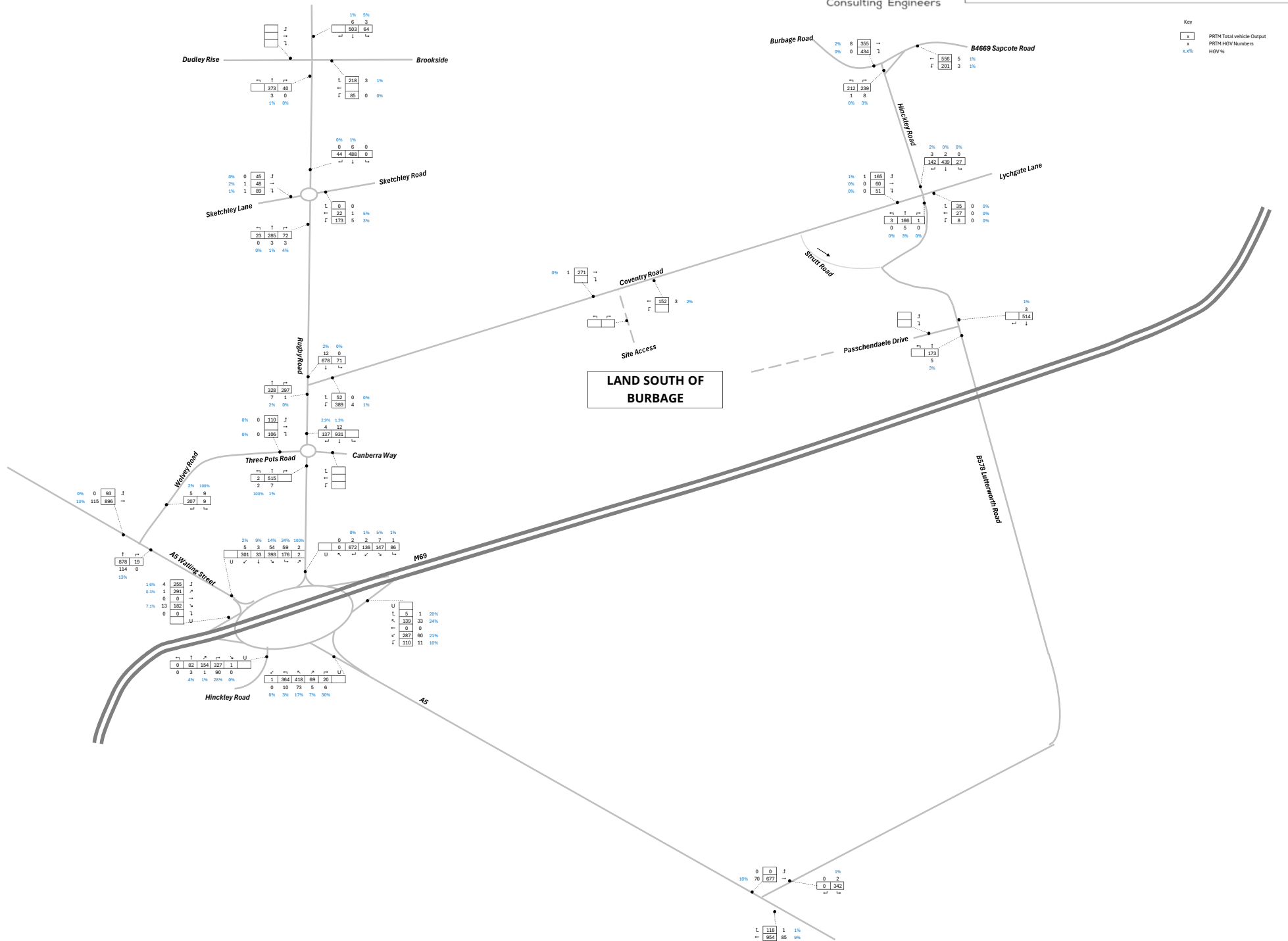
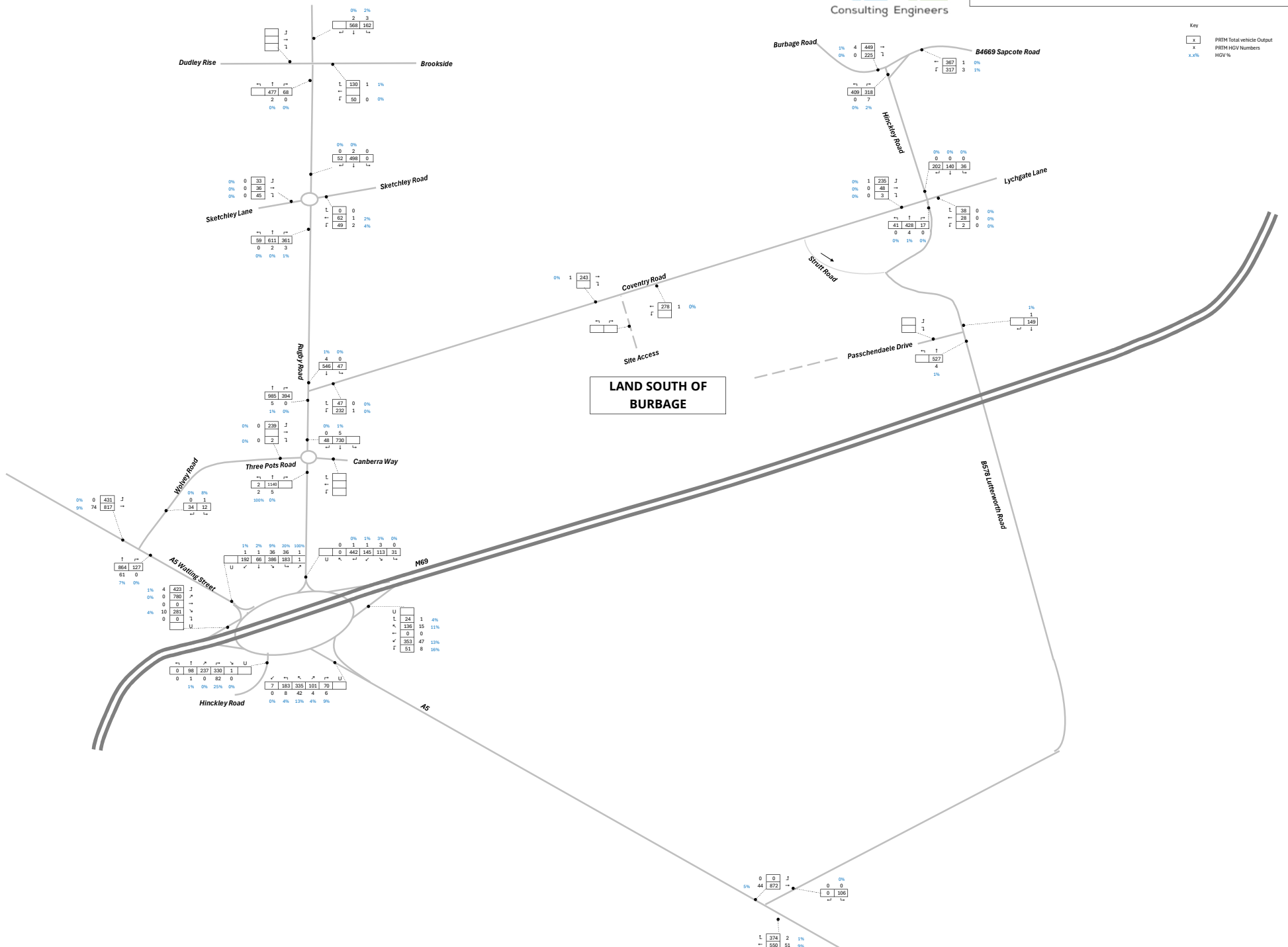
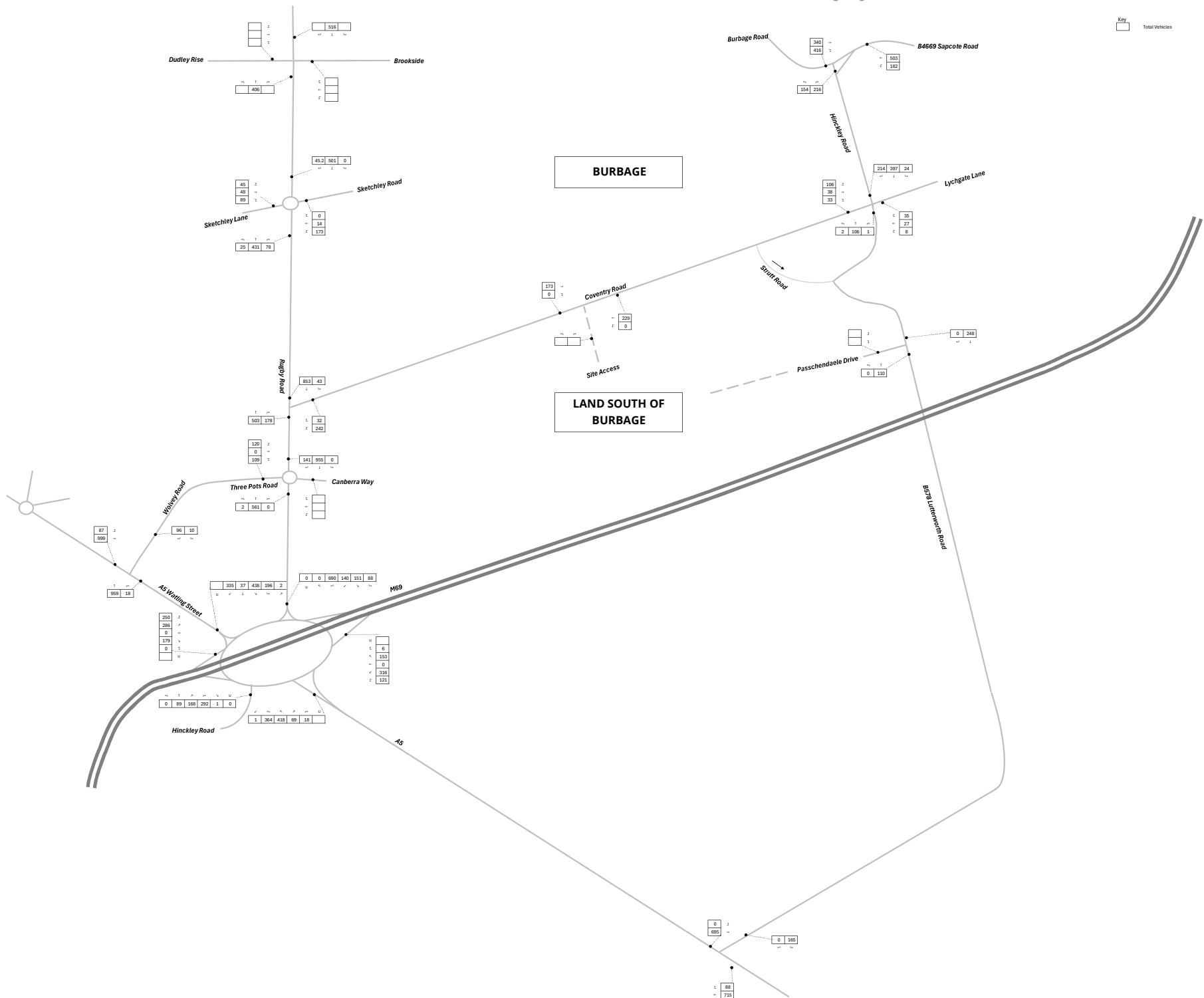
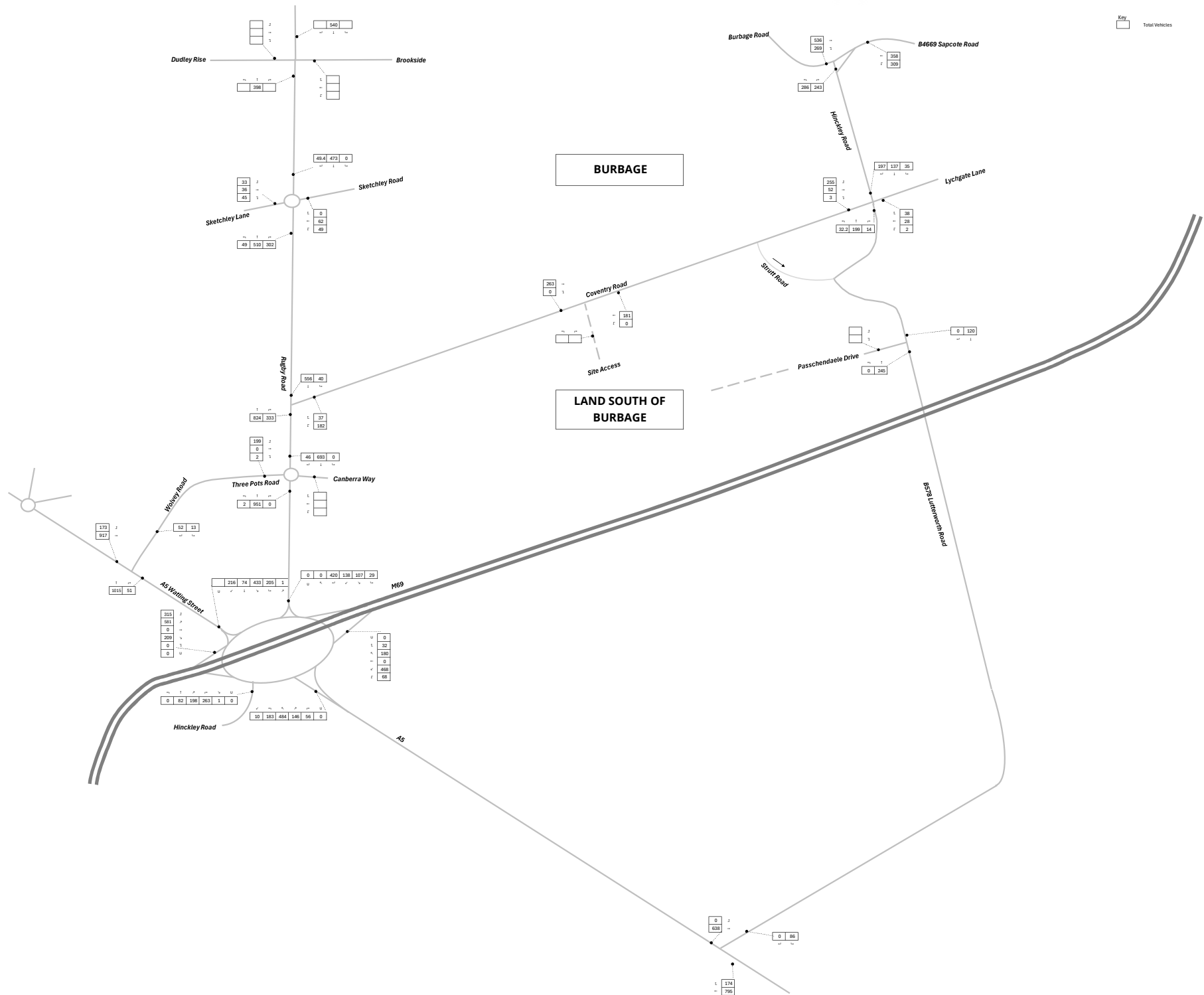


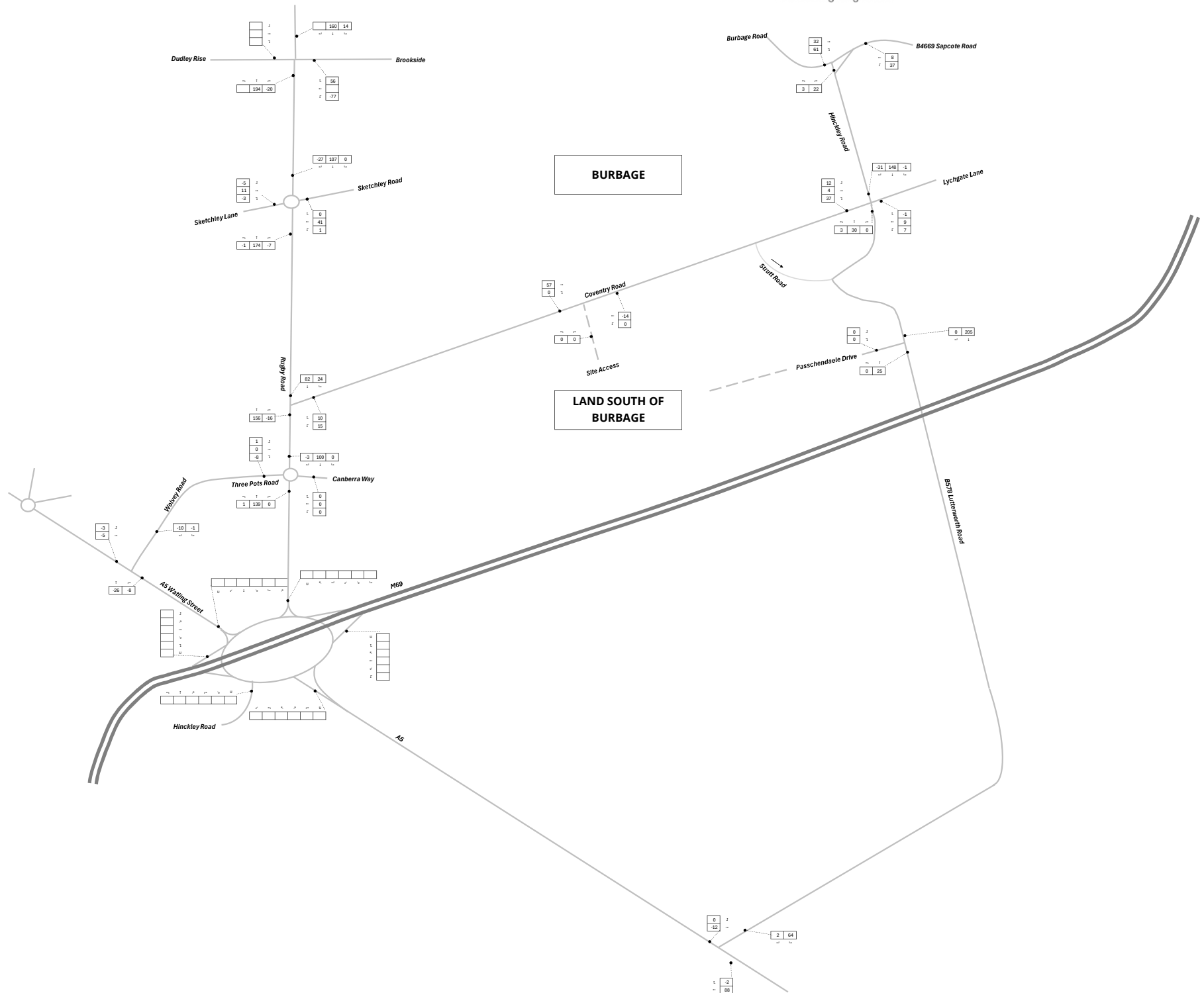
Appendix P: PRTM 2021 Traffic Flows and Traffic Growth

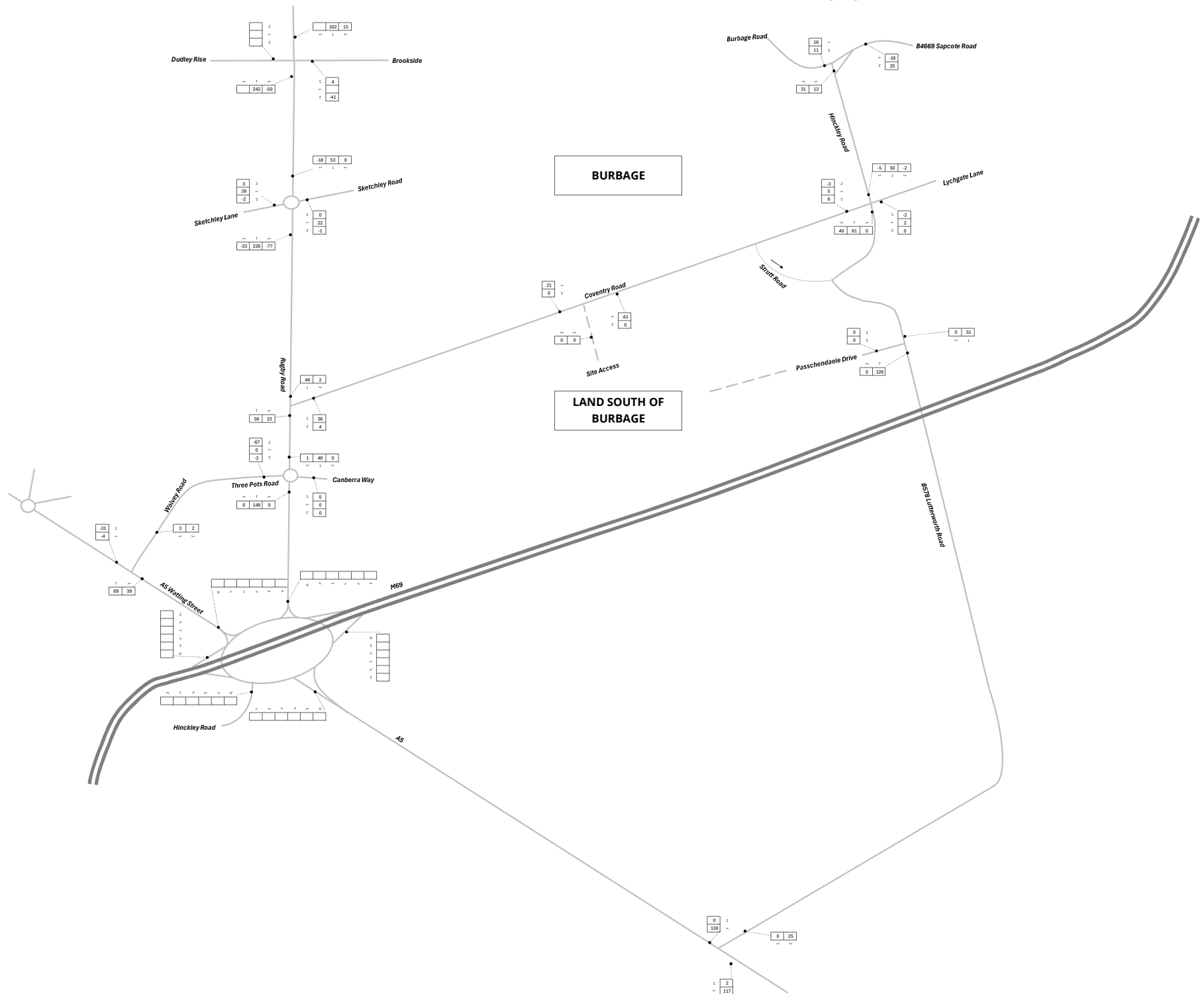


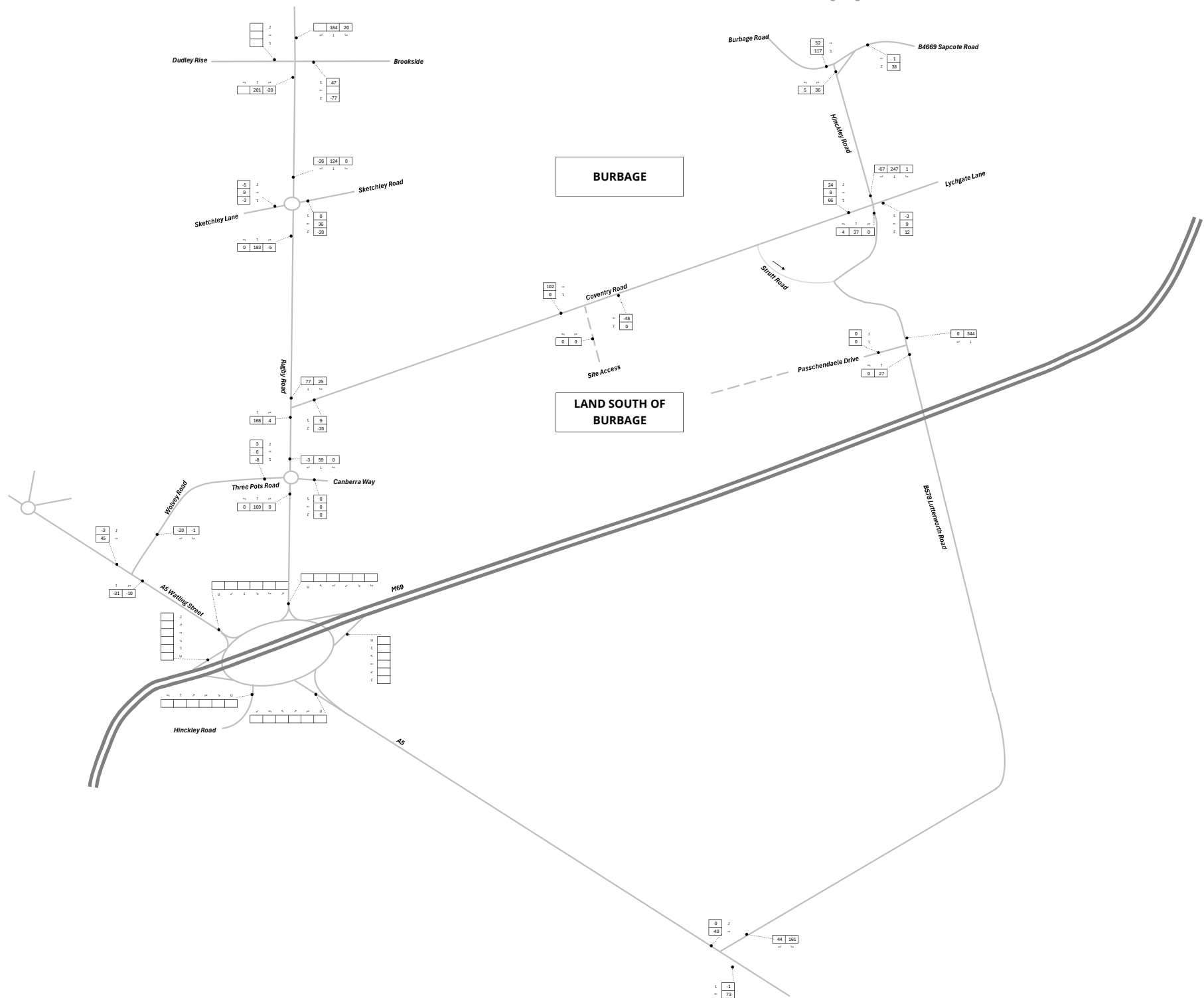


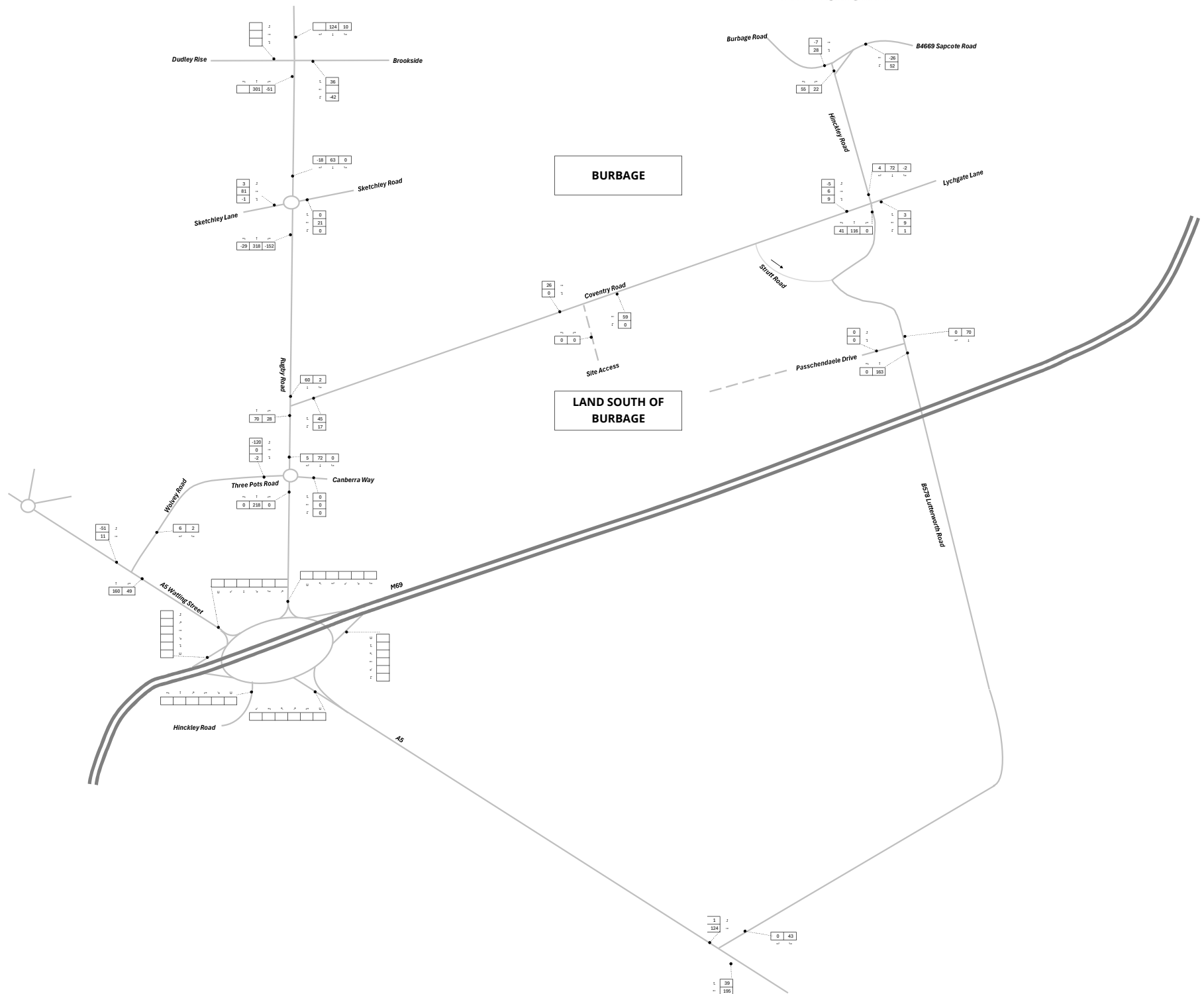








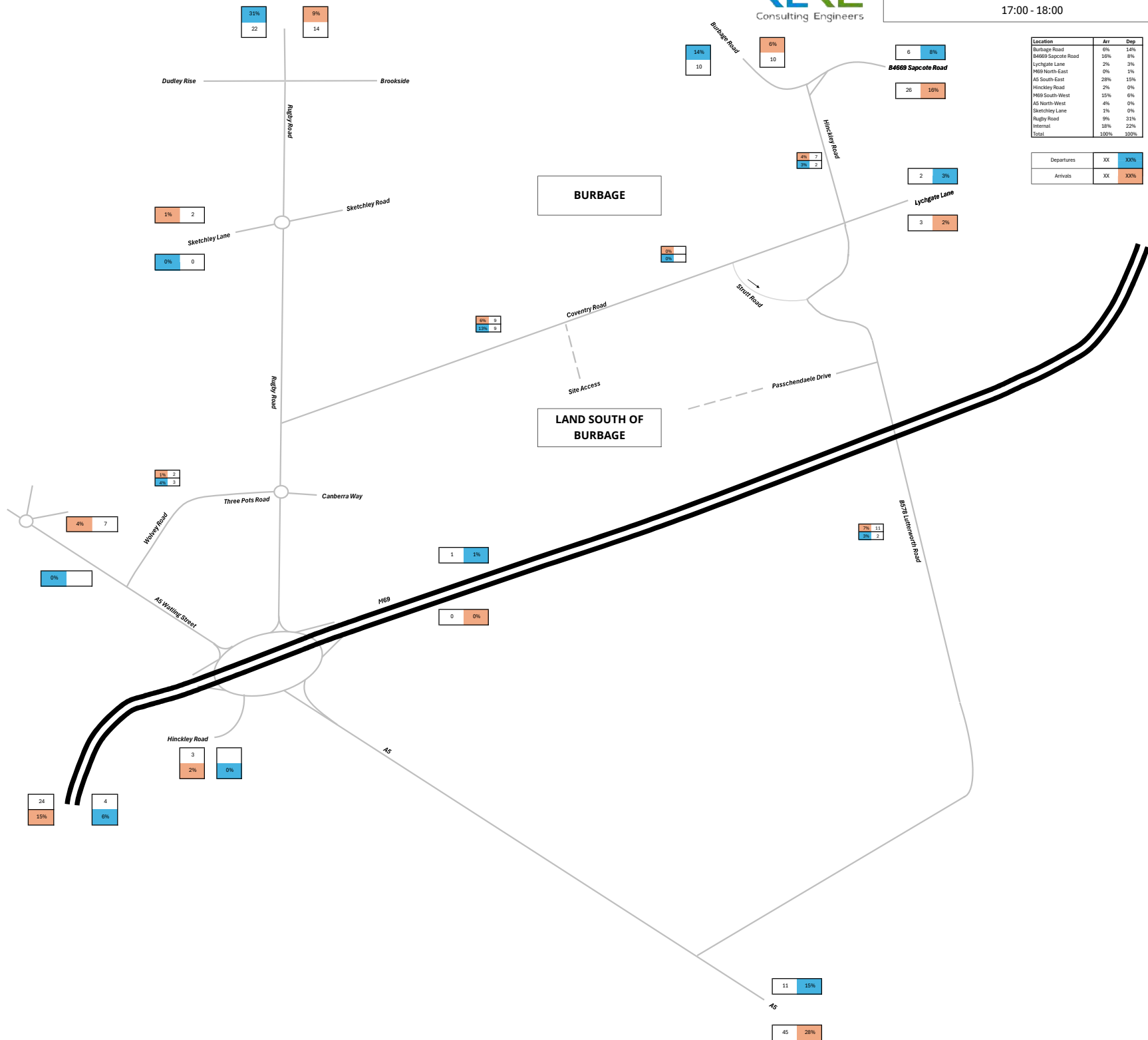


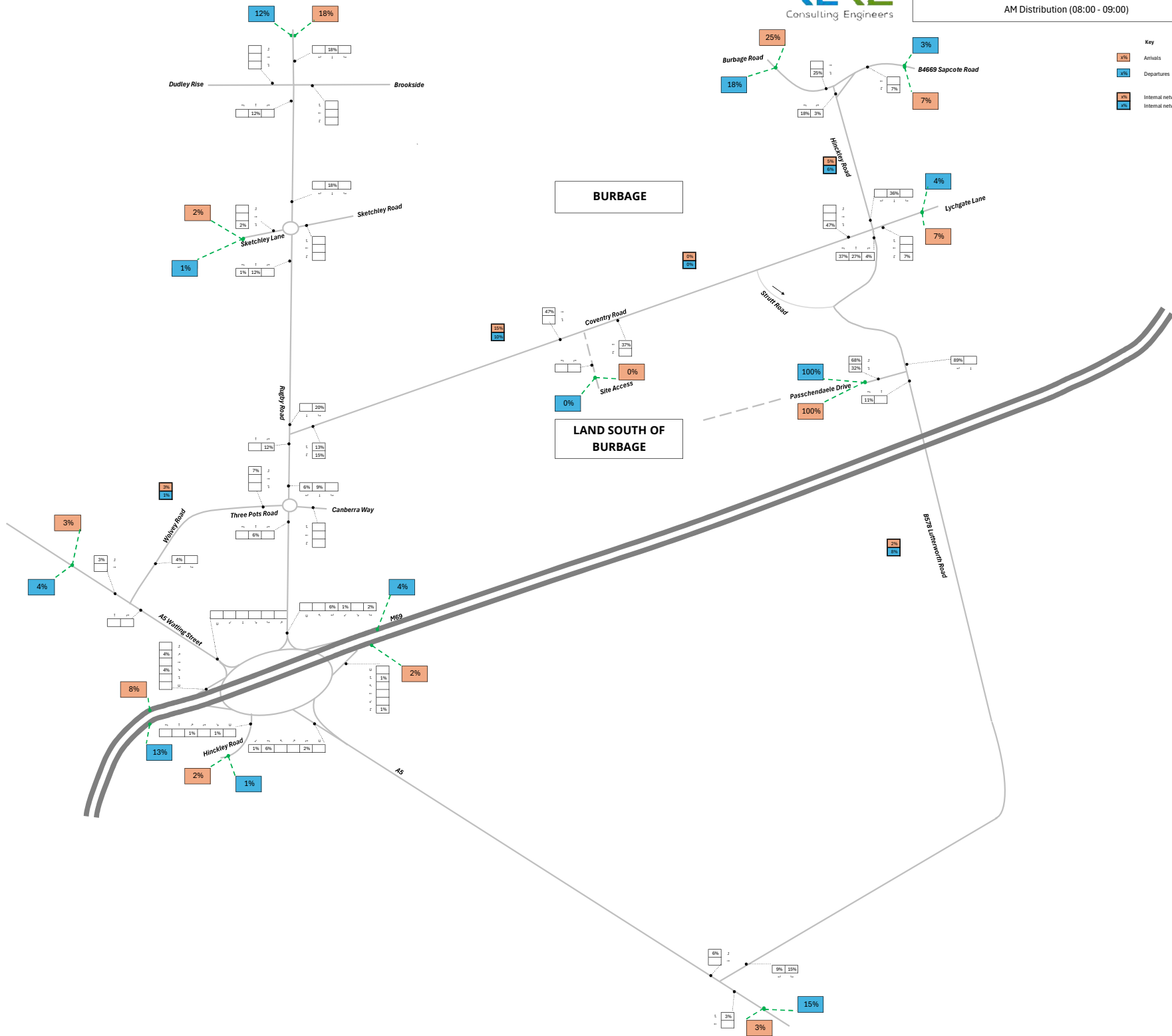
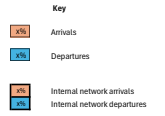


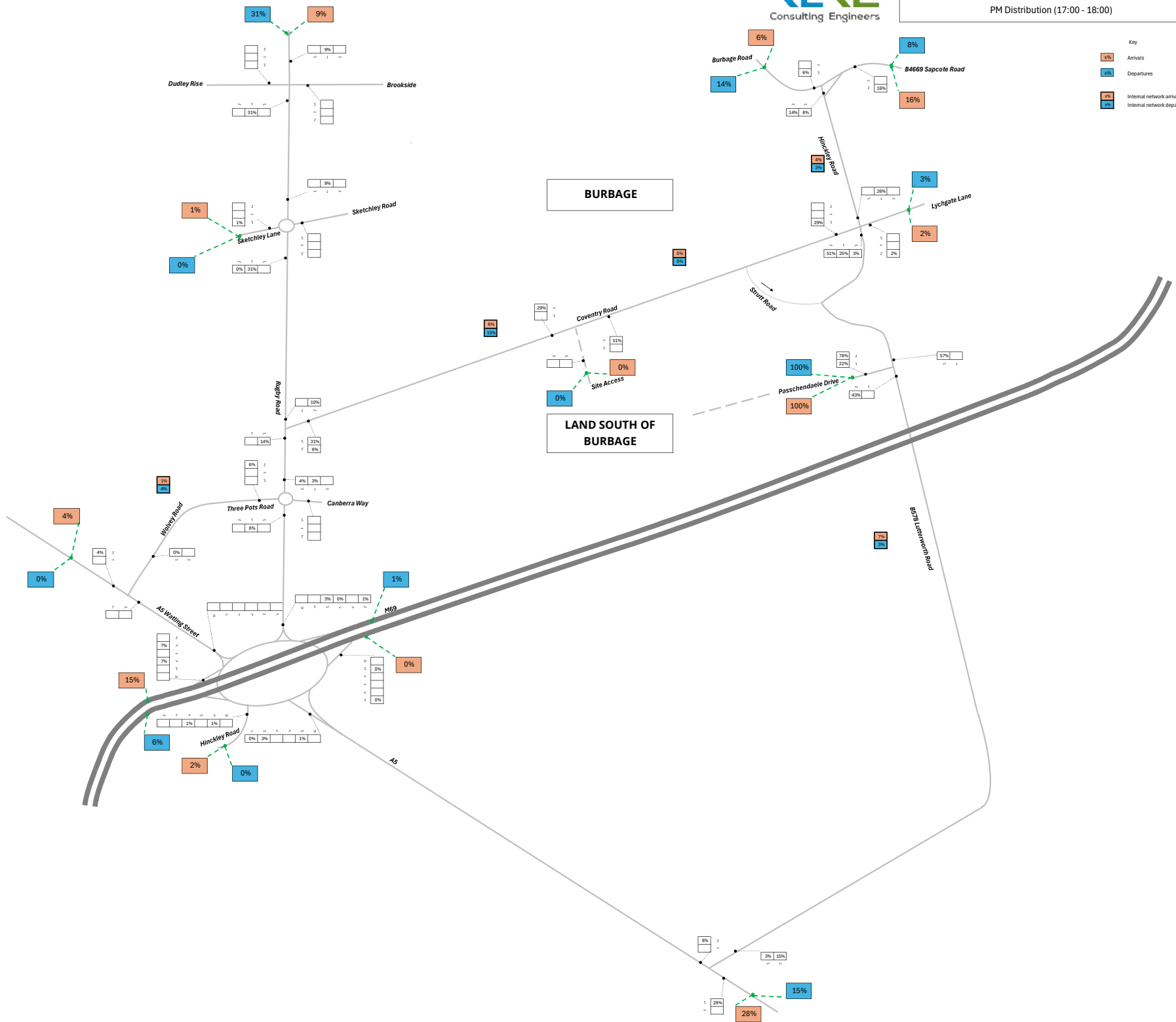
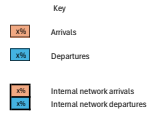
Appendix Q: Trip Distribution and Assignment

Location	Arr	Dep
Burbage Road	6%	14%
B4609 Sapcote Road	18%	8%
Lychgate Lane	2%	3%
M69 North-East	0%	1%
A5 South-East	28%	10%
Hinckley Road	2%	0%
M69 South-West	15%	6%
A5 North-West	4%	0%
Sketchley Lane	3%	0%
Rugby Road	9%	31%
Internal	18%	22%
Total	100%	100%

Departures	XX	XX%
Arrivals	XX	XX%

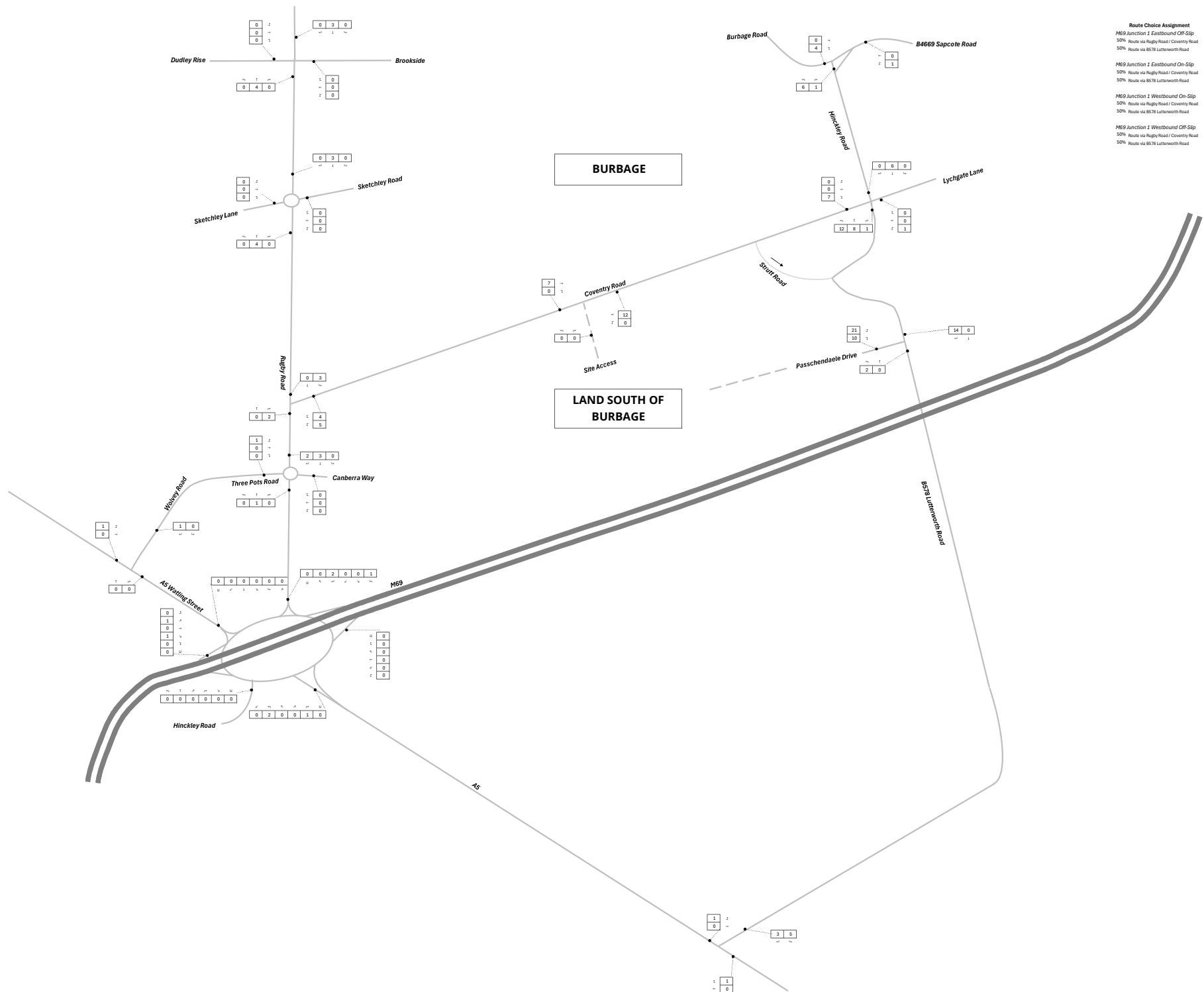






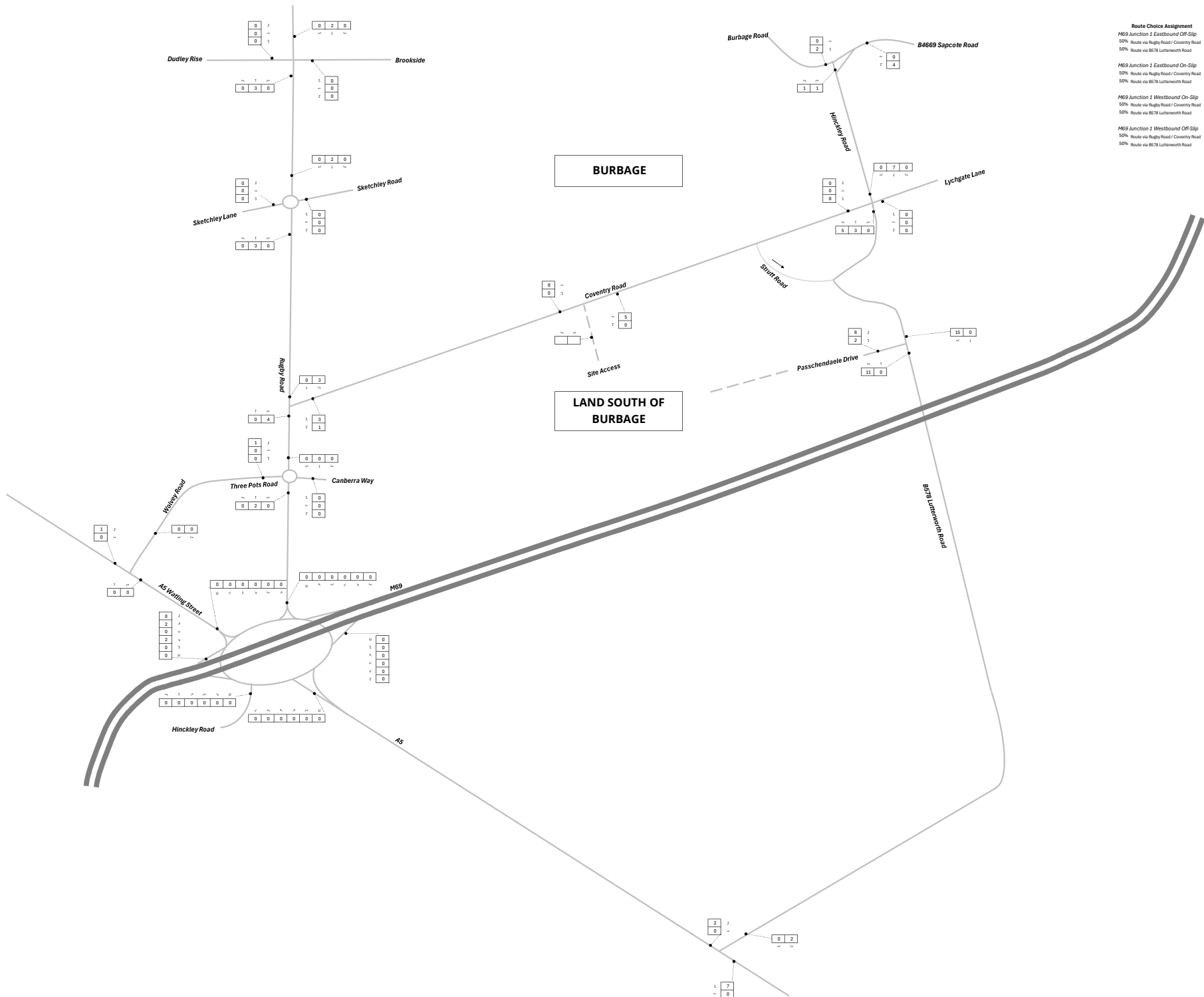
Route Choice Assignment

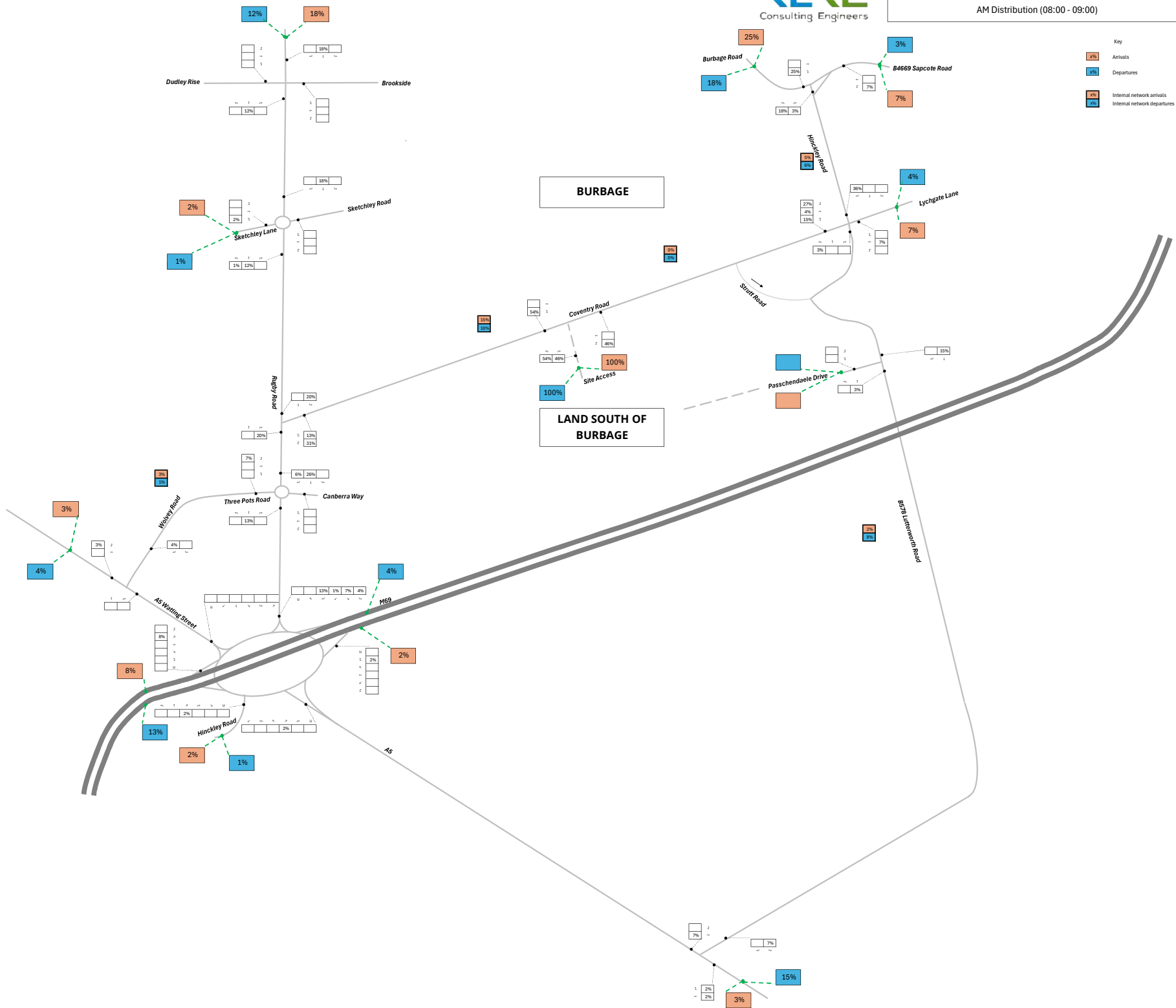
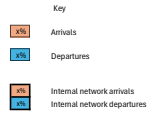
- M69 Junction 1 Eastbound Off-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road
- M69 Junction 1 Eastbound On-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road
- M69 Junction 1 Westbound On-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road
- M69 Junction 1 Westbound Off-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road

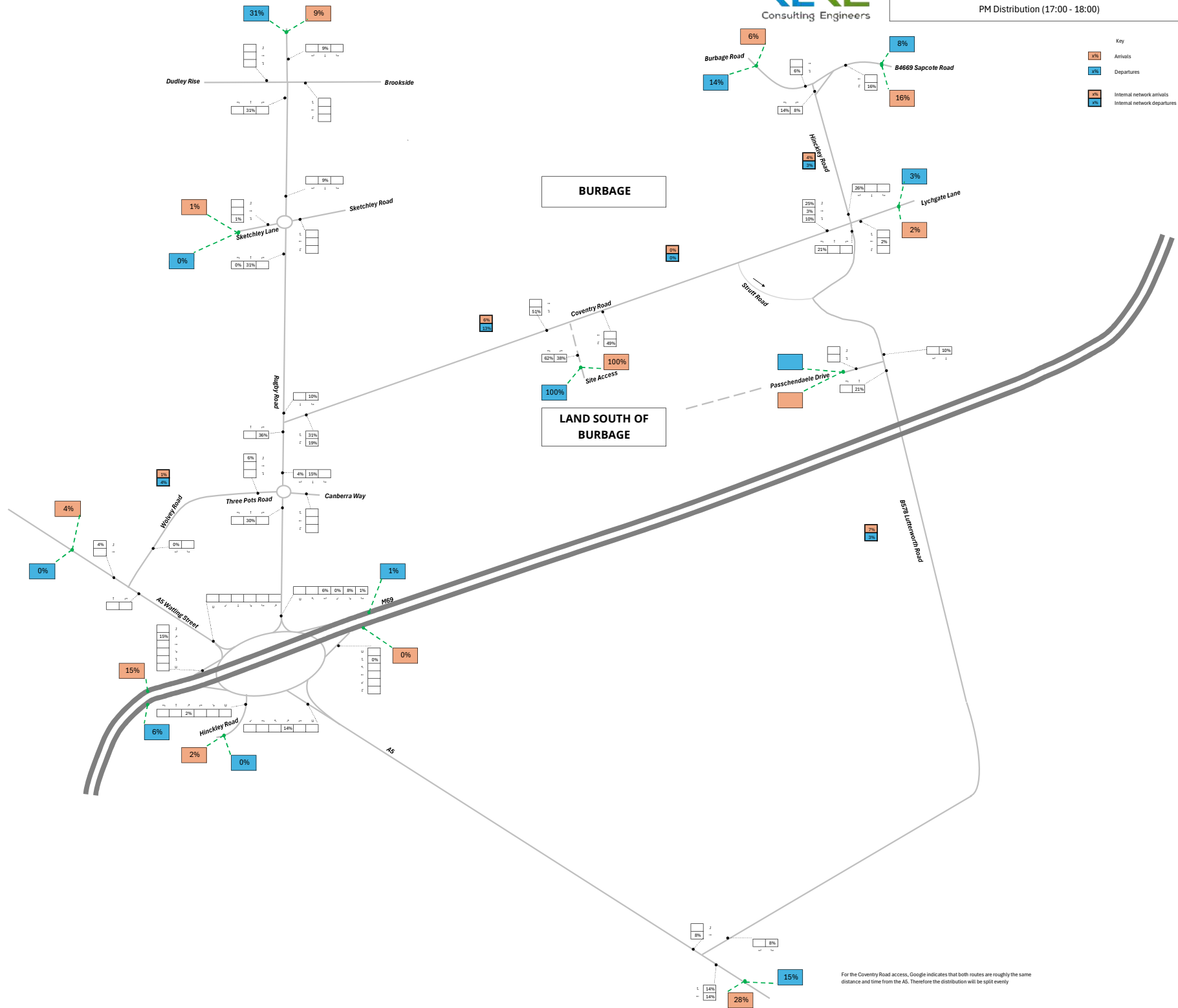
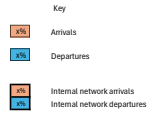


Route Choice Assignment

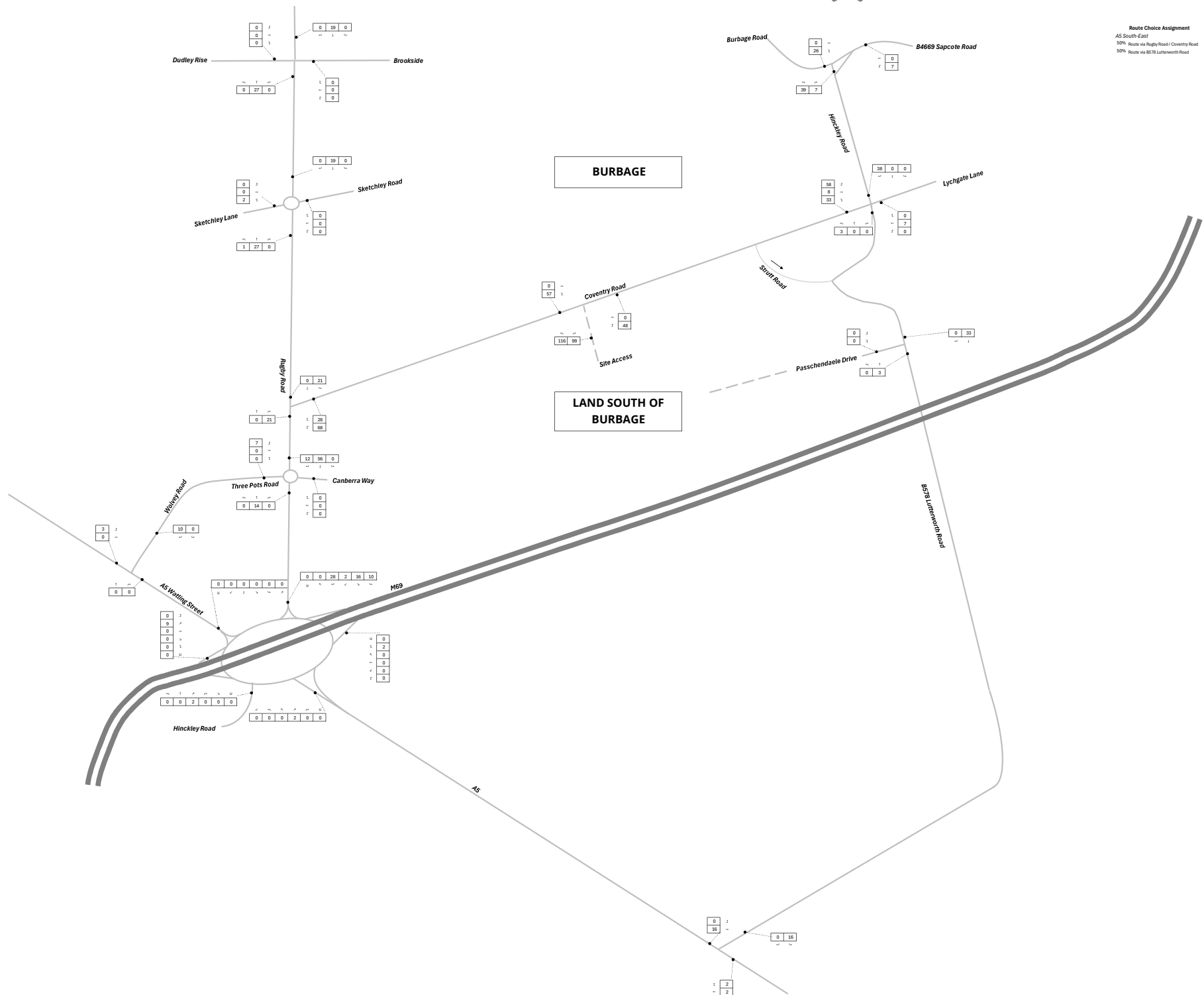
- M69 Junction 1 Eastbound Off-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road
- M69 Junction 1 Eastbound On-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road
- M69 Junction 1 Westbound On-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road
- M69 Junction 1 Westbound Off-Slip**
50% Route via Ragby Road / Coventry Road
50% Route via B578 Lutworth Road







Route Choice Assignment
AS South-East
50% Route via Rugby Road / Coventry Road
50% Route via B578 Lutworth Road





Care Home Trip Distribution - Gravity Model

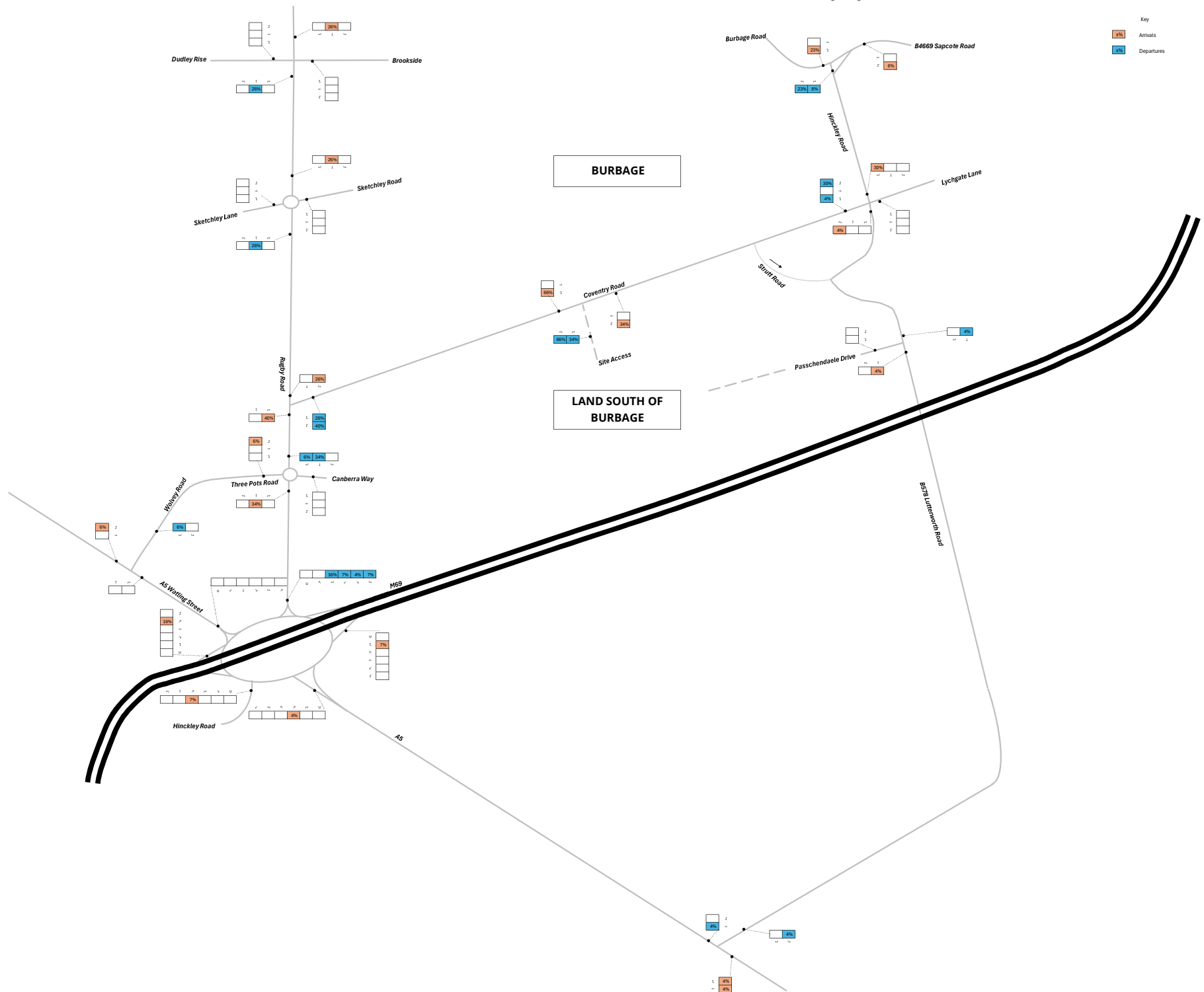
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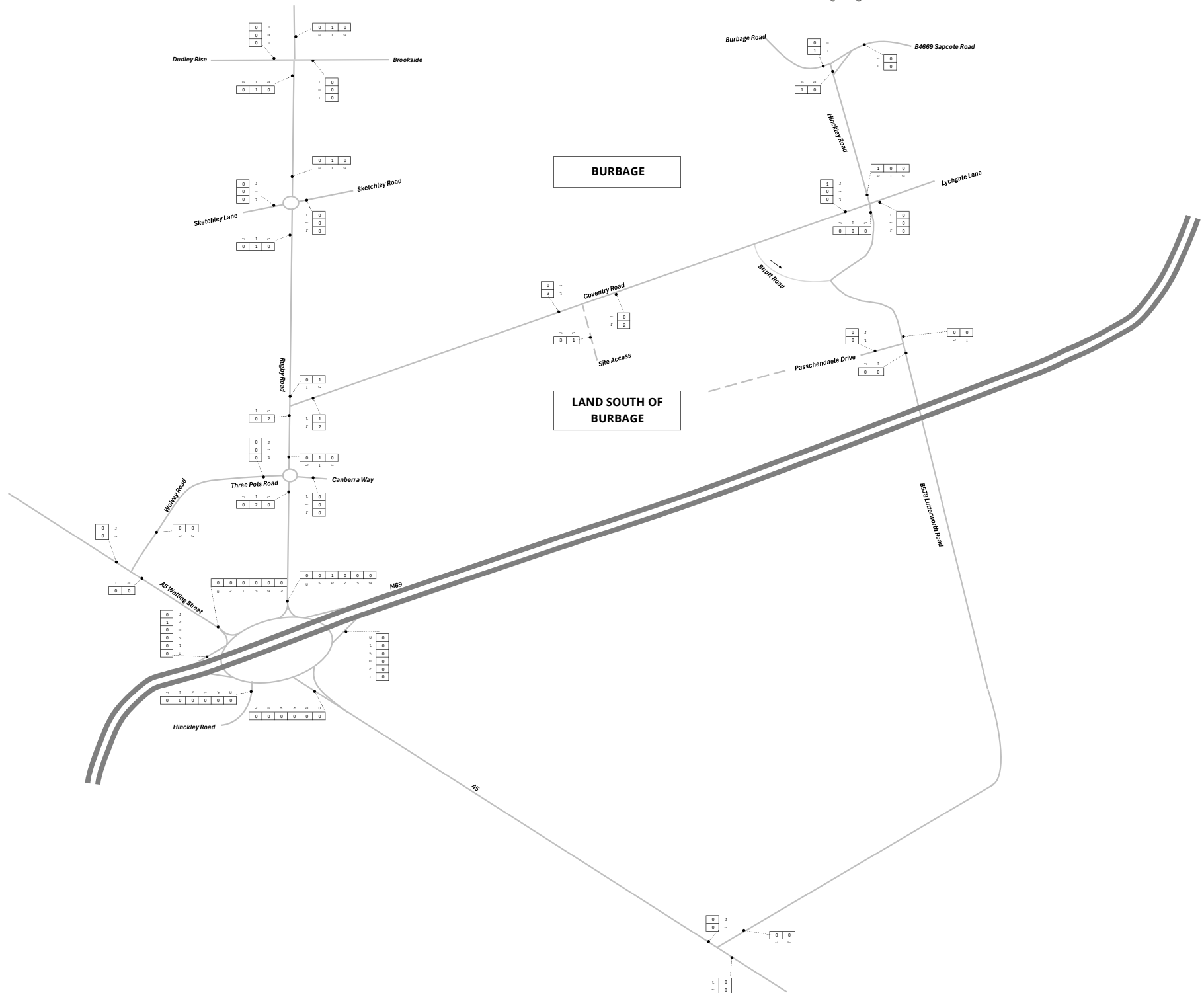
NOMIS (BUA inc Subdivision)

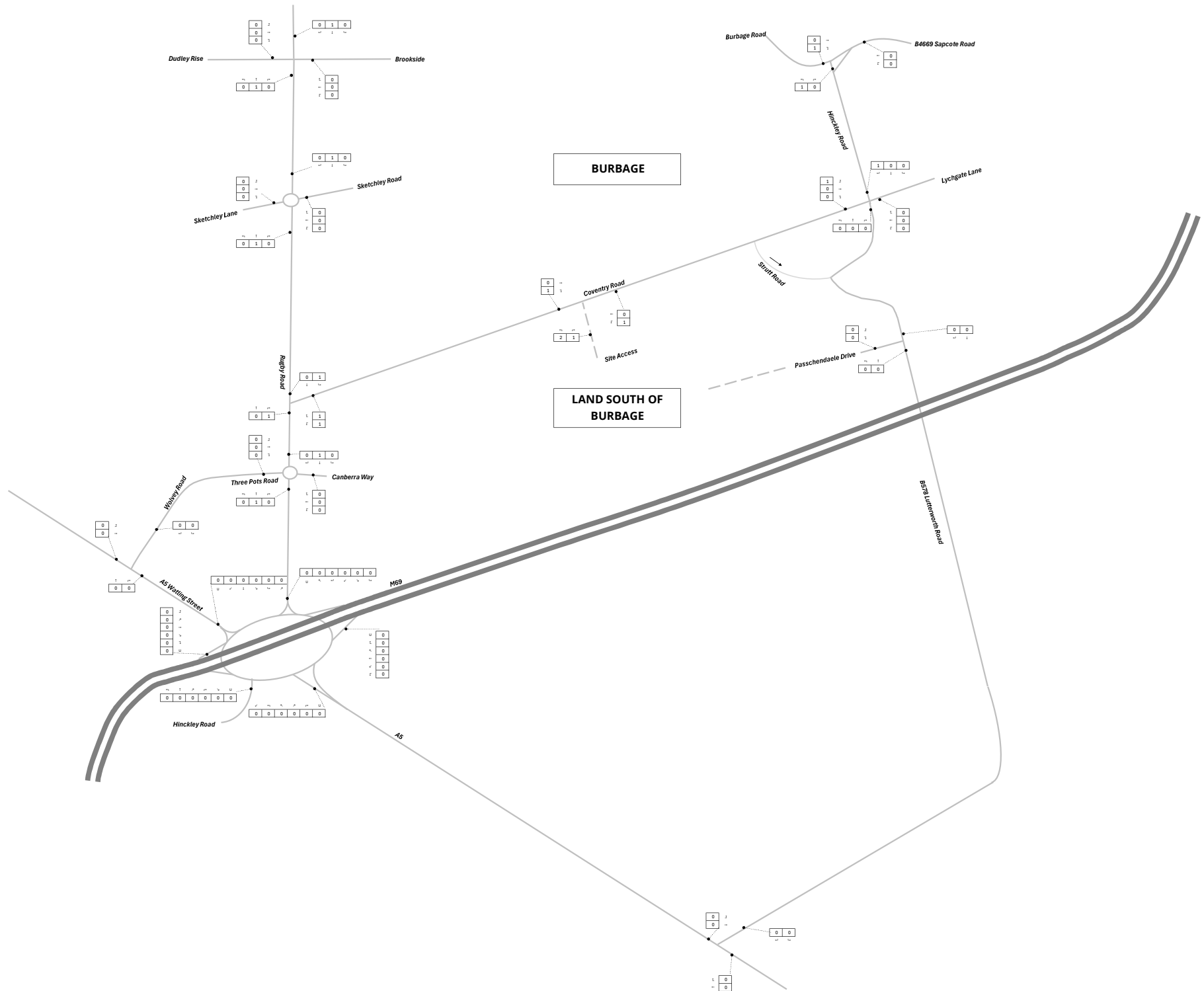
Locations	Population	Distance (km)	Calculation	Distribution	Route	Proportion
Atherstone	11,259	14.4	54.1	0.6%	A5 North-West	0.6%
Bedworth	31,332	9.1	381.7	4.2%	A5 North-West; M69 South-West; Hinckley Road	1.4%
Bulkington	6,146	6.9	129.5	1.4%	Hinckley Road	1.4%
Coalville	37,661	22.5	74.5	0.8%	Rugby Road; M69 North-East	0.4%
Coventry	345,328	16.3	1304.5	14.4%	M69 South-West	14.4%
Earl Shilton	10,047	6.7	223.8	2.5%	B4669 Burbage Road	2.5%
Hinckley	34,202	3.1	3652.7	40.4%	B4669 Burbage Road; Rugby Road	20.2%
Leicester	368,600	19.3	989.6	11.0%	B4669 Sapcote Road; M69 North-East	5.5%
Lutterworth	10,833	12.9	65.3	0.7%	A5 South-East	0.7%
Narborough	8,448	11.6	62.9	0.7%	B4669 Sapcote Road	0.7%
Nuneaton	94,634	7.7	1600.3	17.7%	A5 South-East; A5 North-West; Rugby Road; Hinckley Road	4.4%
Rugby	78,117	17.8	247.1	2.7%	A5 South-East	2.7%
Sapcote	3,260	5.3	117.8	1.3%	B4669 Sapcote Road	1.3%
Syston	12,804	27.4	17.0	0.2%	B4669 Sapcote Road; M69 North-East	0.1%
Tamworth	78,653	26.1	115.7	1.3%	Rugby Road; M69 North-East	0.6%
Total	1,131,324	207	9,036	100.0%		

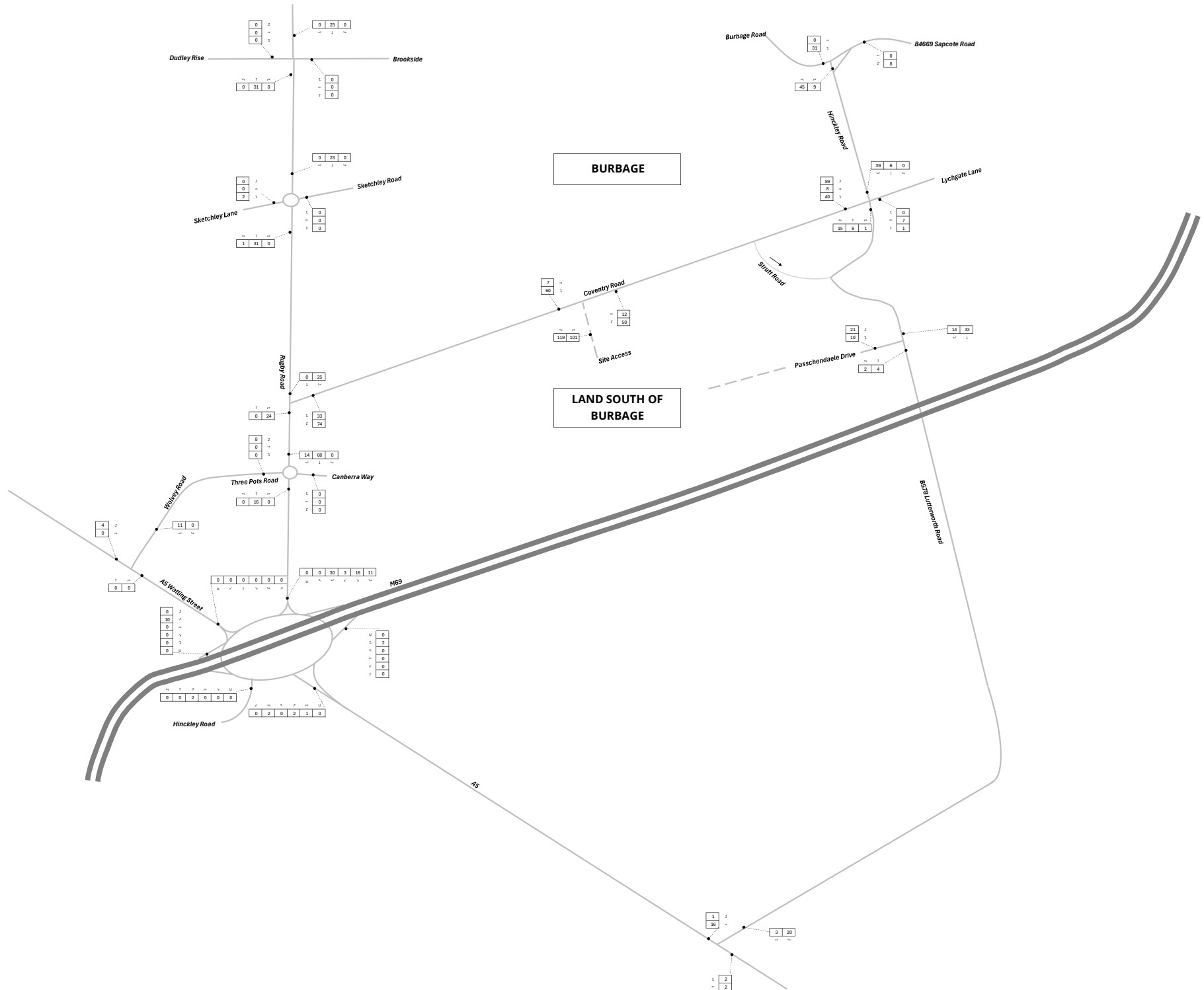
Link	Dist
A5 North-West	6.4%
A5 South-East	7.9%
M69 North-East	6.6%
M69 South-West	15.8%
B4669 Sapcote Road	7.6%
B4669 Burbage Road	22.7%
Hinckley Road	7.3%
B4109 Rugby Road	25.7%
Total	100.0%

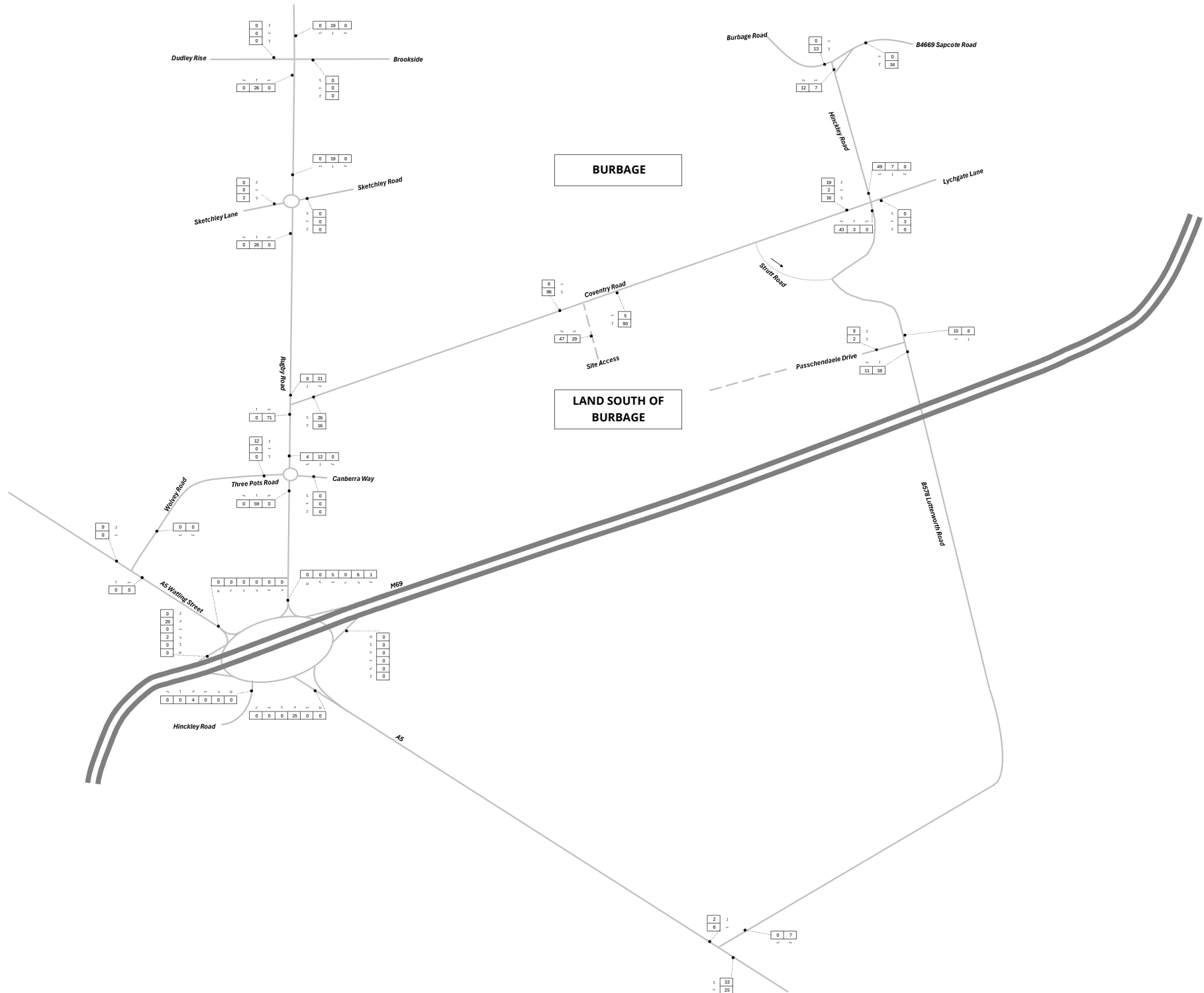
Key
■ Arrivals
■ Departures





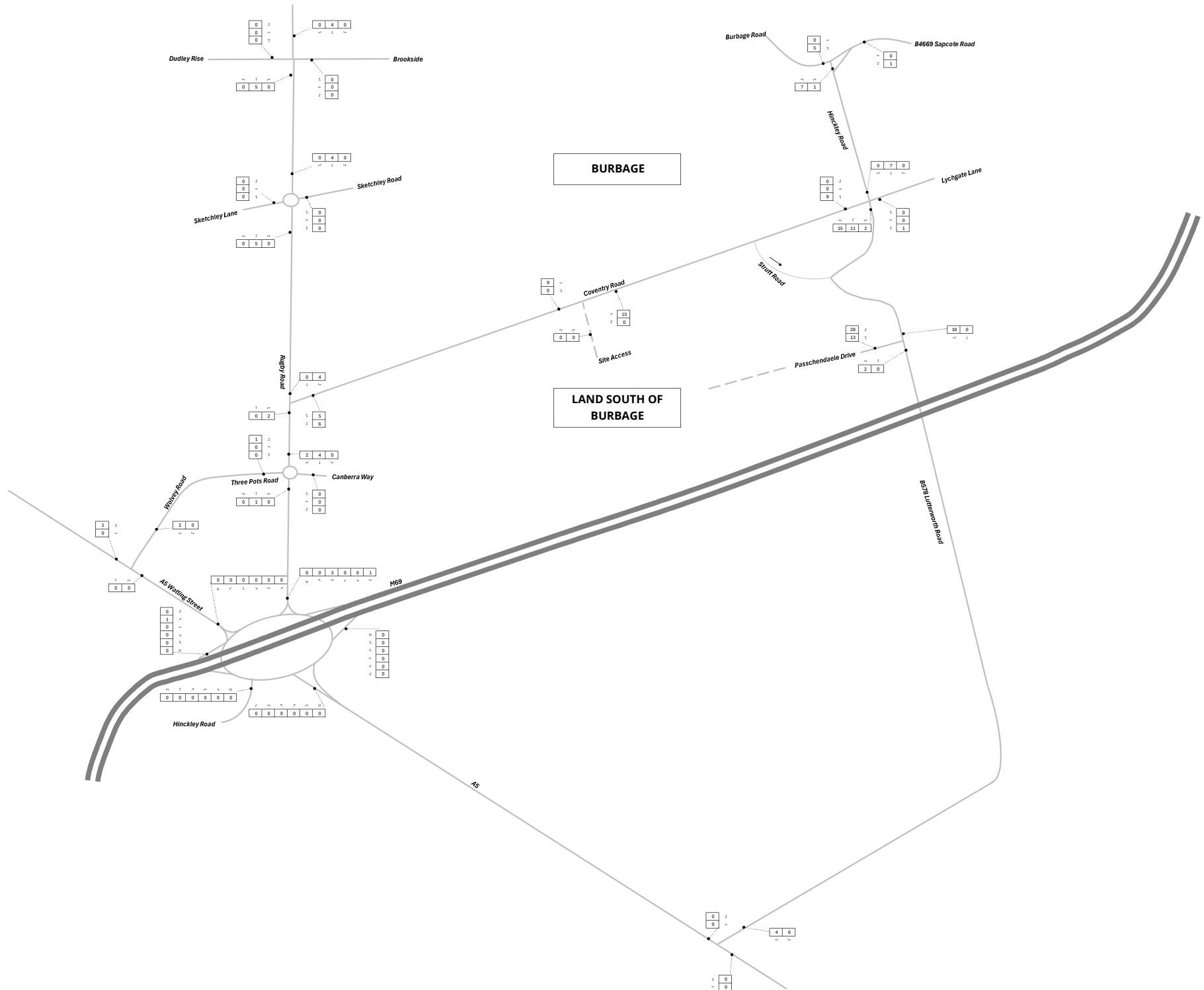


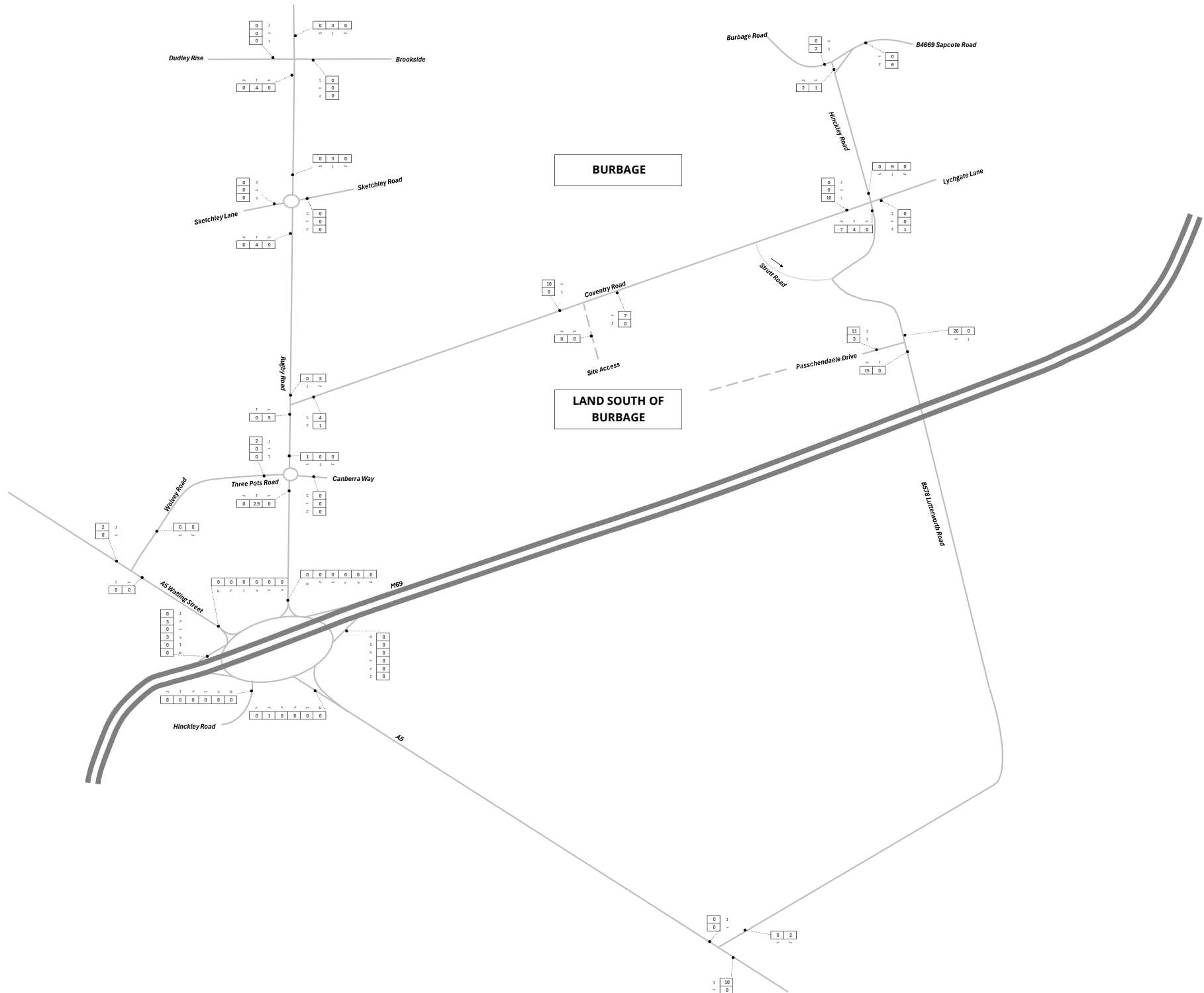


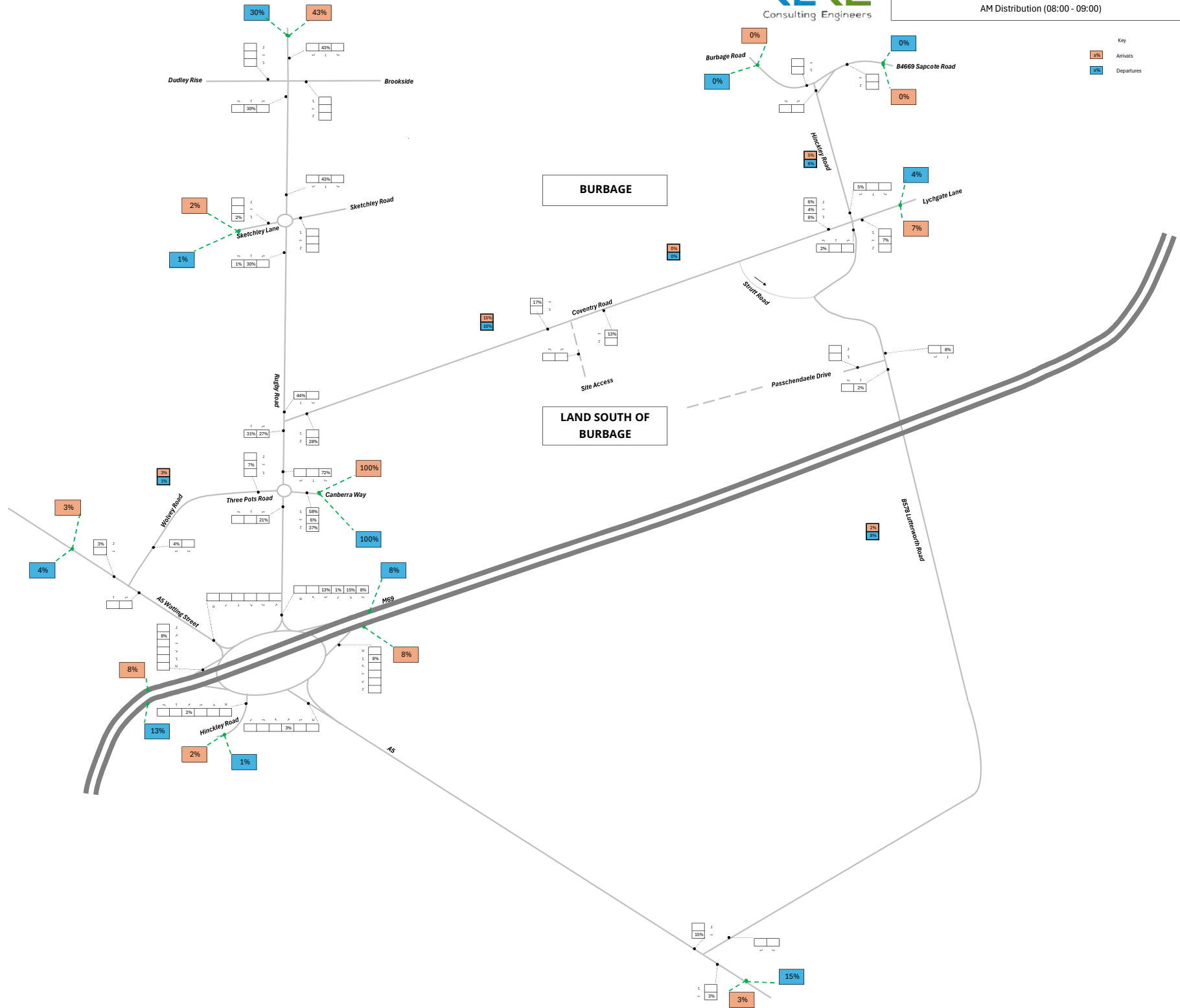


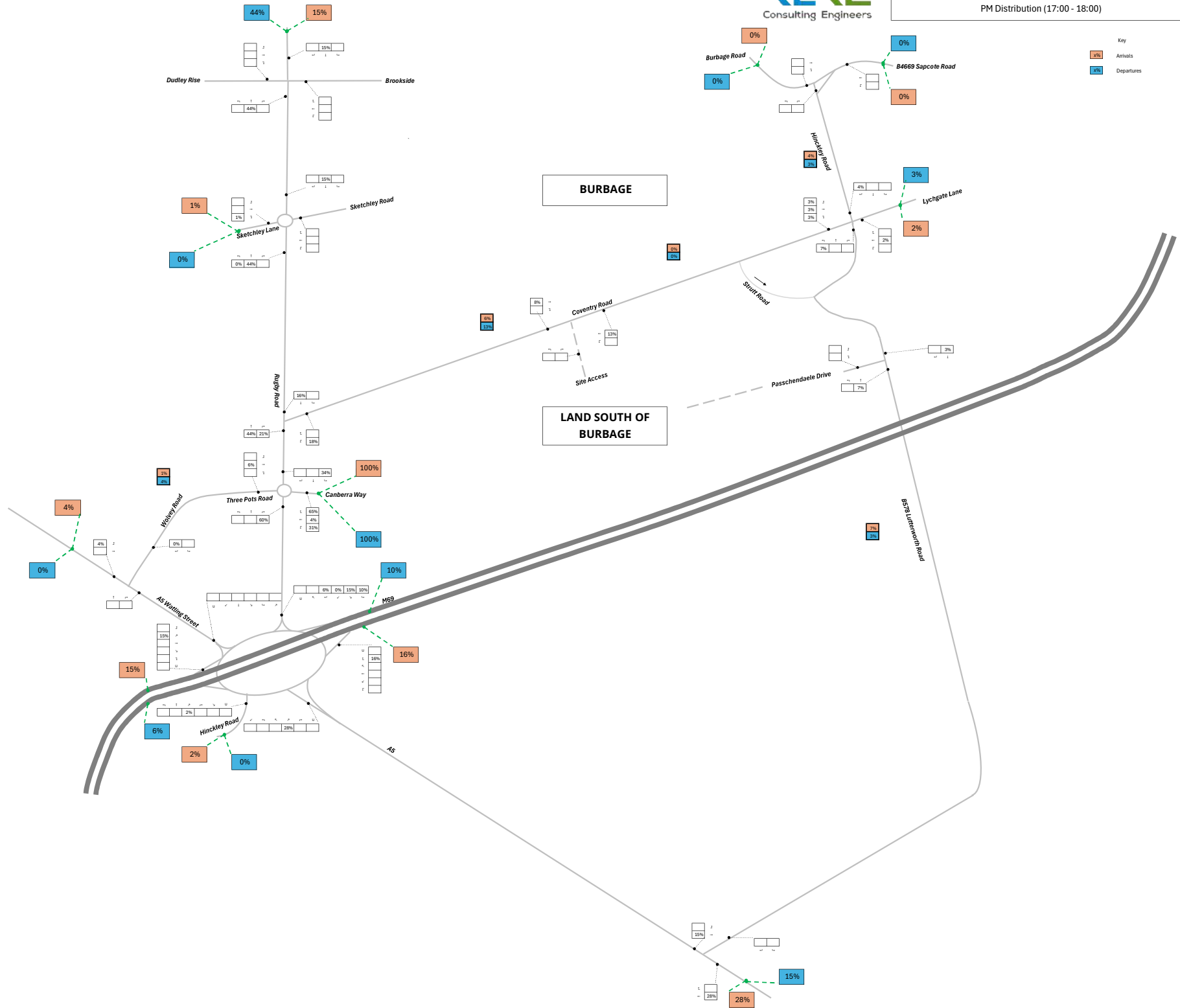


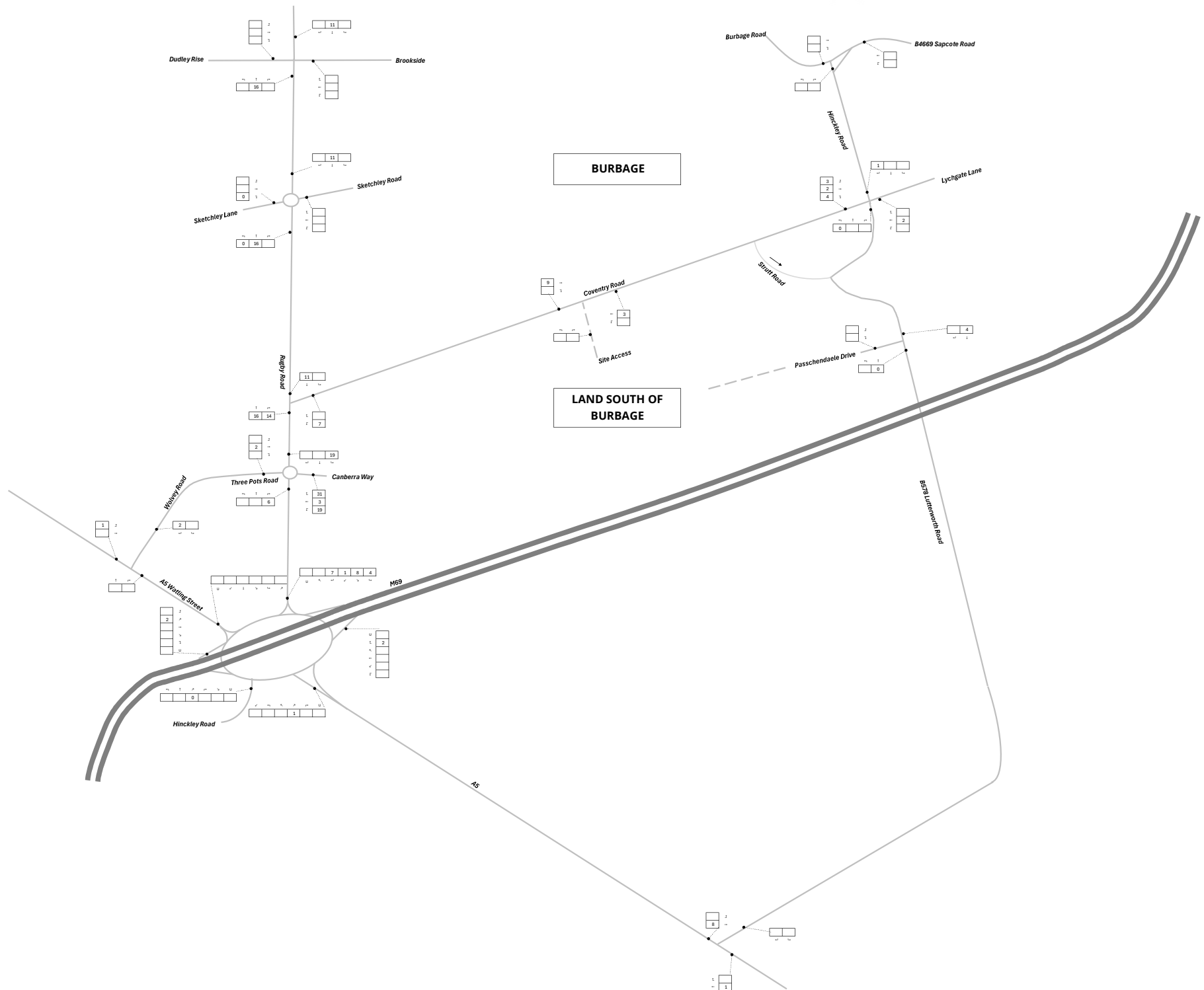


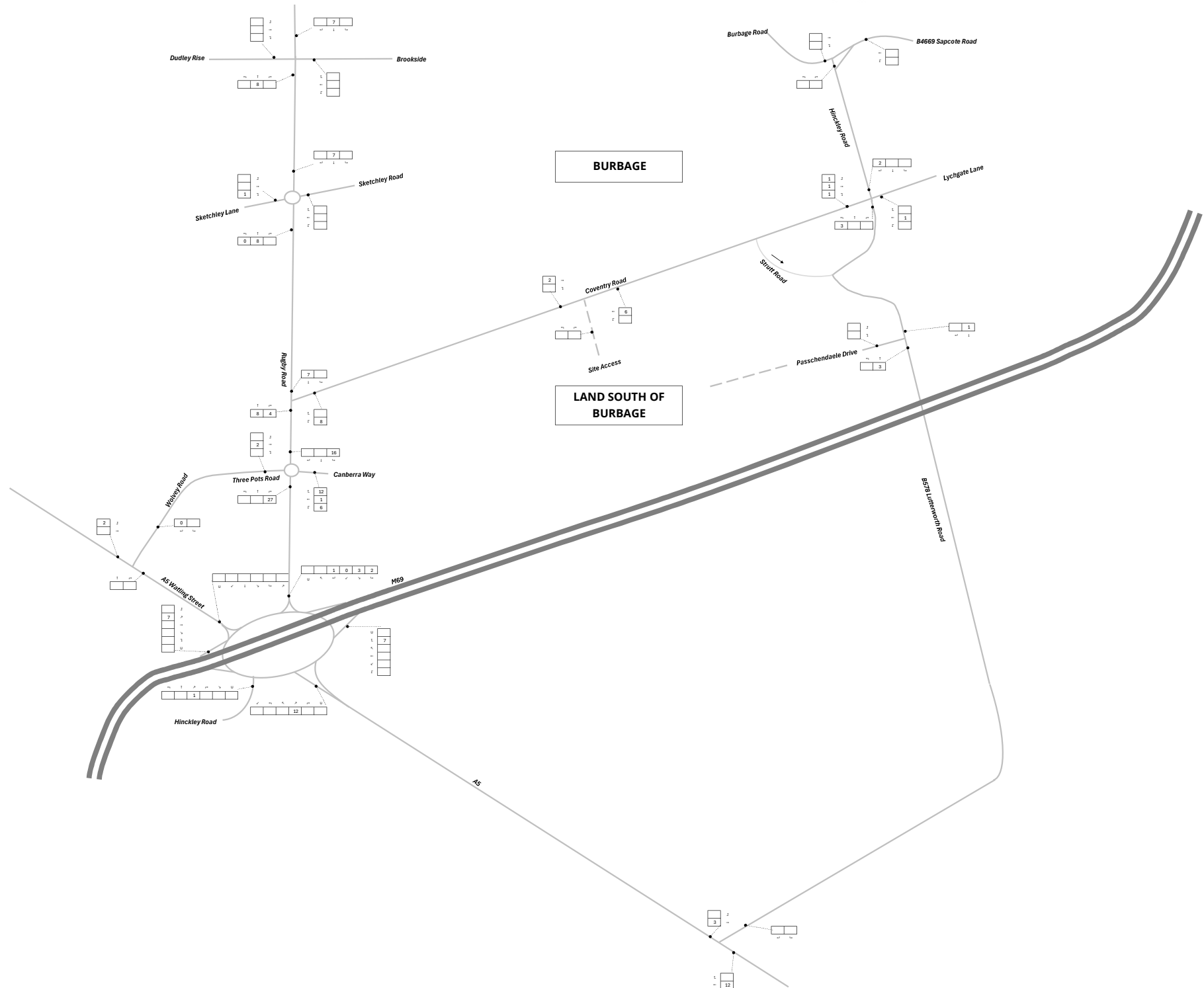


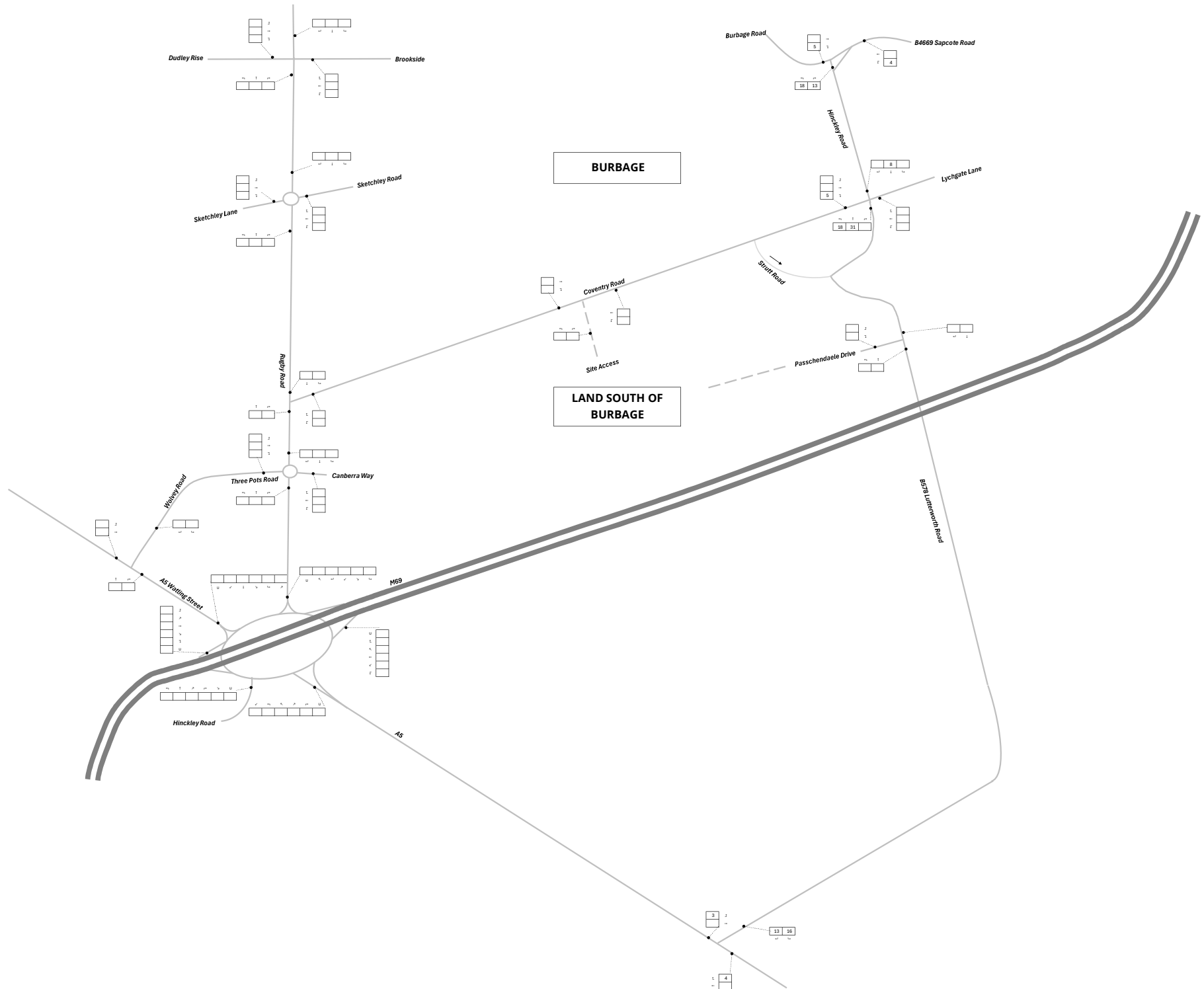


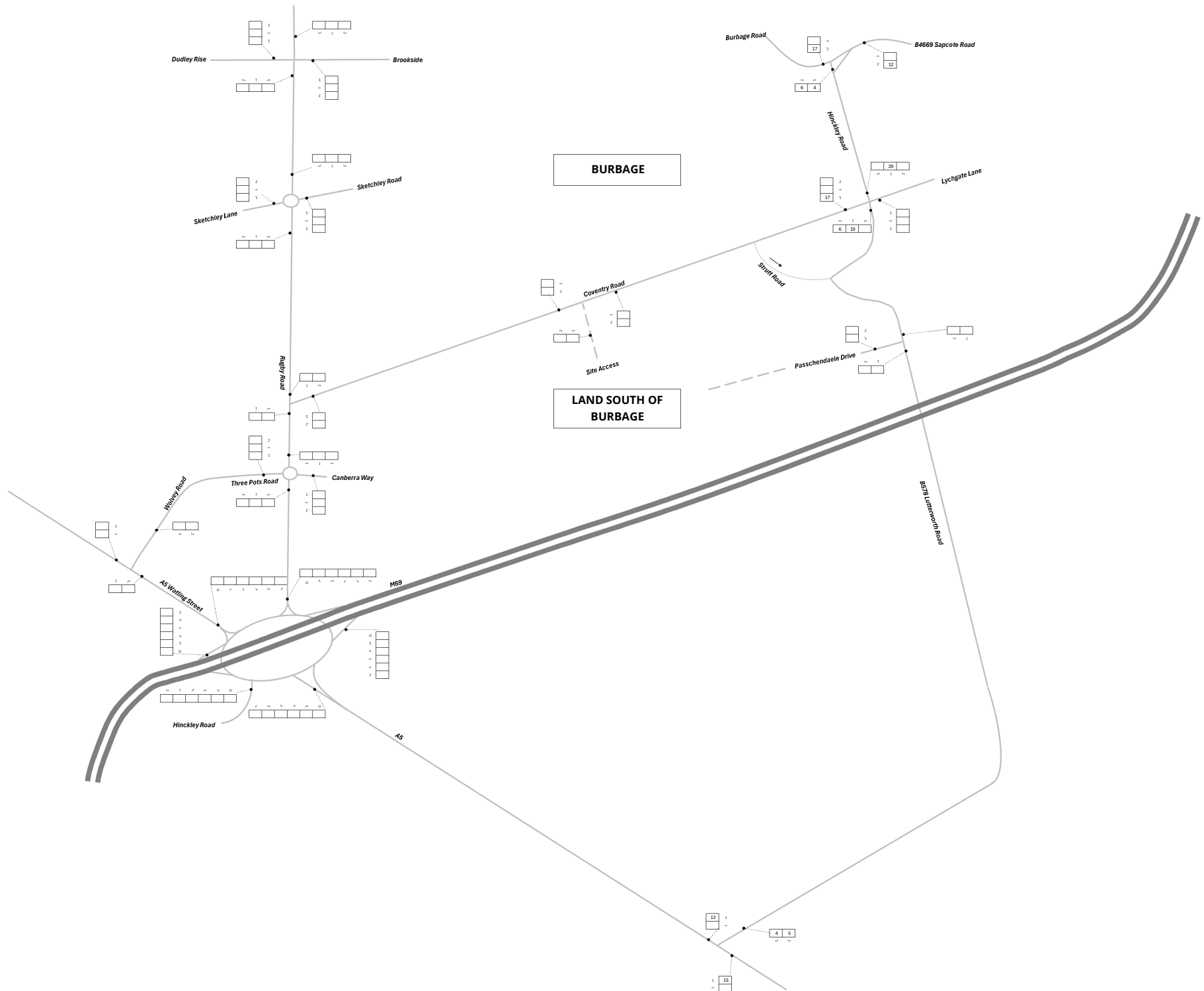












Appendix R: Junction Capacity Modelling Traffic Flows

PCUs	A	B	C	D	TOTAL
A	0	167	539	3	708
B	243	0	162	1	426
C	431	123	0	2	557
D	4	2	2	0	8
TOTAL	678	292	723	6	1699

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise

PCUs	A	B	C	TOTAL
A	0	52	822	875
B	37	0	305	342
C	516	149	0	665
TOTAL	553	201	1127	1882

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)

PCUs	A	B	C	D	E	F	TOTAL
A	0	72	105	0	254	37	468
B	46	0	14	236	499	134	923
C	139	0	0	12	86	111	357
D	0	137	10	10	398	226	780
E	311	455	71	325	0	14	1176
F	105	199	186	596	44	0	1129
TOTAL	602	872	385	1173	1281	522	4634

Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach

Key

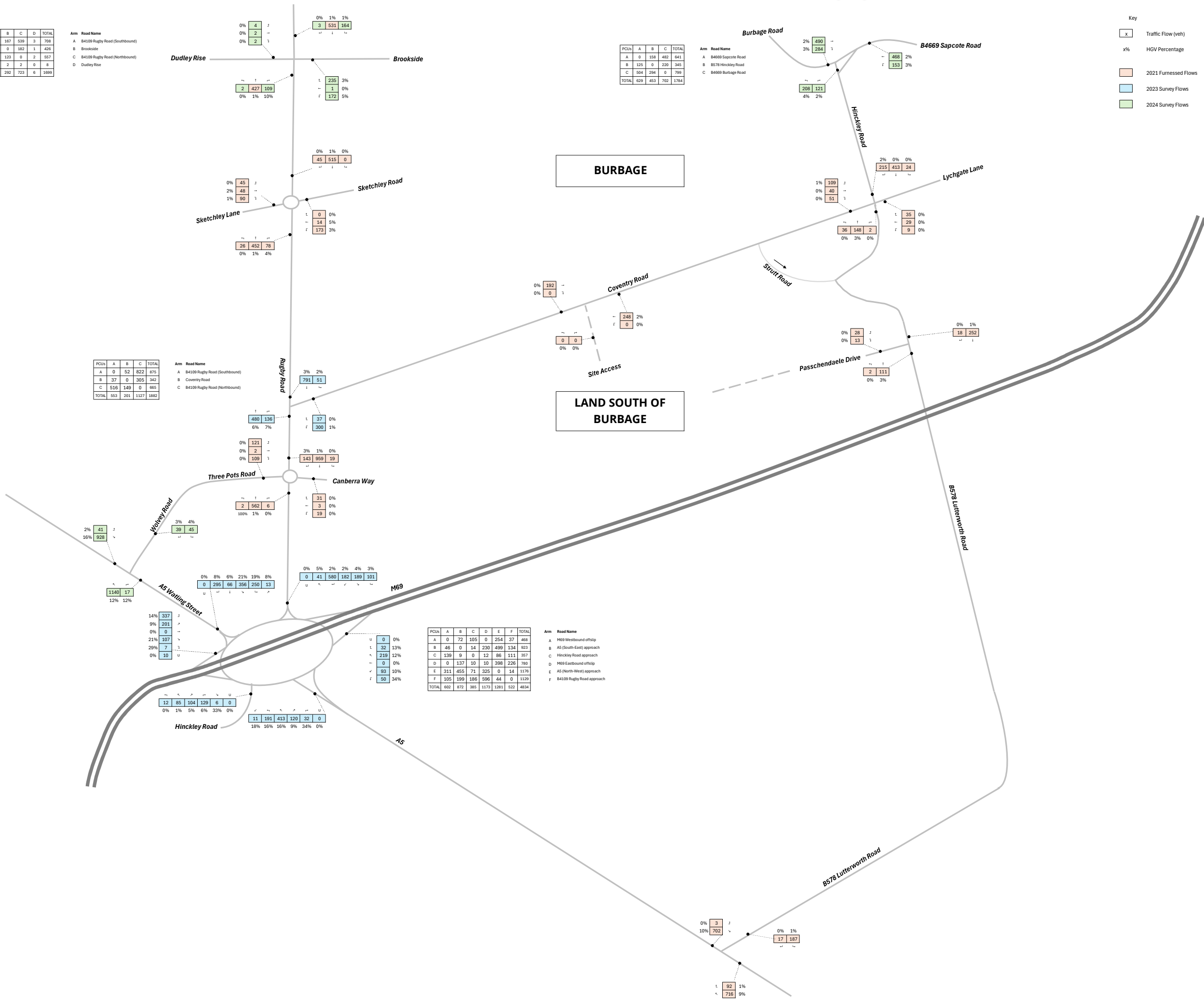
x Traffic Flow (veh)

x% HGV Percentage

2021 Furnessed Flows

2023 Survey Flows

2024 Survey Flows



Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach

Note: All junctions use the growth from the PRTM with the exception of the M69 J1 which uses TEMPro v8.1 growth factors

PCUs	A	B	C	D	TOTAL
A	0	181	724	3	908
B	301	0	161	1	462
C	659	101	0	2	761
D	4	2	2	0	8
TOTAL	963	283	827	6	2079

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise

PCUs	A	B	C	TOTAL
A	0	102	907	1009
B	80	0	394	474
C	684	156	0	840
TOTAL	764	258	1302	2324

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)

PCUs	A	B	C	D	E	F	TOTAL
A	0	74	108	0	262	40	485
B	48	0	14	237	519	139	949
C	141	9	0	12	87	114	364
D	0	141	10	10	410	243	814
E	318	465	73	333	0	15	1204
F	117	218	191	634	44	0	1383
TOTAL	624	908	396	1208	1314	552	5619

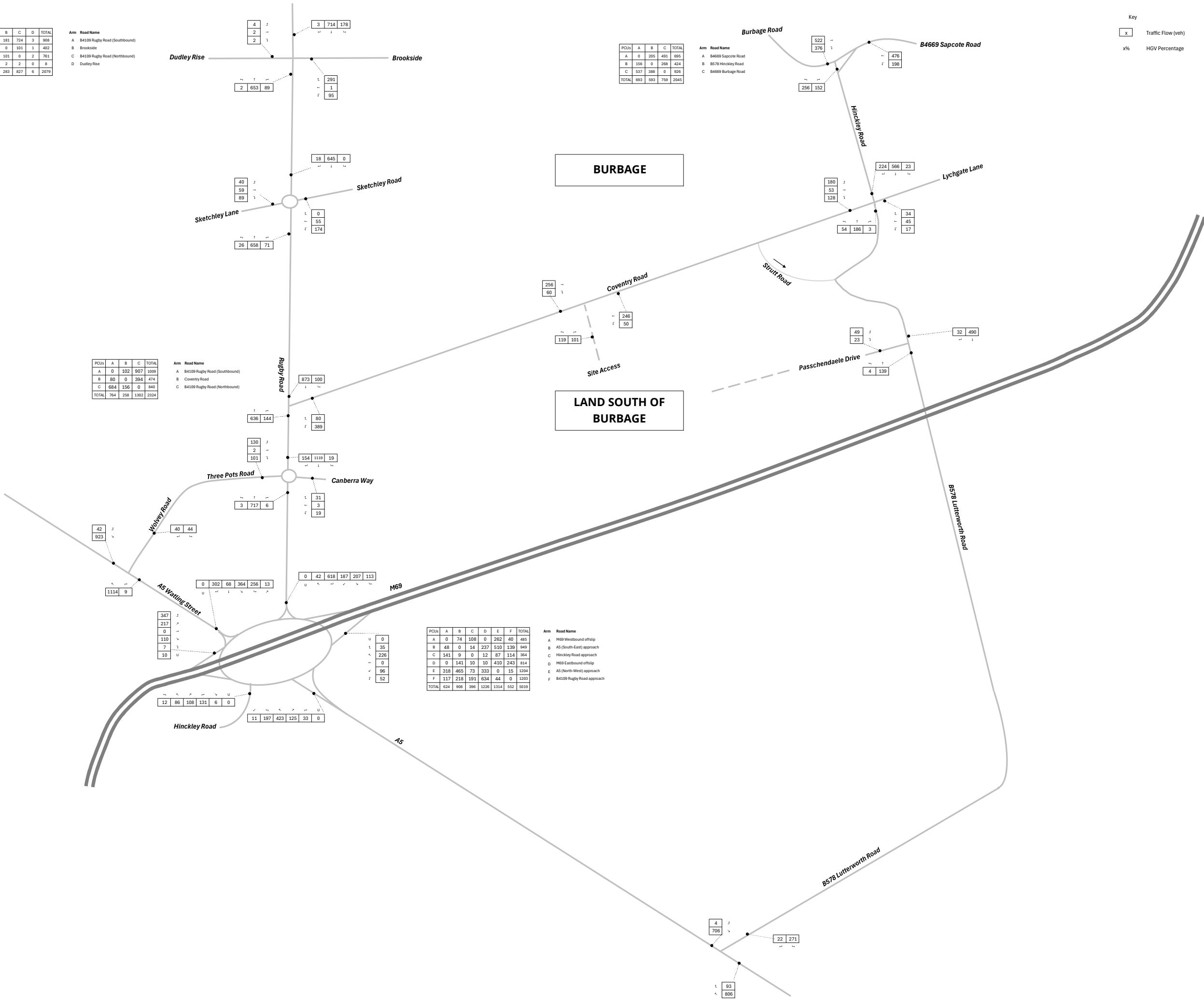
Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach

PCUs	A	B	C	TOTAL
A	0	205	491	695
B	156	0	238	424
C	537	388	0	926
TOTAL	693	593	729	2045

Arm	Road Name
A	B4669 Sapcote Road
B	B578 Hinckley Road
C	B4669 Burbage Road

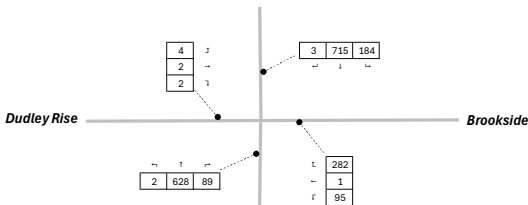
Key

	Traffic Flow (veh)
	HGV Percentage



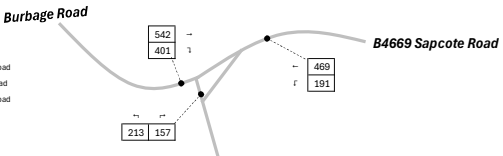
PCUs	A	B	C	D	TOTAL
A	0	187	725	3	915
B	291	0	161	1	393
C	634	101	0	2	737
D	4	2	2	0	8
TOTAL	929	290	828	6	2053

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise



PCUs	A	B	C	TOTAL
A	0	197	483	681
B	162	0	225	387
C	558	416	0	974
TOTAL	720	613	708	2041

Arm	Road Name
A	B4669 Sapcote Road
B	B578 Hinckley Road
C	B4669 Burbage Road



Key

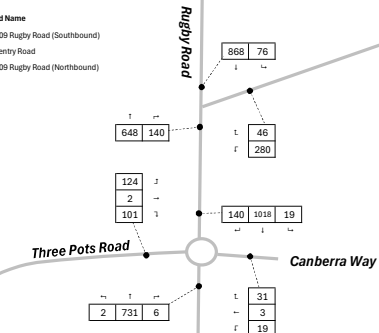
x Traffic Flow (veh)

x% HGV Percentage

Note: All junctions use the growth from the PRTH with the exception of the M69 J1 which uses TEMPro v8.1 growth factors

PCUs	A	B	C	TOTAL
A	0	78	902	980
B	46	0	285	331
C	697	153	0	851
TOTAL	743	231	1187	2161

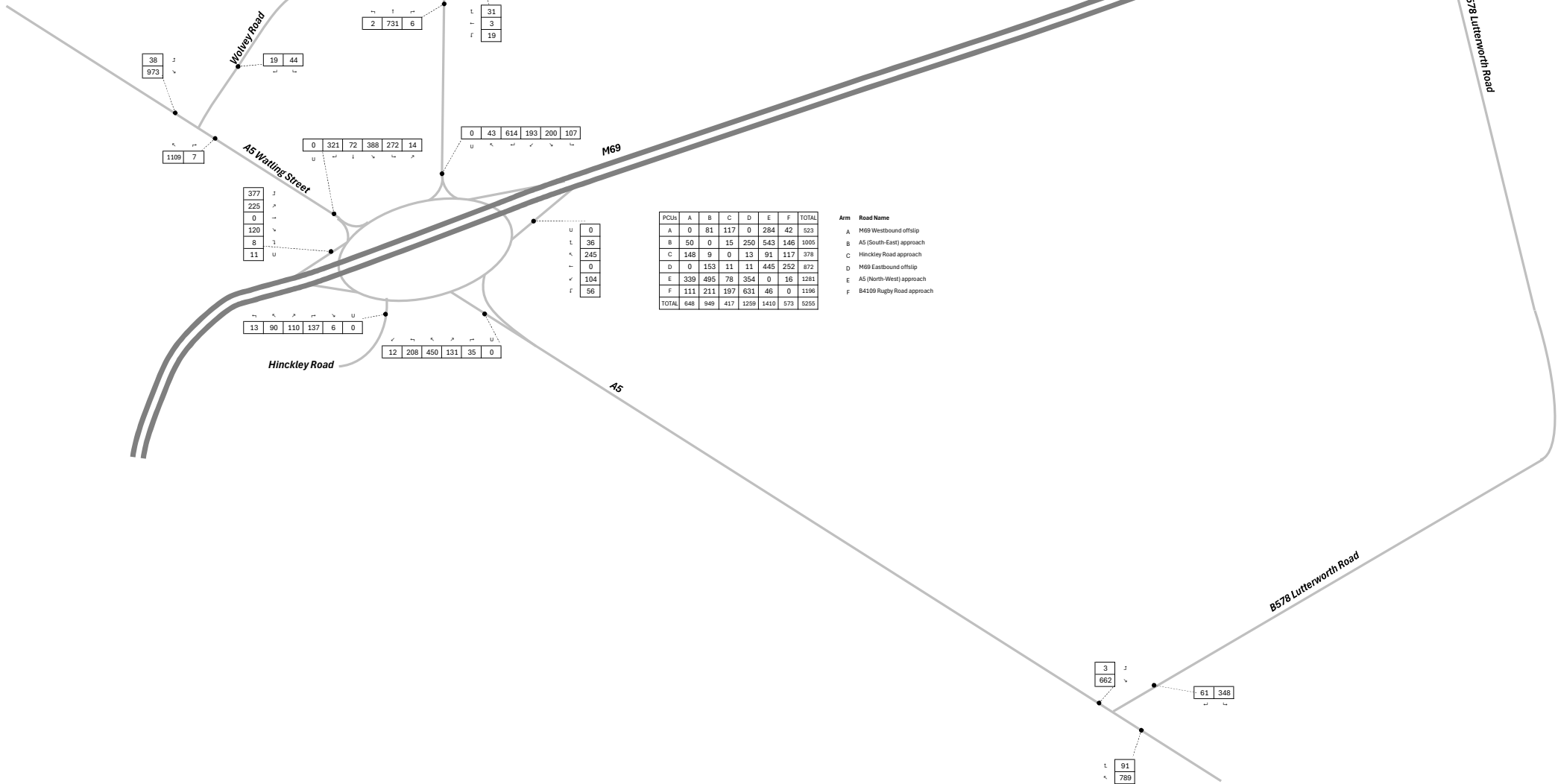
Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)



LAND SOUTH OF
BURBAGE

PCUs	A	B	C	D	E	F	TOTAL
A	0	81	117	0	284	42	523
B	50	0	15	250	543	146	1005
C	148	0	0	13	91	117	379
D	0	153	11	11	445	252	872
E	339	495	78	354	0	16	1281
F	111	211	197	631	46	0	1196
TOTAL	648	949	417	1208	1418	573	5255

Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach



PCUs	A	B	C	D	TOTAL
A	0	187	748	3	938
B	291	0	101	1	393
C	666	101	0	2	768
D	4	2	2	0	8
TOTAL	961	290	851	6	2104

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise

PCUs	A	B	C	TOTAL
A	0	103	902	1005
B	79	0	359	438
C	697	178	0	875
TOTAL	776	281	1261	2318

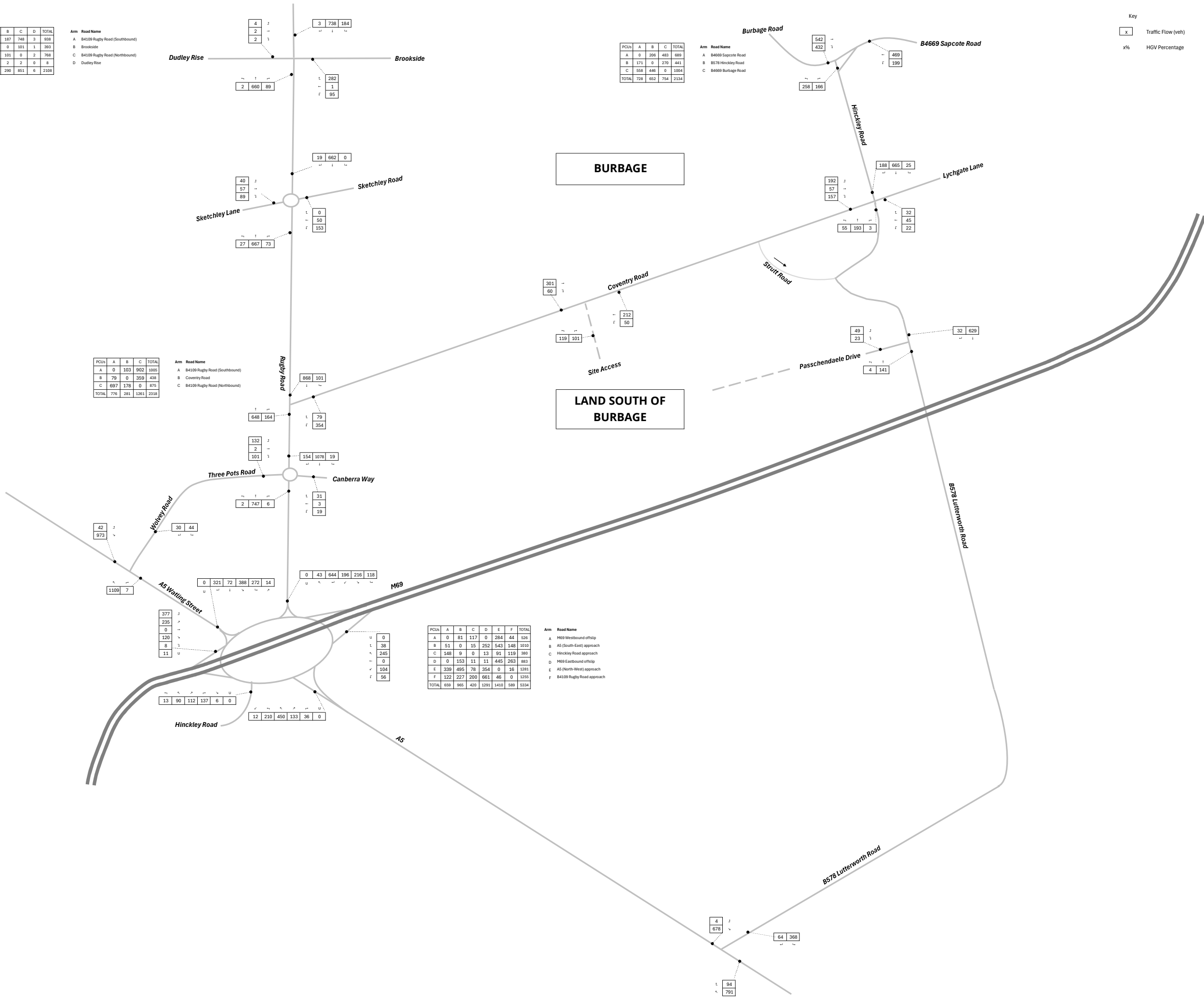
Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)

PCUs	A	B	C	D	E	F	TOTAL
A	0	81	117	0	284	44	526
B	51	0	15	252	543	148	1010
C	148	0	0	13	91	119	360
D	0	153	11	11	445	263	883
E	339	495	78	354	0	16	1281
F	122	227	200	661	46	0	1356
TOTAL	659	965	420	1291	1410	589	5334

Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach

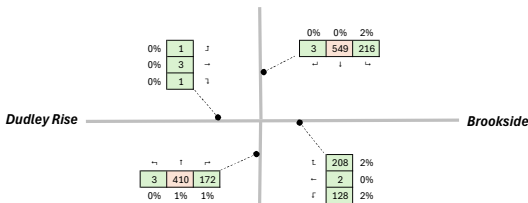
Key

	Traffic Flow (veh)
	HGV Percentage



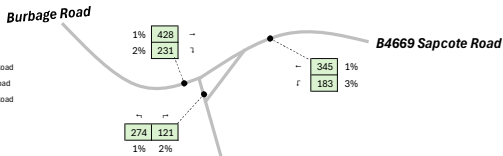
PCUs	A	B	C	D	TOTAL
A	0	221	552	3	776
B	213	0	131	2	346
C	413	173	0	3	589
D	1	3	1	0	5
TOTAL	627	398	683	6	1714

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise



PCUs	A	B	C	TOTAL
A	0	189	348	537
B	124	0	277	402
C	423	236	0	659
TOTAL	557	425	624	1606

Arm	Road Name
A	B4669 Sapcote Road
B	B578 Hinckley Road
C	B4669 Burbage Road



Key

x Traffic Flow (veh)

x% HGV Percentage

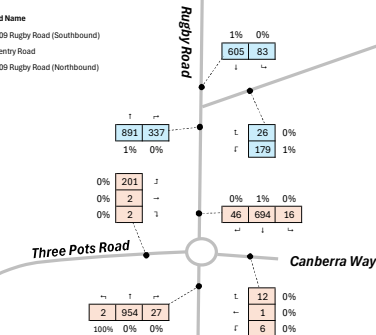
2021 Furnessed Flows

2023 Survey Flows

2024 Survey Flows

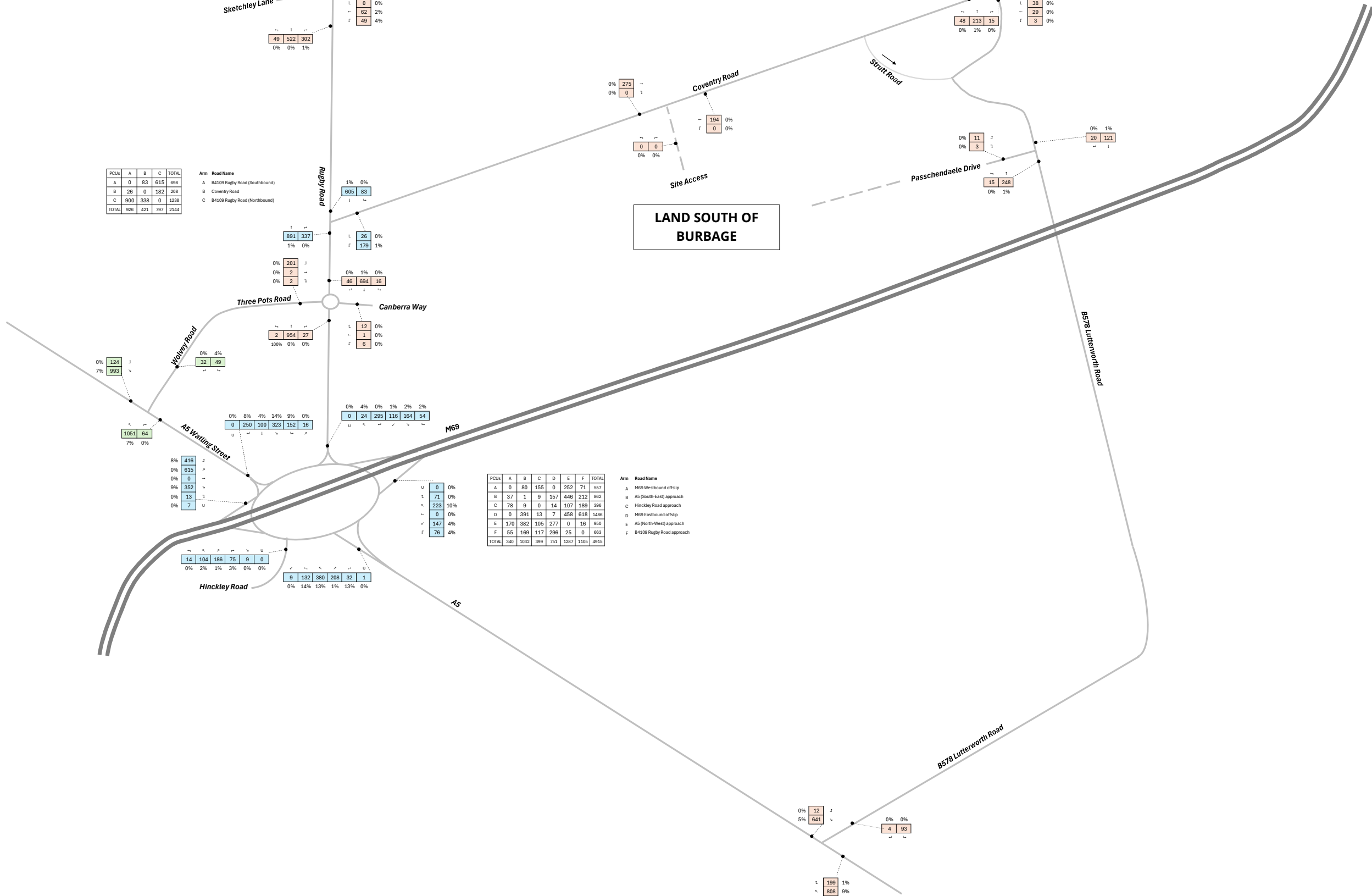
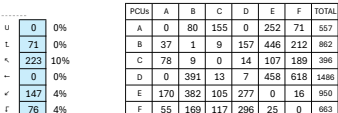
PCUs	A	B	C	TOTAL
A	0	83	615	698
B	26	0	182	208
C	900	338	0	1238
TOTAL	926	421	797	2144

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)



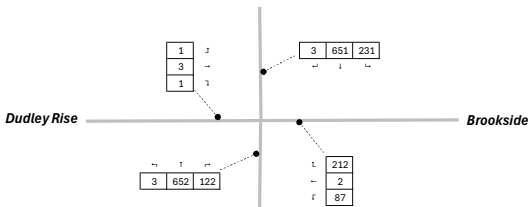
PCUs	A	B	C	D	E	F	TOTAL
A	0	80	155	0	252	71	557
B	37	1	9	157	446	212	862
C	78	0	0	14	107	189	386
D	0	391	13	7	458	618	1486
E	170	382	105	277	0	16	950
F	55	169	117	296	25	0	663
TOTAL	340	1032	389	761	1287	1105	4915

Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach



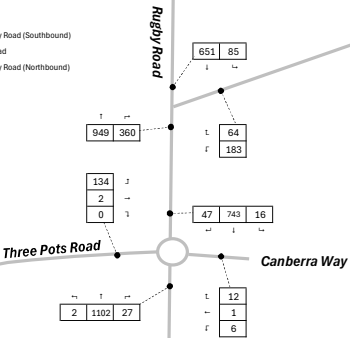
PCUs	A	B	C	D	TOTAL
A	0	237	654	3	894
B	217	0	89	2	308
C	656	123	0	3	782
D	1	3	1	0	5
TOTAL	875	362	744	6	1989

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise



PCUs	A	B	C	TOTAL
A	0	85	662	747
B	64	0	186	250
C	959	361	0	1320
TOTAL	1023	446	848	2317

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)



PCUs	A	B	C	TOTAL
A	429	634	0	1063
B	13	7	0	20
C	0	0	0	0
TOTAL	442	641	0	1083

Hinckley Road

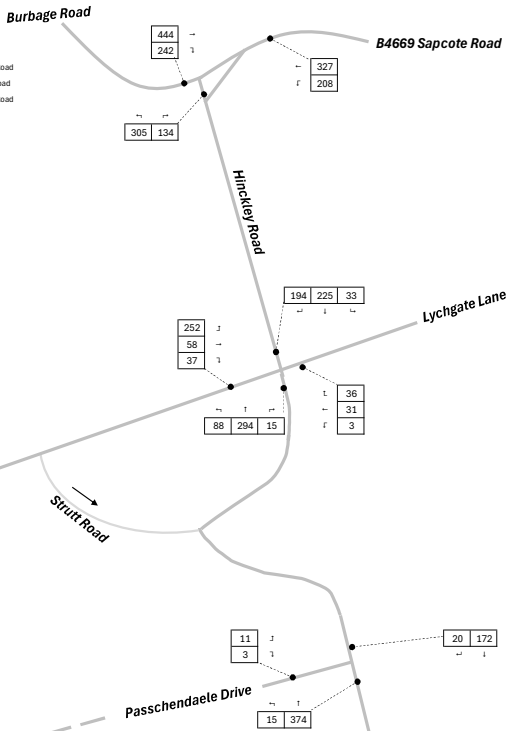
PCUs	A	B	C	TOTAL
A	14	105	188	307
B	76	9	0	85
C	0	0	0	0
TOTAL	90	114	188	392

PCUs	A	B	C	D	E	F	TOTAL
A	0	82	160	0	259	73	575
B	38	1	9	160	457	217	863
C	79	0	0	14	106	191	481
D	0	403	13	7	472	637	1533
E	174	391	108	284	0	16	973
F	56	171	119	300	26	0	672
TOTAL	347	1058	489	766	1322	1135	5637

Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach

PCUs	A	B	C	TOTAL
A	0	215	329	545
B	137	0	338	445
C	449	247	0	697
TOTAL	586	463	637	1686

Arm	Road Name
A	B4669 Sapcote Road
B	B578 Hinckley Road
C	B4669 Burbage Road



Key

X Traffic Flow (veh)

x% HGV Percentage

Note: All junctions use the growth from the PRTM with the exception of the M69 J1 which uses TEMPro v8.1 growth factors

BURBAGE

LAND SOUTH OF
BURBAGE

B578 Lutterworth Road

PCUs	A	B	C	D	TOTAL
A	0	237	677	3	917
B	217	0	89	2	308
C	683	123	0	3	809
D	1	3	1	0	5
TOTAL	901	362	767	6	2036

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise

PCUs	A	B	C	TOTAL
A	0	106	662	768
B	90	0	201	292
C	959	432	0	1391
TOTAL	1049	538	864	2451

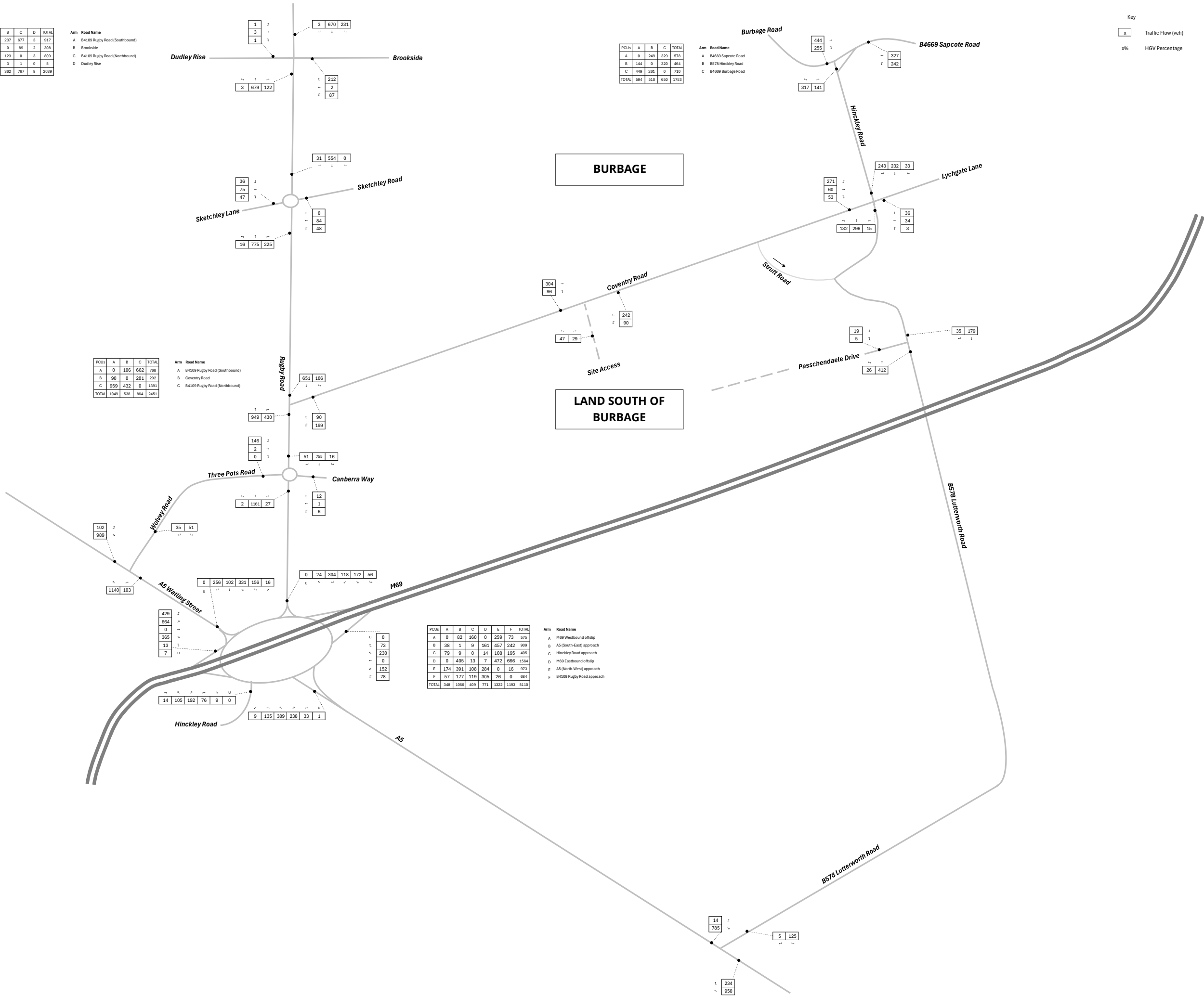
Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)

PCUs	A	B	C	D	E	F	TOTAL
A	0	82	160	0	259	73	575
B	38	1	9	161	457	242	909
C	79	0	0	14	106	195	405
D	0	405	13	7	472	666	1564
E	174	391	108	284	0	16	973
F	57	177	119	305	26	0	684
TOTAL	348	1066	489	771	1322	1193	5110

Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach

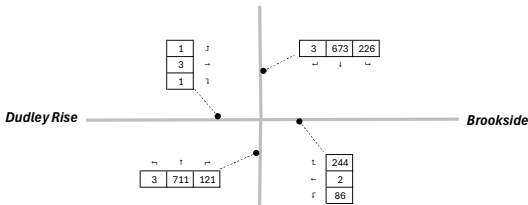
Key

	Traffic Flow (veh)
	HGV Percentage



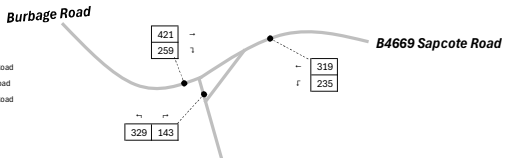
PCUs	A	B	C	D	TOTAL
A	0	231	676	3	911
B	250	0	88	2	340
C	716	122	0	3	841
D	1	3	1	0	5
TOTAL	967	356	765	6	2094

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise



PCUs	A	B	C	TOTAL
A	0	243	321	564
B	146	0	332	478
C	426	265	0	691
TOTAL	572	508	654	1734

Arm	Road Name
A	B4669 Sapcote Road
B	B578 Hinckley Road
C	B4669 Burbage Road



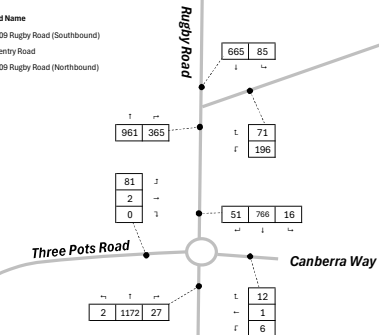
Key

 Traffic Flow (veh)
x% HGV Percentage

Note: All junctions use the growth from the PRTH with the exception of the M69 J1 which uses TEMPro v8.1 growth factors

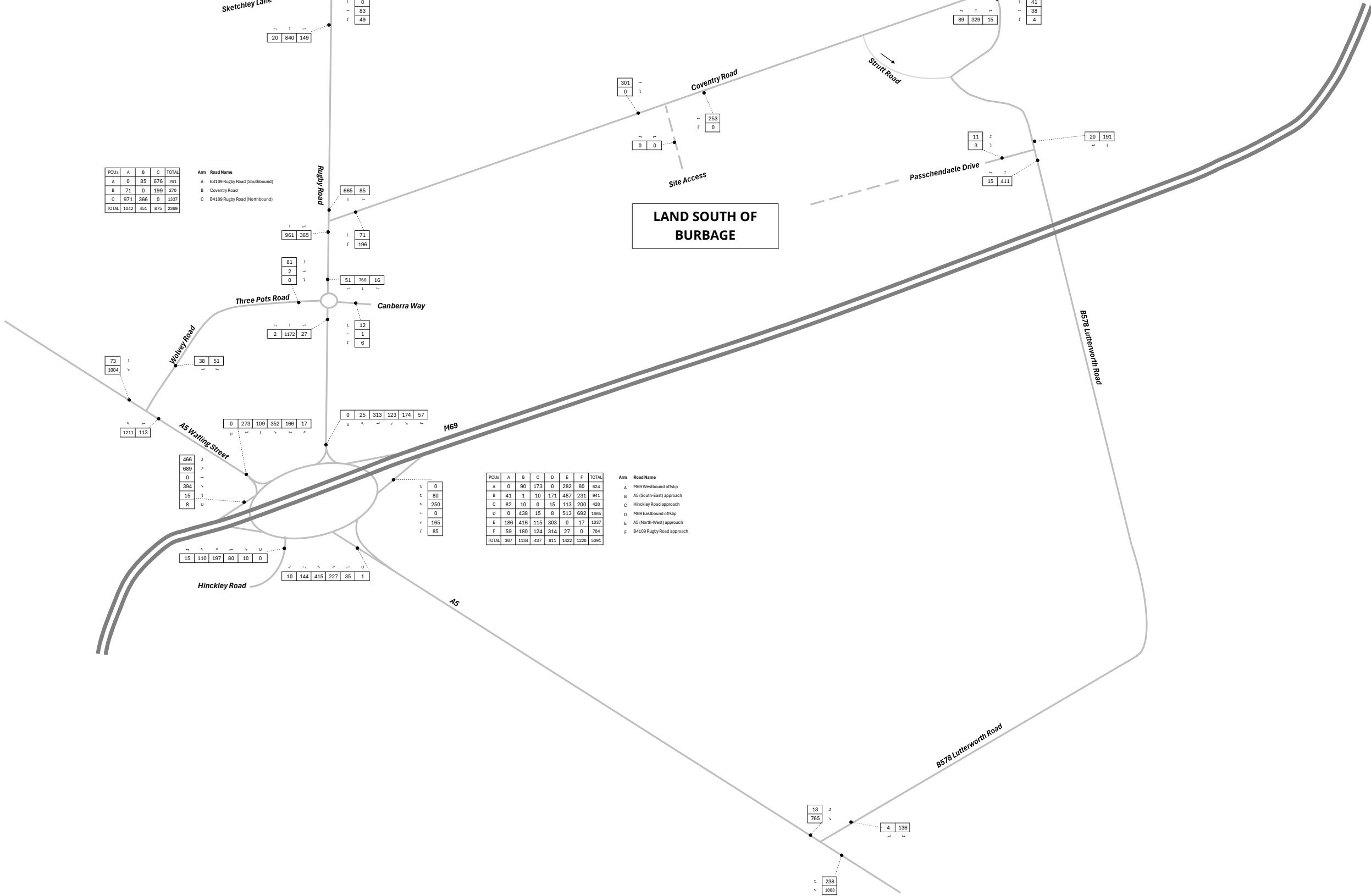
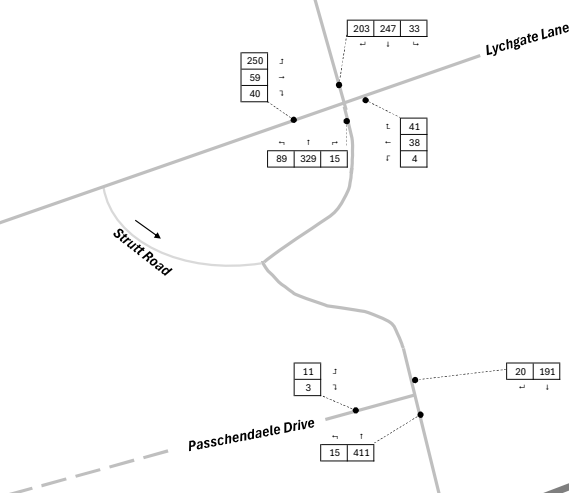
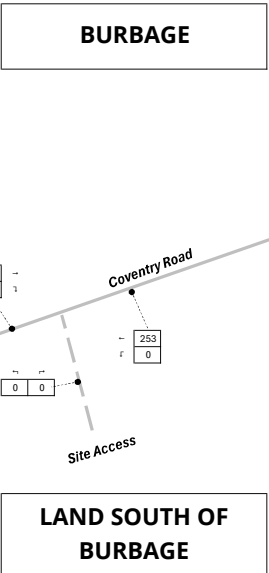
PCUs	A	B	C	TOTAL
A	0	85	676	761
B	71	0	199	270
C	971	366	0	1337
TOTAL	1042	451	875	2369

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)



PCUs	A	B	C	D	E	F	TOTAL
A	0	90	173	0	262	80	604
B	41	1	10	171	487	231	941
C	82	10	0	15	113	200	420
D	0	438	15	8	513	692	1666
E	186	416	115	303	0	17	1037
F	59	180	124	314	27	0	704
TOTAL	367	1134	437	811	1422	1220	5391

Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach



PCUs	A	B	C	D	TOTAL
A	0	231	699	3	934
B	250	0	88	2	340
C	742	122	0	3	867
D	1	3	1	0	5
TOTAL	993	356	788	6	2144

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Brookside
C	B4109 Rugby Road (Northbound)
D	Dudley Rise

PCUs	A	B	C	TOTAL
A	0	106	676	783
B	97	0	215	312
C	971	437	0	1408
TOTAL	1068	543	891	2502

Arm	Road Name
A	B4109 Rugby Road (Southbound)
B	Coventry Road
C	B4109 Rugby Road (Northbound)

PCUs	A	B	C	D	E	F	TOTAL
A	0	90	173	0	282	80	624
B	41	1	10	171	487	257	967
C	82	10	0	15	113	204	424
D	0	440	15	8	513	721	1697
E	186	416	115	303	0	17	1037
F	60	185	125	319	27	0	716
TOTAL	369	1142	437	816	1422	1279	5485

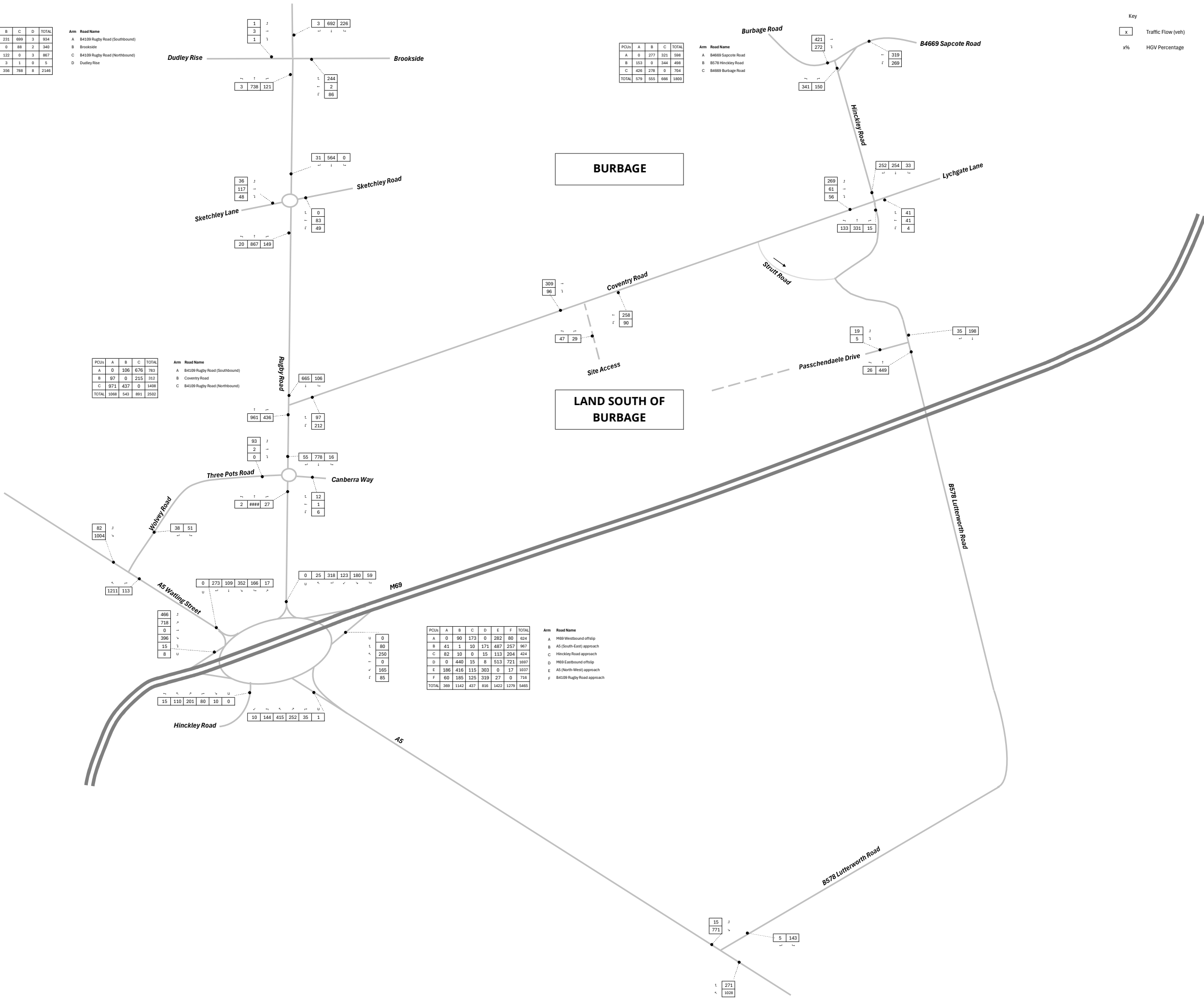
Arm	Road Name
A	M69 Westbound offslip
B	A5 (South-East) approach
C	Hinckley Road approach
D	M69 Eastbound offslip
E	A5 (North-West) approach
F	B4109 Rugby Road approach

PCUs	A	B	C	TOTAL
A	0	277	321	598
B	153	0	344	496
C	426	278	0	704
TOTAL	579	555	665	1800

Arm	Road Name
A	B4669 Sapcote Road
B	B578 Hinckley Road
C	B4669 Burbage Road

Key

	Traffic Flow (veh)
	HGV Percentage



Appendix S: Observed Queue Length Data

QUEUE LENGTHS

JOB REF: 12486



JOB NAME: BURBAGE

SITE: 2

DATE: 29/06/2023

LOCATION: CANBERRA WAY / RUGBY ROAD (S) / THREE POTS ROAD / RUGBY ROAD (N)

DAY: THURSDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A CANBERRA WAY	ARM B RUGBY ROAD (S)		ARM C THREE POTS ROAD	ARM D RUGBY ROAD (N)	
	LANE 1	LANE 1	LANE 2	LANE 1	LANE 1	LANE 2
08:00	2	0	0	2	5	1
08:05	3	1	0	2	4	0
08:10	1	2	0	2	3	1
08:15	2	1	0	3	4	0
08:20	2	2	0	2	3	2
08:25	1	3	0	3	2	0
08:30	2	4	0	3	5	0
08:35	1	2	0	2	10	0
08:40	0	1	0	0	1	0
08:45	0	0	0	1	0	0
08:50	1	1	0	4	2	0
08:55	1	2	0	3	3	0

TIME	ARM A CANBERRA WAY	ARM B RUGBY ROAD (S)		ARM C THREE POTS ROAD	ARM D RUGBY ROAD (N)	
	LANE 1	LANE 1	LANE 2	LANE 1	LANE 1	LANE 2
17:00	1	3	0	3	3	1
17:05	0	3	0	6	2	1
17:10	0	4	0	2	0	1
17:15	1	5	0	5	1	0
17:20	2	3	0	5	4	0
17:25	1	3	1	4	1	2
17:30	0	5	0	4	1	0
17:35	1	4	0	6	2	1
17:40	1	4	0	3	0	0
17:45	0	5	0	3	2	0
17:50	0	3	1	3	2	0
17:55	1	3	1	4	0	0

QUEUE LENGTHS

JOB REF: 12486



JOB NAME: BURBAGE

SITE: 3

DATE: 29/06/2023

LOCATION: RUGBY ROAD / M69 SLIP ROADS (E) / A5 (SE) / HINCKLEY ROAD / M69 SLIP ROADS (W) / A5 (NW)

DAY: THURSDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A RUGBY ROAD			ARM B M69 SLIP ROADS (E)			ARM C A5 (SE)			ARM D HINCKLEY ROAD		ARM E M69 SLIP ROADS (W)			ARM F A5 (NW)		
	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 3
08:00	2	9	26	4	2	3	6	8	4	3	9	10	7	5	8	11	6
08:05	3	11	27	5	2	3	5	4	9	4	8	13	9	3	10	12	12
08:10	2	12	22	2	5	4	7	6	7	4	5	8	10	3	6	10	10
08:15	2	12	16	6	3	2	7	5	4	2	8	5	6	4	10	7	9
08:20	2	6	11	2	4	3	7	8	6	2	11	8	3	3	5	12	10
08:25	1	7	11	5	4	5	3	4	6	3	5	8	8	2	9	13	9
08:30	0	6	11	4	2	5	5	6	6	3	11	11	8	9	4	14	8
08:35	3	4	18	4	1	3	7	5	11	2	2	6	5	2	7	10	6
08:40	3	5	9	2	2	3	8	6	6	3	3	6	6	6	5	15	8
08:45	2	5	10	3	3	1	1	7	5	2	7	5	3	4	9	18	7
08:50	2	10	6	4	4	4	5	5	4	4	2	9	6	2	8	16	8
08:55	2	10	9	3	2	4	5	8	6	2	6	11	6	3	6	20	8

TIME	ARM A RUGBY ROAD			ARM B M69 SLIP ROADS (E)			ARM C A5 (SE)			ARM D HINCKLEY ROAD		ARM E M69 SLIP ROADS (W)			ARM F A5 (NW)		
	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 3
17:00	2	7	8	6	4	3	4	6	8	4	8	17	20	20	3	20	10
17:05	2	7	7	2	4	2	3	9	9	3	5	15	20	15	10	20	14
17:10	1	6	5	3	2	3	1	6	8	2	10	18	20	13	7	20	12
17:15	1	4	4	3	3	4	3	7	11	3	7	18	20	10	2	20	7
17:20	2	9	11	5	2	6	4	7	9	3	6	22	20	15	5	20	16
17:25	2	7	5	8	3	4	4	9	5	3	6	11	15	13	8	12	11
17:30	2	3	5	4	6	4	4	9	9	3	9	14	19	12	6	15	9
17:35	1	7	9	6	5	5	2	7	6	2	6	13	13	7	7	18	10
17:40	2	7	8	5	3	3	1	11	9	1	10	10	11	8	6	20	13
17:45	2	6	6	6	4	2	8	8	12	2	4	12	20	12	6	20	15
17:50	1	5	3	4	4	5	2	12	8	2	3	16	12	10	4	17	16
17:55	1	4	7	5	6	2	2	6	7	3	2	7	12	11	5	15	10

QUEUE LENGTHS

JOB REF: 13473



JOB NAME: BURBAGE

SITE: 1

DATE: 19/06/2024

LOCATION: A5 (W) / B578 / A5 (E)

DAY: WEDNESDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A	ARM B		ARM C	
	A5 (W)	B578		A5 (E)	
	LANE 1	LANE 1	LANE 2	LANE 1	LANE 2
08:00	0	8	0	0	1
08:05	0	9	1	0	3
08:10	0	5	1	0	1
08:15	0	3	1	0	4
08:20	0	4	1	0	2
08:25	0	5	1	0	1
08:30	0	4	1	0	3
08:35	0	2	1	0	2
08:40	0	5	1	0	4
08:45	0	4	0	0	1
08:50	0	3	1	0	2
08:55	0	4	0	0	3

TIME	ARM A	ARM B		ARM C	
	A5 (W)	B578		A5 (E)	
	LANE 1	LANE 1	LANE 2	LANE 1	LANE 2
17:00	0	4	1	0	4
17:05	0	6	1	0	2
17:10	0	2	1	0	6
17:15	0	1	1	0	7
17:20	0	3	1	0	5
17:25	0	2	1	0	5
17:30	0	2	1	0	2
17:35	0	2	0	0	4
17:40	0	3	0	0	2
17:45	0	2	1	0	3
17:50	0	2	1	0	4
17:55	0	3	0	0	1

QUEUE LENGTHS

JOB REF: 13473



JOB NAME: BURBAGE

SITE: 2

DATE: 19/06/2024

LOCATION: WATLING STREET (E) / WOLVEY ROAD (S) / WATLING STREET (W) / WOLVEY ROAD (N)

DAY: WEDNESDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A		ARM B		ARM C		ARM D	
	WATLING STREET (E)		WOLVEY ROAD (S)		WATLING STREET (W)		WOLVEY ROAD (N)	
	LANE 1	LANE 2	LANE 1	LANE 2	LANE 1	LANE 2	LANE 1	LANE 2
08:00	0	1	0	0	0	0	1	2
08:05	0	1	0	0	0	0	1	1
08:10	0	1	0	0	5	0	1	2
08:15	0	0	0	0	11	0	1	1
08:20	0	1	1	0	6	0	1	1
08:25	3	1	0	0	8	1	1	4
08:30	0	0	0	0	0	0	1	1
08:35	0	0	0	0	7	0	2	1
08:40	0	2	0	0	6	1	1	0
08:45	0	0	0	0	0	0	1	1
08:50	0	0	0	0	0	0	1	2
08:55	0	0	0	1	0	0	1	1

TIME	ARM A		ARM B		ARM C		ARM D	
	WATLING STREET (E)		WOLVEY ROAD (S)		WATLING STREET (W)		WOLVEY ROAD (N)	
	LANE 1	LANE 2	LANE 1	LANE 2	LANE 1	LANE 2	LANE 1	LANE 2
17:00	0	1	0	0	0	0	1	1
17:05	0	1	0	0	0	0	2	1
17:10	0	3	0	0	2	2	1	1
17:15	0	2	0	0	12	1	1	1
17:20	0	2	0	0	0	0	2	3
17:25	0	2	1	1	0	0	1	3
17:30	0	2	1	0	0	0	2	1
17:35	0	1	0	0	0	0	1	0
17:40	0	3	0	0	5	0	1	1
17:45	0	1	0	0	6	1	2	1
17:50	0	3	0	0	0	0	0	1
17:55	0	1	0	0	0	0	1	3

QUEUE LENGTHS

JOB REF: 13473



JOB NAME: BURBAGE

SITE: 3

DATE: 19/06/2024

LOCATION: SKETCHLEY ROAD / RUGBY ROAD (S) / SKETCHLEY LANE / RUGBY ROAD (N)

DAY: WEDNESDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A SKETCHLEY ROAD	ARM B RUGBY ROAD (S)	ARM C SKETCHLEY LANE	ARM D RUGBY ROAD (N)
	LANE 1	LANE 1	LANE 1	LANE 1
08:00	2	3	3	0
08:05	3	4	5	5
08:10	3	3	2	6
08:15	4	3	4	3
08:20	6	3	2	0
08:25	3	2	2	0
08:30	3	2	4	2
08:35	2	5	2	7
08:40	4	3	3	3
08:45	6	4	2	5
08:50	9	5	3	4
08:55	3	4	1	1

TIME	ARM A SKETCHLEY ROAD	ARM B RUGBY ROAD (S)	ARM C SKETCHLEY LANE	ARM D RUGBY ROAD (N)
	LANE 1	LANE 1	LANE 1	LANE 1
17:00	2	2	1	4
17:05	2	4	3	2
17:10	3	4	3	5
17:15	3	3	1	1
17:20	2	3	1	2
17:25	4	1	2	0
17:30	2	1	2	2
17:35	2	4	3	3
17:40	3	3	1	0
17:45	2	3	2	0
17:50	2	1	3	0
17:55	3	4	2	0

QUEUE LENGTHS

JOB REF: 13473



JOB NAME: BURBAGE

SITE: 4

DATE: 19/06/2024

LOCATION: CHURCH STREET / LYCHGATE LANE / LUTTERWORTH ROAD / WINDSOR STREET

DAY: WEDNESDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A CHURCH STREET	ARM B LYCHGATE LANE	ARM C LUTTERWORTH H ROAD	ARM D WINDSOR STREET
	LANE 1	LANE 1	LANE 1	LANE 1
08:00	2	3	2	1
08:05	2	2	0	1
08:10	0	1	0	1
08:15	2	2	0	1
08:20	2	1	1	2
08:25	1	2	0	1
08:30	1	0	0	1
08:35	1	2	1	3
08:40	0	0	0	2
08:45	0	1	0	1
08:50	1	1	1	3
08:55	2	1	0	5

TIME	ARM A CHURCH STREET	ARM B LYCHGATE LANE	ARM C LUTTERWORTH H ROAD	ARM D WINDSOR STREET
	LANE 1	LANE 1	LANE 1	LANE 1
17:00	1	1	0	2
17:05	2	2	0	3
17:10	0	3	0	3
17:15	2	1	0	1
17:20	0	1	0	4
17:25	2	2	0	2
17:30	0	2	1	3
17:35	4	1	0	1
17:40	1	1	0	4
17:45	4	1	0	3
17:50	3	1	0	3
17:55	0	1	1	1

QUEUE LENGTHS

JOB REF: 13473

JOB NAME: BURBAGE

SITE: 5

LOCATION: SAPCOTE ROAD / B578 / BURBAGE ROAD

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane



DATE: 19/06/2024

DAY: WEDNESDAY

TIME	ARM A		ARM B		ARM C	
	SAPCOTE ROAD		B578		BURBAGE ROAD	
	LANE 1	LANE 2	LANE 1	LANE 2	LANE 1	LANE 2
08:00	1	0	2	4	0	2
08:05	3	0	2	2	0	2
08:10	0	0	1	1	0	3
08:15	0	0	4	3	0	2
08:20	0	0	7	3	0	1
08:25	2	7	2	2	0	3
08:30	0	0	4	2	0	3
08:35	0	0	3	2	0	1
08:40	1	0	3	4	0	5
08:45	1	0	3	2	0	3
08:50	4	0	4	4	0	4
08:55	2	0	4	3	0	5

TIME	ARM A		ARM B		ARM C	
	SAPCOTE ROAD		B578		BURBAGE ROAD	
	LANE 1	LANE 2	LANE 1	LANE 2	LANE 1	LANE 2
17:00	0	8	10	3	0	3
17:05	2	8	13	3	0	1
17:10	2	8	15	5	0	3
17:15	1	9	10	3	0	2
17:20	1	8	11	2	0	2
17:25	2	8	13	3	0	1
17:30	1	7	10	4	0	1
17:35	2	8	12	2	0	1
17:40	2	7	12	4	0	2
17:45	3	7	12	2	0	3
17:50	0	4	7	5	0	2
17:55	1	3	4	2	0	2

QUEUE LENGTHS

JOB REF: 13473



JOB NAME: BURBAGE

SITE: 6

DATE: 19/06/2024

LOCATION: B578 (S) / PASSCHENDELE DRIVE / B578 (N)

DAY: WEDNESDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A B578 (S)	ARM B PASSCHENDE LE DRIVE	ARM C B578 (N)
	LANE 1	LANE 1	LANE 1
08:00	0	1	1
08:05	0	1	0
08:10	0	1	0
08:15	0	1	0
08:20	0	0	0
08:25	0	0	0
08:30	0	1	1
08:35	0	0	0
08:40	0	1	0
08:45	1	0	0
08:50	0	0	1
08:55	0	0	1

TIME	ARM A B578 (S)	ARM B PASSCHENDE LE DRIVE	ARM C B578 (N)
	LANE 1	LANE 1	LANE 1
17:00	0	1	0
17:05	0	1	0
17:10	0	2	2
17:15	0	1	0
17:20	0	0	0
17:25	0	0	1
17:30	0	0	3
17:35	0	0	0
17:40	0	1	0
17:45	0	0	2
17:50	0	0	1
17:55	0	1	0

QUEUE LENGTHS

JOB REF: 13473

JOB NAME: BURBAGE

SITE: 7

LOCATION: RUGBY ROAD (N) / BROOKSIDE / SERVICE ROAD / RUGBY ROAD (S) / DUDLEY RISE

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane



DATE: 19/06/2024

DAY: WEDNESDAY

TIME	ARM A		ARM B	ARM C	ARM D		ARM E
	RUGBY ROAD (N)		BROOKSIDE	SERVICE ROAD	RUGBY ROAD (S)		DUDLEY RISE
	LANE 1	LANE 2	LANE 1	LANE 1	LANE 1	LANE 2	LANE 1
08:00	11	10	14	0	5	3	0
08:05	8	7	11	0	12	4	1
08:10	8	6	8	0	10	3	0
08:15	11	10	10	0	9	2	0
08:20	8	9	9	0	11	3	0
08:25	9	7	10	0	14	4	1
08:30	14	12	12	0	15	3	2
08:35	13	12	13	0	9	4	0
08:40	5	3	10	0	14	1	0
08:45	7	6	10	0	5	3	0
08:50	6	5	11	0	15	2	1
08:55	9	8	15	0	9	2	1

TIME	ARM A		ARM B	ARM C	ARM D		ARM E
	RUGBY ROAD (N)		BROOKSIDE	SERVICE ROAD	RUGBY ROAD (S)		DUDLEY RISE
	LANE 1	LANE 2	LANE 1	LANE 1	LANE 1	LANE 2	LANE 1
17:00	8	5	9	0	15	3	0
17:05	16	11	10	0	14	4	1
17:10	17	15	12	0	15	4	1
17:15	10	12	10	0	15	4	0
17:20	13	10	10	0	14	4	0
17:25	6	6	8	0	13	2	1
17:30	8	10	9	0	11	6	0
17:35	14	10	10	0	15	5	0
17:40	8	5	6	0	14	2	1
17:45	5	3	4	0	10	3	0
17:50	9	2	6	0	15	3	0
17:55	5	8	7	0	12	4	0

Appendix T: Coventry Rd / Site Access J10 Report

Junctions 10							
PICADY 10 - Priority Intersection Module							
Version: 10.1.1.1905							
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Filename: Coventry Road_Site Access.j10

Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10\P08

Report generation date: 16/07/2024 15:11:07

- »2026 Opening Year + Development, AM
- »2026 Opening Year + Development, PM
- »2031 Forecast Year + Development, AM
- »2031 Forecast Year + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2026 Opening Year + Development									
Stream B-AC	D5	1.0	15.65	0.51	C	D6	0.2	9.25	0.18	A
Stream C-AB		0.2	5.46	0.14	A		0.5	5.90	0.23	A
	2031 Forecast Year + Development									
Stream B-AC	D9	1.0	15.35	0.51	C	D10	0.2	9.37	0.18	A
Stream C-AB		0.3	5.21	0.14	A		0.5	5.92	0.23	A

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

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

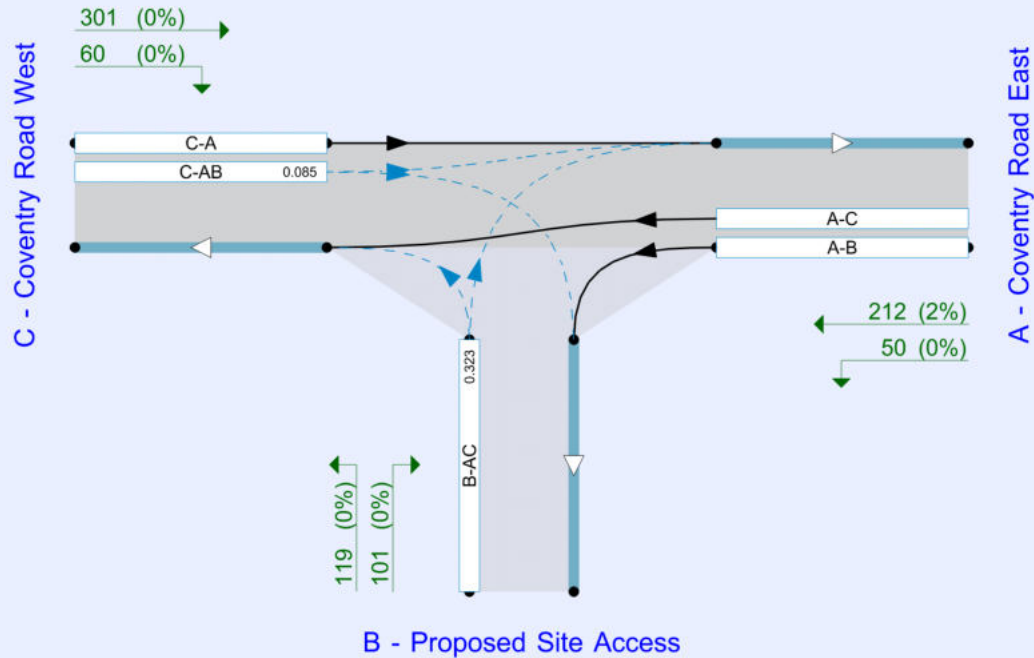
File summary

File Description

Title	Land South of Burbage - Coventry Road Site Access
Location	
Site number	
Date	11/07/2024
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



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

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 simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Opening Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Opening Year + Development	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Forecast Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Forecast Year + Development	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 Opening Year + Development, 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		4.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.69	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 Opening Year + Development	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	✓	296	100.000
B - Proposed Site Access		ONE HOUR	✓	220	100.000
C - Coventry Road West		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Coventry Road East	B - Proposed Site Access	C - Coventry Road West
A - Coventry Road East		0	50	246
B - Proposed Site Access		101	0	119
C - Coventry Road West		256	60	0

Vehicle Mix

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

Heavy Vehicle %

From	To			
		A - Coventry Road East	B - Proposed Site Access	C - Coventry Road West
A - Coventry Road East		0	0	2
B - Proposed Site Access		0	0	0
C - Coventry Road West		0	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	15.65	1.0	C	202	303
C-AB	0.14	5.46	0.2	A	82	122
C-A					208	313
A-B					46	69
A-C					226	339

2026 Opening Year + Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	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 Opening Year + Development	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	✓	332	100.000
B - Proposed Site Access		ONE HOUR	✓	76	100.000
C - Coventry Road West		ONE HOUR	✓	400	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	90	242
	B - Proposed Site Access	29	0	47
	C - Coventry Road West	304	96	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	0
	B - Proposed Site Access	0	0	0
	C - Coventry Road West	0	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	9.25	0.2	A	70	105
C-AB	0.23	5.90	0.5	A	141	211
C-A					226	339
A-B					83	124
A-C					222	333

2031 Forecast Year + Development, 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		4.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.57	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)	Run automatically
D9	2031 Forecast Year + Development	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	✓	262	100.000
B - Proposed Site Access		ONE HOUR	✓	220	100.000
C - Coventry Road West		ONE HOUR	✓	361	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	50	212
	B - Proposed Site Access	101	0	119
	C - Coventry Road West	301	60	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	0	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	15.35	1.0	C	202	303
C-AB	0.14	5.21	0.3	A	87	130
C-A					245	367
A-B					46	69
A-C					195	292

2031 Forecast Year + Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	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		1.97	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.97	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
D10	2031 Forecast Year + Development	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	✓	348	100.000
B - Proposed Site Access		ONE HOUR	✓	76	100.000
C - Coventry Road West		ONE HOUR	✓	405	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	90	258
	B - Proposed Site Access	29	0	47
	C - Coventry Road West	309	96	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	0
	B - Proposed Site Access	0	0	0
	C - Coventry Road West	0	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	9.37	0.2	A	70	105
C-AB	0.23	5.92	0.5	A	142	213
C-A					229	344
A-B					83	124
A-C					237	355

Appendix U: B578 Lutterworth Rd / Passchendaele Dr J10 Report

Junctions 10										
PICADY 10 - Priority Intersection Module										
Version: 10.1.1.1905										
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Filename: Lutterworth Road_Passchendaale Drive.j10
Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10\P08
Report generation date: 16/07/2024 15:31:36

- »Base Year, AM
- »Base Year, PM
- »2026 Opening Year, AM
- »2026 Opening Year, PM
- »2026 Opening Year + Development, AM
- »2026 Opening Year + Development, PM
- »2031 Forecast Year, AM
- »2031 Forecast Year, PM
- »2031 Forecast Year + Development, AM
- »2031 Forecast Year + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base Year									
Stream B-AC	D1	0.1	7.62	0.09	A	D2	0.0	7.29	0.03	A
Stream C-AB		0.0	4.54	0.03	A		0.1	5.18	0.04	A
	2026 Opening Year									
Stream B-AC	D3	0.1	8.02	0.09	A	D4	0.0	7.87	0.03	A
Stream C-AB		0.1	4.10	0.04	A		0.1	5.19	0.04	A
	2026 Opening Year + Development									
Stream B-AC	D5	0.2	8.84	0.16	A	D6	0.1	8.30	0.06	A
Stream C-AB		0.1	4.12	0.08	A		0.1	5.44	0.07	A
	2031 Forecast Year									
Stream B-AC	D7	0.1	8.27	0.09	A	D8	0.0	8.07	0.03	A
Stream C-AB		0.1	3.84	0.05	A		0.1	5.17	0.04	A
	2031 Forecast Year + Development									
Stream B-AC	D9	0.2	9.15	0.17	A	D10	0.1	8.52	0.06	A
Stream C-AB		0.2	3.87	0.09	A		0.1	5.42	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.

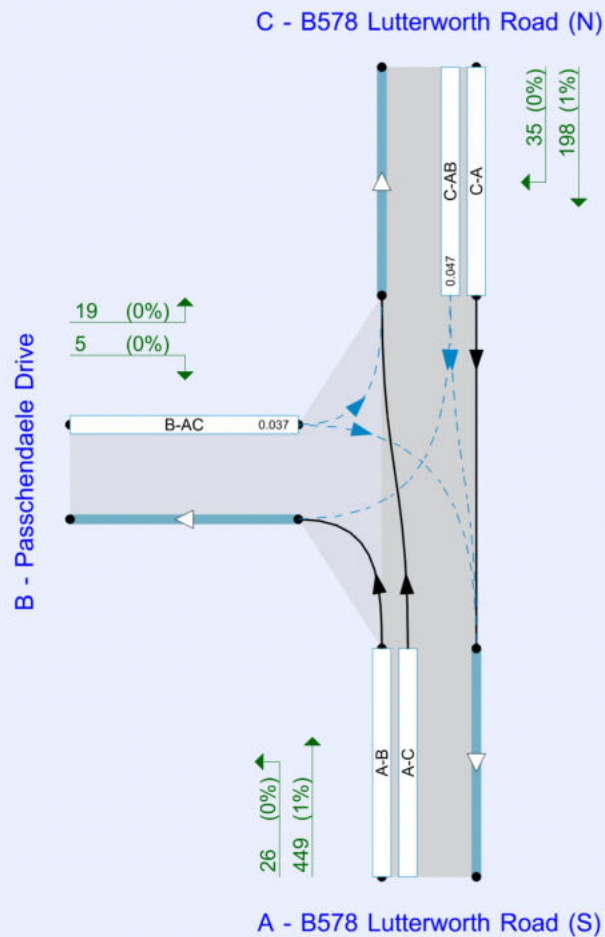
File summary

File Description

Title	B578 Lutterworth Road / Passchendaele Drive Junction
Location	
Site number	
Date	11/07/2024
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



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	Base Year	AM	ONE HOUR	07:45	09:15	15
D2	Base Year	PM	ONE HOUR	16:45	18:15	15
D3	2026 Opening Year	AM	ONE HOUR	07:45	09:15	15
D4	2026 Opening Year	PM	ONE HOUR	16:45	18:15	15
D5	2026 Opening Year + Development	AM	ONE HOUR	07:45	09:15	15
D6	2026 Opening Year + Development	PM	ONE HOUR	16:45	18:15	15
D7	2031 Forecast Year	AM	ONE HOUR	07:45	09:15	15
D8	2031 Forecast Year	PM	ONE HOUR	16:45	18:15	15
D9	2031 Forecast Year + Development	AM	ONE HOUR	07:45	09:15	15
D10	2031 Forecast Year + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base Year, 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		0.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.99	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	Base Year	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)		✓	113	100.000
B - Passchendaale Drive		✓	41	100.000
C - B578 Lutterworth Road (N)		✓	270	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	2	111
	B - Passchendaale Drive	13	0	28
	C - B578 Lutterworth Road (N)	252	18	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	7.62	0.1	A
C-AB	0.03	4.54	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	534	0.058	31	0.1	7.143	A
C-AB	18	810	0.022	18	0.0	4.542	A
C-A	186			186			
A-B	2			2			
A-C	84			84			

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	527	0.070	37	0.1	7.338	A
C-AB	22	829	0.027	22	0.0	4.464	A
C-A	220			220			
A-B	2			2			
A-C	100			100			

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	518	0.087	45	0.1	7.618	A
C-AB	29	854	0.034	29	0.0	4.363	A
C-A	268			268			
A-B	2			2			
A-C	122			122			

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	518	0.087	45	0.1	7.618	A
C-AB	29	854	0.034	29	0.0	4.364	A
C-A	268			268			
A-B	2			2			
A-C	122			122			

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	527	0.070	37	0.1	7.340	A
C-AB	22	829	0.027	22	0.0	4.468	A
C-A	220			220			
A-B	2			2			
A-C	100			100			

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	534	0.058	31	0.1	7.153	A
C-AB	18	810	0.022	18	0.0	4.544	A
C-A	186			186			
A-B	2			2			
A-C	84			84			

Base Year, 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		0.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.54	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	Base Year	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)		✓	263	100.000
B - Passchendaale Drive		✓	14	100.000
C - B578 Lutterworth Road (N)		✓	140	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	15	248
	B - Passchendaale Drive	3	0	11
	C - B578 Lutterworth Road (N)	120	20	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	7.29	0.0	A
C-AB	0.04	5.18	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	533	0.020	10	0.0	6.884	A
C-AB	17	720	0.024	17	0.0	5.123	A
C-A	88			88			
A-B	11			11			
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	523	0.024	13	0.0	7.048	A
C-AB	21	721	0.029	21	0.0	5.145	A
C-A	105			105			
A-B	13			13			
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	509	0.030	15	0.0	7.289	A
C-AB	27	722	0.037	27	0.1	5.176	A
C-A	127			127			
A-B	17			17			
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	509	0.030	15	0.0	7.289	A
C-AB	27	722	0.037	27	0.1	5.180	A
C-A	127			127			
A-B	17			17			
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	523	0.024	13	0.0	7.049	A
C-AB	21	721	0.029	21	0.0	5.150	A
C-A	105			105			
A-B	13			13			
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	533	0.020	11	0.0	6.884	A
C-AB	17	720	0.024	17	0.0	5.126	A
C-A	88			88			
A-B	11			11			
A-C	187			187			

2026 Opening Year, 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		0.70	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.70	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 Opening Year	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)		✓	138	100.000
B - Passchendaale Drive		✓	41	100.000
C - B578 Lutterworth Road (N)		✓	475	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	2	136
	B - Passchendaale Drive	13	0	28
	C - B578 Lutterworth Road (N)	457	18	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	8.02	0.1	A
C-AB	0.04	4.10	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	519	0.060	31	0.1	7.371	A
C-AB	22	900	0.024	22	0.0	4.099	A
C-A	336			336			
A-B	2			2			
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	508	0.072	37	0.1	7.632	A
C-AB	29	937	0.031	29	0.0	3.965	A
C-A	398			398			
A-B	2			2			
A-C	122			122			

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	494	0.091	45	0.1	8.020	A
C-AB	40	988	0.041	40	0.1	3.798	A
C-A	482			482			
A-B	2			2			
A-C	150			150			

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	494	0.091	45	0.1	8.024	A
C-AB	41	988	0.041	41	0.1	3.802	A
C-A	482			482			
A-B	2			2			
A-C	150			150			

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	508	0.072	37	0.1	7.638	A
C-AB	29	937	0.031	29	0.0	3.968	A
C-A	398			398			
A-B	2			2			
A-C	122			122			

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	519	0.060	31	0.1	7.382	A
C-AB	22	900	0.024	22	0.0	4.101	A
C-A	336			336			
A-B	2			2			
A-C	102			102			

2026 Opening Year, 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		0.41	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.41	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 Opening Year	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)		✓	389	100.000
B - Passchendaale Drive		✓	14	100.000
C - B578 Lutterworth Road (N)		✓	192	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	15	374
	B - Passchendaale Drive	3	0	11
	C - B578 Lutterworth Road (N)	172	20	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	7.87	0.0	A
C-AB	0.04	5.19	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	509	0.021	10	0.0	7.227	A
C-AB	18	720	0.026	18	0.0	5.132	A
C-A	126			126			
A-B	11			11			
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	494	0.026	13	0.0	7.484	A
C-AB	23	721	0.032	23	0.0	5.153	A
C-A	150			150			
A-B	13			13			
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	473	0.033	15	0.0	7.874	A
C-AB	30	724	0.041	30	0.1	5.183	A
C-A	182			182			
A-B	17			17			
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	473	0.033	15	0.0	7.874	A
C-AB	30	724	0.041	30	0.1	5.187	A
C-A	182			182			
A-B	17			17			
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	493	0.026	13	0.0	7.485	A
C-AB	23	721	0.032	23	0.0	5.159	A
C-A	150			150			
A-B	13			13			
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	509	0.021	11	0.0	7.228	A
C-AB	18	720	0.026	18	0.0	5.134	A
C-A	126			126			
A-B	11			11			
A-C	282			282			

2026 Opening Year + Development, 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		1.20	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.20	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 Opening Year + Development	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)		✓	143	100.000
B - Passchendaale Drive		✓	72	100.000
C - B578 Lutterworth Road (N)		✓	522	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	4	139
	B - Passchendaale Drive	23	0	49
	C - B578 Lutterworth Road (N)	490	32	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	8.84	0.2	A
C-AB	0.08	4.12	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	54	514	0.105	54	0.1	7.814	A
C-AB	40	914	0.044	40	0.1	4.117	A
C-A	353			353			
A-B	3			3			
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	65	503	0.129	65	0.1	8.218	A
C-AB	54	954	0.056	53	0.1	3.998	A
C-A	416			416			
A-B	4			4			
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	79	486	0.163	79	0.2	8.835	A
C-AB	76	1009	0.075	76	0.1	3.855	A
C-A	499			499			
A-B	4			4			
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	79	486	0.163	79	0.2	8.843	A
C-AB	76	1009	0.075	76	0.1	3.860	A
C-A	499			499			
A-B	4			4			
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	65	503	0.129	65	0.1	8.228	A
C-AB	54	954	0.056	54	0.1	4.002	A
C-A	416			416			
A-B	4			4			
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	54	514	0.105	54	0.1	7.834	A
C-AB	41	914	0.044	41	0.1	4.121	A
C-A	352			352			
A-B	3			3			
A-C	105			105			

2026 Opening Year + Development, 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		0.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.66	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 Opening Year + Development	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)		✓	438	100.000
B - Passchendaale Drive		✓	24	100.000
C - B578 Lutterworth Road (N)		✓	214	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	26	412
	B - Passchendaale Drive	5	0	19
	C - B578 Lutterworth Road (N)	179	35	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	8.30	0.1	A
C-AB	0.07	5.44	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	18	500	0.036	18	0.0	7.459	A
C-AB	32	713	0.046	32	0.1	5.283	A
C-A	129			129			
A-B	20			20			
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	484	0.045	22	0.0	7.792	A
C-AB	41	714	0.057	41	0.1	5.346	A
C-A	152			152			
A-B	23			23			
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	26	460	0.057	26	0.1	8.301	A
C-AB	53	716	0.074	53	0.1	5.432	A
C-A	182			182			
A-B	29			29			
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	26	460	0.057	26	0.1	8.303	A
C-AB	53	716	0.074	53	0.1	5.437	A
C-A	182			182			
A-B	29			29			
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	484	0.045	22	0.0	7.794	A
C-AB	41	714	0.057	41	0.1	5.352	A
C-A	152			152			
A-B	23			23			
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	18	500	0.036	18	0.0	7.463	A
C-AB	33	714	0.046	33	0.1	5.291	A
C-A	129			129			
A-B	20			20			
A-C	310			310			

2031 Forecast Year, 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		0.61	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.61	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)
D7	2031 Forecast Year	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		✓	41	100.000
C - B578 Lutterworth Road (N)		✓	614	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	2	138
	B - Passchendaale Drive	13	0	28
	C - B578 Lutterworth Road (N)	596	18	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	8.27	0.1	A
C-AB	0.05	3.84	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	511	0.060	31	0.1	7.497	A
C-AB	25	964	0.026	25	0.0	3.834	A
C-A	437			437			
A-B	2			2			
A-C	104			104			

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	498	0.074	37	0.1	7.800	A
C-AB	34	1013	0.034	34	0.0	3.675	A
C-A	518			518			
A-B	2			2			
A-C	124			124			

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	481	0.094	45	0.1	8.263	A
C-AB	50	1082	0.047	50	0.1	3.486	A
C-A	626			626			
A-B	2			2			
A-C	152			152			

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	481	0.094	45	0.1	8.266	A
C-AB	51	1082	0.047	51	0.1	3.490	A
C-A	626			626			
A-B	2			2			
A-C	152			152			

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	498	0.074	37	0.1	7.806	A
C-AB	34	1013	0.034	35	0.0	3.682	A
C-A	518			518			
A-B	2			2			
A-C	124			124			

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	511	0.060	31	0.1	7.505	A
C-AB	25	964	0.026	25	0.0	3.837	A
C-A	437			437			
A-B	2			2			
A-C	104			104			

2031 Forecast Year, 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		0.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.38	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)
D8	2031 Forecast Year	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)		✓	426	100.000
B - Passchendaale Drive		✓	14	100.000
C - B578 Lutterworth Road (N)		✓	211	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	15	411
	B - Passchendaale Drive	3	0	11
	C - B578 Lutterworth Road (N)	191	20	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	8.07	0.0	A
C-AB	0.04	5.17	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	501	0.021	10	0.0	7.337	A
C-AB	19	722	0.026	19	0.0	5.121	A
C-A	140			140			
A-B	11			11			
A-C	309			309			

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	485	0.026	13	0.0	7.626	A
C-AB	24	724	0.033	24	0.0	5.139	A
C-A	166			166			
A-B	13			13			
A-C	369			369			

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	462	0.033	15	0.0	8.069	A
C-AB	31	728	0.043	31	0.1	5.163	A
C-A	201			201			
A-B	17			17			
A-C	453			453			

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	461	0.033	15	0.0	8.070	A
C-AB	31	728	0.043	31	0.1	5.168	A
C-A	201			201			
A-B	17			17			
A-C	453			453			

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	485	0.026	13	0.0	7.630	A
C-AB	24	724	0.033	24	0.0	5.143	A
C-A	166			166			
A-B	13			13			
A-C	369			369			

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	501	0.021	11	0.0	7.341	A
C-AB	19	722	0.026	19	0.0	5.123	A
C-A	140			140			
A-B	11			11			
A-C	309			309			

2031 Forecast Year + Development, 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		1.07	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.07	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)
D9	2031 Forecast Year + Development	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)		✓	145	100.000
B - Passchendaale Drive		✓	72	100.000
C - B578 Lutterworth Road (N)		✓	661	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	4	141
	B - Passchendaale Drive	23	0	49
	C - B578 Lutterworth Road (N)	629	32	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	0.17	9.15	0.2	A
C-AB	0.09	3.87	0.2	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	54	506	0.107	54	0.1	7.959	A
C-AB	47	978	0.048	46	0.1	3.862	A
C-A	451			451			
A-B	3			3			
A-C	106			106			

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	65	492	0.132	65	0.1	8.417	A
C-AB	64	1031	0.062	64	0.1	3.721	A
C-A	530			530			
A-B	4			4			
A-C	127			127			

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	79	473	0.168	79	0.2	9.140	A
C-AB	95	1104	0.086	95	0.2	3.564	A
C-A	633			633			
A-B	4			4			
A-C	155			155			

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	79	473	0.168	79	0.2	9.149	A
C-AB	95	1104	0.086	95	0.2	3.567	A
C-A	633			633			
A-B	4			4			
A-C	155			155			

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	65	492	0.132	65	0.2	8.432	A
C-AB	64	1031	0.062	64	0.1	3.730	A
C-A	530			530			
A-B	4			4			
A-C	127			127			

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	54	506	0.107	54	0.1	7.980	A
C-AB	47	978	0.048	47	0.1	3.868	A
C-A	451			451			
A-B	3			3			
A-C	106			106			

2031 Forecast Year + Development, 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		0.63	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.63	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)
D10	2031 Forecast Year + Development	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)		✓	475	100.000
B - Passchendaale Drive		✓	24	100.000
C - B578 Lutterworth Road (N)		✓	233	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	26	449
	B - Passchendaale Drive	5	0	19
	C - B578 Lutterworth Road (N)	198	35	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	8.52	0.1	A
C-AB	0.08	5.42	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	18	493	0.037	18	0.0	7.576	A
C-AB	33	716	0.047	33	0.1	5.273	A
C-A	142			142			
A-B	20			20			
A-C	338			338			

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	475	0.045	22	0.0	7.947	A
C-AB	42	717	0.058	42	0.1	5.332	A
C-A	168			168			
A-B	23			23			
A-C	404			404			

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	26	449	0.059	26	0.1	8.519	A
C-AB	55	720	0.077	55	0.1	5.416	A
C-A	201			201			
A-B	29			29			
A-C	494			494			

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	26	449	0.059	26	0.1	8.521	A
C-AB	55	720	0.077	55	0.1	5.420	A
C-A	201			201			
A-B	29			29			
A-C	494			494			

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	475	0.045	22	0.0	7.951	A
C-AB	42	717	0.059	42	0.1	5.340	A
C-A	167			167			
A-B	23			23			
A-C	404			404			

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	18	493	0.037	18	0.0	7.581	A
C-AB	33	716	0.047	33	0.1	5.279	A
C-A	142			142			
A-B	20			20			
A-C	338			338			

Appendix V: B4109 Rugby Rd / Coventry Rd J10 Report

Junctions 10				
PICADY 10 - Priority Intersection Module				
Version: 10.1.1.1905				
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Filename: Rugby Road_Coventry_Road - 2023 Traffic Count Flows.j10

Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10\P08

Report generation date: 15/07/2024 15:46:33

- »Base Year, AM
- »Base Year, PM
- »2026 Opening Year, AM
- »2026 Opening Year, PM
- »2026 Opening Year + Development, AM
- »2026 Opening Year + Development, PM
- »2031 Forecast Year, AM
- »2031 Forecast Year, PM
- »2031 Forecast Year + Development, AM
- »2031 Forecast Year + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base Year									
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 Opening Year									
Stream B-C	D3	7.3	81.56	0.92	F	D4	1.5	28.54	0.62	D
Stream B-A		2.4	188.82	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 Opening Year + Development									
Stream B-C	D5	55.4	473.64	1.33	F	D6	25.0	383.89	1.27	F
Stream B-A		12.4	554.46	1.27	F		12.1	436.27	1.23	F
Stream C-B		0.6	13.56	0.37	B		7.0	57.49	0.90	F
	2031 Forecast Year									
Stream B-C	D7	3.6	45.45	0.81	E	D8	5.1	87.95	0.90	F
Stream B-A		0.9	67.28	0.49	F		3.4	165.41	0.86	F
Stream C-B		0.6	13.17	0.36	B		3.0	28.31	0.76	D
	2031 Forecast Year + Development									
Stream B-C	D9	40.8	360.85	1.25	F	D10	36.9	550.60	1.45	F
Stream B-A		10.3	456.32	1.19	F		17.5	595.31	1.42	F
Stream C-B		0.7	14.71	0.42	B		8.2	66.00	0.92	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

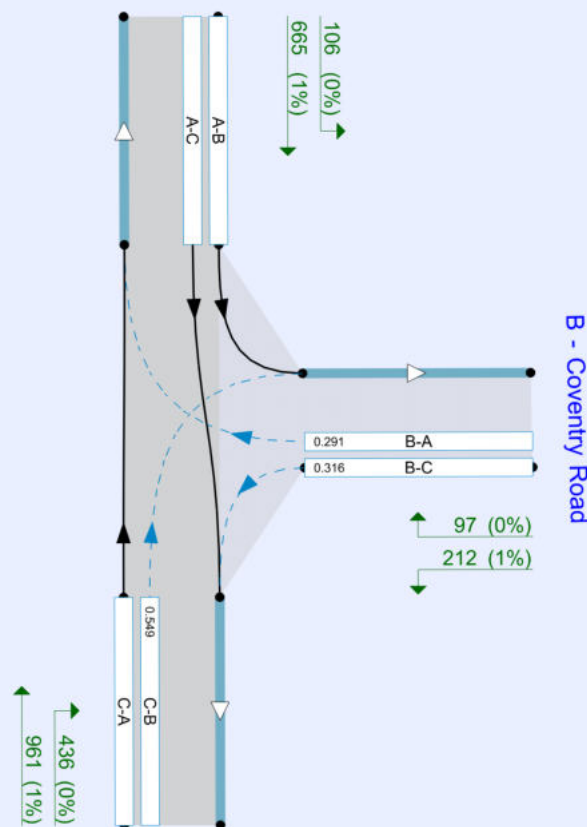
File Description

Title	B4109 Rugby Road / Coventry Road 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 ()

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 simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base Year	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Opening Year	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Opening Year	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Opening Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Opening Year + Development	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Forecast Year	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Forecast Year	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Forecast Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Forecast Year + Development	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

Base Year, 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	Base Year	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				

Base Year, 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	Base Year	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 Opening Year, 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		17.08	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	17.08	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 Opening Year	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	4	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	81.56	7.3	F	289	434
B-A	0.82	188.82	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	12.841	B
B-A	35	9	290	0.122	35	0.0	0.1	14.105	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	19.304	C
B-A	42	11	210	0.201	42	0.1	0.2	21.332	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	55.448	F
B-A	52	13	82	0.634	47	0.2	1.3	96.389	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	81.560	F
B-A	52	13	63	0.821	47	1.3	2.4	188.823	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	305	7.3	1.8	27.191	D
B-A	42	11	190	0.222	51	2.4	0.3	27.183	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	13.515	B
B-A	35	9	286	0.124	36	0.3	0.1	14.431	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 Opening Year, 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 Opening Year	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 Opening Year + Development, 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		101.48	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	101.48	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 Opening Year + Development	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	✓	469	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	780	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	80	0	389
	C - B4109 Rugby Road South	636	144	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	4	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	1.33	473.64	55.4	F	357	535
B-A	1.27	554.46	12.4	F	73	110
C-A					584	875
C-B	0.37	13.56	0.6	B	132	198
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	293	73	489	0.599	287	0.0	1.4	17.390	C
B-A	60	15	250	0.241	59	0.0	0.3	18.821	C
C-A	479	120			479				
C-B	108	27	516	0.210	107	0.0	0.3	8.788	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	350	87	423	0.827	340	1.4	3.8	39.509	E
B-A	72	18	140	0.514	69	0.3	1.0	49.351	E
C-A	572	143			572				
C-B	129	32	477	0.271	129	0.3	0.4	10.321	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	428	107	335	1.279	329	3.8	28.7	203.368	F
B-A	88	22	69	1.270	63	1.0	7.3	300.459	F
C-A	700	175			700				
C-B	159	40	424	0.374	158	0.4	0.6	13.473	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	428	107	322	1.330	321	28.7	55.4	461.611	F
B-A	88	22	69	1.268	68	7.3	12.4	554.456	F
C-A	700	175			700				
C-B	159	40	424	0.374	159	0.6	0.6	13.559	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	350	87	388	0.901	381	55.4	47.5	473.639	F
B-A	72	18	82	0.873	79	12.4	10.7	542.465	F
C-A	572	143			572				
C-B	129	32	477	0.271	130	0.6	0.4	10.398	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	293	73	438	0.669	429	47.5	13.6	264.423	F
B-A	60	15	93	0.646	85	10.7	4.4	342.025	F
C-A	479	120			479				
C-B	108	27	516	0.210	109	0.4	0.3	8.850	A
A-B	75	19			75				
A-C	657	164			657				

2026 Opening Year + Development, 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		57.79	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	57.79	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
D6	2026 Opening Year + Development	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	✓	289	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	1379	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	199
	C - B4109 Rugby Road South	949	430	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	383.89	25.0	F	183	274
B-A	1.23	436.27	12.1	F	83	124
C-A					871	1306
C-B	0.90	57.49	7.0	F	395	592
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	150	37	515	0.291	148	0.0	0.4	9.760	A
B-A	68	17	258	0.263	66	0.0	0.3	18.665	C
C-A	714	179			714				
C-B	324	81	601	0.539	319	0.0	1.1	12.601	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	179	45	434	0.412	178	0.4	0.7	13.985	B
B-A	81	20	182	0.444	79	0.3	0.7	34.407	D
C-A	853	213			853				
C-B	387	97	569	0.679	383	1.1	2.0	19.005	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	219	55	181	1.207	170	0.7	12.9	178.918	F
B-A	99	25	84	1.187	75	0.7	6.9	241.961	F
C-A	1045	261			1045				
C-B	473	118	525	0.901	457	2.0	6.0	44.854	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	219	55	172	1.271	171	12.9	25.0	383.893	F
B-A	99	25	81	1.230	78	6.9	12.1	436.274	F
C-A	1045	261			1045				
C-B	473	118	525	0.901	470	6.0	7.0	57.494	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	179	45	274	0.652	264	25.0	3.8	210.235	F
B-A	81	20	127	0.637	117	12.1	3.0	250.000	F
C-A	853	213			853				
C-B	387	97	569	0.679	406	7.0	2.3	24.186	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	150	37	500	0.300	163	3.8	0.4	11.118	B
B-A	68	17	252	0.269	78	3.0	0.4	21.827	C
C-A	714	179			714				
C-B	324	81	601	0.539	328	2.3	1.2	13.399	B
A-B	80	20			80				
A-C	490	123			490				

2031 Forecast Year, 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		8.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.44	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)	Run automatically
D7	2031 Forecast Year	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	✓	944	100.000
B - Coventry Road		ONE HOUR	✓	326	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	788	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	76	868
	B - Coventry Road	46	0	280
	C - B4109 Rugby Road South	648	140	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	4	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	0.81	45.45	3.6	E	257	385
B-A	0.49	67.28	0.9	F	42	63
C-A					595	892
C-B	0.36	13.17	0.6	B	128	193
A-B					70	105
A-C					796	1195

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	211	53	513	0.411	208	0.0	0.7	11.718	B
B-A	35	9	294	0.118	34	0.0	0.1	13.818	B
C-A	488	122			488				
C-B	105	26	516	0.204	104	0.0	0.3	8.734	A
A-B	57	14			57				
A-C	653	163			653				

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	252	63	467	0.540	250	0.7	1.1	16.480	C
B-A	41	10	222	0.186	41	0.1	0.2	19.840	C
C-A	583	146			583				
C-B	126	31	479	0.263	125	0.3	0.4	10.185	B
A-B	68	17			68				
A-C	780	195			780				

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	308	77	387	0.796	300	1.1	3.2	38.053	E
B-A	51	13	110	0.459	48	0.2	0.8	56.508	F
C-A	713	178			713				
C-B	154	39	427	0.361	153	0.4	0.6	13.100	B
A-B	84	21			84				
A-C	956	239			956				

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	308	77	383	0.805	307	3.2	3.6	45.453	E
B-A	51	13	103	0.492	50	0.8	0.9	67.278	F
C-A	713	178			713				
C-B	154	39	427	0.361	154	0.6	0.6	13.175	B
A-B	84	21			84				
A-C	956	239			956				

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	252	63	463	0.543	261	3.6	1.2	18.591	C
B-A	41	10	215	0.192	44	0.9	0.2	21.297	C
C-A	583	146			583				
C-B	126	31	479	0.263	127	0.6	0.4	10.254	B
A-B	68	17			68				
A-C	780	195			780				

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	211	53	512	0.412	213	1.2	0.7	12.121	B
B-A	35	9	292	0.119	35	0.2	0.1	14.038	B
C-A	488	122			488				
C-B	105	26	516	0.204	106	0.4	0.3	8.795	A
A-B	57	14			57				
A-C	653	163			653				

2031 Forecast Year, 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		16.74	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.74	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
D8	2031 Forecast Year	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	✓	750	100.000
B - Coventry Road		ONE HOUR	✓	267	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	1326	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	665
	B - Coventry Road	71	0	196
	C - B4109 Rugby Road South	961	365	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	0.90	87.95	5.1	F	180	270
B-A	0.86	165.41	3.4	F	65	98
C-A					882	1323
C-B	0.76	28.31	3.0	D	335	502
A-B					78	117
A-C					610	915

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	148	37	533	0.277	146	0.0	0.4	9.279	A
B-A	53	13	270	0.198	52	0.0	0.2	16.513	C
C-A	723	181			723				
C-B	275	69	602	0.457	272	0.0	0.8	10.805	B
A-B	64	16			64				
A-C	501	125			501				

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	176	44	475	0.371	175	0.4	0.6	11.989	B
B-A	64	16	200	0.320	63	0.2	0.5	26.176	D
C-A	864	216			864				
C-B	328	82	570	0.575	326	0.8	1.3	14.632	B
A-B	76	19			76				
A-C	598	149			598				

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	216	54	287	0.753	208	0.6	2.5	42.265	E
B-A	78	20	98	0.797	70	0.5	2.4	110.989	F
C-A	1058	265			1058				
C-B	402	100	527	0.763	396	1.3	2.9	26.225	D
A-B	94	23			94				
A-C	732	183			732				

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	216	54	238	0.905	206	2.5	5.1	87.954	F
B-A	78	20	91	0.860	74	2.4	3.4	165.411	F
C-A	1058	265			1058				
C-B	402	100	527	0.763	401	2.9	3.0	28.309	D
A-B	94	23			94				
A-C	732	183			732				

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	176	44	451	0.391	194	5.1	0.7	14.948	B
B-A	64	16	192	0.333	75	3.4	0.5	33.615	D
C-A	864	216			864				
C-B	328	82	570	0.575	335	3.0	1.4	15.672	C
A-B	76	19			76				
A-C	598	149			598				

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	148	37	530	0.278	149	0.7	0.4	9.463	A
B-A	53	13	268	0.200	55	0.5	0.3	16.985	C
C-A	723	181			723				
C-B	275	69	602	0.457	277	1.4	0.9	11.168	B
A-B	64	16			64				
A-C	501	125			501				

2031 Forecast Year + Development, 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		73.38	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	73.38	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
D9	2031 Forecast Year + Development	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	✓	969	100.000
B - Coventry Road		ONE HOUR	✓	433	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	812	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	101	868
	B - Coventry Road	79	0	354
	C - B4109 Rugby Road South	648	164	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	4	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	1.25	360.85	40.8	F	325	487
B-A	1.19	456.32	10.3	F	72	109
C-A					595	892
C-B	0.42	14.71	0.7	B	150	226
A-B					93	139
A-C					796	1195

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	267	67	491	0.543	262	0.0	1.1	15.439	C
B-A	59	15	261	0.228	58	0.0	0.3	17.699	C
C-A	488	122			488				
C-B	123	31	517	0.239	122	0.0	0.3	9.095	A
A-B	76	19			76				
A-C	653	163			653				

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	318	80	426	0.747	312	1.1	2.6	30.254	D
B-A	71	18	164	0.434	69	0.3	0.7	37.502	E
C-A	583	146			583				
C-B	147	37	478	0.308	147	0.3	0.4	10.842	B
A-B	91	23			91				
A-C	780	195			780				

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	390	97	325	1.199	316	2.6	21.2	161.691	F
B-A	87	22	73	1.192	65	0.7	6.3	256.490	F
C-A	713	178			713				
C-B	181	45	425	0.425	179	0.4	0.7	14.579	B
A-B	111	28			111				
A-C	956	239			956				

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	390	97	312	1.248	311	21.2	40.8	360.847	F
B-A	87	22	74	1.178	71	6.3	10.3	456.323	F
C-A	713	178			713				
C-B	181	45	425	0.425	181	0.7	0.7	14.706	B
A-B	111	28			111				
A-C	956	239			956				

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	318	80	382	0.832	373	40.8	27.1	324.143	F
B-A	71	18	89	0.798	83	10.3	7.3	372.924	F
C-A	583	146			583				
C-B	147	37	478	0.308	149	0.7	0.5	10.951	B
A-B	91	23			91				
A-C	780	195			780				

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	267	67	452	0.589	368	27.1	1.6	82.067	F
B-A	59	15	171	0.348	86	7.3	0.6	54.780	F
C-A	488	122			488				
C-B	123	31	517	0.239	124	0.5	0.3	9.177	A
A-B	76	19			76				
A-C	653	163			653				

2031 Forecast Year + Development, 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		81.93	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	81.93	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
D10	2031 Forecast Year + Development	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	✓	771	100.000
B - Coventry Road		ONE HOUR	✓	309	100.000
C - B4109 Rugby Road South		ONE HOUR	✓	1397	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	665
	B - Coventry Road	97	0	212
	C - B4109 Rugby Road South	961	436	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	1.45	550.60	36.9	F	195	292
B-A	1.42	595.31	17.5	F	89	134
C-A					882	1323
C-B	0.92	66.00	8.2	F	400	600
A-B					97	146
A-C					610	915

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	160	40	505	0.316	158	0.0	0.5	10.323	B
B-A	73	18	251	0.291	71	0.0	0.4	19.931	C
C-A	723	181			723				
C-B	328	82	598	0.549	324	0.0	1.2	12.924	B
A-B	80	20			80				
A-C	501	125			501				

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	191	48	409	0.466	189	0.5	0.8	16.251	C
B-A	87	22	172	0.507	85	0.4	0.9	40.498	E
C-A	864	216			864				
C-B	392	98	565	0.693	388	1.2	2.1	19.889	C
A-B	95	24			95				
A-C	598	149			598				

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	233	58	169	1.381	162	0.8	18.7	252.814	F
B-A	107	27	79	1.353	73	0.9	9.4	317.508	F
C-A	1058	265			1058				
C-B	480	120	521	0.922	461	2.1	6.8	49.316	E
A-B	117	29			117				
A-C	732	183			732				

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	233	58	161	1.451	160	18.7	36.9	550.598	F
B-A	107	27	75	1.418	74	9.4	17.5	595.305	F
C-A	1058	265			1058				
C-B	480	120	521	0.922	475	6.8	8.2	66.004	F
A-B	117	29			117				
A-C	732	183			732				

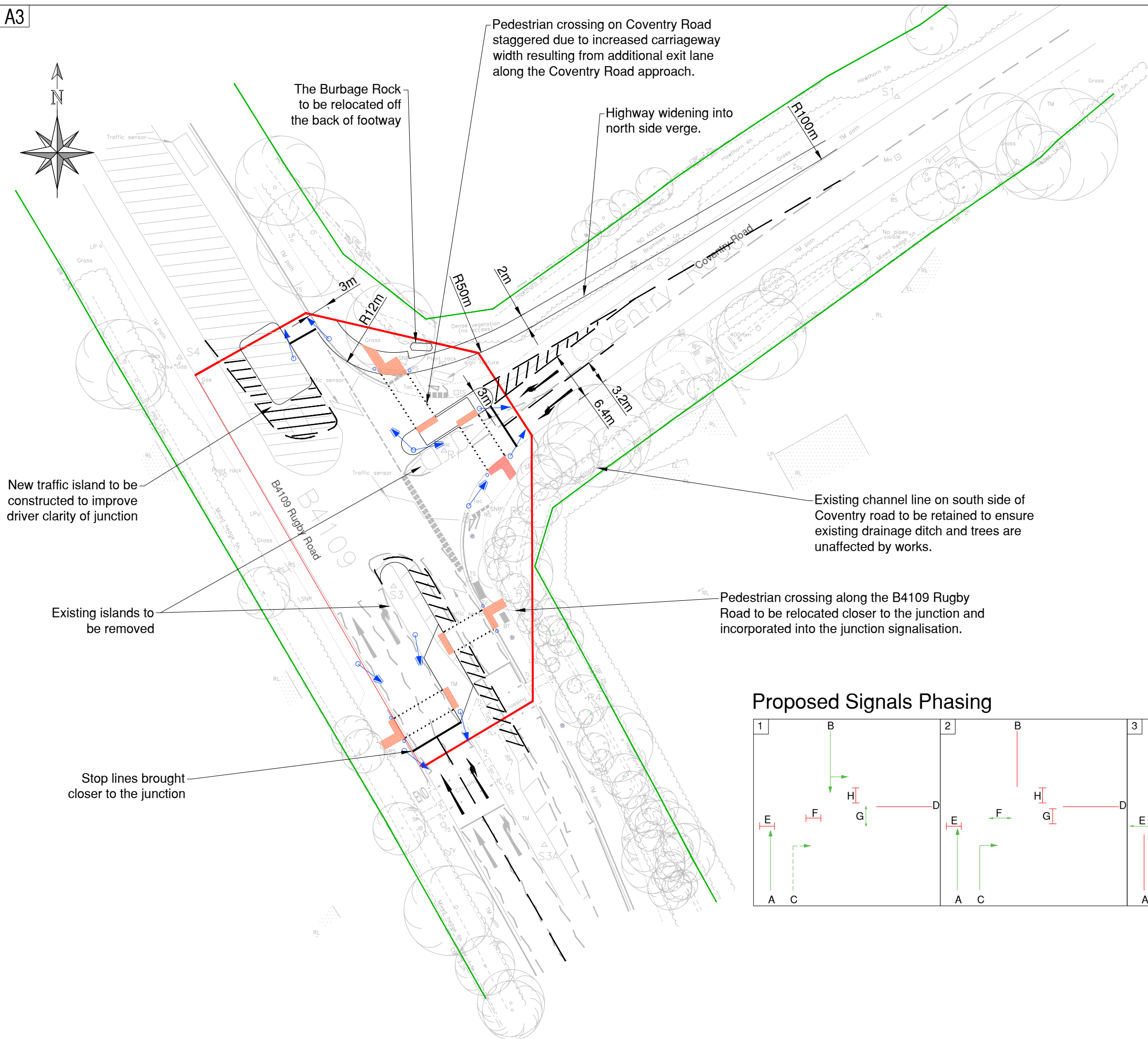
17:45 - 18:00

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	191	48	260	0.733	253	36.9	21.3	392.476	F
B-A	87	22	121	0.722	114	17.5	10.7	416.980	F
C-A	864	216			864				
C-B	392	98	565	0.693	415	8.2	2.4	26.911	D
A-B	95	24			95				
A-C	598	149			598				

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	160	40	429	0.372	242	21.3	0.6	30.120	D
B-A	73	18	216	0.338	114	10.7	0.5	49.472	E
C-A	723	181			723				
C-B	328	82	598	0.549	333	2.4	1.3	13.828	B
A-B	80	20			80				
A-C	501	125			501				

Appendix W: B4109 Rugby Rd / Coventry Road Mitigation Scheme, Stage 1 RSA and LinSig Report



Key

- Highway Boundary
- Proposed Kerline
- Primary Signal Head
- Secondary Signal Head
- Junction Intervisibility Zone

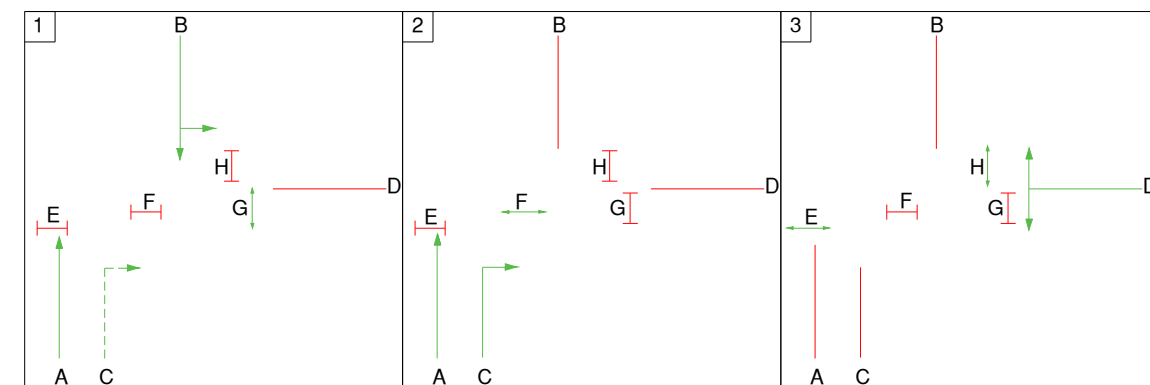
NOTE

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.

Proposed Signals Phasing



P04	19/06/24	Amended Signal Phasing	JWB	ADM
P03	10/04/24	Added Signals Phasing & Junction Intervisibility Zone	JWB	ADM
P02	04/07/202	Amendments Made Following Stage 3 RSA	JWB	ADM
P01	07/06/23	Topographical Survey Map Added	JWB	ADM
Rev	Date	Amendments	By	Chk



Client

Redrow Homes

Project

Land South of Burbage

Drawing Title

Preliminary B4109 Rugby Road / Coventry Road Mitigation

Status

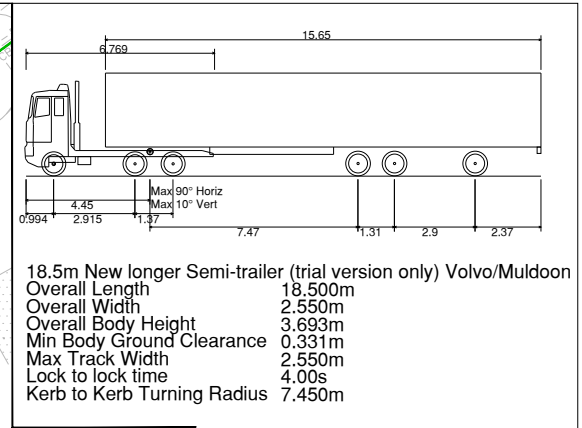
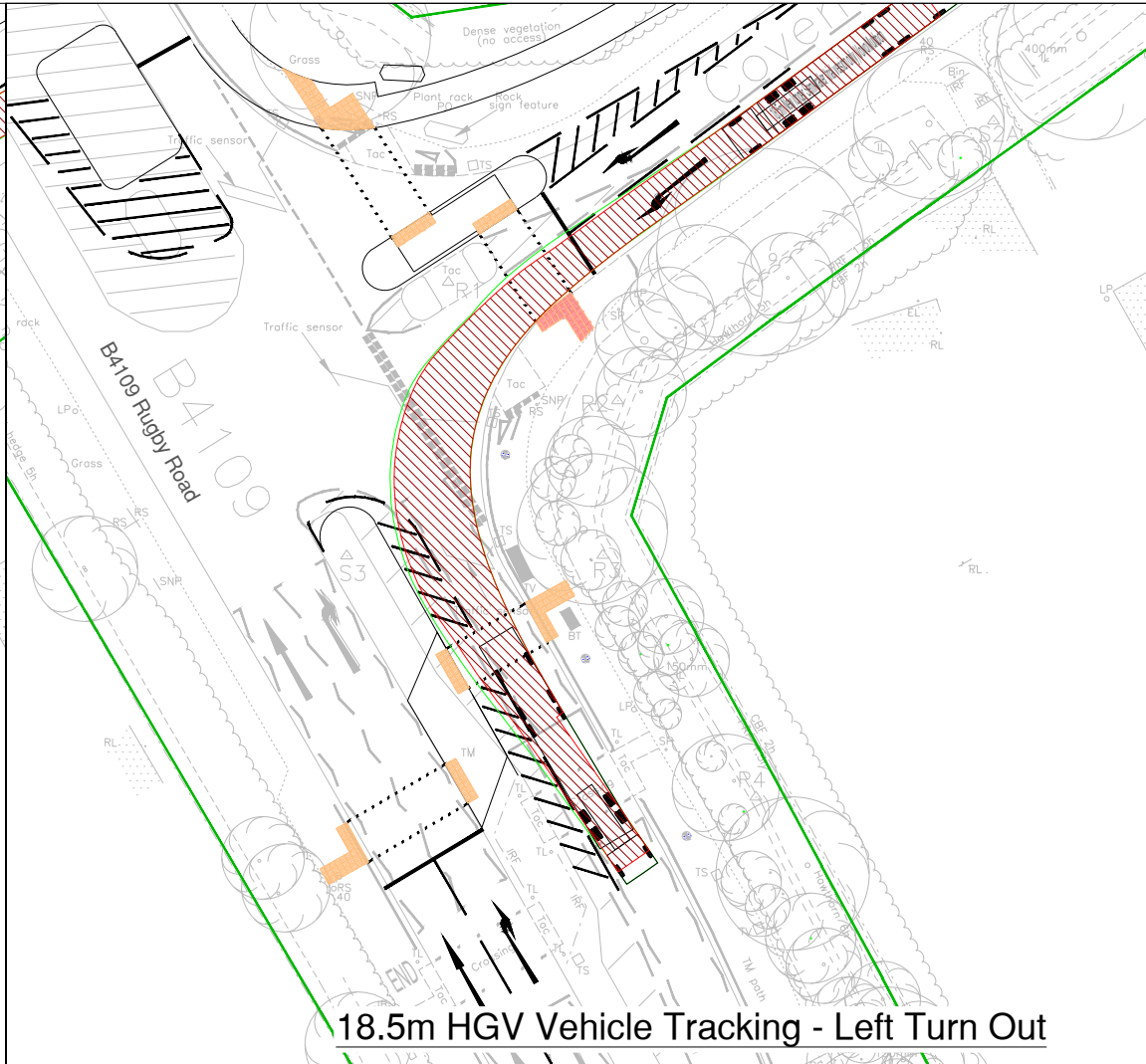
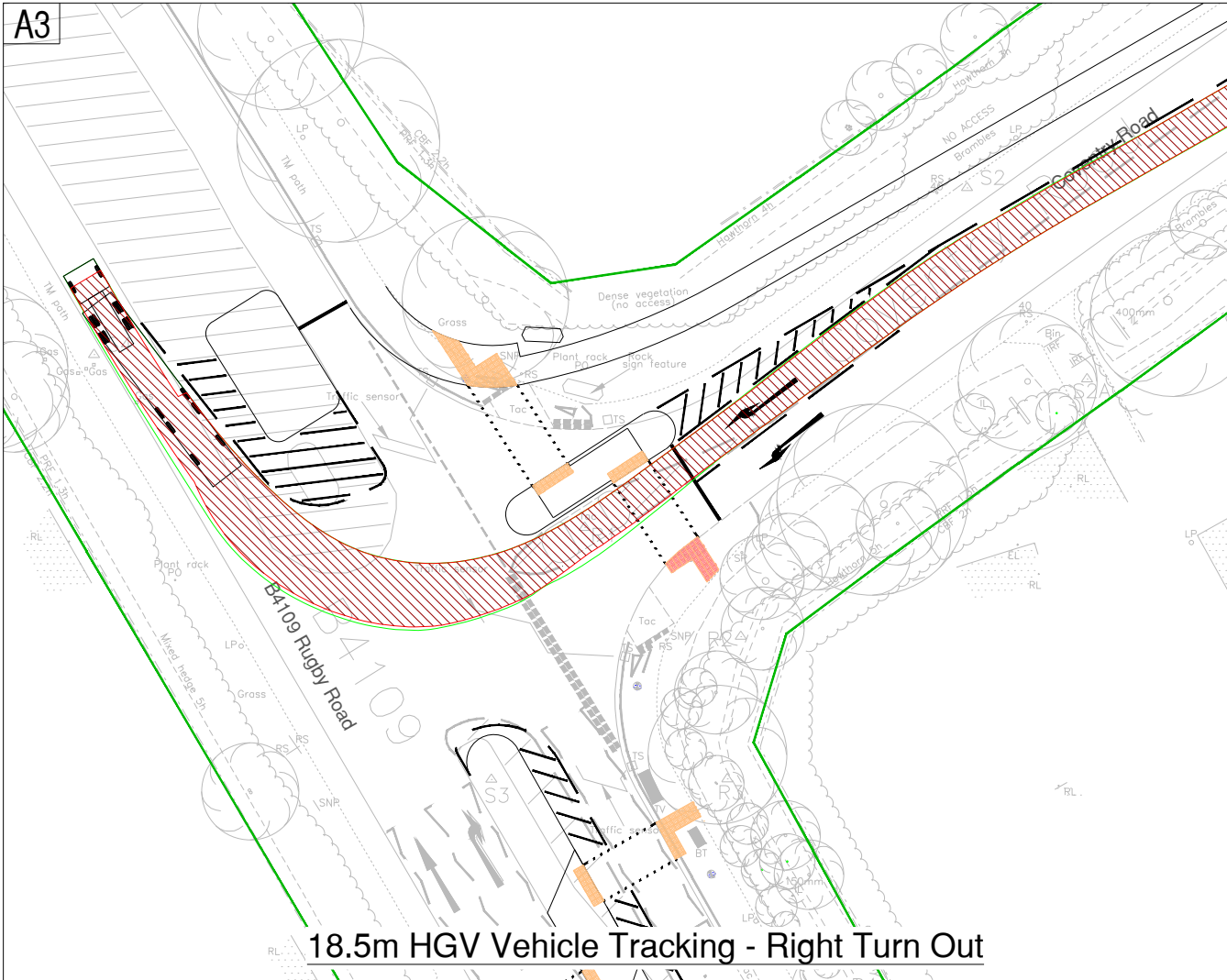
For Information

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

Drawing No. Rev.

21390-RLL-23-XX-DR-D-5011 P04

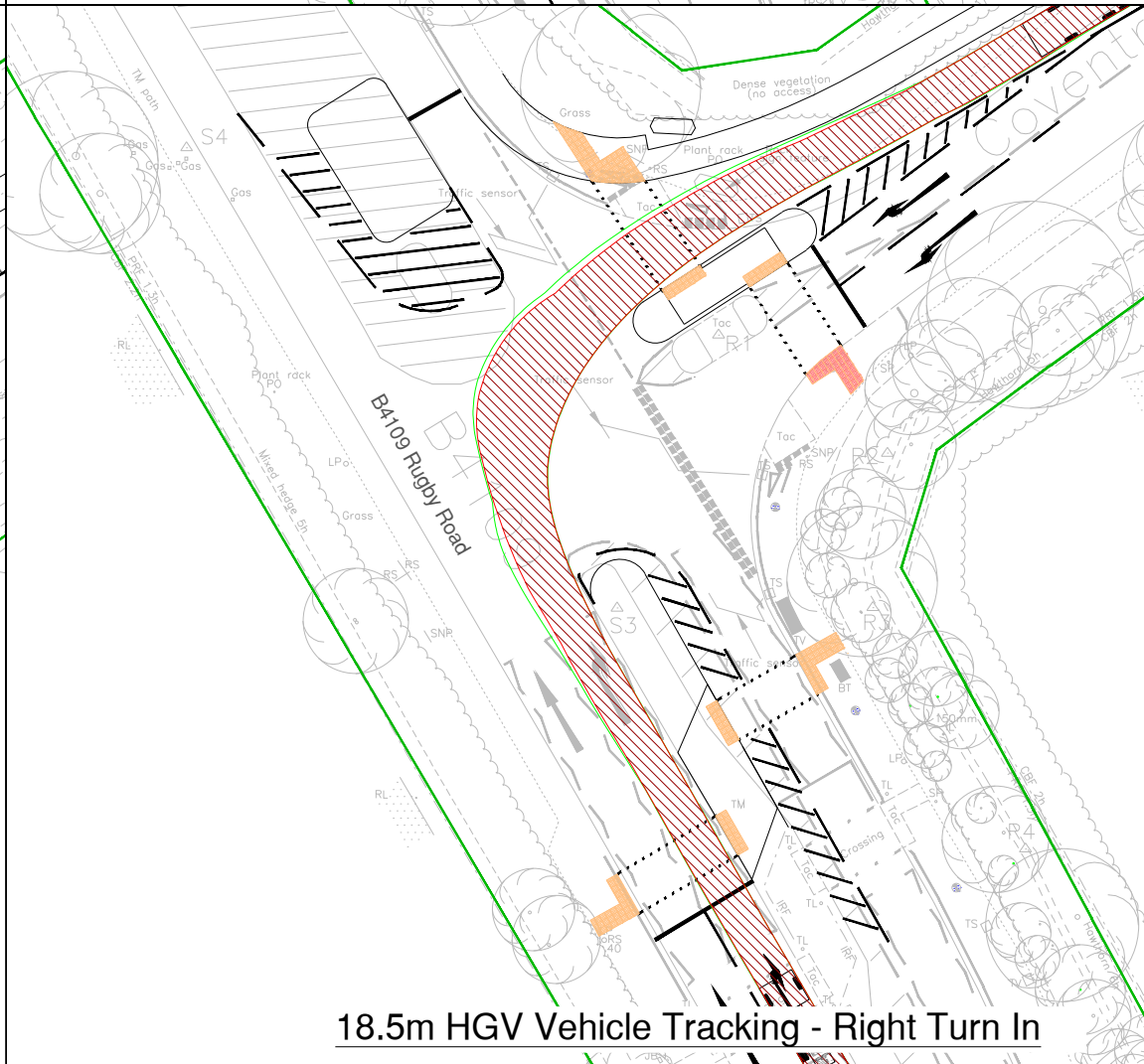
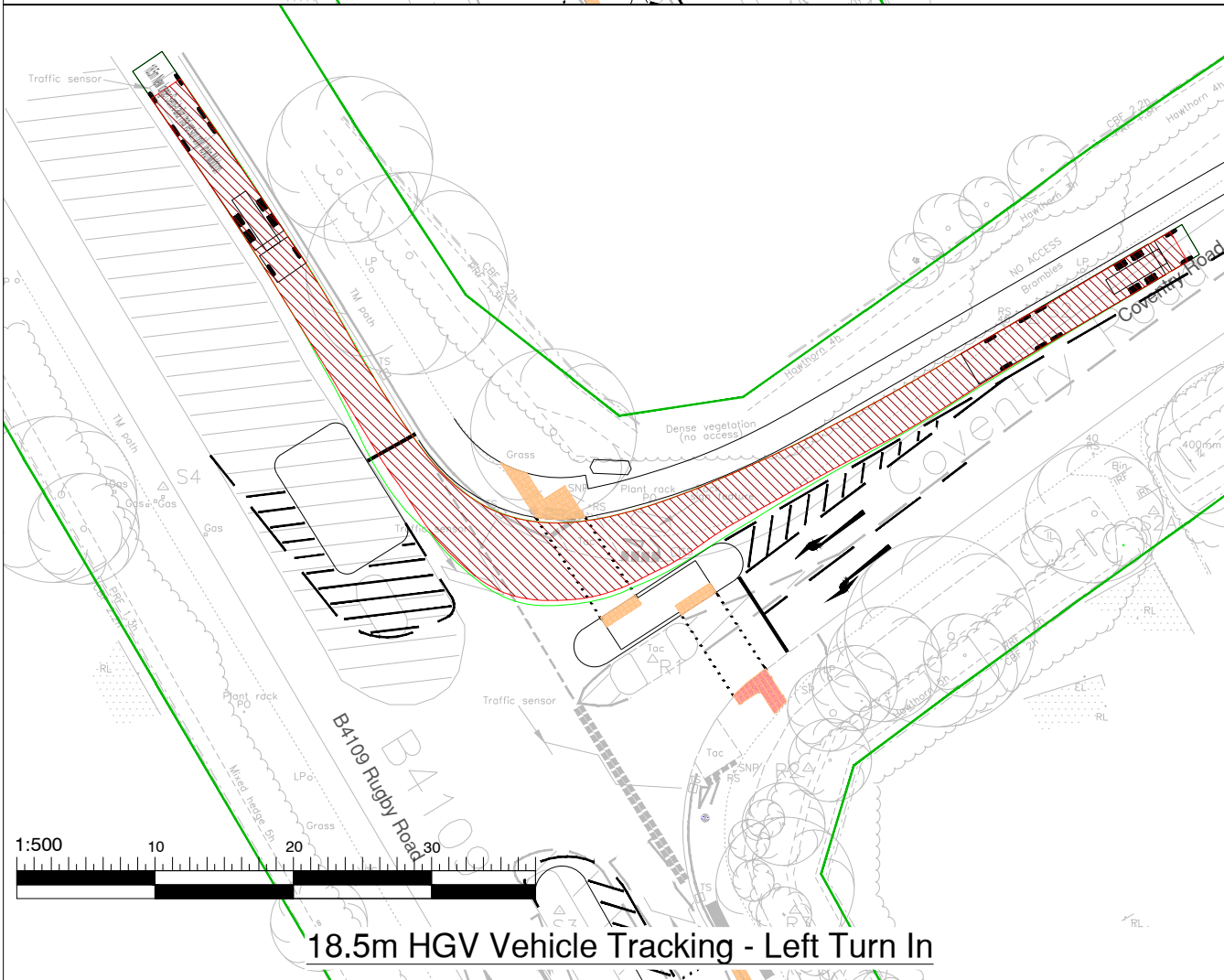
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NOTE
Preliminary scheme only for comment & review.

Vehicle tracking has been undertaken using a vehicle speed of 15kph.

Do not scale from this drawing.



P03	18/06/24	Changed vehicle used for swept paths	JWB	ADM	
P02	10/04/24	Updated swept paths based on 15kph vehicle speed	JWB	ADM	
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 Mitigation Vehicle Tracking

Status

For Information

Scale	Drawn	Checked	Date
A3@ 1:500	CB	ADM	13/06/23

Drawing No. 21390-RLL-23-XX-DR-D-5016 P03

Rev.

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REDROW HOMES DEVELOPMENT RUGBY ROAD BURBAGE SECTION 278 WORKS

STAGE 1 ROAD SAFETY AUDIT

SA 4143
June 2023



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REV	ISSUE STATUS	PREPARED BY/DATE	CHECKED BY/DATE	APPROVED BY/DATE
1	DRAFT	LB 27 June 2023	JC 27 June 2023	
2	FINAL	LB 28 June 2023	JC 28 June 2023	ASD 02 July 2023

Disclaimer notes

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

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

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APPENDICES

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1.0 INTRODUCTION

- 1.1 This report is for a Stage 1 Road Safety Audit (RSA) carried out on the proposed Section 278 Works at the junction of Coventry Road/Rugby Road, Burbage. This report was requested by Redrow Homes.
- 1.2 The RSA team, staff members from Waterman Aspen, present at the RSA were:

Liam Bourne
Audit Team Leader

Joe Clarbourn
Audit Team Member
- 1.3 We confirm that no member of the Audit Team has been involved with the design process and that at least one member of the Audit Team holds the National Highways Certificate of Competency.
- 1.4 The Audit Team visited the site together on Friday, 23 June 2023. The weather during the site visit was bright sunshine with a dry carriageway surface.
- 1.5 The RSA brief issued to the team comprised various elements listed at Appendix Two.
- 1.6 The scheme has been examined and this report compiled only with regard to the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other Standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. Any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.
- 1.7 All of the problems described in this report are considered by the RSA team to require action in order to improve the safety of the scheme and minimise collision occurrence. However, if any of the problems or recommendations within this Road Safety Audit report is not accepted, a copy of the signed exception report from the Overseeing Organisation should be sent to the Road Safety Audit Team Leader.
- 1.8 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

2.0 SCHEME DESCRIPTION

- 2.1 The scheme comprises Section 278 works consisting of the traffic signalisation of the Coventry Road and Rugby Road T-junction in Burbage.

3.0 RECORDED INJURY COLLISION HISTORY

- 3.1 Collision data for a vast area of Burbage village was sent to the Audit Team to review with the proposals, however, none of the collisions occurred at the specific junction where the scheme is proposed.

4.0 DEPARTURES FROM STANDARD

- 4.1 No departures from standard have been highlighted within the Audit Brief.

5.0 DOCUMENTS AND INFORMATION NOT PROVIDED

- 5.1 The following information was not provided within the audit brief and therefore has not been considered with the audit:
- Previous Road Safety Audits
 - Site clearance
 - Street lighting
 - Landscaping
 - Road traffic signing
 - Drainage
 - Levels and gradients
 - Construction details
 - Kerb details
 - Surfacing details
 - Extents of S278 works

6.0 MATTERS ARISING FROM THIS STAGE 1 ROAD SAFETY AUDIT

6.1 Problem

Location: Approaches to traffic signal stop lines

Summary: **Risk of vehicles overshooting traffic signal stop lines**

During the site visit, it was noted that there was existing overhanging vegetation which could reduce forward visibility of the proposed primary signal heads. If there is inadequate visibility on the approach to the signals then there will be a risk of vehicles overshooting stop lines, potentially leading to collisions with other road users.

Recommendation

It is recommended that adequate visibility is provided on all the approaches to the traffic signal heads.

6.2 Problem

Location: Coventry Road arm of junction

Summary: **Risk of pedestrian and cyclist collisions**

There is an existing shared use cycleway along Rugby Road which crosses over the junction with Coventry Road. The drawings submitted for audit show it is proposed to signalise this crossing by incorporating the crossing into the wider traffic signalised junction. The Audit Team are concerned that the crossing and central island may be too small to cater for both cyclists and pedestrians using the facilities. If there is inadequate space within the crossing area or central island, then there could be collisions between cyclists and pedestrians.

Recommendation

It is recommended that the traffic signal-controlled crossings over the Coventry Road arm of the junction be widened to accommodate the shared use cycleway crossing the junction.

6.3 Problem

Location: Northern side of Coventry Road arm of the junction

Summary: **Risk of pedestrian falls from height**

During the site visit it was noted that there appeared to be a level difference where it is proposed to widen the carriageway and relocate the footway on the northern side of the Coventry Road arm of the junction. The Audit Team are concerned that the level difference could pose a potential fall from height for pedestrians if not sufficiently accommodated into the detail design.

Recommendation

It is recommended that any potential for falls from height be removed from the back of the footway off the back of the Coventry Road arm of the junction.

6.4 Problem

Location: Throughout the junction

Summary: **Risk of vehicle and pedestrian collisions**

The Audit Team are concerned that there may not be sufficient secondary traffic signal heads for the offside lanes on the approaches. If traffic signals and phases are not clearly visible to road users, then there could be collisions between users.

Recommendation

It is recommended the traffic signal phasing and location of traffic signals are reviewed during the detail design phase.

APPENDIX ONE

7.0 AUDIT TEAM STATEMENT

AUDIT TEAM STATEMENT

We certify that the audit has been carried out in accordance with the requirements set out in GG119. The problems identified have been noted in this report together with associated safety improvement suggestions which we recommend should be studied for implementation.

AUDIT TEAM LEADER

Liam Bourne MCIHT HE Cert - Comp
Senior Traffic Engineer
Waterman Aspen
5th Floor
1 Cornwall Street
Birmingham
B3 2DX

A handwritten signature in blue ink, appearing to read 'Liam'.

Signed.....

Date: 27 June 2023

AUDIT TEAM MEMBER

Joe Clarbourn MSc, BA Hons
Senior Road Safety Engineer
Waterman Aspen
5th Floor
1 Cornwall Street
Birmingham
B3 2DX

A handwritten signature in blue ink, appearing to read 'Joe'.

Signed.....

Date: 27 June 2023

APPENDIX TWO

8.0 LIST OF DRAWINGS AND DOCUMENTS PROVIDED TO THE AUDIT TEAM

LIST OF DRAWINGS AND DOCUMENTS PROVIDED TO THE AUDIT TEAM

Drawings

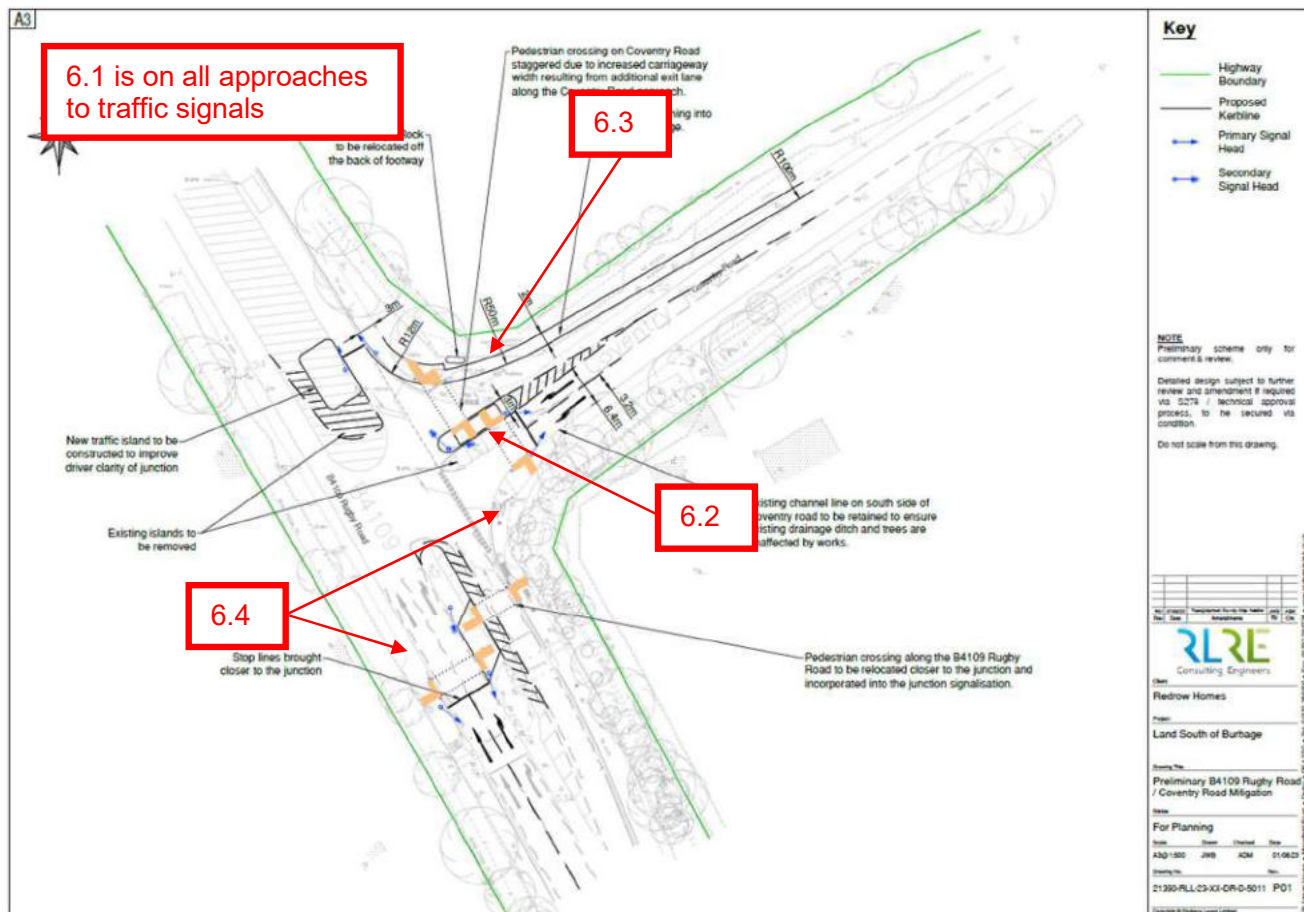
- Rugby Rd_Coventry Rd - 21390-RLL-23-XX-DR-D-5011(P01) Preliminary Rugby Road Coventry Road Scheme
- Rugby Rd_Coventry Rd - 21390-RLL-23-XX-DR-D-5016 (P01) Preliminary Rugby Road Coventry Road Scheme Tracking
- LCC Collision Records
- Site Location Plan

Documents

- B4109 Rugby Road_Coventry Road LinSig Results
- Rugby Road_Coventry Road Stage 1 RSA Brief
- Traffic Flows - AADT 24hr
- Traffic Flows - Peak Hour Turning Flows - AM 08-09
- Traffic Flows - Peak Hour Turning Flows - PM 17-18
- Collision Records_All accidents
- Collision Records_Cycle accidents
- Collision Records_Pedestrian accidents
- Collision Records_Statistics
- Collision Records_Summary - All accidents

APPENDIX THREE

9.0 PROBLEM LOCATION PLAN





ROAD SAFETY AUDIT DESIGNER'S RESPONSE DOCUMENT

Junction Layout / Reference No	Rugby Road / Coventry Road, Burbage	Road Safety Audit Stage	1
Project Title	Land South of Burbage	Audit Site Visit Undertaken	Friday 23 rd of June 2023
Project Reference	P21-390	RSA Document Reference No	SA 4138 (27 th June 2023)
Designer's Response Prepared by	Jake Blay Graduate Transport Planner	Auditors' Name and Company	Liam Bourne (Team Leader) Joe Clarbour (Team Member) Waterman Aspen (WA)

Reference	Location	Problem	Recommendation	Designer's Response
6.1	Approaches to traffic signal stop lines	Summary: Risk of vehicles overshooting traffic signal stop lines <i>During the site visit, it was noted that there was existing overhanging vegetation which could reduce forward visibility of the proposed primary signal heads. If there is inadequate visibility on the approach to the signals then there will be a risk of vehicles overshooting stop lines, potentially leading to collisions with other road users.</i> Problem accepted? Yes: ☐ No: ☒	It is recommended that adequate visibility is provided on all approaches to the traffic signal heads. Recommendation accepted? Yes: ☐ No: ☒	Vegetation within the public highway boundary will be cut back as part of routine maintenance. Vegetation clearance within the public highway will occur during the construction of the improvements/installation of the traffic signals. Adequate visibility will be achievable on all approaches to the traffic signal heads.

Reference	Location	Problem	Recommendation	Designer's Response
6.2	Coventry Road arm of the junction	Summary: Risk of pedestrian and cyclist collisions <i>There is an existing shared use cycleway along Rugby Road which crosses over the junction with Coventry Road. The drawings submitted for audit show it is proposed to signalise this crossing by incorporating the crossing into the wider traffic signalised junction. The Audit Team are concerned that the crossing and central island may be too small to cater for both cyclists and pedestrians using the facilities. If there is inadequate space within the crossing area or central island, then there could be collisions between cyclists and pedestrians.</i> Problem accepted? Yes: ☐ No: ☒	It is recommended that the traffic signal-controlled crossings over the Coventry Road arm of the junction be widened to accommodate the shared use cycleway crossing the junction. Recommendation accepted? Yes: ☐ No: ☒	The Leicestershire Highways Design Guide (Interim 2022) states that "where a refuge in the middle of the road is required, you should provide this to standard drawing with: a 2m width for pedestrian-only use and 2.5m width where it will be used by cyclists." The proposed 3m width central refuge on the Coventry Road minor arm is safe and suitable and inline with LCC design standards.

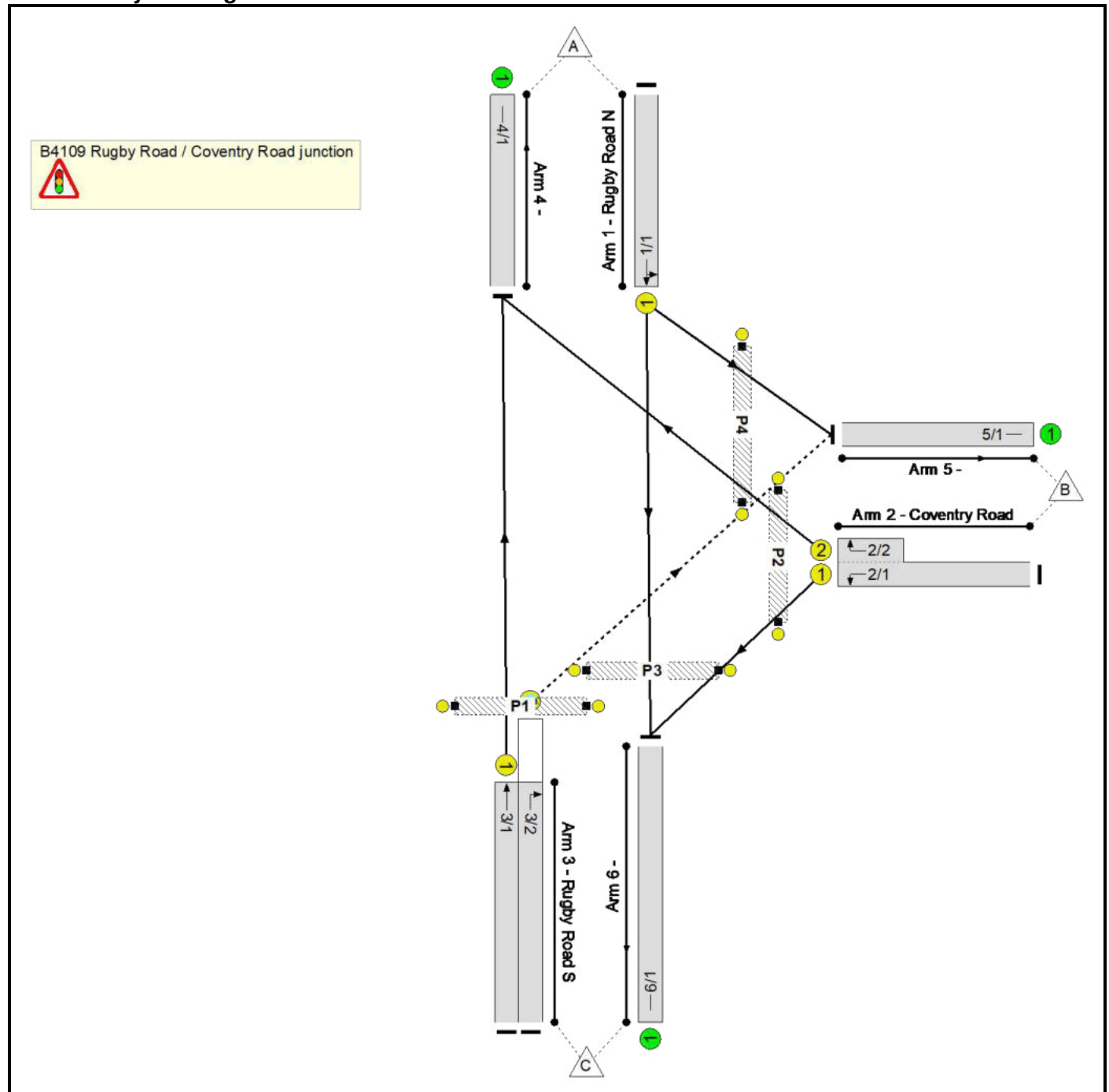
Reference	Location	Problem	Recommendation	Designer's Response
6.3	Northern side of Coventry Road arm of junction	<i>Summary: Risk of pedestrian falls from height</i> <i>During the site visit it was noted that there appeared to be a level difference where it is proposed to widen the carriageway and relocate the footway on the northern side of the Coventry Road arm of the junction. The Audit Team are concerned that the level difference could pose a potential fall from height for pedestrians if not sufficiently accommodated into the detail design.</i> Problem accepted? Yes: ☒ No: ☐	It is recommended that any potential for falls from height be removed from the back of the footway off the back of the Coventry Road arm of the junction. Recommendation accepted? Yes: ☒ No: ☐	The area required to provide the junction improvements will be levelled/filled to ensure that the works are at level. Exact details of levels will be provided during the detailed design stage.

Reference	Location	Problem	Recommendation	Designer's Response
6.4	Throughout the junction	Summary: Risk of vehicle and pedestrian collisions <i>The Audit Team are concerned that there may not be sufficient secondary traffic signal heads for the offside lanes on the approaches. If traffic signals and phases are not clearly visible to road users, then there could be collisions between users.</i> Problem accepted? Yes: ☒ No: ☐	It is recommended the traffic signal phasing and location of traffic signals are reviewed during the detail design phase. Recommendation accepted? Yes: ☒ No: ☐	Additional secondary signal heads to be added, the scheme drawing has been revised accordingly. Further details to be discussed with LCC during the detailed design stage.

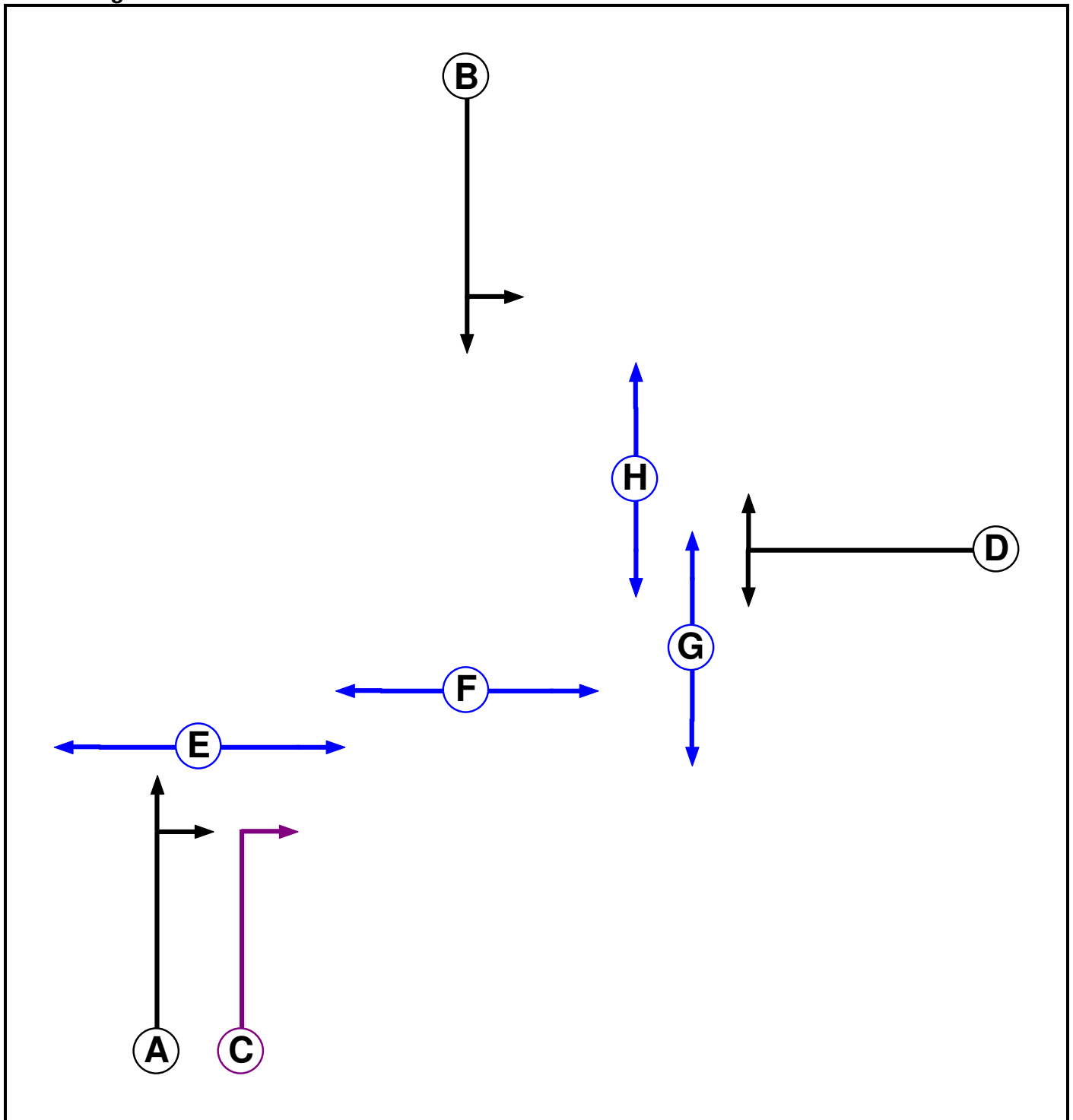
Full Input Data And Results**User and Project Details**

Project:	Land South of Burbage
Title:	Proposed signalisation of the B4109 Rugby Road / Coventry Road junction
Location:	Burbage, Leicestershire
Client:	Redrow Homes
Model Purpose:	Junction capacity testing
Model Assumptions:	LinSig model developed using Rodgers Leask drawing 21390-RLL-23-XX-DR-D-5011P04
Additional detail:	
File name:	Rugby Rd_Coventry Rd_mitigation scheme.lsg3x
Author:	T&T
Company:	Rodgers Leask
Address:	St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Ind. Arrow	A	4	4
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7

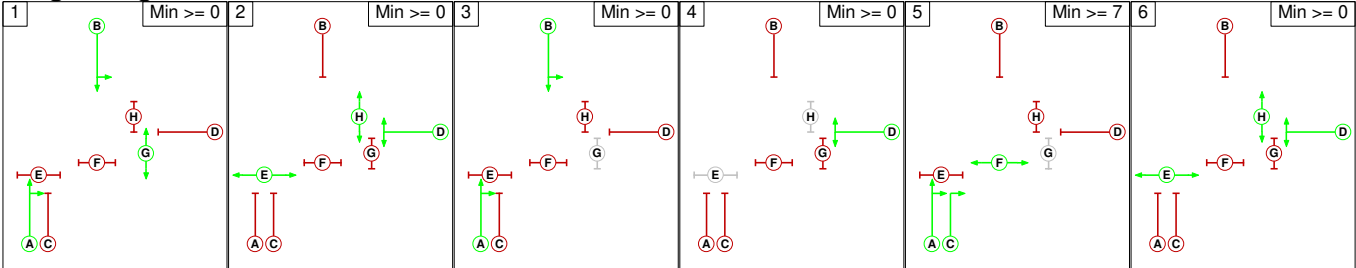
Phase Intergreens Matrix

Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		-	-	8	6	-	-	8
	B	-		3	7	-	9	-	7
	C	-	7		7	6	-	-	8
	D	5	5	5		-	7	5	-
	E	9	-	9	-		-	-	-
	F	-	7	-	7	-		-	-
	G	-	-	-	8	-	-		-
	H	9	9	9	-	-	-	-	

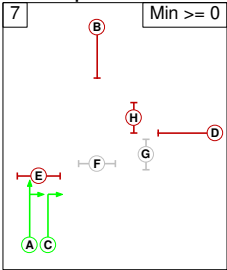
Phases in Stage

Stage No.	Phases in Stage
1	A B G
2	D E H
3	A B
4	D
5	A C F
6	D E H
7	A C

Stage Diagram



Full Input Data And Results



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Losing	1	1
1	2	B	Losing	1	1
1	4	A	Losing	1	1
1	4	B	Losing	1	1
1	6	A	Losing	1	1
1	6	B	Losing	1	1
2	1	D	Losing	4	4
2	3	D	Losing	4	4
2	5	D	Losing	4	4
3	4	A	Losing	1	1
3	4	B	Losing	1	1
3	6	A	Losing	1	1
3	6	B	Losing	1	1
6	1	D	Losing	4	4
6	3	D	Losing	4	4
6	5	D	Losing	4	4

Prohibited Stage Change

		To Stage						
From Stage		1	2	3	4	5	6	7
	1		9	0	9	9	9	3
	2	9		9	0	11	0	9
	3	0	8		9	9	9	3
	4	5	0	5		7	0	5
	5	7	8	7	8		8	0
	6	9	0	9	0	11		9
	7	7	8	7	8	0	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: B4109 Rugby Road / Coventry Road junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/2 (Rugby Road S)	5/1 (Right)	1439	0	1/1	1.09	All	4.00	-	0.50	4	4.00

Lane Input Data

Junction: B4109 Rugby Road / Coventry Road junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Rugby Road N)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	13.50
											Arm 6 Ahead	Inf
2/1 (Coventry Road)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 6 Left	15.00
2/2 (Coventry Road)	U	D	2	3	4.1	Geom	-	3.20	0.00	Y	Arm 4 Right	12.00
3/1 (Rugby Road S)	U	A	2	3	12.2	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
3/2 (Rugby Road S)	O	A C	2	3	12.2	Geom	-	3.65	0.00	Y	Arm 5 Right	7.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 + Land South of Burbage (442dw) AM'	08:00	09:00	01:00	
2: '2026 + Land South of Burbage (442dw) PM'	17:00	18:00	01:00	
3: '2031 + Land South of Burbage (442dw) AM'	08:00	09:00	01:00	
4: '2031 + Land South of Burbage (442dw) PM'	17:00	18:00	01:00	

Scenario 1: '2026 + Dev AM (no ped crossing calls)' (FG1: '2026 + Land South of Burbage (442dw) AM', Plan 1: 'AM Plan (single) - no crossings called')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	102	907	1009
	B	80	0	394	474
	C	684	156	0	840
	Tot.	764	258	1301	2323

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2026 + Dev AM (no ped crossing calls)
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	1009
2/1 (with short)	474(In) 394(Out)
2/2 (short)	80
3/1	684
3/2	156
4/1	764
5/1	258
6/1	1301

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	10.1 % 89.9 %	1894	1894
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2026 + Dev AM' (FG1: '2026 + Land South of Burbage (442dw) AM', Plan 2: 'AM Plan (triple) - crossings called')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	102	907	1009
	B	80	0	394	474
	C	684	156	0	840
	Tot.	764	258	1301	2323

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2026 + Dev AM
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	1009
2/1 (with short)	474(In) 394(Out)
2/2 (short)	80
3/1	684
3/2	156
4/1	764
5/1	258
6/1	1301

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	10.1 % 89.9 %	1894	1894
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2026 + Dev PM (no ped crossing calls)' (FG2: '2026 + Land South of Burbage (442dw) PM', Plan 3: 'PM Plan (single) - no crossings called')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	106	662	768
	B	90	0	201	291
	C	959	432	0	1391
	Tot.	1049	538	863	2450

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2026 + Dev PM (no ped crossing calls)
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	768
2/1 (with short)	291(In) 201(Out)
2/2 (short)	90
3/1	959
3/2	432
4/1	1049
5/1	538
6/1	863

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	13.8 % 86.2 %	1886	1886
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2026 + Dev PM' (FG2: '2026 + Land South of Burbage (442dw) PM', Plan 4: 'PM Plan (double) - crossings called')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	106	662	768
	B	90	0	201	291
	C	959	432	0	1391
	Tot.	1049	538	863	2450

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2026 + Dev PM
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	768
2/1 (with short)	291 (In) 201 (Out)
2/2 (short)	90
3/1	959
3/2	432
4/1	1049
5/1	538
6/1	863

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	13.8 % 86.2 %	1886	1886
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2031 + Dev AM (no ped crossing calls)' (FG3: '2031 + Land South of Burbage (442dw) AM', Plan 1: 'AM Plan (single) - no crossings called')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	103	902	1005
	B	79	0	359	438
	C	697	178	0	875
	Tot.	776	281	1261	2318

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2031 + Dev AM (no ped crossing calls)
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	1005
2/1 (with short)	438(In) 359(Out)
2/2 (short)	79
3/1	697
3/2	178
4/1	776
5/1	281
6/1	1261

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	10.2 % 89.8 %	1893	1893
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2031 + Dev AM' (FG3: '2031 + Land South of Burbage (442dw) AM', Plan 2: 'AM Plan (triple) - crossings called')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	103	902	1005
	B	79	0	359	438
	C	697	178	0	875
	Tot.	776	281	1261	2318

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2031 + Dev AM
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	1005
2/1 (with short)	438(In) 359(Out)
2/2 (short)	79
3/1	697
3/2	178
4/1	776
5/1	281
6/1	1261

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	10.2 % 89.8 %	1893	1893
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2031 + Dev PM (no ped crossing calls)' (FG4: '2031 + Land South of Burbage (442dw) PM', Plan 3: 'PM Plan (single) - no crossings called')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	106	676	782
	B	97	0	215	312
	C	971	437	0	1408
	Tot.	1068	543	891	2502

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2031 + Dev PM (no ped crossing calls)
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	782
2/1 (with short)	312(In) 215(Out)
2/2 (short)	97
3/1	971
3/2	437
4/1	1068
5/1	543
6/1	891

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	13.6 % 86.4 %	1887	1887
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2031 + Dev PM' (FG4: '2031 + Land South of Burbage (442dw) PM', Plan 4: 'PM Plan (double) - crossings called')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	106	676	782
	B	97	0	215	312
	C	971	437	0	1408
	Tot.	1068	543	891	2502

Traffic Lane Flows

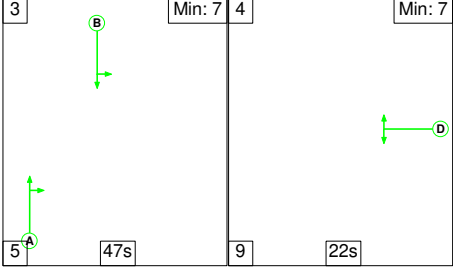
Lane	Scenario 8: 2031 + Dev PM
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	782
2/1 (with short)	312(In) 215(Out)
2/2 (short)	97
3/1	971
3/2	437
4/1	1068
5/1	543
6/1	891

Lane Saturation Flows

Junction: B4109 Rugby Road / Coventry Road junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Rugby Road N)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	13.50 Inf	13.6 % 86.4 %	1887	1887
2/1 (Coventry Road)	3.20	0.00	Y	Arm 6 Left	15.00	100.0 %	1759	1759
2/2 (Coventry Road)	3.20	0.00	Y	Arm 4 Right	12.00	100.0 %	1720	1720
3/1 (Rugby Road S)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (Rugby Road S)	3.65	0.00	Y	Arm 5 Right	7.00	100.0 %	1631	1631
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2026 + Dev AM (no ped crossing calls)' (FG1: '2026 + Land South of Burbage (442dw) AM', Plan 1: 'AM Plan (single) - no crossings called')

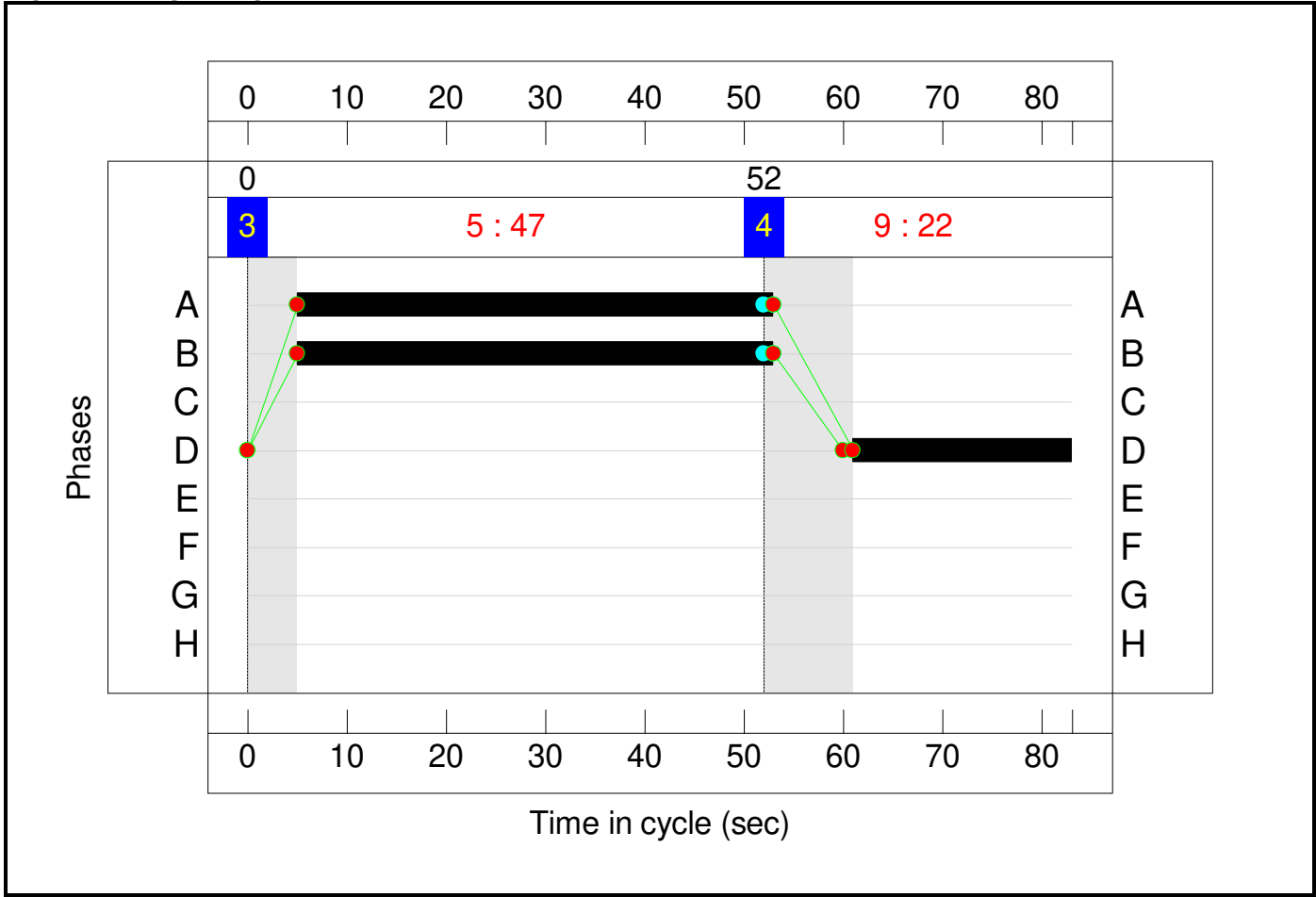
Stage Sequence Diagram



Stage Timings

Stage	3	4
Duration	47	22
Change Point	0	52

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

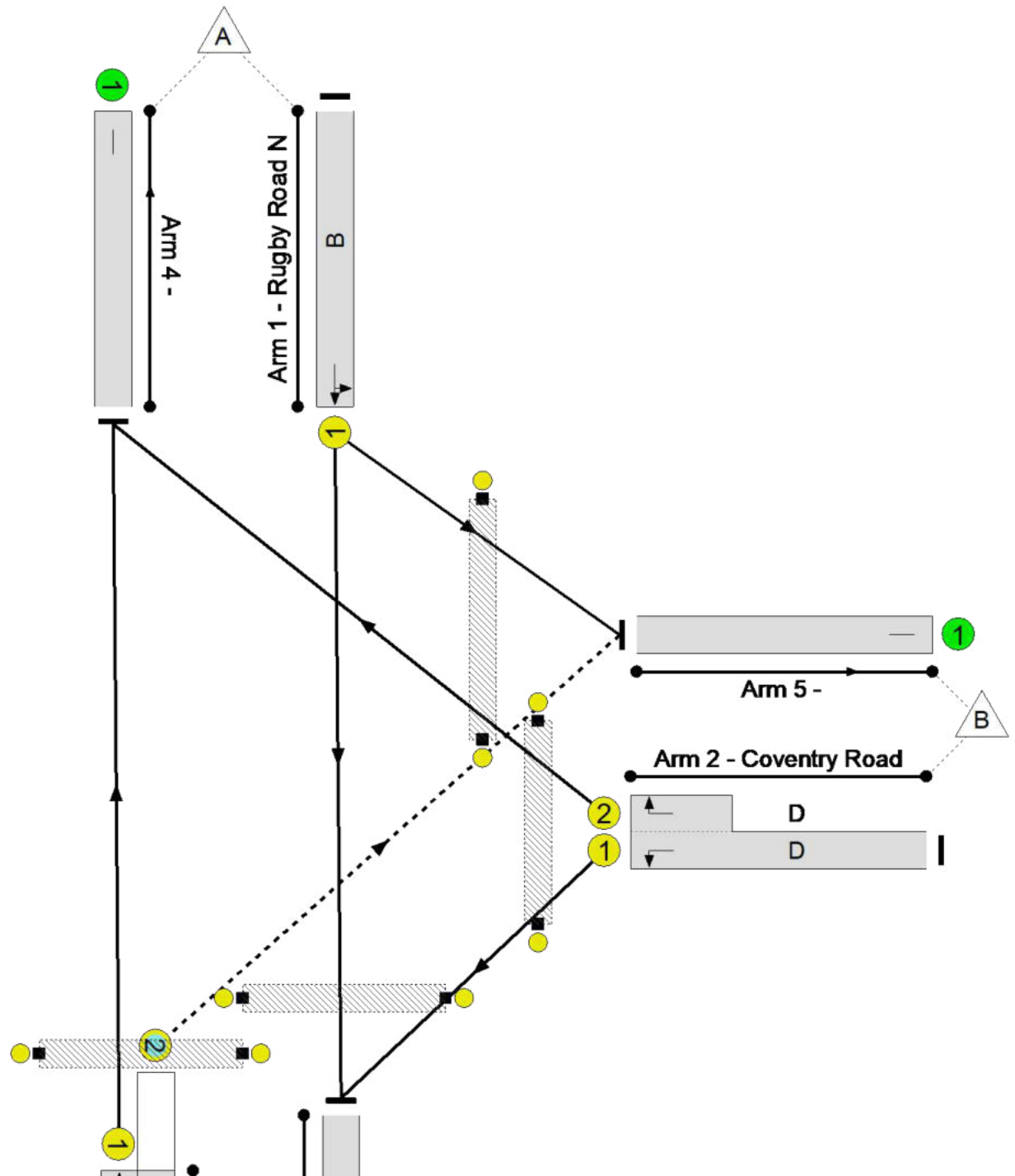
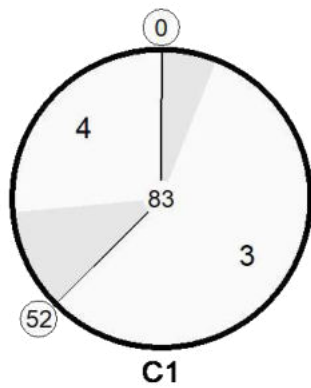
B4109 Rugby Road / Coventry Road junction



PRC: -0.3 %

Total Traffic Delay: 21.9 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	90.2%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	90.2%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		1	48	-	1009	1894	1118	90.2%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		1	22	-	474	1759:1720	440+89	89.6 : 89.6%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		1	48	-	684	1980	1169	58.5%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	1	48	0	156	1631	206	75.7%
4/1		U	N/A	N/A	-		-	-	-	764	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	258	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1301	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		0	0	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		0	0	-	0	-	0	0.0%

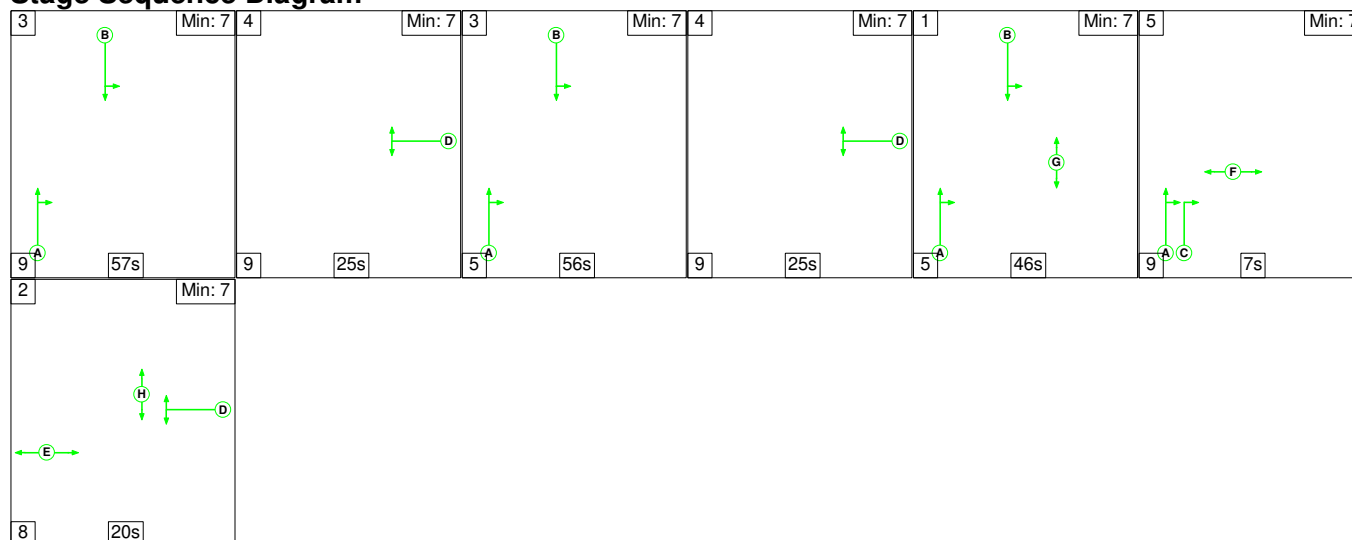
Full Input Data And Results

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Full Input Data And Results

Scenario 2: '2026 + Dev AM' (FG1: '2026 + Land South of Burbage (442dw) AM', Plan 2: 'AM Plan (triple) - crossings called')

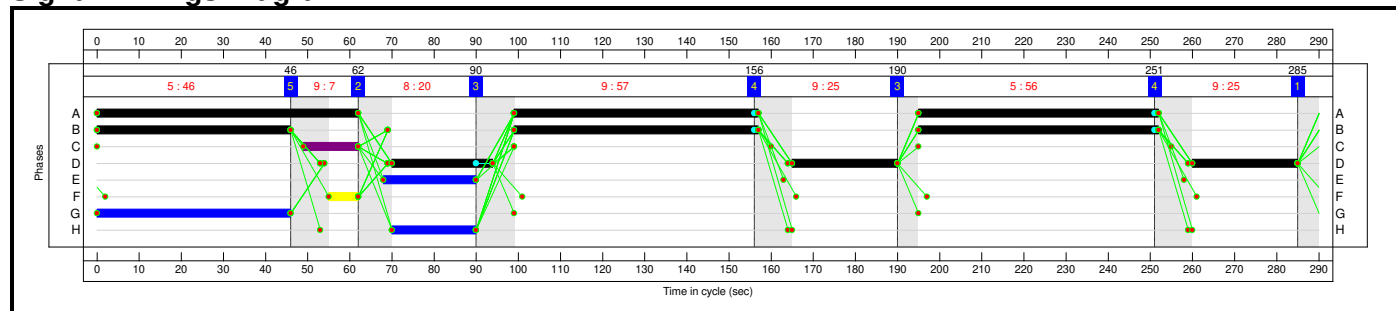
Stage Sequence Diagram



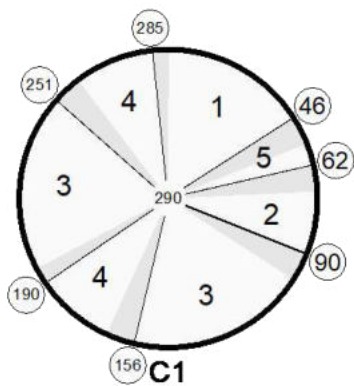
Stage Timings

Stage	3	4	3	4	1	5	2
Duration	57	25	56	25	46	7	20
Change Point	90	156	190	251	285	46	62

Signal Timings Diagram



 Total Traffic Delay: 28.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	94.3%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	94.3%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		3	161	-	1009	1894	1071	94.2%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		3	74	-	474	1759:1720	418+85	94.3 : 94.3%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		3	177	-	684	1980	1229	55.7%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	3	177	13	156	1631	248	62.9%
4/1		U	N/A	N/A	-		-	-	-	764	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	258	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1301	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		1	22	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		1	46	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	20	-	0	-	0	0.0%

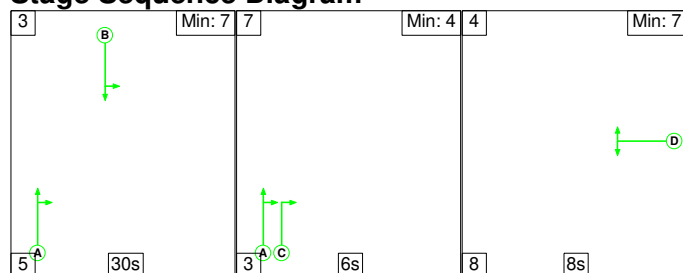
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	23	46	87	12.5	14.0	1.6	28.1	-	-	-	-
B4109 Rugby Road / Coventry Road junction	-	-	23	46	87	12.5	14.0	1.6	28.1	-	-	-	-
1/1	1009	1009	-	-	-	5.6	6.7	-	12.3	44.0	31.1	6.7	37.8
2/1+2/2	474	474	-	-	-	4.5	5.9	-	10.4	78.8	12.1	5.9	18.0
3/1	684	684	-	-	-	2.0	0.6	-	2.6	13.9	10.6	0.6	11.3
3/2	156	156	23	46	87	0.4	0.8	1.6	2.8	63.6	1.9	0.8	2.7
4/1	764	764	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	258	258	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1301	1301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 PRC for Signalled Lanes (%): -4.8 Total Delay for Signalled Lanes (pcuHr): 28.11 Cycle Time (s): 290 PRC Over All Lanes (%): -4.8 Total Delay Over All Lanes(pcuHr): 28.11													

Full Input Data And Results

Scenario 3: '2026 + Dev PM (no ped crossing calls)' (FG2: '2026 + Land South of Burbage (442dw) PM', Plan 3: 'PM Plan (single) - no crossings called')

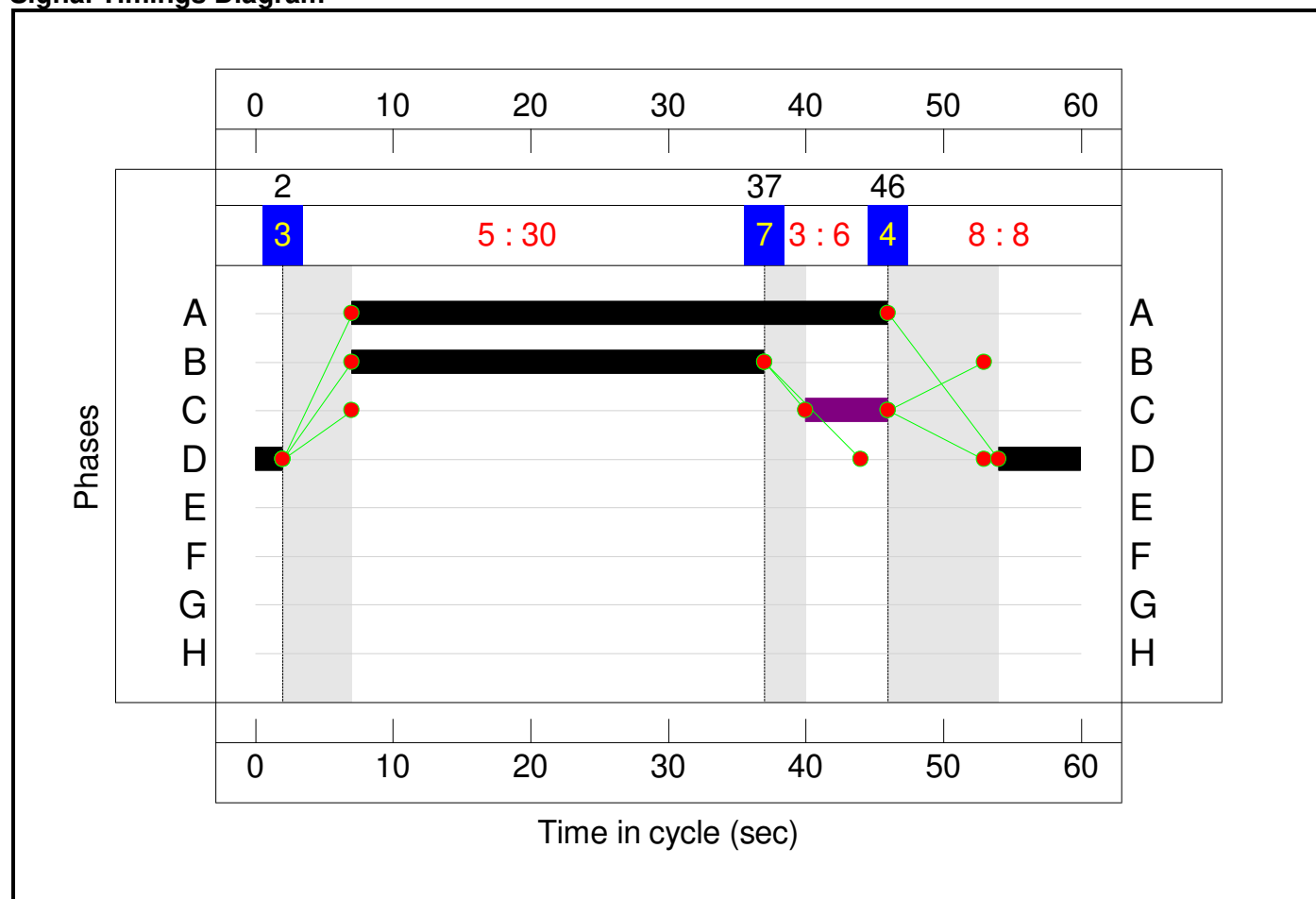
Stage Sequence Diagram



Stage Timings

Stage	3	7	4
Duration	30	6	8
Change Point	2	37	46

Signal Timings Diagram



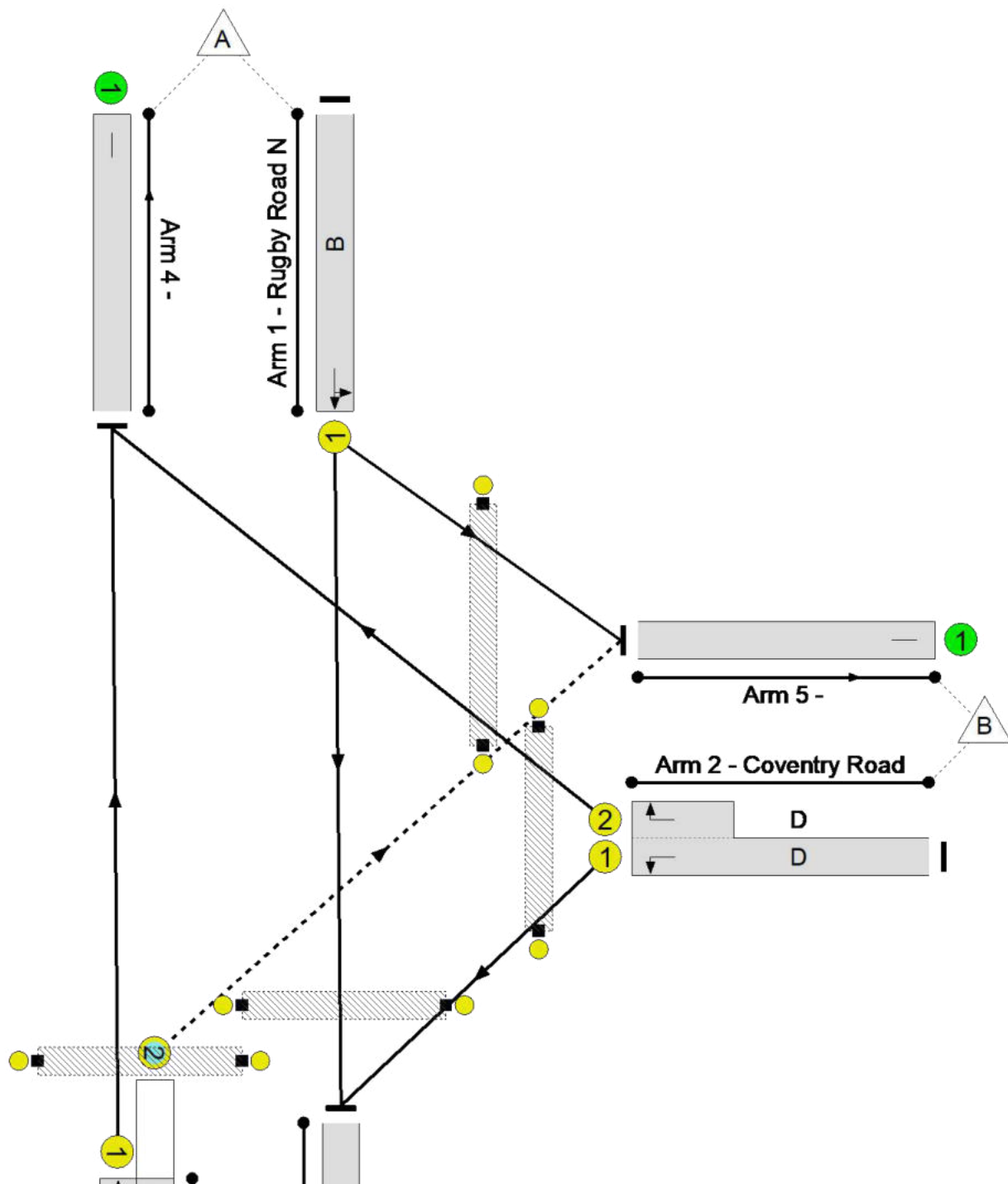
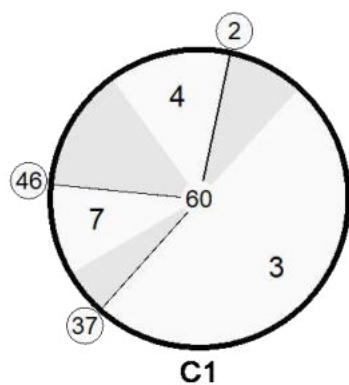
B4109 Rugby Road / Coventry Road junction



PRC: 12.6 %

Total Traffic Delay: 15.4 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	79.9%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	79.9%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		1	30	-	768	1886	974	78.8%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		1	8	-	291	1759:1720	264+118	76.2 : 76.2%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		1	39	-	959	1980	1320	72.7%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	1	39	6	432	1631	541	79.9%
4/1		U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	538	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	863	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		0	0	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		0	0	-	0	-	0	0.0%

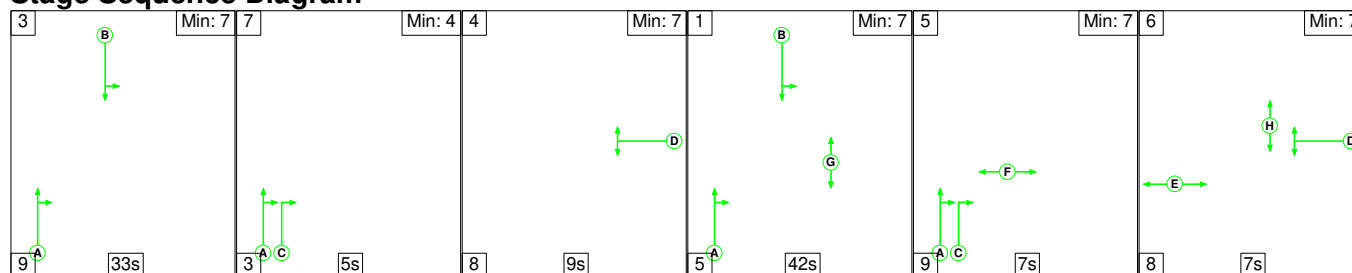
Full Input Data And Results

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Full Input Data And Results

Scenario 4: '2026 + Dev PM' (FG2: '2026 + Land South of Burbage (442dw) PM', Plan 4: 'PM Plan (double) - crossings called')

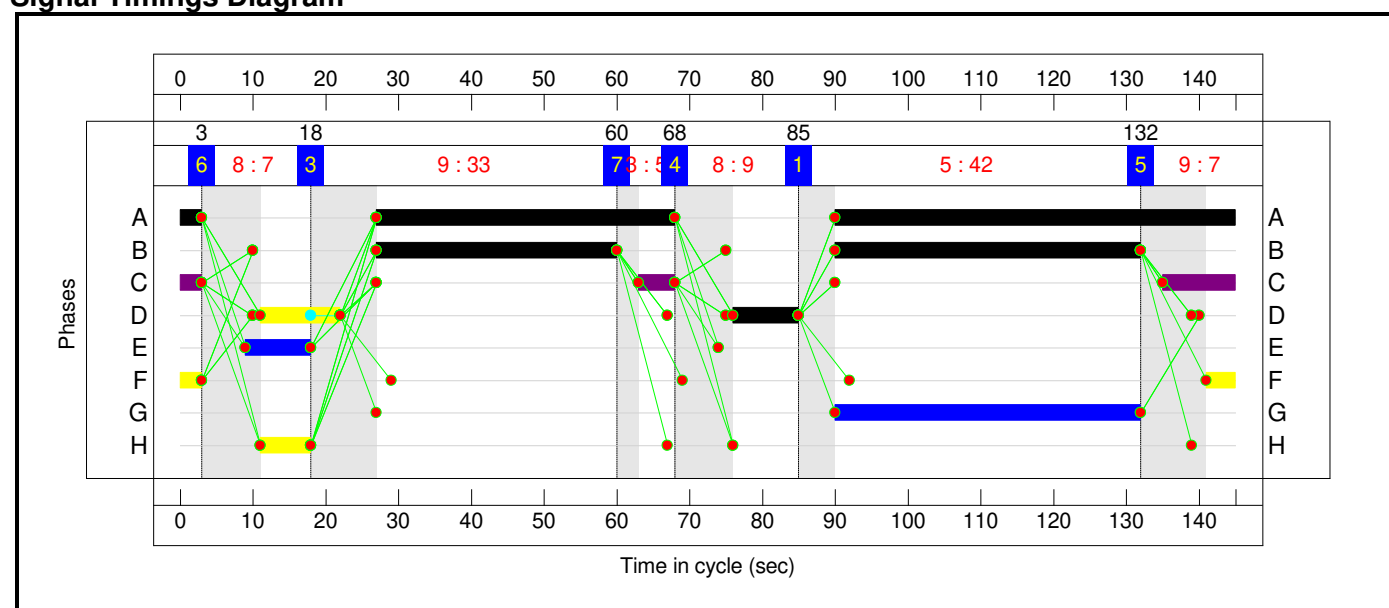
Stage Sequence Diagram



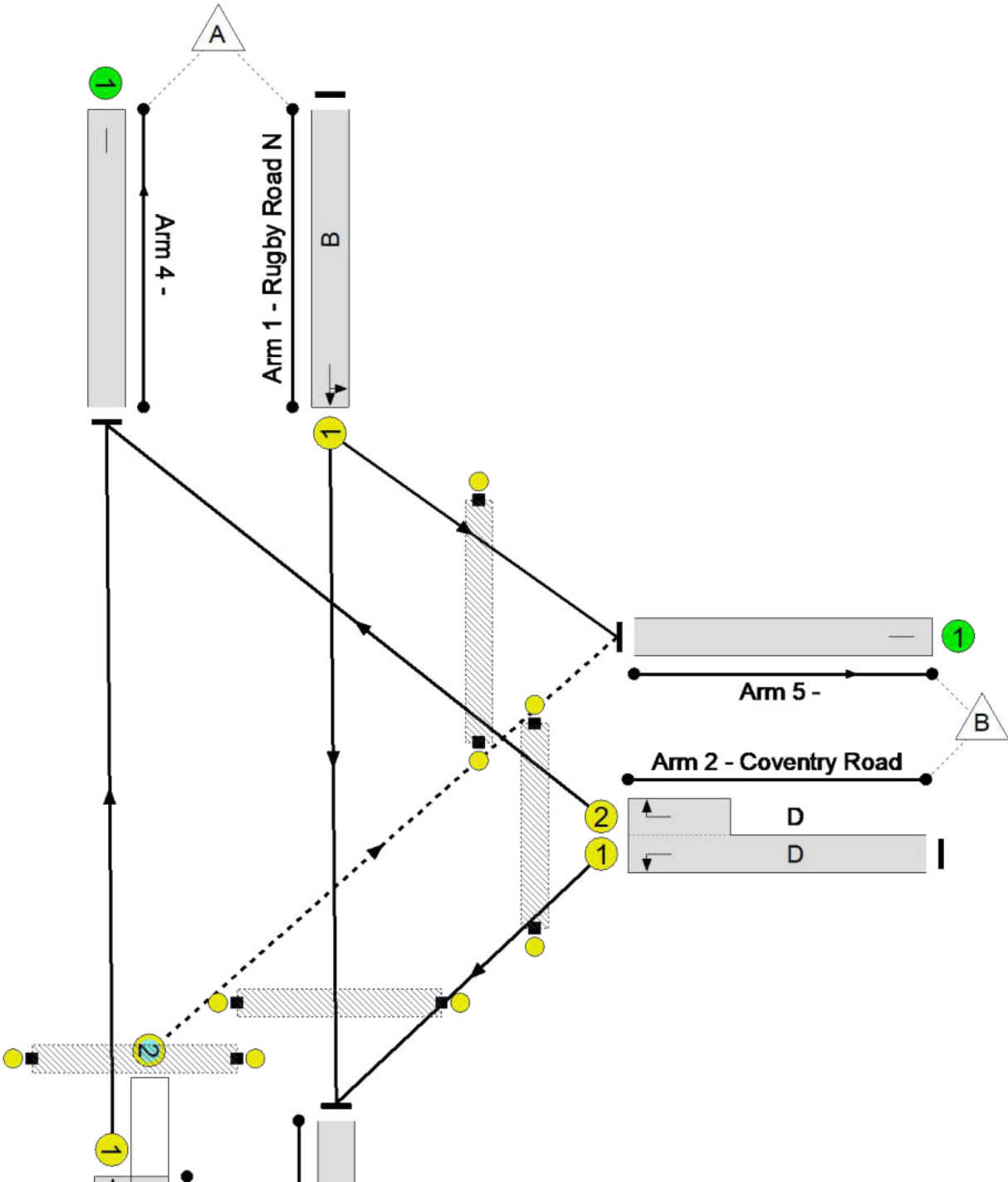
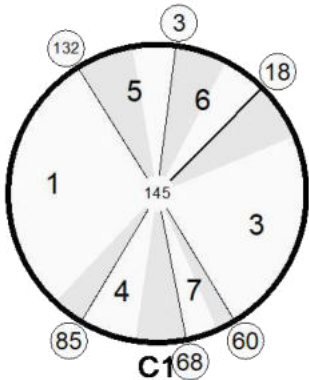
Stage Timings

Stage	3	7	4	1	5	6
Duration	33	5	9	42	7	7
Change Point	18	60	68	85	132	3

Signal Timings Diagram



B4109 Rugby Road / Coventry Road junction
PRC: 13.0 %
Total Traffic Delay: 16.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	79.7%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	79.7%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		2	75	-	768	1886	1002	76.7%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		2	20	-	291	1759:1720	252+113	79.7 : 79.7%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		2	99	-	959	1980	1379	69.5%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	2	99	18	432	1631	548	78.8%
4/1		U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	538	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	863	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		1	9	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		1	42	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	7	-	0	-	0	0.0%

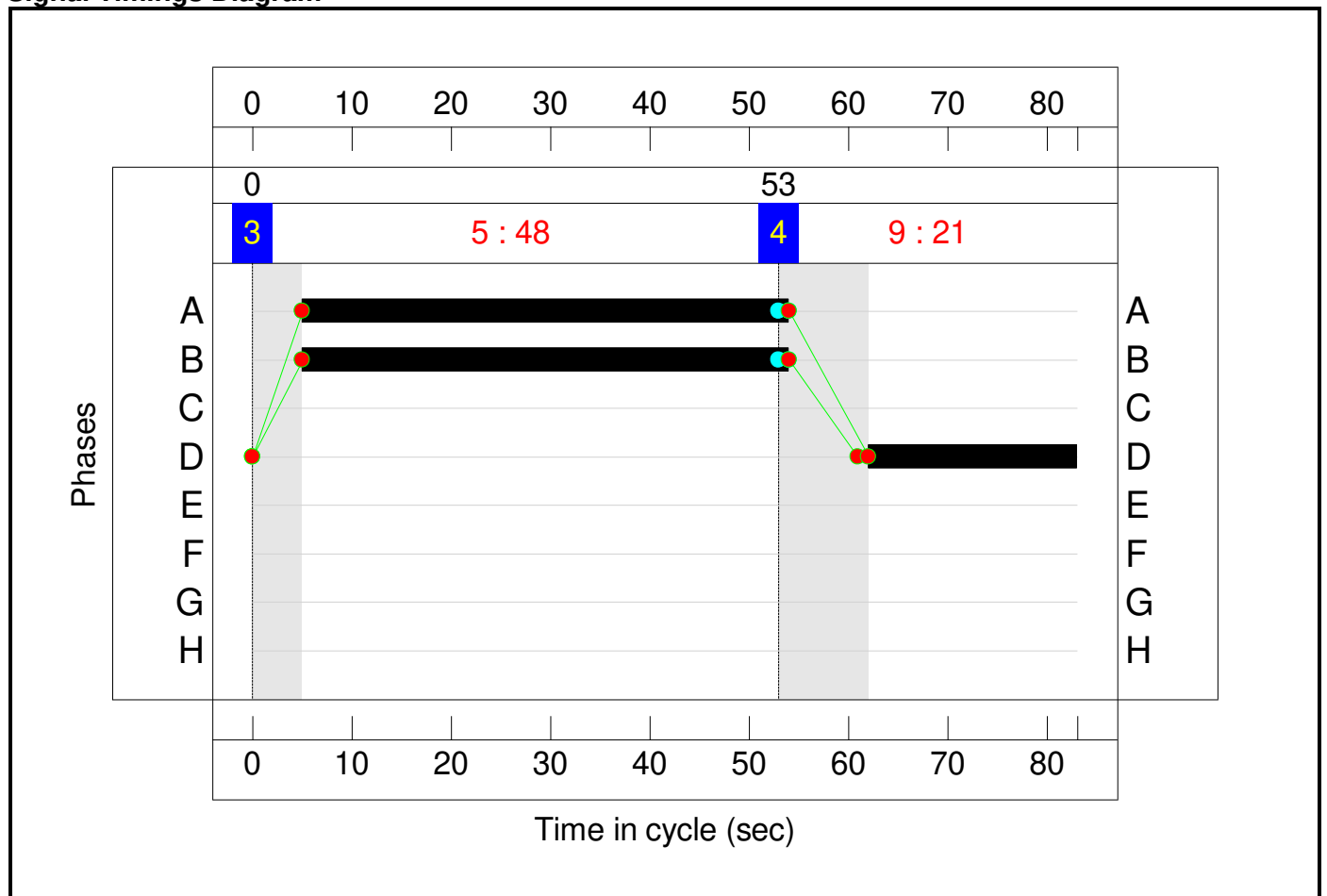
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	125	198	109	8.0	6.4	1.9	16.4	-	-	-	-
B4109 Rugby Road / Coventry Road junction	-	-	125	198	109	8.0	6.4	1.9	16.4	-	-	-	-
1/1	768	768	-	-	-	2.9	1.6	-	4.6	21.3	13.9	1.6	15.5
2/1+2/2	291	291	-	-	-	2.4	1.9	-	4.2	52.5	4.5	1.9	6.3
3/1	959	959	-	-	-	1.7	1.1	-	2.9	10.7	11.7	1.1	12.9
3/2	432	432	125	198	109	1.0	1.8	1.9	4.7	39.5	4.0	1.8	5.8
4/1	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	538	538	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	863	863	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 PRC for Signalled Lanes (%): 13.0 Total Delay for Signalled Lanes (pcuHr): 16.40 Cycle Time (s): 145 PRC Over All Lanes (%): 13.0 Total Delay Over All Lanes(pcuHr): 16.40													

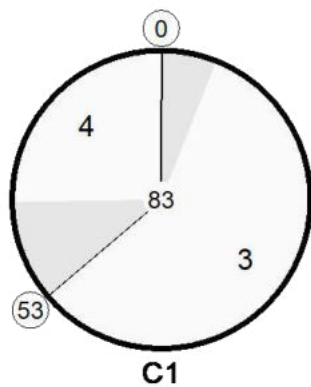
Stage Sequence Diagram



Signal Timings Diagram



 PRC: 2.1 %
 Total Traffic Delay: 20.5 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	88.1%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	88.1%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		1	49	-	1005	1893	1140	88.1%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		1	21	-	438	1759:1720	419+92	85.8 : 85.8%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		1	49	-	697	1980	1193	58.4%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	1	49	0	178	1631	215	82.8%
4/1		U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1261	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		0	0	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		0	0	-	0	-	0	0.0%

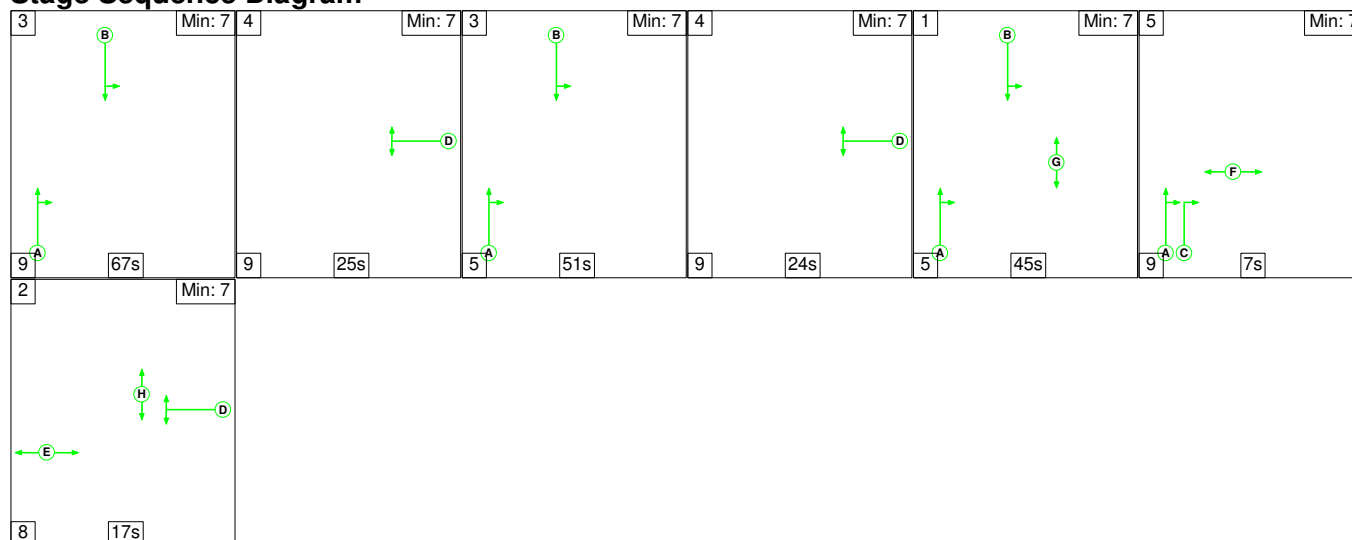
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	50	0	128	9.7	9.2	1.6	20.5	-	-	-	-
B4109 Rugby Road / Coventry Road junction	-	-	50	0	128	9.7	9.2	1.6	20.5	-	-	-	-
1/1	1005	1005	-	-	-	3.9	3.5	-	7.4	26.6	19.5	3.5	23.1
2/1+2/2	438	438	-	-	-	3.4	2.8	-	6.2	51.1	8.6	2.8	11.4
3/1	697	697	-	-	-	2.0	0.7	-	2.7	13.7	9.7	0.7	10.4
3/2	178	178	50	0	128	0.4	2.2	1.6	4.1	83.8	1.8	2.2	4.0
4/1	776	776	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1261	1261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
C1 PRC for Signalled Lanes (%): 2.1 Total Delay for Signalled Lanes (pcuHr): 20.46 Cycle Time (s): 83 PRC Over All Lanes (%): 2.1 Total Delay Over All Lanes(pcuHr): 20.46													

Full Input Data And Results

Scenario 6: '2031 + Dev AM' (FG3: '2031 + Land South of Burbage (442dw) AM', Plan 2: 'AM Plan (triple) - crossings called')

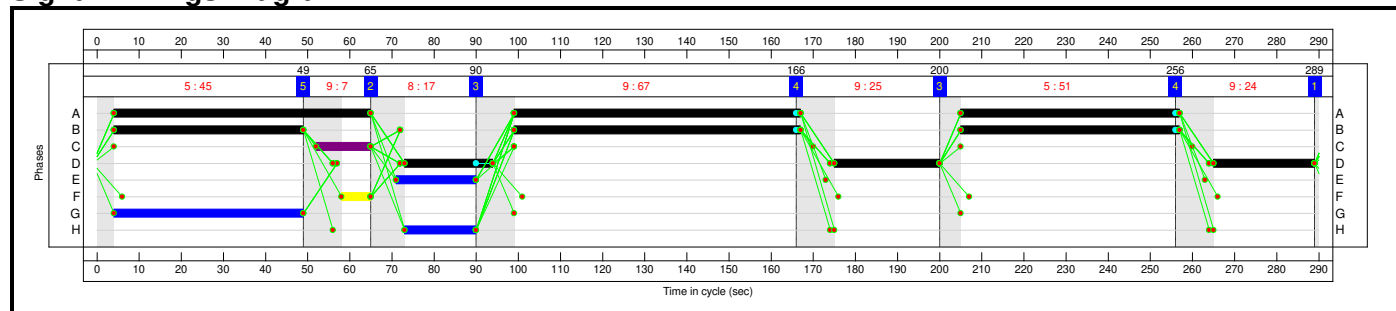
Stage Sequence Diagram



Stage Timings

Stage	3	4	3	4	1	5	2
Duration	67	25	51	24	45	7	17
Change Point	90	166	200	256	289	49	65

Signal Timings Diagram

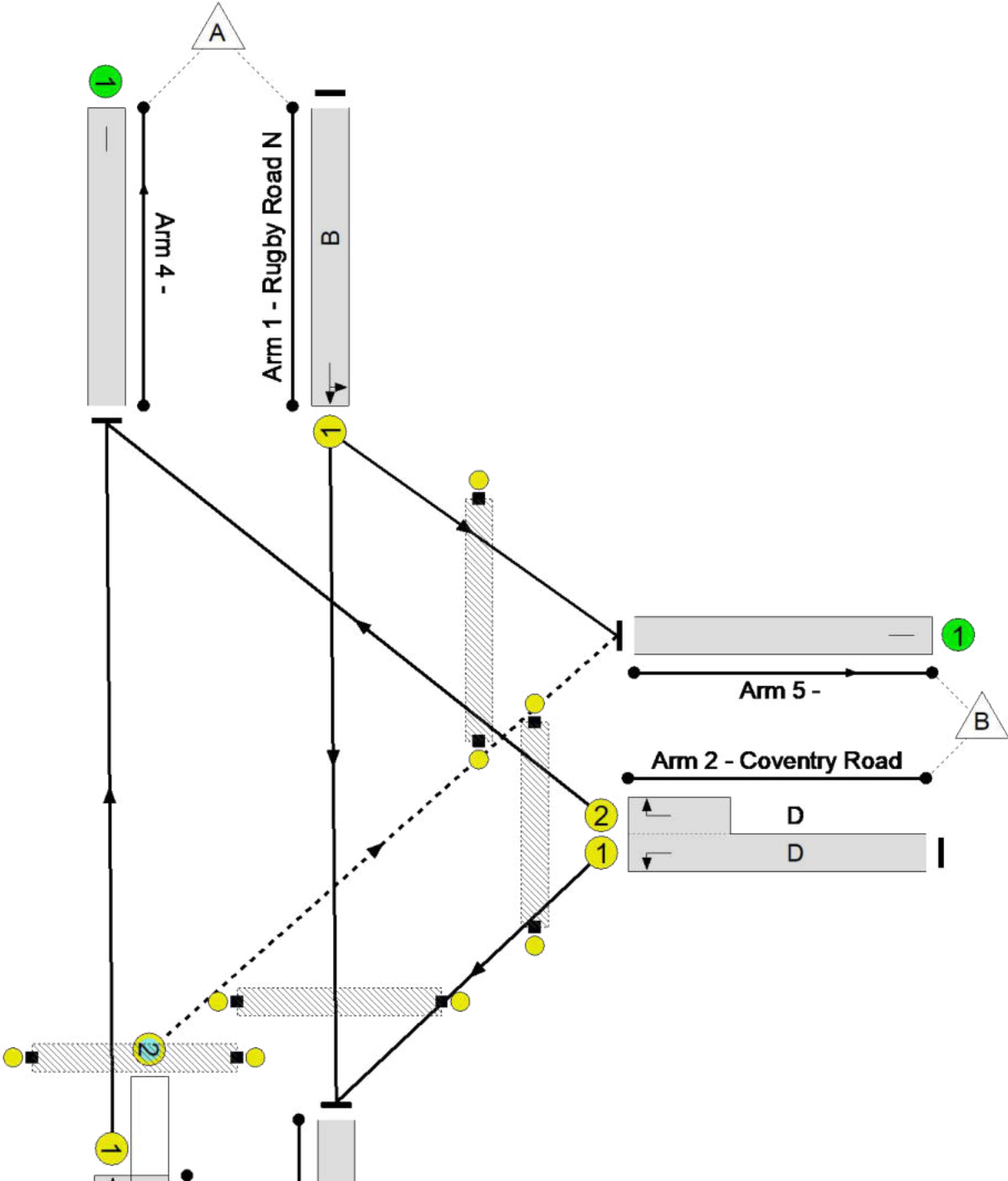
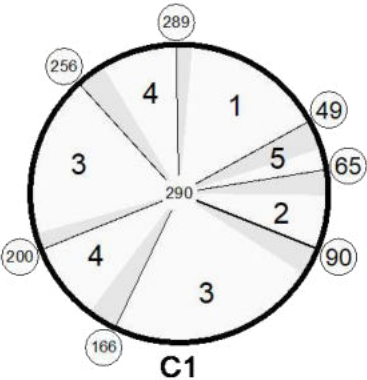


Full Input Data And Results

Network Layout Diagram



B4109 Rugby Road / Coventry Road junction
PRC: -1.8 %
Total Traffic Delay: 24.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	91.6%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	91.6%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		3	165	-	1005	1893	1097	91.6%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		3	70	-	438	1759:1720	394+87	91.1 : 91.1%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		3	181	-	697	1980	1256	55.5%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	3	181	13	178	1631	257	69.3%
4/1		U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1261	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		1	19	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		1	45	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	17	-	0	-	0	0.0%

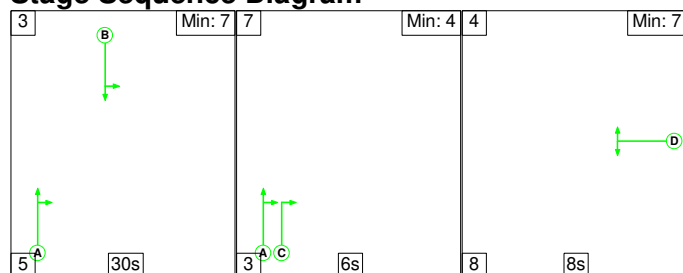
Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 7: '2031 + Dev PM (no ped crossing calls)' (FG4: '2031 + Land South of Burbage (442dw) PM', Plan 3: 'PM Plan (single) - no crossings called')

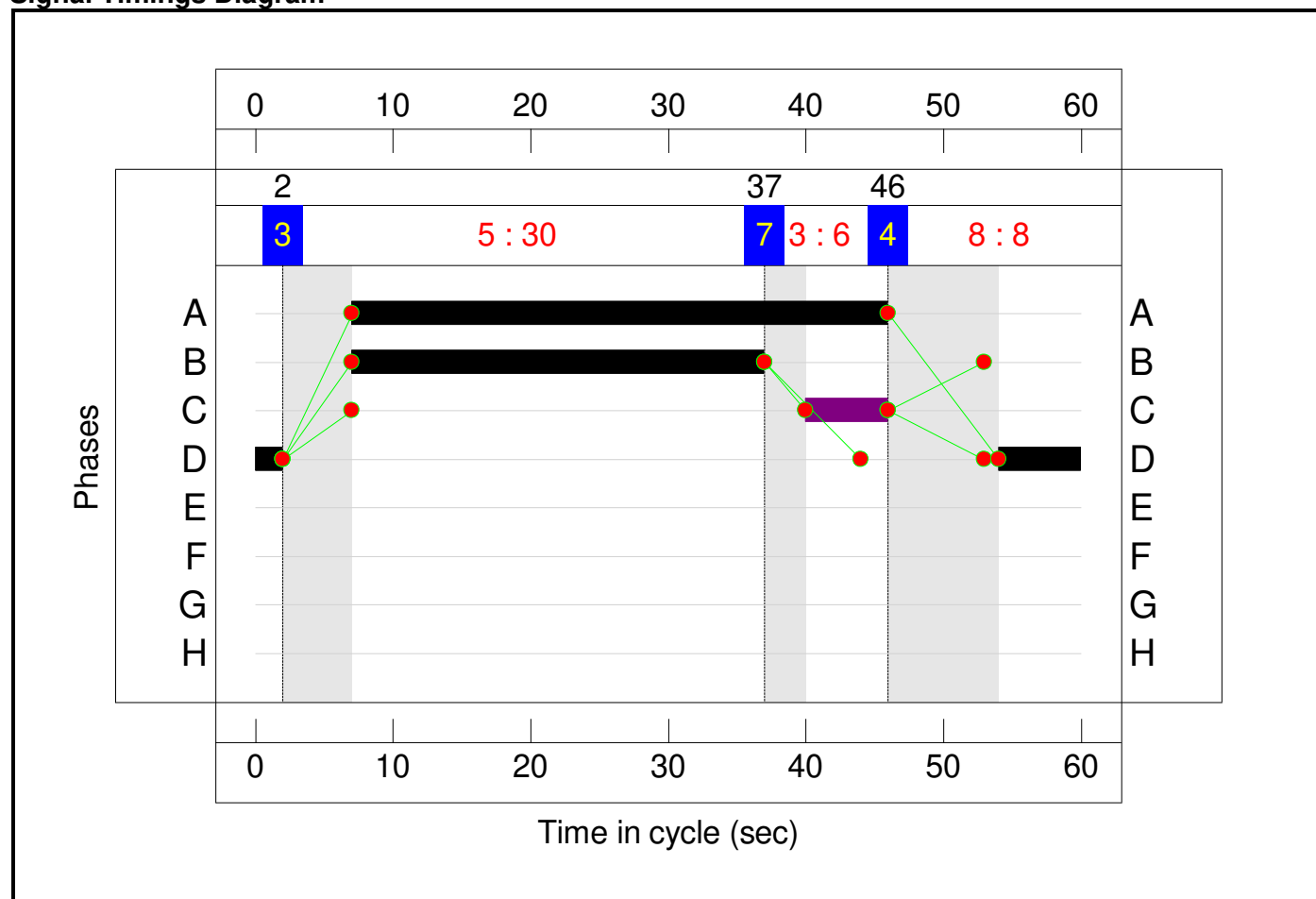
Stage Sequence Diagram



Stage Timings

Stage	3	7	4
Duration	30	6	8
Change Point	2	37	46

Signal Timings Diagram

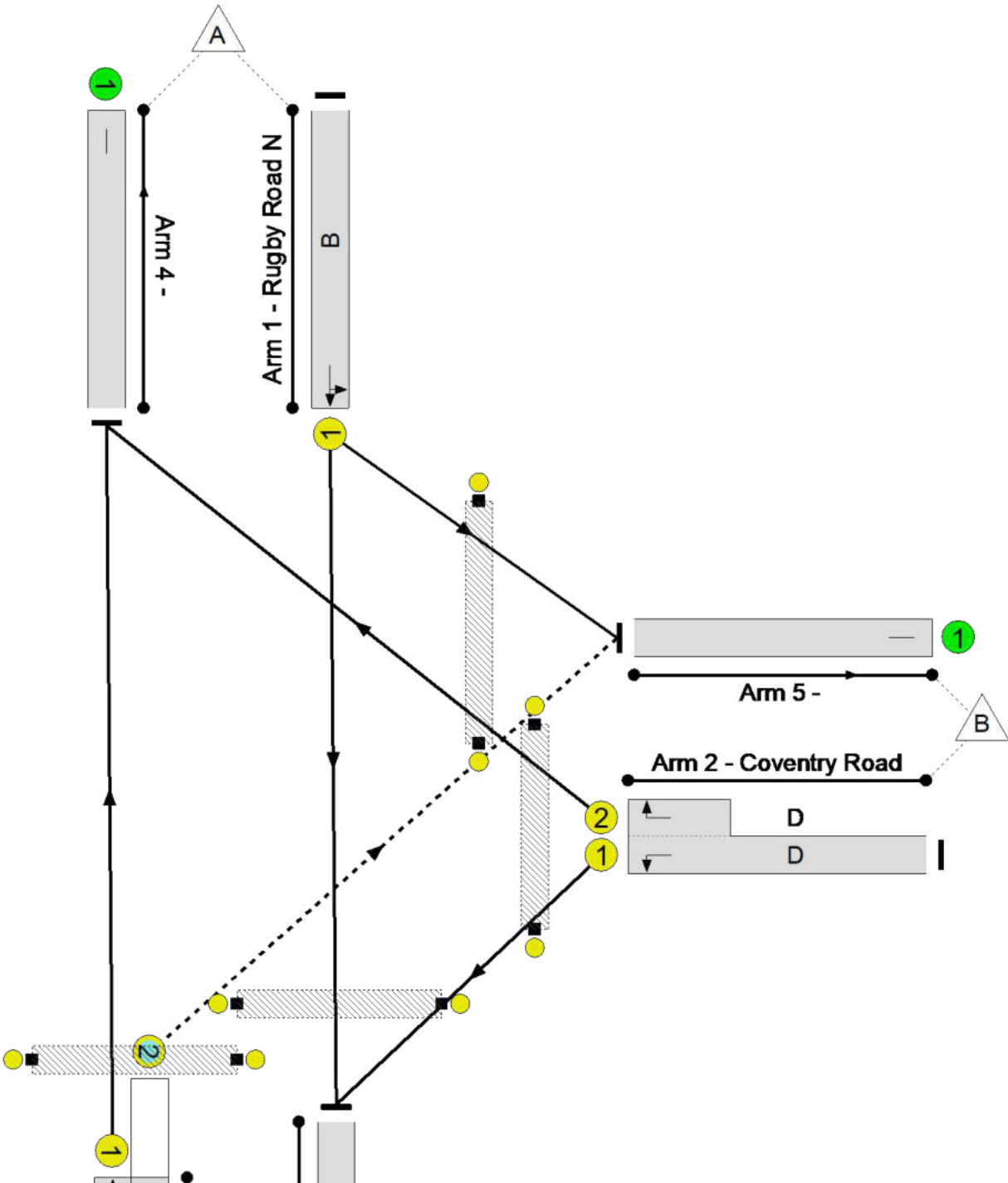
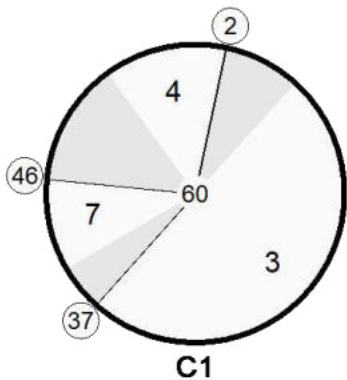


Full Input Data And Results

Network Layout Diagram



B4109 Rugby Road / Coventry Road junction
PRC: 8.7 %
Total Traffic Delay: 16.9 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	82.8%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	82.8%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		1	30	-	782	1887	975	80.2%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		1	8	-	312	1759:1720	264+119	81.5 : 81.5%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		1	39	-	971	1980	1320	73.6%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	1	39	6	437	1631	528	82.8%
4/1		U	N/A	N/A	-		-	-	-	1068	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	891	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		0	0	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		0	0	-	0	-	0	0.0%

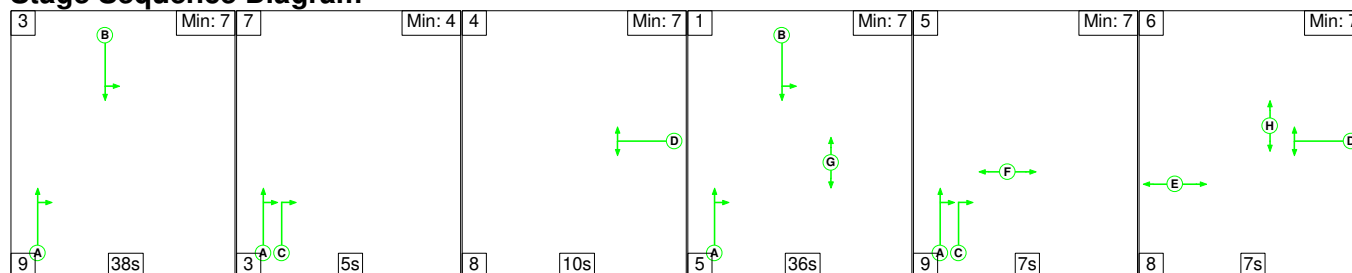
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	98	190	149	7.3	7.7	1.9	16.9	-	-	-	-
B4109 Rugby Road / Coventry Road junction	-	-	98	190	149	7.3	7.7	1.9	16.9	-	-	-	-
1/1	782	782	-	-	-	2.6	2.0	-	4.6	21.1	10.6	2.0	12.6
2/1+2/2	312	312	-	-	-	2.1	2.1	-	4.2	48.1	3.5	2.1	5.5
3/1	971	971	-	-	-	1.8	1.4	-	3.1	11.7	10.5	1.4	11.9
3/2	437	437	98	190	149	0.9	2.3	1.9	5.0	41.6	3.3	2.3	5.6
4/1	1068	1068	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	891	891	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
C1 PRC for Signalled Lanes (%): 8.7 Total Delay for Signalled Lanes (pcuHr): 16.95 Cycle Time (s): 60 PRC Over All Lanes (%): 8.7 Total Delay Over All Lanes(pcuHr): 16.95													

Full Input Data And Results

Scenario 8: '2031 + Dev PM' (FG4: '2031 + Land South of Burbage (442dw) PM', Plan 4: 'PM Plan (double) - crossings called')

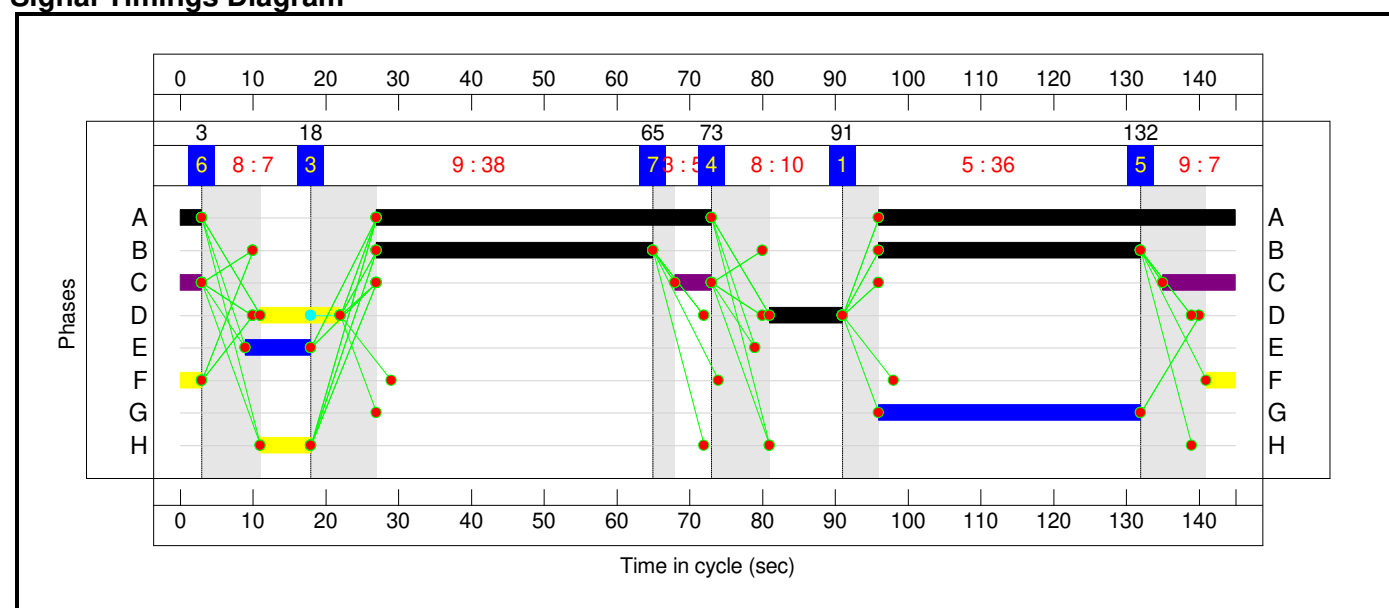
Stage Sequence Diagram



Stage Timings

Stage	3	7	4	1	5	6
Duration	38	5	10	36	7	7
Change Point	18	65	73	91	132	3

Signal Timings Diagram

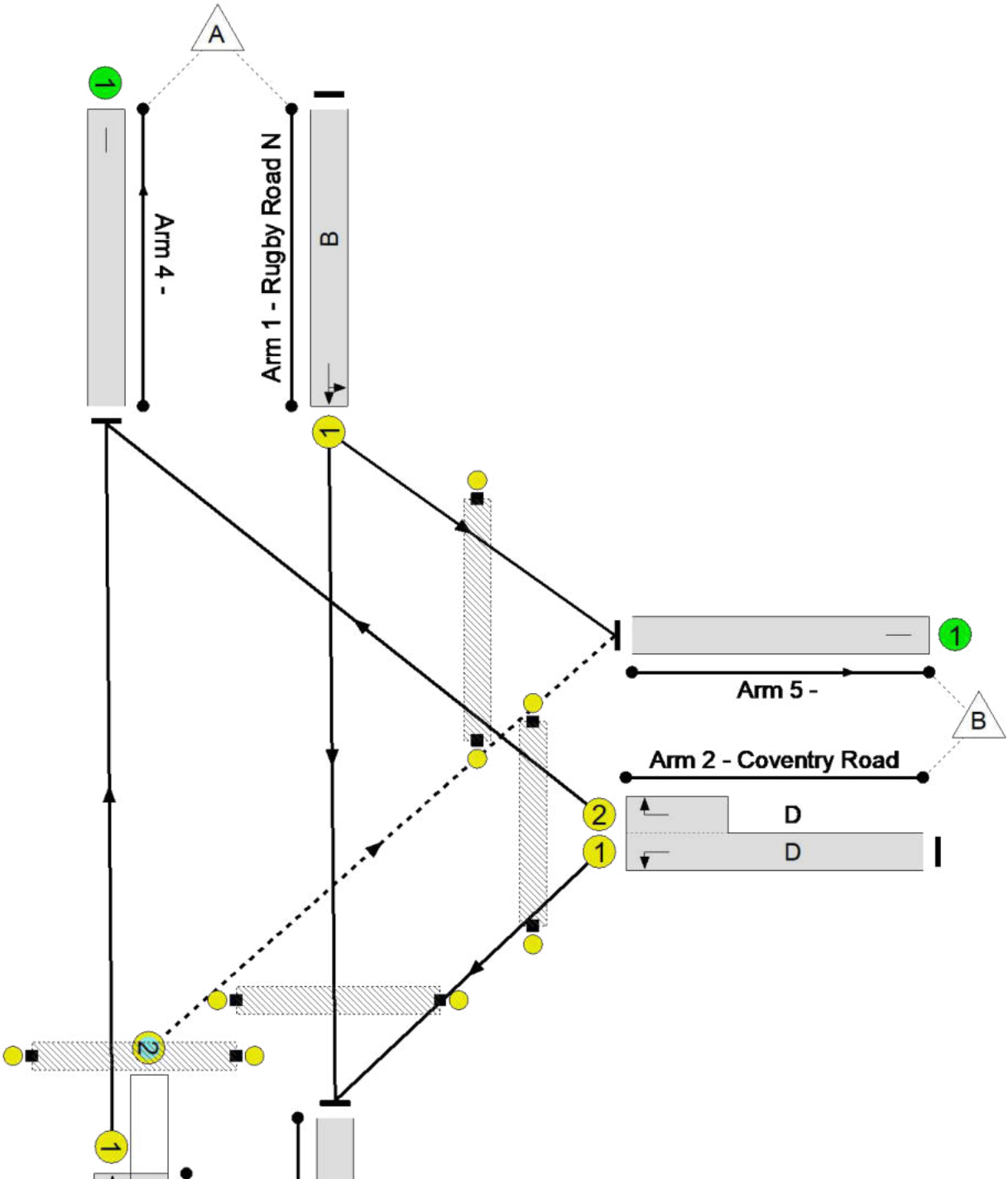
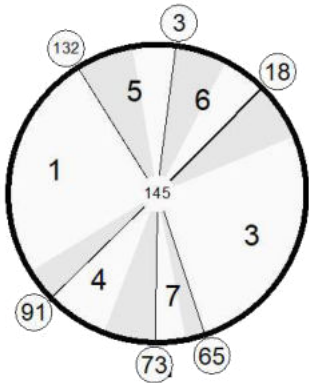


Full Input Data And Results

Network Layout Diagram



B4109 Rugby Road / Coventry Road junction
PRC: 9.1 %
Total Traffic Delay: 18.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	82.5%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	82.5%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		2	74	-	782	1887	989	79.1%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		2	21	-	312	1759:1720	261+118	82.5 : 82.5%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		2	98	-	971	1980	1366	71.1%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	2	98	18	437	1631	531	82.3%
4/1		U	N/A	N/A	-		-	-	-	1068	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	891	Inf	Inf	0.0%
Ped Link: P1	Rugby Rd toucan	-	N/A	-	E		1	9	-	0	-	0	0.0%
Ped Link: P2	Coventry Rd toucan crossing	-	N/A	-	G		1	36	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed signalisation of the B4109 Rugby Road / Coventry Road junction	-	-	107	219	111	8.6	7.5	2.0	18.1	-	-	-	-
B4109 Rugby Road / Coventry Road junction	-	-	107	219	111	8.6	7.5	2.0	18.1	-	-	-	-
1/1	782	782	-	-	-	3.1	1.9	-	5.0	22.8	14.3	1.9	16.2
2/1+2/2	312	312	-	-	-	2.5	2.2	-	4.7	54.2	4.4	2.2	6.7
3/1	971	971	-	-	-	1.8	1.2	-	3.1	11.4	12.1	1.2	13.4
3/2	437	437	107	219	111	1.2	2.2	2.0	5.4	44.4	4.5	2.2	6.7
4/1	1068	1068	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	891	891	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 PRC for Signalled Lanes (%): 9.1 Total Delay for Signalled Lanes (pcuHr): 18.11 Cycle Time (s): 145 PRC Over All Lanes (%): 9.1 Total Delay Over All Lanes(pcuHr): 18.11													

Appendix X: B4109 Rugby Rd / Canberra Wy / Three Pots Rd J10 Report

Junctions 10		
ARCADY 10 - Roundabout Module		
Version: 10.1.1.1905		
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Filename: Rugby Road_Canberra Way.j10

Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10\P08

Report generation date: 16/07/2024 15:27:13

-
- »Base Year, AM
 - »Base Year, PM
 - »2026 Opening Year, AM
 - »2026 Opening Year, PM
 - »2026 Opening Year + Development, AM
 - »2026 Opening Year + Development, PM
 - »2031 Forecast Year, AM
 - »2031 Forecast Year, PM
 - »2031 Forecast Year + Development, AM
 - »2031 Forecast Year + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base Year									
1 - Canberra Way	D1	0.2	12.21	0.17	B	D2	0.0	6.05	0.03	A
2 - B4109 Rugby Road South		0.9	5.13	0.47	A		3.0	10.16	0.75	B
3 - Three Pots Road		0.8	11.70	0.45	B		1.8	30.34	0.66	D
4 - B4109 Rugby Road North		3.9	11.52	0.80	B		1.1	4.59	0.51	A
	2026 Opening Year									
1 - Canberra Way	D3	0.2	14.66	0.19	B	D4	0.0	6.33	0.04	A
2 - B4109 Rugby Road South		1.4	6.56	0.59	A		6.1	18.48	0.87	C
3 - Three Pots Road		1.0	15.26	0.51	C		1.3	32.39	0.58	D
4 - B4109 Rugby Road North		6.0	16.73	0.86	C		1.2	4.92	0.55	A
	2026 Opening Year + Development									
1 - Canberra Way	D5	0.3	17.53	0.22	C	D6	0.0	6.44	0.04	A
2 - B4109 Rugby Road South		1.5	6.91	0.61	A		9.2	26.96	0.91	D
3 - Three Pots Road		1.2	16.51	0.54	C		2.2	52.89	0.72	F
4 - B4109 Rugby Road North		9.5	25.56	0.92	D		1.3	5.04	0.56	A
	2031 Forecast Year									
1 - Canberra Way	D7	0.2	13.42	0.18	B	D8	0.0	6.51	0.04	A
2 - B4109 Rugby Road South		1.6	6.94	0.61	A		10.0	29.16	0.92	D
3 - Three Pots Road		1.1	16.61	0.54	C		0.7	27.50	0.41	D
4 - B4109 Rugby Road North		4.8	13.93	0.84	B		1.3	5.13	0.57	A
	2031 Forecast Year + Development									
1 - Canberra Way	D9	0.3	15.83	0.20	C	D10	0.0	6.61	0.04	A
2 - B4109 Rugby Road South		1.7	7.34	0.63	A		17.6	48.01	0.97	E
3 - Three Pots Road		1.3	18.11	0.57	C		1.1	39.78	0.54	E
4 - B4109 Rugby Road North		7.2	19.90	0.89	C		1.4	5.26	0.58	A

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

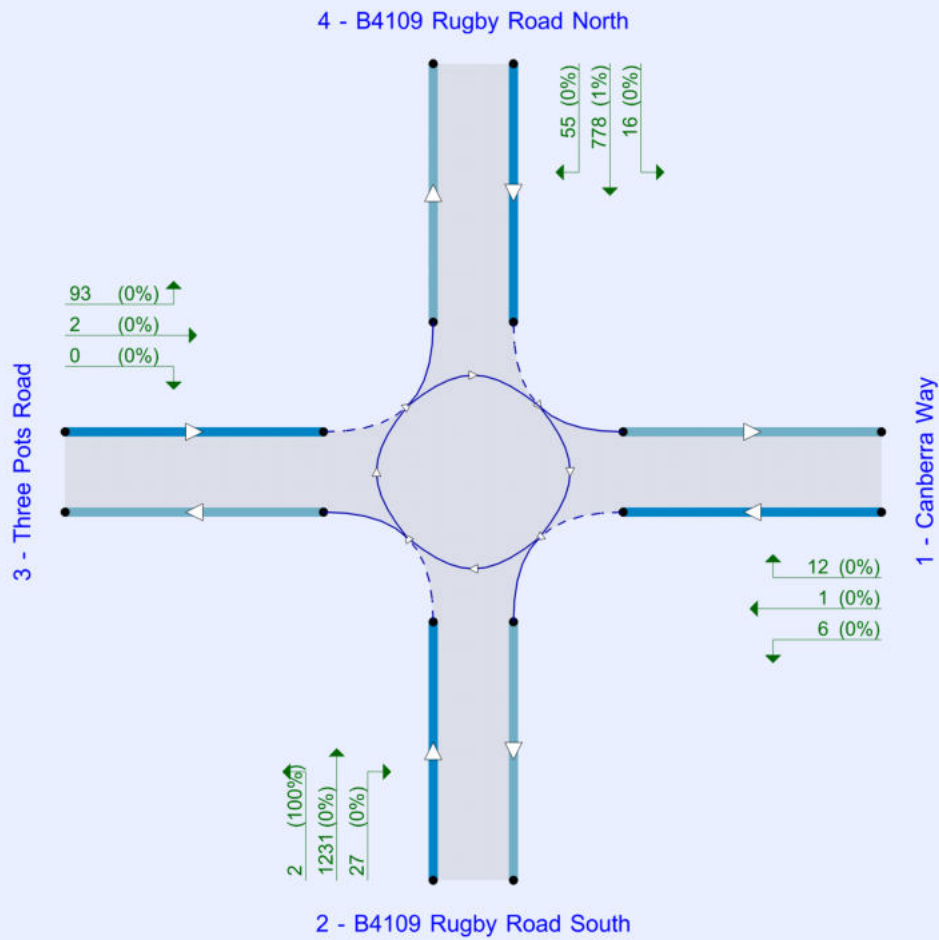
File summary

File Description

Title	B4109 Rugby Road / Canberra Way / Three Pots Road Roundabout
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



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 simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base Year	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Opening Year	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Opening Year	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Opening Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Opening Year + Development	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Forecast Year	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Forecast Year	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Forecast Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Forecast Year + Development	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

Base Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	9.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.71	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Canberra Way		
2	B4109 Rugby Road South		
3	Three Pots Road		
4	B4109 Rugby Road North		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Canberra Way	2.44	4.80	6.3	10.8	38.0	27.0		
2 - B4109 Rugby Road South	4.00	7.51	10.5	27.1	38.0	20.0		
3 - Three Pots Road	3.15	4.00	8.9	10.0	38.0	27.5		
4 - B4109 Rugby Road North	4.00	7.80	12.6	60.0	38.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - Canberra Way	None		
2 - B4109 Rugby Road South	Direct	To better reflect observed queueing	-325
3 - Three Pots Road	Direct	To better reflect observed queueing	-200
4 - B4109 Rugby Road North	Direct	To better reflect observed queueing	-275

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Canberra Way	0.502	1030
2 - B4109 Rugby Road South	0.682	1483
3 - Three Pots Road	0.514	905
4 - B4109 Rugby Road North	0.715	1656

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	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 (%)
1 - Canberra Way		ONE HOUR	✓	53	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	570	100.000
3 - Three Pots Road		ONE HOUR	✓	232	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1121	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	19	3	31
	2 - B4109 Rugby Road South	6	0	2	562
	3 - Three Pots Road	2	109	0	121
	4 - B4109 Rugby Road North	19	959	143	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	1
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.17	12.21	0.2	B	49	73
2 - B4109 Rugby Road South	0.47	5.13	0.9	A	523	785
3 - Three Pots Road	0.45	11.70	0.8	B	213	319
4 - B4109 Rugby Road North	0.80	11.52	3.9	B	1029	1543

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	907	570	0.070	40	20	0.0	0.1	6.790	A
2 - B4109 Rugby Road South	429	107	132	1372	0.313	427	814	0.0	0.5	3.805	A
3 - Three Pots Road	175	44	449	672	0.260	173	111	0.0	0.3	7.194	A
4 - B4109 Rugby Road North	844	211	87	1574	0.536	839	535	0.0	1.1	4.868	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1086	479	0.100	48	24	0.1	0.1	8.349	A
2 - B4109 Rugby Road South	512	128	159	1354	0.379	512	975	0.5	0.6	4.273	A
3 - Three Pots Road	209	52	538	626	0.333	208	133	0.3	0.5	8.597	A
4 - B4109 Rugby Road North	1008	252	105	1562	0.645	1005	641	1.1	1.8	6.435	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1325	357	0.163	58	30	0.1	0.2	12.024	B
2 - B4109 Rugby Road South	628	157	194	1330	0.472	626	1189	0.6	0.9	5.110	A
3 - Three Pots Road	255	64	658	564	0.453	254	162	0.5	0.8	11.586	B
4 - B4109 Rugby Road North	1234	309	128	1546	0.799	1226	784	1.8	3.7	11.014	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1333	353	0.165	58	30	0.2	0.2	12.213	B
2 - B4109 Rugby Road South	628	157	195	1329	0.472	628	1196	0.9	0.9	5.132	A
3 - Three Pots Road	255	64	659	563	0.454	255	163	0.8	0.8	11.702	B
4 - B4109 Rugby Road North	1234	309	129	1545	0.799	1234	786	3.7	3.9	11.520	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1097	473	0.101	48	24	0.2	0.1	8.481	A
2 - B4109 Rugby Road South	512	128	160	1353	0.379	514	985	0.9	0.6	4.296	A
3 - Three Pots Road	209	52	540	625	0.334	210	134	0.8	0.5	8.696	A
4 - B4109 Rugby Road North	1008	252	106	1561	0.645	1016	644	3.9	1.9	6.692	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	915	565	0.071	40	20	0.1	0.1	6.855	A
2 - B4109 Rugby Road South	429	107	134	1371	0.313	430	821	0.6	0.5	3.825	A
3 - Three Pots Road	175	44	452	671	0.260	175	112	0.5	0.4	7.275	A
4 - B4109 Rugby Road North	844	211	88	1574	0.536	847	539	1.9	1.2	4.971	A

Base Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	10.06	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.06	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	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 (%)
1 - Canberra Way		ONE HOUR	✓	19	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	983	100.000
3 - Three Pots Road		ONE HOUR	✓	205	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	756	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	6	1	12
	2 - B4109 Rugby Road South	27	0	2	954
	3 - Three Pots Road	2	2	0	201
	4 - B4109 Rugby Road North	16	694	46	0

Vehicle Mix

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

Heavy Vehicle %

From	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	0
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.03	6.05	0.0	A	17	26
2 - B4109 Rugby Road South	0.75	10.16	3.0	B	902	1353
3 - Three Pots Road	0.66	30.34	1.8	D	188	282
4 - B4109 Rugby Road North	0.51	4.59	1.1	A	694	1041

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	557	748	0.019	14	34	0.0	0.0	4.906	A
2 - B4109 Rugby Road South	740	185	44	1450	0.510	736	526	0.0	1.0	5.014	A
3 - Three Pots Road	154	39	743	523	0.295	153	37	0.0	0.4	9.682	A
4 - B4109 Rugby Road North	569	142	23	1625	0.350	567	873	0.0	0.5	3.395	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	666	692	0.025	17	40	0.0	0.0	5.331	A
2 - B4109 Rugby Road South	884	221	53	1444	0.612	882	630	1.0	1.6	6.379	A
3 - Three Pots Road	184	46	891	447	0.412	183	44	0.4	0.7	13.579	B
4 - B4109 Rugby Road North	680	170	28	1622	0.419	679	1046	0.5	0.7	3.819	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	816	617	0.034	21	49	0.0	0.0	6.042	A
2 - B4109 Rugby Road South	1082	271	65	1436	0.754	1077	772	1.6	2.9	9.876	A
3 - Three Pots Road	226	56	1088	346	0.653	222	54	0.7	1.7	28.100	D
4 - B4109 Rugby Road North	832	208	34	1617	0.515	831	1275	0.7	1.0	4.571	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	817	616	0.034	21	50	0.0	0.0	6.049	A
2 - B4109 Rugby Road South	1082	271	65	1436	0.754	1082	773	2.9	3.0	10.163	B
3 - Three Pots Road	226	56	1093	343	0.658	225	54	1.7	1.8	30.344	D
4 - B4109 Rugby Road North	832	208	34	1617	0.515	832	1284	1.0	1.1	4.586	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	668	691	0.025	17	41	0.0	0.0	5.342	A
2 - B4109 Rugby Road South	884	221	53	1444	0.612	889	632	3.0	1.6	6.558	A
3 - Three Pots Road	184	46	898	443	0.416	189	44	1.8	0.7	14.372	B
4 - B4109 Rugby Road North	680	170	28	1621	0.419	681	1059	1.1	0.7	3.835	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	559	746	0.019	14	34	0.0	0.0	4.916	A
2 - B4109 Rugby Road South	740	185	44	1450	0.511	742	529	1.6	1.1	5.105	A
3 - Three Pots Road	154	39	750	520	0.297	156	37	0.7	0.4	9.919	A
4 - B4109 Rugby Road North	569	142	23	1625	0.350	570	882	0.7	0.5	3.414	A

2026 Opening Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	13.25	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.25	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Opening Year	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 (%)
1 - Canberra Way		ONE HOUR	✓	53	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	710	100.000
3 - Three Pots Road		ONE HOUR	✓	225	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1218	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	19	3	31
	2 - B4109 Rugby Road South	6	0	3	701
	3 - Three Pots Road	2	101	0	122
	4 - B4109 Rugby Road North	19	1059	140	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	1
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.19	14.66	0.2	B	49	73
2 - B4109 Rugby Road South	0.59	6.56	1.4	A	652	977
3 - Three Pots Road	0.51	15.26	1.0	C	206	310
4 - B4109 Rugby Road North	0.86	16.73	6.0	C	1118	1676

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	973	536	0.074	40	20	0.0	0.1	7.246	A
2 - B4109 Rugby Road South	535	134	130	1373	0.389	532	882	0.0	0.6	4.270	A
3 - Three Pots Road	169	42	553	618	0.274	168	109	0.0	0.4	7.968	A
4 - B4109 Rugby Road North	917	229	81	1579	0.581	912	639	0.0	1.4	5.352	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1165	438	0.109	47	24	0.1	0.1	9.203	A
2 - B4109 Rugby Road South	638	160	156	1355	0.471	637	1056	0.6	0.9	5.010	A
3 - Three Pots Road	202	51	662	561	0.360	202	131	0.4	0.6	9.985	A
4 - B4109 Rugby Road North	1095	274	98	1568	0.699	1091	766	1.4	2.3	7.503	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1417	310	0.188	58	29	0.1	0.2	14.235	B
2 - B4109 Rugby Road South	782	195	190	1331	0.587	780	1285	0.9	1.4	6.499	A
3 - Three Pots Road	248	62	810	485	0.511	246	159	0.6	1.0	14.967	B
4 - B4109 Rugby Road North	1341	335	119	1552	0.864	1327	937	2.3	5.7	15.156	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1430	304	0.192	58	30	0.2	0.2	14.662	B
2 - B4109 Rugby Road South	782	195	191	1330	0.588	782	1297	1.4	1.4	6.561	A
3 - Three Pots Road	248	62	812	483	0.512	248	161	1.0	1.0	15.255	C
4 - B4109 Rugby Road North	1341	335	120	1552	0.864	1340	940	5.7	6.0	16.733	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1184	429	0.111	48	25	0.2	0.1	9.462	A
2 - B4109 Rugby Road South	638	160	158	1353	0.472	640	1073	1.4	0.9	5.064	A
3 - Three Pots Road	202	51	666	560	0.361	204	133	1.0	0.6	10.177	B
4 - B4109 Rugby Road North	1095	274	99	1567	0.699	1109	771	6.0	2.4	8.104	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	983	531	0.075	40	20	0.1	0.1	7.337	A
2 - B4109 Rugby Road South	535	134	132	1372	0.390	536	891	0.9	0.6	4.311	A
3 - Three Pots Road	169	42	557	616	0.275	170	110	0.6	0.4	8.085	A
4 - B4109 Rugby Road North	917	229	82	1578	0.581	921	644	2.4	1.4	5.509	A

2026 Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	14.02	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.02	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Opening Year	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 (%)
1 - Canberra Way		ONE HOUR	✓	19	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1131	100.000
3 - Three Pots Road		ONE HOUR	✓	136	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	806	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	6	1	12
	2 - B4109 Rugby Road South	27	0	2	1102
	3 - Three Pots Road	2	0	0	134
	4 - B4109 Rugby Road North	16	743	47	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	0
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.04	6.33	0.0	A	17	26
2 - B4109 Rugby Road South	0.87	18.48	6.1	C	1038	1557
3 - Three Pots Road	0.58	32.39	1.3	D	125	187
4 - B4109 Rugby Road North	0.55	4.92	1.2	A	740	1109

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	592	730	0.020	14	34	0.0	0.0	5.031	A
2 - B4109 Rugby Road South	851	213	45	1450	0.587	846	562	0.0	1.4	5.910	A
3 - Three Pots Road	102	26	853	466	0.220	101	37	0.0	0.3	9.832	A
4 - B4109 Rugby Road North	607	152	22	1626	0.373	604	933	0.0	0.6	3.517	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	709	670	0.025	17	40	0.0	0.0	5.509	A
2 - B4109 Rugby Road South	1017	254	54	1444	0.704	1013	673	1.4	2.3	8.291	A
3 - Three Pots Road	122	31	1022	380	0.322	122	45	0.3	0.5	13.913	B
4 - B4109 Rugby Road North	725	181	26	1623	0.446	724	1118	0.6	0.8	4.001	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	868	590	0.035	21	49	0.0	0.0	6.326	A
2 - B4109 Rugby Road South	1245	311	66	1435	0.868	1231	823	2.3	5.8	16.623	C
3 - Three Pots Road	150	37	1242	266	0.563	147	55	0.5	1.2	29.474	D
4 - B4109 Rugby Road North	887	222	32	1619	0.548	886	1358	0.8	1.2	4.899	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	870	589	0.036	21	50	0.0	0.0	6.334	A
2 - B4109 Rugby Road South	1245	311	66	1435	0.868	1244	825	5.8	6.1	18.478	C
3 - Three Pots Road	150	37	1255	260	0.576	149	55	1.2	1.3	32.388	D
4 - B4109 Rugby Road North	887	222	32	1619	0.548	887	1372	1.2	1.2	4.922	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	712	669	0.026	17	41	0.0	0.0	5.522	A
2 - B4109 Rugby Road South	1017	254	54	1443	0.704	1031	675	6.1	2.5	9.027	A
3 - Three Pots Road	122	31	1040	370	0.330	125	45	1.3	0.5	14.889	B
4 - B4109 Rugby Road North	725	181	26	1623	0.447	726	1139	1.2	0.8	4.022	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	596	728	0.020	14	34	0.0	0.0	5.043	A
2 - B4109 Rugby Road South	851	213	45	1449	0.587	856	565	2.5	1.4	6.101	A
3 - Three Pots Road	102	26	863	461	0.222	103	38	0.5	0.3	10.077	B
4 - B4109 Rugby Road North	607	152	22	1626	0.373	608	944	0.8	0.6	3.540	A

2026 Opening Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	18.58	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.58	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
D5	2026 Opening Year + Development	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 (%)
1 - Canberra Way		ONE HOUR	✓	53	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	726	100.000
3 - Three Pots Road		ONE HOUR	✓	233	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1292	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	19	3	31
	2 - B4109 Rugby Road South	6	0	3	717
	3 - Three Pots Road	2	101	0	130
	4 - B4109 Rugby Road North	19	1119	154	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	From				
	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	1
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.22	17.53	0.3	C	49	73
2 - B4109 Rugby Road South	0.61	6.91	1.5	A	666	999
3 - Three Pots Road	0.54	16.51	1.2	C	214	321
4 - B4109 Rugby Road North	0.92	25.56	9.5	D	1186	1778

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	1028	508	0.079	40	20	0.0	0.1	7.677	A
2 - B4109 Rugby Road South	547	137	141	1365	0.400	544	927	0.0	0.7	4.368	A
3 - Three Pots Road	175	44	565	612	0.287	174	120	0.0	0.4	8.186	A
4 - B4109 Rugby Road North	973	243	81	1579	0.616	966	657	0.0	1.6	5.819	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1230	405	0.118	47	24	0.1	0.1	10.057	B
2 - B4109 Rugby Road South	653	163	168	1346	0.485	652	1109	0.7	0.9	5.166	A
3 - Three Pots Road	209	52	677	554	0.378	209	143	0.4	0.6	10.400	B
4 - B4109 Rugby Road North	1161	290	98	1567	0.741	1157	788	1.6	2.8	8.665	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1489	274	0.213	58	29	0.1	0.3	16.631	C
2 - B4109 Rugby Road South	799	200	204	1322	0.605	797	1343	0.9	1.5	6.830	A
3 - Three Pots Road	257	64	828	476	0.539	254	173	0.6	1.1	16.122	C
4 - B4109 Rugby Road North	1423	356	119	1552	0.916	1399	963	2.8	8.5	20.944	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1509	264	0.221	58	30	0.3	0.3	17.525	C
2 - B4109 Rugby Road South	799	200	207	1320	0.606	799	1361	1.5	1.5	6.910	A
3 - Three Pots Road	257	64	830	474	0.541	256	176	1.1	1.2	16.505	C
4 - B4109 Rugby Road North	1423	356	120	1552	0.917	1419	967	8.5	9.5	25.559	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1262	389	0.122	48	25	0.3	0.1	10.574	B
2 - B4109 Rugby Road South	653	163	172	1343	0.486	655	1138	1.5	1.0	5.247	A
3 - Three Pots Road	209	52	680	552	0.379	212	147	1.2	0.6	10.640	B
4 - B4109 Rugby Road North	1161	290	99	1566	0.741	1188	793	9.5	3.0	10.107	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	1040	502	0.080	40	20	0.1	0.1	7.801	A
2 - B4109 Rugby Road South	547	137	142	1364	0.401	548	938	1.0	0.7	4.416	A
3 - Three Pots Road	175	44	569	610	0.288	176	121	0.6	0.4	8.319	A
4 - B4109 Rugby Road North	973	243	82	1578	0.616	978	663	3.0	1.6	6.053	A

2026 Opening Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	20.23	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	20.23	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
D6	2026 Opening Year + Development	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 (%)
1 - Canberra Way		ONE HOUR	✓	19	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1190	100.000
3 - Three Pots Road		ONE HOUR	✓	148	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	822	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	6	1	12
	2 - B4109 Rugby Road South	27	0	2	1161
	3 - Three Pots Road	2	0	0	146
	4 - B4109 Rugby Road North	16	755	51	0

Vehicle Mix

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

Heavy Vehicle %

From	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	0
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.04	6.44	0.0	A	17	26
2 - B4109 Rugby Road South	0.91	26.96	9.2	D	1092	1638
3 - Three Pots Road	0.72	52.89	2.2	F	136	204
4 - B4109 Rugby Road North	0.56	5.04	1.3	A	754	1131

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	604	724	0.020	14	34	0.0	0.0	5.074	A
2 - B4109 Rugby Road South	896	224	48	1448	0.619	890	571	0.0	1.6	6.380	A
3 - Three Pots Road	111	28	897	444	0.251	110	40	0.0	0.3	10.744	B
4 - B4109 Rugby Road North	619	155	22	1626	0.381	616	985	0.0	0.6	3.556	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	724	663	0.026	17	40	0.0	0.0	5.571	A
2 - B4109 Rugby Road South	1070	267	57	1441	0.742	1065	683	1.6	2.8	9.451	A
3 - Three Pots Road	133	33	1074	353	0.377	132	48	0.3	0.6	16.227	C
4 - B4109 Rugby Road North	739	185	26	1623	0.455	738	1180	0.6	0.8	4.064	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	886	581	0.036	21	49	0.0	0.0	6.426	A
2 - B4109 Rugby Road South	1310	328	70	1432	0.915	1288	836	2.8	8.3	22.144	C
3 - Three Pots Road	163	41	1299	237	0.687	158	59	0.6	1.9	42.883	E
4 - B4109 Rugby Road North	905	226	31	1619	0.559	903	1425	0.8	1.3	5.017	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	887	580	0.036	21	49	0.0	0.0	6.435	A
2 - B4109 Rugby Road South	1310	328	70	1432	0.915	1307	838	8.3	9.2	26.956	D
3 - Three Pots Road	163	41	1318	228	0.716	162	59	1.9	2.2	52.894	F
4 - B4109 Rugby Road North	905	226	32	1619	0.559	905	1447	1.3	1.3	5.043	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	726	662	0.026	17	41	0.0	0.0	5.585	A
2 - B4109 Rugby Road South	1070	267	58	1441	0.742	1095	686	9.2	3.0	11.075	B
3 - Three Pots Road	133	33	1104	338	0.394	139	49	2.2	0.7	18.684	C
4 - B4109 Rugby Road North	739	185	27	1622	0.455	741	1216	1.3	0.8	4.091	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	608	722	0.020	14	34	0.0	0.0	5.088	A
2 - B4109 Rugby Road South	896	224	48	1447	0.619	901	574	3.0	1.7	6.653	A
3 - Three Pots Road	111	28	909	438	0.254	113	41	0.7	0.3	11.115	B
4 - B4109 Rugby Road North	619	155	22	1626	0.381	620	1000	0.8	0.6	3.580	A

2031 Forecast Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	11.83	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.83	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Forecast Year	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 (%)
1 - Canberra Way		ONE HOUR	✓	53	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	739	100.000
3 - Three Pots Road		ONE HOUR	✓	227	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1177	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	19	3	31
	2 - B4109 Rugby Road South	6	0	2	731
	3 - Three Pots Road	2	101	0	124
	4 - B4109 Rugby Road North	19	1018	140	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	From				
	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	1
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.18	13.42	0.2	B	49	73
2 - B4109 Rugby Road South	0.61	6.94	1.6	A	678	1017
3 - Three Pots Road	0.54	16.61	1.1	C	208	312
4 - B4109 Rugby Road North	0.84	13.93	4.8	B	1080	1620

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	942	552	0.072	40	20	0.0	0.1	7.027	A
2 - B4109 Rugby Road South	556	139	130	1375	0.405	554	852	0.0	0.7	4.372	A
3 - Three Pots Road	171	43	575	607	0.282	169	109	0.0	0.4	8.206	A
4 - B4109 Rugby Road North	886	222	81	1579	0.561	881	663	0.0	1.3	5.122	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1128	457	0.104	47	24	0.1	0.1	8.790	A
2 - B4109 Rugby Road South	664	166	156	1357	0.490	663	1020	0.7	0.9	5.182	A
3 - Three Pots Road	204	51	689	547	0.373	203	130	0.4	0.6	10.437	B
4 - B4109 Rugby Road North	1058	265	98	1567	0.675	1055	795	1.3	2.0	6.984	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1375	332	0.176	58	30	0.1	0.2	13.129	B
2 - B4109 Rugby Road South	814	203	190	1333	0.610	811	1243	0.9	1.5	6.865	A
3 - Three Pots Road	250	62	843	468	0.535	248	158	0.6	1.1	16.230	C
4 - B4109 Rugby Road North	1296	324	119	1552	0.835	1285	972	2.0	4.7	12.998	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1385	326	0.179	58	30	0.2	0.2	13.424	B
2 - B4109 Rugby Road South	814	203	191	1332	0.611	814	1252	1.5	1.6	6.938	A
3 - Three Pots Road	250	62	846	466	0.536	250	160	1.1	1.1	16.615	C
4 - B4109 Rugby Road North	1296	324	120	1552	0.835	1295	975	4.7	4.8	13.927	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1143	449	0.106	48	24	0.2	0.1	8.980	A
2 - B4109 Rugby Road South	664	166	158	1355	0.490	667	1033	1.6	1.0	5.244	A
3 - Three Pots Road	204	51	693	545	0.374	206	132	1.1	0.6	10.672	B
4 - B4109 Rugby Road North	1058	265	99	1566	0.675	1069	800	4.8	2.1	7.386	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	951	547	0.073	40	20	0.1	0.1	7.108	A
2 - B4109 Rugby Road South	556	139	131	1374	0.405	558	860	1.0	0.7	4.418	A
3 - Three Pots Road	171	43	579	604	0.283	172	110	0.6	0.4	8.335	A
4 - B4109 Rugby Road North	886	222	82	1578	0.561	889	669	2.1	1.3	5.251	A

2031 Forecast Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	19.48	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	19.48	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
D8	2031 Forecast Year	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 (%)
1 - Canberra Way		ONE HOUR	✓	19	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1201	100.000
3 - Three Pots Road		ONE HOUR	✓	83	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	833	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	6	1	12
	2 - B4109 Rugby Road South	27	0	2	1172
	3 - Three Pots Road	2	0	0	81
	4 - B4109 Rugby Road North	16	766	51	0

Vehicle Mix

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

Heavy Vehicle %

From	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	0
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.04	6.51	0.0	A	17	26
2 - B4109 Rugby Road South	0.92	29.16	10.0	D	1102	1653
3 - Three Pots Road	0.41	27.50	0.7	D	76	114
4 - B4109 Rugby Road North	0.57	5.13	1.3	A	764	1147

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	613	719	0.020	14	34	0.0	0.0	5.104	A
2 - B4109 Rugby Road South	904	226	48	1448	0.625	898	579	0.0	1.6	6.472	A
3 - Three Pots Road	62	16	905	440	0.142	62	40	0.0	0.2	9.511	A
4 - B4109 Rugby Road North	627	157	22	1626	0.386	625	945	0.0	0.6	3.586	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	734	658	0.026	17	40	0.0	0.0	5.614	A
2 - B4109 Rugby Road South	1080	270	57	1441	0.749	1075	693	1.6	2.9	9.689	A
3 - Three Pots Road	75	19	1084	348	0.215	74	48	0.2	0.3	13.136	B
4 - B4109 Rugby Road North	749	187	26	1623	0.461	748	1132	0.6	0.8	4.110	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	898	575	0.036	21	49	0.0	0.0	6.496	A
2 - B4109 Rugby Road South	1322	331	70	1432	0.923	1298	848	2.9	8.9	23.415	C
3 - Three Pots Road	91	23	1309	232	0.394	90	59	0.3	0.6	25.113	D
4 - B4109 Rugby Road North	917	229	31	1619	0.566	915	1368	0.8	1.3	5.104	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	899	574	0.036	21	49	0.0	0.0	6.507	A
2 - B4109 Rugby Road South	1322	331	70	1432	0.923	1318	850	8.9	10.0	29.157	D
3 - Three Pots Road	91	23	1329	222	0.412	91	59	0.6	0.7	27.501	D
4 - B4109 Rugby Road North	917	229	32	1619	0.567	917	1388	1.3	1.3	5.130	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	736	657	0.026	17	41	0.0	0.0	5.627	A
2 - B4109 Rugby Road South	1080	270	58	1441	0.749	1107	696	10.0	3.1	11.605	B
3 - Three Pots Road	75	19	1116	331	0.225	76	49	0.7	0.3	14.201	B
4 - B4109 Rugby Road North	749	187	27	1622	0.462	751	1166	1.3	0.9	4.139	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	616	718	0.020	14	34	0.0	0.0	5.119	A
2 - B4109 Rugby Road South	904	226	48	1448	0.625	910	582	3.1	1.7	6.766	A
3 - Three Pots Road	62	16	917	433	0.144	63	41	0.3	0.2	9.731	A
4 - B4109 Rugby Road North	627	157	22	1626	0.386	628	958	0.9	0.6	3.613	A

2031 Forecast Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	15.48	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	15.48	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
D9	2031 Forecast Year + Development	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 (%)
1 - Canberra Way		ONE HOUR	✓	53	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	755	100.000
3 - Three Pots Road		ONE HOUR	✓	235	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1251	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	19	3	31
	2 - B4109 Rugby Road South	6	0	2	747
	3 - Three Pots Road	2	101	0	132
	4 - B4109 Rugby Road North	19	1078	154	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	1
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.20	15.83	0.3	C	49	73
2 - B4109 Rugby Road South	0.63	7.34	1.7	A	693	1039
3 - Three Pots Road	0.57	18.11	1.3	C	216	323
4 - B4109 Rugby Road North	0.89	19.90	7.2	C	1148	1722

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	997	524	0.076	40	20	0.0	0.1	7.433	A
2 - B4109 Rugby Road South	568	142	141	1367	0.416	566	896	0.0	0.7	4.475	A
3 - Three Pots Road	177	44	587	600	0.295	175	119	0.0	0.4	8.436	A
4 - B4109 Rugby Road North	942	235	81	1579	0.597	936	681	0.0	1.5	5.551	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1194	424	0.112	47	24	0.1	0.1	9.568	A
2 - B4109 Rugby Road South	679	170	168	1348	0.503	678	1073	0.7	1.0	5.357	A
3 - Three Pots Road	211	53	704	540	0.391	210	142	0.4	0.6	10.892	B
4 - B4109 Rugby Road North	1125	281	98	1567	0.718	1121	816	1.5	2.5	7.985	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1450	294	0.199	58	29	0.1	0.2	15.238	C
2 - B4109 Rugby Road South	831	208	205	1323	0.628	829	1303	1.0	1.7	7.239	A
3 - Three Pots Road	259	65	860	459	0.564	256	173	0.6	1.2	17.584	C
4 - B4109 Rugby Road North	1377	344	119	1552	0.887	1360	998	2.5	6.7	17.383	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	58	15	1466	286	0.204	58	30	0.2	0.3	15.833	C
2 - B4109 Rugby Road South	831	208	207	1322	0.629	831	1317	1.7	1.7	7.336	A
3 - Three Pots Road	259	65	863	457	0.566	259	175	1.2	1.3	18.106	C
4 - B4109 Rugby Road North	1377	344	120	1551	0.888	1375	1002	6.7	7.2	19.901	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	48	12	1218	412	0.116	48	25	0.3	0.1	9.916	A
2 - B4109 Rugby Road South	679	170	172	1346	0.504	681	1094	1.7	1.0	5.438	A
3 - Three Pots Road	211	53	708	538	0.393	214	145	1.3	0.7	11.187	B
4 - B4109 Rugby Road North	1125	281	99	1566	0.718	1143	822	7.2	2.6	8.855	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	40	10	1008	518	0.077	40	20	0.1	0.1	7.540	A
2 - B4109 Rugby Road South	568	142	142	1366	0.416	570	906	1.0	0.7	4.525	A
3 - Three Pots Road	177	44	592	598	0.296	178	120	0.7	0.4	8.586	A
4 - B4109 Rugby Road North	942	235	82	1578	0.597	946	687	2.6	1.5	5.740	A

2031 Forecast Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Rugby Road / Canberra Way	Standard Roundabout		1, 2, 3, 4	30.90	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	30.90	D

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
D10	2031 Forecast Year + Development	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 (%)
1 - Canberra Way		ONE HOUR	✓	19	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1260	100.000
3 - Three Pots Road		ONE HOUR	✓	95	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	849	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
From	1 - Canberra Way	0	6	1	12
	2 - B4109 Rugby Road South	27	0	2	1231
	3 - Three Pots Road	2	0	0	93
	4 - B4109 Rugby Road North	16	778	55	0

Vehicle Mix

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

Heavy Vehicle %

From	To				
		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	1 - Canberra Way	0	0	0	0
	2 - B4109 Rugby Road South	0	0	100	0
	3 - Three Pots Road	0	0	0	0
	4 - B4109 Rugby Road North	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Canberra Way	0.04	6.61	0.0	A	17	26
2 - B4109 Rugby Road South	0.97	48.01	17.6	E	1156	1734
3 - Three Pots Road	0.54	39.78	1.1	E	87	131
4 - B4109 Rugby Road North	0.58	5.26	1.4	A	779	1169

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	625	713	0.020	14	34	0.0	0.0	5.148	A
2 - B4109 Rugby Road South	949	237	51	1446	0.656	941	588	0.0	1.9	7.033	A
3 - Three Pots Road	72	18	949	417	0.171	71	43	0.0	0.2	10.362	B
4 - B4109 Rugby Road North	639	160	22	1626	0.393	637	998	0.0	0.6	3.629	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	748	651	0.026	17	40	0.0	0.0	5.678	A
2 - B4109 Rugby Road South	1133	283	61	1439	0.787	1126	704	1.9	3.5	11.274	B
3 - Three Pots Road	85	21	1135	321	0.266	85	52	0.2	0.4	15.175	C
4 - B4109 Rugby Road North	763	191	26	1623	0.470	762	1194	0.6	0.9	4.178	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	915	566	0.037	21	49	0.0	0.0	6.602	A
2 - B4109 Rugby Road South	1387	347	75	1430	0.970	1345	861	3.5	14.0	32.685	D
3 - Three Pots Road	105	26	1356	208	0.504	102	64	0.4	0.9	33.475	D
4 - B4109 Rugby Road North	935	234	31	1619	0.577	933	1428	0.9	1.3	5.228	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	21	5	917	565	0.037	21	49	0.0	0.0	6.613	A
2 - B4109 Rugby Road South	1387	347	75	1429	0.970	1373	863	14.0	17.6	48.009	E
3 - Three Pots Road	105	26	1384	194	0.540	104	64	0.9	1.1	39.776	E
4 - B4109 Rugby Road North	935	234	32	1619	0.577	935	1456	1.3	1.4	5.261	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	17	4	751	650	0.026	17	42	0.0	0.0	5.694	A
2 - B4109 Rugby Road South	1133	283	61	1439	0.787	1188	707	17.6	3.9	17.035	C
3 - Three Pots Road	85	21	1196	290	0.295	88	52	1.1	0.4	18.066	C
4 - B4109 Rugby Road North	763	191	27	1622	0.471	765	1257	1.4	0.9	4.211	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Canberra Way	14	4	628	712	0.020	14	34	0.0	0.0	5.162	A
2 - B4109 Rugby Road South	949	237	51	1446	0.656	957	591	3.9	2.0	7.479	A
3 - Three Pots Road	72	18	964	409	0.175	72	44	0.4	0.2	10.708	B
4 - B4109 Rugby Road North	639	160	22	1626	0.393	640	1014	0.9	0.7	3.655	A

Appendix Y: B4109 Rugby Rd / Sketchley Road / Sketchley Ln J10 Report

Junctions 10	
ARCADY 10 - Roundabout Module	
Version: 10.1.1.1905	
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Filename: Rugby Road_Sketchley Road.j10

Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10\P08

Report generation date: 16/07/2024 15:21:27

-
- »Base Year, AM
 - »Base Year, PM
 - »2026 Opening Year, AM
 - »2026 Opening Year, PM
 - »2026 Opening Year + Development, AM
 - »2026 Opening Year + Development, PM
 - »2031 Forecast Year, AM
 - »2031 Forecast Year, PM
 - »2031 Forecast Year + Development, AM
 - »2031 Forecast Year + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base Year									
1 - Sketchley Road	D1	0.5	8.08	0.32	A	D2	0.2	6.28	0.18	A
2 - B4109 Rugby Road South		1.0	5.71	0.49	A		3.6	13.72	0.79	B
3 - Sketchley Lane		0.5	8.37	0.32	A		0.3	10.02	0.26	B
4 - B4109 Rugby Road North		1.8	10.46	0.64	B		2.0	12.63	0.67	B
	2026 Opening Year									
1 - Sketchley Road	D3	0.7	10.05	0.41	B	D4	0.3	6.75	0.21	A
2 - B4109 Rugby Road South		1.8	8.20	0.64	A		7.4	25.97	0.89	D
3 - Sketchley Lane		0.6	10.63	0.38	B		0.7	15.12	0.42	C
4 - B4109 Rugby Road North		2.6	13.59	0.73	B		2.3	13.27	0.70	B
	2026 Opening Year + Development									
1 - Sketchley Road	D5	0.7	10.44	0.42	B	D6	0.3	6.90	0.22	A
2 - B4109 Rugby Road South		2.0	8.93	0.67	A		9.2	31.53	0.92	D
3 - Sketchley Lane		0.6	11.26	0.39	B		0.8	16.21	0.44	C
4 - B4109 Rugby Road North		3.0	15.08	0.75	C		2.5	14.40	0.72	B
	2031 Forecast Year									
1 - Sketchley Road	D7	0.6	9.55	0.37	A	D8	0.3	6.83	0.22	A
2 - B4109 Rugby Road South		1.9	8.40	0.65	A		8.6	29.53	0.91	D
3 - Sketchley Lane		0.6	10.74	0.38	B		1.2	19.55	0.54	C
4 - B4109 Rugby Road North		2.9	14.67	0.75	B		2.2	12.84	0.69	B
	2031 Forecast Year + Development									
1 - Sketchley Road	D9	0.6	9.90	0.38	A	D10	0.3	6.98	0.22	A
2 - B4109 Rugby Road South		2.1	9.17	0.68	A		10.9	36.72	0.93	E
3 - Sketchley Lane		0.6	11.39	0.39	B		1.3	21.42	0.57	C
4 - B4109 Rugby Road North		3.3	16.42	0.78	C		2.5	13.89	0.72	B

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

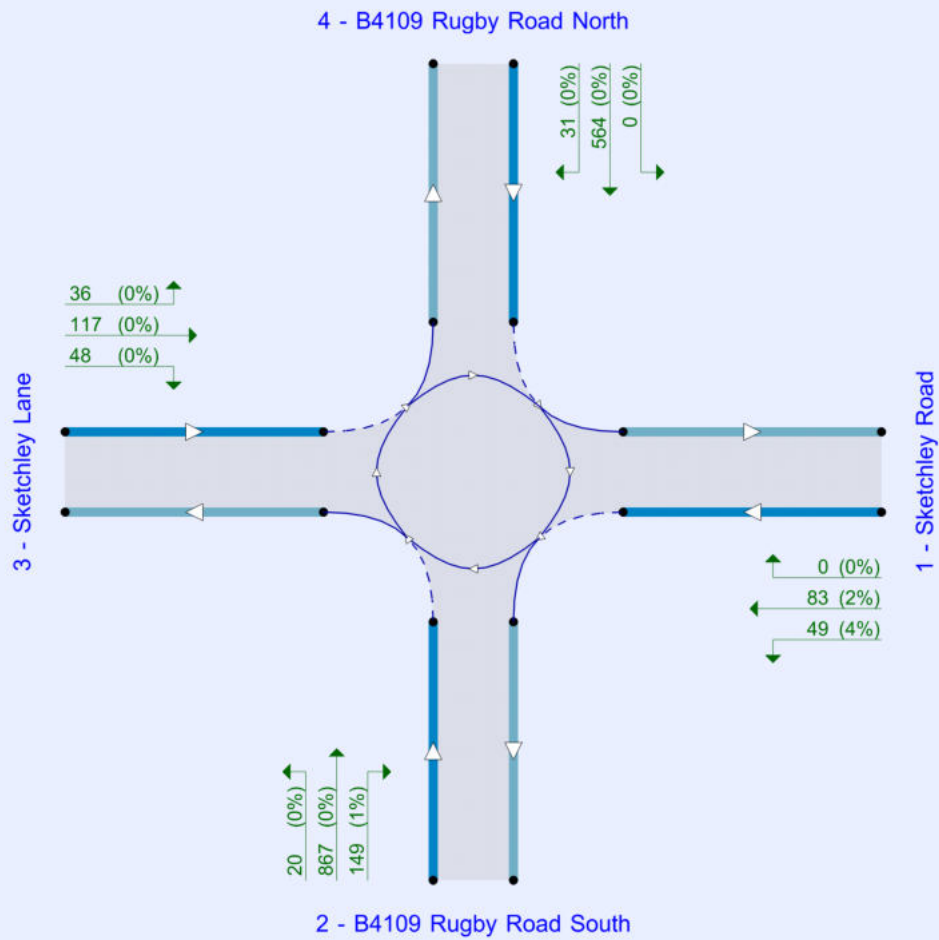
File summary

File Description

Title	B4109 Rugby Road / Sketchley Road / Sketchley Lane Roundabout
Location	
Site number	
Date	11/07/2024
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



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 simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base Year	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Opening Year	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Opening Year	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Opening Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Opening Year + Development	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Forecast Year	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Forecast Year	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Forecast Year + Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Forecast Year + Development	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

Base Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	8.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.12	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Sketchley Road		
2	B4109 Rugby Road South		
3	Sketchley Lane		
4	B4109 Rugby Road North		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Sketchley Road	3.00	5.30	2.8	12.5	22.0	37.5		
2 - B4109 Rugby Road South	3.65	4.50	7.3	16.0	22.0	25.5		
3 - Sketchley Lane	3.00	4.00	1.4	8.6	22.0	34.5		
4 - B4109 Rugby Road North	3.20	4.65	1.8	15.0	22.0	23.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Sketchley Road	0.510	1040
2 - B4109 Rugby Road South	0.582	1298
3 - Sketchley Lane	0.478	921
4 - B4109 Rugby Road North	0.542	1101

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	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 (%)
1 - Sketchley Road		ONE HOUR	✓	187	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	556	100.000
3 - Sketchley Lane		ONE HOUR	✓	183	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	560	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	173	14	0
	2 - B4109 Rugby Road South	78	0	26	452
	3 - Sketchley Lane	48	90	0	45
	4 - B4109 Rugby Road North	0	515	45	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	3	5	0
	2 - B4109 Rugby Road South	4	0	0	1
	3 - Sketchley Lane	2	1	0	0
	4 - B4109 Rugby Road North	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.32	8.08	0.5	A	172	257
2 - B4109 Rugby Road South	0.49	5.71	1.0	A	510	765
3 - Sketchley Lane	0.32	8.37	0.5	A	168	252
4 - B4109 Rugby Road North	0.64	10.46	1.8	B	514	771

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	141	35	486	766	0.184	140	94	0.0	0.2	5.743	A
2 - B4109 Rugby Road South	419	105	44	1255	0.334	417	582	0.0	0.5	4.282	A
3 - Sketchley Lane	138	34	397	721	0.191	137	64	0.0	0.2	6.152	A
4 - B4109 Rugby Road North	422	105	162	1002	0.421	419	372	0.0	0.7	6.141	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	168	42	583	717	0.234	168	113	0.2	0.3	6.545	A
2 - B4109 Rugby Road South	500	125	53	1250	0.400	499	698	0.5	0.7	4.793	A
3 - Sketchley Lane	165	41	476	683	0.241	164	76	0.2	0.3	6.931	A
4 - B4109 Rugby Road North	503	126	194	984	0.511	502	446	0.7	1.0	7.444	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	206	51	713	653	0.315	205	138	0.3	0.5	8.033	A
2 - B4109 Rugby Road South	612	153	65	1243	0.493	611	853	0.7	1.0	5.687	A
3 - Sketchley Lane	201	50	582	632	0.319	201	93	0.3	0.5	8.336	A
4 - B4109 Rugby Road North	617	154	237	961	0.642	614	546	1.0	1.7	10.292	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	206	51	716	651	0.316	206	139	0.5	0.5	8.083	A
2 - B4109 Rugby Road South	612	153	65	1243	0.493	612	856	1.0	1.0	5.709	A
3 - Sketchley Lane	201	50	584	632	0.319	201	94	0.5	0.5	8.370	A
4 - B4109 Rugby Road North	617	154	238	960	0.642	616	547	1.7	1.8	10.460	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	168	42	587	715	0.235	169	114	0.5	0.3	6.594	A
2 - B4109 Rugby Road South	500	125	53	1249	0.400	501	703	1.0	0.7	4.817	A
3 - Sketchley Lane	165	41	478	682	0.241	165	77	0.5	0.3	6.966	A
4 - B4109 Rugby Road North	503	126	195	984	0.512	506	448	1.8	1.1	7.580	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	141	35	491	763	0.184	141	95	0.3	0.2	5.790	A
2 - B4109 Rugby Road South	419	105	45	1255	0.334	419	587	0.7	0.5	4.314	A
3 - Sketchley Lane	138	34	400	720	0.191	138	64	0.3	0.2	6.192	A
4 - B4109 Rugby Road North	422	105	163	1001	0.421	423	375	1.1	0.7	6.235	A

Base Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	12.59	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.59	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	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 (%)
1 - Sketchley Road		ONE HOUR	✓	111	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	873	100.000
3 - Sketchley Lane		ONE HOUR	✓	115	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
	1 - Sketchley Road	0	49	62	0
	2 - B4109 Rugby Road South	302	0	49	522
	3 - Sketchley Lane	36	46	0	33
	4 - B4109 Rugby Road North	0	483	49	0

Vehicle Mix

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

Heavy Vehicle %

From	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
	1 - Sketchley Road	0	4	2	0
	2 - B4109 Rugby Road South	1	0	0	0
	3 - Sketchley Lane	0	0	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.18	6.28	0.2	A	102	153
2 - B4109 Rugby Road South	0.79	13.72	3.6	B	801	1202
3 - Sketchley Lane	0.26	10.02	0.3	B	106	158
4 - B4109 Rugby Road North	0.67	12.63	2.0	B	488	732

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	84	21	432	797	0.105	83	253	0.0	0.1	5.041	A
2 - B4109 Rugby Road South	657	164	83	1245	0.528	653	432	0.0	1.1	6.037	A
3 - Sketchley Lane	87	22	616	625	0.138	86	120	0.0	0.2	6.669	A
4 - B4109 Rugby Road North	401	100	287	944	0.424	398	415	0.0	0.7	6.554	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	100	25	518	754	0.132	100	303	0.1	0.2	5.499	A
2 - B4109 Rugby Road South	785	196	100	1235	0.635	782	518	1.1	1.7	7.909	A
3 - Sketchley Lane	103	26	738	567	0.182	103	143	0.2	0.2	7.762	A
4 - B4109 Rugby Road North	478	120	344	913	0.524	477	497	0.7	1.1	8.228	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	122	31	633	697	0.175	122	370	0.2	0.2	6.254	A
2 - B4109 Rugby Road South	961	240	122	1222	0.786	954	633	1.7	3.5	13.097	B
3 - Sketchley Lane	127	32	901	489	0.259	126	175	0.2	0.3	9.906	A
4 - B4109 Rugby Road North	586	146	420	871	0.672	582	607	1.1	2.0	12.290	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	122	31	636	696	0.176	122	372	0.2	0.2	6.278	A
2 - B4109 Rugby Road South	961	240	122	1222	0.787	961	636	3.5	3.6	13.725	B
3 - Sketchley Lane	127	32	907	486	0.261	127	176	0.3	0.3	10.016	B
4 - B4109 Rugby Road North	586	146	423	870	0.673	586	611	2.0	2.0	12.634	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	100	25	523	751	0.133	100	306	0.2	0.2	5.527	A
2 - B4109 Rugby Road South	785	196	100	1235	0.636	792	523	3.6	1.8	8.255	A
3 - Sketchley Lane	103	26	747	562	0.184	104	145	0.3	0.2	7.859	A
4 - B4109 Rugby Road North	478	120	348	911	0.525	482	503	2.0	1.1	8.458	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	84	21	437	794	0.105	84	255	0.2	0.1	5.065	A
2 - B4109 Rugby Road South	657	164	84	1244	0.528	660	437	1.8	1.1	6.187	A
3 - Sketchley Lane	87	22	623	622	0.139	87	121	0.2	0.2	6.730	A
4 - B4109 Rugby Road North	401	100	290	942	0.425	402	419	1.1	0.7	6.681	A

2026 Opening Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	10.62	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.62	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Opening Year	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 (%)
1 - Sketchley Road		ONE HOUR	✓	229	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	722	100.000
3 - Sketchley Lane		ONE HOUR	✓	186	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	640	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	174	55	0
	2 - B4109 Rugby Road South	71	0	25	626
	3 - Sketchley Lane	59	87	0	40
	4 - B4109 Rugby Road North	0	622	18	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	3	5	0
	2 - B4109 Rugby Road South	4	0	0	1
	3 - Sketchley Lane	2	1	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.41	10.05	0.7	B	210	315
2 - B4109 Rugby Road South	0.64	8.20	1.8	A	663	994
3 - Sketchley Lane	0.38	10.63	0.6	B	171	256
4 - B4109 Rugby Road North	0.73	13.59	2.6	B	587	881

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	172	43	543	737	0.234	171	97	0.0	0.3	6.350	A
2 - B4109 Rugby Road South	544	136	55	1249	0.435	541	660	0.0	0.8	5.058	A
3 - Sketchley Lane	140	35	522	661	0.212	139	73	0.0	0.3	6.883	A
4 - B4109 Rugby Road North	482	120	162	1011	0.477	478	499	0.0	0.9	6.712	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	206	51	652	684	0.301	205	117	0.3	0.4	7.520	A
2 - B4109 Rugby Road South	649	162	65	1243	0.522	648	791	0.8	1.1	6.036	A
3 - Sketchley Lane	167	42	625	611	0.274	167	88	0.3	0.4	8.090	A
4 - B4109 Rugby Road North	575	144	195	993	0.579	574	598	0.9	1.3	8.541	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	252	63	795	613	0.412	251	143	0.4	0.7	9.928	A
2 - B4109 Rugby Road South	795	199	80	1234	0.644	792	966	1.1	1.8	8.094	A
3 - Sketchley Lane	205	51	765	545	0.376	204	107	0.4	0.6	10.537	B
4 - B4109 Rugby Road North	705	176	238	969	0.727	700	731	1.3	2.5	13.140	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	252	63	800	610	0.413	252	143	0.7	0.7	10.050	B
2 - B4109 Rugby Road South	795	199	80	1234	0.644	795	972	1.8	1.8	8.195	A
3 - Sketchley Lane	205	51	767	543	0.377	205	108	0.6	0.6	10.627	B
4 - B4109 Rugby Road North	705	176	239	969	0.727	704	733	2.5	2.6	13.589	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	206	51	659	680	0.303	207	117	0.7	0.4	7.624	A
2 - B4109 Rugby Road South	649	162	66	1242	0.522	652	800	1.8	1.1	6.124	A
3 - Sketchley Lane	167	42	629	610	0.274	168	89	0.6	0.4	8.171	A
4 - B4109 Rugby Road North	575	144	196	992	0.580	580	601	2.6	1.4	8.830	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	172	43	549	734	0.235	173	98	0.4	0.3	6.421	A
2 - B4109 Rugby Road South	544	136	55	1249	0.435	545	667	1.1	0.8	5.122	A
3 - Sketchley Lane	140	35	526	659	0.213	140	74	0.4	0.3	6.948	A
4 - B4109 Rugby Road North	482	120	164	1010	0.477	484	503	1.4	0.9	6.864	A

2026 Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	19.76	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	19.76	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
D4	2026 Opening Year	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 (%)
1 - Sketchley Road		ONE HOUR	✓	132	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	990	100.000
3 - Sketchley Lane		ONE HOUR	✓	155	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	567	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	48	84	0
	2 - B4109 Rugby Road South	225	0	16	749
	3 - Sketchley Lane	75	44	0	36
	4 - B4109 Rugby Road North	0	536	31	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	4	2	0
	2 - B4109 Rugby Road South	1	0	0	0
	3 - Sketchley Lane	0	0	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.21	6.75	0.3	A	121	182
2 - B4109 Rugby Road South	0.89	25.97	7.4	D	908	1363
3 - Sketchley Lane	0.42	15.12	0.7	C	142	213
4 - B4109 Rugby Road North	0.70	13.27	2.3	B	520	780

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	457	786	0.126	99	224	0.0	0.1	5.235	A
2 - B4109 Rugby Road South	745	186	86	1244	0.599	739	469	0.0	1.5	7.052	A
3 - Sketchley Lane	117	29	728	572	0.204	116	98	0.0	0.3	7.864	A
4 - B4109 Rugby Road North	427	107	257	961	0.444	424	586	0.0	0.8	6.664	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	548	741	0.160	118	269	0.1	0.2	5.785	A
2 - B4109 Rugby Road South	890	222	103	1234	0.721	886	563	1.5	2.5	10.210	B
3 - Sketchley Lane	139	35	872	503	0.277	139	117	0.3	0.4	9.859	A
4 - B4109 Rugby Road North	510	127	308	933	0.546	508	702	0.8	1.2	8.441	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	668	681	0.214	145	326	0.2	0.3	6.716	A
2 - B4109 Rugby Road South	1090	273	126	1221	0.893	1073	687	2.5	6.8	22.113	C
3 - Sketchley Lane	171	43	1055	415	0.411	169	144	0.4	0.7	14.561	B
4 - B4109 Rugby Road North	624	156	374	897	0.696	620	851	1.2	2.2	12.822	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	672	679	0.214	145	330	0.3	0.3	6.750	A
2 - B4109 Rugby Road South	1090	273	127	1220	0.893	1088	691	6.8	7.4	25.974	D
3 - Sketchley Lane	171	43	1070	409	0.418	171	144	0.7	0.7	15.115	C
4 - B4109 Rugby Road North	624	156	378	895	0.698	624	862	2.2	2.3	13.271	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	554	738	0.161	119	275	0.3	0.2	5.821	A
2 - B4109 Rugby Road South	890	222	104	1234	0.721	909	569	7.4	2.7	11.667	B
3 - Sketchley Lane	139	35	894	493	0.283	141	118	0.7	0.4	10.260	B
4 - B4109 Rugby Road North	510	127	314	929	0.548	514	720	2.3	1.2	8.744	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	462	783	0.127	100	227	0.2	0.1	5.267	A
2 - B4109 Rugby Road South	745	186	87	1244	0.599	750	475	2.7	1.5	7.355	A
3 - Sketchley Lane	117	29	738	567	0.206	117	99	0.4	0.3	8.007	A
4 - B4109 Rugby Road North	427	107	260	959	0.445	429	595	1.2	0.8	6.809	A

2026 Opening Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	11.56	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.56	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Opening Year + Development	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 (%)
1 - Sketchley Road		ONE HOUR	✓	229	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	755	100.000
3 - Sketchley Lane		ONE HOUR	✓	188	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	663	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	174	55	0
	2 - B4109 Rugby Road South	71	0	26	658
	3 - Sketchley Lane	59	89	0	40
	4 - B4109 Rugby Road North	0	645	18	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	3	5	0
	2 - B4109 Rugby Road South	4	0	0	1
	3 - Sketchley Lane	2	1	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.42	10.44	0.7	B	210	315
2 - B4109 Rugby Road South	0.67	8.93	2.0	A	693	1039
3 - Sketchley Lane	0.39	11.26	0.6	B	173	259
4 - B4109 Rugby Road North	0.75	15.08	3.0	C	608	913

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	172	43	562	728	0.237	171	97	0.0	0.3	6.452	A
2 - B4109 Rugby Road South	568	142	55	1249	0.455	565	678	0.0	0.8	5.235	A
3 - Sketchley Lane	142	35	546	650	0.218	140	74	0.0	0.3	7.057	A
4 - B4109 Rugby Road North	499	125	164	1010	0.494	495	522	0.0	1.0	6.939	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	206	51	674	673	0.306	205	117	0.3	0.4	7.696	A
2 - B4109 Rugby Road South	679	170	65	1243	0.546	677	814	0.8	1.2	6.347	A
3 - Sketchley Lane	169	42	654	598	0.283	169	89	0.3	0.4	8.380	A
4 - B4109 Rugby Road North	596	149	196	992	0.601	594	626	1.0	1.5	8.994	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	252	63	822	600	0.421	251	143	0.4	0.7	10.297	B
2 - B4109 Rugby Road South	831	208	80	1234	0.673	828	993	1.2	2.0	8.788	A
3 - Sketchley Lane	207	52	799	528	0.392	206	108	0.4	0.6	11.142	B
4 - B4109 Rugby Road North	730	182	240	968	0.754	724	765	1.5	2.9	14.439	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	252	63	828	597	0.423	252	143	0.7	0.7	10.443	B
2 - B4109 Rugby Road South	831	208	80	1234	0.674	831	999	2.0	2.0	8.928	A
3 - Sketchley Lane	207	52	803	527	0.393	207	109	0.6	0.6	11.258	B
4 - B4109 Rugby Road North	730	182	241	967	0.755	730	768	2.9	3.0	15.078	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	206	51	682	668	0.308	207	117	0.7	0.5	7.820	A
2 - B4109 Rugby Road South	679	170	66	1243	0.546	682	823	2.0	1.2	6.457	A
3 - Sketchley Lane	169	42	658	596	0.284	170	90	0.6	0.4	8.478	A
4 - B4109 Rugby Road North	596	149	198	991	0.601	602	631	3.0	1.5	9.370	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	172	43	569	725	0.238	173	98	0.5	0.3	6.534	A
2 - B4109 Rugby Road South	568	142	55	1249	0.455	570	686	1.2	0.8	5.313	A
3 - Sketchley Lane	142	35	550	647	0.219	142	75	0.4	0.3	7.129	A
4 - B4109 Rugby Road North	499	125	165	1009	0.495	501	527	1.5	1.0	7.115	A

2026 Opening Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	23.21	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	23.21	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
D6	2026 Opening Year + Development	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 (%)
1 - Sketchley Road		ONE HOUR	✓	132	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1016	100.000
3 - Sketchley Lane		ONE HOUR	✓	158	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	585	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	48	84	0
	2 - B4109 Rugby Road South	225	0	16	775
	3 - Sketchley Lane	75	47	0	36
	4 - B4109 Rugby Road North	0	554	31	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	4	2	0
	2 - B4109 Rugby Road South	1	0	0	0
	3 - Sketchley Lane	0	0	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.22	6.90	0.3	A	121	182
2 - B4109 Rugby Road South	0.92	31.53	9.2	D	932	1398
3 - Sketchley Lane	0.44	16.21	0.8	C	145	217
4 - B4109 Rugby Road North	0.72	14.40	2.5	B	537	805

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	472	778	0.128	99	224	0.0	0.1	5.295	A
2 - B4109 Rugby Road South	765	191	86	1244	0.615	759	485	0.0	1.6	7.321	A
3 - Sketchley Lane	119	30	747	563	0.211	118	98	0.0	0.3	8.058	A
4 - B4109 Rugby Road North	440	110	259	960	0.459	437	606	0.0	0.8	6.845	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	566	731	0.162	118	268	0.1	0.2	5.873	A
2 - B4109 Rugby Road South	913	228	103	1234	0.740	909	582	1.6	2.7	10.897	B
3 - Sketchley Lane	142	36	894	493	0.288	142	117	0.3	0.4	10.239	B
4 - B4109 Rugby Road North	526	131	311	932	0.565	524	725	0.8	1.3	8.797	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	691	669	0.217	145	325	0.2	0.3	6.859	A
2 - B4109 Rugby Road South	1119	280	126	1221	0.916	1097	710	2.7	8.2	25.453	D
3 - Sketchley Lane	174	43	1080	404	0.431	173	143	0.4	0.7	15.474	C
4 - B4109 Rugby Road North	644	161	376	896	0.719	639	876	1.3	2.4	13.797	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	695	667	0.218	145	329	0.3	0.3	6.898	A
2 - B4109 Rugby Road South	1119	280	127	1221	0.917	1115	714	8.2	9.2	31.530	D
3 - Sketchley Lane	174	43	1097	396	0.440	174	144	0.7	0.8	16.215	C
4 - B4109 Rugby Road North	644	161	381	893	0.721	644	890	2.4	2.5	14.395	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	573	728	0.163	119	276	0.3	0.2	5.917	A
2 - B4109 Rugby Road South	913	228	104	1234	0.740	938	588	9.2	3.0	13.087	B
3 - Sketchley Lane	142	36	923	479	0.297	143	119	0.8	0.4	10.778	B
4 - B4109 Rugby Road North	526	131	318	927	0.567	531	748	2.5	1.3	9.179	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	478	775	0.128	100	227	0.2	0.1	5.329	A
2 - B4109 Rugby Road South	765	191	87	1244	0.615	770	491	3.0	1.6	7.684	A
3 - Sketchley Lane	119	30	758	558	0.213	120	99	0.4	0.3	8.228	A
4 - B4109 Rugby Road North	440	110	263	958	0.460	442	615	1.3	0.9	7.011	A

2031 Forecast Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	11.07	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.07	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Forecast Year	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 (%)
1 - Sketchley Road		ONE HOUR	✓	203	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	734	100.000
3 - Sketchley Lane		ONE HOUR	✓	184	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	658	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
	From				
	1 - Sketchley Road	0	153	50	0
	2 - B4109 Rugby Road South	73	0	26	635
	3 - Sketchley Lane	57	87	0	40
	4 - B4109 Rugby Road North	0	639	19	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	3	5	0
	2 - B4109 Rugby Road South	4	0	0	1
	3 - Sketchley Lane	2	1	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.37	9.55	0.6	A	186	279
2 - B4109 Rugby Road South	0.65	8.40	1.9	A	674	1010
3 - Sketchley Lane	0.38	10.74	0.6	B	169	253
4 - B4109 Rugby Road North	0.75	14.67	2.9	B	604	906

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	153	38	557	730	0.209	152	97	0.0	0.3	6.210	A
2 - B4109 Rugby Road South	553	138	52	1251	0.442	549	657	0.0	0.8	5.109	A
3 - Sketchley Lane	139	35	530	657	0.211	137	71	0.0	0.3	6.914	A
4 - B4109 Rugby Road North	495	124	162	1011	0.490	492	505	0.0	0.9	6.881	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	182	46	668	676	0.270	182	117	0.3	0.4	7.288	A
2 - B4109 Rugby Road South	660	165	62	1245	0.530	659	788	0.8	1.1	6.125	A
3 - Sketchley Lane	165	41	635	607	0.273	165	85	0.3	0.4	8.143	A
4 - B4109 Rugby Road North	592	148	195	993	0.596	590	606	0.9	1.4	8.875	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	224	56	814	603	0.371	223	143	0.4	0.6	9.439	A
2 - B4109 Rugby Road South	808	202	76	1237	0.653	805	961	1.1	1.8	8.285	A
3 - Sketchley Lane	203	51	777	539	0.376	202	104	0.4	0.6	10.644	B
4 - B4109 Rugby Road North	724	181	238	969	0.748	719	740	1.4	2.8	14.090	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	224	56	820	600	0.372	223	143	0.6	0.6	9.548	A
2 - B4109 Rugby Road South	808	202	76	1237	0.654	808	967	1.8	1.9	8.395	A
3 - Sketchley Lane	203	51	779	538	0.377	203	105	0.6	0.6	10.740	B
4 - B4109 Rugby Road North	724	181	239	969	0.748	724	743	2.8	2.9	14.673	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	182	46	676	672	0.272	183	117	0.6	0.4	7.387	A
2 - B4109 Rugby Road South	660	165	62	1245	0.530	663	797	1.9	1.1	6.215	A
3 - Sketchley Lane	165	41	639	605	0.274	166	86	0.6	0.4	8.227	A
4 - B4109 Rugby Road North	592	148	196	992	0.596	597	609	2.9	1.5	9.226	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	153	38	563	727	0.210	153	98	0.4	0.3	6.277	A
2 - B4109 Rugby Road South	553	138	52	1251	0.442	554	664	1.1	0.8	5.176	A
3 - Sketchley Lane	139	35	534	655	0.211	139	72	0.4	0.3	6.981	A
4 - B4109 Rugby Road North	495	124	164	1010	0.490	498	509	1.5	1.0	7.049	A

2031 Forecast Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	21.89	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.89	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
D8	2031 Forecast Year	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 (%)
1 - Sketchley Road		ONE HOUR	✓	132	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1009	100.000
3 - Sketchley Lane		ONE HOUR	✓	198	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	577	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
	1 - Sketchley Road	0	49	83	0
	2 - B4109 Rugby Road South	149	0	20	840
	3 - Sketchley Lane	117	45	0	36
	4 - B4109 Rugby Road North	0	546	31	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	4	2	0
	2 - B4109 Rugby Road South	1	0	0	0
	3 - Sketchley Lane	0	0	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.22	6.83	0.3	A	121	182
2 - B4109 Rugby Road South	0.91	29.53	8.6	D	926	1389
3 - Sketchley Lane	0.54	19.55	1.2	C	182	273
4 - B4109 Rugby Road North	0.69	12.84	2.2	B	529	794

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	465	782	0.127	99	199	0.0	0.1	5.268	A
2 - B4109 Rugby Road South	760	190	85	1246	0.610	754	478	0.0	1.5	7.227	A
3 - Sketchley Lane	149	37	739	567	0.263	148	100	0.0	0.4	8.549	A
4 - B4109 Rugby Road North	434	109	232	975	0.446	431	654	0.0	0.8	6.587	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	557	736	0.161	118	238	0.1	0.2	5.832	A
2 - B4109 Rugby Road South	907	227	102	1236	0.734	903	574	1.5	2.6	10.660	B
3 - Sketchley Lane	178	44	885	498	0.358	177	120	0.4	0.5	11.211	B
4 - B4109 Rugby Road North	519	130	278	949	0.546	517	784	0.8	1.2	8.297	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	680	675	0.215	145	289	0.2	0.3	6.793	A
2 - B4109 Rugby Road South	1111	278	125	1222	0.909	1091	700	2.6	7.7	24.290	C
3 - Sketchley Lane	218	55	1069	409	0.533	216	147	0.5	1.1	18.398	C
4 - B4109 Rugby Road North	635	159	338	917	0.693	631	947	1.2	2.2	12.427	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	685	672	0.216	145	292	0.3	0.3	6.828	A
2 - B4109 Rugby Road South	1111	278	125	1222	0.909	1107	704	7.7	8.6	29.531	D
3 - Sketchley Lane	218	55	1086	401	0.543	218	147	1.1	1.2	19.546	C
4 - B4109 Rugby Road North	635	159	342	915	0.694	635	962	2.2	2.2	12.840	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	564	733	0.162	119	244	0.3	0.2	5.872	A
2 - B4109 Rugby Road South	907	227	103	1235	0.734	930	580	8.6	2.9	12.567	B
3 - Sketchley Lane	178	44	911	485	0.367	180	121	1.2	0.6	11.905	B
4 - B4109 Rugby Road North	519	130	285	946	0.548	523	807	2.2	1.2	8.581	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	470	779	0.128	100	202	0.2	0.1	5.302	A
2 - B4109 Rugby Road South	760	190	86	1245	0.610	765	484	2.9	1.6	7.571	A
3 - Sketchley Lane	149	37	750	562	0.265	150	101	0.6	0.4	8.754	A
4 - B4109 Rugby Road North	434	109	236	973	0.447	436	664	1.2	0.8	6.729	A

2031 Forecast Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	12.14	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.14	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2031 Forecast Year + Development	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 (%)
1 - Sketchley Road		ONE HOUR	✓	203	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	767	100.000
3 - Sketchley Lane		ONE HOUR	✓	186	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	681	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	153	50	0
	2 - B4109 Rugby Road South	73	0	27	667
	3 - Sketchley Lane	57	89	0	40
	4 - B4109 Rugby Road North	0	662	19	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	3	5	0
	2 - B4109 Rugby Road South	4	0	0	1
	3 - Sketchley Lane	2	1	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.38	9.90	0.6	A	186	279
2 - B4109 Rugby Road South	0.68	9.17	2.1	A	704	1056
3 - Sketchley Lane	0.39	11.39	0.6	B	171	256
4 - B4109 Rugby Road North	0.78	16.42	3.3	C	625	937

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	153	38	575	721	0.212	152	97	0.0	0.3	6.310	A
2 - B4109 Rugby Road South	577	144	52	1251	0.461	574	675	0.0	0.8	5.290	A
3 - Sketchley Lane	140	35	554	646	0.217	139	72	0.0	0.3	7.090	A
4 - B4109 Rugby Road North	513	128	164	1010	0.507	509	529	0.0	1.0	7.120	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	182	46	690	665	0.275	182	117	0.3	0.4	7.453	A
2 - B4109 Rugby Road South	690	172	62	1245	0.554	688	810	0.8	1.2	6.445	A
3 - Sketchley Lane	167	42	664	593	0.282	167	86	0.3	0.4	8.434	A
4 - B4109 Rugby Road North	612	153	196	992	0.617	610	634	1.0	1.6	9.362	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	224	56	841	590	0.379	223	143	0.4	0.6	9.771	A
2 - B4109 Rugby Road South	844	211	76	1237	0.683	841	988	1.2	2.1	9.012	A
3 - Sketchley Lane	205	51	811	522	0.392	204	105	0.4	0.6	11.263	B
4 - B4109 Rugby Road North	750	187	240	968	0.775	743	775	1.6	3.2	15.576	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	224	56	847	587	0.381	223	143	0.6	0.6	9.903	A
2 - B4109 Rugby Road South	844	211	76	1237	0.683	844	995	2.1	2.1	9.166	A
3 - Sketchley Lane	205	51	815	521	0.393	205	106	0.6	0.6	11.386	B
4 - B4109 Rugby Road North	750	187	241	967	0.775	749	778	3.2	3.3	16.416	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	182	46	699	660	0.277	183	117	0.6	0.4	7.570	A
2 - B4109 Rugby Road South	690	172	62	1245	0.554	693	820	2.1	1.3	6.565	A
3 - Sketchley Lane	167	42	669	591	0.283	168	87	0.6	0.4	8.538	A
4 - B4109 Rugby Road North	612	153	198	991	0.618	619	639	3.3	1.7	9.830	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	153	38	582	718	0.213	153	98	0.4	0.3	6.385	A
2 - B4109 Rugby Road South	577	144	52	1251	0.462	579	684	1.3	0.9	5.370	A
3 - Sketchley Lane	140	35	559	643	0.218	141	73	0.4	0.3	7.167	A
4 - B4109 Rugby Road North	513	128	165	1009	0.508	515	534	1.7	1.0	7.321	A

2031 Forecast Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4109 Rugby Road / Sketchley Road Roundabout	Standard Roundabout		1, 2, 3, 4	26.21	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	26.21	D

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
D10	2031 Forecast Year + Development	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 (%)
1 - Sketchley Road		ONE HOUR	✓	132	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1036	100.000
3 - Sketchley Lane		ONE HOUR	✓	201	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
From	1 - Sketchley Road	0	49	83	0
	2 - B4109 Rugby Road South	149	0	20	867
	3 - Sketchley Lane	117	48	0	36
	4 - B4109 Rugby Road North	0	564	31	0

Vehicle Mix

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

Heavy Vehicle %

From	To				
		1 - Sketchley Road	2 - B4109 Rugby Road South	3 - Sketchley Lane	4 - B4109 Rugby Road North
	1 - Sketchley Road	0	4	2	0
	2 - B4109 Rugby Road South	1	0	0	0
	3 - Sketchley Lane	0	0	0	0
	4 - B4109 Rugby Road North	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Sketchley Road	0.22	6.98	0.3	A	121	182
2 - B4109 Rugby Road South	0.93	36.72	10.9	E	951	1426
3 - Sketchley Lane	0.57	21.42	1.3	C	184	277
4 - B4109 Rugby Road North	0.72	13.89	2.5	B	546	819

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	480	774	0.128	99	198	0.0	0.1	5.328	A
2 - B4109 Rugby Road South	780	195	85	1246	0.626	773	494	0.0	1.6	7.520	A
3 - Sketchley Lane	151	38	758	558	0.271	150	100	0.0	0.4	8.791	A
4 - B4109 Rugby Road North	448	112	234	973	0.460	445	674	0.0	0.8	6.766	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	576	726	0.163	118	238	0.1	0.2	5.921	A
2 - B4109 Rugby Road South	931	233	102	1236	0.754	926	592	1.6	2.9	11.436	B
3 - Sketchley Lane	181	45	908	486	0.372	180	120	0.4	0.6	11.717	B
4 - B4109 Rugby Road North	535	134	281	948	0.564	533	807	0.8	1.3	8.641	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	703	663	0.219	145	288	0.2	0.3	6.940	A
2 - B4109 Rugby Road South	1141	285	125	1222	0.933	1115	723	2.9	9.4	28.287	D
3 - Sketchley Lane	221	55	1093	398	0.556	219	147	0.6	1.2	19.843	C
4 - B4109 Rugby Road North	655	164	340	916	0.715	651	972	1.3	2.4	13.345	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	145	36	708	661	0.220	145	292	0.3	0.3	6.979	A
2 - B4109 Rugby Road South	1141	285	125	1222	0.933	1135	727	9.4	10.9	36.723	E
3 - Sketchley Lane	221	55	1113	388	0.570	221	147	1.2	1.3	21.419	C
4 - B4109 Rugby Road North	655	164	345	913	0.717	655	989	2.4	2.5	13.887	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	119	30	583	723	0.164	119	245	0.3	0.2	5.964	A
2 - B4109 Rugby Road South	931	233	103	1235	0.754	962	599	10.9	3.2	14.471	B
3 - Sketchley Lane	181	45	943	469	0.385	183	121	1.3	0.6	12.684	B
4 - B4109 Rugby Road North	535	134	289	944	0.567	539	838	2.5	1.3	9.002	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Sketchley Road	99	25	486	771	0.129	100	202	0.2	0.1	5.365	A
2 - B4109 Rugby Road South	780	195	86	1245	0.626	786	500	3.2	1.7	7.936	A
3 - Sketchley Lane	151	38	771	552	0.274	152	101	0.6	0.4	9.031	A
4 - B4109 Rugby Road North	448	112	238	971	0.461	450	685	1.3	0.9	6.929	A