



Transport Assessment

Huyton Lane, Huyton

Client: Breck Homes



Document Control		
Report Reference	P24120/TA	
Document Version	Final	
File Reference	Prime Transport Planning\PrimeSharepoint - Documents\Projects 2024\P24120 - Huyton Lane, Huyton\7.Reports\TA	
Date	July 2025	
Client	Breck Homes	
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1 INTRODUCTION

1.1 Purpose of Report

- 1.1.1 This Transport Assessment (TA) assesses the highways and transportation implications associated with a proposal for a development comprising up to 81 dwellings situated on land northwest of B1599 Huyton Lane, Huyton.
- 1.1.2 Knowsley Metropolitan Borough Council (KMBC) is both the Local Highway Authority (LHA) and the Local Planning Authority (LPA).
- 1.1.3 This document has been prepared in accordance with the Government's Planning Practice Guidance (PPG): *Travel Plans, Transport Assessments and Statements* (2014) and *Transport evidence bases in plan making and decision taking* (2015). It considers the accessibility of the site and safety for all modes of travel including walking, cycling and public transport.
- 1.1.4 This TA has been produced by Prime Transport Planning (Prime) and forms part of the documentation produced to support the full planning application by Breck Homes (Breck).
- 1.1.5 The conclusions and recommendations contained herein have been drawn based on information available and obtained in advance of the planning submission to which this report relates.
- 1.1.6 Reasonable checks have been carried out on any third-party information used in the preparation of this report but, nonetheless, Prime accepts no liability for the accuracy or otherwise of this data.
- 1.1.7 Third-party rights are excluded for the use of information contained within this report.

1.2 Scope of Report

- 1.2.1 Prime contacted KMBC Highways via email on 28th of November 2024 to set out the proposed scope and methodology of the TA, with further correspondence taking place up to January 2025. The methodology highlighted by Prime as part of this correspondence was received positively by Highway Officers at KMBC and deemed to be 'logical'.
- 1.2.2 A subsequent briefing note was produced by Prime and submitted to KMBC to highlight the agreed methodology in a more formal capacity. The KMBC response (1st April 2025) stated that '*Highways would have no objections*'. A more formal pre-application response was also provided by KMBC on 13th June 2025, which stated similar, as well as some other minor queries. All correspondence is presented in Appendix A.
- 1.2.3 It is important to note that the scale of development has evolved since initial scoping discussions with KMBC and the preparation of the original briefing note. The site was initially proposed to accommodate approximately 60 dwellings alongside a 70-bed assisted living facility. The current proposal, as outlined above, now comprises 81 residential units, including a mix of 1–4 bedroom

houses, maisonettes and apartments. The previously agreed trip generation figures have been updated to reflect this revised scheme, although almost identical results are achieved to those previously supported by KMBC. As such, it is considered reasonable to assume that KMBC would maintain its position of '*no objection*'.

1.2.4 It is worth noting that the development site has previously been the subject of a hybrid planning application (Ref 20/00333/HYB). The proposal involved a full application for the demolition of an existing building and the erection of an Aldi store, with associated access, parking and landscaping, accompanied by an outline planning application for up to 21 dwellings. The application was ultimately withdrawn, however.

1.2.1 Following this introduction, the remainder of this report is structured as follows:

- Section 2 summarises the relevant local and national transport policy and guidance;
- Section 3 describes the existing situation in terms of the site location, local highway network and traffic conditions, whilst also reviewing the collision records for the local highway network;
- Section 4 provides details of the development proposal including the access strategy and parking arrangements;
- Section 5 details access to the site by sustainable modes of travel, which includes walking, cycling and public transport;
- Section 6 forecasts the potential impact of the development traffic on the adjacent highway network; and
- Section 7 concludes the findings of the report.

2 TRANSPORT POLICY AND GUIDANCE

2.1 Introduction

- 2.1.1 It is important that any developments conform to and complement national and local planning policy. This section details the policies that are relevant to this development.

2.2 National Planning Policy Framework

- 2.2.1 The current National Planning Policy Framework (NPPF) was published in December 2024, with slight amendments on 7th February 2025, and sets out the Government's current planning policies. At the heart of NPPF is 'a presumption in favour of sustainable development' as detailed in paragraphs 10 and 11.

- 2.2.2 Section 9 of the NPPF, *Promoting sustainable transport*, outlines the important role that the planning system has in facilitating sustainable development. It states in paragraph 110 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.'

- 2.2.3 The document offers guidance for planning policies including:

- supporting appropriate mixes of land uses;
- minimising the number and length of journeys;
- actively involving local highway authorities, transport infrastructure providers and operators and neighbouring councils in order to align strategies and investments for supporting sustainable travel; and
- providing high quality walking and cycling networks and associated supporting facilities such as cycle parking.

- 2.2.4 Paragraph 115 of the NPPF provides direction for the assessment of sites for development, stating:

'...it should be ensured that:

a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) 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

d) 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 through a vision-led approach.'

2.2.5 In determining planning applications, paragraph 116 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 impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.'

2.2.6 Paragraph 117 continues:

'Within this context, 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;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) 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;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'

2.2.7 Paragraph 118 highlights the need for planning applications for developments that will *'generate significant amounts of movement'* to be accompanied by a Transport Assessment or Transport Statement and a Travel Plan so that the *'likely impacts of the proposal can be assessed and monitored'*.

2.3 Planning Practice Guidance

2.3.1 The theme of sustainable development runs throughout Planning Practice Guidance, with the detailed elements regarding transport being focussed on in the following sections:

- Transport evidence bases in plan making and decision taking; and
- Travel Plans, Transport Assessments and Statements.

- 2.3.2 Both sections of the Guidance provide significant amounts of detail on the information types and sources that are appropriate for helping Local Planning Authorities to take forward their Local Plan with an appropriate evidence base. The guidance is also a useful reference for assessing schemes such as the development which this report accompanies.

2.4 Manual for Streets

- 2.4.1 *Manual for Streets* (MfS) was published on behalf of the DfT and Communities and Local Government in March 2007 and provides advice for the design of residential streets in England and Wales.

- 2.4.2 The focus of MfS is to demonstrate the:

‘benefits that flow from good design and assigns a higher priority to pedestrians and cyclists, setting out an approach to residential streets that recognises their role in creating places that work for all members of the community. MfS refocuses on the place function of residential streets, giving clear guidance on how to achieve well-designed streets and spaces that serve the community in a range of ways’ (MfS page 7).

- 2.4.3 The guidance addresses many common design principles and discusses detailed design issues, often presenting recommended design criteria. Some of the key principles of MfS include:

- The need to shift from focusing on designing for motor vehicles to designing streets around the needs of pedestrians, cyclists and public transport users which in turn enhances safety;
- Good design can help to create and strengthen a sense of place and community;
- Creating streets that are permeable and offer good quality connections to main destinations for all road users;
- Inclusive design that recognises the needs of people of all ages and abilities; and
- Cost-effective construction often by avoiding over-designing.

- 2.4.4 In September 2010 a companion document *Manual for Streets 2* - wider application of the principles (MfS2) was published. This document expands on some of the design principles of MfS and provides examples of places where designs based on these principles have been implemented.

2.5 Liverpool City Region 4th Local Transport Plan: Developing a Vision for Local Transport to 2040

- 2.5.1 Liverpool City Region Combined Authority (LCRCA) was formed in 2014. ‘A Transport Plan for Growth’ (2015) was released soon after this formation, which outlined the LCRA vision and the importance of transport for the growth of local economies. The document covered the Merseyside aims for transport. The report forms the basis for which the soon to be adopted Liverpool City Region LTP 4 is to be based on.

- 2.5.2 LTP 4 is due to be adopted and finalised in 2025 and will provide the statutory framework for transport strategy and plans across Merseyside. At the time of writing this TS, a consultation version of the LTP4 is the most recently available document and sets out the following vision and goals:

‘Clean, safe and accessible transport for moving people and goods

Goal 1 – Support good, clean job growth and opportunity for all

Goal 2 – Achieve net-zero carbon and an improved environment

Goal 3 – Improve health and quality of life

Goal 4 – Transport that is well maintained and tough

Goal 5 – Plan and respond to uncertainty and change and be innovative’

- 2.5.3 A move away from car dependency and towards active travel and public transport use is a key theme of LTP4 with plans to create bus lanes, active travel routes and low traffic streets.

2.6 Knowsley Local Plan Core Strategy (2016)

- 2.6.1 The Knowsley Local Plan Core Strategy sets out the vision, objectives and policies which will guide development within the borough up to 2028.

- 2.6.2 *‘Strategic Objective 2 – Well Balanced Housing Market’* supports sustainable housing growth in the borough to address imbalances in the housing market, i.e. affordable housing and accommodation for older people.

- 2.6.3 *‘Strategic Objective 6 – Sustainable Transport’* seeks to ensure new development encourages a reduction in the overall need to travel, prioritising active and sustainable methods between housing and employment/education and other amenities.

- 2.6.4 *‘Policy CS7: Transport Networks’* focuses on the location design and management of new development, which will be required to be:

‘a) 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;’

‘c) Where subject to a planning application, accompanied (except in the case of smaller scale proposals) by Transport Assessments and/or Travel Plans;

d) In compliance with adopted cycle, car, disabled and service vehicle parking standards for different types and scales of new development;

e) Inclusive of measures that will mitigate carbon emissions and improve air quality where appropriate'

- 2.6.5 Developers will be expected to contribute towards transport schemes and programmes in accordance with 'Policy CS27: Planning and Paying for New Infrastructure', 'Developer Contributions Supplementary Planning Document' and/or a Community Infrastructure Levy Charging Schedule.

2.7 Ensuring a Choice of Travel SPD

- 2.7.1 The *Ensuring a Choice of Travel* Supplementary Planning Document (SPD) was originally developed in partnership with the Merseyside Local Authorities and Merseytravel in order to provide consistent guidance to developers on access and transport requirements for new developments across the wider Merseyside area. Its overall purpose is stated to be:

'The Council has published this guidance as a Supplementary Planning Document (SPD) to show how development can satisfy the requirements of accessibility policies contained within Knowsley's Development Plan. It will assist developers in ensuring that their proposals are accessible, promote sustainable travel patterns and minimise the congestion and pollution caused by vehicles. '

- 2.7.2 With the main objective being 'to ensure a good choice of travel modes to all new development'.

2.8 Summary

- 2.8.1 This section has outlined national and local transport policies and guidance which are applicable to the development site. How the site conforms to and complements these policies, and guidance will be discussed in the following sections of this report, where relevant.

3 EXISTING SITUATION

3.1 Site Description

- 3.1.1 The development site is located on land to the northwest of the B5199 Huyton Lane, Huyton. The site has historically been occupied by the Huyton Cricket and Bowling Club, although the land has remained unused officially for several years, with the existing pavilion falling into a poor state of repair.
- 3.1.2 The site is bound to the north by the River Alt and a footpath, with existing residences to the west and south. The B5199 Huyton Lane forms the site's southeastern boundary, providing circa 120m of frontage. A roundabout providing access to the adjacent ASDA Supercentre is located in the approximate centre of this frontage. Access to the site in its current form is provided via a gate circa 60m northeast of the roundabout at the site's northeastern extremity.
- 3.1.3 The location of the site in the context of the local highway network is illustrated in Image 3.1.

Image 3.1: Site Location and Local Highway Network



Source: [OpenStreetMap](https://www.openstreetmap.org/)

3.2 Local Highway Network

B5199 Huyton Lane

- 3.2.1 As previously mentioned, the B5199 Huyton Lane forms the site's southeastern boundary, providing circa 120m of frontage and accommodating the sites current access. A roundabout which serves the adjacent ASDA Supercentre is located in the approximate centre of the site's frontage.
- 3.2.2 From the site, the B5199 Huyton Lane continues to the northeast for circa 1.6km before bridging over the M57 and forming the southern arm of a mini roundabout with Carr Lane. From here, a connection is possible to Junction 2 of the M57 (Forest House Interchange).
- 3.2.3 To the southwest, the B5199 Huyton Lane continues for circa 700m from the site frontage, where it then transitions to B5199 Archway Road, beyond the Lathom Road signalised junction. Beyond this junction, the road splits into two carriageways separated by a central reservation. The road continues to form the northeastern arm of the B5199/Blacklow Brow/A5080/Twickenham Drive roundabout.
- 3.2.4 In the vicinity of the site frontage, on both approaches to the ASDA Supercentre roundabout, the B5199 Huyton Lane carriageway measures approximately 7m in width. Footways are provided on both sides of the carriageway, generally maintaining a consistent width of around 2m, accompanied by streetlighting.
- 3.2.5 Tactile paving, dropped kerbs and refuge islands are provided to assist pedestrian movements across the ASDA Supercentre roundabout. In addition, a formal puffin crossing is located at the northeast corner of the site, further enhancing pedestrian accessibility.
- 3.2.6 A Traffic Regulation Order (TRO) in the form of double-yellow line waiting restrictions are in place along the B5199 Huyton Lane. From the ASDA Supercentre roundabout, these restrictions extend for circa 40m to the northeast before ceasing, whilst they continue along the road's full southwestern extent. Yellow hatched box markings are also present at key junctions.
- 3.2.7 Bus stops with laybys and shelters, or flag and pole arrangements, are located at regular intervals along the B5199 Huyton Lane, with each stop having a TRO stating '*No Stopping Except for Buses*'. The entire length of the B5199 Huyton Lane is subject to a 30 mph speed limit.

3.3 Existing Traffic Conditions

- 3.3.1 To assess vehicle flows on the B5199 Huyton Lane, a Manual Classified Count (MCC) survey was carried out at the B5199 Huyton Lane/ASDA Supercentre roundabout. The MCC survey was carried out by Paul Castle Associates, a specialist traffic survey and data collection company, on behalf of Prime on Thursday 23rd January 2025. The periods between 07:00 to 10:00 and 15:30 to 18:30 were surveyed to ensure that the commuter peaks were covered, allowing the morning (AM) and evening

(PM) peak hours to be determined. A survey of queue lengths was also undertaken as part of this survey.

3.3.2 In order to aid the capacity assessment modelling detailed in Section 6, the three user classes surveyed have been condensed into two, with buses added to the 'HGVs' user class. The queue length surveys recorded the maximum queue lengths every five minutes. Queues were measured as stationary and/or slow-moving traffic less than 5mph.

3.3.3 The observed peak hours along the B5199 Huyton Lane at the site frontage have been determined to be 08:15 to 09:15 and 16:45 to 17:45. Table 3.1 presents a summary of the two-way traffic flows for each of the ASDA Supercentre roundabout arms during the network peak hours. The recorded 5-day average flows have been presented.

Table 3.1: Two-Way Link Flow Summary at ASDA Supercentre Roundabout

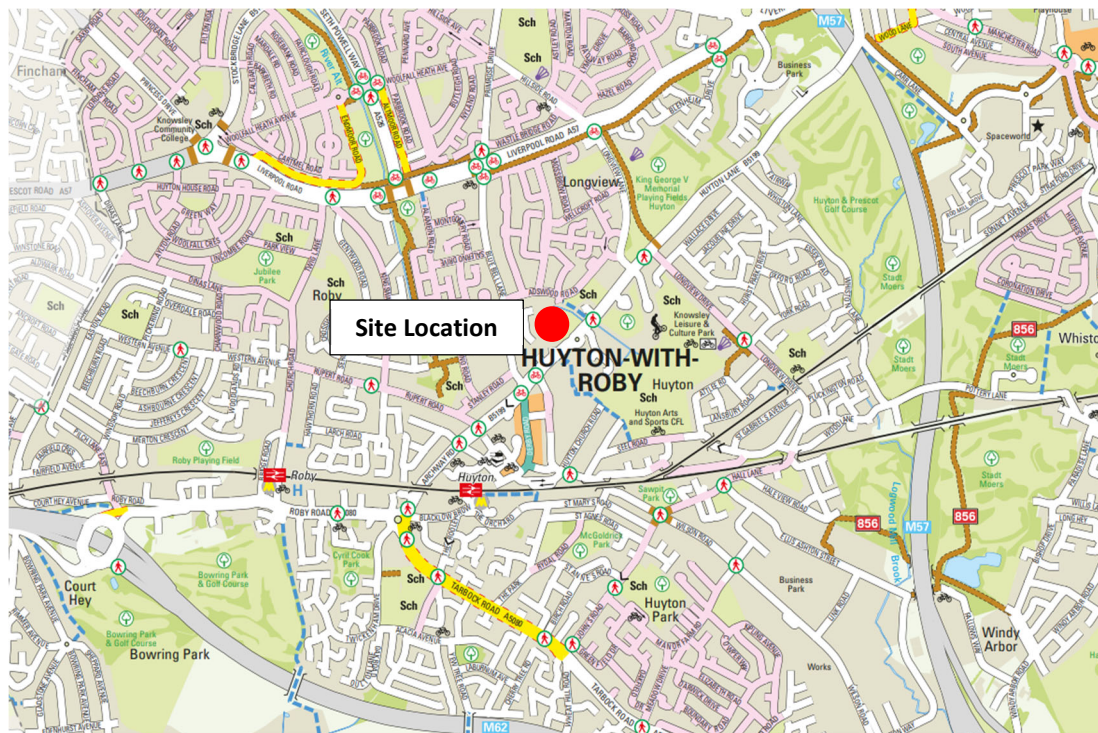
Peak	Direction	Two Way Link Flow			Heavy %
		Lights	Heavies	Total	
AM	Huyton Lane (N)	1075	16	1091	1.5%
	Huyton Lane (S)	1191	18	1209	1.5%
	ASDA	457	2	459	<1%
PM	Huyton Lane (N)	1325	15	1340	1%
	Huyton Lane (S)	1556	15	1571	1%
	ASDA	961	0	961	0%

3.3.4 Table 3.1 indicates that the B5199 Huyton Lane experiences relatively consistent traffic flows, which is characteristic of a road of this nature serving as a distributor route near a busy town centre. The road is busiest during the PM peak, with circa 300 more vehicles travelling the route when compared to the AM peak.

3.3.5 The raw survey data is presented in Appendix B and has been used to inform the traffic distribution, which is discussed in detail in Section 6 (and agreed with KMC Highways as part of scoping discussions).

3.4 Cycle Facilities

3.4.1 The site benefits from its close proximity to existing cycle routes within Huyton. Image 3.2 provides an extract from the Knowsley Cycle Map, offering an overview of the local cycling network and associated infrastructure. On-road signed cycle lanes are represented by yellow lines, off-road cycle tracks are represented by brown lines, while 20mph streets are highlighted in pink.

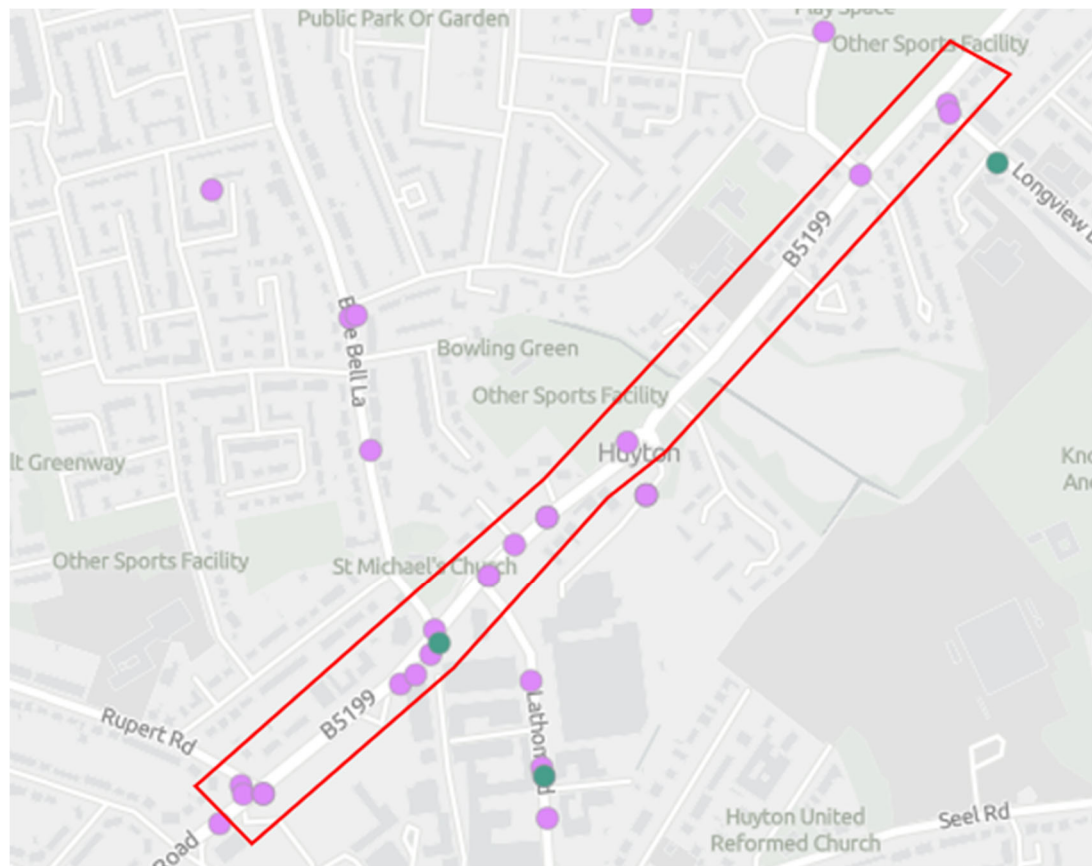
Image 3.2: Knowsley Cycle Map

Source: [Knowsley](#)

- 3.4.2 As illustrated in the image above, a number of on-road and off-road cycle routes are available in the vicinity of the site. To the north, the A57 Liverpool Road features bidirectional off-road cycle paths that provide connectivity to Prescott town centre to the east. Additionally, a further off-road cycle route to the north leads towards Stockbridge Village. A signed on-road cycle route is provided to the south of the development along the A5080 Tarbock Road. Much of the residential area surrounding the site falls within a 20mph speed limit zone, which contributes positively to creating a safer and more supportive environment for cycling.

3.5 Road Safety

- 3.5.1 A review of the Department for Transport (DfT) Mapping Application for Visualising Road Injury Casualties (MAVRIC) for the most recent five-year period available (2019 – 2023) has been undertaken for the highway surrounding the development site. This review includes the B5199 Huyton Lane from Rupert Road to Longview Drive.
- 3.5.2 Image 3.3 illustrates the recorded incidents in the study area, as highlighted by the red outline below. Serious collisions are represented by green dots, and slight by purple dots.

Image 3.3: MAVRIC Extract

Source: [MAVRIC](#)

- 3.5.3 An examination of the above shows that there have been 15 collisions within the study area. Of these, 14 resulted in slight injuries and one resulted in a serious injury. There were no incidents resulting in fatal injuries.
- 3.5.4 The serious incident occurred on the 2nd May 2020, adjacent to the B5199 Huyton Lane/Blue Bell Lane junction. The collision involved a bus/coach and a pedestrian, with the pedestrian sustaining serious injuries.
- 3.5.5 The remaining slight collisions that involved a vulnerable road user are summarised below:
- The first incident occurred on the 6th March 2019, at the B5199 Huyton Lane/Rupert Road junction. It involved a car and a pedestrian who sustained slight injuries;
 - The second incident occurred on the 2nd April 2019 in proximity to the B5199 Huyton Lane/Blue Bell Lane junction. It involved a vehicle and a pedestrian who sustained slight injuries;
 - The third incident occurred on the 23rd October 2019 along the B5199 Huyton Lane. It involved a car and a pedestrian who sustained slight injuries;

- The fourth incident occurred on the 6th February 2020 in proximity to the B5199 Huyton Lane/Lathom Road junction. It involved a motorcycle with the rider sustaining slight injuries;
- The fifth incident occurred on the 17th June 2022 in proximity to the Huyton Lane/Longview Drive junction. It involved a car and a pedestrian who sustained slight injuries;
- The sixth incident occurred on 24th October 2023 in proximity to the B5199 Huyton Lane/Longview Drive junction. It involved a car and a cyclist who sustained slight injuries; and
- The latest collision occurred on 14th November 2023 along the B5199 Huyton Lane. It involved a car and a cyclist who sustained slight injuries.

3.5.6 Given that the section of the B5199 Huyton Lane under review extends over 1km and considering its role within the local road hierarchy, alongside typical traffic volumes and pedestrian activity, the recorded total of 15 incidents over a five-year period (averaging approximately three per year) is not considered excessive or unusual. This assessment is further supported by the fact that 93% of the incidents were classified as slight in severity. Moreover, there is no evidence to indicate that these incidents resulted from anything other than driver or pedestrian error.

3.5.7 The above would therefore suggest that there are no existing road safety issues in the area surrounding the development site that would preclude the delivery of the proposals or influence the location of any proposed access into the site.

4 DEVELOPMENT PROPOSALS

4.1 Development Description

4.1.1 Breck is seeking full planning permission for a development comprising up to 81 dwellings situated on land northwest of B5199 Huyton Lane, Huyton.

4.1.2 The development itself is comprised of 4 x 2-bedroom bungalows, 10 x 2-bedroom houses, 16 x 3-bedroom houses, 6 x 4-bedroom houses, 6 x 1-bedroom maisonettes, 6 x 2-bedroom maisonettes and 33 apartments (6 x 1 bedroom and 27 x 2 bedroom). The existing pavilion on site will remain, although no formal sports provision is proposed at this time.

4.2 Proposed Site Access

Vehicular Access

4.2.1 The current gated site access at the development's northeastern boundary will be closed in line with the proposals. The site will be accessed via the addition of a fourth arm to the existing ASDA Supercentre roundabout, as shown in Drawing P24120-001C in Appendix C. The fourth arm will consist of a 5.5m wide carriageway, 6m corner radii and 2m wide footways to meet with the existing provision on B5199 Huyton Lane (as well as an accompanying 2m wide pedestrian refuge island).

4.2.2 Drawing P24120-001C demonstrates that the largest anticipated vehicle to require access to the site, an 11.4m long refuse wagon, can safely enter and exit via the newly proposed fourth arm.

4.2.3 The proposed site access has been reviewed and approved in principle by KMBC Highways during scoping and pre-application discussions, with any comments made incorporated into the design.

Cycle and Pedestrian Access

4.2.4 As shown in Drawing P24120-001C in Appendix C, 2m wide footways will be positioned along both sides of the access road, with a 2m wide refuge island in place to assist pedestrian movements across the mouth of the roundabout arm. The location of the refuge island has been determined at the request of KMBC Highways, with both the principle of access and the associated details also having been agreed upon with the authority.

Internal Circulation

4.2.5 Drawing P24120-003C in Appendix C shows that a large refuse collection vehicle (11.4m length) can safely access the site in forward gear, turn and egress the site in forward gear.

4.2.6 For completeness, Drawing P24120-004C in Appendix C further shows a large car safely manoeuvring within the parking courts for the site.

4.3 Parking Provision

Car Parking

4.3.1 The maximum parking standards for C3 residential developments are set out in Knowsley Council's Ensuring a Choice of Travel Supplementary Planning Document (SPD). For "other areas" — which includes the application site, as it falls outside the Huyton Village Shopping Centre boundary defined in the Local Plan Policies Map — the relevant standards are as follows:

- 1-bedroom dwellings: 1 parking space
- 2–3-bedroom dwellings: 2 parking spaces
- 4-bedroom dwellings: 3 parking spaces.

4.3.2 The proposed development provides 125 formal car parking spaces, distributed across private driveways and parking courts. While this is slightly below the maximum standards (which indicate 150 parking spaces and as such a minor short fall of 13%), it aligns with the flexibility permitted under the SPD, which states:

'In all areas there may be instances where provision should be less than the maximum specified for example where a site is particularly accessible by modes of transport other than the private car'

4.3.3 As highlighted in Section 5 below (and acknowledged by KMBC during scoping discussions), the development site is located in a sustainable location in terms of public transport and the accessibility of local amenities. The need to own a vehicle is negated as a result.

4.3.4 While the principle of the development is supported by KMBC Highways, comments have been raised regarding the level of parking provision proposed for the apartments and maisonettes, with a request for further justification to be provided.

4.3.5 A report, published by *Communities and Local government: Residential Car Parking Research* (2007), has considered in detail the expected levels of car ownership for developments. It states that Local Planning Authorities can look towards National Census statistics to help in determining these levels:

'Local planning authorities can obtain from National Statistics the Census data... broken down to smaller geographical levels such as wards or Census Output Areas (COAs). This data can then be used to examine in detail car ownership patterns in a particular settlement or for a part of an urban area.'

4.3.6 In line with these reports, car ownership levels for the Knowsley 011 MSOA have been downloaded from Nomis (2021 Census) and used to consider the potential car ownership levels of the development. Table 4.1 and Table 4.2 summarise the car ownership levels and apply them proportionally to the number of apartments and maisonettes proposed.

Table 4.1: Existing and Forecast Car Ownership Levels (33 Proposed Apartments)

Cars	Existing		Proposed	
	Knowsley 011	%	Household Split	No. Cars
All categories: Car or van availability	2,408	100%	33	35
No cars or vans in household	709	29%	10	0
1 car or van in household	975	40%	13	13
2 cars or vans in household	560	23%	8	16
3 cars or vans in household	164	7%	2	6

- 4.3.7 The local census data suggests that 35 spaces would be sufficient for the 33 apartments. The car park for the apartments (and 4 x 3 bed houses) includes 41 parking spaces. Deducting 8 spaces for the houses (as per KMBC standards) would allow 33 parking spaces to remain available for the apartments, or a 1:1 provision. The minor shortfall of 2 spaces, indicated by Table 4.1, is not considered to be a quantum which could realistically result in a significant highway impact. A 1:1 parking provision for the apartments is considered commensurate with the sustainable location of the development.

Table 4.2: Existing and Forecast Car Ownership Levels (12 Proposed Maisonettes)

Cars	Existing		Proposed	
	Knowsley 011	%	Household Split	No. Cars
All categories: Car or van availability	2,408	100%	12	14
No cars or vans in household	709	29%	4	0
1 car or van in household	975	40%	5	5
2 cars or vans in household	560	23%	3	6
3 cars or vans in household	164	7%	1	3

- 4.3.8 The local census data suggests that 14 spaces would be sufficient for the 12 maisonettes. The maisonettes are proposed to have 12 parking spaces. Like the above, a minor shortfall of 2 spaces, indicated by Table 4.2, is not considered to be a quantum which could realistically result in a significant highways impact. Such a provision is considered commensurate with the sustainable location of the development.
- 4.3.9 In the unlikely event of demand for parking exceeding the provision, such as during special events where a household may have several visitors arriving in more than one or two cars, parking is available on-street within the development site. TRO's are in place on the surrounding highway to the development site to allow for enforcement action to be taken should vehicles park irresponsibly.
- 4.3.10 The level of parking provision proposed is considered sufficient to meet future demand for the development site.

- 4.3.11 Each property will be provided with electric vehicle (EV) charging facilities in line with *Approved Document S* of the Building Regulations.

Cycle Parking

- 4.3.12 KMBC's *Ensuring a Choice of Travel SPD* outlines cycle parking requirements for C3 residential developments as follows:

- 1-bedroom dwellings: 1 allocated space and 1 communal space.
- 2–3-bedroom dwellings: 2 allocated spaces and 1 communal space.
- 4-bedroom dwellings: 4 allocated spaces and 2 communal spaces.

- 4.3.13 An appropriate level of space for the secure parking of bicycles will be provided within the curtilage of each property, with communal/visitor spaces also provided as part of the proposed apartments.

4.4 Other Comments

- 4.4.1 KMBC provided some additional comments with their formal pre-application response (13th June 2025). These comments can be viewed in Appendix A, but those which require a response are summarised below for convenience:

- Small parking courts are not accepted by KMBC for antisocial behaviour concerns;
- A resident parking zone TRO will be required for the development due to proximity to the town centre;
- A query regarding intention for vehicular access to 50 Adswood Road;
- Request for Road Safety Audit (RSA); and
- Additional detail required for access to Plots 75-83 if this is to be adopted

- 4.4.2 Subsequent responses are provided below to each of the points above:

- The client has significant experience with the delivery of development sites and antisocial behaviour has not been noted as an issue for parking courts. As far as Prime are aware, no policy or guidance exists to state otherwise;
- The requirement to implement a residents' parking TRO is considered disproportionate. Given the availability of free parking in the surrounding area, including the ASDA Supercentre car park and the KMBC-owned multi-storey car park, it is unlikely that members of the public would seek to park within the new development to access the town centre;
- Vehicular access to 50 Adswood Road is proposed. Details of the access construction will be provided at the detailed design stage, although its composition will reflect that of a standard private drive construction;

- An RSA has been completed for the development site access and a subsequent Designers' Response (DR) can be viewed in Appendix D of this report, along with the RSA itself. In summary, no significant issues were highlighted; and
- Access to Plots 75-83 is not to form part of any future s38 adoption agreement

4.5 Summary

- 4.5.1 As discussed in this section, access will be provided by the addition of a fourth arm to the ASDA Supercentre roundabout. The dimensions of the access will accord with MfS standards and provide safe access for all road users, including occasional large vehicles such as those associated with refuse collection.
- 4.5.2 The development proposals, particularly the access arrangement, will conform to national and local policy and guidance (and has been agreed by KMBC Highways). The design reflects the MfS principles of inclusive design, shifting from focusing on designing for motor vehicles to designing streets around the needs of pedestrians, cyclists and public transport users, controlling speeds, not overdesigning and creating permeable streets. These principles in turn help the site to conform to NPPF guidance including paragraph 115 in terms of giving priority to pedestrian and cycle movements, *'safe and suitable access to the site can be achieved for all users'*.

5 ACCESS BY SUSTAINABLE MODES

5.1 Introduction to Sustainable Modes of Transport

- 5.1.1 National and local transport planning policy centres on the importance of sustainable development, meaning that new developments should be located in areas where there is access to sustainable modes of travel, or where sustainable modes of travel can be introduced. NPPF (2024) defines sustainable transport modes as:

‘Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, ultra low and zero emission vehicles, car sharing and public transport.’

- 5.1.2 Walking, cycling and public transport are widely recognised as the most sustainable modes of travel. Given its proximity to Huyton Village Shopping Centre, the ASDA Supercentre, Huyton Train Station and Huyton Bus Station, the development site is situated in a highly accessible location with extensive opportunities to access a broad range of amenities and services. This has been acknowledged by KMBC Highways during scoping discussions. Nevertheless, this section of the report has been written to highlight the site's level of accessibility.

5.2 Access on Foot

- 5.2.1 The site is situated a short distance to the northeast of the pedestrianised Huyton Village Shopping Centre, one of the key attractions in Huyton. The area benefits from significant vehicular parking provisions and is well-served by an extensive network of high-quality footways, featuring numerous controlled pedestrian crossings, street lighting, dropped kerbs, tactile paving and refuge islands. All of this infrastructure creates an environment conducive to walking when travelling between the site and local amenities.
- 5.2.2 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled *Providing for Journeys on Foot* (2000) suggests walking distances which are relevant to this application. These distances are shown in Table 5.1.

Table 5.1: Suggested Walking Distances

Criteria	Town Centres (m)	Commuting/School/Sightseeing (m)	Elsewhere/Local Services (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

Source: CIHT Document *Providing for Journeys on Foot* (2000)

- 5.2.3 There are a significant number of amenities within the CIHT's '*preferred maximum*' walking distance of 1200m for local service trips. These include, but are by no means limited to, an ASDA Supercentre, an Iceland supermarket, Knowsley Leisure & Culture Park, a medical centre, pharmacy, takeaways, a post office, restaurants and cafes, Huyton Library and Lloyds Bank.
- 5.2.4 The site's location provides access to extensive educational opportunities within the CIHT recommended maximum walking distance of 2,000m for school journeys. Pedestrians from the site can easily access educational facilities such Huyton with Roby C of E Primary School, St Aidan's Catholic Primary School, St Joseph's RC Primary School, Willow Tree Primary School and Lord Derby Academy.
- 5.2.5 The site's location also provides extensive employment opportunities within the CIHT recommended maximum walking distance of 2,000m for commuting. Pedestrians from the site can easily access the employment opportunities within Huyton Village Shopping Centre, the Interchange Motorway Industrial Estate, Huyton Industrial Estate, Paramount Business Park and Wilson Business Centre. Prescot town centre and its associated employment/educational opportunities are also located just outside the catchment area.
- 5.2.6 The nearest bus stop is located less than a one-minute walk north of the site boundary along B5199 Huyton Lane. Huyton Bus Station is also within convenient walking distance, approximately 750m away and provides access to around 25 bus services serving a wide range of destinations across the Liverpool City Region. Huyton Train Station is similarly accessible, located approximately 1.3km from the development site.
- 5.2.7 An array of pedestrian infrastructure is in place surrounding the development site to provide safe and convenient access to all amenities, services and public transport opportunities. Given the evidence presented above, walking can be considered to be a realistic and viable method of travel for future residents of the site.

5.3 Access by Cycle

- 5.3.1 It is widely recognised that cycling can offer an attractive alternative to short car trips, particularly those under 8km, but also as part of longer journeys by public transport.
- 5.3.2 The CIHT document Cycle Friendly Infrastructure (2004) states in paragraph 2.3 that:
- 'Three quarters of journeys by all modes of travel are less than five miles (8km) and half under two miles (3.2km) (DoT 1993, table 2a). These are distances that can be cycled comfortably by a reasonably fit person.'*
- 5.3.3 Local Transport Note 1/20 Cycle Infrastructure Design states similar, that:

‘Two out of every three personal trips are less than five miles [8km] in length - an achievable distance to cycle for most people.’

- 5.3.4 As outlined in Section 3, the local area benefits from well-established cycling infrastructure, including both off-road cycle routes and designated on-road cycle lanes. This level of provision is likely to appeal to future residents.
- 5.3.5 Given that a wide range of amenities, services and public transport options can be easily accessed on foot from the development site, the need to cycle to reach such provisions is reduced. However, within a 5km distance from the site, cyclists can reach Knowsley Village to the north, Prescot to the east, Belle Vale to the south and Broadgreen to the west. Within an 8km distance from the site, cyclists can reach Kirkby to the north, St Helens to the east, Hunts Cross to the south and Kensington to the west. All of these areas have their own additional amenities, services and employment opportunities, such as Kirkby Industrial Estate, Axis Business Park and the significant industrial area in Hunts Cross.
- 5.3.6 Liverpool Community College, as well as parts of Liverpool Hope University (and other further education opportunities), can all be cycled to within the 8km catchment area.

5.4 Access by Local Bus Services

- 5.4.1 The CIHT document *Planning for Public Transport in Developments* recommends a walking distance of up to 400m to bus waiting facilities from new developments, which is equivalent to a five-minute walk based on approximately a 1.4m/s walking speed.
- 5.4.2 As mentioned previously, the nearest bus stop to the site is less than a minute’s walk, located on the B5199 Huyton Lane. For northeast-bound services, the relevant stop is located circa 100m northeast of the site’s eastern corner, known as ‘Huyton Lane opp Marshfield Close’. This stop consists of a flag and pole arrangement. For southwest-bound services, the relevant stop is located circa 50m northeast of the site’s eastern corner, known as ‘Huyton Lane nr Marshfield Close’, which is also marked by a flag and pole.
- 5.4.3 Table 5.2 summarises the services that can be accessed from the bus stops described above and which are of relevance to the proposals. The information has been obtained from Traveline (<https://www.traveline.info>). Copies of timetable information available at the time of writing can be provided upon request.

Table 5.2: Summary of Key Bus Services

Service	Route	Weekday			Weekend	
		AM	Inter	PM	Saturday	Sunday
89	St. Helens – Liverpool John Lennon Airport	3/hr	3/hr	3/hr	2/hr	2/hr
246	Huyton (Circular)	1/hr	1/hr	1/hr	1/hr	n/a

- 5.4.4 As shown above, the 89 service provides a frequent route between St. Helens and Liverpool John Lennon Airport, calling at key destinations such as St. Helens Bus Station, Whiston Hospital, Prescot Bus Station and Huyton Bus Station. The 246 service provides a circular route within Huyton, providing access to amenities within the local area.
- 5.4.5 Huyton Bus Station, as stated, is accessible through the 89 service, but it is also accessible via a short walk or cycle from the development site. As mentioned previously, Huyton Bus Station caters for circa 25 different services, which provide connections across the Liverpool City Region throughout the week. Although the bus station is over the recommended 400m walking distance (a circa 750m walk), it remains within an approximate 10-minute journey on foot, utilising the pedestrianised zone within Huyton Village Shopping Centre. The extensive range of bus services available, combined with the traffic-free pedestrian route to Huyton Bus Station, is considered sufficient to offset the minor exceedance of the recommended walking distance guidelines.
- 5.4.6 All services which are accessible within the local area will enable future residents to commute to employment/educational opportunities and a variety of leisure amenities within the various district centres along the route.
- 5.4.7 Given the scale and nature of the development, it is reasonable to conclude that bus travel will be a convenient option for future residents.

Rail

- 5.4.8 The nearest rail station is Huyton Station, managed by Northern Trains. From the site, it can be reached within a 15-minute walk or a five-minute cycle. The station acts as an interchange between the Liverpool to Wigan Line and the Liverpool to Manchester Line. The station is served by two trains per hour to Wigan North Western, one train per hour to Manchester Airport and Manchester Piccadilly, one train per hour to Preston and Blackpool North and four trains per hour to Liverpool Lime Street during peak times.
- 5.4.9 Huyton Station is staffed, offering a ticket office, toilets, and covered seating areas. The station provides 10 car parking spaces and 12 cycle storage spaces.
- 5.4.10 Rail travel will allow future residents to access additional employment/educational opportunities and leisure amenities within Liverpool or Manchester City Centre.

5.5 Minimum Accessibility Standards (MASA)

- 5.5.1 As set out in the KMBC *Ensuring a Choice of Travel SPD*, MASA guidance has been used to demonstrate that the development proposal is compliant with accessibility requirements. The MASA requires a score to be given for all developments based on the land use type, scale, location and facilities provided.

- 5.5.2 A residential development of this size is classified in the standards as ‘Large’ in an ‘other urban’ area. The minimum required scores are as set out in Table 5.3 below.

Table 5.3: Minimum Required MASA Scoring

Development Type, Location, Size	Minimum score for walking	Minimum score for cycling	Minimum score for public transport	Minimum score for vehicle access & parking
C3 – Dwelling Houses, ‘Major’, ‘Other Urban’	4	5	5	1

- 5.5.3 A summary of the scoring awarded is provided in Table 5.4, while the MASA is provided in full in Appendix E.

Table 5.4: MASA Scoring Results

Development Type, Location, Size	Awarded score for walking	Awarded score for cycling	Awarded score for public transport	Awarded score for vehicle access & parking
C3 – Dwelling Houses, ‘Major’, ‘Other Urban’	4	3	5	2

- 5.5.4 Table 5.3 and 5.4 demonstrate that the development proposals meet the minimum scoring requirements of the MASA exercise for walking, public transport and access/parking, reflecting the safe design of the proposals and the sustainable location of the site. While the development falls marginally short in the cycling category, due to formal cycle routes being located beyond the 400m threshold, this is not considered a significant concern. The MASA does not account for the site's proximity to a network of 20mph roads, which contribute to a safer and more supportive cycling environment. As such, this minor shortfall is effectively mitigated by the surrounding conditions that are conducive to cycling.

5.6 Travel Plan

- 5.6.1 A Travel Plan (TP) has been produced and submitted as part of this planning application. The document forms the start of an ongoing process to encourage and monitor the use of sustainable modes of travel. As many aspects of the TP will be applicable to this TA, a summary of the key points is as follows:

- A commitment to ensuring that the site is accessible for residents by sustainable modes of transport and to initiate the TP process;
- That the use of sustainable modes of transport is encouraged by residents;

- Outlines the key local and national objectives of the TP process;
- Indicates potential measures that can be implemented to encourage travel by sustainable modes; and
- Provides details of how the TP will be managed and reviewed.

5.7 Summary

5.7.1 This section of the report has demonstrated that the site is in a highly sustainable location where a range of local amenities, educational establishments and employment opportunities are located within nationally recognised acceptable walking and cycling distances from the site.

5.7.2 A key theme of national and local transport planning policy is that development should be located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. As detailed in Section 2 of this report, the NPPF 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’*, as well as providing *‘safe and suitable’* access for all.

6 IMPACT ASSESSMENT

6.1 Introduction

- 6.1.1 This section outlines the methodology for predicting the demand associated with the proposed development. During scoping discussions with KMBC, trip generation and distribution figures were agreed upon for the previous iteration of the scheme. Trip generation figures remain virtually unchanged in line with the latest proposal; as such, it is reasonable to assume that the following remains acceptable to KMBC.

6.2 Forecast Traffic Growth

- 6.2.1 In accordance with GTA, the forecast year of assessment is 2030, which represents the year of application (2025) plus 5 years. It is expected that the site will be fully built out and occupied by this forecast year.
- 6.2.2 The 2025 Observed traffic flows, shown in Traffic Flow Diagrams 1 and 2 in Appendix F, have been factored to the 2030 assessment year using the DfT software TEMPro (Trip End Model Presentation Program) version 8.1. This package allows access to data used in the National Trip End Model (NTEM) and is the industry standard method of applying background traffic growth.
- 6.2.3 In order to derive local traffic growth factors, the Knowsley 011 MSOA was selected as it contains the development site and neighbouring residential area. Trip end growth factors for car drivers were derived from TEMPro and modified by NTM dataset National Road Traffic Projections (NRTP) 2022 Core for 'minor' road types (non-'A' road, trunk road, motorway etc).
- 6.2.4 DfT derived NRTP based growth factors for the Northwest region have been applied to heavy vehicles, as TEMPro is not applicable to such vehicle classes as detailed in the DfT's Transport Analysis Guidance.
- 6.2.5 The subsequent growth factors derived from the above are shown in Table 6.1.

Table 6.1: Traffic Growth Factors 2025-2030

Source	TEMPro (Lights)		NRTP (Heavies)
Peak	AM	PM	Both
Factor	1.0559	1.0552	1.0009

- 6.2.6 The traffic growth figures were agreed upon with KMBC Highways as part of scoping discussions. The growth factors shown in Table 6.1 above have been applied to the 2025 Observed traffic flows resulting in the 2030 Base traffic flows, as shown in Traffic Flow Diagrams 3 and 4 in Appendix F.

6.3 Trip Generation

6.3.1 In order to determine the traffic generation associated with the proposed development, the TRICS 7.11.4 database has been used. This industry-standard database contains traffic generation surveys of numerous sites of various land use types across the UK and Eire. The TRICS database has been used to determine the peak hour trip rates, with all outputs provided in Appendix G.

6.3.2 A summary of the key selections applied in order to derive the sample is as follows:

- Land use category - houses privately owned;
- Regions excluded - London, Northern Ireland and Eire;
- No. dwelling range selection - 40 to 100 units (40 to 99 actual);
- Date range - 01/01/14 to 18/09/24;
- Weekend surveys excluded;
- Selected locations - suburban area, edge of town and neighbourhood centre; and
- Location sub categories - residential zone and village.

6.3.3 The above selections returned a sample of 16 sites; however, four sites were removed due to them either being surveyed during the Covid-19 pandemic period or as outliers to the dataset. The results of these surveys would have skewed the trip rates of the sample.

6.3.4 As previously noted, KMBC agreed to trip rates and associated trip generation for the previous iteration of the development. These trip generation figures have been recalculated to represent the current proposal of 81 dwellings, whilst reusing the previously agreed upon 'House Privately Owned' trip rates. The previously agreed trip generation figures and the latest proposal trip generation can be viewed below in Table 6.2 and Table 6.3, respectively.

Table 6.2: Trip Generation (Previous Scheme Iteration Accepted by KMBC)

Time	Trip Generation		
	Arrivals	Arrivals	Arrivals
08:00-09:00	17	27	44
17:00-18:00	25	17	42

Table 6.3: Trip Generation (Current Scheme Iteration of 81 Dwellings)

Time	Trip Rate			Trip Generation		
	Arrivals	Departures	Total	Arrivals	Departures	Total
08:00-09:00	0.159	0.382	0.541	13	31	44
17:00-18:00	0.368	0.165	0.533	30	13	43

- 6.3.5 Through a comparison of Table 6.2 and Table 6.3, it can be seen that the figures are almost identical. As such, it is reasonable to assume that KMBC Highways would maintain their acceptance and agreement.
- 6.3.6 Table 6.3 shows 44 two-way trips could be expected in the AM peak and 43 two-way trips could be expected in the PM peak. This is a significantly lower volume of vehicles compared to the previous Aldi application on the development site, which had 92 two-way vehicles in the AM peak and 192 two-way vehicles in the PM peak. On a weekend, in excess of 300 two-way vehicles were predicted to access/exit the site.
- 6.3.7 It should be noted that no assumptions have been made regarding potential future reductions in car travel resulting from increased uptake of sustainable modes of transport.

6.4 Traffic Distribution

- 6.4.1 The use of traffic survey data to determine existing traffic flow proportions and a subsequent development traffic distribution has been agreed upon with KMBC. The survey highlighted the following northbound/southbound movement proportions on the B5199 Huyton Lane:

- AM Peak: North 47% and South 53%; and
- PM Peak: North 52% and South 48%.

- 6.4.2 This equates to the following two-way development traffic flows:

- AM Peak: North 21 and South 23; and
- PM Peak: North 22 and South 20.

- 6.4.3 As can be seen, neither of the traffic figures north and south of the roundabout exceeds the typical 30-vehicle threshold requirement for junction capacity assessment. As such, it is reasonable to limit capacity assessments to the existing roundabout only. The principle of this was agreed with KMBC Highways.

- 6.4.4 The distribution figures can be viewed diagrammatically in Traffic Flow Diagrams 5 and 6 in Appendix F.

6.5 Multimodal Trip Generation

- 6.5.1 The number of non-car trips likely to be generated by the site has been forecast using 2011 Census Method of Travel to Work (MTW) data. The Knowsley 011 MSOA has been selected, which comprises the site and the surrounding built-up area. The trip ends for each method of travel have been downloaded from Nomis (<http://www.nomisweb.co.uk>).

- 6.5.2 Several of the transport mode categories have been manually removed from the data for reasons including it being unrealistic that they will be used by residents of the site (i.e. underground); or that they will not generate a trip (i.e. not in employment).
- 6.5.3 As the vehicular trips were calculated using TRICS, factors have been derived between them and the census car driver trips (1,474). The factors equate to 3.0% in both peaks. They have then been applied to the other census modes to forecast the likely number of multimodal trips generated by the site.
- 6.5.4 Table 6.4 provides the forecast multimodal trips.

Table 6.4: Forecast Multimodal Person Trips

Method of Travel to Work	Census Trips	Mode %	AM Trips	PM Trips
Work mainly at or from home	137	5%	4	4
Train	100	4%	3	3
Bus, minibus or coach	329	13%	10	10
Driving a car or van	1,474	59%	44	43
Passenger in a car or van	205	8%	6	6
Bicycle	37	1%	1	1
On foot	212	9%	6	6
Trips Excluding WFH	2,357	-	70	69
All Modes	2,494	100%	74	73
<i>Factors</i>			3.0%	3.0%

- 6.5.5 Based on the figures in Table 6.4, the site is forecast to generate 74 and 73 total people physical trips in the AM and PM peaks, respectively, with around four people working from home, although this figure is likely to be higher given the increase in working from home following the Covid-19 pandemic.
- 6.5.6 Following driving a car being the most common method of travel likely to be used by residents of the site, bus trips are expected to account for 10 trips in each peak, walking and car passenger trips are each expected to account for six trips in each peak, trips via train travel are expected to account for three trips in each peak, while bicycles trips are expected to account for one trip in each peak.

6.6 Junction Capacity Assessment

- 6.6.1 The capacity assessment has been undertaken using the industry standard software Junctions 10, developed by TRL software. This software includes the ARCADY module which is used to model roundabouts. This has been used as part of this assessment.
- 6.6.2 When interpreting the results, the capacity of each arm or movement is calculated as the Ratio of Flow to Capacity (RFC) with 0.85 representing the practical capacity threshold of the arm and 1.00 representing the theoretical capacity threshold. It is above the practical capacity threshold where

capacity problems may begin to occur while exceeding the theoretical capacity means that arms are over capacity.

6.6.3 Table 6.5 below provides a summary of the results of the capacity assessment.

Table 6.5 Capacity Assessment Results – Huyton Lane, Roundabout

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2025 Observed				
1 - B5199 Huyton Lane (North-Eastern Arm)	0.60	1.5	0.68	2.1
2 - ASDA Access	0.16	0.2	0.42	0.7
3 - B5199 Huyton Lane (South-Western Arm)	0.56	1.3	0.77	3.2
2030 Without Development				
1 - B5199 Huyton Lane (North-Eastern Arm)	0.63	1.8	0.72	2.6
2 - ASDA Access	0.17	0.2	0.45	0.8
3 - B5199 Huyton Lane (South-Western Arm)	0.60	1.5	0.81	4.2
2030 With Development				
1 - B5199 Huyton Lane (North-Eastern Arm)	0.66	1.9	0.74	2.8
2 - ASDA Access	0.18	0.2	0.46	0.8
3 - B5199 Huyton Lane (South-Western Arm)	0.61	1.6	0.83	4.7
4 - Proposed Site Access	0.15	0.3	0.04	0.0

6.6.4 The results indicate that the roundabout will continue to operate with spare capacity with the development in place in 2030. The highest recorded RFC is 0.83 on Huyton Lane (South-Western Arm) during the PM peak. In comparison, the same movement in the 2030 Without Development scenario has an RFC of 0.81. This demonstrates that the development's impact on the roundabout is negligible.

6.6.5 The proposed fourth arm, which will provide access to the proposed development, will operate with a considerable level of spare capacity and is therefore appropriate to serve the development. The modelling outputs can be viewed in Appendix H.

6.7 Summary

6.7.1 This section has explained the trip forecasting methodology for the development proposal.

6.7.2 The above would suggest that the development proposals will not result in an '*unacceptable impact on highway safety*' and the cumulative impact of the development can certainly not be considered '*severe*', meaning that according to paragraph 116 of the NPPF, as described in Section 2 of this report, the development should not be refused on transport grounds.

7 SUMMARY AND CONCLUSION

7.1 Summary

- 7.1.1 This TA considers the highways and transportation implications associated with a proposal for a development comprising up to 81 dwellings situated on land northwest of Huyton Lane, Huyton.
- 7.1.2 A review of collision data for the local area has been undertaken for the most recent five years available on MAVRIC. The data indicate that there are no existing road safety issues in the area surrounding the development site that would preclude the delivery of the proposals or influence the location of any proposed access into the site.
- 7.1.3 The fourth arm will consist of a 5.5m wide carriageway, 6m corner radii and 2m wide footways to meet with the existing provision on B5199 Huyton Lane (as well as an accompanying 2m wide pedestrian refuge island).
- 7.1.4 The proposed development provides 125 formal car parking spaces, distributed across private driveways and parking courts. It has been shown, based on the sustainability of the local area and anticipated car ownership levels, that this quantum of parking will be sufficient for the site.
- 7.1.5 An appropriate level of space for the secure parking of bicycles will be provided within the curtilage of each property, with communal/visitor spaces also provided.
- 7.1.6 An assessment has been undertaken of the site's level of accessibility by sustainable modes, from which it can be concluded that realistic options exist for access to local amenities, education and employment opportunities on foot, by cycle and by public transport. Future residents of the site will benefit from an extensive network of footways, pedestrian crossing facilities, the proximity of cycle routes and also the proximity of local bus stops and rail stations.
- 7.1.7 All of these facilities offer the opportunity for future residents of the site to use sustainable modes of transport to access jobs, services and educational establishments.

7.2 Conclusion

- 7.2.1 It is concluded that the proposed development would not result in an '*unacceptable impact on highway safety*' nor have a '*severe*' impact on the operation of the highway network in terms of safety and capacity. The impact is best described as negligible.
- 7.2.2 As the proposal complies with local and national planning policy and guidance with respect to sustainable accessibility, safety and impact on the highway network, there are no highways or transportation related reasons why planning permission should not be granted. Should the highway authority have any concerns, we would be happy to consult further with them.

APPENDIX A

SCOPING CORRESPONDENCE

Anthony Morley

From: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Sent: 22 January 2025 17:42
To: Anthony Morley
Cc: Carrick McClean; David Stoddart
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Hi Ant,

That all seems logical. Based on what you have shown, just the roundabout will be fine.

Jon

From: Anthony Morley <A.Morley@primetp.co.uk>
Sent: 21 January 2025 09:54
To: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Cc: Carrick McClean <c.mcclean@primetp.co.uk>; David Stoddart <D.Stoddart@primetp.co.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Morning Jon

Thanks for the below,

I've attached the 2018 traffic flows from the Aldi application. Given the location of any potential future resi scheme, I think its most realistic to assume that residents would walk to ASDA (rather than drive). As such, I have taken the Eastbound and Westbound only movements to determine a proportional split (AM Flows).

Eastbound 43%
Westbound 57%

(PM proportions are pretty much 50/50)

The development peak AM movements are the highest (i.e. 40 two way), so we could expect the following:

Eastbound 17 vehicles

Westbound 23 vehicles

Given this is below the rough 30-vehicle threshold, can I assume that the access roundabout is the only junction needed for assessment?

Thanks,

Anthony Morley
Associate
Prime Transport Planning

DD: +44 (0)151 728 1867



From: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Sent: 20 January 2025 17:15
To: Anthony Morley <A.Morley@primetp.co.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Hi Ant,

I'm content with the trip rates and the method of distribution. However, could you take a look at the application for a foodstore on the same site please, and use it to ascertain the background traffic so we can get a better understanding of the likely development traffic distribution, before we exclude off site capacity assessment locations.

Thanks
Jon

From: Anthony Morley <A.Morley@primetp.co.uk>
Sent: 15 January 2025 08:30
To: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Morning Jon

Yes it reflects Richards comments, we haven't collected the data yet (avoiding the bad weather) but will look to get this booked in over the next couple weeks.

As a point of interest, please see attached the proposed TRICs rates. This is for 74 dwellings, although its worth noting that the scheme may change slightly, offering a larger portion of the site to a care facility. This would naturally reduce the vehicle trips highlighted below and as such it could be considered a worst case.

Once the below trips have been distributed from the Huyton Lane/ASDA roundabout, I assume there would be no need to assess other junctions in the area? We would split the trips based on existing turning proportions derived from the traffic survey.

Many thanks,

	Dwellings		74	
	Arr	Dep	Tot	
07:00-08:00	6	25	31	
08:00-09:00	12	28	40	
09:00-10:00	12	15	27	
10:00-11:00	9	12	21	
11:00-12:00	9	11	20	
12:00-13:00	14	13	27	
13:00-14:00	13	13	26	
14:00-15:00	13	13	26	
15:00-16:00	18	13	31	
16:00-17:00	23	13	36	

17:00-18:00	27	12	39
18:00-19:00	19	12	31
Sum	175	180	355

Anthony Morley
Associate
Prime Transport Planning

DD: +44 (0)151 728 1867



www.primetp.co.uk

From: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Sent: 09 January 2025 15:46
To: Anthony Morley <A.Morley@primetp.co.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Good afternoon Ant,

I think what you have provided is basically what Rich set out in his email, and yes, it will definitely need modelling. Have you collected the data yet?

I noticed some Padel courts in the sketch layout too. Its all the rage I gather!

Look forward to seeing it come in.

Jon

From: Anthony Morley <A.Morley@primetp.co.uk>
Sent: 09 January 2025 14:58
To: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Afternoon Jon

We have amended the layout slightly based on Richard's comments

Any amendments you would like to see prior to ourselves submitting? I assume you would want the roundabout modeled?

Best Regards,

Anthony Morley
Associate
Prime Transport Planning

DD: +44 (0)151 728 1867



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From: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Sent: 17 December 2024 11:44
To: Anthony Morley <A.Morley@primetp.co.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton



Parry, Jon reacted to your message:

From: Anthony Morley <A.Morley@primetp.co.uk>
Sent: Tuesday, December 17, 2024 11:43:12 AM
To: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Cheers Jon

Ill ping Richard an email

Thanks,

Anthony Morley
Associate
Prime Transport Planning

DD: +44 (0)151 728 1867



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From: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Sent: 17 December 2024 11:41
To: Anthony Morley <A.Morley@primetp.co.uk>
Subject: RE: External Mail: RE: Huyton Lane, Huyton

Good morning Ant,

I literally had your previous email on my screen. I think I mentioned to you that this corridor is undergoing a review at the moment, including this junction. I'm not going to be able to provide comments on it without feedback from Richard Thorpe. I have sent him the drawing, but in the meantime you may want to contact him directly?

Kind regards
Jon

From: Anthony Morley <A.Morley@primetp.co.uk>
Sent: 17 December 2024 11:37
To: Parry, Jon <Jon.Parry@knowsley.gov.uk>
Cc: David Stoddart <D.Stoddart@primetp.co.uk>
Subject: External Mail: RE: Huyton Lane, Huyton

CAUTION: This email originated from an external source. If you suspect a potential phishing email, report it via the IT Self Service Portal which can be found within the Quick Links section on Bertha

Morning Jon

Is there any follow up from the below?

Many thanks,

Anthony Morley
Associate
Prime Transport Planning

DD: +44 (0)151 728 1867



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From: Anthony Morley
Sent: 28 November 2024 10:32
To: 'jon.parry@knowsley.gov.uk' <jon.parry@knowsley.gov.uk>
Cc: David Stoddart <D.Stoddart@primetp.co.uk>
Subject: Huyton Lane, Huyton

Morning Jon

Site access and very indicative masterplan attached for land adjacent to Huyton ASDA to provide context

As the existing roundabout has single lanes on approach and a 32m diameter, it is considered to be a 'compact' roundabout rather than a 'full size' roundabout in DMRB terms. As seen from the drawing, we have enough room to tag a fourth arm on without needing to increase the diameter of the roundabout. The arm obviously wouldn't need to account for through traffic and swept paths work well with a large car/refuse wagon.

Any KMBC opinions would be appreciated regarding the access,

Any issues or queries, feel free to give me a call,

Thanks,

Anthony Morley
Associate
Prime Transport Planning

DD: +44 (0)151 728 1867



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Date:	1 st April 2025
To:	Planning Services
Planning App. No:	25/00016/PREAPP
Proposal:	RESIDENTIAL DEVELOPMENT OF 116 NO. DWELLINGS, REFURBISHMENT OF PAVILLION AND ERECTION OF 3NO. PADEL COURTS TOGETHER WITH ASSOCIATED INFRASTRUCTURE WORKS
Location:	FORMER HUYTON CRICKET CLUB HUYTON LANE ST GABRIELS SOUTH HUYTON L36 7XG

☒ Highway Pre-Application Advice

Highways would have no objections to the proposed development. As previously advised to the Transport Consultant, the Council has an aspiration to upgrade the junction to signal control to facilitate pedestrian and cycle movements. Any works to provide access to this site would be expected to at least take this into consideration within the design.

TS Scoping Exercise

The proposed scoping note is broadly accepted, however the decision to omit trip generation from the padel courts is not accepted. The courts would not be reserved for the sole use of the residents and such facilities tend to have increased patronage from 5pm onwards as people visit after work. A trip generation exercise for this land use will need to be included.

The trip generation is based upon 60 dwellings + 70 unit assisted care, whilst the pre-application description states 116 dwellings in total. There is no objection to the assessment being carried out using more dwellings than that being proposed, however, the consultant may find it useful to restrict the trip generation to that being proposed once the padel trips are included to minimise the junction impact.

A Travel Plan should be submitted with the application.

Layout

The layout is generally considered to be acceptable. The site has no parking for the padel courts. As noted above, the courts will not only be frequented by residents of the development, and therefore car parking will be necessary. A justification for the level of parking provided will also be required.

The car parking for the maisonettes is below the levels set out in the 'Ensuring a Choice of Travel' SPD, and this should be justified in the TS.

Servicing arrangements for the Assisted Living element of the scheme should be clearly identified.

TRO – the site is located close to the town centre and all residential roads within walking distance are subject to residents' parking zones, this development will also need to be covered by such a TRO.

Highways would require a Road Safety Audit to be conducted of the proposed access arrangements as a fourth arm of the existing roundabout. The entry radii at 10m could permit relatively high speeds of traffic from the south western approach on Huyton Lane into the site, which would be hazardous to pedestrians crossing the access. The existing street trees, although currently immature will increase in size and this could cause an impairment to visibility of vehicles approaching from this direction.

APPENDIX B

RAW SURVEY DATA

Huyton, Thursday 23rd January 2025

Junction: 1
Approach: Huyton Lane North

TIME	Left to Asda					Ahead to Huyton Lane (South)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	4	0	0	4	4.0	51	0	1	52	53.0	0	0	0	0	0.0
07:15 - 07:30	7	0	0	7	7.0	69	2	1	72	75.6	0	0	0	0	0.0
07:30 - 07:45	16	0	0	16	16.0	100	0	0	100	100.0	0	0	0	0	0.0
07:45 - 08:00	17	0	0	17	17.0	133	2	1	136	139.6	0	0	0	0	0.0
Hourly Total	44	0	0	44	44.0	353	4	3	360	368.2	0	0	0	0	0.0
08:00 - 08:15	15	0	0	15	15.0	131	1	1	133	135.3	1	0	0	1	1.0
08:15 - 08:30	19	1	0	20	21.3	153	3	1	157	161.9	0	0	0	0	0.0
08:30 - 08:45	21	0	0	21	21.0	115	3	0	118	121.9	1	1	0	2	3.3
08:45 - 09:00	33	0	0	33	33.0	121	2	2	125	129.6	0	0	0	0	0.0
Hourly Total	88	1	0	89	90.3	520	9	4	533	548.7	2	1	0	3	4.3
09:00 - 09:15	26	0	0	26	26.0	96	1	2	99	102.3	0	0	0	0	0.0
09:15 - 09:30	33	0	0	33	33.0	92	4	1	97	103.2	0	0	0	0	0.0
09:30 - 09:45	43	0	0	43	43.0	85	6	1	92	100.8	0	0	0	0	0.0
09:45 - 10:00	37	0	0	37	37.0	78	4	1	83	89.2	0	0	0	0	0.0
Hourly Total	139	0	0	139	139.0	351	15	5	371	395.5	0	0	0	0	0.0
TOTAL	271	1	0	272	273.3	1224	28	12	1264	1312.4	2	1	0	3	4.3
15:30 - 15:45	51	0	0	51	51.0	127	0	1	128	129.0	0	0	0	0	0.0
15:45 - 16:00	36	0	0	36	36.0	111	1	0	112	113.3	0	0	0	0	0.0
Hourly Total	87	0	0	87	87.0	238	1	1	240	242.3	0	0	0	0	0.0
16:00 - 16:15	34	0	0	34	34.0	108	2	1	111	114.6	0	0	0	0	0.0
16:15 - 16:30	42	0	0	42	42.0	122	0	1	123	124.0	0	0	0	0	0.0
16:30 - 16:45	34	0	0	34	34.0	123	1	1	125	127.3	0	0	0	0	0.0
16:45 - 17:00	65	0	0	65	65.0	109	3	1	113	117.9	0	0	0	0	0.0
Hourly Total	175	0	0	175	175.0	462	6	4	472	483.8	0	0	0	0	0.0
17:00 - 17:15	38	0	0	38	38.0	116	1	1	118	120.3	0	0	0	0	0.0
17:15 - 17:30	45	0	0	45	45.0	105	0	0	105	105.0	0	0	0	0	0.0
17:30 - 17:45	38	0	0	38	38.0	126	0	1	127	128.0	0	0	0	0	0.0
17:45 - 18:00	36	0	0	36	36.0	91	0	0	91	91.0	0	0	0	0	0.0
Hourly Total	157	0	0	157	157.0	438	1	2	441	444.3	0	0	0	0	0.0
18:00 - 18:15	34	0	0	34	34.0	112	0	2	114	116.0	0	0	0	0	0.0
18:15 - 18:30	34	0	0	34	34.0	100	1	0	101	102.3	0	0	0	0	0.0
Hourly Total	68	0	0	68	68.0	212	1	2	215	218.3	0	0	0	0	0.0
TOTAL	487	0	0	487	487.0	1350	9	9	1368	1388.7	0	0	0	0	0.0

Huyton, Thursday 23rd January 2025

Junction: 1
Approach: Asda

TIME	Left to Huyton Lane (South)					Right to Huyton Lane (North)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	5	0	0	5	5.0	2	0	0	2	2.0	0	0	0	0	0.0
07:15 - 07:30	11	1	0	12	13.3	5	0	0	5	5.0	0	0	0	0	0.0
07:30 - 07:45	11	0	0	11	11.0	10	0	0	10	10.0	0	0	0	0	0.0
07:45 - 08:00	20	0	0	20	20.0	12	0	0	12	12.0	0	0	0	0	0.0
Hourly Total	47	1	0	48	49.3	29	0	0	29	29.0	0	0	0	0	0.0
08:00 - 08:15	18	0	0	18	18.0	12	0	0	12	12.0	0	0	0	0	0.0
08:15 - 08:30	29	0	0	29	29.0	17	0	0	17	17.0	0	0	0	0	0.0
08:30 - 08:45	19	0	0	19	19.0	12	0	0	12	12.0	0	0	0	0	0.0
08:45 - 09:00	28	1	0	29	30.3	13	0	0	13	13.0	0	0	0	0	0.0
Hourly Total	94	1	0	95	96.3	54	0	0	54	54.0	0	0	0	0	0.0
09:00 - 09:15	30	0	0	30	30.0	29	0	0	29	29.0	0	0	0	0	0.0
09:15 - 09:30	47	0	0	47	47.0	20	0	0	20	20.0	0	0	0	0	0.0
09:30 - 09:45	37	0	0	37	37.0	22	0	0	22	22.0	0	0	0	0	0.0
09:45 - 10:00	50	0	0	50	50.0	20	0	0	20	20.0	0	0	0	0	0.0
Hourly Total	164	0	0	164	164.0	91	0	0	91	91.0	0	0	0	0	0.0
TOTAL	305	2	0	307	309.6	174	0	0	174	174.0	0	0	0	0	0.0
15:30 - 15:45	70	0	0	70	70.0	38	0	0	38	38.0	0	0	0	0	0.0
15:45 - 16:00	74	0	0	74	74.0	28	0	0	28	28.0	0	0	0	0	0.0
Hourly Total	144	0	0	144	144.0	66	0	0	66	66.0	0	0	0	0	0.0
16:00 - 16:15	73	0	0	73	73.0	38	0	0	38	38.0	0	0	0	0	0.0
16:15 - 16:30	73	0	0	73	73.0	23	0	0	23	23.0	0	0	0	0	0.0
16:30 - 16:45	74	0	0	74	74.0	34	0	0	34	34.0	0	0	0	0	0.0
16:45 - 17:00	73	0	0	73	73.0	43	0	0	43	43.0	1	0	0	1	1.0
Hourly Total	293	0	0	293	293.0	138	0	0	138	138.0	1	0	0	1	1.0
17:00 - 17:15	79	0	0	79	79.0	43	0	0	43	43.0	0	0	0	0	0.0
17:15 - 17:30	61	0	0	61	61.0	42	0	0	42	42.0	0	0	0	0	0.0
17:30 - 17:45	87	0	0	87	87.0	52	0	0	52	52.0	0	0	0	0	0.0
17:45 - 18:00	71	0	0	71	71.0	50	0	0	50	50.0	0	0	0	0	0.0
Hourly Total	298	0	0	298	298.0	187	0	0	187	187.0	0	0	0	0	0.0
18:00 - 18:15	63	0	0	63	63.0	35	0	0	35	35.0	0	0	0	0	0.0
18:15 - 18:30	60	0	0	60	60.0	35	0	0	35	35.0	0	0	0	0	0.0
Hourly Total	123	0	0	123	123.0	70	0	0	70	70.0	0	0	0	0	0.0
TOTAL	858	0	0	858	858.0	461	0	0	461	461.0	1	0	0	1	1.0

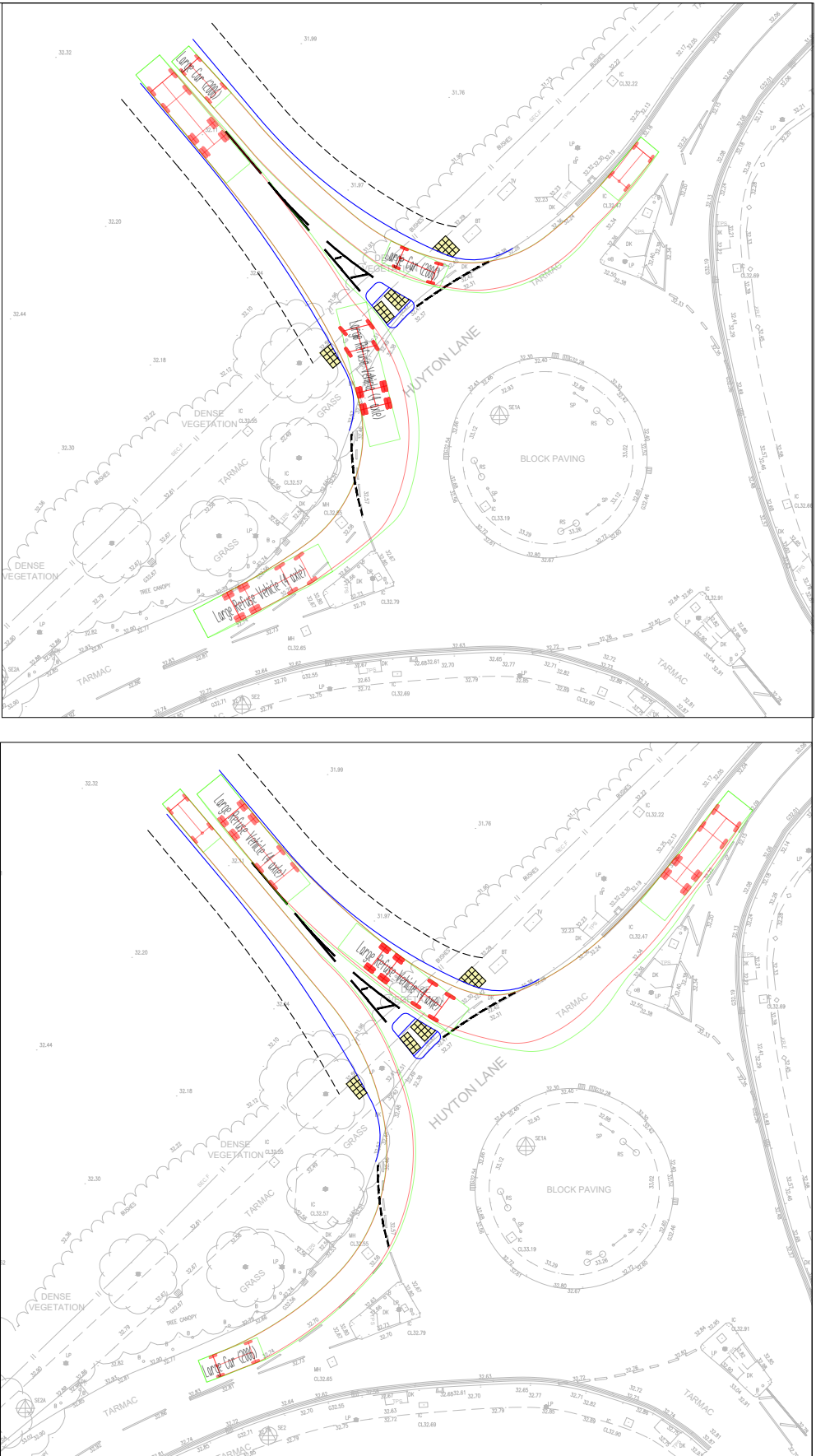
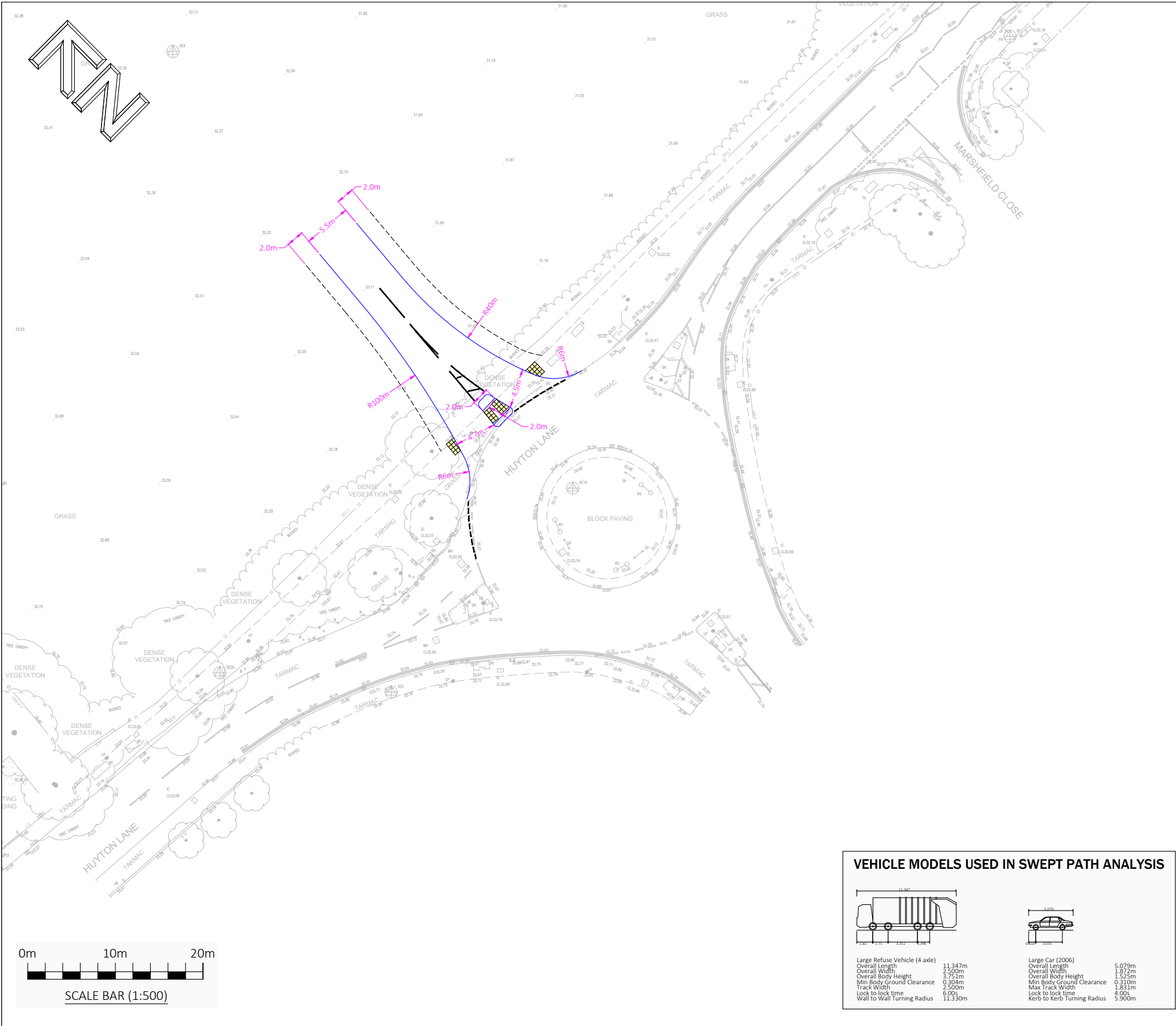
Huyton, Thursday 23rd January 2025

Junction: 1
Approach: Huyton Lane South

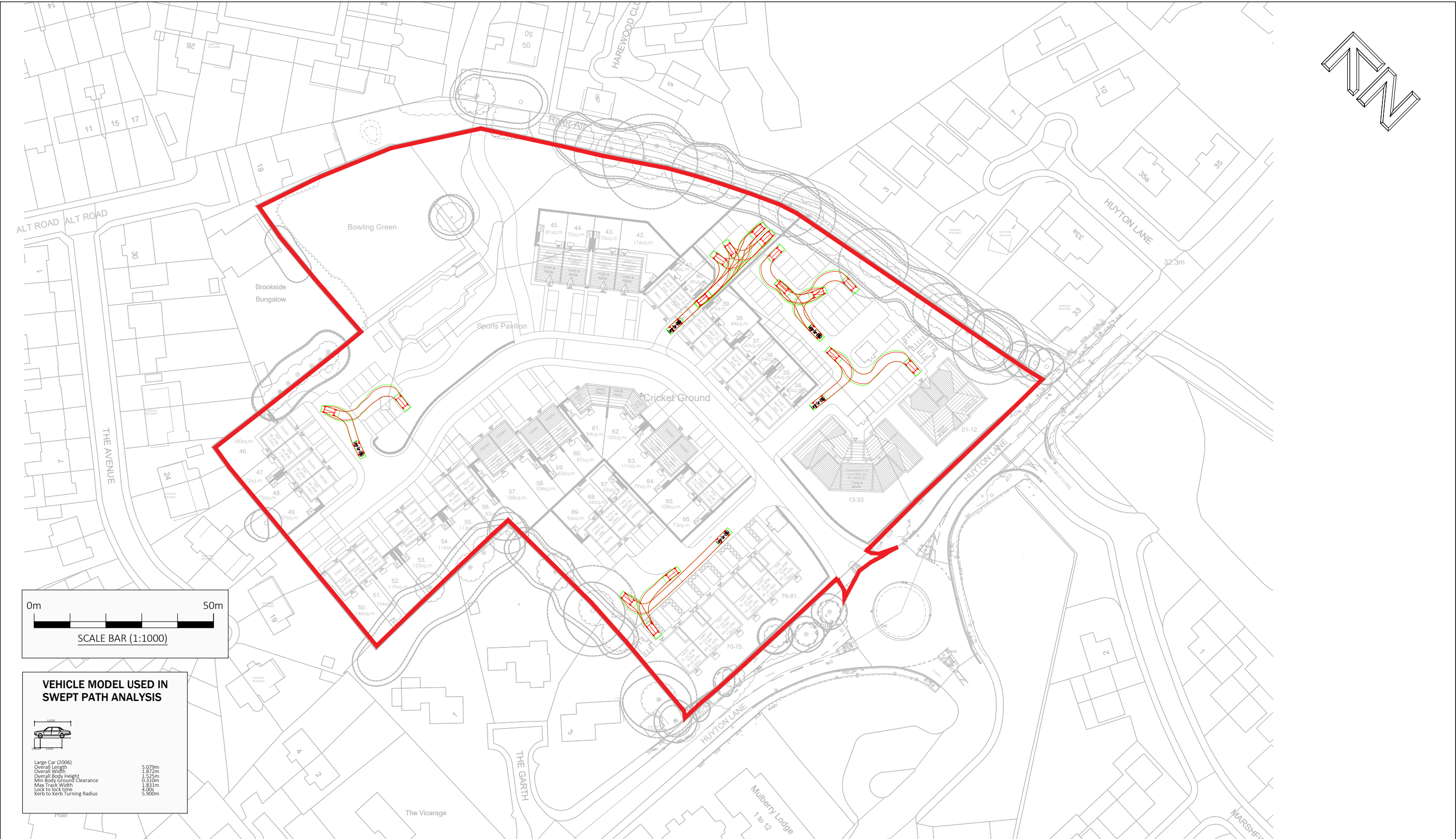
TIME	Ahead to Huyton Lane (North)					Right to Asda					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	34	1	1	36	38.3	13	0	0	13	13.0	1	0	0	1	1.0
07:15 - 07:30	56	0	0	56	56.0	14	0	0	14	14.0	0	0	0	0	0.0
07:30 - 07:45	68	2	1	71	74.6	19	0	0	19	19.0	0	0	0	0	0.0
07:45 - 08:00	94	2	2	98	102.6	21	0	0	21	21.0	0	0	0	0	0.0
Hourly Total	252	5	4	261	271.5	67	0	0	67	67.0	1	0	0	1	1.0
08:00 - 08:15	90	3	1	94	98.9	22	0	0	22	22.0	0	0	0	0	0.0
08:15 - 08:30	94	2	1	97	100.6	37	0	0	37	37.0	0	0	0	0	0.0
08:30 - 08:45	94	4	0	98	103.2	35	0	0	35	35.0	0	0	0	0	0.0
08:45 - 09:00	128	6	1	135	143.8	56	0	0	56	56.0	0	0	0	0	0.0
Hourly Total	406	15	3	424	446.5	150	0	0	150	150.0	0	0	0	0	0.0
09:00 - 09:15	103	2	1	106	109.6	53	0	0	53	53.0	0	0	0	0	0.0
09:15 - 09:30	65	4	1	70	76.2	44	0	0	44	44.0	0	0	0	0	0.0
09:30 - 09:45	93	2	3	98	103.6	45	0	0	45	45.0	0	0	0	0	0.0
09:45 - 10:00	70	1	0	71	72.3	59	0	1	60	61.0	0	0	0	0	0.0
Hourly Total	331	9	5	345	361.7	201	0	1	202	203.0	0	0	0	0	0.0
TOTAL	989	29	12	1030	1079.7	418	0	1	419	420.0	1	0	0	1	1.0
15:30 - 15:45	145	9	1	155	167.7	69	0	0	69	69.0	0	0	0	0	0.0
15:45 - 16:00	119	6	1	126	134.8	59	0	0	59	59.0	0	0	0	0	0.0
Hourly Total	264	15	2	281	302.5	128	0	0	128	128.0	0	0	0	0	0.0
16:00 - 16:15	133	8	0	141	151.4	62	0	0	62	62.0	1	0	0	1	1.0
16:15 - 16:30	102	1	1	104	106.3	67	0	0	67	67.0	1	0	0	1	1.0
16:30 - 16:45	105	2	1	108	111.6	68	0	0	68	68.0	2	0	0	2	2.0
16:45 - 17:00	141	1	1	143	145.3	89	0	0	89	89.0	1	0	0	1	1.0
Hourly Total	481	12	3	496	514.6	286	0	0	286	286.0	5	0	0	5	5.0
17:00 - 17:15	119	1	0	120	121.3	62	0	0	62	62.0	1	0	0	1	1.0
17:15 - 17:30	145	1	1	147	149.3	78	0	0	78	78.0	1	0	0	1	1.0
17:30 - 17:45	98	1	2	101	104.3	65	0	0	65	65.0	0	0	0	0	0.0
17:45 - 18:00	122	1	0	123	124.3	72	0	0	72	72.0	0	0	0	0	0.0
Hourly Total	484	4	3	491	499.2	277	0	0	277	277.0	2	0	0	2	2.0
18:00 - 18:15	105	1	0	106	107.3	50	0	0	50	50.0	1	0	0	1	1.0
18:15 - 18:30	104	1	1	106	108.3	43	0	0	43	43.0	0	0	0	0	0.0
Hourly Total	209	2	1	212	215.6	93	0	0	93	93.0	1	0	0	1	1.0
TOTAL	1438	33	9	1480	1531.9	784	0	0	784	784.0	8	0	0	8	8.0

APPENDIX C

TECHNICAL DRAWINGS



 9 Hurricane Court Liverpool International Business Park Estuary Boulevard Liverpool L24 8RL www.primetp.co.uk 0151 728 1860	C	02/05/25	RO	KERB RADII AMENDED UPDATED TO TOPO SURVEY ROUNDBOUT GEOMETRY UPDATED	Project	HUYTON LANE, HUYTON	Drawn by RO	Issue date 13 NOV 2024
	B	08/02/25	RO					
	A	09/01/25	RO					
	Rev	Date	By	Revision notes	Title	PROPOSED SITE ACCESS FROM B5199 HUYTON LANE ROUNDBOUT	Scale(s) 1:500 @ A3	
Status				Drawing No P24120-001C				
INFORMATION								



9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

C B A	11/07/25	RO	SITE LAYOUT UPDATED SITE LAYOUT UPDATED SITE LAYOUT UPDATED
	10/07/25	RO	
	03/07/25	RO	
Rev	Date	By	Revision notes
Status			
INFORMATION			

Project	HUYTON LANE
Title	
SWEPT PATH ANALYSIS OF LARGE CAR	

Drawn by RO	Issue date 02 JUNE 2025
Scale(s) 1:1000 @ A3	
Drawing No P24120-004C	

APPENDIX D

RSA AND DESIGNERS' RESPONSE

1 INTRODUCTION

1.1 Preamble

- 1.1.1 As part of pre-application 25/00016/PREAPP for a residential development on land off Huyton Lane, Knowsley Metropolitan Borough Council (KMBC) provided several pre-application comments.

- 1.1.2 'Highways Observation Memo', received in April 2025, stated the following:

'Highways would require a Road Safety Audit to be conducted of the proposed access arrangements as a fourth arm of the existing roundabout. The entry radii at 10m could permit relatively high speeds of traffic from the south western approach on Huyton Lane into the site, which would be hazardous to pedestrians crossing the access. The existing street trees, although currently immature will increase in size and this could cause an impairment to visibility of vehicles approaching from this direction.'

- 1.1.3 A Road Safety Audit (RSA) was commissioned in line with the above comments. The following report is a Designer's Response (DR) which has been produced to address each comment raised as part of the RSA.

2 STAGE 1 ROAD SAFETY AUDIT

2.1 Introduction

- 2.1.1 The independent consultant six:TEN Highways & Traffic Ltd (six:TEN) was commissioned to undertake the audit based on the DMRB document GG119 – *Road Safety Audit*. The RSA was completed by two Society of Road Safety Auditors, qualified professionals who undertook a site visit as part of the RSA on Thursday 26th June 2025.
- 2.1.2 The audit has been based on Drawing P24120-001C, with the actual RSA available to view in Appendix I.
- 2.1.3 No problems were identified relating to ‘general’ road safety issues, ‘local alignment’, ‘junctions’ or ‘traffic signs, carriageway markings and lighting’. The RSA did identify two ‘problems’ relating to ‘walking, cycling and horse riding’. These are detailed below, along with a designer’s response to each.

RSA Problem 2.4.1

Location: Throughout the scheme

Summary: Planting/vegetation adjacent to the existing uncontrolled pedestrian crossings may obscure pedestrian and driver intervisibility which may increase the risk of pedestrian/vehicular collisions

It was observed during the site visit that planting/vegetation adjacent to the existing uncontrolled pedestrian crossings on the arms of the roundabout may obscure the pedestrian and driver intervisibility to/from the uncontrolled pedestrian crossings. Notably, both sides of the supermarket access arm and Huyton Lane north-eastern arm eastern crossing point. A reduction of pedestrian and driver intervisibility may increase the risk of pedestrian/vehicular collisions as crossing pedestrians fail to sufficiently appreciate approaching traffic and vice versa. Whilst it is noted this is an existing issue the proposed development is likely to increase the use of the uncontrolled pedestrian crossing throughout the roundabout.

Recommendation

It is recommended that the pedestrian and driver invisibility is investigated, and the design ensures sufficient pedestrian/driver intervisibility splays are provided at the uncontrolled pedestrian crossings throughout the scheme and a suitable maintenance regime of the planting/vegetation is implemented.

Designer's Response to 2.4.1

- 2.1.4 This is a pre-existing issue, with the vegetation in question falling within either KMBC adopted highway or possibly within private 3rd party ownership relating to the adjacent supermarket.
- 2.1.5 Should KMBC have concerns about intervisibility between pedestrians and vehicles due to overgrown vegetation, it is their responsibility to either carry out the maintenance themselves or contact third-party landowners to address the issue.

RSA Problem 2.4.2

Location: In-line uncontrolled pedestrian crossings on the proposed site access arm

Summary: Incorrect tactile paving layout increases the risk of visually impaired pedestrians inadvertently entering the carriageway and potentially being struck by a vehicle

The proposed tactile paving at the in-line type uncontrolled pedestrian crossings on the proposed site access arm of the roundabout do not appear to have the required minimum depth of tactile paving across the whole width of the dropped kerbs for in-line type uncontrolled crossings. The audit team note that the minimum depth of tactile paving for in-line type crossings is generally 1200mm. A reduced depth of tactile paving results in a lack of appropriate warning for visually impaired pedestrians of the side road ahead and they may inadvertently enter the carriageway, which may increase the risk pedestrian/vehicular collisions.

Recommendation

It is recommended that the tactile paving layout should be amended to provide a minimum depth of 1200mm tactile paving across the whole width of the dropped kerbs at the in-line type uncontrolled pedestrian crossings.

Designers Response to 2.4.2

- 2.1.6 Acknowledged. Precise details regarding tactile paving will be determined as part of any future detailed design or s278 application.

2.2 Summary

- 2.2.1 The Stage 1 RSA, undertaken by six:TEN in accordance with DMRB GG119, identified no issues relating to general highway alignment, junction layout, or traffic signage, markings and lighting. Two issues were raised in relation to 'walking, cycling and horse riding'.
-

- 2.2.2 Both issues have been acknowledged in the DR, with either KMBC or 3rd party landowners having responsibilities relating to vegetation maintenance, or to be reserved for later design stages.
-

APPENDIX I

RSA

HUYTON LANE, HUYTON PROPOSED SITE ACCESS FROM ROUNDABOUT

STAGE 1 ROAD SAFETY AUDIT

610/2025/141/01 Rev 1

16 July 2025

six:TEN Highways & Traffic Ltd
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Manchester
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Rev:	Issue Status:	Prepared by/Date:	Checked by/Date:	Approved by/Date:
0	DRAFT	Tristan Brooks 15 July 2025	Rachel Lister 15 July 2025	
1	FINAL	Tristan Brooks 16 July 2025	Rachel Lister 16 July 2025	Tristan Brooks 16 July 2025

Report Title:	Huyton Lane, Huyton Proposed Site Access from Roundabout - Stage 1 Road Safety Audit
Date:	16 July 2025
Document Reference & Revision:	610/2025/141/01 Rev 1
Prepared by:	Six Ten Highways & Traffic Ltd
On behalf of:	Prime

Disclaimer note

The client has confirmed that it is entering into the agreement under which this report is being prepared on its own behalf and not on behalf of, or for the benefit of any other party and has agreed that in any event of any claim arising out of or in connection with that agreement and/or the report itself it shall be entitled to recover from six:TEN Highways & Traffic Limited only the losses, if any, it has itself suffered.

This report therefore is for the private and confidential use of the client for whom it was prepared solely for the purposes requested by the client. It should not be reproduced in whole or in part or relied upon by any third party for any use whatsoever without the express written authority of six:TEN Highways & Traffic Limited.

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1.0 INTRODUCTION

- 1.1 This report results from a preliminary design Stage 1 Road Safety Audit (RSA) carried out on the proposed site access from the B5199 Huyton Lane roundabout, Huyton, at the request of Prime, the designer of the scheme who provided the Audit information, and although there was no formal 'audit brief' the RSA team has accepted that sufficient information has been provided to undertake the Stage 1 RSA. The audit team has been approved by the Overseeing Organisation Knowsley Council to carry out Road Safety Audits on their highway network.
- 1.2 The Road Safety Audit Team was as follows:
- Tristan Brooks* Bsc (Hons), MBA, CMILT, MCIHT, MSoRSA, HE RSA Cert of Comp
Audit Team Leader
- Rachel Lister BSc (Hons), MSc, MRTPI, MCIHT, MSoRSA
Audit Team Member
- 1.3 Audit Team members marked with an asterisk above hold a National Highways approved Certificate of Competency (CoC) in Road Safety Audit, in accordance with Article (1–3) of EC Directive 2008/96/EC.
- 1.4 The audit took place at the Manchester office of six:TEN Highways and Traffic between 25 June 2025 and 16 July 2025. The Road Safety Audit was undertaken in accordance with the Road Safety Audit information provided. The audit comprised an examination of the documents provided as detailed in Appendix One.
- 1.5 The Audit Team visited the site together during the afternoon of Thursday 26 June 2025 between 13.45hrs and 14:30hrs and comprised a walk and drive-throughs (where available) of the area covered by the scheme. During the site visit the weather was partially cloudy and the carriageway surface was dry. At the time of the site visit traffic movements in the vicinity of the proposed scheme were moderate with some pedestrian and cyclist movements observed.
- 1.6 Huyton Lane in the vicinity of the proposed highway works is subject to a 30mph speed limit and there is street lighting throughout.
- 1.7 The terms of reference of the audit are as described in GG 119 Rev.2. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. This Road Safety Audit has been undertaken based on the Road Safety Audit Team's previous experience and knowledge in undertaking Collision Investigation, Road Safety Engineering and Road Safety Audits.
- 1.8 The proposed highway works are associated with a proposed residential development on land to the north-west of Huyton Lane and in summary includes:
- Provision of a new arm on the existing roundabout on Huyton Lane to provide access to the proposed development; and
 - Provision of uncontrolled pedestrian crossings on the new arm incorporating a pedestrian refuge/splitter island.

- 1.9 The Audit Team have not been informed of any Departures from Standard for the proposed scheme nor have they been made aware of any previous RSA's undertaken on the scheme.
- 1.10 Personal injury collision data obtained from the online Crashmap database shows there has been two personal injury collisions in the vicinity of the proposed highway works during the latest five-year period (2019-2023) for which data is available. One collision occurred on the roundabout, involved one vehicle and resulted in one casualty whose injuries were classified as slight in severity. The remaining collision is shown as occurring on the access road to the adjacent supermarket, involved two vehicles and resulted in three casualties whose injuries were classified as slight in severity. The Personal Injury Collision location plan is shown in Appendix Four.
- 1.11 The scheme has been examined and this report compiled only regarding the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other Standards or criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. Any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.
- 1.12 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG 119 Rev 2, and in no way, imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

2.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

2.1 General

2.1.1 No road safety issues identified at this stage.

2.2 Local Alignment

2.2.1 No road safety issues identified at this stage.

2.3 Junctions

2.3.1 No road safety issues identified at this stage.

2.4 Walking, Cycling and Horse Riding

2.4.1 Location: Throughout the scheme

Problem

Summary: Planting/vegetation adjacent to the existing uncontrolled pedestrian crossings may obscure pedestrian and driver intervisibility which may increase the risk of pedestrian/vehicular collisions

It was observed during the site visit that planting/vegetation adjacent to the existing uncontrolled pedestrian crossings on the arms of the roundabout may obscure the pedestrian and driver intervisibility to/from the uncontrolled pedestrian crossings. Notably, both sides of the supermarket access arm and Huyton Lane north-eastern arm eastern crossing point. A reduction of pedestrian and driver intervisibility may increase the risk of pedestrian/vehicular collisions as crossing pedestrians fail to sufficiently appreciate approaching traffic and vice versa. Whilst it is noted this is an existing issue the proposed development is likely to increase the use of the uncontrolled pedestrian crossing throughout the roundabout.

Recommendation

It is recommended that the pedestrian and driver invisibility is investigated, and the design ensures sufficient pedestrian/driver intervisibility splays are provided at the uncontrolled pedestrian crossings throughout the scheme and a suitable maintenance regime of the planting/vegetation is implemented.

2.4.2 Location: In-line uncontrolled pedestrian crossings on the proposed site access arm

Problem

Summary: Incorrect tactile paving layout increases the risk of visually impaired pedestrians inadvertently entering the carriageway and potentially being struck by a vehicle

The proposed tactile paving at the in-line type uncontrolled pedestrian crossings on the proposed site access arm of the roundabout do not appear to have the required minimum depth of tactile paving across the whole width of the dropped kerbs for in-line type uncontrolled crossings. The audit team note that the minimum depth of tactile paving for in-line type crossings is generally 1200mm. A reduced depth of tactile paving results in a lack of appropriate warning for visually impaired pedestrians of the side road ahead and they may inadvertently enter the carriageway, which may increase the risk pedestrian/vehicular collisions.

Recommendations

It is recommended that the tactile paving layout should be amended to provide a minimum depth of 1200mm tactile paving across the whole width of the dropped kerbs at the in-line type uncontrolled pedestrian crossings.

2.5 Traffic Signs, Carriageway Markings and Lighting

2.5.1 No road safety issues identified at this stage.

3.0 ROAD SAFETY AUDIT TEAM STATEMENT

We certify that the audit has been carried out in accordance with DMRB GG119 Rev 2.

AUDIT TEAM LEADER

Tristan Brooks Bsc (Hons), MBA, CMILT, MCIHT, MSoRSA, HE RSA Cert of Comp

Traffic & Road Safety Engineer

Signed: 

six:TEN Highways & Traffic Ltd

Date: 16 July 2025

AUDIT TEAM MEMBER

Rachel Lister BSc (Hons), MSc, MRTPI, MCIHT, MSoRSA

Traffic & Road Safety Engineer

Signed: 

six:TEN Highways & Traffic Ltd

Date: 16 July 2025

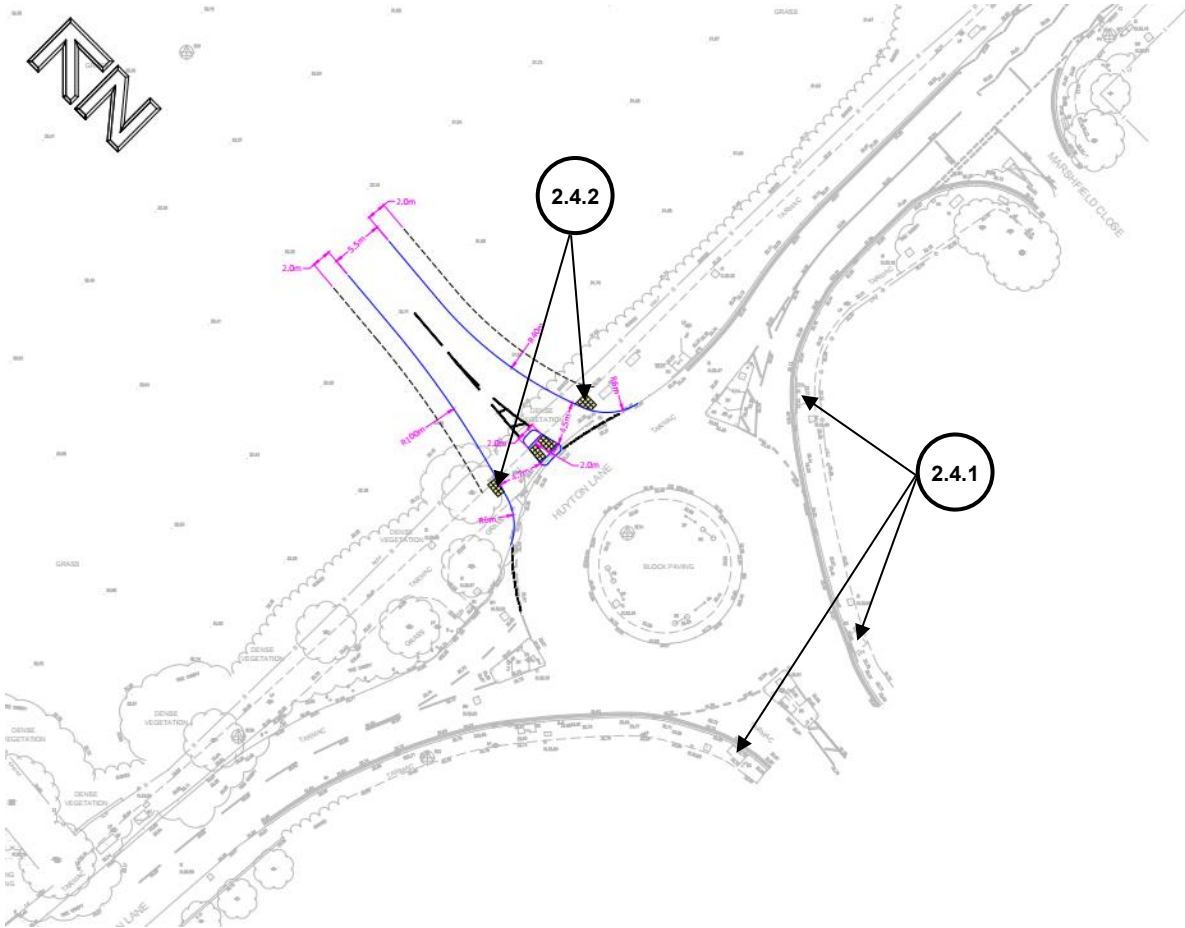
APPENDIX ONE

4.0 LIST OF DRAWINGS AND DOCUMENTS SUPPLIED BY THE DESIGN ORGANISATION

- P24120-001C Site Access from B5199 Roundabout
- 1693 Huyton Lane Traffic Count Data
- Traffic Flow Diagrams
- Five-year (2019-2023) personal injury collision data from Crashmap

APPENDIX TWO

5.0 PROBLEM LOCATION PLAN



APPENDIX THREE

6.0 PHOTOGRAPHS



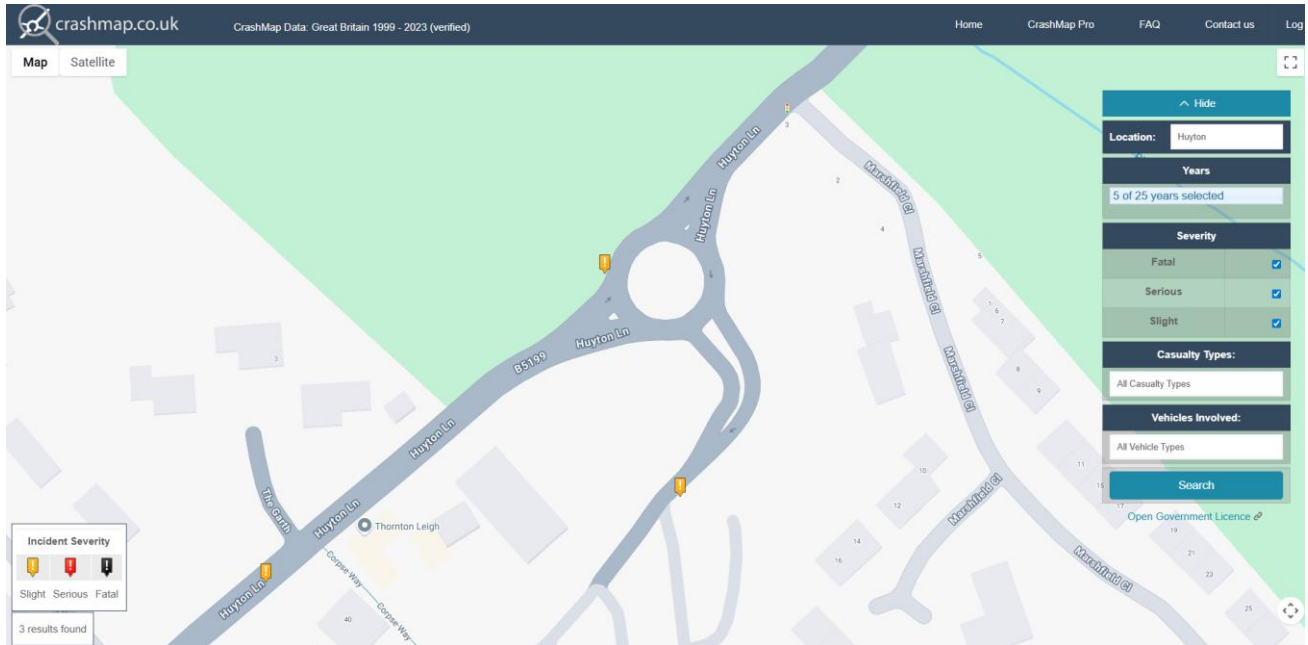
6.1 General view looking north-east towards the proposed site access arm.



6.2 General view looking south-west from the proposed site access arm.

APPENDIX FOUR

7.0 PERSONAL INJURY COLLISION LOCATION PLAN



APPENDIX E

MASA

Accessibility Assessment Form

Access on foot		Points	Score	Justification for Scoring
Location	<u>Residential Development:</u> Is the site within 800m of a district or local centre (see Accessibility Maps) OR <u>Non-residential development:</u> Is the density of existing local housing (i.e. within 800m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	located within range of local centre
		No	0	
Internal layout	Does ‘circulation’ and access inside the sites 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	Circulation prioritises pedestrians
		No	0	
External layout	Are there barriers between site and local facilities or housing, which restrict pedestrian access? Examples include no dropped kerbs at crossings or on desire lines; steep gradients; a lack of a formal crossing where there is heavy traffic; security concerns, e.g. lack of lighting	Yes	-1	No barriers
		No	1	
	Total Score		4	
	Minimum score required		4	
Comments or action needed to correct any shortfall				

Access by Cycle			Points	Score	Justification for Scoring
Location	<u>Residential Development:</u> Is the site within 1500m of a district or local centre (see Accessibility Maps) Or <u>Non-residential development:</u> Is the density of existing local housing (e.g. within 1500m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	2	
		No	0		
Internal layout	Does 'circulation' and access inside the site reflect appropriate and direct cycle routes, with priority given to cyclists where they meet motor vehicles?	Yes	1	1	
		No	0		
External Access	Is the development within 400m of an existing or proposed designated cycle route and/ or proposes to create a link to a cycle route, or develop a route.	Yes	1	-1	
		No	-1		
Other	Development includes cycle parking, shower facilities, and lockers for cyclists.	Yes	1	1	
		No	0		
	Total Score			3	
	Minimum score required			5	
Comments or action needed to correct any shortfall Cycle routes exist over 400m away					

Access by Public Transport			Points	Score	Justification for Scoring
Location and access to public transport	Is the site within a 200m walk of a bus or tram stop, and/or within 400m of a rail station?	Yes	2	2	
		No	0		
	Are there barriers on direct pedestrian routes to bus or tram stops or rail stations e.g. a lack of dropped kerbs, footpaths less than 2m wide, a lack of formal crossings and / or bus stop infrastructure.	Yes	0	1	
		No	1		
Frequency	High (four or more bus or tram services or trains an hour)		2	2	
	Medium (two or three bus or tram services or trains an hour)		1		
	Low (less than two bus or tram services or trains an hour)		0		
Other	The proposal contributes to bus priority measures serving the site	Yes	1	0	
		No	0		
	The proposal contributes to bus stops, bus interchange, tram facilities or bus or rail stations in the vicinity and/or provides bus stops or bus interchange in the site	Yes	1	0	
		No	0		
	The proposal contributes to an existing or new supported bus service	Yes	1	1	
		No	0		
	Total Score			5	
	Minimum score required			5	
Comments or action needed to correct any shortfall					
No contribution to local services					

Parking			Points	Score	Justification for Scoring
Parking	The off-street parking provided is as advised in Section 4 for that development type	Yes	1		
		No	0		
	The off street parking provided is less than 75% of the amount advised in Section 4 for that development type (or shares parking provision with another development).	Yes	2	0	2
		No	0		
	For development in controlled parking zones:				
	Is the proposal for a car free development?	Yes	1	0	
		No	0		
	Does it supports the control or removal of on-street parking spaces (inc provision of disabled spaces) or contributes to other identified measures in the local parking strategy (including car clubs)	Yes	1	0	
		No	0		
		Total Score			2
	Minimum score required			1	
Comments or action needed to correct any shortfall.					

APPENDIX F

TRAFFIC FLOW DIAGRAM

Traffic Flow Diagrams			
Reference	Scenario	Peak	Derivation
1	Traffic Flow Diagram 1 - 2025 Observed Flows	AM (0815-0915)	Raw data
2	Traffic Flow Diagram 2 - 2025 Observed Flows	PM (1645-1745)	Raw data
3	Traffic Flow Diagram 3 - 2030 Base Flows	AM (0815 - 0915)	1*TEMPPro
4	Traffic Flow Diagram 4 - 2030 Base Flows	PM (1645-1745)	2*TEMPPro
5	Traffic Flow Diagram 5 - Distribution	AM (0815 - 0915)	Observed Turning Proportions
6	Traffic Flow Diagram 6 - Distribution	PM (1645-1745)	Observed Turning Proportions
7	Traffic Flow Diagram 7 - Development Traffic Flow	AM (0815 - 0915)	TRICS
8	Traffic Flow Diagram 8 - Development Traffic Flow	PM (1645 - 1745)	TRICS
9	Traffic Flow Diagram 9 - 2030 with Development Flows	AM (0815 - 0915)	3+7
10	Traffic Flow Diagram 10 - 2030 with Development Flows	PM (1645-1745)	4+8

Land at Huyton Lane, Huyton

Project: Land at Huyton Lane, Huyton

Scenario: Traffic Flow Diagram 1 - 2025 Observed Flows

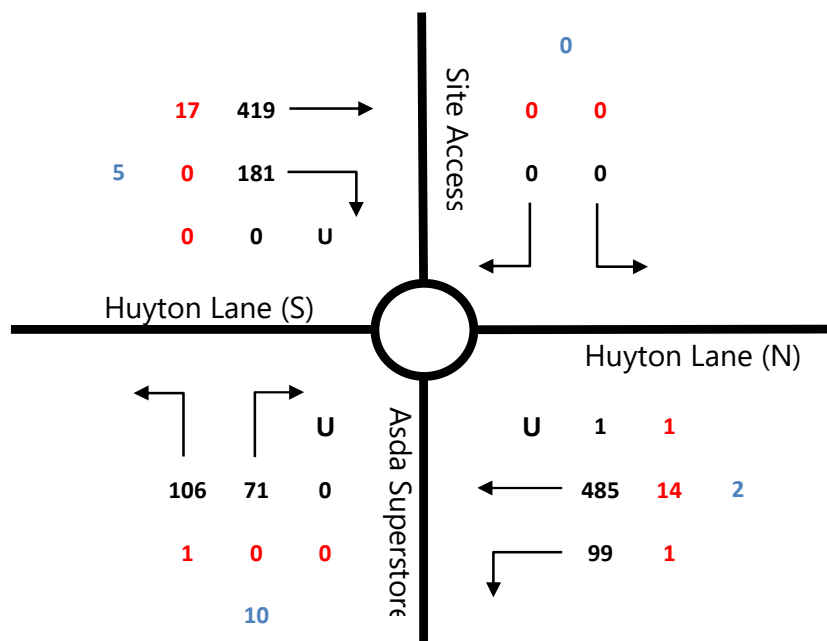
Peak AM (0815-0915)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red

Observed queues in blue



Project: Land at Huyton Lane, Huyton

Scenario: Traffic Flow Diagram 2 - 2025 Observed Flows

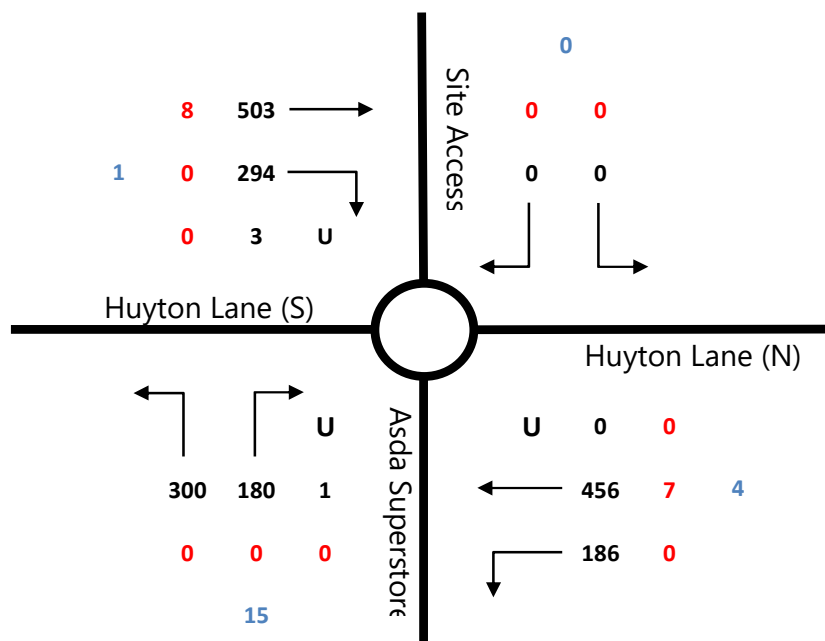
Peak PM (1645-1745)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red

Observed queues in blue



Project: Land at Huyton Lane, Huyton

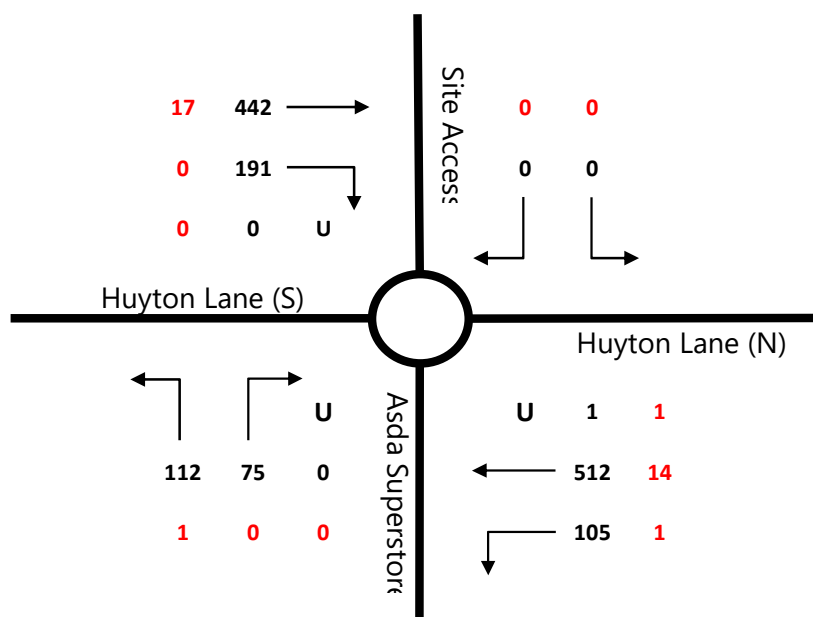
Scenario: Traffic Flow Diagram 3 - 2030 Base Flows

Peak AM (0815 - 0915)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red

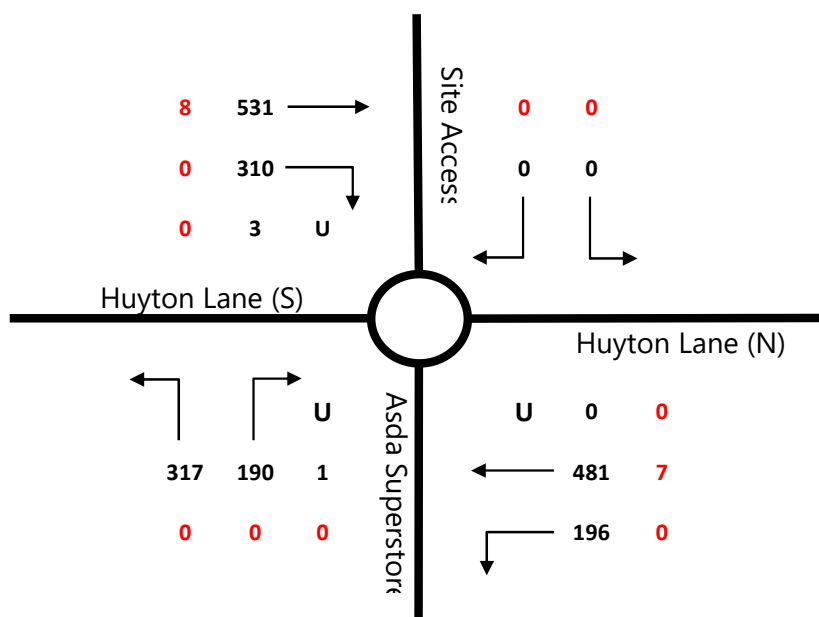


Project: Land at Huyton Lane, Huyton
Scenario: Traffic Flow Diagram 4 - 2030 Base Flows
Peak PM (1645-1745)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red



Project: Land at Huyton Lane, Huyton

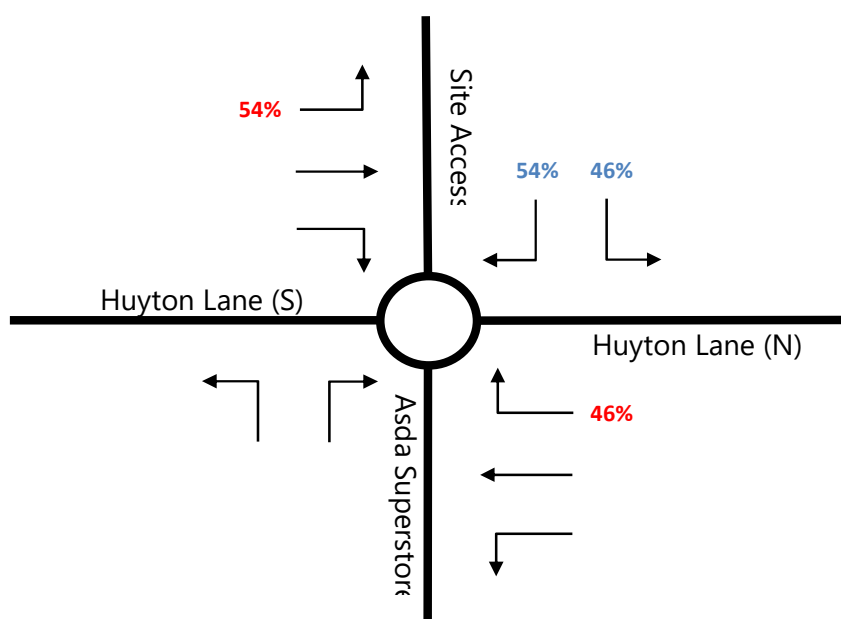
Scenario: Traffic Flow Diagram 5 - Distribution

Peak AM (0815 - 0915)

Notes: Based on observed turning proportions from traffic survey

Arrivals in red

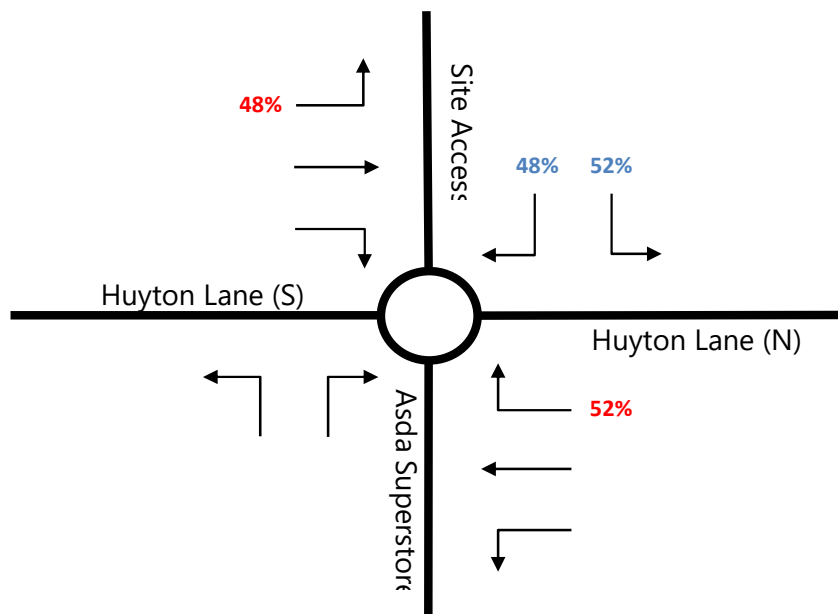
Departures in blue



Project: Land at Huyton Lane, Huyton
Scenario: Traffic Flow Diagram 6 - Distribution
Peak PM (1645-1745)
Notes: Based on observed turning proportions from traffic survey

Arrivals in red

Departures in blue



Project: Land at Huyton Lane, Huyton

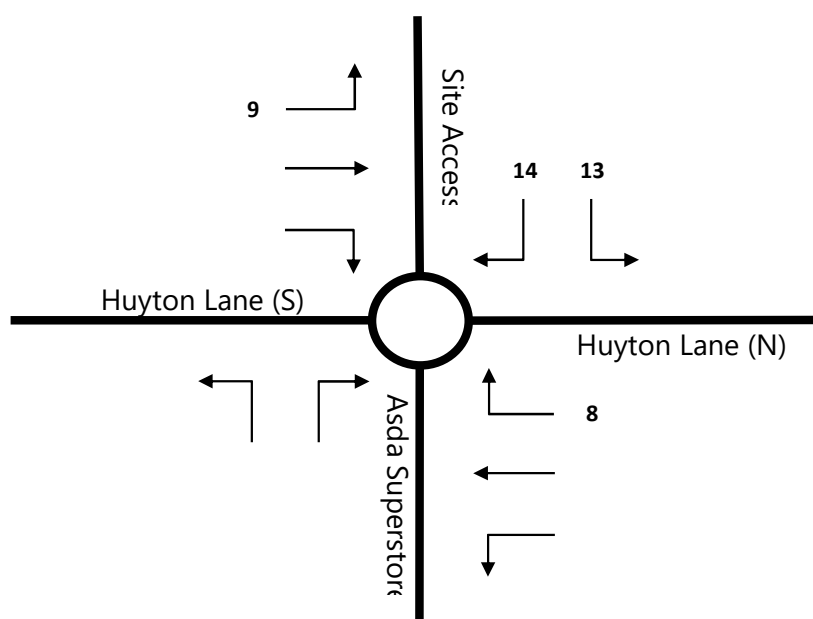
Scenario: Traffic Flow Diagram 7 - Development Traffic Flow

Peak AM (0815 - 0915)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red



Project: Land at Huyton Lane, Huyton

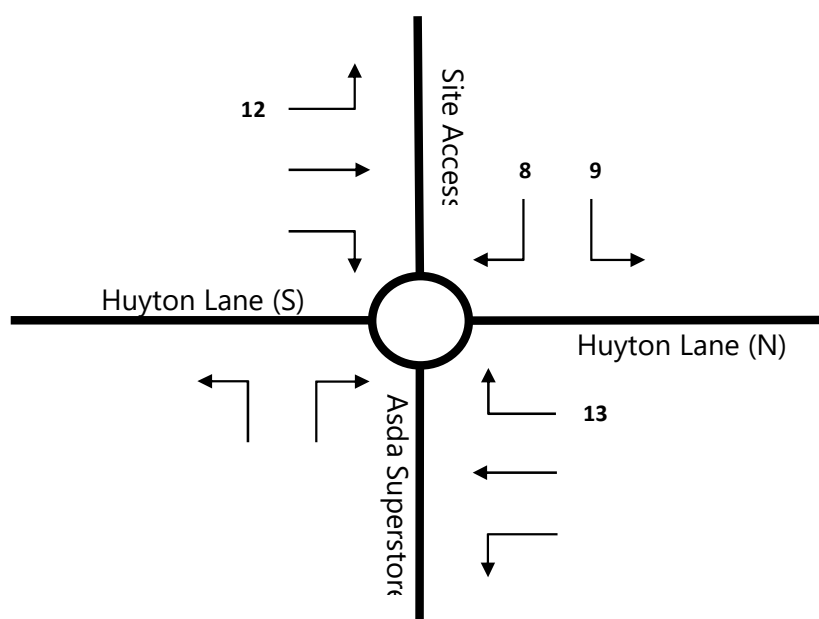
Scenario: Traffic Flow Diagram 8 - Development Traffic Flow

Peak PM (1645 - 1745)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red



Project: Land at Huyton Lane, Huyton

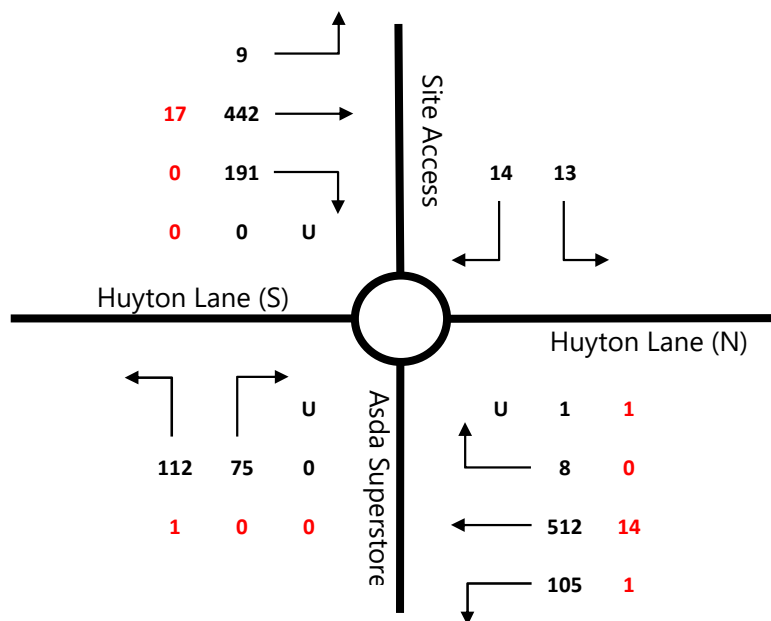
Scenario: Traffic Flow Diagram 9 - 2030 with Development Flows

Peak AM (0815 - 0915)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red



Project: Land at Huyton Lane, Huyton

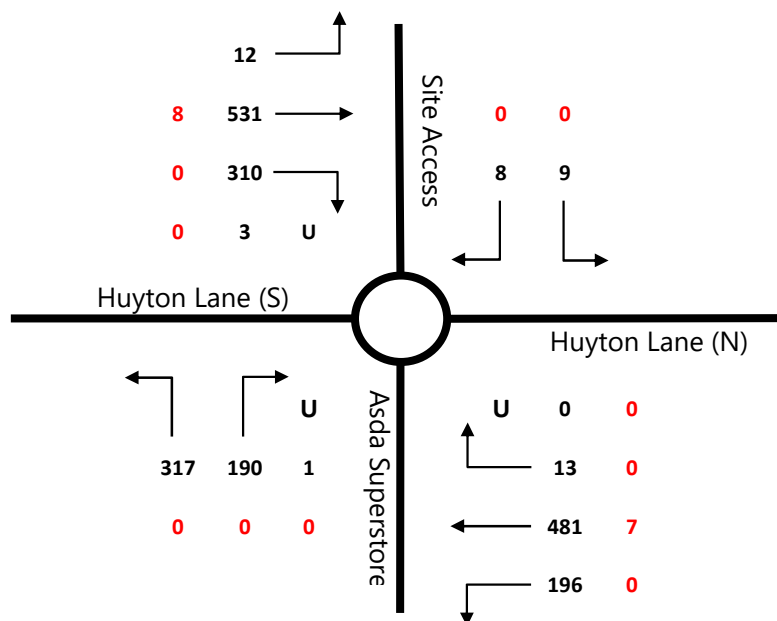
Scenario: Traffic Flow Diagram 10 - 2030 with Development Flows

Peak PM (1645-1745)

Notes: All flows are in vehicles

Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red



APPENDIX G

TRICS

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	1 days
	KC KENT	1 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	DV DEVON	1 days
	SM SOMERSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	2 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
09	NORTH	
	FU WESTMORLAND & FURNESS	1 days
11	SCOTLAND	
	HI HIGHLAND	1 days

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

PRIME Transport Planning ' Hurricane Court Liverpool

Licence No: 753001

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: No of Dwellings
Actual Range: 40 to 99 (units:)
Range Selected by User: 40 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 18/09/24

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	1 days
Tuesday	7 days
Wednesday	2 days
Thursday	5 days
Friday	1 days

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

Selected survey types:

Manual count	15 days
Directional ATC Count	1 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 Centre	3
Suburban Area (PPS6 Out of Centre)	4
Neighbourhood Centre (PPS6 Local Centre)	9

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:

Residential Zone	6
Village	9
No Sub Category	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	10 days - Selected
Servicing vehicles Excluded	21 days - Selected

Secondary Filtering selection:

Use Class:

C3 16 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	7 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	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	4 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
100,001 to 125,000	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	1 days
1.1 to 1.5	13 days
1.6 to 2.0	2 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	5 days
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	16 days
-----------------	---------

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

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LIST OF SITES relevant to selection parameters

1	AC-03-A-06 COMMON LANE NEAR CHESTER WAVERTON Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 99 Survey date: FRIDAY 29/04/22	DETACHED HOUSES	CESHIRE WEST & CHESTER	Survey Type: MANUAL
2	CA-03-A-08 GIDDING ROAD SAWTRY Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 83 Survey date: THURSDAY 13/10/22	DETACHED & SEMI-DETACHED	CAMBRIDGESHIRE	Survey Type: MANUAL
3	DV-03-A-03 LOWER BRAND LANE HONITON Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 70 Survey date: MONDAY 28/09/15	TERRACED & SEMI DETACHED	DEVON	Survey Type: MANUAL
4	ES-03-A-16 RAILWAY ROAD NEWHAVEN Edge of Town Centre No Sub Category Total No of Dwellings: 92 Survey date: TUESDAY 14/03/23	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
5	FU-03-A-02 MACADAM WAY PENRITH Edge of Town Centre Residential Zone Total No of Dwellings: 50 Survey date: TUESDAY 21/06/16	DETACHED / TERRACED HOUSING	WESTMORLAND & FURNESS	Survey Type: MANUAL
6	HC-03-A-23 CANADA WAY LIPHOOK Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 Survey date: TUESDAY 19/11/19	HOUSES & FLATS	HAMPSHIRE	Survey Type: MANUAL
7	HI-03-A-14 KING BRUDE ROAD INVERNESS SCORGUIE Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 40 Survey date: WEDNESDAY 23/03/16	SEMI-DETACHED & TERRACED	HIGHLAND	Survey Type: MANUAL

PRIME Transport Planning ' Hurricane Court Liverpool

Licence No: 753001

LIST OF SITES relevant to selection parameters (Cont.)

8	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 Survey date: THURSDAY 14/07/16	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
9	LE-03-A-02 MELBOURNE ROAD IBSTOCK Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18	DETACHED & OTHERS	LEICESTERSHIRE	Survey Type: MANUAL
10	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21	MIXED HOUSES & FLATS	NORFOLK	Survey Type: MANUAL
11	NF-03-A-40 MILL LANE NEAR NORWICH HORSFORD Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: TUESDAY 11/10/16	MIXED HOUSES	NORFOLK	Survey Type: MANUAL
12	NY-03-A-12 RACECOURSE LANE NORTHALLERTON Edge of Town Centre Residential Zone Total No of Dwellings: 47 Survey date: TUESDAY 27/09/16	TOWN HOUSES	NORTH YORKSHIRE	Survey Type: DIRECTIONAL ATC COUNT
13	SM-03-A-02 HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 42 Survey date: TUESDAY 25/09/18	MIXED HOUSES	SOMERSET	Survey Type: MANUAL
14	SM-03-A-03 HYDE LANE NEAR TAUNTON CREECH ST MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 41 Survey date: TUESDAY 25/09/18	MIXED HOUSES	SOMERSET	Survey Type: MANUAL
15	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17	BUNGALOWS	WEST SUSSEX	Survey Type: MANUAL

PRIME Transport Planning ' Hurricane Court Liverpool

Licence No: 753001

LIST OF SITES relevant to selection parameters (Cont.)

16 WS-03-A-25 PRIVATE HOUSES & FLATS WEST SUSSEX
LIDSEY ROAD
WOODGATE

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 65
Survey date: WEDNESDAY 18/09/24 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
AC-03-A-05	Covid
DH-03-A-01	Non-representative
IM-03-A-04	Non-representative
WS-03-A-16	Non-representative

APPENDIX H

MODEL RESULTS

Junctions 10	
ARCADY 10 - Roundabout Module	
Version: 10.1.1.1905 © Copyright TRL Software Limited, 2023	
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: J1 - SA RB.j10

Path: C:\Users\b.gaze\Prime Transport Planning\PrimeSharepoint - Documents\Projects 2024\P24120 - Huyton Lane, Huyton\6.Technical\Models

Report generation date: 12/02/2025 15:29:42

»Observed 2025, AM

»Observed 2025, PM

»Without Development 2030, AM

»Without Development 2030, PM

»With Development 2030, AM

»With Development 2030, PM

File summary

File Description

Title	B5199 Huyton Lane/Asda Access/Proposed Site Access
Location	Huyton
Site number	1
Date	12/02/2025
Version	
Status	Final
Identifier	
Client	
Jobnumber	P24120
Enumerator	GHC\b.gaze
Description	Checked by D. Stoddart

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	Observed 2025	AM	ONE HOUR	07:45	09:15	15
D2	Observed 2025	PM	ONE HOUR	16:45	18:15	15
D3	Without Development 2030	AM	ONE HOUR	07:45	09:15	15
D4	Without Development 2030	PM	ONE HOUR	16:45	18:15	15
D5	With Development 2030	AM	ONE HOUR	07:45	09:15	15
D6	With Development 2030	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Observed 2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5199 Huyton Lane/Asda Access/Proposed Site Access	Standard Roundabout		1, 2, 3, 4	6.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.98	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B5199 Huyton Lane (North-Eastern Arm)		
2	Asda Access		
3	B5199 Huyton Lane (South-Western Arm)		
4	Proposed Site Access		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B5199 Huyton Lane (North-Eastern Arm)	3.50	4.30	4.0	93.8	32.0	31.0		
2 - Asda Access	3.80	6.40	10.2	23.8	32.0	33.0		
3 - B5199 Huyton Lane (South-Western Arm)	3.70	5.90	5.2	14.4	32.0	50.0		
4 - Proposed Site Access	2.80	4.60	7.5	10.0	32.0	61.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B5199 Huyton Lane (North-Eastern Arm)	0.575	1251
2 - Asda Access	0.631	1581
3 - B5199 Huyton Lane (South-Western Arm)	0.543	1280
4 - Proposed Site Access	0.460	976

The slope and intercept shown above include any corrections and adjustments.

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)
D1	Observed 2025	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B5199 Huyton Lane (North-Eastern Arm)		✓	617	100.000
2 - Asda Access		✓	179	100.000
3 - B5199 Huyton Lane (South-Western Arm)		✓	634	100.000
4 - Proposed Site Access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
From	1 - B5199 Huyton Lane (North-Eastern Arm)	3	101	513	0
	2 - Asda Access	71	0	108	0
	3 - B5199 Huyton Lane (South-Western Arm)	453	181	0	0
	4 - Proposed Site Access	0	0	0	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
From	1 - B5199 Huyton Lane (North-Eastern Arm)	50	1	3	10
	2 - Asda Access	0	10	1	10
	3 - B5199 Huyton Lane (South-Western Arm)	4	0	10	10
	4 - Proposed Site Access	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - B5199 Huyton Lane (North-Eastern Arm)	0.60	8.09	1.5	A
2 - Asda Access	0.16	3.53	0.2	A
3 - B5199 Huyton Lane (South-Western Arm)	0.56	6.88	1.3	A
4 - Proposed Site Access	0.00	0.00	0.0	A

Observed 2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5199 Huyton Lane/Asda Access/Proposed Site Access	Standard Roundabout		1, 2, 3, 4	10.34	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.34	B

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)
D2	Observed 2025	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B5199 Huyton Lane (North-Eastern Arm)		✓	656	100.000
2 - Asda Access		✓	481	100.000
3 - B5199 Huyton Lane (South-Western Arm)		✓	816	100.000
4 - Proposed Site Access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
	1 - B5199 Huyton Lane (North-Eastern Arm)	0	186	470	0
	2 - Asda Access	180	1	300	0
	3 - B5199 Huyton Lane (South-Western Arm)	519	294	3	0
	4 - Proposed Site Access	0	0	0	0

Vehicle Mix

Heavy Vehicle %

	To				
From		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
	1 - B5199 Huyton Lane (North-Eastern Arm)	10	0	2	10
	2 - Asda Access	0	0	0	10
	3 - B5199 Huyton Lane (South-Western Arm)	2	0	0	10
	4 - Proposed Site Access	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - B5199 Huyton Lane (North-Eastern Arm)	0.68	10.69	2.1	B
2 - Asda Access	0.42	4.98	0.7	A
3 - B5199 Huyton Lane (South-Western Arm)	0.77	13.23	3.2	B
4 - Proposed Site Access	0.00	0.00	0.0	A

Without Development 2030, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5199 Huyton Lane/Asda Access/Proposed Site Access	Standard Roundabout		1, 2, 3, 4	7.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.59	A

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)
D3	Without Development 2030	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B5199 Huyton Lane (North-Eastern Arm)		✓	651	100.000
2 - Asda Access		✓	189	100.000
3 - B5199 Huyton Lane (South-Western Arm)		✓	668	100.000
4 - Proposed Site Access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
From	1 - B5199 Huyton Lane (North-Eastern Arm)	3	107	541	0
	2 - Asda Access	75	0	114	0
	3 - B5199 Huyton Lane (South-Western Arm)	477	191	0	0
	4 - Proposed Site Access	0	0	0	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
From	1 - B5199 Huyton Lane (North-Eastern Arm)	49	1	3	10
	2 - Asda Access	0	10	1	10
	3 - B5199 Huyton Lane (South-Western Arm)	4	0	10	10
	4 - Proposed Site Access	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - B5199 Huyton Lane (North-Eastern Arm)	0.63	8.93	1.8	A
2 - Asda Access	0.17	3.63	0.2	A
3 - B5199 Huyton Lane (South-Western Arm)	0.60	7.41	1.5	A
4 - Proposed Site Access	0.00	0.00	0.0	A

Without Development 2030, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5199 Huyton Lane/Asda Access/Proposed Site Access	Standard Roundabout		1, 2, 3, 4	12.40	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.40	B

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)
D4	Without Development 2030	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B5199 Huyton Lane (North-Eastern Arm)		✓	692	100.000
2 - Asda Access		✓	508	100.000
3 - B5199 Huyton Lane (South-Western Arm)		✓	861	100.000
4 - Proposed Site Access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
From	1 - B5199 Huyton Lane (North-Eastern Arm)	0	196	496	0
	2 - Asda Access	190	1	317	0
	3 - B5199 Huyton Lane (South-Western Arm)	547	310	3	0
	4 - Proposed Site Access	0	0	0	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
From	1 - B5199 Huyton Lane (North-Eastern Arm)	10	0	1	10
	2 - Asda Access	0	0	0	10
	3 - B5199 Huyton Lane (South-Western Arm)	1	0	0	10
	4 - Proposed Site Access	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - B5199 Huyton Lane (North-Eastern Arm)	0.72	12.51	2.6	B
2 - Asda Access	0.45	5.33	0.8	A
3 - B5199 Huyton Lane (South-Western Arm)	0.81	16.48	4.2	C
4 - Proposed Site Access	0.00	0.00	0.0	A

With Development 2030, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5199 Huyton Lane/Asda Access/Proposed Site Access	Standard Roundabout		1, 2, 3, 4	8.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.21	A

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)
D5	With Development 2030	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B5199 Huyton Lane (North-Eastern Arm)		✓	659	100.000
2 - Asda Access		✓	189	100.000
3 - B5199 Huyton Lane (South-Western Arm)		✓	677	100.000
4 - Proposed Site Access		✓	81	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
	1 - B5199 Huyton Lane (North-Eastern Arm)	3	107	541	8
	2 - Asda Access	75	0	114	0
	3 - B5199 Huyton Lane (South-Western Arm)	477	191	0	9
	4 - Proposed Site Access	38	0	43	0

Vehicle Mix

Heavy Vehicle %

	To				
From		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
	1 - B5199 Huyton Lane (North-Eastern Arm)	49	1	3	0
	2 - Asda Access	0	10	1	10
	3 - B5199 Huyton Lane (South-Western Arm)	4	0	10	0
	4 - Proposed Site Access	50	10	50	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - B5199 Huyton Lane (North-Eastern Arm)	0.66	9.78	1.9	A
2 - Asda Access	0.18	3.77	0.2	A
3 - B5199 Huyton Lane (South-Western Arm)	0.61	7.64	1.6	A
4 - Proposed Site Access	0.15	10.60	0.3	B

With Development 2030, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5199 Huyton Lane/Asda Access/Proposed Site Access	Standard Roundabout		1, 2, 3, 4	13.41	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.41	B

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)
D6	With Development 2030	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B5199 Huyton Lane (North-Eastern Arm)		✓	705	100.000
2 - Asda Access		✓	508	100.000
3 - B5199 Huyton Lane (South-Western Arm)		✓	873	100.000
4 - Proposed Site Access		✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
	1 - B5199 Huyton Lane (North-Eastern Arm)	0	196	496	13
	2 - Asda Access	190	1	317	0
	3 - B5199 Huyton Lane (South-Western Arm)	547	310	3	12
	4 - Proposed Site Access	9	0	8	0

Vehicle Mix

Heavy Vehicle %

	To				
From		1 - B5199 Huyton Lane (North-Eastern Arm)	2 - Asda Access	3 - B5199 Huyton Lane (South-Western Arm)	4 - Proposed Site Access
	1 - B5199 Huyton Lane (North-Eastern Arm)	10	0	1	0
	2 - Asda Access	0	0	0	10
	3 - B5199 Huyton Lane (South-Western Arm)	1	0	0	0
	4 - Proposed Site Access	0	10	0	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - B5199 Huyton Lane (North-Eastern Arm)	0.74	13.40	2.8	B
2 - Asda Access	0.46	5.45	0.8	A
3 - B5199 Huyton Lane (South-Western Arm)	0.83	18.15	4.7	C
4 - Proposed Site Access	0.04	8.47	0.0	A