Project: Land at Mount Road, Gorton, Manchester

Client: Kellen Homes and
Greater Manchester Youth Federation (GMYF)

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1 Introduction

General

1.1 This Transport Assessment has been prepared by CBO Transport Ltd [CBO] on behalf of Kellen Homes and the Greater Manchester Youth Federation [GMYF] and is submitted in support of an application for full planning permission at Land at Mount Road, Gorton (referred to from here on in as "the site"). A Travel Plan Framework has also been prepared and submitted with the application.

1.2 The description of development is as follows:

"Full planning application proposing the erection of a youth, sports and community hub (Use Class E(d)(g)), F2(b)), 2no football pitches combined netball and basketball court, cricket strip (Use Class F2 (c)), a three storey apartment building comprising 36no apartments for young person's accommodation (Use Class C3) and 267no dwellinghouses (Use Class C3a), with associated landscaping, public realm, ecological mitigation, refuse storage, drainage, car parking and other associated works, with access from Wembley Road and Mount Road."

1.3 The application site is owned by GMYF in its entirety. GMYF is a charity, originating from the mid 1800s, who work with a wide variety of voluntary youth groups and projects throughout the most disadvantaged communities of Greater Manchester. GMYF's aim is to provide as many opportunities as possible for young people to grow and be the best that they can be, helping them to move beyond their boundaries. In simple terms, it is about getting young people off the streets, into clubs and doing something positive with their time.

1.4 The application site was previously in use as football pitches but has been vacant and underutilised since 2019 with no public access. GMYF selected Kellen Homes as their developer partner and together, with their professional teams, they have developed proposals for the site which will secure its future as a youth, community and sports hub whilst also providing much needed housing in Gorton.

1.5 The proposed development is described fully in the Design and Access Statement prepared by Gillespies and presented on the application drawings. The application proposals have been developed in consultation with Manchester City Council Officers and other key stakeholders.

1.6 The site is located in the Gorton area of Manchester and is bound by Mannering Street and residential properties to the north, a dedicated pedestrian / cycle route, residential properties and an educational establishment to the south, Wembley Road to the east and Mount Road to the west. The location of the site is shown in **Figure 1.1**.

1.7 The site is located in the Manchester City area and Manchester City Council is both the local planning authority and highway authority for the local roads in the vicinity of the site.

Discussions with Manchester City Council / Report Requirements

1.8 CBO has held discussions with Manchester City Council [MCC] highways regarding the issues to be covered in this report, whilst MCC has also discussed these requirements with Transport for Greater Manchester [TfGM]. Given the scale and nature of the proposals, it has been agreed that a Transport Assessment is required to support the planning application providing details of the accessibility of the site by the sustainable modes and the changes to traffic movement at the site arising from the scheme. In terms of traffic consideration, a study area has been agreed which includes:

- The proposed site accesses;
- B6178 Mount Road / Matthews Lane;
- B6178 Mount Road / Kirkmanshulme Lane;
- A57 Hyde Road / Mount Road / Glencastle Road;
- A57 Hyde Road / Glencastle Road / Queens Avenue; and
- A57 Hyde Road / A6010 Pottery Lane.

Scope of Report

1.9 In light of the above, the purpose of this report is to provide MCC with the necessary information to support the proposals and consider their transport implications. In order to provide this information, this report has been produced in 9 sections including this introduction.

1.10 Section 2 reviews relevant national and local plan policy, as well as planning policy guidance.

1.11 Section 3 reviews existing conditions and provides details of the study area from a highways perspective, whilst Section 4 considers the accessibility of the site by the sustainable modes and linkage to the surrounding area.

1.12 Section 5 provides details of the development proposals.

1.13 Section 6 then considers the traffic generations associated with the scheme, whilst Section 7 details its off-site traffic impact.

1.14 Section 8 goes on to set out details of the traffic flows used to undertake operational assessments, together with the findings of these assessments.

1.15 The conclusions and recommendations of the report are included in Section 9.

2 Planning Policy and Guidance

National Planning Policy Framework

2.1 National planning policy in relation to transport matters is set out in the revised National Planning Policy Framework [NPPF] July 2021.

2.2 With regard to transport, the policies are contained within paragraphs 104 to 113 at Section 9 and all relate to the promotion of sustainable transport. In considering development proposals, paragraph 108 states that:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

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

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree"

2.3 Paragraph 111 then goes on to state 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 would be severe".

Local Planning Policy

2.4 The "Manchester's Local Development Framework Core Strategy Development Plan Document" was adopted on the 11th July 2012. Objective 5 of this document relates to transport and, at paragraph 11.1, states:

"SO5. Improve the physical connectivity of the City, through sustainable transport networks, to enhance its functioning and competitiveness and provide access to jobs, education, services, retail, leisure and recreation".

2.5 Under this objective, Policy T 1 relates to "Sustainable Transport" as follows:

"To deliver a sustainable, high quality, integrated transport system to encourage modal shift away from car travel to public transport, cycling and walking, to support the needs of residents and businesses and to prepare for carbon free modes of transport, the Council will support proposals that: -

- *Improve choice by developing alternatives to the car.*
- *Promote regeneration and economic vitality by relieving traffic congestion and improving access to jobs and services, particularly for those most in need and for those without a car.*
- *Improve access to transport services and facilities in order to enable disabled people and people with mobility impairments to participate fully in public life.*
- *Improve pedestrian routes and the pedestrian environment.*
- *Improve and develop further Manchester's cycle network (for example the Manchester Cycleway and the Trans Pennine Trail).*
- *Contribute to improvements to the extent and reliability of the public transport network through safe and attractive waiting and interchange facilities, better priority, improved services and information provision.*
- *Improve and develop appropriate road, rail and water freight transport routes and associated intermodal freight transport facilities in order to assist in the sustainable and efficient movement of goods.*
- *Facilitate modes of transport that reduce carbon emissions e.g by incorporating charging points for electric vehicles, subject to their appropriate design and location.*

- *Would reduce the negative impacts of road traffic, for example, congestion, air pollution and road accident casualties.*
- *Take account of the needs of road users according to a broad hierarchy consisting of, in order of priority:*

  1. pedestrians and disabled people

  2. cyclists, public transport,

  3. commercial access,

  4. general off peak traffic,

  5. general peak time traffic"

2.6 Policy T 2 then relates to "Accessible areas of opportunity and need" as follows:

"The Council will actively manage the pattern of development to ensure that new development: -

- *Is located to ensure good access to the City's main economic drivers, including the Regional Centre, the Oxford Road Universities and Hospitals and the Airport and to ensure good national and international connections.*
- *Is easily accessible by walking, cycling and public transport; connecting residents to jobs, centres, health, leisure, open space and educational opportunities. Particular priority will be given to providing all residents access to strategic employment sites including:-*
  - *Links between North Manchester residents and key employment locations, including the City Centre, Central Park, Salford Quays and Chadderton Industrial Estate and Trafford Park.*
  - *Links within East Manchester to employment locations, Central Park and Eastlands in particular.*
  - *Links within Central Area between residents and employment, the Corridor in particular and east/west connectivity for residents in Central Area to employment areas in Trafford and East Manchester.*
  - *Maintaining strong links between residential areas in the South and the Regional Centre and improving connectivity with the Airport.*
- *Ensuring good links between Wythenshawe residents and the Airport and further employment opportunities in Stockport, Trafford and the Regional Centre.*
- *Within the City Centre, provides a level of car parking which reflects the highly accessible nature of the location, as well as the realistic requirements of the users of the development. Elsewhere, all new development should provide appropriate car parking facilities, taking account of the guidance in appendix B, which reflects policy in the Regional Strategy (RS). In all parts of the City proposals should have regard to the need for disabled and cycle parking, in line with appendix B. If the RS is revoked the Council will continue to use these standards when applying this policy. Standards are set for two different area types:*
  - *District Centres*
  - *Areas not within the City Centre or District Centres*
- *The car parking standards are maximums and the cycle and disabled car parking standards are minimums. However the Council will take the circumstances of each proposal into account to establish what level of parking is appropriate.*
- *Includes proportionate Traffic Impact Assessments and Travel Plans for all major applications and for any proposals where there are likely to be access or transport issues."*

Planning Practice Guidance

2.7 Planning Practice Guidance was published on the 6th March 2014 in relation to "Travel plans, transport assessments and statements in decision-taking".

2.8 In considering the over-arching principles that should be taken into account in preparing a Transport Assessment, this guidance suggests they should be:

- "proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;
- established at the earliest practicable possible stage of a development proposal;
- be tailored to particular local;
- be brought forward through collaborative ongoing working between the Local Planning Authority/ Transport Authority, transport operators, Rail Network Operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies."

2.9 This report accords with this guidance.

3 Existing Conditions and Study Area

Site Description

3.1 The site comprises an area of land at the B6178 Mount Road, situated within Gorton, a predominantly residential area located to the west of Manchester City Centre.

3.2 The site as existing is vacant, with no public access, having previously been used as playing pitches until 2019. The site comprises 9.07ha and is rectangular in shape with the majority formed of grass land aside from an area of hard standing where the former changing facilities once stood. The former vehicular access is from Mount Road.

3.3 The northern boundary of the site sits adjacent to a residential development built by Seddon Homes comprising terraced and semi detached properties, with Mannering Street running in between, separated by fencing. To the east is Wembley Road, which hosts a number of semidetached dwellings, with mature trees lining the site boundary. To the west is Mount Road, also lined with fencing and trees, with Gorton Primary School, Manchester Boxing Centre and Nutsford Vale Park adjacent to the street. To the south lies a footway which connects Mount Road to Wembley Road. Further south is Cedar Mount Academy and Melland High School, known collectively as Gorton Education Village.

3.4 The location of the site is shown in **Figure 1.1**.

3.5 There is one existing vehicular access to the site from the B6178 Mount Road, which runs north-south along the western boundary of the site. This access is approximately 5.5 metres wide and is located at the north-western corner of the site. The access joins the B6178 Mount Road via a kerbed radii arrangement and includes gates at the rear of the Mount Road footway.

3.6 In addition to this vehicular access, there are three gated pedestrian accesses to the site from the B6178 Mount Road located approximately 125, 185 and 255 metres from the northern site boundary. There are also two gated pedestrian accesses to the site from the public footpath to the south.

3.7 This vehicular access and all five pedestrian accesses are now closed.

3.8 There is no vehicular or pedestrian access provided to the site from Wembley Road.

Highway Study Area and Observed Traffic Flows / Speeds

Traffic Flows

3.9 As set out in the introduction and through discussions with MCC and TfGM, it has been agreed that the study area in terms of considering traffic impact be made up of the following local junctions:

- The proposed site accesses;
- B6178 Mount Road / Matthews Lane;
- B6178 Mount Road / Kirkmanshulme Lane;
- A57 Hyde Road / Mount Road / Glencastle Road;
- A57 Hyde Road / Glencastle Road / Queens Avenue; and
- A57 Hyde Road / A6010 Pottery Lane.

3.10 In order, therefore, to ascertain existing traffic flows at the junctions identified above and past the proposed site, fully classified turning counts were undertaken by an independent survey company on the Tuesday 22nd November 2022 between the hours 7:00 and 10:00 and 16:00 and 19:00. Automatic traffic counters were also placed on the B6178 Mount Road and Wembley Road outside the site for a period of 7 days between the 13th and 19th December 2022 and the 22nd and 28th November 2022 respectively.

3.11 Based on these surveys, the weekday morning peak was seen to occur during the hour 7:45 to 8:45 at the B6178 Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road, A57 Hyde Road / Glencastle Road / Queens Avenue and A57 Hyde Road / A6010 Pottery Lane junctions. At the B6178 Mount Road / Matthews Lane junction, and in turn on the B6178 Mount Road past the site, the weekday morning peak was seen to occur during the hour 8:15 to 9:15. On Wembley Road, the weekday morning peak occurred during the hour 8:00 to 9:00.

3.12 Considering the weekday evening peak, this was seen to occur during the hour 16:15 to 17:15 at the B6178 Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Glencastle Road / Queens Avenue junction and at 16:30 17:30 at the A57 Hyde Road / A6010 Pottery Lane junction. At the B6178 Mount Road / Matthews Lane junction, and in turn on the B6178 Mount Road past the site, the weekday evening peak was seen to occur during the hour 16:45 to 17:45. On Wembley Road, the weekday evening peak occurred during the hour 16:00 to 17:00.

3.13 Based on these time periods, the observed weekday morning and evening peak hour traffic flows are shown in **Figure 3.1**. It should be noted that, whilst these flows are from November 2022, conditions will not have changed in the intervening seven or eight months therefore they are still considered representative of existing conditions.

Suppressed demand

3.14 The peak hour flows referred to above are based on observed traffic flows through each junction. However, in the past when assessing the A57 corridor, TfGM has requested that traffic counts also measure queue lengths to understand the extent of suppressed demand, with actual demand rather than the measured demand then being used in assessments.

3.15 In light of the above, the surveys referred to above also included queue length surveys at 5 minute intervals, with queue lengths recorded in each lane on each approach. Two queue lengths were recorded, namely the maximum queue every five minutes (max) and the queue at the end of the closest red period to these five minute intervals (spot). The results of these queue length surveys are included in the tables at **Appendix A**.

A57 Hyde Road / Mount Road / Glencastle Road, A57 Hyde Road / Queens Avenue and Mount Road / Kirkmanshulme Lane

3.16 During both the morning and evening peaks, the tables at Appendix A show that there is no suppressed demand at the *A57 Hyde Road / Mount Road / Glencastle Road, A57 Hyde Road / Queens Avenue and Mount Road / Kirkmanshulme Lane* junctions, with queue lengths at the end of the peak hours not exceeding what would pass through the junctions during a single cycle.

A57 Hyde Road / A6010 Pottery Lane

3.17 During the morning peak, the table at Appendix A shows that there is no suppressed demand on the A57 Hyde Road (W) and A6010 Pottery Lane (S) approach to the A57 Hyde Road / A6010 Pottery Lane junction, with queue lengths at the end of the peak hour not exceeding what would pass through the junctions during a single cycle. However, on the A57 Hyde Road (E) approach, queues are around 50 vehicles longer at the end of the peak hour than at the start and around 30 vehicles longer 5 minutes after the peak hour than at the start. On the A6010 Pottery Lane (N) approach, queues are around 25 vehicles longer at the end of the peak hour than at the start and around 20 vehicles longer 5 minutes after the peak hour than at the start.

3.18 Based on the above, the observed traffic flows in Figure 3.1 include increases of 40 vehicles on the A57 Hyde Road (E) approach and 20 vehicles on the A6010 Pottery Lane (N) approach to make allowances for this suppressed demand.

3.19 During the evening peak, the table at Appendix A show that there is no suppressed demand at the *A57 Hyde Road / A6010 Pottery Lane junction,* with queue lengths at the end of the peak hours not exceeding what would pass through the junction during a single cycle.

B6178 Mount Road / Matthews Lane

3.20 During both the morning and evening peaks, the tables at Appendix A show that there is no suppressed demand at the B6178 Mount Road / Matthews Lane junction, with no more than 3 vehicles queuing at the end of the peak hours.

Summary

3.21 Based on the above and with the identified adjustments to the A57 Hyde Road (E) and A6010 Pottery Lane (N) approaches to the A57 Hyde Road / A6010 Pottery Lane junction, the observed flows through the identified junctions are considered representative of 'actual' demand flows and therefore appropriate for assessing the operation of these junctions.

Traffic Speeds

3.22 As set out above ATCs were placed outside the site on the B6178 Mount Road and Wembley Road for a period of 7 days. These locations are considered suitable to pick up traffic speeds for the purpose of considering the appropriateness of accesses to the site. The data from these ATCs is included at **Appendix B**, whilst the average results over the 7 day period (rounded up to the next full mph) are set out below in Table 3.1.

Table 3.1: Speed Survey Results

	Average Speed (mph)		85th Percentile Speed (mph)	
	Northbound	Southbound	Northbound	Southbound
B6178 Mount Road	23	23	29	29
Wembley Road	27	27	34	34

3.23 As can be seen from the above table, the average speeds along the B6178 Mount Road and Wembley Road are above the 20mph speed limits that are in place but below the traditional 30mph limit for urban roads. The 85th percentile speeds are also below the 37mph design speed for a 30mph speed limit.

Highway Network

Wembley Road

3.24 Wembley Road past the eastern site frontage is a single carriageway road of approximately 7.5 metres in width. It broadly travels in a north – south direction, linking with Melland Road / Hemsworth Road to the north of the site and Holmcroft Road to the south. The route is lit and subject to a 20mph speed limit along its length.

3.25 The route includes frontage residential properties on its eastern side along the full length between Melland Road and Holmcroft Road and on its western side north of the site through to Melland Road. These residential dwellings are served by individual private driveways accessed from Wembley Road.

3.26 Approximately 100 metres south of the northern site boundary and opposite the site, Wembley Road is joined on its eastern side by Harlow Drive, which is a circa 3 metre wide cul-de-sac serving 16 dwellings.

3.27 At the southeast corner of the site, Wembley Road is joined on its eastern side by Holmcroft Road, which heads east from Wembley Road. However, the Wembley Road – Holmcroft Road route forms the main route through this junction, turning through circa 110 degrees with the southern part of Wembley Road then joining the outside of this bend as the minor arm of a simply priority T junction. From this junction, Wembley Road continues south for a distance of approximately 35 metres, where it forms the access to Cedar Mount Academy and Melland High School and is also joined by Rawsthorne Avenue to the east.

3.28 Both sides of this circa 35 metre length of Wembley Road, together with circa 20 metres of the northern side of Holmcroft Road and circa 20 metres of both sides of the northern part of Wembley Road, is protected by at any time, double yellow line waiting restrictions.

B6178 Mount Road outside site

3.29 The B6178 Mount Road past the western site frontage is a single carriageway road of approximately 7.4 metres in width. It broadly travels in a north – south direction, linking with the A57 Hyde Road to the north and (via the B6178 Broom Lane) the A6 to the south. The route is lit and, past the site frontage, is subject to a 20mph speed limit.

3.30 Approximately 30 metres south of the northern site boundary, the B6178 Mount Road is joined on the western side by an access serving Gorton Primary School. A further circa 55 metres south of this access (and circa 85 metres south of the northern site boundary), the B6178 Mount Road is also joined on the western side by an access serving Grange School. Both of these accesses join the B6178 Mount Road via kerbed radii arrangements.

3.31 With regard to the access serving Grange School, this is only used to serve a small car park (circa 12 spaces) and by kitchen deliveries and is not the main access to the school, which is from Matthews Lane.

3.32 At the southwest corner of the site, the B6178 Mount Road is joined on its western side by Matthews Lane, which forms the minor arm of a simple priority junction and includes a central refuge island at the junction.

3.33 Approximately 45 metres north of the B6178 Mount Road / Matthews Lane junction, Mount Road includes a Toucan crossing facility whilst, approximately 60 metres north of the site, there is also a signal controlled pedestrian crossing. The circa 310 metre length of Mount Road between these two crossings points includes traffic calming in the form of speed humps at either end and shallower speed humps in between.

3.34 At the northern end of the site, there are single yellow line waiting restrictions on the site side of the B6178 Mount Road running north. From a point approximately 15 metres south of the northern site boundary, double yellow line, at anytime waiting restrictions then extend south for a distance of approximately 80 metres to a point just south of the access to Grange School. Along this section, the west side of the B6178 Mount Road is protected by a combination of double yellow line at any time waiting restrictions and school keep clear zig zag markings.

3.35 Approximately 30 metres south of these restrictions, there is a circa 20 metre length of double yellow line at any time waiting restrictions running alongside one of the shallower speed humps, with another circa 20 metre length of double yellow line at any time waiting restrictions located a further circa 30 metres south alongside on of the other shallower speed humps.

Wider network

3.36 Approximately 100 metres north of the site, the B6178 Mount Road and Wembley Road are linked by Melland Road, which runs east – west between the two routes. At its western end, Melland Road joins the B6178 Mount Road as the minor arm of a 4 arm priority junction, with Longsight Road forming the fourth arm to the west. At its junction with Wembley Road, Melland Road forms the main route through a priority controlled crossroads, with Wembley Road forming the minor arms to both sides.

3.37 North of its junction with Melland Road, the B6178 Mount Road continues north for a distance of approximately 1km where it is joined by Kirkmanshulme Lane via a signal controlled T junction. Traffic entering this junction from Kirkmanshulme Lane must turn left, with the right turn movement prohibited. Traffic can however enter Kirkmanshulme Lane from the B6178 Mount Road in both directions. The southbound B6178 Mount Road approach to the junction includes a dedicated right turn lane into Kirkmanshulme Lane, together with a dedicated ahead lane for traffic continuing on Mount Road. The northbound B6178 Mount Road approach includes two lanes, both of which travel ahead whilst the nearside lane also provides a left turn into Kirkmashulme Lane.

3.38 Approximately 60 metres to the north-east of the B6178 Mount Road / Kirkmanshulme Lane junction, Mount Road joins the A57 Hyde Road via the four arm A57 Hyde Road / Mount Road / Glencastle Road signal controlled junction. The B6178 Mount Road approach to this junction is made up of three lanes, including a dedicated left turn lane and two dedicated right turn lanes onto the A57 Hyde Road. The A57 Hyde Road itself includes two lanes on each approach to the junction, with the westbound nearside being used by traffic turning left into the B6178 Mount Road. Heading eastbound through the junction, the A57 Hyde Road is restricted to the ahead only movements, with the right turn movement into the B6178 Mount Road prohibited.

3.39 Traffic wishing to turn from the eastbound A57 Hyde Road into the B6178 Mount Road at this junction is required to use the fourth arm of the junction, Glencastle Road. This is a one way route that is accessed from the A57 Hyde Road / Queens Avenue junction to the west and allows traffic to enter the B6178 Mount Road and either continue south on Mount Road or turn right into Kirkmanshulme Lane. Glencastle Road also includes a dedicated bus lane / left turn lane for buses, which eastbound buses use to pass through the A57 Hyde Road / Mount Road / Glencastle Road junction via a Glencastle Road bus stop instead of continuing through the junction on the A57 Hyde Road.

3.40 The A57 Hyde Road / Queens Avenue signal controlled junction is located approximately 170 metres to the west of the A57 Hyde Road / Mount Road / Glencastle Road junction. As well as providing access to the Glencastle Road route referred to above from the eastbound A57 Hyde Road and Queens Avenue, this junction also allows all movements for traffic leaving Queens Avenue to join the A57 Hyde Road. Traffic can also turn left into Queens Avenue at this junction from the nearside lane of two eastbound A57 Hyde Road approach lanes. However, the right turn from the A57 Hyde Road into Queens Avenue is prohibited, with the two lane westbound A57 Hyde Road approach to the junction being restricted to the ahead movement in both lanes.

3.41 Approximately 840 metres west of the A57 Hyde Road / Queens Avenue is junction, the A6010 Pottery Lane passes through the A57 Hyde Road via a four arm traffic signal controlled junction. All four approaches to this junction include two through lanes and a left turn movement from the nearside lane. All approaches also include dedicated right turn lanes of varying lengths.

Highway Conditions

3.42 Observations during the weekday evening peak showed that the junctions within the study area were operating with spare capacity, with no prolonged queueing or delay observed at the identified junctions.

3.43 With regard to the school pick up period, vehicles were seen to park on both sides of Wembley Road along the length between Melland Road and Holmcroft Road. On the B6178 Mount Road, vehicles were seen to park on the footway at the northern end of the site. This parking was in association with Gorton Primary School, with no pupils of Grange School being picked up from the access opposite the site.

Personal Injury Accident Record

3.44 Based on personal injury accident data that is freely available on the internet for the period 2017 to 2021, consideration has been given to the areas of the B6178 Mount Road and Wembley Road in the vicinity of the site, together with the identified off-site junctions.

Wembley Road

3.45 This data shows there have been no personal injury accidents recorded during the identified five year period on the length of Wembley Road that runs between Melland Road to the north and Holmcroft Road to the south.

B6178 Mount Road

3.46 Along the site frontage, this data shows there has been one personal injury accident recorded during the identified five year period. This accident was a slight injury accident, occurred in February 2019 and did not involve a pedestrian or a cyclist.

B6178 Mount Road / Matthews Lane

3.47 There has been 1 personal injury accident recorded at the B6178 Mount Road / Matthews Lane junction during the identified period. This was a slight injury accident, occurred in October 2021 and involved a pedestrian. Another slight injury accident was also recorded just south of this junction on Mount Road which occurred in May 2021 and also involved a pedestrian.

B6178 Mount Road / Kirkmanshulme Lane

3.48 There has been 1 personal injury accident recorded at the B6178 Mount Road / Kirkmanshulme Lane junction during the identified period. This was a slight injury accident, occurred in June 2018 and involved a pedestrian.

3.49 Between around 25 and 50 metres west of the junction, there have been 4 personal injury accidents recorded on Kirkmanshulme Lane. Two of these, which occurred in June 2018 and December 2019, were serious injury accidents. The other two, which occurred in January 2017 and December 2020, were slight injury accidents. None of these accidents involved a pedestrian or a cyclist.

A57 Hyde Road / Mount Road / Glencastle Road junction

3.50 There have been 5 personal injury accidents recorded at the A57 Hyde Road / Mount Road / Glencastle Road junction during the identified period. Two of these were serious injury accidents, with the remaining 3 being slight accidents.

3.51 The serious injury accidents occurred in July 2017 and October 2019. Both involved pedestrians.

3.52 With regard to the 3 slight injury accidents, one of these occurred in February 2017 and involved a pedestrian. The other two, which occurred in January 2017 and January 2019, did not involve a pedestrian or a cyclist.

A57 Hyde Road / Queens Avenue junction

3.53 There has been 1 personal injury accident recorded at the A57 Hyde Road / Queens Avenue junction during the identified period. This was a slight injury accident, occurred in March 2018 and did not involve a pedestrian or a cyclist.

A57 Hyde Road / A6010 Pottery Lane

3.54 There have been 12 personal injury accidents recorded at the A57 Hyde Road / A6010 Pottery Lane junction during the identified period. One of these was a serious injury accident, with the remaining 11 being slight injury accidents.

3.55 The serious injury accident occurred in September 2017 and involved a pedestrian.

3.56 With regard to the 11 slight injury accidents, one of these occurred in May 2018 and involved a cyclist. Of the remaining 10 slight injury accidents, 5 occurred in 2017, 4 occurred in 2019 and 1 occurred in 2021. None of these accidents involved a pedestrian or a cyclist.

Summary

3.57 There are no notable accident issues on Wembley Road, the B6178 Mount Road along the site frontage or at the B6178 Mount Road / Matthews Lane junction which traffic from the proposed development would exacerbate. Whilst there have been a number of personal injury accidents recorded at the identified off-site junctions within the study area, particularly at the A57 Hyde Road / A6010 Pottery Lane junction, it is also suggested that the minimal increases in traffic in these locations associated with the development (as referred to later in this report) considered against existing traffic flows through these junctions would not materially exacerbate existing conditions.

4 Accessibility by the Sustainable Modes

Pedestrian & Cycle Infrastructure

4.1 As shown in the local linkages plan at **Figure 4.1**, the proposed site has good accessibility for pedestrians and cyclists.

Existing pedestrian infrastructure

4.2 The B6178 Mount Road and Wembley Road include good quality and width footways to both sides. In addition and as shown in **Figure 4.1**, and as referred to previously in Section 3, the B6178 Mount Road includes a Toucan crossing located approximately 45 metres north of the B6178 Mount Road / Matthews Lane junction, together with a signal controlled pedestrian crossing located approximately 60 metres north of the site. There is also a kerbed central island with tactile paving located on Matthews Lane at its junction with the B6178 Mount Road. To the north, there are dropped crossings with tactile paving on all four arms of the B6178 Mount Road / Melland Road / Longsight Road junction. At Wembley Road, there is a signal controlled pedestrian crossing on Melland Road located just west of its junction with Wembley Road.

4.3 In addition to these provisions adjacent to local roads and as shown in **Figure 4.1**, there is a dedicated pedestrian / cycle route running along the southern boundary of the site that links Wembley Road to the east with the B6178 Mount Road to the west.

4.4 These facilities provide good quality pedestrian access on desire lines to the services and facilities referred to later in this section.

Existing cycle infrastructure

4.5 As set out above, there is a dedicated pedestrian / cycle route running along the southern boundary of the site that links Wembley Road to the east with the B6178 Mount Road to the west. In addition and as shown in **Figure 4.1**, Wembley Road is a signposted on road cycle route and links to other signposted on road routes and 20mph roads to the east. To the west of the dedicated link and as previously referred to, there is a Toucan crossing on the B6178 Mount Road just north of the link and Matthews Lane. This provides cyclists with access to Matthews Lane, which is also a signposted on road cycle route. There are also a number of 20mph roads to the north of the site off the B6178 Mount Road which are conducive to cycle use.

4.6 These routes provide access to the facilities and areas around the site.

Proposed pedestrian / cycle infrastructure

4.7 As set out later in Section 5, the footways within the site would link to the existing provision on the B6178 Mount Road and Wembley Road, whilst the roads within the scheme would be conducive to cycle use. Dropped crossings with tactile paving would also be provided at junctions within the scheme.

4.8 In addition and as discussed in Section 5, it is proposed to provide pedestrian links from the site to Mannering Street to the north and the dedicated pedestrian / cycle route to the south. It is also proposed to provide a new dropped crossing with tactile paving on Wembley Road in the proximity of the bus stops.

4.9 With these provisions and links in place, residents of / visitors to the development travelling on foot and by bicycle could access the pedestrian and cycle routes surrounding the site and shown in **Figure 4.1**.

Levenshulme and Burnage Low traffic Neighbourhood Scheme

4.10 The Levenshulme and Burnage Low Traffic Neighbourhood Scheme consultation period finished earlier this year. MCC's website for the scheme states that "*discussions with Transport for Greater Manchester are ongoing about the final design of Phase 2, but it is hoped that work will begin on the ground later this year.*"

4.11 In the vicinity of the site, this scheme includes proposals for Matthews Lane, the key aspects of which are:

- The removal of the existing Toucan crossing north of junction on the B6178 Mount Road and the creation of a new signal junction with Toucan controlled crossings (which allow pedestrians and cyclists to cross separately) on all the arms of the junction;

- A segregated cycle lane and 0.5m kerbed buffer zone on both sides of Matthews Lane form the junction with Prestage Street and St Oswald Street to the junction with Lonsdale Road (south side), then becoming a 2-way cycle lane on the north side of Matthews Lane from near the junction with Lonsdale Road to the junction with Mount Road; and
- A number of raised tables, flat top humps and controlled crossing points along Matthews Lane.

Summary

4.12 Based on the above and with the proposed linkages in place, the pedestrian and cycle infrastructure in the vicinity of the site and on local desire lines is considered to be of a good quality, providing a suitable and safe pedestrian and cyclist environment. This pedestrian and cycle infrastructure also provides access to the services, facilities and public transport network discussed below that are within walking and cycling distance of the site.

Accessibility for Pedestrians

4.13 It is commonly accepted that walking has the greatest potential to replace short car trips, particularly those under two kilometres, whilst the Institution of Highways and Transportation "Guidelines for Providing for Journeys on Foot" states that *"Walking accounts for over a quarter of all journeys and four fifths of journeys less than one mile"*.

4.14 The "Guidelines for Providing for Journeys on Foot" also includes a table which suggests that 800 metres is an acceptable maximum walking distance in a town centre and that 1.2km is an acceptable maximum walking distance elsewhere. It also suggests a distance of 2km is an acceptable maximum for commuter and education journeys, although statutory guidance indicates that just over 3km is an acceptable walk distance for primary school pupils, with secondary school pupils being expected to walk up to 5km.

4.15 In the context of the above, **Figure 4.2** shows the 800m, 1.2km and 2km walking catchments for the site. The areas, services and facilities within these catchments, which are based on walking route distances from the centre of the site and not distances as the crow flies, are discussed below.

Local Schools

4.16 As shown in **Figures 4.1 and 4.2**, Gorton Primary School is located immediately opposite the site on the B6178 Mount Road and therefore well within the 800 metre walking catchment for the site. At around a 850 metre walk, **Figure 4.2** shows Rushbrook Primary Academy is also around the 800 metre walking catchment for the site. In addition, **Figure 4.2** shows there are four other primary schools within the 1.2km catchment, including Old Hall Drive Academy (1.0km), Sacred Heart RC Primary School (1.0km), St Richard's Primary School (1.1km) and Crowcroft Park Primary School (1.2km). Stanley Grove Primary Academy is also a 1.7km walk from the site and therefore within the 2km catchment.

4.17 All seven of the primary schools referred to above are therefore within the 2km distance deemed acceptable by the IHT guidelines and well within the 3km statutory walk distance.

4.18 With regard to high schools and as shown in **Figures 4.1 and 4.2**, Cedar Mount Academy and Melland High School are located immediately to the southeast of the site off Wembley Road and therefore well within the 800 metre walking catchment for the site. As also shown in **Figure 4.2**, St Peter's RC High School is 1.5km from the site. All three schools are therefore within the 2km distance deemed acceptable by the IHT guidelines and well within the 5km statutory walk distance.

4.19 In addition to the above and as shown in **Figures 4.1 and 4.2**, Grange school is also located immediately opposite the site on the B6178 Mount Road and therefore well within the 800 metre walking catchment for the site.

4.20 In the context of the above, it is suggested that the site is well placed to allow future pupils to walk to and from school.

Local Shops and Post Office

4.21 As shown in **Figures 4.1 and 4.2**, the 800 metre catchment for the site takes in a convenience store and the majority of a row of local shops on the B6178 Mount Road. These local shops include a Post Office and a Pharmacy.

4.22 These facilities therefore provide key services and shopping facilities within an acceptable walk distance of the proposed site.

District Centre

4.23 As shown in **Figure 4.2**, the 2km catchment for the site takes in Gorton District Centre to the north and Levenshulme District Centre to the west.

4.24 These district centres, which are considered to be within walking distance of the site, include numerous retail, leisure and employment destinations.

Doctors / Health Facilities

4.25 As shown in **Figure 4.2**, Mount Road Surgery is 1.0km from the site. In addition and as also shown in **Figure 4.2**, Parkside Medical Centre and Levenshulme Medical Centre are around 1.2km from the site and within the 1.2km catchment. There is therefore considered to be access to health facilities within walking distance of the site.

Annie Lees Park

4.26 As shown in **Figures 4.1 and 4.2**, Annie Lees Park is situated around 1km to the north of the site and offers future residents access to a recreational facility within easy walking distance.

West Gorton JFC Playing Field

4.27 As shown in **Figures 4.1 and 4.2**, West Gorton JFC playing field is situated around 1.1km to the north of the site and offers future residents access to a football facility within easy walking distance.

Residential areas

4.28 As shown in **Figure 4.2**, the 2km catchment takes in a large proportion of north and south Gorton, as well as parts of Longsight and Levenshulme. Residents of these areas would therefore be well placed to walk to make use of the proposed community facility.

Bus Stops and Railway Station

4.29 As shown in **Figures 4.1 and 4.2**, the closest bus stops are situated immediately outside the site on the B6178 Mount Road and Wembley Road.

4.30 In addition to these bus stops and as also shown in **Figure 4.2**, Ryder Brow railway station is situated approximately 850 metres from the site.

4.31 As set out later in this section, these bus stops and the railway station are considered accessible from the proposed site on foot.

Summary

4.32 The above demonstrates that the site is well placed in terms of pedestrian connectivity and that walking represents a very realistic alternative to the car for future residents undertaking educational and 'top up' shopping trips, some recreational trips and potentially employment trips. Walking is also a realistic alternative to the car for future users of the community facility walking directly from home. Furthermore, the site is well placed for future residents to access local facilities and district centres, as well as for future residents and users of the community facility to connect to the local bus network.

Accessibility for Cyclists

4.33 Considering the accessibility of the site by bicycle, it is commonly accepted that cycling also has the potential to substitute for short car trips, particularly those under five kilometres, and to form part of a longer journey by public transport. In this context, **Figure 4.3** shows the 5km cycling catchment for the site.

4.34 As can be seen from **Figure 4.3**, the south side of Manchester is within the 5km distance, as are places such as Reddish, Denton and Droylsden. The 5km catchment also extends to the southern edge of Manchester City Centre and the northern edge of Stockport Town Centre, whilst just a further 1km or 2km would take in these centres in their entirety. Although outside the 5km catchment, these 6km or 7km catchments would be accessible to some future residents / users of the site, particularly given the growing popularity of e-bikes.

4.35 In addition, Ryder Brow and Levenshulme railway stations are within a 850 metre and 2km cycle ride respectively from the site.

4.36 The site is therefore ideally placed for future residents to travel by bicycle for educational, employment, retail and leisure trips and for users of the community facility to cycle to the site. It also offers the opportunity for future residents and users of the community facility to cycle to join the local rail network.

Accessibility by Public Transport

Bus

4.37 As set out above and shown in **Figures 4.1 and 4.2**, the closest bus stops are situated immediately outside the site on the B6178 Mount Road and Wembley Road. These stops are within the 400 metre distance referred to in guidance.

4.38 Based on the above, Table 4.1 below shows the buses serving the site.

Table 4.1: Local Bus Services (Monday to Saturday and Sunday)

No.	Route	AM Peak	Off Peak	PM Peak	Saturday	Sunday
Mount Road						
150	Gorton – Belle Vue – Longsight – Levenshulme – Fallowfield – Chorlton – Stretford – The Trafford Centre	2 buses	Every 30mins	2 buses	Every 30mins	Hourly
171	Newton Heath – Gorton – Levenshulme – Burnage – Didsbury – East Didsbury	Hourly	Hourly	Hourly	Hourly	No service
172	Newton Heath – Gorton – Levenshulme – Burnage – Southern Cemetery	Hourly	Hourly	Hourly	Hourly	Hourly
Wembley Road						
172	As above for Mount Road					

4.39 As can be seen from the above, the 150 bus provides regular services between Gorton and The Trafford Centre. With regard to the 171 and 172 buses, these are staggered to provide a 30 minute frequency between Newton Heath and Fog Lane park. These services therefore offer the opportunity for future residents of the scheme to travel by bus, with regular services to local employment, retail and leisure destinations. They also offer the opportunity for uses of the community facility to travel by this mode.

4.40 In addition, the 171 and 172 buses provide a 30 minute frequency bus service between the site and Levenshulme railway station and, with a journey time of around 6 or 7 minutes, offer the opportunity to use the bus to link to a journey by rail.

Rail

4.41 In addition to the bus access, Ryder Brow railway station is situated approximately 850 metres from the site and around the 800 metre distance referred to in guidance. This station is on the Manchester – New Mills line, calling at stations in between including Brinnington, Bredbury, Romiley and Marple. Although no trains stop at Ryder Brow on a Sunday, there are hourly services Monday to Friday, with journey times of around 10 minutes to Manchester and 20 minutes to New Mills.

4.42 In addition to the above, Levenshulme station is within a 2km cycle ride of the site and therefore considered accessible. As set to above, it is also readily accessible using the 171/172 bus service. This station provides regular services into Manchester City Centre and Stockport. From these stations, regular services are provided across the north-west.

4.43 Via these stations, the proposed site is considered to be connected to the local rail network, which offers an excellent opportunity for travel by rail for employment, retail and leisure purposes.

5 Development Proposals

Development Proposals

5.1 As set out in the Introduction, the proposed description of development is:

"Full planning application proposing the erection of a youth, sports and community hub (Use Class E(d)(g)), F2(b)), 2no football pitches combined netball and basketball court, cricket strip (Use Class F2 (c)), a three storey apartment building comprising 36no apartments for young person's accommodation (Use Class C3) and 267no dwellinghouses (Use Class C3a), with associated landscaping, public realm, ecological mitigation, refuse storage, drainage, car parking and other associated works, with access from Wembley Road and Mount Road".

5.2 The proposed site layout for the scheme is reproduced at **Appendix C**, whilst each element is described in greater detail below.

Residential housing element

5.3 The residential housing element would comprise a total of 267 dwellings, made up of a mix of dwelling types and bedroom numbers as follows:

- 110 No. 2 bed houses;
- 135 No. 3 bed houses: and
- 22 No. 4 bed houses.

Young person's accommodation element

5.4 The young person's accommodation would be built and operated by Centrepoint and would comprise a purpose-designed independent living accommodation building providing 36 studio apartments for young people aged 18—25.

5.5 This independent living accommodation would be specifically designed for young adults who are leaving the care system at 18 years old and are at risk of homelessness. Crucially, the young adults would be in full-time employment or education and a proportion of their income would be required as a rent payment. As such, the accommodation is intended to be a stepping-stone to longer term stable housing. Given their circumstances, these young adults would not have access to a car.

5.6 In light of the above, this accommodation would be served by 4 car parking spaces, including 2 spaces for visitors and staff visiting the building, together with 2 disabled spaces. Young adults with a bike would store this within their studio apartment or in the external covered and secured parking provided.

Sports & community facility element

5.7 The sports & community facility element would be operated by GMYF and would include a youth, sports and community hub building of circa 460sq.m, a changing room building, a combined netball & basketball court, a cricket strip and two unlit, full size grass football pitches.

5.8 This sports & community facility element would be served by 40 car parking spaces, together with secure (lockable covered store) parking for 20 bicycles. The use of the car parking spaces would be controlled by barriers at the car park accesses.

Envisaged Use of the Sports & Community Facility Element

5.9 The youth, sports and community hub building, together with the combined netball & basketball court and cricket strip, would provide a new home for GMYF's programme of youth-focused activities, which would run in the afternoons and evenings after school. These activities would typically be attended by young persons who would walk or cycle to the community hub straight from school. Some young persons could go home and return later, with some of the younger youths escorted by parents. However, census data shows that nearly 50% of households in Gorton do not have access to a car therefore the majority of youths being escorted by parents are still likely to travel on foot, by bicycle or by public transport.

5.10 The two grass football pitches, which would have the ability to be split up into multiple smaller pitches for football or other outdoor sports, would provide year-round playing field provision for use by GMYF as part of the above activities. They would also be available during weekday evenings and weekends for other clubs active in the local area. In this regard, it is understood GMYF have received support from West Gorton Junior FC, Friends of Nutsford Vale and Cedar Mount Academy who have outlined that the new hub would greatly benefit them and that they would make regular use of the facilities.

5.11 When sports pitches are used for more formal weekday training activities by clubs like West Gorton Junior FC, and as is understood to be the case now for West Gorton Junior FC, these would typically not start before 18:00 to allow parents time to return from work, youths to have a meal, etc. It is envisaged that this would be the case at this facility.

5.12 Although the sports pitches would provide year-round playing field provision, given that they would not be lit they would only be used for weekday evening training between the end of May and the end of August. In addition and in order to prevent overuse and manage the condition of the pitches, each pitch would be limited to a maximum weekly playing time of 4.5 hours.

Site Accesses

5.13 As shown on the proposed site layout at **Appendix C**, access to the site would be provided via two new simple priority junction arrangements; one off the B6178 Mount Road and one off Wembley Road. Both of these accesses would include 5.5 metre wide carriageways, 6 metre radii and 2 metre wide footways to both sides. All other existing accesses would be closed as part of the development.

5.14 In addition to the above and as also shown on the layout at Appendix C, 12 dwellings would be served by direct private driveways from Wembley Road.

5.15 The above access solutions are discussed in more detail below.

B6178 Mount Road access

5.16 As shown on the proposed site layout at **Appendix C**, the proposed B6178 Mount Road access would be located approximately 90 metres south of the northern site boundary and approximately 5 metres south of the access opposite serving Grange School. Given that this access would create a staggered cross-roads junction with the Grange School, MCC highways recommended during the pre-application process that the access be relocated.

5.17 However, as set out in Section 3, it is the case that the referred to Grange School access is only used to serve a small car park (circa 12 spaces) and by kitchen deliveries and is not the main access to the school, which is from Matthews Lane. It is also the case that this access is not used by pedestrians and, during CBO's observations, pedestrians were only seen to leave the Grange School from Matthews Lane.

5.18 In addition to the above and in light of MCC highways comments, a survey was undertaken at the school access on Tuesday 21st March 2023. The results of this survey, which are shown diagrammatically in **Figure 5.1** for a number of key periods, show that traffic flows at the access are very low. They also show that the majority of vehicles using the school access enter from / exit to the north. Based on this information, it is considered that there would be minimal vehicular conflicts between the two accesses.

5.19 Based on this additional information, MCC highways has confirmed they are comfortable with the proposed access location.

5.20 With regard to visibility provision at the B6178 Mount Road access, the requirements set out in Manual for Streets [MfS] are appropriate for roads with an 85th percentile speed of up to 37mph. Given that the observed speeds referred to in Section 2 are 29mph on the B6178 Mount Road and 34mph on Wembley Road, the use of a 34mph design speed is considered appropriate in this instance.

5.21 Based, therefore, on the more onerous 34mph design speed, MfS requires a 'y' distance of 52 metres. With regard to the 'x' distance and as set out in MfS, a 2.4 metre provision should be adopted.

5.22 Taking account of the above, **Figure 5.2** shows that 2.4 x 52 metres visibility splays can be provided in both directions for vehicles leaving the B6178 Mount Road site access.

5.23 Based on the above, the proposed access arrangement from the B6178 Mount Road is considered acceptable and appropriate from a design, safety and operational perspective. This junction form is also considered to be in keeping with the surrounding highway network.

Wembley Road

5.24 As shown on the proposed site layout at **Appendix C**, the proposed Wembley Road access would be located approximately 75 metres south of the northern site boundary.

5.25 In order to accommodate this access, it is proposed to relocate the existing northbound bus stop on Wembley Road approximately 50 metres to the south. In addition and as referred to in Section 4, it is also proposed to provide a new dropped crossing with tactile paving on Wembley Road in the proximity of the bus stops.

5.26 With the bus stop in this location, it would be almost equidistant between the proposed site access from Wembley Road and the footpath running to the south of the site and would therefore be readily accessible. It would also be difficult to provide a more direct pedestrian route to this stop as it would need to pass through private drives and would result in an enclosed alleyway. It has therefore been agreed with MCC that (subject to approval from TfGM) this bus stop relocation is acceptable and that no additional pedestrian route is needed through the development.

5.27 With regard to visibility provision at the Wembley Road access and as set out above, the use of a 34mph design speed is considered appropriate in this instance. Based, therefore, on this 34mph design speed, MfS requires a 'y' distance of 52 metres. With regard to the 'x' distance and as set out in MfS, a 2.4 metre provision should be adopted.

5.28 Taking account of the above, **Figure 5.3** shows that 2.4 x 52 metres visibility splays can be provided in both directions for vehicles leaving the Wembley Road site access. Figure 5.3 shows this provision is also achievable to the south to the corner of a bus waiting in the relocated northbound bus stop.

5.29 Based on the above, the proposed access arrangement from Wembley Road is considered acceptable and appropriate from a design, safety and operational perspective. This junction form is also considered to be in keeping with the surrounding highway network.

Wembley Road direct private driveways

5.30 As set out above, there are 12 dwellings which would have driveways directly served from Wembley Road. Manual for Streets refers to a study which "*found that very few accidents occurred involving vehicles turning into and out of driveways, even on heavily-trafficked roads*". It also suggests that direct private driveways are appropriate on routes carrying up to 10,000 vehicles per day and "*that this figure could be increased further*". The daily traffic flow on Wembley Road is less than 10,000 vehicles. It is also the case that there a numerous existing residential properties fronting both sides of Wembley Road which include direct private driveways.

5.31 Based on the above, the provision of direct private driveway from Wembley Road is considered acceptable and appropriate from a design, safety and operational perspective. This arrangement is also considered to be in keeping with existing provision on the route.

Road Safety Audit: Site Accesses

5.32 MCC highways indicated through the pre-application process that a Road Safety Audit is required for the proposed accesses.

5.33 A road safety audit was therefore undertaken in May 2023. A copy of this road safety audit, which has been annotated with CBO's responses, is included at **Appendix D**.

5.34 The road safety audit at **Appendix D** did not raise any fundamental safety issues with the proposed accesses. In addition, the issues that were raised are addressed in the responses included on the annotated road safety audit and the CBO access drawing **CBO-0767-001 Rev A**, which is included at **Appendix E**.

5.35 For completeness, Table 5.1 below summarises the problems / recommendation of the road safety audit, together with the subsequent response.

Table 5.1: Summary of Road Safety Audit Problems, Recommendations & Reponses

Problem	Recommendation	Response
The site is very close to busy schools. During the site visit significant on-street parking was observed, predominantly consisting of child pick up particularly on Wembley Road. Vehicles were parked on the carriageway at and opposite existing junctions, parking on the junction radii and obstructing the footways. Footway parking even extended to the bend on Wembley Road / Holmcroft Road even though there are 'no waiting at any time' restrictions on the bend. The new junction on Wembley Road is within the area of parking associated with the school. The audit team expect that parking would continue in and around the new junction restricting sight lines particularly for vehicles emerging and children crossing the junctions which could increase the risk of collision between vehicles and pedestrians. The position of the access on Mount Road is in the vicinity of a section of 'no wating at any time' restriction. However, this restriction terminates in the vicinity of the access and would therefore not cover the whole access and could encourage parking towards the southern side of the junction	Although the highway code advises against parking around and opposite junctions it is clear from the site visit that this is disregarded by some drivers at these locations. 'No waiting at any time' restrictions should be included in the detailed design to protect the whole of the junctions from parked vehicles	A CBO access drawing (reference CBO-0767-001 Rev A) has been prepared to pick up on this point. This drawing is included at Appendix E
Parking on the footway takes place on the corner of Wembley Road / Holmcroft Road in the vicinity of the proposed informal crossing point. Drivers are likely to use the dropped kerb to access the footway and obstruct the crossing point. Parking on the footway can also reduce the visibility passing drivers have of pedestrians, particularly children waiting to cross and of children being able to see oncoming traffic. Current parking on the footway is in contravention of the existing waiting restrictions	Bollards should be installed adjacent to the crossing point to restrict parking on the footway at the crossing point	A CBO access drawing (reference CBO-0767-001 Rev A) has been prepared to pick up on this point. This drawing is included at Appendix E
The proposals include two footpath links from the development on to Mannering Street. There is a narrow kerbed hard strip along the southern boundary of Mannering Street which the footpaths would link into. The hard strip, being tarmac, could encourage pedestrians, particularly children, to use it as a footway, its narrowness could result in pedestrians walking in the carriageway increasing the risk of being struck by passing traffic	The hard strip should be widened to form a formal footway along the full length of Mannering Street to tie into the existing footways at each end	Due to ownership constraints, it is not possible to include a footway on the south side of Mannering Street. However, Kellen propose installing a knee high fence along the side of the footway to the rear of the hard strip, then a bollard in the hard strip itself. This arrangement would prevent pedestrians walking in this area.

Subsequent Provisions in the Access Arrangement

5.36 As referred to above and shown on Drawing Number CBO-0767-001 Rev A at Appendix E, the following provisions are proposed at the accesses to address the findings of the Road Safety Audit:

- Reference to the investigation of the provision of 'No waiting at any time' restrictions as part of the detailed design to protect the junctions, with the extent of these provisions (on Wembley Road) to be investigated to be determined by MCC as the highway authority; and
- The provision of bollards adjacent to the proposed Wembley Road crossing point.

Internal Site Layout

General

5.37 Within the site and as shown on the proposed site layout at **Appendix C**, the two accesses from Wembley Road and the B6178 Mount Road would head east and west respectively into the development, with the Wembley Road access continuing for approximately 55 metres and the B6178 Mount Road continuing for approximately 285 metres.

5.38 At the circa 55 metre point at the end of the Wembley Road access, the route would join a north – south route which would terminate at cul-de-sacs at either end. Approximately 50 metres south of the Wembley Road access, this north – south route would be joined on its western side by an access road which would run circa 170 metres into the site in an east – west direction. This route would then be linked to the access road in from the B6178 Mount Road by three north – south access roads. There would also be two cul-de-sacs heading south off this east – west route and three cul-de-sacs heading north off the B6178 Mount Road access route.

5.39 All roads within the scheme would be 5.5 metres in width and include 2 metre wide footways to both sides.

5.40 In order to discourage rat running through the scheme, and in addition to the tortuous route through the scheme, the proposed site layout at Appendix C includes a number of tabletop junctions and traffic calming features.

5.41 At the western end of the site, the B6178 Mount Road access would provide access to the car park areas serving the community hub and the young person's accommodation. These accesses, which would be located approximately 20, 60 and 100 metres from the B6178 Mount Road, would all take the form of dropped crossing accesses.

Internal visibility

5.42 It was agreed through pre-application discussions with MCC highways that a drawing would be included in the Transport Assessment that shows visibility provision with the scheme. It was agreed this would be based on a forward visibility distance of 17 metres (15mph design speed) a visibility at junctions of 2.4 x 33 metres (25mph design speed). **CBO drawing CBO-0767-002 Rev A** at **Appendix F** therefore shows these provisions.

5.43 As can be seen from this drawing, the required visibility is achievable with the scheme.

Swept path analysis

5.44 Following discussions with MCC highways, the scheme has been tracked using an 11.5m long refuse vehicle, the parameters for which have been agreed. **Figure 5.4** shows this vehicle can negotiate the streets within the scheme, whilst **Figures 5.5 and 5.6** shows it can manoeuvre within the turning head areas.

Temporary Construction / Delivery Access

5.45 It is proposed to provide a temporary construction / delivery access to the site from Wembley Road approximately 20 metres north of the Wembley Road / Holmcroft Road junction. The Kellen drawing "Site Compounds & Storage Plan" at **Appendix G** therefore shows a potential location for this temporary access based on it taking the form of a circa 10 metre wide dropped crossing arrangement with a 20 metre deep by 17 to 30 metre wide off road vehicle holding area to the rear of the footway.

5.46 It is also proposed that a Construction Management Plan would be in place throughout the construction of the development which would include the provision of a banks person at the temporary construction / delivery access and a restriction on hours of use to avoid school drop off and pick up periods.

5.47 Notwithstanding the presence of a banks person to ensure the safe use of this temporary construction / delivery access, it is considered appropriate to ensure there is suitable visibility provision at the access. In this regard and based on the parameters identified previously for the Wembley Road access, a 2.4 x 52 metres visibility splay is considered appropriate to the north. To the south, and given the proximity of the temporary access to the bend in the route, a 2.4 x 33 metre provision is considered sufficient based on a 25mph approach speed around the bend. **Figure 5.7** shows these provisions are achievable. It also shows a 33 metre forward visibility provision is achievable for vehicles waiting to turn right into the access.

5.48 Considering the swept path analysis of vehicles using this temporary access, **Figures 5.8 and 5.9** show an articulated HGV turning in and out of the site, whilst **Figures 5.10 and 5.11** show a large tipper lorry turning in and out of the access. As can be seen from these figures, these vehicles are able to negotiate the temporary access within the confines of the Wembley Road carriageway.

Summary

5.49 Based on the above, and given the temporary nature of this arrangement, the proposed delivery / construction access arrangement from Wembley Road is considered acceptable.

Pedestrian and Cycle Provision

Pedestrian provision

5.50 As set out above, the site accesses would include 2 metre wide footways to both sides and link the site to the surrounding pedestrian network off the B6178 Mount Road and Wembley Road. These footways would continue throughout the site on both sides of the highway network referred to above. Dropped crossings with tactile paving would also be provided at junctions within the scheme.

5.51 In addition to the above and as shown on the proposed site layout at Appendix C, two of the cul—de-sacs to the north would include pedestrian links to Mannering Street, whilst two of the cul-de-sacs to the south would provide pedestrian links to the dedicated pedestrian / cycle route to the south. As set out previously, it is also proposed to provide a new dropped crossings with tactile paving on Wembley Road in the proximity of the bus stops.

5.52 With these provisions and links in place, residents of / visitors to the development travelling on foot could access the pedestrian routes surrounding the site, as well as the bus stops on Wembley Road and the B6178 Mount Road.

Cycle provision

5.53 With regard to cycle provision, the internal site layout is considered to be conducive to cycle use, whilst the access to the site off Wembley Road links directly to a signposted on road cycle route. In addition and via the pedestrian links from the cul-de-sacs to the south, cyclist would be able to link to the dedicated pedestrian / cycle route to the south to head to / from Matthews Lane.

5.54 With regard to the dedicated pedestrian / cycle route to the south of the site and through pre-application discussions, MCC highways requested that the applicant look at this route in terms of its current condition, lighting etc in the context of additional usage arising from the development and potential improvement.

5.55 It is the case that this route is in good condition, providing a circa 1.8 to 2.0 metre wide, well surfaced and lit route along its length. LTN 1/20 "Cycle Infrastructure Design" *recommends* a minimum 3.0 metre wide route where it carries up to 300 pedestrians and 300 cyclists per hour. However, it is the case that this route would not carry these volumes even with the proposed development in place. As a result, and on the basis that LTN 1/20 refers to "*a typical space profile of around 1.0m for a moving cyclist*" and that Manual for Streets suggests 0.9m is sufficient width for a wheelchair (and therefore a pushchair), it is the case that the existing provision is sufficient for these users to pass. Given these points, it is considered that no improvement is required to the existing dedicated pedestrian / cycle route. It is also the case that the route of this footway is constrained by the Nico Ditch which runs to the south and is an archaeological and drainage feature.

Parking Provision

Residential element

Car parking

5.56 Through discussions around earlier versions of the scheme through the pre-application process, MCC planning requested a reduction in frontage car parking and indicated that the provision of 1 car parking space per dwelling across the housing mix would be acceptable.

5.57 The proposed scheme includes 139no. dwellings (made up primarily of 2 & 3 beds but some 4 beds) with 1 car parking space per dwelling, with the remaining 128 dwellings (made up primarily of 3 beds but some 2 & 4 beds) providing 2 car parking spaces per dwelling. These 2 spaces per dwelling have to a degree resulted from MCC requesting side parking where it is more efficient to provide a longer driveway. It is also the case that Kellen need to be able to market and sell the dwellings and that 2 car parking spaces per dwelling will be more desirable to people looking for 3 and 4 bedroom dwellings in this area.

5.58 Based on the above, the proposed level of parking provision is considered to strike a balance between the lower level of parking referred to by MCC and what is considered by Kellen to be an appropriate level of provision for the proposed dwelling types.

Cycle parking

5.59 In terms of cycle parking, there would be 1 secure anchor per house fixed to rear elevation accessible via a secure side or rear gate. This is considered appropriate.

Young person's accommodation element

Car parking

5.60 As previously identified, the young person's accommodation would be served by 4 car parking spaces, including 2 spaces for visitors and staff visiting the building, together with 2 disabled spaces. As also identified previously, and given their circumstances, these young adults would not have access to a car.

5.61 In light of the above, the provision of 4 spaces is considered sufficient to accommodate people visiting the accommodation, be it staff, family or carers.

Cycle parking

5.62 Young adult residents with a bike would store this within their studio apartment, whilst 1 covered and secured external cycle parking space would also be provided per studio apartment. This provision is considered appropriate.

Sports & community facility element

Car parking

5.63 As previously identified, the sports & community facility element would be served by 40 car parking spaces. Whilst the parking standards set out in MCC's Core Strategy Development Plan Document refer to a maximum provision of 1 space per 22sq.m for "Other Leisure Facilities" under the D2: Assembly and Leisure land use, they do not provide standards for sports pitches.

5.64 Sport England's "Clubhouse Design Guidance Notes" refer to 1 space per 3 staff, plus 1 space per 3 players, plus 1 space per 3 spectators with a minimum of 10 spaces, whilst standards CBO has found for two other authorities (namely Three Rivers DC and Charnwood Borough) refer to 20 spaces per pitch (Three Rivers DC) and provision based on 2 people per car (Charnwood).

5.65 In addition to the above, the recent permission for the extension of Hough End Leisure Centre provides just 12 to 13 spaces per football pitch.

5.66 In the context of the above, the proposed provision of 40 spaces equates to:

- 1 space per 1.0 to 1.35 players based on a maximum use at one time of 2 youth 11v11 pitches, 3 youth 9v9 pitches, 3 mini 7v7 pitches or 4 mini 5v5 pitches, which is in excess of the Sports England guidance;
- 20 spaces per pitch which is comparable with the Three Rivers DC standards and in excess of the 12 to 13 spaces per pitch permitted at Hough End Leisure Centre; and

- Provision based on 1 to 1.35 people per car, which is a higher provision than the 2 people per car referred to in the Charnwood standards.

5.67 It is also the case that the provision of 40 spaces is in excess of the 1 to 29 vehicles referred to later in Section 6 as arriving at the site for formal training sessions.

5.68 In light of the above, it is considered that the proposed 40 car parking spaces is appropriate and sufficient to accommodate vehicles associated with formal and general use of the youth, sports and community hub facility.

Cycle parking

5.69 The sports & community facility element would be served by secure (lockable covered store) parking for 20 bicycles. This is considered appropriate based on GMYF's experience from their Hub in Partington, where over 250 children come through the door each week and where the provision is similar and sufficient to meet demand.

6 Traffic Generation and Assignment

General

6.1 As set out previously, the proposals would see the site developed for a residential housing, young person's accommodation and sports & community facility development. The traffic generation and, where appropriate, traffic assignment associated with each of these elements is set out in this section of the report.

Residential Housing Element: Traffic Generation

6.2 For the residential element and through the scoping exercise, it was agreed that the use of TRICS was acceptable. However, (through MCC) TfGM noted that sites in Northern Ireland were used in the scoping note, that they are not usually included and that the TRICS analysis should therefore be updated to exclude these sites. This updated TRICS analysis is therefore included in this section of the report.

6.3 In addition, it has been agreed through pre-application scoping discussions that the proposed development traffic generation be calculated using person-trips approach, with people trip rates derived from the TRICS database under the sub land use of 'Houses Privately Owned' and the appropriate modal share percentages then being applied from local Census data. This is the same approach that TfGM indicated should be used for the assessment of the application at the Former Greyhound Stadium, Belle Vue.

6.4 Adopting this approach, and excluding sites in Northern Ireland as requested by TfGM, Table 6.1 below sets out the people trip rates for the proposed scheme, together with the resultant people trips based on a 267 dwelling scheme. Full TRICS Outputs are included at **Appendix H**.

Table 6.1: Proposed Development People Trip Rates / People Trips

	Weekday Morning Peak			Weekday Evening Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Trip Rate (per dwelling)	0.196	0.725	0.921	0.598	0.266	0.864
People trips	52	194	246	160	71	231

6.5 In order to determine the modal share percentages to be applied to the above people trips, local Census Journey to Work data has been utilised for the Super Output Areas (SOAs) around the site, namely Manchester 023 and 027. A plan showing the area covered by these SOAs is included at **Appendix I**, whilst the resultant modal split is shown in Table 6.2 below.

Table 6.2: Modal Split for Local Area from Local Census Data

Mode	Percentage
Train / tram	2.8%
Bus	33.0%
Car driver, motorcycle, taxi	44.2%
Passenger in a car or van	5.4%
Bicycle	3.6%
Walk	11.0%
Total	100.00%

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level) merged data for SOA's Manchester 023 & 027

6.6 Based on these mode splits and the people trips shown in Table 6.1, Table 6.3 below shows the resultant trips by each mode. The trips by car driver, motorcycle and taxi (as highlighted yellow in Table 6.3) have been taken as the traffic generation for the development.

Table 6.3: Proposed Development Trips by Mode

	Weekday Morning Peak			Weekday Evening Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Train / tram	1	5	6	4	2	6
Bus	17	64	81	53	23	76
Car driver, motorcycle, taxi	23	86	109	71	31	102
Passenger in a car or van	3	11	14	9	4	13
Bicycle	2	7	9	6	3	9
Walk	6	21	27	17	8	25
Total	52	194	246	160	71	231

Residential Housing Element: Traffic Distribution and Assignment

6.7 In order to distribute the above traffic movements and assign them to the local highway network, Journey to Work data from the 2011 census for the middle super output areas around the site (Manchester 023 and 027) has again been utilised. This information provides details of the destination of journeys taking place and the numbers of people making those journeys via different modes. For the purpose of this exercise, only the number of car drivers was taken into account.

6.8 Having determined the destination of car driver based journeys, these journeys have then been manually assigned to the local network based on the following broad destinations:

1. South from the site along Mount Road;
2. South from the site along Mount Road then Matthews Lane;
3. North from the site along Mount Road and then west, departing via Kirkmanshulme Lane and arriving via Stanley Grove;
4. North from the site along Mount Road on to the A57 Hyde Road then west through A6010 Pottery Lane junction;
5. North from the site along Mount Road, west on the A57 Hyde Road then north on A6010 Pottery Lane; and
6. North from the site along Mount Road then east on the A57 Hyde Road.

6.9 The destination and origin areas associated with the above routes are shown in the information included at **Appendix I**, which provides the raw ward data used to derive the distribution.

6.10 Based on the methodology detailed above, Table 6.4 below shows the percentage of development related traffic assigned to each of the destinations.

Table 6.4: Traffic Distribution and Assignment

Route	Origin / Destination	Percentage	
		Arr	Dep
1	South from the site along Mount Road	30%	30%
2	South from the site along Mount Road then Matthews Lane	14%	14%
3	North from the site along Mount Road and then west, departing via Kirkmanshulme Lane and arriving via Stanley Grove	4%	4%
4	North from the site along Mount Road on to the A57 Hyde Road then west through A6010 Pottery Lane junction	26%	26%
5	North from the site along Mount Road, west on the A57 Hyde Road then north on A6010 Pottery Lane	9%	9%
6	North from the site along Mount Road then east on the A57 Hyde Road	17%	17%
Total		100%	100%

6.11 Adopting the above methodology, the percentage traffic assignments within the study area for the residential use are shown graphically in **Figure 6.1**, whilst the weekday morning and evening peak traffic flows associated with the proposed residential use are shown diagrammatically in **Figure 6.2**.

6.12 It should be noted that Figure 6.2 assumes that all traffic enters and exits the site via the B6178 Mount Road access. However, given that the traffic associated with the residential development would be split between the Mount Road and Wembley Road accesses and that Wembley Road carries notably less traffic than Mount Road, this approach is considered to be a robust representation of potential traffic increases.

Young Person's Accommodation Element

6.13 As set out in Section 5, the circumstances of the young adults who would be living in the young person's accommodation is such that they would not have access to a car, whilst this accommodation would be served by just 4 car parking spaces for visitors and staff visiting the building.

6.14 As a result, this element of the development would not have a meaningful weekday peak period traffic generating function. As a result, it is not considered necessary to include / assess the impact of any traffic generation for this use.

Sports & Community Facility Element

General youth, sports and community hub facility use

6.15 As set out in Section 5, youth-focused activities would run at the youth, sports and community hub facility in the afternoons and evenings after school. However, for the reasons set out in Section 5, trips associated with these activities would primarily be made up of journeys on foot, by bicycle or by public transport.

6.16 In addition, it is also the case that any vehicle trips associated with these activities would utilise the B6178 Mount Road site access given the proximity of the community hub parking to this access. In this regard and as previously identified, and for the purpose of assessments, it has been assumed that all of the residential housing traffic would use the Mount Road access, which is considered to be a robust representation of potential traffic increases. As a result, it is considered that any minimal vehicular trips at this access associated with the general use of the youth, sports and community hub facility would be absorbed in this increased residential housing traffic.

6.17 In light of the above, it is not considered necessary to include any traffic generation for this general use of the youth, sports and community hub facility (including the combined netball & basketball court and cricket strip which forms part of the hub) in the weekday peak period assessments.

Formal training use of the sports pitches

6.18 As set out in Section 5, the two grass football pitches would also be available during weekday evenings and weekends for other clubs active in the local area. In this regard and as also set out in Section 5, it is the case that when sports pitches are used for more formal weekday training activities by clubs like West Gorton Junior FC, and as is understood to be the case now for West Gorton Junior FC, these would typically not start before 18:00 to allow parents time to return from work, youths to have a meal, etc. It is envisaged that this would be the case at this facility.

6.19 It also worth reiterating that given that they would not be lit the pitches would only be used for weekday evening training between the end of May and the end of August, whilst each pitch would be limited to a maximum weekly capacity of 4.5 hours in order to prevent overuse and manage the condition of the pitches. As a result there is a limit to the number of formal weekday training sessions that could take place on the pitches in addition to their general use as part of activities at the youth, sports and community hub facility and weekend matches.

6.20 Based on a typical 18:00 start for formal training sessions, it is the case that the use of the sports & community facility for this purpose would not generate any weekday traffic until 17:45 onwards. However, the weekday evening peak occurs during the hour 16:45 to 17:45 / 16:00 to 17:00, i.e. before formal training sessions would generate any traffic.

6.21 It is also the case that the traffic surveys show that the two way flow on the B6178 Mount Road drops from 1,382 pcu's during the 16:45 to 17:45 peak hour to 1,174 pcu's during the hour 17:45 to 18:45, a reduction of 208 pcu's. Even if the vehicle movements association with formal training at, and general use of the youth, sports and community hub facility between 17:45 and 18:45 were added to the observed flows for this hour, they would still not exceed the observed 16:45 to 17:45 peak hour flows. Likewise at the weekends, the ATC data shows that the two way flow on the B6178 Mount Road is 1,111 vehicles during the busiest hour (13:00 to 14:00) on a Saturday and 982 vehicles during the busiest hour (13:00 to 14:00) on a Sunday, which is between 271 and 400 vehicles less than were observed during the weekday evening peak. Even if the vehicle movements identified in association with matches at, and general use of the youth, sports and community hub facility were added to these observed flows, they would still not exceed the observed weekday evening 16:45 to 17:45 peak hour flows.

6.22 In light of the above, it is considered that highway conditions would be no worse when the sports & community facility is in use for formal training than they would be during the peak hours. The traffic generated by this facility is therefore not being allowed for in the assessment of peak period traffic impact.

Total Assessment Period Traffic Generation

6.23 Based on the above, the weekday morning and evening peak traffic flows shown diagrammatically in **Figure 6.2** in association with the residential housing element of the development are considered to be representative of the weekday morning and evening peak traffic flows for the whole development.

Sports Pitch Traffic Generation: Formal Training and Matches

6.24 For the reasons identified, there is not considered to be a requirement to allow for traffic associated with formal weekday training at the youth, sports and community hub facility within the assessments included in this report. However, MCC highways have asked to see anticipated levels of multi-modal trip generations for this use during the operational evening periods when trip generations for this use are likely to be at their highest. This is therefore provided below.

6.25 As set out in Section 5, census data shows that nearly 50% of households in Gorton do not have access to a car therefore the majority of youths being escorted to formal training by parents are likely to travel on foot, by bicycle or by public transport.

6.26 In addition, information provided by West Gorton Junior FC suggests that between circa 35% and 80% of the total number of players and coaches arrive by car depending on the age group attending the session.

6.27 With regard to the pitches themselves, a full size football pitch can be used in a number of ways. In terms of training, it could likely be split in half and used by two 11 player or 9 player teams or split into thirds and used by three 7 player teams.

6.28 Based on these general assumptions and on the basis that only one pitch is used per training session in order to rotate them / manage their hours used, the potential traffic generation for the pitches per training session is calculated below:

- 11 player team training: Based on there being 15 players / 2 coaches per team and two teams training, this could equate to 34 people using the facility. This would equate to 12 to 27 cars, with the remainder of people travelling on foot, by bicycle or by public transport;
- 9 player team training: Based on there being 13 players / 2 coaches per team and two teams training, this could equate to 30 people using the facility. This would equate to 11 to 24 cars, with the remainder of people travelling on foot, by bicycle or by public transport;
- 7 player team training: Based on there being 10 players / 2 coaches per team and three teams training across both pitches, this could equate to 36 people using the facility. This would equate to 13 to 29 cars, with the remainder of people travelling on foot, by bicycle or by public transport.

6.29 As can be seen from the above, these are not significant traffic movements and would not have any notable impact during the off peak periods they would occur.

7 Off-Site Traffic Impact

General

7.1 As set out earlier in the report, the study area for considering the off-site impact of the proposed development includes:

- B6178 Mount Road / Matthews Lane;
- B6178 Mount Road / Kirkmanshulme Lane;
- A57 Hyde Road / Mount Road / Glencastle Road;
- A57 Hyde Road / Glencastle Road / Queens Avenue; and
- A57 Hyde Road / A6010 Pottery Lane.

7.2 In light of the above, the below reviews the traffic impact of the proposals at these off-site junctions compared to the observed traffic flows, whilst these impacts are illustrated in **Figure 7.1** for the weekday morning and evening peak hours respectively. It should be noted that, given that these impacts are based on existing traffic flows, they represent a robust, worst case scenario.

B6178 Mount Road / Matthews Lane

7.3 **Figure 7.1** shows that the total percentage impact of the proposed development would be 2.9% at the B6178 Mount Road / Matthews Lane junction. These figures also show that the maximum single arm impact is 5.5%, with the remainder being between 1.0% and 3.8%. Furthermore, **Figure 6.2** shows that the maximum numerical increase on a single arm is 38 passenger car units [pcu's] during the weekday morning peak and 31 pcu's during the weekday evening peak. This equates to around one additional vehicle every one and a half minutes during each peak.

7.4 In the context of the 1,669 pcu's currently passing through this junction during the weekday morning peak and the 1,571 pcu's currently passing through this junction during the weekday evening peak, these increases would be minimal.

7.5 Notwithstanding the above, it is considered appropriate to undertake operational assessments at this location.

Mount Road / Kirkmanshulme Lane and A57 Hyde Road / Mount Road / Glencastle Road

7.6 Given their proximity and interaction, impact at the Mount Road / Kirkmanshulme Lane and A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue junctions has been considered in the context of these operating as one junction. As a result, **Figure 7.1** shows that the total percentage impact of the proposed development would be between 1.6% and 1.8% at this location. These figures also show that the maximum single arm impact is 6.9% on the Mount Road approach during the weekday morning peak and 6.5% on the Glencaslte Road approach during the weekday evening peak, with the remainder being between 0.2% and 2.7%. Furthermore, **Figure 6.2** shows that the maximum numerical increase on a single arm is 48 passenger car units [pcu's] during the weekday morning peak and 25 pcu's during the weekday evening peak. This equates to around one additional vehicle every one and a quarter minutes during the morning peak and around one additional vehicle every two and a half minutes during the evening peak.

7.7 In the context of the 3,326 pcu's currently passing through these junctions during the weekday morning peak and the 3,439 pcu's currently passing through these junctions during the weekday evening peak, these increases in traffic could be accounted for through daily variation.

7.8 In light of the above and based on these minimal increases and existing conditions, it is considered that the operation of the existing Mount Road / Kirkmanshulme Lane and A57 Hyde Road / Mount Road / Glencastle Road junctions would not be materially affected by the proposed development and that no operational assessment is required at this location.

A57 Hyde Road / Glencastle Road / Queens Avenue

7.9 **Figure 7.1** shows that the total percentage impact of the proposed development would be between 1.6% and 1.8% at the A57 Hyde Road / Queens Avenue junction. These figures also show that the maximum single arm impact is 2.3%, with the remainder being between 1.1% and 1.8%. Furthermore, **Figure 6.2** shows that the maximum numerical increase on a single arm is 30 passenger car units [pcu's] during the weekday morning peak and 25 pcu's during the weekday evening peak. This equates to one additional vehicle every two minutes during the morning peak and around one additional vehicle every two and a half minutes during the evening peak.

7.10 In the context of the 2,125 pcu's currently passing through this junction during the weekday morning peak and the 2,282 pcu's currently passing through this junction during the weekday evening peak, these increases in traffic could be accounted for through daily variation.

7.11 In light of the above and based on these minimal increases and existing conditions, it is considered that the operation of the existing A57 Hyde Road / Queens Avenue junction would not be materially affected by the proposed development and that no operational assessment is required at this location.

A57 Hyde Road / A6010 Pottery Lane

7.12 **Figure 7.1** shows that the total percentage impact of the proposed development would be between 0.9% and 1.1% at the A57 Hyde Road / A6010 Pottery Lane junction. These figures also show that the maximum single arm impact is 2.4%, with the remainder being between 0.2% and 1.7%. Furthermore, **Figure 6.2** shows that the maximum numerical increase on a single arm is 30 passenger car units [pcu's] during the weekday morning peak and 19 pcu's during the weekday evening peak. This equates to one additional vehicle every two minutes during the morning peak and around one additional vehicle every three minutes during the evening peak.

7.13 In the context of the 3,617 pcu's currently passing through this junction during the weekday morning peak and the 3,854 pcu's currently passing through this junction during the weekday evening peak, these increases in traffic could be accounted for through daily variation.

7.14 In light of the above and based on these minimal increases and existing conditions, it is considered that the operation of the existing A57 Hyde Road / A6010 Pottery Lane junction would not be materially affected by the proposed development and that no operational assessment is required at this location.

Summary

7.15 Based on the numerical analysis presented in this section of the report, it is considered that the increases at the B6178 Mount Road / Matthews Lane junction warrant the undertaking of operational assessments. However, at the remaining junctions identified as forming part of the study area, it is considered that the level of changes on traffic flow as a result of the proposed development would not be noticeable on the ground and would have no material impact on junction operation. No operational assessment is therefore considered necessary in these locations.

8 Operational Assessments

General

8.1 Given the findings set out in Section 7, it is considered that operational assessments are not required at three of the off-site junctions within the study area and that the only location where operational assessments are required is the proposed site accesses and the B6178 Mount Road / Matthews Lane junction.

8.2 Notwithstanding the above, operational assessments have been carried out at all off-site junctions.

8.3 Details of the traffic flows used to undertake these assessments, together with the resultant model findings, are therefore set out in this section. With regard to the models used to carry out these operational assessments, the Junctions 9 and LINSIG programs have been utilised as appropriate.

Committed Development

8.4 Following discussions with MCC, they have confirmed that the following committed developments should be taken into account:

- 122160/FO/2018 - Proposed residential development comprising erection of 80 no. apartments within 1 no. part 3 part 4 storey block and 1 no. 3 storey block and the erection of 167 no. 2 and 2 1/2 storey dwellings - Belle Vue Stadium, Kirkmanshulme Lane;
- 129076/VO/2021 - Erection of a part three, part two storey detached school building (Class F1) with associated sports facilities - Showcase Cinema, Hyde Road;
- 129852/FO/2021 Erection of 4 storey building to 24 x 1 bedroom and 16 x 2 bedroom apartments (40 total) (Class C3) - Former Chatsworth Mill Williams Road Gorton; and
- 135270/FO/2022 Erection of 6 x 2 storey dwellinghouses and 3 storey building to form 31 apartments (Class C3) - Land Between 121-131 Levenshulme Road Manchester

8.5 Traffic flows for these schemes have therefore been taken from their associated Transport Assessments and, where necessary, assigned to the study network.

8.6 Based on the above, **Figure 8.1** shows the combined traffic generations associated with these four live applications

Traffic Growth

8.7 MCC has indicated that the above committed developments should be considered "*in lieu of TEMPRO growth.*" No traffic growth factors have therefore been applied to the observed traffic flows.

Assessment Traffic Flows

8.8 In light of the above, future year base traffic flows are shown in **Figure 8.2** and have been derived by adding the above committed development traffic flows (Figure 8.1) to the observed traffic flows referred to in section 3 (Figure 3.1).

8.9 Following on from the above, **Figure 8.3** show these future year base (Figure 8.2) plus proposed development (Figure 6.2) traffic flows.

Operational Assessments: Proposed Site Accesses

8.10 Based on the future year base plus proposed development flows identified above, Junctions 9 assessments have been carried out for the proposed site accesses.

8.11 With regard to the details of these models, only one model has been produced and run for both weekday morning and evening peak hours to represent the potential operation of each access. This model has been based on the Mount Road access and, as set out in Section 6, assumes that all traffic enters and exits the site via this route. However, given that the traffic associated with the residential housing would be split between the Mount Road and Wembley Road accesses and that Wembley Road carries notably less traffic than Mount Road, this approach is considered to be a robust representation of potential operation.

8.12 In addition to the above, the Grange school access and its associated traffic flows as referred to in Section 5 has been included in the model. For the evening peak, the 15:00 to 16:00 flows at the school access have been included in the models, as opposed to the zero flows observed during the network evening peak. Again, this approach is considered robust.

8.13 Based on the above approach, Table 8.1 below shows the results of these operational assessments, whilst the full Junction 9 outputs are included at **Appendix J** for information.

Table 8.1: Proposed Site Access: Junctions 9 Results

	Weekday Morning Peak		Weekday Evening Peak	
	RFC	Q	RFC	Q
Site Access: Left & right	0.312	0	0.115	0
Mount Rd: Right turn to site	0.040	0	0.120	0
School Access: Left & Right	0.037	0	0.076	0
Mount Rd: Right turn to School	0.044	0	0.017	0

RFC: Ratio of Flow to Capacity. Q: Queue length in PCUs

8.14 As can be seen from the above table the Junctions 9 modelling indicates that, despite the onerous traffic flows used in the assessments, the maximum RFC value at the site access would be 0.312 during the weekday morning peak and 0.120 during the weekday evening peak. These levels of RFC are significantly below the traditional 0.850 design capacity. There would also be no queuing during either peak.

8.15 Based on these results it is suggested that there would be no operational issues associated with the proposed site layout and that the access arrangements proposed would be more than sufficient to safely serve the proposed development.

Operational Assessments: B6178 Mount Road / Matthews Lane

8.16 Based on the observed, future year base and future year base plus proposed development traffic flows, Junctions 9 assessments have been carried out for the existing B6178 Mount Road / Matthews Lane priority junction. Tables 8.2 to 8.5 below show the results of these operational assessments, whilst the full Junctions 9 outputs are included at **Appendix K** for information.

8.17 Based on this model and in the first instance, Table 8.2 below shows the results of the existing traffic flow model, whilst Table 8.3 shows the results of the existing weekday morning peak model on the busiest Mount Road to Matthews Lane right turn movement in 15 minute intervals.

Table 8.2: B6178 Mount Road / Matthews Lane: Junctions 9 Results (Existing Model)

	Weekday Morning Peak		Weekday Evening Peak	
	RFC	Q	RFC	Q
Matthews Ln: Left	0.416	1	0.382	1
Matthews Ln: Right	0.387	1	0.558	1
Mount Rd: Right turn	0.828	7	0.450	2

RFC: Ratio of Flow to Capacity. Q: Queue length in PCUs

Table 8.3: B6178 Mount Road to Matthews Lane Movement: Existing Model (Weekday Morning Peak)

	Weekday Morning Peak: Mount Road to Matthews Lane	
	RFC	Q
8:15 – 8:30	0.579	2
8:30 – 8:45	0.828	7
8:45 – 9:00	0.725	5
9:00 – 9:15	0.573	2

RFC: Ratio of Flow to Capacity. Q: Queue length in PCUs

8.18 Whilst the queue length on the Mount Road to Matthews Lane movement is marginally lower during one fifteen minute period during the morning peak than what has been observed on site and recorded through queue length surveys carried out at the time of the counts and presented in Appendix A, the results in the above table relating to the existing scenario are considered to be representative on the whole of existing conditions. The model therefore provides a representative base against which to consider future operation with the proposed development in place.

8.19 Given that the Junctions 9 model is considered to provide a sufficiently accurate representation of existing conditions against which to consider the impact of the proposed development, Table 8.4 shows the weekday morning and weekday evening results of the assessment scenario models, whilst Table 8.5 shows the results on the busiest Mount Road to Matthews Lane right turn movement in 15 minute intervals.

Table 8.4: B6178 Mount Road / Matthews Lane: Junctions 9 Results

	Future Year Base		Future Year Base Plus Proposed Development	
	RFC	Q	RFC	Q
Weekday Morning Peak				
Matthews Ln: Left	0.434	1	0.447	1
Matthews Ln: Right	0.400	1	0.420	1
Mount Rd: Right turn	0.850	8	0.911	11
Weekday Evening Peak				
Matthews Ln: Left	0.401	1	0.443	1
Matthews Ln: Right	0.573	1	0.599	1
Mount Rd: Right turn	0.460	2	0.482	2

RFC: Ratio of Flow to Capacity. Q: Queue length in PCUs

Table 8.5: B6178 Mount Road to Matthews Lane Movement: Weekday Morning Peak

	Weekday Morning Peak: Mount Road to Matthews Lane			
	Future Year Base		Future Year Base Plus Proposed Dev	
	RFC	Q	RFC	Q
8:15 – 8:30	0.597	2	0.646	3
8:30 – 8:45	0.850	8	0.911	11
8:45 – 9:00	0.747	6	0.809	9
9:00 – 9:15	0.591	3	0.643	3

RFC: Ratio of Flow to Capacity. Q: Queue length in PCUs

8.20 As can be seen from the above table the Junctions 9 modelling indicates that, during the weekday evening peak and with the development in place, the maximum RFC value would be 0.599 on the Matthews Lane right turn approach. This level of RFC continues to be significantly below the traditional 0.850 design capacity. There would also be no notable queuing.

8.21 During the weekday morning peak, both the future year base and future year base plus proposed development models shows the RFC to be below its traditional design capacity on the Matthews Lane approaches, with a maximum RFC value of 0.447.

8.22 The only movement / time the junction would be operating around its design capacity is therefore on the right turn movement from Mount Road to Matthews Lane during the morning peak. As under existing conditions, the RFC value for this movement is around its traditional design capacity under the future year base scenario with a value of 0.850. This increases by 0.061 to 0.911 under future year base plus proposed development conditions, which equates in an increase in queue length of just 3 pcu's.

8.23 However, Table 8.5 shows that, even with the proposed development in place, this movement is only operating around its design capacity for one fifteen minute period, with the RFC value reducing to between 0.643 and 0.809 for the remainder of the peak hour. This suggests that the increase in RFC value and queuing is associated with the school drop off and is, therefore, short lived.

8.24 In light of these results it is suggested that the proposed development would not result in any significant increase to queuing and delay at the B6178 Mount Road / Matthews Lane junction, that the operation of this junction would not be materially affected by the proposals and that no mitigation is therefore required.

Operational Assessments: B6178 Mount Road / Matthews Lane (Sensitivity Test)

8.25 As set out in Section 4, the Levenshulme and Burnage Low Traffic Neighbourhood Scheme includes proposals to remove the existing Toucan crossing north of the B6178 Mount Road / Matthews Lane junction and create a new signal junction with Toucan controlled crossings on all the arms of the junction. MCC has therefore requested that a 'sensitivity test' be undertaken that assesses the operation of the B6178 Mount Road / Matthews Lane junction under a scenario whereby the traffic signal scheme is in place.

8.26 It was hoped that a LINSIG model could be provided by MCC / TfGM for this scheme but unfortunately this has not been possible. CBO has therefore built a LINSIG model to represent this scheme on the basis of it having single lane approaches and an 'all red' pedestrian / cyclists phase being called every cycle.

8.27 Based on this model and the future year base and future year base plus proposed development traffic flows, Table 8.6 below show the results of these operational assessments, whilst the full LINSIG outputs are included at **Appendix L** for information.

Table 8.6: B6178 Mount Road / Matthews Lane: LINSIG Results (Sensitivity Test)

	Future Year Base		Future Year Base Plus Proposed Development	
	DoS	Q	DoS	Q
Weekday Morning Peak				
Mount Road: North	87.5%	25	92.2%	29
Matthews Lane	61.0%	15	61.6%	16
Mount Road: South	86.6%	11	87.6%	12
Weekday Evening Peak				
Mount Road: North	76.1%	21	79.0%	23
Matthews Lane	49.9%	11	51.7%	12
Mount Road: South	76.3%	10	79.2%	11

DoS: Degree of Saturation. Q: Queue length in PCUs

8.28 As can be seen from the above table the LINSIG modelling indicates that, under the future year base scenario, the signal junction would be operating within the traditional design capacity (90% degree of saturation), with a maximum degree of saturation of 87.5% during the weekday morning peak and 76.3% during the weekday evening peak. With the development added, the signals would continue to operate within the traditional design capacity during the weekday evening peak, with a maximum degree of saturation of 79.2%. Other than the Mount Road (N) arm, they would also continue to operate below the traditional design capacity during the morning peak, with a degree of saturation of 87.6% on Mount Road (S) and 61.6% on Matthews Lane.

8.29 The only arm, therefore, to be operating over the traditional design capacity with the development in place is the Mount Road (N) arm during the weekday morning peak, with a degree of saturation of 92.2%. However, this is on marginally above the 90% design capacity, well with the actual capacity and represents only a 4.7% increase in degree of saturation and a 4 pcu increase in queue length compared to the base scenario. These changes are minimal and would not be noticeable on the ground.

8.30 In light of these results, it is suggested that the proposed development would not materially impact on the proposals for this location associated with the Levenshulme and Burnage Low Traffic Neighbourhood Scheme.

Operational Assessments: Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue

8.31 Based on the observed, future year base and future year base plus proposed development traffic flows, LINSIG assessments have been carried out for the Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue signals. Tables 8.7 to 8.9 below show the results of these operational assessments, whilst the full LINSIG outputs are included at **Appendix M** for information.

8.32 Adopting the modelling approach used and approved in other Transport Assessments for developments in the vicinity of these junctions, they have been modelled as one network within the LINSIG programme.

8.33 Based on this model and in the first instance, Table 8.7 below shows the results of the existing traffic flow model.

Table 8.7: Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue: LINSIG Results (Existing Model)

	Weekday Morning Peak		Weekday Evening Peak	
	DoS	Q	DoS	Q
Mount Road / Kirkmanshulme Lane				
Mount Rd (S): left & ahead	43.4%	8	35.3%	3
Mount Rd (S): ahead	28.1%	5	39.8%	4
Kirkmanshulme Ln	18.4%	3	34.0%	3
Mount Rd (N): ahead	40.5%	4	43.9%	6
Mount Rd (N): right	39.4%	5	11.0%	1
Total Delay	5.10		3.45	
A57 Hyde Road / Mount Road / Glencastle Road				
A57 Hyde Rd (E): left & ahead	94.2%	27	88.5%	17
A57 Hyde Rd (E): ahead	94.8%	32	80.7%	16
Mount Rd: left	42.4%	4	20.8%	3
Mount Rd: right	49.5%	5	76.0%	9
Mount Rd: right	72.8%	8	82.9%	10
A57 Hyde Rd (W): ahead	20.9%	3	74.3%	11
A57 Hyde Rd (W): ahead	32.6%	4	88.0%	19
Glencastle Rd	90.3%	11	69.9%	10
Total Delay	41.61		42.05	
A57 Hyde Road / Queens Avenue				
A57 Hyde Rd (E): ahead	26.6%	8	14.9%	2
A57 Hyde Rd (E): ahead	65.9%	2	39.8%	1
A57 Hyde Rd (W): left & ahead	31.5%	5	61.7%	13
A57 Hyde Rd (W): ahead	22.7%	3	43.4%	8
Queens Ave: all moves	24.6%	2	23.2%	2
Total Delay	4.78		6.05	
Overall Total Delay	51.84		51.94	

DoS: Degree of Saturation Q: Queue length in PCUs Delay: Delay in pcu/Hr

8.34 Although the queue lengths on the A57 Hyde Road (E) arm are marginally higher during the morning peak, and the queue lengths on Mount Road are marginally lower during both peaks, than those recorded through queue length surveys carried out at the time of the counts and presented in Appendix A, the results in the above table relating to the existing scenario are considered to be representative on the whole of existing conditions. In the context of the minimal increases in traffic flow referred to earlier in Section 6, the model therefore provides a representative base against which to consider future operation with the proposed development in place.

8.35 Given that the LINSIG model is considered to provide a sufficiently accurate representation of existing conditions against which to consider the impact of the proposed development, Tables 8.8 and 8.9 show the weekday morning and weekday evening results respectively of the assessment scenario models.

Table 8.8: Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue: LINSIG Results (Morning Peak)

	Future Year Base		Future Year Base Plus Dev	
	DoS	Q	DoS	Q
Mount Road / Kirkmanshulme Lane				
Mount Rd (S): left & ahead	48.0%	9	48.5%	9
Mount Rd (S): ahead	21.7%	4	25.6%	4
Kirkmanshulme Ln	25.3%	4	25.3%	4
Mount Rd (N): ahead	41.2%	4	41.8%	4
Mount Rd (N): right	44.8%	7	44.8%	7
Total Delay	5.45		5.68	
A57 Hyde Road / Mount Road / Glencastle Road				
A57 Hyde Rd (E): left & ahead	95.8%	29	95.9%	30
A57 Hyde Rd (E): ahead	96.2%	34	96.4%	34
Mount Rd: left	46.5%	5	50.8%	5
Mount Rd: right	66.4%	7	58.8%	6
Mount Rd: right	60.1%	7	71.1%	9
A57 Hyde Rd (W): ahead	24.7%	3	21.4%	3
A57 Hyde Rd (W): ahead	30.9%	4	34.0%	5
Glencastle Rd	93.1%	12	95.9%	14
Total Delay	46.59		48.96	
A57 Hyde Road / Queens Avenue				
A57 Hyde Rd (E): ahead	29.4%	6	31.5%	7
A57 Hyde Rd (E): ahead	66.9%	1	67.1%	1
A57 Hyde Rd (W): left & ahead	35.2%	5	33.5%	5
A57 Hyde Rd (W): ahead	21.5%	3	23.6%	4
Queens Ave: all moves	25.0%	2	25.0%	2
Total Delay	5.05		5.23	
Overall Total Delay	57.45		60.23	

DoS: Degree of Saturation Q: Queue length in PCUs Delay: Delay in pcu/Hr

Table 8.9: Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue: LINSIG Results (Evening Peak)

	Future Year Base		Future Year Base Plus Dev	
	DoS	Q	DoS	Q
Mount Road / Kirkmanshulme Lane				
Mount Rd (S): left & ahead	38.6%	3	40.1%	3
Mount Rd (S): ahead	38.9%	3	39.3%	4
Kirkmanshulme Ln	35.6%	3	35.6%	3
Mount Rd (N): ahead	44.5%	6	46.5%	7
Mount Rd (N): right	13.7%	1	13.7%	1
Total Delay	3.65		3.74	
A57 Hyde Road / Mount Road / Glencastle Road				
A57 Hyde Rd (E): left & ahead	90.4%	18	92.4%	20
A57 Hyde Rd (E): ahead	82.0%	17	82.0%	17
Mount Rd: left	21.8%	3	23.0%	4
Mount Rd: right	80.3%	10	80.5%	10
Mount Rd: right	81.0%	10	82.0%	10
A57 Hyde Rd (W): ahead	80.0%	12	79.6%	12
A57 Hyde Rd (W): ahead	85.0%	18	85.4%	18
Glencastle Rd	72.1%	11	76.9%	12
Total Delay	43.58		45.54	
A57 Hyde Road / Queens Avenue				
A57 Hyde Rd (E): ahead	15.7%	2	16.5%	2
A57 Hyde Rd (E): ahead	40.4%	1	40.4%	1
A57 Hyde Rd (W): left & ahead	66.1%	15	67.7%	15
A57 Hyde Rd (W): ahead	41.9%	8	42.1%	8
Queens Ave: all moves	23.4%	2	23.4%	2
Total Delay	6.45		6.69	
Overall Total Delay	54.09		56.40	

DoS: Degree of Saturation Q: Queue length in PCUs Delay: Delay in pcu/Hr

8.36 The results in Tables 8.8 and 8.9 show that, with the development traffic added, the network of junctions at the Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue would continue to operate within capacity. These results also show that, on the whole, the addition of the development would increase the degree of saturation on the key A57 Hyde Road and Mount Road approaches by no more than around 1% or 2%, with queue lengths being unaffected. There are a few links where the degree of saturation increases by around 3% or 4%, and one link during the weekday morning peak where the increase is around 11%. However, even with these increases, queue length increases would be no more than 1 or 2 pcu's.

8.37 These levels of change are likely to occur in this location already through daily variation.

8.38 In light of these results, it is suggested that the proposed development would not result in any significant increase to queuing and delay at the Mount Road / Kirkmanshulme Lane, A57 Hyde Road / Mount Road / Glencastle Road and A57 Hyde Road / Queens Avenue junctions and that the operation of these junctions would not be materially affected by the proposals.

Operational Assessments: A57 Hyde Road / A6010 Pottery Lane

8.39 Based on the observed, future year base and future year base plus proposed development traffic flows, LINSIG assessments have been carried out for the A57 Hyde Road / A6010 Pottery Lane signals. Tables 8.10 and 8.11 below show the results of these operational assessments, whilst the full LINSIG outputs are included at **Appendix N** for information.

8.40 With regard to the LINSIG model used to assess this junction, this again adopts the modelling approach used and approved in other Transport Assessments for developments in the vicinity of this junction.

8.41 Based on this model and in the first instance, Table 8.10 below shows the results of the existing traffic flow model.

Table 8.10: A57 Hyde Road / A6010 Pottery Lane: LINSIG Results (Existing Model)

	Weekday Morning Peak		Weekday Evening Peak	
	DoS	Q	DoS	Q
A57 Hyde Rd (W): left & ahead	43.6%	5	73.4%	15
A57 Hyde Rd (W): ahead & right	46.8%	6	75.2%	16
A6010 Pottery Ln (S): left & ahead	40.8%	7	58.3%	10
A6010 Pottery Ln (S): ahead & right	56.2%	8	86.7%	11
A57 Hyde Rd (E): left & ahead	85.8%	21	61.0%	14
A57 Hyde Rd (E): ahead & right	87.9%	12	80.3%	8
A6010 Pottery Ln (N): left & ahead	75.5%	15	81.5%	16
A6010 Pottery Ln (N): ahead & right	74.3%	17	81.9%	18
Total Delay	39.64		44.67	

DoS: Degree of Saturation Q: Queue length in PCUs Delay: Delay in pcu/Hr

8.42 Although the queue lengths are lower on the A57 Hyde Road (E) arm and marginally lower on the A6010 Potter Lane (N) arm during the morning peak than those recorded through queue length surveys carried out at the time of the counts and presented in Appendix A, the results in the above table relating to the existing scenario are considered to be representative on the whole of existing conditions. In the context of the minimal increases in traffic flow referred to earlier in Section 6, the model therefore provides a representative base against which to consider future operation with the proposed development in place.

8.43 Given that the LINSIG model is considered to provide a sufficiently accurate representation of existing conditions against which to consider the impact of the proposed development, Table 8.11 below shows the results of the assessment scenario models.

Table 8.11: A57 Hyde Road / A6010 Pottery Lane: LINSIG Results

	Future Year Base		Future Year Base Plus Dev	
	DoS	Q	DoS	Q
Weekday Morning Peak				
A57 Hyde Rd (W): left & ahead	46.0%	6	46.7%	6
A57 Hyde Rd (W): ahead & right	49.3%	7	49.9%	7
A6010 Pottery Ln (S): left & ahead	44.0%	7	44.2%	7
A6010 Pottery Ln (S): ahead & right	64.4%	8	64.4%	8
A57 Hyde Rd (E): left & ahead	87.6%	24	86.9%	23
A57 Hyde Rd (E): ahead & right	85.6%	12	88.6%	14
A6010 Pottery Ln (N): left & ahead	81.2%	16	81.2%	16
A6010 Pottery Ln (N): ahead & right	79.8%	18	80.1%	18
Total Delay	42.47		43.48	
Weekday Evening Peak				
A57 Hyde Rd (W): left & ahead	75.6%	15	77.1%	16
A57 Hyde Rd (W): ahead & right	77.8%	17	79.0%	17
A6010 Pottery Ln (S): left & ahead	58.8%	11	58.7%	11
A6010 Pottery Ln (S): ahead & right	87.2%	11	88.4%	11
A57 Hyde Rd (E): left & ahead	64.2%	15	65.1%	16
A57 Hyde Rd (E): ahead & right	84.1%	9	85.2%	9
A6010 Pottery Ln (N): left & ahead	81.8%	16	82.3%	17
A6010 Pottery Ln (N): ahead & right	82.2%	18	82.7%	19
Total Delay	46.70		47.74	

DoS: Degree of Saturation Q: Queue length in PCUs Delay: Delay in pcu/Hr

8.44 Based on the above the modelling shows that, with the development traffic added, the A57 Hyde Road / A6010 Pottery Lane junction would operate within its design capacity during both peaks. The above also shows that the proposed development would have no material impact on the operation of the junction, with the degree of saturation increasing by a maximum of 3.0% during the weekday morning peak and 1.5% during the weekday evening peak. The development would also have no material impact on queue lengths, which would increase by a maximum of 2 pcu's.

8.45 In light of these results, it is suggested that the proposed development would not result in any significant increase to queuing and delay at the A57 Hyde Road / A6010 Pottery Lane junction and that the operation of the junction would not be materially affected by the proposals.

Summary

8.46 Based on the modelling presented in this section of the report, it is concluded that the proposed development would not result in any significant increase to queuing and delay at the existing junctions within the study area and that the operation of these junctions would not be materially affected by the proposals. Consequently, the impact of the development on the existing highway network cannot be considered severe.

8.47 With regard to the B6178 Mount Road / Matthews Lane junction, it is also concluded that the proposed development would not materially impact on the proposals for this location associated with the Levenshulme and Burnage Low Traffic Neighbourhood Scheme.

8.48 In light of the above, no highway mitigation is required in association with the proposed development.

9 Summary, Conclusions and Recommendations

Summary and Conclusions

9.1 Based on the findings of this report it is concluded that:

Accessibility by the Sustainable Modes

- With the proposed linkages in place to Mannering Street to the north and the dedicated footway / cycleway to the south, the pedestrian and cycle infrastructure in the vicinity of the site and on local desire lines is considered to be of a good quality, providing a suitable and safe pedestrian and cyclist environment. This pedestrian and cycle infrastructure also provides access to services, facilities and the public transport network that are within walking and cycling distance of the site;
- The site is well placed in terms of pedestrian connectivity, with walking representing a very realistic alternative to the car for future residents undertaking educational and 'top up' shopping trips, some recreational trips and potentially employment trips. Walking is also a realistic alternative to the car for future users of the sports & community facility walking directly from home. Furthermore, the site is well placed for future residents to access local facilities and district centres, as well as for future residents and users of the sports & community facility to connect to the local bus network;
- The site is ideally placed for residents to travel by bicycle for educational, employment, retail and leisure trips and for users of the sports & community facility to cycle to the site. The south side of Manchester, Reddish, Denton and Droylsden, as well as the southern edge of Manchester City Centre and the northern edge of Stockport Town Centre, are within a 5km distance. Just a further 1km or 2km would take in these centres in their entirety and, although outside the 5km catchment, these 6km or 7km catchments would be accessible to some future residents / users of the sports & community facility, particularly given the growing popularity of e-bikes. Future residents and users of the sports & community facility would also be able to cycle to Levenshulme railway station to join the local rail network;
- The site is well placed for future residents to travel by bus for educational, employment, retail and leisure purposes. These buses also offer the opportunity for uses of the sports & community facility to travel by this mode. Furthermore, local bus services offer the opportunity to use the bus to link to a journey by rail which, in combination with the accessibility of Levenshulme station by bicycle, means the site is also considered to be connected to the local rail network;

Site Access and on site Pedestrian, Cycle & Parking Provision

- The proposed access arrangements off Wembley Road and the B6178 Mount Road are considered acceptable and appropriate from a design and safety perspective, whilst the junction form is also considered to be in keeping with the surrounding highway network. Furthermore, assessments show there would be no operational issues associated with the proposed site layout and that the access arrangements proposed would be more than sufficient to adequately serve the proposed development;
- The Road Safety Audit for the accesses recommended 'No waiting at any time' restrictions should be included in the detailed design to protect the whole of the junctions from parked vehicles. Reference has therefore been made in the submitted drawings to the investigation of these provisions, with the extent of these provisions to be investigated to be determined by MCC as the highway authority;
- To accommodate the Wembley Road access, it is proposed to relocate the existing northbound Wembley Road bus stop approximately 50 metres to the south. As part of this relocation, it is also proposed to include a dropped crossing provision on Wembley Road to improve access to bus stops, with this crossing being protected by bollards following the recommendation of the Road Safety Audit. This arrangement is considered appropriate;
- The proposed temporary construction / delivery access arrangement from Wembley Road is considered acceptable;
- The internal highway arrangement is appropriate to suitably serve the proposed development;
- The proposed car parking provision within the site is considered to strike a balance between the lower level of parking referred to by MCC and what is considered by Kellen to be an appropriate level of provision for the proposed dwelling types. It also accords with GMYF's requirements;

- In terms of cycle parking, dwellings would have 1 secure anchor per house fixed to rear elevation. Residents of the young person's accommodation with a bike would store this within their studio apartment, whilst 1 covered and secured external cycle parking space would also be provided per studio apartment. 20 secure cycle parking spaces would also be provided at the community hub. These provisions are considered by GMYF and Kellen to accord with their requirements;

Traffic Impact

- There are no notable accident issues on Wembley Road, the B6178 Mount Road along the site frontage or at the B6178 Mount Road / Matthews Lane junction which traffic from the proposed development would exacerbate. Whilst there have been a number of personal injury accidents recorded at the identified off-site junctions within the study area, particularly at the A57 Hyde Road / A6010 Pottery Lane junction, it is also suggested that the minimal increases in traffic in these locations associated with the development considered against existing traffic flows through these junctions would not materially exacerbate existing conditions;
- Based on numerical analysis, it is considered that the traffic increases arising from the development at the B6178 Mount Road / Matthews Lane junction warrant the undertaking of operational assessments. However, at the remaining junctions identified as forming part of the study area, it is considered that the level of changes on traffic flow as a result of the proposed development would not be noticeable on the ground and would have no material impact on junction operation. No operational assessment is therefore considered necessary in these locations;
- Notwithstanding the above, operational assessments have been carried out at all off-site junctions;
- These operational assessment show that the proposed development would not result in any significant increase to queuing and delay at the existing junctions within the study area and that the operation of these junctions would not be materially affected by the proposals. Consequently, the impact of the development on the existing highway network cannot be considered severe;
- With regard to the B6178 Mount Road / Matthews Lane junction, the operational assessments also show that the proposed development would not materially impact on the proposals for this location associated with the Levenshulme and Burnage Low Traffic Neighbourhood Scheme;
- In light of the above, no highway mitigation is required in association with the proposed development.

Recommendations

9.2 In light of the above it is the recommendation of CBO Transport that there are no traffic or transportation grounds on which to refuse the application for the proposed residential and sports & community facility development.

CBO TRANSPORT

Project: Land at Mount Road, Gorton, Manchester

Client: Kellen Homes and
Greater Manchester Youth Federation (GMYF)

Document: Transport Assessment

FIGURES AND APPENDICES

Project: Land at Mount Road, Gorton, Manchester

Client: Kellen Homes and
Greater Manchester Youth Federation (GMYF)

FIGURES AND APPENDICES

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Figure 5.7: Temporary Construction / Delivery Access Visibility Provision
Figure 5.8: Swept Path Analysis: Articulated HGV Turning Right Into / Left Out of Temporary Construction / Delivery Access
Figure 5.9: Swept Path Analysis: Articulated HGV Turning Left Into / Right Out of Temporary Construction / Delivery Access
Figure 5.10: Swept Path Analysis: Large Tipper Lorry Turning Right Into / Left Out of Temporary Construction / Delivery Access
Figure 5.11: Swept Path Analysis: Large Tipper Lorry Turning Left Into / Right Out of Temporary Construction / Delivery Access

Figure 6.1: Proposed Development Traffic Assignment
Figure 6.2: Proposed Development Traffic Flows

Figure 7.1: Proposed Development Traffic Impact

Figure 8.1: Committed Development Traffic Flows
Figure 8.2: Future Year Base Traffic Flows
Figure 8.3: Future Year Base Plus Proposed Development Traffic Flows

Figure 1.1 Site Location

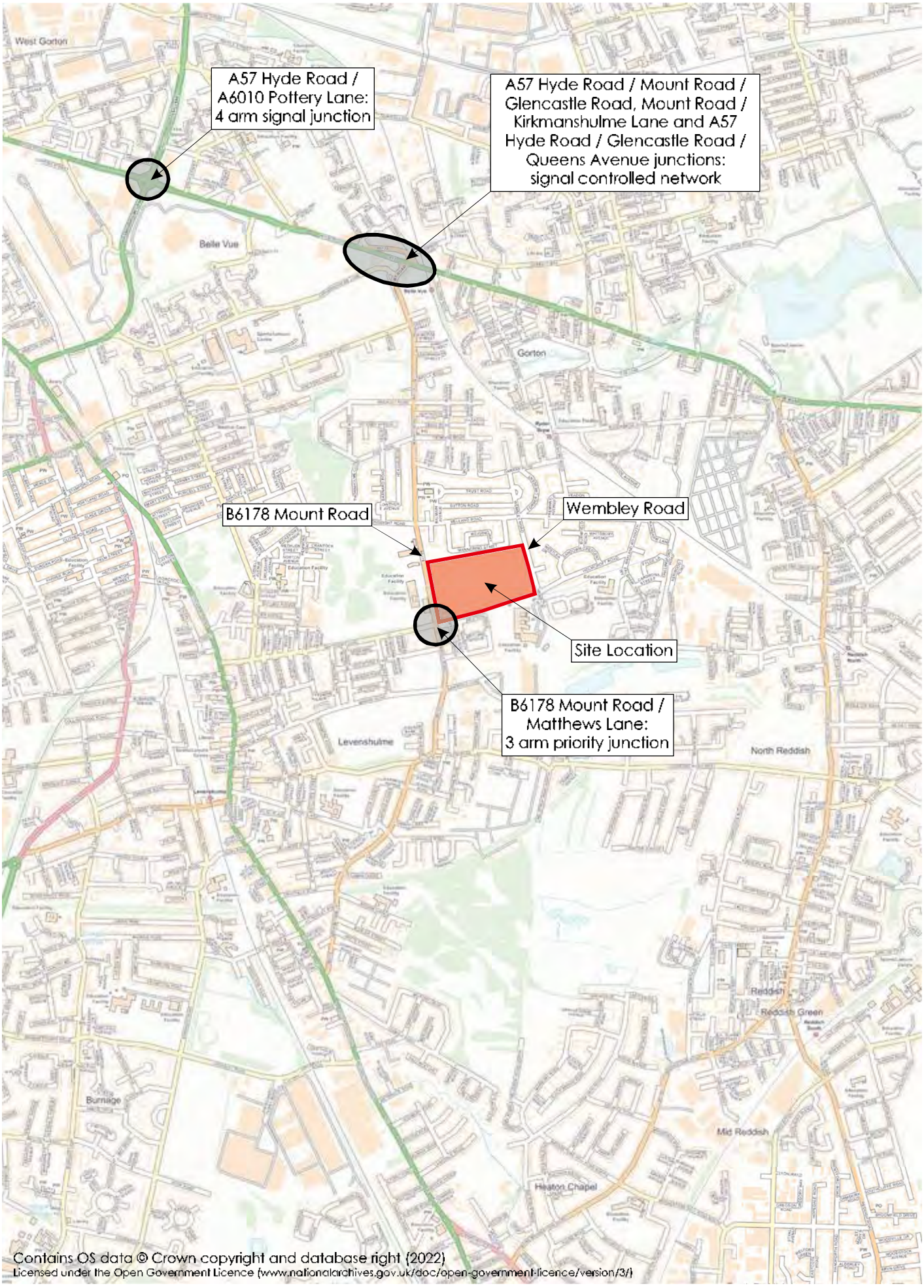


Figure 3.1 Observed Traffic Flows

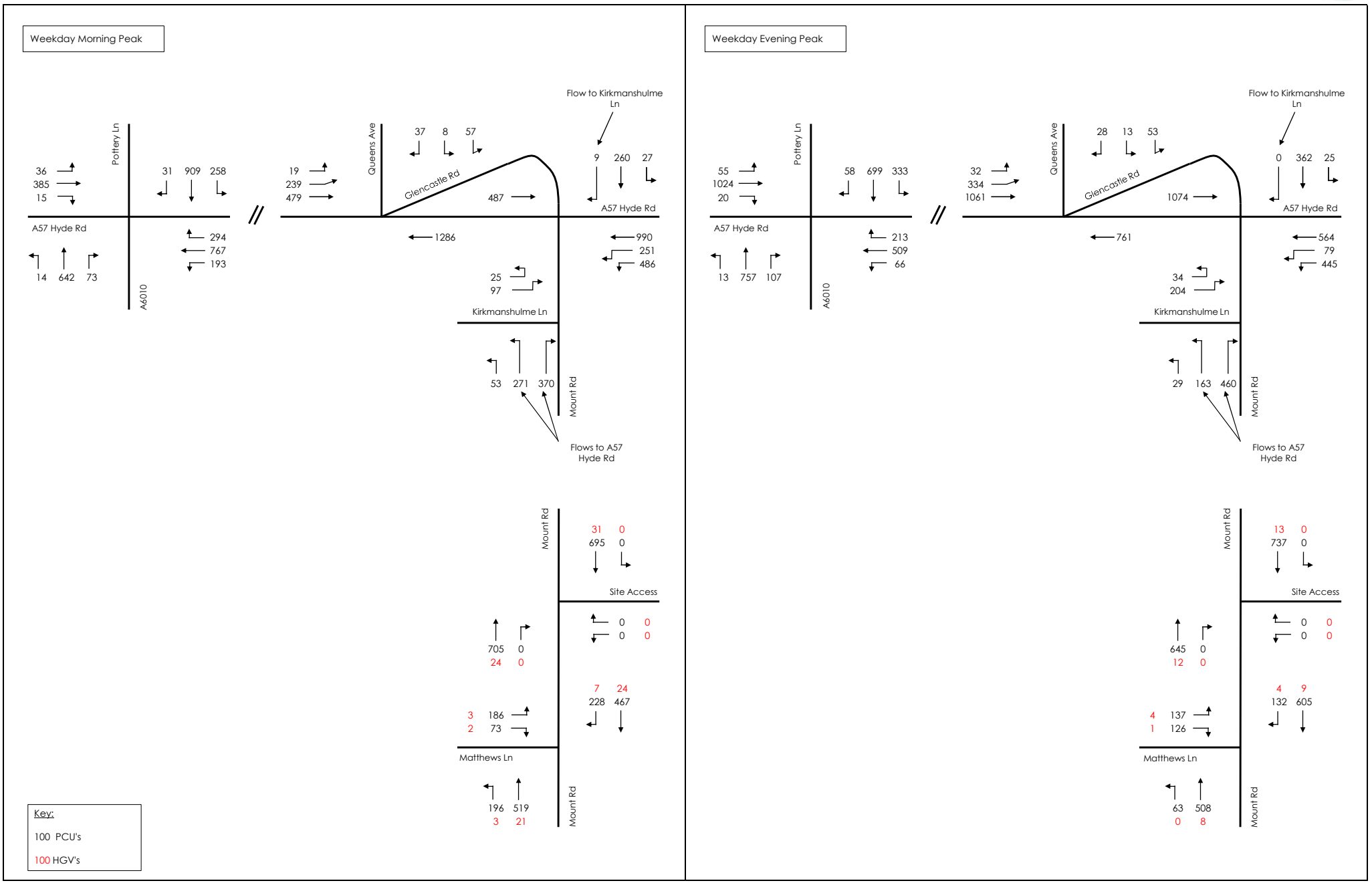


Figure 4.1 Local Linkages

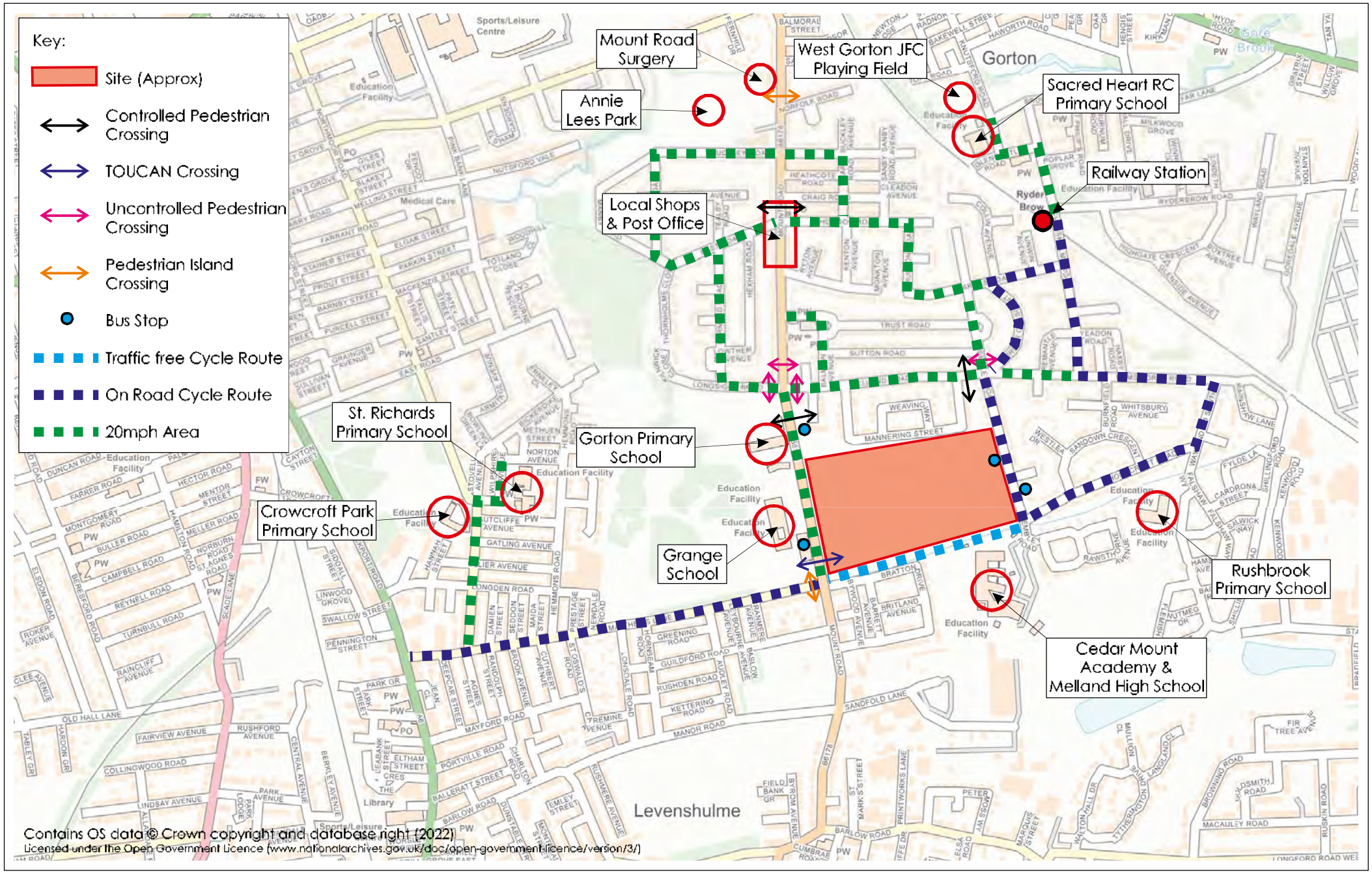


Figure 4.2 Walking Catchment and Site Accessibility

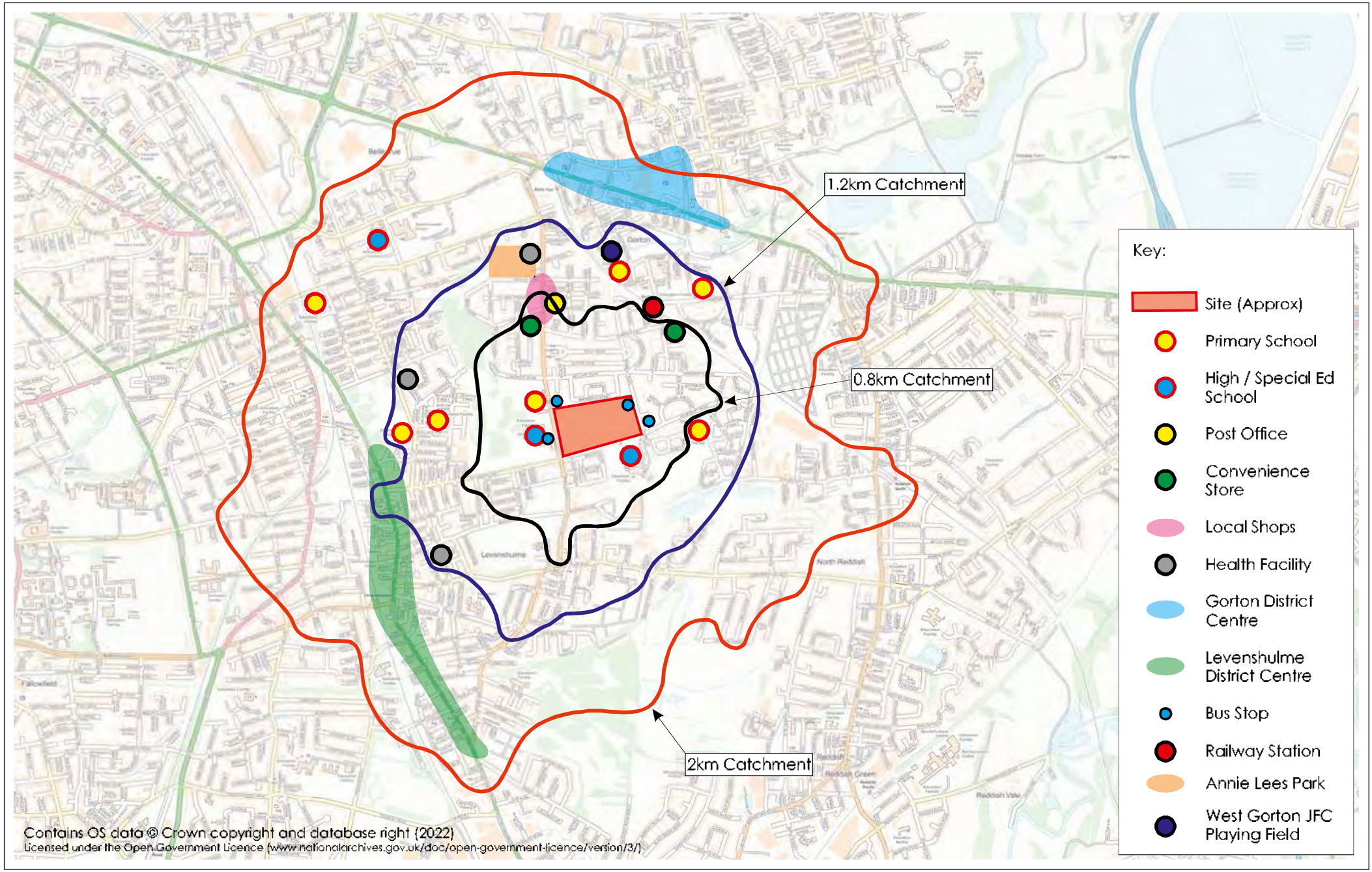
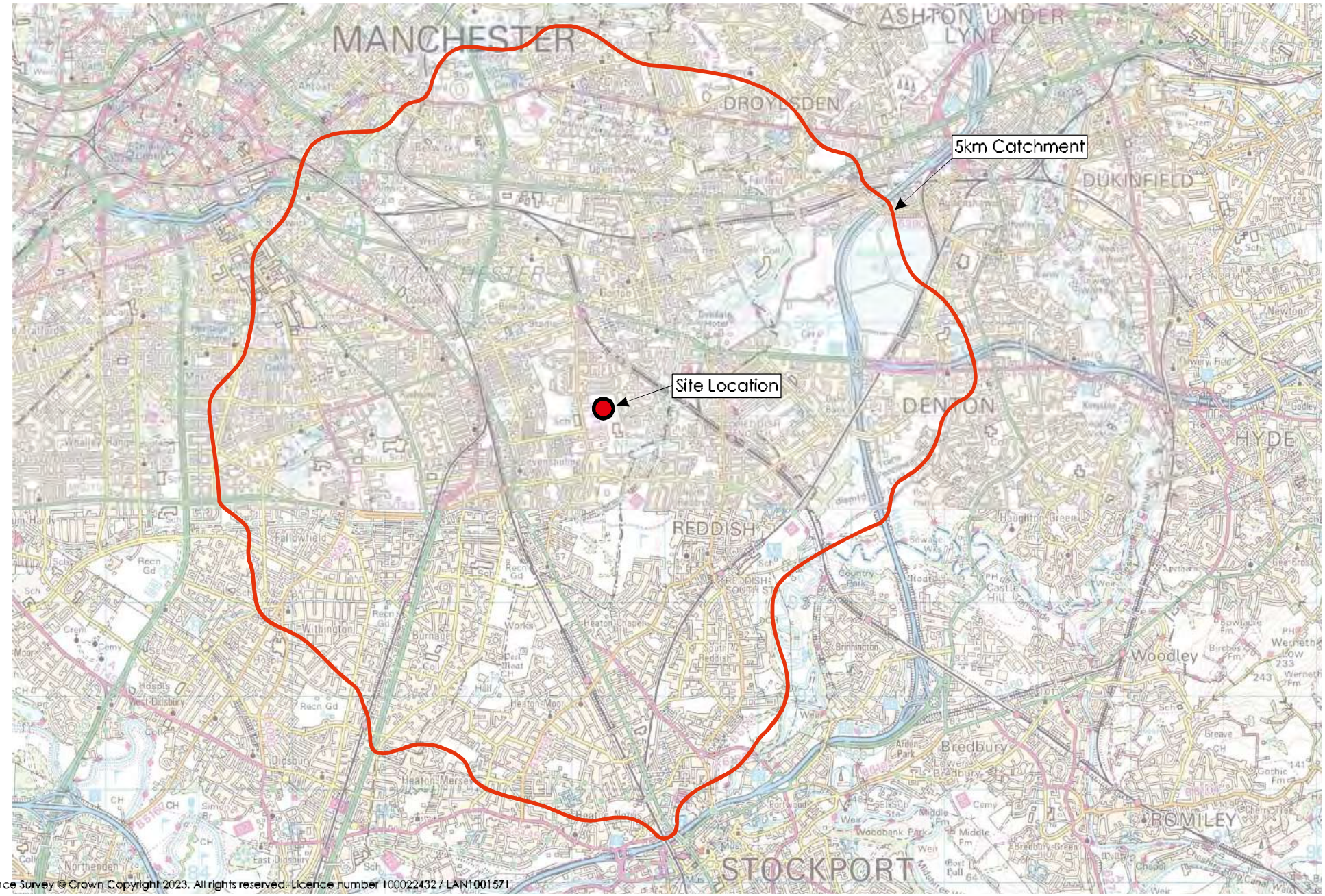


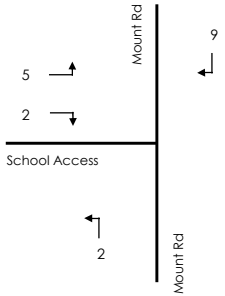
Figure 4.3 5km Cycle Catchment



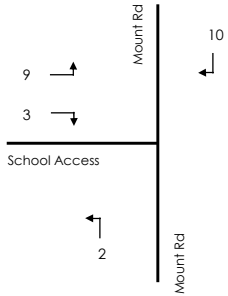
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Figure 5.1 Observed Traffic Flows at Grange School Access

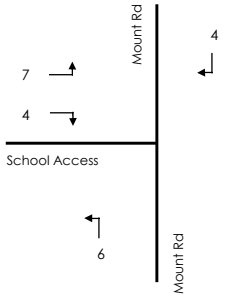
8:15 - 9:15 (Network Peak)



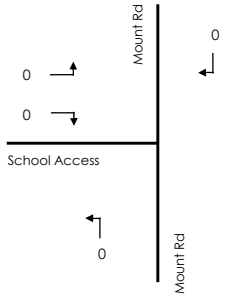
8:45 - 9:45 (School Access Peak)



15:00 - 16:00 (School Access Peak)



16:45 - 17:45 (Network Peak)



Key:

100 Tot

Figure 5.2 Proposed Access Visibility Provision: Mount Road Access
(1:500 @ A3)

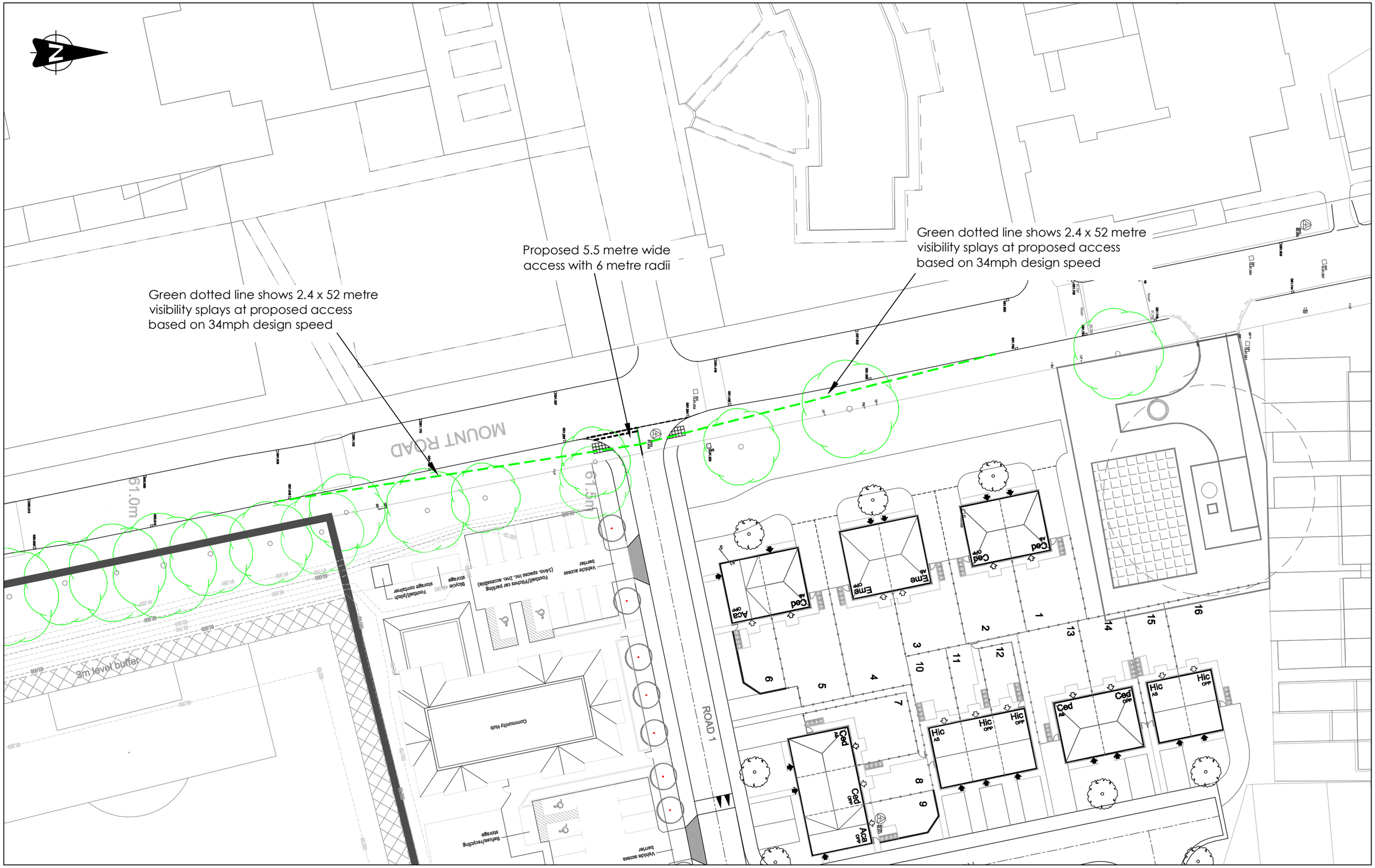


Figure 5.3 Proposed Access Visibility Provision: Wembley Road Access (1:500 @ A3)

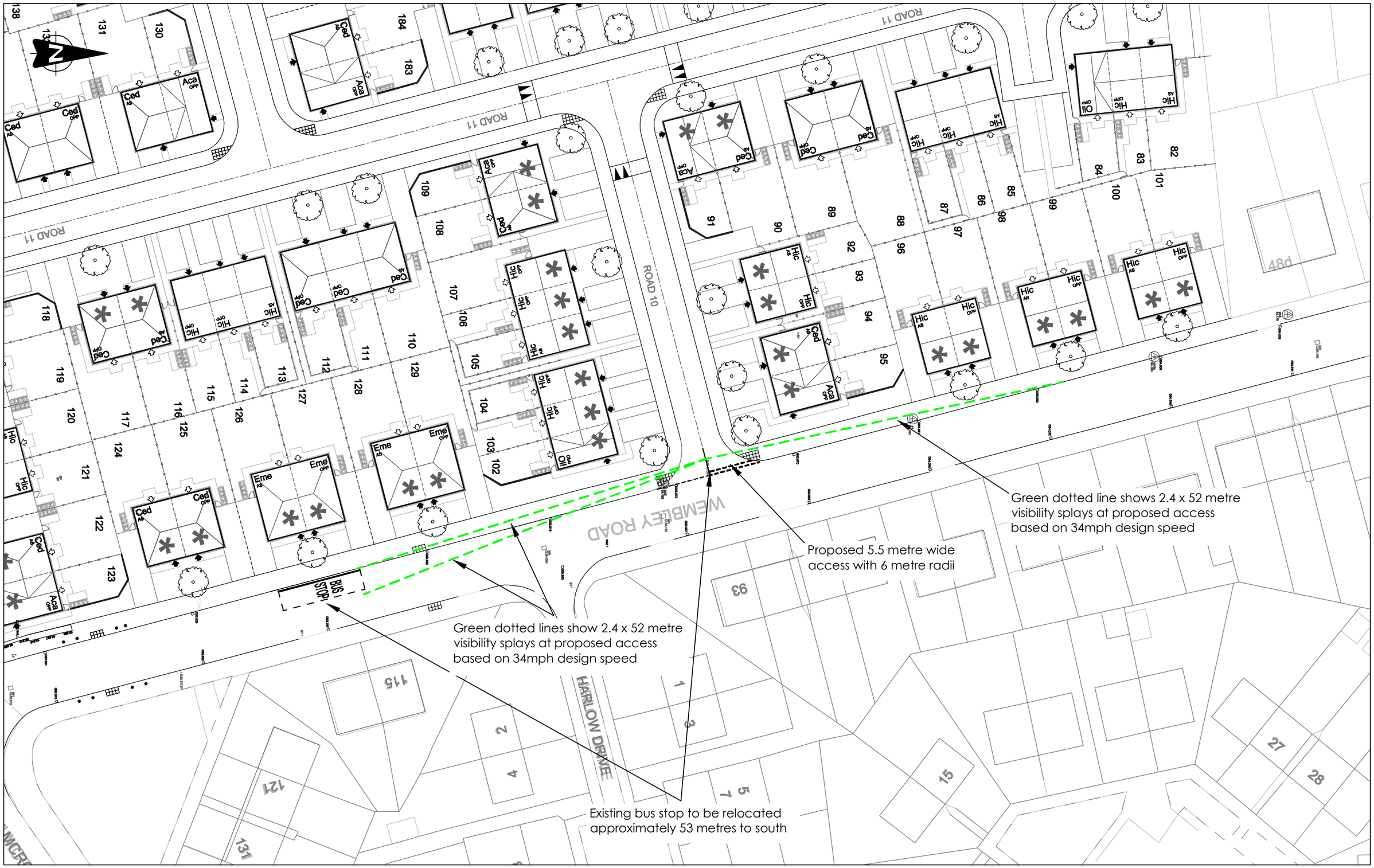


Figure 5.4 Swept Path Analysis: Large Refuse Vehicle Travelling Through the Site
(1:1,000 @ A3)



Figure 5.5 Swept Path Analysis: Large Refuse Vehicle Turning in Northern Turning Heads (1:250 @ A3)



Figure 5.6 Swept Path Analysis: Large Refuse Vehicle Turning in Southern Turning Heads (1:250 @ A3)

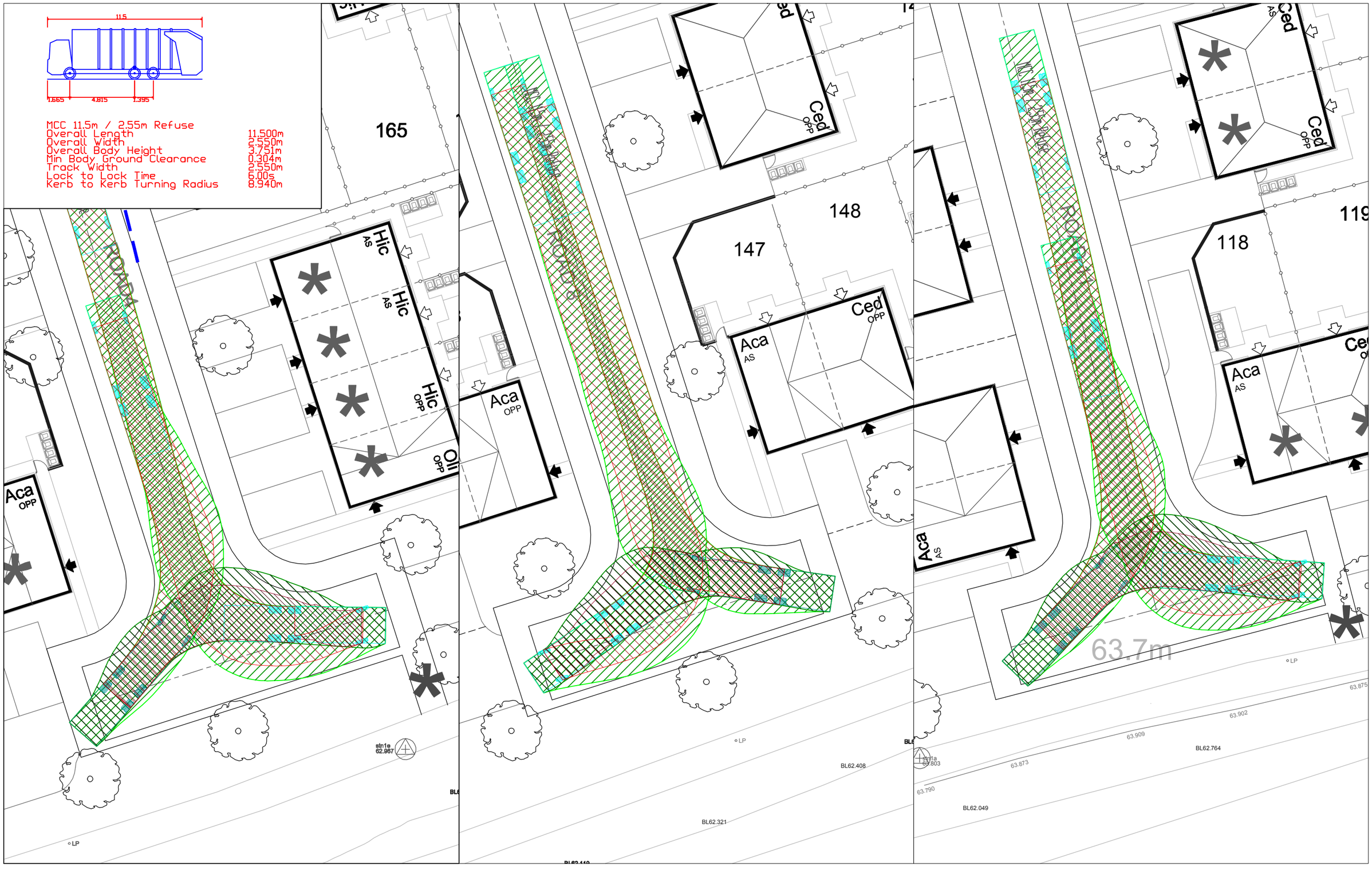


Figure 5.7 Temporary Construction / Delivery Access Visibility Provision
(1:500 @ A3)

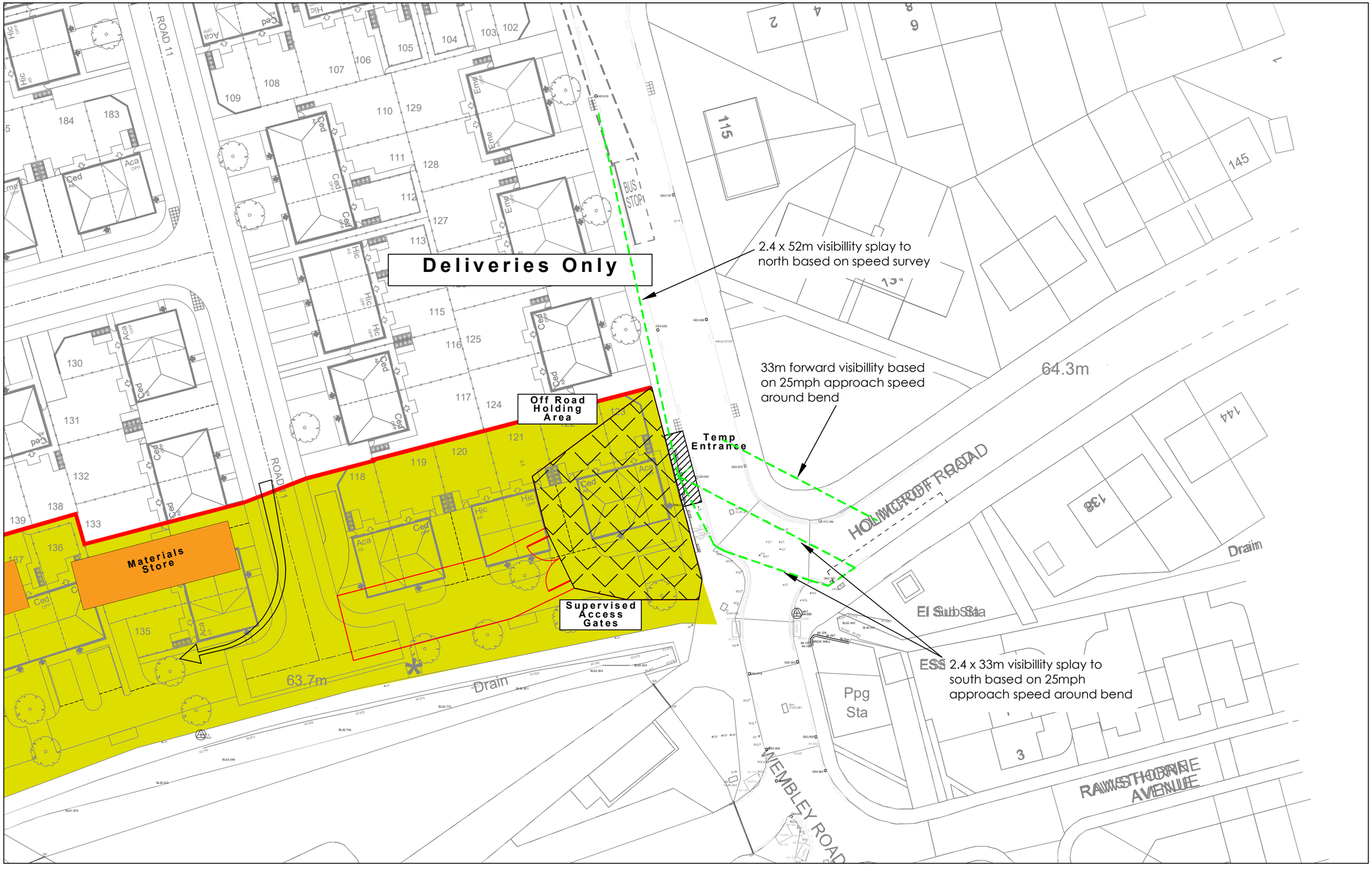


Figure 5.8 Swept Path Analysis: Articulated HGV Turning Right Into / Left Out of Temporary Construction / Delivery Access (1:250 @ A3)



Figure 5.9 Swept Path Analysis: Articulated HGV Turning Left Into / Right Out of Temporary Construction / Delivery Access (1:250 @ A3)



Figure 5.10 Swept Path Analysis: Large Tipper Lorry Turning Right Into / Left Out of Temporary Construction / Delivery Access (1:250 @ A3)



Figure 5.11 Swept Path Analysis: Large Tipper Lorry Turning Left Into / Right Out of Temporary Construction / Delivery Access (1:250 @ A3)



Figure 6.1 Proposed Development Traffic Assignment

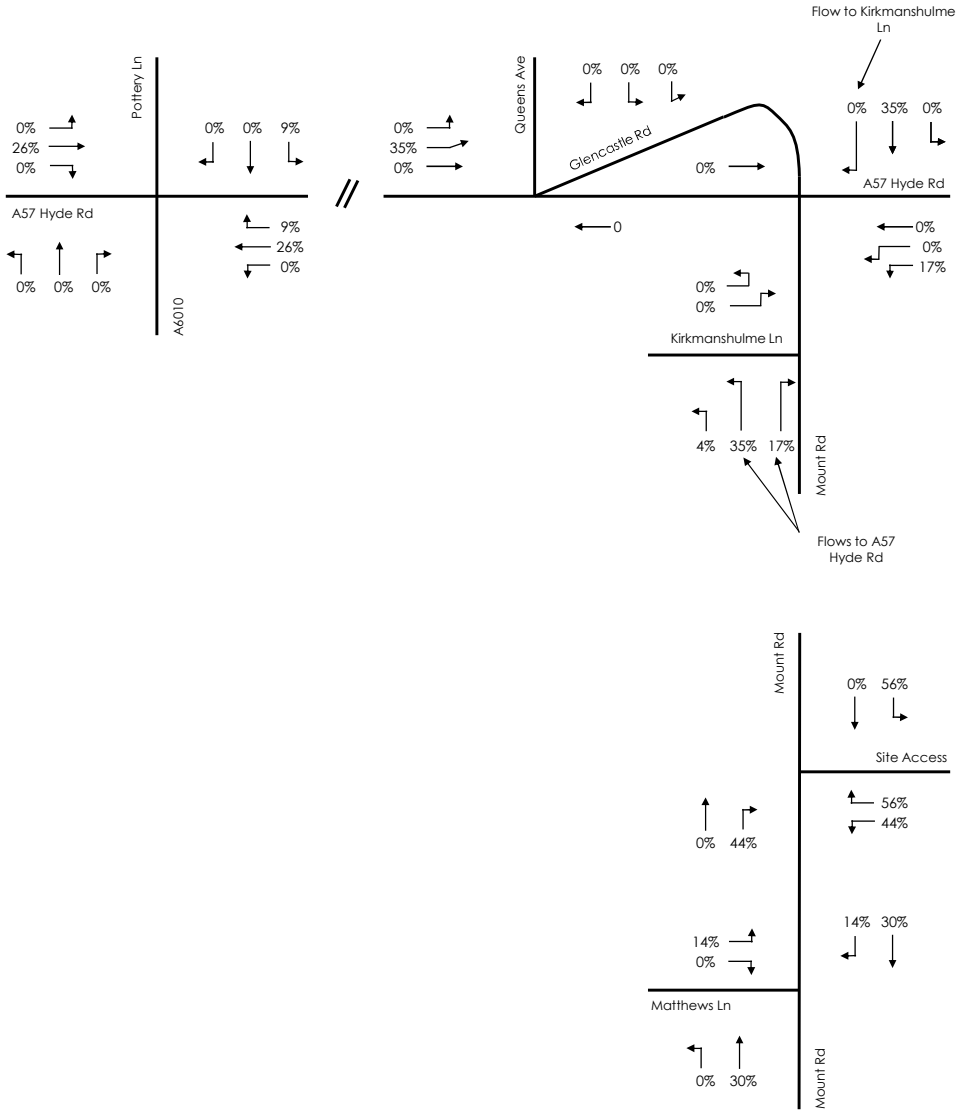


Figure 6.2 Proposed Development Traffic Flows

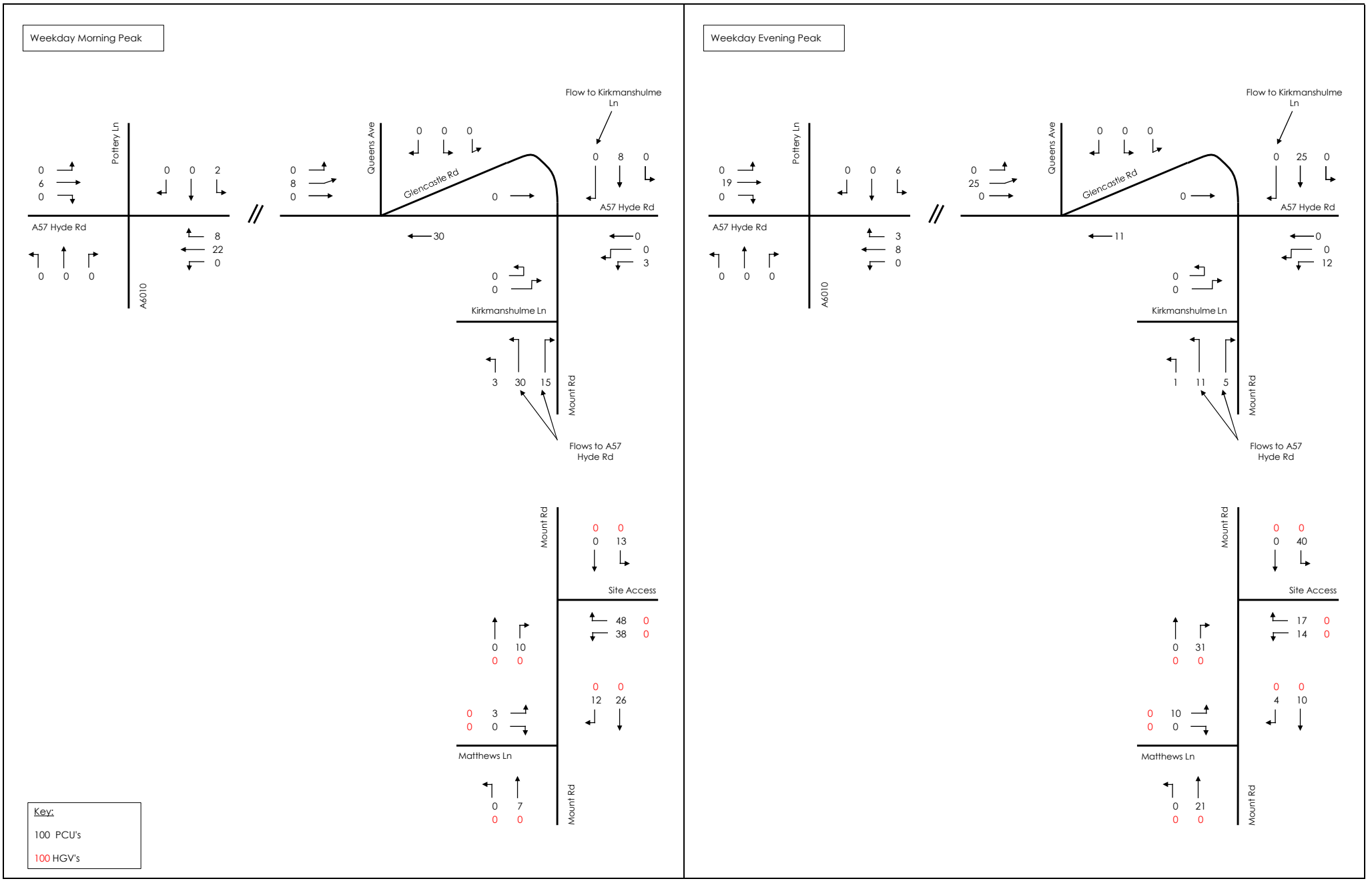


Figure 7.1 Proposed Development Traffic Impact

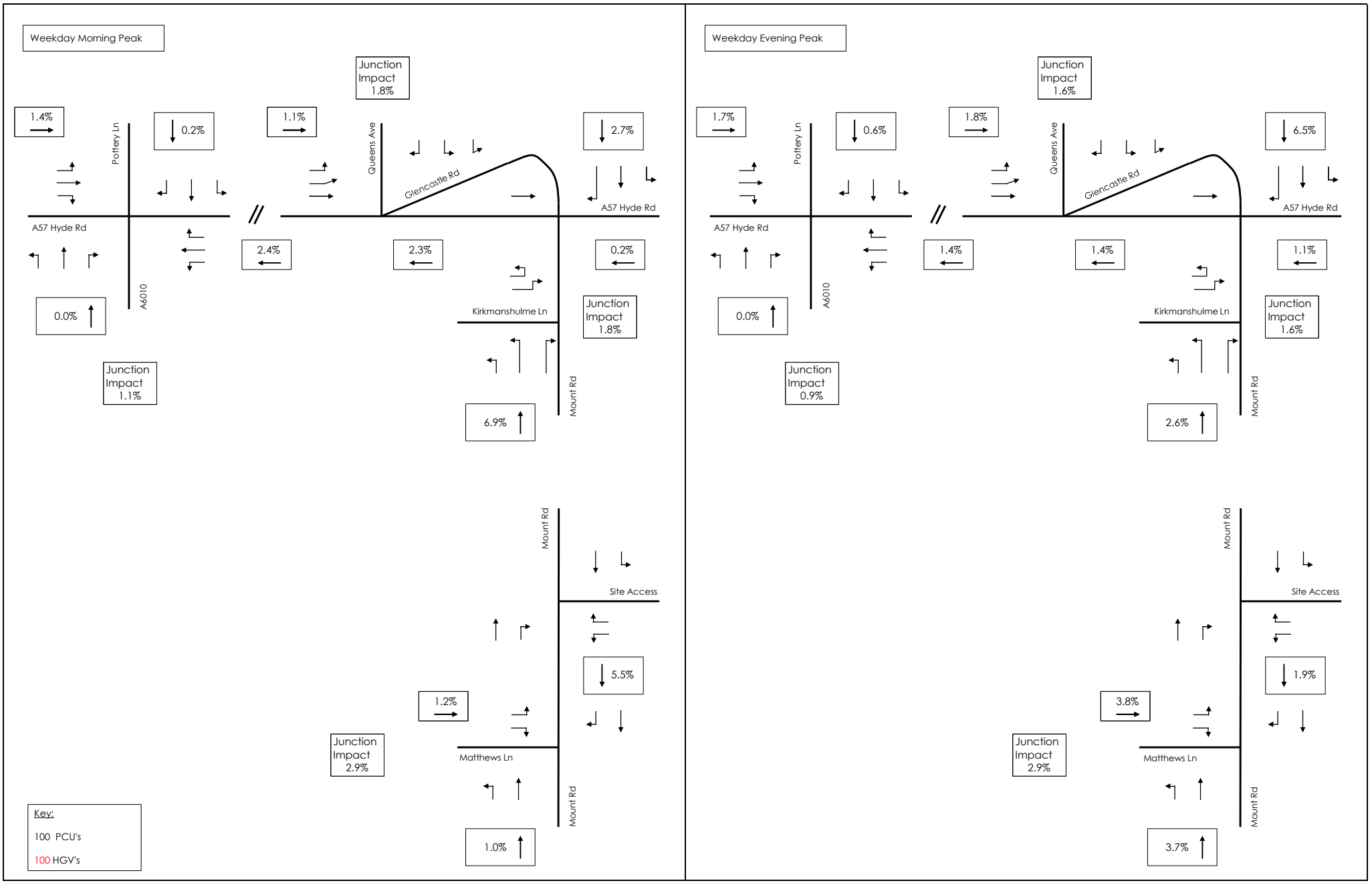


Figure 8.1 Committed Development Traffic Flows: Total

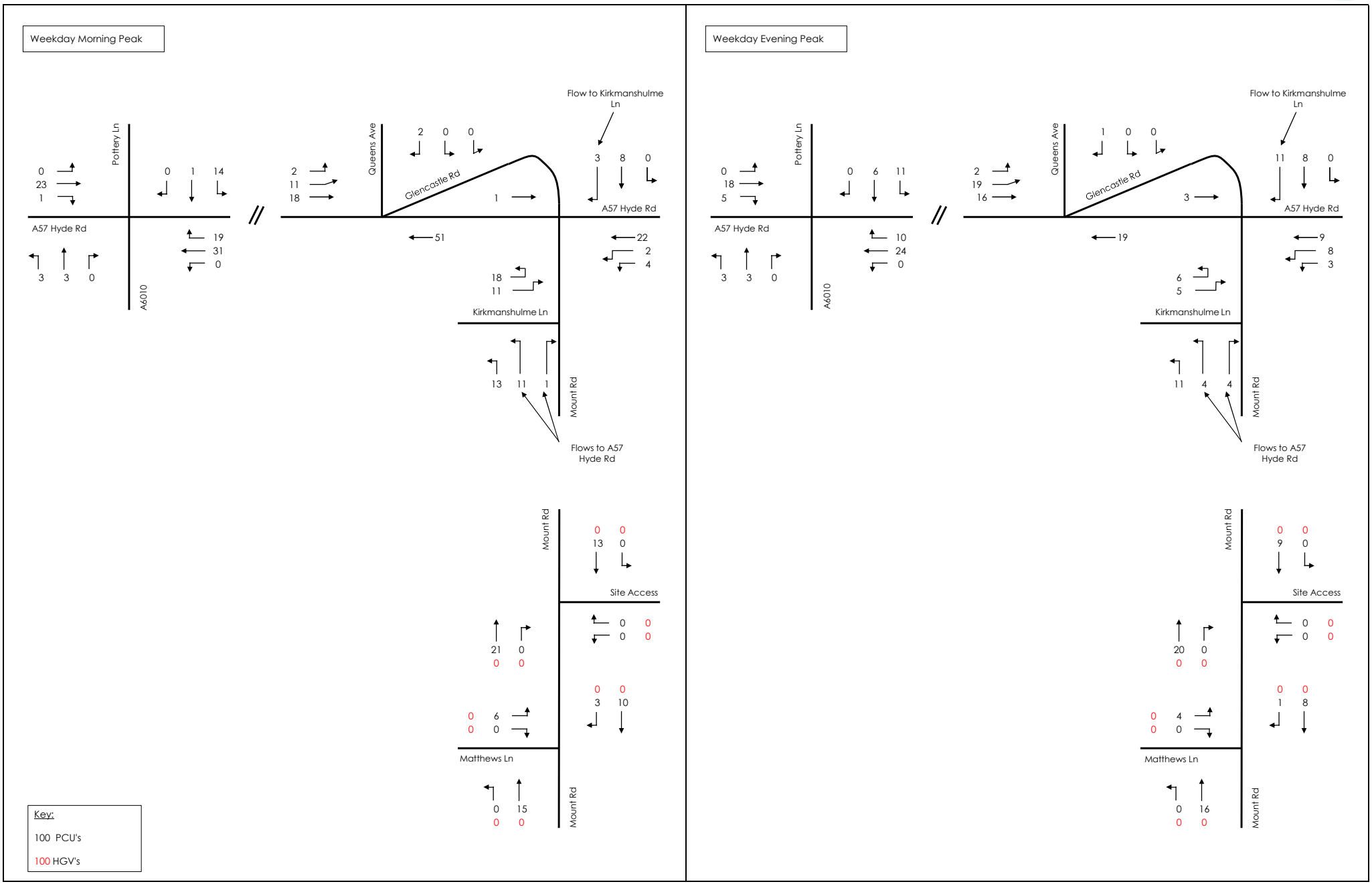


Figure 8.2 Future Year Base Traffic Flows

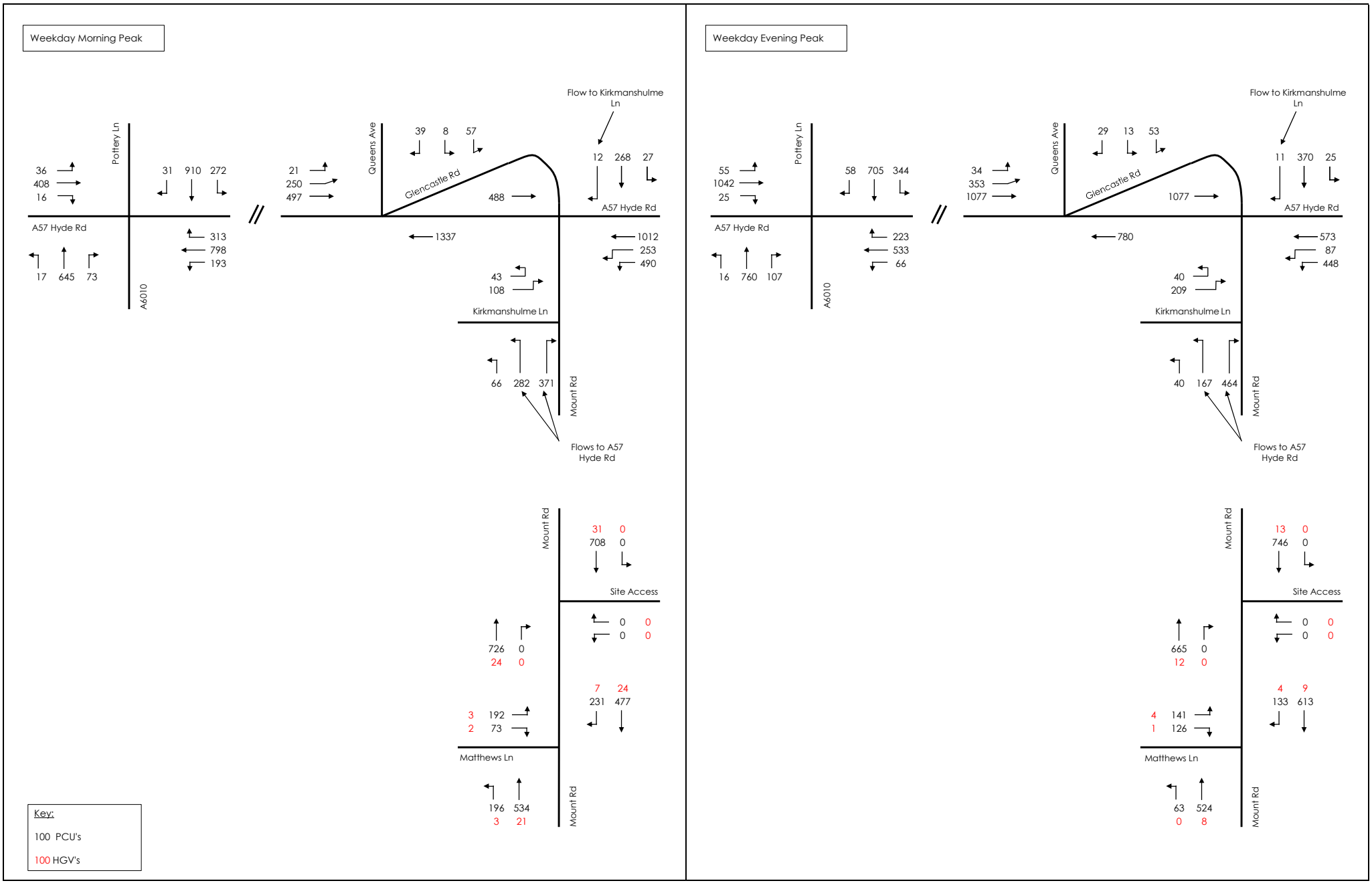
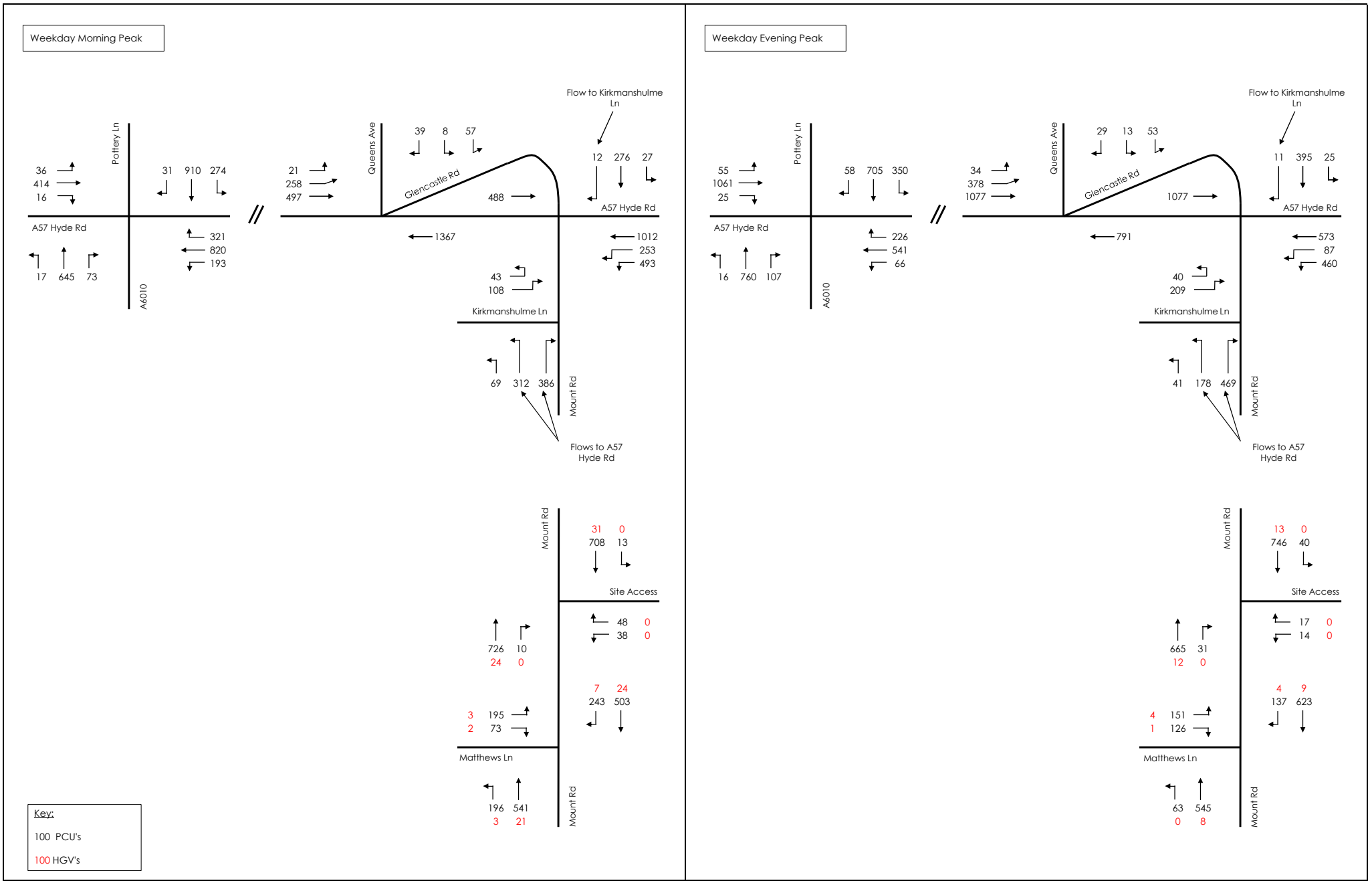


Figure 8.3 Future Year Base Plus Proposed Development Traffic Flows



Appendix A: Queue Length Surveys

Mount Road, Gorton, Manchester - Queue Length Survey: Tuesday, 22 November 2022

Produced by Streetwise Services Ltd.

Junction: A - Glencastle Road / B - (East) A57 Hyde Road / C - B6178 Mount Road / D - Kirkmanshulme Lane / E - (West) A57 Hyde Road

	A - Glencastle Road						B - (East) A57 Hyde Road				C - B6178 Mount Road						D - Kirkmanshulme Lane		E - (West) A57 Hyde Road			
	Lane 1		Lane 2		Lane 3		Lane 1		Lane 2		Lane 1		Lane 2		Lane 3		Lane 1		Lane 1		Lane 2	
Survey Period	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT
07:00 - 07:05	0	0	4	4	0	0	13	12	12	10	0	0	6	4	2	2	2	1	3	1	2	0
07:05 - 07:10	0	0	3	3	0	0	14	12	15	13	0	0	7	3	2	2	3	0	4	4	4	3
07:10 - 07:15	0	0	2	1	1	0	22	17	19	10	0	0	6	4	2	2	1	1	2	2	2	2
07:15 - 07:20	2	0	3	3	1	0	19	19	17	17	0	0	9	9	5	5	0	0	6	1	4	0
07:20 - 07:25	2	0	6	6	1	0	13	5	3	3	0	0	6	6	3	1	3	3	1	1	0	0
07:25 - 07:30	0	0	4	4	0	0	19	17	20	19	0	0	9	5	2	1	2	2	3	0	1	0
07:30 - 07:35	2	0	11	7	1	0	12	12	11	5	0	0	7	4	5	4	1	1	5	5	3	3
07:35 - 07:40	0	0	11	11	2	0	15	15	16	14	0	0	5	5	5	5	4	1	3	1	2	0
07:40 - 07:45	2	0	13	6	0	0	16	16	8	5	0	0	6	2	3	3	3	3	5	5	2	1
07:45 - 07:50	0	0	14	14	1	0	22	20	12	10	0	0	6	6	3	3	1	0	9	9	3	3
07:50 - 07:55	0	0	7	7	0	0	13	4	14	5	1	0	27	1	16	4	4	2	1	0	1	0
07:55 - 08:00	0	0	15	15	1	1	25	25	12	11	0	0	11	10	16	9	3	0	5	3	3	1
08:00 - 08:05	2	0	13	7	2	1	17	17	8	6	0	0	22	12	18	12	1	1	6	6	2	2
08:05 - 08:10	0	0	15	15	2	2	26	18	22	22	2	2	9	9	17	10	4	4	10	1	3	1
08:10 - 08:15	0	0	7	5	0	0	19	12	9	9	2	2	15	9	15	11	1	0	4	4	3	3
08:15 - 08:20	2	0	15	15	0	0	24	24	22	22	0	0	11	8	9	5	3	3	2	2	2	1
08:20 - 08:25	2	0	12	5	3	0	14	14	14	8	2	2	12	10	16	10	5	1	3	1	1	1
08:25 - 08:30	0	0	8	8	1	0	27	27	23	23	0	0	7	7	6	6	1	0	10	2	6	1
08:30 - 08:35	2	0	8	7	1	0	27	27	10	5	0	0	28	13	10	1	4	3	3	3	5	5
08:35 - 08:40	0	0	9	9	1	1	25	22	14	13	0	0	14	11	3	3	8	1	9	9	4	4
08:40 - 08:45	0	0	7	4	1	0	16	14	7	4	0	0	7	7	13	11	5	2	9	9	6	6
08:45 - 08:50	0	0	12	9	1	1	9	9	14	14	0	0	11	4	2	2	5	2	5	3	4	4
08:50 - 08:55	0	0	8	8	5	0	17	17	12	5	0	0	12	5	6	6	6	3	6	6	2	1
08:55 - 09:00	0	0	11	5	0	0	8	8	10	10	0	0	23	12	22	12	3	3	2	0	4	0
09:00 - 09:05	0	0	11	11	3	1	12	12	12	7	0	0	22	16	22	7	1	1	8	2	9	0
09:05 - 09:10	0	0	9	6	1	0	16	16	16	16	0	0	22	14	17	12	4	2	6	6	3	3
09:10 - 09:15	0	0	8	7	0	0	27	27	13	9	0	0	24	15	16	12	4	1	4	2	3	0
09:15 - 09:20	0	0	8	6	1	0	23	23	13	13	0	0	8	8	10	10	6	2	3	2	4	1
09:20 - 09:25	0	0	8	6	0	0	22	22	13	11	0	0	13	12	15	14	2	2	2	0	2	0
09:25 - 09:30	0	0	16	7	2	1	15	9	7	6	0	0	6	6	3	3	6	6	5	5	2	0
09:30 - 09:35	2	0	8	8	0	0	21	21	20	9	0	0	8	5	5	5	3	3	4	1	3	3
09:35 - 09:40	0	0	9	2	2	0	8	6	5	5	0	0	2	2	3	0	3	3	4	4	2	0
09:40 - 09:45	0	0	8	8	0	0	11	11	13	12	0	0	13	10	3	2	2	1	7	7	1	1
09:45 - 09:50	2	0	3	2	2	1	3	3	7	5	0	0	8	8	7	7	6	6	6	0	6	0
09:50 - 09:55	2	0	5	2	0	0	4	1	3	0	2	2	3	2	4	4	6	6	8	2	5	3
09:55 - 10:00	0	0	3	3	0	0	14	8	13	8	0	0	5	4	5	1	3	2	6	4	7	1
16:00 - 16:05	2	0	7	7	1	1	16	12	11	7	2	2	5	5	7	3	12	5	21	10	23	8
16:05 - 16:10	2	0	16	16	1	1	23	23	18	18	0	0	17	6	8	2	13	11	21	21	18	18
16:10 - 16:15	2	0	6	6	1	1	19	14	7	7	0	0	23	12	25	12	18	10	14	14	12	10
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16:30 - 16:35	2	0	17	17	2	0	27	11	23	9	0	0	4	4	17	2	16	11	14	10	18	12
16:35 - 16:40	0	0	17	7	0	0	25	25	9	9	0	0	15	6	11	5	7	7	16	16	13	13
16:40 - 16:45	0	0	14	14	1	1	17	15	8	8	0	0	6	0	4	1	7	3	11	11	14	14
16:45 - 16:50	2	0	11	11	4	4	25	22	12	10	0	0	18	6	7	3	8	6	14	14	18	18
16:50 - 16:55	0	0	11	11	2	2	23	21	13	7	0	0	12	5	5	5	5	5	14	14	13	13
16:55 - 17:00	0	0	14	14	1	1	23	23	7	7	0	0	4	3	5	1	5	2	18	9	23	8
17:00 - 17:05	3	0	14	8	2	2	17	17	9	9	0	0	13	4	12	0	10	4	14	14	16	16
17:05 - 17:10	2	1	16	15	0	0	14	10	10	7	0	0	9	9	23	15	7	6	12	1	7	1
17:10 - 17:15	0	0	10	10	0	0	24	10	11	7	0	0	15	8	14	14	10	5	15	12	17	14
17:15 - 17:20	0	0	15	15	1	0	15	15	10	10	0	0	24	12	20	3	6	6	16	16	10	10
17:20 - 17:25	0	0	10	8	1	1	16	4	5	5	0	0	20	10	19	11	7	0	15	6	15	4
17:25 - 17:30	0	0	14	9	1	1	14	14	9	9	0	0	13	9	6	6	7	7	18	18	20	17
17:30 - 17:35	2	0	11	11	1	0	13	12	8	8	0	0	5	5	3	1	8	8	15	5	16	9
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17:40 - 17:45	2	0	9	6	1	1	21	21	14	14	0	0	4	2	2	2	9	3	10	10	11	11
17:45 - 17:50	2	2	12	8	2	0	25	11	12	12	0	0	6	6	3	3	9	9	10	7	17	11
17:50 - 17:55	2	0	9	9	0	0	26	26	16	16	0	0	11	8	5	5	7	1	10	8	15	15
17:55 - 18:00	4	0	10	10	1	1	18	11	7	6	0	0	7	1	14	3	7	5	9	4	9	2
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18:10 - 18:15	2	0	5	4	1	1	19	19	8	8	0	0	5	1	6	1	4	1	7	7	8	8
18:15 - 18:20	2	0	8	8	0	0	15	13	11	3	0	0	5	3	3	0	2	2	6	6	10	7
18:20 - 18:25	0	0	8	8	2	0	17	17	13	10	0	0	5	0	3	2	3	0	8	8	7	4
18:25 - 18:30	2	0	7	6	1	1	14	14	5	4	0	0	6	6	6	0	4	4	11	11	12	5
18:30 - 18:35	0	0	9	7	2	2	11	8	9	9	0	0	6	3	5	4	3	2	5	2	3	1
18:35 - 18:40	2	0	7	6	0	0	18	15	14	6	0	0	4	3	5	0	3	3	10	10	9	2
18:40 - 18:45	2	0	7	3	0	0	20	8	13	3	0	0	3	1	2	0	3	3	5	5	6	6
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18:50 - 18:55	0	0	4	2	1	1	16	16	6	3	0	0	8	6	3	3	2	0	5	5	4	2
18:55 - 19:00	0	0	4	4	1	1	18	6	11	4	0	0	4	2	6	2	3	1	2	2	1	0

Mount Road, Gorton, Manchester - Queue Length Survey: Tuesday, 22 November 2022

Produced by Streetwise Services Ltd.

Junction: A - Harvard Road / B - Glencastle Road / C - (East) A57 Hyde Road / D - (West) A57 Hyde Road

	A - Harvard Road				C - (East) A57 Hyde Road						D - (West) A57 Hyde Road					
	Lane 1		Lane 2		Lane 1		Lane 2		Lane 3		Lane 1		Lane 2		Lane 3	
Survey Period	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT
07:00 - 07:05	0	0	1	1	0	0	1	0	0	0	0	0	4	2	0	0
07:05 - 07:10	0	0	1	1	0	0	1	1	0	0	0	0	4	4	0	0
07:10 - 07:15	1	0	0	0	0	0	2	1	2	0	0	0	3	3	2	2
07:15 - 07:20	1	1	1	0	0	0	3	1	2	0	0	0	2	2	0	0
07:20 - 07:25	1	1	2	2	0	0	2	2	2	2	0	0	1	1	1	1
07:25 - 07:30	1	0	2	2	0	0	2	2	4	0	0	0	8	8	3	3
07:30 - 07:35	4	3	1	0	0	0	3	3	3	0	0	0	0	0	0	0
07:35 - 07:40	1	0	2	1	0	0	4	4	3	3	0	0	6	2	4	1
07:40 - 07:45	1	0	1	0	0	0	2	0	3	0	0	0	4	4	4	4
07:45 - 07:50	3	0	2	1	0	0	2	2	5	5	0	0	2	2	1	0
07:50 - 07:55	2	1	2	0	0	0	4	1	5	0	0	0	7	2	1	0
07:55 - 08:00	3	3	1	0	0	0	2	2	7	4	0	0	2	0	0	0
08:00 - 08:05	4	0	2	2	0	0	1	0	2	0	0	0	3	0	1	0
08:05 - 08:10	4	4	1	0	0	0	1	1	4	3	0	0	7	2	2	1
08:10 - 08:15	3	2	2	0	0	0	1	0	1	1	0	0	3	2	1	1
08:15 - 08:20	3	3	2	0	0	0	2	0	1	0	0	0	5	5	3	3
08:20 - 08:25	4	4	2	0	0	0	2	2	1	1	1	0	4	0	4	0
08:25 - 08:30	2	2	2	2	0	0	1	1	3	3	2	2	6	6	2	1
08:30 - 08:35	2	0	1	0	0	0	2	0	4	0	0	0	3	3	2	0
08:35 - 08:40	4	4	5	2	0	0	1	1	4	4	0	0	6	6	2	2
08:40 - 08:45	2	2	1	0	0	0	2	0	3	0	0	0	3	0	1	0
08:45 - 08:50	3	3	1	0	0	0	0	0	1	0	0	0	2	2	0	0
08:50 - 08:55	2	0	0	0	0	0	1	1	2	2	0	0	1	0	0	0
08:55 - 09:00	3	2	1	0	0	0	3	0	2	0	0	0	4	0	2	0
09:00 - 09:05	3	3	0	0	0	0	3	0	1	0	0	0	0	0	0	0
09:05 - 09:10	2	2	1	1	0	0	2	0	0	0	0	0	3	1	1	0
09:10 - 09:15	2	2	1	1	0	0	2	0	2	1	1	0	2	1	2	2
09:15 - 09:20	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0
09:20 - 09:25	2	0	0	0	0	0	2	1	3	0	0	0	8	1	3	0
09:25 - 09:30	2	0	2	2	0	0	4	4	5	5	1	0	5	2	4	0
09:30 - 09:35	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1	1
09:35 - 09:40	2	2	0	0	0	0	3	3	0	0	0	0	2	0	1	0
09:40 - 09:45	0	0	1	1	0	0	1	1	2	0	0	0	5	5	3	3
09:45 - 09:50	0	0	2	0	0	0	6	3	2	0	0	0	2	2	1	1
09:50 - 09:55	1	0	1	1	0	0	0	0	2	2	0	0	0	0	1	0
09:55 - 10:00	1	1	0	0	0	0	2	2	5	5	0	0	4	2	5	0
16:00 - 16:05	6	5	2	0	0	0	1	1	1	0	0	0	4	4	1	1
16:05 - 16:10	2	2	1	1	0	0	1	1	1	1	0	0	8	8	2	2
16:10 - 16:15	2	2	3	3	0	0	2	0	1	1	0	0	6	2	7	0
16:15 - 16:20	4	4	1	0	0	0	0	0	0	0	0	0	4	4	5	5
16:20 - 16:25	2	2	0	0	0	0	1	1	0	0	1	1	3	2	4	4
16:25 - 16:30	1	1	2	2	0	0	0	0	0	0	0	0	7	7	6	1
16:30 - 16:35	3	3	1	0	0	0	2	0	1	0	0	0	12	4	7	3
16:35 - 16:40	3	3	1	0	0	0	2	0	1	0	0	0	4	0	1	0
16:40 - 16:45	5	4	0	0	0	0	3	3	2	0	0	0	8	5	10	6
16:45 - 16:50	2	2	2	0	0	0	0	0	0	0	0	0	6	3	4	3
16:50 - 16:55	3	0	2	2	0	0	1	1	0	0	1	0	8	8	8	3
16:55 - 17:00	3	2	2	2	0	0	1	1	2	0	0	0	12	7	6	6
17:00 - 17:05	3	3	3	2	0	0	1	1	1	1	0	0	4	4	8	1
17:05 - 17:10	3	3	1	0	0	0	2	2	3	3	0	0	2	2	1	1
17:10 - 17:15	2	0	1	1	0	0	3	3	2	2	2	0	6	3	5	4
17:15 - 17:20	4	0	1	1	0	0	6	0	0	0	1	1	7	4	3	1
17:20 - 17:25	1	1	2	2	0	0	3	0	4	0	0	0	5	5	4	3
17:25 - 17:30	4	4	1	0	0	0	3	0	4	3	0	0	3	3	3	1
17:30 - 17:35	3	3	1	1	0	0	1	0	1	0	0	0	8	5	4	3
17:35 - 17:40	1	0	0	0	0	0	1	1	0	0	0	0	3	3	1	0
17:40 - 17:45	3	3	3	3	0	0	1	1	0	0	0	0	3	2	4	4
17:45 - 17:50	0	0	1	1	0	0	2	2	0	0	0	0	5	5	9	5
17:50 - 17:55	3	0	1	1	0	0	1	1	2	1	0	0	5	5	4	4
17:55 - 18:00	1	0	1	0	0	0	1	1	1	0	0	0	3	0	2	0
18:00 - 18:05	1	1	0	0	0	0	2	1	4	2	0	0	7	2	2	2
18:05 - 18:10	0	0	1	1	0	0	3	2	3	3	0	0	3	3	2	1
18:10 - 18:15	2	2	1	1	0	0	3	3	2	0	0	0	4	4	4	4
18:15 - 18:20	1	1	2	0	0	0	6	6	6	1	1	1	6	6	9	9
18:20 - 18:25	2	1	1	1	0	0	5	5	3	2	0	0	6	4	0	0
18:25 - 18:30	2	1	3	0	0	0	1	0	1	1	0	0	5	0	2	2
18:30 - 18:35	1	1	1	1	0	0	2	0	2	0	0	0	5	5	2	2
18:35 - 18:40	1	1	1	0	0	0	2	2	1	1	0	0	2	2	5	5
18:40 - 18:45	1	0	1	0	0	0	1	1	1	0	0	0	4	4	3	3
18:45 - 18:50	1	0	1	0	0	0	6	1	7	1	0	0	7	4	6	0
18:50 - 18:55	2	1	2	1	0	0	3	3	2	2	0	0	6	6	4	4
18:55 - 19:00	2	0	0	0	0	0	3	1	2	1	1	0	3	2	1	1

Mount Road, Gorton, Manchester - Queue Length Survey: Tuesday, 22 November 2022

Produced by Streetwise Services Ltd.

Junction: A - (North) A6010 Pottery Lane / B - (East) A57 Hyde Road / C - (South) A6010 Pottery Lane / D - (West) A57 Hyde Road

	A - (North) A6010 Pottery Lane								B - (East) A57 Hyde Road								C - (South) A6010 Pottery Lane								D - (West) A57 Hyde Road							
	Lane 1		Lane 2		Lane 3		Lane 4		Lane 1		Lane 2		Lane 3		Lane 4		Lane 1		Lane 2		Lane 3		Lane 4		Lane 1		Lane 2		Lane 3		Lane 4	
Survey Period	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT
07:00 - 07:05	0	0	5	5	3	1	2	1	0	0	3	3	5	1	6	5	0	0	8	3	6	5	1	1	1	0	6	6	1	1	0	0
07:05 - 07:10	0	0	5	0	2	2	2	0	1	1	4	0	8	1	6	5	2	0	6	6	4	3	0	0	1	0	5	5	3	3	0	0
07:10 - 07:15	0	0	4	2	6	5	4	1	1	0	6	2	12	3	4	4	0	0	5	3	10	3	1	0	1	0	3	3	5	5	1	1
07:15 - 07:20	0	0	9	9	12	12	1	1	0	0	5	4	13	6	3	1	0	0	6	1	2	1	0	0	2	2	10	4	6	2	2	1
07:20 - 07:25	3	2	10	10	16	7	1	1	1	0	6	6	13	13	5	4	1	1	6	6	5	2	1	0	1	0	4	4	2	1	1	1
07:25 - 07:30	2	1	15	7	14	8	1	0	0	0	16	14	17	13	8	8	0	0	7	7	7	0	1	0	0	0	8	8	3	2	2	2
07:30 - 07:35	3	2	9	9	10	10	0	0	0	0	5	5	19	19	8	2	0	0	4	4	5	2	2	1	1	1	3	2	4	4	0	0
07:35 - 07:40	3	3	13	13	10	10	2	0	2	0	8	5	21	6	8	4	0	0	7	3	5	1	1	0	0	0	6	6	7	7	1	1
07:40 - 07:45	3	3	14	10	16	16	1	0	2	1	15	11	19	15	12	12	0	0	5	5	3	3	2	2	0	0	6	5	10	5	2	2
07:45 - 07:50	1	1	15	14	17	13	1	1	2	0	16	14	16	11	7	7	0	0	6	6	6	6	3	3	0	0	6	5	5	4	2	2
07:50 - 07:55	1	1	12	7	16	16	0	0	3	1	15	15	25	25	8	4	0	0	7	6	5	4	1	1	2	0	8	4	7	4	1	1
07:55 - 08:00	1	0	5	5	14	14	0	0	2	2	8	5	9	9	11	4	1	1	8	5	8	5	1	1	1	1	10	6	6	3	1	1
08:00 - 08:05	3	0	13	2	6	3	0	0	1	0	9	5	7	1	9	7	1	1	10	6	7	2	5	5	0	0	8	5	5	5	0	0
08:05 - 08:10	1	1	7	7	13	13	2	0	1	1	11	11	19	19	14	9	0	0	8	3	14	6	1	1	0	0	11	6	9	2	0	0
08:10 - 08:15	2	2	10	3	12	5	2	2	0	0	17	17	21	16	12	9	0	0	10	4	10	3	6	2	0	0	7	7	10	10	1	0
08:15 - 08:20	1	1	24	10	26	15	0	0	2	0	19	19	29	13	6	3	1	1	8	3	7	5	2	2	0	0	4	4	7	1	1	1
08:20 - 08:25	2	0	29	29	25	25	0	0	3	3	21	16	21	21	7	3	0	0	4	4	4	4	0	0	1	0	7	7	7	7	1	1
08:25 - 08:30	2	0	35	35	27	27	0	0	0	0	51	45	54	29	2	1	1	1	3	3	3	2	4	4	0	0	8	8	9	9	1	1
08:30 - 08:35	2	1	22	19	19	13	0	0	1	1	40	33	43	35	5	5	1	1	4	3	4	4	5	4	0	0	5	1	7	3	0	0
08:35 - 08:40	3	3	25	22	18	10	0	0	0	0	47	39	50	50	9	8	0	0	10	10	6	3	4	3	0	0	6	0	10	0	1	1
08:40 - 08:45	2	2	29	29	26	22	2	1	0	0	39	39	41	41	13	13	1	0	9	9	9	6	6	4	2	0	8	5	8	5	1	1
08:45 - 08:50	1	1	21	21	29	29	0	0	0	0	32	18	41	37	15	14	0	0	6	4	9	5	10	10	1	0	6	6	6	5	3	1
08:50 - 08:55	1	0	28	18	26	19	2	2	0	0	29	29	39	39	5	2	1	0	7	5	7	7	3	2	0	0	7	5	3	3	1	1
08:55 - 09:00	3	3	25	25	18	18	4	4	0	0	25	25	23	21	10	1	0	0	7	3	9	9	3	3	0	0	7	7	6	6	2	2
09:00 - 09:05	1	1	7	7	11	7	0	0	0	0	20	19	27	25	4	4	1	1	9	3	7	7	2	2	1	0	6	1	3	1	2	2
09:05 - 09:10	3	3	10	6	11	3	0	0	2	0	15	11	21	15	8	8	1	1	10	9	8	7	4	4	0	0	6	5	8	3	1	1
09:10 - 09:15	2	1	6	6	6	2	3	3	0	0	25	17	23	23	12	2	0	0	9	9	9	9	3	3	2	0	6	6	5	5	2	1
09:15 - 09:20	2	0	13	11	12	8	1	0	0	0	23	16	25	17	5	1	1	0	10	10	10	10	4	2	2	2	5	1	3	2	2	1
09:20 - 09:25	2	0	15	15	14	14	1	0	0	0	21	21	21	21	7	3	0	0	13	13	8	8	2	2	0	0	7	7	4	4	0	0
09:25 - 09:30	2	0	17	16	12	12	2	0	0	0	16	16	25	12	7	5	1	0	8	6	8	6	1	0	1	0	7	7	3	2	1	1
09:30 - 09:35	3	3	14	14	17	14	1	1	1	0	2	2	5	5	5	3	0	0	6	6	7	7	1	0	1	0	10	10	4	1	2	2
09:35 - 09:40	2	1	19	14	17	10	1	1	3	0	15	6	7	7	8	5	2	2	8	8	8	8	3	3	1	1	9	3	3	2	0	0
09:40 - 09:45	2	2	9	9	12	12	1	1	0	0	6	6	8	8	12	4	0	0	12	3	5	3	3	3	0	0	7	5	6	1	3	3
09:45 - 09:50	2	1	7	7	11	11	3	0	1	1	7	1	9	2	7	6	1	0	9	3	6	3	4	2	0	0	12	12	3	3	1	1
09:50 - 09:55	2	2	6	6	12	12	2	2	2	1	3	2	4	2	9	9	1	1	8	2	5	2	4	4	1	0	5	3	3	2	2	2
09:55 - 10:00	2	2	6	5	5	3	2	1	0	0	3	3	7	2	10	10	1	0	6	6	4	3	2	0	1	0	4	4	4	4	1	1
10:00 - 10:05	2	2	14	14	7	7	5	0	1	0	5	5	4	4	6	6	0	0	10	7	7	7	7	7	0	0	14	12	14	14	2	2
10:05 - 10:10	3	1	14	14	10	6	3	3	0	0	6	6	8	8	9	9	0	0	8	3	8	3	9	3	0	0	7	7	7	6	0	0
10:10 - 10:15	3	3	16	12	10	10	1	1	1	1	6	1	5	4	5	3	0	0	7	7	5	3	6	6	0	0	7	6	7	6	2	2
10:15 - 10:20	2	1	9	9	9	3	2	0	1	0	4	4	6	5	9	4	0	0	8	5	4	4	5	0	0	0	13	13	10	10	0	0
10:20 - 10:25	2	2	10	6	8	1	2	1	1	1	1	1	3	2	15	13	0	0	9	9	7	7	14	10	0	0	10	6	9	8	2	1
10:25 - 10:30	2	2	12	1	11	3	0	0	2	0	6	3	7	2	8	3	0	0	10	10	13	13	10	10	1	0	9	6	11	7	4	4
10:30 - 10:35	2	2	12	2	16	3	0	0	0	0	3	2	15	15	6	6	0	0	9	9	8	8	4	1	0	0	12	4	9	6	1	1
10:35 - 10:40	2	2	13	11	9	5	0	0	0	0	7	3	8	3	6	6	1	1	8	8	9	9	3	3	1	0	12	12	5	4	2	1
10:40 - 10:45	2	1	24	14	12	12	2	0	1	1	6	3	7	6	14	10	0	0	7	7	7	5	4	4	1	1	11	11	11	11	1	1
10:45 - 10:50	2	0	21	17	16	10	2	1	0	0	6	5	7	7	9	9	0	0	9	6	7	7	5	4	0	0	11	6	17	8	2	2
10:50 - 10:55	2	0	27	22	19	19	2	1	1	0	3	1	3	1	10	10	0	0	7	6	8	3	2	1	1	0	15	13	15	15	2	1
10:55 - 17:00	2	2	27	19	22	9	4	4	0	0	8	4	6	6	11	6	0	0	11	9	11	7	9	3	0	0	13	13	11	11	0	0
17:00 - 17:05	2	2	16	11	9	9	1	0	1	1	2	2	4	4	13	13	0	0	8	5	7	3	10	8	1	0	13	7	11	8	0	0
17:05 - 17:10	2	2	18	12	13	7	3	3	1	1	8	1	9	1	6	4	2	0	9	9	9	5	11	8	0	0	12	10	9	9	2	2
17:10 - 17:15	2	1	15	15	11	11	4	4	2	2	2	1	4	4	12	2	0	0	9	4	8	8	7	7	1	0	9	9	10	9	0	0
17:15 - 17:20	2	1	7	7	8	8	1	0	1	0	9	5	4	4	15	15	0	0	10	9	10	10	3	3	1	1	12	8	12	10	1	1
17:20 - 17:25	2	0	20	14	13	9	1	0	1	0	6	6	6	3	10	10	0	0	10	10	9	9	5	5	1	0	12	12	10	10	1	1
17:25 - 17:30	2	2	13	8	8	7	0	0	1	1	2	2	1	0	6	6	0	0	9	9	9	9	7	3	0	0	16	10	16	15	2	2
17:30 - 17:35	2	2	16	9	12	2	1	1	1	0	6	1	8	1	5	5	0	0	18	18	16	16	5	5	0	0	13	13	9	9	2	2
17:35 - 17:40	2	2	14	13	11	11	4	1	1	1	8	8	12	12	9	9	0	0	10	9	11	11	7	5	1	0	12	12	14	14	1	1
17:40 - 17:45	2	2	22	10	12	12	1	0	0	0	8	4	5	5	10	2	0	0	9	8	7	4	5	5	0	0	12	12	16	16	1	1
17:45 - 17:50	2	2	19	18	19	19	2	1	1	1	6	6	9	9	8	8	0	0	9	9	7	3	2	1	1	0	9	6	8	4	1	1
17:50 - 17:55	2	2	13	13	11	11	0	0	1	0	5	5	7	7	8	5	0	0	9	7	6	4	1	1	1	0	12	7	9	8	1	1
17:55 - 18:00	2	1	16	16	13	13	1	0	2	0	5	3	5	4	7	2	0	0	7	5	10	2	3	0	0	0	12	12	8	1	1	1
18:00 - 18:05	2	0	15	15	15	15	2	2	0	0	6	3	5	2	6	6	0	0	7	7	7	5	5	5	0	0	14	4	11	9	1	1
18:05 - 18:10	2	2	22	22	11	6	2	0	0	0	14	2	14	2	11	6	0	0	9	7	7	8	2	2	0	0	11	11	11	7	1	0
18:10 - 18:15	2	2	15	12	9	7	2	0	1	0	7	7	5	5	8	8	0	0	8	7	9	9	9	1	1	1	8	8	11	5	2	2
18:15 - 18:20	2	2	24	24	14	10	1	1	1	1	11	4	10	2	9	2	1	1	8	1	6	0	8	8	1	1	10	7	13	3	1	1
18:20 - 18:25	2	2	22	22	16	9	3	3	0	0	10	7	11	5	5	5	0	0	8	4	8	3	7	7	0	0	7	7	11	11	1	1
18:25 - 18:30	2	2	6	4	4	3	1	1	2	1	5	5	4	2	7	7	0	0	8	8	6	4	8	6	1	0	11	9	9	9	1	1
18:30 - 18:35	1	1	8	8	3	2	2	1	1	0	7	7	6	6	7	3	0	0	8	4	7	6	5	1	1	0	12	8	8	7	1	1
18:35 - 18:40	1	1	11	8	8	8	2	1	1	0	9	8	7	4	9	6	0	0	7	7	4	4	2	2	2	2	14	8	11	7	4	4
18:40 - 18:45	2	2	8	8	4	4	2	0	1	1	5	5	5	5	4	4	0	0	5	5	4	4	1	1	0	0	10	3	6	4	1	1
18:45 - 18:50	1	1	5	5	4	1	1	0	0	0	5	4	9	0	6	1	0	0	6	4	4	2	2	0	0	0	7	7	8	8	2	2
18:50 - 18:55	2	2	10	2	6	3	1	1	1	1	4	4	4	1	6	4	1	0	5	5	2	2	5	0	0	0	7	7	5	1	0	0
18:55 - 19:00	2	0	6	6	7	7	1	1	1	0	3	1	2	2	6	6	0	0	2	2	1	1	1	1	1	0	6	4	5	5	0	0

Mount Road, Gorton, Manchester - Queue Length Survey: Tuesday, 22 November 2022

Produced by Streetwise Services Ltd.

Junction: **A - (North) B6178 Mount Road / B - (South) B6178 Mount Road / C - Matthews Lane**

	A - (North) B6178 Mount Road		B - (South) B6178 Mount Road		C - Matthews Lane			
	Lane 1		Lane 1		Lane 1		Lane 2	
Survey Period	MAX	SPOT	MAX	SPOT	MAX	SPOT	MAX	SPOT
07:00 - 07:05	2	0	0	0	0	0	1	0
07:05 - 07:10	3	0	0	0	0	0	2	0
07:10 - 07:15	8	0	0	0	0	0	2	0
07:15 - 07:20	5	0	0	0	1	0	1	0
07:20 - 07:25	12	0	0	0	1	0	0	0
07:25 - 07:30	9	0	0	0	0	0	1	0
07:30 - 07:35	5	5	0	0	0	0	2	0
07:35 - 07:40	3	0	9	0	1	0	1	0
07:40 - 07:45	4	0	0	0	0	0	1	0
07:45 - 07:50	3	3	0	0	0	0	1	1
07:50 - 07:55	12	0	4	0	1	0	2	0
07:55 - 08:00	9	0	1	0	0	0	2	0
08:00 - 08:05	4	0	0	0	0	0	3	0
08:05 - 08:10	10	2	0	0	1	0	2	0
08:10 - 08:15	16	0	0	0	0	0	3	0
08:15 - 08:20	22	5	7	0	1	0	4	0
08:20 - 08:25	21	3	7	0	0	0	3	0
08:25 - 08:30	22	0	6	0	1	0	2	0
08:30 - 08:35	22	1	1	0	1	0	4	0
08:35 - 08:40	16	0	0	0	0	0	5	3
08:40 - 08:45	21	16	0	0	0	0	3	1
08:45 - 08:50	11	0	7	0	0	0	4	0
08:50 - 08:55	16	0	7	0	1	0	9	2
08:55 - 09:00	20	4	6	0	1	0	5	0
09:00 - 09:05	10	0	0	0	0	0	5	2
09:05 - 09:10	7	5	1	0	6	0	13	4
09:10 - 09:15	5	0	0	0	0	0	2	1
09:15 - 09:20	6	0	5	0	1	0	6	0
09:20 - 09:25	4	0	0	0	0	0	5	5
09:25 - 09:30	7	0	3	0	1	0	4	0
09:30 - 09:35	14	0	0	0	0	0	4	0
09:35 - 09:40	11	0	6	0	0	0	3	0
09:40 - 09:45	1	0	0	0	0	0	3	0
09:45 - 09:50	2	0	0	0	0	0	5	0
09:50 - 09:55	7	0	0	0	0	0	1	0
09:55 - 10:00	0	0	0	0	0	0	3	0
16:00 - 16:05	3	0	0	0	2	0	3	0
16:05 - 16:10	5	0	0	0	0	0	6	0
16:10 - 16:15	1	0	3	0	4	0	4	1
16:15 - 16:20	3	0	0	0	2	0	6	2
16:20 - 16:25	9	0	0	0	3	0	9	1
16:25 - 16:30	4	0	0	0	3	0	5	1
16:30 - 16:35	18	0	0	0	1	1	2	2
16:35 - 16:40	0	0	0	0	1	0	3	0
16:40 - 16:45	13	0	0	0	0	0	11	1
16:45 - 16:50	8	0	0	0	1	0	10	0
16:50 - 16:55	13	0	1	0	1	0	13	6
16:55 - 17:00	6	0	2	0	1	0	17	0
17:00 - 17:05	16	0	0	0	0	0	14	5
17:05 - 17:10	16	0	7	0	1	0	5	0
17:10 - 17:15	12	0	0	0	1	0	13	0
17:15 - 17:20	14	0	4	0	1	0	6	1
17:20 - 17:25	13	0	0	0	1	0	6	5
17:25 - 17:30	6	0	0	0	1	1	4	0
17:30 - 17:35	2	0	0	0	0	0	3	0
17:35 - 17:40	11	0	0	0	1	0	6	2
17:40 - 17:45	5	3	0	0	0	0	5	3
17:45 - 17:50	7	0	0	0	0	0	2	0
17:50 - 17:55	3	0	0	0	1	0	6	0
17:55 - 18:00	6	0	4	0	2	2	6	3
18:00 - 18:05	13	0	3	0	1	0	7	6
18:05 - 18:10	2	0	0	0	0	0	4	2
18:10 - 18:15	4	0	0	0	2	0	7	2
18:15 - 18:20	5	0	0	0	0	0	3	0
18:20 - 18:25	9	0	0	0	1	0	2	2
18:25 - 18:30	11	0	0	0	0	0	7	0
18:30 - 18:35	12	0	0	0	0	0	4	1
18:35 - 18:40	3	0	0	0	1	0	5	0
18:40 - 18:45	0	0	0	0	0	0	2	0
18:45 - 18:50	7	0	0	0	1	0	2	0
18:50 - 18:55	4	0	0	0	1	0	5	0
18:55 - 19:00	3	0	0	0	0	0	3	0

Appendix B: Speed Survey Results

Mount Road, Gorton, Manchester ATC 01, Mount Road

Produced by Streetwise Services Ltd.

Channel 1 - Northbound **Average Speed** **Week 1**

Hr Ending	13/12/2022 Tuesday	14/12/2022 Wednesday	15/12/2022 Thursday	16/12/2022 Friday	17/12/2022 Saturday	18/12/2022 Sunday	19/12/2022 Monday
1	25.9	25.5	26.5	27.1	24.8	24.8	24.6
2	26.2	24.6	25.1	27.1	26.1	26.8	25.8
3	29.2	25.7	25.1	26.6	26.2	26.7	26.3
4	28.6	25.1	26.8	25.0	25.3	26.5	28.0
5	27.4	27.1	26.3	28.0	27.0	27.2	27.4
6	26.2	27.0	26.9	26.2	25.4	26.8	25.9
7	24.8	24.5	24.6	25.6	25.8	25.8	24.9
8	22.1	22.8	22.6	22.5	25.3	24.7	23.1
9	20.5	20.3	18.4	22.0	25.1	25.4	22.9
10	20.7	22.3	22.0	22.5	25.3	25.6	23.2
11	23.7	23.6	24.2	23.7	24.7	25.0	22.9
12	23.6	23.8	23.5	23.2	24.2	24.3	23.2
13	24.0	23.7	23.6	23.7	23.7	24.4	23.4
14	24.0	23.4	23.5	23.4	22.8	23.8	23.1
15	23.0	23.2	22.8	21.5	23.8	24.3	22.9
16	15.3	16.2	19.2	20.7	23.8	23.9	22.0
17	21.9	21.7	19.4	21.6	21.9	23.8	21.8
18	21.6	21.7	19.9	21.7	22.3	23.3	21.6
19	22.4	22.0	22.7	21.7	22.7	22.9	22.3
20	23.9	23.4	22.7	22.6	23.2	23.8	22.9
21	24.5	24.9	23.4	23.1	23.0	23.9	23.2
22	25.2	24.2	24.8	23.8	24.5	24.2	24.5
23	25.3	25.6	24.9	23.6	24.3	24.5	24.7
24	26.4	25.4	24.8	25.0	24.8	25.4	25.3
10-12	23.6	23.7	23.9	23.4	24.5	24.6	23.1
14-16	19.0	19.5	20.8	21.1	23.8	24.1	22.4
0-24	22.4	22.4	22.2	22.7	23.8	24.3	23.0

7 Day Ave	23.0

85th Percentile

Hr Ending	13/12/2022 Tuesday	14/12/2022 Wednesday	15/12/2022 Thursday	16/12/2022 Friday	17/12/2022 Saturday	18/12/2022 Sunday	19/12/2022 Monday
1	33.7	28.6	34.0	33.7	28.9	28.7	28.2
2	33.5	28.3	28.4	33.9	28.7	33.9	28.5
3	33.6	33.3	33.3	33.8	28.5	28.5	33.3
4	38.3	28.8	28.2	28.0	28.4	28.1	28.3
5	33.3	33.8	28.2	33.5	38.1	33.8	33.0
6	28.8	33.6	33.6	33.9	28.8	33.4	28.5
7	28.0	29.0	28.4	28.4	28.5	28.5	28.2
8	28.8	28.9	28.4	28.7	28.8	28.5	28.9
9	23.8	23.2	23.7	23.5	28.6	28.2	28.6
10	23.7	28.7	28.3	28.5	28.8	28.3	28.8
11	28.0	29.0	28.6	28.5	28.0	28.1	28.9
12	28.4	28.2	28.2	28.4	28.2	28.6	28.3
13	28.9	28.5	28.2	28.4	28.1	28.2	28.5
14	28.8	28.1	28.6	28.3	28.1	28.9	28.1
15	28.4	29.0	28.1	28.1	28.3	28.1	28.6
16	24.0	23.7	23.5	23.2	28.1	28.4	28.4
17	28.9	23.0	23.9	24.0	23.0	28.3	24.0
18	23.1	23.6	23.3	23.1	23.5	28.9	23.1
19	28.9	23.1	28.8	23.4	28.7	28.8	28.9
20	28.4	28.1	28.4	28.4	28.5	28.3	28.6
21	28.5	28.8	28.3	28.5	28.8	28.7	28.3
22	28.8	28.3	28.9	28.2	28.1	28.3	28.1
23	28.1	28.0	28.6	28.5	28.2	28.1	28.5
24	28.6	28.3	28.6	28.3	28.7	28.0	28.2
10-12	28.5	28.4	28.4	28.6	28.5	28.3	29.0
14-16	23.3	23.3	23.1	23.5	28.4	28.8	28.1
0-24	28.6	28.9	28.6	28.2	28.1	28.3	28.0

7 Day Ave	28.4

Mount Road, Gorton, Manchester ATC 01, Mount Road

Produced by Streetwise Services Ltd.

Channel 2 - Southbound **Average Speed** **Week 1**

Hr Ending	13/12/2022 Tuesday	14/12/2022 Wednesday	15/12/2022 Thursday	16/12/2022 Friday	17/12/2022 Saturday	18/12/2022 Sunday	19/12/2022 Monday
1	26.5	27.3	29.1	26.9	26.1	25.7	26.1
2	26.8	26.5	28.0	28.0	25.0	25.7	25.6
3	24.0	28.6	27.2	26.0	29.0	26.9	25.6
4	27.4	29.4	28.0	26.0	27.2	27.3	28.0
5	26.3	27.4	27.3	29.2	27.1	26.0	26.5
6	26.3	26.8	25.4	26.5	26.3	26.8	26.3
7	25.9	26.9	27.3	26.5	25.4	27.2	25.4
8	22.6	23.4	23.9	23.4	26.7	27.3	22.9
9	17.2	16.1	14.8	22.4	25.8	27.0	22.8
10	21.5	23.1	21.6	24.0	24.5	24.8	23.6
11	24.1	24.4	25.0	24.8	24.7	25.0	23.5
12	24.7	23.4	24.5	23.5	24.1	24.7	23.9
13	23.8	25.1	24.7	24.6	23.9	24.5	23.2
14	24.0	24.7	24.7	24.4	23.9	23.4	23.6
15	22.4	23.5	23.5	19.9	24.0	24.4	23.0
16	17.0	15.9	17.4	18.7	23.3	24.4	21.1
17	19.0	20.1	18.9	21.5	22.2	22.8	21.5
18	21.1	21.3	19.3	21.5	22.6	23.2	21.9
19	23.0	22.8	22.7	22.1	21.8	23.1	22.3
20	23.6	23.5	23.8	22.8	22.9	23.8	23.7
21	25.0	24.7	24.8	24.0	23.8	24.5	24.3
22	25.9	25.1	25.1	23.9	24.1	25.1	25.4
23	25.2	26.1	25.6	25.2	24.2	24.2	24.6
24	26.8	28.5	26.8	25.3	24.3	26.1	26.3
10-12	24.4	23.9	24.7	24.1	24.4	24.8	23.7
14-16	19.6	19.3	20.2	19.3	23.6	24.4	22.0
0-24	22.0	22.3	22.1	22.8	23.8	24.4	23.1

7 Day Ave	22.9

85th Percentile

Hr Ending	13/12/2022 Tuesday	14/12/2022 Wednesday	15/12/2022 Thursday	16/12/2022 Friday	17/12/2022 Saturday	18/12/2022 Sunday	19/12/2022 Monday
1	28.3	33.3	33.7	33.6	28.2	28.6	33.8
2	28.5	33.3	33.5	33.3	28.2	28.8	28.3
3	28.9	33.2	33.6	28.1	33.3	28.5	28.7
4	33.5	33.5	33.2	28.2	28.8	33.2	33.4
5	33.4	33.2	28.5	38.1	33.1	28.9	33.8
6	28.8	33.6	28.7	33.4	33.5	28.4	33.7
7	28.8	33.4	33.8	29.0	28.8	33.3	28.4
8	28.7	28.9	28.4	28.5	33.8	33.8	28.1
9	23.7	23.5	23.9	23.5	28.3	33.2	28.4
10	29.0	28.2	28.7	29.0	29.0	28.4	28.3
11	28.3	28.7	28.1	28.2	28.8	28.2	28.7
12	28.5	28.7	28.6	28.4	28.7	28.9	28.3
13	28.4	28.6	28.7	28.4	28.9	28.6	28.8
14	28.7	28.8	28.0	28.3	28.9	28.4	28.2
15	28.2	28.2	28.4	23.5	28.4	28.4	28.6
16	23.4	23.8	23.4	23.1	28.1	28.9	24.0
17	23.5	23.2	23.3	23.5	29.0	28.6	23.2
18	23.8	24.0	24.0	24.0	23.8	28.9	23.9
19	28.5	23.1	23.8	23.6	28.7	28.5	23.1
20	28.4	28.1	28.7	28.9	28.4	28.3	29.0
21	28.5	28.8	28.4	28.7	28.0	28.9	28.6
22	28.2	28.4	28.7	28.4	28.2	28.3	28.6
23	28.6	28.5	28.3	28.7	28.2	28.3	28.9
24	28.5	33.1	28.4	28.1	28.5	33.2	33.6
10-12	28.7	28.1	28.4	28.8	28.4	28.3	28.2
14-16	23.9	28.2	28.9	23.7	28.1	28.0	28.9
0-24	28.4	28.0	28.1	28.5	28.3	28.7	28.1

7 Day Ave	28.3

Mount Road, Gorton, Manchester ATC 02, Wembley Road

Produced by Streetwise Services Ltd.

Channel 1 - Southbound **Average Speed** **Week 1**

Hr Ending	22/11/2022 Tuesday	23/11/2022 Wednesday	24/11/2022 Thursday	25/11/2022 Friday	26/11/2022 Saturday	27/11/2022 Sunday	28/11/2022 Monday
1	24.2	29.4	26.8	25.5	28.7	27.7	29.5
2	26.3	26.8	29.7	29.2	32.1	35.3	26.1
3	28.0	23.0	33.0	25.5	30.5	33.5	28.0
4	31.3	33.0	25.5	33.0	28.0	24.7	26.8
5	31.3	28.0	30.5	38.0	29.7	31.3	27.0
6	30.0	29.7	29.9	24.2	28.0	27.3	26.0
7	29.5	28.9	29.5	28.9	29.7	24.2	30.3
8	28.4	28.3	28.8	27.4	25.2	24.2	28.2
9	25.4	22.3	25.2	24.7	27.3	27.3	24.7
10	24.4	25.9	23.4	22.9	29.7	24.6	24.4
11	25.5	27.6	27.2	27.9	27.4	25.6	26.6
12	26.0	26.1	25.2	26.6	27.0	29.7	29.1
13	28.0	27.0	28.3	28.8	28.8	29.8	28.5
14	27.2	29.3	23.9	27.6	28.4	26.5	30.0
15	26.0	26.4	24.0	26.5	28.8	30.0	24.9
16	21.8	20.1	19.3	23.5	30.1	29.4	21.7
17	27.6	27.7	27.6	27.6	29.2	28.9	28.7
18	28.0	29.0	27.7	29.8	27.9	28.3	27.3
19	27.9	26.2	26.5	26.3	27.1	27.2	26.9
20	29.2	27.0	25.4	26.4	28.8	27.9	27.3
21	26.0	28.5	26.2	29.0	28.0	29.0	28.1
22	27.5	28.1	26.6	28.8	28.6	28.9	25.1
23	28.9	28.5	28.5	27.3	26.1	27.4	27.0
24	27.1	27.0	39.2	26.4	26.0	32.1	29.3
10-12	25.7	26.8	26.0	27.1	27.2	27.2	27.8
14-16	23.3	22.3	21.2	24.6	29.4	29.7	22.8
0-24	26.0	25.4	25.3	26.2	28.1	27.8	25.8

7 Day Ave	26.4

85th Percentile

Hr Ending	22/11/2022 Tuesday	23/11/2022 Wednesday	24/11/2022 Thursday	25/11/2022 Friday	26/11/2022 Saturday	27/11/2022 Sunday	28/11/2022 Monday
1	28.7	33.6	34.0	33.7	38.9	33.7	33.2
2	28.5	28.3	33.4	38.9	38.7	56.4	28.5
3	33.6	33.3	48.3	28.8	43.5	56.0	28.3
4	48.3	33.8	33.2	43.0	28.4	28.1	33.3
5	38.3	33.8	33.2	48.5	43.1	38.8	28.0
6	43.8	38.6	33.6	33.9	38.8	38.4	38.5
7	33.0	34.0	33.4	38.4	38.5	28.5	33.2
8	33.8	33.9	33.4	33.7	33.8	28.5	33.9
9	33.8	28.2	33.7	28.5	33.6	33.2	33.6
10	28.7	33.7	28.3	28.5	38.8	33.3	28.8
11	33.0	34.0	33.6	33.5	33.0	33.1	33.9
12	33.4	33.2	33.2	33.4	33.2	38.6	33.3
13	33.9	33.5	38.2	33.4	38.1	38.2	38.5
14	33.8	33.1	33.6	33.3	38.1	33.9	38.1
15	33.4	34.0	28.1	33.1	33.3	38.1	33.6
16	29.0	28.7	28.5	28.2	38.1	33.4	28.4
17	33.9	33.0	33.9	34.0	33.0	38.3	34.0
18	33.1	33.6	33.3	33.1	33.5	38.9	33.1
19	33.9	33.1	33.8	33.4	33.7	33.8	33.9
20	33.4	33.1	33.4	33.4	33.5	33.3	33.6
21	33.5	33.8	33.3	33.5	33.8	33.7	33.3
22	33.8	33.3	33.9	38.2	33.1	33.3	33.1
23	33.1	33.0	33.6	38.5	33.2	33.1	28.5
24	33.6	33.3	56.1	33.3	33.7	38.0	33.2
10-12	33.5	33.4	33.4	33.6	33.5	33.3	34.0
14-16	28.3	28.3	28.1	28.5	38.4	33.8	28.1
0-24	33.6	33.9	33.6	33.2	33.1	33.3	33.0

7 Day Ave	33.4

Mount Road, Gorton, Manchester ATC 02, Wembley Road

Produced by Streetwise Services Ltd.

Channel 2 - Northbound **Average Speed** **Week 1**

Hr Ending	22/11/2022 Tuesday	23/11/2022 Wednesday	24/11/2022 Thursday	25/11/2022 Friday	26/11/2022 Saturday	27/11/2022 Sunday	28/11/2022 Monday
1	25.5	31.0	26.3	27.2	30.5	28.7	30.5
2	31.1	34.7	32.3	29.2	31.0	28.6	28.0
3	28.0	18.0	28.0	26.3	24.0	31.0	23.0
4	23.0	25.5	31.3	33.0	36.3	29.2	24.7
5	31.0	28.0	29.4	29.7	33.0	24.7	24.7
6	33.0	32.6	32.0	29.4	29.9	29.1	29.9
7	29.0	30.4	30.6	29.9	27.0	31.9	29.3
8	28.6	29.2	29.2	27.1	27.4	28.4	29.1
9	25.5	22.8	25.1	24.2	27.7	27.6	25.4
10	24.7	24.8	24.5	25.2	28.5	26.0	25.0
11	26.1	26.1	28.4	30.9	27.2	28.7	28.9
12	26.3	26.8	25.5	28.4	27.0	28.1	27.5
13	29.1	27.8	26.6	30.5	26.5	27.4	27.8
14	25.1	28.1	26.2	26.0	27.6	27.8	29.2
15	27.1	26.5	26.2	28.0	28.9	26.6	28.1
16	19.9	20.9	19.6	21.7	29.1	29.9	19.6
17	27.1	26.6	27.7	27.7	26.5	27.7	28.4
18	27.8	27.5	25.9	26.9	27.1	29.0	26.9
19	28.5	26.3	26.2	27.8	29.0	31.5	27.2
20	28.8	26.5	27.2	27.4	27.2	29.6	27.1
21	27.3	28.7	25.4	29.1	30.1	29.6	26.6
22	29.4	29.2	26.9	26.6	26.6	30.7	27.6
23	23.3	26.7	30.9	31.3	30.9	30.5	22.0
24	28.0	25.5	31.3	28.5	25.5	27.4	28.0
10-12	26.2	26.5	27.1	29.5	27.1	28.5	28.3
14-16	22.2	22.6	21.4	23.7	29.0	27.6	22.2
0-24	26.1	25.5	25.6	26.4	27.7	28.3	26.2

7 Day Ave	26.5

85th Percentile

Hr Ending	22/11/2022 Tuesday	23/11/2022 Wednesday	24/11/2022 Thursday	25/11/2022 Friday	26/11/2022 Saturday	27/11/2022 Sunday	28/11/2022 Monday
1	33.3	38.3	28.7	33.6	43.2	33.6	48.8
2	56.0	48.3	33.5	38.3	38.2	33.8	28.3
3	28.9	18.2	28.6	28.1	33.3	38.5	33.7
4	23.5	33.5	38.2	33.2	43.8	33.2	28.4
5	43.4	33.2	33.5	33.1	38.1	33.9	33.8
6	38.8	38.6	38.7	38.4	38.5	33.4	38.7
7	38.8	38.4	38.8	39.0	28.8	38.3	38.4
8	33.7	33.9	38.4	33.5	33.8	33.8	33.1
9	33.7	33.5	33.9	28.5	33.3	33.2	33.4
10	29.0	28.2	33.7	34.0	34.0	33.4	33.3
11	33.3	33.7	38.1	38.2	33.8	33.2	38.7
12	33.5	33.7	33.6	33.4	33.7	33.9	33.3
13	38.4	33.6	33.7	38.4	33.9	33.6	33.8
14	33.7	33.8	33.0	33.3	33.9	38.4	33.2
15	33.2	33.2	28.4	33.5	38.4	33.4	33.6
16	28.4	28.8	33.4	33.1	33.1	38.9	29.0
17	33.5	33.2	33.3	33.5	34.0	33.6	33.2
18	33.8	34.0	34.0	34.0	33.8	38.9	33.9
19	33.5	33.1	33.8	33.6	38.7	43.5	33.1
20	38.4	33.1	33.7	38.9	33.4	38.3	34.0
21	28.5	38.8	33.4	38.7	38.0	38.9	33.6
22	33.2	33.4	33.7	33.4	28.2	38.3	38.6
23	28.6	38.5	43.3	43.7	33.2	38.3	28.9
24	38.5	33.1	43.4	33.1	33.5	33.2	38.6
10-12	33.7	33.1	33.4	38.8	33.4	33.3	33.2
14-16	28.9	33.2	33.9	33.7	38.1	33.0	33.9
0-24	33.4	33.0	33.1	33.5	33.3	33.7	33.1

7 Day Ave	33.3

Appendix C: Proposed Site Layout

N

Mount
.cademy

MANNERING STREET

MOUNT ROAD

WEMBLEY ROAD

HARLOW DR

Grange School

Shelter

Gorton Education
Village

Cedar Mount Academy

Melland High School

Ward Bdy

DRAINAGE EASEMENT

MATTHEWS LANE

BRITLAND AVENUE

BRATTON DRIVE

BARRET

ROAD 1

ROAD 3

ROAD 4

ROAD 5

ROAD 6

ROAD 7

ROAD 8

ROAD 9

ROAD 10

ROAD 11

4 no. car parking spaces

3m level buffer

110yds (100.584m) x 70yds (64.008m)

60yds (55m) x 3.00m

3m wide buffer

3m wide buffer

3m level buffer

3m level buffer

0 2.5 5 10 15 25 m

SCALE BAR 1:500

Legend

- Indicates 1.8m high feature fence
- Indicates 1.8m high plot divisional screen fence.
- Indicates bin stores.
- Indicates principle entrance door to dwelling.
- Indicates secondary entrance door to dwelling.
- Indicates application site boundary.
- Indicates affordable units
- Indicates adaptable units
- Indicates footpath connection points
- Indicates proposed trees
- Indicates substation
- Indicates pumping station
- Indicates electric vehicle charging points.

All plots to be provided with a secure cycle point.

Accommodation Schedule
Mount Road, Gorton

KELLEN HOMES

House Type		Bed No.	Type	No.	Sqft	Total Sqft	Split
Private							
Hic	Hickory	2	Semi	73	767	55991	24.09%
Olive	Olive	2	Semi	8	770	6160	2.64%
Ced	Cedar	3	Semi	82	936	76752	27.06%
Aca	Acacia	3	Semi	26	940	24440	8.38%
Eme	Emerson	4	Semi	18	1064	19152	5.94%
				207		**182495**	**68.32%**
Affordables							
Adu835	adu835	2	Semi	2	835	1670	0.66%
Adu1009	adu1009	3	Semi	2	1009	2018	0.66%
Hic	Hickory	2	Semi	25	767	19175	8.25%
Ced	Cedar	3	Semi	19	936	17784	6.27%
Aca	Acacia	3	Semi	6	940	5640	1.98%
Oli	Olive	2	Semi	2	770	1540	0.66%
Eme	Emerson	4	Semi	4	1064	4256	1.32%
				60		**52083**	**19.80%**
			Total	**267**		**234578**	
YP Studio Apartments	Apts	1	Apartments	36	280	10080	11.88%
				36		**10080**	**11.88%**
							31.68%
			Total	**303**		**244658**	**100.00%**

Gross Site Area:	22.4	Acres	9.07	Hectares
Nett Residential Site Area:	**15.645**	**Acres**	**6.33**	**Hectares**
Gross Density:	13.53	Units/Acre	33.43	Units/Hectare
Nett Density:	**19.37**	**Units/Acre**	**47.87**	**Units/Hectare**
Gross Footage:	10022.23	SQFT/Acre	2507.37	SQM/Hectare
Nett Footage:	**15643.09**	**SQFT/Acre**	**3591.13**	**SQM/Hectare**

Revision	Date	Amendment	Initials
P8	07.11.23	Cricket pitch added to layout.	BOP
P7	03.10.23	EV Charging points added, Subs amended.	BOP
P6	02.10.23	Combined Netball & Basketball Court added.	BOP
P5	19.09.23	Hickory HT semi's roofs changed back to up and over and not hipped.	RGC
P4	11.09.23	Plot 74 amended to show hipped roof. Drive to plot 74 amended and emergency access	KLW
P3	07.09.23	Cedar sqft updated 840 to 936.	KLW
P2	05.09.23	Affordable units increased to 60 plots. Mix updated accordingly	KLW
P1	25.08.23	Detailed site layout completed	BOP

Development
MOUNT_ROAD
Location
GORTON
Marketing Name

Drawing Title
CADSITELAYOUT
Job No.
KH008
Drawing No.
A-100
Revision
P8
Scale @ A0
1:500
Drawn By
BOP
Date
25.08.23
Checked by
RGC
Date Checked

1st Floor, 103 Dalton Avenue, Birchwood Park, Warrington WA3 6YE
T: 01925 363108 W: www.kellenhomes.com
KELLEN HOMES

Appendix D: Road Safety Audit: Accesses

Mount Road
Gorton
Manchester
S278

Road Safety Audit
Stage 1 Report



Network Road Safety Ltd

Contents

1.0 Project details

2.0 Introduction

3.0 Items raised at previous road safety audits

4.0 Items raised at this stage 1 road safety audit

5.0 Audit team statement

6.0 List of documents presented for road safety audit

7.0 Problem location plan

1.0 Project details

Report title:	Mount Road – Gorton - Manchester – S278 Road Safety Audit Stage 1 Report
Date:	26th May 2023
Document reference and revision:	MRGMS278/CBO/1/0
Prepared by:	Network Road Safety Limited
On behalf of:	CBO Transport Ltd

2.0 Introduction

Site location:

Mount Road and Wembley Road, Gorton, Manchester

Scheme purpose:

The proposed works are the highway elements to a scheme to develop land adjacent to Mount Road and Wembley Road, Gorton, Manchester. The proposals comprise construction of a priority junctions onto Mount Road and Wembley Road. The works are to provide access to a proposed residential housing development.

The RSA was instructed by Steve Bowers, CBO Transport Ltd.

The RSA team membership consisted:

D Ramsden DipASM CertAI FIHIE FARRM
Network Road Safety Limited
HE Certificate of Competency

Neil Jones DipTEDM MSoRSA FCIHT
Network Road Safety Ltd
HE Certificate of Competency

The site was visited on 22nd May 2023 at 14:00-16:00, during which the weather was dry. The road surface was dry. Traffic conditions were considered heavy and congested.

The terms of reference of this report are as described within GG119. The road safety audit 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.

No departures from standard have been brought to the attention of the road safety audit team regarding the scheme as presented.

3.0 Items raised at previous road safety audits

No previous road safety audits have been carried out on the scheme as presented.

4.0 Items raised at this stage 1 road safety audit

PROBLEM – 1

Location: Mount Road and Wembley Road junctions

Summary: Parking could obstruct sight lines for emerging vehicles

The site is very close to busy schools. During the site visit significant on-street parking was observed, predominantly consisting of child pick up Particularly on Wembley Road. Vehicles were parked on the carriageway at and opposite existing junctions, parking on the junction radii and obstructing the footways. Footway parking even extended to the bend on Wembley Road / Holmcroft Road even though there are 'no waiting at any time' restrictions on the bend. The new junction on Wembley Road is within the area of parking associated with the school. The audit team expect that parking would continue in and around the new junction restricting sight lines particularly for vehicles emerging and children crossing the junctions which could increase the risk of collision between vehicles and pedestrians.

The position of the access on Mount Road is in the vicinity of a section of 'no wating at any time' restriction. However, this restriction terminates in the vicinity of the access and would therefore not cover the whole access and could encourage parking towards the southern side of the junction.

RECOMMENDATION

Although the highway code advises against parking around and opposite junctions it is clear from the site visit that this is disregarded by some drivers at these locations. 'No waiting at any time' restrictions should be included in the detailed design to protect the whole of the junctions from parked vehicles.

CBO Response (Problem 1):
A CBO access drawing (reference CBO-0767-001) has been prepared to pick up on this point.

PROBLEM – 2

Location: Wembley Road crossing point

Summary: Parking could obstruct visibility of pedestrians

Parking on the footway takes place on the corner of Wembley Road / Holmcroft Road in the vicinity of the proposed informal crossing point. Drivers are likely to use the dropped kerb to access the footway and obstruct the crossing point. Parking on the footway can also reduce the visibility passing drivers have of pedestrians, particularly children waiting to cross and of children being able to see oncoming traffic. Current parking on the footway is in contravention of the existing waiting restrictions.

RECOMMENDATION

Bollards should be installed adjacent to the crossing point to restrict parking on the footway at the crossing point.

CBO Response (Problem 2):
A CBO access drawing (reference CBO-0767-001) has been prepared to pick up on this point.

PROBLEM – 3

Location: Northern footpath links to Mannering Street

Summary: Narrow footway could result in pedestrians walking in the carriageway

The proposals include two footpath links from the development on to Mannering Street. There is a narrow kerbed hard strip along the southern boundary of Mannering Street which the footpaths would link into. The hard strip, being tarmac, could encourage pedestrians, particularly children, to use it as a footway, its narrowness could result in pedestrians walking in the carriageway increasing the risk of being struck by passing traffic.

RECOMMENDATION

The hard strip should be widened to form a formal footway along the full length of Mannering Street to tie into the existing footways at each end.

CBO Response (Problem 3):
Due to ownership constraints, it is not possible to include a footway on the south side of Mannering Street. However, Kellen propose installing a knee high fence along the side of the footway to the rear of the hard strip, then a bollard in the hard strip itself. This arrangement would prevent pedestrians walking in this area.

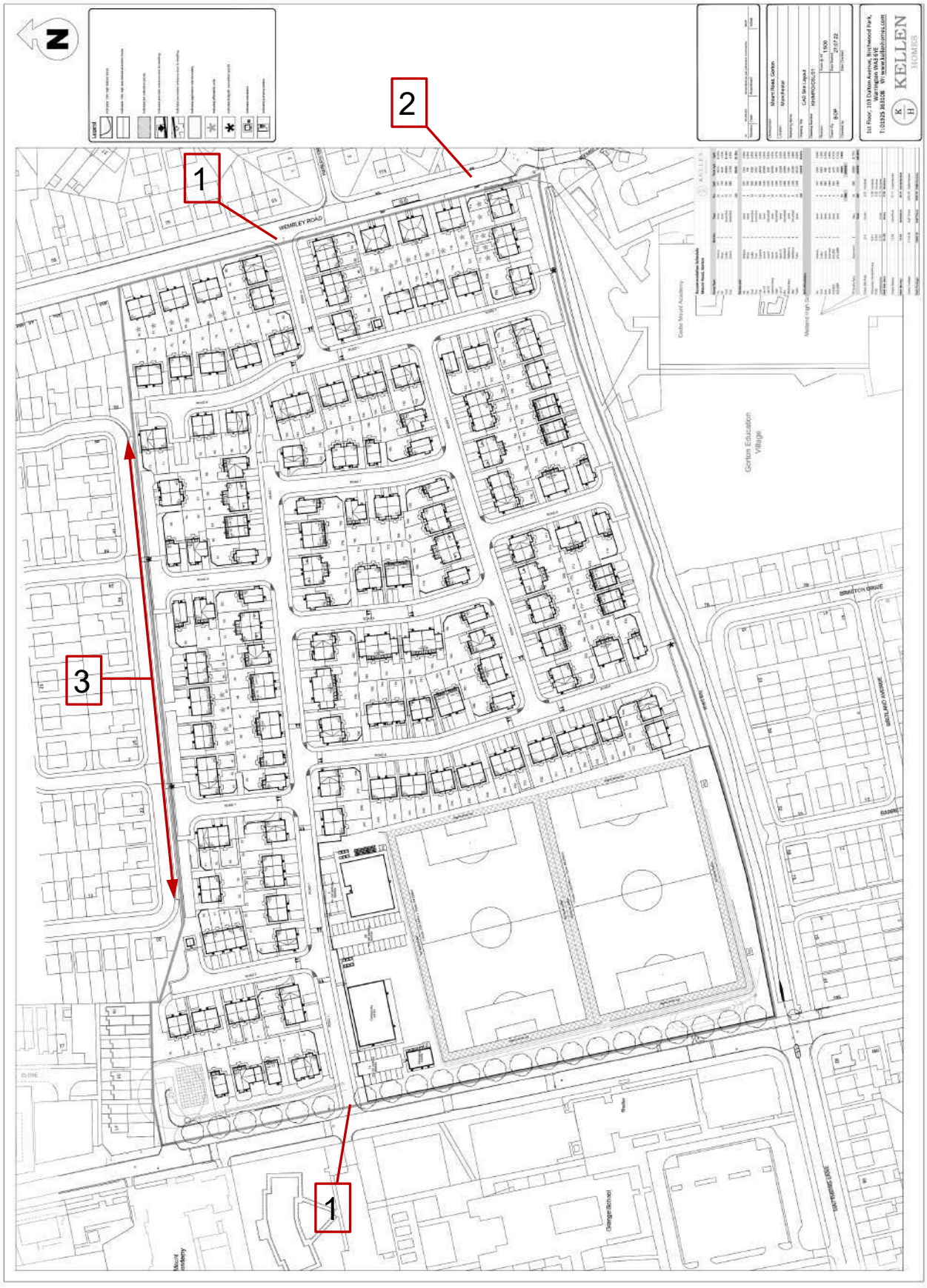
5.0 Audit team statement

We certify that this road safety audit has been carried out in accordance with GG 119	
Road Safety Audit Team Leader	
Name:	David Ramsden
Signed:	
Position:	Director
Organisation:	Network Road Safety Limited
Date:	24th May 2023
Road Safety Audit Team Member(s)	
Name:	Neil Jones
Signed:	
Position:	Consultant Road Safety Engineer
Organisation:	Network Road Safety Limited
Date:	25th May 2023

6.0 List of documents presented for road safety audit

CBO-0763-004		Stage 1 RSA brief
CBO-0767-Extract 001		Mount Road Access
CBO-0767-Extract 002		Wembley Road Access
CBO-0767-Extract 003		Refuse Vehicle Using Mount Road Access
CBO-0767-Extract 004		Refuse Vehicle Using Wembley Road Access
Figure A		Committed development traffic flows: Total
Figure A		Committed development traffic flows: Total
KH/MRG/CSL/01	-	CAD Site Layout
Trip generation information		

7.0 Problem location plan



Appendix E: CBO Drawing: Site Accesses

Potential to include / provide a financial contribution towards no waiting double yellow lines around area of junction - over extent to be determined by MCC highways - to be investigated as part of the detailed design process

Existing no waiting double yellow lines north of, and extending partially across, proposed site access

Existing bus stop to be relocated approximately 53 metres to south

Potential to include / provide a financial contribution towards amending and extending the no waiting double yellow lines in location shown to be investigated as part of the detailed design process

Existing no waiting double yellow lines at speed hump

Proposed new dropped crossing point with tactile paving and bollards to both sides to prevent parking on the footway

SCHOOL – KEEP CLEAR

WEMBLEY ROAD

MOUNT ROAD

HARLOW DRIVE

HOLMCROFT

61.5m

BUS STOP

Rev.	Date	Revision Details	Drawn	Check	App.
A	14.09.23	Updated Plot Layouts	SFB	SFB	PRC

CBO TRANSPORT

Jactin House
24 Hood Street
Ancoats
Manchester
M4 6WX
T: 0161 327 1931
E: info@cbotransport.co.uk
W: www.cbotransport.co.uk

Client
Kellen Homes and GMYF

Project
Land at Mount Road, Gorton, Manchester

Drawing Title
Access Drawing

Drawn	Checked	Approved
SFB	PRC	PRC

Scale / Size	Date
1:500 @ A3	09.06.23

Status	Drg No	Rev
Information	CBO-0767-001	A

Appendix F: CBO Drawing: Internal Visibility Provision

Key

2.4 x 33m visibility splays

17m forward visibility provision

MANNERING STREET

WEMBLEY ROAD

ROAD 1

ROAD 2

ROAD 3

ROAD 4

ROAD 5

ROAD 6

ROAD 7

ROAD 8

ROAD 9

ROAD 10

ROAD 11

Vehicle barrier
4
no. car parking
spaces

S/C

3m level buffer
110yds (100.584m) x 70yds (64.008m)

3m level buffer

61.5m

61.0m

62.8m

Drain

Ward Bdy

Cedar Mou

Rev	Date	Revision Details	Drawn	Check	App.
A	14.09.23	Updated Plot Layouts	SFB	SFB	PRC

Barnett House
53 Fountain Street
Manchester
M2 2AN
T: 0161 235 6365
F: 0161 235 6566
E: info@cbotransport.co.uk
W: www.cbotransport.co.uk

Client

Kellen Homes and GMYF

Project

Land at Mount Road, Gorton, Manchester

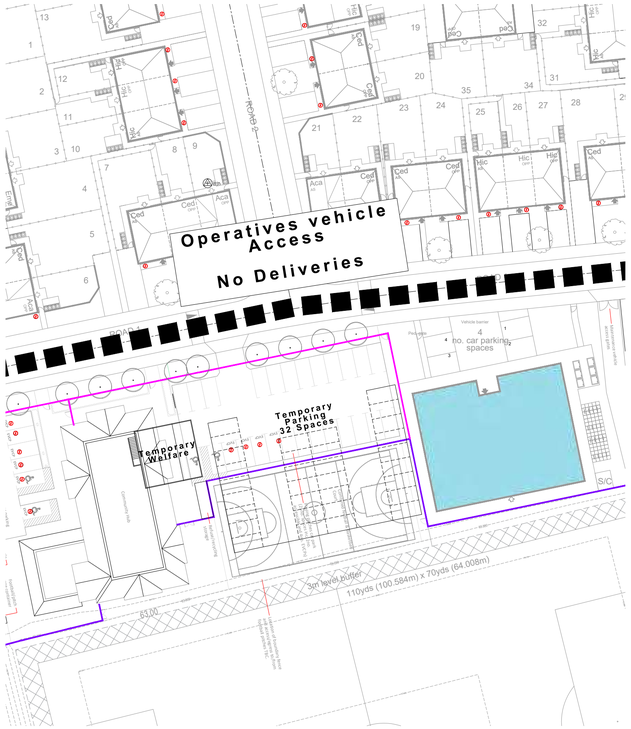
Drawing Title

Internal Highway Network Visibility Provision

Drawn	Checked	Approved
SFB	SFB	PRC
Scale / Size		**Date**
1:500 @ A1		04.07.23
Status	**Drg No**	**Rev**
Information	CBO-0767-002	A

Appendix G: Kellen Drawing: Site Compounds & Storage Plan

N



Community Centre Compound
Scale - 1:500



Site Plan
Scale 1:1250



Main Compound
Scale - 1:500

0 2.5 5 10 15 25 m
SCALE BAR 1:500

Legend

- Indicates Main Compound Area
- Indicates Materials Storage
- Site Access
- Main Compound
- Parking Area

Revision	Date	Amendment	Initials
-	-	-	-

Development
MOUNT ROAD

Location
GORTON

Marketing Name
Storey Heights Plan

Drawing Title
Site Compounds & Storage Plan

Job No.	Drawing No.
KH008	**A-010**
Revision: -	Scale @ A1: As Shown
Drawn By: NK	Date: 29.09.23
Checked by: -	Date Checked: -

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KELLEN HOMES

Z:\008 Mount Road, Gorton\01. Architects\02. Drawings\100 - Layout\Compound layout.dwg

Appendix H: TRICS Outputs

Calculation Reference: AUDIT-751701-221208-1204

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
	KC	KENT	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	3 days
04	EAST ANGLIA		
	NF	NORFOLK	2 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 151 to 432 (units:)
Range Selected by User: 150 to 500 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: Selected: 2.30 to 3.5 Actual: 1.60 to 4.50

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 30/06/22

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

Selected survey days:

Monday	4 days
Tuesday	1 days
Wednesday	2 days
Thursday	3 days

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

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	9
Neighbourhood Centre (PPS6 Local Centre)	1

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	8
Village	1
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.

Secondary Filtering selection:

Use Class:

C3	10 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	5 days
10,001 to 15,000	4 days
15,001 to 20,000	1 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	3 days
125,001 to 250,000	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	2 days
1.1 to 1.5	6 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	7 days
No	3 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	10 days

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

LIST OF SITES relevant to selection parameters

1 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

2 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

3 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total No of Dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

4 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

5 NF-03-A-30 MIXED HOUSES NORFOLK
BRANDON ROAD
SWAFFHAM

Edge of Town
Residential Zone
Total No of Dwellings: 266
Survey date: THURSDAY *23/09/21* *Survey Type: MANUAL*

6 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

7 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

8 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

10 WS-03-A-15 MIXED HOUSES WEST SUSSEX
HILLAND ROAD
BILLINGSHURST

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 380
Survey date: TUESDAY *23/11/21* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
ES-03-A-03	High number of flats
HC-03-A-24	High number of flats
HC-03-A-26	High number of flats
HC-03-A-29	High number of flats
KC-03-A-06	High number of flats
SF-03-A-09	Covid
SP-03-A-02	High number of flats
WS-03-A-12	Covid
WS-03-A-13	Covid

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.80

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.091	10	259	0.285	10	259	0.376
08:00 - 09:00	10	259	0.127	10	259	0.350	10	259	0.477
09:00 - 10:00	10	259	0.135	10	259	0.166	10	259	0.301
10:00 - 11:00	10	259	0.119	10	259	0.146	10	259	0.265
11:00 - 12:00	10	259	0.128	10	259	0.144	10	259	0.272
12:00 - 13:00	10	259	0.158	10	259	0.141	10	259	0.299
13:00 - 14:00	10	259	0.148	10	259	0.141	10	259	0.289
14:00 - 15:00	10	259	0.167	10	259	0.182	10	259	0.349
15:00 - 16:00	10	259	0.267	10	259	0.177	10	259	0.444
16:00 - 17:00	10	259	0.272	10	259	0.165	10	259	0.437
17:00 - 18:00	10	259	0.320	10	259	0.157	10	259	0.477
18:00 - 19:00	10	259	0.279	10	259	0.170	10	259	0.449
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.211			2.224			4.435

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

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

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Parameter summary

Trip rate parameter range selected:	151 - 432 (units:)
Survey date date range:	01/01/14 - 30/06/22
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	9

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.002	10	259	0.002	10	259	0.004
08:00 - 09:00	10	259	0.004	10	259	0.004	10	259	0.008
09:00 - 10:00	10	259	0.002	10	259	0.002	10	259	0.004
10:00 - 11:00	10	259	0.001	10	259	0.001	10	259	0.002
11:00 - 12:00	10	259	0.000	10	259	0.000	10	259	0.000
12:00 - 13:00	10	259	0.001	10	259	0.001	10	259	0.002
13:00 - 14:00	10	259	0.000	10	259	0.000	10	259	0.000
14:00 - 15:00	10	259	0.001	10	259	0.001	10	259	0.002
15:00 - 16:00	10	259	0.004	10	259	0.005	10	259	0.009
16:00 - 17:00	10	259	0.001	10	259	0.002	10	259	0.003
17:00 - 18:00	10	259	0.001	10	259	0.000	10	259	0.001
18:00 - 19:00	10	259	0.001	10	259	0.001	10	259	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.019			0.037

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.002	10	259	0.001	10	259	0.003
08:00 - 09:00	10	259	0.002	10	259	0.003	10	259	0.005
09:00 - 10:00	10	259	0.004	10	259	0.002	10	259	0.006
10:00 - 11:00	10	259	0.002	10	259	0.002	10	259	0.004
11:00 - 12:00	10	259	0.001	10	259	0.002	10	259	0.003
12:00 - 13:00	10	259	0.003	10	259	0.003	10	259	0.006
13:00 - 14:00	10	259	0.002	10	259	0.001	10	259	0.003
14:00 - 15:00	10	259	0.003	10	259	0.003	10	259	0.006
15:00 - 16:00	10	259	0.002	10	259	0.002	10	259	0.004
16:00 - 17:00	10	259	0.003	10	259	0.002	10	259	0.005
17:00 - 18:00	10	259	0.003	10	259	0.002	10	259	0.005
18:00 - 19:00	10	259	0.002	10	259	0.002	10	259	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.029			0.025			0.054

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.001	10	259	0.001	10	259	0.002
08:00 - 09:00	10	259	0.000	10	259	0.000	10	259	0.000
09:00 - 10:00	10	259	0.001	10	259	0.001	10	259	0.002
10:00 - 11:00	10	259	0.001	10	259	0.001	10	259	0.002
11:00 - 12:00	10	259	0.001	10	259	0.001	10	259	0.002
12:00 - 13:00	10	259	0.001	10	259	0.001	10	259	0.002
13:00 - 14:00	10	259	0.001	10	259	0.001	10	259	0.002
14:00 - 15:00	10	259	0.001	10	259	0.001	10	259	0.002
15:00 - 16:00	10	259	0.001	10	259	0.001	10	259	0.002
16:00 - 17:00	10	259	0.001	10	259	0.001	10	259	0.002
17:00 - 18:00	10	259	0.001	10	259	0.001	10	259	0.002
18:00 - 19:00	10	259	0.000	10	259	0.000	10	259	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.004	10	259	0.007	10	259	0.011
08:00 - 09:00	10	259	0.004	10	259	0.015	10	259	0.019
09:00 - 10:00	10	259	0.000	10	259	0.002	10	259	0.002
10:00 - 11:00	10	259	0.003	10	259	0.005	10	259	0.008
11:00 - 12:00	10	259	0.002	10	259	0.003	10	259	0.005
12:00 - 13:00	10	259	0.004	10	259	0.003	10	259	0.007
13:00 - 14:00	10	259	0.002	10	259	0.002	10	259	0.004
14:00 - 15:00	10	259	0.003	10	259	0.003	10	259	0.006
15:00 - 16:00	10	259	0.006	10	259	0.005	10	259	0.011
16:00 - 17:00	10	259	0.012	10	259	0.008	10	259	0.020
17:00 - 18:00	10	259	0.011	10	259	0.005	10	259	0.016
18:00 - 19:00	10	259	0.006	10	259	0.007	10	259	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.065			0.122

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.112	10	259	0.448	10	259	0.560
08:00 - 09:00	10	259	0.166	10	259	0.623	10	259	0.789
09:00 - 10:00	10	259	0.181	10	259	0.260	10	259	0.441
10:00 - 11:00	10	259	0.162	10	259	0.222	10	259	0.384
11:00 - 12:00	10	259	0.175	10	259	0.216	10	259	0.391
12:00 - 13:00	10	259	0.235	10	259	0.206	10	259	0.441
13:00 - 14:00	10	259	0.226	10	259	0.210	10	259	0.436
14:00 - 15:00	10	259	0.244	10	259	0.271	10	259	0.515
15:00 - 16:00	10	259	0.482	10	259	0.264	10	259	0.746
16:00 - 17:00	10	259	0.480	10	259	0.250	10	259	0.730
17:00 - 18:00	10	259	0.530	10	259	0.230	10	259	0.760
18:00 - 19:00	10	259	0.443	10	259	0.279	10	259	0.722
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.436			3.479			6.915

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.013	10	259	0.026	10	259	0.039
08:00 - 09:00	10	259	0.025	10	259	0.064	10	259	0.089
09:00 - 10:00	10	259	0.027	10	259	0.026	10	259	0.053
10:00 - 11:00	10	259	0.024	10	259	0.023	10	259	0.047
11:00 - 12:00	10	259	0.017	10	259	0.017	10	259	0.034
12:00 - 13:00	10	259	0.019	10	259	0.015	10	259	0.034
13:00 - 14:00	10	259	0.023	10	259	0.026	10	259	0.049
14:00 - 15:00	10	259	0.034	10	259	0.035	10	259	0.069
15:00 - 16:00	10	259	0.073	10	259	0.040	10	259	0.113
16:00 - 17:00	10	259	0.045	10	259	0.033	10	259	0.078
17:00 - 18:00	10	259	0.041	10	259	0.027	10	259	0.068
18:00 - 19:00	10	259	0.036	10	259	0.051	10	259	0.087
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.377			0.383			0.760

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.000	10	259	0.010	10	259	0.010
08:00 - 09:00	10	259	0.001	10	259	0.014	10	259	0.015
09:00 - 10:00	10	259	0.001	10	259	0.006	10	259	0.007
10:00 - 11:00	10	259	0.003	10	259	0.003	10	259	0.006
11:00 - 12:00	10	259	0.003	10	259	0.002	10	259	0.005
12:00 - 13:00	10	259	0.003	10	259	0.002	10	259	0.005
13:00 - 14:00	10	259	0.004	10	259	0.003	10	259	0.007
14:00 - 15:00	10	259	0.003	10	259	0.004	10	259	0.007
15:00 - 16:00	10	259	0.014	10	259	0.007	10	259	0.021
16:00 - 17:00	10	259	0.009	10	259	0.005	10	259	0.014
17:00 - 18:00	10	259	0.010	10	259	0.003	10	259	0.013
18:00 - 19:00	10	259	0.013	10	259	0.004	10	259	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.064			0.063			0.127

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.001	10	259	0.010	10	259	0.011
08:00 - 09:00	10	259	0.000	10	259	0.009	10	259	0.009
09:00 - 10:00	10	259	0.000	10	259	0.002	10	259	0.002
10:00 - 11:00	10	259	0.000	10	259	0.002	10	259	0.002
11:00 - 12:00	10	259	0.000	10	259	0.000	10	259	0.000
12:00 - 13:00	10	259	0.001	10	259	0.003	10	259	0.004
13:00 - 14:00	10	259	0.001	10	259	0.002	10	259	0.003
14:00 - 15:00	10	259	0.001	10	259	0.000	10	259	0.001
15:00 - 16:00	10	259	0.005	10	259	0.002	10	259	0.007
16:00 - 17:00	10	259	0.003	10	259	0.000	10	259	0.003
17:00 - 18:00	10	259	0.006	10	259	0.001	10	259	0.007
18:00 - 19:00	10	259	0.008	10	259	0.001	10	259	0.009
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.032			0.058

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.002	10	259	0.019	10	259	0.021
08:00 - 09:00	10	259	0.001	10	259	0.023	10	259	0.024
09:00 - 10:00	10	259	0.001	10	259	0.008	10	259	0.009
10:00 - 11:00	10	259	0.003	10	259	0.005	10	259	0.008
11:00 - 12:00	10	259	0.003	10	259	0.003	10	259	0.006
12:00 - 13:00	10	259	0.004	10	259	0.005	10	259	0.009
13:00 - 14:00	10	259	0.005	10	259	0.005	10	259	0.010
14:00 - 15:00	10	259	0.003	10	259	0.004	10	259	0.007
15:00 - 16:00	10	259	0.019	10	259	0.009	10	259	0.028
16:00 - 17:00	10	259	0.012	10	259	0.006	10	259	0.018
17:00 - 18:00	10	259	0.016	10	259	0.003	10	259	0.019
18:00 - 19:00	10	259	0.020	10	259	0.005	10	259	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.089			0.095			0.184

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.80

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.130	10	259	0.500	10	259	0.630
08:00 - 09:00	10	259	0.196	10	259	0.725	10	259	0.921
09:00 - 10:00	10	259	0.209	10	259	0.295	10	259	0.504
10:00 - 11:00	10	259	0.191	10	259	0.255	10	259	0.446
11:00 - 12:00	10	259	0.198	10	259	0.240	10	259	0.438
12:00 - 13:00	10	259	0.262	10	259	0.229	10	259	0.491
13:00 - 14:00	10	259	0.256	10	259	0.243	10	259	0.499
14:00 - 15:00	10	259	0.285	10	259	0.313	10	259	0.598
15:00 - 16:00	10	259	0.581	10	259	0.318	10	259	0.899
16:00 - 17:00	10	259	0.549	10	259	0.297	10	259	0.846
17:00 - 18:00	10	259	0.598	10	259	0.266	10	259	0.864
18:00 - 19:00	10	259	0.506	10	259	0.342	10	259	0.848
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.961			4.023			7.984

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.068	10	259	0.251	10	259	0.319
08:00 - 09:00	10	259	0.106	10	259	0.317	10	259	0.423
09:00 - 10:00	10	259	0.107	10	259	0.137	10	259	0.244
10:00 - 11:00	10	259	0.096	10	259	0.126	10	259	0.222
11:00 - 12:00	10	259	0.109	10	259	0.118	10	259	0.227
12:00 - 13:00	10	259	0.136	10	259	0.123	10	259	0.259
13:00 - 14:00	10	259	0.123	10	259	0.116	10	259	0.239
14:00 - 15:00	10	259	0.145	10	259	0.160	10	259	0.305
15:00 - 16:00	10	259	0.236	10	259	0.147	10	259	0.383
16:00 - 17:00	10	259	0.246	10	259	0.144	10	259	0.390
17:00 - 18:00	10	259	0.281	10	259	0.139	10	259	0.420
18:00 - 19:00	10	259	0.258	10	259	0.152	10	259	0.410
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.911			1.930			3.841

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.017	10	259	0.028	10	259	0.045
08:00 - 09:00	10	259	0.014	10	259	0.023	10	259	0.037
09:00 - 10:00	10	259	0.020	10	259	0.023	10	259	0.043
10:00 - 11:00	10	259	0.019	10	259	0.015	10	259	0.034
11:00 - 12:00	10	259	0.017	10	259	0.022	10	259	0.039
12:00 - 13:00	10	259	0.018	10	259	0.013	10	259	0.031
13:00 - 14:00	10	259	0.022	10	259	0.022	10	259	0.044
14:00 - 15:00	10	259	0.016	10	259	0.017	10	259	0.033
15:00 - 16:00	10	259	0.021	10	259	0.021	10	259	0.042
16:00 - 17:00	10	259	0.018	10	259	0.015	10	259	0.033
17:00 - 18:00	10	259	0.031	10	259	0.012	10	259	0.043
18:00 - 19:00	10	259	0.017	10	259	0.012	10	259	0.029
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.230			0.223			0.453

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	259	0.000	10	259	0.002	10	259	0.002
08:00 - 09:00	10	259	0.000	10	259	0.003	10	259	0.003
09:00 - 10:00	10	259	0.000	10	259	0.000	10	259	0.000
10:00 - 11:00	10	259	0.000	10	259	0.000	10	259	0.000
11:00 - 12:00	10	259	0.000	10	259	0.000	10	259	0.000
12:00 - 13:00	10	259	0.000	10	259	0.001	10	259	0.001
13:00 - 14:00	10	259	0.000	10	259	0.000	10	259	0.000
14:00 - 15:00	10	259	0.002	10	259	0.000	10	259	0.002
15:00 - 16:00	10	259	0.003	10	259	0.002	10	259	0.005
16:00 - 17:00	10	259	0.003	10	259	0.002	10	259	0.005
17:00 - 18:00	10	259	0.003	10	259	0.002	10	259	0.005
18:00 - 19:00	10	259	0.001	10	259	0.003	10	259	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.015			0.027

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

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

Appendix I: Super Output Areas and Traffic Distribution Data

Selection of areas

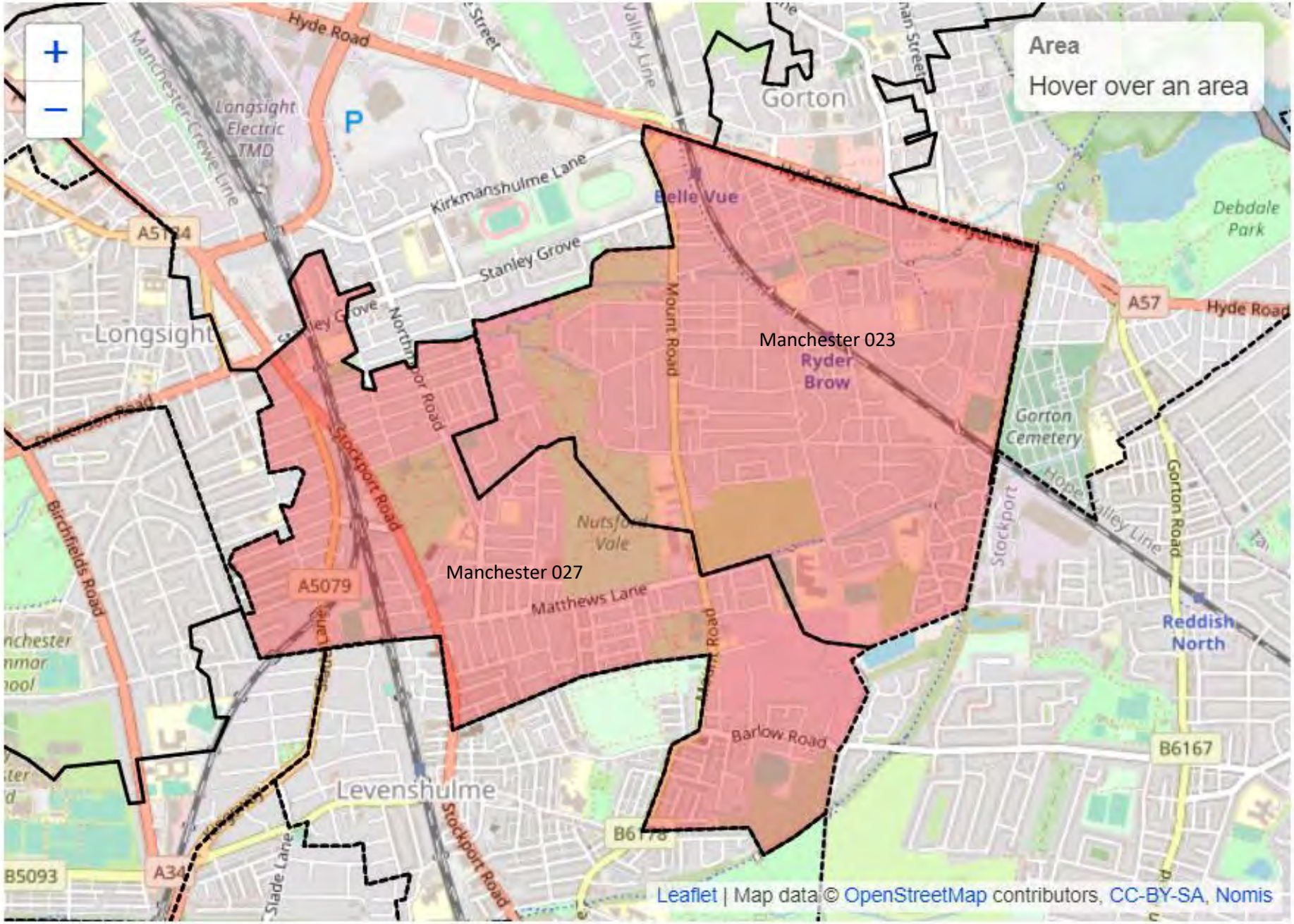


Table I: Workplace Destinations

Location	Car Driver	Route 1	2	3	4	5	6
E02001045 : Manchester 001-009	43					43	
E02001055 : Manchester 011-015	92					92	
E02001061 : Manchester 017	60						60
E02001062 : Manchester 018	129				129		
E02001063 : Manchester 019	31		31				
E02001064 : Manchester 020	96			96			
E02001065 : Manchester 021	11						11
E02001066 : Manchester 022	99		99				
E02001067 : Manchester 023	37	37					
E02001069 : Manchester 025	23		23				
E02001070 : Manchester 026	53		53				
E02001071 : Manchester 027	56	20	36				
E02001073 : Manchester 029	18		18				
E02001074 : Manchester 030	20		20				
E02001075 : Manchester 031	49	49					
E02001076 : Manchester 032	21	21					
E02001077 : Manchester 033	17	17					
E02001078 : Manchester 034	18	18					
E02001080 : Manchester 036	11	11					
E02001082 : Manchester 038	17	17					
E02001083 : Manchester 039	17	17					
E02001085 : Manchester 041	16	16					
E02001087 : Manchester 043	16	16					
E02001089 : Manchester 045	30	30					
E02001090 : Manchester 046	14	14					
E02001097 : Manchester 053	44	44					
E02006902 : Manchester 054	94				94		
E02006912 : Manchester 055	71				71		
E02006913 : Manchester 056	23					23	
E02006914 : Manchester 057	23		23				
E02006915 : Manchester 058	15					15	
E02006917 : Manchester 060	44					44	
E02001187 : Stockport 001 - 004	26	26					
E02001192 : Stockport 006	36	36					
E02001193 : Stockport 007	19	19					
E02001194 : Stockport 008	10	10					
E02001195 : Stockport 009	30						30
E02001197 : Stockport 011	16	16					
E02001199 : Stockport 013	13	13					
E02001200 : Stockport 014	53	53					
E02001202 : Stockport 016	16	16					
E02001204 : Stockport 018	11	11					
E02001205 : Stockport 019	14	14					
E02001208 : Stockport 022	23	23					
E02001213 : Stockport 027	18	18					
E02001214 : Stockport 028	11	11					
E02001217 : Stockport 031	18	18					
E02001222 : Stockport 036	15	15					
E02001157 : Salford 001 - 016	15				15		
E02001173 : Salford 017	13				13		
E02001177 : Salford 021	20				20		
E02001178 : Salford 022	33				33		
E02001184 : Salford 028	36				36		
E02001186 : Salford 030	11				11		
Tameside	84						84
E02001259 : Trafford 001	23				23		
E02001260 : Trafford 002	51				51		
E02001261 : Trafford 003	25				25		
E02001262 : Trafford 004	15				15		
E02001264 : Trafford 006	32				32		
E02001270 : Trafford 012 - 016	31		31				
E02001277 : Trafford 019 - 028	48	48					
Bolton	24						24
Bury	44						44
Cheshire East	57	57					
Liverpool	18				18		
Oldham	62						62
Rochdale	38						38
Warrington	28				28		
Wigan	20						20
Yorkshire and The Humber	33						33
	2,398	731	334	96	614	217	406
		30.48%	13.93%	4.00%	25.60%	9.05%	16.93%
		30.00%	14.00%	4.00%	26.00%	9.00%	17.00%

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Appendix J: Junctions 9 Outputs:
Site Access

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Site Access_School Access 267 units.j9
Path: L:\Projects\CBO-0767 Mount Road, Manchester\Modelling
Report generation date: 12/09/2023 13:55:56

»Proposed Layout - Future Year Base Plus Dev, AM
»Proposed Layout - Future Year Base Plus Dev, PM

Summary of junction performance

	AM							PM						
	Set ID	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Res Cap	Set ID	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Res Cap
	Proposed Layout - Future Year Base Plus Dev													
Stream B-ACD	D1	0.4	18.99	0.31	C	1.28	24 % [Stream B-ACD]	D2	0.1	14.88	0.11	B	0.74	42 % [Stream B-ACD]
Stream A-BCD		0.1	4.15	0.04	A				0.0	3.82	0.02	A		
Stream D-ABC		0.0	11.63	0.04	B				0.1	12.28	0.08	B		
Stream C-ABD		0.1	4.01	0.04	A				0.3	4.52	0.12	A		

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

File summary

File Description

Title	Site Access / School Access
Location	
Site number	
Date	08/06/2023
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	Future Year Base Plus Dev	AM	DIRECT	08:15	09:15	60	15
D2	Future Year Base Plus Dev	PM	DIRECT	16:45	17:45	60	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Proposed Layout	100.000

Proposed Layout - Future Year Base Plus Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.28	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	24	Stream B-ACD

Arms

Arms

Arm	Name	Description	Arm type
A	Mount Road (N)		Major
B	Site Access		Minor
C	Mount Road (S)		Major
D	School Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.30			90.0	✓	0.00
C	7.40			90.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	18	17
D	One lane	2.40	15	13

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	10.435	-	-	-	0.229	0.229	0.229	-	0.229	-	-
B-AD	7.992	0.082	0.207	-	-	-	0.130	0.296	0.130	0.082	0.207
B-C	10.313	0.089	0.225	-	-	-	-	-	-	0.089	0.225
C-B	10.435	0.228	0.228	-	-	-	-	-	-	0.228	0.228
D-A	9.902	-	-	-	0.217	0.086	0.217	-	0.086	-	-
D-BC	7.659	0.126	0.126	0.285	0.200	0.079	0.200	-	0.079	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	Future Year Base Plus Dev	AM	DIRECT	08:15	09:15	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000
D			100.000

Origin-Destination Data

Demand (PCU/min)

		To			
		A	B	C	D
From	A	0.00	0.22	11.80	0.15
	B	0.80	0.00	0.63	0.00
	C	12.10	0.17	0.00	0.03
	D	0.08	0.00	0.03	0.00

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	5	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
08:15-08:30	A	10.74	10.74
	B	1.43	1.43
	C	12.79	12.79
	D	0.07	0.07
08:30-08:45	A	14.24	14.24
	B	1.43	1.43
	C	11.67	11.67
	D	0.00	0.00
08:45-09:00	A	12.48	12.48
	B	1.43	1.43
	C	12.82	12.82
	D	0.20	0.20
09:00-09:15	A	11.28	11.28
	B	1.43	1.43
	C	11.99	11.99
	D	0.20	0.20

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-ACD	0.31	18.99	0.4	C
A-BCD	0.04	4.15	0.1	A
A-B				
A-C				
D-ABC	0.04	11.63	0.0	B
C-ABD	0.04	4.01	0.1	A
C-D				
C-A				

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.43	5.23	0.273	1.41	0.4	15.594	C
A-BCD	0.43	15.37	0.028	0.43	0.0	4.149	A
A-B	0.19			0.19			
A-C	10.13			10.13			
D-ABC	0.07	5.52	0.013	0.07	0.0	11.005	B
C-ABD	0.64	17.26	0.037	0.64	0.1	3.714	A
C-D	0.03			0.03			
C-A	12.11			12.11			

08:30 - 08:45

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.43	4.58	0.312	1.43	0.4	18.986	C
A-BCD	0.79	18.11	0.044	0.79	0.1	3.588	A
A-B	0.24			0.24			
A-C	13.21			13.21			
D-ABC	0.00	4.61	0.000	0.00	0.0	0.000	A
C-ABD	0.57	15.97	0.036	0.57	0.1	4.009	A
C-D	0.03			0.03			
C-A	11.07			11.07			

08:45 - 09:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.43	4.82	0.296	1.43	0.4	17.693	C
A-BCD	0.59	16.66	0.036	0.60	0.1	3.873	A
A-B	0.21			0.21			
A-C	11.67			11.67			
D-ABC	0.20	5.36	0.037	0.20	0.0	11.628	B
C-ABD	0.68	17.05	0.040	0.67	0.1	3.769	A
C-D	0.03			0.03			
C-A	12.11			12.11			

09:00 - 09:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.43	5.19	0.275	1.43	0.4	15.966	C
A-BCD	0.47	15.88	0.029	0.47	0.0	4.029	A
A-B	0.19			0.19			
A-C	10.62			10.62			
D-ABC	0.20	5.65	0.035	0.20	0.0	11.007	B
C-ABD	0.57	16.60	0.034	0.57	0.0	3.850	A
C-D	0.03			0.03			
C-A	11.39			11.39			

Proposed Layout - Future Year Base Plus Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		0.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	42	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	Future Year Base Plus Dev	PM	DIRECT	16:45	17:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000
D			100.000

Origin-Destination Data

Demand (PCU/min)

		To			
		A	B	C	D
From	A	0.00	0.67	12.43	0.07
	B	0.28	0.00	0.23	0.00
	C	11.08	0.52	0.00	0.10
	D	0.12	0.00	0.07	0.00

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	2	0
	B	0	0	0	0
	C	2	0	0	0
	D	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
16:45-17:00	A	14.15	14.15
	B	0.52	0.52
	C	12.04	12.04
	D	0.40	0.40
17:00-17:15	A	13.43	13.43
	B	0.52	0.52
	C	12.15	12.15
	D	0.33	0.33
17:15-17:30	A	11.34	11.34
	B	0.52	0.52
	C	12.12	12.12
	D	0.00	0.00
17:30-17:45	A	13.76	13.76
	B	0.52	0.52
	C	10.46	10.46
	D	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-ACD	0.11	14.88	0.1	B
A-BCD	0.02	3.82	0.0	A
A-B				
A-C				
D-ABC	0.08	12.28	0.1	B
C-ABD	0.12	4.52	0.3	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.52	4.54	0.115	0.51	0.1	14.880	B
A-BCD	0.32	18.18	0.017	0.32	0.0	3.406	A
A-B	0.70			0.70			
A-C	13.13			13.13			
D-ABC	0.40	5.28	0.076	0.39	0.1	12.279	B
C-ABD	1.91	15.94	0.120	1.89	0.3	4.331	A
C-D	0.09			0.09			
C-A	10.04			10.04			

17:00 - 17:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.52	4.69	0.111	0.52	0.1	14.403	B
A-BCD	0.28	17.64	0.016	0.28	0.0	3.506	A
A-B	0.67			0.67			
A-C	12.48			12.48			
D-ABC	0.33	5.32	0.062	0.33	0.1	12.030	B
C-ABD	1.93	16.14	0.120	1.93	0.3	4.289	A
C-D	0.09			0.09			
C-A	10.13			10.13			

17:15 - 17:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.52	5.18	0.100	0.52	0.1	12.870	B
A-BCD	0.19	16.10	0.012	0.19	0.0	3.824	A
A-B	0.57			0.57			
A-C	10.58			10.58			
D-ABC	0.00	5.06	0.000	0.00	0.0	0.000	A
C-ABD	1.83	16.42	0.112	1.83	0.3	4.176	A
C-D	0.09			0.09			
C-A	10.19			10.19			

17:30 - 17:45

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.52	4.85	0.107	0.52	0.1	13.845	B
A-BCD	0.29	18.08	0.016	0.29	0.0	3.417	A
A-B	0.69			0.69			
A-C	12.79			12.79			
D-ABC	0.00	5.15	0.000	0.00	0.0	0.000	A
C-ABD	1.42	14.89	0.095	1.42	0.2	4.523	A
C-D	0.08			0.08			
C-A	8.96			8.96			

Appendix K: Junctions 9 Outputs:
B6178 Mount Road / Matthews Lane

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Mount Rd_Mattews Ln 267 units.j9
Path: L:\Projects\CBO-0767 Mount Road, Manchester\Modelling
Report generation date: 12/09/2023 14:07:04

»**Existing layout - 2022 Existing, AM**
»**Existing layout - 2022 Existing , PM**
»**Existing layout - 2028 Base, AM**
»**Existing layout - 2028 Base , PM**
»**Existing layout - 2028 Base plus dev, AM**
»**Existing layout - 2028 Base plus dev, PM**

Summary of junction performance

	AM							PM						
	Set ID	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Res Cap	Set ID	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Res Cap
Existing layout - 2022 Existing														
Stream B-C	D1	0.7	12.39	0.42	B	9.92	6 % [Stream C-AB]	D2	0.6	14.58	0.38	B	5.47	3 % [Stream B-A]
Stream B-A		0.6	27.97	0.39	D				1.2	31.33	0.56	D		
Stream C-AB		6.8	21.94	0.83	C				1.6	6.93	0.45	A		
Existing layout - 2028 Base														
Stream B-C	D3	0.8	12.95	0.43	B	10.91	5 % [Stream B-A]	D4	0.7	15.37	0.40	C	5.70	1 % [Stream B-A]
Stream B-A		0.7	29.55	0.40	D				1.3	33.26	0.57	D		
Stream C-AB		7.7	24.15	0.85	C				1.7	7.02	0.46	A		
Existing layout - 2028 Base plus dev														
Stream B-C	D5	0.8	13.46	0.45	B	14.62	1 % [Stream C-AB]	D6	0.8	17.04	0.44	C	6.23	-1 % [Stream B-A]
Stream B-A		0.7	32.05	0.42	D				1.4	36.95	0.60	E		
Stream C-AB		11.1	32.27	0.91	D				1.9	7.27	0.48	A		

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

File summary

File Description

Title	Mount Road / Matthews Lane

Location	
Site number	
Date	08/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2022 Existing	AM	DIRECT	08:15	09:15	60	15
D2	2022 Existing	PM	DIRECT	16:45	17:45	60	15
D3	2028 Base	AM	DIRECT	08:15	09:15	60	15
D4	2028 Base	PM	DIRECT	16:45	17:45	60	15
D5	2028 Base plus dev	AM	DIRECT	08:15	09:15	60	15
D6	2028 Base plus dev	PM	DIRECT	16:45	17:45	60	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing layout	100.000

Existing layout - 2022 Existing, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.92	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	Mount Road (S)		Major
B	Matthews Lane		Minor
C	Mount Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.40			90.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.30	4.30	4.30	4.30	✓	1.00	29	33

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	8.594	0.088	0.223	0.140	0.318
B-C	12.255	0.106	0.268	-	-
C-B	10.435	0.228	0.228	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2022 Existing	AM	DIRECT	08:15	09:15	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000

Origin-Destination Data

Demand (PCU/min)

		To		
		A	B	C
From	A	0.00	3.27	8.65
	B	1.22	0.00	3.10
	C	7.78	3.80	0.00

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	2	4
	B	3	0	2
	C	5	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
08:15-08:30	A	12.49	12.49
	B	3.93	3.93
	C	10.30	10.30
08:30-08:45	A	10.81	10.81
	B	4.87	4.87
	C	13.80	13.80
08:45-09:00	A	12.98	12.98
	B	4.05	4.05
	C	11.91	11.91
09:00-09:15	A	11.39	11.39
	B	4.43	4.43
	C	10.37	10.37

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-C	0.42	12.39	0.7	B
B-A	0.39	27.97	0.6	D
C-AB	0.83	21.94	6.8	C
C-A				
A-B				
A-C				

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.82	8.64	0.327	2.79	0.5	10.407	B
B-A	1.11	4.08	0.272	1.08	0.4	20.471	C
C-AB	7.38	12.76	0.579	7.24	2.2	11.242	B
C-A	2.92			2.92			
A-B	3.42			3.42			
A-C	9.07			9.07			

08:30 - 08:45

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.50	8.41	0.416	3.48	0.7	12.392	B
B-A	1.37	3.55	0.387	1.36	0.6	27.969	D
C-AB	12.29	14.84	0.828	11.98	6.8	21.942	C
C-A	1.51			1.51			
A-B	2.96			2.96			
A-C	7.85			7.85			

08:45 - 09:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.91	8.27	0.352	2.92	0.6	11.453	B
B-A	1.14	3.55	0.321	1.15	0.5	25.783	D
C-AB	9.93	13.70	0.725	10.06	5.0	18.983	C
C-A	1.98			1.98			
A-B	3.56			3.56			
A-C	9.42			9.42			

09:00 - 09:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.18	8.69	0.366	3.18	0.6	11.099	B
B-A	1.25	4.14	0.302	1.25	0.5	21.455	C
C-AB	7.53	13.14	0.573	7.70	2.3	12.125	B
C-A	2.84			2.84			
A-B	3.12			3.12			
A-C	8.27			8.27			

Existing layout - 2022 Existing , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.47	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	3	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2022 Existing	PM	DIRECT	16:45	17:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000

Origin-Destination Data

Demand (PCU/min)

		To		
		A	B	C
From	A	0.00	1.05	8.47
	B	2.10	0.00	2.28
	C	10.08	2.20	0.00

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	0	2
	B	1	0	3
	C	2	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
16:45-17:00	A	10.30	10.30
	B	4.45	4.45
	C	13.06	13.06
17:00-17:15	A	9.97	9.97
	B	5.00	5.00

	C	12.61	12.61
17:15-17:30	A	9.23	9.23
	B	4.51	4.51
	C	10.52	10.52
17:30-17:45	A	8.55	8.55
	B	3.60	3.60
	C	12.94	12.94

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-C	0.38	14.58	0.6	B
B-A	0.56	31.33	1.2	D
C-AB	0.45	6.93	1.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.32	7.24	0.320	2.29	0.5	12.396	B
B-A	2.13	4.25	0.502	2.07	1.0	27.101	D
C-AB	7.16	15.92	0.450	7.06	1.6	6.926	A
C-A	5.90			5.90			
A-B	1.14			1.14			
A-C	9.16			9.16			

17:00 - 17:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.60	6.82	0.382	2.59	0.6	14.580	B
B-A	2.40	4.29	0.558	2.38	1.2	31.331	D
C-AB	6.72	15.75	0.426	6.72	1.5	6.879	A
C-A	5.89			5.89			
A-B	1.10			1.10			
A-C	8.87			8.87			

17:15 - 17:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.35	7.73	0.304	2.36	0.5	11.532	B
B-A	2.16	4.92	0.440	2.19	0.8	22.406	C
C-AB	4.69	14.62	0.321	4.73	0.9	6.270	A
C-A	5.83			5.83			
A-B	1.02			1.02			

A-C	8.21			8.21			

17:30 - 17:45

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	1.88	8.32	0.225	1.89	0.3	9.615	A
B-A	1.72	4.73	0.365	1.74	0.6	20.377	C
C-AB	6.87	16.13	0.426	6.83	1.4	6.647	A
C-A	6.07			6.07			
A-B	0.94			0.94			
A-C	7.61			7.61			

Existing layout - 2028 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		10.91	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2028 Base	AM	DIRECT	08:15	09:15	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000

Origin-Destination Data

Demand (PCU/min)

		To		
		A	B	C
From	A	0.00	3.27	8.90
	B	1.22	0.00	3.20
	C	7.95	3.85	0.00

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	2	4
	B	3	0	2
	C	5	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
08:15-08:30	A	12.74	12.74
	B	4.03	4.03
	C	10.52	10.52
08:30-08:45	A	11.06	11.06
	B	4.97	4.97
	C	14.02	14.02
08:45-09:00	A	13.23	13.23
	B	4.15	4.15
	C	12.13	12.13
09:00-09:15	A	11.64	11.64
	B	4.53	4.53
	C	10.59	10.59

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-C	0.43	12.95	0.8	B
B-A	0.40	29.55	0.7	D
C-AB	0.85	24.15	7.7	C
C-A				
A-B				
A-C				

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.92	8.55	0.341	2.89	0.5	10.731	B
B-A	1.11	3.96	0.280	1.08	0.4	21.304	C
C-AB	7.66	12.84	0.597	7.50	2.4	11.626	B
C-A	2.86			2.86			
A-B	3.42			3.42			
A-C	9.32			9.32			

08:30 - 08:45

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.60	8.29	0.434	3.58	0.8	12.946	B
B-A	1.37	3.42	0.400	1.35	0.7	29.550	D
C-AB	12.70	14.93	0.850	12.34	7.7	24.151	C
C-A	1.32			1.32			
A-B	2.97			2.97			
A-C	8.09			8.09			

08:45 - 09:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.01	8.16	0.368	3.02	0.6	11.922	B
B-A	1.14	3.42	0.334	1.15	0.5	27.287	D
C-AB	10.33	13.82	0.747	10.46	5.7	21.067	C
C-A	1.80			1.80			
A-B	3.55			3.55			
A-C	9.68			9.68			

09:00 - 09:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.28	8.60	0.382	3.28	0.6	11.506	B
B-A	1.25	4.01	0.312	1.25	0.5	22.483	C
C-AB	7.83	13.24	0.591	8.04	2.6	12.800	B
C-A	2.76			2.76			
A-B	3.13			3.13			
A-C	8.51			8.51			

Existing layout - 2028 Base , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.70	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	1	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2028 Base	PM	DIRECT	16:45	17:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000

Origin-Destination Data

Demand (PCU/min)

		To		
		A	B	C
From	A	0.00	1.05	8.73
	B	2.10	0.00	2.35
	C	10.22	2.22	0.00

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	0	2
	B	1	0	3
	C	2	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
16:45-17:00	A	10.57	10.57
	B	4.52	4.52
	C	13.21	13.21
17:00-17:15	A	10.24	10.24
	B	5.07	5.07

	C	12.76	12.76
17:15-17:30	A	9.50	9.50
	B	4.58	4.58
	C	10.67	10.67
17:30-17:45	A	8.82	8.82
	B	3.67	3.67
	C	13.09	13.09

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-C	0.40	15.37	0.7	C
B-A	0.57	33.26	1.3	D
C-AB	0.46	7.02	1.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.39	7.11	0.336	2.35	0.5	12.892	B
B-A	2.13	4.14	0.516	2.07	1.0	28.446	D
C-AB	7.35	15.98	0.460	7.23	1.7	7.019	A
C-A	5.86			5.86			
A-B	1.13			1.13			
A-C	9.44			9.44			

17:00 - 17:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.68	6.67	0.401	2.67	0.7	15.372	C
B-A	2.39	4.18	0.573	2.38	1.3	33.257	D
C-AB	6.89	15.81	0.436	6.90	1.6	6.975	A
C-A	5.87			5.87			
A-B	1.10			1.10			
A-C	9.14			9.14			

17:15 - 17:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.42	7.62	0.318	2.43	0.5	11.948	B
B-A	2.16	4.80	0.450	2.19	0.9	23.429	C
C-AB	4.81	14.67	0.328	4.86	1.0	6.322	A
C-A	5.86			5.86			
A-B	1.02			1.02			

A-C	8.48			8.48			

17:30 - 17:45

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	1.94	8.22	0.236	1.95	0.3	9.869	A
B-A	1.73	4.62	0.375	1.75	0.6	21.183	C
C-AB	7.04	16.19	0.435	7.00	1.5	6.729	A
C-A	6.05			6.05			
A-B	0.95			0.95			
A-C	7.87			7.87			

Existing layout - 2028 Base plus dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		14.62	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	1	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	2028 Base plus dev	AM	DIRECT	08:15	09:15	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000

Origin-Destination Data

Demand (PCU/min)

		To		
		A	B	C
From	A	0.00	3.27	9.02
	B	1.22	0.00	3.25
	C	8.38	4.05	0.00

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	2	4
	B	3	0	2
	C	5	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
08:15-08:30	A	12.86	12.86
	B	4.08	4.08
	C	11.15	11.15
08:30-08:45	A	11.18	11.18
	B	5.02	5.02
	C	14.65	14.65
08:45-09:00	A	13.35	13.35
	B	4.20	4.20
	C	12.76	12.76
09:00-09:15	A	11.76	11.76
	B	4.58	4.58
	C	11.22	11.22

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-C	0.45	13.46	0.8	B
B-A	0.42	32.05	0.7	D
C-AB	0.91	32.27	11.1	D
C-A				
A-B				
A-C				

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.97	8.48	0.350	2.93	0.5	10.961	B
B-A	1.11	3.80	0.292	1.08	0.4	22.531	C
C-AB	8.49	13.14	0.646	8.29	2.9	12.777	B
C-A	2.66			2.66			
A-B	3.42			3.42			
A-C	9.44			9.44			

08:30 - 08:45

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.65	8.16	0.447	3.63	0.8	13.460	B
B-A	1.37	3.26	0.420	1.35	0.7	32.046	D
C-AB	13.89	15.25	0.911	13.34	11.1	32.274	D
C-A	0.76			0.76			
A-B	2.97			2.97			
A-C	8.21			8.21			

08:45 - 09:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.06	8.03	0.381	3.07	0.6	12.356	B
B-A	1.14	3.22	0.355	1.15	0.6	29.987	D
C-AB	11.52	14.24	0.809	11.68	8.6	30.293	D
C-A	1.24			1.24			
A-B	3.55			3.55			
A-C	9.80			9.80			

09:00 - 09:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.33	8.50	0.392	3.33	0.7	11.847	B
B-A	1.25	3.81	0.328	1.25	0.5	24.245	C
C-AB	8.77	13.64	0.643	9.13	3.3	15.467	C
C-A	2.45			2.45			
A-B	3.13			3.13			
A-C	8.63			8.63			

Existing layout - 2028 Base plus dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.23	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-1	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	2028 Base plus dev	PM	DIRECT	16:45	17:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A			100.000
B			100.000
C			100.000

Origin-Destination Data

Demand (PCU/min)

		To		
		A	B	C
From	A	0.00	1.05	9.08
	B	2.10	0.00	2.52
	C	10.38	2.28	0.00

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	0	2
	B	1	0	3
	C	2	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/min)	Demand in PCU (PCU/min)
16:45-17:00	A	10.92	10.92
	B	4.69	4.69
	C	13.44	13.44
17:00-17:15	A	10.59	10.59
	B	5.24	5.24

	C	12.99	12.99
17:15-17:30	A	9.85	9.85
	B	4.75	4.75
	C	10.90	10.90
17:30-17:45	A	9.17	9.17
	B	3.84	3.84
	C	13.32	13.32

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
B-C	0.44	17.04	0.8	C
B-A	0.60	36.95	1.4	E
C-AB	0.48	7.27	1.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.56	6.93	0.369	2.52	0.6	13.897	B
B-A	2.13	3.96	0.539	2.06	1.1	30.912	D
C-AB	7.73	16.05	0.482	7.61	1.9	7.274	A
C-A	5.71			5.71			
A-B	1.13			1.13			
A-C	9.79			9.79			

17:00 - 17:15

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.86	6.45	0.443	2.84	0.8	17.041	C
B-A	2.38	3.98	0.599	2.36	1.4	36.949	E
C-AB	7.26	15.89	0.457	7.27	1.8	7.225	A
C-A	5.73			5.73			
A-B	1.10			1.10			
A-C	9.49			9.49			

17:15 - 17:30

Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.59	7.45	0.347	2.60	0.6	12.790	B
B-A	2.16	4.62	0.468	2.19	0.9	25.320	D
C-AB	5.09	14.74	0.345	5.14	1.1	6.464	A
C-A	5.81			5.81			
A-B	1.02			1.02			

A-C	8.83			8.83			

17:30 - 17:45

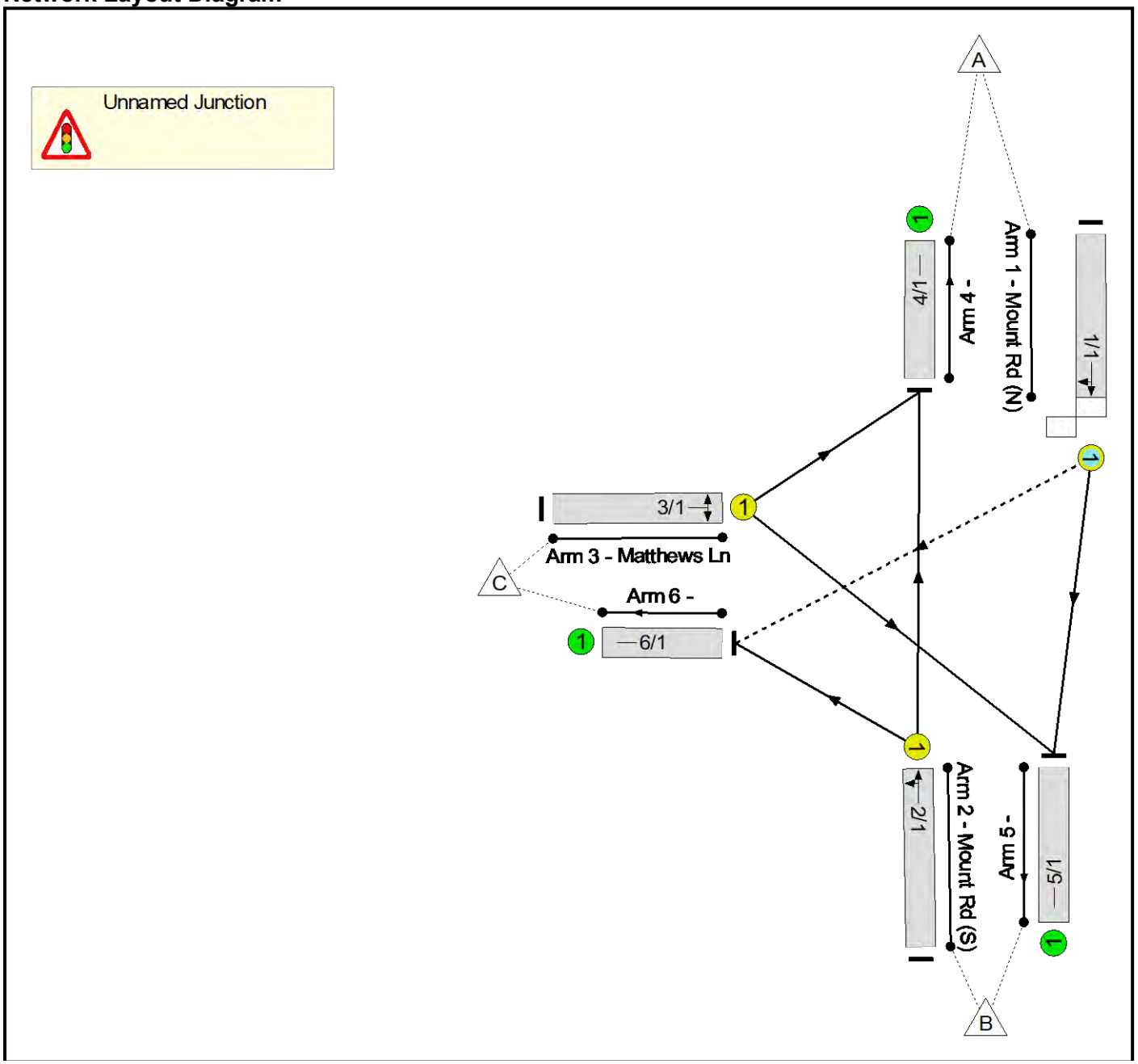
Stream	Total Demand (PCU/min)	Capacity (PCU/min)	RFC	Throughput (PCU/min)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2.09	8.07	0.259	2.11	0.4	10.377	B
B-A	1.75	4.46	0.392	1.76	0.7	22.647	C
C-AB	7.41	16.26	0.456	7.37	1.6	6.961	A
C-A	5.91			5.91			
A-B	0.95			0.95			
A-C	8.22			8.22			

Appendix L: LINSIG Outputs:
B6178 Mount Road / Matthews Lane

Project and User Details

Project:	**Mount Road, Gorton**
Title:	**Mount Road / Mathews Lane**
Author:	

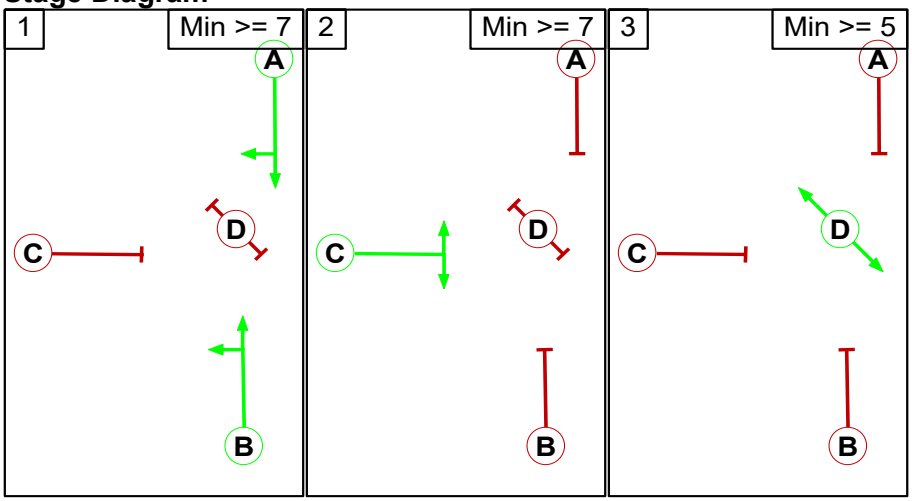
Network Layout Diagram



Phase Intergreens Matrix

		Starting Phase			
		A	B	C	D
Terminating Phase	A		-	5	5
	B	-		5	5
	C	5	5		5
	D	9	9	9	

Stage Diagram



Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Mount Rd (N))	O	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	10.00
2/1 (Mount Rd (S))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	10.00
3/1 (Matthews Ln)	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	8.00
											Arm 5 Right	10.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Network Results

Scenario 1: 'Future Year Base: AM Peak' (FG1: 'Future Year Base: AM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Road / Mathews Lane	-	-	-		-	-	-	-	-	**87.5%**	**11.5**	**6.9**	**18.8**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**87.5%**	**11.5**	**6.9**	**18.8**	-	-	-
1/1	Mount Rd (N) Ahead Right	O	A		75	708	1873	1873	809	87.5%	5.3	3.3	9.0	46.0	21.4	24.7
2/1	Mount Rd (S) Ahead Left	U	B		75	730	1889	1889	1196	61.0%	2.7	0.8	3.4	17.0	14.4	15.2
3/1	Matthews Ln Left Right	U	C		21	265	1669	1669	306	86.6%	3.5	2.8	6.3	86.2	8.5	11.4
4/1		U	-		-	726	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	550	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	427	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 2.8 Total Delay for Signalled Lanes (pcuHr): 18.83 Cycle Time (s): 120
PRC Over All Lanes (%): 2.8 Total Delay Over All Lanes(pcuHr): 18.83

Scenario 2: 'Future Year Base: PM Peak' (FG2: 'Future Year Base: PM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Road / Mathews Lane	-	-	-		-	-	-	-	-	**76.3%**	**9.7**	**3.6**	**13.5**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**76.3%**	**9.7**	**3.6**	**13.5**	-	-	-
1/1	Mount Rd (N) Ahead Right	O	A		72	746	1914	1914	980	76.1%	4.2	1.6	6.0	28.8	19.7	21.3
2/1	Mount Rd (S) Ahead Left	U	B		72	587	1934	1934	1177	49.9%	2.2	0.5	2.7	16.3	10.9	11.4
3/1	Matthews Ln Left Right	U	C		24	267	1680	1680	350	76.3%	3.3	1.6	4.9	65.6	8.3	9.9
4/1		U	-		-	665	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	739	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	196	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 18.0 Total Delay for Signalled Lanes (pcuHr): 13.49 Cycle Time (s): 120
PRC Over All Lanes (%): 18.0 Total Delay Over All Lanes(pcuHr): 13.49

Scenario 3: 'Future Year Base Plus Dev: AM Peak' (FG3: 'Future Year Base Plus Dev: AM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Road / Mathews Lane	-	-	-		-	-	-	-	-	**92.2%**	**12.1**	**8.9**	**21.5**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**92.2%**	**12.1**	**8.9**	**21.5**	-	-	-
1/1	Mount Rd (N) Ahead Right	O	A		75	746	1873	1873	809	92.2%	5.9	5.1	11.4	55.1	23.4	28.5
2/1	Mount Rd (S) Ahead Left	U	B		75	737	1890	1890	1197	61.6%	2.7	0.8	3.5	17.1	14.7	15.5
3/1	Matthews Ln Left Right	U	C		21	268	1669	1669	306	87.6%	3.5	3.0	6.6	88.5	8.6	11.7
4/1		U	-		-	736	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	576	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	439	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): -2.5
PRC Over All Lanes (%): -2.5

Total Delay for Signalled Lanes (pcuHr): 21.52
Total Delay Over All Lanes(pcuHr): 21.52

Cycle Time (s): 120

Scenario 4: 'Future Year Base Plus Dev: PM Peak' (FG4: 'Future Year Base Plus Dev: PM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Road / Mathews Lane	-	-	-		-	-	-	-	-	**79.2%**	**10.2**	**4.2**	**14.6**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**79.2%**	**10.2**	**4.2**	**14.6**	-	-	-
1/1	Mount Rd (N) Ahead Right	O	A		72	760	1913	1913	962	79.0%	4.5	1.9	6.6	31.0	20.9	22.8
2/1	Mount Rd (S) Ahead Left	U	B		72	608	1935	1935	1177	51.7%	2.3	0.5	2.8	16.6	11.5	12.0
3/1	Matthews Ln Left Right	U	C		24	277	1679	1679	350	79.2%	3.5	1.8	5.3	68.6	8.7	10.5
4/1		U	-		-	696	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	749	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	200	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

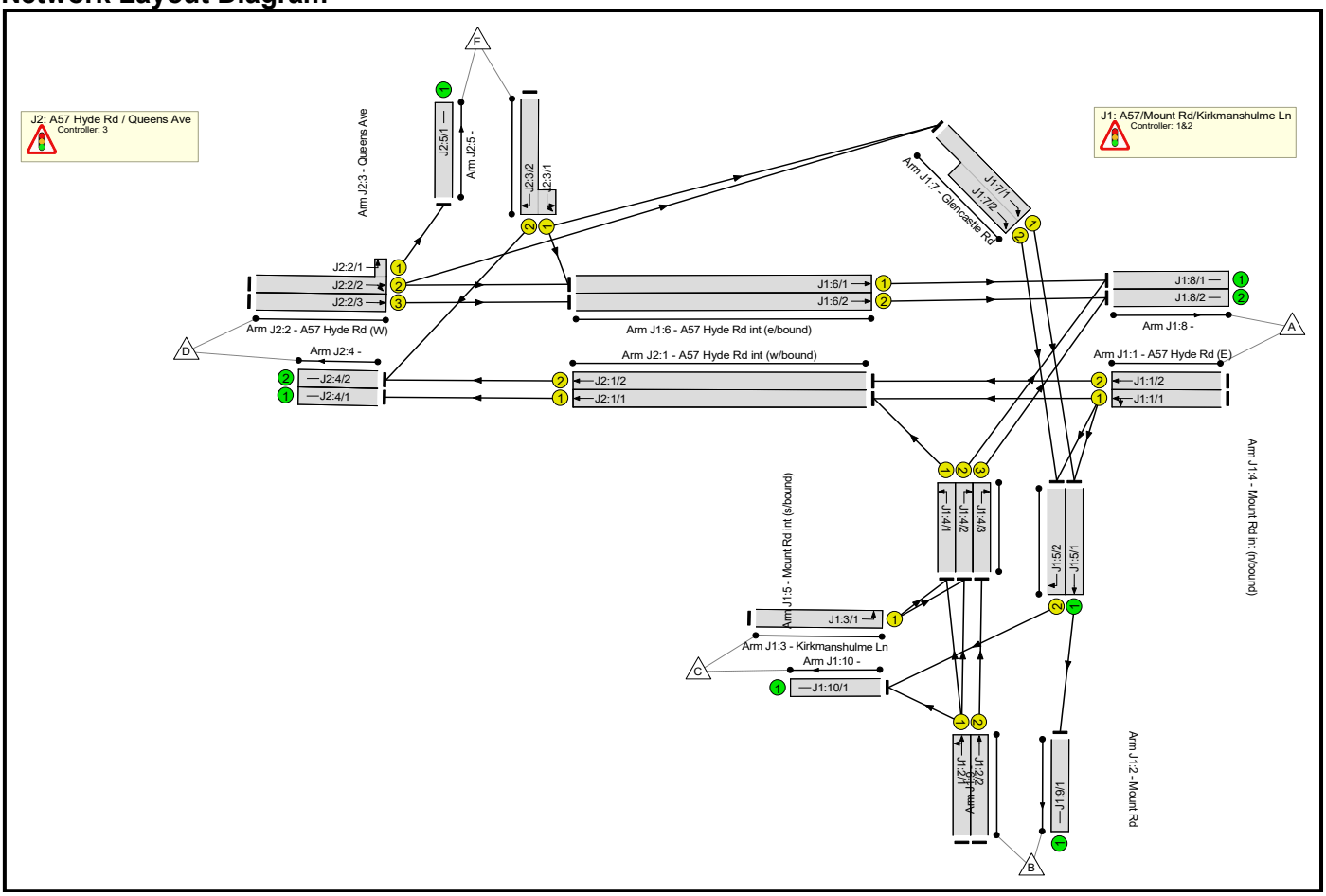
C1 PRC for Signalled Lanes (%): 13.7 Total Delay for Signalled Lanes (pcuHr): 14.63 Cycle Time (s): 120
PRC Over All Lanes (%): 13.7 Total Delay Over All Lanes(pcuHr): 14.63

Appendix M: LINSIG Outputs:
Mount Road / Kirkmanshulme Lane,
A57 Hyde Road / Mount Road / Glencastle Road and
A57 Hyde Road / Queens Avenue

Project and User Details

Project:	**Mount Road, Gorton**
Title:	**Mount Rd / Kirkmanshulme Ln, A57 Hyde Rd / Mount Rd / Glencastle Rd and A57 Hyde Rd / Queens Ave**
Author:	

Network Layout Diagram



Phase Intergreens Matrix

C1 - A57 Hyde Rd / Mount Rd

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K
A		-	7	-	5	5	-	9	-	-	-
B	-		5	9	6	9	-	5	9	-	-
C	5	5		-	5	-	5	-	8	-	-
D	-	5	-		-	-	-	-	-	-	5
E	7	7	6	-		-	-	10	-	5	-
F	5	5	-	-	-		-	-	-	-	-
G	-	-	8	-	-	-		-	-	-	-
H	5	5	-	-	10	-	-		-	-	-
I	-	7	7	-	-	-	-	-		-	-
J	-	-	-	-	6	-	-	-	-		-
K	-	-	-	5	-	-	-	-	-	-	

C2 - Mount Rd / Kirkmanshulme Ln

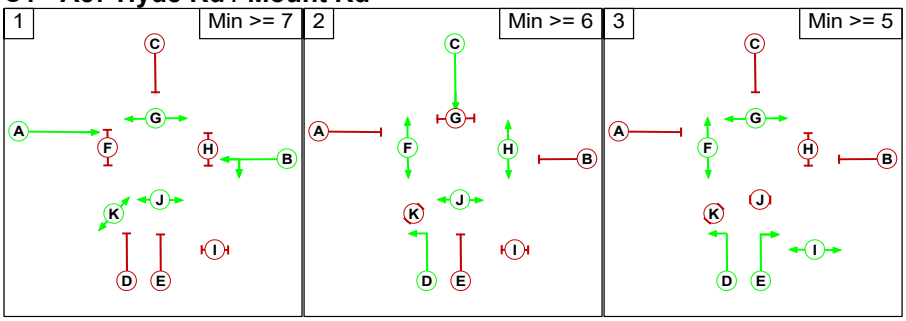
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G
A		5	5	5	8	-	-
B	5		-	-	8	-	-
C	5	-		-	5	-	-
D	7	-	-		-	-	-
E	7	7	7	-		-	-
F	-	-	-	-	-		5
G	-	-	-	-	-	5	

C3 - A57 Hyde Rd / Queens Ave

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		-	-	5	-	5	-	-	-
B	-		-	5	7	7	-	-	-
C	-	-		-	-	-	-	-	5
D	6	6	6		-	-	-	5	-
E	-	5	-	-		-	5	-	-
F	5	5	5	-	-		-	-	-
G	-	-	-	-	5	-		-	-
H	-	-	-	5	-	-	-		-
I	-	-	5	-	-	-	-	-	

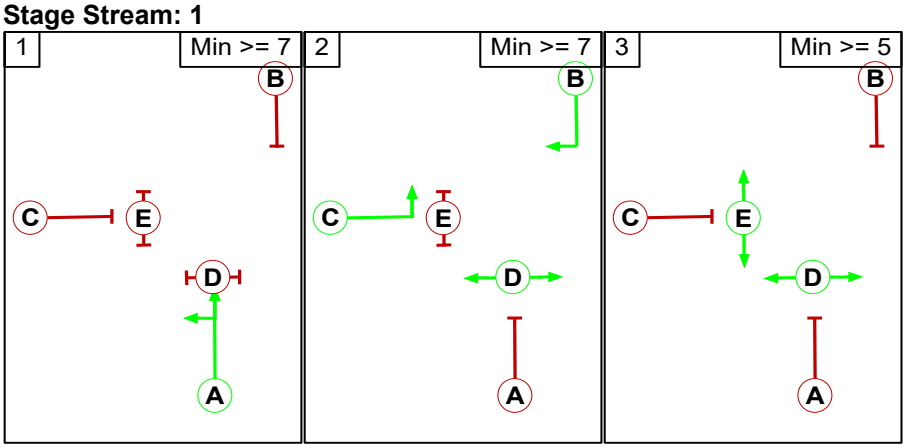
Stage Diagram

C1 - A57 Hyde Rd / Mount Rd

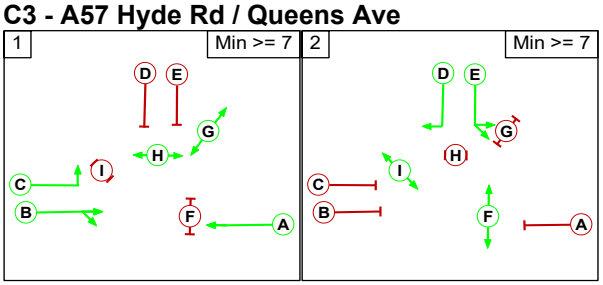


C2 - Mount Rd / Kirkmanshulme Ln

Stage Stream: 1



C3 - A57 Hyde Rd / Queens Ave



Lane Input Data

Junction: J1: A57/Mount Rd/Kirkmanshulme Ln												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (A57 Hyde Rd (E))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:5 Left Arm J2:1 Ahead	15.00 Inf
J1:1/2 (A57 Hyde Rd (E))	U	B	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:1 Ahead	Inf
J1:2/1 (Mount Rd)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:4 Ahead Arm J1:10 Left	30.00 13.00
J1:2/2 (Mount Rd)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm J1:4 Ahead	30.00
J1:3/1 (Kirkmanshulme Ln)	U	C	2	3	60.0	Geom	-	4.25	0.00	Y	Arm J1:4 Left	14.00
J1:4/1 (Mount Rd int (n/bound))	U	D	2	3	9.6	Geom	-	4.00	0.00	Y	Arm J2:1 Left	12.00
J1:4/2 (Mount Rd int (n/bound))	U	E	2	3	9.6	Geom	-	3.00	0.00	Y	Arm J1:8 Right	32.00
J1:4/3 (Mount Rd int (n/bound))	U	E	2	3	9.6	Geom	-	3.00	0.00	N	Arm J1:8 Right	32.00
J1:5/1 (Mount Rd int (s/bound))	U		2	3	12.2	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	22.00
J1:5/2 (Mount Rd int (s/bound))	U	B	2	3	12.2	Geom	-	3.50	0.00	N	Arm J1:10 Right	13.00
J1:6/1 (A57 Hyde Rd int (e/bound))	U	A	2	3	29.6	Geom	-	3.00	0.00	Y	Arm J1:8 Ahead	Inf
J1:6/2 (A57 Hyde Rd int (e/bound))	U	A	2	3	29.6	Geom	-	3.00	0.00	N	Arm J1:8 Ahead	Inf
J1:7/1 (Glencastle Rd)	U	C	2	3	36.5	Geom	-	4.00	0.00	Y	Arm J1:5 Ahead	30.00
J1:7/2 (Glencastle Rd)	U	C	2	3	7.0	Geom	-	3.50	0.00	N	Arm J1:5 Ahead	30.00
J1:8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:8/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:10/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: A57 Hyde Rd / Queens Ave												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
J2:1/1 (A57 Hyde Rd int (w/bound))	U	A	2	3	27.0	Geom	-	3.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:1/2 (A57 Hyde Rd int (w/bound))	U	A	2	3	27.0	Geom	-	3.00	0.00	N	Arm J2:4 Ahead	Inf
J2:2/1 (A57 Hyde Rd (W))	U	C	2	3	1.0	Geom	-	3.00	0.00	Y	Arm J2:5 Left	19.00
J2:2/2 (A57 Hyde Rd (W))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:6 Ahead	Inf
											Arm J1:7 Ahead	Inf
J2:2/3 (A57 Hyde Rd (W))	U	B	2	3	60.0	Geom	-	3.00	0.00	N	Arm J1:6 Ahead	Inf
J2:3/1 (Queens Ave)	U	E	2	3	2.1	Geom	-	3.00	0.00	Y	Arm J1:6 Left	28.00
											Arm J1:7 Ahead	32.00
J2:3/2 (Queens Ave)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:4 Right	8.00
J2:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Network Results

Scenario 1: 'Observed AM Peak' (FG1: 'Observed AM Peak', Plan 2: 'AM Peak')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Rd / Kirkmanshulme Ln, A57 Hyde Rd / Mount Rd / Glencastle Rd and A57 Hyde Rd / Queens Ave	-	-	-		-	-	-	-	-	**94.8%**	**29.0**	**22.8**	**51.8**	-	-	-
J1: A57/Mount Rd/Kirkmanshulme Ln	-	-	-		-	-	-	-	-	**94.8%**	**25.9**	**21.1**	**47.1**	-	-	-
1/1	A57 Hyde Rd (E) Left Ahead	U	C1:B		141	792	1752	1752	841	94.2%	5.4	6.4	11.8	53.8	20.7	27.1
1/2	A57 Hyde Rd (E) Ahead	U	C1:B		141	935	2055	2055	986	94.8%	6.4	7.1	13.6	52.2	24.7	31.8
2/1	Mount Rd Ahead Left	U	C2:A		153	408	1809	1809	941	43.4%	1.7	0.4	2.1	18.3	7.6	8.0
2/2	Mount Rd Ahead	U	C2:A		153	286	1957	1957	1018	28.1%	1.1	0.2	1.3	16.0	4.8	5.0
3/1	Kirkmanshulme Ln Left	U	C2:C		105	122	1843	1843	663	18.4%	0.7	0.1	0.9	25.4	2.6	2.7
4/1	Mount Rd int (n/bound) Left	U	C1:D		114	296	1791	1791	698	42.4%	1.5	0.4	1.9	22.7	3.7	4.1
4/2	Mount Rd int (n/bound) Right	U	C1:E		57	181	1829	1829	366	49.5%	1.5	0.5	2.0	40.4	4.3	4.8
4/3	Mount Rd int (n/bound) Right	U	C1:E		57	286	1963	1963	393	72.8%	2.0	1.3	3.3	41.2	6.2	7.5
5/1	Mount Rd int (s/bound) Ahead	U	-		-	746	1840	1840	1840	40.5%	0.0	0.3	0.3	1.7	3.1	3.5
5/2	Mount Rd int (s/bound) Right	U	C2:B		102	260	1887	1887	660	39.4%	0.6	0.3	0.9	12.3	4.9	5.3
6/1	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		141	192	1915	1915	919	20.9%	0.7	0.1	0.8	15.3	2.4	2.6
6/2	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		141	322	2055	2055	986	32.6%	1.2	0.2	1.4	16.2	3.9	4.2
7/1+7/2	Glencastle Rd Ahead	U	C1:C		42	269	1919:2005	1919	288+10	90.3 : 90.3%	3.1	3.7	6.8	90.7	7.3	11.0
8/1		U	-		-	373	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

8/2		U	-		-	608	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
9/1		U	-		-	746	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
10/1		U	-		-	313	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
J2: A57 Hyde Rd / Queens Ave	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**65.9%**	**3.1**	**1.7**	**4.8**	**-**	**-**	**-**
1/1	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		204	351	1915	1915	1321	26.6%	0.8	0.2	1.0	10.6	7.6	7.8
1/2	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		204	935	2055	2055	1418	65.9%	0.1	1.0	1.1	4.1	1.0	2.0
2/2+2/1	A57 Hyde Rd (W) Ahead Ahead2 Left	U	C3:B C3:C		204	415	1915:1775	1915	1256+60	31.5 : 31.5%	0.7	0.2	0.9	8.1	4.4	4.7
2/3	A57 Hyde Rd (W) Ahead	U	C3:B		204	322	2055	2055	1418	22.7%	0.5	0.1	0.7	7.3	3.2	3.4
3/2+3/1	Queens Ave Left Ahead Right	U	C3:D C3:E		63:60	102	1613:1828	1613	150+264	24.6 : 24.6%	0.9	0.2	1.1	38.4	1.8	1.9
4/1		U	-		-	351	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
4/2		U	-		-	972	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	19	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1 - A57 Hyde Rd / Mount Rd		PRC for Signalled Lanes (%):	-5.3	Total Delay for Signalled Lanes (pcuHr):	41.61
C2 - Mount Rd / Kirkmanshulme Ln	Stream: 1	PRC for Signalled Lanes (%):	107.5	Total Delay for Signalled Lanes (pcuHr):	5.10
C3 - A57 Hyde Rd / Queens Ave		PRC for Signalled Lanes (%):	36.5	Total Delay for Signalled Lanes (pcuHr):	4.78
		PRC Over All Lanes (%):	-5.3	Total Delay Over All Lanes(pcuHr):	51.84

Cycle Time (s):	300
Cycle Time (s):	300
Cycle Time (s):	300

Scenario 2: 'Observed PM Peak' (FG2: 'Observed PM Peak', Plan 3: 'PM Peak')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Rd / Kirkmanshulme Ln, A57 Hyde Rd / Mount Rd / Glencastle Rd and A57 Hyde Rd / Queens Ave	-	-	-		-	-	-	-	-	**88.5%**	**33.4**	**18.5**	**51.9**	-	-	-
J1: A57/Mount Rd/Kirkmanshulme Ln	-	-	-		-	-	-	-	-	**88.5%**	**29.1**	**16.8**	**45.9**	-	-	-
1/1	A57 Hyde Rd (E) Left Ahead	U	C1:B		33	524	1741	1741	592	88.5%	4.5	3.5	8.0	55.2	13.7	17.2
1/2	A57 Hyde Rd (E) Ahead	U	C1:B		33	564	2055	2055	699	80.7%	4.7	2.0	6.7	43.0	14.1	16.1
2/1	Mount Rd Ahead Left	U	C2:A		44	294	1813	1813	834	35.3%	0.7	0.3	1.0	12.0	2.6	2.9
2/2	Mount Rd Ahead	U	C2:A		44	358	1957	1957	900	39.8%	0.9	0.3	1.2	12.2	3.3	3.6
3/1	Kirkmanshulme Ln Left	U	C2:C		36	238	1843	1843	700	34.0%	0.7	0.3	1.0	14.9	2.3	2.6
4/1	Mount Rd int (n/bound) Left	U	C1:D		52	197	1791	1791	949	20.8%	0.6	0.1	0.7	13.0	3.0	3.1
4/2	Mount Rd int (n/bound) Right	U	C1:E		21	306	1829	1829	402	76.0%	2.9	1.5	4.4	52.1	7.8	9.3
4/3	Mount Rd int (n/bound) Right	U	C1:E		21	358	1963	1963	432	82.9%	3.7	2.3	6.0	60.4	7.7	10.0
5/1	Mount Rd int (s/bound) Ahead	U	-		-	807	1840	1840	1840	43.9%	0.0	0.4	0.4	1.8	5.2	5.6
5/2	Mount Rd int (s/bound) Right	U	C2:B		36	79	1887	1887	717	11.0%	0.2	0.1	0.3	11.7	0.7	0.8
6/1	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		33	484	1915	1915	651	74.3%	3.0	1.4	4.4	32.9	9.1	10.5
6/2	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		33	615	2055	2055	699	88.0%	4.2	3.4	7.6	44.3	16.0	19.4
7/1+7/2	Glencastle Rd Ahead	U	C1:C		26	362	1919:2105	1919	518+0	69.9 : 0.0%	3.0	1.1	4.2	41.3	9.2	10.3
8/1		U	-		-	790	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/2		U	-		-	973	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

9/1		U	-		-	807	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
10/1		U	-		-	108	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
J2: A57 Hyde Rd / Queens Ave	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**61.7%**	**4.3**	**1.8**	**6.1**	**-**	**-**	**-**
1/1	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		68	197	1915	1915	1321	14.9%	0.4	0.1	0.5	8.7	1.8	1.8
1/2	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		68	564	2055	2055	1418	39.8%	0.0	0.3	0.3	2.2	0.0	0.4
2/2+2/1	A57 Hyde Rd (W) Ahead Ahead2 Left	U	C3:B C3:C		68	812	1915:1775	1915	1265+52	61.7 : 61.7%	1.9	0.8	2.7	11.9	12.1	12.9
2/3	A57 Hyde Rd (W) Ahead	U	C3:B		68	615	2055	2055	1418	43.4%	1.2	0.4	1.6	9.1	7.5	7.9
3/2+3/1	Queens Ave Left Ahead Right	U	C3:D C3:E		21:20	94	1613:1827	1613	121+285	23.2 : 23.2%	0.8	0.2	1.0	37.8	1.5	1.6
4/1		U	-		-	197	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
4/2		U	-		-	592	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	32	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1 - A57 Hyde Rd / Mount Rd		PRC for Signalled Lanes (%):	1.7	Total Delay for Signalled Lanes (pcuHr):	42.05
C2 - Mount Rd / Kirkmanshulme Ln	Stream: 1	PRC for Signalled Lanes (%):	126.3	Total Delay for Signalled Lanes (pcuHr):	3.45
C3 - A57 Hyde Rd / Queens Ave		PRC for Signalled Lanes (%):	45.9	Total Delay for Signalled Lanes (pcuHr):	6.05
		PRC Over All Lanes (%):	1.7	Total Delay Over All Lanes(pcuHr):	51.94

Cycle Time (s):	100
Cycle Time (s):	100
Cycle Time (s):	100

Scenario 3: 'Future Year Base AM Peak' (FG5: 'Future Year Base AM Peak', Plan 2: 'AM Peak')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Rd / Kirkmanshulme Ln, A57 Hyde Rd / Mount Rd / Glencastle Rd and A57 Hyde Rd / Queens Ave	-	-	-		-	-	-	-	-	**96.2%**	**30.4**	**27.1**	**57.4**	-	-	-
J1: A57/Mount Rd/Kirkmanshulme Ln	-	-	-		-	-	-	-	-	**96.2%**	**27.1**	**25.3**	**52.4**	-	-	-
1/1	A57 Hyde Rd (E) Left Ahead	U	C1:B		141	806	1753	1753	841	95.8%	5.6	7.9	13.5	60.2	21.5	29.4
1/2	A57 Hyde Rd (E) Ahead	U	C1:B		141	949	2055	2055	986	96.2%	6.6	8.7	15.3	58.0	25.3	34.0
2/1	Mount Rd Ahead Left	U	C2:A		164	483	1808	1808	1006	48.0%	1.8	0.5	2.3	16.9	8.7	9.2
2/2	Mount Rd Ahead	U	C2:A		164	236	1957	1957	1089	21.7%	0.7	0.1	0.9	13.3	3.5	3.7
3/1	Kirkmanshulme Ln Left	U	C2:C		94	151	1843	1843	596	25.3%	1.1	0.2	1.2	29.3	3.5	3.7
4/1	Mount Rd int (n/bound) Left	U	C1:D		114	325	1791	1791	698	46.5%	1.6	0.4	2.0	22.5	4.6	5.0
4/2	Mount Rd int (n/bound) Right	U	C1:E		57	243	1829	1829	366	66.4%	2.1	1.0	3.1	46.1	6.3	7.3
4/3	Mount Rd int (n/bound) Right	U	C1:E		57	236	1963	1963	393	60.1%	1.7	0.7	2.4	36.8	6.0	6.8
5/1	Mount Rd int (s/bound) Ahead	U	-		-	758	1840	1840	1840	41.2%	0.0	0.4	0.4	1.7	3.1	3.5
5/2	Mount Rd int (s/bound) Right	U	C2:B		91	265	1887	1887	591	44.8%	0.7	0.4	1.1	14.7	6.1	6.5
6/1	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		141	227	1915	1915	919	24.7%	0.9	0.2	1.1	16.9	3.1	3.3
6/2	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		141	305	2055	2055	986	30.9%	1.3	0.2	1.5	17.6	4.1	4.4
7/1+7/2	Glencastle Rd Ahead	U	C1:C		42	280	1919:2005	1919	288+13	93.1 : 93.1%	3.1	4.7	7.7	99.1	7.4	12.1
8/1		U	-		-	470	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/2		U	-		-	541	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

9/1		U	-		-	758	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
10/1		U	-		-	331	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
J2: A57 Hyde Rd / Queens Ave	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**66.9%**	**3.3**	**1.8**	**5.0**	**-**	**-**	**-**
1/1	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		204	388	1915	1915	1321	29.4%	1.0	0.2	1.2	11.5	5.8	6.0
1/2	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		204	949	2055	2055	1418	66.9%	0.0	1.0	1.0	3.8	0.1	1.1
2/2+2/1	A57 Hyde Rd (W) Ahead Ahead2 Left	U	C3:B C3:C		204	463	1915:1775	1915	1256+60	35.2 : 35.2%	0.8	0.3	1.1	8.5	5.1	5.4
2/3	A57 Hyde Rd (W) Ahead	U	C3:B		204	305	2055	2055	1418	21.5%	0.5	0.1	0.6	7.3	3.0	3.2
3/2+3/1	Queens Ave Left Ahead Right	U	C3:D C3:E		63:60	104	1613:1828	1613	156+260	25.0 : 25.0%	0.9	0.2	1.1	37.7	1.6	1.7
4/1		U	-		-	388	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
4/2		U	-		-	988	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	21	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1 - A57 Hyde Rd / Mount Rd		PRC for Signalled Lanes (%):	-6.9	Total Delay for Signalled Lanes (pcuHr):	46.59
C2 - Mount Rd / Kirkmanshulme Ln	Stream: 1	PRC for Signalled Lanes (%):	87.5	Total Delay for Signalled Lanes (pcuHr):	5.45
C3 - A57 Hyde Rd / Queens Ave		PRC for Signalled Lanes (%):	34.5	Total Delay for Signalled Lanes (pcuHr):	5.05
		PRC Over All Lanes (%):	-6.9	Total Delay Over All Lanes(pcuHr):	57.45

Cycle Time (s):	300
Cycle Time (s):	300
Cycle Time (s):	300

Scenario 4: 'Future Year Base PM Peak' (FG6: 'Future Year Base PM Peak', Plan 3: 'PM Peak')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Rd / Kirkmanshulme Ln, A57 Hyde Rd / Mount Rd / Glencastle Rd and A57 Hyde Rd / Queens Ave	-	-	-		-	-	-	-	-	**90.4%**	**34.5**	**19.6**	**54.1**	-	-	-
J1: A57/Mount Rd/Kirkmanshulme Ln	-	-	-		-	-	-	-	-	**90.4%**	**29.9**	**17.7**	**47.6**	-	-	-
1/1	A57 Hyde Rd (E) Left Ahead	U	C1:B		33	535	1741	1741	592	90.4%	4.7	4.1	8.8	59.1	14.1	18.2
1/2	A57 Hyde Rd (E) Ahead	U	C1:B		33	573	2055	2055	699	82.0%	4.8	2.2	7.0	44.0	14.5	16.7
2/1	Mount Rd Ahead Left	U	C2:A		44	321	1810	1810	833	38.6%	0.8	0.3	1.1	12.4	2.9	3.2
2/2	Mount Rd Ahead	U	C2:A		44	350	1957	1957	900	38.9%	0.9	0.3	1.2	12.2	3.1	3.4
3/1	Kirkmanshulme Ln Left	U	C2:C		36	249	1843	1843	700	35.6%	0.8	0.3	1.0	15.1	2.4	2.7
4/1	Mount Rd int (n/bound) Left	U	C1:D		52	207	1791	1791	949	21.8%	0.6	0.1	0.8	13.4	3.2	3.3
4/2	Mount Rd int (n/bound) Right	U	C1:E		21	323	1829	1829	402	80.3%	3.1	1.9	5.1	56.3	8.2	10.2
4/3	Mount Rd int (n/bound) Right	U	C1:E		21	350	1963	1963	432	81.0%	3.6	2.0	5.6	58.0	7.5	9.5
5/1	Mount Rd int (s/bound) Ahead	U	-		-	818	1840	1840	1840	44.5%	0.0	0.4	0.4	1.8	5.2	5.6
5/2	Mount Rd int (s/bound) Right	U	C2:B		36	98	1887	1887	717	13.7%	0.2	0.1	0.3	11.9	1.0	1.1
6/1	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		33	521	1915	1915	651	80.0%	3.4	1.9	5.3	36.6	10.3	12.2
6/2	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		33	594	2055	2055	699	85.0%	4.0	2.7	6.7	40.4	15.1	17.8
7/1+7/2	Glencastle Rd Ahead	U	C1:C		26	381	1919:2005	1919	513+15	72.1 : 72.1%	3.1	1.3	4.4	41.3	9.5	10.7
8/1		U	-		-	844	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/2		U	-		-	944	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

9/1		U	-		-	818	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
10/1		U	-		-	138	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
J2: A57 Hyde Rd / Queens Ave	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**66.1%**	**4.5**	**1.9**	**6.5**	**-**	**-**	**-**
1/1	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		68	207	1915	1915	1321	15.7%	0.4	0.1	0.5	9.1	1.9	2.0
1/2	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		68	573	2055	2055	1418	40.4%	0.0	0.3	0.3	2.2	0.0	0.4
2/2+2/1	A57 Hyde Rd (W) Ahead Ahead2 Left	U	C3:B C3:C		68	870	1915:1775	1915	1265+51	66.1 : 66.1%	2.1	1.0	3.1	12.9	13.7	14.7
2/3	A57 Hyde Rd (W) Ahead	U	C3:B		68	594	2055	2055	1418	41.9%	1.1	0.4	1.5	8.9	7.1	7.5
3/2+3/1	Queens Ave Left Ahead Right	U	C3:D C3:E		21:20	95	1613:1827	1613	124+282	23.4 : 23.4%	0.8	0.2	1.0	37.8	1.5	1.6
4/1		U	-		-	207	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
4/2		U	-		-	602	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	34	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1 - A57 Hyde Rd / Mount Rd		PRC for Signalled Lanes (%):	-0.4	Total Delay for Signalled Lanes (pcuHr):	43.58
C2 - Mount Rd / Kirkmanshulme Ln	Stream: 1	PRC for Signalled Lanes (%):	131.5	Total Delay for Signalled Lanes (pcuHr):	3.65
C3 - A57 Hyde Rd / Queens Ave		PRC for Signalled Lanes (%):	36.2	Total Delay for Signalled Lanes (pcuHr):	6.45
		PRC Over All Lanes (%):	-0.4	Total Delay Over All Lanes(pcuHr):	54.09

Cycle Time (s):	100
Cycle Time (s):	100
Cycle Time (s):	100

Scenario 5: 'Future Year Base Plus Dev AM Peak' (FG9: 'Future Year Base Plus Dev AM Peak', Plan 2: 'AM Peak')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Rd / Kirkmanshulme Ln, A57 Hyde Rd / Mount Rd / Glencastle Rd and A57 Hyde Rd / Queens Ave	-	-	-		-	-	-	-	-	**96.4%**	**31.2**	**29.1**	**60.2**	-	-	-
J1: A57/Mount Rd/Kirkmanshulme Ln	-	-	-		-	-	-	-	-	**96.4%**	**27.7**	**27.3**	**55.0**	-	-	-
1/1	A57 Hyde Rd (E) Left Ahead	U	C1:B		141	807	1753	1753	841	95.9%	5.6	8.0	13.6	60.7	21.5	29.5
1/2	A57 Hyde Rd (E) Ahead	U	C1:B		141	951	2055	2055	986	96.4%	6.6	8.9	15.6	59.0	25.4	34.3
2/1	Mount Rd Ahead Left	U	C2:A		164	488	1808	1808	1006	48.5%	1.8	0.5	2.3	17.0	8.8	9.3
2/2	Mount Rd Ahead	U	C2:A		164	279	1957	1957	1089	25.6%	0.9	0.2	1.1	13.7	4.3	4.4
3/1	Kirkmanshulme Ln Left	U	C2:C		94	151	1843	1843	596	25.3%	1.1	0.2	1.2	29.3	3.5	3.7
4/1	Mount Rd int (n/bound) Left	U	C1:D		114	355	1791	1791	698	50.8%	1.8	0.5	2.3	23.1	4.9	5.4
4/2	Mount Rd int (n/bound) Right	U	C1:E		57	215	1829	1829	366	58.8%	1.9	0.7	2.6	43.7	5.5	6.2
4/3	Mount Rd int (n/bound) Right	U	C1:E		57	279	1963	1963	393	71.1%	2.0	1.2	3.2	41.5	7.3	8.5
5/1	Mount Rd int (s/bound) Ahead	U	-		-	769	1840	1840	1840	41.8%	0.0	0.4	0.4	1.7	3.6	4.0
5/2	Mount Rd int (s/bound) Right	U	C2:B		91	265	1887	1887	591	44.8%	0.7	0.4	1.1	14.7	6.0	6.5
6/1	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		141	197	1915	1915	919	21.4%	0.8	0.1	0.9	16.5	2.7	2.8
6/2	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		141	335	2055	2055	986	34.0%	1.4	0.3	1.7	17.9	4.5	4.8
7/1+7/2	Glencastle Rd Ahead	U	C1:C		42	288	1919:2005	1919	288+13	95.9 : 95.9%	3.2	5.9	9.1	113.7	7.7	13.6
8/1		U	-		-	412	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/2		U	-		-	614	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

9/1		U	-		-	769	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
10/1		U	-		-	334	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
J2: A57 Hyde Rd / Queens Ave	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**67.1%**	**3.4**	**1.8**	**5.2**	**-**	**-**	**-**
1/1	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		204	416	1915	1915	1321	31.5%	1.2	0.2	1.4	12.2	6.5	6.7
1/2	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		204	951	2055	2055	1418	67.1%	0.0	1.0	1.0	3.9	0.1	1.1
2/2+2/1	A57 Hyde Rd (W) Ahead Ahead2 Left	U	C3:B C3:C		204	441	1915:1775	1915	1253+63	33.5 : 33.5%	0.8	0.3	1.0	8.3	4.9	5.1
2/3	A57 Hyde Rd (W) Ahead	U	C3:B		204	335	2055	2055	1418	23.6%	0.5	0.2	0.7	7.4	3.4	3.6
3/2+3/1	Queens Ave Left Ahead Right	U	C3:D C3:E		63:60	104	1613:1828	1613	156+260	25.0 : 25.0%	0.9	0.2	1.1	37.7	1.6	1.7
4/1		U	-		-	416	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
4/2		U	-		-	990	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	21	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1 - A57 Hyde Rd / Mount Rd		PRC for Signalled Lanes (%):	-7.1	Total Delay for Signalled Lanes (pcuHr):	48.96	Cycle Time (s): 300
C2 - Mount Rd / Kirkmanshulme Ln	Stream: 1	PRC for Signalled Lanes (%):	85.6	Total Delay for Signalled Lanes (pcuHr):	5.68	Cycle Time (s): 300
C3 - A57 Hyde Rd / Queens Ave		PRC for Signalled Lanes (%):	34.2	Total Delay for Signalled Lanes (pcuHr):	5.23	Cycle Time (s): 300
		PRC Over All Lanes (%):	-7.1	Total Delay Over All Lanes(pcuHr):	60.23	

Scenario 6: 'Future Year Base Plus Dev PM Peak' (FG10: 'Future Year Base Plus Dev PM Peak', Plan 3: 'PM Peak')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: Mount Rd / Kirkmanshulme Ln, A57 Hyde Rd / Mount Rd / Glencastle Rd and A57 Hyde Rd / Queens Ave	-	-	-		-	-	-	-	-	**92.4%**	**35.2**	**21.2**	**56.4**	-	-	-
J1: A57/Mount Rd/Kirkmanshulme Ln	-	-	-		-	-	-	-	-	**92.4%**	**30.5**	**19.2**	**49.7**	-	-	-
1/1	A57 Hyde Rd (E) Left Ahead	U	C1:B		33	547	1741	1741	592	92.4%	4.8	5.0	9.8	64.5	14.6	19.6
1/2	A57 Hyde Rd (E) Ahead	U	C1:B		33	573	2055	2055	699	82.0%	4.8	2.2	7.0	44.0	14.5	16.7
2/1	Mount Rd Ahead Left	U	C2:A		44	334	1810	1810	833	40.1%	0.8	0.3	1.2	12.5	3.1	3.4
2/2	Mount Rd Ahead	U	C2:A		44	354	1957	1957	900	39.3%	0.9	0.3	1.2	12.2	3.1	3.5
3/1	Kirkmanshulme Ln Left	U	C2:C		36	249	1843	1843	700	35.6%	0.8	0.3	1.0	15.1	2.4	2.7
4/1	Mount Rd int (n/bound) Left	U	C1:D		52	218	1791	1791	949	23.0%	0.7	0.1	0.8	13.7	3.4	3.5
4/2	Mount Rd int (n/bound) Right	U	C1:E		21	324	1829	1829	402	80.5%	3.1	2.0	5.1	56.8	8.3	10.2
4/3	Mount Rd int (n/bound) Right	U	C1:E		21	354	1963	1963	432	82.0%	3.7	2.2	5.8	59.1	7.6	9.8
5/1	Mount Rd int (s/bound) Ahead	U	-		-	855	1840	1840	1840	46.5%	0.0	0.4	0.4	1.9	6.2	6.7
5/2	Mount Rd int (s/bound) Right	U	C2:B		36	98	1887	1887	717	13.7%	0.3	0.1	0.3	12.1	1.1	1.1
6/1	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		33	518	1915	1915	651	79.6%	3.4	1.9	5.3	36.6	10.2	12.0
6/2	A57 Hyde Rd int (e/bound) Ahead	U	C1:A		33	597	2055	2055	699	85.4%	4.0	2.8	6.8	40.8	15.1	17.9
7/1+7/2	Glencastle Rd Ahead	U	C1:C		26	406	1919:2005	1919	514+14	76.9 : 76.9%	3.3	1.6	4.9	43.8	10.3	11.9
8/1		U	-		-	842	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/2		U	-		-	951	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

9/1		U	-		-	855	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
10/1		U	-		-	139	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
J2: A57 Hyde Rd / Queens Ave	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**67.7%**	**4.7**	**2.0**	**6.7**	**-**	**-**	**-**
1/1	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		68	218	1915	1915	1321	16.5%	0.5	0.1	0.6	9.4	2.1	2.2
1/2	A57 Hyde Rd int (w/bound) Ahead	U	C3:A		68	573	2055	2055	1418	40.4%	0.0	0.3	0.3	2.2	0.0	0.4
2/2+2/1	A57 Hyde Rd (W) Ahead Ahead2 Left	U	C3:B C3:C		68	892	1915:1775	1915	1266+50	67.7 : 67.7%	2.2	1.0	3.3	13.3	14.3	15.4
2/3	A57 Hyde Rd (W) Ahead	U	C3:B		68	597	2055	2055	1418	42.1%	1.1	0.4	1.5	9.0	7.1	7.5
3/2+3/1	Queens Ave Left Ahead Right	U	C3:D C3:E		21:20	95	1613:1827	1613	124+282	23.4 : 23.4%	0.8	0.2	1.0	37.8	1.5	1.6
4/1		U	-		-	218	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
4/2		U	-		-	602	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	34	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

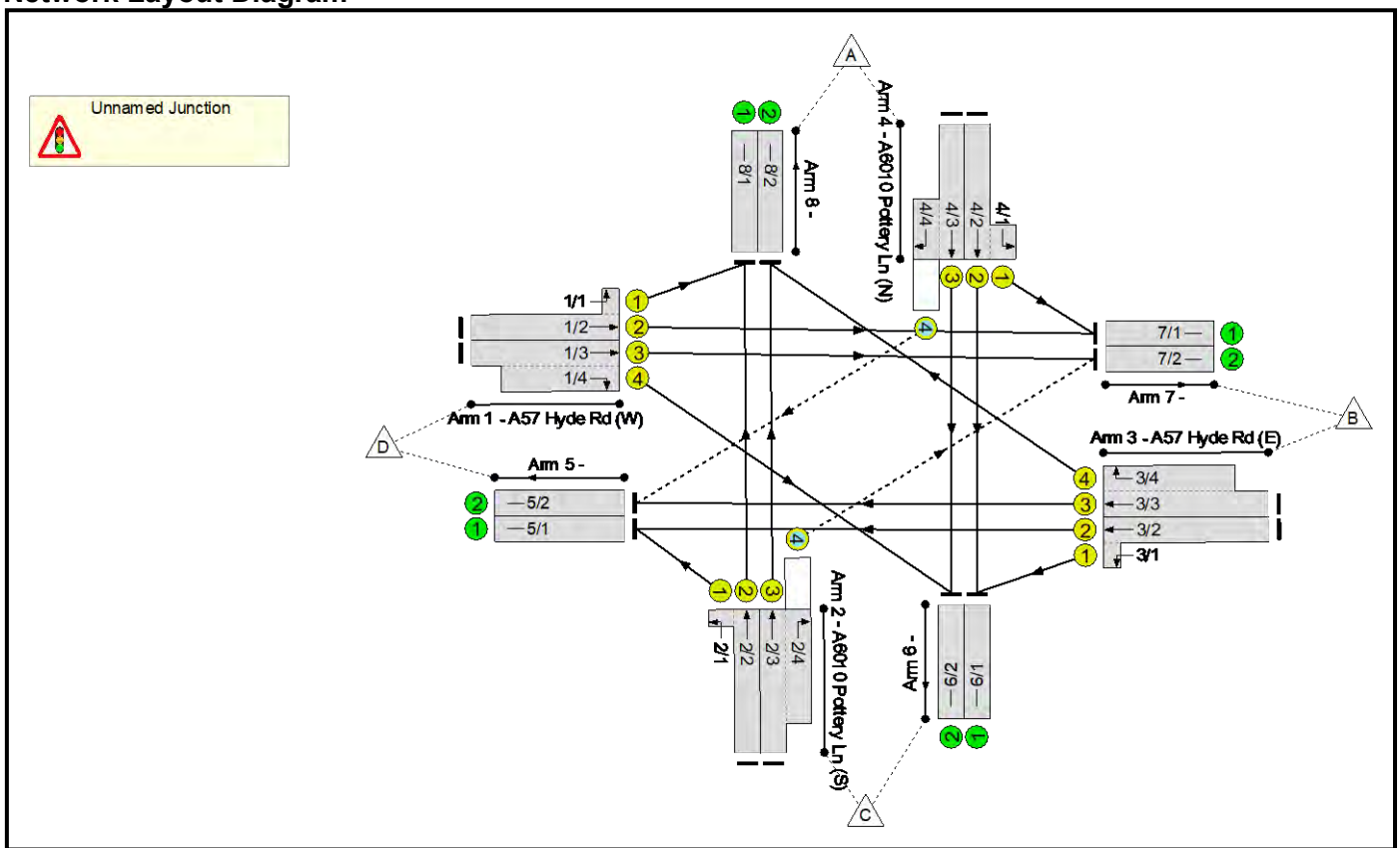
C1 - A57 Hyde Rd / Mount Rd	PRC for Signalled Lanes (%):	-2.7	Total Delay for Signalled Lanes (pcuHr):	45.54	Cycle Time (s): 100
C2 - Mount Rd / Kirkmanshulme Ln	Stream: 1 PRC for Signalled Lanes (%):	124.4	Total Delay for Signalled Lanes (pcuHr):	3.74	Cycle Time (s): 100
C3 - A57 Hyde Rd / Queens Ave	PRC for Signalled Lanes (%):	32.8	Total Delay for Signalled Lanes (pcuHr):	6.69	Cycle Time (s): 100
	PRC Over All Lanes (%):	-2.7	Total Delay Over All Lanes(pcuHr):	56.40	

Appendix N: LINSIG Outputs:
A57 Hyde Road / A6010 Pottery Lane

Project and User Details

Project:	**Mount Road, Gorton**
Title:	**A57 Hyde Road / A6010 Pottery Lane**
Author:	

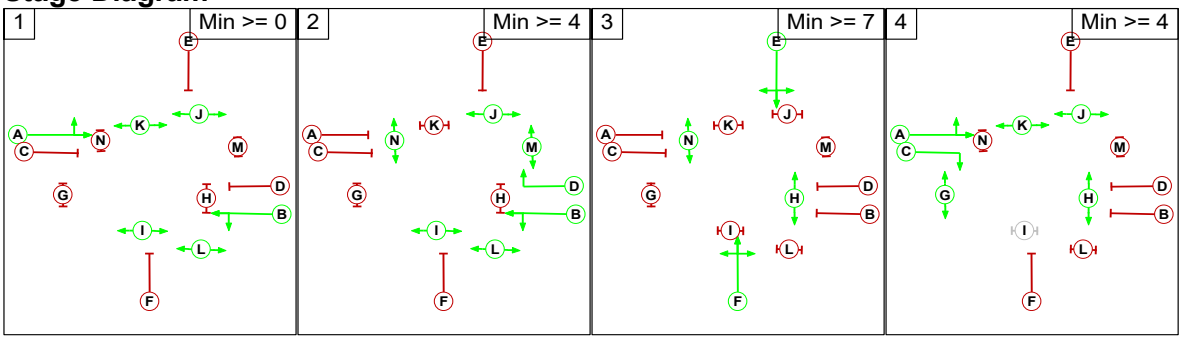
Network Layout Diagram



Phase Intergreens Matrix

		Starting Phase													
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
Terminating Phase	A		-	-	5	8	8	-	-	-	-	-	-	9	5
	B	-		5	-	8	8	9	5	-	-	-	-	-	-
	C	-	7		-	8	8	-	-	-	-	-	8	-	5
	D	7	-	-		8	8	-	5	-	-	8	-	-	-
	E	8	8	8	8		-	11	-	-	5	-	9	-	-
	F	8	8	8	8	-		-	-	5	-	8	-	11	-
	G	-	5	-	-	5	-		-	-	-	-	-	-	-
	H	-	6	-	6	-	-	-		-	-	-	-	-	-
	I	-	-	-	-	-	10	-	-		-	-	-	-	-
	J	-	-	-	-	7	-	-	-	-		-	-	-	-
	K	-	-	-	8	-	8	-	-	-	-		-	-	-
	L	-	-	6	-	6	-	-	-	-	-	-		-	-
	M	5	-	-	-	-	5	-	-	-	-	-	-		-
	N	6	-	6	-	-	-	-	-	-	-	-	-	-	

Stage Diagram



Lane Input Data

Junction: Unnamed Junction												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A57 Hyde Rd (W))	U	A	2	3	1.0	Geom	-	3.50	0.00	Y	Arm 8 Left	40.00
1/2 (A57 Hyde Rd (W))	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 7 Ahead	Inf
1/3 (A57 Hyde Rd (W))	U	A	2	3	60.0	Geom	-	3.70	0.00	N	Arm 7 Ahead	Inf
1/4 (A57 Hyde Rd (W))	U	C	2	3	9.0	Geom	-	3.40	0.00	N	Arm 6 Right	12.00
2/1 (A6010 Pottery Ln (S))	U	F	2	3	1.0	Geom	-	3.50	0.00	Y	Arm 5 Left	25.00
2/2 (A6010 Pottery Ln (S))	U	F	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 8 Ahead	Inf
2/3 (A6010 Pottery Ln (S))	U	F	2	3	60.0	Geom	-	4.00	0.00	N	Arm 8 Ahead	Inf
2/4 (A6010 Pottery Ln (S))	O	F	2	3	12.2	Geom	-	4.00	0.00	N	Arm 7 Right	17.00
3/1 (A57 Hyde Rd (E))	U	B	2	3	1.0	Geom	-	3.50	0.00	Y	Arm 6 Left	35.00
3/2 (A57 Hyde Rd (E))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
3/3 (A57 Hyde Rd (E))	U	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 5 Ahead	Inf
3/4 (A57 Hyde Rd (E))	U	D	2	3	8.0	Geom	-	3.00	0.00	N	Arm 8 Right	14.00
4/1 (A6010 Pottery Ln (N))	U	E	2	3	2.0	Geom	-	3.50	0.00	Y	Arm 7 Left	30.00
4/2 (A6010 Pottery Ln (N))	U	E	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 6 Ahead	Inf
4/3 (A6010 Pottery Ln (N))	U	E	2	3	60.0	Geom	-	3.60	0.00	N	Arm 6 Ahead	Inf

4/4 (A6010 Pottery Ln (N))	O	E	2	3	3.5	Geom	-	3.25	0.00	N	Arm 5 Right	12.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Network Results

Scenario 1: 'Observed AM Peak' (FG1: 'Observed AM Peak', Plan 2: 'Stage 4 every other')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: A57 Hyde Road / A6010 Pottery Lane	-	-	-		-	-	-	-	-	**87.9%**	**28.3**	**10.8**	**39.6**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**87.9%**	**28.3**	**10.8**	**39.6**	-	-	-
1/2+1/1	A57 Hyde Rd (W) Ahead Left	U	A		46	198	1985:1894	1985	372+83	43.6 : 43.6%	1.9	0.4	2.3	41.5	4.7	5.1
1/3+1/4	A57 Hyde Rd (W) Right Ahead	U	A C		46:7	238	2125:1862	2125	477+32	46.8 : 46.8%	2.6	0.4	3.0	45.5	5.6	6.1
2/2+2/1	A6010 Pottery Ln (S) Left Ahead	U	F		78	311	2015:1854	2015	728+34	40.8 : 40.8%	2.1	0.3	2.4	27.9	6.8	7.1
2/3+2/4	A6010 Pottery Ln (S) Right Ahead	U+O	F		78	418	2155:1980	2155	749+130	46.1 : 56.2%	2.7	0.5	3.7	31.6	7.6	8.0
3/2+3/1	A57 Hyde Rd (E) Ahead Left	U	B		86	707	1965:1884	1965	599+225	85.8 : 85.8%	5.4	2.9	8.3	42.0	18.5	21.4
3/3+3/4	A57 Hyde Rd (E) Ahead Right	U	B D		86:42	547	2105:1856	2105	288+335	87.9 : 87.9%	4.6	3.3	7.9	52.2	8.5	11.8
4/2+4/1	A6010 Pottery Ln (N) Ahead Left	U	E		78	591	1975:1871	1975	441+342	75.5 : 75.5%	4.4	1.5	5.9	36.2	13.6	15.1
4/3+4/4	A6010 Pottery Ln (N) Right Ahead	U+O	E		78	607	2115:1849	2115	775+42	74.3 : 74.3%	4.7	1.4	6.1	36.4	15.5	16.9
5/1		U	-		-	528	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/2		U	-		-	284	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	526	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/2		U	-		-	591	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1		U	-		-	420	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/2		U	-		-	296	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

8/1		U	-		-	333	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/2		U	-		-	639	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		2.4		Total Delay for Signalled Lanes (pcuHr):			39.64	Cycle Time (s):	210				
				PRC Over All Lanes (%):		2.4		Total Delay Over All Lanes(pcuHr):			39.64						

Scenario 2: 'Observed PM Peak' (FG2: 'Observed PM Peak', Plan 2: 'Stage 4 every other')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: A57 Hyde Road / A6010 Pottery Lane	-	-	-		-	-	-	-	-	**86.7%**	**32.3**	**11.5**	**44.7**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**86.7%**	**32.3**	**11.5**	**44.7**	-	-	-
1/2+1/1	A57 Hyde Rd (W) Ahead Left	U	A		73	518	1985:1894	1985	631+75	73.4 : 73.4%	4.2	1.4	5.6	38.8	13.3	14.6
1/3+1/4	A57 Hyde Rd (W) Right Ahead	U	A C		73:7	581	2125:1862	2125	746+27	75.2 : 75.2%	5.2	1.5	6.7	41.6	14.7	16.2
2/2+2/1	A6010 Pottery Ln (S) Left Ahead	U	F		65	372	2015:1854	2015	616+22	58.3 : 58.3%	3.1	0.7	3.8	36.9	9.7	10.4
2/3+2/4	A6010 Pottery Ln (S) Right Ahead	U+O	F		65	505	2155:1980	2155	630+123	63.2 : 86.7%	4.1	1.0	5.8	41.5	10.4	11.4
3/2+3/1	A57 Hyde Rd (E) Ahead Left	U	B		99	575	1965:1884	1965	834+108	61.0 : 61.0%	3.2	0.8	4.0	25.1	13.3	14.1
3/3+3/4	A57 Hyde Rd (E) Ahead Right	U	B D		99:28	213	2105:1856	2105	0+265	0.0 : 80.3%	2.6	1.9	4.5	75.8	6.3	8.2
4/2+4/1	A6010 Pottery Ln (N) Ahead Left	U	E		65	525	1975:1871	1975	236+409	81.5 : 81.5%	4.7	2.1	6.8	46.7	13.9	16.0
4/3+4/4	A6010 Pottery Ln (N) Right Ahead	U+O	E		65	565	2115:1849	2115	619+71	81.9 : 81.9%	5.1	2.2	7.4	47.4	15.8	17.9
5/1		U	-		-	522	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/2		U	-		-	58	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	258	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/2		U	-		-	527	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1		U	-		-	796	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/2		U	-		-	668	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/1		U	-		-	414	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

8/2		U	-		-	611	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		3.8		Total Delay for Signalled Lanes (pcuHr):			44.67	Cycle Time (s):	210				
				PRC Over All Lanes (%):		3.8		Total Delay Over All Lanes(pcuHr):			44.67						

Scenario 3: 'Future Year Base AM Peak' (FG5: 'Future Year Base AM Peak', Plan 2: 'Stage 4 every other')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: A57 Hyde Road / A6010 Pottery Lane	-	-	-		-	-	-	-	-	**87.6%**	**29.9**	**12.0**	**42.5**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**87.6%**	**29.9**	**12.0**	**42.5**	-	-	-
1/2+1/1	A57 Hyde Rd (W) Ahead Left	U	A		46	209	1985:1894	1985	376+78	46.0 : 46.0%	2.0	0.4	2.4	42.1	5.1	5.5
1/3+1/4	A57 Hyde Rd (W) Right Ahead	U	A C		46:7	251	2125:1862	2125	477+32	49.3 : 49.3%	2.7	0.5	3.2	46.1	6.0	6.5
2/2+2/1	A6010 Pottery Ln (S) Left Ahead	U	F		73	314	2015:1854	2015	676+39	44.0 : 44.0%	2.2	0.4	2.6	30.3	6.9	7.3
2/3+2/4	A6010 Pottery Ln (S) Right Ahead	U+O	F		73	421	2155:1980	2155	708+113	49.2 : 64.4%	3.0	0.5	4.0	34.1	7.8	8.4
3/2+3/1	A57 Hyde Rd (E) Ahead Left	U	B		91	762	1965:1884	1965	649+220	87.6 : 87.6%	5.6	3.3	8.9	42.1	20.2	23.5
3/3+3/4	A57 Hyde Rd (E) Ahead Right	U	B D		91:47	542	2105:1856	2105	267+366	85.6 : 85.6%	4.4	2.8	7.2	48.0	9.4	12.2
4/2+4/1	A6010 Pottery Ln (N) Ahead Left	U	E		73	601	1975:1871	1975	405+335	81.2 : 81.2%	4.9	2.1	7.0	41.8	14.0	16.1
4/3+4/4	A6010 Pottery Ln (N) Right Ahead	U+O	E		73	612	2115:1849	2115	728+39	79.8 : 79.8%	5.1	1.9	7.1	41.6	15.8	17.7
5/1		U	-		-	586	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/2		U	-		-	260	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	522	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/2		U	-		-	597	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1		U	-		-	445	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/2		U	-		-	308	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/1		U	-		-	333	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

8/2		U	-		-	661	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	2.7	Total Delay for Signalled Lanes (pcuHr):	42.47	Cycle Time (s):	210			
	PRC Over All Lanes (%):	2.7	Total Delay Over All Lanes(pcuHr):	42.47					

Scenario 4: 'Future Year Base PM Peak' (FG6: 'Future Year Base PM Peak', Plan 2: 'Stage 4 every other')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: A57 Hyde Road / A6010 Pottery Lane	-	-	-		-	-	-	-	-	**87.2%**	**33.3**	**12.6**	**46.7**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**87.2%**	**33.3**	**12.6**	**46.7**	-	-	-
1/2+1/1	A57 Hyde Rd (W) Ahead Left	U	A		72	527	1985:1894	1985	624+73	75.6 : 75.6%	4.4	1.5	5.9	40.4	13.6	15.2
1/3+1/4	A57 Hyde Rd (W) Right Ahead	U	A C		72:7	595	2125:1862	2125	733+32	77.8 : 77.8%	5.6	1.7	7.3	44.1	15.1	16.9
2/2+2/1	A6010 Pottery Ln (S) Left Ahead	U	F		66	381	2015:1854	2015	620+27	58.8 : 58.8%	3.2	0.7	3.9	36.7	10.0	10.7
2/3+2/4	A6010 Pottery Ln (S) Right Ahead	U+O	F		66	502	2155:1980	2155	638+123	61.9 : 87.2%	4.0	1.0	5.7	41.0	10.3	11.3
3/2+3/1	A57 Hyde Rd (E) Ahead Left	U	B		98	599	1965:1884	1965	830+103	64.2 : 64.2%	3.5	0.9	4.4	26.3	14.4	15.2
3/3+3/4	A57 Hyde Rd (E) Ahead Right	U	B D		98:28	223	2105:1856	2105	0+265	0.0 : 84.1%	2.7	2.4	5.1	82.4	6.6	9.0
4/2+4/1	A6010 Pottery Ln (N) Ahead Left	U	E		66	532	1975:1871	1975	230+421	81.8 : 81.8%	4.7	2.2	6.9	46.6	14.3	16.4
4/3+4/4	A6010 Pottery Ln (N) Right Ahead	U+O	E		66	575	2115:1849	2115	629+71	82.2 : 82.2%	5.2	2.2	7.5	47.2	16.2	18.4
5/1		U	-		-	549	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/2		U	-		-	58	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	254	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/2		U	-		-	542	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1		U	-		-	816	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/2		U	-		-	677	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/1		U	-		-	420	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

8/2		U	-		-	618	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

		C1			PRC for Signalled Lanes (%):	3.2			Total Delay for Signalled Lanes (pcuHr):		46.70		Cycle Time (s):	210			
					PRC Over All Lanes (%):	3.2			Total Delay Over All Lanes(pcuHr):		46.70						

Scenario 5: 'Future Year Base Plus Dev AM Peak' (FG9: 'Future Year Base Plus Dev AM Peak', Plan 2: 'Stage 4 every other')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: A57 Hyde Road / A6010 Pottery Lane	-	-	-		-	-	-	-	-	**88.6%**	**30.4**	**12.6**	**43.5**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**88.6%**	**30.4**	**12.6**	**43.5**	-	-	-
1/2+1/1	A57 Hyde Rd (W) Ahead Left	U	A		46	212	1985:1894	1985	377+77	46.7 : 46.7%	2.1	0.4	2.5	42.3	5.2	5.6
1/3+1/4	A57 Hyde Rd (W) Right Ahead	U	A C		46:7	254	2125:1862	2125	477+32	49.9 : 49.9%	2.8	0.5	3.3	46.2	6.1	6.6
2/2+2/1	A6010 Pottery Ln (S) Left Ahead	U	F		73	316	2015:1854	2015	676+38	44.2 : 44.2%	2.3	0.4	2.7	30.3	7.0	7.4
2/3+2/4	A6010 Pottery Ln (S) Right Ahead	U+O	F		73	419	2155:1980	2155	708+113	48.9 : 64.4%	2.9	0.5	4.0	34.0	7.8	8.3
3/2+3/1	A57 Hyde Rd (E) Ahead Left	U	B		91	756	1965:1884	1965	648+222	86.9 : 86.9%	5.5	3.1	8.7	41.2	20.0	23.2
3/3+3/4	A57 Hyde Rd (E) Ahead Right	U	B D		91:47	578	2105:1856	2105	290+362	88.6 : 88.6%	4.8	3.5	8.4	52.1	10.6	14.1
4/2+4/1	A6010 Pottery Ln (N) Ahead Left	U	E		73	601	1975:1871	1975	403+338	81.2 : 81.2%	4.9	2.1	7.0	41.7	14.0	16.1
4/3+4/4	A6010 Pottery Ln (N) Right Ahead	U+O	E		73	614	2115:1849	2115	728+39	80.1 : 80.1%	5.1	2.0	7.1	41.8	15.8	17.8
5/1		U	-		-	580	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/2		U	-		-	288	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	520	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/2		U	-		-	599	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1		U	-		-	450	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/2		U	-		-	311	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/1		U	-		-	335	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

8/2		U	-		-	667	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

	C1	PRC for Signalled Lanes (%):	1.6	Total Delay for Signalled Lanes (pcuHr):	43.48	Cycle Time (s):	210		
		PRC Over All Lanes (%):	1.6	Total Delay Over All Lanes(pcuHr):	43.48				

Scenario 6: 'Future Year Base Plus Dev PM Peak' (FG10: 'Future Year Base Plus Dev PM Peak', Plan 2: 'Stage 4 every other')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: A57 Hyde Road / A6010 Pottery Lane	-	-	-		-	-	-	-	-	**88.4%**	**33.7**	**13.2**	**47.7**	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	**88.4%**	**33.7**	**13.2**	**47.7**	-	-	-
1/2+1/1	A57 Hyde Rd (W) Ahead Left	U	A		72	537	1985:1894	1985	625+71	77.1 : 77.1%	4.5	1.6	6.2	41.3	13.9	15.6
1/3+1/4	A57 Hyde Rd (W) Right Ahead	U	A C		72:7	604	2125:1862	2125	733+32	79.0 : 79.0%	5.7	1.8	7.5	44.8	15.6	17.4
2/2+2/1	A6010 Pottery Ln (S) Left Ahead	U	F		66	380	2015:1854	2015	620+27	58.7 : 58.7%	3.2	0.7	3.9	36.6	10.0	10.7
2/3+2/4	A6010 Pottery Ln (S) Right Ahead	U+O	F		66	503	2155:1980	2155	638+121	62.1 : 88.4%	4.0	1.0	5.7	41.1	10.3	11.3
3/2+3/1	A57 Hyde Rd (E) Ahead Left	U	B		98	607	1965:1884	1965	831+101	65.1 : 65.1%	3.6	0.9	4.5	26.6	14.7	15.6
3/3+3/4	A57 Hyde Rd (E) Ahead Right	U	B D		98:28	226	2105:1856	2105	0+265	0.0 : 85.2%	2.8	2.6	5.3	84.7	6.8	9.3
4/2+4/1	A6010 Pottery Ln (N) Ahead Left	U	E		66	534	1975:1871	1975	224+425	82.3 : 82.3%	4.8	2.2	7.0	47.1	14.4	16.6
4/3+4/4	A6010 Pottery Ln (N) Right Ahead	U+O	E		66	579	2115:1849	2115	630+70	82.7 : 82.7%	5.2	2.3	7.7	47.7	16.3	18.6
5/1		U	-		-	557	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/2		U	-		-	58	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	250	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/2		U	-		-	546	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1		U	-		-	832	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/2		U	-		-	686	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
8/1		U	-		-	419	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

8/2		U	-		-	622	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	47.74	Cycle Time (s): 210
	PRC Over All Lanes (%):	1.8	Total Delay Over All Lanes(pcuHr):	47.74	



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