-01	ASDA DISTRIBUTION CENTRE	TYNE & WEAR
	MANDARIN WAY		
	WASHINGTON		
	PATTISON IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	31000 sqm	
	Survey date: FRIDAY	13/11/15	Survey Type: MANUAL
10	WM-02-F-02	LOGISTICS FIRM	WEST MIDLANDS
	SOVEREIGN ROAD		
	BIRMINGHAM		
	KINGS NORTON		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	3625 sqm	
	Survey date: MONDAY	09/11/15	Survey Type: MANUAL
11	WY-02-F-02	DISTRIBUTION COMPANY	WEST YORKSHIRE
	STAITHGATE LANE		
	BRADFORD		
	NEWHALL		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	10446 sqm	
	Survey date: THURSDAY	14/03/19	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BO-02-F-01	COVID-19
LO-02-F-01	COVID-19

mode transport limited Lombard House, 145 Great Charles Street Birmingham, B3 3LP

Licence No: 754101

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	5318	0.348	2	5318	0.169	2	5318	0.517
06:00 - 07:00	2	5318	0.555	2	5318	0.244	2	5318	0.799
07:00 - 08:00	11	9410	0.207	11	9410	0.106	11	9410	0.313
08:00 - 09:00	11	9410	0.207	11	9410	0.122	11	9410	0.329
09:00 - 10:00	11	9410	0.160	11	9410	0.101	11	9410	0.261
10:00 - 11:00	11	9410	0.139	11	9410	0.139	11	9410	0.278
11:00 - 12:00	11	9410	0.141	11	9410	0.150	11	9410	0.291
12:00 - 13:00	11	9410	0.156	11	9410	0.143	11	9410	0.299
13:00 - 14:00	11	9410	0.161	11	9410	0.151	11	9410	0.312
14:00 - 15:00	11	9410	0.132	11	9410	0.160	11	9410	0.292
15:00 - 16:00	11	9410	0.124	11	9410	0.174	11	9410	0.298
16:00 - 17:00	11	9410	0.123	11	9410	0.191	11	9410	0.314
17:00 - 18:00	11	9410	0.118	11	9410	0.254	11	9410	0.372
18:00 - 19:00	11	9410	0.088	11	9410	0.134	11	9410	0.222
19:00 - 20:00	3	10345	0.061	3	10345	0.235	3	10345	0.296
20:00 - 21:00	3	10345	0.048	3	10345	0.048	3	10345	0.096
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.768			2.521			5.289

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

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

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Parameter summary

Trip rate parameter range selected:	190 - 31000 (units: sqm)
Survey date range:	01/01/14 - 22/11/21
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

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

mode transport limited Lombard House, 145 Great Charles Street Birmingham, B3 3LP

Licence No: 754101

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

OGVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	5318	0.075	2	5318	0.113	2	5318	0.188
06:00 - 07:00	2	5318	0.085	2	5318	0.160	2	5318	0.245
07:00 - 08:00	11	9410	0.037	11	9410	0.058	11	9410	0.095
08:00 - 09:00	11	9410	0.044	11	9410	0.061	11	9410	0.105
09:00 - 10:00	11	9410	0.043	11	9410	0.043	11	9410	0.086
10:00 - 11:00	11	9410	0.051	11	9410	0.060	11	9410	0.111
11:00 - 12:00	11	9410	0.048	11	9410	0.048	11	9410	0.096
12:00 - 13:00	11	9410	0.060	11	9410	0.043	11	9410	0.103
13:00 - 14:00	11	9410	0.052	11	9410	0.050	11	9410	0.102
14:00 - 15:00	11	9410	0.043	11	9410	0.035	11	9410	0.078
15:00 - 16:00	11	9410	0.056	11	9410	0.046	11	9410	0.102
16:00 - 17:00	11	9410	0.055	11	9410	0.043	11	9410	0.098
17:00 - 18:00	11	9410	0.053	11	9410	0.043	11	9410	0.096
18:00 - 19:00	11	9410	0.036	11	9410	0.023	11	9410	0.059
19:00 - 20:00	3	10345	0.019	3	10345	0.042	3	10345	0.061
20:00 - 21:00	3	10345	0.023	3	10345	0.019	3	10345	0.042
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.780			0.887			1.667

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

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

APPENDIX K

PICADY Modelling Output – Proposed Access Junction

Junctions 9											
PICADY 9 - Priority Intersection Module											
Version: 9.0.2.5947											
© Copyright TRL Limited, 2017											
For sales and distribution information, program advice and maintenance, contact TRL:											
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk											
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution											

Filename: East Hub_Knowsley v1.2.j9

Path: C:\Users\manch\Dropbox (mode)\Project\Manchester\2. Projects\J326156_East Hub, Knowlsey\4. Data\6. Junction Capacity Assessments

Report generation date: 25/07/2022 12:39:28

- »2022 Base + Development Industrial Unit, AM
- »2022 Base + Development Industrial Unit, PM
- »2022 Base + Development Warehousing, AM
- »2022 Base + Development Warehousing, PM

Summary of junction performance

	AM						PM					
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
	2022 Base + Development Industrial Unit											
Stream B-AC	0.0	0.00	0.00	A	0.17	392 %	0.0	7.58	0.04	A	0.29	250 %
Stream C-AB	0.0	5.65	0.03	A		[Stream C-AB]	0.0	7.56	0.00	A		[Stream B-AC]
	2022 Base + Development Warehousing											
Stream B-AC	0.0	12.33	0.02	B	0.35	261 %	0.0	8.40	0.03	A	0.25	253 %
Stream C-AB	0.0	6.04	0.02	A		[Stream B-AC]	0.0	9.27	0.00	A		[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

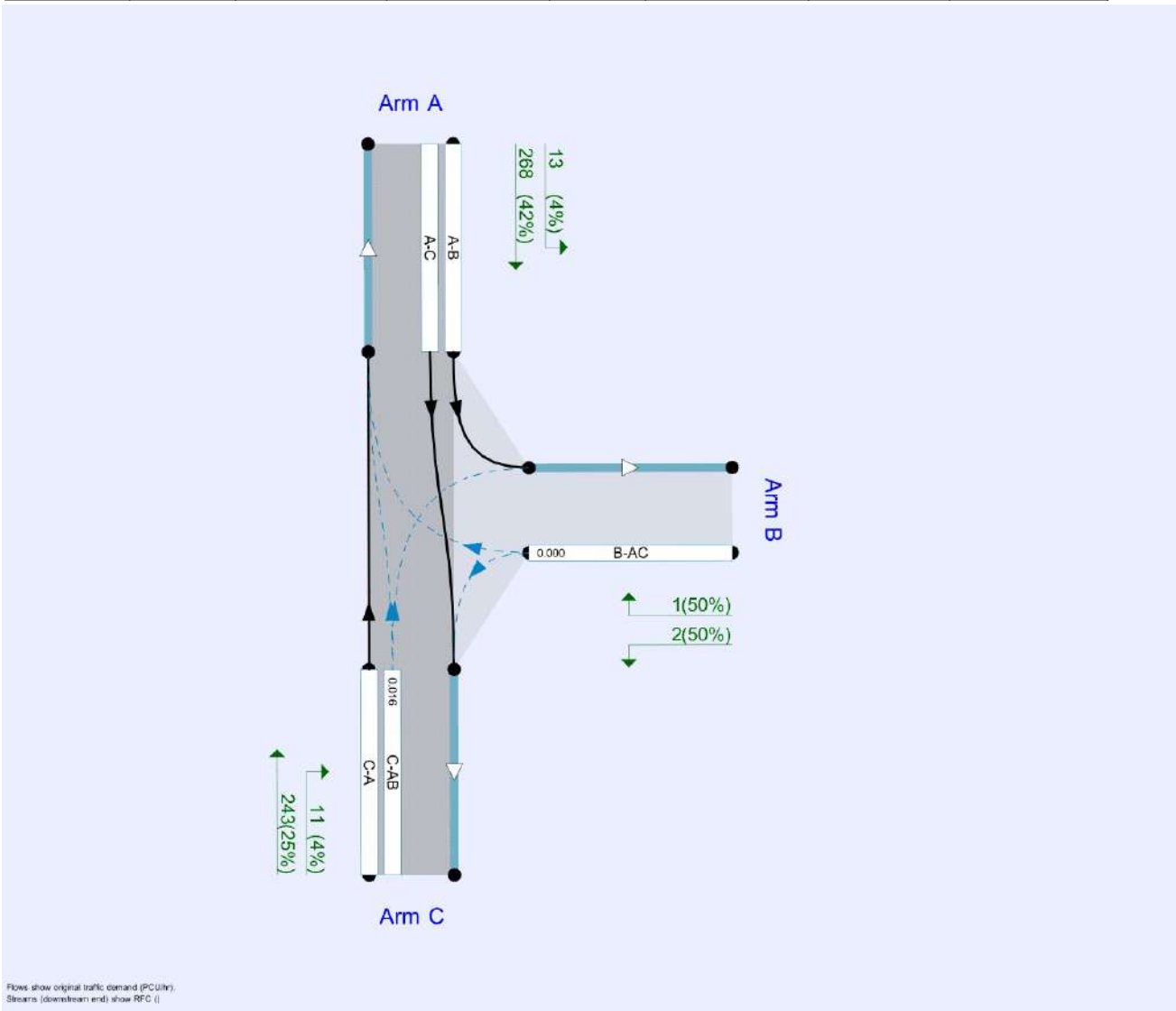
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	20/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-J595SBC\Manchester Mode
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base + Development Industrial Unit	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022 Base + Development Industrial Unit	PM	ONE HOUR	17:00	18:30	15	✓
D3	2022 Base + Development Warehousing	AM	ONE HOUR	08:00	09:30	15	✓
D4	2022 Base + Development Warehousing	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2022 Base + Development Industrial Unit, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	392	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	Gale Rd N		Major
B	Site Access		Minor
C	Gale Rd S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.60			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.65	36	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	533	0.090	0.228	0.144	0.326
1	B-C	679	0.097	0.245	-	-
1	C-B	632	0.228	0.228	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base + Development Industrial Unit	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	281	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	254	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	13	268
	B	1	0	2
	C	243	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	4	42
	B	50	0	50
	C	25	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.03	5.65	0.0	A	15	22
C-A					218	327
A-B					12	18
A-C					246	369

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	529	0.000	0	0.0	0.0	0.000	A
C-AB	11	3	707	0.016	11	0.0	0.0	5.621	A
C-A	180	45			180				
A-B	10	2			10				
A-C	202	50			202				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-AB	14	4	723	0.020	14	0.0	0.0	5.544	A
C-A	214	54			214				
A-B	12	3			12				
A-C	241	60			241				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	497	0.000	0	0.0	0.0	0.000	A
C-AB	19	5	746	0.025	19	0.0	0.0	5.459	A
C-A	261	65			261				
A-B	14	4			14				
A-C	295	74			295				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	497	0.000	0	0.0	0.0	0.000	A
C-AB	19	5	746	0.025	19	0.0	0.0	5.484	A
C-A	261	65			261				
A-B	14	4			14				
A-C	295	74			295				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-AB	14	4	723	0.020	14	0.0	0.0	5.598	A
C-A	214	54			214				
A-B	12	3			12				
A-C	241	60			241				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	0	0	529	0.000	0	0.0	0.0	0.000	A
C-AB	11	3	707	0.016	11	0.0	0.0	5.648	A
C-A	180	45			180				
A-B	10	2			10				
A-C	202	50			202				

2022 Base + Development Industrial Unit, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	250	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Base + Development Industrial Unit	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	446	100.000
B		ONE HOUR	✓	21	100.000
C		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	4	442
	B	4	0	17
	C	104	1	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	25	20
	B	5	0	5
	C	31	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.04	7.58	0.0	A	19	29
C-AB	0.00	7.56	0.0	A	1	2
C-A					95	143
A-B					4	6
A-C					406	608

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	16	4	561	0.028	16	0.0	0.0	6.931	A
C-AB	0.86	0.22	610	0.001	0.86	0.0	0.0	7.436	A
C-A	78	20			78				
A-B	3	0.75			3				
A-C	333	83			333				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19	5	544	0.035	19	0.0	0.0	7.192	A
C-AB	1	0.27	606	0.002	1	0.0	0.0	7.487	A
C-A	93	23			93				
A-B	4	0.90			4				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23	6	522	0.044	23	0.0	0.0	7.582	A
C-AB	1	0.34	601	0.002	1	0.0	0.0	7.558	A
C-A	114	29			114				
A-B	4	1			4				
A-C	487	122			487				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23	6	522	0.044	23	0.0	0.0	7.582	A
C-AB	1	0.34	601	0.002	1	0.0	0.0	7.564	A
C-A	114	29			114				
A-B	4	1			4				
A-C	487	122			487				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19	5	544	0.035	19	0.0	0.0	7.193	A
C-AB	1	0.27	606	0.002	1	0.0	0.0	7.501	A
C-A	93	23			93				
A-B	4	0.90			4				
A-C	397	99			397				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	16	4	561	0.028	16	0.0	0.0	6.934	A
C-AB	0.86	0.22	610	0.001	0.87	0.0	0.0	7.441	A
C-A	78	20			78				
A-B	3	0.75			3				
A-C	333	83			333				

2022 Base + Development Warehousing, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.35	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	261	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Base + Development Warehousing	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	276	100.000
B		ONE HOUR	✓	10	100.000
C		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	8	268
	B	5	0	5
	C	243	7	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	15	42
	B	67	0	67
	C	25	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	12.33	0.0	B	9	14
C-AB	0.02	6.04	0.0	A	9	14
C-A					220	330
A-B					7	11
A-C					246	369

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	530	0.014	7	0.0	0.0	11.499	B
C-AB	7	2	708	0.010	7	0.0	0.0	6.030	A
C-A	181	45			181				
A-B	6	2			6				
A-C	202	50			202				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9	2	517	0.017	9	0.0	0.0	11.833	B
C-AB	9	2	724	0.012	9	0.0	0.0	5.924	A
C-A	216	54			216				
A-B	7	2			7				
A-C	241	60			241				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	499	0.022	11	0.0	0.0	12.327	B
C-AB	12	3	747	0.016	12	0.0	0.0	5.790	A
C-A	263	66			263				
A-B	9	2			9				
A-C	295	74			295				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	499	0.022	11	0.0	0.0	12.327	B
C-AB	12	3	747	0.016	12	0.0	0.0	5.802	A
C-A	263	66			263				
A-B	9	2			9				
A-C	295	74			295				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9	2	517	0.017	9	0.0	0.0	11.837	B
C-AB	9	2	724	0.012	9	0.0	0.0	5.952	A
C-A	216	54			216				
A-B	7	2			7				
A-C	241	60			241				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	8	2	530	0.014	8	0.0	0.0	11.503	B
C-AB	7	2	708	0.010	7	0.0	0.0	6.043	A
C-A	181	45			181				
A-B	6	2			6				
A-C	202	50			202				

2022 Base + Development Warehousing, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	253	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 Base + Development Warehousing	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	448	100.000
B		ONE HOUR	✓	14	100.000
C		ONE HOUR	✓	106	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	6	442
	B	3	0	11
	C	104	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	60	20
	B	17	0	17
	C	31	60	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	8.40	0.0	A	13	19
C-AB	0.00	9.27	0.0	A	2	3
C-A					95	143
A-B					6	8
A-C					406	608

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	556	0.019	10	0.0	0.0	7.714	A
C-AB	2	0.43	609	0.003	2	0.0	0.0	9.219	A
C-A	78	20			78				
A-B	5	1			5				
A-C	333	83			333				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	13	3	540	0.023	13	0.0	0.0	7.989	A
C-AB	2	0.53	606	0.004	2	0.0	0.0	9.251	A
C-A	93	23			93				
A-B	5	1			5				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	15	4	517	0.030	15	0.0	0.0	8.400	A
C-AB	3	0.68	601	0.005	3	0.0	0.0	9.266	A
C-A	114	28			114				
A-B	7	2			7				
A-C	487	122			487				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	15	4	517	0.030	15	0.0	0.0	8.400	A
C-AB	3	0.68	601	0.005	3	0.0	0.0	9.235	A
C-A	114	28			114				
A-B	7	2			7				
A-C	487	122			487				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	13	3	540	0.023	13	0.0	0.0	7.989	A
C-AB	2	0.53	606	0.004	2	0.0	0.0	9.188	A
C-A	93	23			93				
A-B	5	1			5				
A-C	397	99			397				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11	3	556	0.019	11	0.0	0.0	7.718	A
C-AB	2	0.43	609	0.003	2	0.0	0.0	9.189	A
C-A	78	20			78				
A-B	5	1			5				
A-C	333	83			333				



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