

Appendix T: PRTM Forecasting Report

PRTM

Transport Modelling

Burbage Fields, Burbage

Forecasting Report

Quality Information

Prepared by

Euan McFarlane

Graduate Consultant

Checked by

Kit Tang / Clare Norris

Associate Director / Senior
Consultant**Approved by**

Mark Dazeley

Regional Director

Revision History

Revision	Revision date	Details	Authorised	Name	Position
v1.0	2022-10-27	For Issue	Yes	Mark Dazeley	Regional Director

Prepared by:

AECOM Limited
Marlborough Court
10 Bricket Road
St Albans
Hertfordshire
AL1 3JX

[aecom.com](https://www.aecom.com)

© 2022 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Google Earth Pro™ imagery in the form of Google Map™ and Google Street View™ have been used, unmodified, within this document. This imagery has been used within the extents of the AECOM license agreement with Google Inc.

Table of Contents

Section 1 – Introduction	4
1.1 Background	4
1.2 Structure of the Report.....	6
Section 2 – Forecast Approach and Assumptions.....	7
2.1 Introduction.....	7
2.2 ‘Without Development’ Assumptions.....	7
2.3 Proposed Development Access Assumptions	8
2.4 Proposed Development Trip Generation Assumptions	8
2.5 Proposed Development Trip Distribution Assumptions.....	10
Section 3 – Forecast Model Results.....	15
3.1 Introduction.....	15
3.2 Forecast Development Traffic.....	15
3.3 Forecast Flow Change	15
3.4 Area of Influence.....	18
3.5 Forecast Delay Change	18
3.6 Forecast Junction Turning Flows.....	21
Section 4 – Summary of the PRTM Assessment	22
4.1 Summary of Assessment	22
Appendix A Planning Data Assumptions.....	23
Appendix B Network Assumptions	24
Appendix C Forecast Junction Turning Flows.....	28

List of Tables

Table 2.1 Development Trip Generation	8
Table 2.2 Development Trip Generation for Coventry Road Access and Passchendaale Drive Access	9

List of Figures

Figure 1.1: Development Location	4
Figure 1.2: Development Access – Flanders Close	5
Figure 1.3: Development Access – Coventry Road.....	5
Figure 2.1 Parent Zone.....	10
Figure 2.2 Trip Distribution to and from the Proposed Development for 2026 (AM).....	11
Figure 2.3 Trip Distribution to and from the Proposed Development for 2026 (PM).....	12
Figure 2.4 Trip Distribution to and from the Proposed Development for 2031 (AM).....	13
Figure 2.5 Trip Distribution to and from the Proposed Development for 2031 (PM).....	14
Figure 3.1: Forecast Flow Change for 2026 ‘With Development’ minus ‘Without Development’ Scenarios	16
Figure 3.2: Forecast Flow Change for 2031 ‘With Development’ minus ‘Without Development’ Scenarios	17
Figure 3.3: Area of Influence.....	18
Figure 3.4: Forecast Delay Change for 2026 ‘With Development’ minus ‘Without Development’ Scenarios	19
Figure 3.5: Forecast Delay Change for 2031 ‘With Development’ minus ‘Without Development’ Scenarios	20
Figure 3.6: Location of Forecast Turning Flow Data	21

Section 1 – Introduction

1.1 Background

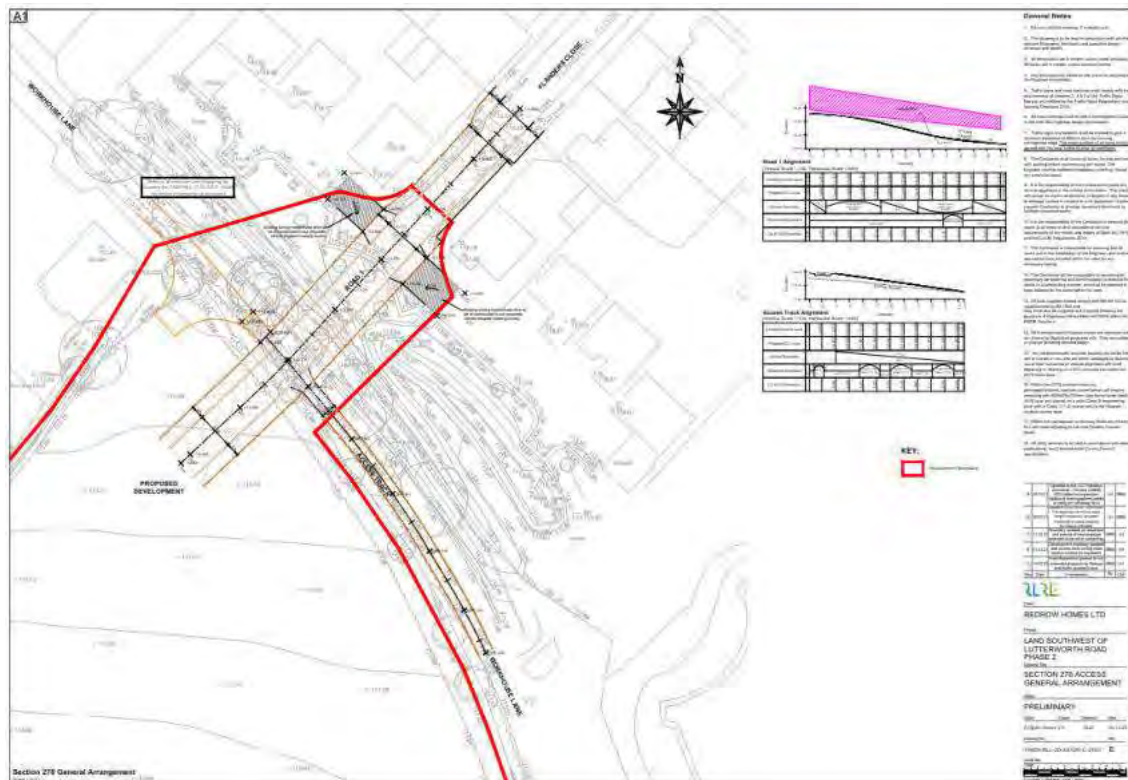
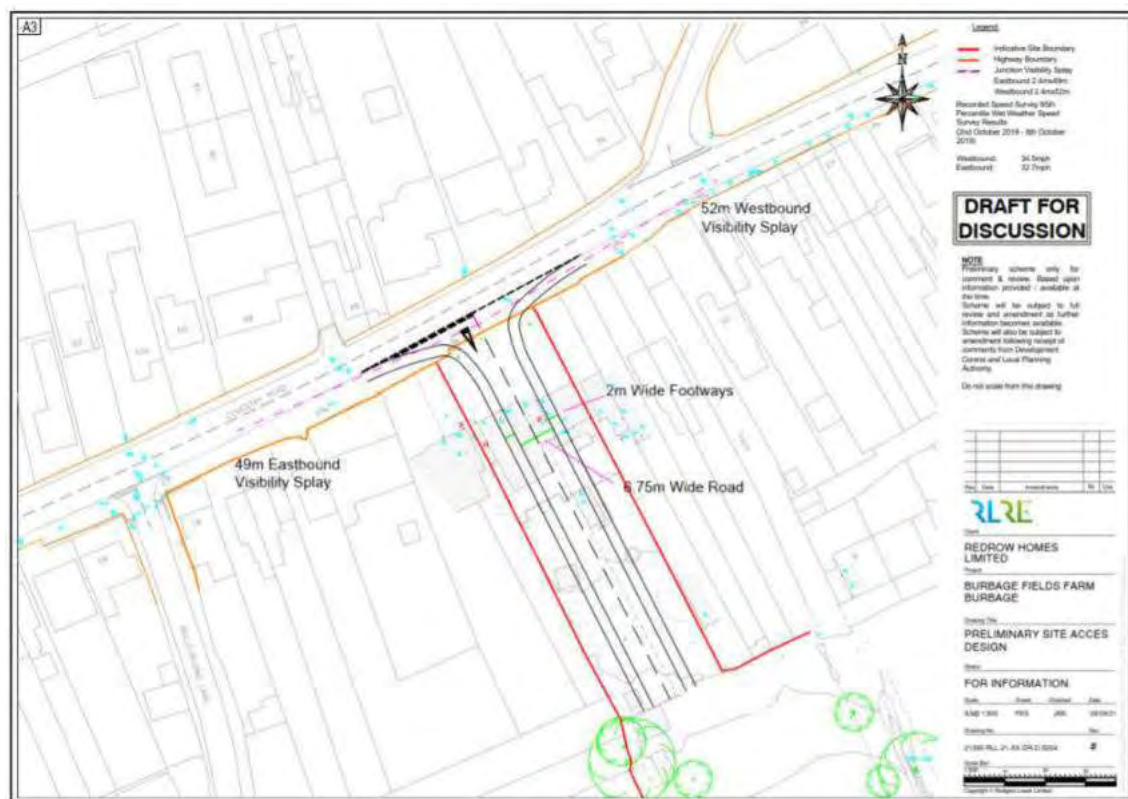
- 1.1.1 The proposed Burbage Fields development is a residential development comprising 450 dwellings (Burbage Fields Phase 2 site (80 dwellings) and Burbage Fields Wider site (370 dwellings))¹. The development site is located on an area of land to the west of Workhouse Lane, in Burbage, Leicestershire. Figure 1.1 shows the location of the proposed development.
- 1.1.2 The proposed Burbage Fields development has two vehicular accesses. The development will connect to Flanders Close, thus providing highway access to the Passchendaele Drive / Lutterworth Road junction, as shown in Figure 1.2; and a new priority junction is proposed to the north of the development to connect to Coventry Road, as shown in Figure 1.3.
- 1.1.3 AECOM has been commissioned to undertake strategic modelling to assess the potential traffic impacts of the proposed development using the Pan-Regional Transport Model (PRTM v2.2) for the AM Peak and PM Peak hours.

Figure 1.1: Development Location³



¹ Table 2, Technical Note – Burbage Fields Farm Site Access Assignment (18/05/2022) (Rodgers Leask)

³ "Attachment 1 - Indicative Red Line Plan.pdf", received via email (22/12/2021)

Figure 1.2: Development Access – Flanders Close⁵Figure 1.3: Development Access – Coventry Road⁶

⁵ "Attachment 2 - 19409-RL-20-XX-DR-C-2100E Section 278 Site Access General Arrangement.pdf", received via email (22/12/2021)

⁶ Drawing no. 21390-RL-21-XX-DE-D-5004, PRTM Development Form for Burbage Fields (PRTM Development Form v0.3_Burbage Fields_RL.pdf)

1.1.4 Within this assessment of the proposed Burbage Fields development, the following forecast scenarios have been produced:

- 2021 'Without Development';
- 2026 'Without Development';
- 2026 'With Development';
- 2031 'Without Development'; and
- 2031 'With Development'.

1.1.5 This report is the Forecasting Report which documents the forecast model results for the PRTM strategic modelling assessment of the proposed Burbage Fields development. This report follows the Burbage Fields Base Year Model Review Report⁷ which details the calibrated 2014 base year model review performance in the vicinity of the proposed development site.

1.2 Structure of the Report

1.2.1 Following the introduction, this report contains the following sections:

- Section 2 – Forecast Approach and Assumptions: this section details the forecast assumptions adopted within this assessment of the proposed development, including the assumed development trip generation and trip distribution.
- Section 3 – Forecast Model Results: this section details the forecast results requested as part of the brief.
- Section 4 – Summary of the PRTM Assessment: this section provides a summary of the assessment of the proposed development.

⁷ PRTM - Burbage Fields, Burbage - Base Year Model Review v3.0 (2022-05-24)

Section 2 – Forecast Approach and Assumptions

2.1 Introduction

- 2.1.1 This section sets out the forecast assumptions applied for this application for the PRTM, and the methodology adopted to create the required model forecasts.
- 2.1.2 In addition to the calibrated 2014 base year model, the following forecast model scenarios have been produced:
- 2021 'Without Development';
 - 2026 'Without Development';
 - 2026 'With Development';
 - 2031 'Without Development'; and
 - 2031 'With Development'.
- 2.1.3 The 'Without Development' forecasts have made use of the highway, public transport and variable demand model components of the PRTM. The forecasts therefore include the response of travel demand to forecast changes in the costs of travel (including congestion, fuel prices and public transport fares) and changes in assumed highway and public transport infrastructure over time. Section 2.2 provides the 'Without Development' assumptions applied.
- 2.1.4 To produce the 'With Development' forecasts, the highway demand for the proposed development has been added to the 2026 'Without Development' and 2031 'Without Development' highway demand matrices and assigned in the PRTM highway model. Sections 2.3 to 2.5 provide the highway network and demand assumptions for the proposed development.
- 2.1.5 As documented in the Burbage Fields Base Year Model Review Report⁸, the PRTM v2.2 uses the May 2020 TAG databook which was the latest TAG databook available at the time of the last model calibration. A sensitivity test, using the November 2021 TAG databook, was undertaken for the base year model which shows the absolute modelled flow difference are generally small when compared with using the 2020 databook (i.e. fewer than 10 vehicles) and do not materially affect the overall base year model performance results. For forecast modelling, the November 2021 TAG databook has been used, as agreed with the client.

2.2 'Without Development' Assumptions

- 2.2.1 The forecast planning data and infrastructure schemes, in the format of an uncertainty log, used to produce the forecast 'Without Development' scenarios, were reviewed by the client.
- 2.2.2 Appendix A presents the planning data assumptions (residential and employment) within Hinckley and Bosworth that have been incorporated in the PRTM forecast year models. Given the number of developments in the uncertainty log, the reporting of the planning data has been limited to residential sites with more than 500 dwellings and employment sites with more than 750 jobs. All available data that should be used in the modelling, irrespective of size, have been used in the model forecasts. The complete list of the planning assumptions is included in the Burbage Fields Uncertainty Log v1.0⁹.
- 2.2.3 Appendix B presents the forecast assumptions for highway and public transport networks for this application.
- 2.2.4 The trip forecasting process contained within the PRTM uses forecasts of population, households, and jobs to generate estimates of future travel demand. Planning forecasts (containing measures of housing and development) were unconstrained (NTEM minimum¹⁰) for this application as noted in the proposal¹¹.

⁸ PRTM – Burbage Fields, Burbage - Base Year Model Review Report v3.0 (2022-05-24)

⁹ Burbage Fields Uncertainty Log v1.0.xlsx

¹⁰ In the event that the planning data lead to below NTEM / TEMPro growth, the model reverts to NTEM / TEMPro as minimum.

¹¹ PRTM Fee Proposal – Burbage Fields v1 (2021-11-05)

2.3 Proposed Development Access Assumptions

- 2.3.1 To produce 'With Development' network for 2026 and 2031, the assumed site accesses for the proposed development, as shown in Figure 1.2 and Figure 1.3, were added in the relevant 'Without Development' networks.
- 2.3.2 Two development zones have been used to represent the Burbage Fields Farm Phase 2 site (80 dwellings), one zone for each proposed development access. Two development zones have also been used to represent the Burbage Fields Wider site (370 dwellings), one zone for each proposed development access. The assumed proportions of development trips for each access have been provided by the client, as shown in Table 2.2.

2.4 Proposed Development Trip Generation Assumptions

- 2.4.1 Development trip generation data for the proposed development were provided by the client which have been reproduced in Table 2.1 and Table 2.2. These have been added to the relevant 'Without Development' highway demand matrices to form the 'With Development' highway demand matrices for 2026 and 2031 and assigned in the PRTM highway model.

Table 2.1 Development Trip Generation¹²

		Car Trips (in veh)	
	Departing (Out)	Arriving (In)	Total
Burbage Fields Phase 2 site (80 dwellings)			
AM Peak hour (08:00 to 09:00)	31	11	42
PM Peak hour (17:00 to 18:00)	13	29	42
Burbage Fields Wider site (370 dwellings)			
AM Peak hour (08:00 to 09:00)	147	50	197
PM Peak hour (17:00 to 18:00)	59	134	193
Burbage Fields Development (450 dwellings)			
AM Peak hour (08:00 to 09:00)	178	61	239
PM Peak hour (17:00 to 18:00)	72	163	235

¹² Table 5, Technical Note – Burbage Fields Farm Site Access Assignment (18/05/2022) (Rodgers Leask)

Table 2.2 Development Trip Generation for Coventry Road Access and Passchendaale Drive Access¹³

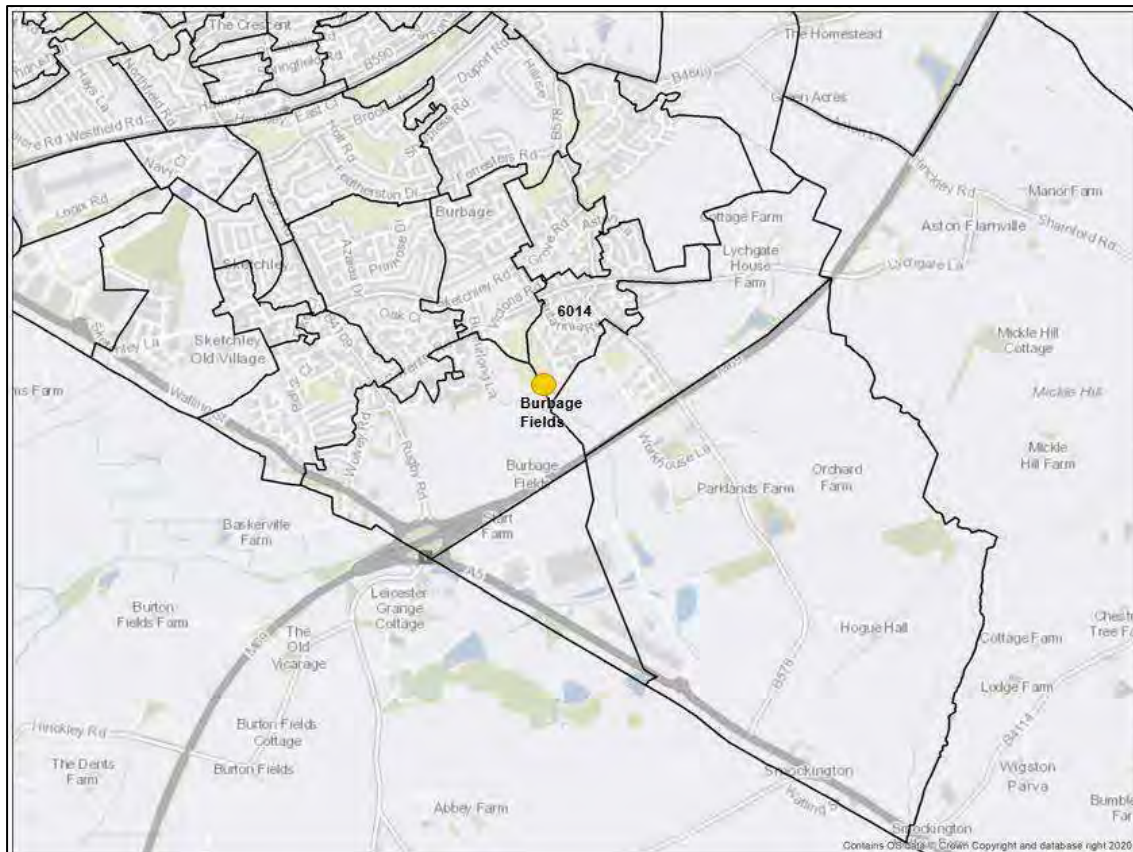
	Car Trips (in veh)		Total
	Departing (Out)	Arriving (In)	
Burbage Fields Phase 2 site (80 dwellings) – Coventry Road			
AM Peak hour (08:00 to 09:00)	14	5	19
PM Peak hour (17:00 to 18:00)	6	13	19
Burbage Fields Wider site (370 dwellings) – Coventry Road			
AM Peak hour (08:00 to 09:00)	116	40	156
PM Peak hour (17:00 to 18:00)	47	106	153
Burbage Fields Development (450 dwellings) – Coventry Road			
AM Peak hour (08:00 to 09:00)	130	45	175
PM Peak hour (17:00 to 18:00)	53	119	172
Burbage Fields Phase 2 site (80 dwellings) – Passchendaale Drive			
AM Peak hour (08:00 to 09:00)	17	6	23
PM Peak hour (17:00 to 18:00)	7	16	23
Burbage Fields Wider site (370 dwellings) – Passchendaale Drive			
AM Peak hour (08:00 to 09:00)	31	10	42
PM Peak hour (17:00 to 18:00)	12	28	40
Burbage Fields Development (450 dwellings) – Passchendaale Drive			
AM Peak hour (08:00 to 09:00)	48	16	65
PM Peak hour (17:00 to 18:00)	19	44	63

¹³ Table 5, Technical Note – Burbage Fields Farm Site Access Assignment (18/05/2022) (Rodgers Lease)

2.5 Proposed Development Trip Distribution Assumptions

- 2.5.1 It was agreed that the development zone distributions are to be based on an existing PRTM 'parent zone' taken from the 2026 and 2031 'Without Development' scenarios. The parent zone selected is zone 6014, as shown in Figure 2.1, which is located to the north-east of the proposed development site and is primarily residential.
- 2.5.2 It should be noted that the split between the access points (i.e. Coventry Road and Passchendaele Drive) for the highway assignment is slightly different (less than 15 PCUs) to the assumed proportions of development trips for each access provided by the client. The total departing and arriving development trips across both access points are consistent with the figures provided in Table 2.1.

Figure 2.1 Parent Zone



Contains Ordnance Survey data ©Crown copyright and database right 2022

- 2.5.3 Figure 2.2 to Figure 2.5 show the forecast development trip distribution on the highway network for the 2026 and the 2031 'With Development' scenarios. These figures show that most of the development traffic routes to / from the M69 via Rugby Road and Sapcote Road, to / from the A5 via Lutterworth Road, and to / from Hinckley Town Centre via Rugby Road and Hinckley Road.

Figure 2.2 Trip Distribution to and from the Proposed Development for 2026 (AM)

2026 'With Development' (AM) – From the Development



2026 'With Development' (AM) – To the Development



Figure 2.3 Trip Distribution to and from the Proposed Development for 2026 (PM)

2026 'With Development' (PM) – From the Development



2026 'With Development' (PM) – To the Development



Figure 2.4 Trip Distribution to and from the Proposed Development for 2031 (AM)

2031 'With Development' (AM) – From the Development



2031 'With Development' (AM) – To the Development



Figure 2.5 Trip Distribution to and from the Proposed Development for 2031 (PM)

2031 'With Development' (PM) – From the Development



2031 'With Development' (PM) – To the Development



Section 3 – Forecast Model Results

3.1 Introduction

3.1.1 This section details the forecast model results for the proposed Burbage Fields Development for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours. The analysis includes:

- the routing of the forecast development traffic in the 2026 and 2031 'With Development' forecasts (Section 2.5 and Section 3.2);
- the forecast flow changes in 2026 between the 'With Development' and 'Without Development' and in 2031 between the 'With Development' and 'Without Development' scenarios (Section 3.3);
- an assessment of the Area of Influence (Aoi) (Section 0);
- the forecast delay changes in 2026 between the 'With Development' and 'Without Development' and in 2031 between the 'With Development' and 'Without Development' scenarios (Section 3.5); and
- the forecast turning flows and volume-capacity ratios at selected junctions (Section 3.6).

3.2 Forecast Development Traffic

3.2.1 Figure 2.2 to Figure 2.5 in Section 2 illustrate the assigned forecast trip distribution to and from the proposed development in 2026 and 2031 for both AM and PM Peak hours. The figures show that traffic generated by the proposed development is forecast to:

- route to and from the M69 via Rugby Road and Sapcote Road;
- route east towards the A5 via the B578 Lutterworth Road; and
- route north towards the centre of Hinckley via Coventry Road, Rugby Road, the B578 / Hinckley Road, and Burbage Road.

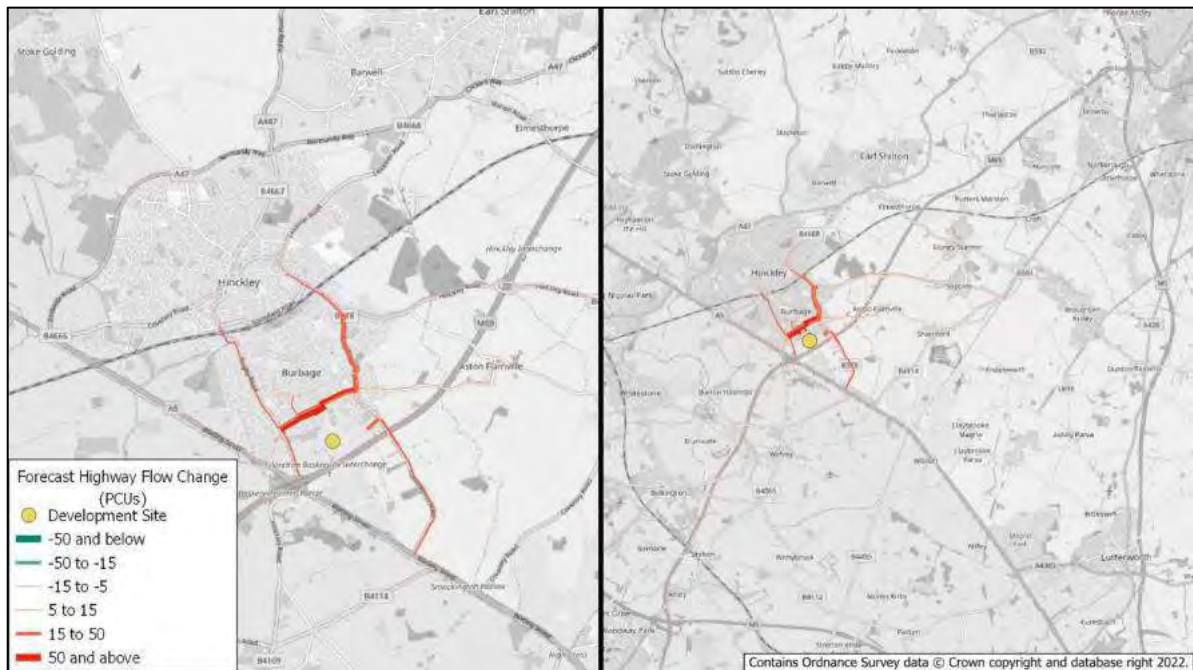
3.3 Forecast Flow Change

3.3.1 Figure 3.1 and Figure 3.2 show the forecast flow changes in 2026 and 2031 between the 'With Development' and 'Without Development' scenarios for the AM Peak and PM Peak hours. Red bandwidth represents an increase in traffic flow in the 'With Development' scenario and green bandwidth represents a decrease.

3.3.2 As expected, the largest increases in flows are forecast along the road links in the immediate vicinity of the proposed development, such as Coventry Road, Rugby Road, Lutterworth Road, and the B579 / Hinckley Road. In the 2026 'With Development' scenario, Coventry Road has a forecast increase in two-way traffic of approximately 110 PCUs and 60 PCUs for the AM Peak hour and PM Peak hour respectively. In the 2031 'With Development' scenario, the forecast increase in two-way traffic on Coventry Road is approximately 120 PCUs and 60 PCUs in the AM Peak hour and PM Peak hour respectively. The M69, the A5, and residential streets to the north of the proposed development, such as Pyeharps Road, Boyslade Road, are also forecast to have an increase in flow.

Figure 3.1: Forecast Flow Change for 2026 'With Development' minus 'Without Development' Scenarios

AM Peak hour



PM Peak hour

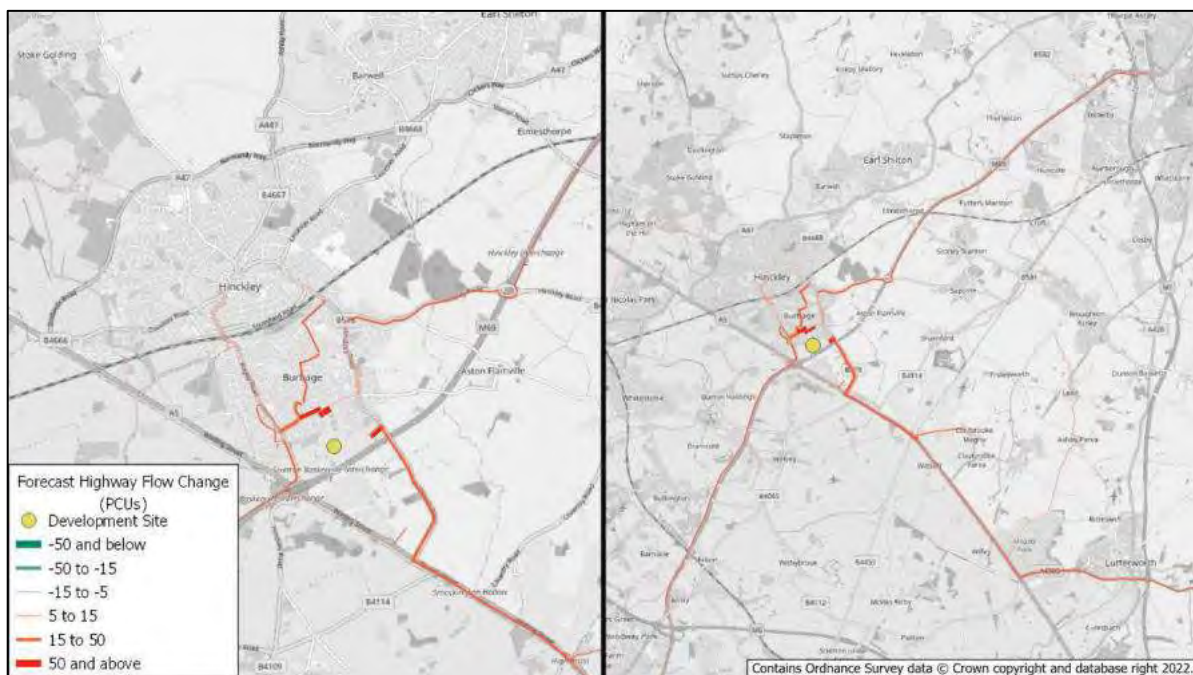
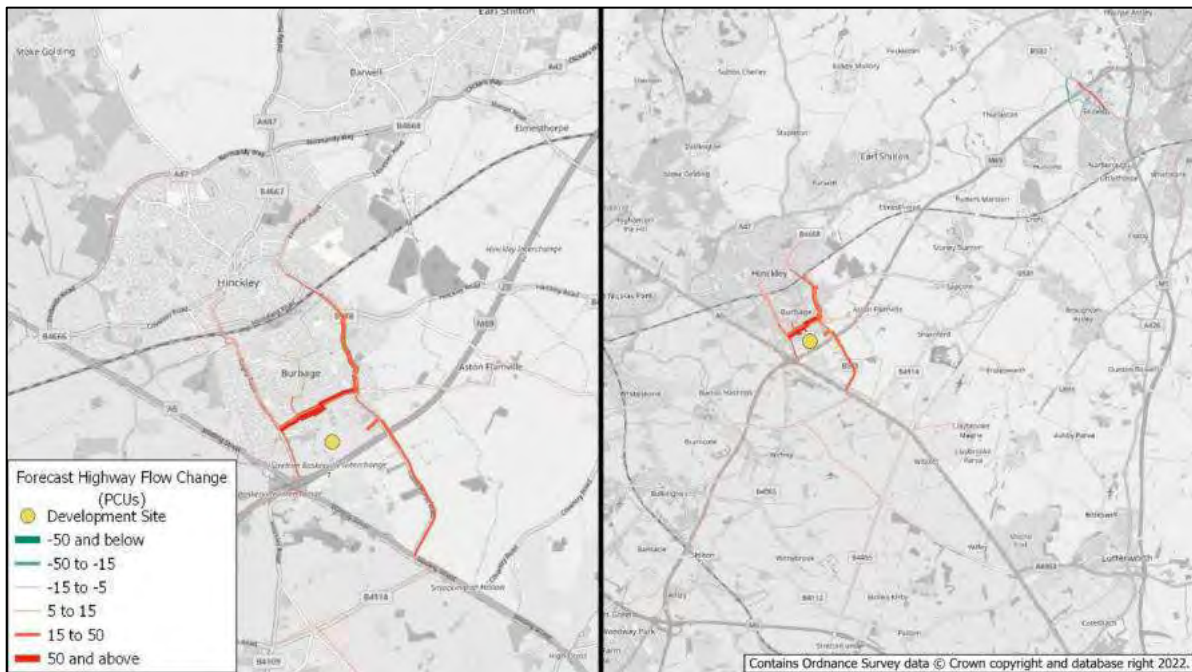
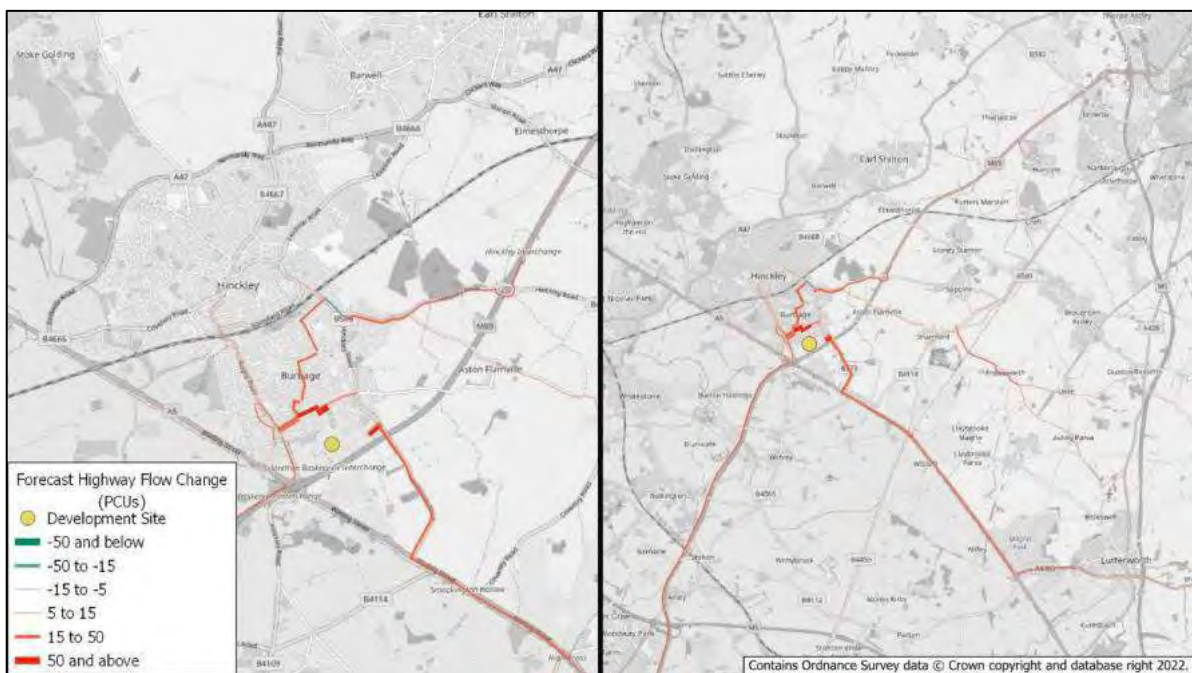


Figure 3.2: Forecast Flow Change for 2031 'With Development' minus 'Without Development' Scenarios

AM Peak hour



PM Peak hour

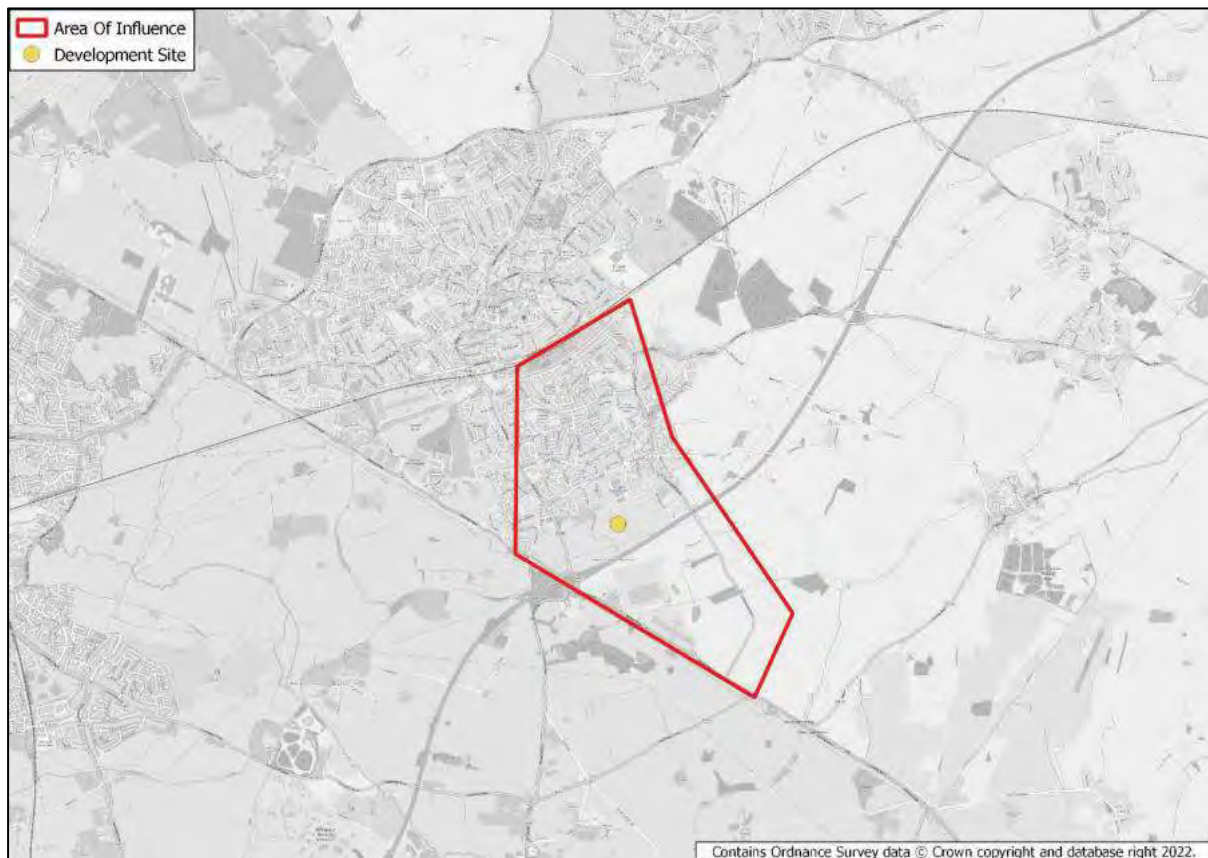


3.4 Area of Influence

3.4.1 Using the forecast flow changes between the 'With Development' and 'Without Development' scenarios, an indication of the Area of Influence has been defined. This has been defined by considering the links which are forecast to change by more than $\pm 5\%$ and ± 30 PCUs between the 2026 'With Development' and 'Without Development', and between the 2031 'With Development' and 'Without Development' scenarios in either the AM Peak or PM Peak hours. The links which are forecast to meet these criteria are included in the Area of Influence, as shown in Figure 3.3, and contains the following areas / links:

- most of the urban area of and Burbage and some areas of south Hinckley;
- B578 Lutterworth Road between the B578 / Windsor Street / Lychgate Lane junction and the A5; and
- the A5 between the A5 / B578 junction and the A5 / Wolvey Road junction.

Figure 3.3: Area of Influence



3.5 Forecast Delay Change

3.5.1 As a result of forecast flow changes in the 'With Development' scenario, there are also changes to the forecast delays on the highway network. These changes in delay can be generated from two sources: link delay based on the speed-flow curve applied to the link; and junction delay due to capacity constraints for individual turning movements. The analysis in this section combines the link and junction delays (taking a flow-weighted average of junction delays) to assess the changes in forecast delays with the proposed development traffic.

3.5.2 Figure 3.4 shows the forecast delay changes in 2026 between the 'With Development' and 'Without Development' scenarios for the AM Peak and PM Peak hours. The changes in forecast delays between the 2026 'With Development' and 'Without Development' scenarios show modest changes close to the proposed development. At the M69 Junction 1 roundabout, there is a forecast increase in delay of 4 seconds on the eastern circulatory link in the AM Peak hour. At the Burbage Road / Hinckley Road / Sapcote Road junction, there is forecast to be an increase in delay of 4 seconds northbound in the AM Peak hour. At the A5 / B4114 junction, there is a forecast increase in delay of 7 seconds on the B4114 western approach to the junction in the PM Peak hour.

- 3.5.3 Figure 3.5 shows the forecast delay changes in 2031 between the 'With Development' and 'Without Development' scenarios for the AM Peak and PM Peak hours. Similar to 2026, the changes in forecast delays between the 2031 'With Development' and 'Without Development' scenarios show modest changes close to the proposed development. At the Burbage Road / Hinckley Road / Sapcote Road junction, there is forecast to be an increase in delay of 3 seconds northbound in the AM Peak hour. At the A5 / B4114 junction, there is a forecast increase in delay of approximately 50 seconds on the B4114 eastern approach to the junction in the AM Peak hour and approximately 15 seconds on the B4114 western approach in the PM Peak hour.

Figure 3.4: Forecast Delay Change for 2026 'With Development' minus 'Without Development' Scenarios

AM Peak hour



PM Peak hour



Figure 3.5: Forecast Delay Change for 2031 'With Development' minus 'Without Development' Scenarios

AM Peak hour



PM Peak hour



3.6 Forecast Junction Turning Flows

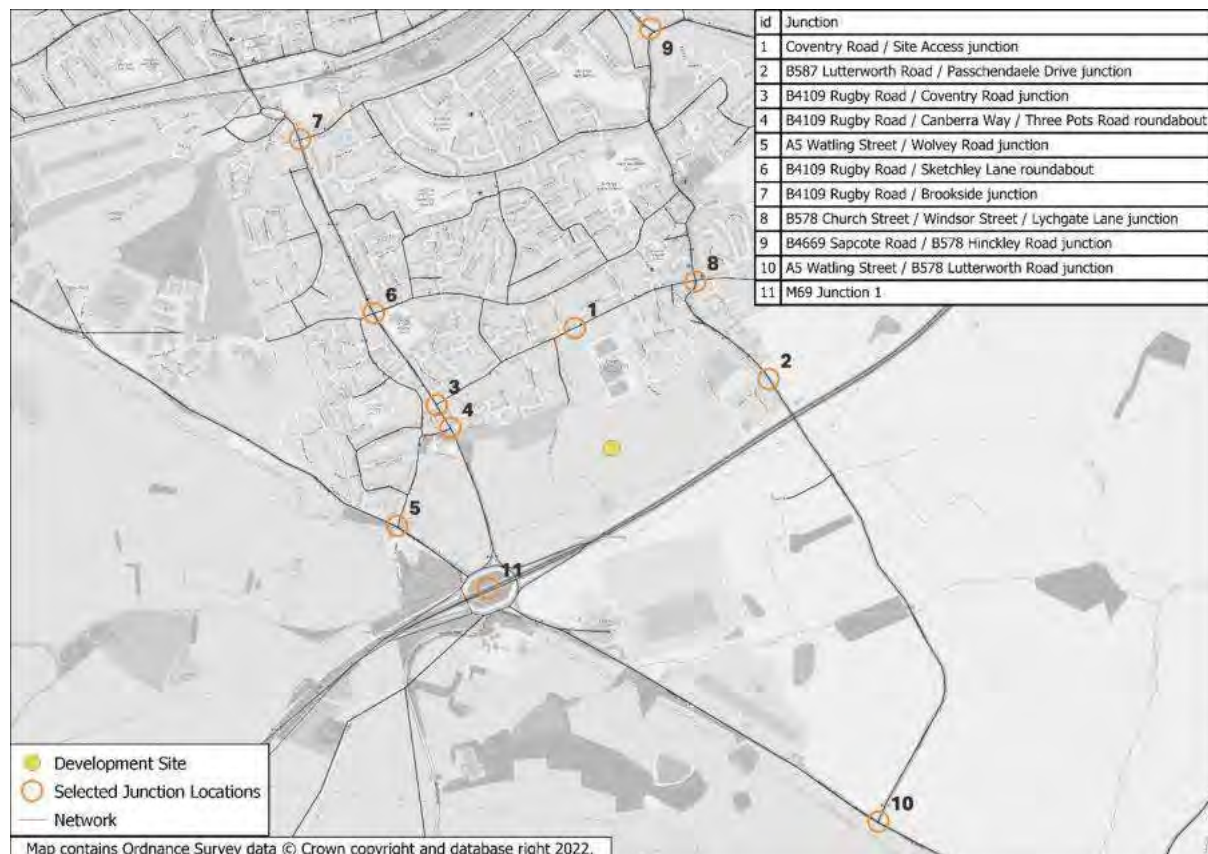
3.6.1 Forecast turning flows have been extracted for the following 11 junctions (also shown in Figure 3.6) in the vicinity of the proposed development:

- Coventry Road / Site Access junction;
- B587 Lutterworth Road / Passchendaele Drive junction;
- B4109 Rugby Road / Coventry Road junction;
- B4109 Rugby Road / Canberra Way / Three Pots Road roundabout;
- A5 Watling Street / Wolvey Road junction;
- B4109 Rugby Road / Sketchley Lane roundabout;
- B4109 Rugby Road / Brookside junction;
- B578 Church Street / Windsor Street / Lynchgate Lane junction;
- B4669 Sapcote Road / B578 Hinckley Road junction;
- A5 Watling Street / B578 Lutterworth Road junction; and
- M69 Junction 1.

3.6.2 Appendix C provides the forecast turning flows for AM Peak and PM Peak hours for light and heavy vehicles. Data are provided for the 2014 'Base Year', the 2021 'Without Development', the '2026 'Without Development', the 2026 'With Development', the 2031 'Without Development', and the 2031 'With Development' scenarios. In addition to the turning flows, turn volume-capacity ratios have also been provided where available.

3.6.3 By design, the PRTM highway model has not been calibrated or validated for individual turning movements, so care should be taken when using forecasts of flows and volume-capacity ratios at this level.

Figure 3.6: Location of Forecast Turning Flow Data



Section 4 – Summary of the PRTM Assessment

4.1 Summary of Assessment

- 4.1.1 Using the PRTM, forecasts have been undertaken to produce the 2021, 2026 and 2031 'Without Development, and the 2026 and 2031 'With Development' scenarios for both AM Peak and PM Peak hours.
- 4.1.2 Based on these model forecasts, the following is a summary of the key findings for the assessment of the proposed development:
- Development traffic has been forecast to route via the following roads:
 - route to and from the M69 via Rugby Road and Sapcote Road;
 - route east towards the A5 via the B578 Lutterworth Road; and
 - route north towards the centre of Hinckley via Coventry Road, Rugby Road, the B578 Hinckley Road, and Burbage Road.
 - The forecast flow changes in 2026 and 2031 between the 'With Development' and 'Without Development' scenarios show that the largest increases in flows are forecast along the road links in the immediate vicinity of the proposed development, such as Coventry Road, Rugby Road, and Lutterworth Road. The M69, the A5 and residential streets to the north of the proposed development, such as Pyeharps Road, Boyslade Road, are also forecast to have an increase in flow.
 - An area of Influence (Aol) has been defined by identifying links which are forecast to change by more than $\pm 5\%$ and ± 30 PCUs between the 'With Development' and 'Without Development' scenarios for 2026 and 2031 in either the AM Peak or PM Peak hours. The forecast Aol includes:
 - most of the urban area of and Burbage and some areas of south Hinckley ;
 - B578 Lutterworth Road between the B578 / Windsor Street / Lychgate Lane junction and the A5; and
 - the A5 between the A5 / B578 junction and the A5 / Wolvey Road junction.
 - The forecast delay changes in 2026 and 2031 between the 'With Development' and 'Without Development' scenarios are generally modest. The most significant changes in delays are forecast at the A5 / B4114 junction, where there is a forecast increase in delay of approximately 50 seconds on the B4114 eastern approach to the junction in the 2031 AM Peak hour and approximately 15 seconds on the B4114 western approach in the 2031 PM Peak hour.
- 4.1.3 The forecasts undertaken reflect the forecast impact of the proposed Burbage Fields development. It should be noted that the results provided in this report are at a high-level. Due to the strategic nature of the PRTM, not all roads are modelled, and the results should be interpreted with that in mind.
- 4.1.4 Although the PRTM modelling provides the strategic impact and form part of the Burbage Fields development assessment evidence packs, the overall assessment should be complemented by local operational assessment and analysis.

Appendix A Planning Data Assumptions

Residential Development Assumptions (Sites with more than 500 dwellings) (Hinckley and Bosworth)

District	Location	Quantum	Timescale	Include
Hinckley & Bosworth	Land North East of Triumph Motorcycles	850	2021-2035	Y
Hinckley & Bosworth	Earl Shilton SUE	1,500	2029-2045	Y
Hinckley & Bosworth	Barwell SUE	2,500	2028-2051	Y

Employment Development Assumptions (Sites with more than 750 jobs) (Hinckley and Bosworth)

District	Location	Quantum	Timescale	Include
Hinckley & Bosworth	Land East of Hinckley Island Hotel Watling Street	121,032 sqm	2019-2023	Y
Hinckley & Bosworth	Nailstone Colliery, Wood Road	121,520 sqm	2022	Y
Hinckley & Bosworth	MIRA	1,788 jobs	2026-2035	Y

Appendix B Network Assumptions

Highway Network Scheme Assumptions

Location	Scheme Name	Certainty	Timescale	First Forecast Year	Include
Blaby	Full signalisation of the B581 Staggered junction (Broughton Road/Coventry Road)	Near Certain	2026	2026	Y
Hinckley & Bosworth	RGF/MIRA, A5 Redgate Junction at A444 to Higham Lane Junction	Complete	Jan-15	2015	Y
Catthorpe	M1 J19	Complete	2016-2017	2017	Y
Nottingham	A453 upgrade - including removal of temporary 40mph speed limit	Complete	Sep-15	2016	Y
Kegworth	M1 J24	Complete	Oct-14	2015	Y
Hinckley & Bosworth	A5 Dodwells and Longshoot junctions	Complete	2016	2016	Y
Nottingham	M1 J23a-J25 SMART motorway	Complete	2019	2019	Y
Warwickshire	M6 J2-J4 SMART motorway	Complete	2017-2020	2021	Y
Various	M1 J16-J19	Complete	2019	2019	Y
Leicestershire	A5 widening to dual carriageway near Hinckley	Hypothetical	2020-2023	2026	N
Daventry	DIRFT III - Daventry International Rail Freight Terminal	Complete	2016	2021	Y
Cotes	A60 Nottingham Road/Loughborough reduction of speed limit traffic calming features	Complete	2016	2016	Y
Earl Shilton	Access arrangements for SUE/Highway improvements for SUE	Near Certain	2021-2035	2026	Y
Barwell	Access arrangements for SUE/Highway improvements for SUE	Near Certain	2019-2035	2026	Y
Lubbesthorpe	Access arrangements for SUE including strategic traffic link to the A563 Lubbesthorpe Way	Complete	2017-2026	2021	Y
SRFI	Southern access for new development	Complete	2016-2018	2019	Y
Loughborough	A512 widening B591 to M1 J23, improvements to J23 and completion of dualling thereafter to either Snell's Nook Lane or Epinal Way junction	Complete	2017-2020	2021	Y
Castle Donington	Western Link Road from Back Lane to Tops Hill, NWLDC package of measures to help mitigate planned growth	Complete	2020	2021	Y
Lubbesthorpe	Link across M69 to join north and south of the Lubbesthorpe development	More than Likely	2026-2031	2031	Y
Lubbesthorpe	Highway improvements for SUE (A47 / Braunstone Lane / Ratby Lane improvement scheme)	Complete	2017-2023	2021	Y
Kegworth	Kegworth Bypass	Complete	2017-2019	2019	Y
SRFI	Highway improvements for new development	Complete	2016-2019	2021	Y
Loughborough	West of Loughborough SUE (access from the north via the A6 roundabout)	More than Likely	2021-2026	2026	Y
Loughborough	Access connection for the Science Park via the A512 roundabout	More than Likely	2031	2031	Y
Loughborough	West of Loughborough SUE (connection to the northern arm of the A512 roundabout)	More than Likely	2036	2036	Y
North West Leicestershire	M1 J22	Complete	Before March 2016	2016	Y
North West Leicestershire	A42 J13	Complete	2017	2018	Y
Blaby	Leicester North West Project Phase 1	Complete	2015-2016	2016	Y
Harborough	Harborough Strategic Development Area	Complete	2021	2021	Y
Charnwood	Mountsorrel Lane, Rothley Link Road	Complete	2021	2021	Y
Charnwood	A512 junction improvements	Complete	2016-2021	2021	Y
Hinckley	Hinckley Area Project Phase 1-3	Complete	2014-2017	2021	Y
Blaby	Glenfield Park/Optimus Point S278 works	Complete	2014-2016	2016	Y
North of East Leicester	North of East Leicester Development Network – Thorpebury SUE	Near Certain	2026	2026	Y
Charnwood	A6 Loughborough Road Bus Lane and Parking Controls	Complete	2016	2016	Y
Leicester City	Removal of Belgrave Flyover	Complete	2014-2015	2016	Y
Leicester City	Saffron Lane - Old Velodrome Improvements	Complete	2016	2016	Y
Leicester City	Traffic Calming Schemes	Near Certain	2016-2021	2016	Y
Leicester City	East of Hamilton Development Improvements	Complete	2016	2017	Y

Leicester City	Pedestrianisation of Hotel Street, Pedestrianisation of St Martins	Complete	2016	2016	Y
Leicester City	Haymarket/Charles Street Bus Station development	Complete	2016	2016	Y
Leicester City	Existing & proposed 20mph zones	Complete	2012-2016	2016	Y
Leicester City	St Nicholas Circle	Complete	2015	2016	Y
Leicester City	Welford Road	Complete	2018	2021	Y
Leicester City	Waterside Development	Near Certain	mid-2020s	2026	Y
Rugby	Rugby Radio Station	Near Certain	2026	2026	Y
Leicester City	Belgrave Gate South	Near Certain	2019	2020	Y
Leicester City	Belvoir Street	Complete	2017	2018	Y
Leicester City	York Road/Bonnors Lane/Grange Road	Complete	2019	2019	Y
Leicester City	King St	Complete	2018	2018	Y
Leicester City	Lancaster Road	Complete	2019	2020	Y
Leicester City	Mansfield Street & Church Gate	Complete	2020	2021	Y
Leicester City	SMBS Access to Burleys Way	Complete	2019	2021	Y
Leicester City	Vaughan Way	Complete	2019	2020	Y
Leicester City	Ashton Green	Near Certain	2021-2031	2021	Y
Leicester City	London Road	Complete	2019	2020	Y
Melton	Melton Mowbray Distributor Road (Northern Section) (Nottingham Road to A607)	Near Certain	2023	2023	Y
Melton	Melton Mowbray Distributor Road (Eastern Section) (A607 to Burton Road)	Near Certain	2023	2023	Y
Melton	Melton Mowbray Southern Link Road (Burton Road to Leicester Road)	Near Certain	2023-2026	2026	Y
Melton	Gladman's Site Access (Leicester Road and Kirby Lane)	More than Likely	2026	2026	Y
Leicester City	Beaumont Leys Anstey Lane Improvements	Complete	2019	2021	Y
Hinckley	Rugby Road Corridor Improvements – Phase 4	Near Certain	2022	2022	Y
Leicester City	Putney Road West Improvements	Near Certain	2019	2021	Y
Lutterworth	Frank Whittle Roundabout approaches (Magna Park)	Complete	2018-2020	2021	Y
Lutterworth	Lutterworth East Development (Development Access (A4304, Gilmorton Road and A426))	More than Likely	2021-2026	2026	Y
Lutterworth	Lutterworth East Development (Link Road between A4304 and A426)	More than Likely	2031	2031	Y
Lutterworth	Lutterworth East Development (Gilmorton Road bridge bus restriction)	More than Likely	2026	2026	Y
Bardon Hill	Interlink Way East junction	Complete	2016	2016	Y
Bardon Hill	Bardon Hill Link Road North Section	More than Likely	2021-2026	2026	Y
Coalville	Hoo Ash Roundabout	More than Likely	2021-2026	2026	Y
Coalville	Thornborough Road Roundabout	More than Likely	2021-2026	2026	Y
Coalville	Dual Carriageway from Thornborough Rd to Whitwick Road	More than Likely	2021-2026	2026	Y
Coalville	Whitwick Road Roundabout	More than Likely	2021-2026	2026	Y
Coalville	Broom Leys Road Junction	More than Likely	2021-2026	2026	Y
Coalville	Bardon Link Road Junction	More than Likely	2021-2026	2026	Y
Coalville	Birch Tree Roundabout	More than Likely	2019-2024	2026	Y
Coalville	Fieldhead Roundabout	More than Likely	2021-2026	2026	Y
Granby Street	Granby Street/Halford Street Improvements	Complete	2017	2018	Y
Loughborough	Alan Moss Road	Complete	2017	2018	Y
Hinckley	DPD A5 Access	Complete	2021	2021	Y
Leicester Forest East	Ratby Lane/Wembley Road junction	Complete	2017/18	2019	Y
Coalville	Flying Horse Roundabout	More than Likely	2021-2026	2026	Y
M6 J10-13	M6 J10-13, M54-Stafford ALR	Complete	2016	2016	Y
M54-M6 Toll	M54-M6 Toll, link road min 2 lane motorway	More than Likely	2024	2024	Y
M1 J28-31	M1 J28-31, Mansfield to Sheffield ALR	Complete	2016	2016	Y
M6 J13-J15	M6 J13-15, Stafford South to Stoke South ALR	Near Certain	2022	2022	Y
M1 J13-16	M1 J13-16, Milton Keynes South to J16 ALR	Near Certain	2022	2022	Y
M40 M42	M40-M42, M40 J16-M42 J3 ALR	More than Likely	2026	2026	Y
A46 Coventry	A46 Coventry, remove Binley and Walsgrove roundabouts & upgrade	More than Likely	2022-2026	2026	Y
A46 Toll Bar End	A46 Toll Bar End, grade separated junction and 3 lane highway	Complete	2021	2021	Y
Newark N	A46 Newark, dualling Newark North bypass	More than Likely	2026	2031	Y

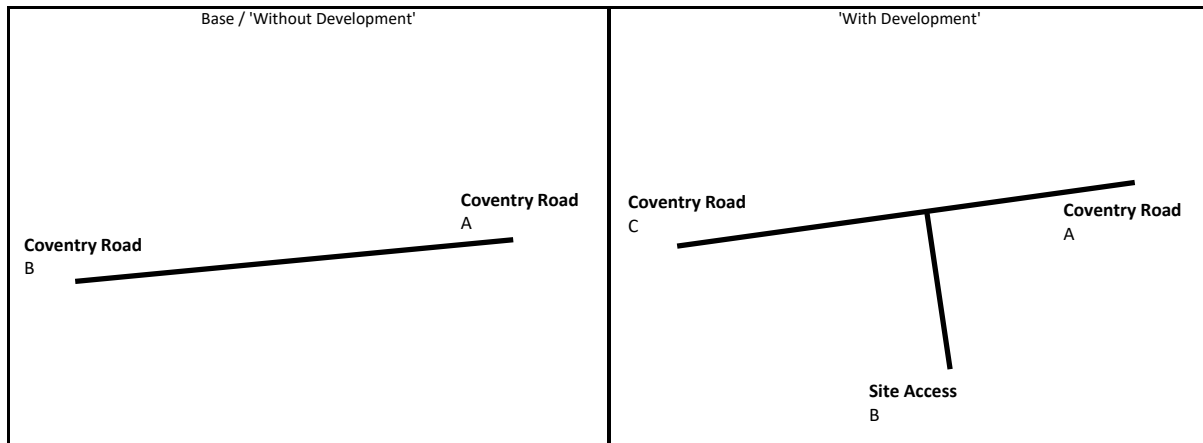
Newark S	South of Newark, A1-A46 link S of Newark; part completed	More than Likely	2031	2031	Y
Lincoln E	East of Lincoln, A15-A158 link; part completed	Complete	2020	2021	Y
Lincoln S	South of Lincoln, A158-A46 link	More than Likely	2027	2031	Y
Grantham S	South of Grantham, A1-A52 link; part completed	Near Certain	2016-2023	2026	Y
Nuneaton and Bedworth Borough	Coton Arches	Complete	2021	2021	Y
Nuneaton and Bedworth Borough	A4254b Eastboro Way P1	Complete	2021	2021	Y
Nuneaton and Bedworth Borough	College Street / A444	Near Certain	2023	2023	Y
Nuneaton and Bedworth Borough	Transforming Nuneaton	Near Certain	2026	2026	Y
Nuneaton and Bedworth Borough	Croft Road/Greenmoor Road Priority	Complete	2020	2020	Y
Nuneaton and Bedworth Borough	A47 Old Hinckley Road	Near Certain	2026	2026	Y
Nuneaton and Bedworth Borough	Coventry Road / Gipsy Lane	More than Likely	2026	2026	Y
Nuneaton and Bedworth Borough	A4254 / B4114/Eastboro Way	Near Certain	2026	2026	Y
Nuneaton and Bedworth Borough	Nuneaton Northern Sites Link Road	Near Certain	2031	2031	Y
North Warwickshire	B5000 Market Street/Bridge St Signals	Near Certain	2026	2026	Y
Rugby Borough	A426/A4071 Avon Mill Roundabout/Newbold Road/Hunters Lane Priority Junction	Near Certain	2026	2026	Y
Rugby Borough	Ashlawn Road/Hillmorton Road	Complete	2021	2021	Y
Rugby Borough	A5 Northern Access to DIRFT III	Complete	2022	2022	Y
Rugby Borough	A5/A428 Halfway House Roundabout	Complete	2021	2021	Y
Rugby Borough	M1 Junction 18	More than Likely	2031	2031	Y
Rugby Borough	M6 to Coton House	Near Certain	2021	2021	Y
Rugby Borough	A5 Southern Access to DIRFT III	Complete	2021	2021	Y
Loughborough	Loughborough Integrated Transport Scheme – not including LIRR	Complete	2013	2014	Y
Blaby	A47/Kirby Lane Tesco Express	Complete	2020	2021	Y
Charnwood	North of Birstall SUE (Broadnook SUE)	Near Certain	2021-2026	2026	Y
Leicester City	LNW2 Ravensbridge Drive / Blackbird Road	Complete	2019	2020	Y
Leicester City	Abbey Park Road Cycle Provision	Complete	2020	2021	Y
Lutterworth	Lutterworth East Development Schemes	Reasonably Foreseeable	2021-2026	2026	N
Nuneaton and Bedworth Borough	New A5 Access to accommodate Callendar Farm Ph2	Near Certain	2026	2026	Y
M6 J3	Interim Improvement Scheme	More than Likely	2026	2026	Y
M6 J2	Update coding of M6 J2 Ansty interchange to include signalised roundabout	Complete	2020	2020	Y
Hinckley	M69 J1 DPD Mitigation	Complete	2020-2021	2021	Y
Lutterworth	Magna Park Extension Access (Mere Lane / A5 improvements and Mere Lane access)	Complete	2020	2020	Y
Lutterworth	Magna Park Extension Access (Northern site access)	Near Certain	2026	2026	Y
North Warwickshire	A5 Dualling between Grendon and Dordon and Dordon junction	More than Likely	2026	2026	Y
Lubbesthorpe	Access arrangements for SUE (southern access roundabout)	Near Certain	2031	2031	Y
Lubbesthorpe	Highway improvements for SUE (Meridian South / A563) (Warren Park Way / Mill Hill) (A47 / A563 signalised crossroads)	Near Certain	2031	2031	Y
Blaby	A50 Groby Road bus gate	Complete	2015	2015	Y
Charnwood	Shuttle signals at the old railway bridge on Tickow Lane	Near Certain	2022	2022	Y

Public Transport Scheme Assumptions

Location	Scheme Name	Certainty	Timescale	First Forecast Year	Include
Lubbesthorpe	Service to accommodate SUE	Near Certain	2018	2021	Y
North of East Leicester	Package of bus measures to accommodate SUE	Complete	2013-16	2016	Y
North of East Leicester	Misc. services (Charnwood / Thurmaston)	Complete	2013-16	2016	Y
Garendon	New services for Garendon	More than Likely	2031	2031	Y
Blaby	Leicester North West Project Phase 1	More than Likely	2015-2016	2016	Y
Hinckley	Hinckley Area Project Phases 1-3	Complete	2016	2016	Y
Kegworth	East Midlands Gateway - Strategic Rail Freight Interchange	Near Certain	2017-2020	2021	Y
Charnwood	A6 Loughborough Road Bus Lane and Parking Controls	Complete	2016	2016	Y
Ashton Green	Ashton Green bus services	More than Likely	2021-2031	2026	Y
Midlands	Midland Mainline Electrification	Near Certain	2021	2021	Y
East Midlands	East Midlands Railway frequency changes	More than Likely	Dec-20	2021	Y
Leicester City	Transforming Cities Fund 2	More than Likely	2026	2026	Y

Appendix C Forecast Junction Turning Flows

Turning Flows (veh) – Coventry Road / Site Access Junction



2014 Base

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	110	1	111	8%	171	1	171	12%
B-A	220	2	222	15%	187	1	188	13%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	149	3	152	11%	277	1	278	19%
B-A	270	1	271	19%	242	1	243	17%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	136	2	138	10%	320	1	321	22%
B-A	326	1	328	22%	263	1	264	18%

2026 'With Development'

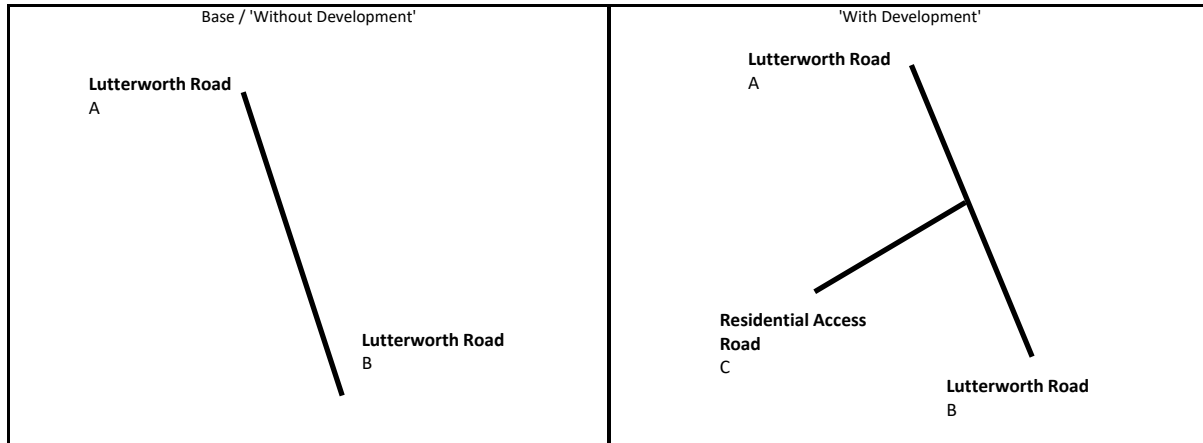
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	21	0	21	2%	47	0	47	4%
A-C	136	2	138	10%	273	1	274	19%
B-A	51	0	51	6%	17	0	17	2%
B-C	82	0	82	7%	39	0	39	4%
C-A	326	1	327	23%	259	1	259	19%
C-B	32	0	32	3%	61	0	61	7%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	102	2	104	7%	337	1	337	23%
B-A	372	1	373	25%	268	1	269	18%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	18	0	18	1%	47	0	47	5%
A-C	100	2	102	7%	295	1	296	21%
B-A	50	0	50	5%	18	0	18	2%
B-C	81	0	81	7%	39	0	39	4%
C-A	374	1	375	26%	268	1	269	19%
C-B	34	0	34	4%	60	0	60	7%

Turning Flows (veh) – B587 Lutterworth Road / Passchendaele Drive Junction**2014 Base**

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	283	14	296	18%	126	3	128	8%
B-A	128	8	136	9%	351	7	357	22%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	511	3	514	31%	149	1	149	9%
B-A	168	5	173	11%	522	4	527	33%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	716	3	719	43%	199	1	200	12%
B-A	191	7	198	13%	647	6	653	40%

2026 'With Development'

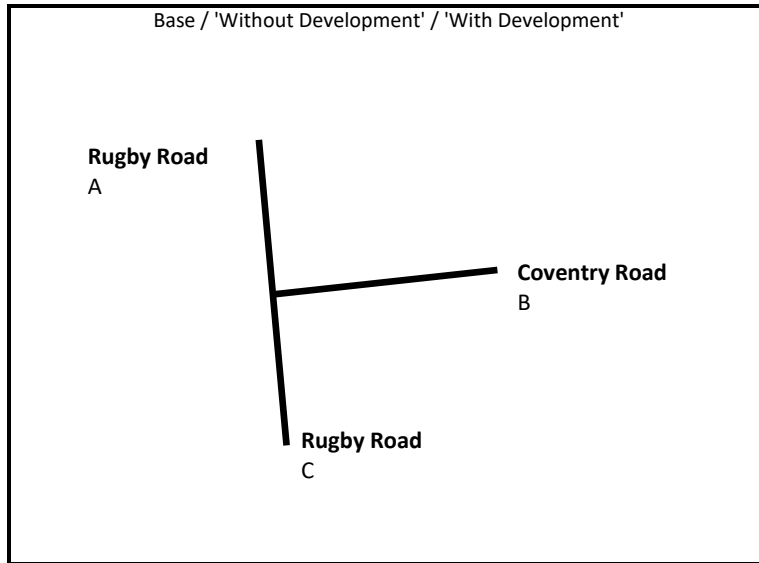
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	716	3	719	43%	198	1	199	12%
A-C	7	0	7	1%	8	0	8	1%
B-A	191	7	198	12%	636	6	642	40%
B-C	2	0	2	0%	46	0	46	5%
C-A	10	0	10	1%	4	0	4	0%
C-B	34	0	34	4%	11	0	11	1%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	854	3	858	51%	218	1	219	13%
B-A	193	7	200	13%	685	5	690	43%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	865	3	869	52%	215	1	216	13%
A-C	7	0	7	1%	9	0	9	1%
B-A	190	7	197	12%	704	5	710	42%
B-C	2	0	2	0%	47	0	47	5%
C-A	10	0	10	1%	4	0	4	0%
C-B	36	0	36	5%	11	0	11	1%

Turning Flows (veh) – B4109 Rugby Road / Coventry Road Junction**2014 Base**

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	48	1	48	7%	48	0	48	5%
A-C	649	11	660	46%	449	3	452	32%
B-A	48	0	48	9%	47	0	47	12%
B-C	326	6	332	43%	194	3	196	21%
C-A	409	10	419	29%	870	6	877	59%
C-B	170	1	170	22%	349	2	351	38%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	71	0	71	10%	47	0	47	6%
A-C	666	12	678	49%	542	4	546	38%
B-A	52	0	52	10%	47	0	47	15%
B-C	385	4	389	51%	231	1	232	27%
C-A	321	7	328	22%	716	5	721	48%
C-B	296	1	297	40%	657	0	658	76%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	95	0	95	15%	49	0	49	6%
A-C	749	12	760	56%	589	4	592	41%
B-A	62	0	62	15%	85	0	85	31%
B-C	401	3	404	57%	235	1	236	28%
C-A	476	8	484	33%	750	5	755	51%
C-B	280	1	281	42%	705	0	705	85%

2026 'With Development'

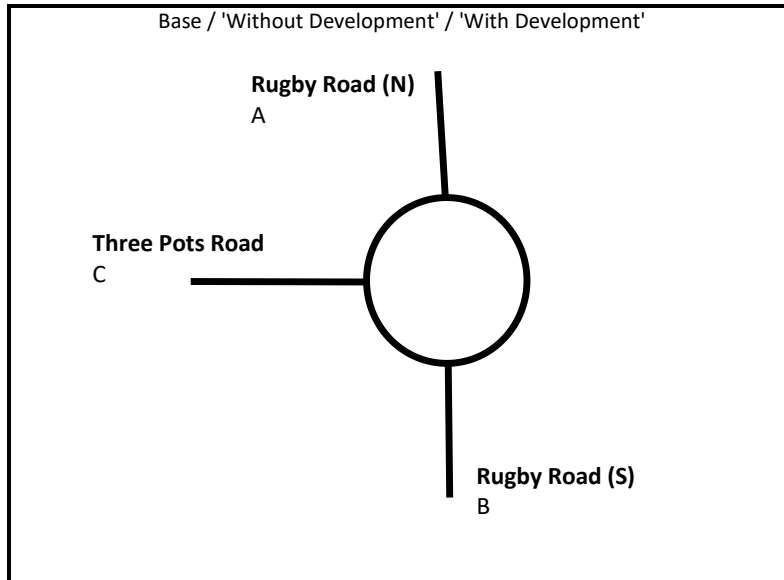
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	106	0	106	17%	66	0	66	8%
A-C	740	11	751	55%	589	4	593	42%
B-A	85	0	85	21%	89	0	89	32%
B-C	440	3	443	62%	243	1	244	29%
C-A	472	8	480	33%	731	5	736	50%
C-B	291	1	292	43%	734	0	735	90%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	95	0	96	15%	49	0	49	6%
A-C	744	11	755	55%	602	4	606	42%
B-A	61	0	61	15%	92	0	92	34%
B-C	366	3	369	52%	249	1	249	30%
C-A	489	8	496	34%	762	5	767	52%
C-B	300	1	301	45%	710	1	710	87%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	111	0	111	18%	65	0	65	8%
A-C	742	11	754	56%	604	4	607	43%
B-A	83	0	83	21%	111	0	111	41%
B-C	395	3	398	56%	259	1	259	32%
C-A	482	8	490	33%	763	5	768	50%
C-B	313	0	313	47%	710	1	710	92%

Turning Flows (veh) – B4109 Rugby Road / Canberra Way / Three Pots Road Roundabout

2014 Base

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	835	15	850	66%	608	6	613	40%
A-C	141	1	142	66%	35	0	35	40%
B-A	484	10	494	33%	987	8	995	62%
B-C	0	0	0	0%	0	0	0	0%
C-A	95	1	95	27%	233	0	234	52%
C-B	98	9	107	27%	12	1	13	52%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	919	12	931	70%	725	5	730	48%
A-C	133	4	137	70%	48	0	48	48%
B-A	508	7	515	35%	1,135	5	1,140	72%
B-C	0	2	2	35%	0	2	2	72%
C-A	110	0	110	28%	239	0	239	62%
C-B	106	0	106	28%	2	0	2	62%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	1,019	12	1,031	76%	775	5	779	51%
A-C	131	3	134	76%	49	0	49	51%
B-A	645	8	654	44%	1,282	6	1,288	81%
B-C	0	3	3	44%	0	2	2	81%
C-A	111	0	111	31%	172	0	172	58%
C-B	98	0	98	31%	0	0	0	58%

2026 'With Development'

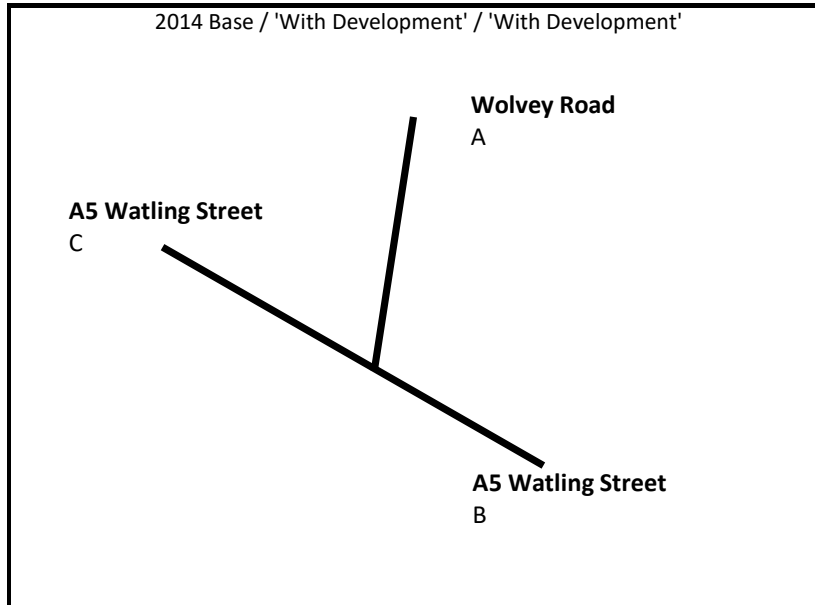
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	1,040	11	1,051	78%	781	5	786	51%
A-C	140	3	143	78%	51	0	51	51%
B-A	646	8	654	44%	1,309	6	1,314	83%
B-C	0	3	3	44%	0	2	2	83%
C-A	117	0	117	32%	157	0	157	56%
C-B	98	0	98	32%	0	0	0	56%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	978	11	990	73%	798	4	802	52%
A-C	131	3	134	73%	52	0	53	52%
B-A	676	8	684	46%	1,353	6	1,358	86%
B-C	0	2	2	46%	0	2	2	86%
C-A	113	0	113	32%	119	0	119	48%
C-B	98	0	98	32%	0	0	0	48%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	997	11	1,008	75%	803	4	807	53%
A-C	140	3	143	75%	60	0	60	53%
B-A	677	8	685	46%	1,353	6	1,359	87%
B-C	0	2	2	46%	0	2	2	87%
C-A	118	0	118	33%	120	0	120	47%
C-B	98	0	98	33%	0	0	0	47%

Turning Flows (veh) – A5 Watling Street / Wolvey Road Junction

2014 Base

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	0	0	0%	0	0	0	0%
A-C	185	2	187	56%	35	0	35	8%
B-A	18	0	18	3%	117	1	118	17%
B-C	712	93	806	54%	698	51	749	51%
C-A	98	0	99	15%	351	0	351	42%
C-B	744	123	866	62%	645	64	709	59%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	9	9	5%	11	1	12	2%
A-C	202	5	207	73%	34	0	34	10%
B-A	19	0	19	3%	127	0	127	22%
B-C	764	114	878	59%	802	61	864	60%
C-A	93	0	93	15%	431	0	431	59%
C-B	782	115	896	63%	743	74	817	73%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	8	8	5%	13	1	14	2%
A-C	193	4	197	70%	37	0	37	13%
B-A	11	0	11	2%	166	0	166	29%
B-C	722	130	852	59%	879	73	953	68%
C-A	90	0	90	15%	400	0	400	55%
C-B	753	139	891	64%	731	81	813	71%

2026 'With Development'

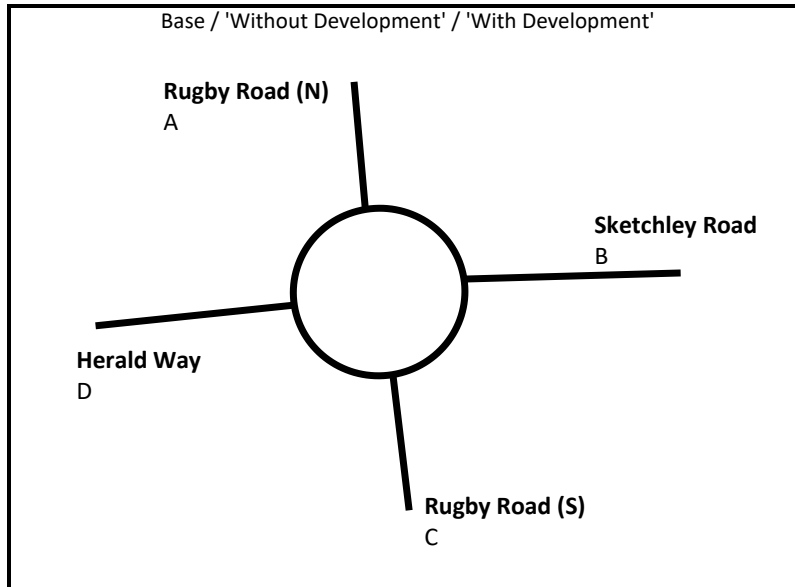
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	8	8	5%	13	1	14	2%
A-C	201	4	204	73%	36	0	36	13%
B-A	11	0	11	2%	167	0	167	29%
B-C	725	130	854	59%	887	73	960	69%
C-A	94	0	94	15%	403	0	403	55%
C-B	751	138	889	64%	731	81	812	71%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	8	8	5%	14	1	14	2%
A-C	183	4	187	72%	39	0	40	16%
B-A	9	0	9	2%	176	0	176	34%
B-C	712	135	847	58%	938	86	1,024	74%
C-A	90	0	90	16%	380	0	380	54%
C-B	803	138	941	67%	738	89	828	72%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	8	8	5%	14	1	14	2%
A-C	190	4	193	74%	44	0	45	17%
B-A	9	0	9	2%	178	0	178	35%
B-C	714	134	848	59%	975	85	1,059	75%
C-A	93	0	93	16%	388	0	388	54%
C-B	799	137	936	67%	735	89	824	72%

Turning Flows (veh) – B4109 Rugby Road / Sketchley Lane / Herald Way Roundabout

2014 Base

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	3	0	3	33%	1	0	1	35%
A-C	412	5	417	33%	412	1	413	36%
A-D	46	3	49	33%	55	1	56	36%
B-A	0	0	0	32%	2	0	2	19%
B-C	208	5	213	32%	46	2	48	19%
B-D	26	0	26	32%	95	0	95	19%
C-A	374	7	381	30%	614	3	618	62%
C-B	67	3	70	30%	258	3	261	62%
C-D	17	0	17	30%	44	0	44	62%
D-A	44	1	45	25%	32	0	32	20%
D-B	80	0	80	25%	38	0	38	20%
D-C	78	1	79	25%	39	0	39	20%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	0	0	0%	0	0	0	0%
A-C	482	6	488	37%	497	2	498	42%
A-D	44	0	44	37%	52	0	52	42%
B-A	0	0	0	0%	0	0	0	0%
B-C	168	5	173	28%	48	2	49	16%
B-D	22	1	22	28%	62	1	62	16%
C-A	282	3	285	24%	453	2	455	50%
C-B	69	3	72	24%	266	3	269	50%
C-D	23	0	23	24%	43	0	44	50%
D-A	45	0	45	21%	33	0	33	18%
D-B	47	1	48	21%	36	0	36	18%
D-C	88	1	89	21%	45	0	45	18%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	0	0	0%	0	0	0	0%
A-C	589	6	595	43%	549	2	551	44%
A-D	17	0	17	43%	34	0	34	44%
B-A	0	0	0	0%	0	0	0	0%
B-C	169	5	174	36%	46	2	48	19%
B-D	63	1	63	36%	83	0	84	19%
C-A	454	5	459	35%	621	3	624	55%
C-B	62	3	65	35%	209	3	212	55%
C-D	22	0	22	35%	4	0	4	55%
D-A	40	0	40	24%	36	0	36	26%
D-B	58	0	59	24%	75	0	75	26%
D-C	85	1	86	24%	43	0	43	26%

2026 'With Development'

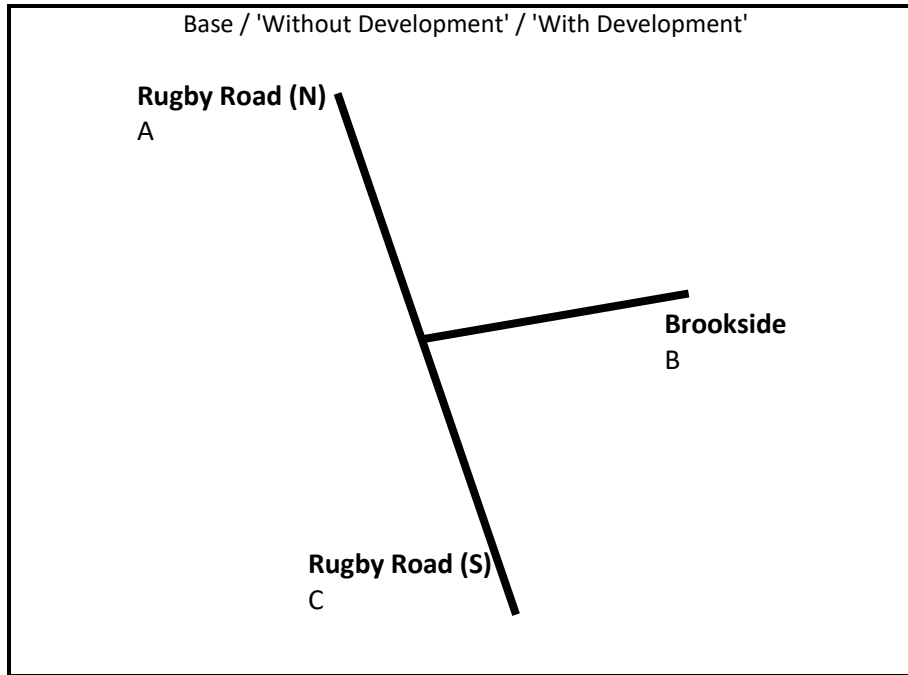
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	0	0	0%	0	0	0	0%
A-C	594	6	599	43%	563	2	565	45%
A-D	17	0	17	43%	34	0	34	45%
B-A	0	0	0	0%	0	0	0	0%
B-C	167	5	172	36%	47	2	49	19%
B-D	61	1	62	36%	83	0	84	19%
C-A	471	5	476	36%	627	3	629	54%
C-B	62	3	65	36%	190	3	193	54%
C-D	23	0	23	36%	3	0	3	54%
D-A	40	0	40	25%	36	0	36	30%
D-B	59	0	59	25%	95	0	95	30%
D-C	86	1	87	25%	45	0	45	30%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	0	0	0%	0	0	0	0%
A-C	606	6	612	44%	560	2	561	44%
A-D	18	0	18	44%	34	0	34	44%
B-A	0	0	0	0%	0	0	0	0%
B-C	148	5	153	33%	47	2	49	19%
B-D	58	1	58	33%	83	0	83	19%
C-A	463	5	468	36%	694	3	697	57%
C-B	64	3	67	36%	154	3	157	57%
C-D	23	0	23	36%	6	0	6	57%
D-A	40	0	40	24%	36	0	36	34%
D-B	57	0	57	24%	117	0	117	34%
D-C	85	1	86	24%	44	0	44	34%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	0	0	0	0%	0	0	0	0%
A-C	619	6	625	45%	576	2	578	45%
A-D	18	0	18	45%	32	0	32	45%
B-A	0	0	0	0%	0	0	0	0%
B-C	149	5	154	33%	47	2	49	19%
B-D	57	1	58	33%	85	0	86	19%
C-A	478	5	482	37%	722	3	725	56%
C-B	64	3	67	37%	149	3	152	56%
C-D	24	0	24	37%	3	0	3	56%
D-A	40	0	40	24%	29	0	29	37%
D-B	58	0	58	24%	134	0	134	37%
D-C	85	1	86	24%	45	0	46	37%

Turning Flows (veh) – B4109 Rugby Road / Brookside Junction

2014 Base

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	66	3	69	12%	185	3	188	26%
A-C	431	5	436	59%	488	1	489	58%
B-A	240	4	244	66%	153	1	154	50%
B-C	89	3	92	43%	63	2	64	30%
C-A	331	4	335	45%	411	3	414	49%
C-B	170	4	174	46%	298	0	298	72%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	61	3	64	11%	159	3	162	23%
A-C	497	6	503	68%	567	2	568	67%
B-A	215	3	218	57%	129	1	130	40%
B-C	84	0	85	34%	50	0	50	21%
C-A	369	3	373	50%	475	2	477	56%
C-B	40	0	40	12%	68	0	68	19%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	75	3	78	22%	174	3	177	35%
A-C	657	6	663	49%	668	2	670	45%
B-A	270	4	274	73%	133	1	134	49%
B-C	8	0	8	8%	9	0	9	6%
C-A	562	5	567	78%	717	3	719	85%
C-B	20	0	20	8%	18	0	18	7%

2026 'With Development'

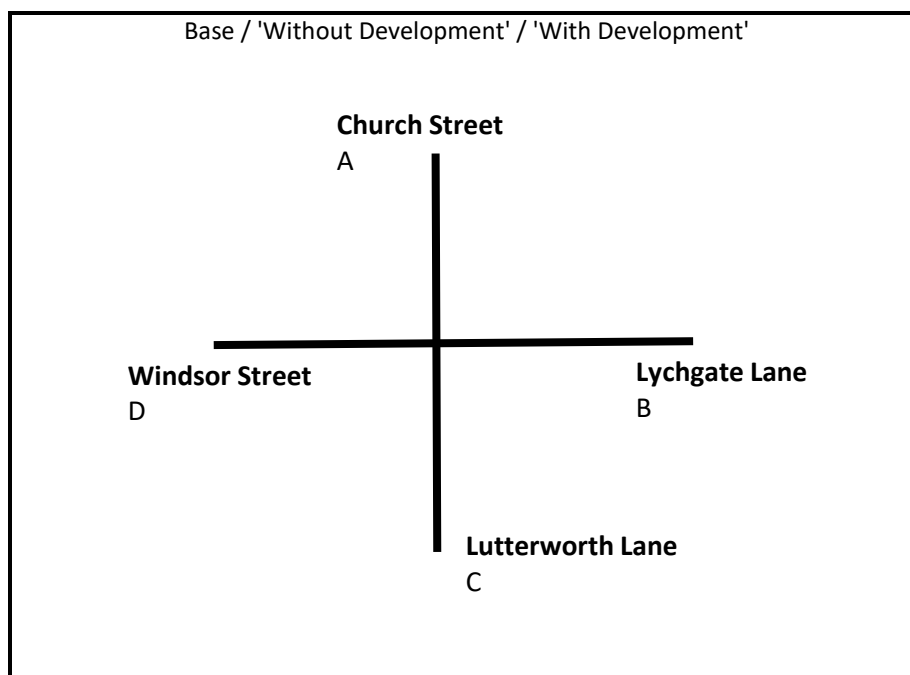
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	76	3	79	23%	174	3	176	35%
A-C	663	6	669	49%	683	2	684	46%
B-A	270	4	274	73%	137	1	138	50%
B-C	8	0	8	8%	9	0	9	6%
C-A	580	5	585	80%	722	3	725	86%
C-B	20	0	20	8%	18	0	18	7%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	81	3	84	24%	170	2	172	35%
A-C	681	6	687	51%	690	2	692	47%
B-A	262	4	265	71%	165	1	166	60%
B-C	8	0	8	7%	8	0	8	7%
C-A	569	5	574	79%	775	3	778	92%
C-B	20	0	20	8%	17	0	17	9%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	83	3	85	25%	169	2	172	35%
A-C	694	6	700	52%	703	2	705	47%
B-A	262	4	266	71%	193	1	194	60%
B-C	8	0	8	7%	7	0	7	7%
C-A	584	5	589	81%	804	3	806	93%
C-B	20	0	20	8%	9	0	9	11%

Turning Flows (veh) – B578 Church Street / Windsor Street / Lychgate Lane Junction

2014 Base

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	26	0	26	3%	33	0	33	3%
A-C	250	13	262	21%	115	2	117	9%
A-D	112	0	113	12%	108	0	109	12%
B-A	28	0	28	3%	38	0	38	4%
B-C	4	0	4	0%	1	0	1	0%
B-D	22	0	22	2%	32	0	32	3%
C-A	123	8	131	9%	289	6	295	21%
C-B	1	0	1	0%	11	0	11	1%
C-D	3	0	3	0%	23	1	23	2%
D-A	157	1	158	14%	188	1	189	18%
D-B	47	0	47	4%	40	0	40	4%
D-C	19	1	20	2%	8	1	9	1%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	27	0	27	4%	36	0	36	4%
A-C	437	2	439	35%	139	0	140	13%
A-D	139	3	142	18%	202	0	202	25%
B-A	35	0	35	5%	38	0	38	5%
B-C	8	0	8	1%	2	0	2	0%
B-D	27	0	27	3%	28	0	28	3%
C-A	162	5	166	12%	424	4	428	31%
C-B	1	0	1	0%	17	0	17	2%
C-D	3	0	3	0%	41	0	41	5%
D-A	164	1	165	15%	234	1	235	25%
D-B	60	0	60	7%	48	0	48	6%
D-C	50	0	51	7%	3	0	3	0%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	26	0	26	4%	34	0	34	4%
A-C	584	3	587	45%	189	1	190	17%
A-D	109	2	111	17%	196	1	197	27%
B-A	33	0	34	5%	36	0	36	6%
B-C	15	0	15	2%	2	0	2	0%
B-D	36	0	36	5%	30	0	30	4%
C-A	190	7	196	14%	504	5	509	37%
C-B	1	0	1	0%	17	0	17	3%
C-D	6	0	6	1%	81	0	81	10%
D-A	176	1	177	16%	232	1	232	26%
D-B	64	0	64	9%	53	0	53	7%
D-C	87	1	88	13%	9	0	9	1%

2026 'With Development'

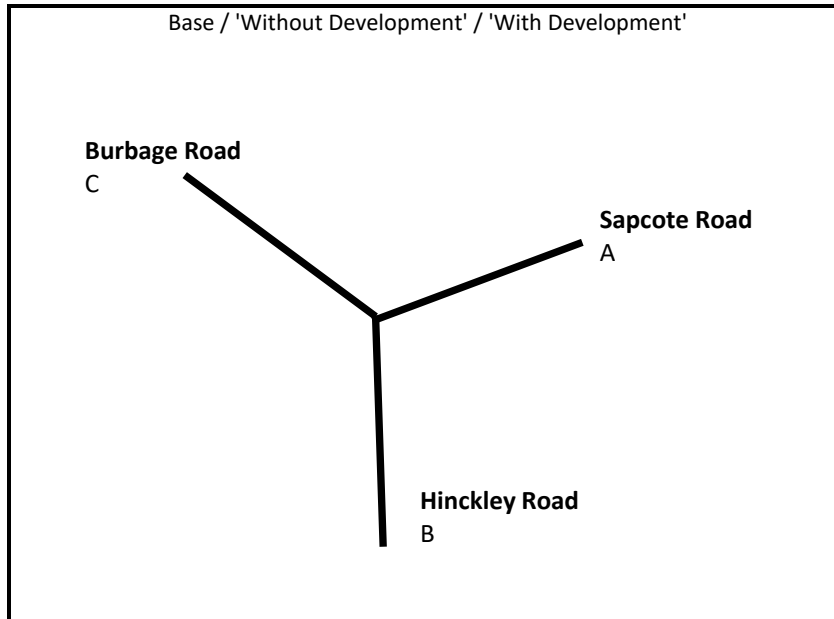
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	28	0	28	4%	35	0	36	4%
A-C	584	3	587	46%	195	1	196	18%
A-D	127	2	129	20%	203	1	203	28%
B-A	33	0	34	5%	36	0	36	6%
B-C	18	0	19	2%	3	0	3	0%
B-D	37	0	37	5%	33	0	33	5%
C-A	198	7	204	14%	505	5	511	37%
C-B	2	0	2	0%	17	0	17	3%
C-D	7	0	7	1%	72	0	73	9%
D-A	214	1	215	20%	245	1	245	28%
D-B	73	0	73	11%	52	0	52	7%
D-C	91	1	91	14%	10	0	10	2%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	28	0	28	5%	34	0	34	4%
A-C	683	3	686	51%	211	1	212	20%
A-D	73	2	75	13%	205	0	206	30%
B-A	32	0	32	6%	41	0	41	7%
B-C	20	0	20	3%	3	0	3	0%
B-D	35	0	36	5%	37	0	37	5%
C-A	196	7	203	14%	539	5	544	40%
C-B	1	0	1	0%	17	0	17	3%
C-D	7	0	7	1%	82	0	82	10%
D-A	188	1	189	18%	229	1	230	27%
D-B	67	0	68	12%	54	0	54	7%
D-C	116	1	117	20%	11	0	12	2%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	28	0	28	5%	35	0	35	4%
A-C	690	3	692	52%	213	1	214	20%
A-D	88	2	90	16%	201	0	201	30%
B-A	32	0	32	6%	41	0	41	7%
B-C	23	0	23	3%	4	0	4	0%
B-D	36	0	36	5%	41	0	41	6%
C-A	201	7	208	15%	556	5	561	40%
C-B	2	0	2	0%	17	0	17	3%
C-D	9	0	9	1%	89	0	89	11%
D-A	226	1	227	22%	243	1	244	28%
D-B	75	0	75	13%	56	0	56	8%
D-C	122	1	123	21%	14	0	14	2%

Turning Flows (veh) – B4669 Sapcote Road / B578 Hinckley Road Junction**2014 Base**

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	167	1	168	21%	295	1	296	31%
A-C	556	10	565	44%	399	1	401	35%
B-A	197	3	200	34%	209	2	211	31%
B-C	178	8	186	23%	326	5	331	34%
C-A	337	8	346	31%	480	9	489	36%
C-B	279	12	291	39%	111	2	113	14%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	198	3	201	25%	314	3	317	33%
A-C	551	5	556	45%	366	1	367	33%
B-A	232	8	239	46%	311	7	318	47%
B-C	212	1	212	27%	409	0	409	43%
C-A	347	8	355	36%	445	4	449	37%
C-B	434	0	434	56%	225	0	225	27%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	235	3	238	30%	339	3	342	35%
A-C	558	6	564	47%	348	1	349	32%
B-A	252	9	261	54%	325	6	331	49%
B-C	215	1	215	29%	440	0	440	46%
C-A	380	8	387	43%	459	6	465	39%
C-B	495	0	495	66%	236	0	236	29%

2026 'With Development'

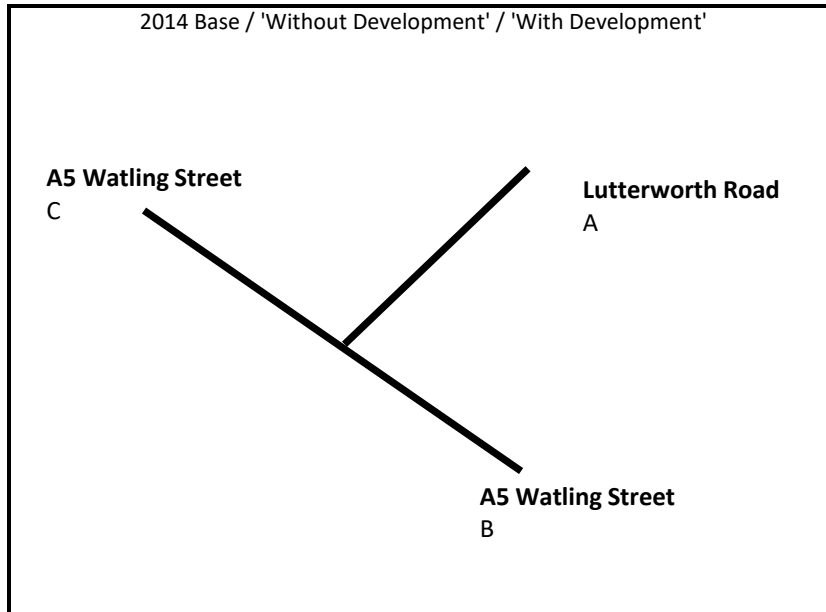
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	239	3	243	31%	369	3	371	38%
A-C	552	6	558	47%	343	1	344	33%
B-A	260	9	270	57%	321	6	327	48%
B-C	245	1	246	33%	448	0	448	47%
C-A	378	8	386	44%	469	6	475	39%
C-B	509	0	510	68%	217	0	217	27%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	236	4	239	30%	367	3	369	37%
A-C	551	6	557	47%	340	1	341	32%
B-A	266	9	275	61%	332	8	340	50%
B-C	216	1	217	31%	464	0	464	49%
C-A	400	7	407	49%	439	4	442	37%
C-B	551	0	551	73%	253	0	253	31%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	240	3	243	31%	426	3	429	40%
A-C	546	6	552	46%	381	1	382	33%
B-A	271	10	281	63%	343	8	351	50%
B-C	246	1	246	35%	434	0	435	49%
C-A	398	7	406	50%	447	4	451	37%
C-B	567	0	567	75%	215	0	215	29%

Turning Flows (veh) – A5 Watling Street / B578 Lutterworth Road Junction

2014 Base

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	286	13	299	28%	88	2	89	8%
A-C	23	0	23	4%	1	0	1	0%
B-A	108	9	117	14%	353	9	363	34%
B-C	603	67	670	49%	420	44	464	40%
C-A	1	0	1	0%	24	0	24	3%
C-B	622	64	686	46%	675	36	711	46%

2021 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	340	2	342	31%	106	0	106	12%
A-C	0	0	0	0%	0	0	0	0%
B-A	117	1	118	20%	373	2	374	40%
B-C	869	85	954	69%	498	51	550	48%
C-A	0	0	0	0%	0	0	0	0%
C-B	607	70	677	46%	828	44	872	56%

2026 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	404	2	406	37%	131	0	131	17%
A-C	2	0	2	1%	0	0	0	0%
B-A	115	1	116	24%	374	2	376	48%
B-C	939	103	1,042	76%	603	64	667	58%
C-A	0	0	0	0%	0	0	0	0%
C-B	589	76	665	46%	959	51	1,010	65%

2026 'With Development'

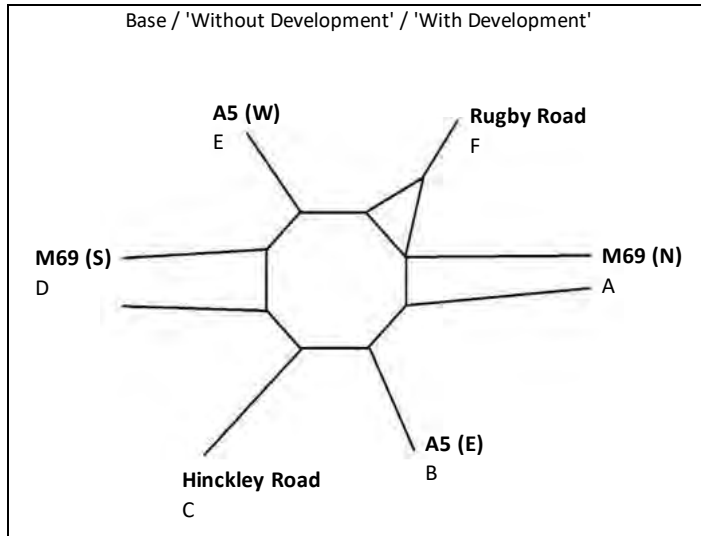
Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	425	2	427	39%	140	0	140	18%
A-C	3	0	3	1%	0	0	0	0%
B-A	116	1	117	24%	414	2	416	53%
B-C	937	103	1,040	75%	597	64	661	60%
C-A	0	0	0	0%	1	0	1	0%
C-B	578	77	654	45%	959	51	1,010	65%

2031 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	500	2	503	45%	148	1	149	19%
A-C	44	0	44	12%	0	0	0	0%
B-A	116	1	117	24%	412	2	413	52%
B-C	918	109	1,027	75%	671	74	745	67%
C-A	0	0	0	0%	1	0	1	0%
C-B	555	82	637	44%	938	58	996	65%

2031 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	525	2	527	47%	155	1	155	20%
A-C	56	0	56	15%	1	0	1	0%
B-A	117	1	118	24%	473	2	474	56%
B-C	911	109	1,021	75%	672	71	744	69%
C-A	0	0	0	0%	1	0	1	0%
C-B	544	81	626	44%	933	62	995	65%

Turning Flows (veh) – M69 Junction 1¹⁵**2014 Base**

Turning Movement	AM			PM		
	LV	HV	Total	LV	HV	Total
A-B	4	7	11	10	4	14
A-C	250	57	307	303	56	358
A-D	0	0	0	0	0	0
A-E	140	35	175	135	16	151
A-F	3	0	3	17	0	17
B-A	4	6	9	3	6	9
B-C	1	0	1	1	0	1
B-D	231	0	231	78	0	78
B-E	350	2	352	258	35	293
B-F	59	6	65	88	5	93
C-A	237	89	326	236	81	318
C-B	1	0	1	0	0	0
C-D	0	0	0	0	0	0
C-E	53	2	55	64	1	65
C-F	146	1	147	198	0	198
D-A	0	0	0	0	0	0
D-B	108	0	108	272	0	272
D-C	0	0	0	0	0	0
D-E	184	0	185	361	1	362
D-F	277	3	280	681	2	683
E-A	130	62	192	138	35	173
E-B	355	48	403	336	29	364
E-C	23	1	24	34	0	34
E-D	237	12	249	138	0	138
E-F	0	0	0	0	0	0
F-A	113	10	123	19	1	20
F-B	160	10	169	99	3	102
F-C	98	1	99	138	1	139
F-D	562	4	566	363	1	364
F-E	0	0	0	0	0	0

V/C (%)	AM		PM	
	Approach Arm	Exit Arm	Approach Arm	Exit Arm
A	30%	47%	31%	39%
B	13%	46%	9%	48%
C	38%	30%	40%	36%
D	29%	61%	66%	34%
E	57%	53%	45%	53%
F	60%	31%	39%	61%

¹⁵ M69 Junction 1 roundabout is coded as an 'exploded' roundabout (as noted in Paragraph 2.2.6 of the PRTM - Burbage Fields - Base Year Model Review v3.0 (2022-05-24)). As such, turn volume-capacity ratio data are not available for this junction and link volume-capacity ratio data have been provided.

2021 'Without Development'

Turning Movement	AM			PM		
	LV	HV	Total	LV	HV	Total
A-B	99	11	110	43	8	51
A-C	227	60	287	306	47	353
A-D	0	0	0	0	0	0
A-E	106	33	139	121	15	136
A-F	4	1	5	23	1	24
B-A	14	6	20	65	6	70
B-C	1	0	1	7	0	7
B-D	353	10	364	175	8	183
B-E	345	73	418	293	42	335
B-F	64	5	69	97	4	101
C-A	237	90	327	248	82	330
C-B	1	0	1	1	0	1
C-D	0	0	0	0	0	0
C-E	79	3	82	96	1	98
C-F	153	1	154	236	0	237
D-A	0	0	0	0	0	0
D-B	169	13	182	271	10	281
D-C	0	0	0	0	0	0
D-E	251	4	255	419	4	423
D-F	291	1	291	780	0	780
E-A	117	59	176	146	36	183
E-B	339	54	393	351	36	386
E-C	30	3	33	65	1	66
E-D	295	5	301	191	1	192
E-F	0	2	2	0	1	1
F-A	85	1	86	31	0	31
F-B	140	7	147	110	3	113
F-C	134	2	136	145	1	145
F-D	669	2	672	442	1	442
F-E	0	0	0	0	0	0

V/C (%)	AM		PM	
	Approach Arm	Exit Arm	Approach Arm	Exit Arm
A	33%	44%	32%	45%
B	16%	56%	13%	54%
C	40%	32%	46%	38%
D	39%	78%	77%	48%
E	59%	59%	52%	61%
F	64%	32%	45%	70%

2026 'Without Development'

Turning Movement	AM			PM		
	LV	HV	Total	LV	HV	Total
A-B	162	10	172	56	9	65
A-C	241	62	303	273	49	321
A-D	0	0	0	0	0	0
A-E	105	34	139	171	14	185
A-F	9	1	9	2	1	3
B-A	17	8	25	103	5	108
B-C	2	0	2	18	0	18
B-D	358	17	375	248	14	262
B-E	306	87	393	329	53	382
B-F	102	6	108	136	5	141
C-A	245	83	328	193	72	265
C-B	1	0	1	1	0	1
C-D	0	0	0	0	0	0
C-E	87	3	89	92	1	93
C-F	178	1	179	294	0	294
D-A	0	0	0	0	0	0
D-B	186	18	205	336	14	351
D-C	0	0	0	0	0	0
D-E	236	6	242	454	5	459
D-F	357	1	359	850	1	851
E-A	139	71	211	127	35	162
E-B	270	64	334	336	44	380
E-C	42	2	44	77	1	77
E-D	299	7	305	205	2	207
E-F	0	2	2	0	1	1
F-A	89	1	90	29	0	29
F-B	185	7	192	124	3	127
F-C	118	2	120	140	1	141
F-D	727	2	729	480	1	481
F-E	0	0	0	0	0	0

V/C (%)	AM		PM	
	Approach Arm	Exit Arm	Approach Arm	Exit Arm
A	37%	47%	33%	42%
B	17%	61%	16%	61%
C	42%	33%	45%	38%
D	43%	82%	86%	56%
E	61%	58%	53%	69%
F	70%	41%	48%	79%

2026 'With Development'

Turning Movement	AM			PM		
	LV	HV	Total	LV	HV	Total
A-B	163	11	175	56	9	65
A-C	241	62	303	273	49	322
A-D	0	0	0	0	0	0
A-E	105	34	139	170	14	184
A-F	9	1	10	2	1	3
B-A	17	8	25	103	5	108
B-C	3	0	3	18	0	18
B-D	357	17	373	246	14	260
B-E	306	87	393	335	53	388
B-F	103	6	108	143	5	147
C-A	245	83	328	195	72	267
C-B	1	0	1	1	0	1
C-D	0	0	0	0	0	0
C-E	87	3	90	94	1	95
C-F	178	1	179	294	0	295
D-A	0	0	0	0	0	0
D-B	182	18	201	336	14	350
D-C	0	0	0	0	0	0
D-E	241	6	247	455	5	460
D-F	356	1	358	869	1	869
E-A	139	71	211	125	35	160
E-B	269	64	332	338	44	382
E-C	42	2	44	77	1	77
E-D	296	7	303	205	2	207
E-F	0	2	2	0	1	1
F-A	97	1	98	30	0	30
F-B	183	7	189	125	3	128
F-C	117	2	119	142	1	142
F-D	746	2	748	483	1	484
F-E	0	0	0	0	0	0

V/C (%)	AM		PM	
	Approach Arm	Exit Arm	Approach Arm	Exit Arm
A	38%	48%	33%	42%
B	17%	60%	17%	61%
C	42%	33%	45%	38%
D	43%	83%	87%	56%
E	60%	58%	53%	70%
F	71%	41%	48%	81%

2031 'Without Development'

Turning Movement	AM			PM		
	LV	HV	Total	LV	HV	Total
A-B	166	9	175	56	8	64
A-C	232	66	298	276	48	324
A-D	0	0	0	0	0	0
A-E	84	33	118	171	14	185
A-F	9	1	9	2	1	3
B-A	17	9	26	96	7	103
B-C	4	0	4	18	0	18
B-D	386	16	402	271	13	284
B-E	308	91	399	346	61	407
B-F	101	6	107	163	5	168
C-A	278	79	357	188	74	262
C-B	1	0	1	1	0	1
C-D	32	0	32	0	0	0
C-E	84	2	87	110	1	112
C-F	177	1	178	283	0	284
D-A	0	0	0	0	0	0
D-B	185	18	203	333	14	347
D-C	0	0	0	0	0	0
D-E	248	7	255	486	10	496
D-F	386	1	388	897	1	897
E-A	137	66	203	108	34	141
E-B	270	66	336	326	49	375
E-C	68	3	70	99	1	100
E-D	327	10	337	219	4	223
E-F	0	2	2	0	1	1
F-A	97	1	98	28	0	28
F-B	138	7	144	128	3	131
F-C	127	2	129	131	1	131
F-D	711	2	714	511	1	512
F-E	0	0	0	0	0	0

V/C (%)	AM		PM	
	Approach Arm	Exit Arm	Approach Arm	Exit Arm
A	37%	49%	33%	41%
B	18%	58%	18%	61%
C	45%	36%	46%	39%
D	45%	87%	91%	60%
E	63%	58%	54%	75%
F	67%	43%	49%	84%

2031 'With Development'

Turning Movement	AM			PM		
	LV	HV	Total	LV	HV	Total
A-B	167	12	179	56	8	64
A-C	230	66	296	276	48	324
A-D	0	0	0	0	0	0
A-E	85	33	118	171	14	185
A-F	9	1	10	2	1	3
B-A	17	9	26	96	7	102
B-C	5	0	5	18	0	18
B-D	400	16	416	264	13	277
B-E	305	91	396	354	60	414
B-F	101	6	107	158	5	163
C-A	276	79	355	191	74	264
C-B	1	0	1	1	0	1
C-D	30	0	30	0	0	0
C-E	84	2	87	112	1	113
C-F	176	1	177	289	0	289
D-A	0	0	0	0	0	0
D-B	183	18	201	332	14	346
D-C	0	0	0	0	0	0
D-E	252	7	259	490	10	499
D-F	387	1	388	912	1	913
E-A	137	65	202	107	34	141
E-B	266	66	332	327	49	376
E-C	71	3	73	99	1	100
E-D	323	10	333	218	4	222
E-F	0	2	2	0	1	1
F-A	106	1	107	29	0	29
F-B	133	7	140	128	3	131
F-C	133	2	135	131	1	131
F-D	720	2	722	515	1	516
F-E	0	0	0	0	0	0

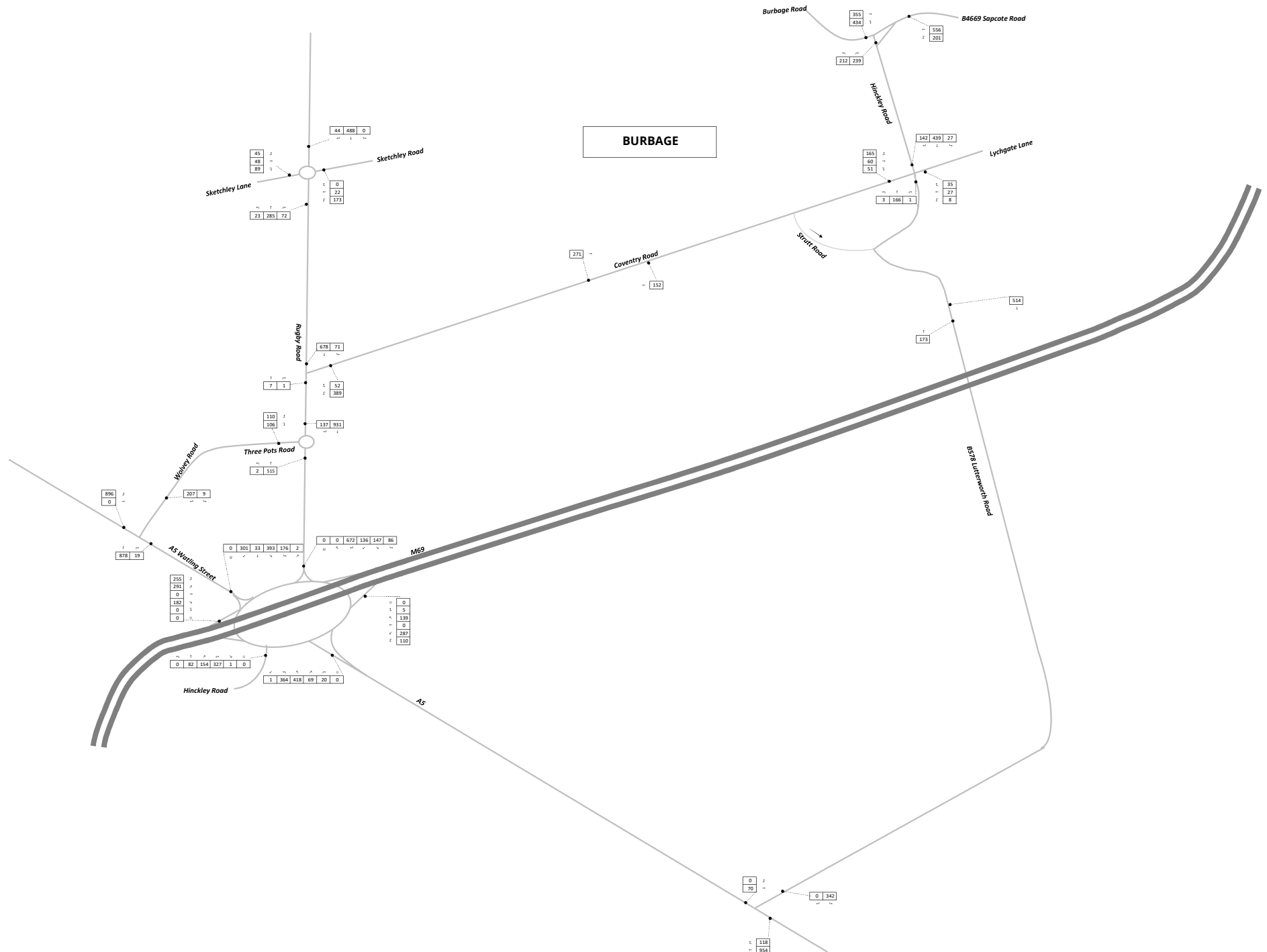
V/C (%)	AM		PM	
	Approach Arm	Exit Arm	Approach Arm	Exit Arm
A	37%	49%	33%	41%
B	18%	58%	18%	61%
C	45%	36%	46%	39%
D	45%	87%	92%	60%
E	63%	58%	54%	76%
F	68%	43%	50%	85%

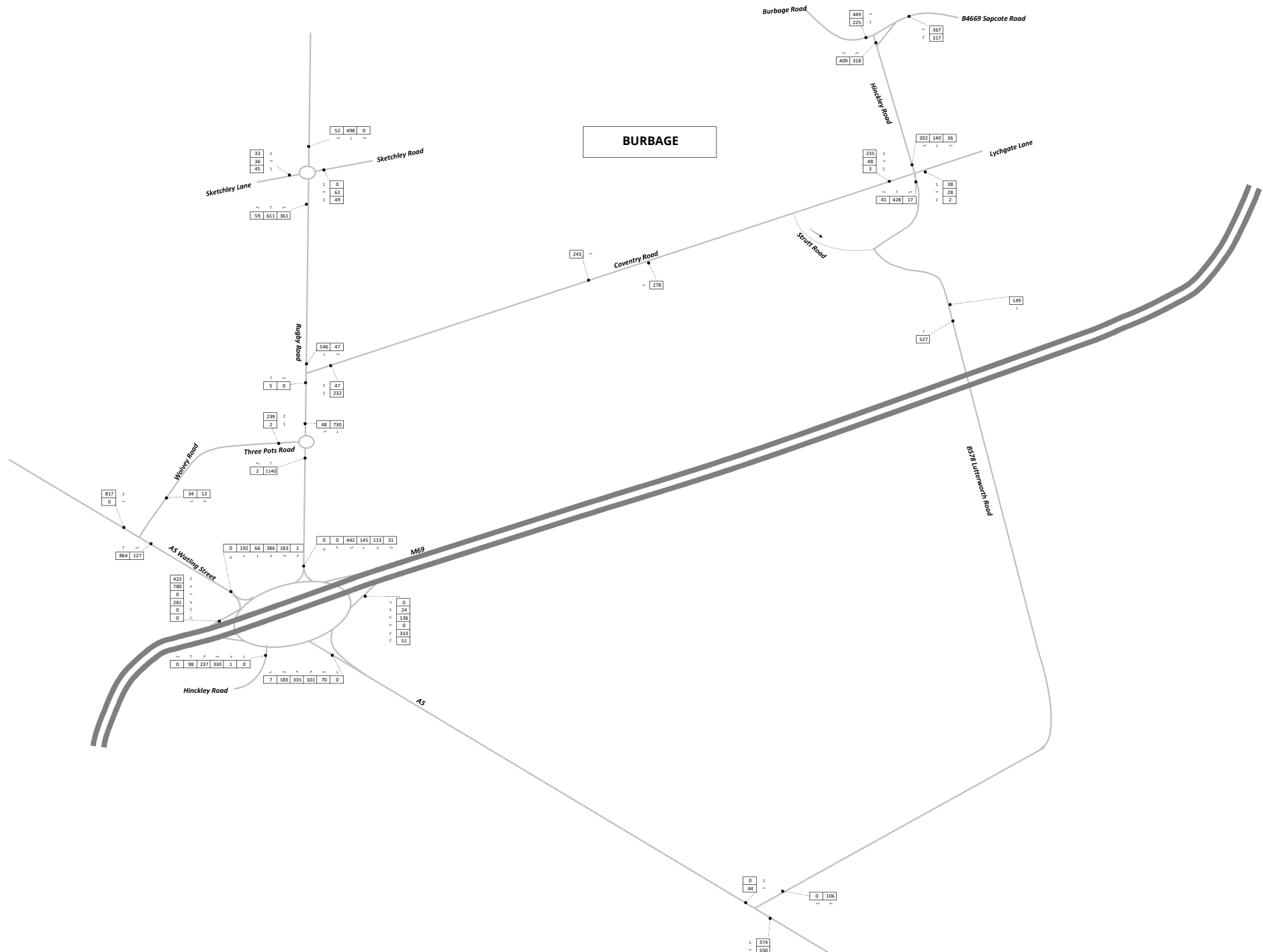
Page intentionally blank

About AECOM

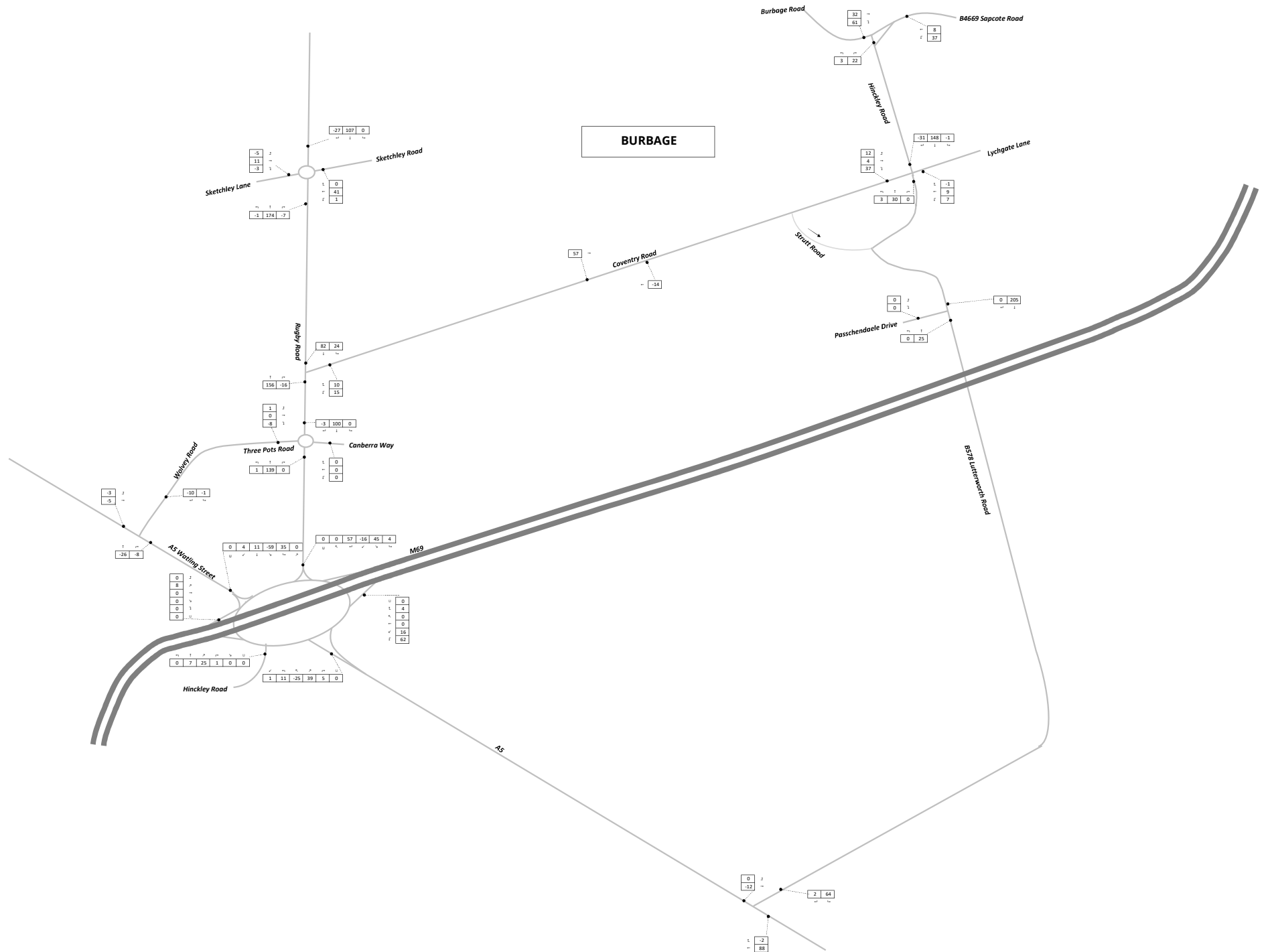
AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivalled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a Fortune 500 firm and its Professional Services business had revenue of \$13.2 billion in fiscal year 2020. See how we are delivering sustainable legacies for generations to come at aecom.com and [@AECOM](https://twitter.com/AECOM).

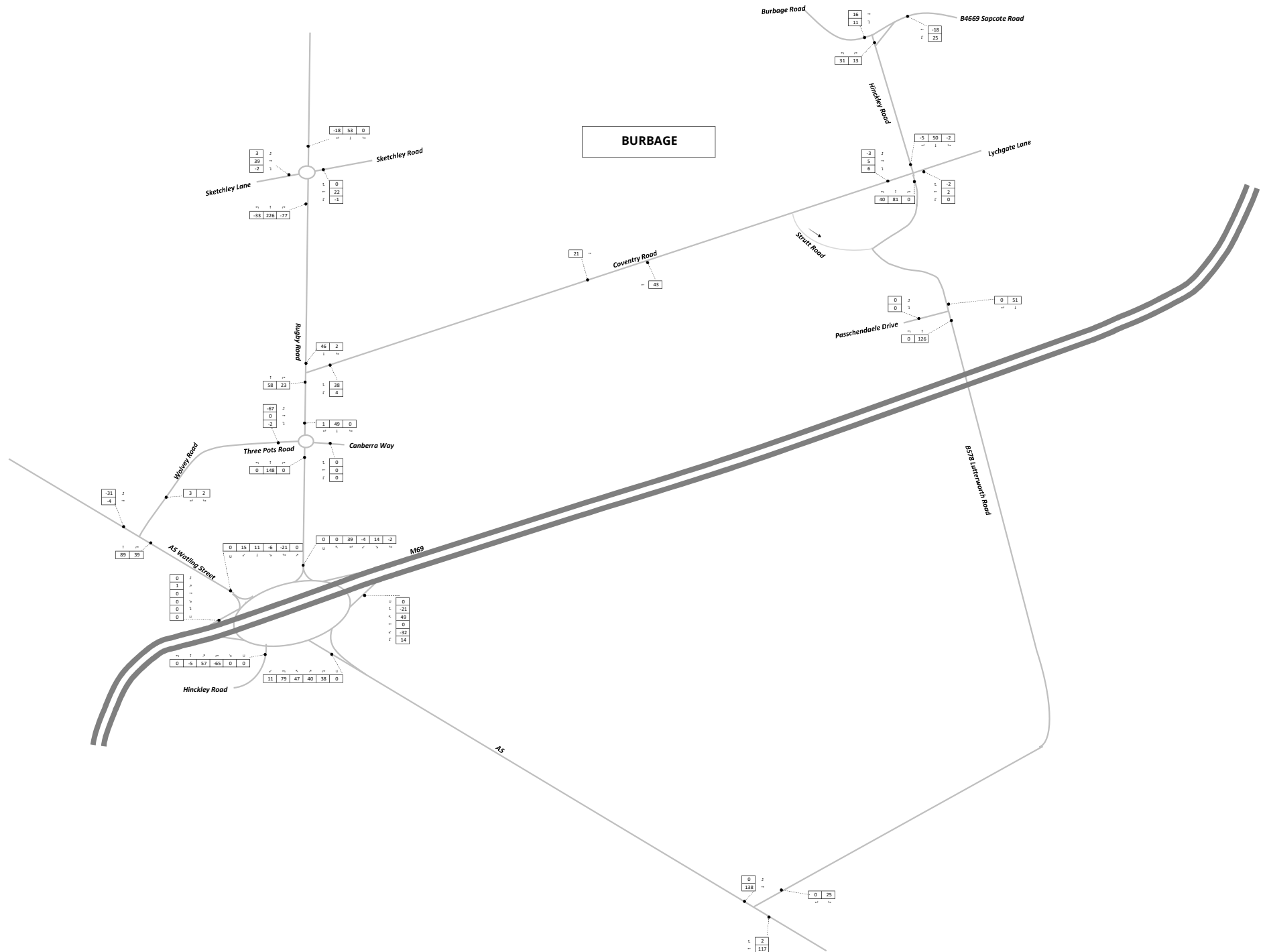
Appendix U: 2021 PRTM Turning Movements

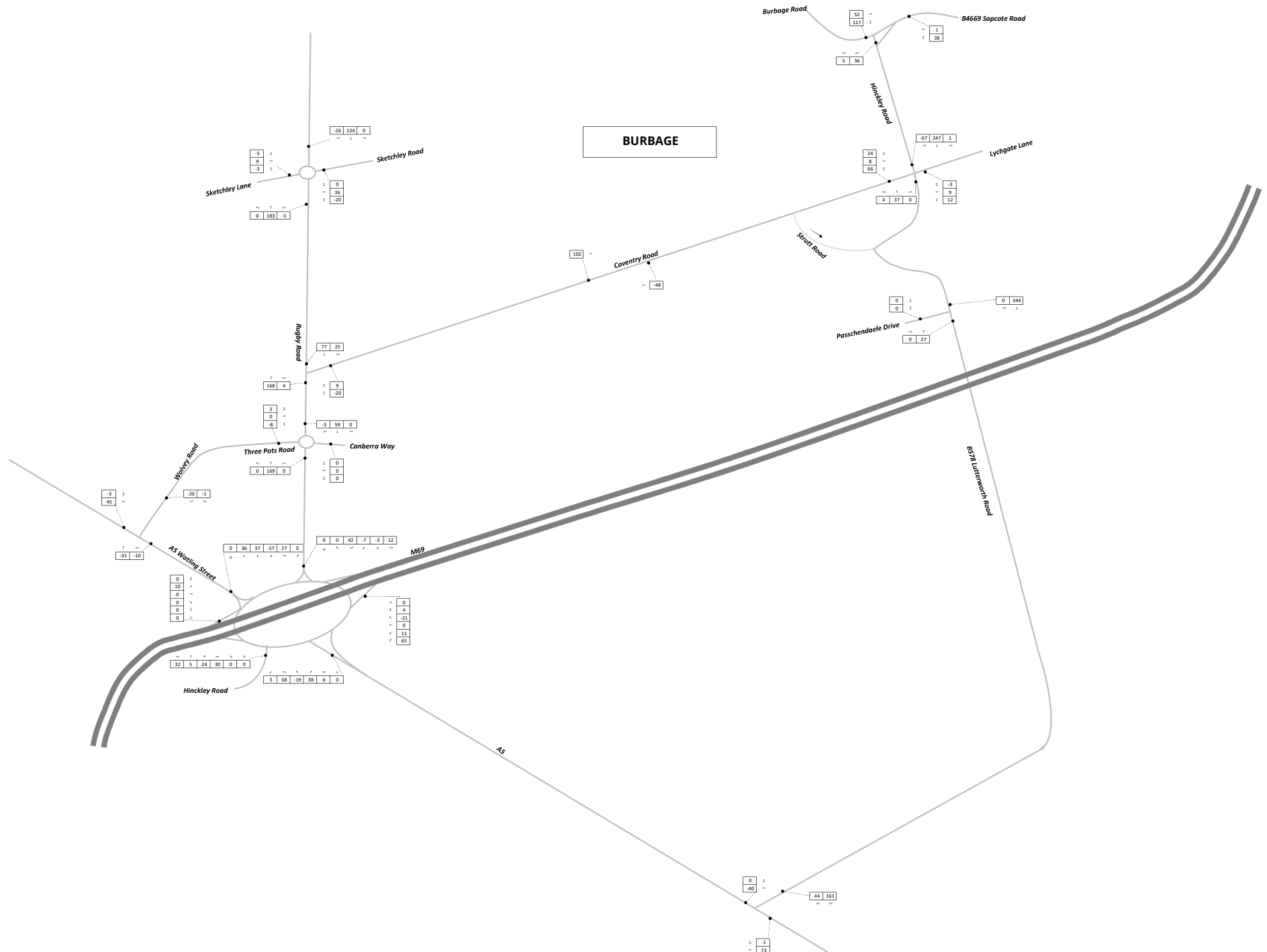


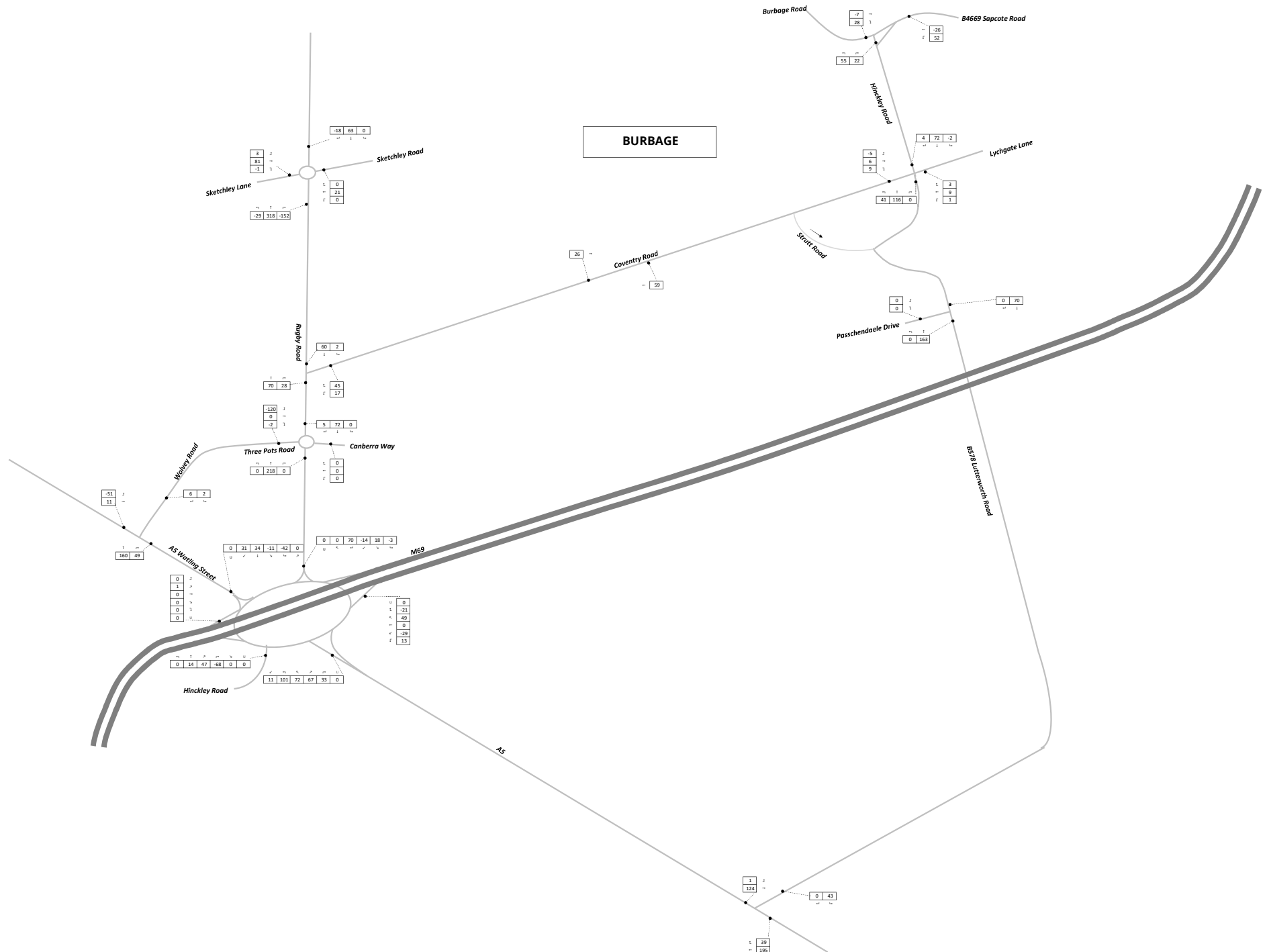


Appendix V: 2026 and 2031 PRTM Calculated Differences to 2021 Base Year

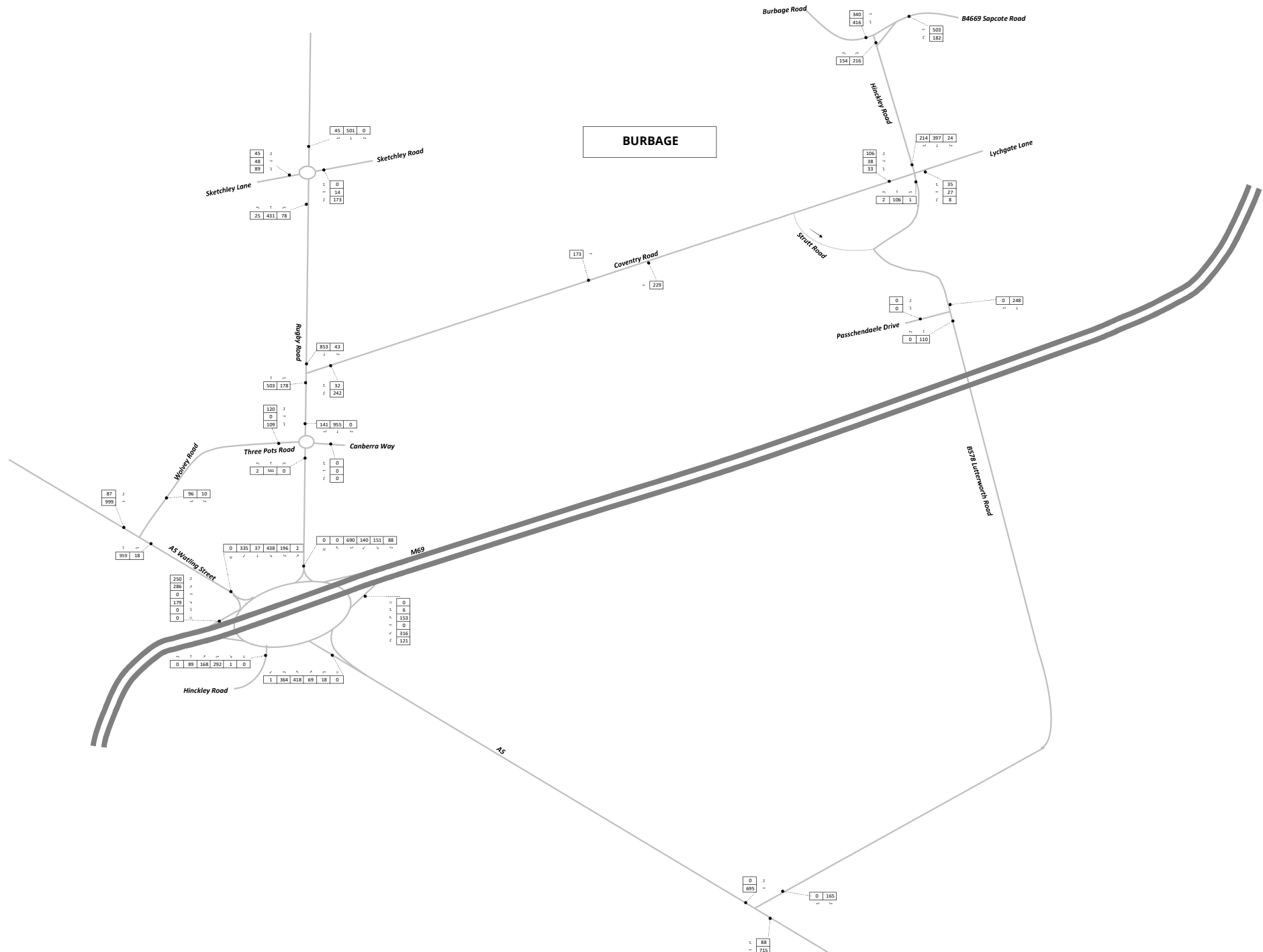


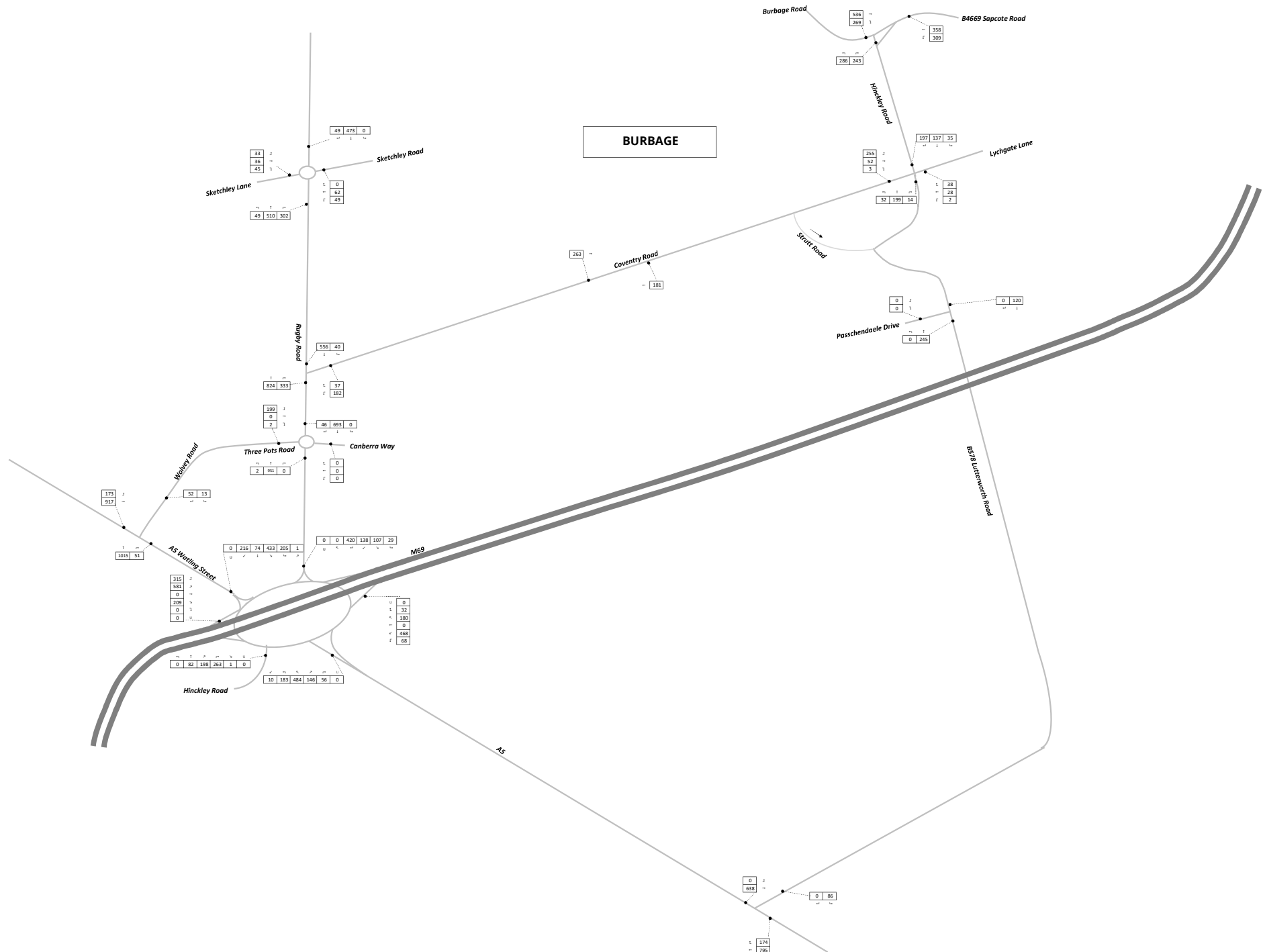


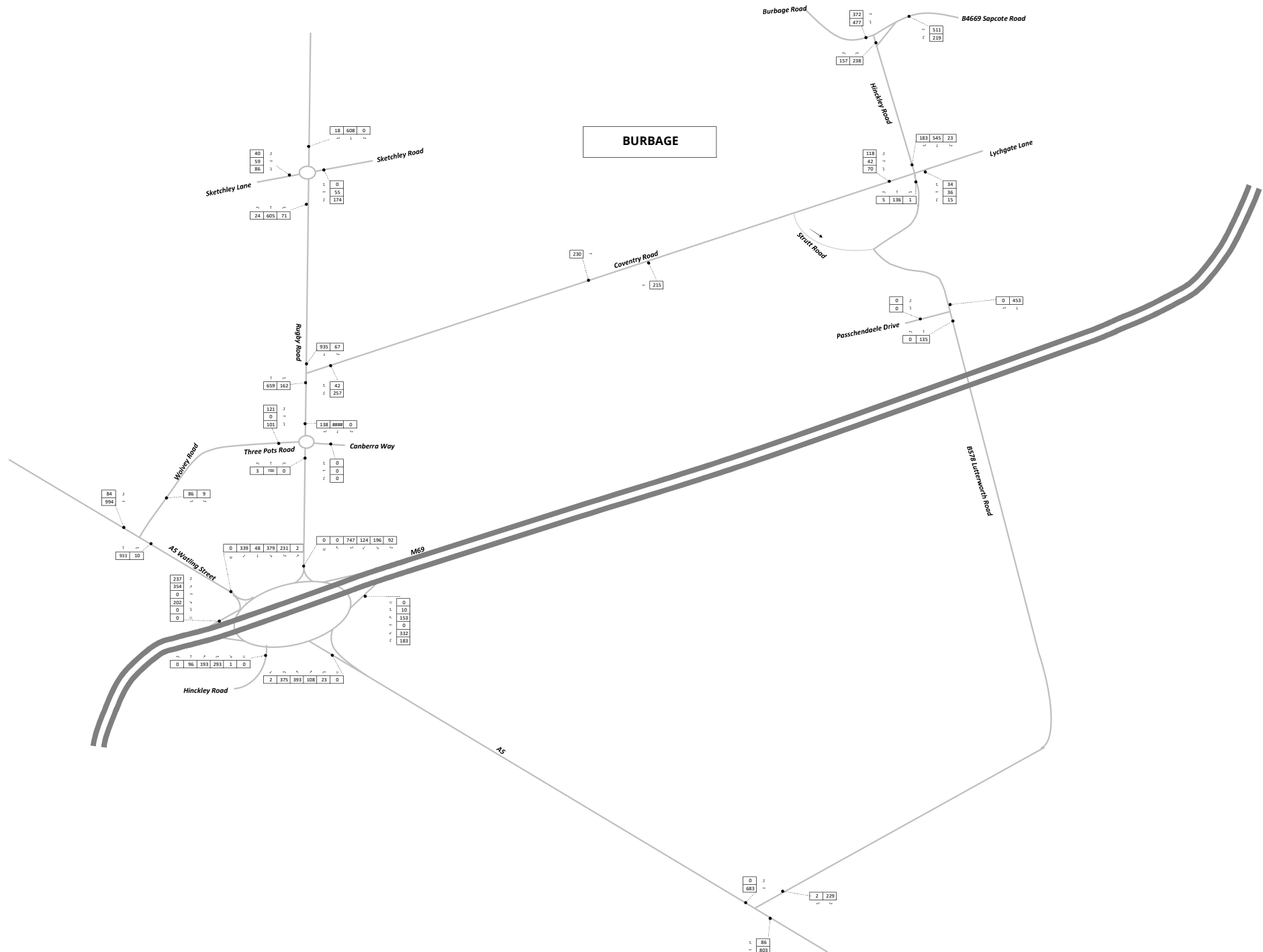


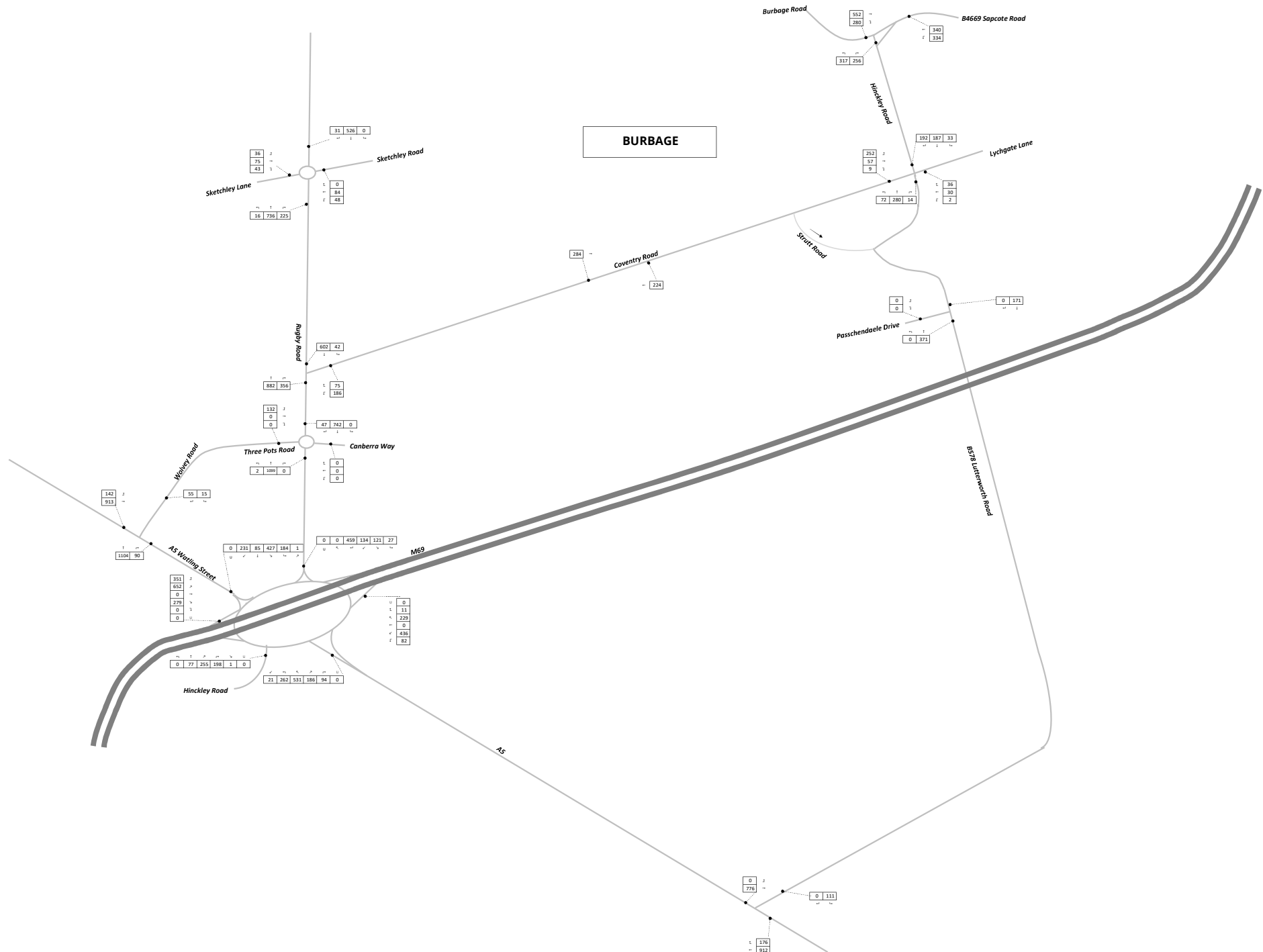


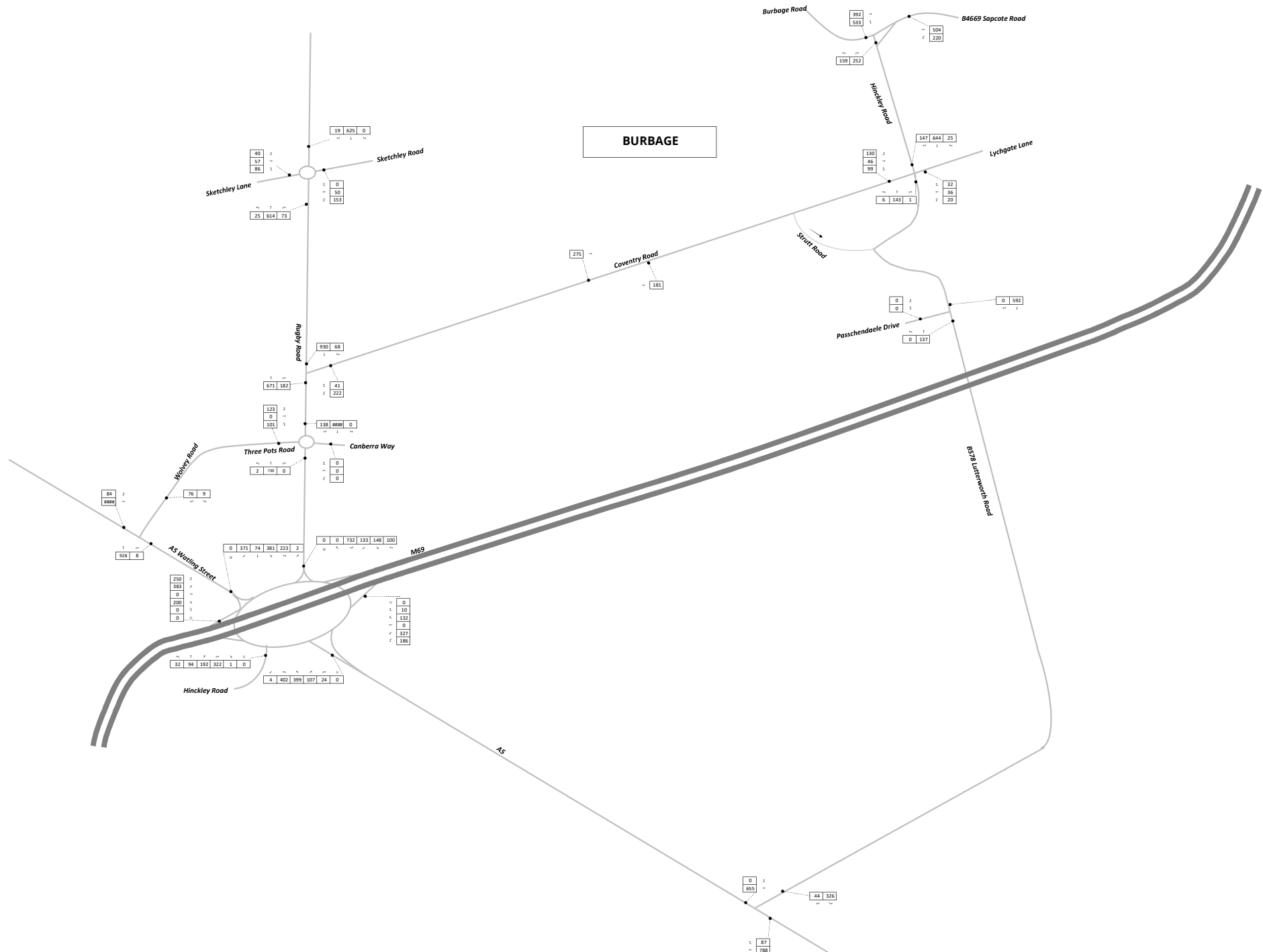
Appendix W: Furnessed 2021 and Calculated 2026 and 2031 Forecast Traffic Flows

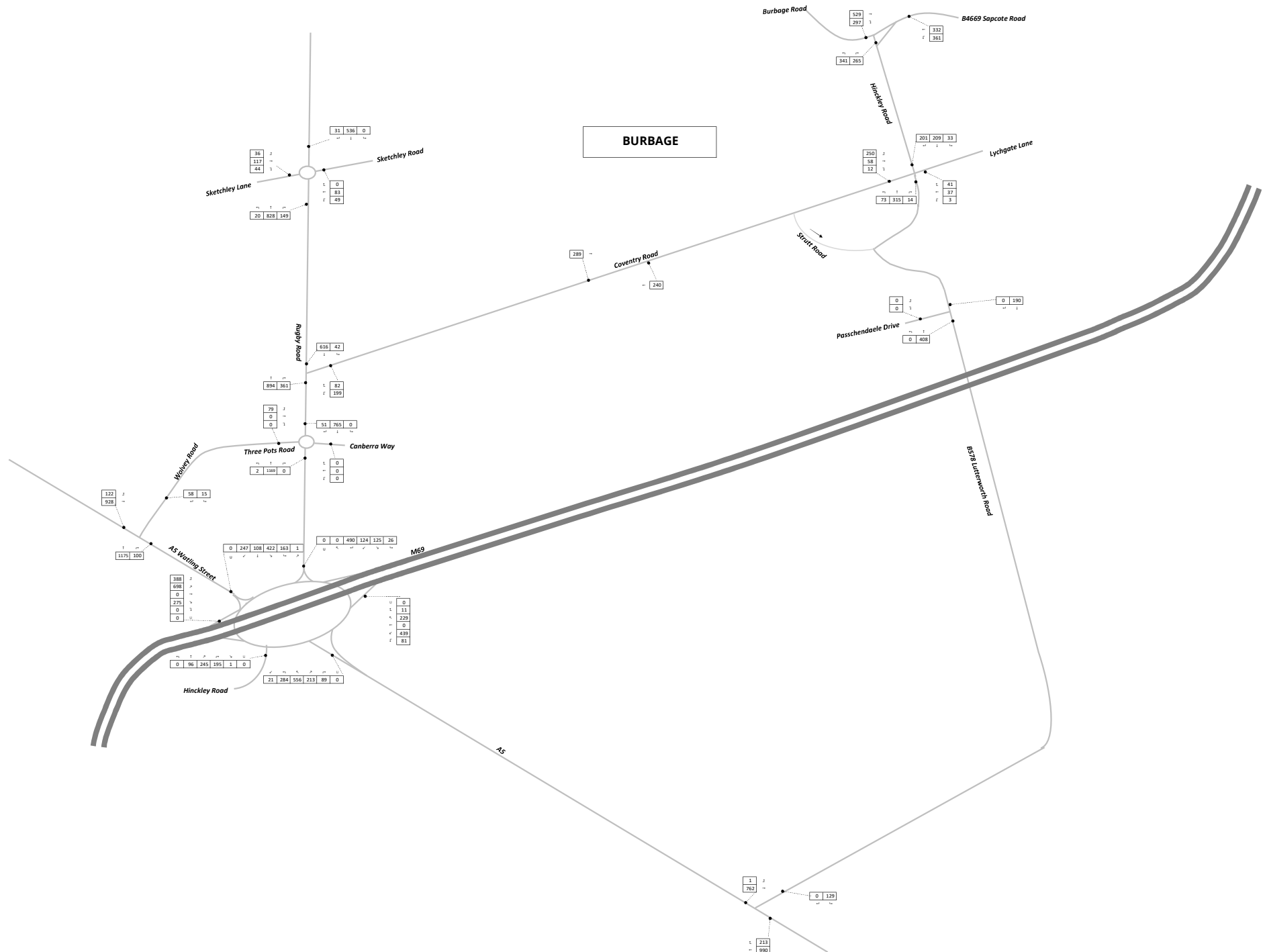






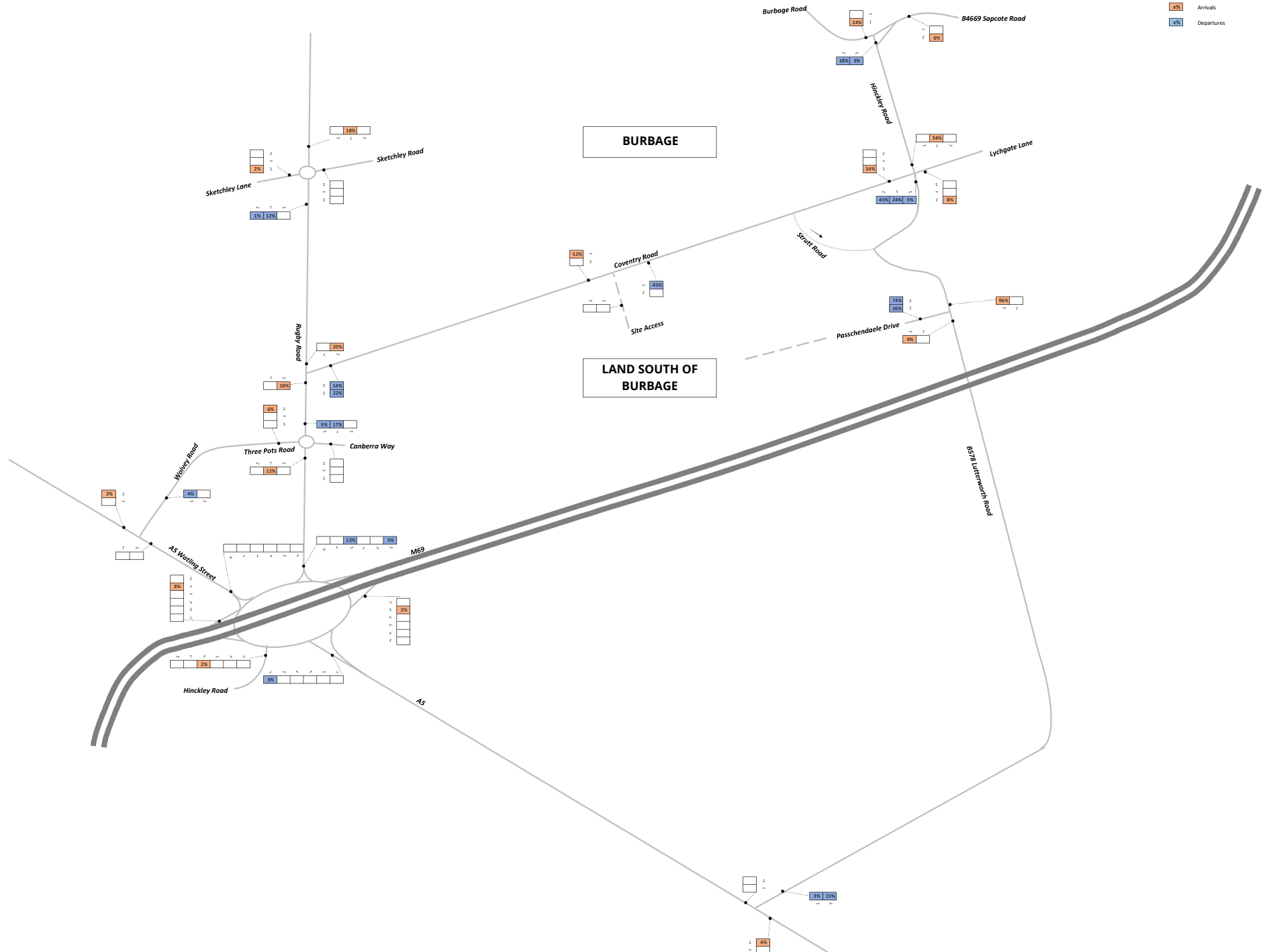




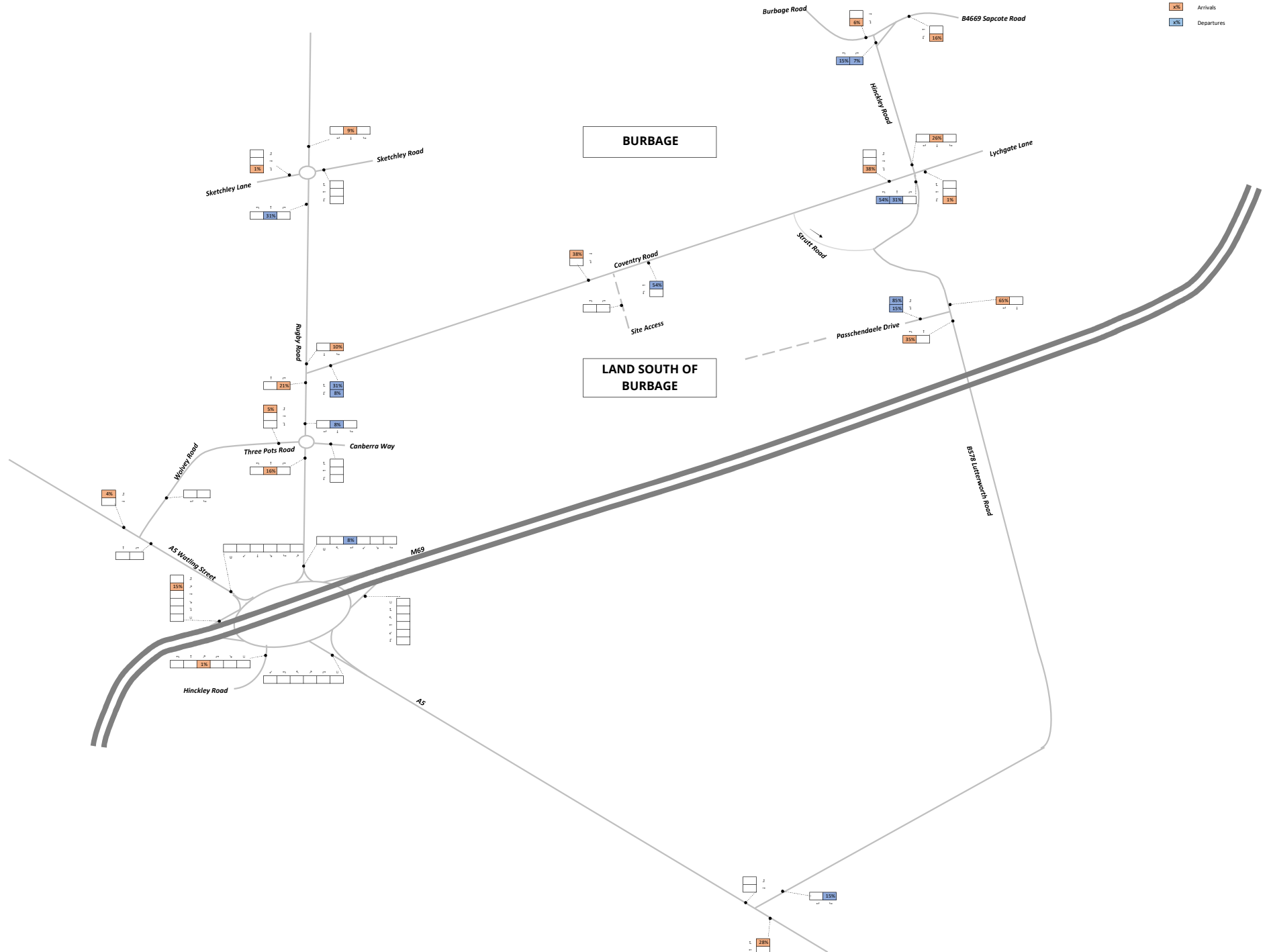


Appendix X: Residential Traffic Distribution

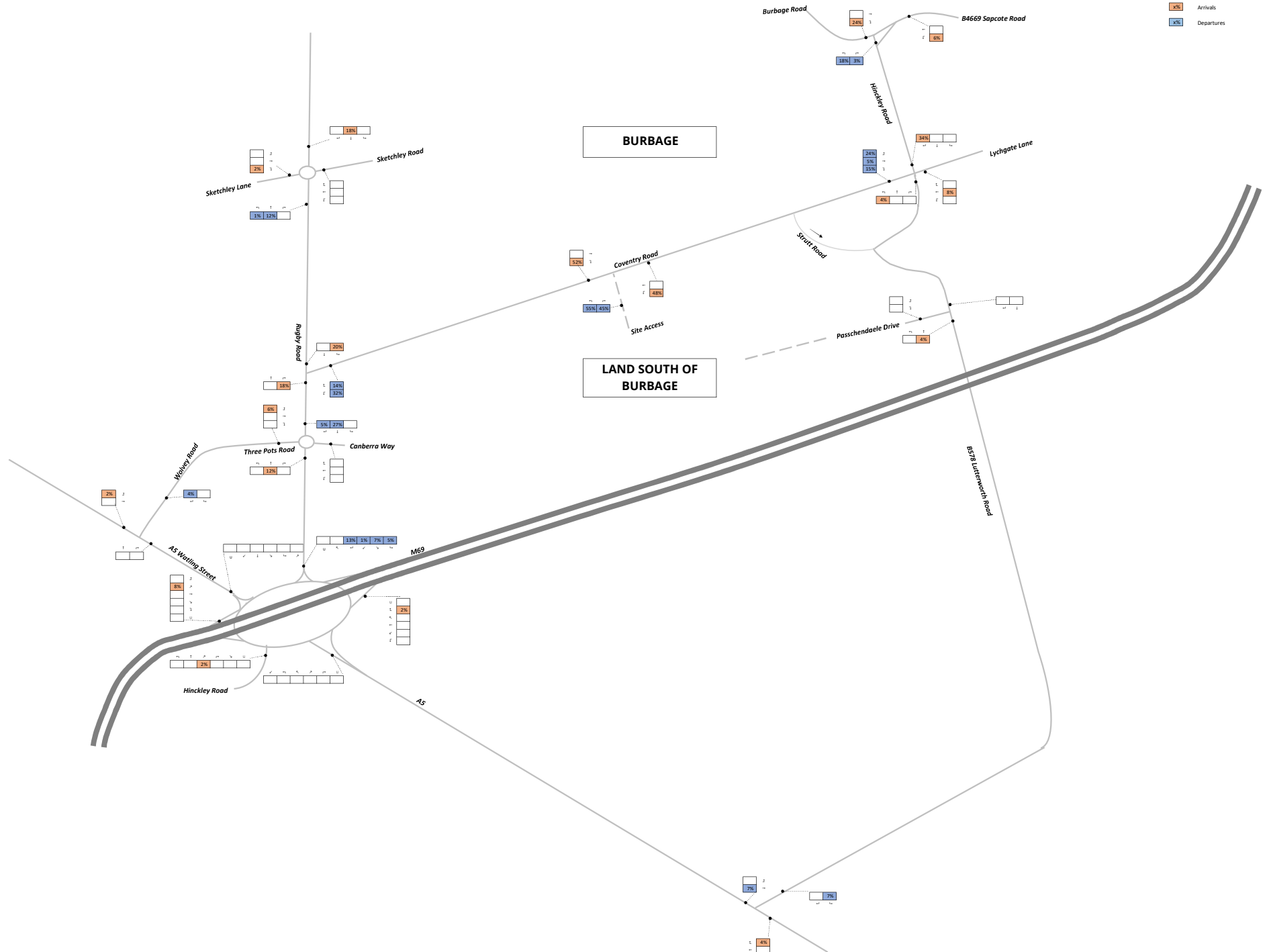
Key
x% Arrivals
x% Departures



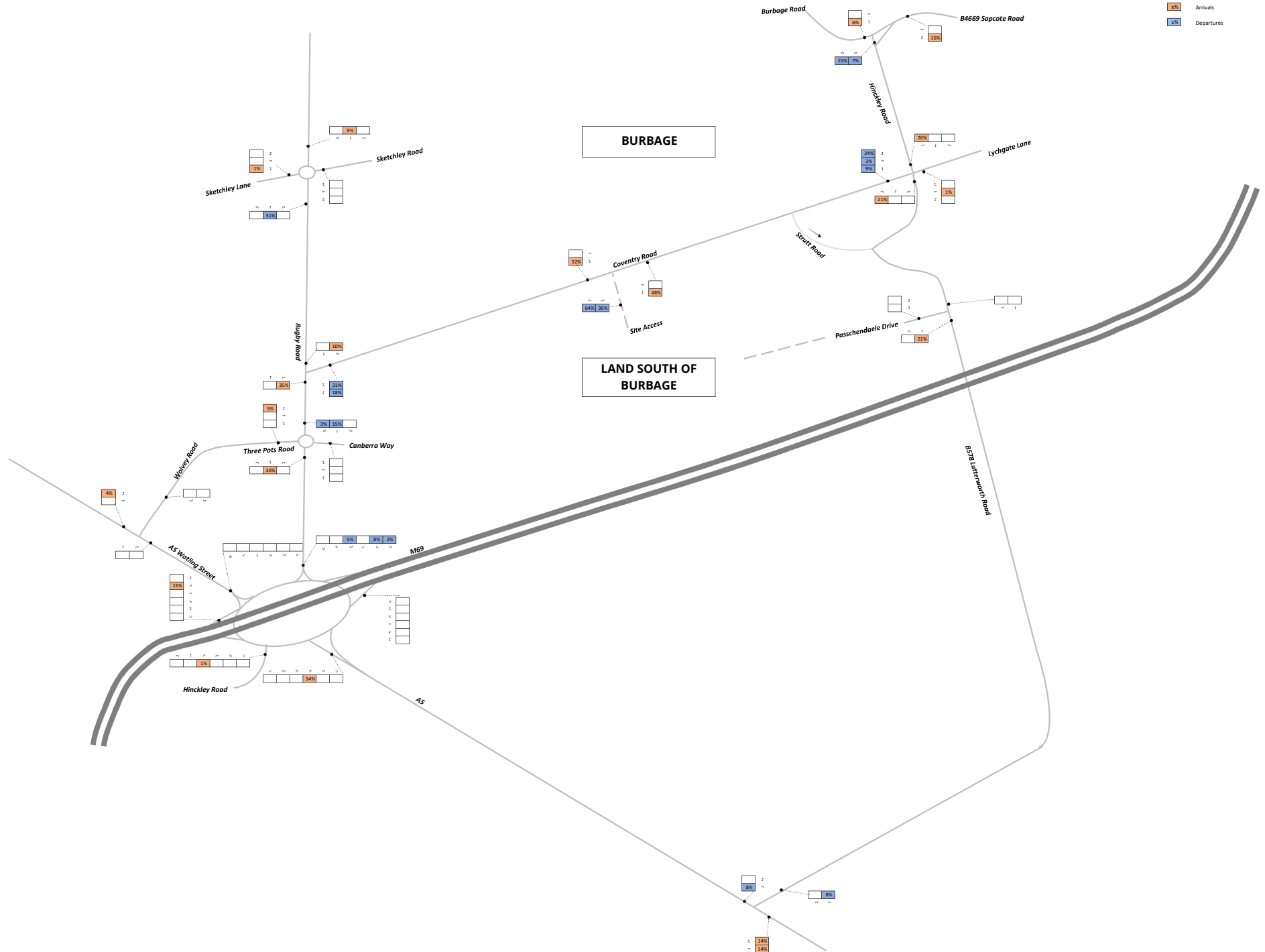
Key
Arrivals
Departures



Key
Arrivals
Departures

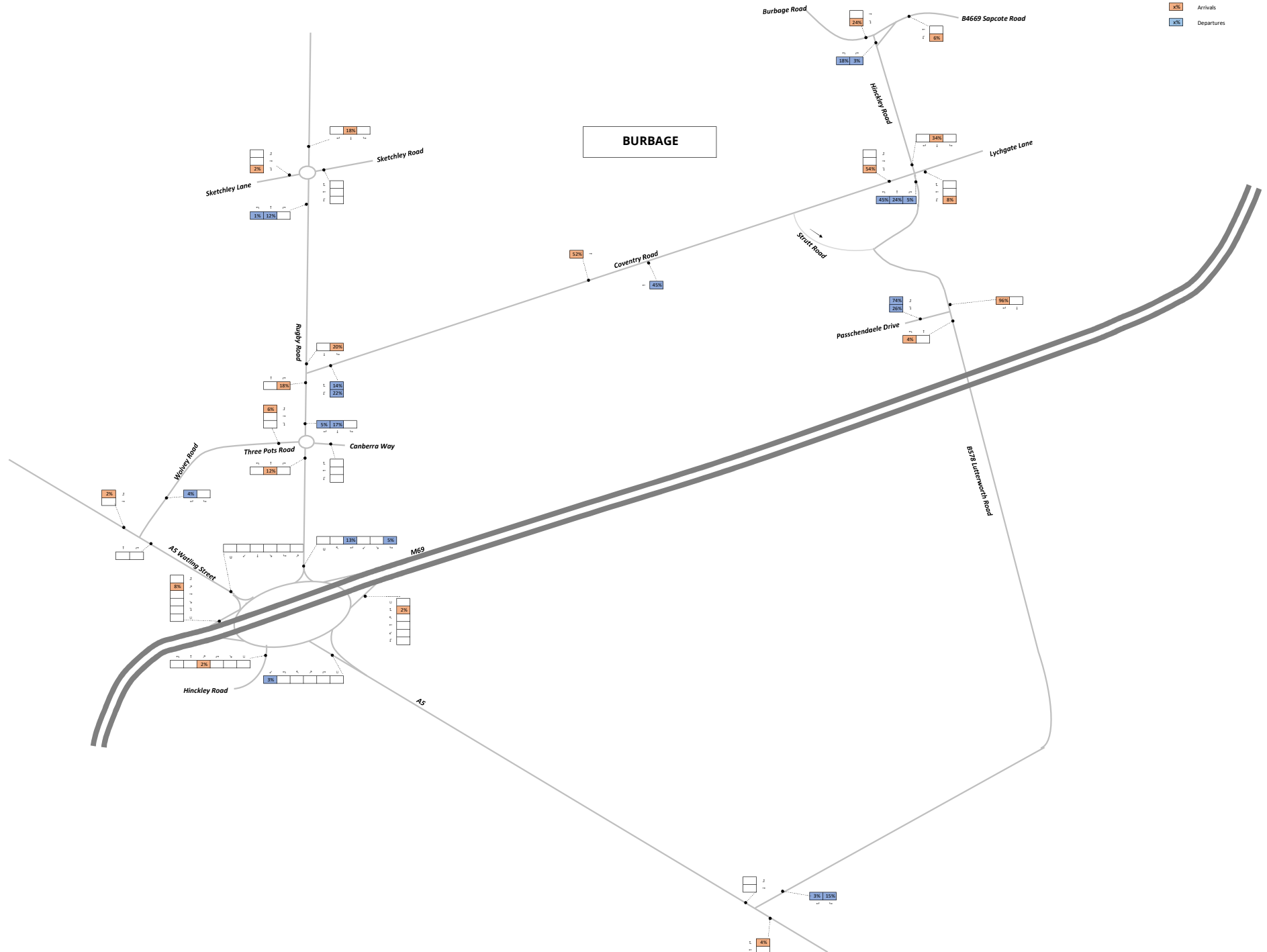


Key
Arrivals
Departures

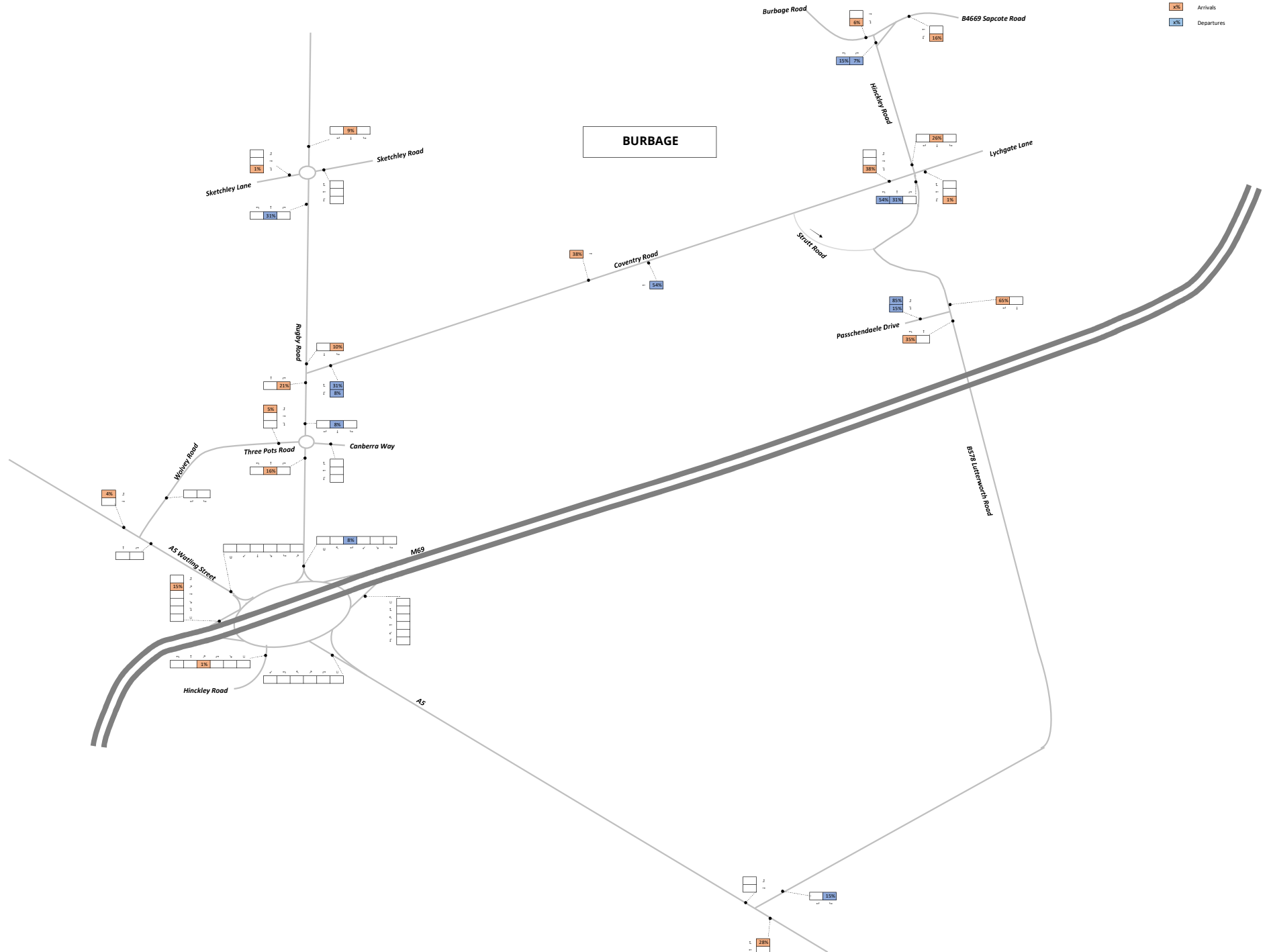


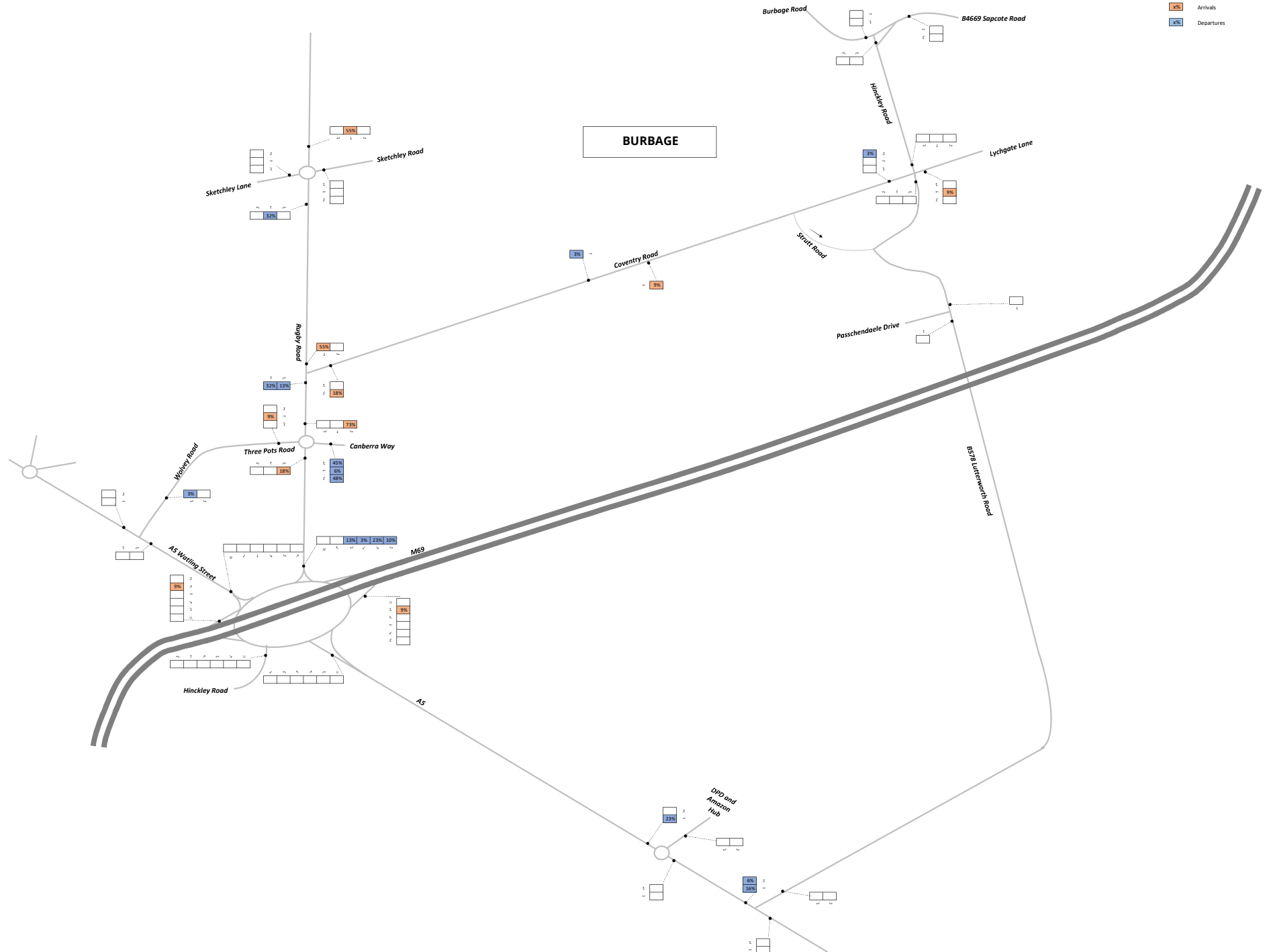
Appendix Y: Committed Development Distribution

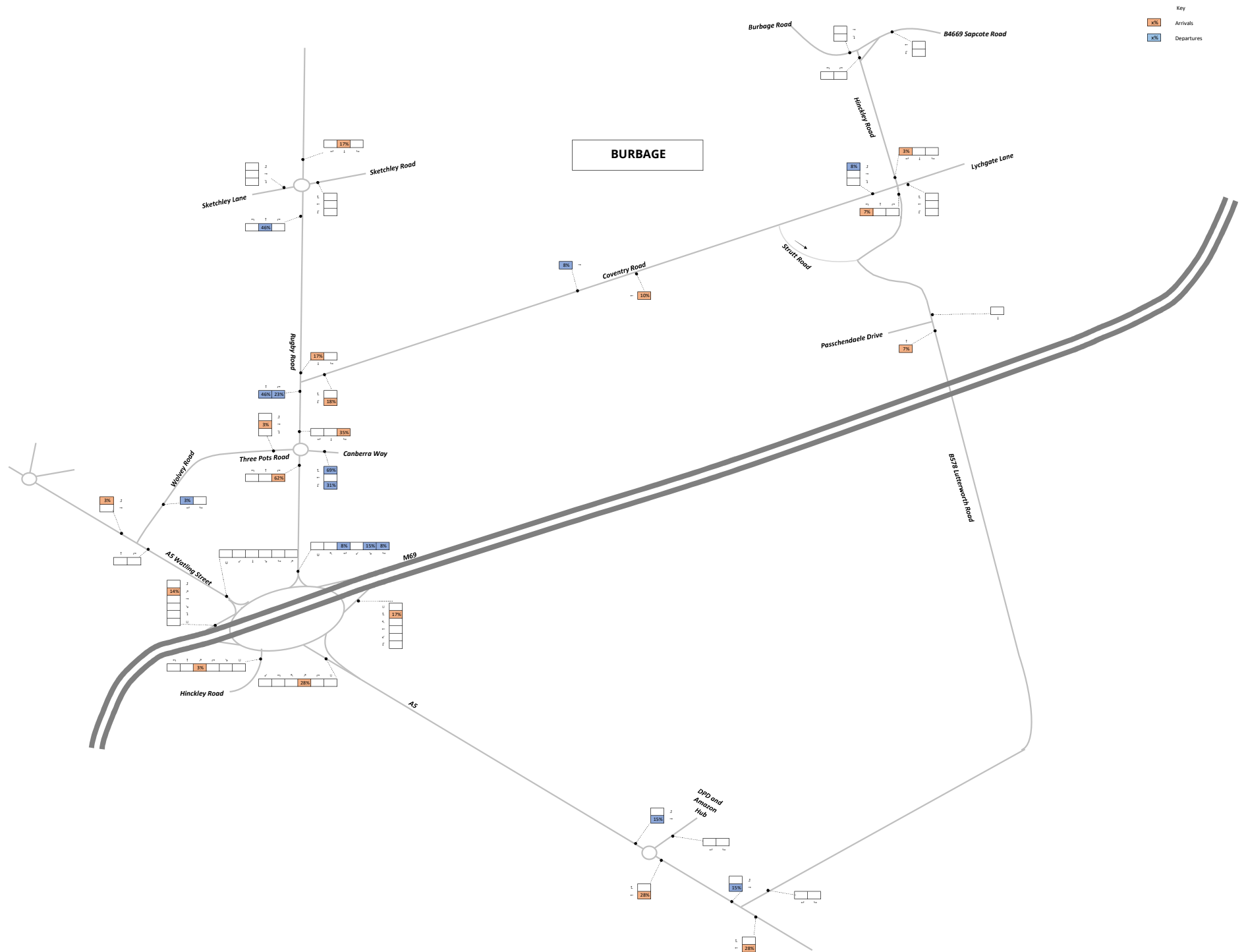
Key
Arrivals
Departures



Key
x% Arrivals
x% Departures

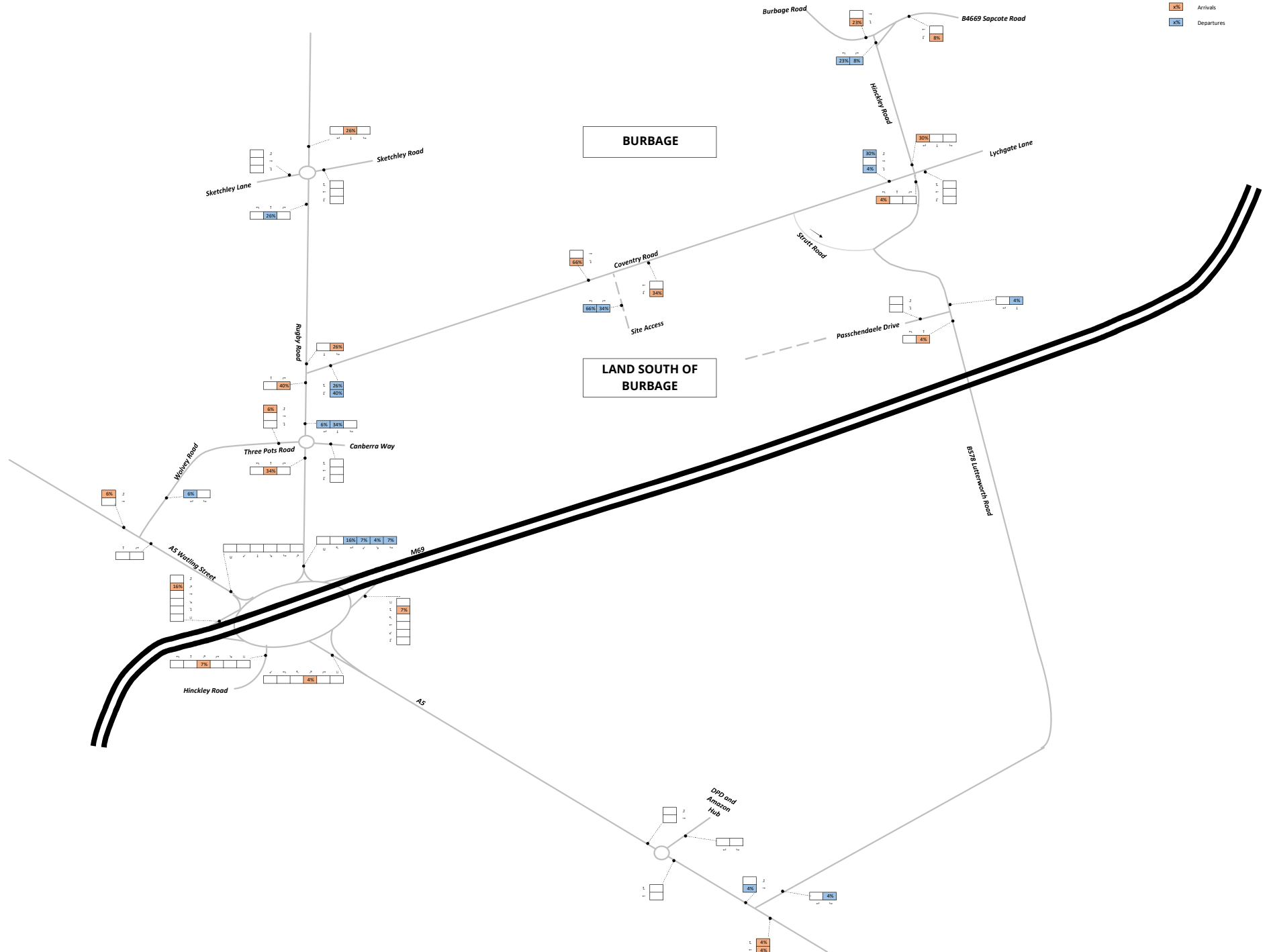




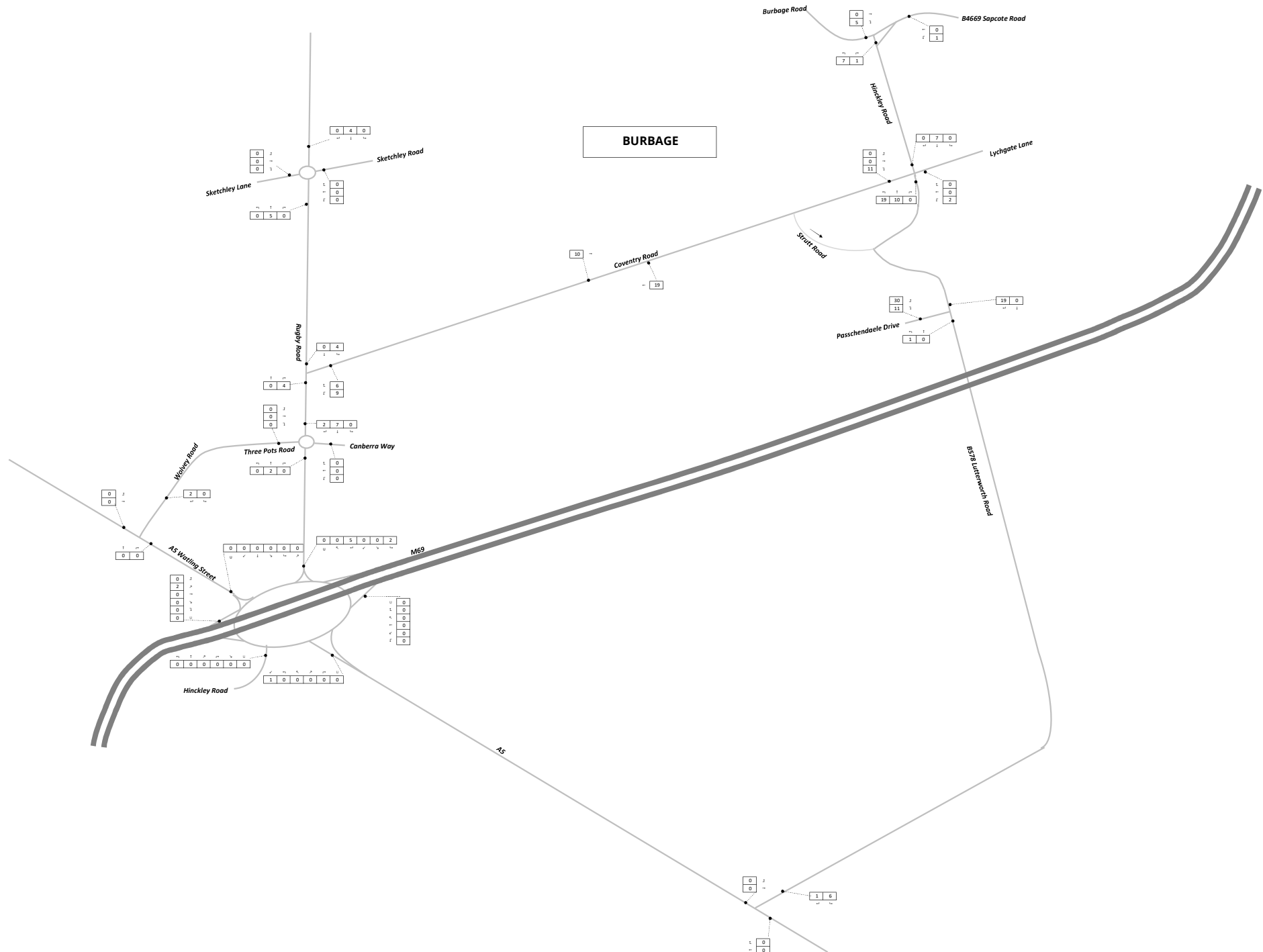


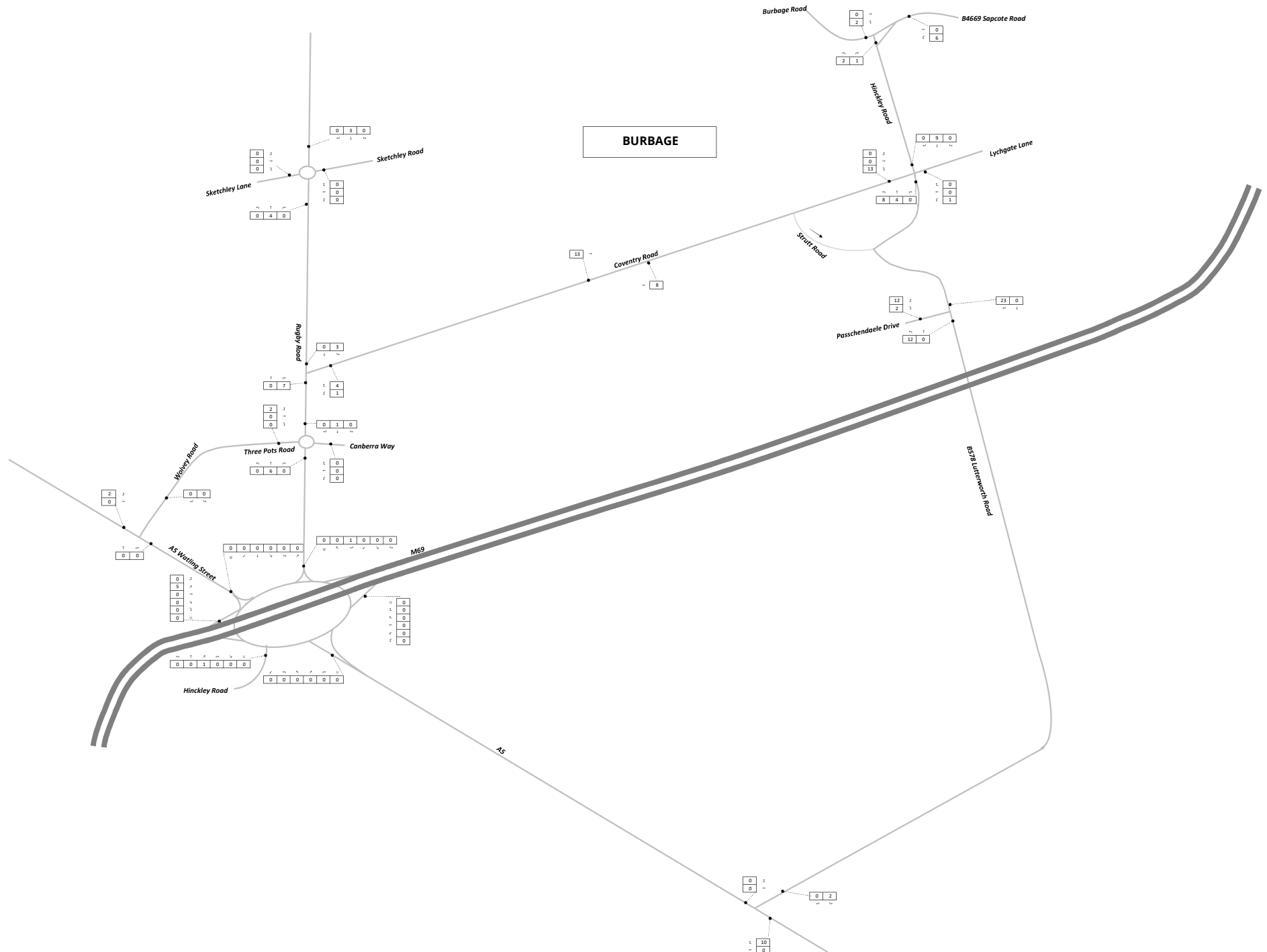
Appendix Z: Residential Care Home Distribution

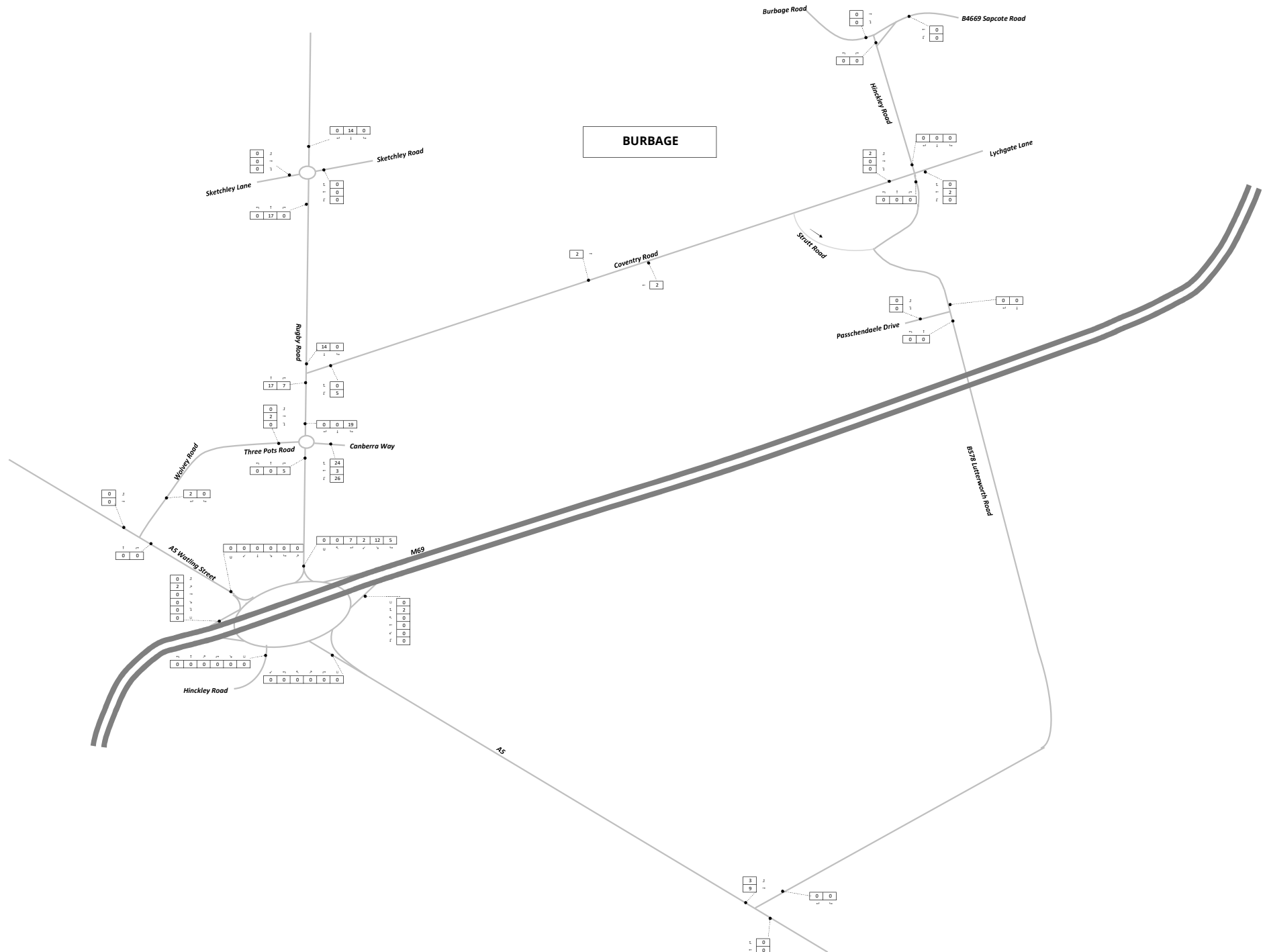
Key
■ x% Arrivals
■ x% Departures

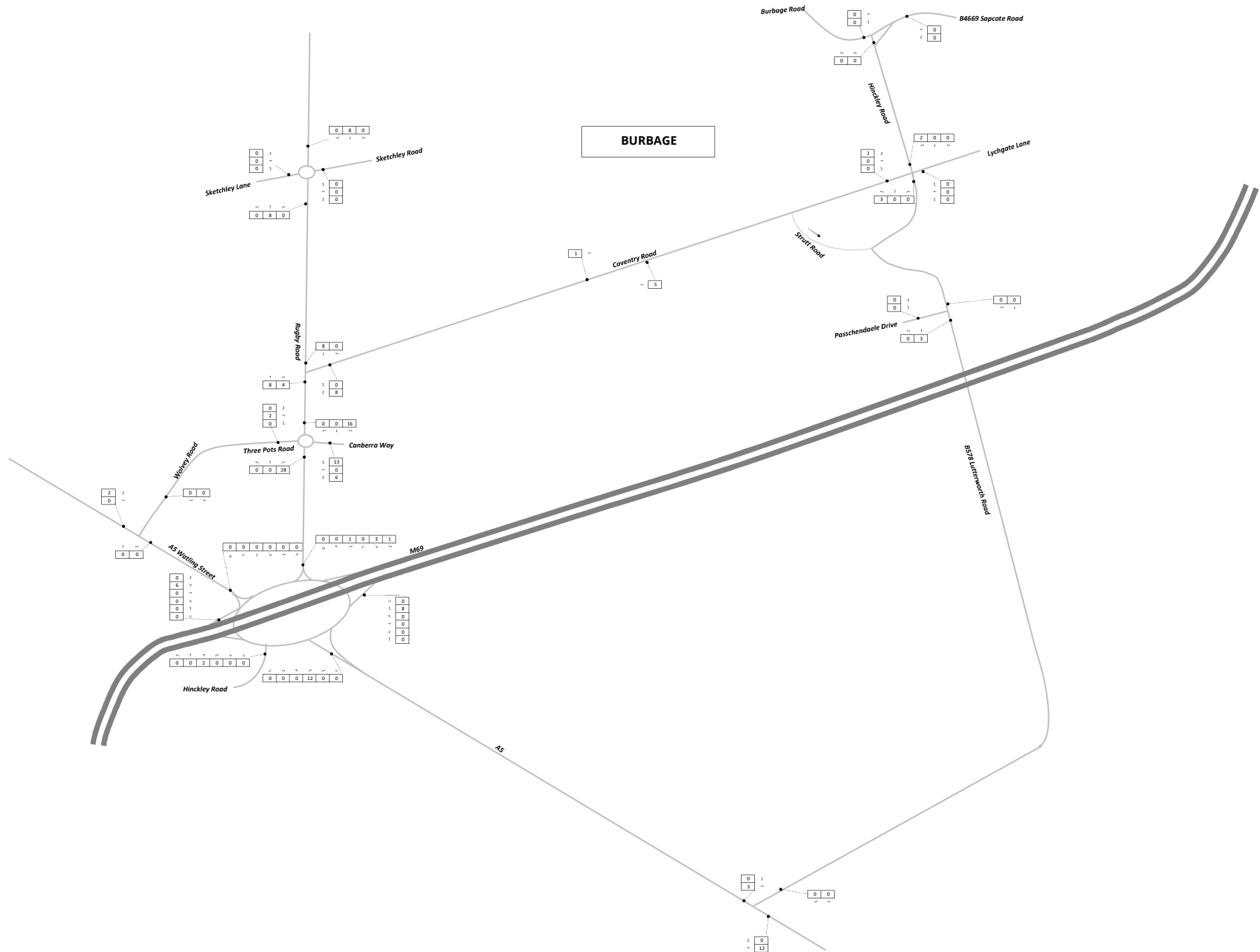


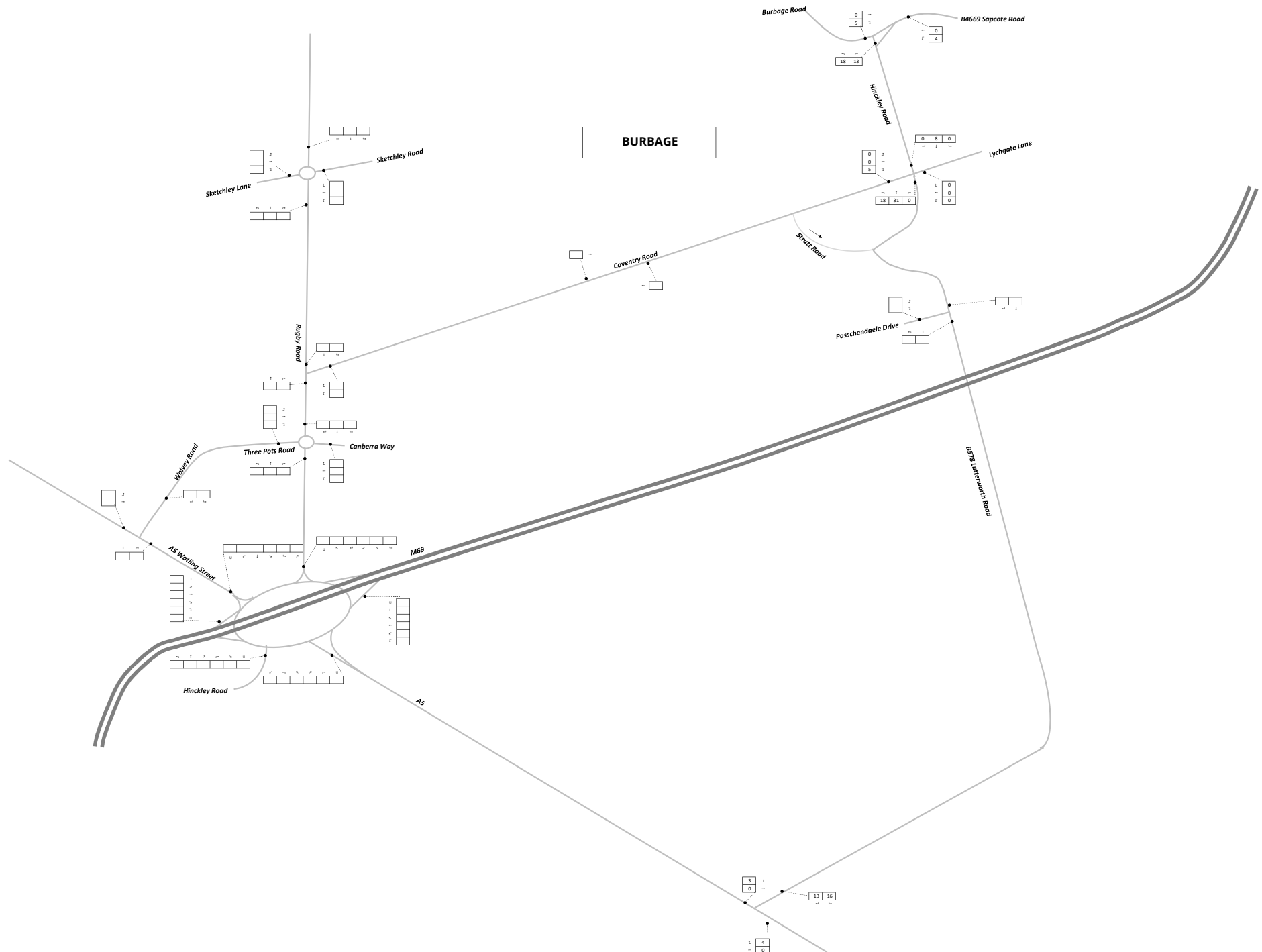
Appendix AA: Committed Development Assignment

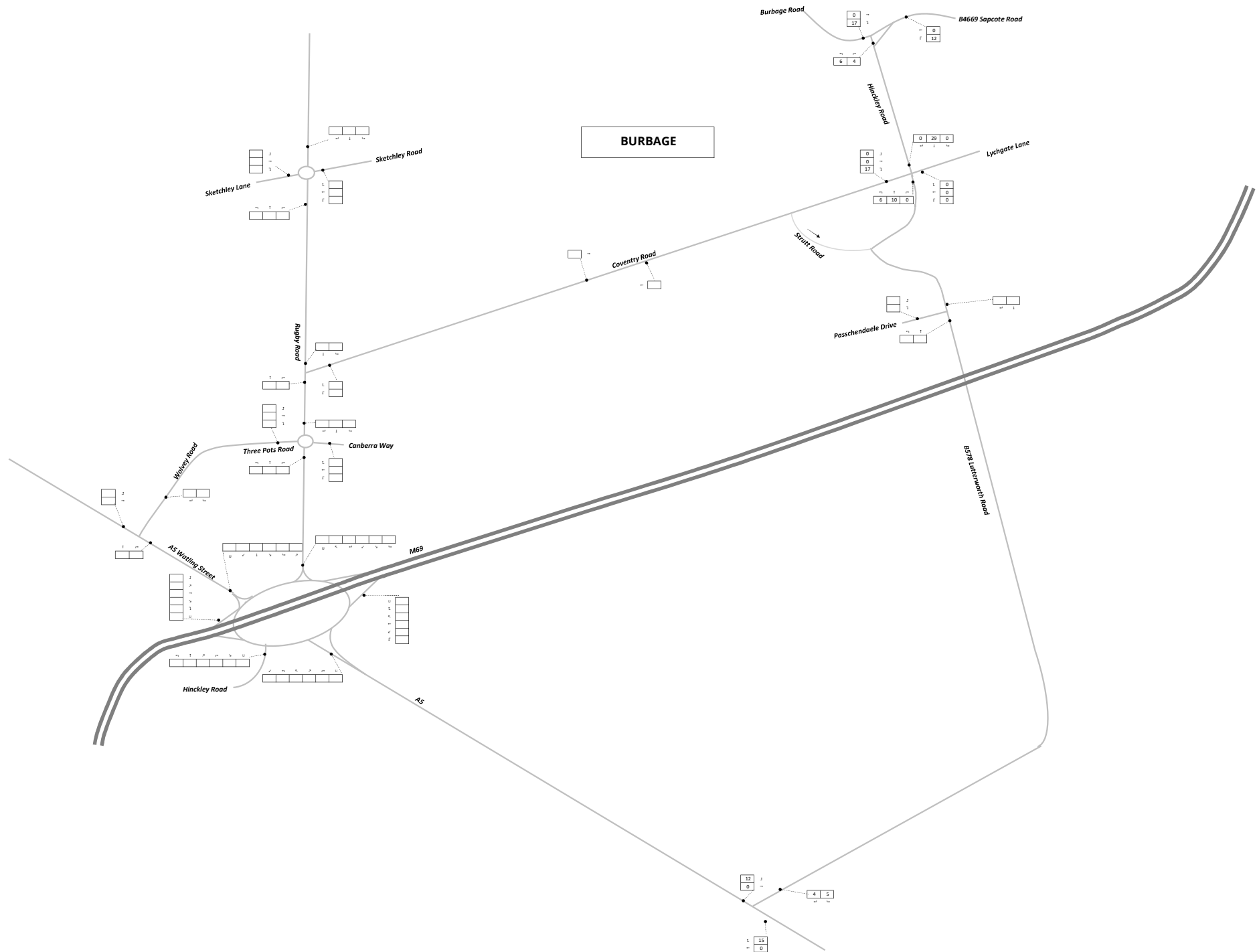


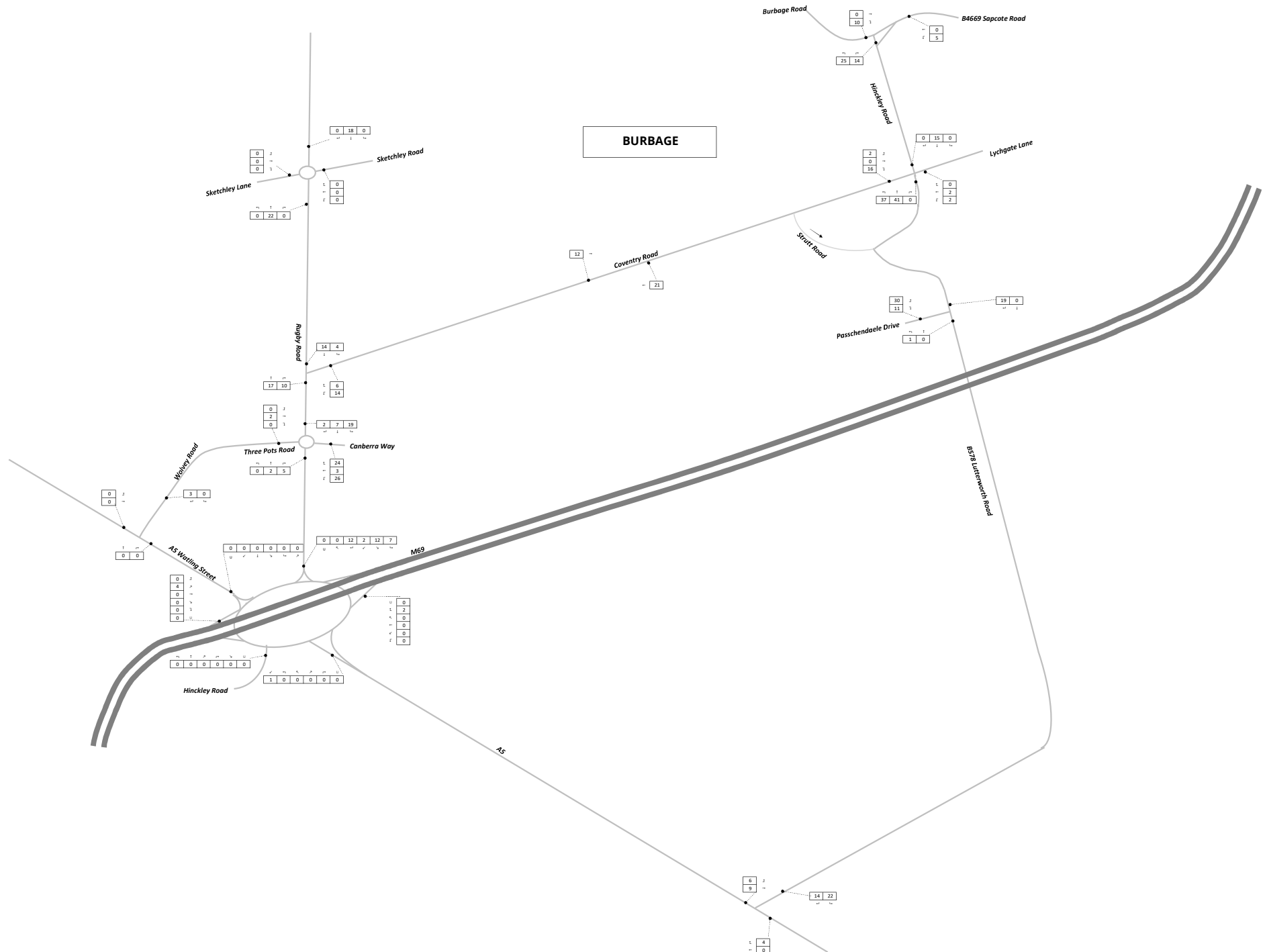


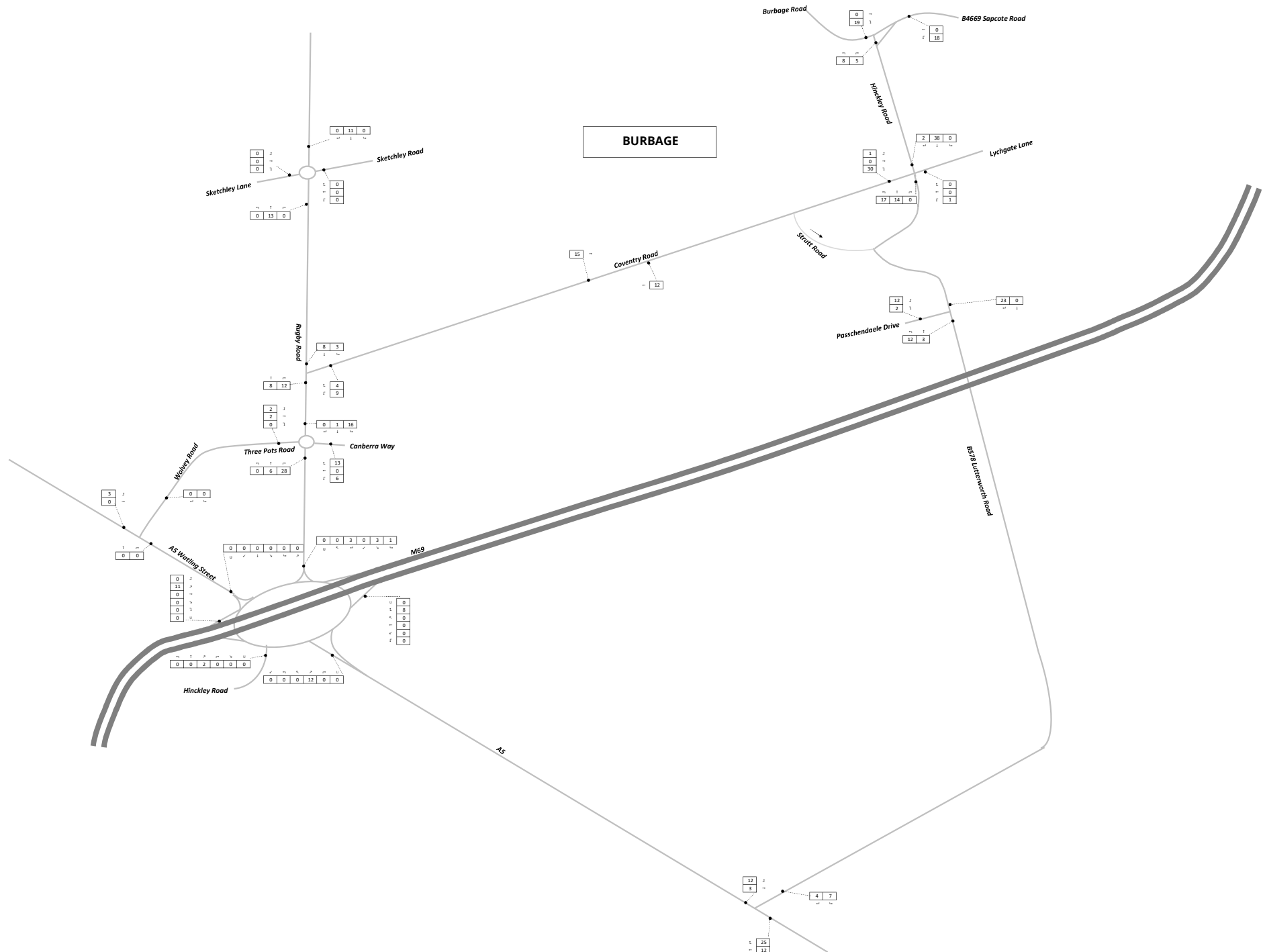




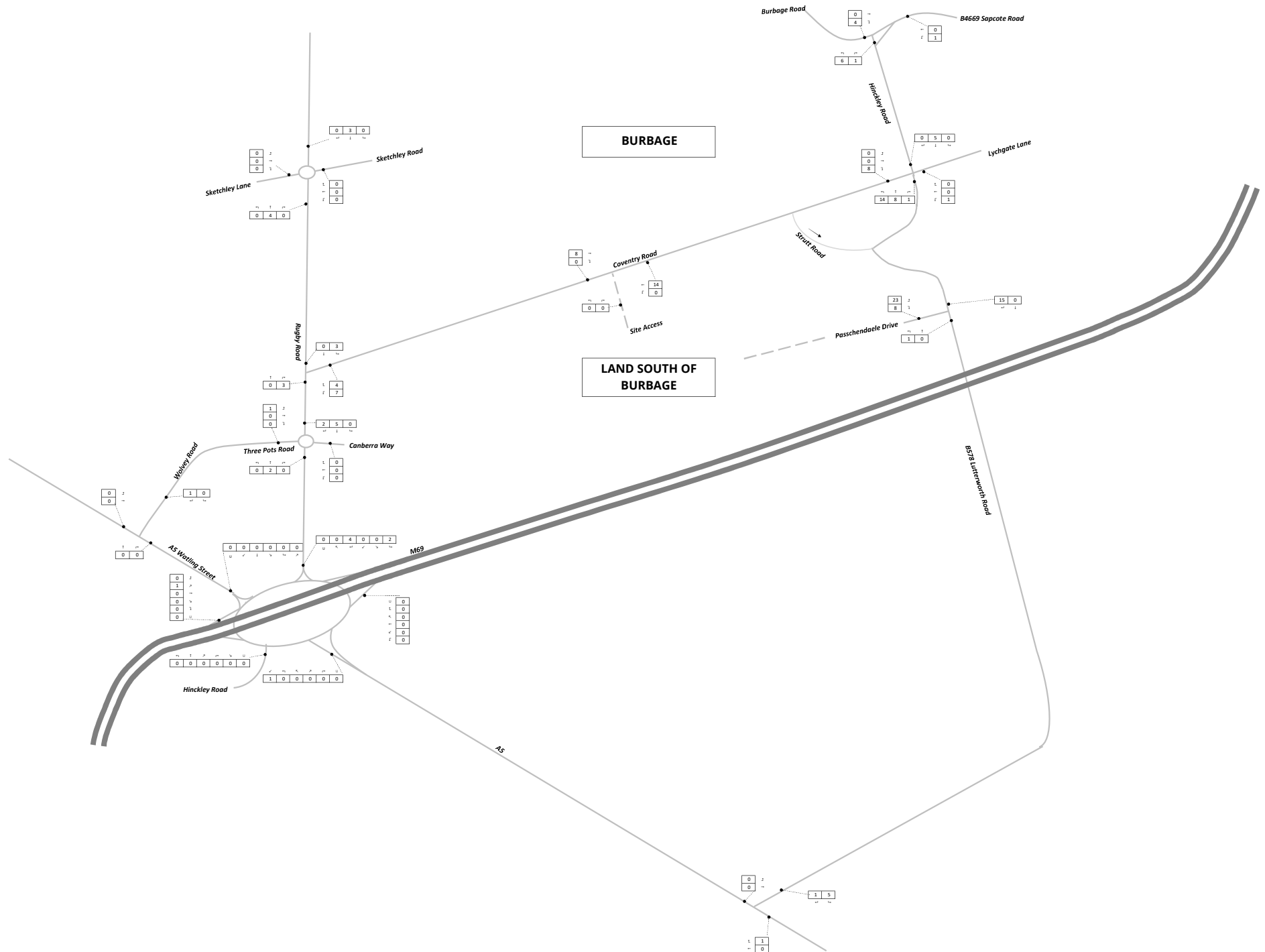


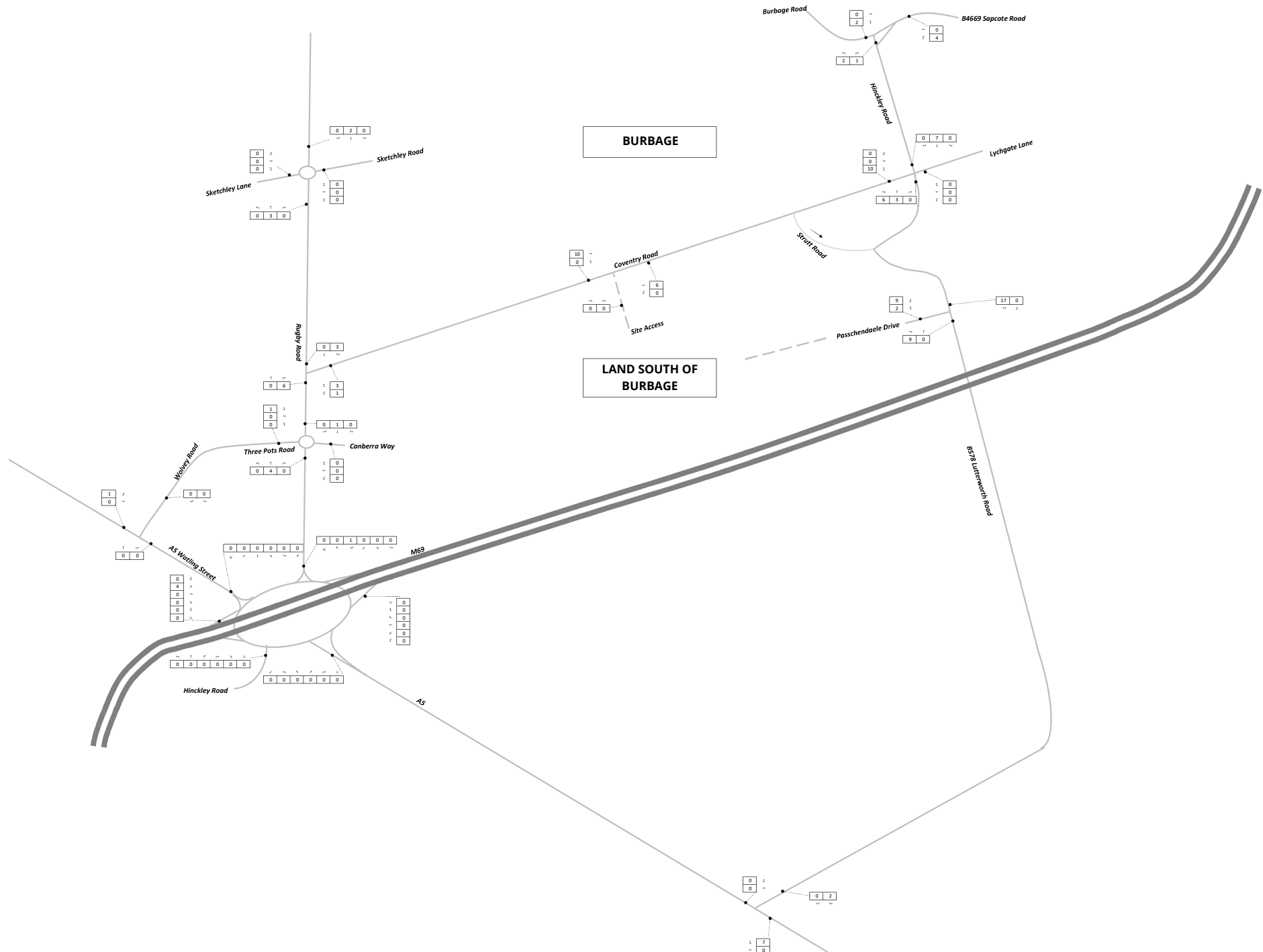


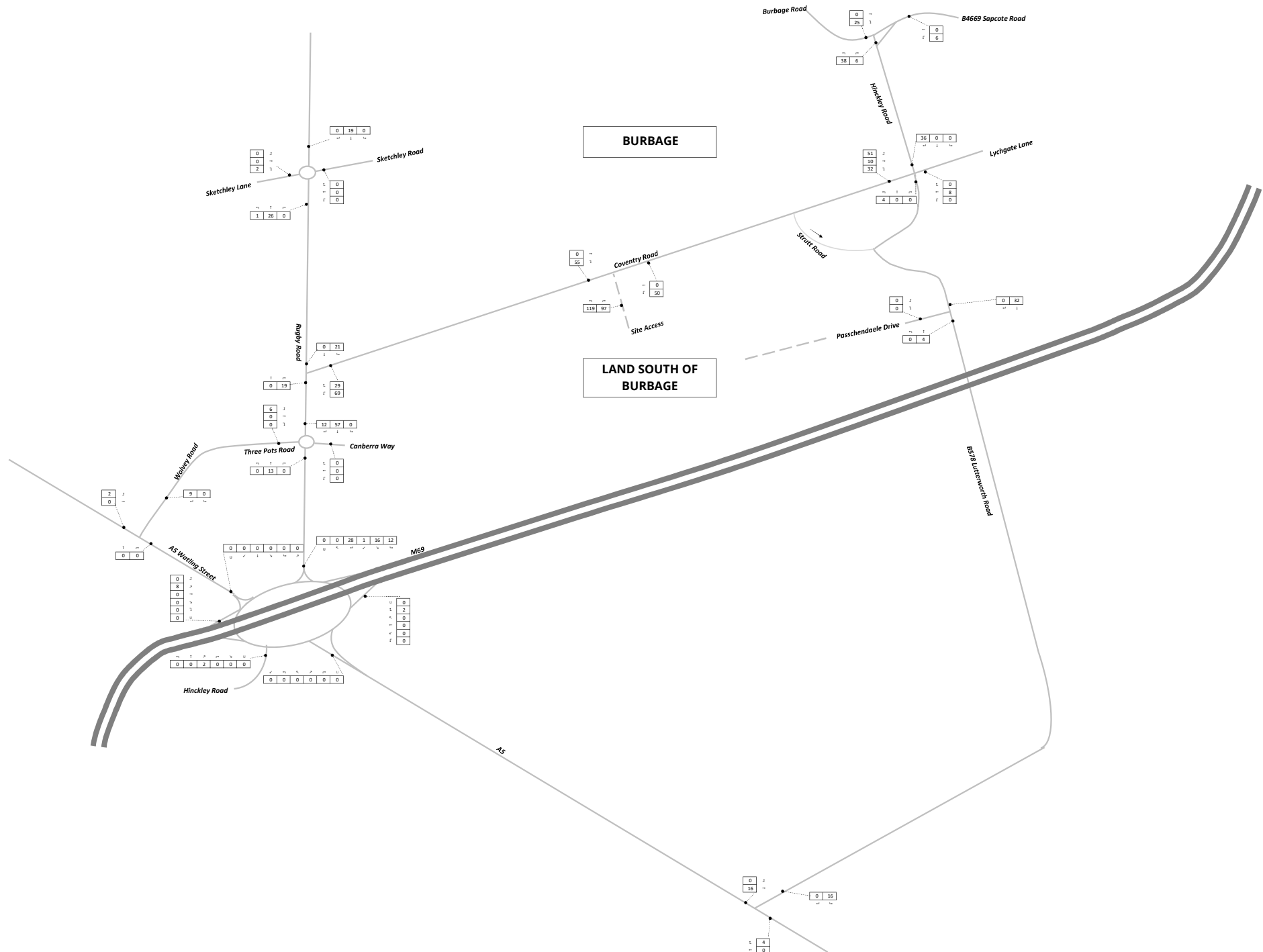




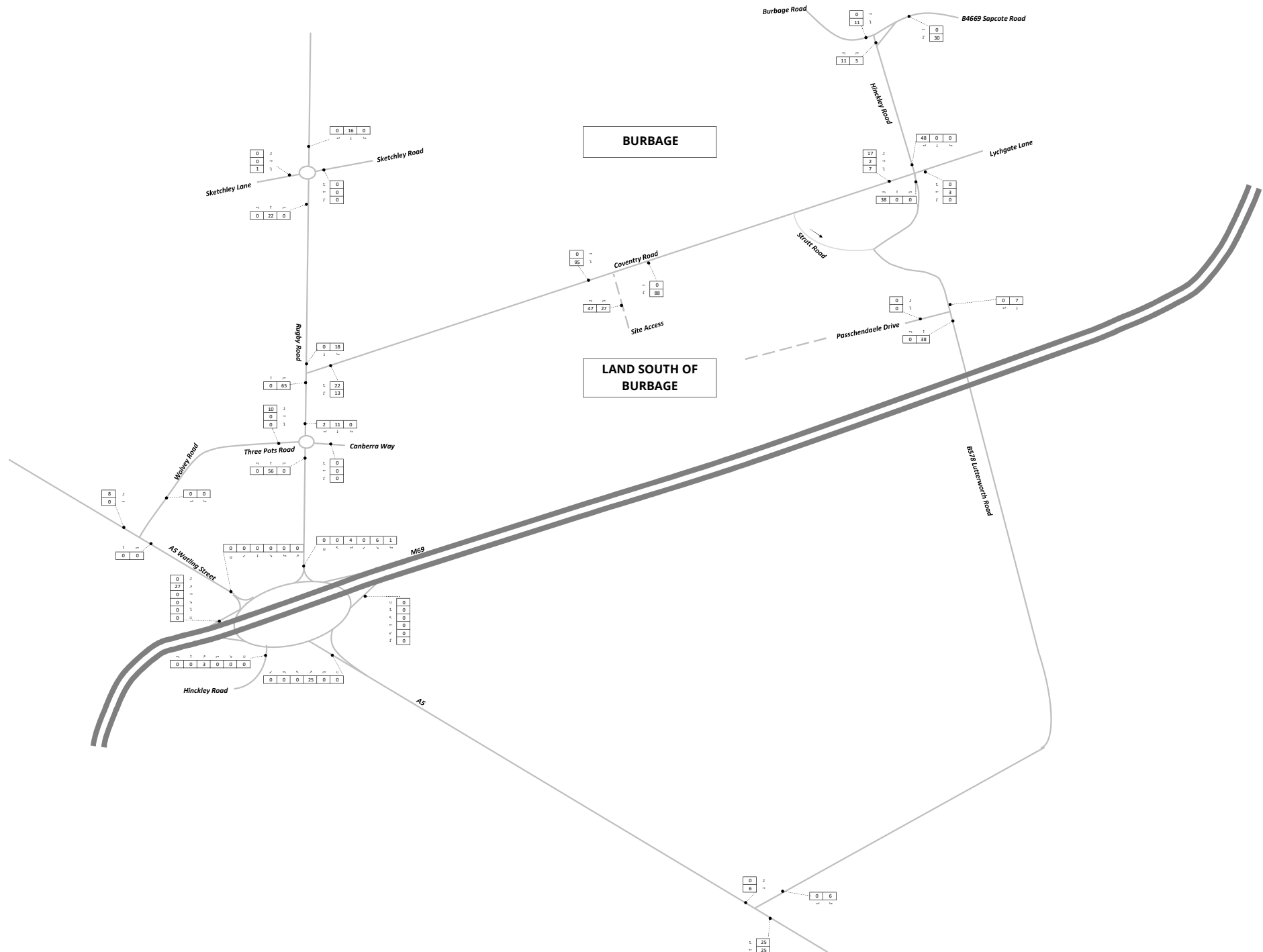
Appendix BB: Total Traffic Assignment

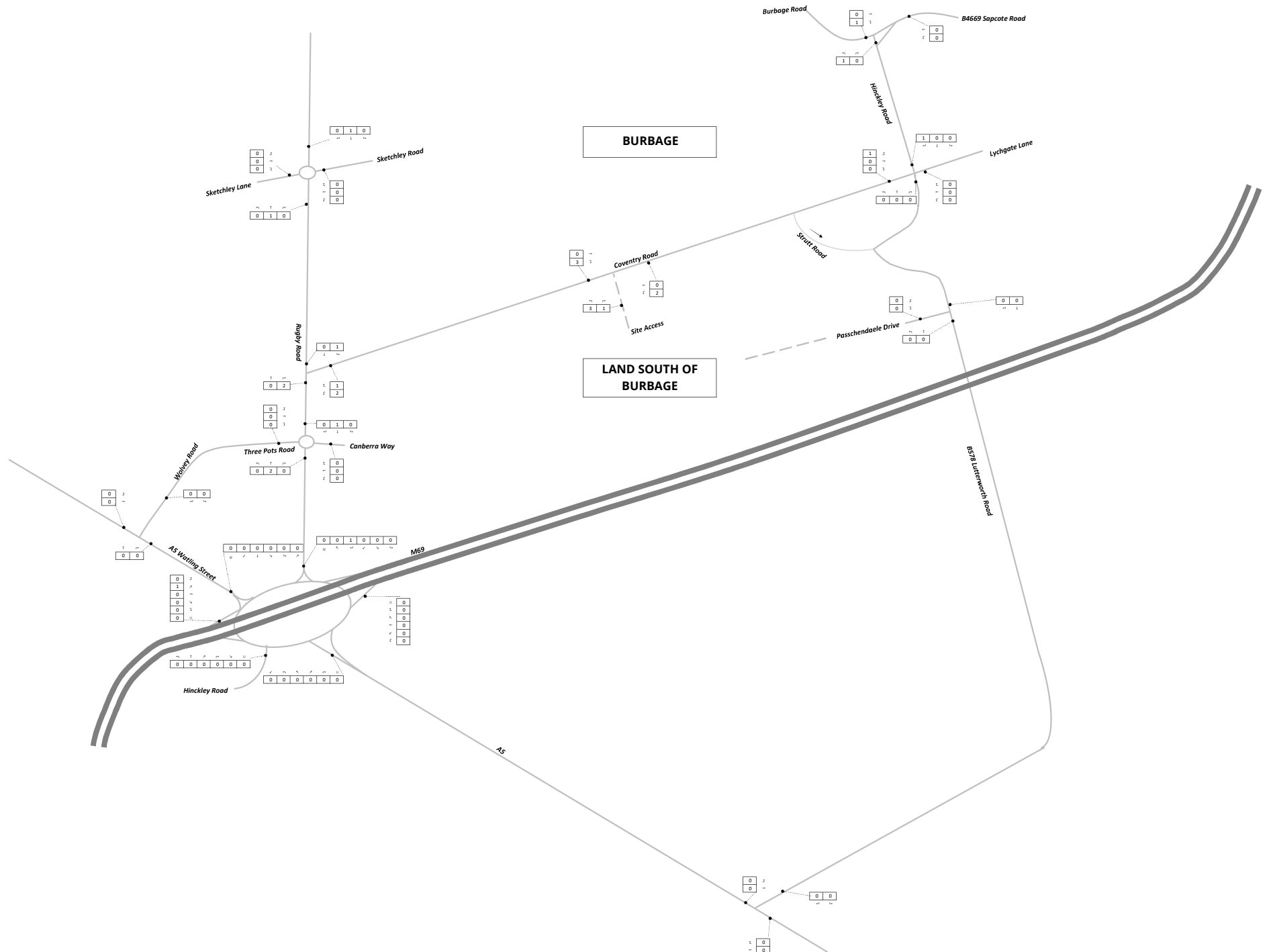


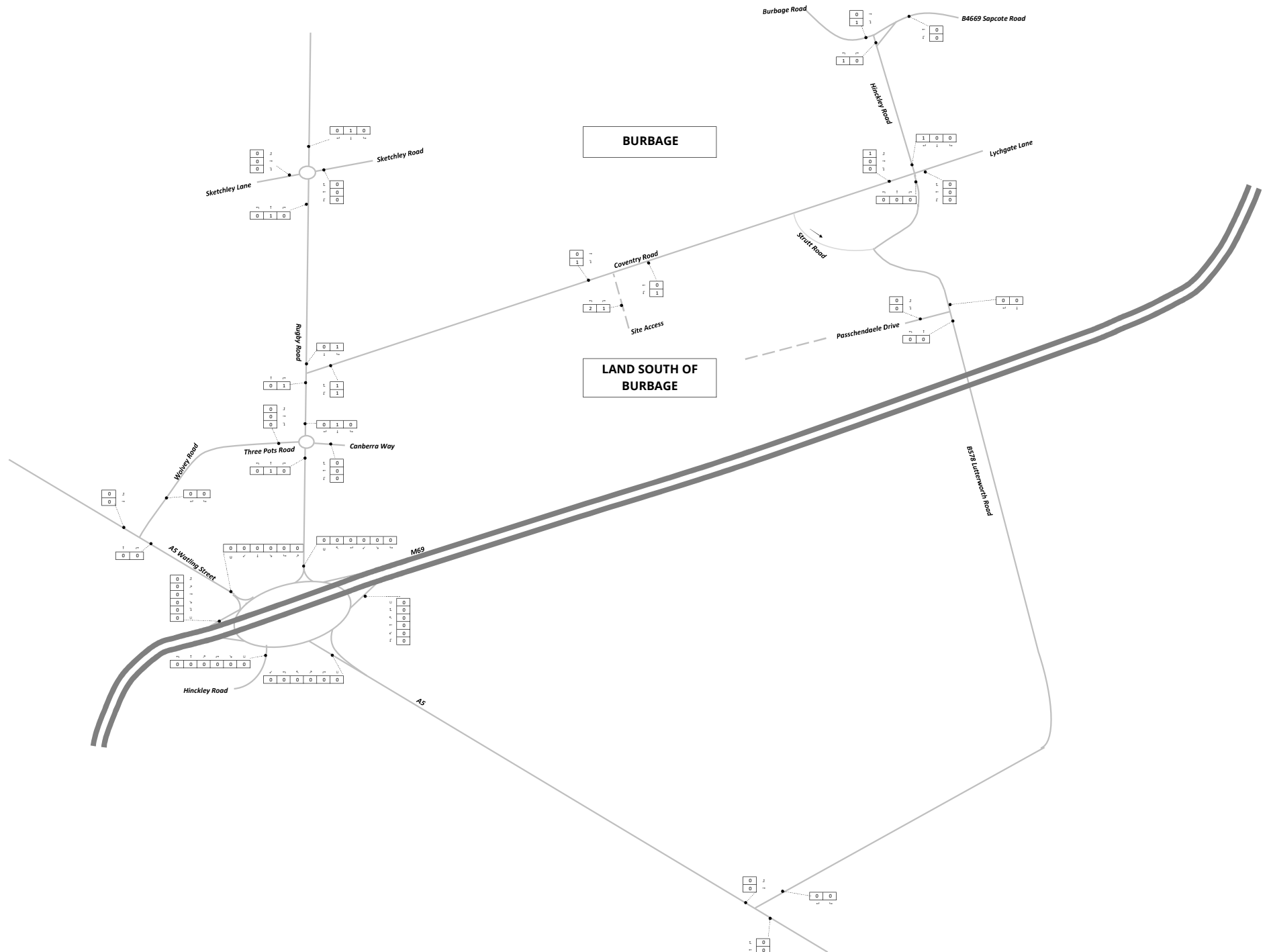


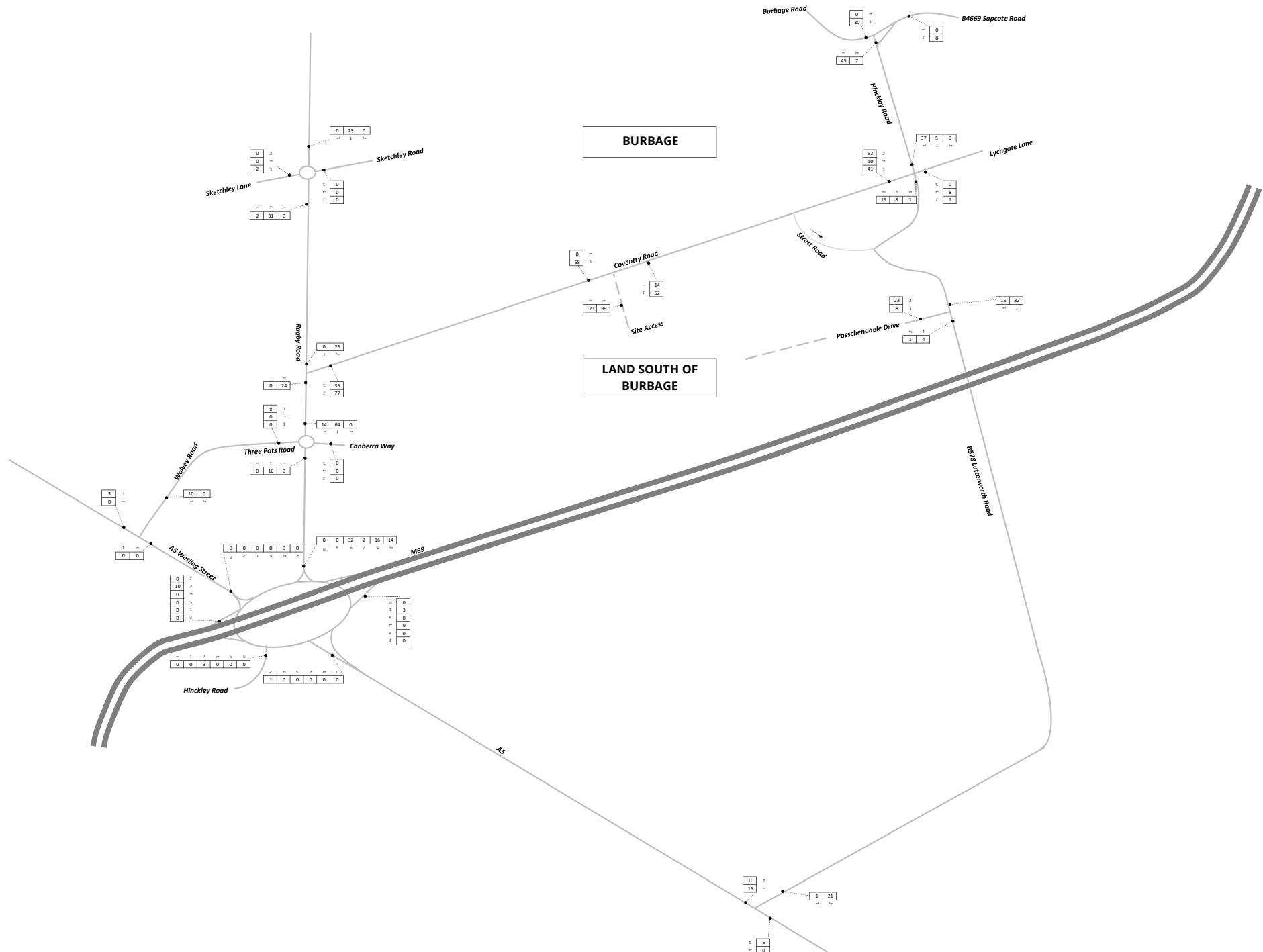


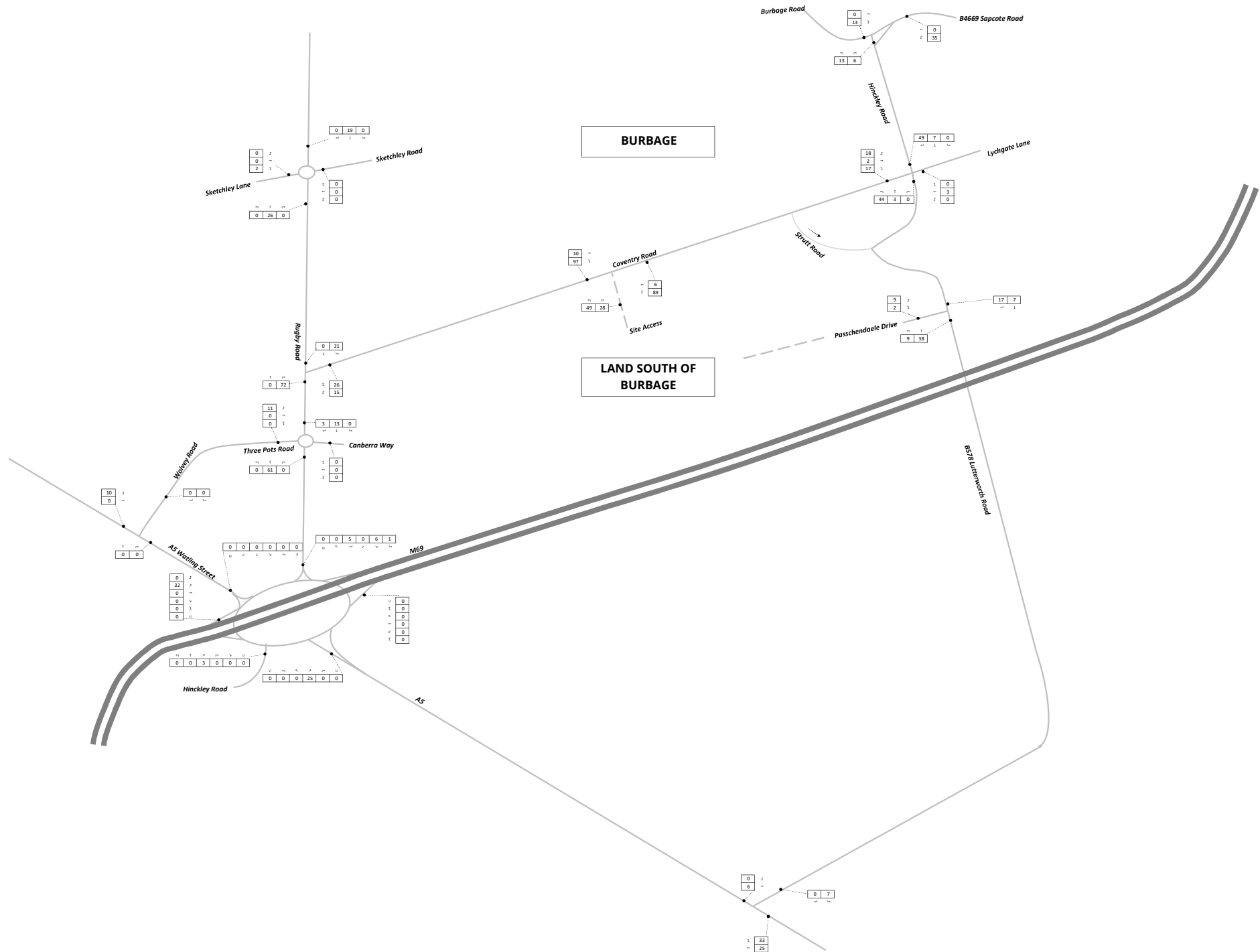
**LAND SOUTH OF
BURBAGE**





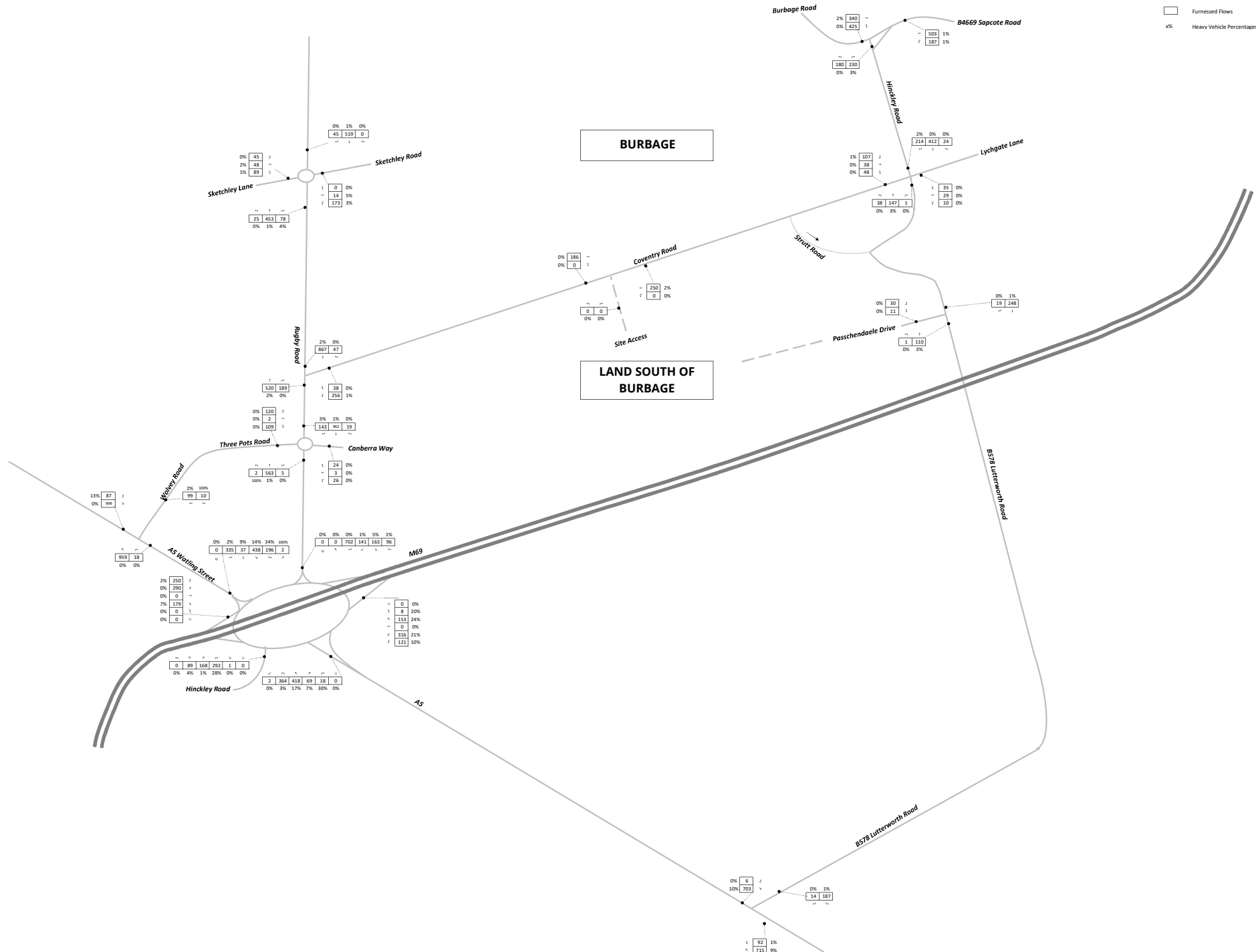


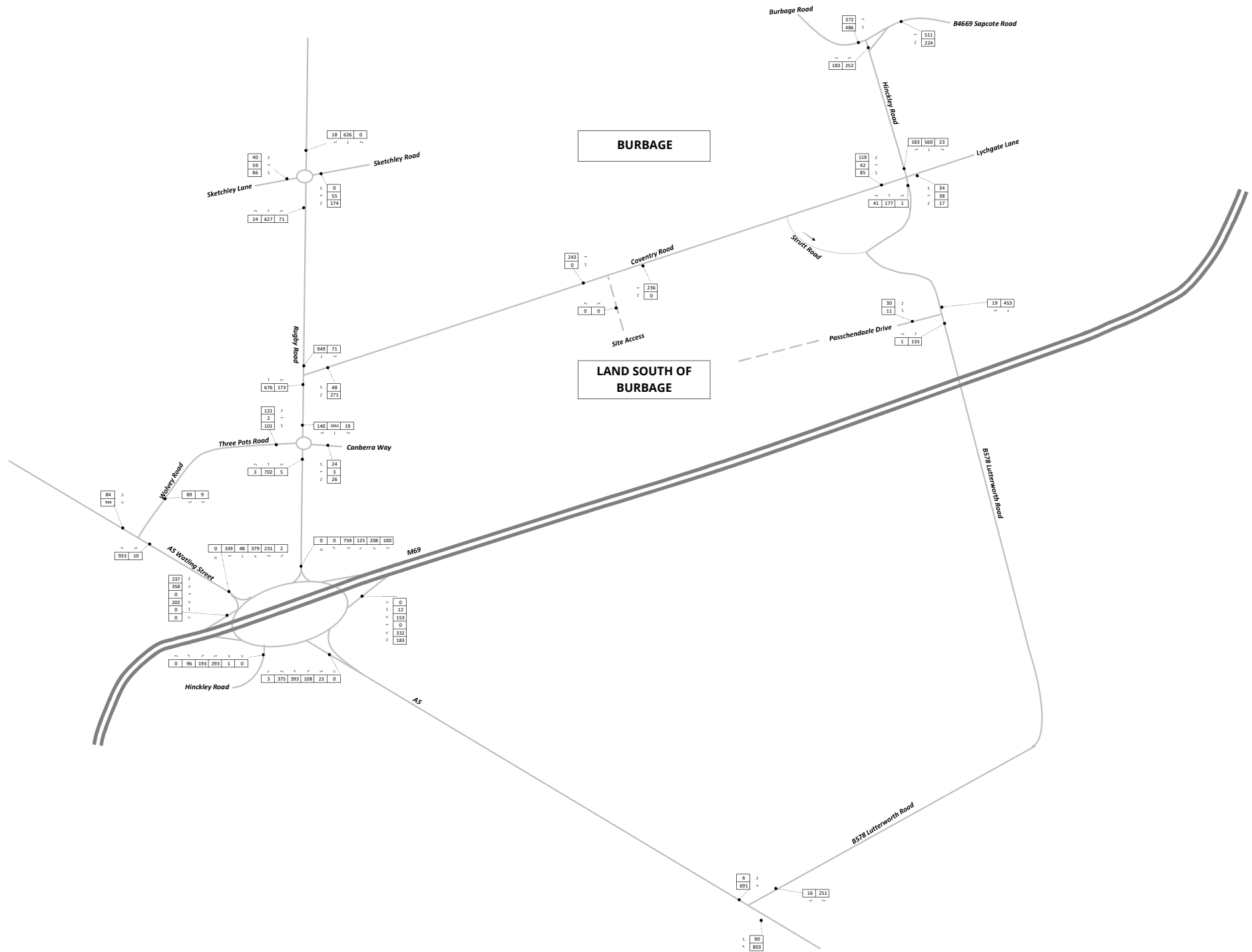


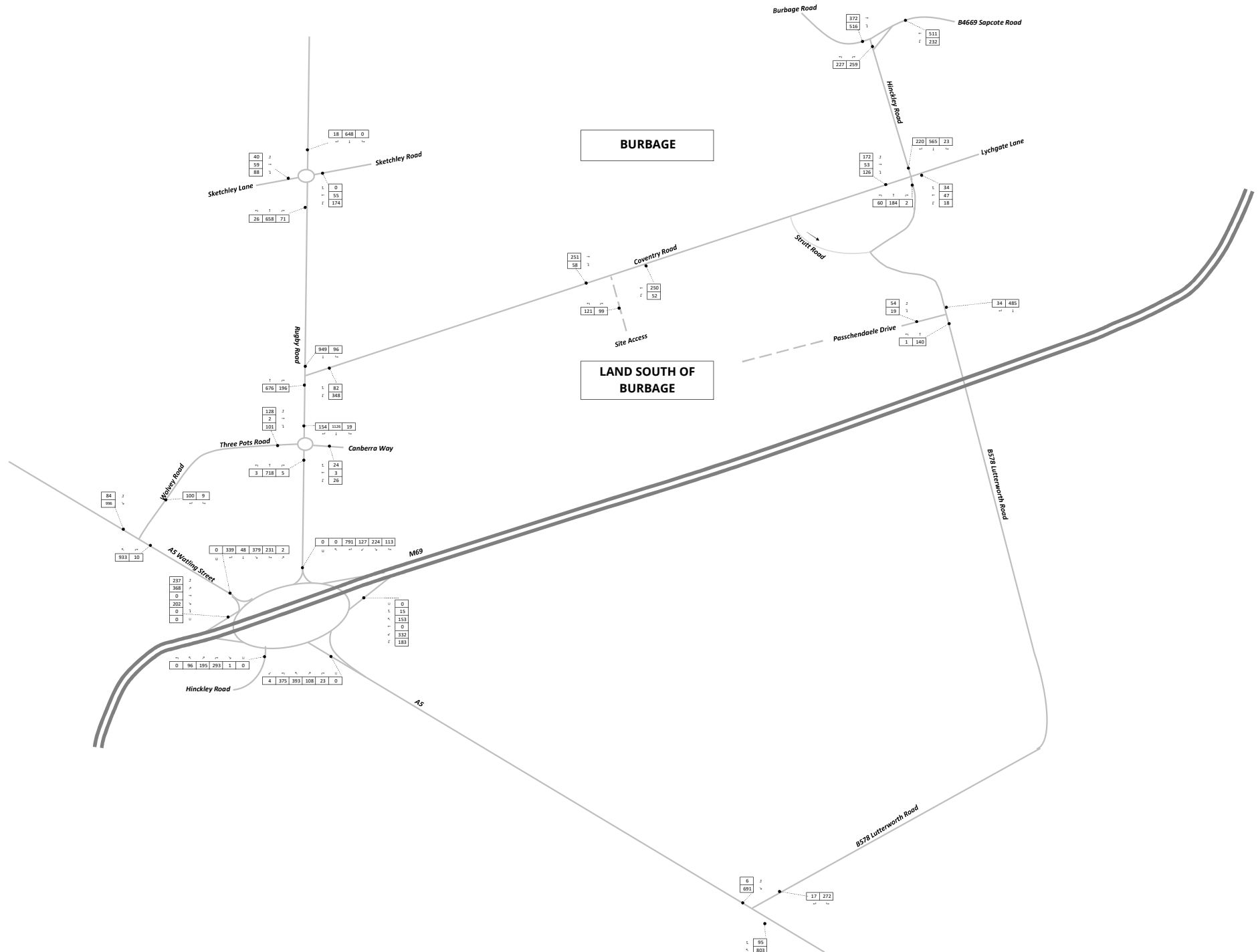


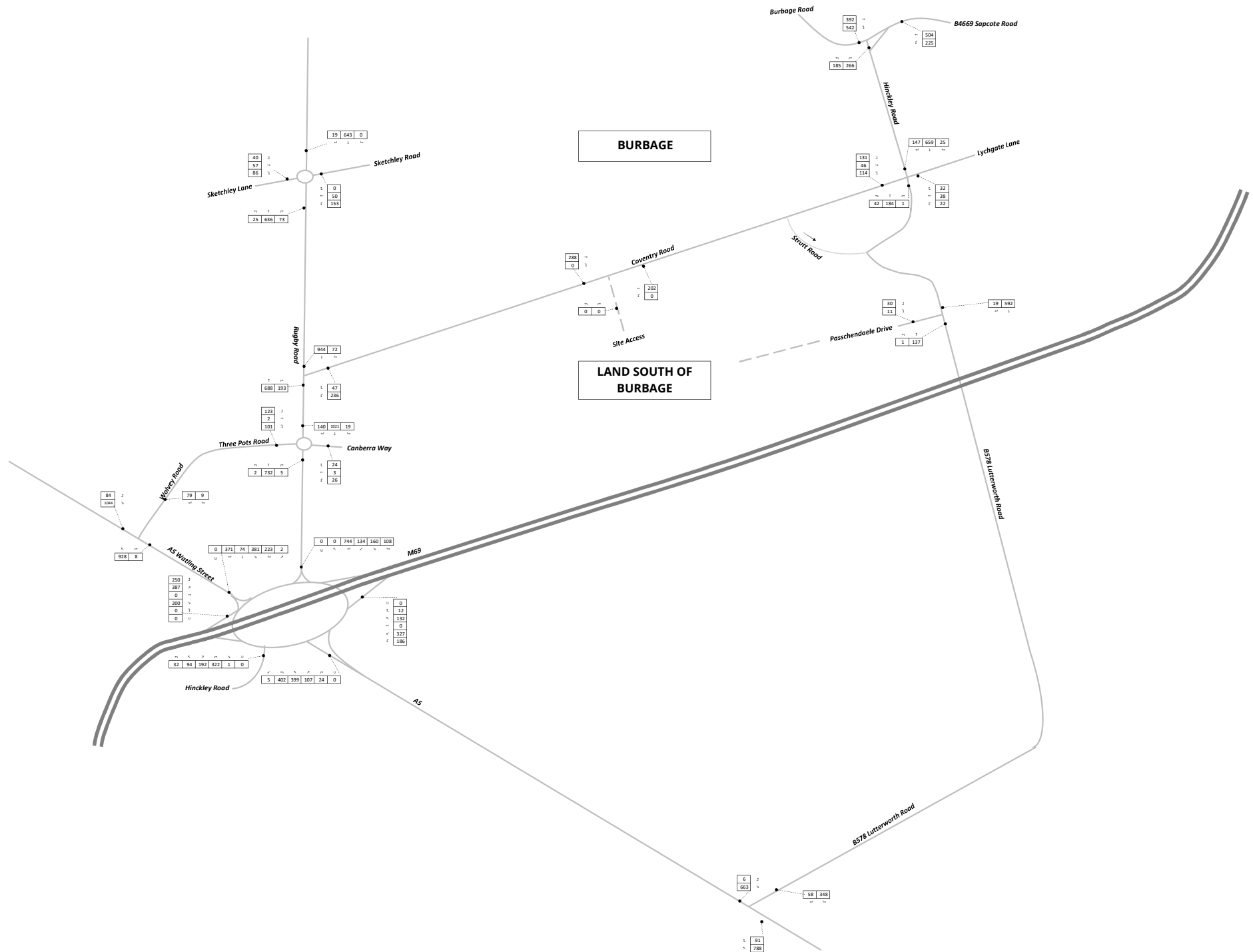
Appendix CC: 2021 Base Year, 2026 and 2031 Forecast Year Traffic Flows

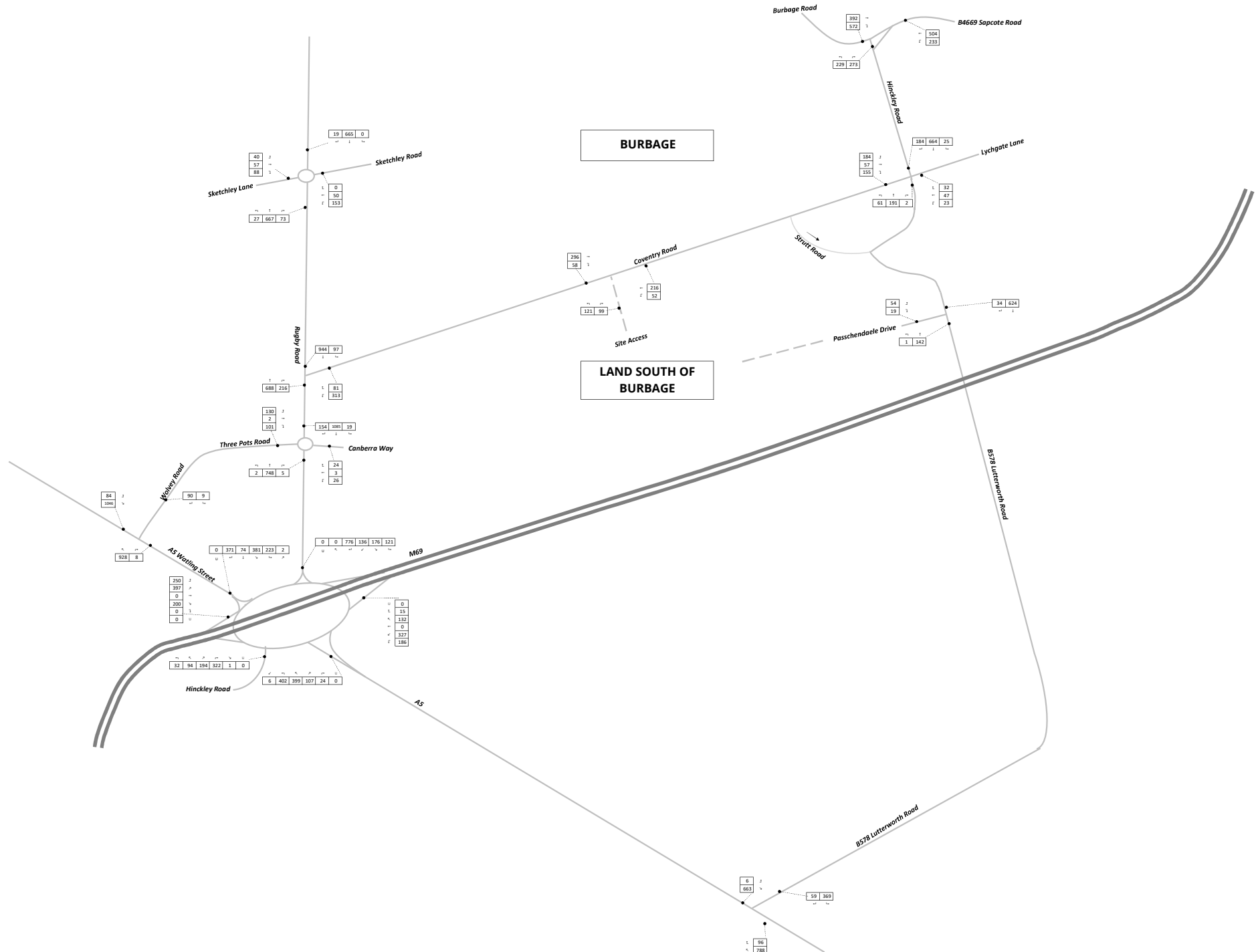
Key
 Furnished Flows
 Heavy Vehicle Percentages



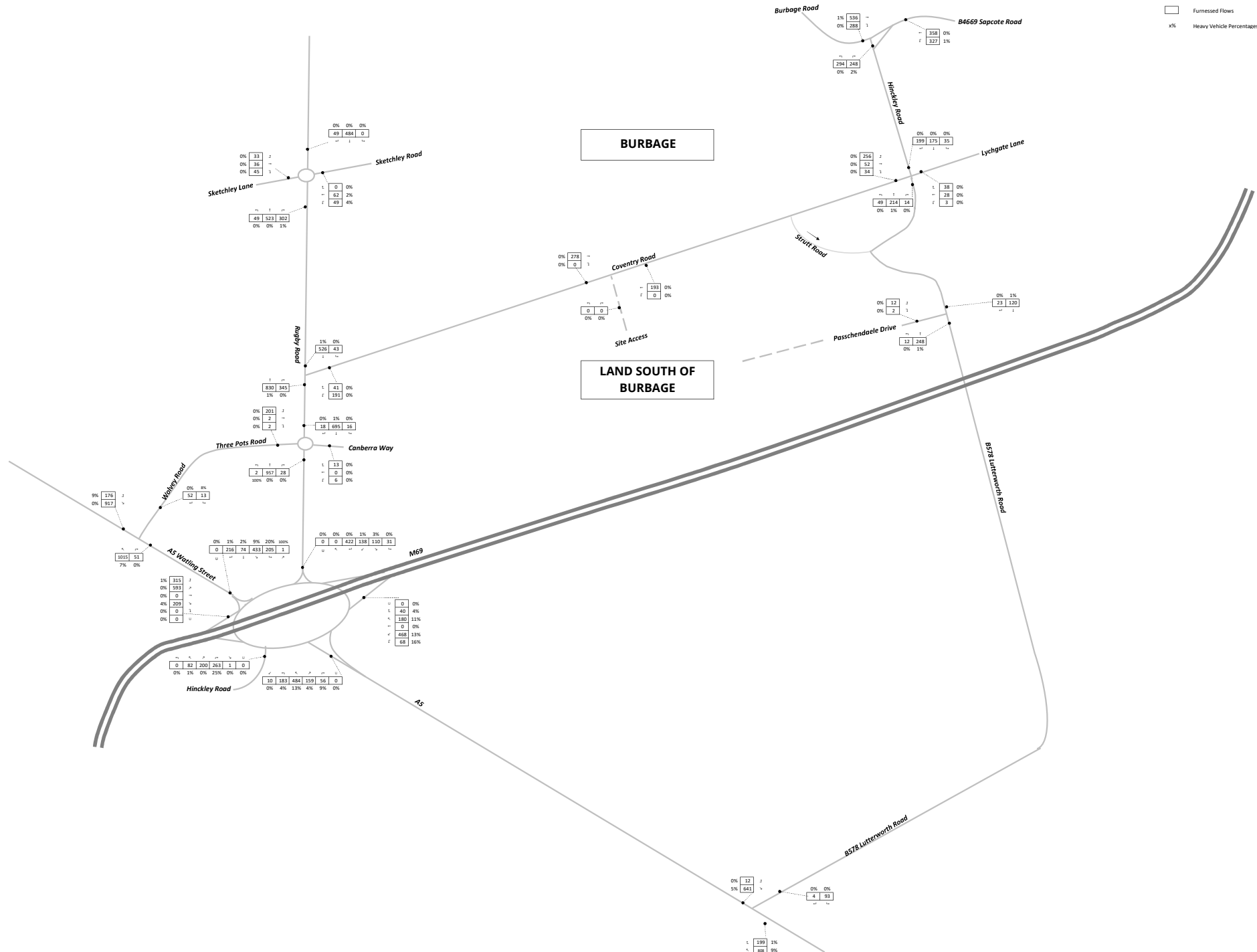


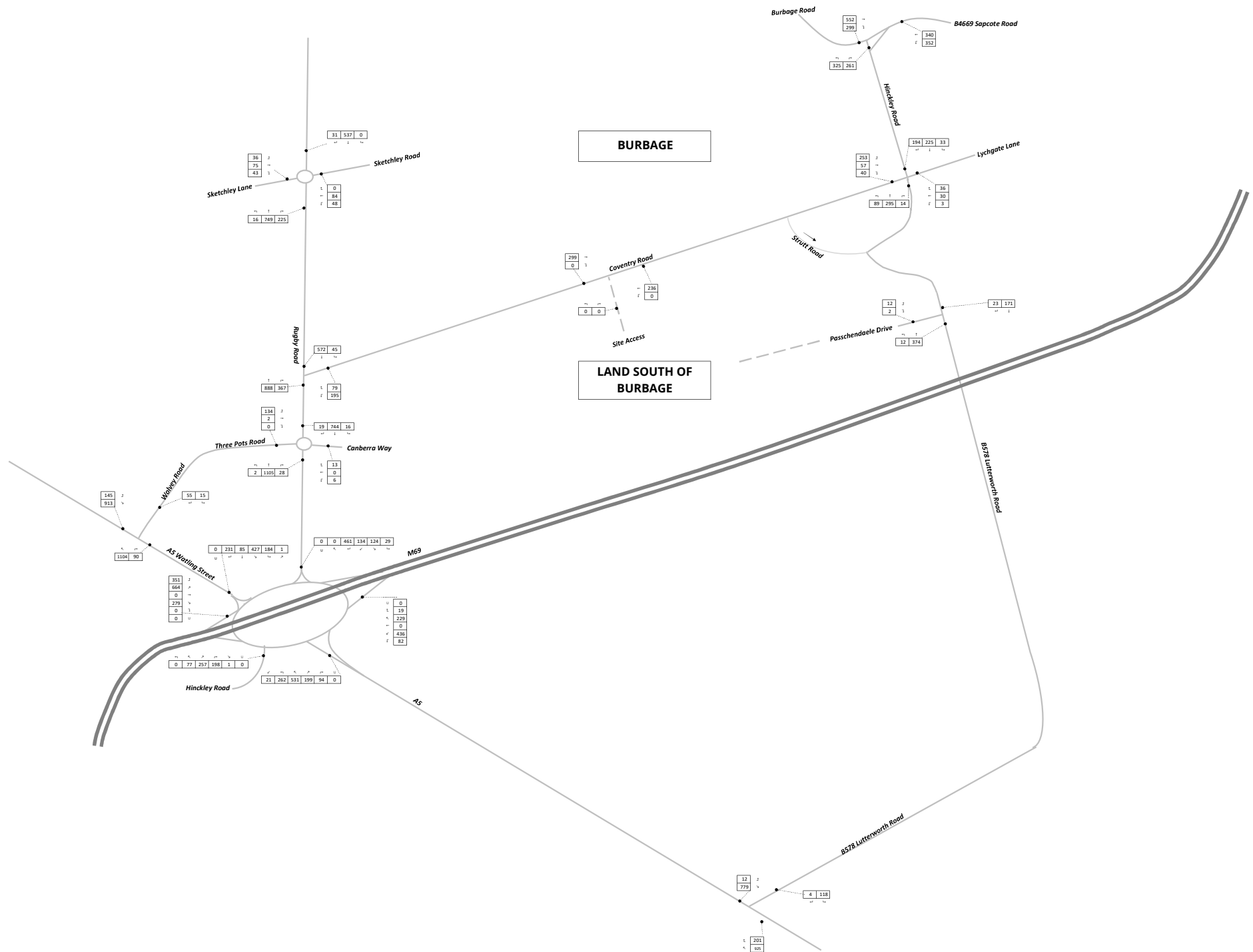


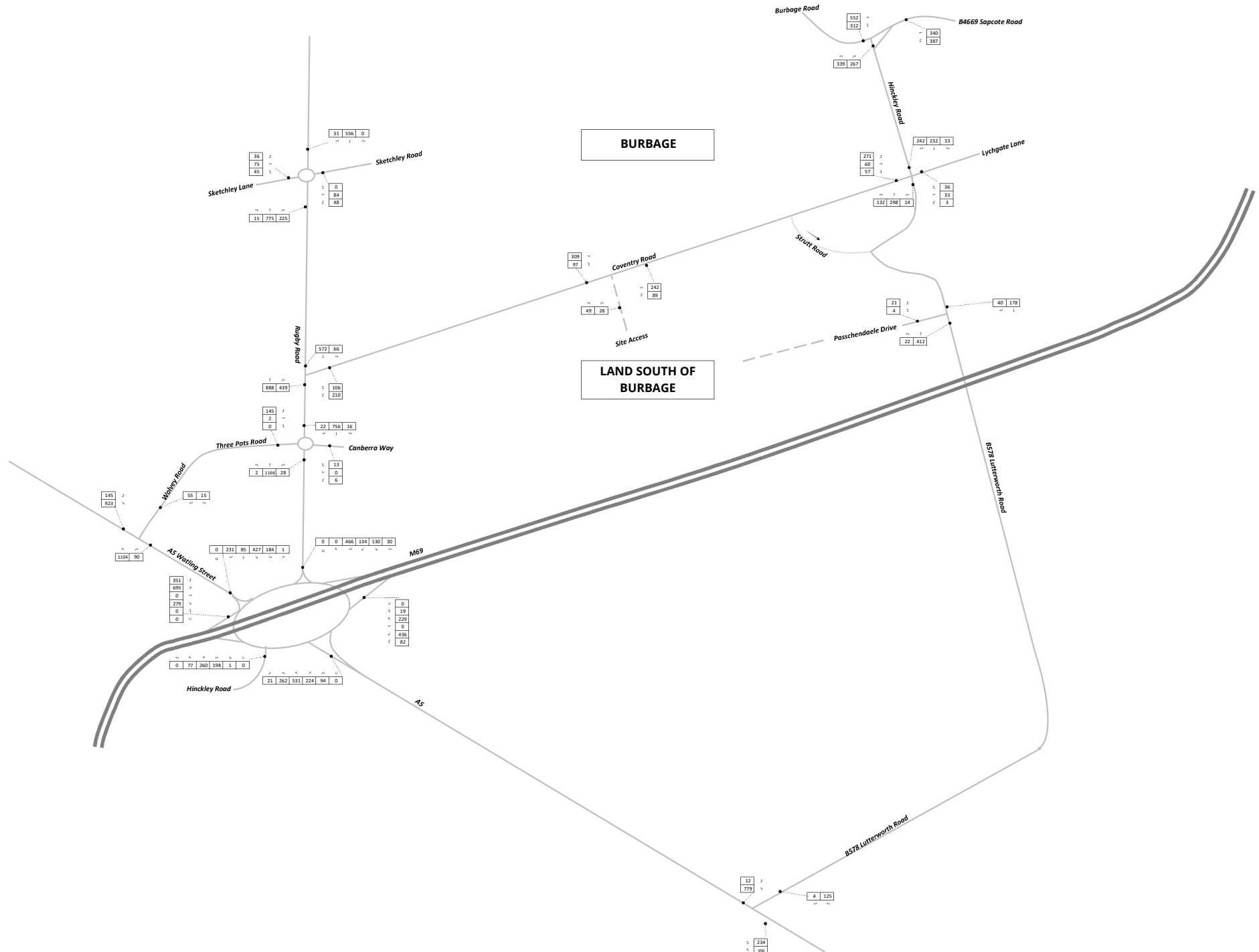


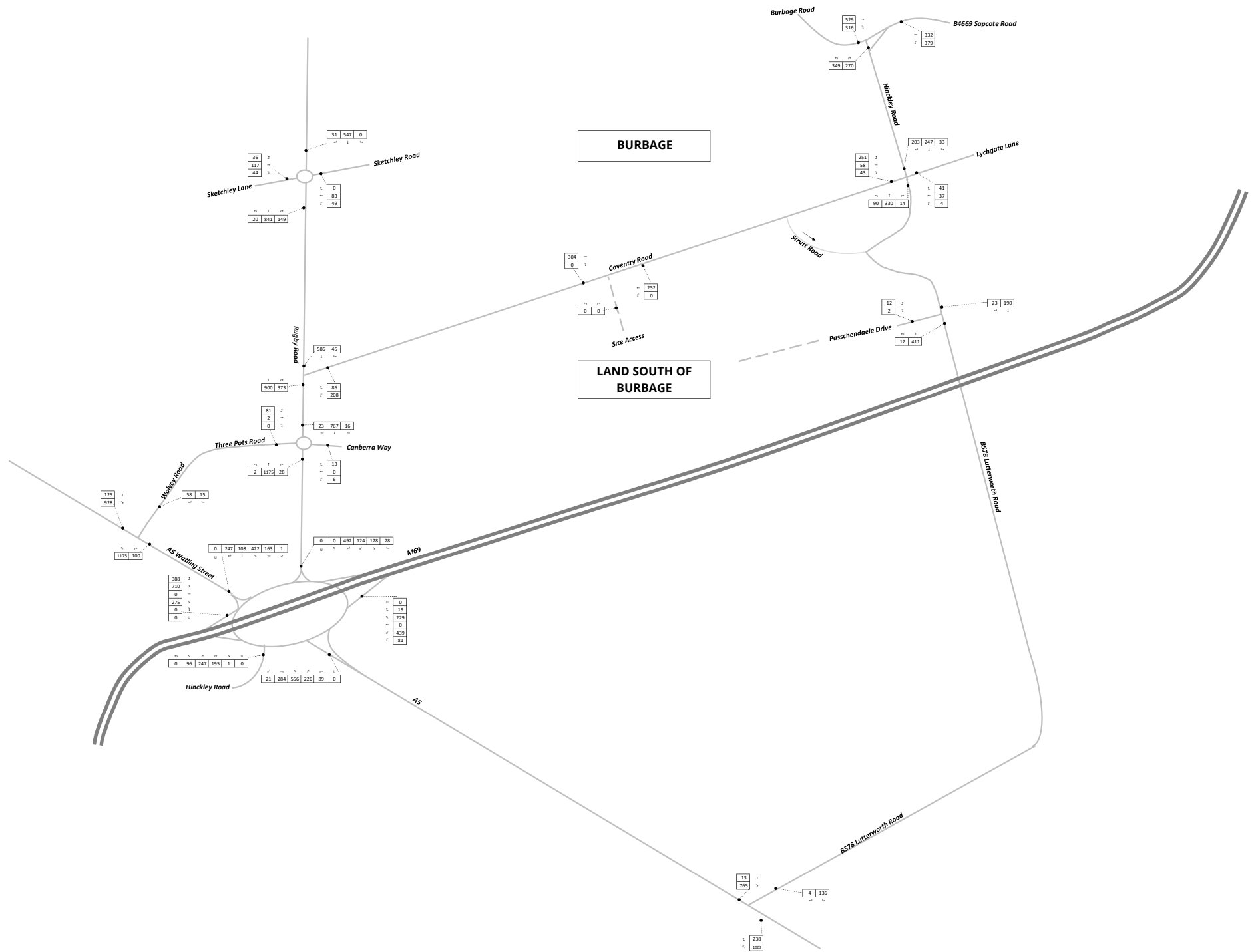


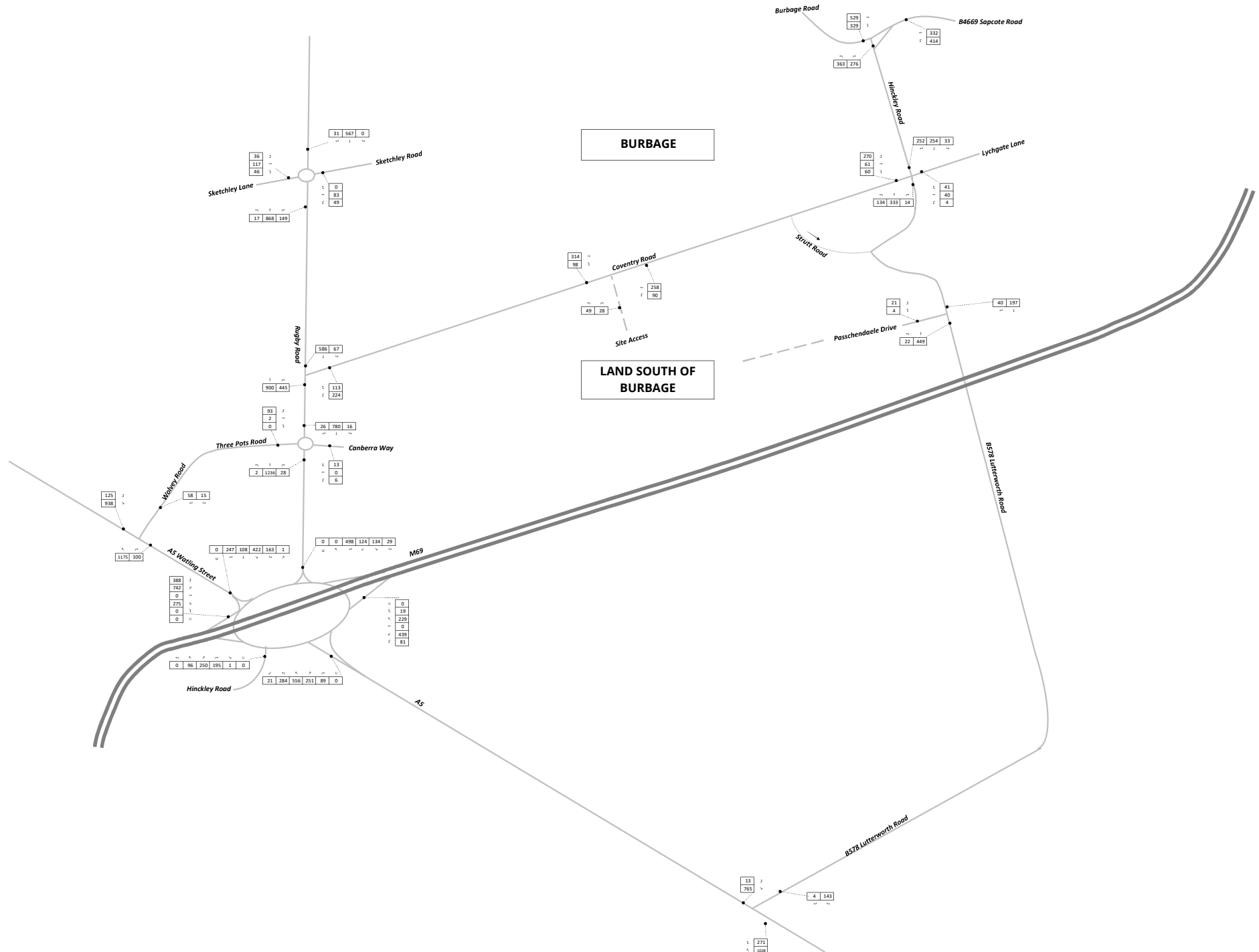
Key
 Furnished Flows
 x% Heavy Vehicle Percentages











Appendix DD: Coventry Road / Site Access Junctions 10 Report

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
© Copyright TRL Software Limited, 2023									
For sales and distribution information, program advice and maintenance, contact TRL Software:									
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: Coventry Road_Site Access.j10

Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10

Report generation date: 15/11/2023 10:52:53

»2026 + Dev, AM

»2026 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2026 + Dev										
Stream B-AC	D5	1.0	15.56	0.51	C	D6	0.2	9.21	0.18	A
Stream C-AB		0.2	5.47	0.13	A		0.5	5.92	0.23	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

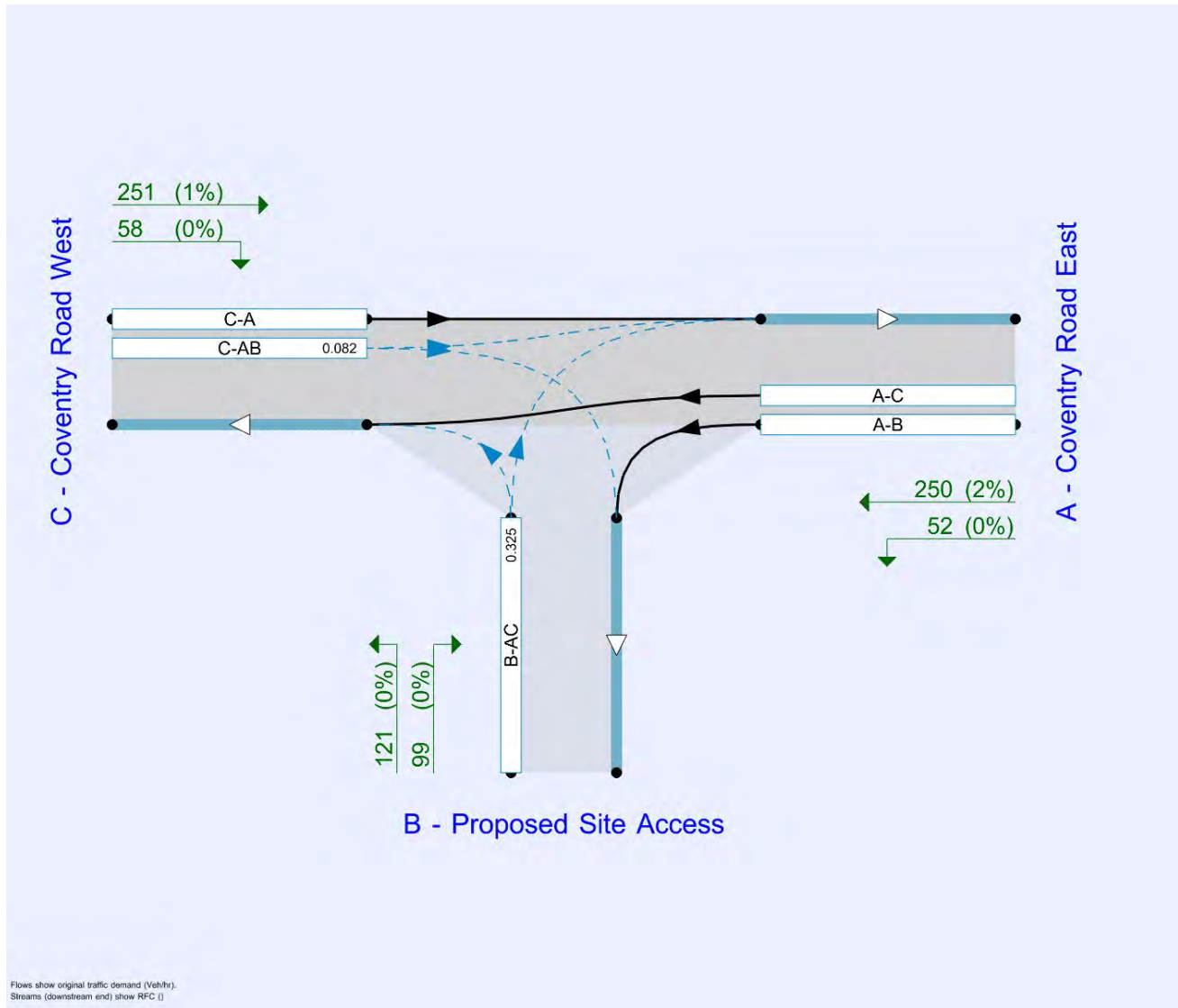
File summary

File Description

Title	Burbage Fields Farm Coventry Road Site Access
Location	
Site number	
Date	27/10/2023
Version	
Status	Proposed
Identifier	
Client	Redrow Homes
Jobnumber	P21-390
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

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
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 + Dev	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

2026 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Site Access	T-Junction	Two-way	Two-way	Two-way		4.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.64	A

Arms

Arms

Arm	Name	Description	Arm type
A	Coventry Road East		Major
B	Proposed Site Access		Minor
C	Coventry Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has rightturn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Coventry Road West	6.50			140.0	✓	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 - Proposed Site Access	One lane	3.37	27	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	516	0.092	0.232	0.146	0.332
B-C	662	0.099	0.251	-	-
C-B	655	0.248	0.248	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Coventry Road East		ONE HOUR	✓	302	100.000
B - Proposed Site Access		ONE HOUR	✓	220	100.000
C - Coventry Road West		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Coventry Road East	B - Proposed Site Access	C - Coventry Road West
From	A - Coventry Road East	0	52	250
	B - Proposed Site Access	99	0	121
	C - Coventry Road West	251	58	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - Coventry Road East	B - Proposed Site Access	C - Coventry Road West
From	A - Coventry Road East	0	0	2
	B - Proposed Site Access	0	0	0
	C - Coventry Road West	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.51	15.56	1.0	C	202	303
C-AB	0.13	5.47	0.2	A	78	118
C-A					205	308
A-B					48	72
A-C					229	344

2026 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Site Access	T-Junction	Two-way	Two-way	Two-way		1.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Coventry Road East		ONE HOUR	✓	331	100.000
B - Proposed Site Access		ONE HOUR	✓	76	100.000
C - Coventry Road West		ONE HOUR	✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Coventry Road East	B - Proposed Site Access	C - Coventry Road West
From	A - Coventry Road East	0	89	242
	B - Proposed Site Access	28	0	48
	C - Coventry Road West	309	97	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - Coventry Road East	B - Proposed Site Access	C - Coventry Road West
From	A - Coventry Road East	0	0	1
	B - Proposed Site Access	0	0	0
	C - Coventry Road West	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	9.21	0.2	A	70	105
C-AB	0.23	5.92	0.5	A	143	215
C-A					229	344
A-B					82	123
A-C					222	333

Appendix EE: B578 Lutterworth Road / Passchendaele Drive Junctions 10 Report

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
© Copyright TRL Software Limited, 2023									
For sales and distribution information, program advice and maintenance, contact TRL Software:									
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: Lutterworth Road_Passchendaele Drive.j10
Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10
Report generation date: 27/10/2023 11:45:08

»2021, AM
 »2021, PM
 »2026, AM
 »2026, PM
 »2026 + Dev, AM
 »2026 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
Stream B-AC	D1	0.1	7.45	0.09	A	D2	0.0	7.09	0.03	A
Stream C-AB		0.0	4.56	0.04	A		0.1	5.20	0.04	A
	2026									
Stream B-AC	D3	0.1	7.81	0.09	A	D4	0.0	7.63	0.03	A
Stream C-AB		0.1	4.11	0.04	A		0.1	5.22	0.05	A
	2026 + Dev									
Stream B-AC	D5	0.2	8.54	0.16	A	D6	0.1	8.13	0.06	A
Stream C-AB		0.1	4.14	0.08	A		0.1	5.50	0.08	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

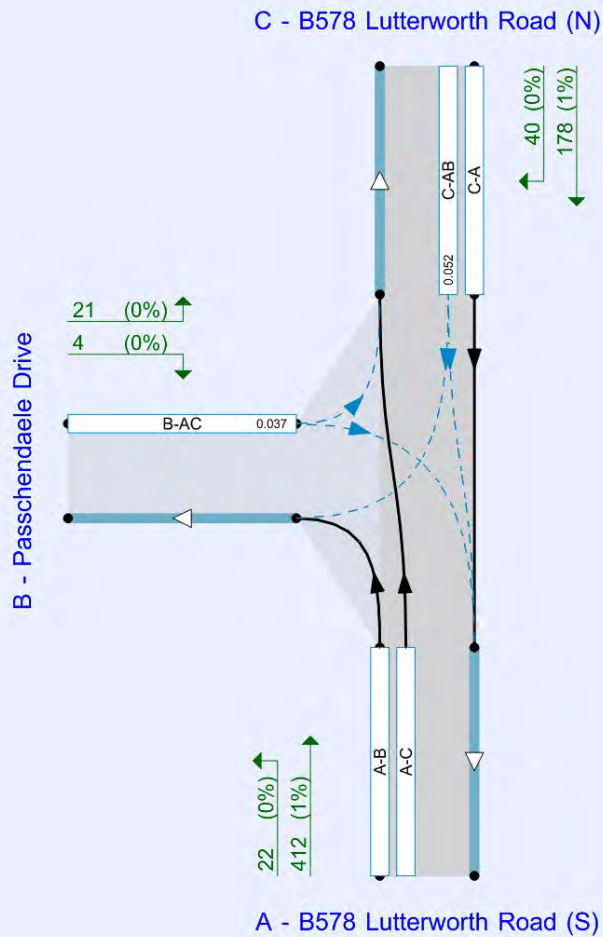
File summary

File Description

Title	B578 Lutterworth Road / Passchendaele Drive Junction
Location	
Site number	
Date	27/10/2023
Version	
Status	Existing
Identifier	
Client	Redrow Homes
Jobnumber	P21-390
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).
Streams (downstream end) show RFC (s)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021	AM	ONE HOUR	07:45	09:15	15
D2	2021	PM	ONE HOUR	16:45	18:15	15
D3	2026	AM	ONE HOUR	07:45	09:15	15
D4	2026	PM	ONE HOUR	16:45	18:15	15
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road / Passchendaale Drive	T-Junction	Two-way	Two-way	Two-way		1.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	B578 Lutterworth Road (S)		Major
B	Passchendaale Drive		Minor
C	B578 Lutterworth Road (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B578 Lutterworth Road (N)	6.00			250.0	✓	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 - Passchendaale Drive	One lane	2.75	20	21

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	482	0.088	0.222	0.140	0.317
B-C	621	0.095	0.241	-	-
C-B	719	0.278	0.278	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)
D1	2021	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Lutterworth Road (S)		✓	111	100.000
B - Passchendaale Drive		✓	41	100.000
C - B578 Lutterworth Road (N)		✓	267	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	1	110
	B - Passchendaale Drive	11	0	30
	C - B578 Lutterworth Road (N)	248	19	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	0	3
	B - Passchendaale Drive	0	0	0
	C - B578 Lutterworth Road (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.09	7.45	0.1	A
C-AB	0.04	4.56	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	544	0.057	31	0.1	7.010	A
C-AB	19	809	0.023	18	0.0	4.556	A
C-A	182			182			
A-B	0.75			0.75			
A-C	83			83			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	537	0.069	37	0.1	7.192	A
C-AB	23	827	0.028	23	0.0	4.480	A
C-A	217			217			
A-B	0.90			0.90			
A-C	99			99			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	528	0.085	45	0.1	7.451	A
C-AB	31	852	0.036	31	0.0	4.382	A
C-A	263			263			
A-B	1			1			
A-C	121			121			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	528	0.085	45	0.1	7.451	A
C-AB	31	852	0.036	31	0.0	4.385	A
C-A	263			263			
A-B	1			1			
A-C	121			121			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	537	0.069	37	0.1	7.197	A
C-AB	23	827	0.028	23	0.0	4.484	A
C-A	217			217			
A-B	0.90			0.90			
A-C	99			99			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	544	0.057	31	0.1	7.017	A
C-AB	19	809	0.023	19	0.0	4.559	A
C-A	182			182			
A-B	0.75			0.75			
A-C	83			83			

2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road / Passchendaale Drive	T-Junction	Two-way	Two-way	Two-way		0.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.57	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Lutterworth Road (S)		✓	260	100.000
B - Passchendaale Drive		✓	14	100.000
C - B578 Lutterworth Road (N)		✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	12	248
	B - Passchendaale Drive	2	0	12
	C - B578 Lutterworth Road (N)	120	23	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	0	1
	B - Passchendaale Drive	0	0	0
	C - B578 Lutterworth Road (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	7.09	0.0	A
C-AB	0.04	5.20	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	547	0.019	10	0.0	6.714	A
C-AB	20	720	0.027	20	0.0	5.137	A
C-A	88			88			
A-B	9			9			
A-C	187			187			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	537	0.023	13	0.0	6.866	A
C-AB	24	721	0.034	24	0.0	5.163	A
C-A	104			104			
A-B	11			11			
A-C	223			223			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	523	0.029	15	0.0	7.089	A
C-AB	31	723	0.043	31	0.1	5.200	A
C-A	126			126			
A-B	13			13			
A-C	273			273			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	523	0.029	15	0.0	7.089	A
C-AB	31	723	0.043	31	0.1	5.204	A
C-A	126			126			
A-B	13			13			
A-C	273			273			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	537	0.023	13	0.0	6.870	A
C-AB	24	721	0.034	24	0.0	5.168	A
C-A	104			104			
A-B	11			11			
A-C	223			223			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	547	0.019	11	0.0	6.715	A
C-AB	20	720	0.028	20	0.0	5.139	A
C-A	88			88			
A-B	9			9			
A-C	187			187			

2026, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road / Passchendaale Drive	T-Junction	Two-way	Two-way	Two-way		0.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.71	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Lutterworth Road (S)		✓	136	100.000
B - Passchendaale Drive		✓	41	100.000
C - B578 Lutterworth Road (N)		✓	472	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	1	135
	B - Passchendaale Drive	11	0	30
	C - B578 Lutterworth Road (N)	453	19	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	0	3
	B - Passchendaale Drive	0	0	0
	C - B578 Lutterworth Road (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.09	7.81	0.1	A
C-AB	0.04	4.11	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	530	0.058	31	0.1	7.210	A
C-AB	23	898	0.026	23	0.0	4.111	A
C-A	332			332			
A-B	0.75			0.75			
A-C	102			102			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	520	0.071	37	0.1	7.450	A
C-AB	30	935	0.032	30	0.0	3.979	A
C-A	394			394			
A-B	0.90			0.90			
A-C	121			121			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	506	0.089	45	0.1	7.805	A
C-AB	42	985	0.043	42	0.1	3.815	A
C-A	477			477			
A-B	1			1			
A-C	149			149			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	506	0.089	45	0.1	7.806	A
C-AB	42	985	0.043	42	0.1	3.820	A
C-A	477			477			
A-B	1			1			
A-C	149			149			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	520	0.071	37	0.1	7.452	A
C-AB	30	935	0.032	30	0.0	3.982	A
C-A	394			394			
A-B	0.90			0.90			
A-C	121			121			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	530	0.058	31	0.1	7.218	A
C-AB	23	899	0.026	23	0.0	4.114	A
C-A	332			332			
A-B	0.75			0.75			
A-C	102			102			

2026, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road / Passchendaale Drive	T-Junction	Two-way	Two-way	Two-way		0.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.44	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Lutterworth Road (S)		✓	386	100.000
B - Passchendaale Drive		✓	14	100.000
C - B578 Lutterworth Road (N)		✓	194	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	12	374
	B - Passchendaale Drive	2	0	12
	C - B578 Lutterworth Road (N)	171	23	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	0	1
	B - Passchendaale Drive	0	0	0
	C - B578 Lutterworth Road (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	7.63	0.0	A
C-AB	0.05	5.22	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	522	0.020	10	0.0	7.033	A
C-AB	21	720	0.029	21	0.0	5.152	A
C-A	125			125			
A-B	9			9			
A-C	282			282			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	508	0.025	13	0.0	7.270	A
C-AB	26	721	0.036	26	0.0	5.178	A
C-A	148			148			
A-B	11			11			
A-C	336			336			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	487	0.032	15	0.0	7.627	A
C-AB	34	724	0.047	34	0.1	5.218	A
C-A	179			179			
A-B	13			13			
A-C	412			412			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	487	0.032	15	0.0	7.627	A
C-AB	34	724	0.047	34	0.1	5.220	A
C-A	179			179			
A-B	13			13			
A-C	412			412			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	508	0.025	13	0.0	7.271	A
C-AB	26	721	0.037	26	0.1	5.184	A
C-A	148			148			
A-B	11			11			
A-C	336			336			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	522	0.020	11	0.0	7.034	A
C-AB	21	720	0.029	21	0.0	5.154	A
C-A	125			125			
A-B	9			9			
A-C	282			282			

2026 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road / Passchendaale Drive	T-Junction	Two-way	Two-way	Two-way		1.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.21	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Lutterworth Road (S)		✓	140	100.000
B - Passchendaale Drive		✓	73	100.000
C - B578 Lutterworth Road (N)		✓	519	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	1	139
	B - Passchendaale Drive	19	0	54
	C - B578 Lutterworth Road (N)	485	34	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	0	3
	B - Passchendaale Drive	0	0	0
	C - B578 Lutterworth Road (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	8.54	0.2	A
C-AB	0.08	4.14	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	528	0.104	54	0.1	7.604	A
C-AB	43	913	0.047	42	0.1	4.136	A
C-A	348			348			
A-B	0.75			0.75			
A-C	105			105			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	517	0.127	66	0.1	7.971	A
C-AB	57	952	0.059	56	0.1	4.022	A
C-A	410			410			
A-B	0.90			0.90			
A-C	125			125			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	502	0.160	80	0.2	8.528	A
C-AB	80	1007	0.079	80	0.1	3.885	A
C-A	491			491			
A-B	1			1			
A-C	153			153			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	502	0.160	80	0.2	8.535	A
C-AB	80	1007	0.080	80	0.1	3.887	A
C-A	491			491			
A-B	1			1			
A-C	153			153			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	517	0.127	66	0.1	7.982	A
C-AB	57	952	0.060	57	0.1	4.027	A
C-A	410			410			
A-B	0.90			0.90			
A-C	125			125			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	528	0.104	55	0.1	7.621	A
C-AB	43	913	0.047	43	0.1	4.143	A
C-A	348			348			
A-B	0.75			0.75			
A-C	105			105			

2026 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road / Passchendaale Drive	T-Junction	Two-way	Two-way	Two-way		0.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.72	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Lutterworth Road (S)		✓	434	100.000
B - Passchendaale Drive		✓	25	100.000
C - B578 Lutterworth Road (N)		✓	218	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	22	412
	B - Passchendaale Drive	4	0	21
	C - B578 Lutterworth Road (N)	178	40	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B578 Lutterworth Road (S)	B - Passchendaale Drive	C - B578 Lutterworth Road (N)
From	A - B578 Lutterworth Road (S)	0	0	1
	B - Passchendaale Drive	0	0	0
	C - B578 Lutterworth Road (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.06	8.13	0.1	A
C-AB	0.08	5.50	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	510	0.037	19	0.0	7.326	A
C-AB	37	714	0.052	37	0.1	5.317	A
C-A	127			127			
A-B	17			17			
A-C	310			310			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	493	0.046	22	0.0	7.644	A
C-AB	46	714	0.065	46	0.1	5.389	A
C-A	150			150			
A-B	20			20			
A-C	370			370			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	470	0.059	27	0.1	8.128	A
C-AB	61	716	0.085	61	0.1	5.493	A
C-A	179			179			
A-B	24			24			
A-C	454			454			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	470	0.059	28	0.1	8.130	A
C-AB	61	716	0.085	61	0.1	5.496	A
C-A	179			179			
A-B	24			24			
A-C	454			454			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	493	0.046	23	0.0	7.649	A
C-AB	46	714	0.065	47	0.1	5.396	A
C-A	150			150			
A-B	20			20			
A-C	370			370			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	510	0.037	19	0.0	7.331	A
C-AB	37	714	0.052	37	0.1	5.323	A
C-A	127			127			
A-B	17			17			
A-C	310			310			

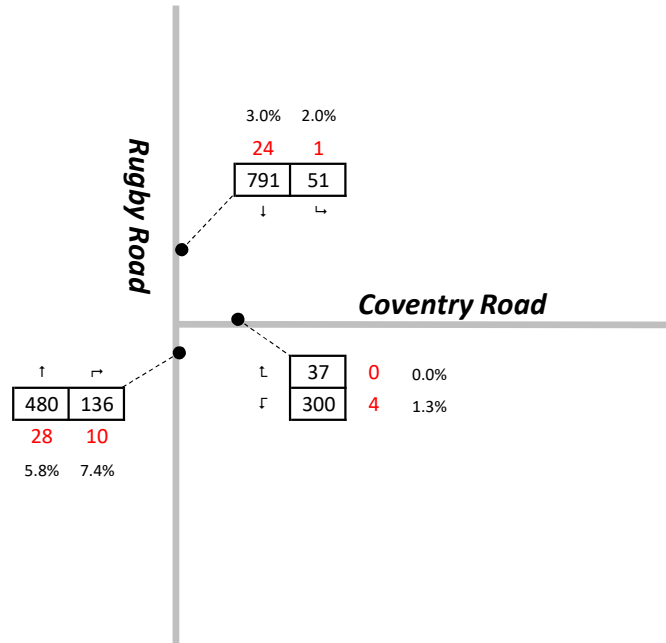
Appendix FF: B4109 Rugby Road / Coventry Road 2023 Survey Data + Forecast Data

2023 Survey Data

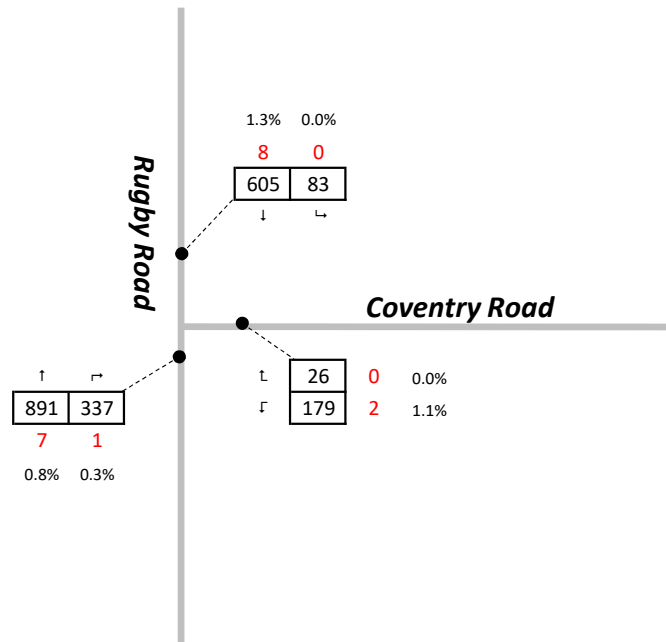
Key

- X All Vehicles
- X HGVs
- x.x% HGV Percentage

AM (08:00 - 09:00)



PM (17:00 - 18:00)

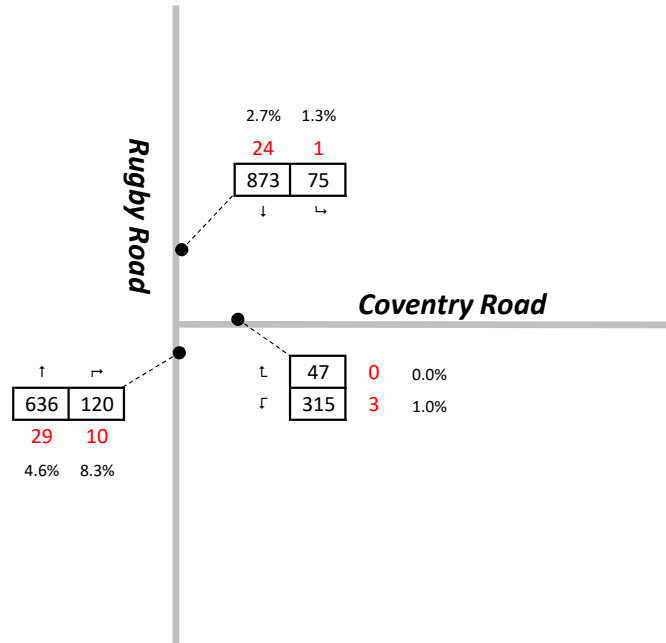


2026 Forecast

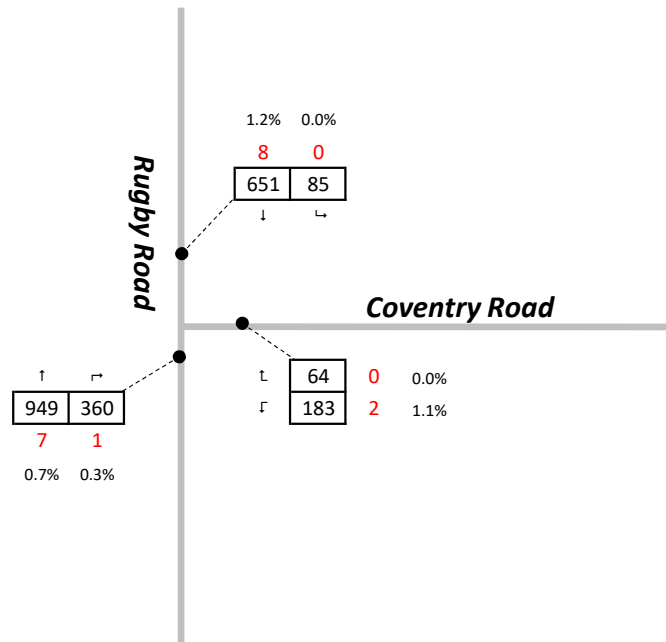
Key

- X All Vehicles
- X HGVs
- x.x% HGV Percentage

AM (08:00 - 09:00)



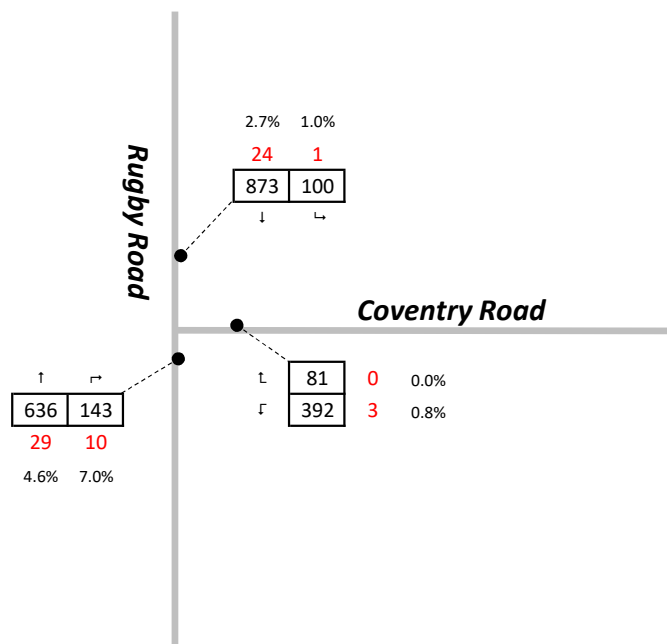
PM (17:00 - 18:00)



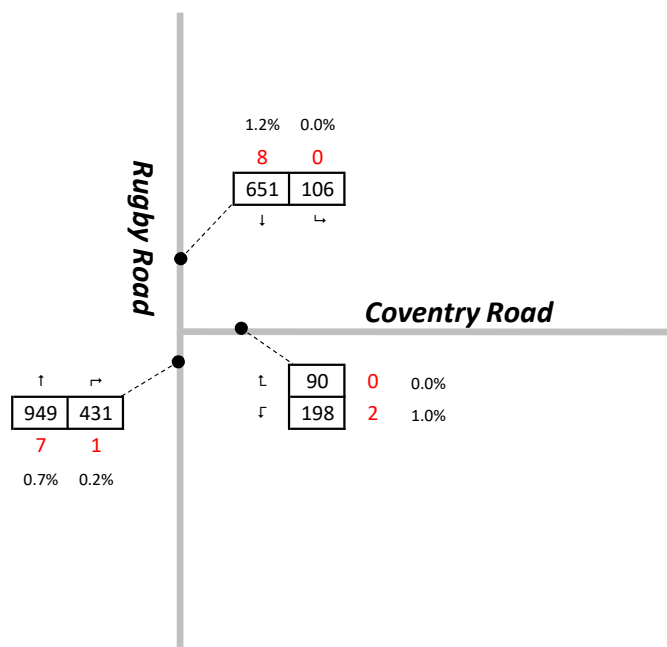
Key

- X All Vehicles
- X HGVs
- x.x% HGV Percentage

AM (08:00 - 09:00)



PM (17:00 - 18:00)



Appendix GG: B4109 Rugby Road / Coventry Road Junctions 10 Report

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
© Copyright TRL Software Limited, 2023									
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: Rugby Road_Coventry_Road - 2023 Traffic Count Flows.j10

Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10

Report generation date: 27/10/2023 12:09:44

»2023, AM
 »2023, PM
 »2026, AM
 »2026, PM
 »2026 + Dev, AM
 »2026 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2023									
Stream B-C	D1	2.9	33.66	0.76	D	D2	0.7	12.22	0.40	B
Stream B-A		0.4	36.95	0.30	E		0.2	30.32	0.19	D
Stream C-B		0.5	11.58	0.33	B		2.0	20.44	0.68	C
	2026									
Stream B-C	D3	7.3	81.70	0.92	F	D4	1.5	28.54	0.62	D
Stream B-A		2.4	189.72	0.82	F		1.6	89.12	0.65	F
Stream C-B		0.4	12.24	0.31	B		2.8	26.33	0.75	D
	2026 + Dev									
Stream B-C	D5	57.5	497.37	1.34	F	D6	25.0	385.55	1.27	F
Stream B-A		12.8	569.81	1.28	F		12.1	437.60	1.23	F
Stream C-B		0.6	13.50	0.37	B		7.1	58.26	0.90	F

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

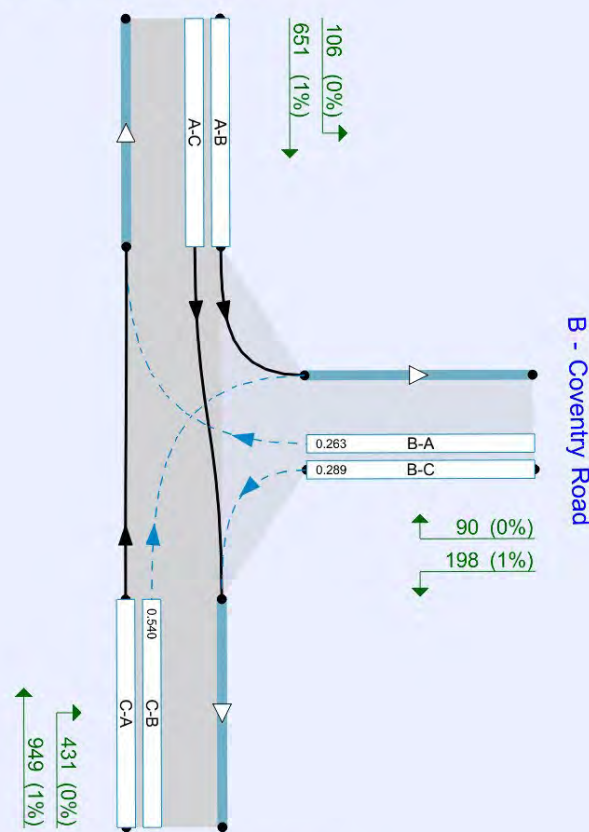
File Description

Title	B4109 Rugby Road / Coventry Road T-Junction
Location	
Site number	
Date	27/10/2023
Version	
Status	Existing
Identifier	
Client	Redrow Homes
Jobnumber	P21-390
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin

A - B4109 Rugby Road North



C - B4109 Rugby Road South

Flows show original traffic demand (Veh/hr).
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

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	2023	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 + Dev	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

2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Coventry Road T-Junction	T-Junction	Two-way	Two-way	Two-way		7.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.14	A

Arms

Arms

Arm	Name	Description	Arm type
A	B4109 Rugby Road North		Major
B	Coventry Road		Minor
C	B4109 Rugby Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B4109 Rugby Road South	7.00	✓	6.00	✓	3.65	150.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Coventry Road	One lane plus flare	10.00	6.20	3.70	3.30	3.30		0.75	43	46

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	589	0.090	0.229	0.144	0.327
B-C	722	0.106	0.268	-	-
C-B	765	0.284	0.284	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2023	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4109 Rugby Road North		ONE HOUR	✓	842	100.000
B - Coventry Road		ONE HOUR	✓	337	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	616	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
	A - B4109 Rugby Road North	0	51	791
	B - Coventry Road	37	0	300
	C - B4109 Rugby Road South	480	136	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
	A - B4109 Rugby Road North	0	2	3
	B - Coventry Road	0	0	1
	C - B4109 Rugby Road South	6	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.76	33.66	2.9	D	275	413
B-A	0.30	36.95	0.4	E	34	51
C-A					440	661
C-B	0.33	11.58	0.5	B	125	187
A-B					47	70
A-C					726	1089

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	226	56	534	0.423	223	0.0	0.7	11.493	B
B-A	28	7	323	0.086	27	0.0	0.1	12.154	B
C-A	361	90			361				
C-B	102	26	540	0.190	101	0.0	0.2	8.190	A
A-B	38	10			38				
A-C	596	149			596				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	270	67	495	0.545	268	0.7	1.2	15.722	C
B-A	33	8	254	0.131	33	0.1	0.1	16.271	C
C-A	432	108			432				
C-B	122	31	507	0.241	122	0.2	0.3	9.349	A
A-B	46	11			46				
A-C	711	178			711				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	330	83	436	0.757	324	1.2	2.8	30.490	D
B-A	41	10	144	0.284	40	0.1	0.4	34.370	D
C-A	528	132			528				
C-B	150	37	460	0.325	149	0.3	0.5	11.538	B
A-B	56	14			56				
A-C	871	218			871				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	330	83	435	0.760	330	2.8	2.9	33.656	D
B-A	41	10	138	0.295	41	0.4	0.4	36.945	E
C-A	528	132			528				
C-B	150	37	460	0.325	150	0.5	0.5	11.583	B
A-B	56	14			56				
A-C	871	218			871				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	270	67	494	0.546	276	2.9	1.2	17.019	C
B-A	33	8	249	0.134	34	0.4	0.2	16.863	C
C-A	432	108			432				
C-B	122	31	507	0.241	123	0.5	0.3	9.396	A
A-B	46	11			46				
A-C	711	178			711				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	226	56	533	0.424	228	1.2	0.8	11.868	B
B-A	28	7	321	0.087	28	0.2	0.1	12.301	B
C-A	361	90			361				
C-B	102	26	540	0.190	103	0.3	0.2	8.238	A
A-B	38	10			38				
A-C	596	149			596				

2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Coventry Road T-Junction	T-Junction	Two-way	Two-way	Two-way		4.63	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.63	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4109 Rugby Road North		ONE HOUR	✓	688	100.000
B - Coventry Road		ONE HOUR	✓	205	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	1228	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	83	605
	B - Coventry Road	26	0	179
	C - B4109 Rugby Road South	891	337	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	0	1
	B - Coventry Road	0	0	1
	C - B4109 Rugby Road South	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.40	12.22	0.7	B	164	246
B-A	0.19	30.32	0.2	D	24	36
C-A					818	1226
C-B	0.68	20.44	2.0	C	309	464
A-B					76	114
A-C					555	833

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	575	0.234	134	0.0	0.3	8.135	A
B-A	20	5	292	0.067	19	0.0	0.1	13.180	B
C-A	671	168			671				
C-B	254	63	615	0.413	251	0.0	0.7	9.825	A
A-B	62	16			62				
A-C	455	114			455				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	544	0.296	160	0.3	0.4	9.372	A
B-A	23	6	232	0.101	23	0.1	0.1	17.250	C
C-A	801	200			801				
C-B	303	76	586	0.517	302	0.7	1.0	12.592	B
A-B	75	19			75				
A-C	544	136			544				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	197	49	493	0.400	196	0.4	0.7	12.106	B
B-A	29	7	149	0.193	28	0.1	0.2	29.751	D
C-A	981	245			981				
C-B	371	93	546	0.679	367	1.0	2.0	19.697	C
A-B	91	23			91				
A-C	666	167			666				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	197	49	491	0.401	197	0.7	0.7	12.224	B
B-A	29	7	147	0.194	29	0.2	0.2	30.315	D
C-A	981	245			981				
C-B	371	93	546	0.679	371	2.0	2.0	20.444	C
A-B	91	23			91				
A-C	666	167			666				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	543	0.296	162	0.7	0.4	9.457	A
B-A	23	6	230	0.102	24	0.2	0.1	17.519	C
C-A	801	200			801				
C-B	303	76	586	0.517	307	2.0	1.1	13.062	B
A-B	75	19			75				
A-C	544	136			544				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	575	0.235	135	0.4	0.3	8.202	A
B-A	20	5	291	0.067	20	0.1	0.1	13.301	B
C-A	671	168			671				
C-B	254	63	615	0.413	255	1.1	0.7	10.056	B
A-B	62	16			62				
A-C	455	114			455				

2026, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Coventry Road T-Junction	T-Junction	Two-way	Two-way	Two-way		17.11	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	17.11	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4109 Rugby Road North		ONE HOUR	✓	948	100.000
B - Coventry Road		ONE HOUR	✓	362	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	756	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	75	873
	B - Coventry Road	47	0	315
	C - B4109 Rugby Road South	636	120	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	1	3
	B - Coventry Road	0	0	1
	C - B4109 Rugby Road South	5	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.92	81.70	7.3	F	289	434
B-A	0.82	189.72	2.4	F	43	65
C-A					584	875
C-B	0.31	12.24	0.4	B	110	165
A-B					69	103
A-C					801	1202

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	237	59	511	0.464	234	0.0	0.8	12.842	B
B-A	35	9	289	0.122	35	0.0	0.1	14.112	B
C-A	479	120			479				
C-B	90	23	515	0.176	90	0.0	0.2	8.445	A
A-B	56	14			56				
A-C	657	164			657				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	283	71	464	0.610	281	0.8	1.5	19.307	C
B-A	42	11	210	0.201	42	0.1	0.2	21.349	C
C-A	572	143			572				
C-B	108	27	478	0.226	108	0.2	0.3	9.722	A
A-B	67	17			67				
A-C	785	196			785				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	347	87	384	0.903	331	1.5	5.6	55.498	F
B-A	52	13	81	0.635	47	0.2	1.3	96.608	F
C-A	700	175			700				
C-B	132	33	426	0.310	132	0.3	0.4	12.193	B
A-B	83	21			83				
A-C	961	240			961				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	347	87	375	0.924	340	5.6	7.3	81.702	F
B-A	52	13	63	0.823	47	1.3	2.4	189.716	F
C-A	700	175			700				
C-B	132	33	426	0.310	132	0.4	0.4	12.241	B
A-B	83	21			83				
A-C	961	240			961				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	283	71	455	0.623	306	7.3	1.8	27.221	D
B-A	42	11	190	0.222	51	2.4	0.3	27.233	D
C-A	572	143			572				
C-B	108	27	478	0.226	108	0.4	0.3	9.770	A
A-B	67	17			67				
A-C	785	196			785				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	237	59	510	0.465	241	1.8	0.9	13.516	B
B-A	35	9	286	0.124	36	0.3	0.1	14.438	B
C-A	479	120			479				
C-B	90	23	515	0.176	91	0.3	0.2	8.496	A
A-B	56	14			56				
A-C	657	164			657				

2026, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Coventry Road T-Junction	T-Junction	Two-way	Two-way	Two-way		8.87	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.87	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4109 Rugby Road North		ONE HOUR	✓	736	100.000
B - Coventry Road		ONE HOUR	✓	247	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	1309	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	85	651
	B - Coventry Road	64	0	183
	C - B4109 Rugby Road South	949	360	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	0	1
	B - Coventry Road	0	0	1
	C - B4109 Rugby Road South	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.62	28.54	1.5	D	168	252
B-A	0.65	89.12	1.6	F	59	88
C-A					871	1306
C-B	0.75	26.33	2.8	D	330	496
A-B					78	117
A-C					597	896

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	541	0.255	136	0.0	0.3	8.869	A
B-A	48	12	276	0.175	47	0.0	0.2	15.707	C
C-A	714	179			714				
C-B	271	68	605	0.448	268	0.0	0.8	10.599	B
A-B	64	16			64				
A-C	490	123			490				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	490	0.335	164	0.3	0.5	11.002	B
B-A	58	14	208	0.276	57	0.2	0.4	23.669	C
C-A	853	213			853				
C-B	324	81	574	0.564	322	0.8	1.3	14.181	B
A-B	76	19			76				
A-C	585	146			585				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	346	0.582	198	0.5	1.3	23.803	C
B-A	70	18	112	0.629	66	0.4	1.4	73.540	F
C-A	1045	261			1045				
C-B	396	99	531	0.746	391	1.3	2.7	24.650	C
A-B	94	23			94				
A-C	717	179			717				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	325	0.619	201	1.3	1.5	28.542	D
B-A	70	18	108	0.650	70	1.4	1.6	89.119	F
C-A	1045	261			1045				
C-B	396	99	531	0.746	396	2.7	2.8	26.328	D
A-B	94	23			94				
A-C	717	179			717				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	481	0.342	169	1.5	0.5	11.660	B
B-A	58	14	205	0.281	62	1.6	0.4	25.999	D
C-A	853	213			853				
C-B	324	81	574	0.564	329	2.8	1.3	15.056	C
A-B	76	19			76				
A-C	585	146			585				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	539	0.256	138	0.5	0.3	9.001	A
B-A	48	12	274	0.176	49	0.4	0.2	16.052	C
C-A	714	179			714				
C-B	271	68	605	0.448	273	1.3	0.8	10.928	B
A-B	64	16			64				
A-C	490	123			490				

2026 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Coventry Road T-Junction	T-Junction	Two-way	Two-way	Two-way		106.79	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	106.79	F

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
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4109 Rugby Road North		ONE HOUR	✓	973	100.000
B - Coventry Road		ONE HOUR	✓	473	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	779	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	100	873
	B - Coventry Road	81	0	392
	C - B4109 Rugby Road South	636	143	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	1	3
	B - Coventry Road	0	0	1
	C - B4109 Rugby Road South	5	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.34	497.37	57.5	F	360	540
B-A	1.28	569.81	12.8	F	74	111
C-A					584	875
C-B	0.37	13.50	0.6	B	131	197
A-B					92	138
A-C					801	1202

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	295	74	488	0.604	289	0.0	1.5	17.626	C
B-A	61	15	249	0.245	60	0.0	0.3	18.916	C
C-A	479	120			479				
C-B	108	27	516	0.209	107	0.0	0.3	8.771	A
A-B	75	19			75				
A-C	657	164			657				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	352	88	422	0.836	342	1.5	4.0	40.949	E
B-A	73	18	137	0.532	70	0.3	1.0	51.868	F
C-A	572	143			572				
C-B	129	32	477	0.269	128	0.3	0.4	10.294	B
A-B	90	22			90				
A-C	785	196			785				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	432	108	334	1.292	329	4.0	29.8	210.670	F
B-A	89	22	70	1.282	63	1.0	7.5	307.075	F
C-A	700	175			700				
C-B	157	39	424	0.371	157	0.4	0.6	13.417	B
A-B	110	28			110				
A-C	961	240			961				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	432	108	321	1.344	320	29.8	57.5	478.701	F
B-A	89	22	69	1.284	68	7.5	12.8	569.808	F
C-A	700	175			700				
C-B	157	39	424	0.371	157	0.6	0.6	13.503	B
A-B	110	28			110				
A-C	961	240			961				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	352	88	387	0.911	380	57.5	50.5	497.369	F
B-A	73	18	82	0.883	78	12.8	11.6	562.713	F
C-A	572	143			572				
C-B	129	32	477	0.269	129	0.6	0.4	10.368	B
A-B	90	22			90				
A-C	785	196			785				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	295	74	435	0.678	427	50.5	17.6	294.167	F
B-A	61	15	94	0.648	87	11.6	5.2	371.378	F
C-A	479	120			479				
C-B	108	27	516	0.209	108	0.4	0.3	8.835	A
A-B	75	19			75				
A-C	657	164			657				

2026 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Coventry Road T-Junction	T-Junction	Two-way	Two-way	Two-way		57.98	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	57.98	F

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
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4109 Rugby Road North		ONE HOUR	✓	757	100.000
B - Coventry Road		ONE HOUR	✓	288	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	1380	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	106	651
	B - Coventry Road	90	0	198
	C - B4109 Rugby Road South	949	431	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - B4109 Rugby Road North	B - Coventry Road	C - B4109 Rugby Road South
From	A - B4109 Rugby Road North	0	0	1
	B - Coventry Road	0	0	1
	C - B4109 Rugby Road South	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.27	385.55	25.0	F	182	273
B-A	1.23	437.60	12.1	F	83	124
C-A					871	1306
C-B	0.90	58.26	7.1	F	395	593
A-B					97	146
A-C					597	896

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	149	37	515	0.289	147	0.0	0.4	9.744	A
B-A	68	17	258	0.263	66	0.0	0.3	18.671	C
C-A	714	179			714				
C-B	324	81	601	0.540	320	0.0	1.1	12.629	B
A-B	80	20			80				
A-C	490	123			490				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	178	44	434	0.410	177	0.4	0.7	13.944	B
B-A	81	20	182	0.444	79	0.3	0.7	34.423	D
C-A	853	213			853				
C-B	387	97	569	0.681	384	1.1	2.0	19.089	C
A-B	95	24			95				
A-C	585	146			585				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	218	55	180	1.209	169	0.7	12.9	179.714	F
B-A	99	25	83	1.188	75	0.7	6.9	242.542	F
C-A	1045	261			1045				
C-B	475	119	525	0.903	458	2.0	6.1	45.264	E
A-B	117	29			117				
A-C	717	179			717				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	218	55	171	1.273	170	12.9	25.0	385.548	F
B-A	99	25	80	1.232	78	6.9	12.1	437.597	F
C-A	1045	261			1045				
C-B	475	119	525	0.903	470	6.1	7.1	58.263	F
A-B	117	29			117				
A-C	717	179			717				

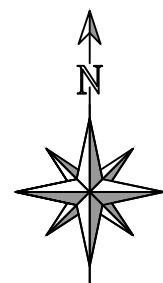
17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	178	44	273	0.652	263	25.0	3.8	211.036	F
B-A	81	20	127	0.636	117	12.1	3.0	250.532	F
C-A	853	213			853				
C-B	387	97	569	0.681	407	7.1	2.3	24.426	C
A-B	95	24			95				
A-C	585	146			585				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	149	37	499	0.298	163	3.8	0.4	11.103	B
B-A	68	17	252	0.269	78	3.0	0.4	21.845	C
C-A	714	179			714				
C-B	324	81	601	0.540	329	2.3	1.2	13.438	B
A-B	80	20			80				
A-C	490	123			490				

Appendix HH: B4109 Rugby Road / Coventry Road Proposed Signalisation Scheme



New traffic island to be constructed to improve driver clarity of junction

Existing islands to be removed

Stop lines brought closer to the junction

The Burbage Rock to be relocated off the back of footway

Pedestrian crossing on Coventry Road staggered due to increased carriageway width resulting from additional exit lane along the Coventry Road approach.

Highway widening into north side verge.

Existing channel line on south side of Coventry road to be retained to ensure existing drainage ditch and trees are unaffected by works.

Pedestrian crossing along the B4109 Rugby Road to be relocated closer to the junction and incorporated into the junction signalisation.

Key

- Highway Boundary
- Proposed Kerbline
- Primary Signal Head
- Secondary Signal Head

NOTE

Preliminary scheme only for comment & review.

Detailed design subject to further review and amendment if required via S278 / technical approval process, to be secured via condition.

Do not scale from this drawing.

Rev	Date	Amendments	By	Chk
P02	04/07/2023	Amendments Made Following Stage 1 RSA	JWB	ADM
P01	07/06/23	Topographical Survey Map Added	JWB	ADM



Client

Redrow Homes

Project

Land South of Burbage

Drawing Title

Preliminary B4109 Rugby Road / Coventry Road Mitigation

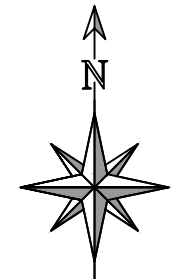
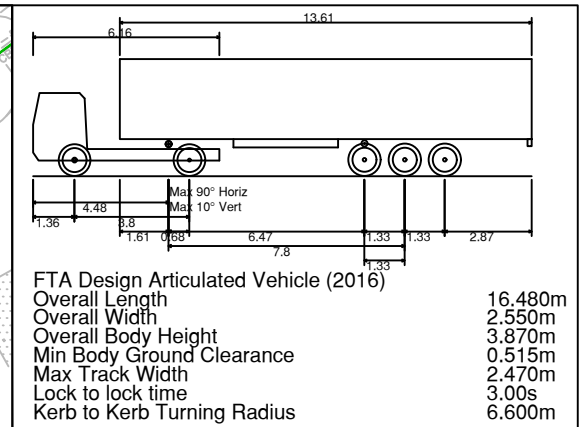
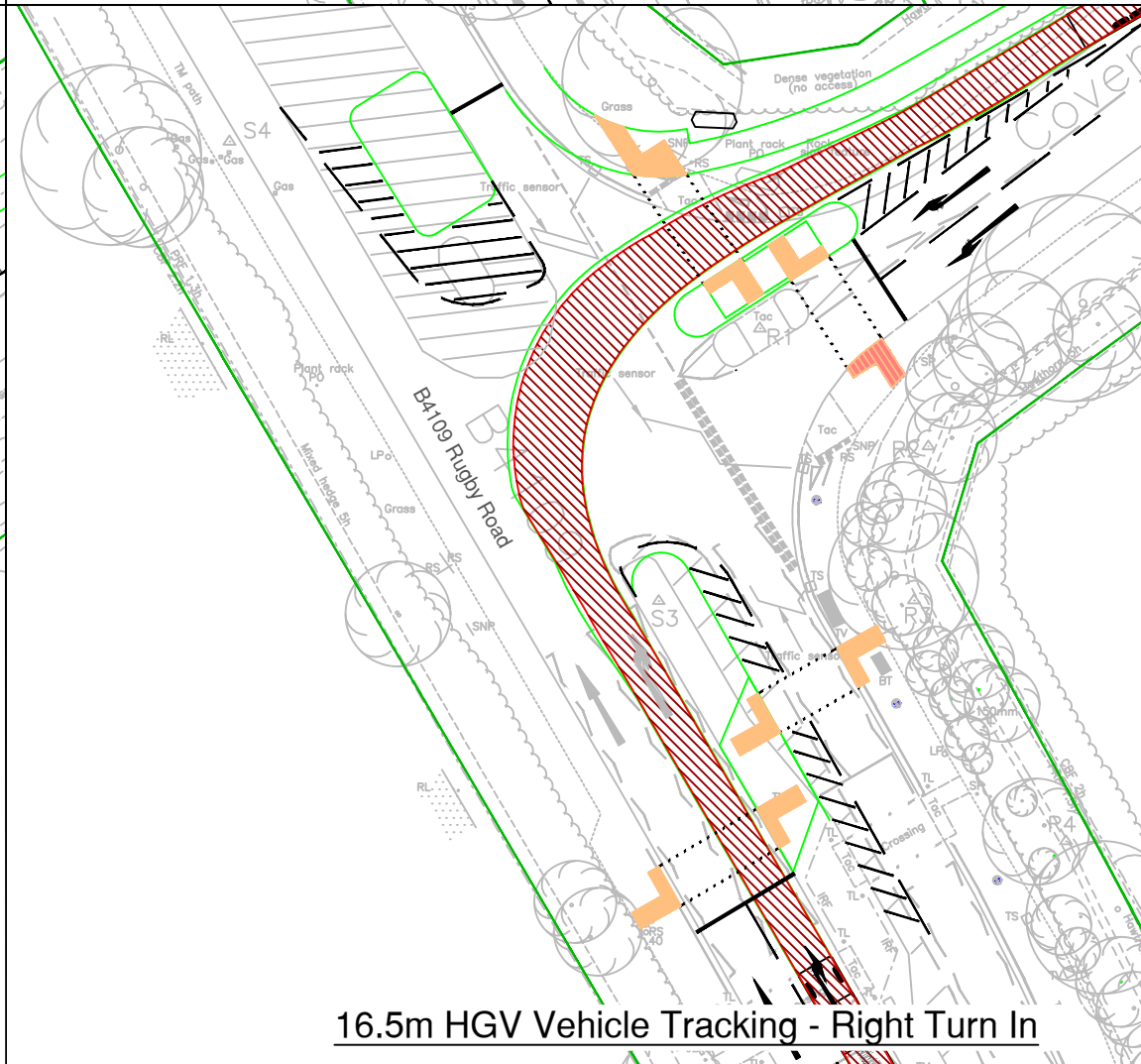
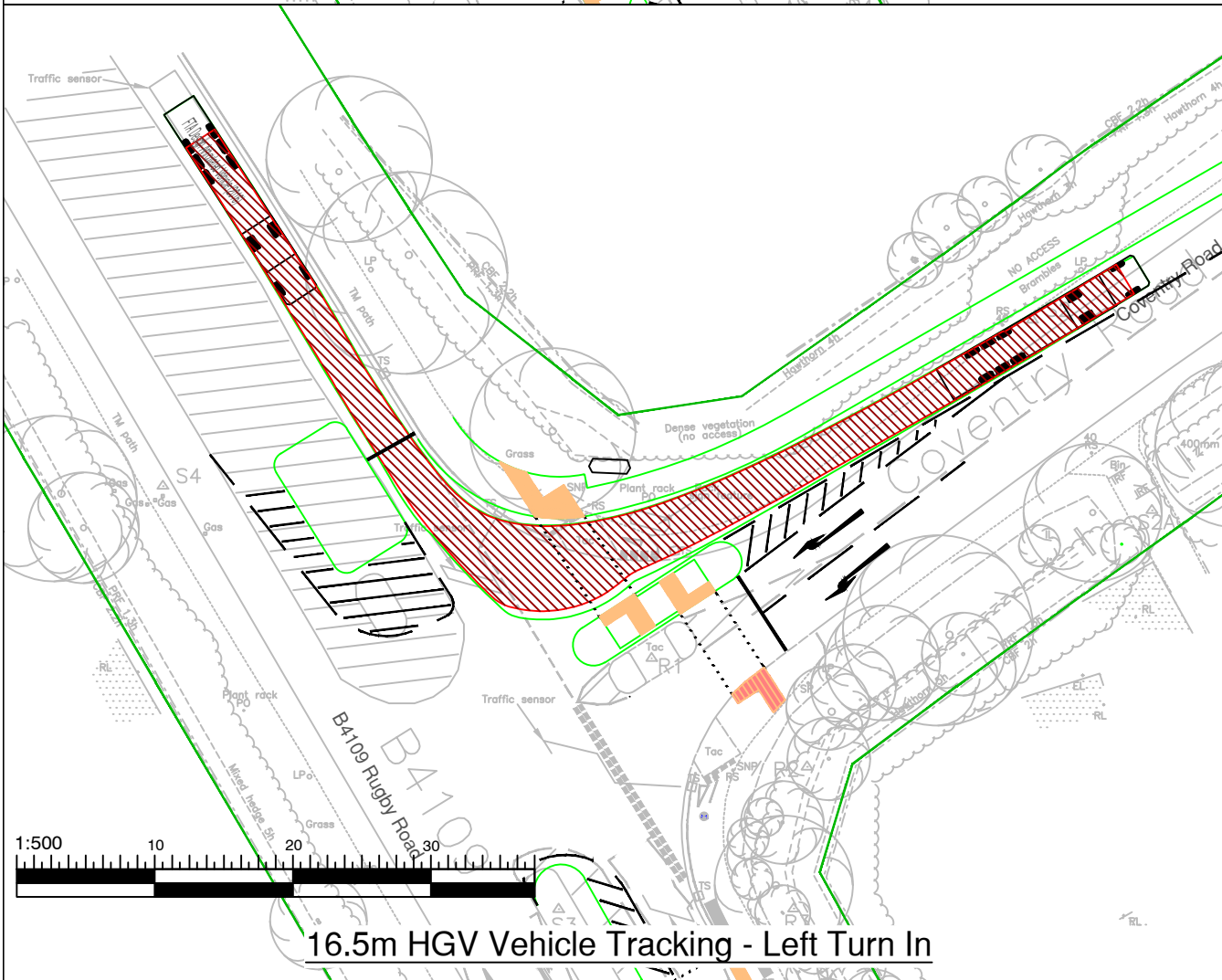
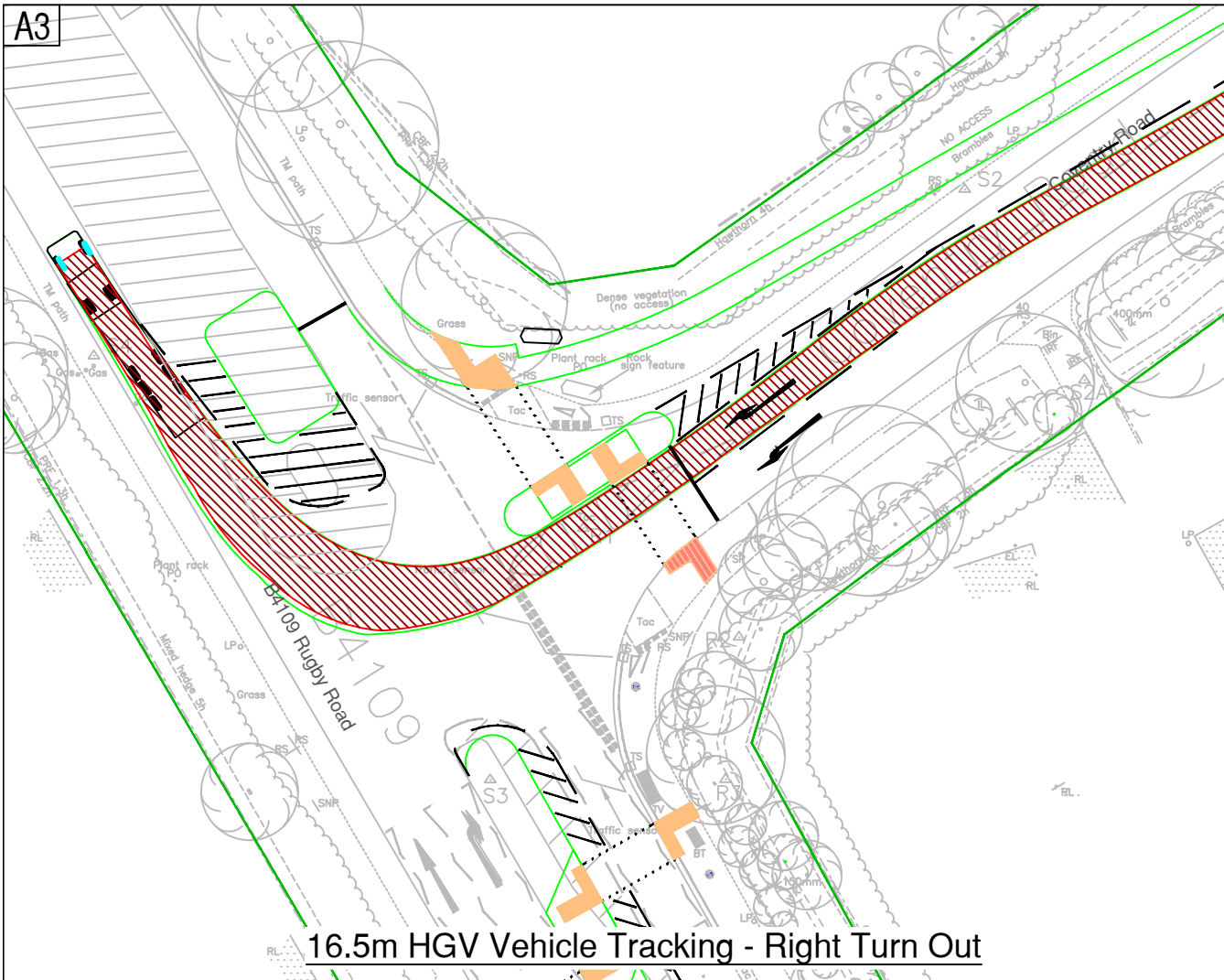
Status

For Planning

Scale	Drawn	Checked	Date
A3@ 1:500	JWB	ADM	01/06/23

Drawing No.	Rev.
21390-RLL-23-XX-DR-D-5011	P02

Copyright © Rodgers Leask Limited



NOTE
Preliminary scheme only for comment & review.

Detailed design subject to further review and amendment if required via S278 / technical approval process, to be secured via condition.

Do not scale from this drawing.

P01	31/08/23	Mitigation Scheme Updated Based on RSA Comments	JWB	ADM	
Rev	Date	Amendments	By	Chk	



Client

Redrow Homes

Project

Land South of Burbage

Drawing Title

B4109 Rugby Road /Coventry Road MitigationVehicle Tracking

Status

For Planning

Scale

Drawn

Checked

Date

A3@ 1:500

CB

ADM

13/06/23

Drawing No.

Rev.

21390-RL-23-XX-DR-D-5016

P01

Copyright © Rodgers Leask Limited

St James House • Mansfield Road • Derby • DE1 3TQ • Tel: 01332 285000 • Fax: 01332 291728 • www.rodgersleak.co.uk