

Transport Assessment

**Proposed Residential and Car Park Development
Holcombe Mill, Ramsbottom**

Eccleston Homes Limited

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Prepared by: Craig Thomson

Checked by: Peter Todd

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Colwyn Chambers
19 YorkStreet
Manchester
M2 3BA

T: 0161 832 4400

E: info@scptransport.co.uk
W: www.scptransport.co.uk



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1.0 INTRODUCTION

Overview

- 1.1 SCP have been appointed by Eccleston Homes Limited to provide transport planning and engineering advice in support of a full planning application for a residential and car park development on the former Holcombe Mill site, Ramsbottom.

Planning Background

[Previous Planning Application \(LPA Ref: 65844\)](#)

- 1.2 A planning application (Application Reference: 65844) was submitted to Bury Council (BC) on 14th August 2020, for a residential development comprising the erection of 73 no. dwellings on the application site including the retention and conversion of 2 existing buildings to residential use (5 no. units), the retention of a chimney and the demolition of a derelict building, together with engineering operations.
- 1.3 The planning application was accompanied by a detailed Transport Assessment (TA) and Travel Plan (TP) dated August 2020. The TA concluded that the development could be safely accessed, is well located in terms of its accessibility by all the major non-car modes of transport and the traffic generated by the development could be accommodated on the local highway network.
- 1.4 The TA was reviewed by BC, as Local Highway Authority, and Transport for Greater Manchester (TfGM). The Local Highway Authority raised no highway objection to the application subject to a number of relatively standard conditions. TfGM raised initial concerns in relation to the impact of the development at the Bury New Road / Manchester Road traffic signal junction. Whilst no objection was raised by TfGM, a Section 106 contribution of £110,000 was requested for the upgrading of the Bury New Road / Manchester Road traffic signal junction to provide MOVA control, which would increase capacity and improve the operation of the junction.
- 1.5 Notwithstanding this position, the application was refused for two reasons on 7th June 2022, with reason for refusal one relating to the highway matters, as summarised below:-

‘1. The proposal would be an intensification of the use of a site, which would be detrimental to road safety and maintaining the free flow of traffic. The proposed development therefore conflicts with the following policy(ies) of the Bury Unitary Development Plan:

Policy HT4 - New Development

Policy H2/2 - The Layout of New Residential Development’

Appeal

1.6 An Appeal (Appeal Reference: APP/T4210/W/22/3302543) was submitted following the refusal of the aforementioned planning application which was dismissed on 14th February 2022. Whilst the Appeal was dismissed, in relation to highways the Inspector concluded that *“there is little to demonstrate that the proposed scheme would cause an unacceptable impact on highway safety or result in a severe impact on the road network”*. Relevant extracts from the Inspectors decision letter are provided below:

- *“I find there is little evidence to demonstrate that the proposed layout and design of access infrastructure would lead to an unacceptable impact on highway safety.”*
- *“it is important to acknowledge that the effect of traffic on the A56/Bury New Road would be limited. It would remain at the variable operating level and below the 100% Degree of Saturation (overloaded conditions). It would not then exceed the threshold defined in Paragraph 111 of the Framework as the residual cumulative effect of the proposals would not be severe.”*
- *“There is also no dispute that, as a site located adjacent to the existing town centre facilities, it is well located in terms of limiting travel demands, particularly by private motorised vehicles. In a highly accessible location with access to sustainable means of transport, trips by private motor vehicle can be expected to be less in comparison to more distant housing locations.”*

- *“I recognise the TCP and expressed local concerns in relation to the levels of town centre parking. However, the scheme would comply with the maximum standards described in the Development Control Policy Guidance Note 11 – Parking Standards in Bury. As a cul-de-sac development with adequate parking for a scheme close to the town centre, there is little to suggest this would exacerbate those concerns or result in out-spill to the detriment of highway safety or traffic movement.”*

1.7 There was a difference of opinion between the applicant and TfGM in relation to the level of impact at the Bury New Road / Manchester Road traffic signal junction and whether the requested contribution of £110,000 to provide MOVA was justified. The Inspector concluded that the requested contribution is excessive and would not be necessary to make the development acceptable in planning terms. Relevant extracts from the Inspectors decision letter are provided below:

“The improvements would be the installation of MOVA at the A56/Bury New Road junction. For the reasons given above, I find that requirement to be excessive and would not be necessary to make the development acceptable in planning terms. It would thereby conflict with Regulation 122 of the Community Infrastructure Levy Regulations 2010. However, the obligation incorporates a ‘blue pencil’ clause which requires my determination to be taken into account. Accordingly, the requirement to pay the contribution would fall away without recourse to variation of the obligation. It would remain lawful having regard to the 3 tests set out in the Regulation.”

- 1.8 This TA has been prepared to support a revised planning application for a residential and car park development, comprising 57 dwellings as well as a 47-space public car park, on the application site.
- 1.9 This TA has been developed in accordance with the now archived Department for Transport (DfT’s) March 2007 “Guidance on Transport Assessment” document and gives due regard to the National Planning Practice Guidance (NPPG) and the National Planning Policy Framework (NPPF).

Structure of This Report

1.10 The structure of this report is as follows:-

- Chapter 2 - describes in detail the site location, local highway network, existing traffic conditions and road safety record;
- Chapter 3 – defines the development proposals including the proposed access, servicing and car parking arrangements;
- Chapter 4 – summarises the national, regional and local transport policies and describes how the proposed development accords with these;
- Chapter 5 – considers the location of the site with regard to the existing local sustainable transport infrastructure;
- Chapter 6 – describes the future baseline traffic conditions on the local highway network in relation to traffic growth and committed developments;
- Chapter 7 – estimates the number of multimodal trips generated by the development and distributes and assigns the vehicular trips on the local highway network;
- Chapter 8 – presents an assessment of the impact of the development on the operational performance of the local highway network; and,
- Chapter 9 – provides summary and conclusions to this TA derived from the analysis presented in the above chapters.

2.0 EXISTING CONDITIONS

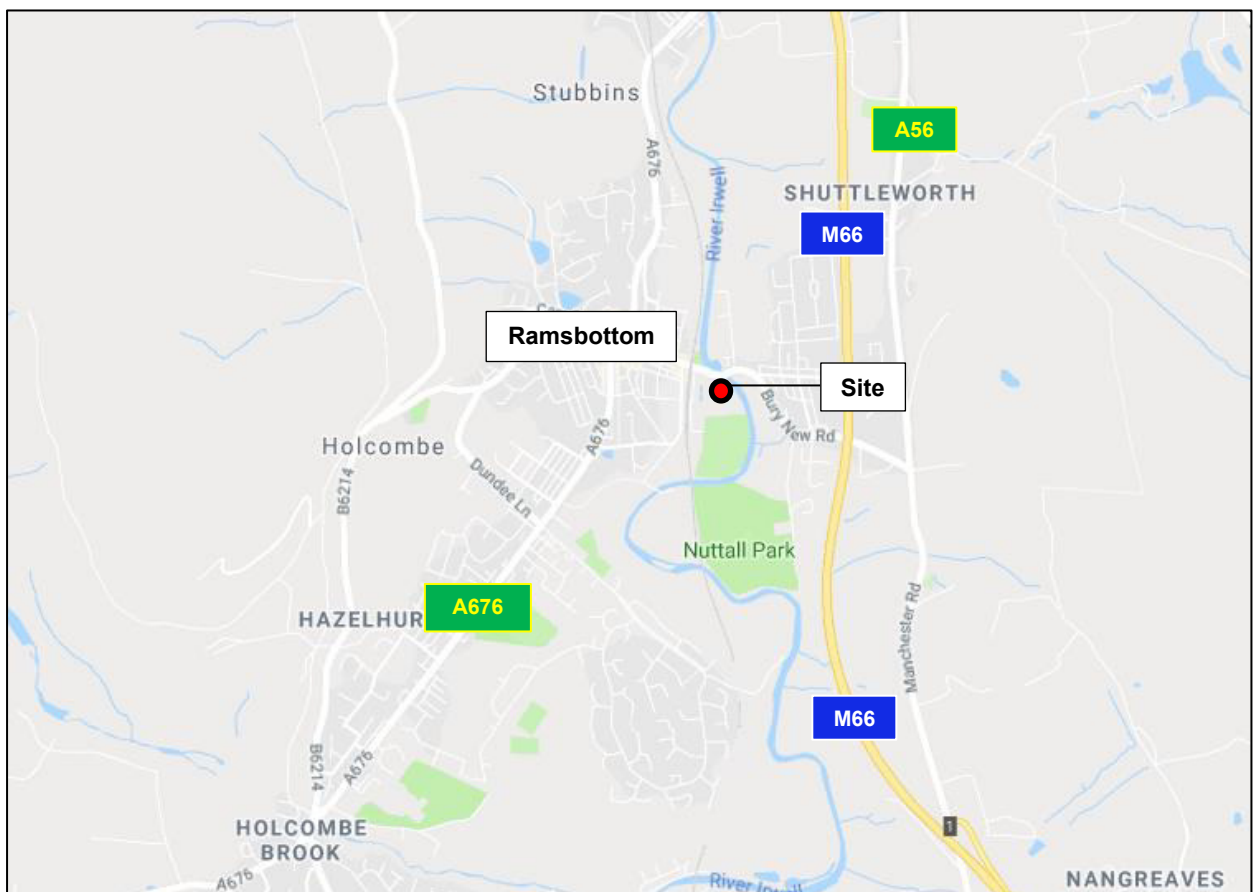
General

- 2.1 This chapter provides a detailed description of the location of the site, local highway network, existing traffic conditions and road safety record.

Site Location

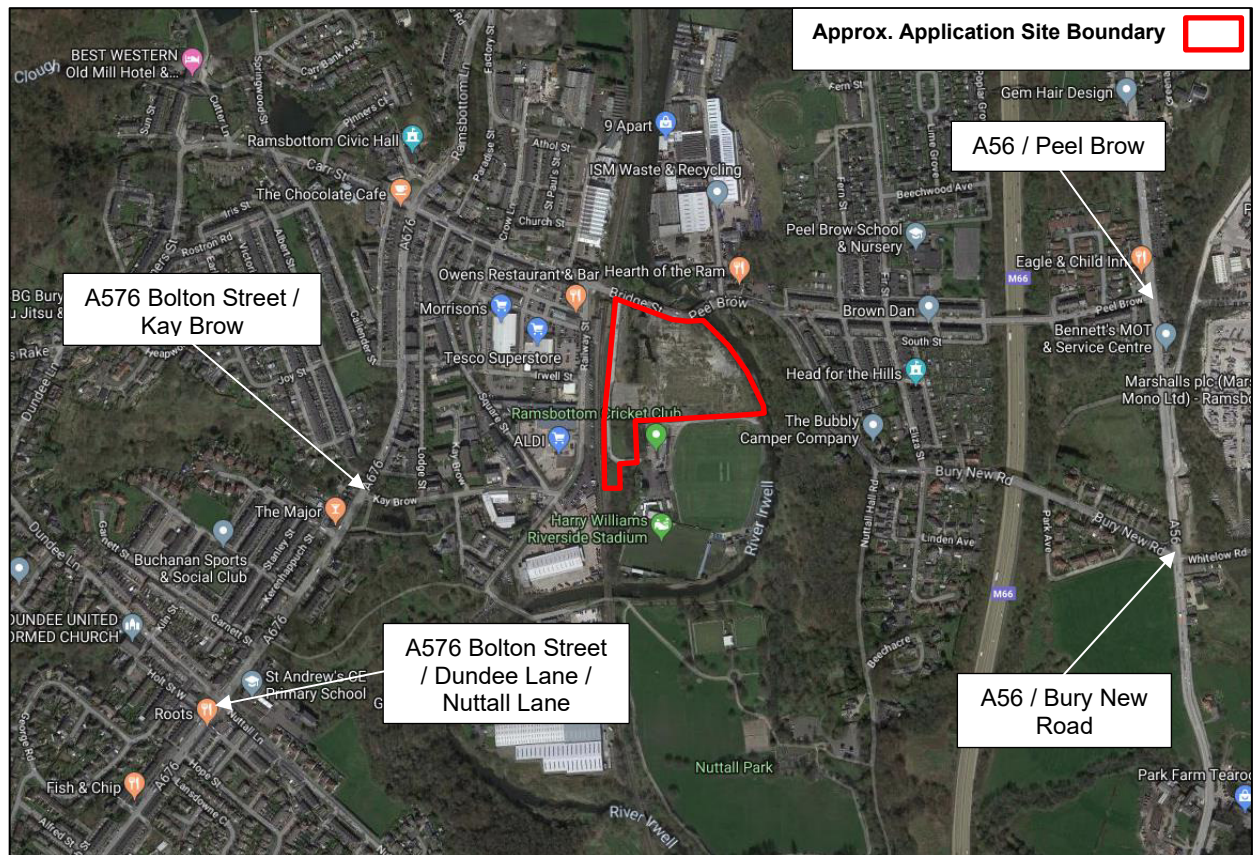
- 2.2 The application site is located to the south of Bridge Street/Peel Brow on the eastern edge of Ramsbottom town centre.
- 2.3 The location of the site in relation to the wider highway network is shown on **Figure 2.1** below.

Figure 2.1 – Site Location – Wider Highway Network



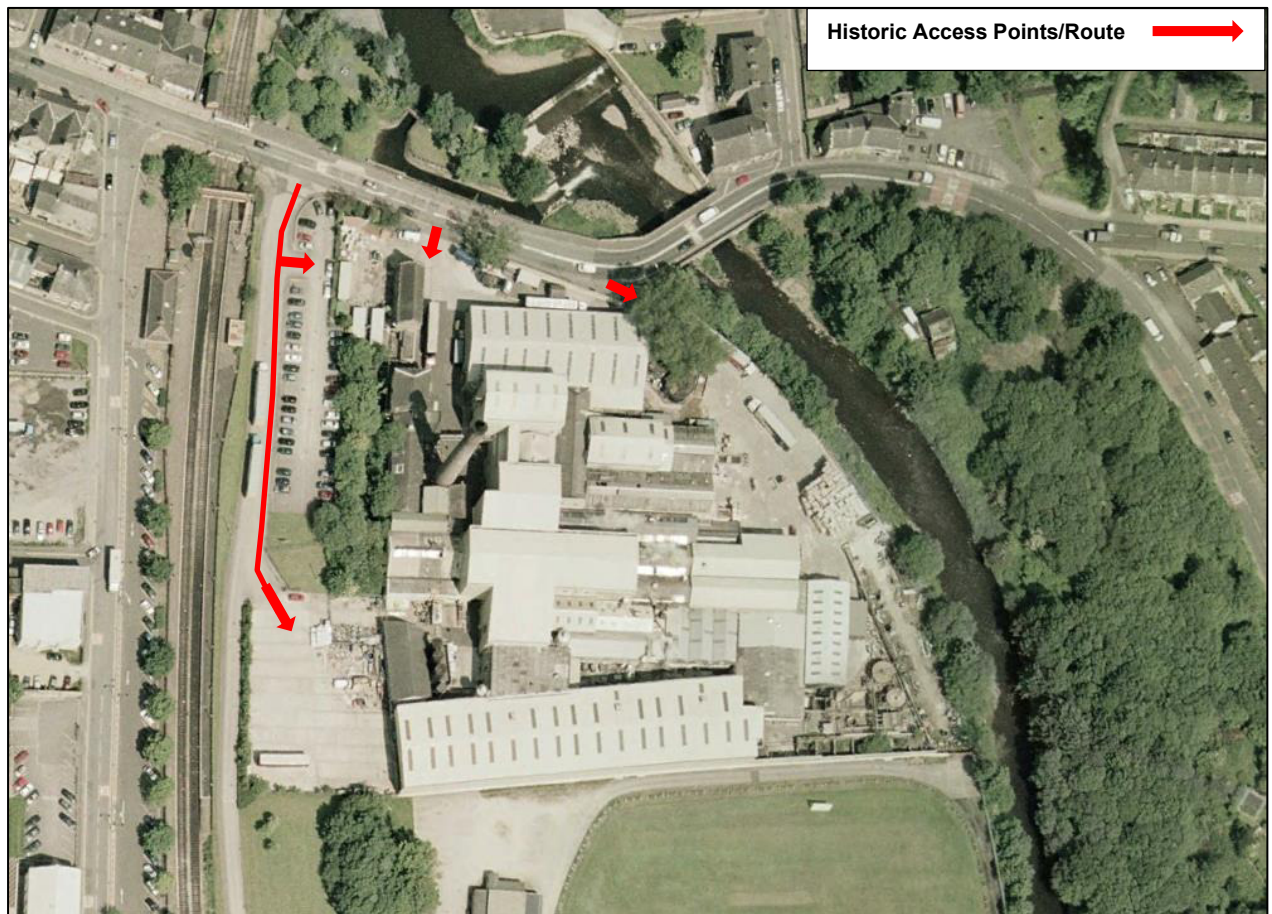
- 2.4 The site boundary is shown in relation to the local highway network in red on **Figure 2.2** below.

Figure 2.2 – Site Location – Local Highway Network



- 2.5 The application site comprises previously developed land that formerly accommodated the Holcombe Paper Mill, which closed in 2008 and was substantially demolished in 2013. Currently the site consists of an area of hard-standing, the former Holcombe Mill chimney stack and three buildings associated with the former mill. It should be noted that the existing buildings have a total GFA of approximately 350m² and could be brought back into use without the need for planning permission.
- 2.6 The site is bounded by Bridge Street/Peel Brow to the north, the river Irwell to the east, Ramsbottom Cricket Club to the south and the East Lancashire Railway and an access road to the site/cricket club to the west.
- 2.7 Vehicular access to the site historically took place from Bridge Street/Peel Brow via three priority-controlled accesses, located to the north-west and north-east of the site as well as centrally, as shown on **Figure 2.3** below. The western access is currently in use and serves Ramsbottom Cricket Club and Harry Williams Riverside Stadium, located to the south of the site.

Figure 2.3 – Existing Site Accesses off Bridge Street/Peel Brow



Local Highway Network

2.8 For the purpose of this TA, the study area includes the following junctions as shown in **Figure 2.2** earlier:

- Proposed site accesses;
- A56 Whalley Road / A56 Manchester Road / Peel Brow;
- A56 Manchester Road / Bury New Road;
- A576 Bolton Street / Kay Brow; and,
- A576 Bolton Street / A576 Bolton Road West / Dundee Lane / Nuttall Lane

Bridge Street / Peel Brow

- 2.9 Bridge Street / Peel Brow fronts the northern site boundary and provides a link between the A676 Bolton Street / A676 Ramsbottom Lane / Carr Street / Bridge Street junction, to the west, with the Peel Prow / Bury New Road and Peel Brow / A56 Manchester Road junctions to the east. Bridge Street / Peel Brow are subject to a 30mph speed limit and benefit from regularly spaced street lighting columns and footways on both sides of the road.
- 2.10 The East Lancashire Railway (ELR) crosses Bridge Street, approximately 60m north-west of the existing central site access, at a gated signal controlled crossing. The ELR is a recreational tourist attraction line that provides an hourly steam train service between Rawtenstall and Bury.
- 2.11 There is a bus stop located immediately adjacent the north-west corner of the site, on Bridge Street. Further details on the accessibility of the site are provided in Chapter 5.

A56 Whalley Road / A56 Manchester Road / Peel Brow

- 2.12 The A56 Whalley Road / A56 Manchester Road / Peel Brow junction is a simple priority-controlled T-junction located to the east of the site. The A56 forms the major arms which link Bury town centre and the M66 Junction 1, to the south, with Edenfield to the north. Peel Brow forms the minor arm, which provides access to numerous residential roads and Ramsbottom town centre, via Bridge Street.

A56 Manchester Road / Bury New Road

- 2.13 The A56 Manchester Road / Bury New Road junction is a three-arm signalised junction, whereby the A56 forms the major arms which link Bury town centre and the M66 Junction 1, to the south, with Edenfield to the north. Bury New Road forms the minor arm, which provides access to numerous residential cul-de-sacs and Ramsbottom town centre, via Peel Brow and Bridge Street.

A676 Bolton Street / Kay Brow

- 2.14 The A676 Bolton Street / Kay Brow junction is a simple priority-controlled T-junction located to the south-west of the site. The A676 Bolton Street forms the major arms which link Ramsbottom town centre and the A676 / A56 / Bolton Road North roundabout, to the north, with the A676 Bolton Street / A676 Bolton Road West / Dundee Lane / Nuttall Lane to the south. Kay Brow forms the minor arm, which connects to Railway Street to the east.

[A676 Bolton Street / A676 Bolton Road West / Dundee Lane / Nuttall Lane](#)

- 2.15 The A676 Bolton Street / A676 Bolton Road West / Dundee Lane / Nuttall Lane junction is a four-arm signalised junction, whereby the A676 forms the major arms which link Ramsbottom town centre and the A676 / A56 / Bolton Road North roundabout, to the north, with the north-east edge of Bolton to the south-west. Dundee Lane forms the north-west minor arm and Nuttall Lane forms the south-east minor arm which both provide access to numerous residential roads.
- 2.16 The A676 Bolton Street / A676 Bolton Road West / Dundee Lane / Nuttall Lane junction is well lit and benefits from road markings and directional arrows to guide drivers through the junction as well as a signalised pedestrian crossing across the north, west and south approaches to aid pedestrians crossing at the junction and improve pedestrian safety.

Traffic Flow Data

- 2.17 Manual classified turning count traffic flow surveys were undertaken on Wednesday 3rd July 2019, between the hours of 07:00 - 09:30 and 16:00 - 18:00, at the following junctions in order to establish the existing traffic flow demand on the local highway network:
- A56 Whalley Road / A56 Manchester Road / Peel Brow;
 - A56 Manchester Road / Bury New Road;
 - A576 Bolton Street / Kay Brow; and,
 - A576 Bolton Street / A576 Bolton Road West / Dundee Lane / Nuttall Lane
- 2.18 The peak hours have been identified as 07:30-08:30 and 16:45-17:45 and the raw traffic survey data is presented in **Appendix A** with the base peak hour traffic flows shown diagrammatically on **Traffic Flow Figure 1**.

Road Safety Record

- 2.19 The NPPG 'Transport evidence bases in plan making and decision taking' document states that, *"Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems"*.

- 2.20 In order to identify critical locations on the network with a poor accident record, the personal injury accident data for the most recently available 5-year period has been obtained from CrashMap.
- 2.21 The location and severity of any accidents within the study area during this period are presented in **Appendix B** and a summary of the number and severity of the accidents at each junction/link in the study area is presented in **Table 2.1** below.

Table 2.1 – Personal Injury Accident Data Summary

Junction/Link	Fatal	Serious	Slight	Total
Bridge Street / Peel Brow Link	0	0	0	0
Bury New Road Link	0	1	0	1
A56 Link	0	0	1	1
Railway Street / Kay Brow Link	0	0	0	0
A676 Link	0	0	2	2
A56 Whalley Road / A56 Manchester Road / Peel Brow Junction	0	0	3	3
A56 Manchester Road / Bury New Road Junction	0	0	1	1
A576 Bolton Street / Kay Brow Junction	0	1	1	2
A676 Bolton Street / A676 Bolton Road West / Dundee Lane / Nuttall Lane Junction	0	0	1	1

- 2.22 This analysis demonstrates that there have been no accidents on the entire length of Bridge Street and Peel Brow over the 5 year study period. Therefore, the existing accident record on the roads immediately surrounding the site does not represent a material concern in the context of the development.
- 2.23 No accidents were recorded on the Railway Street/Kay Brow link, although one ‘serious’ accident occurred on Bury New Road, to the west of the M66, one ‘slight’ accident occurred on the A56, between Peel Brow and Bury New Road, and two ‘slight’ accidents occurred on the A676, between the A676 Bolton Street/Kay Brow junction and the A676 Bolton Street / A676 Bolton Road West / Dundee Lane / Nuttall Lane junction. Four accidents (average of 0.8 accidents per year) over a five-year period is not considered to be an unusual frequency given the size of the study area. The existing accident record at these links does not therefore represent a material concern in the context of the development.

- 2.24 All of the junctions within the study area have been subject to between one and three accidents during the 5-year period, of which, the majority were classified as 'slight', with only 1 'serious' accident recorded, on the A576 Bolton Street / Kay Brow junction. Up to three accident over a 5-year period is not considered an unusual frequency for any type of junction and therefore, the existing accident record at these junctions does not represent a material concern in the context of the development.
- 2.25 It should also be noted that, as part of the aforementioned appeal, no concerns were raised by the Inspector in relation to highway safety.

3.0 PROPOSED DEVELOPMENT

General

- 3.1 The development proposals consist of a residential and car park development, comprising 57 dwellings as well as a 47-space public car park, on the former Holcombe Mill site, Ramsbottom.
- 3.2 The proposed site layout plan is contained in **Appendix C** and the proposed accommodation schedule is summarised below:
- 2 no. 2-bed houses;
 - 31 no. 3-bed houses; and,
 - 24 no. 4-bed houses
- 3.3 The charging regime for the proposed car park is to be discussed and agreed with BC.

Proposed Site Access Arrangements

- 3.4 Vehicular access to the development will be provided off Bridge Street in the location of the existing access to the north-west of the site, as shown on drawing number SCP/220419/SK01 Rev B, presented in **Appendix D**. The access measures 6.5m in width and benefits from 2m footways on both sides of the road which connect the site to the existing pedestrian infrastructure on Bridge Street. The remaining two existing accesses, located to the north-east of the site and centrally, will be closed with the footway reinstated.
- 3.5 Junction visibility from the site access has been calculated based on the visibility requirements set out in the MfS for a 30mph road, providing visibility splays that have an 'x' (minor arm setback distance) of 2.4m and a minimum 'y' (major road visibility) distance of 43m in both directions. As shown on drawing number SCP/220419/SK01 Rev B, presented in **Appendix D**, the required visibility splays are shown to be achievable in both directions.
- 3.6 An independent Stage One RSA of an access arrangement in the same location was previously undertaken as part an earlier application (Application Reference: 65217) on the site. No significant issues were raised, however, the RSA did raise the potential for vehicles failing to give-way at the access, non-motorised users (NMU) to slip/fall and queuing traffic affecting the ability of vehicles to safely access/egress the site.

- 3.7 The previous recommendation of the audit to introduce ‘keep clear’ and give way markings at the access to stop queuing vehicles from blocking the access and to inform drivers to give way, has been implemented on the proposed access design. Furthermore, the recommendation of the audit to provide dropped kerbs and tactile paving at the access to prevent NMU slipping/falling has been implemented on the proposed access design.
- 3.8 Having regard to the above, the proposed access arrangement is considered acceptable, particularly given that, as part of the aforementioned Appeal, the Inspector noted that “*Visibility at the access on to Bridge Street has been demonstrated to be sufficient to allow safe egress from the access road. In conjunction with carriageway widening to 5.5m, 6m radii and in-highway ‘Keep Clear’ markings on the nearside carriageway of Bridge Street, this would allow for a suitable standard of vehicular access to serve the development proposed.*”

Emergency Access

- 3.9 A secondary 3.5m wide emergency access is proposed off Bridge Street with dropped kerbs and retractable bollards, as shown on drawing number SCP/220419/SK01 Rev B presented in **Appendix D**, which will also improve pedestrian permeability.

Internal Site Layout

Proposed Residential Development

- 3.10 It should be noted that the applicant does not seek the internal estate roads to be adopted and they are proposed to remain in private ownership and maintained by a management company.
- 3.11 The internal site layout has been designed to accommodate the movements of a refuse vehicle. Drawing number SCP/220419/ATR01 Rev B, presented in **Appendix E**, shows the swept path analysis of this vehicle and demonstrates that it can enter the site via the site access, turn within the site and exit in a forward gear. In addition, drawing number SCP/220419/ATR02 Rev B, presented in **Appendix F**, shows the swept path analysis of a fire appliance and demonstrates that this vehicle can enter the site via the secondary emergency site access.

- 3.12 Given the straight alignment of the site, an appropriate 20mph traffic calming scheme is proposed to keep traffic speeds down, as shown on drawing number SCP/220419/SK03 Rev B, presented in **Appendix G**. In addition, 2.4 x 25m visibility spays, in accordance with guidance set out in the MfS for a 20mph road, have been demonstrated to be achievable from all internal junctions, as shown on drawing number SCP/220419/SK02 Rev B, presented in **Appendix H**.

Proposed Car Park

- 3.13 Access to the proposed car park has been designed with a carriageway width of 4.5m and 6m aisle widths are proposed to provide sufficient manoeuvring space within the car park.
- 3.14 In excess of 2.4 x 25m visibility, in accordance with guidance set out in the MfS for a 20mph road, has been demonstrated to be achievable to the south of the proposed car park access, as shown on drawing number SCP/220419/SK02 Rev B, presented in **Appendix H**. To the north, 2.4m x 23m visibility is achievable to the Bridge Street / Site Access junction which is considered acceptable given that vehicles entering the site from Bridge Street will be traveling at significantly reduced speeds as they turn into the site.

Parking

- 3.15 Bury Council's maximum parking standards are set out in their Development Control Policy Guidance Note 11, titled Parking Standards in Bury. The document specifies parking standards for areas of high and low accessibility areas within Bury and highlights that the application site is located within the 'high accessibility' area. This maximum car parking standards in the 'high accessibility' areas are therefore summarised below:

Residential

- 1-bed houses – 1 space;
 - 2-bed houses – 1.5 spaces;
 - 3-bed houses – 2 spaces; and,
 - 4+ bedroom houses – 3 spaces.
- 3.16 As shown on the site layout plan, contained in **Appendix C**, the proposed development provides a level of parking in accordance with the Council's 'high accessibility' parking standards detailed above.

4.0 PLANNING POLICY CONTEXT

Introduction

- 4.1 This chapter provides a summary of relevant national, regional and local transport policies and provides a brief analysis of how the proposed development will contribute towards their aims and objectives.

National Planning Policy Framework (NPPF)

- 4.2 NPPF is published by the Ministry for Communities and Local Government to set the framework under which local transport, parking and accessibility plans and policies are set. The NPPF has been revised most recently in July 2021.
- 4.3 At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development which for decision-taking means:
- *“approving development proposals that accord with an up-to-date development plan without delay; or*
 - *where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*
 - *the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*
 - *any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.”*
- 4.4 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) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and

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

4.5 Importantly, NPPF states that:

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

‘Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.*

All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

Greater Manchester Transport Strategy 2040 (GMTS 2040)

- 4.6 In February 2017, Transport for Greater Manchester (TfGM) published the Greater Manchester Transport Strategy 2040 which sets out the vision for Greater Manchester and provides a plan to “establish a fully integrated, high capacity transport system across Greater Manchester”.
- 4.7 The Transport Strategy has identified the following key challenges to help protect the environment:

- *“Increasing the use of sustainable transport to reduce the negative impacts of car use. Many people do not currently see sustainable modes as realistic alternatives and we must continue to work hard to improve the quality of our walking, cycling and public transport networks and to provide people with the facilities and training to make them natural, easy choices. The design of new development needs to make it easier for people to use sustainable modes.*
- *Reducing transport emissions is a particular challenge, given that economic and population growth will increase the demand for travel, hence more radical measures will be needed to enable Greater Manchester to meet challenging standards and targets, in terms of air quality and in response to the challenge of climate change.*
- *Making the best use of existing infrastructure will help to reduce environmental impacts. Locating new development where there is good access to public transport and services will reduce car travel and therefore emissions. Road and rail networks must also be used as efficiently as possible and be well maintained.”*

4.8 As such, “TfGM will continue to work with planning authorities and developers to better integrate transport and new development in accordance with the principles of:

- *Reducing the need to travel by car, and the distance travelled;*
- *Maximising accessibility by sustainable modes;*
- *Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes;*
- *Maximising opportunities to provide additional public transport; and,*
- *Designing to encourage active travel.”*

Bury Local Plan

4.9 BC have commenced preparation of a new Local Plan. The Local Plan will set out a range of planning policies that will seek to support or restrict development for the next 20 years and will zone land for specific uses. Once adopted, it will replace the current Unitary Development Plan which was adopted in 1997.

Adopted Bury Unitary Development Plan

- 4.10 The current UDP was adopted in 1997. The strategy to be pursued through the UDP which was previously published in the document "Bury 2001 - The Strategy for the Plan" (July 1991). This Strategy is now set out as part of the UDP to provide essential background to the policies and proposals which follow later in the Plan.
- 4.11 Primarily, the Strategy is a response to the changes which have taken place in the local economy over recent years and the growing concern for the environmental quality of the area. Such matters can also be seen to be at the heart of the emerging interest in the concept of "sustainability" where it is recognised that, if development is to be sustainable, its impact should not result in the irreversible or unacceptable deterioration of the environment.
- 4.12 One of the identified key issues which the UDP will address is 'Traffic Movement and the Transportation Network':
- 'Continuing trends of growing car ownership and usage, together with high levels of commuter travel in the Borough will place increasing demands on the highway and transportation network. New road construction and improvements will not provide all the answers and other solutions must be examined. The concentration of employment, services and shopping in central locations will facilitate access by public transport but measures are needed to encourage its use and make centres more "user friendly" for pedestrians, cyclists, and other vulnerable transport users.'*
- 4.13 In defining its own Strategy for the Plan the Council has in turn identified the need for the Plan to provide for:
- the effective and efficient operation of public transport and the maximisation of the benefits to be derived from Metrolink;
 - the promotion of the safety, convenience and mobility of vulnerable road users;
 - the optimisation of the transport infrastructure in the location and density of new development;
 - the promotion of measures to alleviate the detrimental effects of heavy trafficking on the Borough's roads; and
 - the promotion of measures to minimise the environmental impact of traffic.
- 4.14 To achieve the aims of the Highway and Transport Strategy, the following objectives have been identified:

- To promote a balanced transportation strategy;
- To encourage the use of public transport;
- To ensure that the highway network and car parking provision is appropriate to the objectives of a balanced transportation strategy;
- To reduce environmental impact and pollution caused by traffic;
- To ensure that all movement can be made safely and conveniently;
- To reduce road traffic accidents; and
- To ensure that the needs of pedestrians, cyclists, the mobility impaired and those with special needs are properly catered for.

Summary and Policy Analysis / Compliance

- 4.15 In general, the national and local transport planning policies set out above follow similar themes and promote common aims. These are to provide sustainable development with good access to jobs and facilities, to encourage non-car modes of transport, to ensure that the highways impact of new developments is acceptable or mitigated against and to promote good site / highway design.
- 4.16 The TA will assess the effect of the proposed development on these aims.

5.0 ACCESSIBILITY

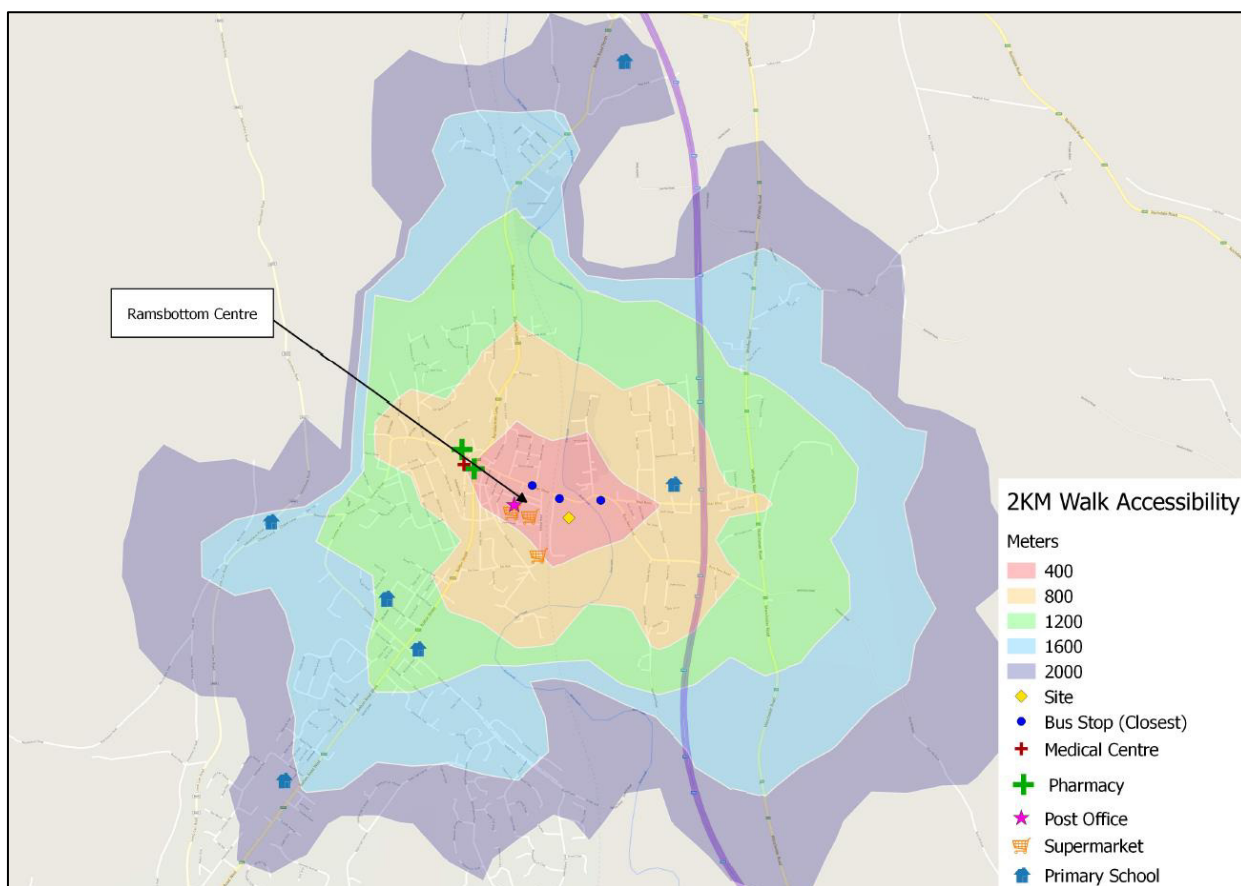
General

- 5.1 This Chapter presents a review of the accessibility of the site by walking, cycling and public transport modes.
- 5.2 It should be noted that, as part of the aforementioned appeal, no concerns were raised by the Inspector in relation to accessibility, with the Inspector stating that *“There is also no dispute that, as a site located adjacent to the existing town centre facilities, it is well located in terms of limiting travel demands, particularly by private motorised vehicles. In a highly accessible location with access to sustainable means of transport, trips by private motor vehicle can be expected to be less in comparison to more distant housing locations.”*

Pedestrian Accessibility

- 5.3 Manual for Streets states that walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes’ (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, it goes on to state that this is not an upper limit and that walking offers the greatest potential to replace short car trips, particularly those under 2km.
- 5.4 GIS TRACC software has been used to assess the accessibility of the development by foot for a 2km walking distance from the site, as shown on **Figure 5.1** below. The plan shows the reachable areas within 400m coloured bands from the site.

Figure 5.1 – Walk Accessibility



- 5.5 Pedestrian and cycle access will be provided from the proposed vehicular access and the secondary emergency access which will both be taken from Bridge Street. The main walk routes benefit from regularly spaced street lighting columns and natural surveillance from the residential properties and businesses that abut these routes.
- 5.6 **Figure 5.1** demonstrates that the site is within acceptable walking distance of Ramsbottom town centre and the array of amenities on offer. A selection of some of the amenities within a short 1km walk distance from the site are summarised in **Table 5.1** below:-

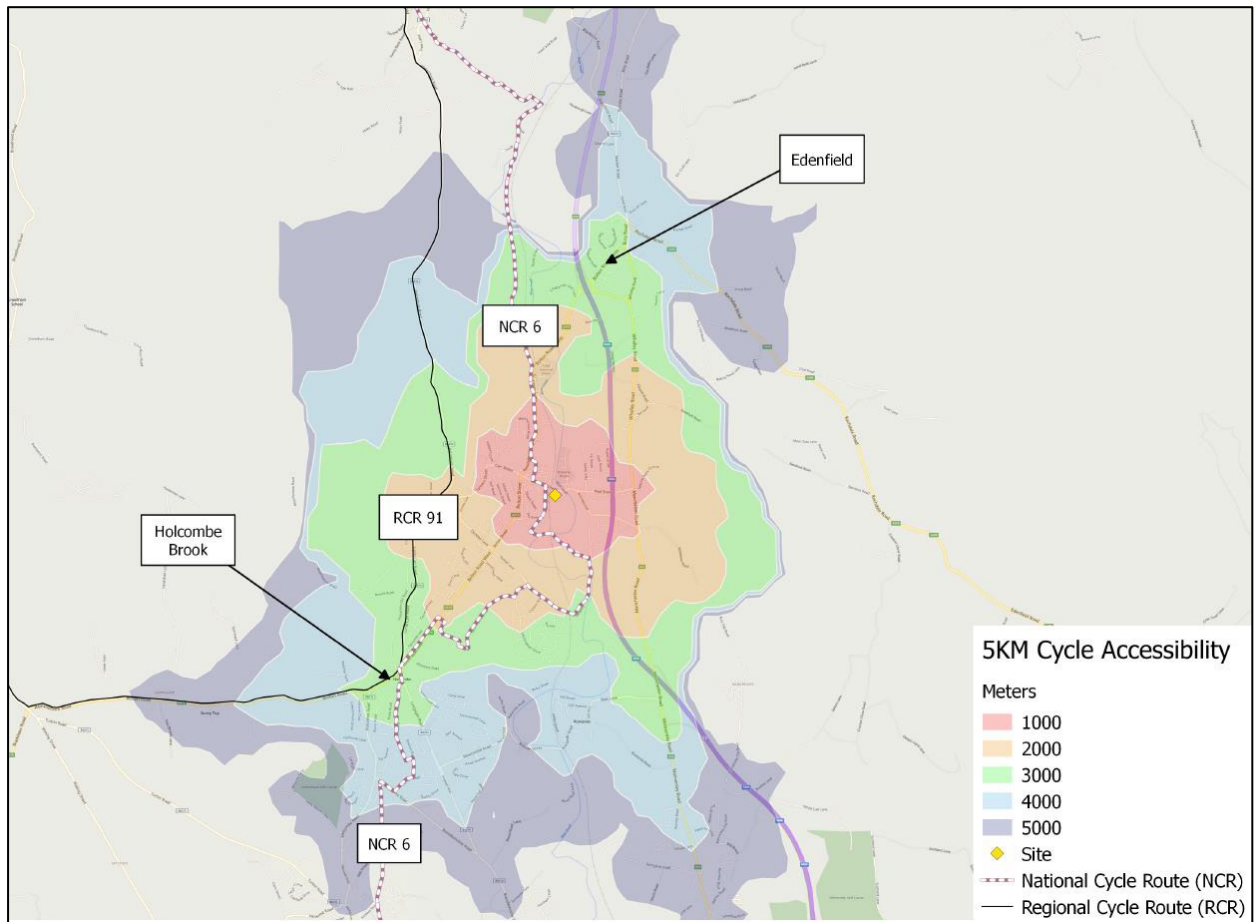
Table 5.1 - Facilities within 1km Walk Distance of the Site

Facility	Details	Approx. Distance From Site
Bus Stop	Bus Stop, Bridge Street	30m
Supermarket	Tesco, King Street	210m
ATM	Tesco, King Street	210m
Supermarket	Morrisons, King Street	270m
Post Office	Post Office, King Street	270m
Supermarket	Aldi, Railway Street	300m
Leisure	Ramsbottom Cricket Club	300m
Leisure	Harry Williams Riverside Stadium	300m
Pharmacy	Cohens Chemist	400m
Doctors	Ramsbottom Health Centre	400m
Library	Ramsbottom Library & Adult Learning Centre	400m
Bank	Santander, Bolton Street	450m
Nursery	Tiddlywinks Nursery School	500m
Hair Salon	Elite Hair, Bolton Street	500m
Dentist	Dental Surgery, Bolton Street	500m
Gym/Pool	Ramsbottom Pool & Fitness	700m
Open Space	Nuttall Park	750m
Primary School	St Andrew's CoE Primary School	1.0km
Primary School	St Joseph's RC Primary School	1.0km

Cycle Accessibility

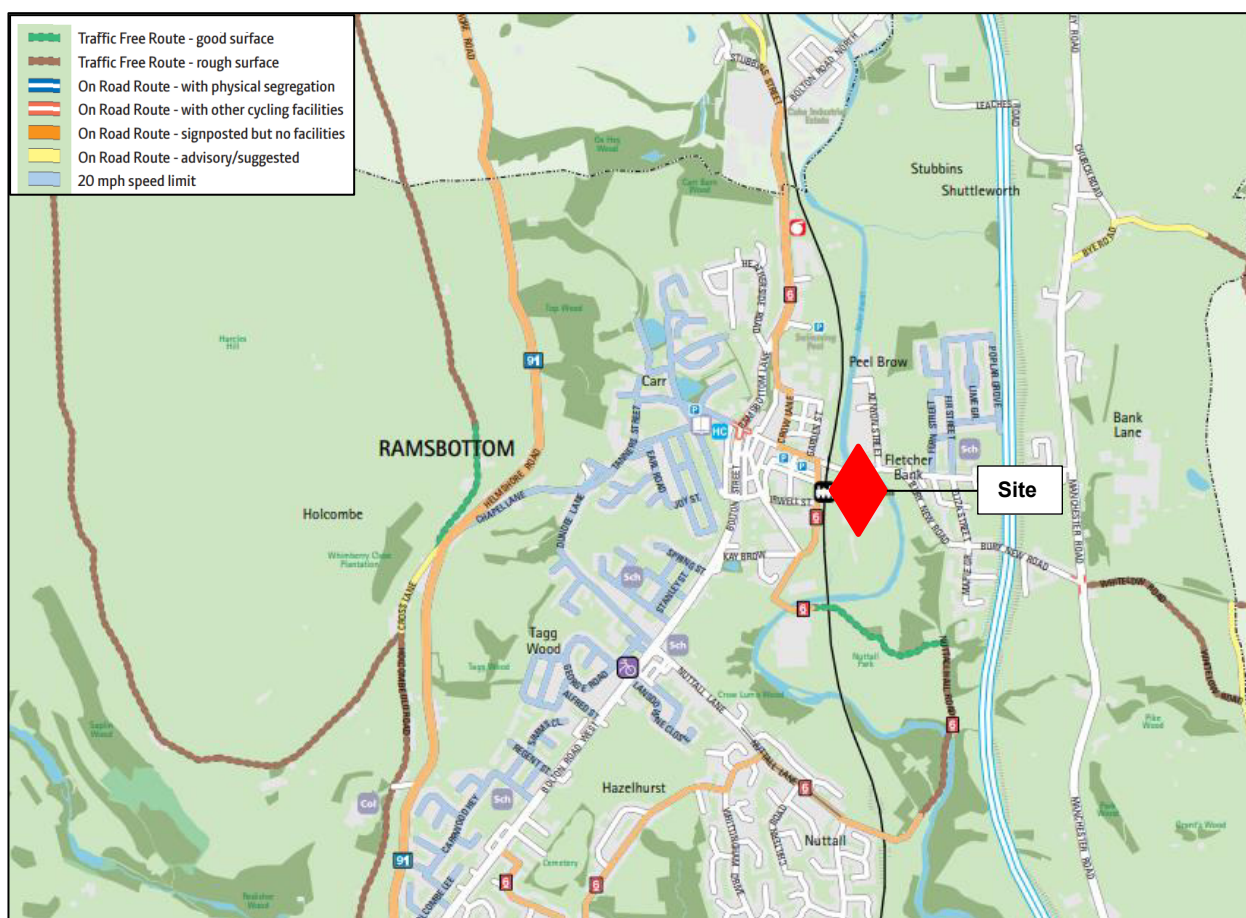
- 5.7 Transport policy identifies that cycling represents a realistic and healthy option to use of the private car for making journeys up to 5km as a whole journey or as part of a longer journey by public transport.
- 5.8 GIS TRACC software has again been used to assess the accessibility of the site by bicycle, for a 5km cycle distance and is shown on **Figure 5.2**.

Figure 5.2 – Cycle Accessibility



- 5.9 The plan demonstrates that Ramsbottom and Edenfield, are located within the 5km catchment area from the development site. Furthermore, **Figure 5.2** demonstrates the sites proximity to National Cycle Route 6 and Regional Cycle Route 91. National Cycle Route 6 runs almost adjacent to the site and locally links Accrington, to the north, with Bury to the south, and also connects to Regional Route 91.
- 5.10 **Figure 5.3** below demonstrates that there are numerous cycle facilities in the vicinity of the site, including numerous 20mph roads, on road signed routes and traffic free routes.

Figure 5.3 – Cycle Facilities Plan



- 5.11 As the application site is within an acceptable cycle distance of a range of areas and associated facilities, cycling is considered to be a viable alternative to private car use for prospective residents of site.

Public Transport Accessibility

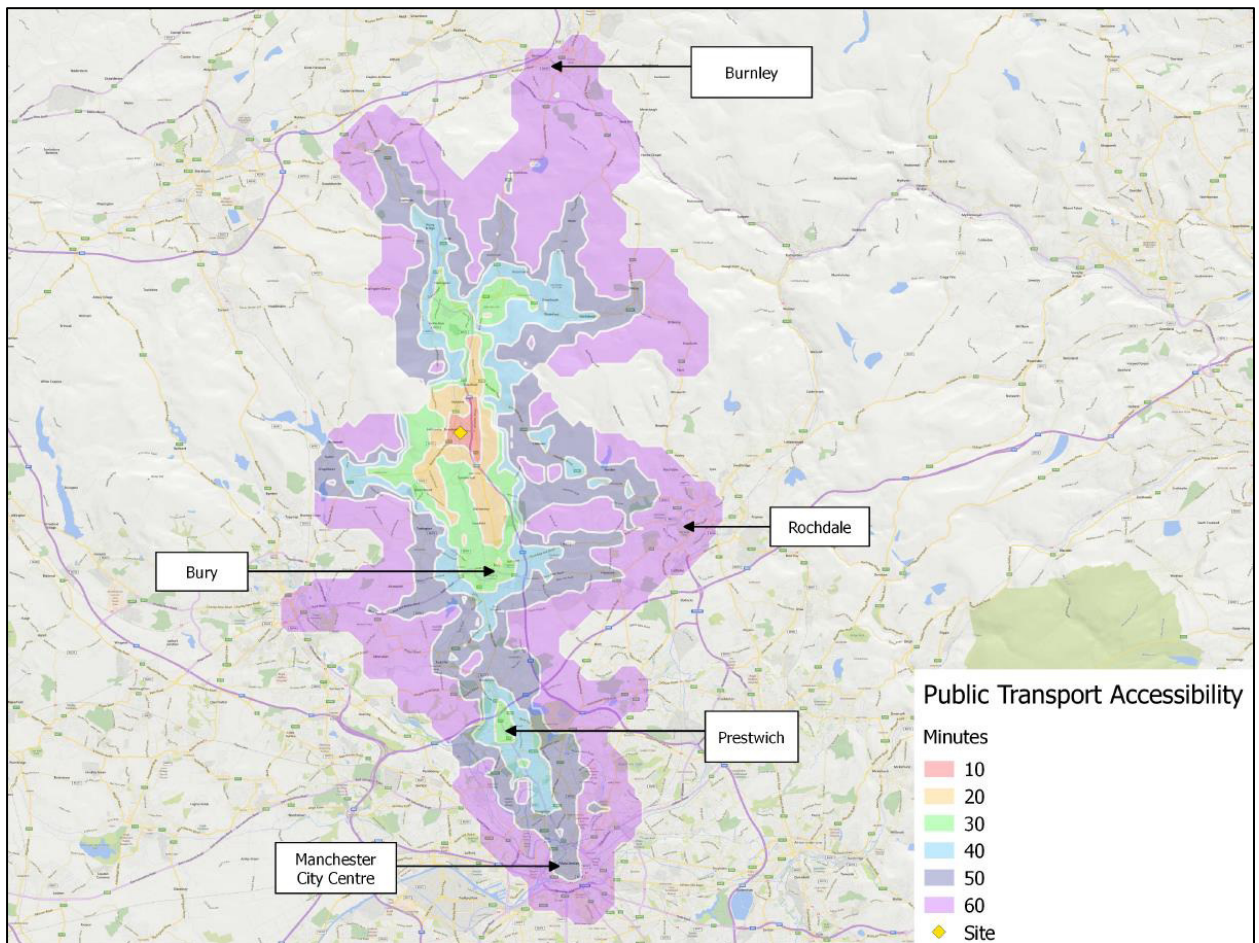
- 5.12 The development is well placed to encourage travel by bus. Guidance published by the CIHT 'Planning for Public Transport in Developments' (1999), recommends that *"Bus stops are located to minimise passengers' walking distance to their final destination. The maximum walking distance to a bus stop should not exceed 400m and preferably be no more than 300m."*
- 5.13 The closest bus stop to the site is located immediately adjacent the north-west corner of the site, on Bridge Street. There are also bus stops located on both sides of the A676 Bolton Street, approximately 400m walk distance west of the site. Details of the main bus services and frequencies which use these stops are provided in **Table 5.2** below.

Table 5.2 – Bus Services:

Service	Route	Service Frequency
472	Bury / Ramsbottom Circular	Mon – Fri: 15mins
		Sat: 15mins
		Sun: 15mins
474	Bury / Ramsbottom Circular	Mon – Fri: 20mins
		Sat: 20mins
		Sun: -20mins
480	Bolton - Bury	Mon – Fri: 60mins
		Sat: 60mins
		Sun: -120mins
B1	Ramsbottom - Bury	Mon – Fri: 60mins
		Sat: 60mins
		Sun: -
X41	Accrington - Manchester	Mon – Fri: 45mins
		Sat: 60mins
		Sun: 60mins

- 5.14 The above demonstrates that prospective residents will have access to bus services stopping close to the site which will provide a viable option for residents to travel by bus.
- 5.15 In terms of rail services, the Ramsbottom ELR Station is located immediately adjacent the site and provides a recreational tourist attraction line that provides steam train services between Rawtenstall and Bury.
- 5.16 The level of accessibility by public transport has been analysed using GIS TRACC software and is shown on **Figure 5.4** below. The figure illustrates the distance that can be travelled within 60 minutes by public transport to and from the site, which includes the time taken to walk to the bus stops.

Figure 5.4 – Public Transport Accessibility



- 5.17 The above demonstrates that the site is within a close proximity to public transport links, serving both the local area and other destinations further afield. The figure shows that key areas of Manchester, Prestwich, Bury, Rochdale and Burnley, amongst others, are in an acceptable 60 minute commute time.

Summary

- 5.18 The above assessments demonstrate that the site is in an accessible location with potential for use of sustainable transport modes, and has a large range of local amenities within close proximity.

6.0 FUTURE BASELINE TRAFFIC FLOWS

Introduction

- 6.1 This Chapter describes the future baseline traffic conditions on the local highway network in relation to traffic growth and committed developments.

Future Baseline Traffic Flows

- 6.2 As per typical guidance, a future assessment year of 2028 has been adopted for this TA (i.e. based on the year of application + 5 years for developments outside of the strategic road network).
- 6.3 In order to quantify the level of background traffic growth that could occur on the local network between the date of the traffic surveys (2019) and the future assessment year (2028), National Traffic Model (NTM) growth factors, modified by TEMPRO local growth factors, have been used, as summarised in **Table 6.1** below:-

Table 6.1 – Traffic Growth Factors

Period	AM Peak	PM Peak
2019 to 2028	1.0899	1.0907

- 6.4 The above growth factors have been applied to the surveyed traffic flows to obtain the 2028 base traffic flows, as shown in **Traffic Flow Figure 2**.

Committed Developments

- 6.5 A committed development for 35 dwellings has been identified on land to the north of Bury New Road (Application Reference: 63617) and has been taken into account in the assessments within this TA.
- 6.6 The development traffic flows have been obtained by applying the approved traffic generation estimates as part of the Outline Permission (Application Reference: 60370), which was for up to 50 dwellings, to the level of development approved at reserved matters (35 dwellings) and distributed through the TA study area based on information from the 2011 Census, as detailed in Chapter 7. The committed development traffic is presented diagrammatically in **Traffic Flow Figure 3**.

7.0 TRIP GENERATION

Overview

- 7.1 This Chapter provides an estimate of the trips generated by the proposed development during the weekday AM and PM peak hours and distributes and assigns the vehicular trips on the local highway network.

Trip Generation – Existing Use

- 7.2 As detailed earlier, the site formally accommodated the Holcombe Paper Mill which was substantially demolished in 2013, however, there are three existing buildings on the site, with a total GFA of approximately 350m², which could be brought back into use without the need for planning permission.
- 7.3 It has been assumed for the purpose of this TA that the existing buildings, if brought back into use, would operate as single industrial buildings (B2 use), which is considered to allow for a robust assessment given that the existing buildings could potentially be occupied by B1 office uses, which generate significantly more trips.
- 7.4 Notwithstanding the above and in order to estimate the level of trips that could be generated by the existing buildings on the site, if brought back into use, the average trip rates submitted with the aforementioned planning application have been obtained, which were accepted by the Local Highway Authority and not questioned by the Inspector. The TRICS outputs are presented in **Appendix I**, with a summary of the vehicular TRICS outputs for the existing development provided in **Table 7.1** below.

Table 7.1 - Estimated Trip Rates (Per 100m ²) Associated with the Existing Buildings				
Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	1.265	0.224	0.097	1.022

- 7.5 The estimated trip generation associated with the existing buildings, if brought back into use, is therefore as summarised in **Table 7.2** below.

Table 7.2 – Estimated Trip Generation – 350m² B2 Industrial Unit				
Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	4	1	0	4

Trip Generation - Proposed Residential Element

- 7.6 In order to estimate the trip generating potential of the proposed residential development, the average trip rates submitted with the aforementioned planning application have been obtained, which were accepted by the Local Highway Authority and not questioned by the Inspector. The TRICS outputs are presented in [Appendix I](#), with a summary of the vehicular TRICS outputs for the proposed residential development provided in [Table 7.3](#) below.

Table 7.3 - Estimated Trip Rates Associated with the Proposed Residential Development				
Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.136	0.370	0.348	0.187

- 7.7 The estimated trip generation associated with the proposed residential development is therefore as summarised in [Table 7.4](#) below.

Table 7.4 – Estimated Trip Generation – 57 Dwellings				
Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	8	21	20	11

Trip Generation - Proposed Car Park Element

- 7.8 As detailed earlier, there are existing parking pressures in the town centre and the 47-space public car park is proposed to cater for the existing parking demand. Therefore, the proposed car park is not anticipated to generate any new trips on the local highway network and will instead alleviate the town centre parking pressures, providing a betterment over the existing situation.

- 7.9 Notwithstanding the above, the car park will generate turning movements at the proposed site access which is considered in the detailed capacity assessment of the access later in this TA. Given the town centre location, it is estimated that each parking space will turnover once in a peak hour on average, equating to circa 47 arrivals and 47 departures in the peak hours. However, in order to allow for a robust assessment, we have assumed an average dwell time of 30 minutes per space with all spaces turning over twice in a peak hour, equating to circa 94 arrivals and 94 departures in the peak hours.

Net Trip Distribution

- 7.10 As detailed above, the proposed car park is not anticipated to generate any new demand and will instead alleviate the town centre parking pressures, providing a betterment over the existing situation. The net traffic generation of the scheme on the local highway network is therefore equal to the total traffic generated via the proposed residential development minus the total traffic that could be generated by the existing buildings, if brought back into use, and is as summarised in **Table 7.5** below.

Table 7.5 – Net Trip Generation				
Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	4	20	20	7

Trip Distribution

- 7.11 The distribution of development-related traffic routing through the TA study area and the potential traffic associated with the existing buildings, which could be brought back into use at any time, has been obtained from the TA submitted with the aforementioned planning application. The distribution methodology was based on Census information and the trip distribution percentages obtained from the submitted TA, which were accepted by both the Local Highway Authority and TfGM, are presented in **Table 7.6** (residential element) and **Table 7.7** (existing buildings – employment) below.

Table 7.6 – Trip Distribution

Route Reference	Route Description	Percentage
A	Peel Brow, A56 Whalley Road North	19.4%
B	Bridge Street, Railway Street, Kay Brow, A676 South	12.8%
C	Peel Brow, Bury New Road, A56 Manchester Road South	67.8%

Table 7.7 – Employment Trip Distribution (Existing Buildings)

Route Reference	Route Description	Percentage
A	A56 Whalley Road North, Peel Brow	27.9%
B	A56 Manchester Road South, Bury New Road, Peel Brow	33.2%
C	A676 South, Kay Brow, Railway Street, Bridge Street	38.9%

- 7.12 The percentage distribution of vehicular trips generated by the proposed residential development and the existing employment buildings is also presented diagrammatically in **Traffic Flow Figure 4 – Figure 5** respectively.
- 7.13 In terms of the traffic associated with the proposed car park, this has been distributed at the access based on the east and westbound mainline flows on Bridge Street, as shown on **Traffic Flow Figure 6**. It should be noted that the presented traffic distribution is considered robust as no traffic has been redistributed/removed from the mainline.

Traffic Assignment

- 7.14 The trip generation estimates for the proposed residential development have been assigned to the network using the previously mentioned residential distribution methodology and are presented diagrammatically on **Traffic Flow Figure 7**.
- 7.15 The trip generation estimates for the existing buildings have been assigned to the network using the employment distributions presented in **Table 7.7** and are presented diagrammatically on **Traffic Flow Figure 8**.

- 7.16 The trip generation estimates for the car park have been assigned at the access based on the aforementioned car park distribution methodology and are presented diagrammatically on **Traffic Flow Figure 9**.
- 7.17 The net traffic is equal to the total traffic generated via the proposed residential development (**Traffic Flow Figure 7**) and car park (**Traffic Flow Figure 9**) minus the total traffic that could be generated by the existing buildings (**Traffic Flow Figure 8**), if brought back into use, and is presented diagrammatically on **Traffic Flow Figure 10**.
- 7.18 The net trip generation estimates are considered to allow for a robust assessment given that the existing buildings could be occupied by B1 office uses, if brought back into use, which generate significantly more trips than the assumed B2 use, as detailed earlier.

8.0 ANTICIPATED HIGHWAY IMPACT

General

8.1 This Chapter describes the impact of the additional trips generated by the proposed development on the operation of the local highway network. As stated earlier, the study area for the TA includes the following junctions:

- Proposed site accesses;
- A56 Whalley Road / A56 Manchester Road / Peel Brow;
- A56 Manchester Road / Bury New Road;
- A576 Bolton Street / Kay Brow; and,
- A576 Bolton Street / A576 Bolton Road West / Dundee Lane / Nuttall Lane

8.2 As shown on **Traffic Flow Figure 10**, once the development traffic has been distributed on the local highway network, the net traffic flows are not considered to have a material impact on the any of the junctions in the TA study area, particularly when having regard to the 30 or more two-way vehicle movements in any hour threshold, outlined in the Department for Transport's document 'Guidance on Transport Assessments'.

8.3 Having regard to this, detailed capacity assessments are only considered necessary at the proposed site access junction which is subject to over 30 two-way trips. This is particularly the case when considering the proposed development will result in a reduction in traffic flows when compared to the aforementioned planning application, whereby the Inspector confirmed at Appeal that there is little evidence to demonstrate the proposed scheme would result in a severe impact on the road network, as detailed earlier.

Assessment Methodology

8.4 The assessment of the priority controlled access junction has been undertaken using Junctions 9 (PICADY) software.

- 8.5 With the Junctions 9 model, the results generated provide a Ratio to Flow capacity (RFC) along with an estimate of the likely traffic queues. RFC values between 0.00 and 0.85 are generally accepted as representing stable and acceptable operating conditions. Values between 0.85 and 1 represents variable operation (i.e. possible queues building up at the junction during the period under consideration and increases in vehicular delay moving through the junction). RFC values in excess of 1 represents overloaded conditions (i.e. congested conditions).
- 8.6 Capacity assessments have been undertaken in the future assessment year of 2028 in the 'with' development scenario. The 2028 'with development' assessment traffic flows are equal to the sum of the 2028 growthed surveyed traffic flows, the total committed development traffic flows and the net development traffic flows, as shown on **Traffic Flow Figure 11**.

Proposed Site Access

- 8.7 PICADY software has been used in the assessment of the proposed site access. The PICADY results are presented in **Appendix J** with the results summarised in **Table 8.1** below.

Table 8.1 – Proposed Site Access PICADY Results

Approach	AM PEAK		PM PEAK	
	RFC	MMQ	RFC	MMQ
2028 'With Development' Assessment				
Site Access- Right Left	0.37	0.6	0.40	0.7
Bridge Street – Ahead Right	0.24	0.9	0.21	0.6

- 8.8 The above results demonstrate that the proposed site access will operate well within practical capacity in the future assessment year of 2028, without significant queuing.
- 8.9 Having regard to the analysis presented above and with reference to paragraph 111 of the NPPF, the impact of the proposed development cannot therefore be considered severe and no off-site highway mitigation measures are required.

9.0 SUMMARY AND CONCLUSIONS

- 9.1 SCP have been appointed by Eccleston Homes Limited to provide transport planning and engineering advice in support of a full planning application for a residential and car park development, comprising 57 dwellings as well as a 47-space public car park, on the former Holcombe Mill site, Ramsbottom.
- 9.2 Vehicular access to the development will be provided off Bridge Street in the location of the existing access to the north-west of the site. The access measures 6.5m in width and benefits from 2m footways on both sides of the road which connect the site to the existing pedestrian infrastructure on Bridge Street. The remaining two existing accesses, located to the north-east of the site and centrally, will be closed with the footway reinstated. In addition, a secondary emergency access will be provided off Bridge Street with dropped kerbs and retractable bollards.
- 9.3 The personal injury accident data for the most recently available five-year period has been reviewed and does not represent a material concern in the context of the proposed development.
- 9.4 The accessibility of the site has been assessed. Overall, the site is considered to be well located in terms of its accessibility by all the major non-car modes of transport.
- 9.5 It has been demonstrated that the proposed development will not have a material impact on the operation of the local highway network but the impact of the traffic arising from the development has been tested in detail at the site access junction, which demonstrates that the site access has sufficient spare capacity to accommodate the proposed development.
- 9.6 Having regard to the above, it is concluded that there are no highway or transport related reasons to withhold planning permission for the scheme and the proposed development is therefore recommended for approval.

S|C|P

APPENDIX A



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	5	1	0	0	0	0	0	6	71	6	3	0	2	0	2	84
07:15	8	3	1	0	0	0	0	12	66	16	2	2	2	1	0	89
07:30	4	0	0	0	0	0	0	4	82	19	1	1	4	0	1	108
07:45	12	0	0	0	0	1	0	13	86	23	5	1	3	0	1	119
H/TOT	29	4	1	0	0	1	0	35	305	64	11	4	11	1	4	400
08:00	14	3	0	0	1	0	0	18	88	27	8	0	4	1	0	128
08:15	15	6	0	0	0	0	0	21	86	10	4	2	3	0	1	106
08:30	15	2	0	0	0	0	0	17	71	12	5	0	2	1	0	91
08:45	15	3	1	0	0	0	0	19	79	12	2	2	2	0	1	98
H/TOT	59	14	1	0	1	0	0	75	324	61	19	4	11	2	2	423
09:00	11	3	0	0	0	0	0	14	98	21	6	4	2	0	1	132
09:15	16	2	3	0	0	0	0	21	70	14	3	0	2	1	0	90
H/TOT	27	5	3	0	0	0	0	35	168	35	9	4	4	1	1	222
P/TOT	115	23	5	0	1	1	0	145	797	160	39	12	26	4	7	1045

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	49	7	0	0	1	1	0	58	105	11	0	0	6	1	0	123
16:15	40	0	0	0	1	1	0	42	125	18	2	1	2	2	0	150
16:30	41	4	0	0	0	0	0	45	134	18	1	1	1	2	0	157
16:45	38	1	0	1	0	0	0	40	135	12	1	0	4	3	2	157
H/TOT	168	12	0	1	2	2	0	185	499	59	4	2	13	8	2	587
17:00	37	4	0	0	2	1	0	44	128	8	2	0	1	0	0	139
17:15	41	2	0	0	0	0	0	43	127	11	1	0	1	0	0	140
17:30	51	7	0	0	0	0	0	58	103	15	1	0	2	0	1	122
17:45	37	6	0	0	0	0	0	43	112	13	1	0	5	0	0	131
H/TOT	166	19	0	0	2	1	0	188	470	47	5	0	9	0	1	532
P/TOT	334	31	0	1	4	3	0	373	969	106	9	2	22	8	3	1119



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	A to B							TOT	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	2	2	1	0	0	0	0	5	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
08:30	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
09:00	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
09:15	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
H/TOT	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
P/TOT	16	4	1	0	0	0	0	21	0	0	0	0	0	0	0	0

TIME	A to B							TOT	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
16:15	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
16:30	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
16:45	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
H/TOT	26	1	0	0	0	0	0	27	0	0	0	0	0	0	0	0
17:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
17:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
17:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
17:45	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	15	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0
P/TOT	41	1	0	0	0	0	0	42	0	0	0	0	0	0	0	0



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
07:15	15	2	1	0	0	0	0	18	3	0	0	0	0	0	0	3
07:30	6	1	0	0	0	0	0	7	2	0	0	0	0	0	0	2
07:45	9	0	0	0	0	0	0	9	2	0	1	0	0	0	0	3
H/TOT	38	3	1	0	0	0	0	42	7	0	1	0	0	0	0	8
08:00	10	2	1	0	0	0	0	13	2	0	0	0	0	0	0	2
08:15	11	0	0	0	0	0	0	11	2	1	1	0	0	0	0	4
08:30	9	3	0	0	0	1	0	13	5	0	0	0	0	0	1	6
08:45	7	0	1	0	0	0	1	9	3	0	0	0	0	0	0	3
H/TOT	37	5	2	0	0	1	1	46	12	1	1	0	0	0	1	15
09:00	10	0	0	0	0	0	0	10	1	0	0	0	0	0	0	1
09:15	7	0	0	0	0	0	0	7	1	1	0	0	0	0	0	2
H/TOT	17	0	0	0	0	0	0	17	2	1	0	0	0	0	0	3
P/TOT	92	8	3	0	0	1	1	105	21	2	2	0	0	0	1	26

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	6	0	0	0	0	0	0	6	5	0	0	0	0	0	0	5
16:15	6	1	0	0	0	0	0	7	8	1	0	0	0	0	0	9
16:30	6	1	0	0	0	0	0	7	5	1	0	0	0	0	0	6
16:45	5	0	1	0	0	0	0	6	9	1	1	0	0	0	0	11
H/TOT	23	2	1	0	0	0	0	26	27	3	1	0	0	0	0	31
17:00	2	0	0	0	0	0	0	2	8	0	0	0	0	0	0	8
17:15	4	1	0	0	0	0	0	5	16	2	0	0	0	0	0	18
17:30	3	0	0	0	0	0	0	3	12	0	0	0	0	0	0	12
17:45	7	2	0	0	0	0	0	9	9	0	0	0	0	0	1	10
H/TOT	16	3	0	0	0	0	0	19	45	2	0	0	0	0	1	48
P/TOT	39	5	1	0	0	0	0	45	72	5	1	0	0	0	1	79



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
07:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
07:30	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
07:45	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
H/TOT	23	4	0	0	0	0	0	27	0	0	0	0	0	0	0	0
08:00	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
08:15	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0
08:30	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
08:45	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	38	1	0	0	0	0	0	39	0	0	0	0	0	0	0	0
09:00	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
09:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0
P/TOT	74	6	0	0	0	0	0	80	0	0	0	0	0	0	0	0

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
16:15	9	0	0	0	0	1	0	10	0	0	0	0	0	0	0	0
16:30	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0
16:45	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	30	1	0	0	0	1	0	32	0	0	0	0	0	0	0	0
17:00	13	1	0	0	0	1	0	15	0	0	0	0	0	0	0	0
17:15	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0
17:30	19	1	0	0	0	1	0	21	0	0	0	0	0	0	0	0
17:45	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0
H/TOT	62	4	0	0	0	2	0	68	0	0	0	0	0	0	0	0
P/TOT	92	5	0	0	0	3	0	100	0	0	0	0	0	0	0	0



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	1	0	0	0	0	0	0	1	71	8	1	3	2	1	1	87
07:15	2	2	0	0	0	0	0	4	123	20	3	1	2	2	2	153
07:30	0	0	0	0	0	0	0	0	132	19	1	2	2	0	0	156
07:45	4	0	0	0	0	0	0	4	148	21	1	3	4	1	0	178
H/TOT	7	2	0	0	0	0	0	9	474	68	6	9	10	4	3	574
08:00	2	0	0	0	0	0	0	2	137	15	1	0	3	2	0	158
08:15	2	0	0	0	0	0	0	2	121	20	5	1	1	0	1	149
08:30	5	0	0	0	0	0	0	5	134	10	2	2	4	0	1	153
08:45	5	0	0	0	0	0	0	5	119	14	5	0	2	1	1	142
H/TOT	14	0	0	0	0	0	0	14	511	59	13	3	10	3	3	602
09:00	2	0	0	0	0	0	0	2	153	16	1	2	5	0	1	178
09:15	6	0	0	0	0	0	0	6	112	13	2	1	2	0	1	131
H/TOT	8	0	0	0	0	0	0	8	265	29	3	3	7	0	2	309
P/TOT	29	2	0	0	0	0	0	31	1250	156	22	15	27	7	8	1485

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	5	0	0	0	0	0	0	5	113	21	4	2	4	3	1	148
16:15	2	0	0	0	0	0	0	2	98	17	3	0	4	1	1	124
16:30	3	0	0	0	0	0	0	3	90	21	1	0	2	0	2	116
16:45	3	0	1	0	0	0	0	4	100	20	3	0	2	0	0	125
H/TOT	13	0	1	0	0	0	0	14	401	79	11	2	12	4	4	513
17:00	4	1	0	0	0	0	0	5	116	9	2	0	3	1	1	132
17:15	2	2	0	0	0	0	0	4	113	13	1	0	3	2	1	133
17:30	1	1	0	0	0	0	0	2	121	11	0	0	1	0	1	134
17:45	6	1	0	0	0	0	0	7	112	11	0	0	4	2	0	129
H/TOT	13	5	0	0	0	0	0	18	462	44	3	0	11	5	3	528
P/TOT	26	5	1	0	0	0	0	32	863	123	14	2	23	9	7	1041



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	3	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0
07:15	6	3	0	0	0	1	0	10	0	0	0	0	0	0	0	0
07:30	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
07:45	8	2	0	0	1	0	0	11	0	0	0	0	0	0	0	0
H/TOT	25	5	1	0	1	1	0	33	0	0	0	0	0	0	0	0
08:00	11	4	1	0	0	0	0	16	0	0	0	0	0	0	0	0
08:15	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0
08:30	17	4	0	0	0	0	0	21	0	0	0	0	0	0	0	0
08:45	14	3	0	0	0	0	0	17	0	0	0	0	0	0	0	0
H/TOT	60	12	1	0	0	0	0	73	0	0	0	0	0	0	0	0
09:00	22	4	0	0	0	0	0	26	0	0	0	0	0	0	0	0
09:15	15	1	0	0	1	0	0	17	0	0	0	0	0	0	0	0
H/TOT	37	5	0	0	1	0	0	43	0	0	0	0	0	0	0	0
P/TOT	122	22	2	0	2	1	0	149	0	0	0	0	0	0	0	0

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	26	1	0	0	0	0	1	28	0	0	0	0	0	0	0	0
16:15	25	5	0	0	0	0	1	31	0	0	0	0	0	0	0	0
16:30	32	3	1	0	0	0	0	36	0	0	0	0	0	0	0	0
16:45	27	2	0	0	2	0	0	31	0	0	0	0	0	0	0	0
H/TOT	110	11	1	0	2	0	2	126	0	0	0	0	0	0	0	0
17:00	26	1	1	0	0	0	0	28	0	0	0	0	0	0	0	0
17:15	46	3	0	0	0	0	0	49	0	0	0	0	0	0	0	0
17:30	41	1	0	0	0	0	0	42	0	0	0	0	0	0	0	0
17:45	33	2	0	0	0	0	0	35	0	0	0	0	0	0	0	0
H/TOT	146	7	1	0	0	0	0	154	0	0	0	0	0	0	0	0
P/TOT	256	18	2	0	2	0	2	280	0	0	0	0	0	0	0	0



SITE: 1

DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane

DAY: Wednesday

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	21	2	0	0	0	0	0	23	3	0	0	0	0	0	0	3
07:15	21	4	0	0	0	0	0	25	2	1	0	0	0	0	0	3
07:30	47	1	1	0	0	0	1	50	3	0	0	0	0	0	0	3
07:45	54	0	0	0	0	0	0	54	1	0	0	0	0	0	0	1
H/TOT	143	7	1	0	0	0	1	152	9	1	0	0	0	0	0	10
08:00	39	0	0	0	0	0	1	40	4	2	0	0	0	0	1	7
08:15	36	2	0	0	1	0	0	39	4	0	0	0	0	0	0	4
08:30	36	1	0	0	0	0	0	37	5	1	0	0	0	0	0	6
08:45	45	3	0	0	0	0	0	48	3	0	0	0	0	0	0	3
H/TOT	156	6	0	0	1	0	1	164	16	3	0	0	0	0	1	20
09:00	16	4	0	0	0	0	0	20	1	0	0	0	0	0	0	1
09:15	20	3	1	0	0	0	0	24	0	0	0	0	0	0	0	0
H/TOT	36	7	1	0	0	0	0	44	1	0	0	0	0	0	0	1
P/TOT	335	20	2	0	1	0	2	360	26	4	0	0	0	0	1	31

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	14	1	3	0	1	0	0	19	3	0	0	0	0	0	0	3
16:15	25	4	0	0	0	0	0	29	5	1	0	0	0	0	0	6
16:30	17	1	0	0	0	0	0	18	1	0	0	0	0	0	0	1
16:45	18	3	0	0	1	0	0	22	2	0	0	0	0	0	0	2
H/TOT	74	9	3	0	2	0	0	88	11	1	0	0	0	0	0	12
17:00	26	2	1	0	0	0	3	32	0	0	0	0	0	0	0	0
17:15	24	2	0	0	2	0	0	28	2	1	0	0	0	0	0	3
17:30	25	1	0	0	0	1	0	27	2	0	0	0	0	0	1	3
17:45	27	6	0	0	0	1	0	34	4	0	0	0	0	0	0	4
H/TOT	102	11	1	0	2	2	3	121	8	1	0	0	0	0	1	10
P/TOT	176	20	4	0	4	2	3	209	19	2	0	0	0	0	1	22



SITE: 1

DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane

DAY: Wednesday

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	44	5	2	0	0	0	0	51	0	0	0	0	0	0	0	0
07:15	48	0	0	0	0	0	0	48	0	0	0	0	0	0	0	0
07:30	71	2	2	0	0	0	0	75	0	0	0	0	0	0	0	0
07:45	59	3	0	0	0	0	0	62	0	0	0	0	0	0	0	0
H/TOT	222	10	4	0	0	0	0	236	0	0	0	0	0	0	0	0
08:00	38	2	0	0	1	0	0	41	0	0	0	0	0	0	0	0
08:15	47	7	0	0	0	0	0	54	0	0	0	0	0	0	0	0
08:30	55	2	2	0	0	0	0	59	0	0	0	0	0	0	0	0
08:45	50	2	0	0	0	0	0	52	0	0	0	0	0	0	0	0
H/TOT	190	13	2	0	1	0	0	206	0	0	0	0	0	0	0	0
09:00	40	4	0	0	0	0	0	44	0	0	0	0	0	0	0	0
09:15	25	7	0	0	0	0	0	32	0	0	0	0	0	0	0	0
H/TOT	65	11	0	0	0	0	0	76	0	0	0	0	0	0	0	0
P/TOT	477	34	6	0	1	0	0	518	0	0	0	0	0	0	0	0

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	14	2	0	0	0	0	0	16	0	0	0	0	0	0	0	0
16:15	20	4	0	0	0	0	0	24	0	0	0	0	0	0	0	0
16:30	30	1	0	0	0	0	0	31	0	0	0	0	0	0	0	0
16:45	21	3	1	0	0	0	0	25	0	0	0	0	0	0	0	0
H/TOT	85	10	1	0	0	0	0	96	0	0	0	0	0	0	0	0
17:00	26	3	0	0	1	0	0	30	0	0	0	0	0	0	0	0
17:15	16	2	0	1	0	0	0	19	0	0	0	0	0	0	0	0
17:30	23	2	0	0	0	0	0	25	0	0	0	0	0	0	0	0
17:45	27	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0
H/TOT	92	7	0	1	1	0	0	101	0	0	0	0	0	0	0	0
P/TOT	177	17	1	1	1	0	0	197	0	0	0	0	0	0	0	0



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	123	13	3	3	2	1	1	146	76	8	3	0	2	0	2	91
07:15	186	22	4	1	2	2	2	219	74	19	3	2	2	1	0	101
07:30	209	22	3	2	2	0	0	238	86	19	2	1	4	0	1	113
07:45	216	24	1	3	4	1	0	249	100	24	5	1	3	1	1	135
H/TOT	734	81	11	9	10	4	3	852	336	70	13	4	11	2	4	440
08:00	185	19	2	0	4	2	0	212	102	30	8	0	5	1	0	146
08:15	179	27	5	1	1	0	1	214	104	16	4	2	3	0	1	130
08:30	198	15	4	2	4	1	1	225	86	15	5	0	2	1	0	109
08:45	176	16	6	0	2	1	2	203	96	15	3	2	2	0	1	119
H/TOT	738	77	17	3	11	4	4	854	388	76	20	4	12	2	2	504
09:00	203	20	1	2	5	0	1	232	112	25	6	4	2	0	1	150
09:15	144	20	2	1	2	0	1	170	92	16	6	0	2	1	0	117
H/TOT	347	40	3	3	7	0	2	402	204	41	12	4	4	1	1	267
P/TOT	1819	198	31	15	28	8	9	2108	928	187	45	12	27	5	7	1211

	TO ARM A									FROM ARM A								
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		
16:00	133	23	4	2	4	3	1	170	159	18	0	0	7	2	0	186		
16:15	124	22	3	0	4	1	1	155	171	18	2	1	3	3	0	198		
16:30	126	23	1	0	2	0	2	154	181	23	1	1	1	2	0	209		
16:45	126	23	5	0	2	0	0	156	182	13	1	1	4	3	2	206		
H/TOT	509	91	13	2	12	4	4	635	693	72	4	3	15	10	2	799		
17:00	144	12	2	0	4	1	1	164	168	12	2	0	3	1	0	186		
17:15	133	16	1	1	3	2	1	157	172	13	1	0	1	0	0	187		
17:30	147	13	0	0	1	0	1	162	157	22	1	0	2	0	1	183		
17:45	146	13	0	0	4	2	0	165	154	19	1	0	5	0	0	179		
H/TOT	570	54	3	1	12	5	3	648	651	66	5	0	11	1	1	735		
P/TOT	1079	145	16	3	24	9	7	1283	1344	138	9	3	26	11	3	1534		



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	4	1	0	0	0	0	0	5	12	1	0	0	0	0	0	13
07:15	4	3	0	0	0	0	0	7	20	3	1	0	0	0	0	24
07:30	3	0	1	0	0	0	0	4	15	2	0	0	0	0	0	17
07:45	7	1	0	0	0	0	0	8	21	1	1	0	0	0	0	23
H/TOT	18	5	1	0	0	0	0	24	68	7	2	0	0	0	0	77
08:00	6	2	0	0	0	0	1	9	21	2	1	0	0	0	0	24
08:15	9	0	0	0	0	0	0	9	25	1	1	0	0	0	0	27
08:30	10	2	0	0	0	0	0	12	18	3	0	0	0	1	1	23
08:45	10	0	0	0	0	0	0	10	23	1	1	0	0	0	1	26
H/TOT	35	4	0	0	0	0	1	40	87	7	3	0	0	1	2	100
09:00	6	1	0	0	0	0	0	7	20	1	0	0	0	0	0	21
09:15	12	0	0	0	0	0	0	12	12	1	0	0	0	0	0	13
H/TOT	18	1	0	0	0	0	0	19	32	2	0	0	0	0	0	34
P/TOT	71	10	1	0	0	0	1	83	187	16	5	0	0	1	2	211

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	13	0	0	0	0	0	0	13	16	1	0	0	0	0	0	17
16:15	13	1	0	0	0	0	0	14	23	2	0	0	0	1	0	26
16:30	10	1	0	0	0	0	0	11	23	2	0	0	0	0	0	25
16:45	14	0	1	0	0	0	0	15	18	1	2	0	0	0	0	21
H/TOT	50	2	1	0	0	0	0	53	80	6	2	0	0	1	0	89
17:00	7	1	0	0	0	0	0	8	23	1	0	0	0	1	0	25
17:15	8	3	0	0	0	0	0	11	35	4	0	0	0	0	0	39
17:30	6	1	0	0	0	0	1	8	34	1	0	0	0	1	0	36
17:45	15	1	0	0	0	0	0	16	31	3	0	0	0	0	1	35
H/TOT	36	6	0	0	0	0	1	43	123	9	0	0	0	2	1	135
P/TOT	86	8	1	0	0	0	1	96	203	15	2	0	0	3	1	224



SITE: 1 DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane DAY: Wednesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	96	9	3	0	2	0	2	112	75	8	2	3	2	1	1	92
07:15	89	21	2	2	2	1	0	117	131	25	3	1	2	3	2	167
07:30	136	21	2	1	4	0	2	166	140	19	1	2	2	0	0	164
07:45	150	24	5	1	3	0	1	184	160	23	1	3	5	1	0	193
H/TOT	471	75	12	4	11	1	5	579	506	75	7	9	11	5	3	616
08:00	136	27	8	0	4	1	1	177	150	19	2	0	3	2	0	176
08:15	134	12	4	2	4	0	1	157	141	21	5	1	1	0	1	170
08:30	111	13	5	0	2	1	0	132	156	14	2	2	4	0	1	179
08:45	137	16	2	2	2	0	1	160	138	17	5	0	2	1	1	164
H/TOT	518	68	19	4	12	2	3	626	585	71	14	3	10	3	3	689
09:00	123	26	6	4	2	0	1	162	177	20	1	2	5	0	1	206
09:15	94	17	4	0	2	1	0	118	133	14	2	1	3	0	1	154
H/TOT	217	43	10	4	4	1	1	280	310	34	3	3	8	0	2	360
P/TOT	1206	186	41	12	27	4	9	1485	1401	180	24	15	29	8	8	1665

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	124	13	3	0	7	1	0	148	144	22	4	2	4	3	2	181
16:15	159	22	2	1	2	3	0	189	125	22	3	0	4	1	2	157
16:30	163	19	1	1	1	2	0	187	125	24	2	0	2	0	2	155
16:45	157	15	1	0	5	3	2	183	130	22	4	0	4	0	0	160
H/TOT	603	69	7	2	15	9	2	707	524	90	13	2	14	4	6	653
17:00	167	11	3	0	1	1	3	186	146	11	3	0	3	1	1	165
17:15	166	14	1	0	3	0	0	184	161	18	1	0	3	2	1	186
17:30	147	17	1	0	2	2	1	170	163	13	0	0	1	0	1	178
17:45	154	20	1	0	5	1	0	181	151	14	0	0	4	2	0	171
H/TOT	634	62	6	0	11	4	4	721	621	56	4	0	11	5	3	700
P/TOT	1237	131	13	2	26	13	6	1428	1145	146	17	2	25	9	9	1353



SITE: 1

DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane

DAY: Wednesday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	8	1	1	0	0	0	0	10	68	7	2	0	0	0	0	77
07:15	17	6	1	0	0	1	0	25	71	5	0	0	0	0	0	76
07:30	14	0	0	0	0	0	0	14	121	3	3	0	0	0	1	128
07:45	22	2	1	0	1	1	0	27	114	3	0	0	0	0	0	117
H/TOT	61	9	3	0	1	2	0	76	374	18	5	0	0	0	1	398
08:00	27	7	1	0	1	0	0	36	81	4	0	0	1	0	2	88
08:15	35	8	1	0	0	0	0	44	87	9	0	0	1	0	0	97
08:30	37	6	0	0	0	0	1	44	96	4	2	0	0	0	0	102
08:45	32	6	1	0	0	0	0	39	98	5	0	0	0	0	0	103
H/TOT	131	27	3	0	1	0	1	163	362	22	2	0	2	0	2	390
09:00	34	7	0	0	0	0	0	41	57	8	0	0	0	0	0	65
09:15	32	4	3	0	1	0	0	40	45	10	1	0	0	0	0	56
H/TOT	66	11	3	0	1	0	0	81	102	18	1	0	0	0	0	121
P/TOT	258	47	9	0	3	2	1	320	838	58	8	0	2	0	3	909

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	80	8	0	0	1	1	1	91	31	3	3	0	1	0	0	38
16:15	73	6	0	0	1	1	1	82	50	9	0	0	0	0	0	59
16:30	78	8	1	0	0	0	0	87	48	2	0	0	0	0	0	50
16:45	74	4	1	1	2	0	0	82	41	6	1	0	1	0	0	49
H/TOT	305	26	2	1	4	2	2	342	170	20	4	0	2	0	0	196
17:00	71	5	1	0	2	1	0	80	52	5	1	0	1	0	3	62
17:15	103	7	0	0	0	0	0	110	42	5	0	1	2	0	0	50
17:30	104	8	0	0	0	0	0	112	50	3	0	0	0	1	1	55
17:45	79	8	0	0	0	0	1	88	58	6	0	0	0	1	0	65
H/TOT	357	28	1	0	2	1	1	390	202	19	1	1	3	2	4	232
P/TOT	662	54	3	1	6	3	3	732	372	39	5	1	5	2	4	428



SITE: 1

DATE: 03/07/2019

LOCATION: A676 Bolton Rd West / Dundee Lane / Nuttall Lane

DAY: Wednesday

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	231	24	7	3	4	1	3	273
07:15	296	52	7	3	4	4	2	368
07:30	362	43	6	3	6	0	2	422
07:45	395	51	7	4	8	2	1	468
H/TOT	1284	170	27	13	22	7	8	1531
08:00	354	55	11	0	9	3	2	434
08:15	357	47	10	3	5	0	2	424
08:30	356	36	9	2	6	2	2	413
08:45	355	38	9	2	4	1	3	412
H/TOT	1422	176	39	7	24	6	9	1683
09:00	366	54	7	6	7	0	2	442
09:15	282	41	9	1	5	1	1	340
H/TOT	648	95	16	7	12	1	3	782
P/TOT	3354	441	82	27	58	14	20	3996

PEAK HOUR	
CALCULATION	TOT
07:00 to 08:00	1531
07:15 to 08:15	1692
07:30 to 08:30	1748
07:45 to 08:45	1739
08:00 to 09:00	1683
08:15 to 09:15	1691
08:30 to 09:30	1607
AM PEAK	1748

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	350	44	7	2	12	5	2	422
16:15	369	51	5	1	7	5	2	440
16:30	377	51	3	1	3	2	2	439
16:45	371	42	8	1	9	3	2	436
H/TOT	1467	188	23	5	31	15	8	1737
17:00	389	29	6	0	7	3	4	438
17:15	410	40	2	1	6	2	1	462
17:30	404	39	1	0	3	2	3	452
17:45	394	42	1	0	9	3	1	450
H/TOT	1597	150	10	1	25	10	9	1802
P/TOT	3064	338	33	6	56	25	17	3539

PEAK HOUR	
CALCULATION	TOT
16:00 to 17:00	1737
16:15 to 17:15	1753
16:30 to 17:30	1775
16:45 to 17:45	1788
17:00 to 18:00	1802
PM PEAK	1802



SITE: 2

DATE: 03/07/2019

LOCATION: A676 Bolton St / Kay Brow

DAY: Wednesday

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	1	0	0	0	0	0	0	1	66	8	3	0	2	0	1	80
07:15	0	1	0	0	0	0	0	1	67	16	2	2	3	1	0	91
07:30	1	0	0	0	0	0	0	1	76	16	1	1	3	0	1	98
07:45	0	0	0	0	0	0	1	1	77	18	4	1	3	1	1	105
H/TOT	2	1	0	0	0	0	1	4	286	58	10	4	11	2	3	374
08:00	0	0	0	0	0	0	0	0	78	19	4	0	4	2	0	107
08:15	1	0	0	0	0	0	0	1	69	15	4	2	3	0	1	94
08:30	3	0	0	0	0	0	0	3	79	13	5	0	2	0	0	99
08:45	1	0	0	0	0	0	0	1	64	14	4	4	2	0	1	89
H/TOT	5	0	0	0	0	0	0	5	290	61	17	6	11	2	2	389
09:00	3	0	0	0	0	0	0	3	79	15	5	1	2	0	1	103
09:15	0	1	0	0	0	0	0	1	70	17	3	0	2	1	2	95
H/TOT	3	1	0	0	0	0	0	4	149	32	8	1	4	1	3	198
P/TOT	10	2	0	0	0	0	1	13	725	151	35	11	26	5	8	961

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	1	0	0	0	0	0	0	1	102	17	0	1	5	1	0	126
16:15	0	1	0	0	0	0	0	1	109	12	2	1	3	0	0	127
16:30	1	0	0	0	0	0	0	1	111	10	1	0	1	1	1	125
16:45	2	0	0	0	0	0	0	2	117	13	1	1	4	3	1	140
H/TOT	4	1	0	0	0	0	0	5	439	52	4	3	13	5	2	518
17:00	2	0	0	0	0	0	0	2	93	9	2	0	3	0	0	107
17:15	1	0	0	0	0	0	0	1	94	7	1	0	1	1	0	104
17:30	0	1	0	0	0	0	0	1	91	12	1	0	2	1	0	107
17:45	0	0	0	0	0	0	0	0	87	11	1	0	5	0	0	104
H/TOT	3	1	0	0	0	0	0	4	365	39	5	0	11	2	0	422
P/TOT	7	2	0	0	0	0	0	9	804	91	9	3	24	7	2	940



SITE: 2 DATE: 03/07/2019
LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0



SITE: 2 DATE: 03/07/2019

LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	B to A							TOT	B to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	93	9	3	3	2	1	1	112	31	2	1	0	0	0	0	34
07:15	130	17	2	1	2	2	1	155	74	4	2	0	0	0	0	80
07:30	159	16	2	1	2	0	1	181	69	7	0	1	0	0	0	77
07:45	162	12	2	3	3	3	0	185	56	7	0	0	1	0	0	64
H/TOT	544	54	9	8	9	6	3	633	230	20	3	1	1	0	0	255
08:00	149	13	1	0	4	2	0	169	49	3	1	0	0	0	0	53
08:15	139	31	3	1	1	0	1	176	53	2	2	0	0	0	0	57
08:30	132	9	3	2	3	0	1	150	60	3	1	0	1	1	0	66
08:45	123	11	5	0	2	2	2	145	54	5	1	0	0	0	0	60
H/TOT	543	64	12	3	10	4	4	640	216	13	5	0	1	1	0	236
09:00	136	16	1	2	4	0	1	160	96	7	0	0	0	0	0	103
09:15	94	11	2	1	3	0	1	112	63	4	0	0	0	0	0	67
H/TOT	230	27	3	3	7	0	2	272	159	11	0	0	0	0	0	170
P/TOT	1317	145	24	14	26	10	9	1545	605	44	8	1	2	1	0	661

TIME	B to A							TOT	B to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	95	20	4	2	4	3	1	129	31	6	0	0	0	0	0	37
16:15	95	19	2	0	4	1	1	122	37	6	1	0	0	0	0	44
16:30	106	15	1	0	2	0	2	126	30	6	0	0	0	0	0	36
16:45	83	19	4	0	2	0	0	108	35	4	1	0	0	0	0	40
H/TOT	379	73	11	2	12	4	4	485	133	22	2	0	0	0	0	157
17:00	126	11	2	0	4	1	1	145	25	1	0	0	0	0	0	26
17:15	96	10	0	1	3	1	0	111	28	3	1	0	0	0	0	32
17:30	115	13	0	0	1	1	1	131	36	2	0	0	0	0	1	39
17:45	109	10	0	0	4	1	1	125	37	2	0	0	0	0	0	39
H/TOT	446	44	2	1	12	4	3	512	126	8	1	0	0	0	1	136
P/TOT	825	117	13	3	24	8	7	997	259	30	3	0	0	0	1	293



SITE: 2 DATE: 03/07/2019
LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0



SITE: 2 DATE: 03/07/2019

LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	13	1	0	0	0	0	0	14	1	0	0	0	0	0	0	1
07:15	10	1	1	0	0	0	0	12	0	0	0	0	0	0	0	0
07:30	18	1	2	0	0	0	0	21	3	0	0	0	0	0	0	3
07:45	18	2	0	0	0	0	0	20	0	0	0	0	0	0	0	0
H/TOT	59	5	3	0	0	0	0	67	4	0	0	0	0	0	0	4
08:00	35	5	4	0	1	0	0	45	1	0	0	0	0	0	0	1
08:15	37	4	0	0	0	0	0	41	0	0	0	0	0	0	0	0
08:30	31	5	0	0	0	1	0	37	0	0	0	0	0	0	0	0
08:45	40	2	0	1	0	0	0	43	0	0	0	0	0	0	0	0
H/TOT	143	16	4	1	1	1	0	166	1	0	0	0	0	0	0	1
09:00	11	4	0	0	0	0	0	15	0	0	0	0	0	0	0	0
09:15	21	4	3	0	0	0	0	28	0	0	0	0	0	0	0	0
H/TOT	32	8	3	0	0	0	0	43	0	0	0	0	0	0	0	0
P/TOT	234	29	10	1	1	1	0	276	5	0	0	0	0	0	0	5

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	63	4	0	0	2	0	0	69	0	0	0	0	0	0	0	0
16:15	61	6	0	0	0	1	0	68	0	0	0	0	0	0	0	0
16:30	59	7	0	0	0	0	1	67	0	0	0	0	0	0	0	0
16:45	70	3	0	0	0	0	0	73	1	0	0	0	0	0	0	1
H/TOT	253	20	0	0	2	1	1	277	1	0	0	0	0	0	0	1
17:00	71	3	0	0	0	0	0	74	0	0	0	0	0	0	0	0
17:15	78	5	0	0	0	0	0	83	0	0	0	0	0	0	0	0
17:30	67	10	0	0	0	1	0	78	0	0	0	0	0	0	0	0
17:45	73	5	0	0	0	0	0	78	1	0	0	0	0	0	0	1
H/TOT	289	23	0	0	0	1	0	313	1	0	0	0	0	0	0	1
P/TOT	542	43	0	0	2	2	1	590	2	0	0	0	0	0	0	2



SITE: 2 DATE: 03/07/2019
LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0



SITE: 2 DATE: 03/07/2019

LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	94	9	3	3	2	1	1	113	67	8	3	0	2	0	1	81
07:15	130	17	2	1	2	2	1	155	67	17	2	2	3	1	0	92
07:30	162	16	2	1	2	0	1	184	77	16	1	1	3	0	1	99
07:45	162	12	2	3	3	3	0	185	77	18	4	1	3	1	2	106
H/TOT	548	54	9	8	9	6	3	637	288	59	10	4	11	2	4	378
08:00	150	13	1	0	4	2	0	170	78	19	4	0	4	2	0	107
08:15	139	31	3	1	1	0	1	176	70	15	4	2	3	0	1	95
08:30	132	9	3	2	3	0	1	150	82	13	5	0	2	0	0	102
08:45	123	11	5	0	2	2	2	145	65	14	4	4	2	0	1	90
H/TOT	544	64	12	3	10	4	4	641	295	61	17	6	11	2	2	394
09:00	136	16	1	2	4	0	1	160	82	15	5	1	2	0	1	106
09:15	94	11	2	1	3	0	1	112	70	18	3	0	2	1	2	96
H/TOT	230	27	3	3	7	0	2	272	152	33	8	1	4	1	3	202
P/TOT	1322	145	24	14	26	10	9	1550	735	153	35	11	26	5	9	974

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	95	20	4	2	4	3	1	129	103	17	0	1	5	1	0	127
16:15	95	19	2	0	4	1	1	122	109	13	2	1	3	0	0	128
16:30	106	15	1	0	2	0	2	126	112	10	1	0	1	1	1	126
16:45	84	19	4	0	2	0	0	109	119	13	1	1	4	3	1	142
H/TOT	380	73	11	2	12	4	4	486	443	53	4	3	13	5	2	523
17:00	126	11	2	0	4	1	1	145	95	9	2	0	3	0	0	109
17:15	96	10	0	1	3	1	0	111	95	7	1	0	1	1	0	105
17:30	115	13	0	0	1	1	1	131	91	13	1	0	2	1	0	108
17:45	110	10	0	0	4	1	1	126	87	11	1	0	5	0	0	104
H/TOT	447	44	2	1	12	4	3	513	368	40	5	0	11	2	0	426
P/TOT	827	117	13	3	24	8	7	999	811	93	9	3	24	7	2	949



SITE: 2 DATE: 03/07/2019

LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	79	9	3	0	2	0	1	94	124	11	4	3	2	1	1	146
07:15	77	17	3	2	3	1	0	103	204	21	4	1	2	2	1	235
07:30	94	17	3	1	3	0	1	119	228	23	2	2	2	0	1	258
07:45	95	20	4	1	3	1	1	125	218	19	2	3	4	3	0	249
H/TOT	345	63	13	4	11	2	3	441	774	74	12	9	10	6	3	888
08:00	113	24	8	0	5	2	0	152	198	16	2	0	4	2	0	222
08:15	106	19	4	2	3	0	1	135	192	33	5	1	1	0	1	233
08:30	110	18	5	0	2	1	0	136	192	12	4	2	4	1	1	216
08:45	104	16	4	5	2	0	1	132	177	16	6	0	2	2	2	205
H/TOT	433	77	21	7	12	3	2	555	759	77	17	3	11	5	4	876
09:00	90	19	5	1	2	0	1	118	232	23	1	2	4	0	1	263
09:15	91	21	6	0	2	1	2	123	157	15	2	1	3	0	1	179
H/TOT	181	40	11	1	4	1	3	241	389	38	3	3	7	0	2	442
P/TOT	959	180	45	12	27	6	8	1237	1922	189	32	15	28	11	9	2206

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	165	21	0	1	7	1	0	195	126	26	4	2	4	3	1	166
16:15	170	18	2	1	3	1	0	195	132	25	3	0	4	1	1	166
16:30	170	17	1	0	1	1	2	192	136	21	1	0	2	0	2	162
16:45	187	16	1	1	4	3	1	213	118	23	5	0	2	0	0	148
H/TOT	692	72	4	3	15	6	3	795	512	95	13	2	12	4	4	642
17:00	164	12	2	0	3	0	0	181	151	12	2	0	4	1	1	171
17:15	172	12	1	0	1	1	0	187	124	13	1	1	3	1	0	143
17:30	158	22	1	0	2	2	0	185	151	15	0	0	1	1	2	170
17:45	160	16	1	0	5	0	0	182	146	12	0	0	4	1	1	164
H/TOT	654	62	5	0	11	3	0	735	572	52	3	1	12	4	4	648
P/TOT	1346	134	9	3	26	9	3	1530	1084	147	16	3	24	8	8	1290



SITE: 2 DATE: 03/07/2019

LOCATION: A676 Bolton St / Kay Brow DAY: Wednesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	32	2	1	0	0	0	0	35	14	1	0	0	0	0	0	15
07:15	74	5	2	0	0	0	0	81	10	1	1	0	0	0	0	12
07:30	70	7	0	1	0	0	0	78	21	1	2	0	0	0	0	24
07:45	56	7	0	0	1	0	1	65	18	2	0	0	0	0	0	20
H/TOT	232	21	3	1	1	0	1	259	63	5	3	0	0	0	0	71
08:00	49	3	1	0	0	0	0	53	36	5	4	0	1	0	0	46
08:15	54	2	2	0	0	0	0	58	37	4	0	0	0	0	0	41
08:30	63	3	1	0	1	1	0	69	31	5	0	0	0	1	0	37
08:45	55	5	1	0	0	0	0	61	40	2	0	1	0	0	0	43
H/TOT	221	13	5	0	1	1	0	241	144	16	4	1	1	1	0	167
09:00	99	7	0	0	0	0	0	106	11	4	0	0	0	0	0	15
09:15	63	5	0	0	0	0	0	68	21	4	3	0	0	0	0	28
H/TOT	162	12	0	0	0	0	0	174	32	8	3	0	0	0	0	43
P/TOT	615	46	8	1	2	1	1	674	239	29	10	1	1	1	0	281

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	32	6	0	0	0	0	0	38	63	4	0	0	2	0	0	69
16:15	37	7	1	0	0	0	0	45	61	6	0	0	0	1	0	68
16:30	31	6	0	0	0	0	0	37	59	7	0	0	0	0	1	67
16:45	37	4	1	0	0	0	0	42	71	3	0	0	0	0	0	74
H/TOT	137	23	2	0	0	0	0	162	254	20	0	0	2	1	1	278
17:00	27	1	0	0	0	0	0	28	71	3	0	0	0	0	0	74
17:15	29	3	1	0	0	0	0	33	78	5	0	0	0	0	0	83
17:30	36	3	0	0	0	0	1	40	67	10	0	0	0	1	0	78
17:45	37	2	0	0	0	0	0	39	74	5	0	0	0	0	0	79
H/TOT	129	9	1	0	0	0	1	140	290	23	0	0	0	1	0	314
P/TOT	266	32	3	0	0	0	1	302	544	43	0	0	2	2	1	592



SITE: 2

DATE: 03/07/2019

LOCATION: A676 Bolton St / Kay Brow

DAY: Wednesday

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	205	20	7	3	4	1	2	242
07:15	281	39	7	3	5	3	1	339
07:30	326	40	5	3	5	0	2	381
07:45	313	39	6	4	7	4	2	375
H/TOT	1125	138	25	13	21	8	7	1337
08:00	312	40	10	0	9	4	0	375
08:15	299	52	9	3	4	0	2	369
08:30	305	30	9	2	6	2	1	355
08:45	282	32	10	5	4	2	3	338
H/TOT	1198	154	38	10	23	8	6	1437
09:00	325	42	6	3	6	0	2	384
09:15	248	37	8	1	5	1	3	303
H/TOT	573	79	14	4	11	1	5	687
P/TOT	2896	371	77	27	55	17	18	3461

PEAK HOUR	
CALCULATION	TOT
07:00 to 08:00	1337
07:15 to 08:15	1470
07:30 to 08:30	1500
07:45 to 08:45	1474
08:00 to 09:00	1437
08:15 to 09:15	1446
08:30 to 09:30	1380
AM PEAK	1500

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	292	47	4	3	11	4	1	362
16:15	302	44	5	1	7	2	1	362
16:30	307	38	2	0	3	1	4	355
16:45	308	39	6	1	6	3	1	364
H/TOT	1209	168	17	5	27	10	7	1443
17:00	317	24	4	0	7	1	1	354
17:15	297	25	2	1	4	2	0	331
17:30	309	38	1	0	3	3	2	356
17:45	307	28	1	0	9	1	1	347
H/TOT	1230	115	8	1	23	7	4	1388
P/TOT	2439	283	25	6	50	17	11	2831

PEAK HOUR	
CALCULATION	TOT
16:00 to 17:00	1443
16:15 to 17:15	1435
16:30 to 17:30	1404
16:45 to 17:45	1405
17:00 to 18:00	1388
PM PEAK	1443



SITE: 3 DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Peel Brow DAY: Wednesday

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	60	14	1	1	1	1	2	80	4	3	1	0	0	0	0	8
07:15	101	20	1	3	2	2	0	129	13	0	0	0	0	0	0	13
07:30	116	10	3	1	1	0	0	131	7	2	0	2	0	0	0	11
07:45	100	15	1	5	1	2	1	125	12	1	0	0	1	0	0	14
H/TOT	377	59	6	10	5	5	3	465	36	6	1	2	1	0	0	46
08:00	85	19	0	6	1	1	0	112	9	0	0	0	1	0	0	10
08:15	86	13	0	2	1	1	2	105	18	2	1	1	0	0	0	22
08:30	83	9	6	2	1	0	0	101	19	3	0	0	0	0	0	22
08:45	81	5	2	3	1	0	2	94	21	2	0	1	0	0	0	24
H/TOT	335	46	8	13	4	2	4	412	67	7	1	2	1	0	0	78
09:00	74	13	1	5	1	1	2	97	10	0	1	0	0	0	0	11
09:15	58	11	5	3	1	2	0	80	6	2	0	1	0	0	0	9
H/TOT	132	24	6	8	2	3	2	177	16	2	1	1	0	0	0	20
P/TOT	844	129	20	31	11	10	9	1054	119	15	3	5	2	0	0	144

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	52	17	2	3	1	0	0	75	16	5	1	0	0	0	0	22
16:15	50	16	0	1	1	0	0	68	26	0	0	0	1	0	0	27
16:30	63	9	1	2	1	2	0	78	21	1	0	0	0	0	0	22
16:45	55	15	0	1	1	2	2	76	22	1	1	0	0	0	0	24
H/TOT	220	57	3	7	4	4	2	297	85	7	2	0	1	0	0	95
17:00	77	12	1	2	1	0	0	93	16	3	3	0	0	1	1	24
17:15	79	10	1	1	1	1	1	94	20	3	0	0	0	0	0	23
17:30	68	4	1	0	1	0	0	74	17	1	1	0	0	0	0	19
17:45	39	4	2	0	1	1	0	47	22	3	0	0	0	0	0	25
H/TOT	263	30	5	3	4	2	1	308	75	10	4	0	0	1	1	91
P/TOT	483	87	8	10	8	6	3	605	160	17	6	0	1	1	1	186



SITE: 3 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Peel Brow DAY: Wednesday

TIME	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	1	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1
P/TOT	0	0	1	0	0	0	0	1

TIME	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	2	0	0	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	2	0	0	0	0	0	0	2



SITE: 3

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Peel Brow

DAY: Wednesday

TIME	B to A							TOT	B to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	8	3	2	1	0	0	0	14	12	1	0	0	0	0	0	13
07:15	9	2	0	0	0	0	0	11	12	3	0	0	0	0	0	15
07:30	10	2	1	1	0	0	0	14	12	5	0	0	0	0	0	17
07:45	9	4	0	3	0	0	0	16	22	0	1	0	0	0	0	23
H/TOT	36	11	3	5	0	0	0	55	58	9	1	0	0	0	0	68
08:00	15	0	2	0	0	0	0	17	18	3	0	0	3	0	0	24
08:15	16	1	1	1	0	0	0	19	10	1	0	0	0	0	0	11
08:30	15	2	5	0	0	0	0	22	20	0	0	0	0	0	0	20
08:45	10	1	1	0	0	0	1	13	6	1	0	0	0	0	0	7
H/TOT	56	4	9	1	0	0	1	71	54	5	0	0	3	0	0	62
09:00	11	1	0	0	0	0	0	12	8	3	0	0	0	0	0	11
09:15	9	1	0	1	0	0	0	11	9	0	0	0	0	0	0	9
H/TOT	20	2	0	1	0	0	0	23	17	3	0	0	0	0	0	20
P/TOT	112	17	12	7	0	0	1	149	129	17	1	0	3	0	0	150

TIME	B to A							TOT	B to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	18	3	0	0	0	0	0	21	2	0	1	0	0	0	0	3
16:15	10	2	1	0	0	1	0	14	8	2	0	0	0	0	0	10
16:30	32	2	0	0	0	0	0	34	7	3	0	0	0	0	1	11
16:45	19	1	0	0	1	0	0	21	6	0	1	0	0	0	0	7
H/TOT	79	8	1	0	1	1	0	90	23	5	2	0	0	0	1	31
17:00	31	1	0	0	0	0	0	32	6	1	0	0	0	0	0	7
17:15	22	5	0	0	0	0	1	28	8	1	0	0	0	0	0	9
17:30	20	4	0	0	0	1	0	25	1	0	0	0	0	0	0	1
17:45	17	1	0	0	0	0	0	18	5	0	0	0	0	0	0	5
H/TOT	90	11	0	0	0	1	1	103	20	2	0	0	0	0	0	22
P/TOT	169	19	1	0	1	2	1	193	43	7	2	0	0	0	1	53



SITE: 3 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Peel Brow DAY: Wednesday

TIME	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0



SITE: 3 DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Peel Brow DAY: Wednesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	1	0	0	0	0	0	0	1	23	5	2	0	1	0	2	33
07:15	2	1	1	0	0	0	0	4	24	7	1	4	0	1	0	37
07:30	0	0	0	0	0	0	0	0	51	8	5	5	1	0	0	70
07:45	1	2	0	0	0	0	0	3	33	15	0	2	1	4	0	55
H/TOT	4	3	1	0	0	0	0	8	131	35	8	11	3	5	2	195
08:00	3	1	1	0	0	0	0	5	57	8	3	2	1	1	0	72
08:15	4	0	0	0	0	0	0	4	44	6	2	3	1	0	1	57
08:30	5	2	0	0	0	0	0	7	44	7	0	3	1	0	0	55
08:45	2	0	0	1	0	0	0	3	42	14	2	2	1	0	0	61
H/TOT	14	3	1	1	0	0	0	19	187	35	7	10	4	1	1	245
09:00	4	1	0	0	0	0	0	5	35	11	2	5	1	0	0	54
09:15	4	1	0	0	0	0	0	5	23	6	3	2	2	0	0	36
H/TOT	8	2	0	0	0	0	0	10	58	17	5	7	3	0	0	90
P/TOT	26	8	2	1	0	0	0	37	376	87	20	28	10	6	3	530

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	8	3	0	0	0	0	0	11	74	7	2	1	2	0	0	86
16:15	8	2	0	0	0	0	0	10	87	13	2	1	1	1	1	106
16:30	15	2	0	0	0	0	0	17	79	11	1	4	2	0	4	101
16:45	11	3	0	0	0	0	0	14	101	8	1	0	1	3	2	116
H/TOT	42	10	0	0	0	0	0	52	341	39	6	6	6	4	7	409
17:00	14	3	0	0	0	0	0	17	113	10	1	2	1	1	2	130
17:15	8	2	0	0	0	0	0	10	125	13	2	0	1	1	1	143
17:30	6	2	0	0	0	0	0	8	97	11	0	0	1	1	3	113
17:45	8	0	0	0	0	0	0	8	107	13	2	2	1	0	1	126
H/TOT	36	7	0	0	0	0	0	43	442	47	5	4	4	3	7	512
P/TOT	78	17	0	0	0	0	0	95	783	86	11	10	10	7	14	921



SITE: 3 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Peel Brow DAY: Wednesday

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	1	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1



SITE: 3 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Peel Brow DAY: Wednesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	31	8	4	1	1	0	2	47	64	17	2	1	1	1	2	88
07:15	33	9	1	4	0	1	0	48	114	20	1	3	2	2	0	142
07:30	61	10	6	6	1	0	0	84	123	12	3	3	1	0	0	142
07:45	42	19	0	5	1	4	0	71	112	16	1	5	2	2	1	139
H/TOT	167	46	11	16	3	5	2	250	413	65	7	12	6	5	3	511
08:00	72	8	5	2	1	1	0	89	94	19	0	6	2	1	0	122
08:15	60	7	3	4	1	0	1	76	104	15	1	3	1	1	2	127
08:30	59	9	5	3	1	0	0	77	102	12	6	2	1	0	0	123
08:45	52	15	3	2	1	0	1	74	102	7	2	4	1	0	2	118
H/TOT	243	39	16	11	4	1	2	316	402	53	9	15	5	2	4	490
09:00	46	12	3	5	1	0	0	67	84	13	3	5	1	1	2	109
09:15	32	7	3	3	2	0	0	47	64	13	5	4	1	2	0	89
H/TOT	78	19	6	8	3	0	0	114	148	26	8	9	2	3	2	198
P/TOT	488	104	33	35	10	6	4	680	963	144	24	36	13	10	9	1199

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	94	10	2	1	2	0	0	109	70	22	3	3	1	0	0	99
16:15	97	15	3	1	1	2	1	120	76	16	0	1	2	0	0	95
16:30	111	13	1	4	2	0	4	135	84	10	1	2	1	2	0	100
16:45	120	9	1	0	2	3	2	137	77	16	1	1	1	2	2	100
H/TOT	422	47	7	6	7	5	7	501	307	64	5	7	5	4	2	394
17:00	144	11	1	2	1	1	2	162	93	15	4	2	1	1	1	117
17:15	147	18	2	0	1	1	2	171	99	13	1	1	1	1	1	117
17:30	117	15	0	0	1	2	3	138	85	5	2	0	1	0	0	93
17:45	124	14	2	2	1	0	1	144	61	7	2	0	1	1	0	72
H/TOT	532	58	5	4	4	4	8	615	338	40	9	3	4	3	2	399
P/TOT	954	105	12	10	11	9	15	1116	645	104	14	10	9	7	4	793



SITE: 3

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Peel Brow

DAY: Wednesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	5	3	1	0	0	0	0	9	20	4	2	1	0	0	0	27
07:15	15	1	1	0	0	0	0	17	21	5	0	0	0	0	0	26
07:30	7	2	0	2	0	0	0	11	22	7	1	1	0	0	0	31
07:45	13	3	0	0	1	0	0	17	31	4	1	3	0	0	0	39
H/TOT	40	9	2	2	1	0	0	54	94	20	4	5	0	0	0	123
08:00	12	1	1	0	1	0	0	15	33	3	2	0	3	0	0	41
08:15	22	2	1	1	0	0	0	26	26	2	1	1	0	0	0	30
08:30	24	5	0	0	0	0	0	29	35	2	5	0	0	0	0	42
08:45	23	2	0	2	0	0	0	27	16	2	1	0	0	0	1	20
H/TOT	81	10	2	3	1	0	0	97	110	9	9	1	3	0	1	133
09:00	14	1	1	0	0	0	0	16	19	4	0	0	0	0	0	23
09:15	10	3	0	1	0	0	0	14	18	1	0	1	0	0	0	20
H/TOT	24	4	1	1	0	0	0	30	37	5	0	1	0	0	0	43
P/TOT	145	23	5	6	2	0	0	181	241	34	13	7	3	0	1	299

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	24	8	1	0	0	0	0	33	20	3	1	0	0	0	0	24
16:15	34	2	0	0	1	0	0	37	18	4	1	0	0	1	0	24
16:30	36	3	0	0	0	0	0	39	39	5	0	0	0	0	1	45
16:45	33	4	1	0	0	0	0	38	25	1	1	0	1	0	0	28
H/TOT	127	17	2	0	1	0	0	147	102	13	3	0	1	1	1	121
17:00	30	6	3	0	0	1	1	41	37	2	0	0	0	0	0	39
17:15	28	5	0	0	0	0	0	33	30	6	0	0	0	0	1	37
17:30	23	3	1	0	0	0	0	27	21	4	0	0	0	1	0	26
17:45	30	3	0	0	0	0	0	33	22	1	0	0	0	0	0	23
H/TOT	111	17	4	0	0	1	1	134	110	13	0	0	0	1	1	125
P/TOT	238	34	6	0	1	1	1	281	212	26	3	0	1	2	2	246



SITE: 3

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Peel Brow

DAY: Wednesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	72	15	1	1	1	1	2	93	24	5	2	0	1	0	2	34
07:15	113	23	1	3	2	2	0	144	26	8	2	4	0	1	0	41
07:30	128	15	3	1	1	0	0	148	51	8	5	5	1	0	0	70
07:45	122	15	2	5	1	2	1	148	34	17	0	2	1	4	0	58
H/TOT	435	68	7	10	5	5	3	533	135	38	9	11	3	5	2	203
08:00	103	22	0	6	4	1	0	136	60	9	4	2	1	1	0	77
08:15	96	14	0	2	1	1	2	116	48	6	2	3	1	0	1	61
08:30	103	9	6	2	1	0	0	121	49	9	0	3	1	0	0	62
08:45	88	6	2	3	1	0	2	102	45	14	2	3	1	0	0	65
H/TOT	390	51	8	13	7	2	4	475	202	38	8	11	4	1	1	265
09:00	82	16	1	5	1	1	2	108	39	12	2	5	1	0	0	59
09:15	67	11	5	3	1	2	0	89	27	7	3	2	2	0	0	41
H/TOT	149	27	6	8	2	3	2	197	66	19	5	7	3	0	0	100
P/TOT	974	146	21	31	14	10	9	1205	403	95	22	29	10	6	3	568

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	55	17	3	3	1	0	0	79	83	10	2	1	2	0	0	98
16:15	58	18	0	1	1	0	0	78	95	15	2	1	1	1	1	116
16:30	70	12	1	2	1	2	1	89	94	13	1	4	2	0	4	118
16:45	61	15	1	1	1	2	2	83	112	11	1	0	1	3	2	130
H/TOT	244	62	5	7	4	4	3	329	384	49	6	6	6	4	7	462
17:00	83	13	1	2	1	0	0	100	127	13	1	2	1	1	2	147
17:15	87	11	1	1	1	1	1	103	133	15	2	0	1	1	1	153
17:30	69	4	1	0	1	0	0	75	103	13	0	0	1	1	3	121
17:45	44	4	2	0	1	1	0	52	115	13	2	2	1	0	1	134
H/TOT	283	32	5	3	4	2	1	330	478	54	5	4	4	3	7	555
P/TOT	527	94	10	10	8	6	4	659	862	103	11	10	10	7	14	1017



SITE: 3

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Peel Brow

DAY: Wednesday

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	108	26	6	2	2	1	4	149
07:15	161	33	3	7	2	3	0	209
07:30	196	27	9	9	2	0	0	243
07:45	177	37	2	10	3	6	1	236
H/TOT	642	123	20	28	9	10	5	837
08:00	187	31	6	8	6	2	0	240
08:15	178	23	4	7	2	1	3	218
08:30	186	23	11	5	2	0	0	227
08:45	163	23	5	7	2	0	3	203
H/TOT	714	100	26	27	12	3	6	888
09:00	142	29	5	10	2	1	2	191
09:15	109	21	8	7	3	2	0	150
H/TOT	251	50	13	17	5	3	2	341
P/TOT	1607	273	59	72	26	16	13	2066

PEAK HOUR	
CALCULATION	TOT
07:00 to 08:00	837
07:15 to 08:15	928
07:30 to 08:30	937
07:45 to 08:45	921
08:00 to 09:00	888
08:15 to 09:15	839
08:30 to 09:30	771
AM PEAK	937

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	173	35	6	4	3	0	0	221
16:15	189	35	3	2	3	2	1	235
16:30	217	28	2	6	3	2	5	263
16:45	214	28	3	1	3	5	4	258
H/TOT	793	126	14	13	12	9	10	977
17:00	257	30	5	4	2	2	3	303
17:15	262	34	3	1	2	2	3	307
17:30	209	22	2	0	2	2	3	240
17:45	198	21	4	2	2	1	1	229
H/TOT	926	107	14	7	8	7	10	1079
P/TOT	1719	233	28	20	20	16	20	2056

PEAK HOUR	
CALCULATION	TOT
16:00 to 17:00	977
16:15 to 17:15	1059
16:30 to 17:30	1131
16:45 to 17:45	1108
17:00 to 18:00	1079
PM PEAK	1131



SITE: 4

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd

DAY: Wednesday

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	73	15	2	2	1	1	2	96
07:15	0	0	0	0	0	0	0	0	102	21	1	8	2	2	0	136
07:30	0	0	0	0	0	0	0	0	119	14	3	6	1	0	0	143
07:45	0	0	0	0	0	0	0	0	118	9	3	5	1	2	1	139
H/TOT	0	0	0	0	0	0	0	0	412	59	9	21	5	5	3	514
08:00	0	0	0	0	0	0	0	0	108	27	0	10	4	1	0	150
08:15	0	0	0	0	0	0	0	0	98	14	1	7	1	1	1	123
08:30	0	0	0	0	0	0	0	0	99	7	5	4	1	0	1	117
08:45	0	0	0	0	0	0	0	0	89	7	2	10	1	0	0	109
H/TOT	0	0	0	0	0	0	0	0	394	55	8	31	7	2	2	499
09:00	0	0	0	0	0	0	0	0	86	16	1	12	1	1	1	118
09:15	0	0	0	0	0	0	0	0	69	9	4	12	1	2	0	97
H/TOT	0	0	0	0	0	0	0	0	155	25	5	24	2	3	1	215
P/TOT	0	0	0	0	0	0	0	0	961	139	22	76	14	10	6	1228

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	1	0	1	61	14	2	5	1	0	0	83
16:15	0	0	0	0	0	0	0	0	61	18	0	2	1	0	0	82
16:30	0	0	0	0	0	0	0	0	69	10	1	3	1	2	1	87
16:45	0	0	0	0	0	0	0	0	66	16	1	3	1	3	1	91
H/TOT	0	0	0	0	0	1	0	1	257	58	4	13	4	5	2	343
17:00	0	0	0	0	0	0	0	0	88	12	1	0	1	0	0	102
17:15	0	0	0	0	0	0	0	0	80	8	0	2	1	1	1	93
17:30	0	0	0	0	0	0	0	0	75	4	1	0	1	0	0	81
17:45	0	0	0	0	0	0	0	0	54	2	3	0	1	1	0	61
H/TOT	0	0	0	0	0	0	0	0	297	26	5	2	4	2	1	337
P/TOT	0	0	0	0	0	1	0	1	554	84	9	15	8	7	3	680



SITE: 4

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd

DAY: Wednesday

TIME	A to B							TOT	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0

TIME	A to B							TOT	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
17:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0



SITE: 4

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd

DAY: Wednesday

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	1	1	0	0	0	0	1	3	0	0	0	0	0	0	0	0
07:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:30	2	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0
07:45	1	2	0	1	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	5	3	0	2	0	0	1	11	0	0	0	0	0	0	0	0
08:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:45	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
09:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
09:15	1	1	0	1	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	4	1	0	1	0	0	0	6	0	0	0	0	0	0	0	0
P/TOT	15	5	0	3	0	0	1	24	0	0	0	0	0	0	0	0

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:15	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
16:30	2	1	0	1	1	0	0	5	0	0	0	0	0	0	0	0
16:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	11	2	0	1	1	0	0	15	0	0	0	0	0	0	0	0
17:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:30	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
17:45	5	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0
H/TOT	16	0	0	0	0	0	1	17	0	0	0	0	0	0	0	0
P/TOT	27	2	0	1	1	0	1	32	0	0	0	0	0	0	0	0



SITE: 4 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	123	14	1	2	1	3	0	144	0	0	0	0	0	0	0	0
07:15	122	6	1	1	2	1	0	133	0	0	0	0	0	0	0	0
07:30	144	16	0	1	1	1	1	164	0	0	0	0	0	0	0	0
07:45	170	9	2	3	2	1	0	187	0	0	0	0	0	0	0	0
H/TOT	559	45	4	7	6	6	1	628	0	0	0	0	0	0	0	0
08:00	126	7	4	5	0	3	0	145	0	0	0	0	0	0	0	0
08:15	110	17	14	3	1	0	0	145	0	0	0	0	0	0	0	0
08:30	128	13	5	1	3	0	0	150	0	0	0	0	0	0	0	0
08:45	95	4	4	0	4	1	0	108	0	0	0	0	0	0	0	0
H/TOT	459	41	27	9	8	4	0	548	0	0	0	0	0	0	0	0
09:00	118	11	0	0	1	0	0	130	0	0	0	0	0	0	0	0
09:15	77	8	0	2	3	0	0	90	0	0	0	0	0	0	0	0
H/TOT	195	19	0	2	4	0	0	220	0	0	0	0	0	0	0	0
P/TOT	1213	105	31	18	18	10	1	1396	0	0	0	0	0	0	0	0

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	63	26	0	2	2	0	0	93	0	0	0	0	0	0	0	0
16:15	37	12	1	2	1	0	0	53	0	0	0	0	0	0	0	0
16:30	62	6	1	1	2	0	0	72	0	0	0	0	0	0	0	0
16:45	46	8	1	0	0	1	0	56	0	0	0	0	0	0	0	0
H/TOT	208	52	3	5	5	1	0	274	0	0	0	0	0	0	0	0
17:00	71	7	0	3	3	0	0	84	0	0	0	0	0	0	0	0
17:15	59	6	1	1	1	2	0	70	0	0	0	0	0	0	0	0
17:30	51	6	0	3	1	0	0	61	0	0	0	0	0	0	0	0
17:45	45	4	1	0	2	0	0	52	0	0	0	0	0	0	0	0
H/TOT	226	23	2	7	7	2	0	267	0	0	0	0	0	0	0	0
P/TOT	434	75	5	12	12	3	0	541	0	0	0	0	0	0	0	0



SITE: 4 DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	18	12	3	2	3	0	0	38	24	7	2	3	1	0	1	38
07:15	22	7	3	2	1	0	0	35	40	6	2	12	0	1	0	61
07:30	29	5	1	1	2	0	0	38	44	9	5	7	1	4	0	70
07:45	19	7	2	2	1	1	0	32	29	11	0	8	1	0	0	49
H/TOT	88	31	9	7	7	1	0	143	137	33	9	30	3	5	1	218
08:00	52	14	1	2	3	0	0	72	61	6	4	5	1	1	0	78
08:15	46	14	3	1	1	0	0	65	52	9	2	4	1	0	1	69
08:30	51	8	3	1	2	0	0	65	49	12	0	12	1	0	0	74
08:45	63	12	3	5	1	0	0	84	34	10	2	4	1	0	0	51
H/TOT	212	48	10	9	7	0	0	286	196	37	8	25	4	1	1	272
09:00	48	12	3	2	1	0	0	66	43	11	4	11	1	0	0	70
09:15	29	12	1	2	2	0	1	47	24	6	3	8	2	0	0	43
H/TOT	77	24	4	4	3	0	1	113	67	17	7	19	3	0	0	113
P/TOT	377	103	23	20	17	1	1	542	400	87	24	74	10	6	2	603

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	93	11	0	2	1	1	0	108	76	9	2	4	2	0	0	93
16:15	120	12	4	1	1	2	0	140	93	16	2	4	1	1	1	118
16:30	114	11	3	4	2	1	0	135	81	11	1	4	1	0	4	102
16:45	116	7	4	2	2	0	0	131	105	10	1	4	1	3	4	128
H/TOT	443	41	11	9	6	4	0	514	355	46	6	16	5	4	9	441
17:00	122	10	2	0	1	0	0	135	118	12	0	2	0	2	1	135
17:15	125	18	7	0	1	1	0	152	127	13	2	3	1	1	1	148
17:30	144	15	5	0	3	1	1	169	100	13	0	4	0	1	2	120
17:45	135	9	4	2	2	0	1	153	106	12	3	2	1	0	1	125
H/TOT	526	52	18	2	7	2	2	609	451	50	5	11	2	4	5	528
P/TOT	969	93	29	11	13	6	2	1123	806	96	11	27	7	8	14	969



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DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd

DAY: Wednesday

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SITE: 4 DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0



SITE: 4 DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SITE: 4 DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	25	8	2	3	1	0	2	41	73	15	2	2	1	1	2	96
07:15	41	6	2	12	0	1	0	62	102	21	1	8	2	2	0	136
07:30	46	9	5	8	1	4	0	73	119	14	3	6	1	0	0	143
07:45	30	13	0	9	1	0	0	53	118	9	3	5	1	2	1	139
H/TOT	142	36	9	32	3	5	2	229	412	59	9	21	5	5	3	514
08:00	62	6	4	5	1	1	0	79	108	27	0	10	4	1	0	150
08:15	52	9	2	4	1	0	1	69	98	14	1	7	1	1	1	123
08:30	50	12	0	12	1	0	0	75	99	7	5	4	1	0	2	118
08:45	38	11	2	4	1	0	0	56	89	7	2	10	1	0	0	109
H/TOT	202	38	8	25	4	1	1	279	394	55	8	31	7	2	3	500
09:00	46	11	4	11	1	0	0	73	86	16	1	12	1	1	1	118
09:15	25	7	3	9	2	0	0	46	69	9	4	12	1	2	0	97
H/TOT	71	18	7	20	3	0	0	119	155	25	5	24	2	3	1	215
P/TOT	415	92	24	77	10	6	3	627	961	139	22	76	14	10	7	1229

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	77	9	2	4	2	0	0	94	61	14	2	5	1	1	0	84
16:15	99	17	2	4	1	1	1	125	61	18	0	2	1	0	0	82
16:30	83	12	1	5	2	0	4	107	69	10	1	3	1	2	1	87
16:45	107	10	1	4	1	3	4	130	66	16	1	3	1	3	2	92
H/TOT	366	48	6	17	6	4	9	456	257	58	4	13	4	6	3	345
17:00	120	12	0	2	0	2	1	137	89	12	1	0	1	0	0	103
17:15	129	13	2	3	1	1	1	150	80	8	0	2	1	1	1	93
17:30	107	13	0	4	0	1	2	127	75	4	1	0	1	0	0	81
17:45	111	12	3	2	1	0	2	131	54	2	3	0	1	1	0	61
H/TOT	467	50	5	11	2	4	6	545	298	26	5	2	4	2	1	338
P/TOT	833	98	11	28	8	8	15	1001	555	84	9	15	8	8	4	683



SITE: 4 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	18	12	3	2	3	0	0	38	124	15	1	2	1	3	1	147
07:15	22	7	3	2	1	0	0	35	123	6	1	1	2	1	0	134
07:30	29	5	1	1	2	0	0	38	146	16	0	2	1	1	1	167
07:45	19	7	2	2	1	1	0	32	171	11	2	4	2	1	0	191
H/TOT	88	31	9	7	7	1	0	143	564	48	4	9	6	6	2	639
08:00	52	14	1	2	3	0	0	72	127	7	4	5	0	3	0	146
08:15	46	14	3	1	1	0	0	65	110	17	14	3	1	0	0	145
08:30	51	8	3	1	2	0	1	66	129	13	5	1	3	0	0	151
08:45	63	12	3	5	1	0	0	84	99	5	4	0	4	1	0	113
H/TOT	212	48	10	9	7	0	1	287	465	42	27	9	8	4	0	555
09:00	48	12	3	2	1	0	0	66	121	11	0	0	1	0	0	133
09:15	29	12	1	2	2	0	1	47	78	9	0	3	3	0	0	93
H/TOT	77	24	4	4	3	0	1	113	199	20	0	3	4	0	0	226
P/TOT	377	103	23	20	17	1	2	543	1228	110	31	21	18	10	2	1420

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	93	11	0	2	1	1	0	108	64	26	0	2	2	0	0	94
16:15	120	12	4	1	1	2	0	140	43	13	1	2	1	0	0	60
16:30	114	11	3	4	2	1	0	135	64	7	1	2	3	0	0	77
16:45	116	7	4	2	2	0	1	132	48	8	1	0	0	1	0	58
H/TOT	443	41	11	9	6	4	1	515	219	54	3	6	6	1	0	289
17:00	123	10	2	0	1	0	0	136	73	7	0	3	3	0	0	86
17:15	125	18	7	0	1	1	0	152	61	6	1	1	1	2	0	72
17:30	144	15	5	0	3	1	1	169	58	6	0	3	1	0	0	68
17:45	135	9	4	2	2	0	1	153	50	4	1	0	2	0	1	58
H/TOT	527	52	18	2	7	2	2	610	242	23	2	7	7	2	1	284
P/TOT	970	93	29	11	13	6	3	1125	461	77	5	13	13	3	1	573



SITE: 4 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	196	29	3	4	2	4	2	240	42	19	5	5	4	0	1	76
07:15	224	27	2	9	4	3	0	269	62	13	5	14	1	1	0	96
07:30	263	30	3	7	2	1	1	307	73	14	6	8	3	4	0	108
07:45	288	18	5	8	3	3	1	326	48	18	2	10	2	1	0	81
H/TOT	971	104	13	28	11	11	4	1142	225	64	18	37	10	6	1	361
08:00	234	34	4	15	4	4	0	295	113	20	5	7	4	1	0	150
08:15	208	31	15	10	2	1	1	268	98	23	5	5	2	0	1	134
08:30	227	20	10	5	4	0	1	267	100	20	3	13	3	0	0	139
08:45	184	11	6	10	5	1	0	217	97	22	5	9	2	0	0	135
H/TOT	853	96	35	40	15	6	2	1047	408	85	18	34	11	1	1	558
09:00	204	27	1	12	2	1	1	248	91	23	7	13	2	0	0	136
09:15	146	17	4	14	4	2	0	187	53	18	4	10	4	0	1	90
H/TOT	350	44	5	26	6	3	1	435	144	41	11	23	6	0	1	226
P/TOT	2174	244	53	94	32	20	7	2624	777	190	47	94	27	7	3	1145

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	124	40	2	7	3	0	0	176	169	20	2	6	3	1	0	201
16:15	98	31	1	4	2	0	0	136	213	28	6	5	2	3	1	258
16:30	131	16	2	4	3	2	1	159	195	22	4	8	3	1	4	237
16:45	112	24	2	3	1	4	1	147	221	17	5	6	3	3	4	259
H/TOT	465	111	7	18	9	6	2	618	798	87	17	25	11	8	9	955
17:00	159	19	1	3	4	0	0	186	240	22	2	2	1	2	1	270
17:15	139	14	1	3	2	3	1	163	252	31	9	3	2	2	1	300
17:30	126	10	1	3	2	0	0	142	244	28	5	4	3	2	3	289
17:45	99	6	4	0	3	1	0	113	241	21	7	4	3	0	2	278
H/TOT	523	49	7	9	11	4	1	604	977	102	23	13	9	6	7	1137
P/TOT	988	160	14	27	20	10	3	1222	1775	189	40	38	20	14	16	2092



SITE: 4 DATE: 03/07/2019
LOCATION: A56 Manchester Rd / Bury New Rd DAY: Wednesday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1



SITE: 4

DATE: 03/07/2019

LOCATION: A56 Manchester Rd / Bury New Rd

DAY: Wednesday

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	239	49	8	9	6	4	4	319
07:15	287	40	7	23	5	4	0	366
07:30	338	44	9	16	5	5	1	418
07:45	337	38	7	19	5	4	1	411
H/TOT	1201	171	31	67	21	17	6	1514
08:00	348	54	9	22	8	5	0	446
08:15	306	54	20	15	4	1	2	402
08:30	328	40	13	18	7	0	2	408
08:45	285	34	11	19	7	1	0	357
H/TOT	1267	182	53	74	26	7	4	1613
09:00	298	50	8	25	4	1	1	387
09:15	200	36	8	25	8	2	1	280
H/TOT	498	86	16	50	12	3	2	667
P/TOT	2966	439	100	191	59	27	12	3794

PEAK HOUR	
CALCULATION	TOT
07:00 to 08:00	1514
07:15 to 08:15	1641
07:30 to 08:30	1677
07:45 to 08:45	1667
08:00 to 09:00	1613
08:15 to 09:15	1554
08:30 to 09:30	1432
AM PEAK	1677

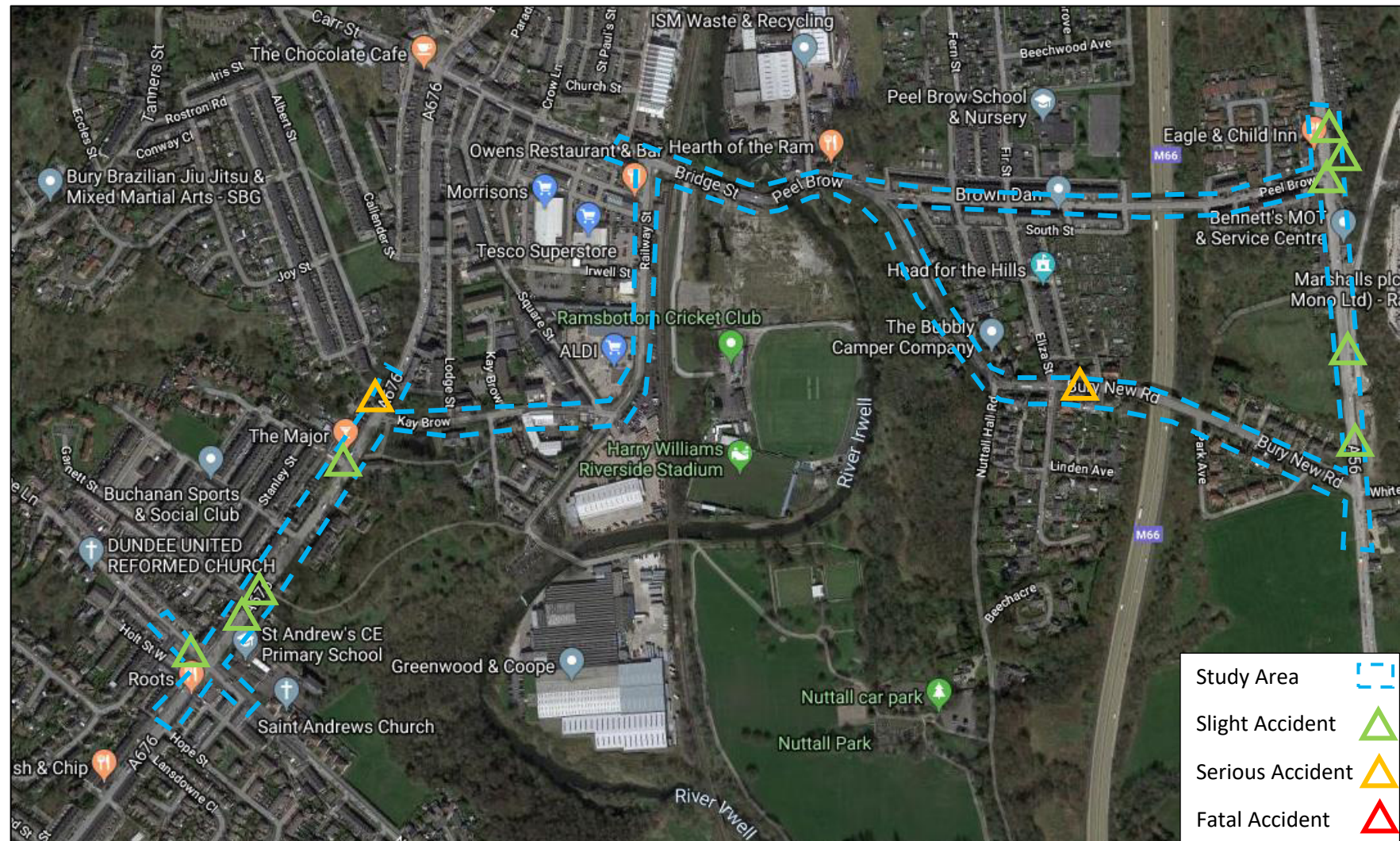
TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	294	60	4	13	6	2	0	379
16:15	317	60	7	9	4	3	1	401
16:30	328	39	6	13	7	3	5	401
16:45	335	41	7	9	4	7	6	409
H/TOT	1274	200	24	44	21	15	12	1590
17:00	402	41	3	5	5	2	1	459
17:15	393	45	10	6	4	5	2	465
17:30	377	38	6	7	5	2	3	438
17:45	345	27	11	4	6	1	3	397
H/TOT	1517	151	30	22	20	10	9	1759
P/TOT	2791	351	54	66	41	25	21	3349

PEAK HOUR	
CALCULATION	TOT
16:00 to 17:00	1590
16:15 to 17:15	1670
16:30 to 17:30	1734
16:45 to 17:45	1771
17:00 to 18:00	1759
PM PEAK	1771

S|C|P

APPENDIX B

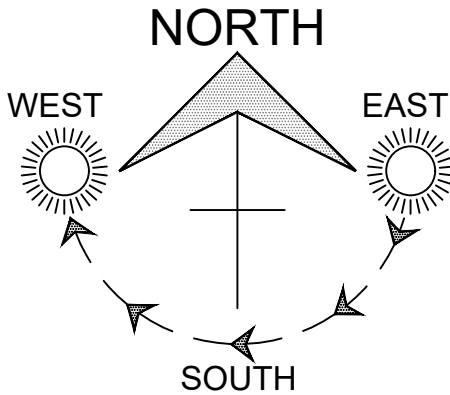
5-Year Road Safety Record – TA Study Area



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APPENDIX C

SCHEDULE OF ACCOMMODATION					
WHEELTON	2 BED SEMI HOUSE	636sqft	1	636sqft	
EDENFIELD	2 BED SEMI HOUSE	636sqft	1	636sqft	
DELAWARE	3 BED SEMI HOUSE	940sqft	8	7520sqft	
GAYTON	3 BED SEMI/DETS	1037sqft	7	7259sqft	
LYTHAM	3 BED SEMI/DET HOUSE	1108sqft	16	17728sqft	
WHALLEY	4 BED DETACHED HOUSE	1152sqft	4	4608sqft	
BUCKLEY	4 BED DETACHED HOUSE	1281sqft	4	5124sqft	
HARTFORD	4 BED DETACHED HOUSE	1281sqft	1	1281sqft	
PLUMLEY	4 BED DETACHED HOUSE	1373sqft	2	2746sqft	
HAIGH	4 BED DETACHED HOUSE	1468sqft	8	11744sqft	
WILLASTON	4 BED DETACHED HOUSE	1479sqft	2	2958sqft	
FORMBY	4 BED DETACHED HOUSE	1567sqft	3	4701sqft	
TOTAL			57	66861sqft	
GROSS SITE AREA:		7.10 Acres			
LANDSCAPE BUFFER:		0.14 Acres			
POS AREA:		1.43 Acres			
CULVERTS & ACCESS TO CRICKET CLUB:		0.43 Acres			
CAR PARK & SUB STATION:		0.49 Acres			
NETT SITE AREA:		4.61 Acres			
GROSS DENSITY:		8.03 Units/Acre			
NETT DENSITY:		12.36 Units/Acre			
TOTAL FOOTAGE:		66861 Sqft			
GROSS FOOTAGE:		9417 Sqft/Acre			
NETT FOOTAGE:		14503 Sqft/Acre			
NOTE:					
47no. PARKING SPACES TO BE PROVIDED.					

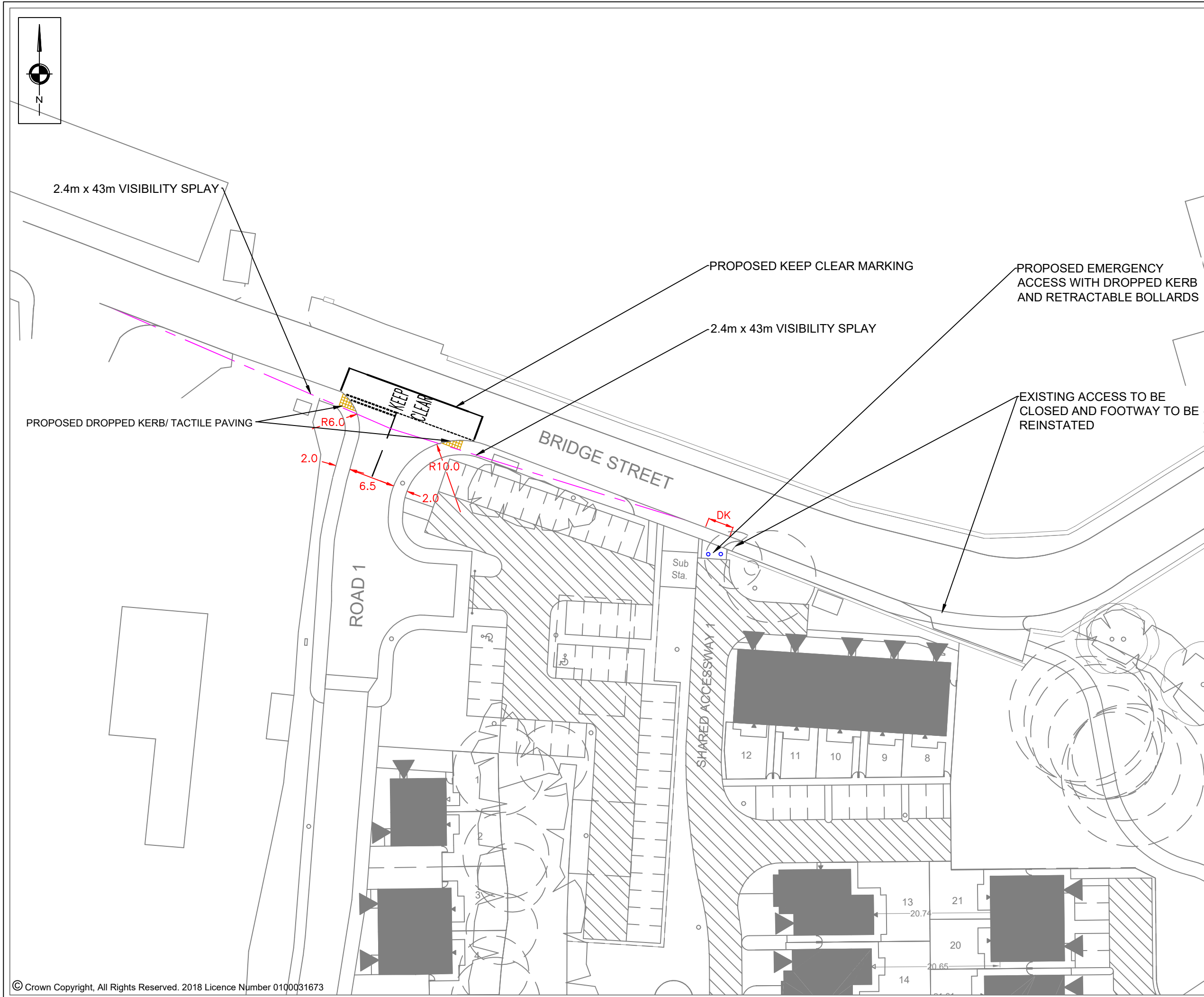


P	LAYOUT UPDATED.	JSM	13.10.23
O	LAYOUT COMPLETED.	JSM	02.10.23
N	MIX UPDATED.	JSM	15.09.23
M	LAYOUT & MIX UPDATED.	JSM	03.03.23
L	CAR PARK INCREASED.	JSM	23.03.22
K	CAR PARK, MODELS AND PLOTS UPDATED.	JSM	14.03.22
J	AFFORDABLE HOUSING UNITS INDICATED.	JSM	30.03.22
I	AFFORDABLE HOUSING UNITS INDICATED.	JSM	29.03.22
H	SUB STATION INDICATED.	JSM	29.10.21
G	UPDATED TO LA COMMENTS.	JSM	05.05.21
F	UPDATED TO LA COMMENTS.	JSM	05.05.21
E	PLOT NUMBERS ADDED TO EXISTING BUILDINGS.	JSM	24.08.20
D	ROADS UPDATED TO VEHICLE TRACKING.	JSM	10.08.20
C	LAYOUT UPDATED.	JSM	14.07.20
B	EXISTING BUILDINGS UPDATED.	JSM	08.07.20
A	LAYOUT REDRAWN.	JSM	03.06.20

REV	DESCRIPTION	INT	DATE
PROJECT			
HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM			
DRAWING TITLE			
PLANNING LAYOUT			
JOB NUMBER	-	REV	P
DRAWING NUMBER	102	SCALE	A1
DRAWN	JSM	04.11.19	1:500
CHECKED	-	-	-

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APPENDIX D



REVISONS			
REV	DESCRIPTION	DATE	BY
A	-NEW SITE LAYOUT UNDERLAID	12.10.23	LD
B	-NEW SITE LAYOUT UNDERLAID	20.10.23	LD



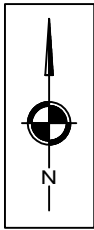
Transportation Planning | Infrastructure Design

Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400,
www.scptransport.co.uk, Email info@scptransport.co.uk

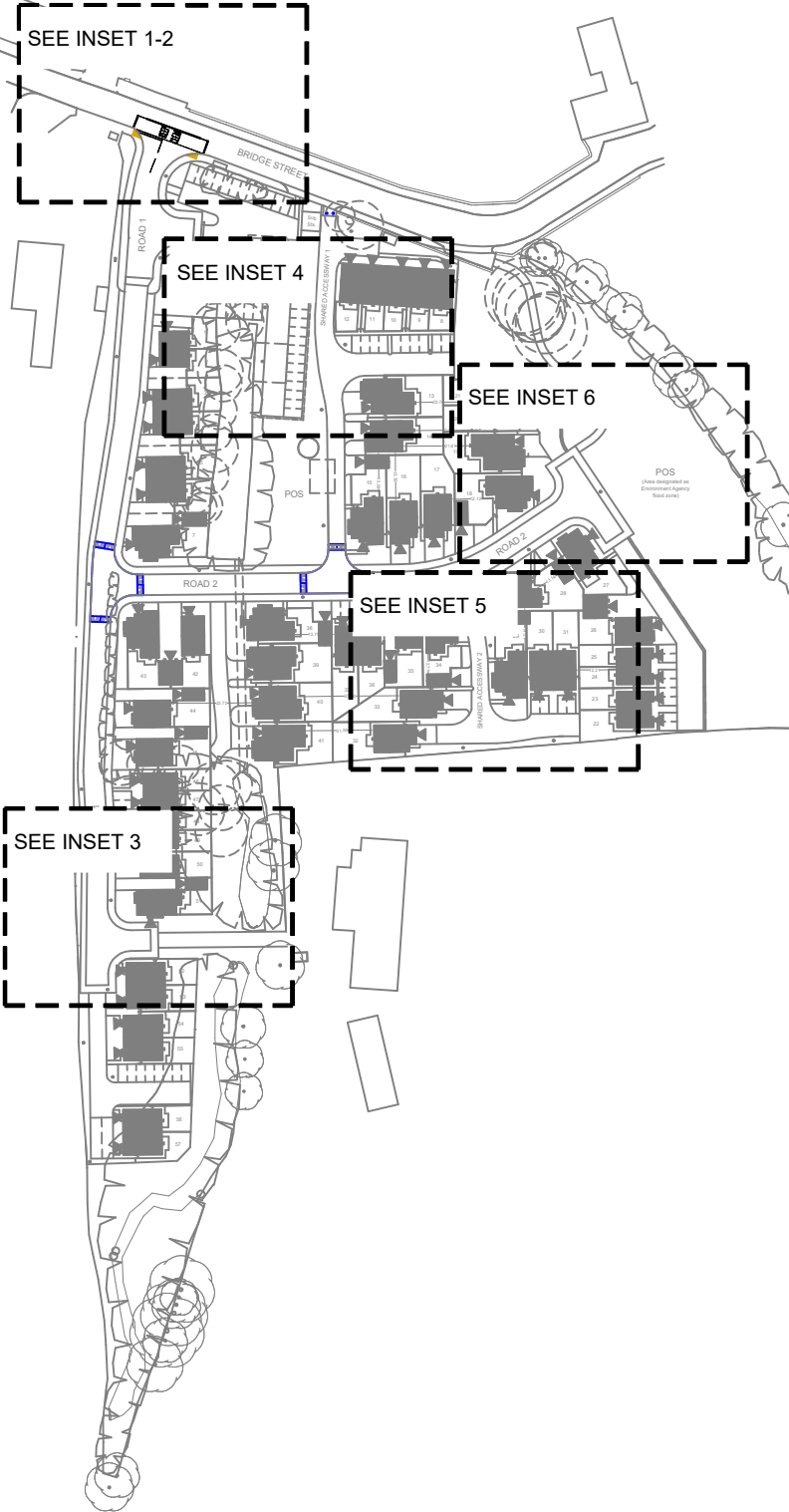
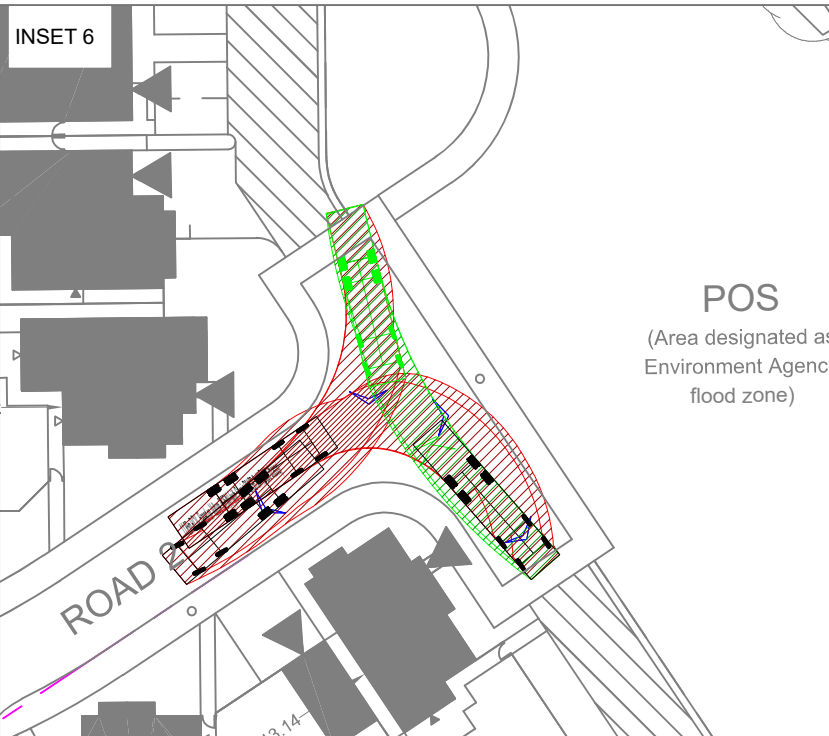
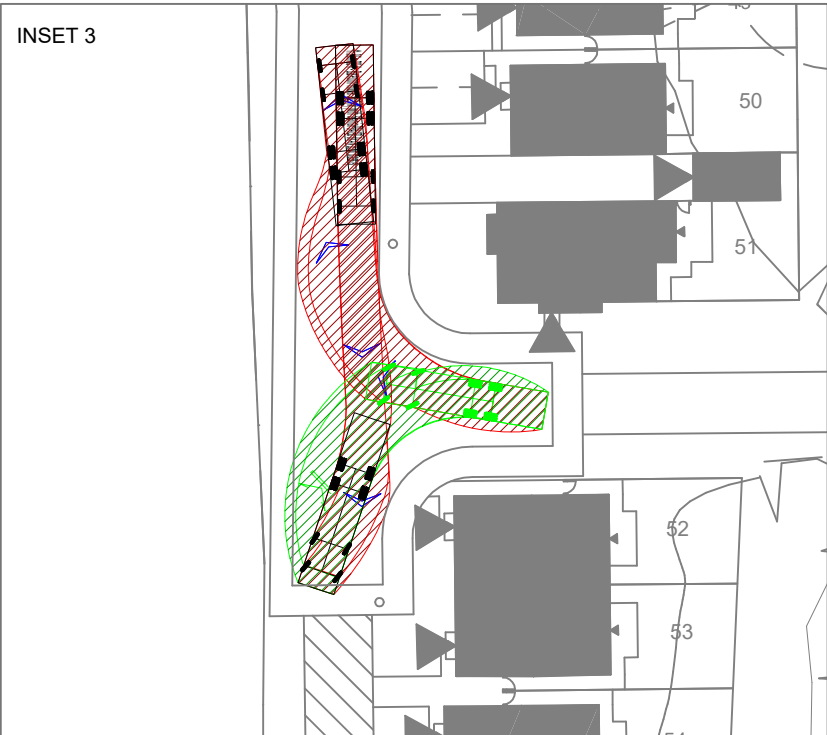
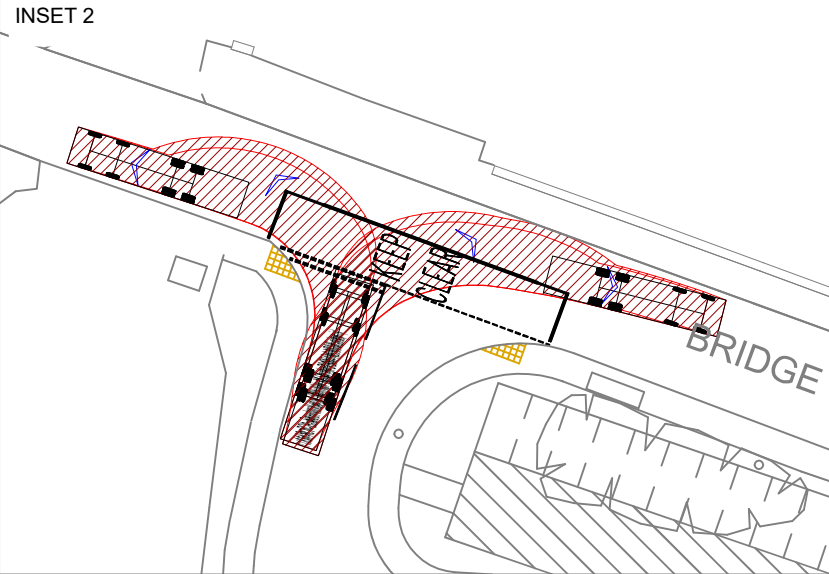
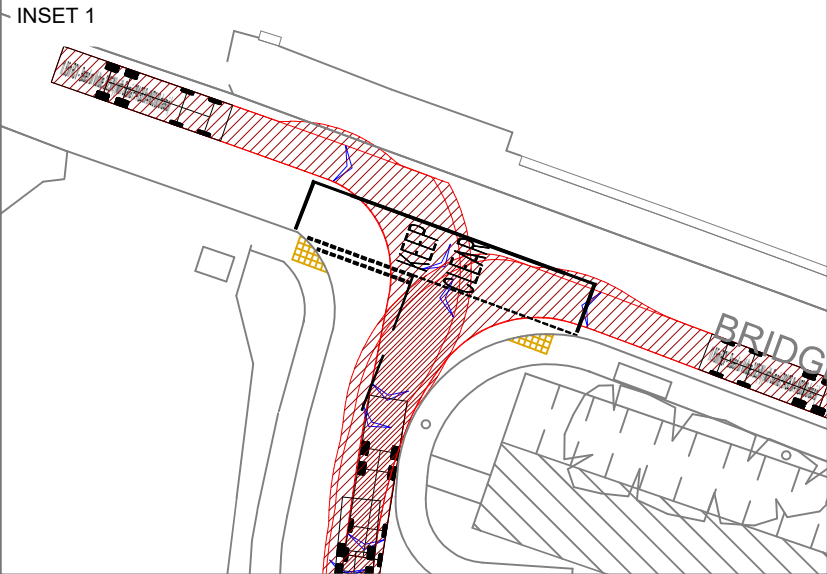
Client Name:			
ECCLESTON HOMES LTD			
Project Title:			
HOLCOMBE MILL, RAMSBOTTOM			
Drawing Title:			
ACCESS ARRANGEMENT & VISIBILITY SPLAYS			
Drawn By:		Date:	
LD		10/10/2023	
Checked:		Scale:	
CT		1:500 @ A3	
Status:		Approved/Unapproved:	
PLANNING		-	
Drawing No.			Rev.
SCP/220419/SK01			B

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APPENDIX E



1:2000



NOTES	
11.85m RCV - Based on Vulture 3025(N)	
Overall Length	11.850m
Overall Width	2.500m
Overall Body Height	3.749m
Min Body Ground Clearance	0.302m
Track Width	2.490m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	11.035m

REVISIONS			
REV	DESCRIPTION	DATE	BY
A	-NEW SITE LAYOUT UNDERLAID	12.10.23	LD
B	-NEW SITE LAYOUT UNDERLAID	20.10.23	LD

S|C|P

Transportation Planning : Infrastructure Design

Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name:

ECCLESTON HOMES LTD

Project Title:

HOLCOMBE MILL, RAMSBOTTOM

Drawing Title:

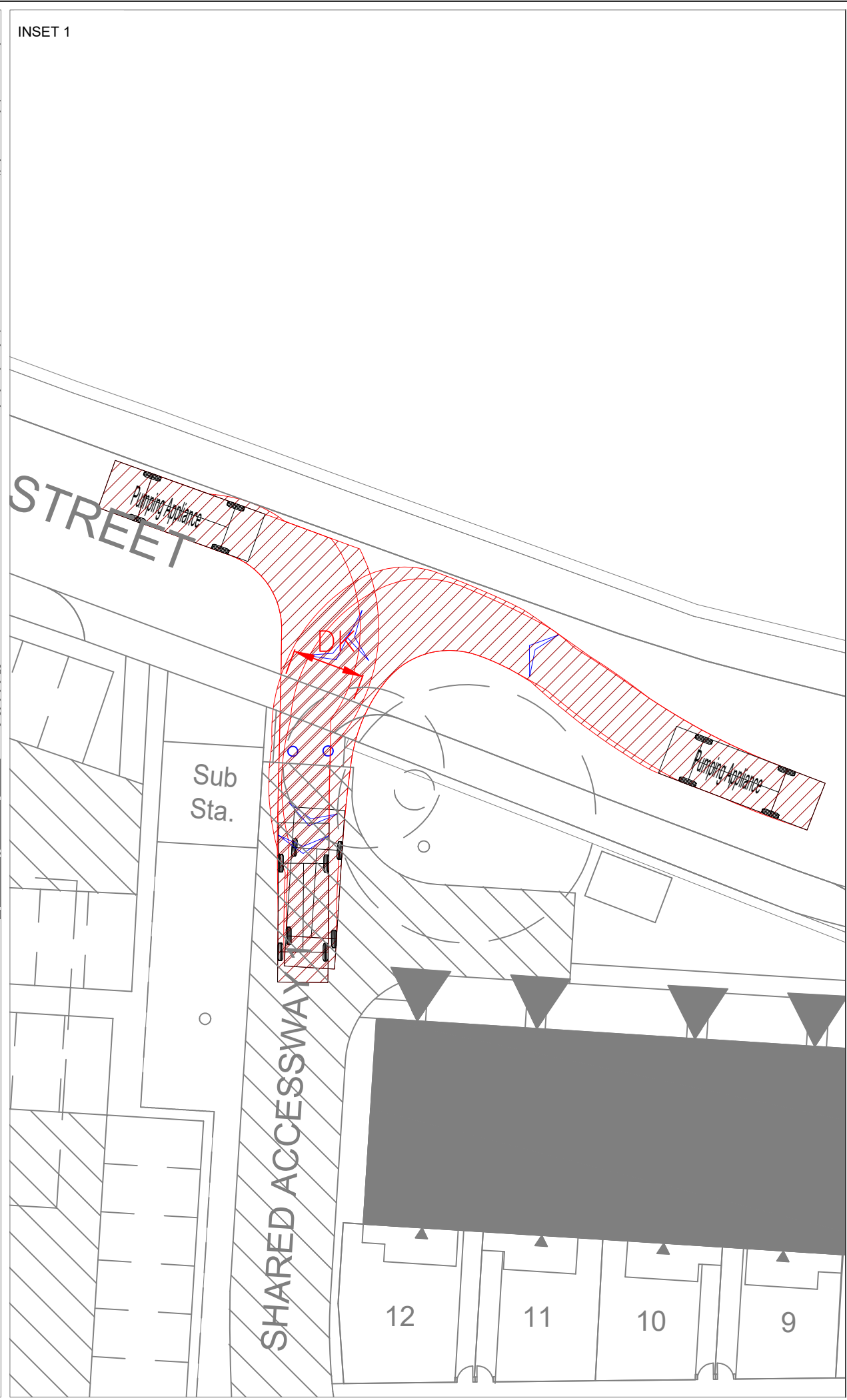
SWEPT PATH ANALYSIS
- REFUSE VEHICLE

Drawn By:	LD	Date:	10/10/2023
Checked:	CT	Scale:	1:500 @ A3 UNLESS STATED
Status:	PLANNING	Approved/Unapproved:	-

Drawing No.	SCP/220419/ATR01	Rev.	B
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APPENDIX F



NOTES

7.9

1.5

4.4

Pumping Appliance

Overall Length

Overall Width

Overall Body Height

Min Body Ground Clearance

Track width

Lock to lock time

Kerb to kerb Turning Radius

7.900m

2.500m

3.300m

0.140m

2.500m

4.00s

7.750m

REVISIONS

REV	DESCRIPTION	DATE	BY
A	-NEW SITE LAYOUT UNDERLAID	12.10.23	LD
B	-NEW SITE LAYOUT UNDERLAID	20.10.23	LD

S|C|P

Transportation Planning : Infrastructure Design

Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name:

ECCLESTON HOMES LTD

Project Title:

HOLCOMBE MILL, RAMSBOTTOM

Drawing Title:

SWEPT PATH ANALYSIS
-FIRE TENDER

Drawn By:

LD

Date:

10/10/2023

Checked:

CT

Scale:

1:250 @ A3
UNLESS STATED

Status:

PLANNING

Approved/Unapproved:

-

Drawing No.

SCP/220419/ATR02

Rev.

B

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APPENDIX G



REVISIONS			
Rev	Description	Date	By
A	-NEW SITE LAYOUT UNDERLAID	12.10.23	LD
B	-NEW SITE LAYOUT UNDERLAID	20.10.23	LD

SCP Transportation Planning : Infrastructure Design Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk	Client ECCLESTON HOMES LTD	Drawing Title PROPOSED TRAFFIC CALMING SCHEME	Scale 1:1000 @ A3	By LD	Drawing No. SCP/220419/SK03
	Project Title HOLCOMBE MILL, RASMBOTTOM		Date 10/10/2023	Checked CT	
			Approved/Unapproved -	Status PLANNING	Revision B

S|C|P

APPENDIX H



NOTES

REVISIONS			
REV	DESCRIPTION	DATE	BY
A	-NEW SITE LAYOUT UNDERLAID	12.10.23	LD
B	-NEW SITE LAYOUT UNDERLAID	20.10.23	LD

S|C|P

Transportation Planning : Infrastructure Design

Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name:

ECCLESTON HOMES LTD

Project Title:

HOLCOMBE MILL, RAMSBOTTOM

Drawing Title:

VISIBILITY SPLAYS

Drawn By:

LD

Date:

10/10/2023

Checked:

CT

Scale:

1:500 @ A3
UNLESS STATED

Status:

PLANNING

Approved/Unapproved:

-

Drawing No.

SCP/220419/SK02

Rev.

B

S|C|P

APPENDIX I

Calculation Reference: AUDIT-726001-190906-0937

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HF HERTFORDSHIRE	1 days
03	SOUTH WEST	
	BR BRISTOL CITY	1 days
	DC DORSET	2 days
	DV DEVON	1 days
06	WEST MIDLANDS	
	HE HEREFORDSHIRE	1 days
	WM WEST MIDLANDS	1 days
10	WALES	
	CF CARDIFF	1 days
11	SCOTLAND	
	FI FIFE	1 days
	HI HIGHLAND	1 days

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

Secondary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 1068 to 5467 (units: sqm)
 Range Selected by User: 1068 to 6000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 06/07/17

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

Selected survey days:

Monday	2 days
Tuesday	4 days
Wednesday	1 days
Thursday	2 days
Friday	1 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
Edge of Town	5

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

Selected Location Sub Categories:

Industrial Zone	8
Commercial Zone	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:

B1	6 days
B2	4 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 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	3 days
15,001 to 20,000	3 days
25,001 to 50,000	3 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	4 days
1.1 to 1.5	5 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:

Not Known	1 days
No	9 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	BR-02-C-01 NOVERS HILL BRISTOL BEDMINSTER Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 1100 sqm Survey date: MONDAY 19/10/09	MECH. ENGINEERS BRISTOL CITY	Survey Type: MANUAL
2	CF-02-C-01 PARC-TY-GLAS CARDIFF LLANISHEN Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 1068 sqm Survey date: TUESDAY 24/10/06	PLASTICS COMPANY CARDIFF	Survey Type: MANUAL
3	DC-02-C-02 HAMPSHIRE ROAD WEYMOUTH CHICKERELL Edge of Town Industrial Zone Total Gross floor area: 3035 sqm Survey date: TUESDAY 04/07/00	NEWSPAPER HQ DORSET	Survey Type: MANUAL
4	DC-02-C-07 MERCERY ROAD WEYMOUTH Edge of Town No Sub Category Total Gross floor area: 5467 sqm Survey date: MONDAY 07/07/08	NEW LOOK DORSET	Survey Type: MANUAL
5	DV-02-C-02 GRACE ROAD SOUTH EXETER MARSH BARTON TRAD. EST. Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 3513 sqm Survey date: THURSDAY 06/07/17	ENERGY RECOVERY FACILITY DEVON	Survey Type: MANUAL
6	FI-02-C-01 HALBEATH PLACE DUNFERMLINE Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 4900 sqm Survey date: FRIDAY 20/04/07	REFRI GERATION FIFE	Survey Type: MANUAL
7	HE-02-C-02 COLLEGE ROAD HEREFORD BURCOTT Edge of Town Commercial Zone Total Gross floor area: 1880 sqm Survey date: TUESDAY 22/10/13	THERMAL PROCESSING HEREFORDSHIRE	Survey Type: MANUAL
8	HF-02-C-01 BRIDGE ROAD EAST WELWYN GARDEN CITY Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 1800 sqm Survey date: THURSDAY 17/07/08	INDUSTRIAL UNIT HERTFORDSHIRE	Survey Type: MANUAL
9	HI-02-C-01 TOM SEMPLE ROAD NAIRN BALMAKEITH BUSINESS PK Edge of Town Industrial Zone Total Gross floor area: 3000 sqm Survey date: WEDNESDAY 24/05/06	DAIRY HIGHLAND	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10	WM-02-C-03 DOWNING STREET SMETHWICK	INDUSTRIAL GLASS	WEST MIDLANDS
	Edge of Town Industrial Zone		
	Total Gross floor area:	5070 sqm	
	Survey date: TUESDAY	06/11/12	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.

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

MULTI-MODAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	3083	0.532	10	3083	0.075	10	3083	0.607
08:00 - 09:00	10	3083	1.265	10	3083	0.224	10	3083	1.489
09:00 - 10:00	10	3083	0.360	10	3083	0.224	10	3083	0.584
10:00 - 11:00	10	3083	0.266	10	3083	0.234	10	3083	0.500
11:00 - 12:00	10	3083	0.256	10	3083	0.240	10	3083	0.496
12:00 - 13:00	10	3083	0.308	10	3083	0.409	10	3083	0.717
13:00 - 14:00	10	3083	0.422	10	3083	0.308	10	3083	0.730
14:00 - 15:00	10	3083	0.269	10	3083	0.224	10	3083	0.493
15:00 - 16:00	10	3083	0.214	10	3083	0.263	10	3083	0.477
16:00 - 17:00	10	3083	0.162	10	3083	0.529	10	3083	0.691
17:00 - 18:00	10	3083	0.097	10	3083	1.022	10	3083	1.119
18:00 - 19:00	9	2881	0.081	9	2881	0.501	9	2881	0.582
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.232			4.253			8.485

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: $\text{COUNT} / \text{TRP} \times \text{FACT}$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	1068 - 5467 (units: sqm)
Survey date range:	01/01/00 - 06/07/17
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:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	3083	0.023	10	3083	0.000	10	3083	0.023
08:00 - 09:00	10	3083	0.019	10	3083	0.003	10	3083	0.022
09:00 - 10:00	10	3083	0.003	10	3083	0.000	10	3083	0.003
10:00 - 11:00	10	3083	0.000	10	3083	0.000	10	3083	0.000
11:00 - 12:00	10	3083	0.000	10	3083	0.000	10	3083	0.000
12:00 - 13:00	10	3083	0.003	10	3083	0.003	10	3083	0.006
13:00 - 14:00	10	3083	0.003	10	3083	0.006	10	3083	0.009
14:00 - 15:00	10	3083	0.000	10	3083	0.003	10	3083	0.003
15:00 - 16:00	10	3083	0.003	10	3083	0.006	10	3083	0.009
16:00 - 17:00	10	3083	0.003	10	3083	0.023	10	3083	0.026
17:00 - 18:00	10	3083	0.006	10	3083	0.019	10	3083	0.025
18:00 - 19:00	9	2881	0.000	9	2881	0.012	9	2881	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.063			0.075			0.138

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: $\text{COUNT} / \text{TRP} \times \text{FACT}$. Trip rates are then rounded to 3 decimal places.

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

MULTI-MODAL PEDESTRIANS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	3083	0.058	10	3083	0.010	10	3083	0.068
08:00 - 09:00	10	3083	0.091	10	3083	0.006	10	3083	0.097
09:00 - 10:00	10	3083	0.032	10	3083	0.003	10	3083	0.035
10:00 - 11:00	10	3083	0.003	10	3083	0.003	10	3083	0.006
11:00 - 12:00	10	3083	0.003	10	3083	0.003	10	3083	0.006
12:00 - 13:00	10	3083	0.023	10	3083	0.065	10	3083	0.088
13:00 - 14:00	10	3083	0.062	10	3083	0.039	10	3083	0.101
14:00 - 15:00	10	3083	0.013	10	3083	0.013	10	3083	0.026
15:00 - 16:00	10	3083	0.006	10	3083	0.010	10	3083	0.016
16:00 - 17:00	10	3083	0.019	10	3083	0.029	10	3083	0.048
17:00 - 18:00	10	3083	0.003	10	3083	0.107	10	3083	0.110
18:00 - 19:00	9	2881	0.004	9	2881	0.042	9	2881	0.046
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.317			0.330			0.647

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 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	3083	0.003	10	3083	0.000	10	3083	0.003
08:00 - 09:00	10	3083	0.006	10	3083	0.000	10	3083	0.006
09:00 - 10:00	10	3083	0.000	10	3083	0.000	10	3083	0.000
10:00 - 11:00	10	3083	0.000	10	3083	0.000	10	3083	0.000
11:00 - 12:00	10	3083	0.000	10	3083	0.000	10	3083	0.000
12:00 - 13:00	10	3083	0.000	10	3083	0.000	10	3083	0.000
13:00 - 14:00	10	3083	0.003	10	3083	0.003	10	3083	0.006
14:00 - 15:00	10	3083	0.003	10	3083	0.000	10	3083	0.003
15:00 - 16:00	10	3083	0.003	10	3083	0.000	10	3083	0.003
16:00 - 17:00	10	3083	0.000	10	3083	0.003	10	3083	0.003
17:00 - 18:00	10	3083	0.000	10	3083	0.013	10	3083	0.013
18:00 - 19:00	9	2881	0.000	9	2881	0.000	9	2881	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			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.

Calculation Reference: AUDIT-726001-190904-0922

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	KC KENT	1 days
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	DV DEVON	3 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	3 days
	SY SOUTH YORKSHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	DH DURHAM	1 days
11	SCOTLAND	
	FA FALKIRK	1 days
	HI HIGHLAND	1 days
	PK PERTH & KINROSS	1 days

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

Secondary 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: Number of dwellings
 Actual Range: 30 to 116 (units:)
 Range Selected by User: 30 to 120 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 09/05/19

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	5 days
Tuesday	4 days
Wednesday	5 days
Thursday	3 days
Friday	2 days

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

Selected survey types:

Manual count	19 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	15

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:

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 19 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 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	5 days
20,001 to 25,000	1 days
25,001 to 50,000	4 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	5 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	4 days
125,001 to 250,000	5 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	4 days
1.1 to 1.5	14 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	3 days
No	16 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	19 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CB-03-A-05 MACADAM WAY PENRITH	DETACHED/ TERRACED HOUSING	CUMBRIA
	Edge of Town Centre Residential Zone Total Number of dwellings: 50 Survey date: TUESDAY 21/06/16		Survey Type: MANUAL
2	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCLAND	SEMI DETACHED	DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 50 Survey date: TUESDAY 28/03/17		Survey Type: MANUAL
3	DV-03-A-01 BRONSHILL ROAD TORQUAY	TERRACED HOUSES	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 37 Survey date: WEDNESDAY 30/09/15		Survey Type: MANUAL
4	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 116 Survey date: FRIDAY 25/09/15		Survey Type: MANUAL
5	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 Survey date: MONDAY 28/09/15		Survey Type: MANUAL
6	FA-03-A-01 MANDELA AVENUE FALKIRK	SEMI-DETACHED/ TERRACED	FALKIRK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 37 Survey date: THURSDAY 30/05/13		Survey Type: MANUAL
7	HC-03-A-20 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 62 Survey date: TUESDAY 20/11/18		Survey Type: MANUAL
8	HI-03-A-14 KING BRUDE ROAD INVERNESS SCORGUIE	SEMI-DETACHED & TERRACED	HIGHLAND
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 40 Survey date: WEDNESDAY 23/03/16		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 51 Survey date: THURSDAY 14/07/16	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
10	LN-03-A-04 EGERTON ROAD LINCOLN Edge of Town Centre Residential Zone Total Number of dwellings: 30 Survey date: MONDAY 29/06/15	DETACHED & SEMI-DETACHED	LINCOLNSHIRE	Survey Type: MANUAL
11	NF-03-A-02 DEREHAM ROAD NORWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 98 Survey date: MONDAY 22/10/12	HOUSES & FLATS	NORFOLK	Survey Type: MANUAL
12	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11	BUNGALOWS & SEMI DET.	NORTH YORKSHIRE	Survey Type: MANUAL
13	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13	MIXED HOUSING	NORTH YORKSHIRE	Survey Type: MANUAL
14	NY-03-A-12 RACECOURSE LANE NORTHALLERTON Edge of Town Centre Residential Zone Total Number of dwellings: 47 Survey date: TUESDAY 27/09/16	TOWN HOUSES	NORTH YORKSHIRE	Survey Type: MANUAL
15	PK-03-A-01 TULLYLUMB TERRACE PERTH CORNHILL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 36 Survey date: WEDNESDAY 11/05/11	DETAC. & BUNGALOWS	PERTH & KINROSS	Survey Type: MANUAL
16	SF-03-A-07 FOXHALL ROAD IPSWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 73 Survey date: THURSDAY 09/05/19	MIXED HOUSES	SUFFOLK	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

17	SY-03-A-01 A19 BENTLEY ROAD DONCASTER BENTLEY RISE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 54 Survey date: WEDNESDAY 18/09/13	SEMI DETACHED HOUSES	SOUTH YORKSHIRE	Survey Type: MANUAL
18	WM-03-A-05 COUNDON ROAD COVENTRY Edge of Town Centre Residential Zone Total Number of dwellings: 89 Survey date: MONDAY 21/11/16	TERRACED & DETACHED	WEST MIDLANDS	Survey Type: MANUAL
19	WS-03-A-05 UPPER SHOREHAM ROAD SHOREHAM BY SEA Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 48 Survey date: WEDNESDAY 18/04/12	TERRACED & FLATS	WEST SUSSEX	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.

Singleton Clamp & Partners Mount Street Manchester

Licence No: 726001

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

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	19	61	0.066	19	61	0.258	19	61	0.324
08:00 - 09:00	19	61	0.136	19	61	0.370	19	61	0.506
09:00 - 10:00	19	61	0.157	19	61	0.164	19	61	0.321
10:00 - 11:00	19	61	0.126	19	61	0.157	19	61	0.283
11:00 - 12:00	19	61	0.135	19	61	0.132	19	61	0.267
12:00 - 13:00	19	61	0.157	19	61	0.161	19	61	0.318
13:00 - 14:00	19	61	0.170	19	61	0.165	19	61	0.335
14:00 - 15:00	19	61	0.138	19	61	0.183	19	61	0.321
15:00 - 16:00	19	61	0.200	19	61	0.130	19	61	0.330
16:00 - 17:00	19	61	0.269	19	61	0.153	19	61	0.422
17:00 - 18:00	19	61	0.348	19	61	0.187	19	61	0.535
18:00 - 19:00	19	61	0.222	19	61	0.147	19	61	0.369
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.124			2.207			4.331

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:	30 - 116 (units:)
Survey date date range:	01/01/11 - 09/05/19
Number of weekdays (Monday-Friday):	19
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	19	61	0.003	19	61	0.019	19	61	0.022
08:00 - 09:00	19	61	0.003	19	61	0.015	19	61	0.018
09:00 - 10:00	19	61	0.002	19	61	0.008	19	61	0.010
10:00 - 11:00	19	61	0.006	19	61	0.004	19	61	0.010
11:00 - 12:00	19	61	0.004	19	61	0.002	19	61	0.006
12:00 - 13:00	19	61	0.003	19	61	0.005	19	61	0.008
13:00 - 14:00	19	61	0.003	19	61	0.002	19	61	0.005
14:00 - 15:00	19	61	0.003	19	61	0.007	19	61	0.010
15:00 - 16:00	19	61	0.023	19	61	0.004	19	61	0.027
16:00 - 17:00	19	61	0.013	19	61	0.004	19	61	0.017
17:00 - 18:00	19	61	0.020	19	61	0.007	19	61	0.027
18:00 - 19:00	19	61	0.008	19	61	0.009	19	61	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.091			0.086			0.177

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: $\text{COUNT} / \text{TRP} \times \text{FACT}$. 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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	19	61	0.027	19	61	0.074	19	61	0.101
08:00 - 09:00	19	61	0.050	19	61	0.219	19	61	0.269
09:00 - 10:00	19	61	0.061	19	61	0.073	19	61	0.134
10:00 - 11:00	19	61	0.058	19	61	0.070	19	61	0.128
11:00 - 12:00	19	61	0.065	19	61	0.048	19	61	0.113
12:00 - 13:00	19	61	0.061	19	61	0.048	19	61	0.109
13:00 - 14:00	19	61	0.055	19	61	0.063	19	61	0.118
14:00 - 15:00	19	61	0.057	19	61	0.063	19	61	0.120
15:00 - 16:00	19	61	0.165	19	61	0.099	19	61	0.264
16:00 - 17:00	19	61	0.139	19	61	0.078	19	61	0.217
17:00 - 18:00	19	61	0.113	19	61	0.055	19	61	0.168
18:00 - 19:00	19	61	0.058	19	61	0.045	19	61	0.103
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.909			0.935			1.844

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: $\text{COUNT} / \text{TRP} \times \text{FACT}$. Trip rates are then rounded to 3 decimal places.

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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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	19	61	0.001	19	61	0.024	19	61	0.025
08:00 - 09:00	19	61	0.000	19	61	0.028	19	61	0.028
09:00 - 10:00	19	61	0.003	19	61	0.010	19	61	0.013
10:00 - 11:00	19	61	0.010	19	61	0.009	19	61	0.019
11:00 - 12:00	19	61	0.008	19	61	0.012	19	61	0.020
12:00 - 13:00	19	61	0.009	19	61	0.013	19	61	0.022
13:00 - 14:00	19	61	0.008	19	61	0.004	19	61	0.012
14:00 - 15:00	19	61	0.014	19	61	0.010	19	61	0.024
15:00 - 16:00	19	61	0.014	19	61	0.005	19	61	0.019
16:00 - 17:00	19	61	0.018	19	61	0.010	19	61	0.028
17:00 - 18:00	19	61	0.021	19	61	0.003	19	61	0.024
18:00 - 19:00	19	61	0.015	19	61	0.001	19	61	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.121			0.129			0.250

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.

S|C|P

APPENDIX J

Junctions 9											
PICADY 9 - Priority Intersection Module											
Version: 9.5.2.1013											
© Copyright TRL Limited, 2019											
For sales and distribution information, program advice and maintenance, contact TRL:											
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk											
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution											

Filename: Site Access_Oct_2023.j9

Path: Z:\Job Library\2022\220419 - Holcombe Mill, Ramsbottom – Appeal Support\Traffic Data

Report generation date: 26/10/2023 08:49:04

»2028 Assessment, AM

»2028 Assessment, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
2028 Assessment												
Stream B-AC	D1	0.6	16.58	0.37	C	30 %	D2	0.7	21.57	0.40	C	15 %
Stream C-AB		0.9	3.92	0.24	A	[Stream B-AC]		0.6	5.64	0.21	A	[Stream B-AC]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	Site Access
Location	
Site number	
Date	12/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\craig.thomson
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Assessment	AM	ONE HOUR	07:15	08:45	15	✓
D2	2028 Assessment	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2028 Assessment, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way		1.88	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	30	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Peel Brow		Major
B	Site Access		Minor
C	Bridge Street		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	7.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	21	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	494	0.086	0.218	0.137	0.311
B-C	637	0.093	0.236	-	-
C-B	632	0.234	0.234	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Assessment	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	375	100.000
B		ONE HOUR	✓	114	100.000
C		ONE HOUR	✓	957	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	46	329
	B	60	0	54
	C	906	51	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.37	16.58	0.6	C	105	157
C-AB	0.24	3.92	0.9	A	193	289
C-A					685	1028
A-B					42	63
A-C					302	453

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	86	21	415	0.207	85	0.0	0.3	10.866	B
C-AB	113	28	1033	0.109	112	0.0	0.2	3.907	A
C-A	608	152			608				
A-B	35	9			35				
A-C	248	62			248				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	26	386	0.266	102	0.3	0.4	12.683	B
C-AB	170	43	1118	0.152	169	0.2	0.4	3.803	A
C-A	690	173			690				
A-B	41	10			41				
A-C	296	74			296				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	31	343	0.366	125	0.4	0.6	16.442	C
C-AB	293	73	1237	0.237	291	0.4	0.9	3.816	A
C-A	761	190			761				
A-B	51	13			51				
A-C	362	91			362				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	31	343	0.366	125	0.6	0.6	16.581	C
C-AB	295	74	1238	0.238	294	0.9	0.9	3.835	A
C-A	759	190			759				
A-B	51	13			51				
A-C	362	91			362				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	26	385	0.266	103	0.6	0.4	12.808	B
C-AB	171	43	1119	0.153	173	0.9	0.4	3.822	A
C-A	689	172			689				
A-B	41	10			41				
A-C	296	74			296				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	86	21	415	0.207	86	0.4	0.3	10.972	B
C-AB	114	28	1034	0.110	115	0.4	0.2	3.921	A
C-A	607	152			607				
A-B	35	9			35				
A-C	248	62			248				

2028 Assessment, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way		1.94	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	15	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Assessment	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	871	100.000
B		ONE HOUR	✓	101	100.000
C		ONE HOUR	✓	522	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	59	812
	B	49	0	52
	C	468	54	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.40	21.57	0.7	C	93	139
C-AB	0.21	5.64	0.6	A	118	177
C-A					361	542
A-B					54	81
A-C					745	1118

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	372	0.205	75	0.0	0.3	12.097	B
C-AB	78	19	737	0.106	77	0.0	0.2	5.454	A
C-A	315	79			315				
A-B	44	11			44				
A-C	611	153			611				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	333	0.273	90	0.3	0.4	14.799	B
C-AB	109	27	765	0.142	108	0.2	0.3	5.489	A
C-A	361	90			361				
A-B	53	13			53				
A-C	730	182			730				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	28	278	0.400	110	0.4	0.6	21.295	C
C-AB	166	41	807	0.206	165	0.3	0.6	5.625	A
C-A	409	102			409				
A-B	65	16			65				
A-C	894	224			894				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	28	278	0.400	111	0.6	0.7	21.574	C
C-AB	166	42	807	0.206	166	0.6	0.6	5.641	A
C-A	408	102			408				
A-B	65	16			65				
A-C	894	224			894				

17:30 - 17:45

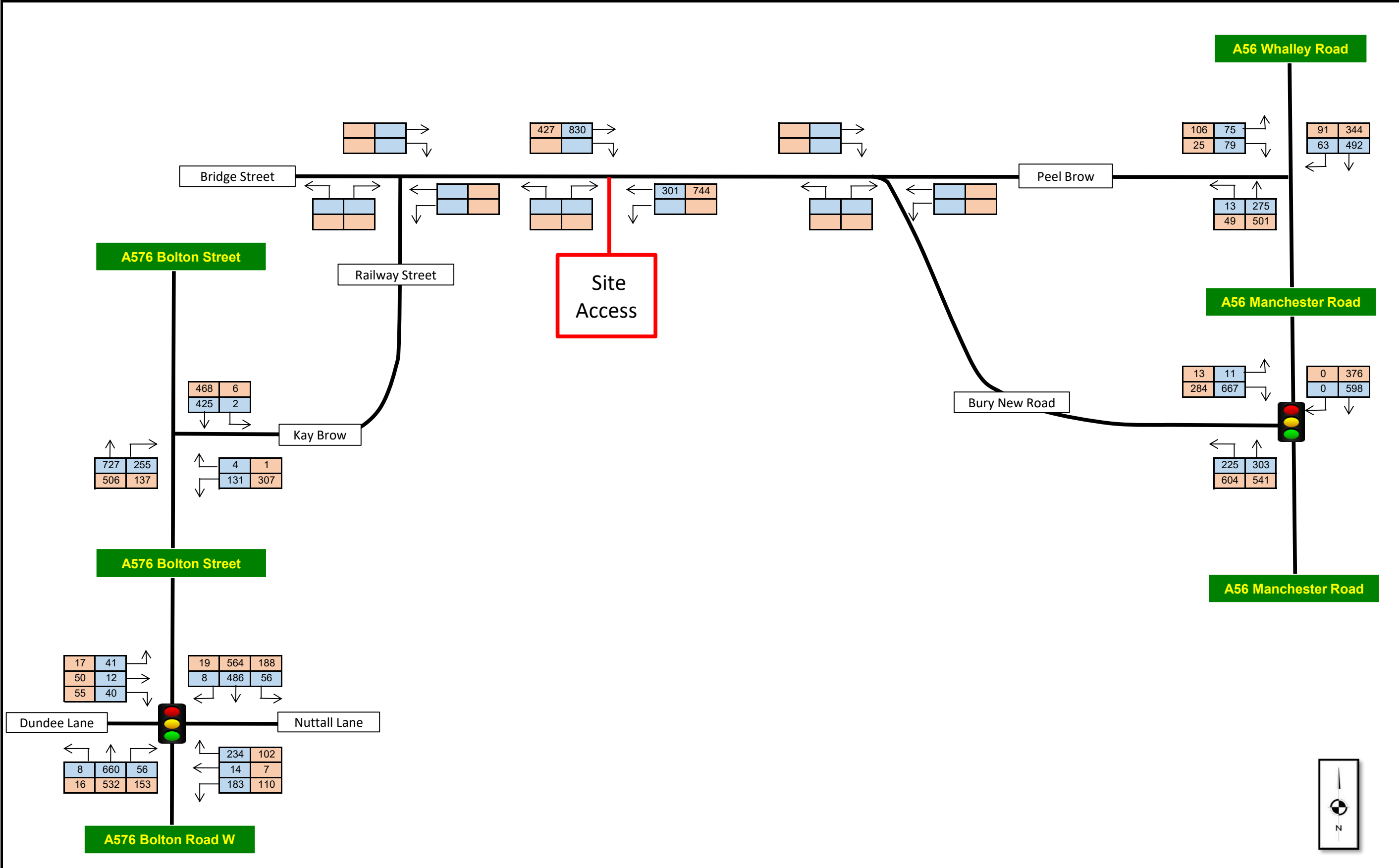
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	333	0.273	92	0.7	0.4	15.000	C
C-AB	109	27	766	0.142	110	0.6	0.4	5.514	A
C-A	360	90			360				
A-B	53	13			53				
A-C	730	182			730				

17:45 - 18:00

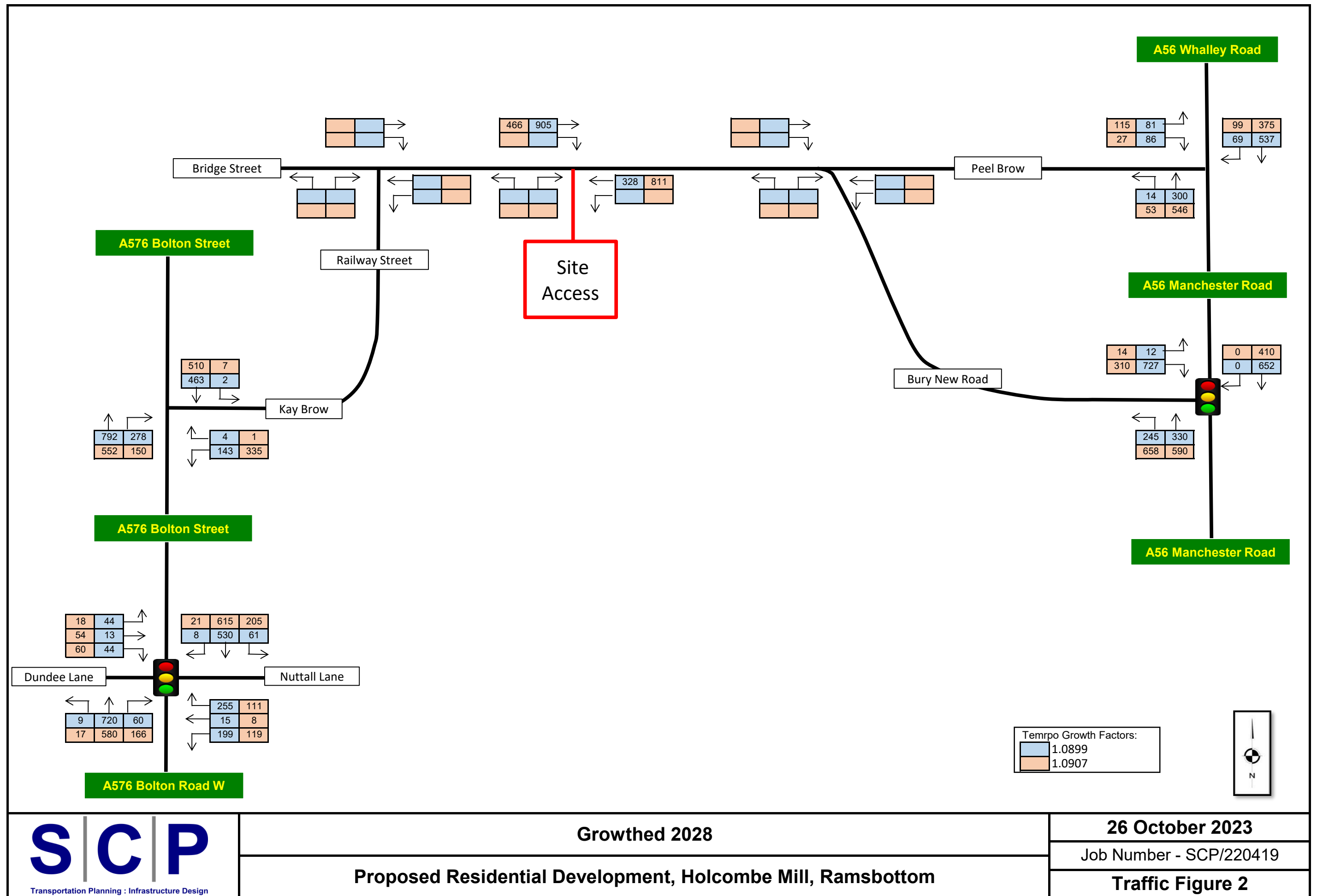
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	371	0.205	77	0.4	0.3	12.228	B
C-AB	78	20	738	0.106	79	0.4	0.2	5.477	A
C-A	314	79			314				
A-B	44	11			44				
A-C	611	153			611				

S|C|P

TRAFFIC FLOW FIGURES



SCP Transportation Planning : Infrastructure Design	Base 2019	26 October 2023
	Proposed Residential Development, Holcombe Mill, Ramsbottom	Job Number - SCP/220419
		Traffic Figure 1



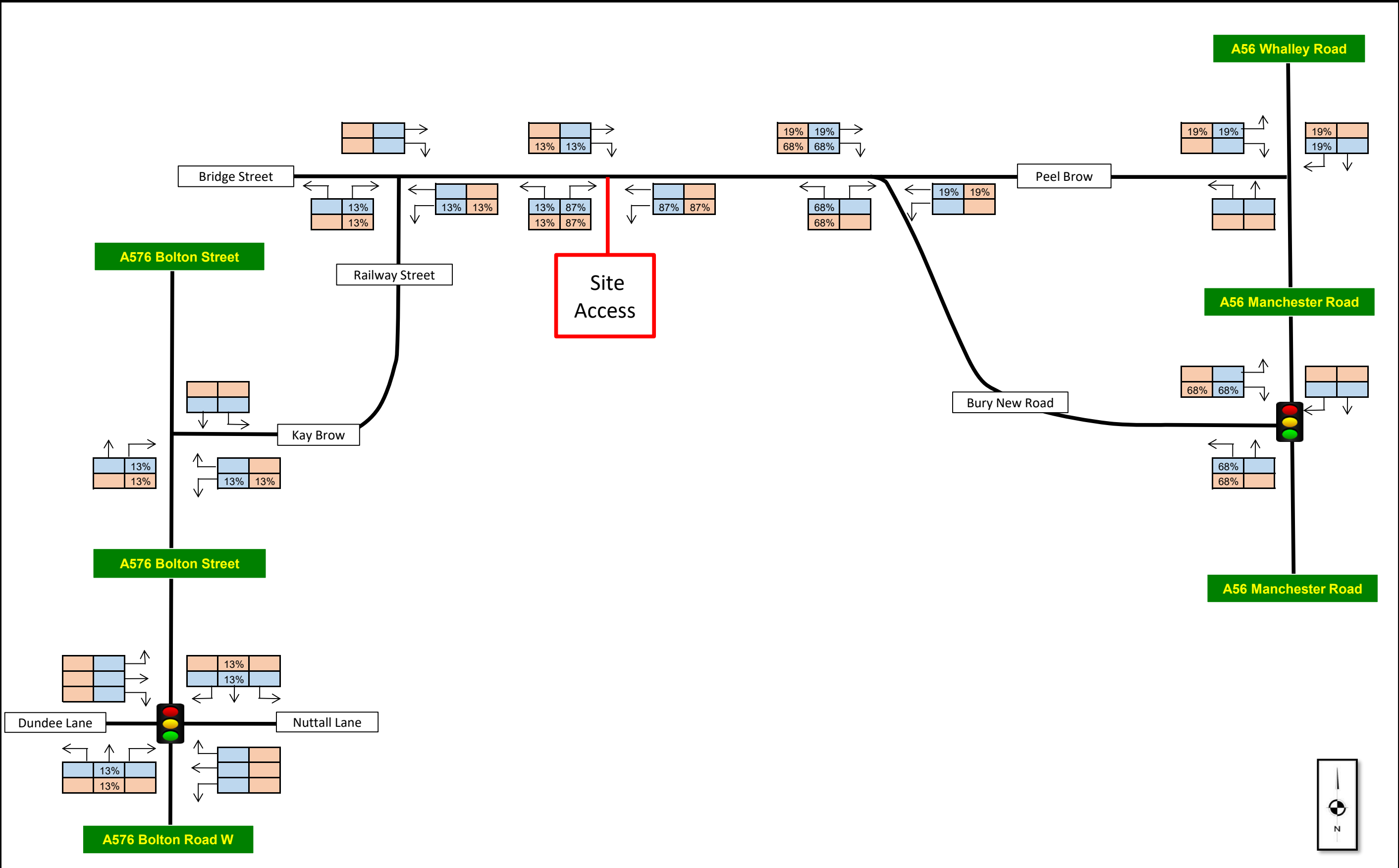
Growthed 2028

26 October 2023

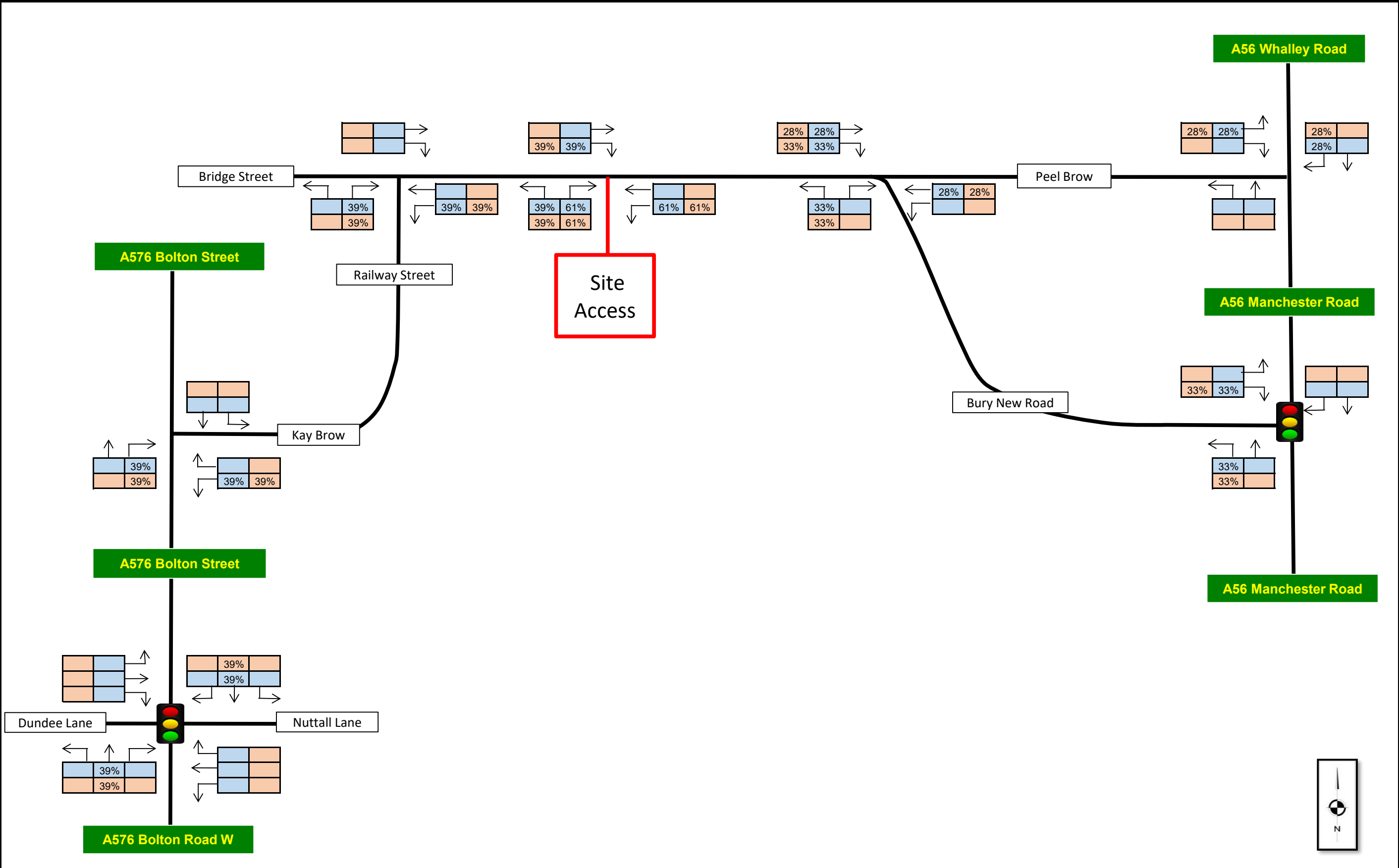
Job Number - SCP/220419

Proposed Residential Development, Holcombe Mill, Ramsbottom

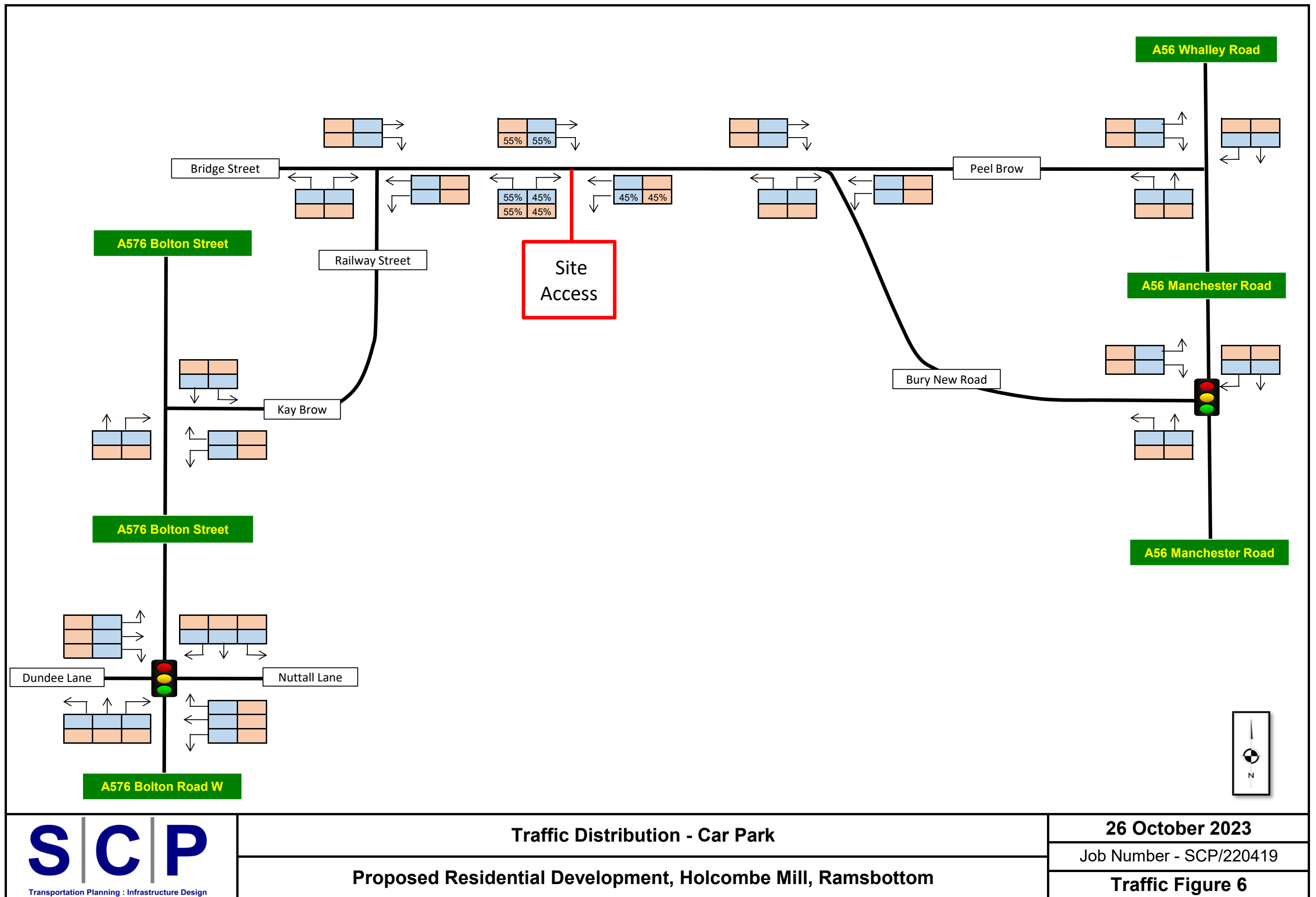
Traffic Figure 2

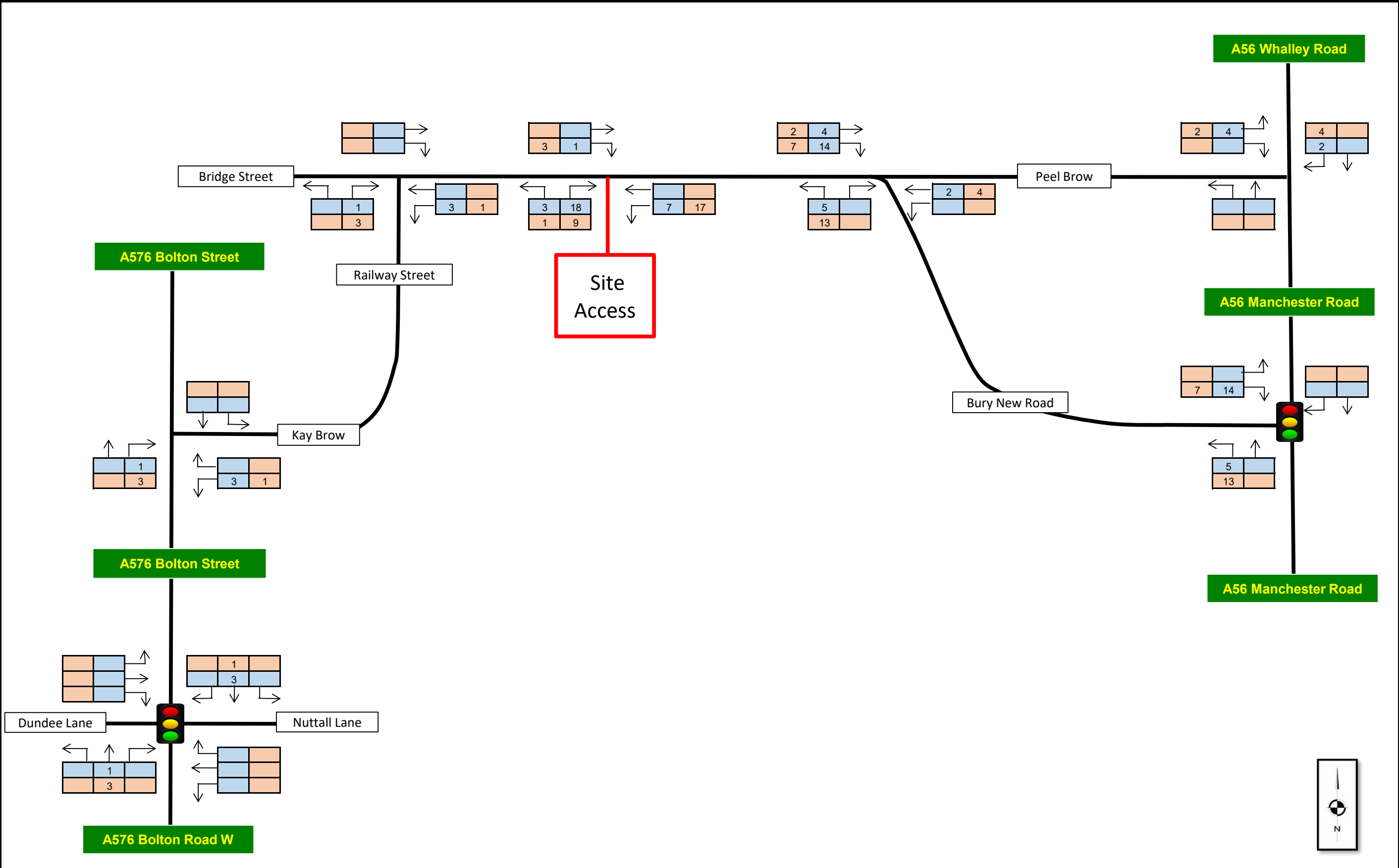


 Transportation Planning : Infrastructure Design	Traffic Distribution - Residential		26 October 2023
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 4

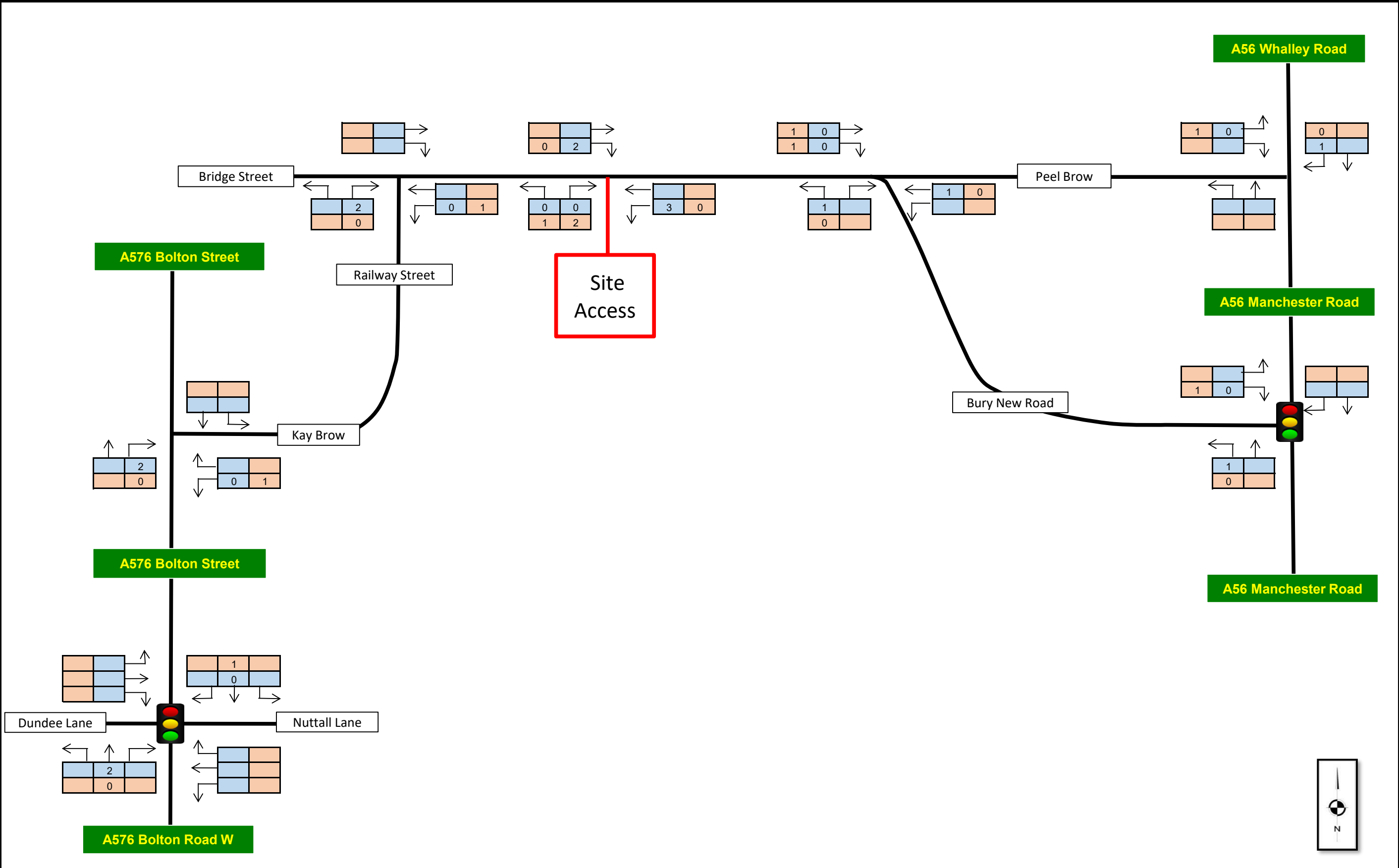


 Transportation Planning : Infrastructure Design	Traffic Distribution - Existing Employment Buildings	26 October 2023
	Proposed Residential Development, Holcombe Mill, Ramsbottom	Job Number - SCP/220419
		Traffic Figure 5

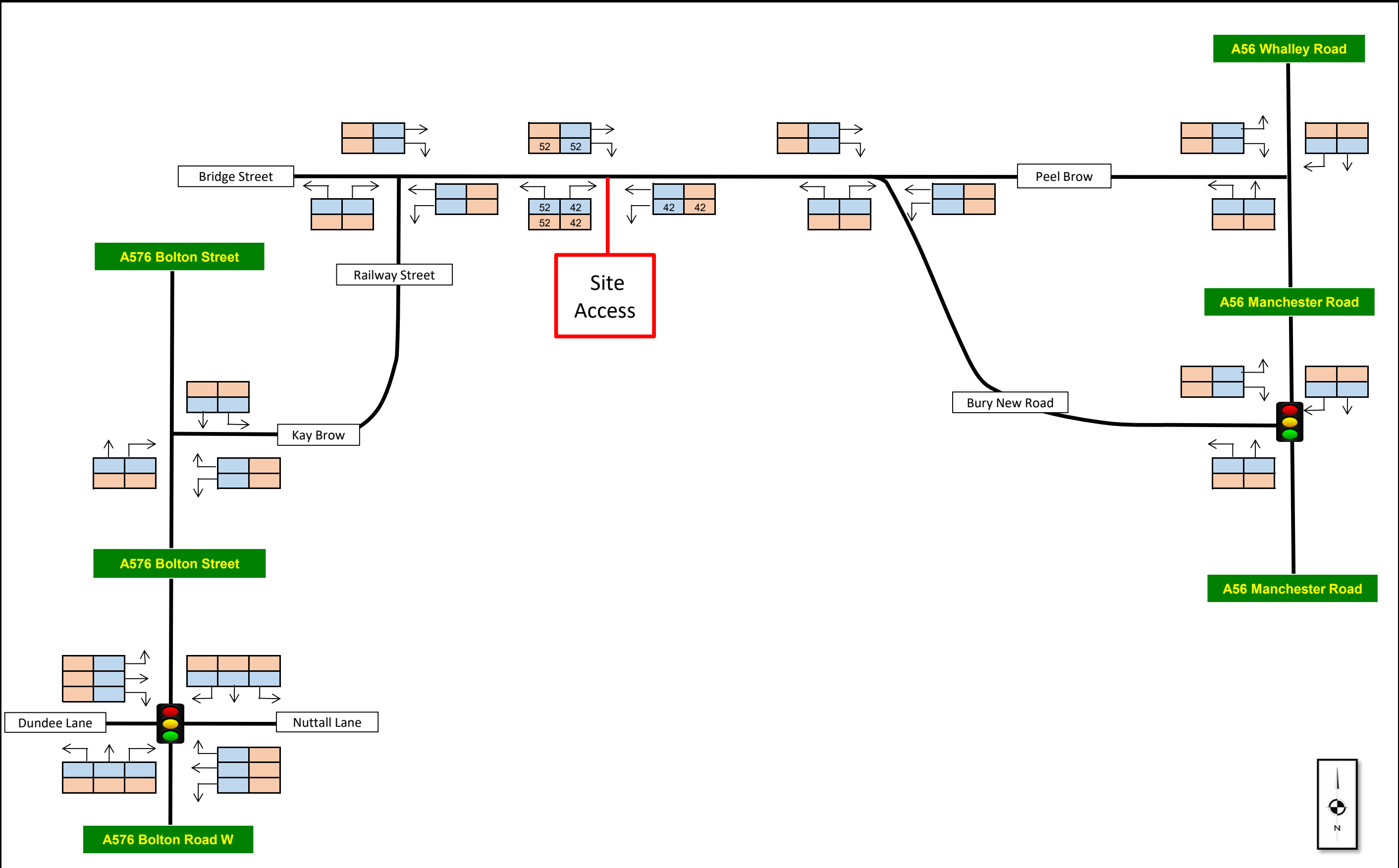




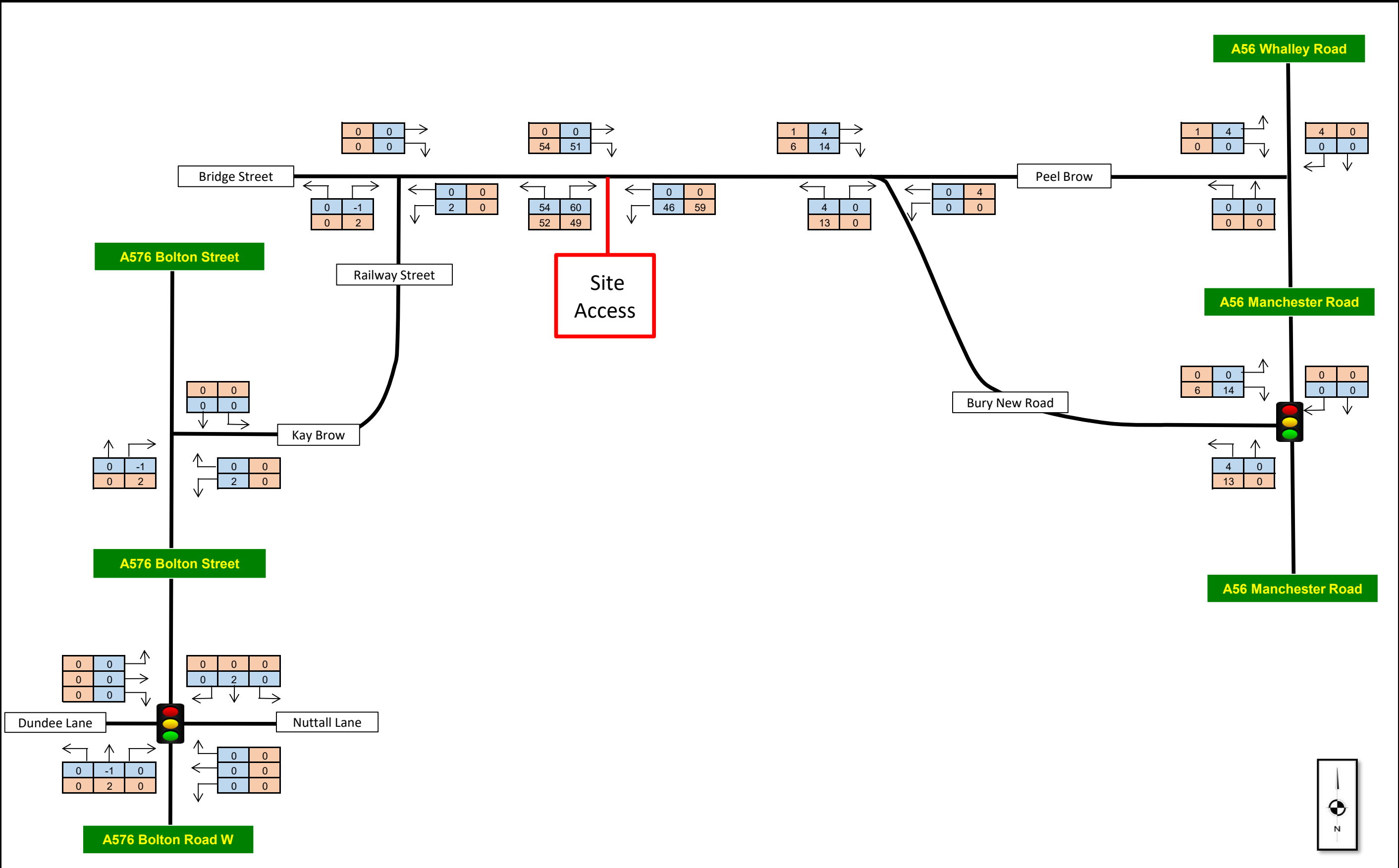
SCP Transportation Planning : Infrastructure Design	Traffic Generation - Residential	26 October 2023
	Proposed Residential Development, Holcombe Mill, Ramsbottom	Job Number - SCP/220419
		Traffic Figure 7



 Transportation Planning : Infrastructure Design	Traffic Generation - Existing Industrial Units		26 October 2023
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 8



SCP Transportation Planning : Infrastructure Design	Traffic Generation - Car Park		26 October 2023
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 9



 Transportation Planning : Infrastructure Design	Net Traffic Generation		26 October 2023
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 10

