

Introduction

- 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

- 2 The site has an extensive planning background, with a summary of the most recent and relevant applications / appeals being provided below.

Previous Planning Application (LPA Ref: 65844)

- 3 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. The planning application was accompanied by a detailed Transport Assessment (TA), dated August 2020, which 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.
- 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.
- 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](#)

- 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, the Inspector concluded in relation to highways 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.”*

- 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.”

- 8 It should also be noted that there was no request by the LHA on Bridge Street as part of this application or any concerns raised in relation to pedestrian safety / crossings raised by the Inspector as part of the Appeal, as discussed in more detail later.

Current Planning Application

- 9 A recent planning application (Application Reference: 70222) was validated by BC on 10th November 2023 for a revised development, comprising 57 dwellings as well as a 47-space public car park on the application site.
- 10 Following a review of the revised TA submitted with the planning application, TfGM provided a formal consultation response, dated 30th November 2023. A Technical Note (TN) was produced by SCP in response, with TfGM providing a subsequent consultation response dated 4th January 2024, resulting in there still being some outstanding comments in relation to the traffic flow data and suggestion that the development should provide a pedestrian crossing over bridge street and a review of the standard of nearby bus stops.
- 11 This TN has therefore been produced in response to TfGM's outstanding comments and provides the clarification / additional information requested.

Response to TfGM's Comments

- 12 This section provides a summary of TfGM's outstanding comments and SCP's response.

Traffic Counts

- 13 TfGM have noted that the traffic counts are over four years old and they have recommended that new counts are undertaken, with the results used to determine the distribution.
- 14 Whilst it is acknowledged that the traffic survey data used in the assessment of the site access junction within the submitted TA is over four years old, it is considered acceptable in this instance for the following reasons:
- The surveys were undertaken in 2019, prior to the Covid-19 pandemic and the resultant changes in travel behaviour, with many people still continuing to work from home several days per week reducing the number of people traveling to work in the peak hours.

- There are a number of DfT counts in the vicinity of the site which, although some of the flows are estimated by the DfT, indicate that traffic flows between the date of the traffic survey and 2022/23 remain relatively consistent or have even reduced, as summarised in **Table 1** below. This supports our view that the original surveys are acceptable, or even robust.

Table 1 – A56 DfT AADT Data

DfT Count Ref:	2019 AADT	2022/23 AADT	% Difference
18442 - A56	8659	7733	-12%
80634 - A56	9011	8268	-9%
77888 - A56	15186	15705	3%
Average			-6%

- The mainline traffic flows at the site access have been obtained from a combination of the traffic routing on Peel Brow and Bury New Road to/from both the A56 Whalley Road / A56 Manchester Road / Peel Brow and A56 Manchester Road / Bury New Road junctions, in order to allow for a highly robust assessment.
 - It should also be noted that the detailed capacity assessment presented in the submitted TA demonstrates that the proposed site access junction off Bridge Street is forecast to operate with ample spare capacity in the future assessment year of 2028, which will clearly still be the case even if the mainline traffic flows increased significantly.
- 15 On the above basis, both the Local Highway Authority and TfGM should be able to make a sound judgement on the acceptability of the access using this data.
- 16 Notwithstanding the above and in order to positively address TfGM's comment, a manual classified turning count traffic flow survey was undertaken on Tuesday 6th February 2024 in order to establish the existing traffic flow demand at the existing site access junction. The raw traffic survey data is presented in **Appendix A** with the base peak hour traffic flows shown diagrammatically on **Traffic Flow Figure 1**.

- 17 A comparison between the 2019 survey data used in the detailed capacity assessment presented in the submitted TA, which was highly robust as detailed earlier, and the recent 2024 survey data is presented in **Table 2** below.

Table 2 – Site Access Junction Total Inflow

Survey Data	AM	PM
2019	1131	1171
2024	873	1015

- 18 The above table demonstrates that the 2019 data used in the detailed capacity assessment presented in the submitted TA is significantly higher and more robust when compared to a recent survey of the site access.
- 19 Notwithstanding the above and for completeness, the detailed capacity assessment presented in the submitted TA has been updated with the 2024 survey data. It should be noted that the assessment methodology presented in the submitted TA remains unchanged, however, the a future assessment year of 2029 has been adopted.
- 20 In order to quantify the level of background traffic growth that could occur on the local network between the date of the traffic surveys and the future assessment year, National Traffic Model (NTM) growth factors, modified by TEMPRO local growth factors, have been used, as summarised in **Table 3** below:-

Table 3 – Traffic Growth Factors

Period	AM Peak	PM Peak
2019 to 2029	1.0981	1.0989
2024 to 2029	1.0409	1.0413

- 21 The above growth factors have been applied to the surveyed traffic flows to obtain the 2029 base traffic flows, as shown in **Traffic Flow Figure 2**.
- 22 For completeness, the committed development, trip distribution, trip generation and 2029 assessment traffic flows are also presented in **Traffic Flow Figure 3-11**, based on the methodology presented in the submitted TA, which has not been disputed by TfGM or the LHA.

- 23 PICADY software has been used in the assessment of the proposed site access. The PICADY results are presented in **Appendix B** with the results summarised in **Table 4** below.

Table 4 – Proposed Site Access PICADY Results

Approach	AM PEAK		PM PEAK	
	RFC	MMQ	RFC	MMQ
2029 'With Development' Assessment				
Site Access- Right Left	0.34	0.5	0.35	0.5
Bridge Street – Ahead Right	0.15	0.4	0.16	0.4

- 24 The above results demonstrate that the proposed site access will operate well within practical capacity in the future assessment year of 2029, without significant queuing, and therefore, the conclusions presented in the submitted TA remain unchanged.
- 25 The TA clearly demonstrates that once the development trips have been distributed on the local highway network, the proposed development will not have a material impact (less than 30 two-way trips) on the operation of any off-site junctions and detailed capacity assessments are not required. This is a position which has not been disputed by TfGM or the LHA.

Public Transport

- 26 TfGM have suggested that a review of the two closest bus stops to the site is undertaken with a view to them being upgraded / improved as necessary.
- 27 The closest bus stops to the site are located immediately south-east (north-westbound services) and circa 90m north-west (south-eastbound services) of the proposed site access, as shown on **Figure 1** below.

Figure 1 – Closest Bus Stops to the Site (Left – South-East and Right – North-West)



- 28 As can be seen from the above, the bus stop located immediately south-east of the site access benefits from a flag pole and shelter, although does not benefit from raised kerbing, and the bus stop to the north-west of the site access benefits from a flag pole and raised kerbing, but no shelter.
- 29 In terms of the bus stop to the north-west of the site access, any shelter would obstruct the view/display of the business behind it. It should also be noted that, with the exception of the bus stop immediately south-east of the site access, none of the bus stops on Bridge Street or Peel Brow have shelters.
- 30 As can be seen from **Table 5** below, based on the average trip rates submitted with the aforementioned planning application which were accepted by the Local Highway Authority and not questioned by the Inspector, the proposed development will only result in only circa 1-2 additional two-way public transport movements in the peak hours, equating to just 1 additional two-way public transport movement every 30-60 minutes.

Table 5 - Estimated Trip Rates and Trip Generation Associated with the Proposed 57 Dwelling Residential Development				
Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
	Trip Rates			
Cyclists	0.003	0.015	0.020	0.007
Pedestrians	0.050	0.219	0.113	0.055
Public Transport	0.000	0.028	0.021	0.003
Mode	Trip Generation			
Cyclists	0	1	1	0
Pedestrians	3	12	6	3
Public Transport	0	2	1	0

- 31 It should also be noted that the above trip generation estimates are considered robust given that they do not take into account the number of public transport uses which could be generated by the existing buildings on the site, which could operate as single industrial buildings (B2 use) or be occupied by B1 office uses if brought back into use.
- 32 Given that these town centre bus stops are likely to already be very well used and the proposed development will not result in a material intensification in the use of them, there should be no requirement for the applicant to upgrade these existing bus stops. Notwithstanding this, the applicant is willing to fund/deliver raised kerbs at the bus stop to the south-east of the site access as part of a S106/S278 agreement.

Active Travel – Conditions

- 33 TfGM have requested suggesting wording for planning conditions relating to the reinstatement of the footway at the redundant accesses along the frontage and introduction of tactile paving at the access.
- 34 These are both relatively standard conditions frequently attached to planning applications and the wording should be provided by the Local Planning Authority.

Active Travel – Pedestrian Crossing

- 35 TfGM have stated that the lack of a crossing on Bridge Street acts as a barrier for pedestrians and should be considered as necessary to enable new residents to access the bus stops more easily and safely.
- 36 As detailed previously, the footways on route to the nearest bus stops as well as the facilities within Ramsbottom town centre are in a reasonable condition, with 2m wide footways proposed through the development and the existing site access being upgraded to provide a dropped kerb crossing with tactile paving to assist pedestrians.
- 37 Beyond the site access, Bridge Street the main high street in Ramsbottom town centre which is currently subject to large volumes of pedestrians crossing the road to access shops and bus stops as well as the benches and short stay parking bays on the north side of the road, where there are currently no pedestrian crossing points.
- 38 As detailed previously, there have been no accidents recorded on the entire length of Bridge Street over the most recently available 5-year period. Whilst it is acknowledged that TfGM have stated the safety record of Bridge Street is not relevant, it is considered wholly relevant given that there are evidently no existing highway safety issues in the area, where many pedestrians currently cross the road, that would justify the provision of a crossing facility across Bridge Street.
- 39 It should also be noted that no pedestrian crossing was requested as part of the previous application, by TfGM or the Local Highway Authority, with no concerns being raised by the Inspector in relation to pedestrian safety / crossing facilities as part of the appeal.

Summary

- 40 The responses and additional information provided above is considered sufficient to address TfGM's comments.

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APPENDIX A

Manual Classified Turning Counts, Ramsbottom

DATE: TUESDAY 6th FEBRUARY 2024

LOCATION: BRIDGE STREET STATION ACCESS

ARM: BRIDGE STREET EAST

TIME / CLASS	LEFT TO STATION ACCESS								STRAIGHT TO BRIDGE STREET WEST								TOTAL MOVEMENT FROM ARM
	PEDAL CYCLE	MOTOR CYCLE	CAR	LGV	OGV 1	OGV 2	BUS COACH	TOTAL	PEDAL CYCLE	MOTOR CYCLE	CAR	LGV	OGV 1	OGV 2	BUS COACH	TOTAL	
7:30 - 7:45	0	0	0	0	0	0	0	0	0	1	68	6	0	1	3	79	79
7:45 - 8:00	0	0	1	0	0	0	0	1	1	0	77	8	2	0	1	89	90
8:00 - 8:15	0	0	0	0	0	0	0	0	0	0	84	4	0	0	0	88	88
8:15 - 8:30	0	0	0	0	0	0	0	0	0	0	72	3	1	1	1	78	78
HOURLY TOTAL	0	0	1	0	0	0	0	1	1	1	301	21	3	2	5	334	335
8:30 - 8:45	0	0	0	0	0	0	0	0	0	0	89	4	0	0	2	95	95
8:45 - 9:00	0	0	0	0	0	0	0	0	0	1	81	6	1	0	1	90	90
9:00 - 9:15	0	0	0	0	0	0	0	0	0	1	73	3	0	1	1	80	80
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	78	5	0	0	2	85	85
HOURLY TOTAL	0	0	0	0	0	0	0	0	1	2	321	18	1	1	6	350	350
PERIOD TOTAL	0	0	1	0	0	0	0	1	2	3	622	39	4	3	11	684	685
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	116	10	1	0	1	128	128
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0	124	12	0	0	1	137	137
17:00 - 17:15	0	0	0	0	0	0	0	0	0	1	132	18	2	0	0	153	153
17:15 - 17:30	0	0	0	0	0	0	0	0	0	0	133	14	0	2	2	151	151
HOURLY TOTAL	0	0	0	0	0	0	0	0	0	1	505	54	3	2	4	569	569
17:30 - 17:45	0	0	0	0	0	0	0	0	0	1	129	18	0	0	2	150	150
17:45 - 18:00	0	0	1	0	0	0	0	1	0	0	141	10	0	0	1	152	153
18:00 - 18:15	0	0	0	0	0	0	0	0	0	0	104	7	0	1	1	113	113
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0	111	9	0	0	1	121	121
HOURLY TOTAL	0	0	1	0	0	0	0	1	0	1	485	44	0	1	5	536	537
PERIOD TOTAL	0	0	1	0	0	0	0	1	0	2	990	98	3	3	9	1105	1106

Manual Classified Turning Counts, Ramsbottom

DATE: TUESDAY 6th FEBRUARY 2024

LOCATION: BRIDGE STREET STATION ACCESS

ARM: STATION ACCESS

TIME / CLASS	LEFT TO BRIDGE STREET WEST								RIGHT TO BRIDGE STREET EAST								TOTAL MOVEMENT FROM ARM
	PEDAL CYCLE	MOTOR CYCLE	CAR	LGV	OGV 1	OGV 2	BUS COACH	TOTAL	PEDAL CYCLE	MOTOR CYCLE	CAR	LGV	OGV 1	OGV 2	BUS COACH	TOTAL	
7:30 - 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 - 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 - 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 - 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTAL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
PERIOD TOTAL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 - 17:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
17:15 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTAL	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
17:30 - 17:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
17:45 - 18:00	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
18:00 - 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTAL	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	2
PERIOD TOTAL	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	3

Manual Classified Turning Counts, Ramsbottom

DATE: TUESDAY 6th FEBRUARY 2024

LOCATION: BRIDGE STREET STATION ACCESS

ARM: BRIDGE STREET WEST

TIME / CLASS	STRAIGHT TO BRIDGE STREET EAST								RIGHT TO STATION ACCESS								TOTAL MOVEMENT FROM ARM
	PEDAL CYCLE	MOTOR CYCLE	CAR	LGV	OGV 1	OGV 2	BUS COACH	TOTAL	PEDAL CYCLE	MOTOR CYCLE	CAR	LGV	OGV 1	OGV 2	BUS COACH	TOTAL	
7:30 - 7:45	1	0	90	13	2	2	1	109	0	0	0	0	0	0	0	0	109
7:45 - 8:00	0	1	111	9	0	4	2	127	0	0	0	0	0	0	0	0	127
8:00 - 8:15	0	0	116	11	2	1	2	132	0	0	0	0	0	0	0	0	132
8:15 - 8:30	0	2	105	11	1	0	2	121	0	0	0	0	0	0	0	0	121
HOURLY TOTAL	1	3	422	44	5	7	7	489	0	0	0	0	0	0	0	0	489
8:30 - 8:45	1	1	99	14	1	1	3	120	0	0	0	0	0	0	0	0	120
8:45 - 9:00	0	0	98	8	3	3	2	114	0	0	0	0	0	0	0	0	114
9:00 - 9:15	1	0	101	10	2	1	1	116	0	0	0	0	0	0	0	0	116
9:15 - 9:30	0	1	104	9	0	1	1	116	0	0	0	0	0	0	0	0	116
HOURLY TOTAL	2	2	402	41	6	6	7	466	0	0	0	0	0	0	0	0	466
PERIOD TOTAL	3	5	824	85	11	13	14	955	0	0	0	0	0	0	0	0	955
16:30 - 16:45	0	0	71	10	1	1	1	84	0	0	0	0	0	0	0	0	84
16:45 - 17:00	0	0	78	8	0	0	1	87	0	0	0	0	0	0	0	0	87
17:00 - 17:15	0	0	86	11	0	1	2	100	0	0	0	0	0	0	0	0	100
17:15 - 17:30	1	1	88	7	0	1	0	98	0	0	0	0	0	0	0	0	98
HOURLY TOTAL	1	1	323	36	1	3	4	369	0	0	0	0	0	0	0	0	369
17:30 - 17:45	0	0	111	12	0	0	0	123	0	0	1	0	0	0	0	1	124
17:45 - 18:00	0	1	66	4	0	0	1	72	0	0	0	0	0	0	0	0	72
18:00 - 18:15	0	0	69	10	0	1	2	82	0	0	0	0	0	0	0	0	82
18:15 - 18:30	0	2	70	7	1	1	1	82	0	0	0	0	0	0	0	0	82
HOURLY TOTAL	0	3	316	33	1	2	4	359	0	0	1	0	0	0	0	1	360
PERIOD TOTAL	1	4	639	69	2	5	8	728	0	0	1	0	0	0	0	1	729

survey and presentation by **trafficsense** Ltd.

S|C|P

APPENDIX B

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_Feb 2024.j9

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

Report generation date: 16/02/2024 08:34:47

»2029 Assessment, AM

»2029 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
2029 Assessment												
Stream B-AC	D1	0.5	14.68	0.34	B	45 %	D2	0.5	17.15	0.35	C	30 %
Stream C-AB		0.4	4.69	0.15	A	[Stream B-AC]		0.4	5.43	0.16	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	2029 Assessment	AM	ONE HOUR	07:30	09:00	15	✓
D2	2029 Assessment	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2029 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		1.95	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	45	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	2029 Assessment	AM	ONE HOUR	07:30	09:00	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	✓	424	100.000
B		ONE HOUR	✓	115	100.000
C		ONE HOUR	✓	583	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	52	372
	B	66	0	49
	C	537	46	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	0.34	14.68	0.5	B	106	158
C-AB	0.15	4.69	0.4	A	99	148
C-A					436	654
A-B					48	72
A-C					341	512

Main Results for each time segment

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	87	22	429	0.202	86	0.0	0.2	10.443	B
C-AB	67	17	836	0.080	66	0.0	0.1	4.675	A
C-A	372	93			372				
A-B	39	10			39				
A-C	280	70			280				

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	103	26	405	0.255	103	0.2	0.3	11.888	B
C-AB	92	23	880	0.105	92	0.1	0.2	4.571	A
C-A	432	108			432				
A-B	47	12			47				
A-C	334	84			334				

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	127	32	372	0.341	126	0.3	0.5	14.599	B
C-AB	137	34	943	0.145	136	0.2	0.4	4.471	A
C-A	505	126			505				
A-B	57	14			57				
A-C	410	102			410				

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	127	32	372	0.341	127	0.5	0.5	14.683	B
C-AB	137	34	943	0.145	137	0.4	0.4	4.478	A
C-A	505	126			505				
A-B	57	14			57				
A-C	410	102			410				

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	103	26	405	0.255	104	0.5	0.3	11.976	B
C-AB	92	23	881	0.105	93	0.4	0.2	4.581	A
C-A	432	108			432				
A-B	47	12			47				
A-C	334	84			334				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	22	429	0.202	87	0.3	0.3	10.532	B
C-AB	67	17	837	0.081	68	0.2	0.2	4.688	A
C-A	371	93			371				
A-B	39	10			39				
A-C	280	70			280				

2029 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		1.80	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	30	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	2029 Assessment	PM	ONE HOUR	16:45	18:15	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	✓	704	100.000
B		ONE HOUR	✓	101	100.000
C		ONE HOUR	✓	464	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	65	639
	B	55	0	46
	C	415	49	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	0.35	17.15	0.5	C	93	139
C-AB	0.16	5.43	0.4	A	93	140
C-A					332	499
A-B					60	89
A-C					586	880

Main Results for each time segment

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	76	19	396	0.192	75	0.0	0.2	11.175	B
C-AB	64	16	732	0.088	64	0.0	0.2	5.386	A
C-A	285	71			285				
A-B	49	12			49				
A-C	481	120			481				

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	91	23	365	0.249	90	0.2	0.3	13.089	B
C-AB	87	22	757	0.115	87	0.2	0.3	5.381	A
C-A	330	82			330				
A-B	58	15			58				
A-C	574	144			574				

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	321	0.346	110	0.3	0.5	17.024	C
C-AB	128	32	793	0.161	127	0.3	0.4	5.414	A
C-A	383	96			383				
A-B	72	18			72				
A-C	704	176			704				

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	111	28	321	0.346	111	0.5	0.5	17.147	C
C-AB	128	32	794	0.162	128	0.4	0.4	5.425	A
C-A	383	96			383				
A-B	72	18			72				
A-C	704	176			704				

17:45 - 18:00

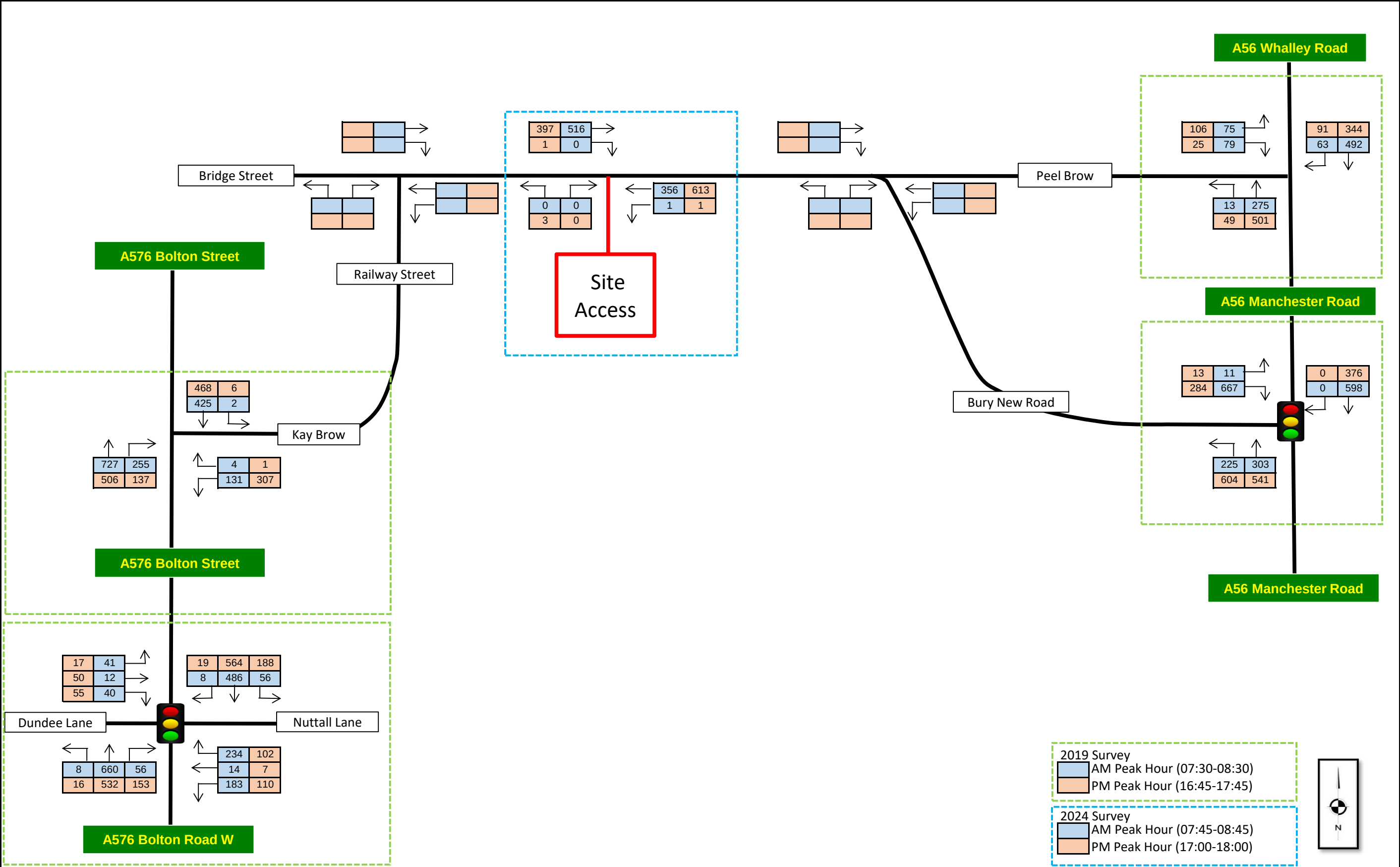
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	365	0.249	92	0.5	0.3	13.199	B
C-AB	88	22	757	0.116	88	0.4	0.3	5.395	A
C-A	330	82			330				
A-B	58	15			58				
A-C	574	144			574				

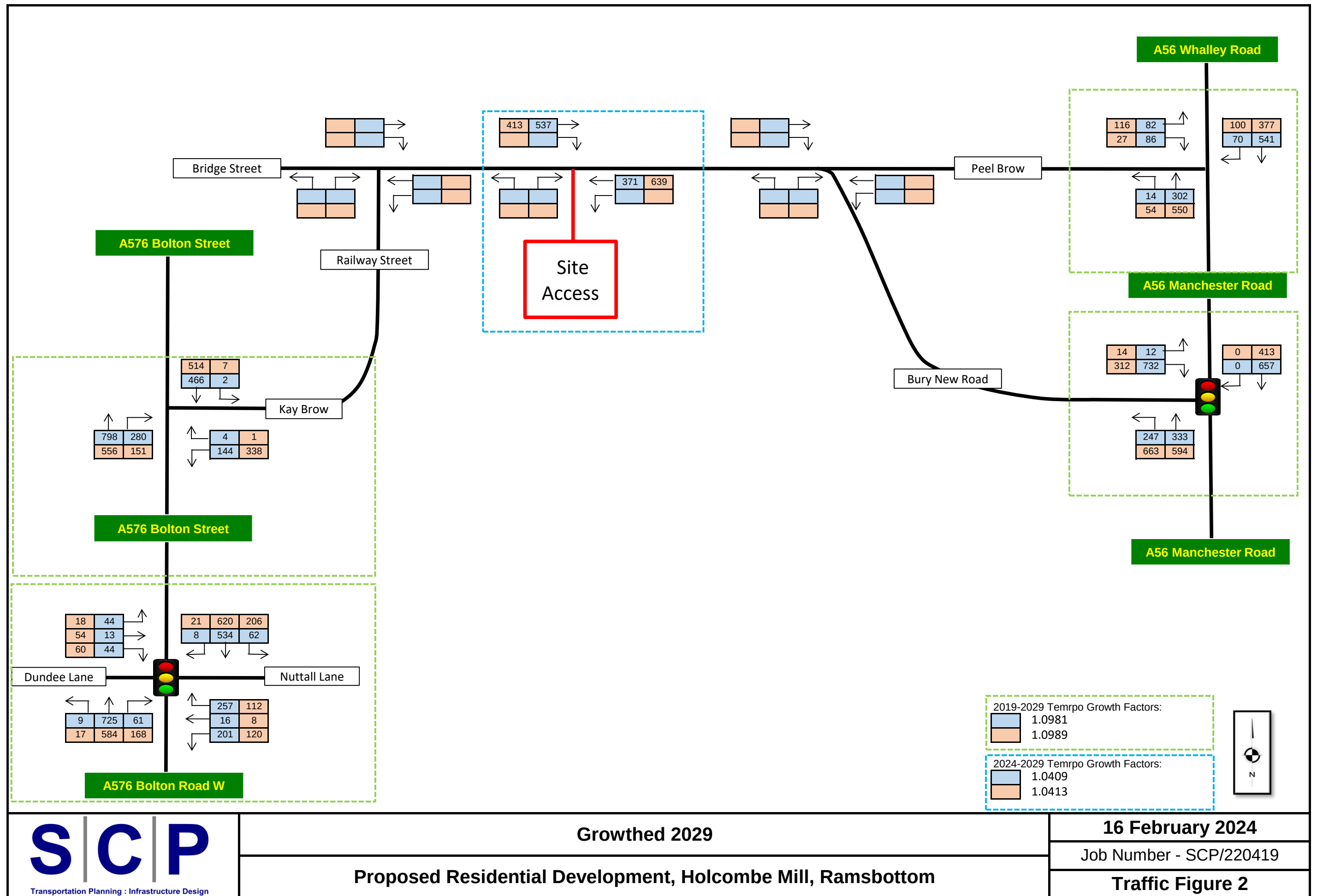
18:00 - 18:15

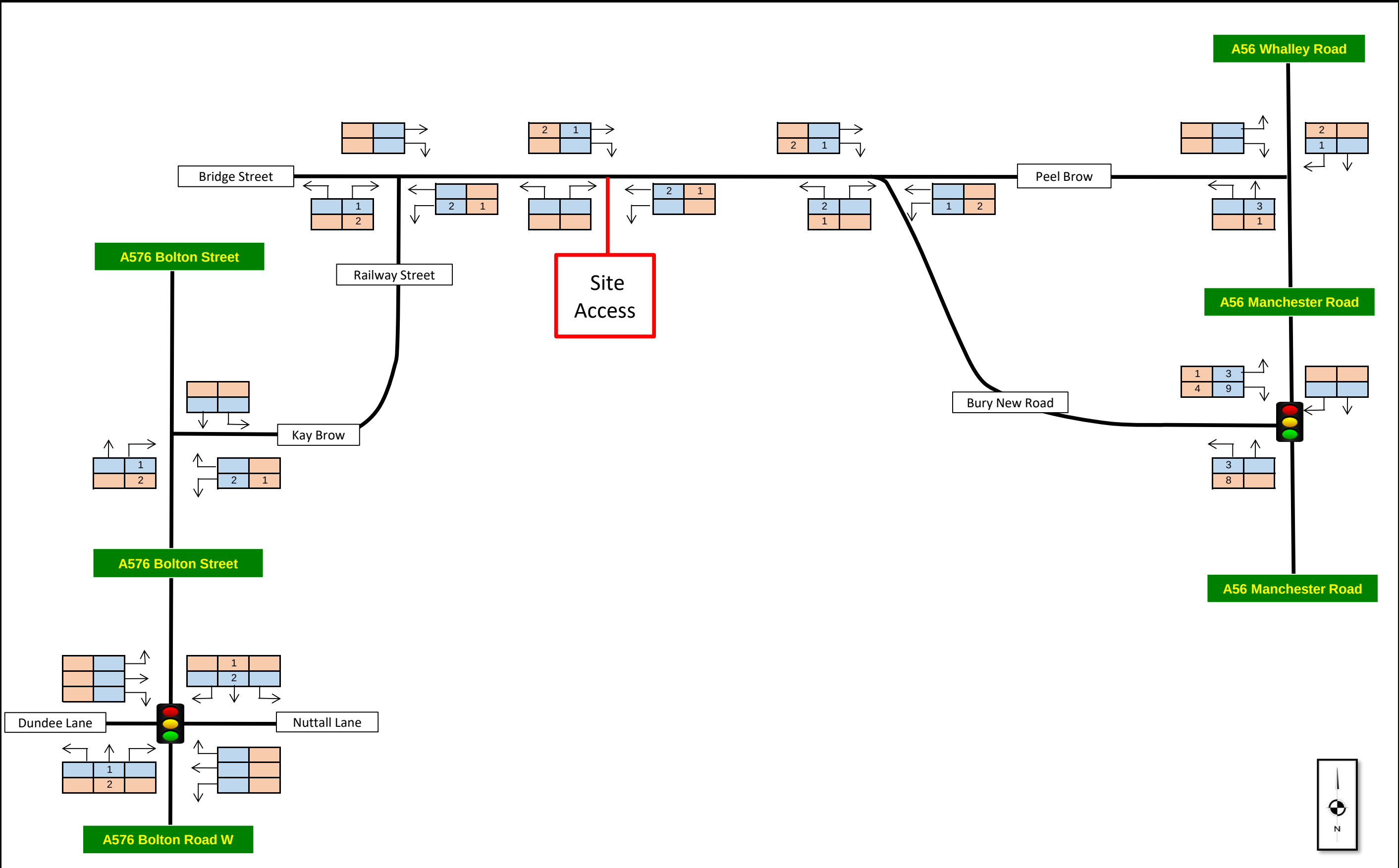
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B-AC	76	19	396	0.192	76	0.3	0.2	11.273	B
C-AB	65	16	732	0.088	65	0.3	0.2	5.404	A
C-A	285	71			285				
A-B	49	12			49				
A-C	481	120			481				

S|C|P

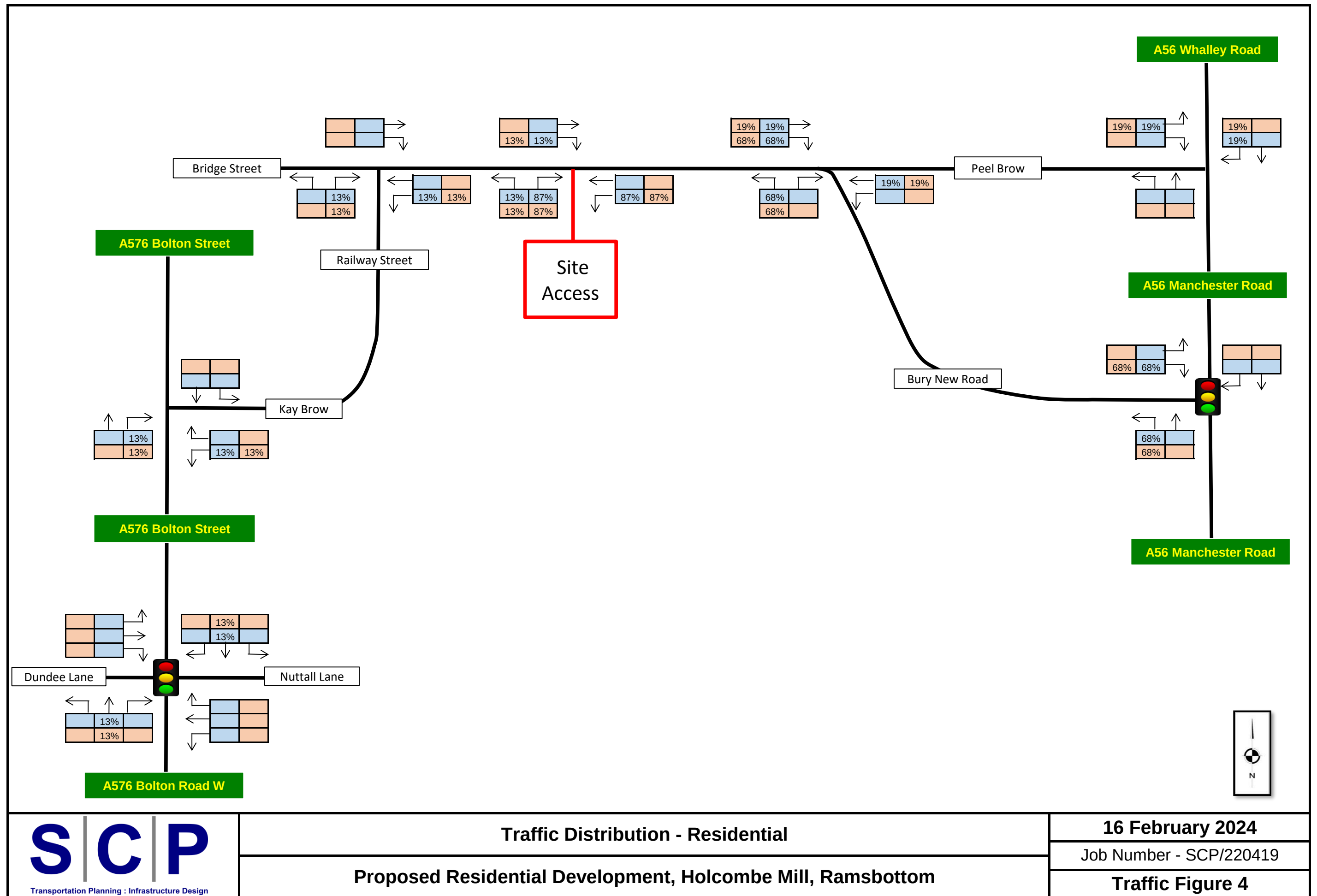
TRAFFIC FLOW FIGURES

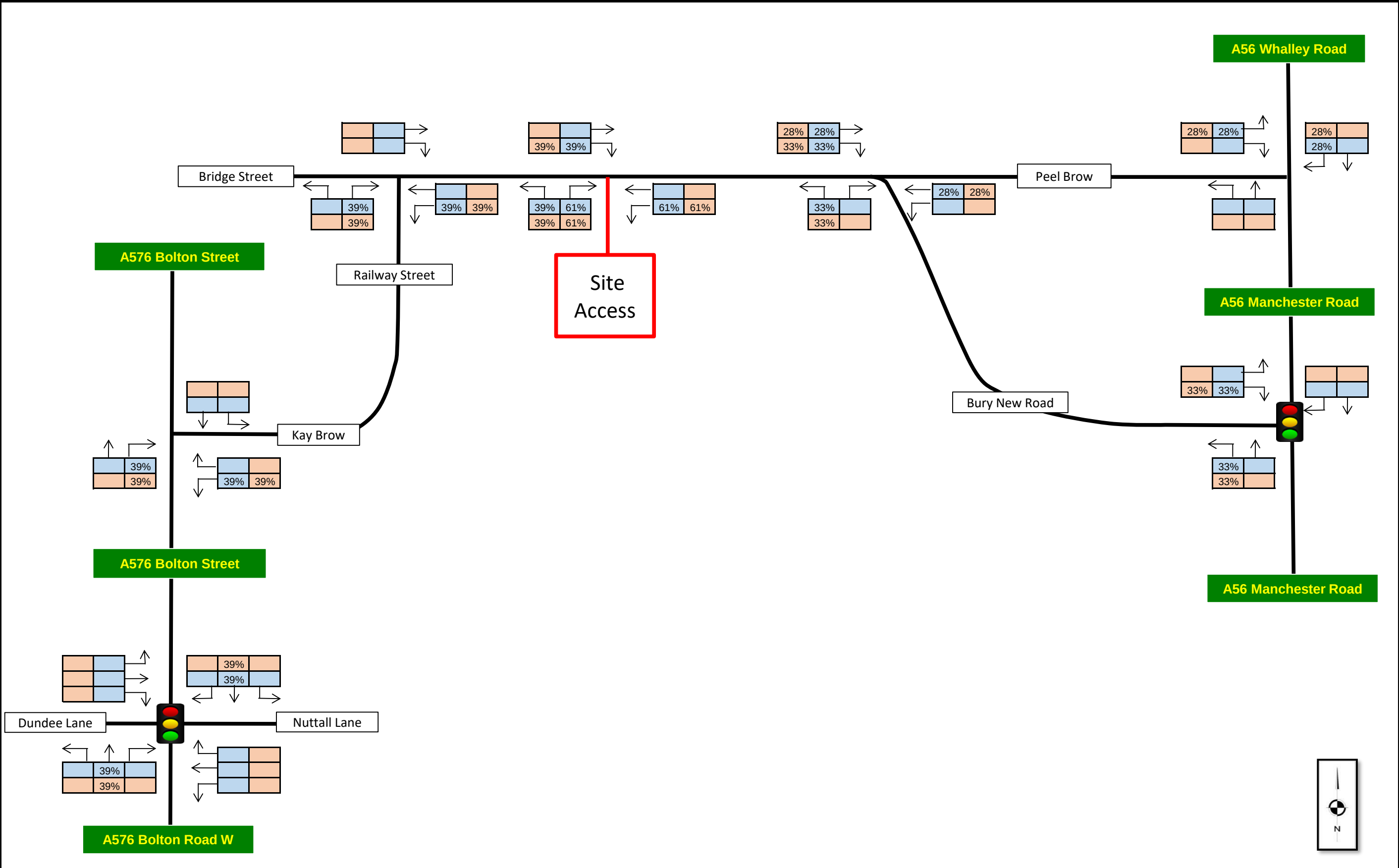


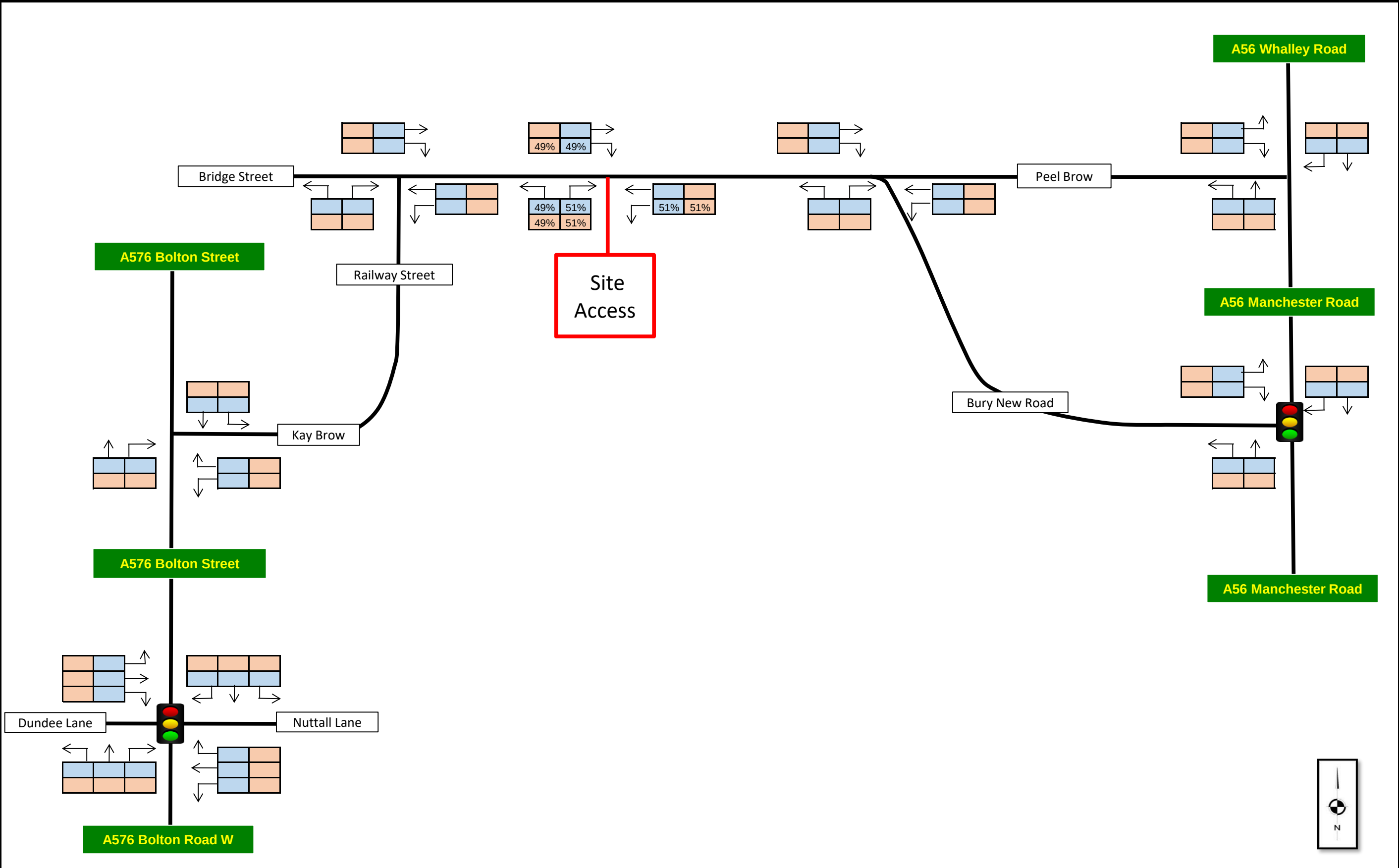




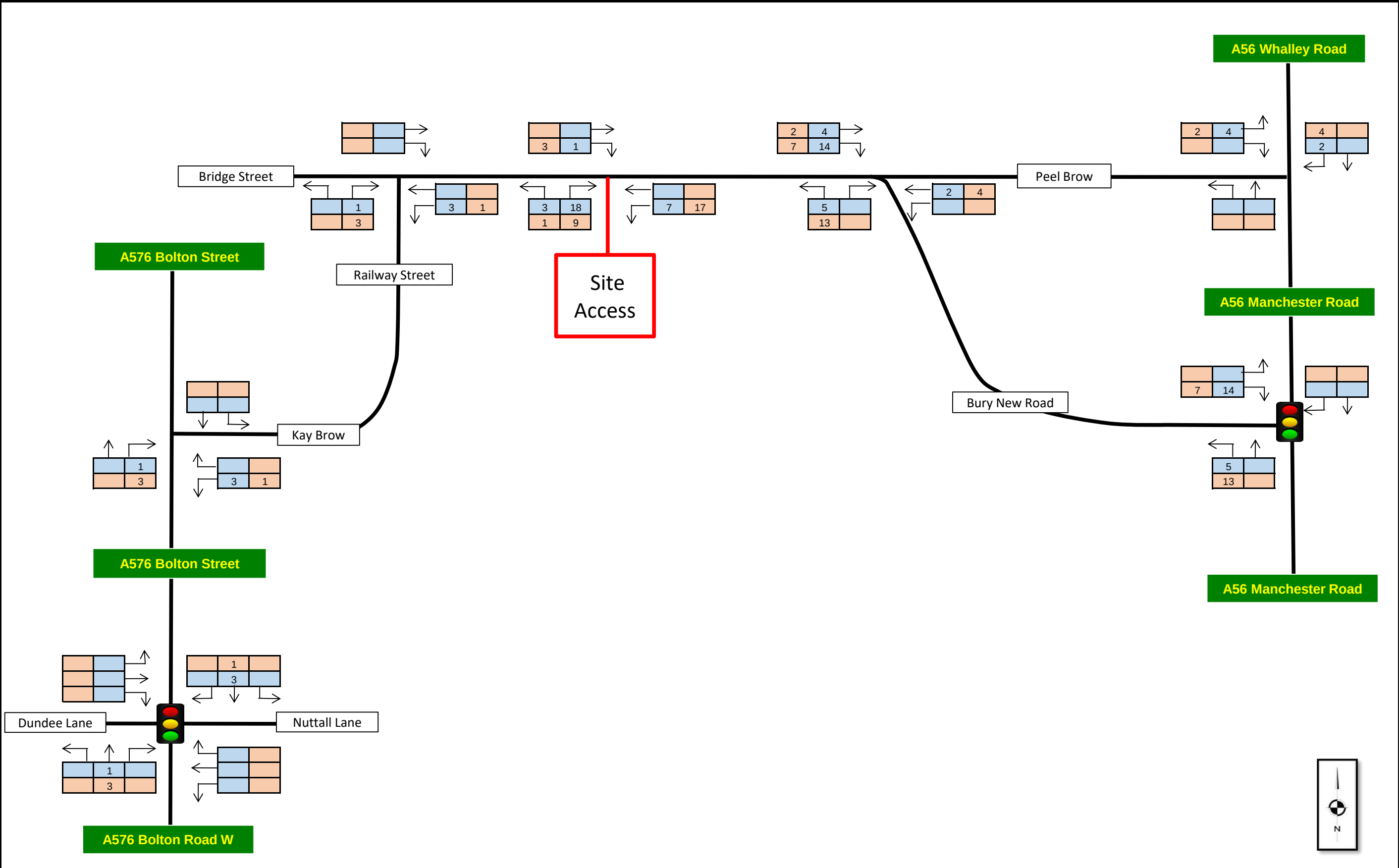
 Transportation Planning : Infrastructure Design	Committed Development - Bury New Road (Ref: 63617)		16 February 2024
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 3



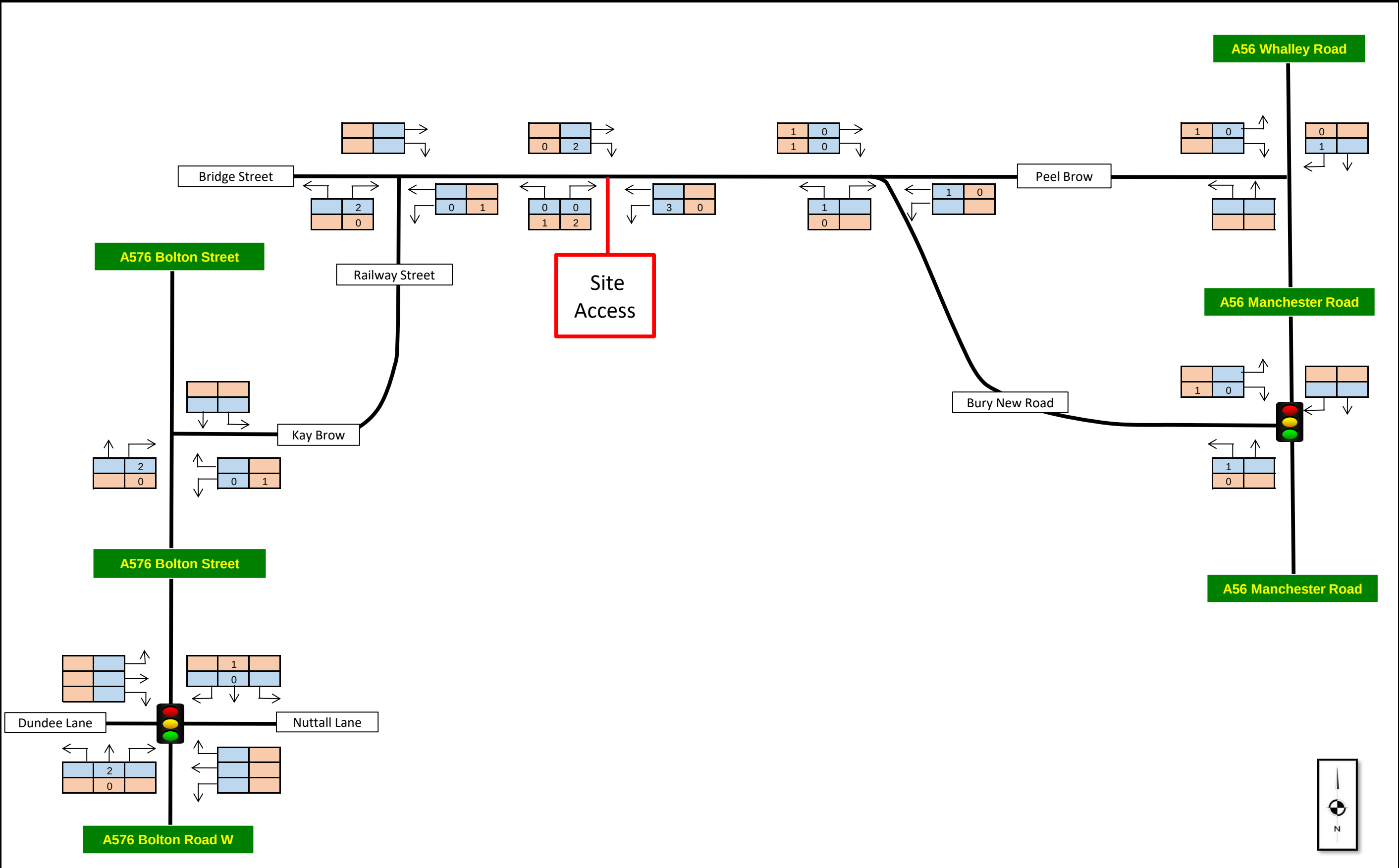




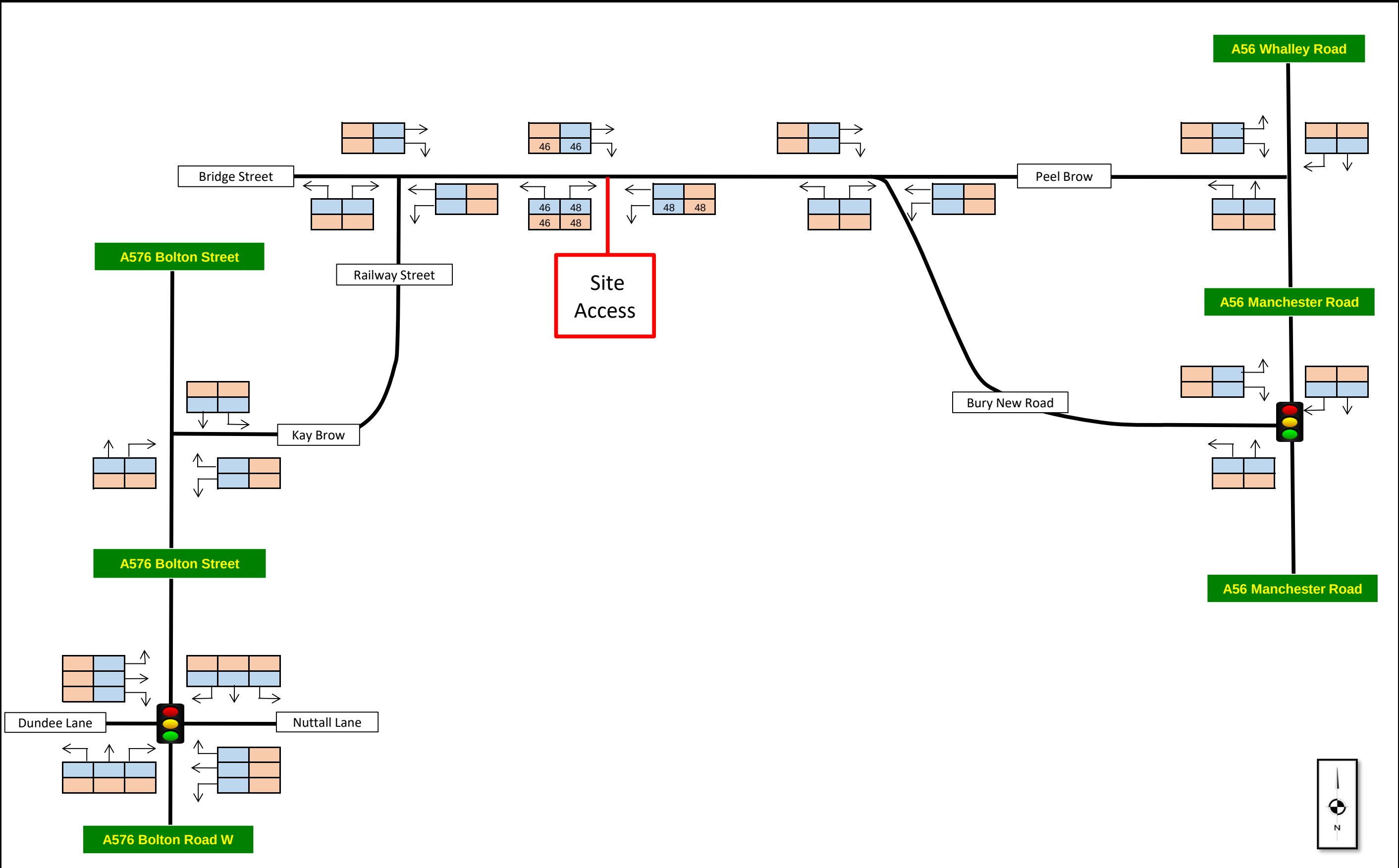
 Transportation Planning : Infrastructure Design	Traffic Distribution - Car Park		16 February 2024
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 6



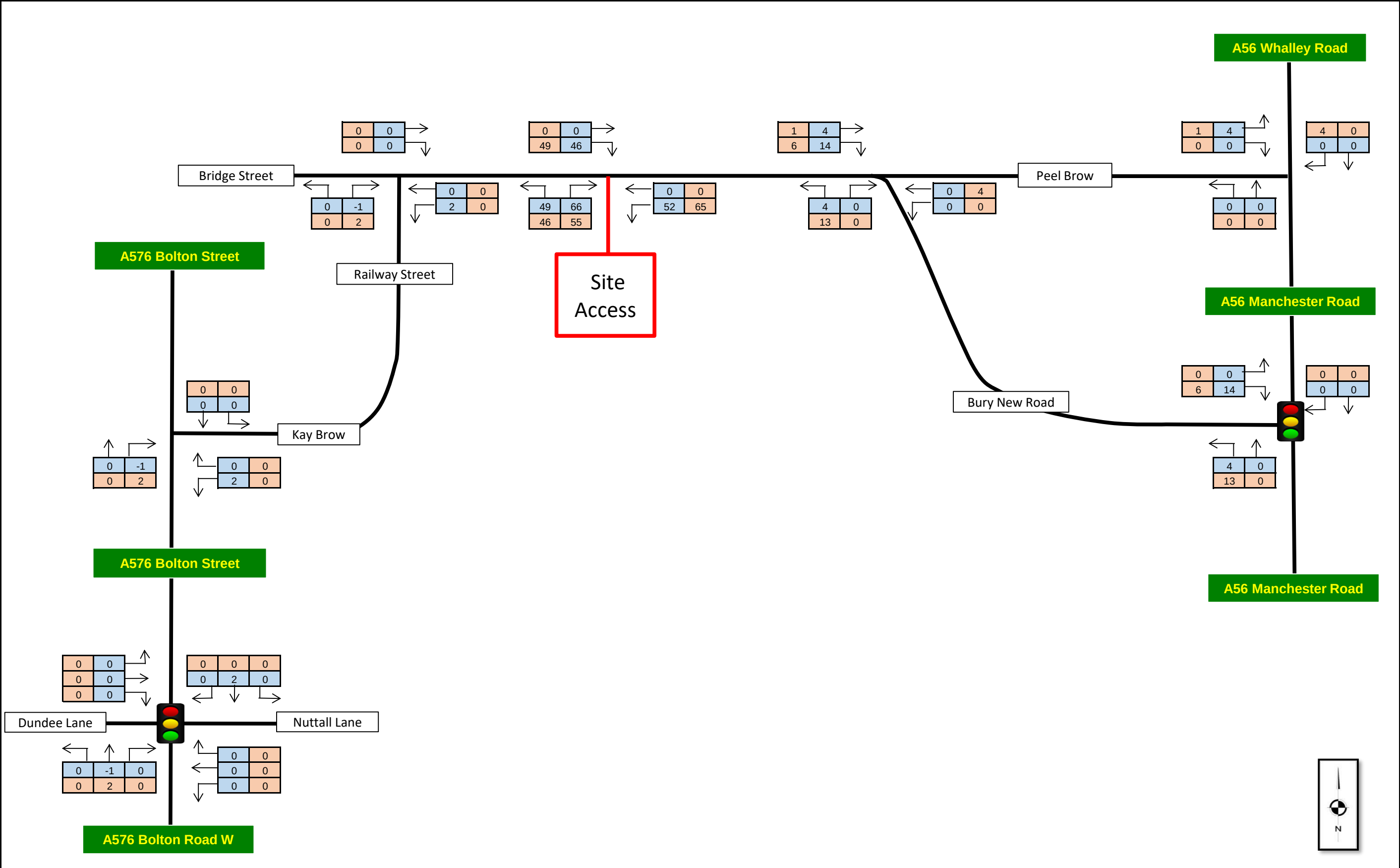
 Transportation Planning : Infrastructure Design	Traffic Generation - Residential		16 February 2024
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 7



 Transportation Planning : Infrastructure Design	Traffic Generation - Existing Industrial Units		16 February 2024
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 8



 Transportation Planning : Infrastructure Design	Traffic Generation - Car Park	16 February 2024
	Proposed Residential Development, Holcombe Mill, Ramsbottom	Job Number - SCP/220419
		Traffic Figure 9



 Transportation Planning : Infrastructure Design	Net Traffic Generation		16 February 2024
	Proposed Residential Development, Holcombe Mill, Ramsbottom		Job Number - SCP/220419
			Traffic Figure 10

