

Appendix II: B4109 Rugby Road / Coventry Road Stage 1 RSA and Designers Response

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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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

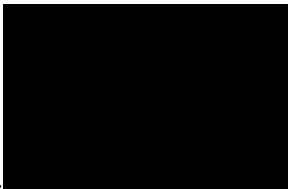
7.0 AUDIT TEAM STATEMENT

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

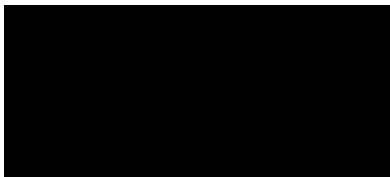
Liam Bourne MCIHT HE Cert - Comp
Senior Traffic Engineer
Waterman Aspen
5th Floor
1 Cornwall Street
Birmingham
B3 2DX

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

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

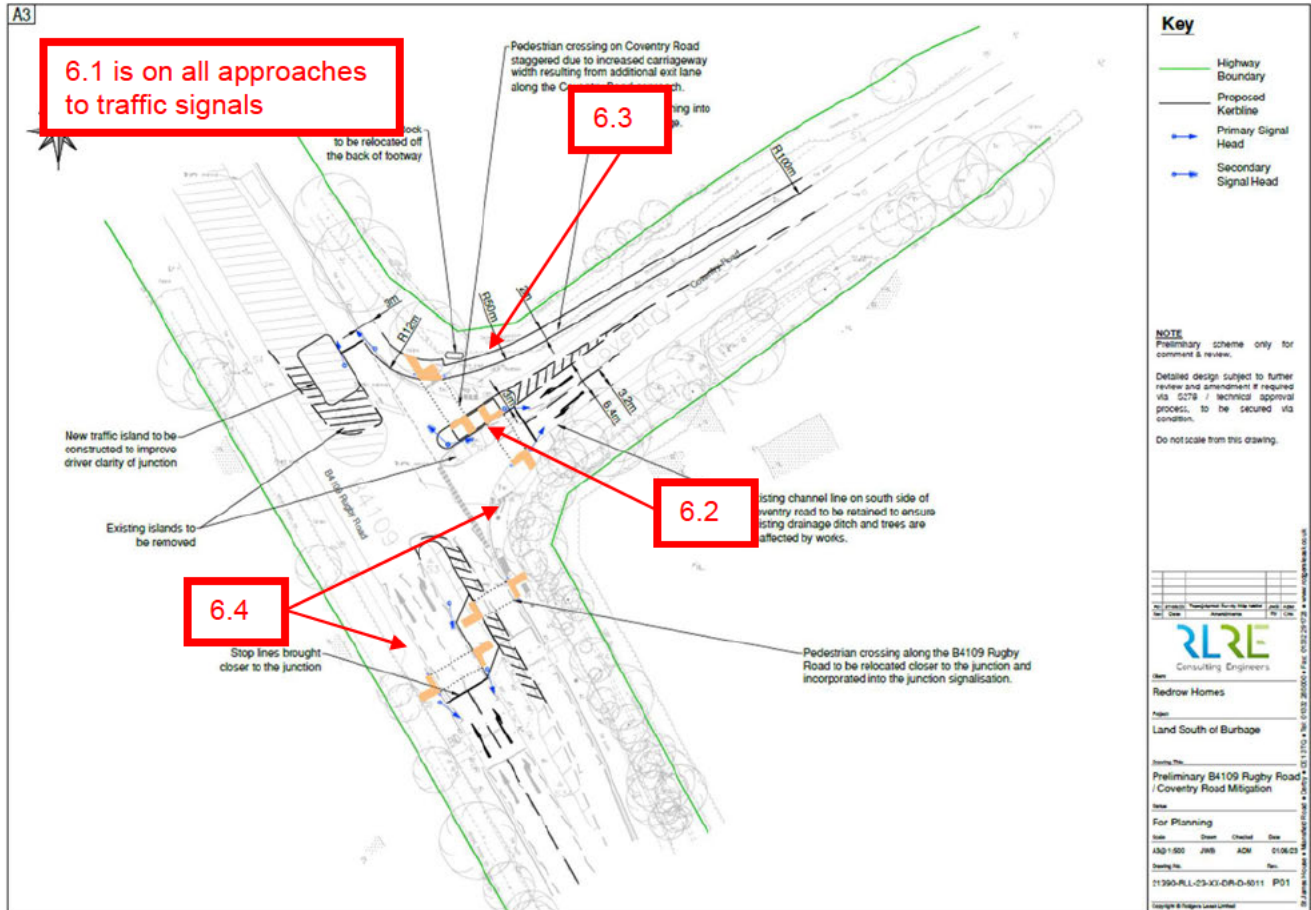
- Rugby Rd_Coventry Rd - 21390-RLL-23-XX-DR-D-5011(P01) Preliminary Rugby Road Coventry Road Scheme
- Rugby Rd_Coventry Rd - 21390-RLL-23-XX-DR-D-5016 (P01) Preliminary Rugby Road Coventry Road Scheme Tracking
- LCC Collision Records
- Site Location Plan

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	<i>Approaches to traffic signal stop lines</i>	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	Summary: Risk of pedestrian falls from height <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.

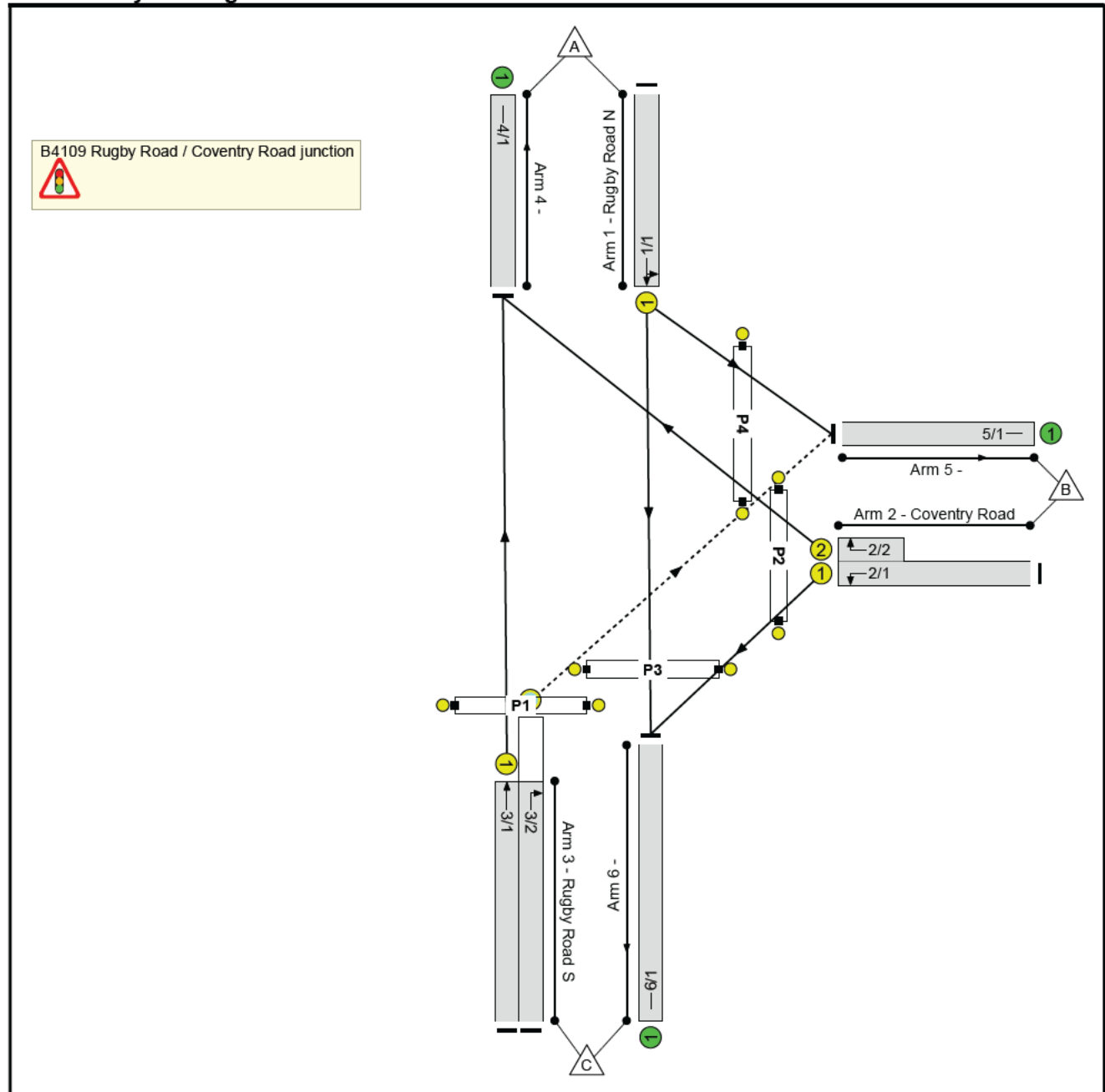
Reference	Location	Problem	Recommendation	Designer's Response
6.4	Throughout the junction	Summary: Risk of vehicle and pedestrian collisions <i>The Audit Team are concerned that there may not be sufficient secondary traffic signal heads for the offside lanes on the approaches. If traffic signals and 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.

Appendix JJ: B4109 Rugby Road / Coventry Road LinSig Report

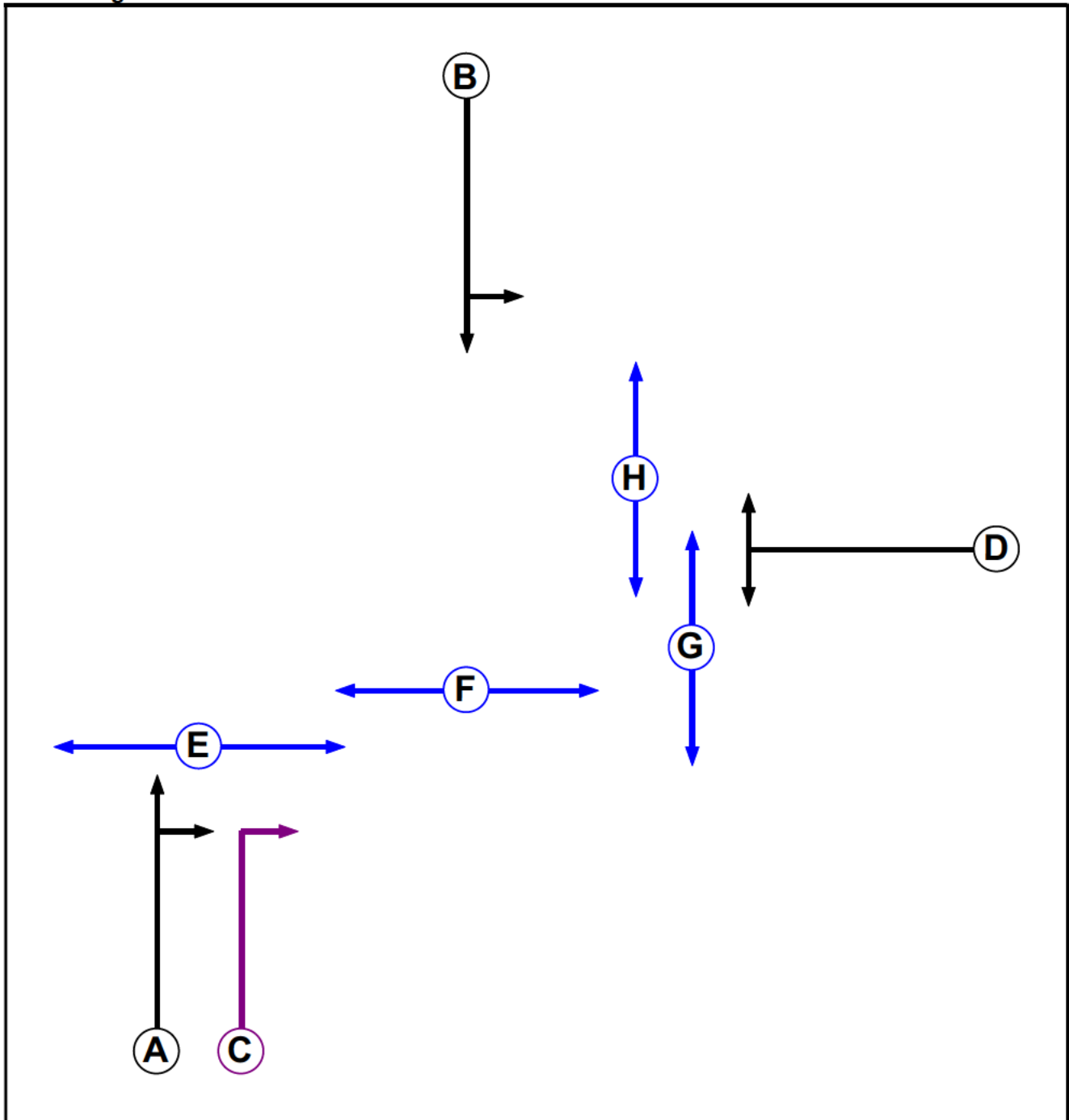
Full Input Data And Results**User and Project Details**

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-5011P01
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



Full Input Data And Results

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

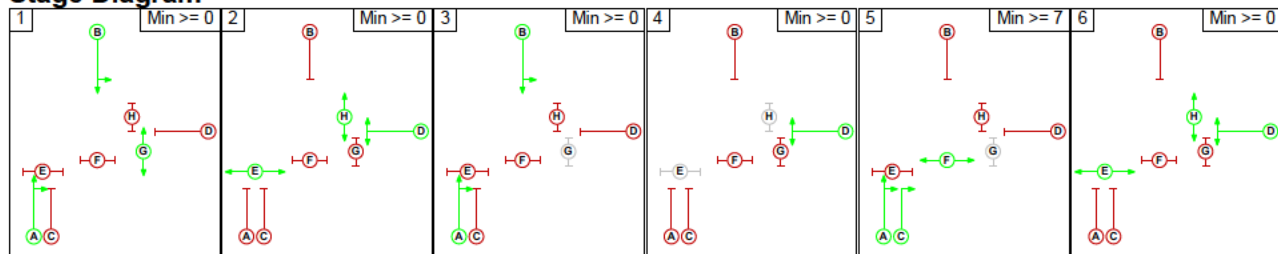
Phase Intergreens Matrix

	Starting Phase								
Terminating 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	-	-	-	-	

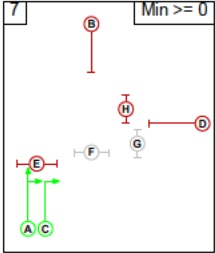
Phases in Stage

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

Full Input Data And Results

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	

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 :

	Destination				
		A	B	C	Tot.
Origin	A	0	101	904	1005
	B	81	0	396	477
	C	674	156	0	830
	Tot.	755	257	1300	2312

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	1005
2/1 (with short)	477(In) 396(Out)
2/2 (short)	81
3/1	674
3/2	156
4/1	755
5/1	257
6/1	1300

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	13.50	10.0 %	1894	1894
				Arm 6 Ahead	Inf	90.0 %		
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	101	904	1005
	B	81	0	396	477
	C	674	156	0	830
	Tot.	755	257	1300	2312

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2026 + Dev AM
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	1005
2/1 (with short)	477(In) 396(Out)
2/2 (short)	81
3/1	674
3/2	156
4/1	755
5/1	257
6/1	1300

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	13.50	10.0 %	1894	1894
				Arm 6 Ahead	Inf	90.0 %		
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	661	767
	B	90	0	201	291
	C	958	433	0	1391
	Tot.	1048	539	862	2449

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	767
2/1 (with short)	291(In) 201(Out)
2/2 (short)	90
3/1	958
3/2	433
4/1	1048
5/1	539
6/1	862

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	13.50	13.8 %	1886	1886
				Arm 6 Ahead	Inf	86.2 %		
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	661	767
	B	90	0	201	291
	C	958	433	0	1391
	Tot.	1048	539	862	2449

Full Input Data And Results

Traffic Lane Flows

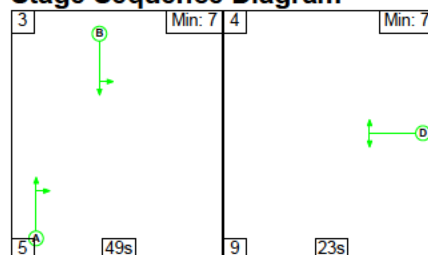
Lane	Scenario 4: 2026 + Dev PM
Junction: B4109 Rugby Road / Coventry Road junction	
1/1	767
2/1 (with short)	291(In) 201(Out)
2/2 (short)	90
3/1	958
3/2	433
4/1	1048
5/1	539
6/1	862

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	13.50	13.8 %	1886	1886
				Arm 6 Ahead	Inf	86.2 %		
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')

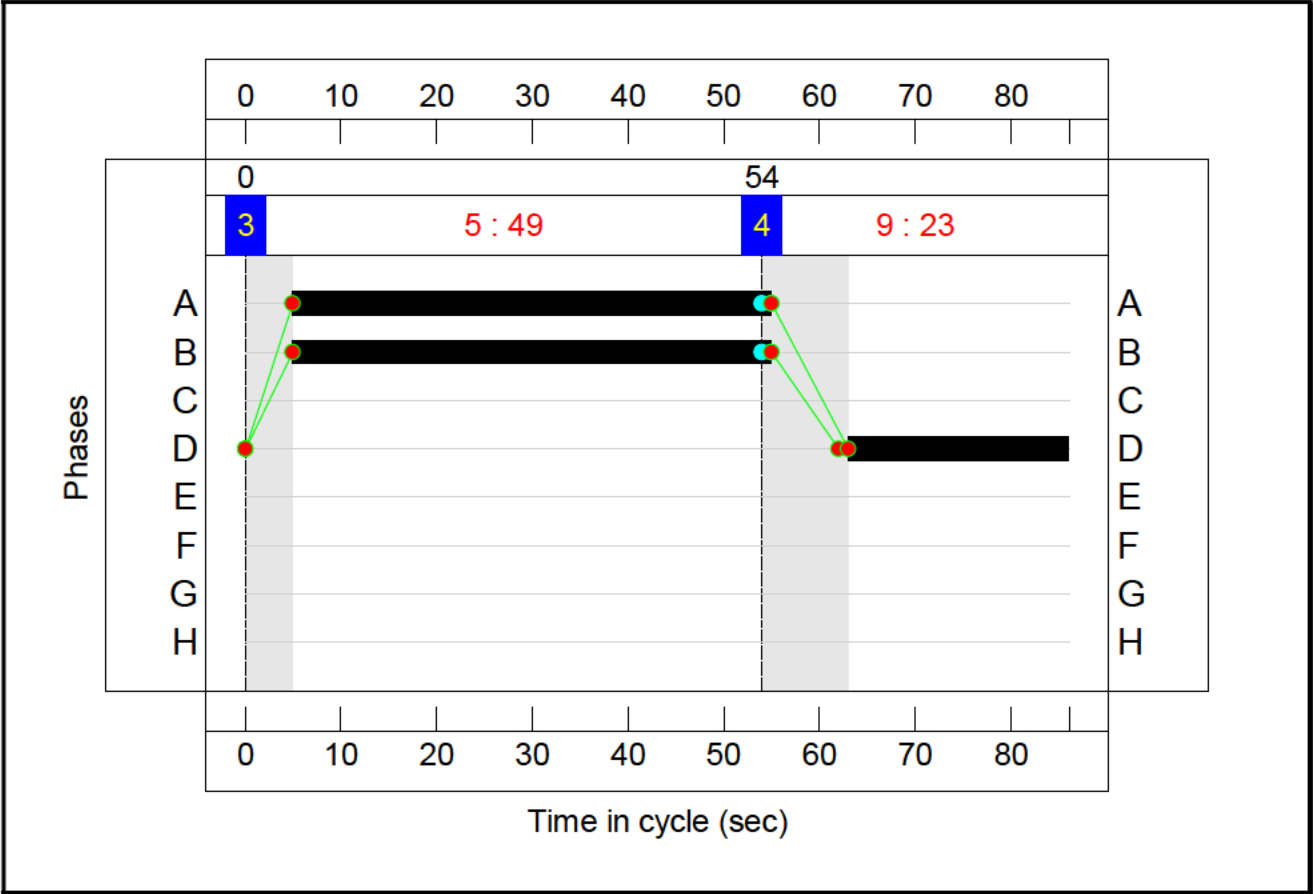
Stage Sequence Diagram



Stage Timings

Stage	3	4
Duration	49	23
Change Point	0	54

Signal Timings Diagram



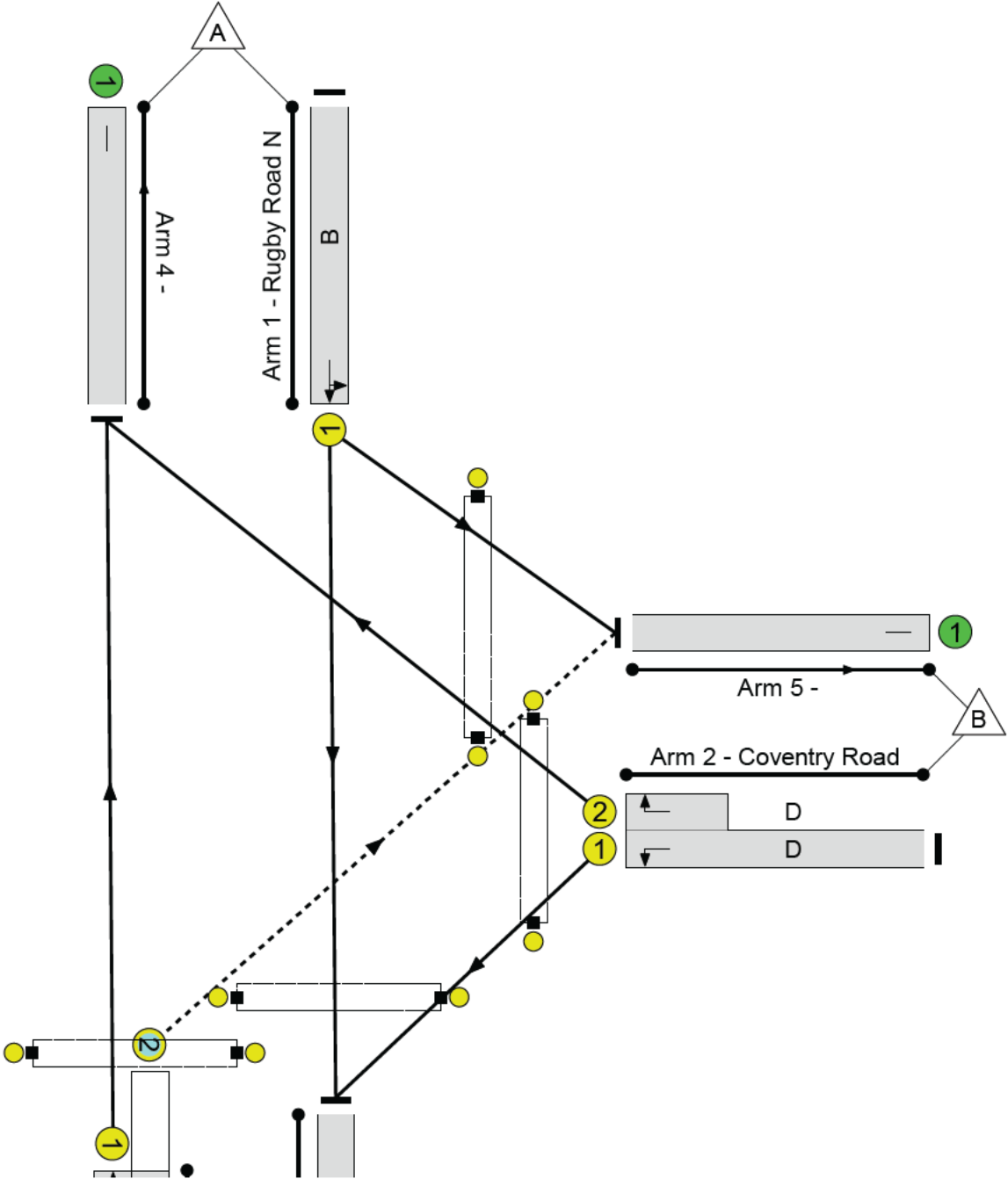
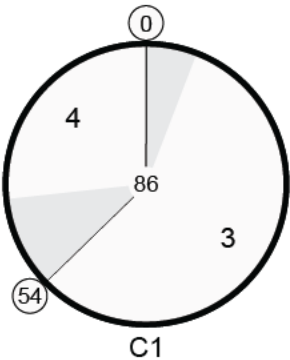
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



B4109 Rugby Road / Coventry Road junction
PRC: 0.2 %
Total Traffic Delay: 22.0 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	-	-		-	-	-	-	-	-	89.8%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	89.8%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		1	50	-	1005	1894	1123	89.5%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		1	23	-	477	1759:1720	441+90	89.8 : 89.8%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		1	50	-	674	1980	1174	57.4%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	1	50	0	156	1631	203	76.7%
4/1		U	N/A	N/A	-		-	-	-	755	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1300	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%

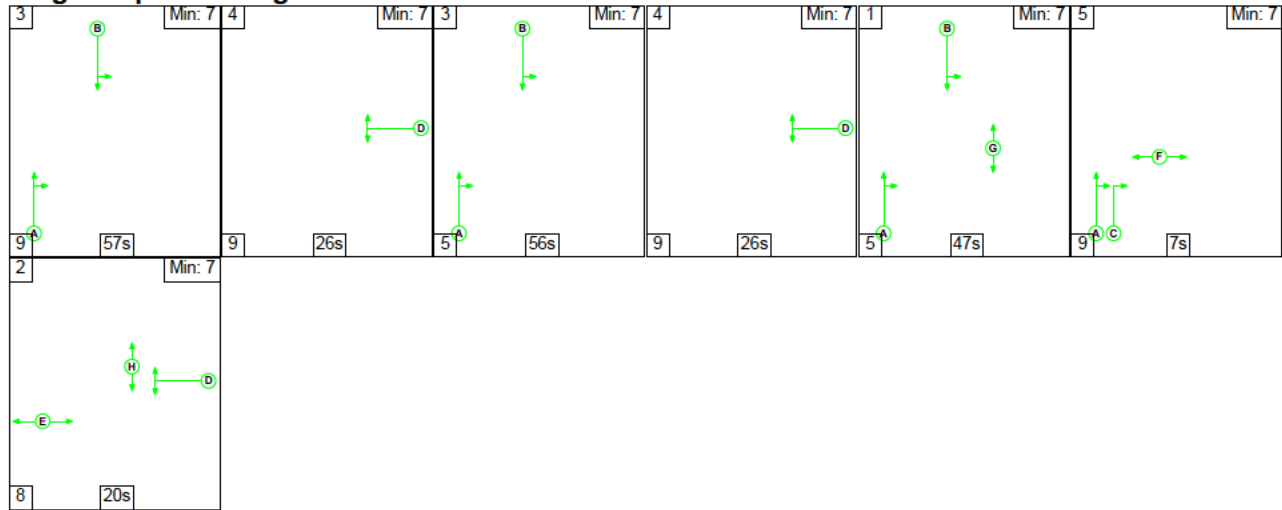
Full Input Data And Results

[illegible]

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')

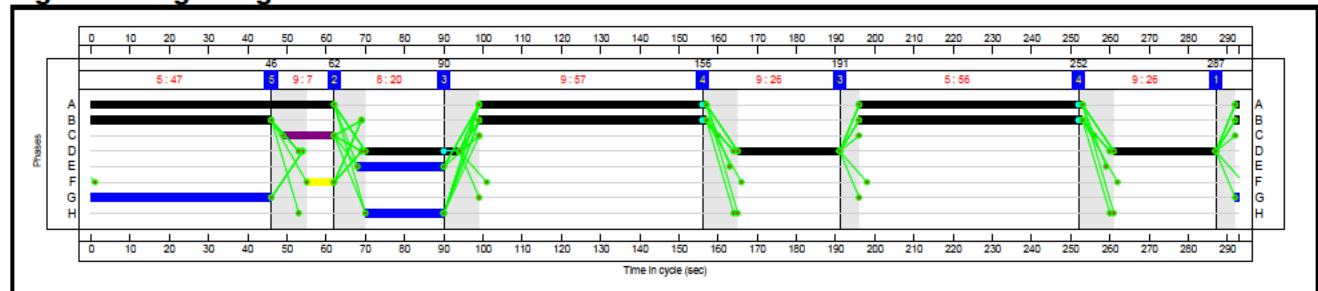
Stage Sequence Diagram



Stage Timings

Stage	3	4	3	4	1	5	2
Duration	57	26	56	26	47	7	20
Change Point	90	156	191	252	287	46	62

Signal Timings Diagram



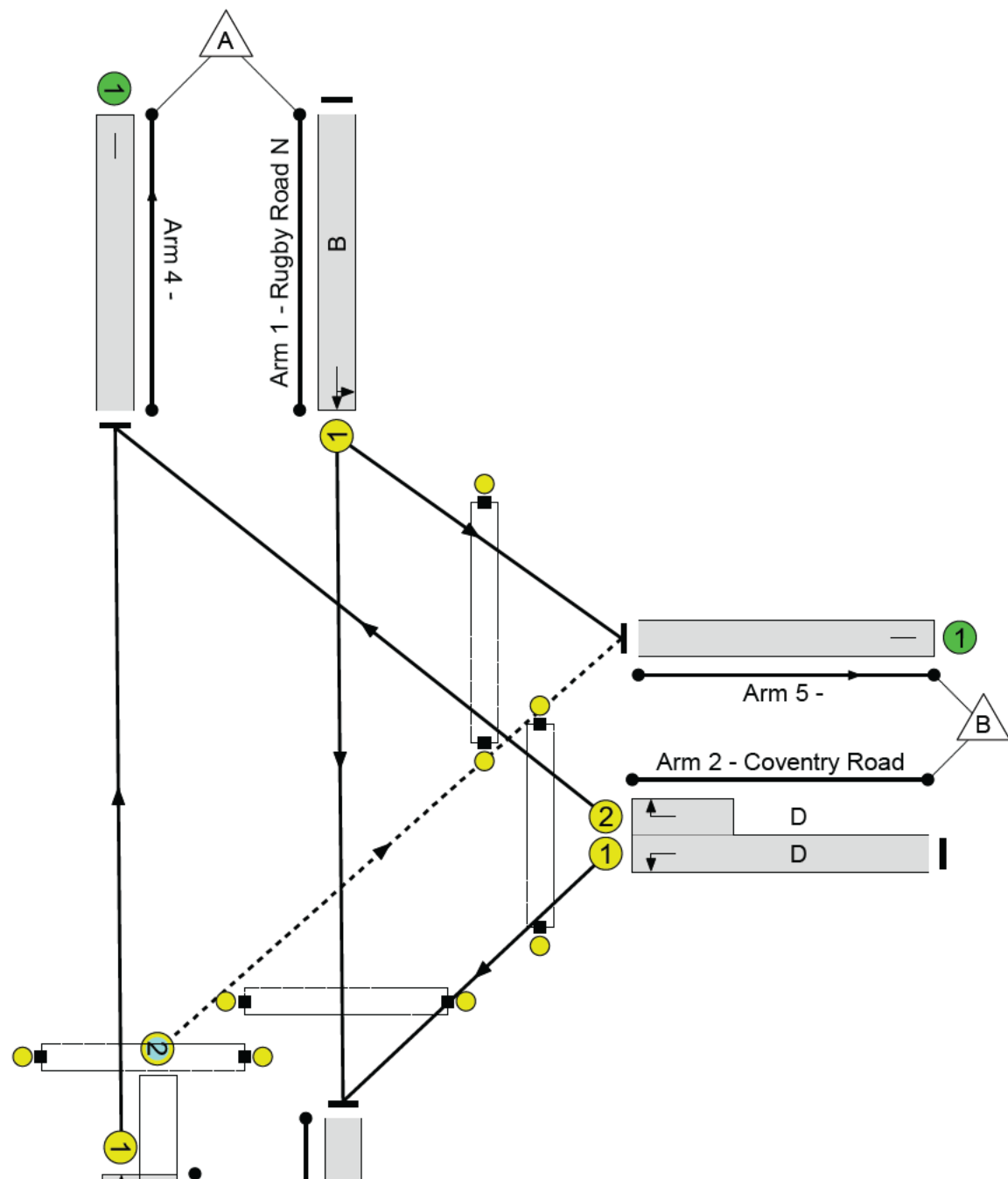
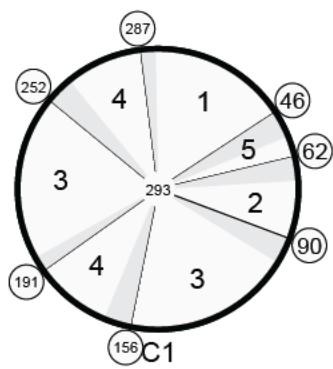
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



B4109 Rugby Road / Coventry Road junction
PRC: -4.7 %
Total Traffic Delay: 27.8 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	-	-		-	-	-	-	-	-	94.2%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	94.2%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		3	162	-	1005	1894	1067	94.2%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		3	76	-	477	1759:1720	423+87	93.6 : 93.6%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		3	178	-	674	1980	1223	55.1%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	3	178	13	156	1631	246	63.4%
4/1		U	N/A	N/A	-		-	-	-	755	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1300	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	47	-	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%

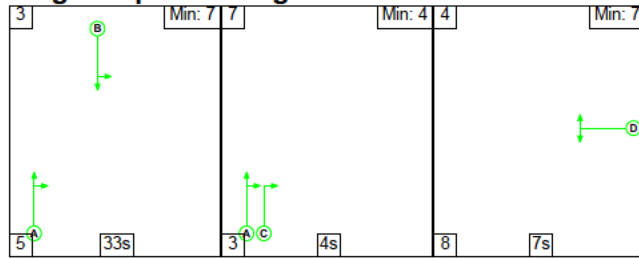
Full Input Data And Results

[illegible]

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')

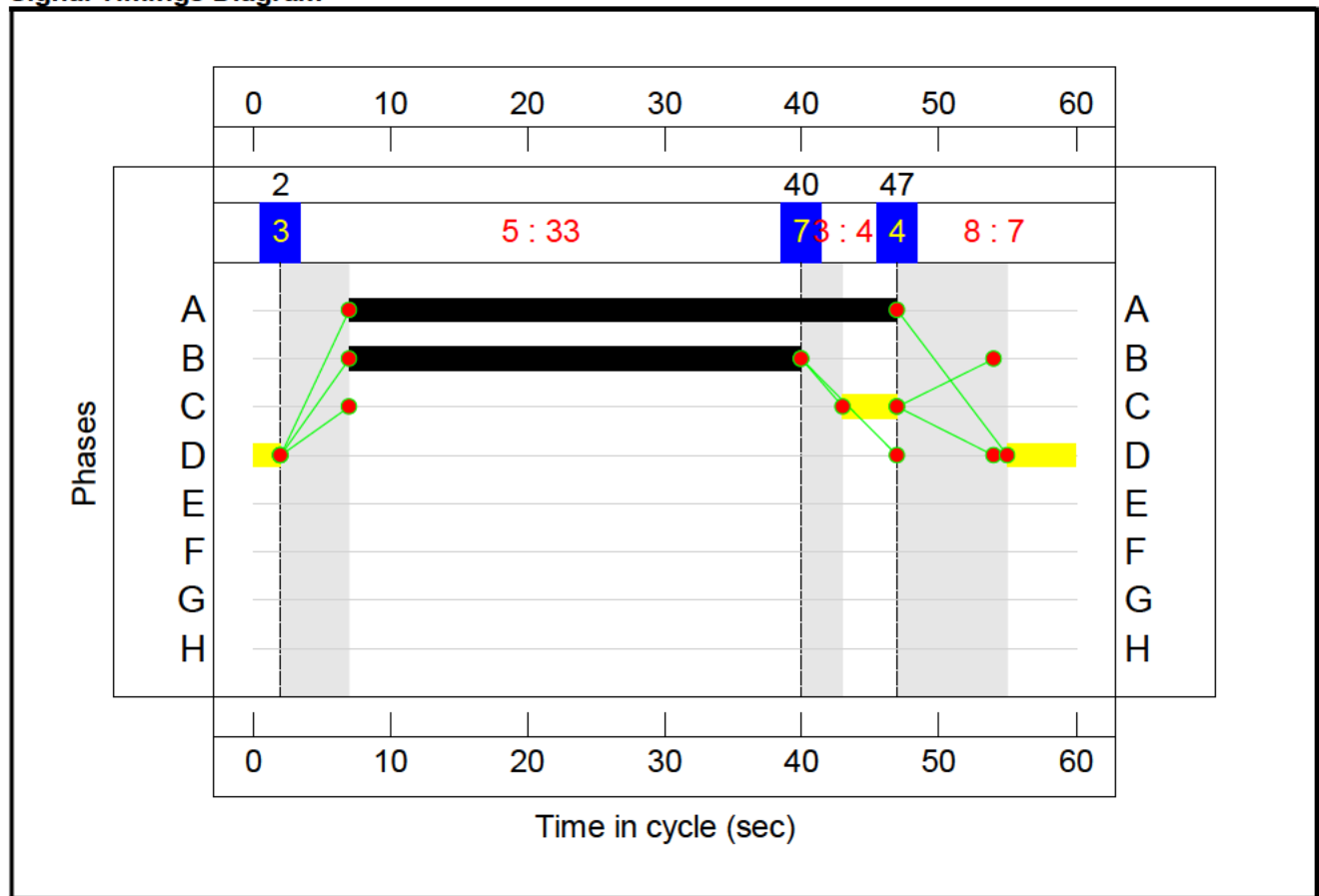
Stage Sequence Diagram



Stage Timings

Stage	3	7	4
Duration	33	4	7
Change Point	2	40	47

Signal Timings Diagram



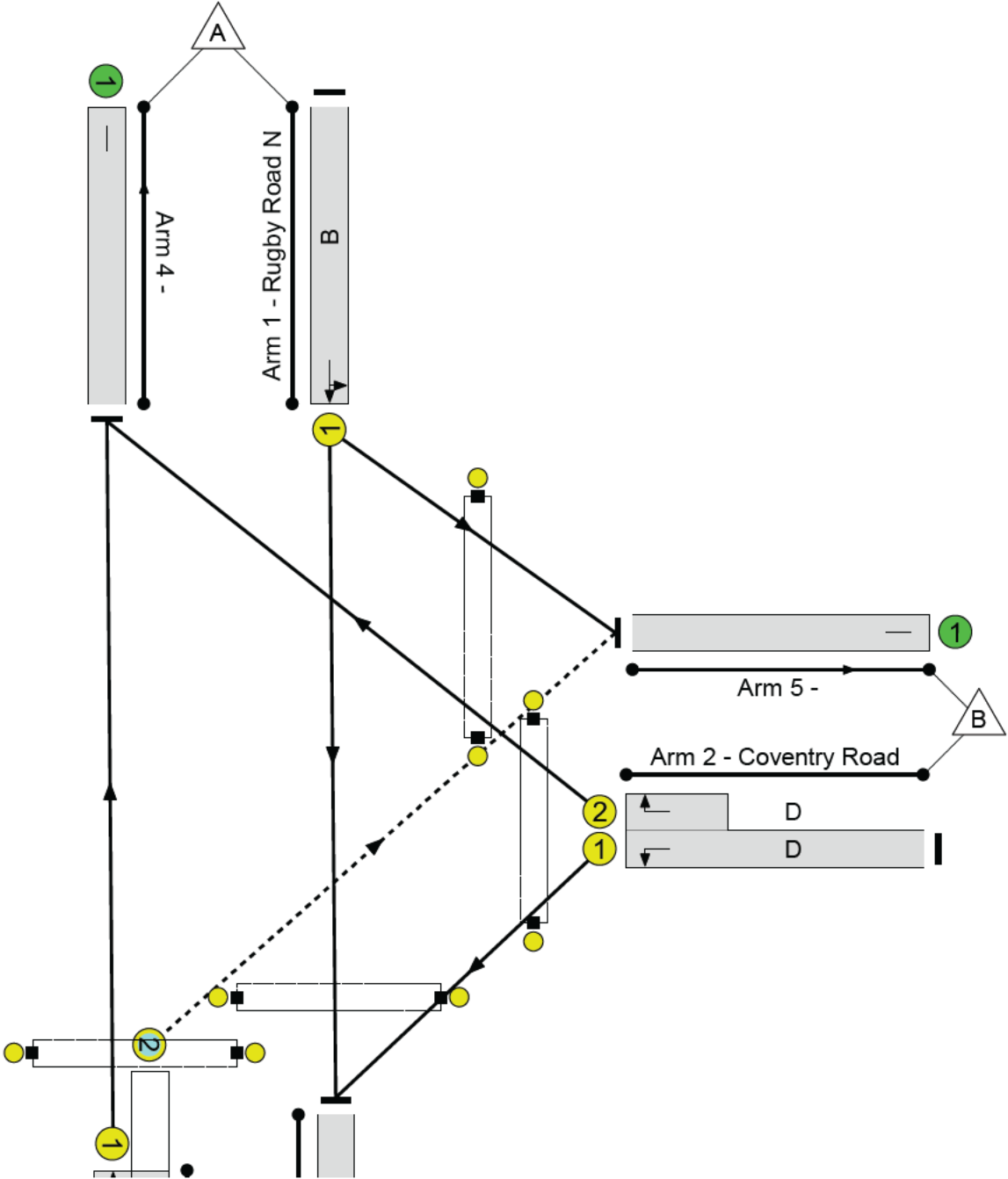
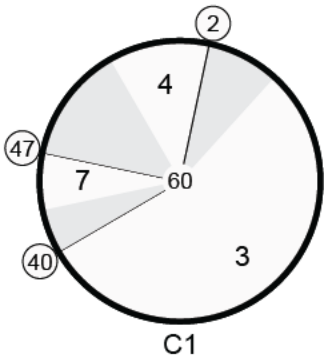
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



B4109 Rugby Road / Coventry Road junction
PRC: 5.0 %
Total Traffic Delay: 15.3 pcuHr
Ave. Route Delay Per Ped: -



Full Input Data And Results

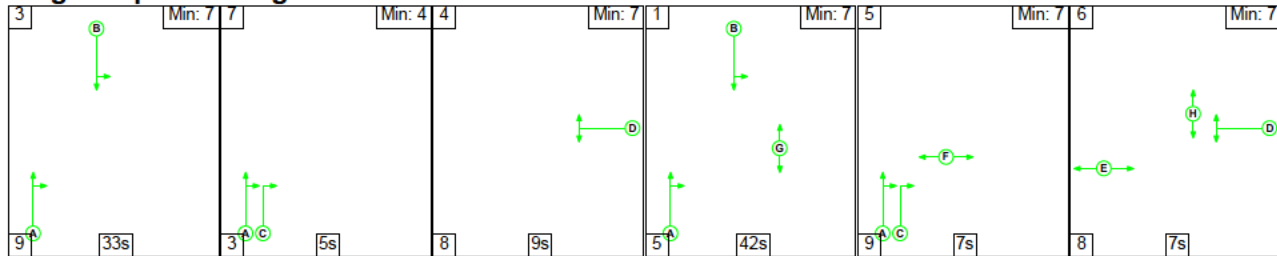
Network Results

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	-	-		-	-	-	-	-	-	85.7%
B4109 Rugby Road / Coventry Road junction	-	-	N/A	-	-		-	-	-	-	-	-	85.7%
1/1	Rugby Road N Left Ahead	U	N/A	N/A	B		1	33	-	767	1886	1069	71.8%
2/1+2/2	Coventry Road Right Left	U	N/A	N/A	D		1	7	-	291	1759:1720	235+105	85.7 : 85.7%
3/1	Rugby Road S Ahead	U	N/A	N/A	A		1	40	-	958	1980	1353	70.8%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	1	40	4	433	1631	537	80.7%
4/1		U	N/A	N/A	-		-	-	-	1048	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	862	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

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

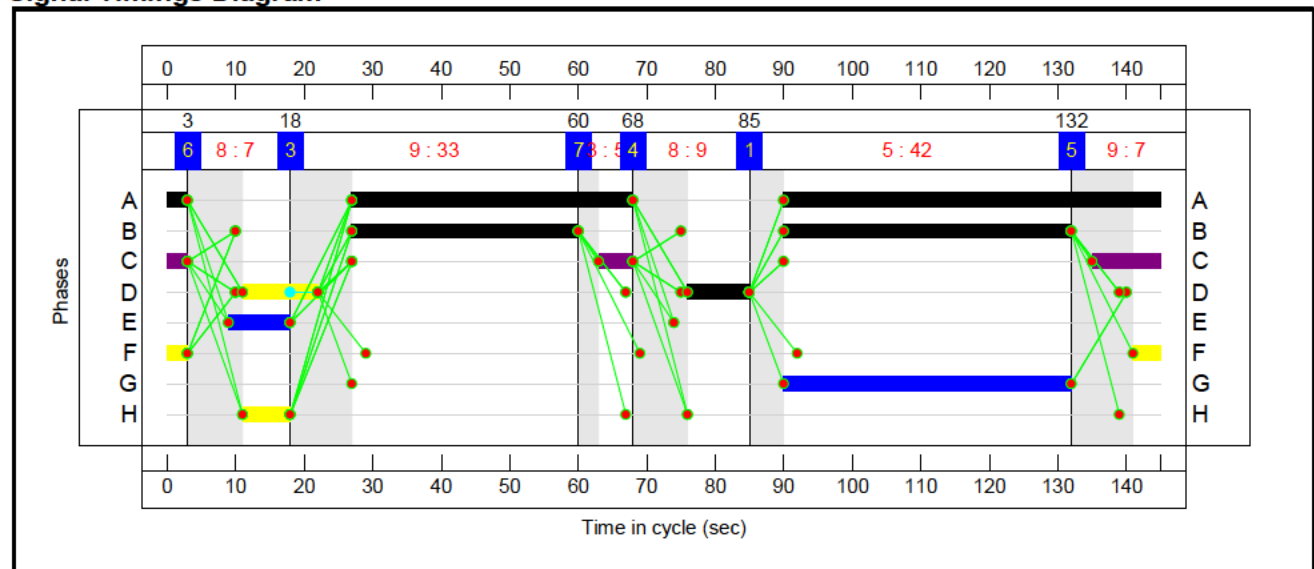
Stage Sequence Diagram



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



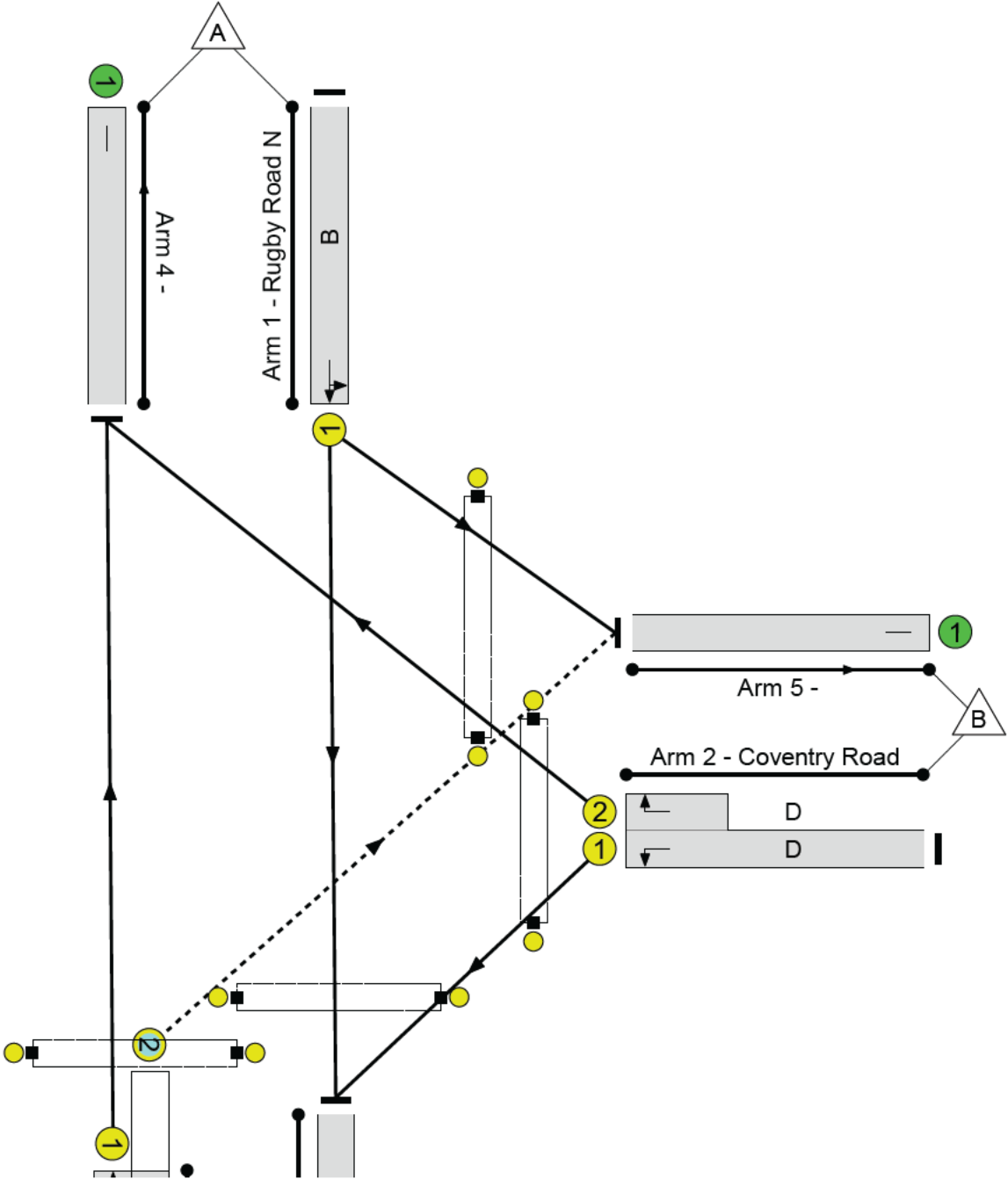
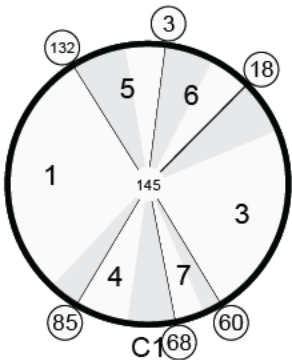
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



B4109 Rugby Road / Coventry Road junction
PRC: 13.0 %
Total Traffic Delay: 16.4 pcuHr
Ave. Route Delay Per 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	-	767	1886	1002	76.6%
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	-	958	1980	1379	69.5%
3/2	Rugby Road S Right	O	N/A	N/A	A	C	2	99	18	433	1631	548	79.0%
4/1		U	N/A	N/A	-		-	-	-	1048	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	862	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

[illegible]

Appendix KK: B4109 Rugby Road / Canberra Way / Three Pots Road Junctions 10 Report

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

Filename: Rugby Road_Canberra Way.j10

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

Report generation date: 27/10/2023 13:40:45

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

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
1 - Canberra Way	D1	0.2	12.29	0.17	B	D2	0.0	5.90	0.03	A
2 - B4109 Rugby Road South		0.6	3.50	0.38	A		1.6	5.18	0.61	A
3 - Three Pots Road		0.5	7.02	0.33	A		0.7	11.45	0.42	B
4 - B4109 Rugby Road North		2.1	6.20	0.68	A		0.7	3.31	0.43	A
	2026									
1 - Canberra Way	D3	0.2	14.80	0.19	B	D4	0.0	6.17	0.03	A
2 - B4109 Rugby Road South		0.9	4.12	0.47	A		2.3	6.77	0.70	A
3 - Three Pots Road		0.6	8.17	0.36	A		0.5	11.74	0.33	B
4 - B4109 Rugby Road North		2.8	7.49	0.74	A		0.8	3.49	0.45	A
	2026 + Dev									
1 - Canberra Way	D5	0.3	17.98	0.23	C	D6	0.0	6.26	0.04	A
2 - B4109 Rugby Road South		0.9	4.25	0.49	A		2.8	7.78	0.74	A
3 - Three Pots Road		0.6	8.49	0.38	A		0.6	13.84	0.38	B
4 - B4109 Rugby Road North		3.5	9.09	0.78	A		0.9	3.54	0.46	A

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

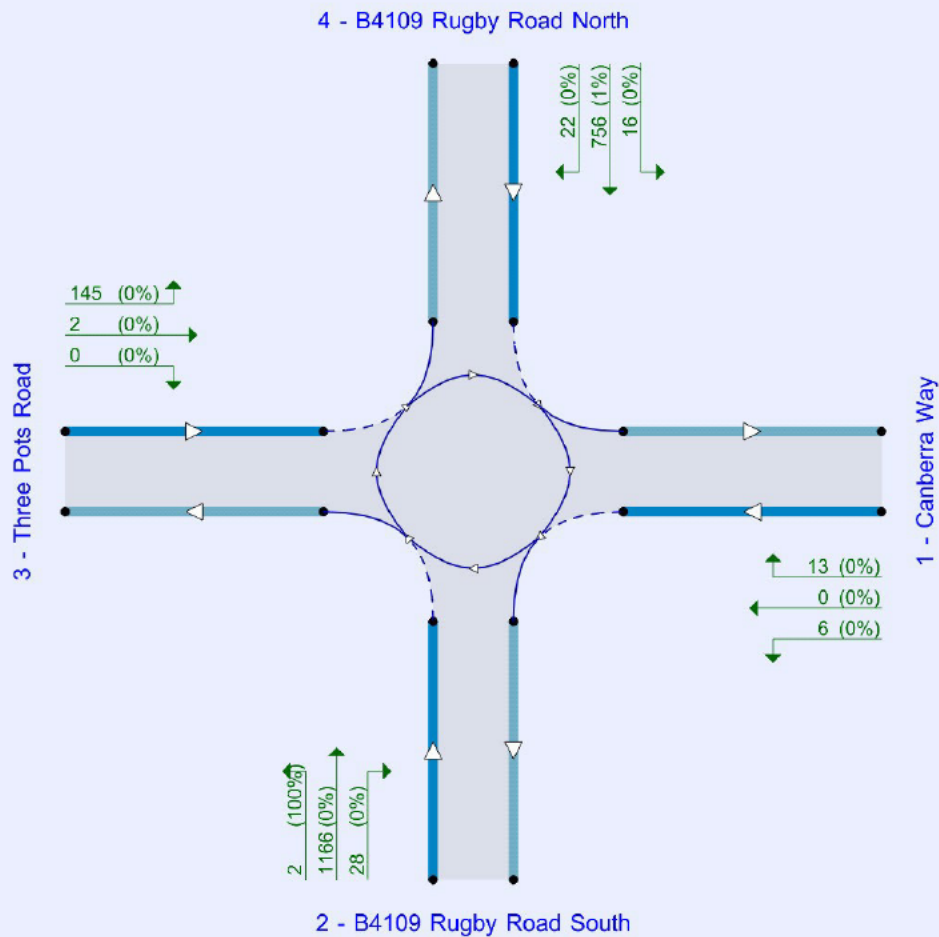
File summary

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



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

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

Analysis Set Details

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

2021, 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	5.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.68	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

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	1808
3 - Three Pots Road	0.514	1105
4 - B4109 Rugby Road North	0.715	1931

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	2021	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	✓	231	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1124	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	26	3	24
	2 - B4109 Rugby Road South	5	0	2	563
	3 - Three Pots Road	2	109	0	120
	4 - B4109 Rugby Road North	19	962	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	12.29	0.2	B	49	73
2 - B4109 Rugby Road South	0.38	3.50	0.6	A	523	785
3 - Three Pots Road	0.33	7.02	0.5	A	212	318
4 - B4109 Rugby Road North	0.68	6.20	2.1	A	1031	1547

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	910	568	0.070	40	19	0.0	0.1	6.814	A
2 - B4109 Rugby Road South	429	107	127	1696	0.253	428	822	0.0	0.3	2.836	A
3 - Three Pots Road	174	43	444	875	0.199	173	111	0.0	0.2	5.122	A
4 - B4109 Rugby Road North	846	212	87	1846	0.458	843	530	0.0	0.8	3.575	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	1090	477	0.100	48	23	0.1	0.1	8.387	A
2 - B4109 Rugby Road South	512	128	153	1679	0.305	512	985	0.3	0.4	3.086	A
3 - Three Pots Road	208	52	532	829	0.250	207	133	0.2	0.3	5.786	A
4 - B4109 Rugby Road North	1010	253	104	1834	0.551	1009	635	0.8	1.2	4.354	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	1333	353	0.165	58	29	0.1	0.2	12.187	B
2 - B4109 Rugby Road South	628	157	187	1655	0.379	627	1204	0.4	0.6	3.499	A
3 - Three Pots Road	254	64	651	767	0.331	254	162	0.3	0.5	7.000	A
4 - B4109 Rugby Road North	1238	309	127	1818	0.681	1234	777	1.2	2.1	6.131	A

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	1337	351	0.166	58	29	0.2	0.2	12.290	B
2 - B4109 Rugby Road South	628	157	187	1655	0.379	628	1208	0.6	0.6	3.503	A
3 - Three Pots Road	254	64	652	767	0.332	254	163	0.5	0.5	7.023	A
4 - B4109 Rugby Road North	1238	309	128	1818	0.681	1237	778	2.1	2.1	6.203	A

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	1095	474	0.101	48	23	0.2	0.1	8.461	A
2 - B4109 Rugby Road South	512	128	153	1678	0.305	513	990	0.6	0.4	3.093	A
3 - Three Pots Road	208	52	533	829	0.251	208	134	0.5	0.3	5.809	A
4 - B4109 Rugby Road North	1010	253	105	1834	0.551	1014	637	2.1	1.2	4.410	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	916	565	0.071	40	20	0.1	0.1	6.859	A
2 - B4109 Rugby Road South	429	107	128	1695	0.253	430	827	0.4	0.3	2.844	A
3 - Three Pots Road	174	43	446	874	0.199	174	112	0.3	0.3	5.149	A
4 - B4109 Rugby Road North	846	212	88	1846	0.458	848	533	1.2	0.9	3.613	A

2021, 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	5.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.14	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	2021	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	✓	987	100.000
3 - Three Pots Road		ONE HOUR	✓	205	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	729	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	1 - Canberra Way	0	6	0	13
	2 - B4109 Rugby Road South	28	0	2	957
	3 - Three Pots Road	2	2	0	201
	4 - B4109 Rugby Road North	16	695	18	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	0.03	5.90	0.0	A	17	26
2 - B4109 Rugby Road South	0.61	5.18	1.6	A	906	1359
3 - Three Pots Road	0.42	11.45	0.7	B	188	282
4 - B4109 Rugby Road North	0.43	3.31	0.7	A	669	1003

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	537	758	0.019	14	35	0.0	0.0	4.841	A
2 - B4109 Rugby Road South	743	186	23	1788	0.416	740	528	0.0	0.7	3.427	A
3 - Three Pots Road	154	39	748	720	0.214	153	15	0.0	0.3	6.337	A
4 - B4109 Rugby Road North	549	137	24	1896	0.289	547	878	0.0	0.4	2.665	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	642	704	0.024	17	41	0.0	0.0	5.237	A
2 - B4109 Rugby Road South	887	222	28	1785	0.497	886	632	0.7	1.0	3.999	A
3 - Three Pots Road	184	46	896	644	0.286	184	18	0.3	0.4	7.807	A
4 - B4109 Rugby Road North	655	164	29	1893	0.346	655	1051	0.4	0.5	2.906	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	786	631	0.033	21	51	0.0	0.0	5.897	A
2 - B4109 Rugby Road South	1087	272	34	1781	0.610	1084	773	1.0	1.5	5.152	A
3 - Three Pots Road	226	56	1097	541	0.417	224	22	0.4	0.7	11.321	B
4 - B4109 Rugby Road North	803	201	35	1888	0.425	802	1286	0.5	0.7	3.312	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	787	631	0.033	21	51	0.0	0.0	5.901	A
2 - B4109 Rugby Road South	1087	272	34	1781	0.610	1087	774	1.5	1.6	5.184	A
3 - Three Pots Road	226	56	1099	540	0.418	226	22	0.7	0.7	11.445	B
4 - B4109 Rugby Road North	803	201	35	1888	0.425	803	1289	0.7	0.7	3.315	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	644	704	0.024	17	41	0.0	0.0	5.243	A
2 - B4109 Rugby Road South	887	222	28	1785	0.497	890	633	1.6	1.0	4.029	A
3 - Three Pots Road	184	46	899	643	0.287	186	18	0.7	0.4	7.895	A
4 - B4109 Rugby Road North	655	164	29	1893	0.346	656	1056	0.7	0.5	2.912	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	539	757	0.019	14	35	0.0	0.0	4.848	A
2 - B4109 Rugby Road South	743	186	23	1788	0.416	744	530	1.0	0.7	3.453	A
3 - Three Pots Road	154	39	752	718	0.215	155	15	0.4	0.3	6.397	A
4 - B4109 Rugby Road North	549	137	24	1896	0.289	549	883	0.5	0.4	2.675	A

2026, 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	6.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.64	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
D3	2026	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Canberra Way		ONE HOUR	✓	53	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	710	100.000
3 - Three Pots Road		ONE HOUR	✓	224	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1221	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	26	3	24
	2 - B4109 Rugby Road South	5	0	3	702
	3 - Three Pots Road	2	101	0	121
	4 - B4109 Rugby Road North	19	1062	140	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	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	14.80	0.2	B	49	73
2 - B4109 Rugby Road South	0.47	4.12	0.9	A	652	977
3 - Three Pots Road	0.36	8.17	0.6	A	206	308
4 - B4109 Rugby Road North	0.74	7.49	2.8	A	1120	1681

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	977	534	0.075	40	19	0.0	0.1	7.276	A
2 - B4109 Rugby Road South	535	134	125	1696	0.315	533	891	0.0	0.5	3.084	A
3 - Three Pots Road	169	42	548	821	0.206	168	109	0.0	0.3	5.514	A
4 - B4109 Rugby Road North	919	230	81	1851	0.497	915	635	0.0	1.0	3.831	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	1169	436	0.109	47	23	0.1	0.1	9.257	A
2 - B4109 Rugby Road South	638	160	150	1679	0.380	638	1067	0.5	0.6	3.454	A
3 - Three Pots Road	201	50	656	764	0.263	201	131	0.3	0.4	6.385	A
4 - B4109 Rugby Road North	1098	274	97	1840	0.597	1096	761	1.0	1.5	4.826	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	1429	304	0.192	58	29	0.1	0.2	14.591	B
2 - B4109 Rugby Road South	782	195	183	1656	0.472	781	1304	0.6	0.9	4.105	A
3 - Three Pots Road	247	62	804	688	0.358	246	160	0.4	0.6	8.127	A
4 - B4109 Rugby Road North	1344	336	119	1824	0.737	1339	931	1.5	2.7	7.344	A

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	1434	302	0.193	58	29	0.2	0.2	14.797	B
2 - B4109 Rugby Road South	782	195	184	1656	0.472	782	1309	0.9	0.9	4.117	A
3 - Three Pots Road	247	62	805	687	0.359	247	161	0.6	0.6	8.168	A
4 - B4109 Rugby Road North	1344	336	119	1824	0.737	1344	933	2.7	2.8	7.492	A

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	1177	432	0.110	48	23	0.2	0.1	9.377	A
2 - B4109 Rugby Road South	638	160	151	1679	0.380	639	1074	0.9	0.6	3.469	A
3 - Three Pots Road	201	50	658	763	0.264	202	132	0.6	0.4	6.422	A
4 - B4109 Rugby Road North	1098	274	97	1839	0.597	1103	763	2.8	1.5	4.919	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	7.338	A
2 - B4109 Rugby Road South	535	134	126	1696	0.315	535	897	0.6	0.5	3.102	A
3 - Three Pots Road	169	42	551	819	0.206	169	110	0.4	0.3	5.542	A
4 - B4109 Rugby Road North	919	230	81	1851	0.497	921	639	1.5	1.0	3.881	A

2026, 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	5.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.85	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Canberra Way		ONE HOUR	✓	19	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1135	100.000
3 - Three Pots Road		ONE HOUR	✓	136	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	779	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	0	13
	2 - B4109 Rugby Road South	28	0	2	1105
	3 - Three Pots Road	2	0	0	134
	4 - B4109 Rugby Road North	16	744	19	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	0.03	6.17	0.0	A	17	26
2 - B4109 Rugby Road South	0.70	6.77	2.3	A	1041	1562
3 - Three Pots Road	0.33	11.74	0.5	B	125	187
4 - B4109 Rugby Road North	0.45	3.49	0.8	A	715	1072

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	573	740	0.019	14	34	0.0	0.0	4.962	A
2 - B4109 Rugby Road South	854	214	24	1788	0.478	851	563	0.0	0.9	3.826	A
3 - Three Pots Road	102	26	859	663	0.154	102	16	0.0	0.2	6.401	A
4 - B4109 Rugby Road North	586	147	22	1897	0.309	585	938	0.0	0.4	2.739	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	685	682	0.025	17	41	0.0	0.0	5.409	A
2 - B4109 Rugby Road South	1020	255	29	1785	0.572	1019	674	0.9	1.3	4.686	A
3 - Three Pots Road	122	31	1029	576	0.212	122	19	0.2	0.3	7.919	A
4 - B4109 Rugby Road North	700	175	27	1894	0.370	700	1124	0.4	0.6	3.012	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	839	605	0.035	21	51	0.0	0.0	6.167	A
2 - B4109 Rugby Road South	1250	312	35	1781	0.702	1246	825	1.3	2.3	6.680	A
3 - Three Pots Road	150	37	1258	458	0.327	149	23	0.3	0.5	11.606	B
4 - B4109 Rugby Road North	858	214	33	1890	0.454	857	1374	0.6	0.8	3.481	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	840	604	0.035	21	51	0.0	0.0	6.172	A
2 - B4109 Rugby Road South	1250	312	35	1781	0.702	1250	826	2.3	2.3	6.773	A
3 - Three Pots Road	150	37	1262	456	0.328	150	23	0.5	0.5	11.740	B
4 - B4109 Rugby Road North	858	214	33	1890	0.454	858	1378	0.8	0.8	3.487	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	687	682	0.025	17	41	0.0	0.0	5.418	A
2 - B4109 Rugby Road South	1020	255	29	1785	0.572	1024	675	2.3	1.4	4.755	A
3 - Three Pots Road	122	31	1034	573	0.213	123	19	0.5	0.3	8.011	A
4 - B4109 Rugby Road North	700	175	27	1894	0.370	701	1130	0.8	0.6	3.020	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	575	738	0.019	14	35	0.0	0.0	4.971	A
2 - B4109 Rugby Road South	854	214	24	1788	0.478	856	565	1.4	0.9	3.869	A
3 - Three Pots Road	102	26	864	661	0.155	103	16	0.3	0.2	6.458	A
4 - B4109 Rugby Road North	586	147	23	1897	0.309	587	945	0.6	0.4	2.750	A

2026 + Dev, 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	7.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.71	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Canberra Way		ONE HOUR	✓	53	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	726	100.000
3 - Three Pots Road		ONE HOUR	✓	231	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	1298	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	1 - Canberra Way	0	26	3	24
	2 - B4109 Rugby Road South	5	0	3	718
	3 - Three Pots Road	2	101	0	128
	4 - B4109 Rugby Road North	19	1126	153	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	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	0.23	17.98	0.3	C	49	73
2 - B4109 Rugby Road South	0.49	4.25	0.9	A	666	999
3 - Three Pots Road	0.38	8.49	0.6	A	212	318
4 - B4109 Rugby Road North	0.78	9.09	3.5	A	1191	1787

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	1034	505	0.079	40	19	0.0	0.1	7.732	A
2 - B4109 Rugby Road South	547	137	135	1690	0.323	545	939	0.0	0.5	3.138	A
3 - Three Pots Road	174	43	560	814	0.214	173	119	0.0	0.3	5.603	A
4 - B4109 Rugby Road North	977	244	81	1851	0.528	973	652	0.0	1.1	4.079	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	1238	401	0.119	47	23	0.1	0.1	10.170	B
2 - B4109 Rugby Road South	653	163	161	1671	0.390	652	1124	0.5	0.6	3.529	A
3 - Three Pots Road	208	52	671	757	0.274	207	143	0.3	0.4	6.549	A
4 - B4109 Rugby Road North	1167	292	97	1840	0.634	1164	781	1.1	1.7	5.312	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	1512	262	0.223	58	29	0.1	0.3	17.571	C
2 - B4109 Rugby Road South	799	200	197	1647	0.485	798	1373	0.6	0.9	4.235	A
3 - Three Pots Road	254	64	821	679	0.375	253	174	0.4	0.6	8.445	A
4 - B4109 Rugby Road North	1429	357	119	1824	0.783	1422	956	1.7	3.5	8.797	A

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	1519	259	0.226	58	29	0.3	0.3	17.977	C
2 - B4109 Rugby Road South	799	200	198	1646	0.486	799	1379	0.9	0.9	4.251	A
3 - Three Pots Road	254	64	822	678	0.375	254	175	0.6	0.6	8.492	A
4 - B4109 Rugby Road North	1429	357	119	1824	0.783	1429	958	3.5	3.5	9.089	A

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	1248	396	0.120	48	23	0.3	0.1	10.364	B
2 - B4109 Rugby Road South	653	163	163	1670	0.391	654	1133	0.9	0.6	3.544	A
3 - Three Pots Road	208	52	673	756	0.275	209	144	0.6	0.4	6.589	A
4 - B4109 Rugby Road North	1167	292	97	1839	0.634	1174	784	3.5	1.8	5.469	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	1042	501	0.080	40	20	0.1	0.1	7.814	A
2 - B4109 Rugby Road South	547	137	136	1689	0.324	547	946	0.6	0.5	3.156	A
3 - Three Pots Road	174	43	563	813	0.214	174	120	0.4	0.3	5.641	A
4 - B4109 Rugby Road North	977	244	82	1851	0.528	980	656	1.8	1.1	4.145	A

2026 + Dev, 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	6.61	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.61	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)	Run automatically
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Canberra Way		ONE HOUR	✓	19	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1196	100.000
3 - Three Pots Road		ONE HOUR	✓	147	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	794	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Canberra Way	2 - B4109 Rugby Road South	3 - Three Pots Road	4 - B4109 Rugby Road North
	1 - Canberra Way	0	6	0	13
	2 - B4109 Rugby Road South	28	0	2	1166
	3 - Three Pots Road	2	0	0	145
	4 - B4109 Rugby Road North	16	756	22	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	6.26	0.0	A	17	26
2 - B4109 Rugby Road South	0.74	7.78	2.8	A	1097	1646
3 - Three Pots Road	0.38	13.84	0.6	B	135	202
4 - B4109 Rugby Road North	0.46	3.54	0.9	A	729	1093

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	584	734	0.019	14	34	0.0	0.0	5.002	A
2 - B4109 Rugby Road South	900	225	26	1787	0.504	896	572	0.0	1.0	4.025	A
3 - Three Pots Road	111	28	905	640	0.173	110	18	0.0	0.2	6.781	A
4 - B4109 Rugby Road North	598	149	22	1897	0.315	596	992	0.0	0.5	2.763	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	699	676	0.025	17	41	0.0	0.0	5.465	A
2 - B4109 Rugby Road South	1075	269	31	1783	0.603	1073	684	1.0	1.5	5.054	A
3 - Three Pots Road	132	33	1083	548	0.241	132	22	0.2	0.3	8.636	A
4 - B4109 Rugby Road North	714	178	27	1894	0.377	713	1188	0.5	0.6	3.046	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	856	596	0.035	21	50	0.0	0.0	6.257	A
2 - B4109 Rugby Road South	1317	329	38	1779	0.740	1312	838	1.5	2.8	7.627	A
3 - Three Pots Road	162	40	1324	424	0.381	161	26	0.3	0.6	13.597	B
4 - B4109 Rugby Road North	874	219	33	1890	0.463	873	1452	0.6	0.9	3.538	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	857	596	0.035	21	51	0.0	0.0	6.262	A
2 - B4109 Rugby Road South	1317	329	39	1779	0.740	1317	839	2.8	2.8	7.785	A
3 - Three Pots Road	162	40	1329	422	0.384	162	26	0.6	0.6	13.841	B
4 - B4109 Rugby Road North	874	219	33	1890	0.463	874	1458	0.9	0.9	3.543	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	700	675	0.025	17	42	0.0	0.0	5.472	A
2 - B4109 Rugby Road South	1075	269	32	1783	0.603	1080	686	2.8	1.5	5.157	A
3 - Three Pots Road	132	33	1090	545	0.243	133	22	0.6	0.3	8.779	A
4 - B4109 Rugby Road North	714	178	27	1894	0.377	715	1196	0.9	0.6	3.054	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	586	733	0.020	14	35	0.0	0.0	5.010	A
2 - B4109 Rugby Road South	900	225	26	1787	0.504	902	574	1.5	1.0	4.081	A
3 - Three Pots Road	111	28	911	637	0.174	111	18	0.3	0.2	6.852	A
4 - B4109 Rugby Road North	598	149	23	1897	0.315	598	999	0.6	0.5	2.774	A

Appendix LL: B4109 Rugby Road / Sketchley Road / Sketchley Lane Junctions 10 Report

Junctions 10									
ARCADY 10 - Roundabout Module									
Version: 10.1.0.1820									
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Filename: Rugby Road_Sketchley Road.j10

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

Report generation date: 27/10/2023 12:03:25

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

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
1 - Sketchley Road	D1	0.5	8.11	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	13.78	0.79	B
3 - Sketchley Lane		0.5	8.36	0.32	A		0.3	10.00	0.26	A
4 - B4109 Rugby Road North		1.8	10.58	0.65	B		2.0	12.66	0.67	B
	2026									
1 - Sketchley Road	D3	0.7	10.10	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	10.61	0.38	B		0.7	15.05	0.42	C
4 - B4109 Rugby Road North		2.7	13.78	0.73	B		2.3	13.30	0.70	B
	2026 + Dev									
1 - Sketchley Road	D5	0.7	10.48	0.42	B	D6	0.3	6.90	0.22	A
2 - B4109 Rugby Road South		2.0	8.93	0.67	A		9.1	31.28	0.92	D
3 - Sketchley Lane		0.6	11.22	0.39	B		0.8	16.06	0.43	C
4 - B4109 Rugby Road North		3.0	15.25	0.76	C		2.5	14.45	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.

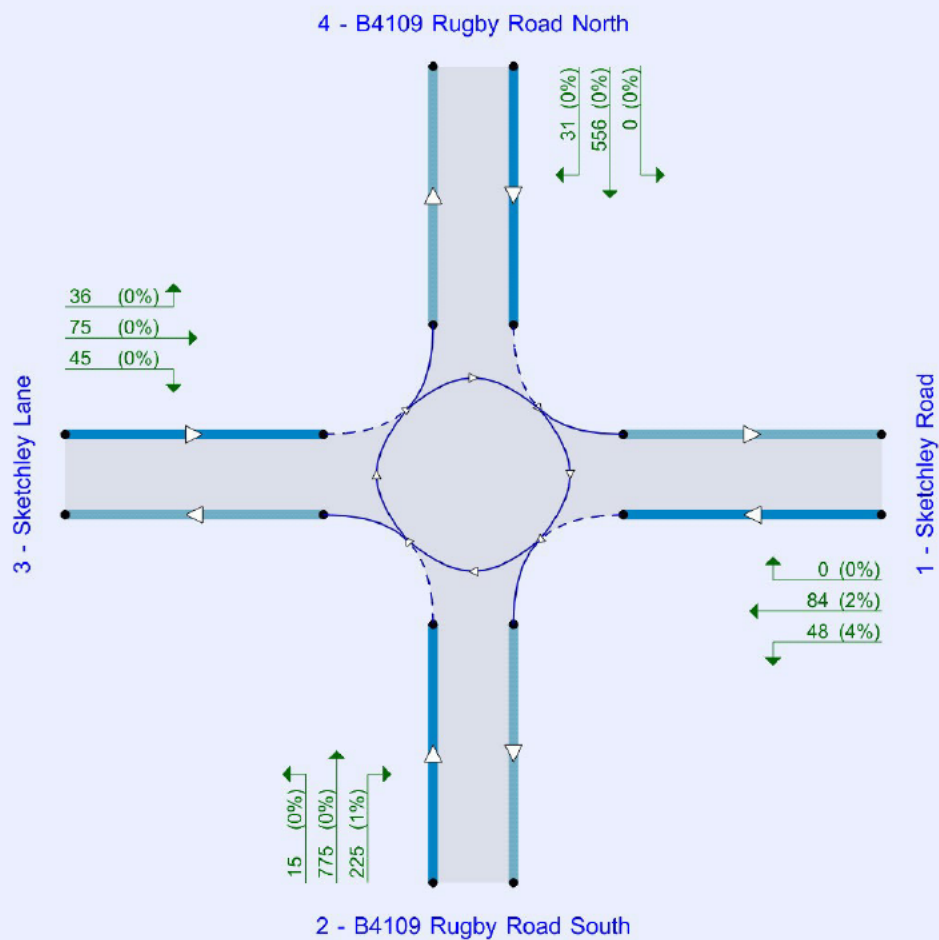
File summary

File Description

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

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

Analysis Set Details

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

2021, 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	8.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.17	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	2021	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	✓	182	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	564	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	25	453
	3 - Sketchley Lane	48	89	0	45
	4 - B4109 Rugby Road North	0	519	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	8.11	0.5	A	172	257
2 - B4109 Rugby Road South	0.49	5.71	1.0	A	510	765
3 - Sketchley Lane	0.32	8.36	0.5	A	167	251
4 - B4109 Rugby Road North	0.65	10.58	1.8	B	518	776

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	488	765	0.184	140	94	0.0	0.2	5.754	A
2 - B4109 Rugby Road South	419	105	44	1255	0.334	417	584	0.0	0.5	4.282	A
3 - Sketchley Lane	137	34	398	721	0.190	136	63	0.0	0.2	6.148	A
4 - B4109 Rugby Road North	425	106	161	1003	0.424	422	373	0.0	0.7	6.166	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	586	716	0.235	168	113	0.2	0.3	6.561	A
2 - B4109 Rugby Road South	500	125	53	1250	0.400	499	700	0.5	0.7	4.793	A
3 - Sketchley Lane	164	41	477	683	0.240	163	75	0.2	0.3	6.925	A
4 - B4109 Rugby Road North	507	127	193	985	0.515	506	447	0.7	1.0	7.492	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	716	651	0.316	205	138	0.3	0.5	8.063	A
2 - B4109 Rugby Road South	612	153	65	1243	0.493	611	856	0.7	1.0	5.687	A
3 - Sketchley Lane	200	50	584	632	0.317	200	92	0.3	0.5	8.325	A
4 - B4109 Rugby Road North	621	155	236	961	0.646	618	547	1.0	1.8	10.401	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	719	650	0.317	206	139	0.5	0.5	8.113	A
2 - B4109 Rugby Road South	612	153	65	1243	0.493	612	860	1.0	1.0	5.709	A
3 - Sketchley Lane	200	50	585	631	0.318	200	92	0.5	0.5	8.358	A
4 - B4109 Rugby Road North	621	155	237	961	0.646	621	548	1.8	1.8	10.577	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	590	714	0.236	169	114	0.5	0.3	6.611	A
2 - B4109 Rugby Road South	500	125	53	1249	0.400	501	706	1.0	0.7	4.819	A
3 - Sketchley Lane	164	41	478	682	0.240	164	76	0.5	0.3	6.962	A
4 - B4109 Rugby Road North	507	127	194	984	0.515	510	449	1.8	1.1	7.630	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	493	762	0.185	141	95	0.3	0.2	5.798	A
2 - B4109 Rugby Road South	419	105	45	1254	0.334	419	590	0.7	0.5	4.313	A
3 - Sketchley Lane	137	34	400	719	0.190	137	63	0.3	0.2	6.187	A
4 - B4109 Rugby Road North	425	106	162	1002	0.424	426	376	1.1	0.7	6.264	A

2021, 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	12.63	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.63	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	2021	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	✓	874	100.000
3 - Sketchley Lane		ONE HOUR	✓	114	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	533	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	62	0
	2 - B4109 Rugby Road South	302	0	49	523
	3 - Sketchley Lane	36	45	0	33
	4 - B4109 Rugby Road North	0	484	49	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	0.18	6.28	0.2	A	102	153
2 - B4109 Rugby Road South	0.79	13.78	3.6	B	802	1203
3 - Sketchley Lane	0.26	10.00	0.3	A	105	157
4 - B4109 Rugby Road North	0.67	12.66	2.0	B	489	734

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	658	164	83	1245	0.529	654	432	0.0	1.1	6.045	A
3 - Sketchley Lane	86	21	617	625	0.137	85	120	0.0	0.2	6.663	A
4 - B4109 Rugby Road North	401	100	286	945	0.425	398	416	0.0	0.7	6.558	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	786	196	100	1235	0.636	783	518	1.1	1.7	7.923	A
3 - Sketchley Lane	102	26	739	566	0.181	102	143	0.2	0.2	7.754	A
4 - B4109 Rugby Road North	479	120	343	913	0.525	478	498	0.7	1.1	8.236	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	962	241	122	1222	0.787	955	633	1.7	3.5	13.144	B
3 - Sketchley Lane	126	31	902	488	0.257	125	175	0.2	0.3	9.892	A
4 - B4109 Rugby Road North	587	147	419	872	0.673	583	608	1.1	2.0	12.311	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	962	241	122	1222	0.788	962	636	3.5	3.6	13.780	B
3 - Sketchley Lane	126	31	908	485	0.259	125	176	0.3	0.3	10.000	A
4 - B4109 Rugby Road North	587	147	422	871	0.674	587	612	2.0	2.0	12.660	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	786	196	100	1235	0.636	793	523	3.6	1.8	8.273	A
3 - Sketchley Lane	102	26	748	562	0.182	103	145	0.3	0.2	7.852	A
4 - B4109 Rugby Road North	479	120	347	911	0.526	483	504	2.0	1.1	8.467	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	5.067	A
2 - B4109 Rugby Road South	658	164	84	1244	0.529	661	437	1.8	1.1	6.195	A
3 - Sketchley Lane	86	21	624	622	0.138	86	121	0.2	0.2	6.722	A
4 - B4109 Rugby Road North	401	100	289	943	0.426	403	420	1.1	0.8	6.683	A

2026, 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	10.70	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.70	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	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	✓	185	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	644	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	24	627
	3 - Sketchley Lane	59	86	0	40
	4 - B4109 Rugby Road North	0	626	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	10.10	0.7	B	210	315
2 - B4109 Rugby Road South	0.64	8.20	1.8	A	663	994
3 - Sketchley Lane	0.38	10.61	0.6	B	170	255
4 - B4109 Rugby Road North	0.73	13.78	2.7	B	591	886

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	545	736	0.234	171	97	0.0	0.3	6.362	A
2 - B4109 Rugby Road South	544	136	55	1249	0.435	541	662	0.0	0.8	5.058	A
3 - Sketchley Lane	139	35	523	661	0.211	138	73	0.0	0.3	6.877	A
4 - B4109 Rugby Road North	485	121	161	1012	0.479	481	499	0.0	0.9	6.743	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	654	682	0.302	205	117	0.3	0.4	7.541	A
2 - B4109 Rugby Road South	649	162	65	1243	0.522	648	794	0.8	1.1	6.036	A
3 - Sketchley Lane	166	42	626	611	0.272	166	87	0.3	0.4	8.081	A
4 - B4109 Rugby Road North	579	145	194	994	0.583	577	598	0.9	1.4	8.603	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	798	611	0.413	251	143	0.4	0.7	9.970	A
2 - B4109 Rugby Road South	795	199	80	1234	0.644	792	970	1.1	1.8	8.094	A
3 - Sketchley Lane	204	51	766	544	0.374	203	106	0.4	0.6	10.519	B
4 - B4109 Rugby Road North	709	177	237	970	0.731	704	732	1.4	2.6	13.313	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	803	609	0.414	252	143	0.7	0.7	10.097	B
2 - B4109 Rugby Road South	795	199	80	1234	0.644	795	975	1.8	1.8	8.196	A
3 - Sketchley Lane	204	51	768	543	0.375	204	107	0.6	0.6	10.609	B
4 - B4109 Rugby Road North	709	177	238	969	0.732	709	734	2.6	2.7	13.782	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	662	679	0.303	207	117	0.7	0.4	7.649	A
2 - B4109 Rugby Road South	649	162	66	1242	0.522	652	802	1.8	1.1	6.121	A
3 - Sketchley Lane	166	42	630	609	0.273	167	88	0.6	0.4	8.162	A
4 - B4109 Rugby Road North	579	145	195	993	0.583	584	602	2.7	1.4	8.902	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	552	733	0.235	173	98	0.4	0.3	6.437	A
2 - B4109 Rugby Road South	544	136	55	1249	0.435	545	670	1.1	0.8	5.122	A
3 - Sketchley Lane	139	35	527	659	0.211	140	73	0.4	0.3	6.946	A
4 - B4109 Rugby Road North	485	121	163	1011	0.480	487	503	1.4	0.9	6.897	A

2026, 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	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	✓	154	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	568	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	43	0	36
	4 - B4109 Rugby Road North	0	537	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	15.05	0.7	C	141	212
4 - B4109 Rugby Road North	0.70	13.30	2.3	B	521	782

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	116	29	728	572	0.203	115	98	0.0	0.3	7.852	A
4 - B4109 Rugby Road North	428	107	256	961	0.445	424	586	0.0	0.8	6.668	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	138	35	872	503	0.275	138	117	0.3	0.4	9.836	A
4 - B4109 Rugby Road North	511	128	307	933	0.547	509	702	0.8	1.2	8.450	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	170	42	1055	415	0.408	168	144	0.4	0.7	14.499	B
4 - B4109 Rugby Road North	625	156	373	898	0.697	621	851	1.2	2.2	12.843	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	170	42	1070	409	0.415	169	144	0.7	0.7	15.046	C
4 - B4109 Rugby Road North	625	156	377	895	0.699	625	862	2.2	2.3	13.296	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	5.824	A
2 - B4109 Rugby Road South	890	222	104	1234	0.721	909	569	7.4	2.7	11.665	B
3 - Sketchley Lane	138	35	894	493	0.281	140	118	0.7	0.4	10.233	B
4 - B4109 Rugby Road North	511	128	314	930	0.549	515	720	2.3	1.2	8.752	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	7.358	A
3 - Sketchley Lane	116	29	738	567	0.204	116	99	0.4	0.3	7.993	A
4 - B4109 Rugby Road North	428	107	260	959	0.446	429	595	1.2	0.8	6.813	A

2026 + Dev, 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	11.63	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.63	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 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Sketchley Road		ONE HOUR	✓	229	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	755	100.000
3 - Sketchley Lane		ONE HOUR	✓	187	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	666	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	88	0	40
	4 - B4109 Rugby Road North	0	648	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	10.48	0.7	B	210	315
2 - B4109 Rugby Road South	0.67	8.93	2.0	A	693	1039
3 - Sketchley Lane	0.39	11.22	0.6	B	172	257
4 - B4109 Rugby Road North	0.76	15.25	3.0	C	611	917

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	563	727	0.237	171	97	0.0	0.3	6.460	A
2 - B4109 Rugby Road South	568	142	55	1249	0.455	565	680	0.0	0.8	5.235	A
3 - Sketchley Lane	141	35	546	650	0.217	140	74	0.0	0.3	7.047	A
4 - B4109 Rugby Road North	501	125	163	1011	0.496	498	522	0.0	1.0	6.964	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	676	672	0.306	205	117	0.3	0.4	7.710	A
2 - B4109 Rugby Road South	679	170	65	1243	0.546	677	815	0.8	1.2	6.347	A
3 - Sketchley Lane	168	42	654	598	0.281	168	89	0.3	0.4	8.362	A
4 - B4109 Rugby Road North	599	150	195	993	0.603	597	626	1.0	1.5	9.042	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	824	599	0.421	251	143	0.4	0.7	10.327	B
2 - B4109 Rugby Road South	831	208	80	1234	0.673	828	995	1.2	2.0	8.788	A
3 - Sketchley Lane	206	51	799	528	0.390	205	108	0.4	0.6	11.106	B
4 - B4109 Rugby Road North	733	183	239	969	0.757	728	765	1.5	2.9	14.584	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	830	596	0.423	252	143	0.7	0.7	10.475	B
2 - B4109 Rugby Road South	831	208	80	1234	0.674	831	1002	2.0	2.0	8.928	A
3 - Sketchley Lane	206	51	803	527	0.391	206	109	0.6	0.6	11.220	B
4 - B4109 Rugby Road North	733	183	240	968	0.758	733	768	2.9	3.0	15.248	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	684	668	0.308	207	117	0.7	0.5	7.836	A
2 - B4109 Rugby Road South	679	170	66	1243	0.546	682	825	2.0	1.2	6.459	A
3 - Sketchley Lane	168	42	658	596	0.282	169	90	0.6	0.4	8.460	A
4 - B4109 Rugby Road North	599	150	197	992	0.604	605	631	3.0	1.6	9.431	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	570	724	0.238	173	98	0.5	0.3	6.541	A
2 - B4109 Rugby Road South	568	142	55	1249	0.455	570	688	1.2	0.8	5.311	A
3 - Sketchley Lane	141	35	550	647	0.217	141	75	0.4	0.3	7.121	A
4 - B4109 Rugby Road North	501	125	165	1010	0.497	504	527	1.6	1.0	7.145	A

2026 + Dev, 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	23.07	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	23.07	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 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Sketchley Road		ONE HOUR	✓	132	100.000
2 - B4109 Rugby Road South		ONE HOUR	✓	1015	100.000
3 - Sketchley Lane		ONE HOUR	✓	156	100.000
4 - B4109 Rugby Road North		ONE HOUR	✓	587	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	15	775
	3 - Sketchley Lane	75	45	0	36
	4 - B4109 Rugby Road North	0	556	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	31.28	9.1	D	931	1397
3 - Sketchley Lane	0.43	16.06	0.8	C	143	215
4 - B4109 Rugby Road North	0.72	14.45	2.5	B	539	808

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	764	191	86	1244	0.614	758	485	0.0	1.6	7.309	A
3 - Sketchley Lane	117	29	747	563	0.209	116	97	0.0	0.3	8.038	A
4 - B4109 Rugby Road North	442	110	258	961	0.460	439	606	0.0	0.8	6.854	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	912	228	103	1234	0.739	908	582	1.6	2.7	10.869	B
3 - Sketchley Lane	140	35	894	493	0.285	140	117	0.3	0.4	10.187	B
4 - B4109 Rugby Road North	528	132	309	933	0.566	526	725	0.8	1.3	8.815	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	1118	279	126	1221	0.915	1096	710	2.7	8.1	25.311	D
3 - Sketchley Lane	172	43	1080	404	0.425	170	142	0.4	0.7	15.339	C
4 - B4109 Rugby Road North	646	162	374	897	0.721	642	876	1.3	2.4	13.849	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	1118	279	127	1221	0.916	1114	714	8.1	9.1	31.283	D
3 - Sketchley Lane	172	43	1097	396	0.434	172	143	0.7	0.8	16.060	C
4 - B4109 Rugby Road North	646	162	379	894	0.723	646	890	2.4	2.5	14.452	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	912	228	104	1234	0.739	937	588	9.1	3.0	13.025	B
3 - Sketchley Lane	140	35	923	479	0.293	142	118	0.8	0.4	10.716	B
4 - B4109 Rugby Road North	528	132	317	928	0.568	532	748	2.5	1.3	9.201	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	5.331	A
2 - B4109 Rugby Road South	764	191	87	1244	0.614	770	491	3.0	1.6	7.670	A
3 - Sketchley Lane	117	29	758	558	0.211	118	98	0.4	0.3	8.199	A
4 - B4109 Rugby Road North	442	110	261	958	0.461	444	615	1.3	0.9	7.021	A

Appendix MM: B578 Lutterworth Road / Lychgate Lane / Windsor Street Crossroads Junctions 10 Report

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
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Filename: Lutterworth Rd_Lychgate Ln_Crossroads.j10
Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10
Report generation date: 27/10/2023 14:02:55

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

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
Stream B-ACD	D1	0.4	16.92	0.28	C	D2	0.3	15.97	0.25	C
Stream A-BCD		0.7	11.01	0.42	B		0.7	10.91	0.40	B
Stream D-AB		0.4	9.78	0.28	A		1.4	16.31	0.59	C
Stream D-BC		0.2	12.67	0.20	B		0.2	13.93	0.20	B
Stream C-ABD		0.0	6.36	0.00	A		0.1	5.62	0.04	A
	2026									
Stream B-ACD	D3	0.6	21.36	0.37	C	D4	0.4	17.87	0.27	C
Stream A-BCD		0.6	10.22	0.36	B		0.7	11.85	0.41	B
Stream D-AB		0.5	10.69	0.32	B		1.7	20.27	0.64	C
Stream D-BC		0.6	20.38	0.38	C		0.3	17.71	0.26	C
Stream C-ABD		0.0	6.30	0.00	A		0.1	5.17	0.04	A
	2026 + Dev									
Stream B-ACD	D5	0.8	26.85	0.45	D	D6	0.4	20.24	0.31	C
Stream A-BCD		0.8	11.82	0.44	B		1.1	15.04	0.53	C
Stream D-AB		1.5	23.64	0.61	C		2.7	30.25	0.74	D
Stream D-BC		1.8	43.75	0.65	E		0.7	28.41	0.41	D
Stream C-ABD		0.0	6.23	0.01	A		0.1	5.08	0.05	A

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

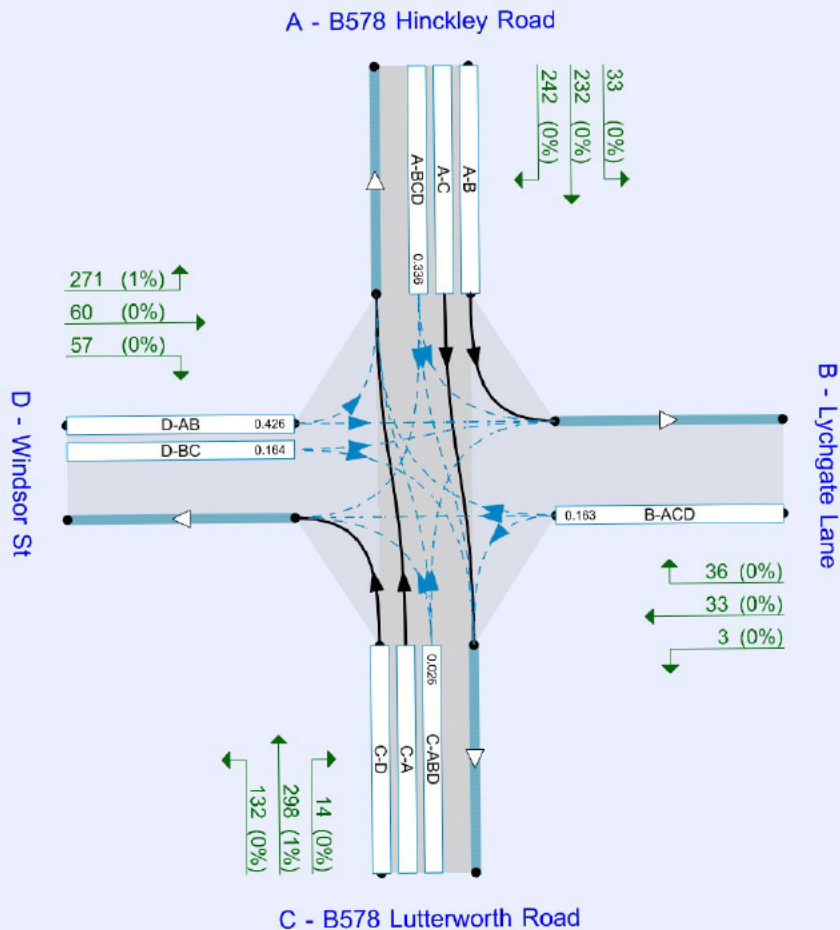
File summary

File Description

Title	Lutterworth Road / Lychgate Lane Crossroads
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

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

Demand Set Summary

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

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road/ Lychgate Lane crossroads	Crossroads	Two-way	Two-way	Two-way	Two-way		5.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.17	A

Arms

Arms

Arm	Name	Description	Arm type
A	B578 Hinckley Road		Major
B	Lychgate Lane		Minor
C	B578 Lutterworth Road		Major
D	Windsor St		Minor

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)
A - B578 Hinckley Road	6.50			85.0	✓	10.00
C - B578 Lutterworth Road	6.50			45.0	✓	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)	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 - Lychgate Lane	One lane	2.60								24	23
D - Windsor St	One lane plus flare		10.00	4.00	3.30	3.20	2.90		1.00	34	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	623	-	-	-	-	-	-	0.236	0.337	0.236	-	-	-
B-A	477	0.085	0.215	0.215	-	-	-	0.135	0.307	-	0.215	0.215	0.107
B-C	613	0.092	0.232	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	477	0.085	0.215	0.215	-	-	-	0.135	0.307	0.135	-	-	-
B-D, offside lane	477	0.085	0.215	0.215	-	-	-	0.135	0.307	0.135	-	-	-
C-B	600	0.227	0.227	0.325	-	-	-	-	-	-	-	-	-
D-A	677	-	-	-	-	-	-	0.257	-	0.101	-	-	-
D-B, nearside lane	530	0.150	0.150	0.341	-	-	-	0.239	0.239	0.094	-	-	-
D-B, offside lane	596	0.169	0.169	0.383	-	-	-	0.268	0.268	0.106	-	-	-
D-C	596	-	0.169	0.383	0.134	0.268	0.268	0.268	0.268	0.106	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Hinckley Road		✓	650	100.000
B - Lychgate Lane		✓	74	100.000
C - B578 Lutterworth Road		✓	186	100.000
D - Windsor St		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
	A - B578 Hinckley Road	0	24	412	214
	B - Lychgate Lane	35	0	10	29
	C - B578 Lutterworth Road	147	1	0	38
	D - Windsor St	107	38	48	0

Vehicle Mix

Heavy Vehicle %

	To				
From		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
	A - B578 Hinckley Road	0	0	0	2
	B - Lychgate Lane	0	0	0	0
	C - B578 Lutterworth Road	3	0	0	0
	D - Windsor St	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.28	16.92	0.4	C
ABCD	0.42	11.01	0.7	B
AB				
AC				
D-AB	0.28	9.78	0.4	A
D-BC	0.20	12.67	0.2	B
C-ABD	0.00	6.36	0.0	A
C-D				
C-A				

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-ACD	56	358	0.155	55	0.2	11.829	B
ABCD	161	578	0.279	160	0.4	8.580	A
AB	18			18			
AC	310			310			
D-AB	96	563	0.171	95	0.2	7.684	A
D-BC	49	435	0.113	49	0.1	9.305	A
C-ABD	0.99	574	0.002	0.99	0.0	6.283	A
C-D	29			29			
C-A	110			110			

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-ACD	67	332	0.201	66	0.2	13.557	B
ABCD	192	571	0.337	192	0.5	9.477	A
AB	22			22			
AC	370			370			
D-AB	115	542	0.212	115	0.3	8.415	A
D-BC	58	402	0.145	58	0.2	10.469	B
C-ABD	1	571	0.002	1	0.0	6.318	A
C-D	34			34			
C-A	132			132			

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-ACD	81	294	0.277	81	0.4	16.822	C
ABCD	236	562	0.419	235	0.7	10.961	B
AB	26			26			
AC	454			454			
D-AB	142	510	0.278	141	0.4	9.745	A
D-BC	71	355	0.199	70	0.2	12.624	B
C-ABD	2	568	0.003	2	0.0	6.351	A
C-D	42			42			
C-A	161			161			

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-ACD	81	294	0.277	81	0.4	16.919	C
ABCD	236	562	0.419	236	0.7	11.015	B
AB	26			26			
AC	454			454			
D-AB	142	510	0.278	142	0.4	9.779	A
D-BC	71	355	0.199	71	0.2	12.672	B
C-ABD	2	568	0.003	2	0.0	6.361	A
C-D	42			42			
C-A	161			161			

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-ACD	67	331	0.201	67	0.3	13.658	B
ABCD	192	571	0.337	193	0.5	9.541	A
AB	22			22			
AC	370			370			
D-AB	115	542	0.212	116	0.3	8.452	A
D-BC	58	401	0.146	59	0.2	10.521	B
C-ABD	1	570	0.002	1	0.0	6.332	A
C-D	34			34			
C-A	132			132			

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-ACD	56	358	0.156	56	0.2	11.941	B
ABCD	161	578	0.279	162	0.4	8.662	A
AB	18			18			
AC	310			310			
D-AB	96	562	0.171	96	0.2	7.729	A
D-BC	49	434	0.113	49	0.1	9.364	A
C-ABD	1	573	0.002	1	0.0	6.294	A
C-D	29			29			
C-A	110			110			

2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road/ Lychgate Lane crossroads	Crossroads	Two-way	Two-way	Two-way	Two-way		8.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.06	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Hinckley Road		✓	409	100.000
B - Lychgate Lane		✓	69	100.000
C - B578 Lutterworth Road		✓	277	100.000
D - Windsor St		✓	342	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
From	A - B578 Hinckley Road	0	35	175	199
	B - Lychgate Lane	38	0	3	28
	C - B578 Lutterworth Road	214	14	0	49
	D - Windsor St	256	52	34	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
From	A - B578 Hinckley Road	0	0	0	0
	B - Lychgate Lane	0	0	0	0
	C - B578 Lutterworth Road	1	0	0	0
	D - Windsor St	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.25	15.97	0.3	C
ABCD	0.40	10.91	0.7	B
AB				
AC				
D-AB	0.59	16.31	1.4	C
D-BC	0.20	13.93	0.2	B
C-ABD	0.04	5.62	0.1	A
C-D				
C-A				

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-ACD	52	361	0.144	51	0.2	11.606	B
ABCD	150	572	0.262	148	0.3	8.462	A
AB	26			26			
AC	132			132			
D-AB	213	579	0.369	211	0.6	9.731	A
D-BC	44	438	0.101	44	0.1	9.128	A
C-ABD	15	656	0.023	15	0.0	5.614	A
C-D	36			36			
C-A	157			157			

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-ACD	62	336	0.185	62	0.2	13.116	B
ABCD	179	563	0.318	178	0.5	9.356	A
AB	31			31			
AC	157			157			
D-AB	255	561	0.455	254	0.8	11.693	B
D-BC	52	394	0.133	52	0.2	10.522	B
C-ABD	20	669	0.029	19	0.0	5.541	A
C-D	43			43			
C-A	187			187			

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-ACD	76	302	0.252	76	0.3	15.870	C
ABCD	219	549	0.399	218	0.7	10.860	B
AB	39			39			
AC	193			193			
D-AB	313	534	0.587	311	1.4	15.991	C
D-BC	63	324	0.196	63	0.2	13.797	B
C-ABD	27	688	0.039	27	0.1	5.440	A
C-D	52			52			
C-A	226			226			

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-ACD	76	301	0.252	76	0.3	15.966	C
ABCD	219	549	0.399	219	0.7	10.910	B
AB	39			39			
AC	193			193			
D-AB	313	534	0.587	313	1.4	16.308	C
D-BC	63	322	0.197	63	0.2	13.929	B
C-ABD	27	688	0.039	27	0.1	5.444	A
C-D	52			52			
C-A	226			226			

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-ACD	62	335	0.185	62	0.2	13.215	B
ABCD	179	563	0.318	180	0.5	9.418	A
AB	31			31			
AC	157			157			
D-AB	255	561	0.455	257	0.9	11.953	B
D-BC	52	392	0.133	53	0.2	10.613	B
C-ABD	20	669	0.029	20	0.0	5.549	A
C-D	43			43			
C-A	187			187			

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-ACD	52	360	0.144	52	0.2	11.712	B
ABCD	150	572	0.262	150	0.4	8.536	A
AB	26			26			
AC	132			132			
D-AB	213	578	0.369	214	0.6	9.923	A
D-BC	44	436	0.101	44	0.1	9.201	A
C-ABD	15	656	0.023	15	0.0	5.621	A
C-D	36			36			
C-A	157			157			

2026, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road/ Lychgate Lane crossroads	Crossroads	Two-way	Two-way	Two-way	Two-way		5.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.59	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Hinckley Road		✓	766	100.000
B - Lychgate Lane		✓	89	100.000
C - B578 Lutterworth Road		✓	219	100.000
D - Windsor St		✓	246	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
	A - B578 Hinckley Road	0	23	560	183
	B - Lychgate Lane	34	0	17	38
	C - B578 Lutterworth Road	177	1	0	41
	D - Windsor St	119	42	85	0

Vehicle Mix

Heavy Vehicle %

	To				
From		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
	A - B578 Hinckley Road	0	0	0	2
	B - Lychgate Lane	0	0	0	0
	C - B578 Lutterworth Road	3	0	0	0
	D - Windsor St	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.37	21.36	0.6	C
ABCD	0.36	10.22	0.6	B
AB				
AC				
D-AB	0.32	10.69	0.5	B
D-BC	0.38	20.38	0.6	C
C-ABD	0.00	6.30	0.0	A
C-D				
C-A				

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-ACD	67	342	0.196	66	0.2	12.988	B
ABCD	138	572	0.241	137	0.3	8.247	A
AB	17			17			
AC	422			422			
D-AB	108	599	0.180	107	0.2	7.308	A
D-BC	77	369	0.209	76	0.3	12.244	B
C-ABD	1	576	0.002	1	0.0	6.258	A
C-D	31			31			
C-A	133			133			

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-ACD	80	311	0.257	80	0.3	15.547	C
ABCD	165	564	0.292	164	0.4	8.991	A
AB	21			21			
AC	503			503			
D-AB	130	563	0.231	130	0.3	8.312	A
D-BC	91	335	0.271	91	0.4	14.689	B
C-ABD	1	574	0.002	1	0.0	6.278	A
C-D	37			37			
C-A	159			159			

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-ACD	98	267	0.367	97	0.6	21.111	C
ABCD	201	554	0.364	201	0.6	10.185	B
AB	25			25			
AC	617			617			
D-AB	162	500	0.323	161	0.5	10.597	B
D-BC	109	286	0.382	108	0.6	20.131	C
C-ABD	2	574	0.003	2	0.0	6.287	A
C-D	45			45			
C-A	194			194			

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-ACD	98	266	0.368	98	0.6	21.356	C
ABCD	201	554	0.364	201	0.6	10.219	B
AB	25			25			
AC	617			617			
D-AB	162	498	0.324	162	0.5	10.686	B
D-BC	109	286	0.382	109	0.6	20.382	C
C-ABD	2	574	0.003	2	0.0	6.297	A
C-D	45			45			
C-A	194			194			

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-ACD	80	310	0.258	81	0.4	15.749	C
ABCD	165	564	0.292	165	0.4	9.034	A
AB	21			21			
AC	503			503			
D-AB	130	561	0.232	131	0.3	8.383	A
D-BC	91	334	0.272	92	0.4	14.895	B
C-ABD	1	574	0.002	1	0.0	6.294	A
C-D	37			37			
C-A	159			159			

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-ACD	67	342	0.196	67	0.2	13.145	B
ABCD	138	572	0.241	138	0.3	8.309	A
AB	17			17			
AC	422			422			
D-AB	108	598	0.181	109	0.2	7.367	A
D-BC	77	368	0.209	77	0.3	12.406	B
C-ABD	1	576	0.002	1	0.0	6.269	A
C-D	31			31			
C-A	133			133			

2026, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road/ Lychgate Lane crossroads	Crossroads	Two-way	Two-way	Two-way	Two-way		8.36	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.36	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Hinckley Road		✓	452	100.000
B - Lychgate Lane		✓	69	100.000
C - B578 Lutterworth Road		✓	398	100.000
D - Windsor St		✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
	A - B578 Hinckley Road	0	33	225	194
	B - Lychgate Lane	36	0	3	30
	C - B578 Lutterworth Road	295	14	0	89
	D - Windsor St	253	57	40	0

Vehicle Mix

Heavy Vehicle %

	To				
From		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
	A - B578 Hinckley Road	0	0	0	0
	B - Lychgate Lane	0	0	0	0
	C - B578 Lutterworth Road	1	0	0	0
	D - Windsor St	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.27	17.87	0.4	C
ABCD	0.41	11.85	0.7	B
AB				
AC				
D-AB	0.64	20.27	1.7	C
D-BC	0.26	17.71	0.3	C
C-ABD	0.04	5.17	0.1	A
C-D				
C-A				

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-ACD	52	345	0.151	51	0.2	12.252	B
ABCD	146	551	0.265	145	0.4	8.832	A
AB	25			25			
AC	169			169			
D-AB	213	553	0.386	211	0.6	10.456	B
D-BC	50	411	0.122	50	0.1	9.939	A
C-ABD	18	715	0.025	18	0.0	5.160	A
C-D	65			65			
C-A	217			217			

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-ACD	62	317	0.196	62	0.2	14.110	B
ABCD	174	537	0.325	174	0.5	9.909	A
AB	30			30			
AC	202			202			
D-AB	255	529	0.483	254	0.9	13.047	B
D-BC	59	361	0.164	59	0.2	11.922	B
C-ABD	24	741	0.032	24	0.0	5.019	A
C-D	77			77			
C-A	257			257			

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-ACD	76	278	0.273	75	0.4	17.725	C
ABCD	214	517	0.413	213	0.7	11.784	B
AB	36			36			
AC	248			248			
D-AB	314	491	0.639	311	1.7	19.597	C
D-BC	71	277	0.258	71	0.3	17.381	C
C-ABD	34	778	0.044	34	0.1	4.835	A
C-D	94			94			
C-A	311			311			

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-ACD	76	277	0.274	76	0.4	17.870	C
ABCD	214	517	0.413	214	0.7	11.850	B
AB	36			36			
AC	248			248			
D-AB	314	491	0.640	314	1.7	20.272	C
D-BC	71	275	0.260	71	0.3	17.711	C
C-ABD	34	778	0.044	34	0.1	4.839	A
C-D	94			94			
C-A	311			311			

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-ACD	62	316	0.197	63	0.2	14.251	B
ABCD	174	537	0.325	175	0.5	9.981	A
AB	30			30			
AC	202			202			
D-AB	255	528	0.484	258	1.0	13.495	B
D-BC	59	358	0.165	60	0.2	12.096	B
C-ABD	24	740	0.032	24	0.0	5.028	A
C-D	77			77			
C-A	257			257			

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-ACD	52	344	0.151	52	0.2	12.365	B
ABCD	146	551	0.265	147	0.4	8.918	A
AB	25			25			
AC	169			169			
D-AB	213	552	0.387	215	0.6	10.707	B
D-BC	50	409	0.122	50	0.1	10.040	B
C-ABD	18	715	0.025	18	0.0	5.167	A
C-D	65			65			
C-A	217			217			

2026 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road/ Lychgate Lane crossroads	Crossroads	Two-way	Two-way	Two-way	Two-way		10.90	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.90	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)
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Hinckley Road		✓	808	100.000
B - Lychgate Lane		✓	99	100.000
C - B578 Lutterworth Road		✓	246	100.000
D - Windsor St		✓	351	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
From	A - B578 Hinckley Road	0	23	565	220
	B - Lychgate Lane	34	0	18	47
	C - B578 Lutterworth Road	184	2	0	60
	D - Windsor St	172	53	126	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
From	A - B578 Hinckley Road	0	0	0	2
	B - Lychgate Lane	0	0	0	0
	C - B578 Lutterworth Road	3	0	0	0
	D - Windsor St	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.45	26.85	0.8	D
ABCD	0.44	11.82	0.8	B
AB				
AC				
D-AB	0.61	23.64	1.5	C
D-BC	0.65	43.75	1.8	E
C-ABD	0.01	6.23	0.0	A
C-D				
C-A				

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-ACD	75	328	0.227	73	0.3	14.092	B
ABCD	166	567	0.292	164	0.4	8.899	A
AB	17			17			
AC	425			425			
D-AB	155	567	0.273	153	0.4	8.676	A
D-BC	109	348	0.314	108	0.4	14.846	B
C-ABD	2	582	0.004	2	0.0	6.210	A
C-D	45			45			
C-A	138			138			

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-ACD	89	293	0.304	88	0.4	17.562	C
ABCD	198	558	0.354	197	0.5	9.951	A
AB	21			21			
AC	508			508			
D-AB	187	508	0.368	186	0.6	11.143	B
D-BC	129	306	0.421	128	0.7	20.094	C
C-ABD	3	582	0.005	3	0.0	6.217	A
C-D	54			54			
C-A	165			165			

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-ACD	109	244	0.447	108	0.8	26.202	D
ABCD	242	547	0.443	241	0.8	11.747	B
AB	25			25			
AC	622			622			
D-AB	234	394	0.593	230	1.4	21.590	C
D-BC	153	236	0.647	149	1.6	39.722	E
C-ABD	4	584	0.007	4	0.0	6.205	A
C-D	66			66			
C-A	201			201			

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-ACD	109	243	0.449	109	0.8	26.851	D
ABCD	242	547	0.443	242	0.8	11.816	B
AB	25			25			
AC	622			622			
D-AB	234	385	0.608	234	1.5	23.635	C
D-BC	152	233	0.654	152	1.8	43.753	E
C-ABD	4	583	0.007	4	0.0	6.213	A
C-D	66			66			
C-A	201			201			

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-ACD	89	292	0.305	90	0.5	18.000	C
ABCD	198	558	0.354	199	0.6	10.032	B
AB	21			21			
AC	508			508			
D-AB	187	500	0.374	191	0.6	11.754	B
D-BC	128	303	0.423	132	0.8	21.523	C
C-ABD	3	581	0.005	3	0.0	6.235	A
C-D	54			54			
C-A	165			165			

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-ACD	75	327	0.228	75	0.3	14.335	B
ABCD	166	567	0.292	166	0.4	8.994	A
AB	17			17			
AC	425			425			
D-AB	155	563	0.275	156	0.4	8.857	A
D-BC	109	347	0.315	110	0.5	15.305	C
C-ABD	2	581	0.004	2	0.0	6.223	A
C-D	45			45			
C-A	138			138			

2026 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Lutterworth Road/ Lychgate Lane crossroads	Crossroads	Two-way	Two-way	Two-way	Two-way		11.94	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.94	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)
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B578 Hinckley Road		✓	507	100.000
B - Lychgate Lane		✓	72	100.000
C - B578 Lutterworth Road		✓	444	100.000
D - Windsor St		✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
From	A - B578 Hinckley Road	0	33	232	242
	B - Lychgate Lane	36	0	3	33
	C - B578 Lutterworth Road	298	14	0	132
	D - Windsor St	271	60	57	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - B578 Hinckley Road	B - Lychgate Lane	C - B578 Lutterworth Road	D - Windsor St
From	A - B578 Hinckley Road	0	0	0	0
	B - Lychgate Lane	0	0	0	0
	C - B578 Lutterworth Road	1	0	0	0
	D - Windsor St	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.31	20.24	0.4	C
ABCD	0.53	15.04	1.1	C
AB				
AC				
D-AB	0.74	30.25	2.7	D
D-BC	0.41	28.41	0.7	D
C-ABD	0.05	5.08	0.1	A
C-D				
C-A				

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-ACD	54	332	0.163	53	0.2	12.907	B
ABCD	182	543	0.336	180	0.5	9.879	A
AB	25			25			
AC	175			175			
D-AB	229	538	0.426	226	0.7	11.435	B
D-BC	63	386	0.164	62	0.2	11.099	B
C-ABD	19	729	0.026	19	0.0	5.066	A
C-D	97			97			
C-A	219			219			

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-ACD	65	301	0.215	64	0.3	15.207	C
ABCD	218	527	0.413	217	0.7	11.577	B
AB	30			30			
AC	209			209			
D-AB	274	508	0.540	273	1.1	15.200	C
D-BC	74	325	0.229	74	0.3	14.297	B
C-ABD	26	759	0.034	26	0.0	4.911	A
C-D	115			115			
C-A	259			259			

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-ACD	79	258	0.307	79	0.4	19.958	C
ABCD	267	506	0.527	265	1.1	14.857	B
AB	36			36			
AC	255			255			
D-AB	338	457	0.739	332	2.5	27.676	D
D-BC	89	222	0.402	88	0.6	26.579	D
C-ABD	38	802	0.047	38	0.1	4.712	A
C-D	138			138			
C-A	313			313			

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-ACD	79	257	0.308	79	0.4	20.236	C
ABCD	267	506	0.527	267	1.1	15.041	C
AB	36			36			
AC	255			255			
D-AB	338	455	0.743	337	2.7	30.252	D
D-BC	89	215	0.414	89	0.7	28.408	D
C-ABD	38	801	0.047	38	0.1	4.716	A
C-D	138			138			
C-A	313			313			

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-ACD	65	299	0.216	65	0.3	15.443	C
ABCD	218	527	0.413	219	0.7	11.752	B
AB	30			30			
AC	209			209			
D-AB	274	506	0.543	280	1.2	16.361	C
D-BC	74	320	0.233	76	0.3	14.861	B
C-ABD	26	758	0.034	26	0.0	4.920	A
C-D	115			115			
C-A	259			259			

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-ACD	54	330	0.164	55	0.2	13.075	B
ABCD	182	543	0.336	183	0.5	10.034	B
AB	25			25			
AC	175			175			
D-AB	229	537	0.427	231	0.8	11.834	B
D-BC	63	383	0.165	64	0.2	11.301	B
C-ABD	19	729	0.026	19	0.0	5.076	A
C-D	97			97			
C-A	218			218			

Appendix NN: B578 Hinckley Road / B4669 Burbage Road / B4669 Sapcote Road Junctions 10 Report

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
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Filename: Burbage Road_Sapcote Road_Hinckley Road.j10
Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10
Report generation date: 27/10/2023 11:43:25

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

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
Stream B-C	D1	25.4	458.70	1.29	F	D2	33.4	361.45	1.22	F
Stream B-A		32.0	446.01	1.30	F		28.3	367.92	1.21	F
Stream C-AB		9.2	43.87	0.90	E		1.7	15.58	0.60	C
	2026									
Stream B-C	D3	52.3	1147.07	1.93	F	D4	47.6	486.22	1.33	F
Stream B-A		72.2	1142.02	1.92	F		38.5	491.73	1.31	F
Stream C-AB		39.4	142.93	1.05	F		1.9	16.32	0.63	C
	2026 + Dev									
Stream B-C	D5	89.9	2040.24	2.46	F	D6	58.3	618.54	1.41	F
Stream B-A		102.3	2030.94	2.47	F		46.3	624.25	1.39	F
Stream C-AB		64.3	276.76	1.12	F		2.3	17.91	0.67	C

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

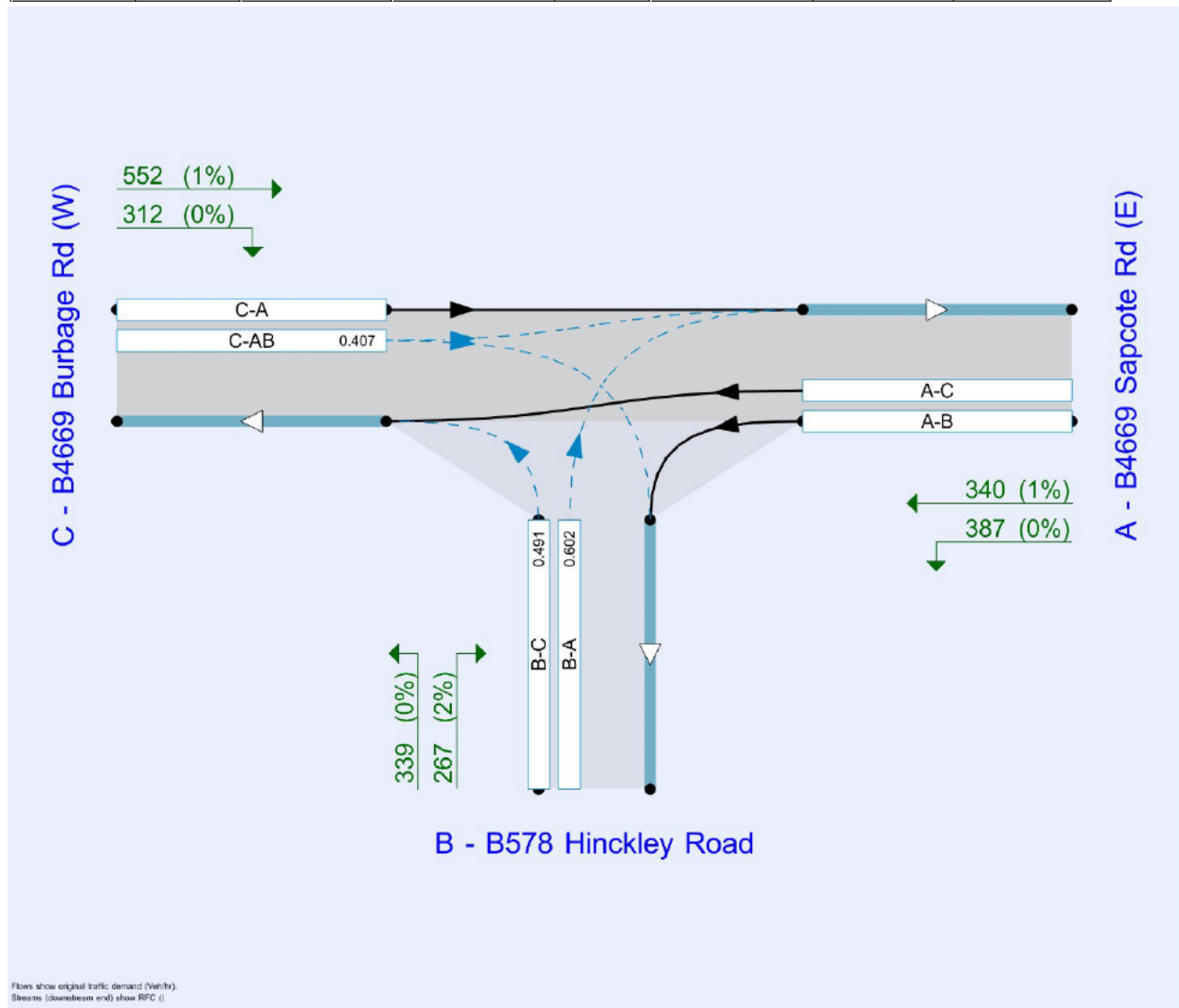
File summary

File Description

Title	B4669 Burbage Road / B4669 Sapcote Road / B578 Hinckley Road Junction
Location	
Site number	
Date	06/04/2023
Version	
Status	
Identifier	
Client	Redrow Homes
Jobnumber	P21-390
Enumerator	
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

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

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sapcote/Burbage/Hinckley Road	T-Junction	Two-way	Two-way	Two-way		111.89	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	111.89	F

Arms

Arms

Arm	Name	Description	Arm type
A	B4669 Sapcote Rd (E)		Major
B	B578 Hinckley Road		Minor
C	B4669 Burbage Rd (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B4669 Burbage Rd (W)	7.90		✓	3.50	95.0	✓	4.50

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 - B578 Hinckley Road	One lane plus flare	10.00	5.30	5.10	4.50	4.50	✓	3.00	140	158

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for AB	Slope for AC	Slope for C-A	Slope for C-B
B-A	617	0.103	0.261	0.164	0.372
B-C	700	0.098	0.249	-	-
C-B	718	0.255	0.255	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4669 Sapcote Rd (E)		✓	690	100.000
B - B578 Hinckley Road		✓	410	100.000
C - B4669 Burbage Rd (W)		✓	765	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	187	503
	B - B578 Hinckley Road	230	0	180
	C - B4669 Burbage Rd (W)	340	425	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	1	1
	B - B578 Hinckley Road	3	0	0
	C - B4669 Burbage Rd (W)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	1.29	458.70	25.4	F
B-A	1.30	446.01	32.0	F
C-AB	0.90	43.87	9.2	E
C-A				
AB				
AC				

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-C	136	501	0.270	134	0.4	9.763	A
B-A	173	331	0.524	169	1.0	21.774	C
C-AB	329	601	0.548	324	1.2	12.813	B
C-A	247			247			
AB	141			141			
AC	379			379			

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-C	162	388	0.417	160	0.7	15.738	C
B-A	207	275	0.751	201	2.5	45.062	E
C-AB	420	613	0.685	416	2.2	17.963	C
C-A	268			268			
AB	168			168			
AC	452			452			

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-C	198	154	1.288	145	13.9	217.782	F
B-A	253	202	1.256	195	17.1	217.191	F
C-AB	673	750	0.898	651	7.6	33.348	D
C-A	170			170			
AB	206			206			
AC	554			554			

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-C	198	154	1.289	153	25.4	458.704	F
B-A	253	195	1.299	194	32.0	446.011	F
C-AB	673	751	0.896	667	9.2	43.874	E
C-A	170			170			
AB	206			206			
AC	554			554			

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-C	162	204	0.793	196	16.7	360.890	F
B-A	207	260	0.797	252	20.8	370.875	F
C-AB	420	615	0.683	446	2.6	24.687	C
C-A	268			268			
AB	168			168			
AC	452			452			

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-C	136	392	0.346	200	0.5	26.168	D
B-A	173	322	0.537	251	1.3	90.696	F
C-AB	329	602	0.547	334	1.3	13.763	B
C-A	247			247			
AB	141			141			
AC	379			379			

2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sapcote/Burbage/Hinckley Road	T-Junction	Two-way	Two-way	Two-way		98.83	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	98.83	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)
D2	2021	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4669 Sapcote Rd (E)		✓	685	100.000
B - B578 Hinckley Road		✓	542	100.000
C - B4669 Burbage Rd (W)		✓	824	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	327	358
	B - B578 Hinckley Road	248	0	294
	C - B4669 Burbage Rd (W)	536	288	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	0	1
	B - B578 Hinckley Road	2	0	0
	C - B4669 Burbage Rd (W)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	1.22	361.45	33.4	F
B-A	1.21	367.92	28.3	F
C-AB	0.60	15.58	1.7	C
C-A				
AB				
AC				

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-C	221	536	0.413	219	0.7	11.244	B
B-A	187	349	0.536	182	1.1	21.153	C
C-AB	219	590	0.370	216	0.6	9.567	A
C-A	402			402			
AB	246			246			
AC	270			270			

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-C	264	436	0.606	261	1.5	20.205	C
B-A	223	296	0.754	217	2.6	42.780	E
C-AB	266	575	0.462	265	0.9	11.566	B
C-A	475			475			
AB	294			294			
AC	322			322			

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-C	324	265	1.223	255	18.8	169.640	F
B-A	273	228	1.200	219	16.1	185.369	F
C-AB	354	586	0.605	351	1.6	15.217	C
C-A	553			553			
AB	360			360			
AC	394			394			

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-C	324	267	1.213	265	33.4	361.445	F
B-A	273	226	1.209	224	28.3	367.920	F
C-AB	354	586	0.605	354	1.7	15.579	C
C-A	553			553			
AB	360			360			
AC	394			394			

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-C	264	319	0.829	310	22.0	314.190	F
B-A	223	270	0.827	260	19.0	323.634	F
C-AB	266	575	0.462	269	0.9	11.879	B
C-A	475			475			
AB	294			294			
AC	322			322			

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-C	221	445	0.497	305	1.0	43.637	E
B-A	187	331	0.565	257	1.4	81.597	F
C-AB	219	590	0.370	220	0.6	9.749	A
C-A	402			402			
AB	246			246			
AC	270			270			

2026, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sapcote/Burbage/Hinckley Road	T-Junction	Two-way	Two-way	Two-way		294.50	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	294.50	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)
D3	2026	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4669 Sapcote Rd (E)		✓	735	100.000
B - B578 Hinckley Road		✓	435	100.000
C - B4669 Burbage Rd (W)		✓	858	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	224	511
	B - B578 Hinckley Road	252	0	183
	C - B4669 Burbage Rd (W)	372	486	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	1	1
	B - B578 Hinckley Road	3	0	0
	C - B4669 Burbage Rd (W)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	1.93	1147.07	52.3	F
B-A	1.92	1142.02	72.2	F
C-AB	1.05	142.93	39.4	F
C-A				
AB				
AC				

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-C	138	465	0.296	136	0.4	10.889	B
B-A	190	308	0.617	184	1.5	27.927	D
C-AB	389	612	0.636	382	1.8	15.284	C
C-A	257			257			
AB	169			169			
AC	385			385			

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-C	165	231	0.711	158	2.1	45.634	E
B-A	227	245	0.923	211	5.3	82.122	F
C-AB	533	668	0.799	525	4.0	24.147	C
C-A	238			238			
AB	201			201			
AC	459			459			

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-C	201	117	1.727	114	23.9	475.533	F
B-A	277	166	1.670	165	33.5	488.227	F
C-AB	945	898	1.052	864	24.2	68.803	F
C-A	0			0			
AB	247			247			
AC	563			563			

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-C	201	104	1.932	104	48.2	1030.309	F
B-A	277	145	1.920	144	66.8	1026.762	F
C-AB	945	899	1.050	884	39.3	141.443	F
C-A	0			0			
AB	247			247			
AC	563			563			

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-C	165	149	1.107	148	52.3	1147.071	F
B-A	227	205	1.103	205	72.2	1142.024	F
C-AB	533	670	0.795	665	6.4	142.935	F
C-A	238			238			
AB	201			201			
AC	459			459			

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-C	138	211	0.654	207	35.1	765.997	F
B-A	190	290	0.653	286	48.0	758.999	F
C-AB	389	613	0.635	407	2.0	19.012	C
C-A	257			257			
AB	169			169			
AC	385			385			

2026, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sapcote/Burbage/Hinckley Road	T-Junction	Two-way	Two-way	Two-way		137.26	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	137.26	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)
D4	2026	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4669 Sapcote Rd (E)		✓	692	100.000
B - B578 Hinckley Road		✓	586	100.000
C - B4669 Burbage Rd (W)		✓	851	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	352	340
	B - B578 Hinckley Road	261	0	325
	C - B4669 Burbage Rd (W)	552	299	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	0	1
	B - B578 Hinckley Road	2	0	0
	C - B4669 Burbage Rd (W)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	1.33	486.22	47.6	F
B-A	1.31	491.73	38.5	F
C-AB	0.63	16.32	1.9	C
C-A				
AB				
AC				

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-C	245	529	0.462	241	0.8	12.363	B
B-A	196	342	0.575	191	1.3	23.217	C
C-AB	227	590	0.385	225	0.6	9.793	A
C-A	413			413			
AB	265			265			
AC	256			256			

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-C	292	406	0.720	286	2.3	28.874	D
B-A	235	284	0.827	226	3.5	54.946	F
C-AB	278	577	0.481	276	0.9	11.938	B
C-A	487			487			
AB	316			316			
AC	306			306			

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-C	358	270	1.328	263	25.9	218.586	F
B-A	287	221	1.298	216	21.3	239.090	F
C-AB	377	598	0.630	374	1.8	15.851	C
C-A	560			560			
AB	388			388			
AC	374			374			

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-C	358	272	1.316	271	47.6	480.266	F
B-A	287	220	1.309	219	38.5	488.884	F
C-AB	377	599	0.630	377	1.9	16.315	C
C-A	560			560			
AB	388			388			
AC	374			374			

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-C	292	326	0.896	319	40.7	486.224	F
B-A	235	263	0.893	256	33.1	491.730	F
C-AB	278	577	0.481	281	1.0	12.327	B
C-A	487			487			
AB	316			316			
AC	306			306			

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-C	245	362	0.675	354	13.5	283.943	F
B-A	196	293	0.672	284	11.2	291.092	F
C-AB	227	590	0.385	229	0.6	9.999	A
C-A	413			413			
AB	265			265			
AC	256			256			

2026 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sapcote/Burbage/Hinckley Road	T-Junction	Two-way	Two-way	Two-way		564.17	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	564.17	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)
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4669 Sapcote Rd (E)		✓	743	100.000
B - B578 Hinckley Road		✓	486	100.000
C - B4669 Burbage Rd (W)		✓	888	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	232	511
	B - B578 Hinckley Road	259	0	227
	C - B4669 Burbage Rd (W)	372	516	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	1	1
	B - B578 Hinckley Road	3	0	0
	C - B4669 Burbage Rd (W)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	2.46	2040.24	89.9	F
B-A	2.47	2030.94	102.3	F
C-AB	1.12	276.76	64.3	F
C-A				
AB				
AC				

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-C	171	456	0.375	169	0.6	12.420	B
B-A	195	293	0.667	188	1.8	32.410	D
C-AB	421	622	0.677	413	2.1	16.665	C
C-A	247			247			
AB	175			175			
AC	385			385			

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-C	204	196	1.043	175	7.8	124.399	F
B-A	233	228	1.023	207	8.2	121.800	F
C-AB	601	706	0.851	587	5.5	28.556	D
C-A	198			198			
AB	209			209			
AC	459			459			

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-C	250	131	1.910	130	37.7	749.797	F
B-A	285	148	1.928	147	42.6	733.887	F
C-AB	978	872	1.122	853	36.6	99.452	F
C-A	0			0			
AB	255			255			
AC	563			563			

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-C	250	101	2.463	101	74.9	2040.238	F
B-A	285	115	2.472	115	85.1	2030.938	F
C-AB	978	873	1.120	867	64.2	226.405	F
C-A	0			0			
AB	255			255			
AC	563			563			

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-C	204	144	1.416	144	89.9	1683.628	F
B-A	233	164	1.419	164	102.3	1679.623	F
C-AB	601	707	0.848	742	28.9	276.764	F
C-A	198			198			
AB	209			209			
AC	459			459			

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-C	171	219	0.782	216	78.5	1402.981	F
B-A	195	249	0.783	247	89.4	1399.792	F
C-AB	421	623	0.676	527	2.5	66.801	F
C-A	247			247			
AB	175			175			
AC	385			385			

2026 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sapcote/Burbage/Hinckley Road	T-Junction	Two-way	Two-way	Two-way		174.48	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	174.48	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)
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B4669 Sapcote Rd (E)		✓	727	100.000
B - B578 Hinckley Road		✓	606	100.000
C - B4669 Burbage Rd (W)		✓	864	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	387	340
	B - B578 Hinckley Road	267	0	339
	C - B4669 Burbage Rd (W)	552	312	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - B4669 Sapcote Rd (E)	B - B578 Hinckley Road	C - B4669 Burbage Rd (W)
From	A - B4669 Sapcote Rd (E)	0	0	1
	B - B578 Hinckley Road	2	0	0
	C - B4669 Burbage Rd (W)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	1.41	618.54	58.3	F
B-A	1.39	624.25	46.3	F
C-AB	0.67	17.91	2.3	C
C-A				
AB				
AC				

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-C	255	520	0.491	251	0.9	13.231	B
B-A	201	334	0.602	195	1.4	25.045	D
C-AB	238	585	0.407	235	0.7	10.218	B
C-A	413			413			
AB	291			291			
AC	256			256			

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-C	305	373	0.816	294	3.5	41.228	E
B-A	240	271	0.886	227	4.6	68.366	F
C-AB	293	574	0.510	291	1.0	12.661	B
C-A	484			484			
AB	348			348			
AC	306			306			

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-C	373	265	1.410	261	31.6	268.271	F
B-A	294	214	1.377	210	25.6	291.282	F
C-AB	411	613	0.670	406	2.2	17.198	C
C-A	541			541			
AB	426			426			
AC	374			374			

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-C	373	267	1.399	266	58.3	583.807	F
B-A	294	212	1.390	211	46.3	593.708	F
C-AB	411	613	0.670	410	2.3	17.906	C
C-A	541			541			
AB	426			426			
AC	374			374			

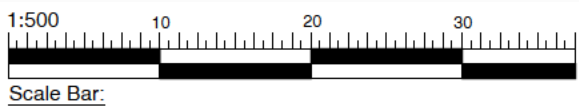
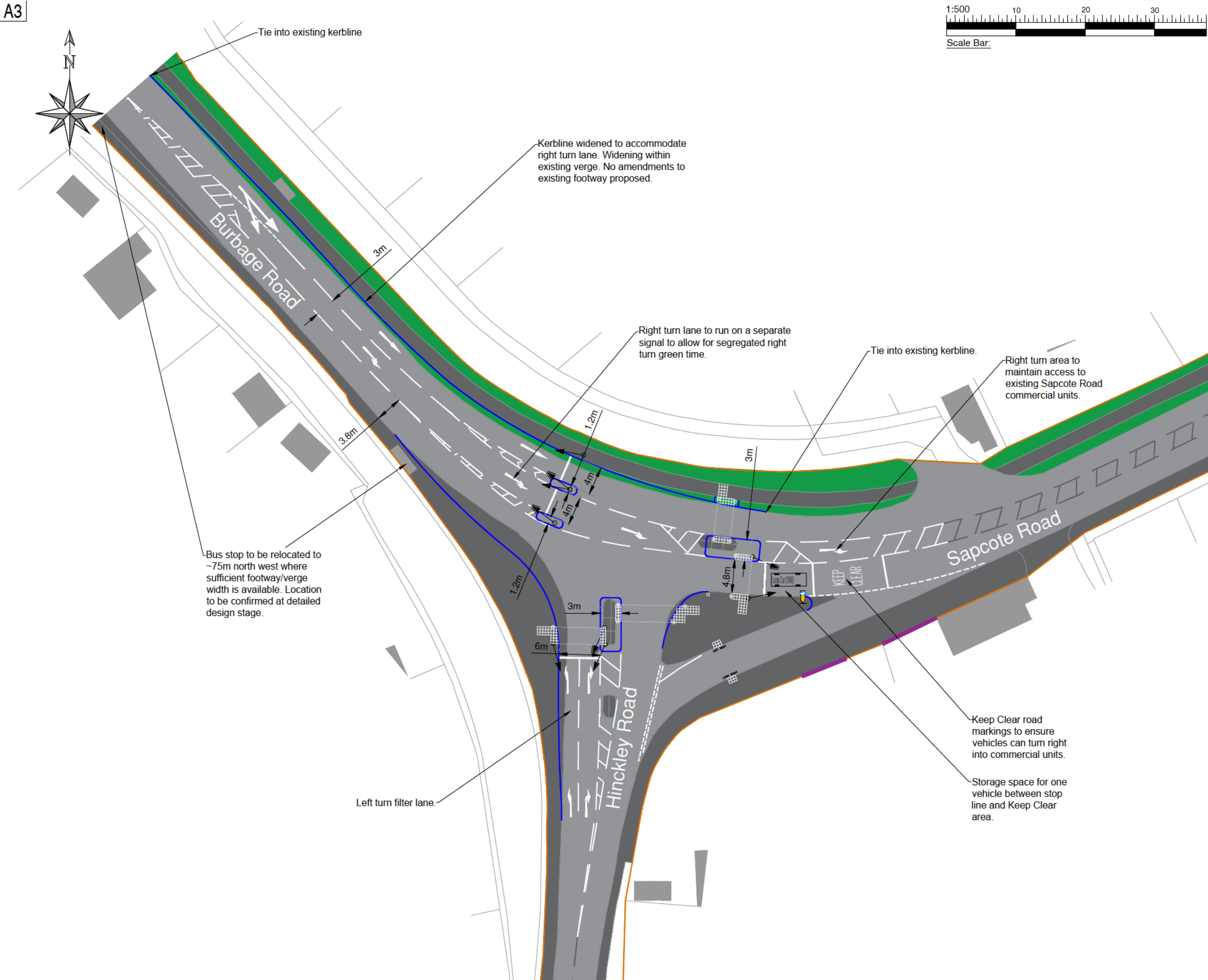
17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	305	324	0.941	318	54.9	618.543	F
B-A	240	256	0.938	251	43.7	624.250	F
C-AB	293	575	0.509	297	1.1	13.233	B
C-A	484			484			
AB	348			348			
AC	306			306			

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-C	255	360	0.709	353	30.4	438.851	F
B-A	201	285	0.706	278	24.3	445.433	F
C-AB	238	585	0.407	239	0.7	10.475	B
C-A	413			413			
AB	291			291			
AC	256			256			

Appendix OO: B578 Hinckley Road / B4669 Burbage Road / B4669 Sapcote Road Proposed Signalised Scheme



- Key:
- Assumed Highway Boundary
 - Kerbline Widening
 - Commercial Unit Dropped Kerb
 - Access
 - Primary Signal Head
 - Secondary Signal Head
 - Pedestrian Signal Pole

NOTE
Preliminary scheme only for comment & review. Based upon information provided / available at the time.

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.

A	05/05/22	Stage 1 RSA Input	JL	AM	
Rev	Date	Amendments	By	Chk	



Client	Redrow Homes		
Project	Burbage Fields Farm Burbage Phase 2		
Drawing Title	Burbage Rd / Hinckley Rd / Sapcote Rd Mitigation		
Status	For Approval		
Scale	Drawn	Checked	Date
A3@1:500	JWL	AM	11/04/22
Drawing No.	Rev.		
19409-22-XX-DR-D-5006	A		

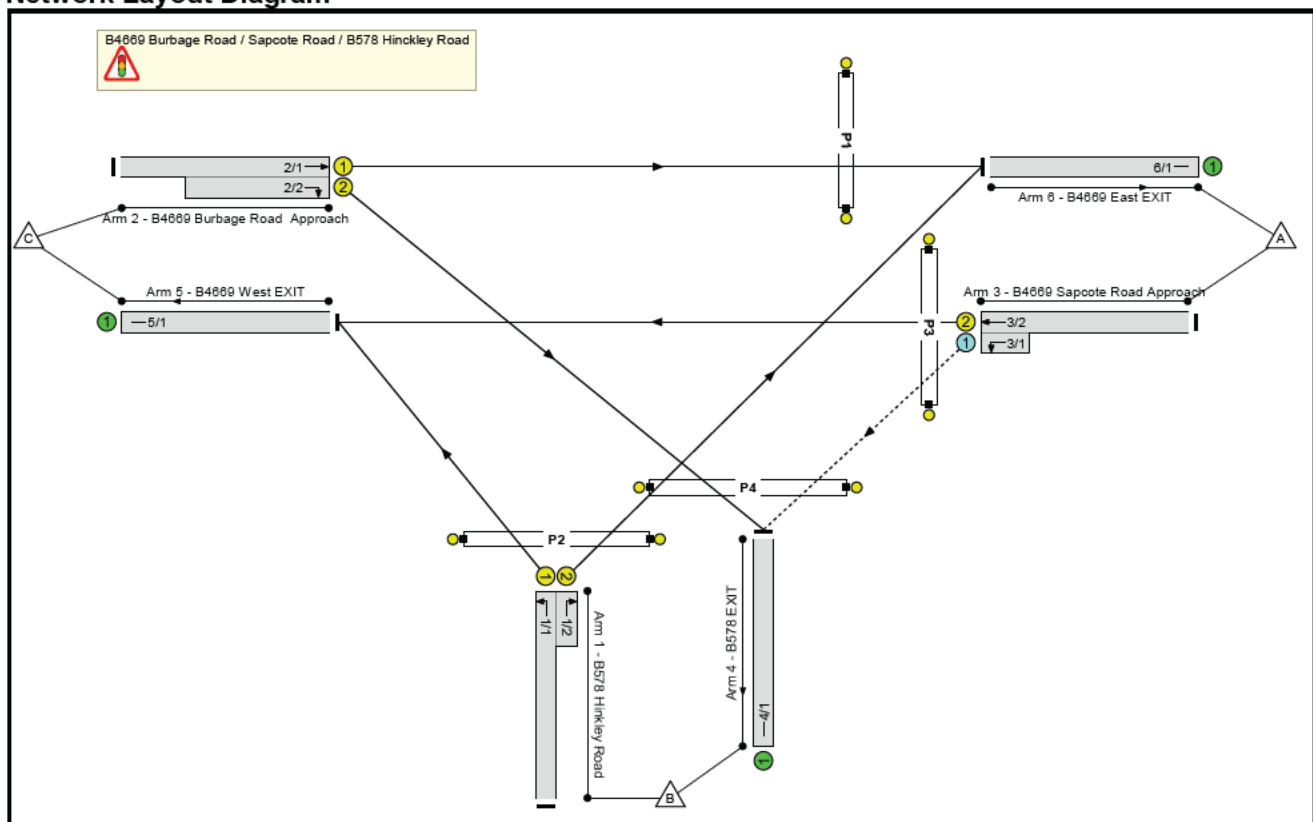
Appendix PP: B578 Hinckley Road / B4669 Burbage Road / B4669 Sapcote Road LinSig Report

Full Input Data And Results
Full Input Data And Results

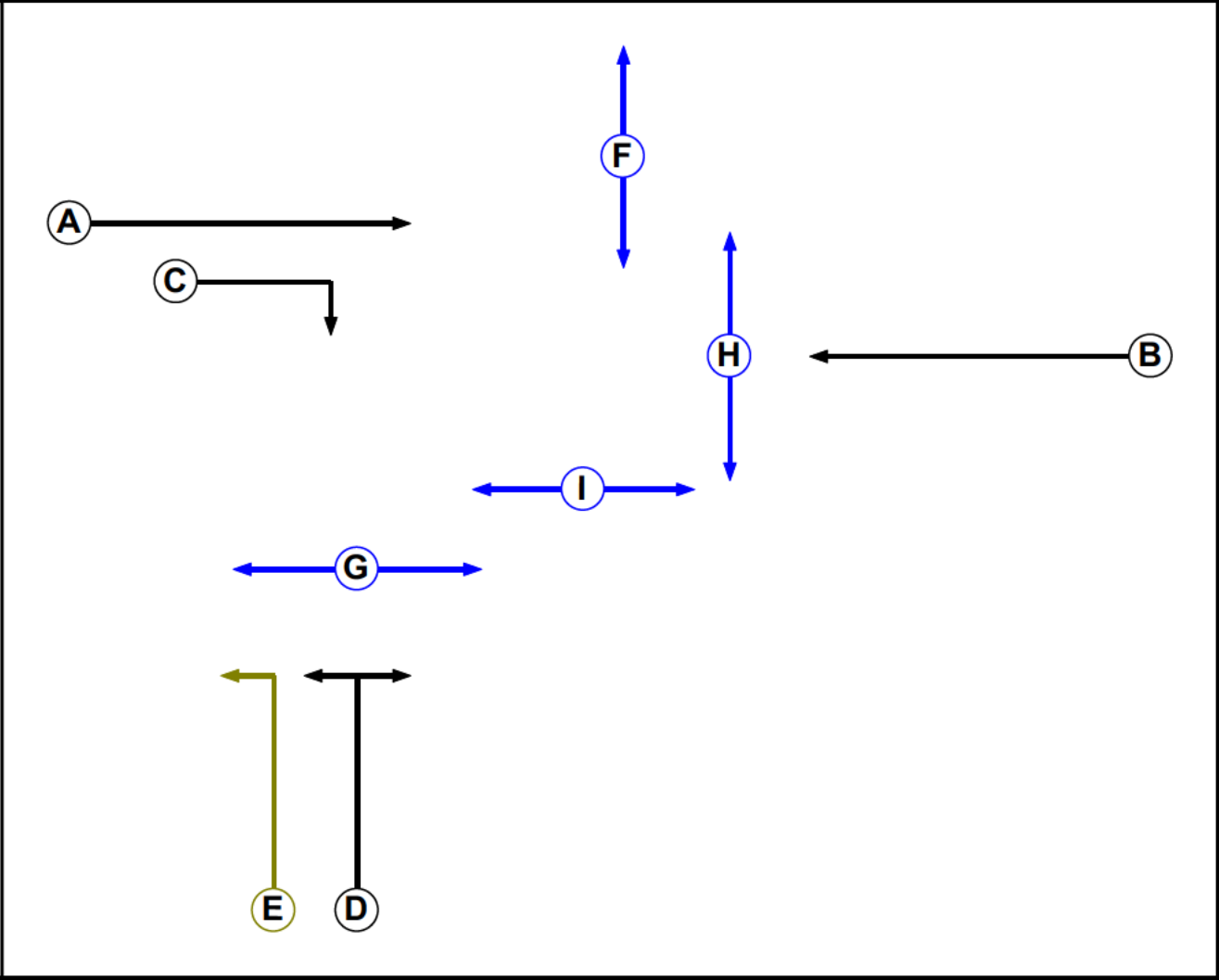
User and Project Details

Project:	Land South of Burbage
Title:	Signalisation of the B4669 / B578 Junction
Location:	B4669 / B578 Junction
Additional detail:	This model has been developed from Rodgers Leask drawing no. 19409-22-XX-DR-D-5006A
File name:	B4669 Burbage Road_Sapcote Road_B578 Hinckley Road_mitigation scheme.lsg3x
Author:	Rodgers Leask
Company:	Rodgers Leask
Address:	Derby

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	Traffic		7	6
D	Traffic		7	7
E	Filter	D	4	0
F	Pedestrian		6	6
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Pedestrian		7	7

Full Input Data And Results

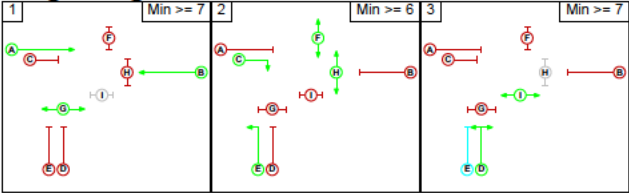
Phase Intergreens Matrix

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

Phases in Stage

Stage No.	Phases in Stage
1	A B G
2	C E F H
3	D I

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage		
	1	2	3
	1	7	7
	2	8	8
3	6	11	-

Full Input Data And Results

Give-Way Lane Input Data

Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road											
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)
3/1 (B4669 Sapcote Road Approach)	4/1 (Left)	715	0	2/2	0.22	To 4/1 (Right)	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road												
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 (B578 Hinkley Road)	U	D E	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Left	15.00
1/2 (B578 Hinkley Road)	U	D	2	3	4.0	Geom	-	3.20	0.00	Y	Arm 6 Right	12.00
2/1 (B4669 Burbage Road Approach)	U	A	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 6 Ahead	Inf
2/2 (B4669 Burbage Road Approach)	U	C	2	3	10.4	Geom	-	4.00	0.00	Y	Arm 4 Right	10.00
3/1 (B4669 Sapcote Road Approach)	O		2	3	3.5	Geom	-	4.00	0.00	Y	Arm 4 Left	10.00
3/2 (B4669 Sapcote Road Approach)	U	B	2	3	60.0	Geom	-	4.80	0.00	Y	Arm 5 Ahead	Inf
4/1 (B578 EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (B4669 West EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (B4669 East EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 AM'	08:00	09:00	01:00	
2: '2026 PM'	17:00	18:00	01:00	
3: '2026 + Dev AM'	08:00	09:00	01:00	
4: '2026 + Dev PM'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2026 AM' (FG1: '2026 AM', Plan 1: 'Control Plan')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	227	521	748
	B	263	0	184	447
	C	383	486	0	869
	Tot.	646	713	705	2064

Traffic Lane Flows

Lane	Scenario 1: 2026 AM
Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	
1/1 (with short)	447(In) 184(Out)
1/2 (short)	263
2/1 (with short)	869(In) 383(Out)
2/2 (short)	486
3/1 (short)	227
3/2 (with short)	748(In) 521(Out)
4/1	713
5/1	705
6/1	646

Full Input Data And Results

Lane Saturation Flows

Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road								
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 (B578 Hinkley Road)	3.20	0.00	Y	Arm 5 Left	15.00	100.0 %	1759	1759
1/2 (B578 Hinkley Road)	3.20	0.00	Y	Arm 6 Right	12.00	100.0 %	1720	1720
2/1 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
2/2 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 4 Right	10.00	100.0 %	1752	1752
3/1 (B4669 Sapcote Road Approach)	4.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1752	1752
3/2 (B4669 Sapcote Road Approach)	4.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2095	2095
4/1 (B578 EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (B4669 West EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B4669 East EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2026 PM' (FG2: '2026 PM', Plan 1: 'Control Plan')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	353	344	697
	B	269	0	325	594
	C	558	299	0	857
	Tot.	827	652	669	2148

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2026 PM
Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	
1/1 (with short)	594(In) 325(Out)
1/2 (short)	269
2/1 (with short)	857(In) 558(Out)
2/2 (short)	299
3/1 (short)	353
3/2 (with short)	697(In) 344(Out)
4/1	652
5/1	669
6/1	827

Lane Saturation Flows

Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road								
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 (B578 Hinkley Road)	3.20	0.00	Y	Arm 5 Left	15.00	100.0 %	1759	1759
1/2 (B578 Hinkley Road)	3.20	0.00	Y	Arm 6 Right	12.00	100.0 %	1720	1720
2/1 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
2/2 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 4 Right	10.00	100.0 %	1752	1752
3/1 (B4669 Sapcote Road Approach)	4.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1752	1752
3/2 (B4669 Sapcote Road Approach)	4.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2095	2095
4/1 (B578 EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (B4669 West EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B4669 East EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2026 + Dev AM' (FG3: '2026 + Dev AM', Plan 1: 'Control Plan')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	234	521	755
	B	270	0	228	498
	C	383	516	0	899
	Tot.	653	750	749	2152

Traffic Lane Flows

Lane	Scenario 3: 2026 + Dev AM
Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	
1/1 (with short)	498(In) 228(Out)
1/2 (short)	270
2/1 (with short)	899(In) 383(Out)
2/2 (short)	516
3/1 (short)	234
3/2 (with short)	755(In) 521(Out)
4/1	750
5/1	749
6/1	653

Full Input Data And Results

Lane Saturation Flows

Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road								
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 (B578 Hinkley Road)	3.20	0.00	Y	Arm 5 Left	15.00	100.0 %	1759	1759
1/2 (B578 Hinkley Road)	3.20	0.00	Y	Arm 6 Right	12.00	100.0 %	1720	1720
2/1 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
2/2 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 4 Right	10.00	100.0 %	1752	1752
3/1 (B4669 Sapcote Road Approach)	4.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1752	1752
3/2 (B4669 Sapcote Road Approach)	4.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2095	2095
4/1 (B578 EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (B4669 West EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B4669 East EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2026 + Dev PM' (FG4: '2026 + Dev PM', Plan 1: 'Control Plan')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	388	344	732
	B	275	0	339	614
	C	558	312	0	870
	Tot.	833	700	683	2216

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2026 + Dev PM
Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	
1/1 (with short)	614(In) 339(Out)
1/2 (short)	275
2/1 (with short)	870(In) 558(Out)
2/2 (short)	312
3/1 (short)	388
3/2 (with short)	732(In) 344(Out)
4/1	700
5/1	683
6/1	833

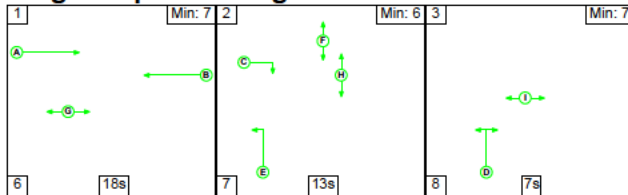
Lane Saturation Flows

Junction: B4669 Burbage Road / Sapcote Road / B578 Hinckley Road								
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 (B578 Hinkley Road)	3.20	0.00	Y	Arm 5 Left	15.00	100.0 %	1759	1759
1/2 (B578 Hinkley Road)	3.20	0.00	Y	Arm 6 Right	12.00	100.0 %	1720	1720
2/1 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
2/2 (B4669 Burbage Road Approach)	4.00	0.00	Y	Arm 4 Right	10.00	100.0 %	1752	1752
3/1 (B4669 Sapcote Road Approach)	4.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1752	1752
3/2 (B4669 Sapcote Road Approach)	4.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2095	2095
4/1 (B578 EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (B4669 West EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B4669 East EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2026 AM' (FG1: '2026 AM', Plan 1: 'Control Plan')

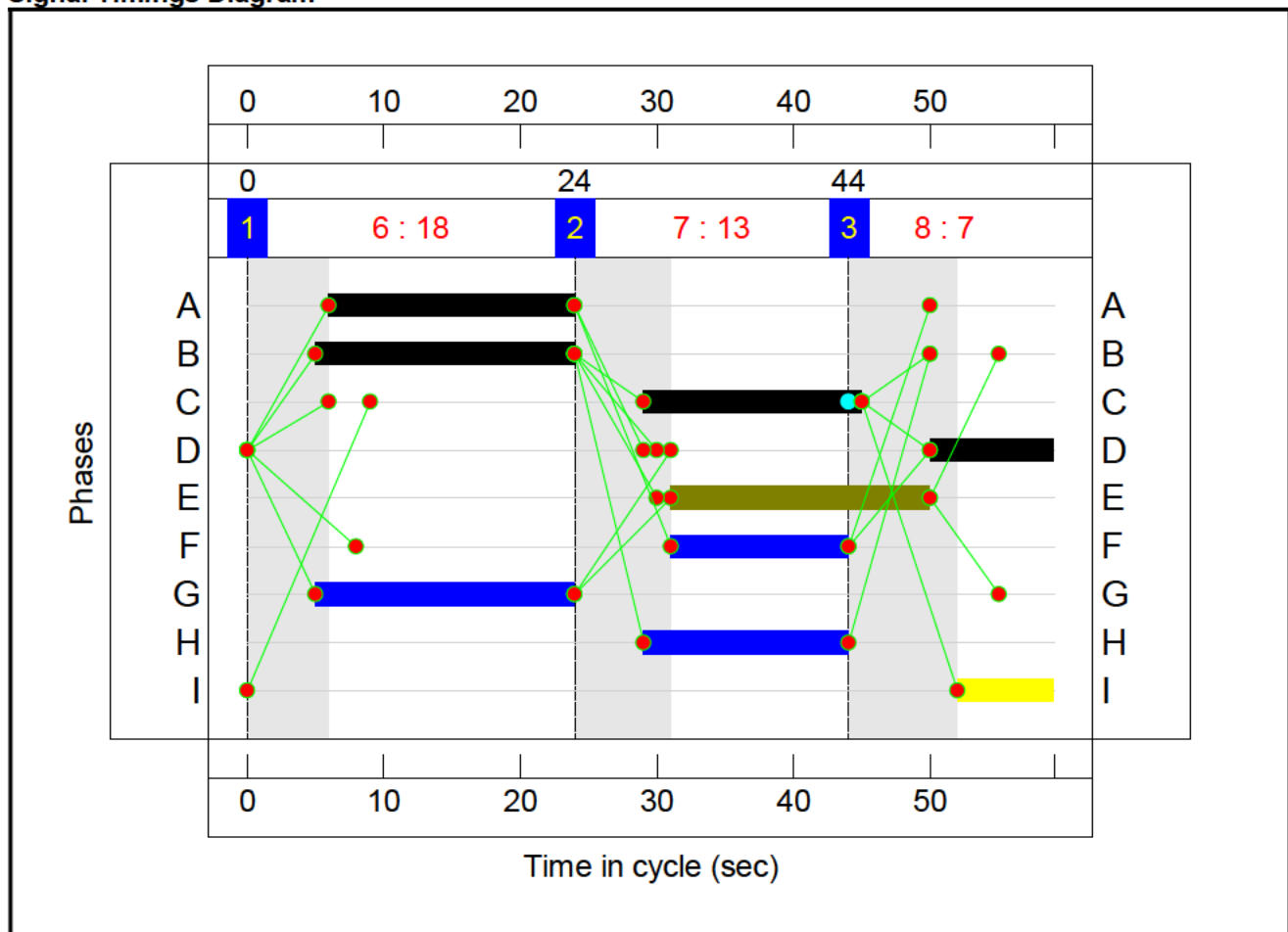
Stage Sequence Diagram



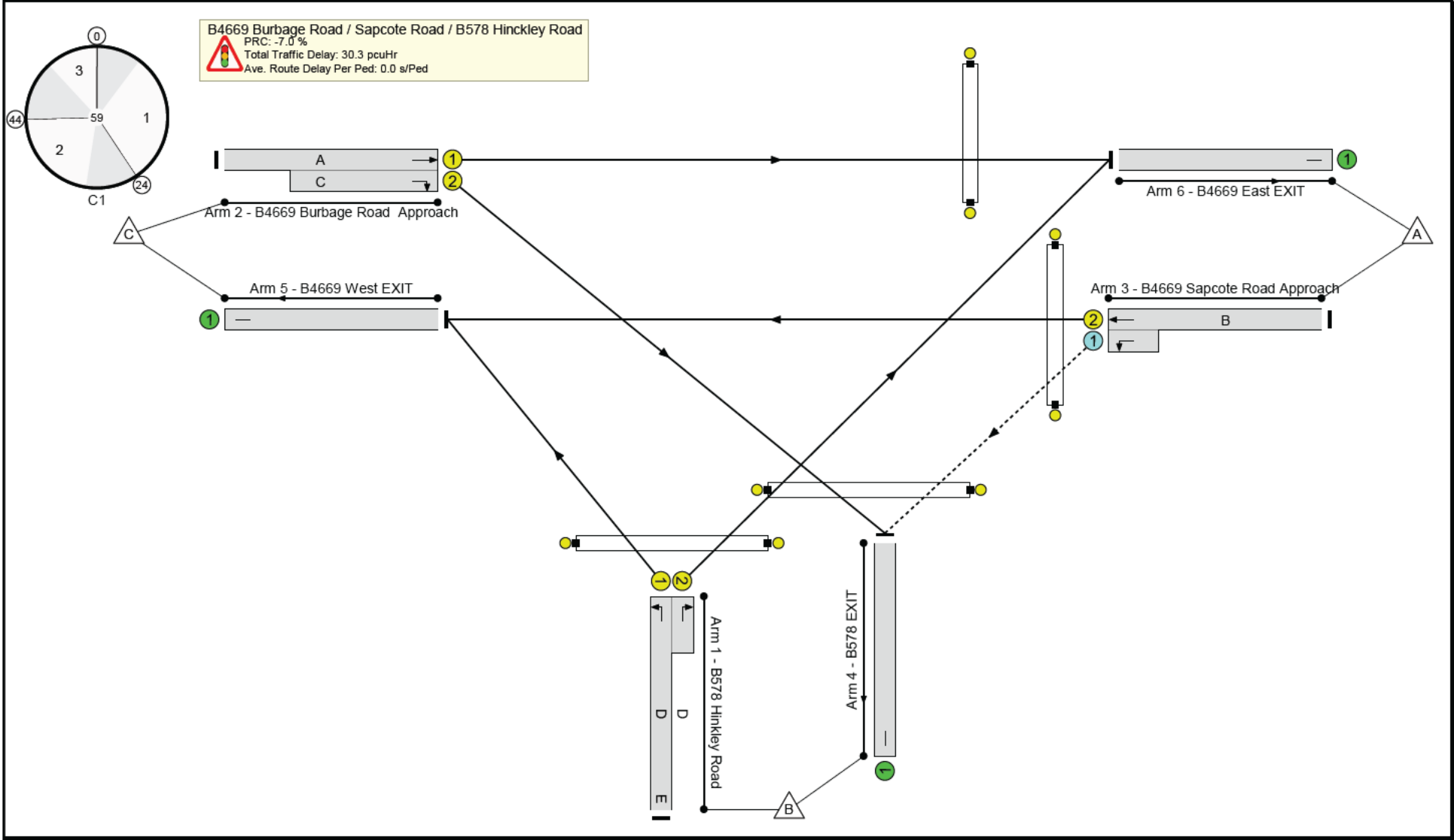
Stage Timings

Stage	1	2	3
Duration	18	13	7
Change Point	0	24	44

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

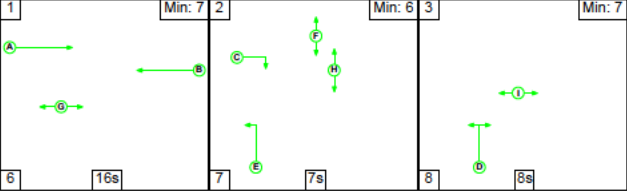
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Signalisation of the B4669 / B578 Junction	-	-	N/A	-	-		-	-	-	-	-	-	96.3%
B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	-	-	N/A	-	-		-	-	-	-	-	-	96.3%
1/1+1/2	B578 Hinckley Road Left Right	U	N/A	N/A	D	E	1	28:9	19	447	1759:1720	195+279	94.4 : 94.4%
2/1+2/2	B4669 Burbage Road Approach Right Ahead	U	N/A	N/A	A C		1	18:16	-	869	2015:1752	398+505	96.3 : 96.3%
3/2+3/1	B4669 Sapcote Road Approach Left Ahead	U+O	N/A	N/A	B -		1	19	-	748	2095:1752	554+242	94.0 : 94.0%
4/1	B578 EXIT	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
5/1	B4669 West EXIT	U	N/A	N/A	-		-	-	-	705	Inf	Inf	0.0%
6/1	B4669 East EXIT	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	13	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	19	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	15	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	7	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results
Scenario 2: '2026 PM' (FG2: '2026 PM', Plan 1: 'Control Plan')

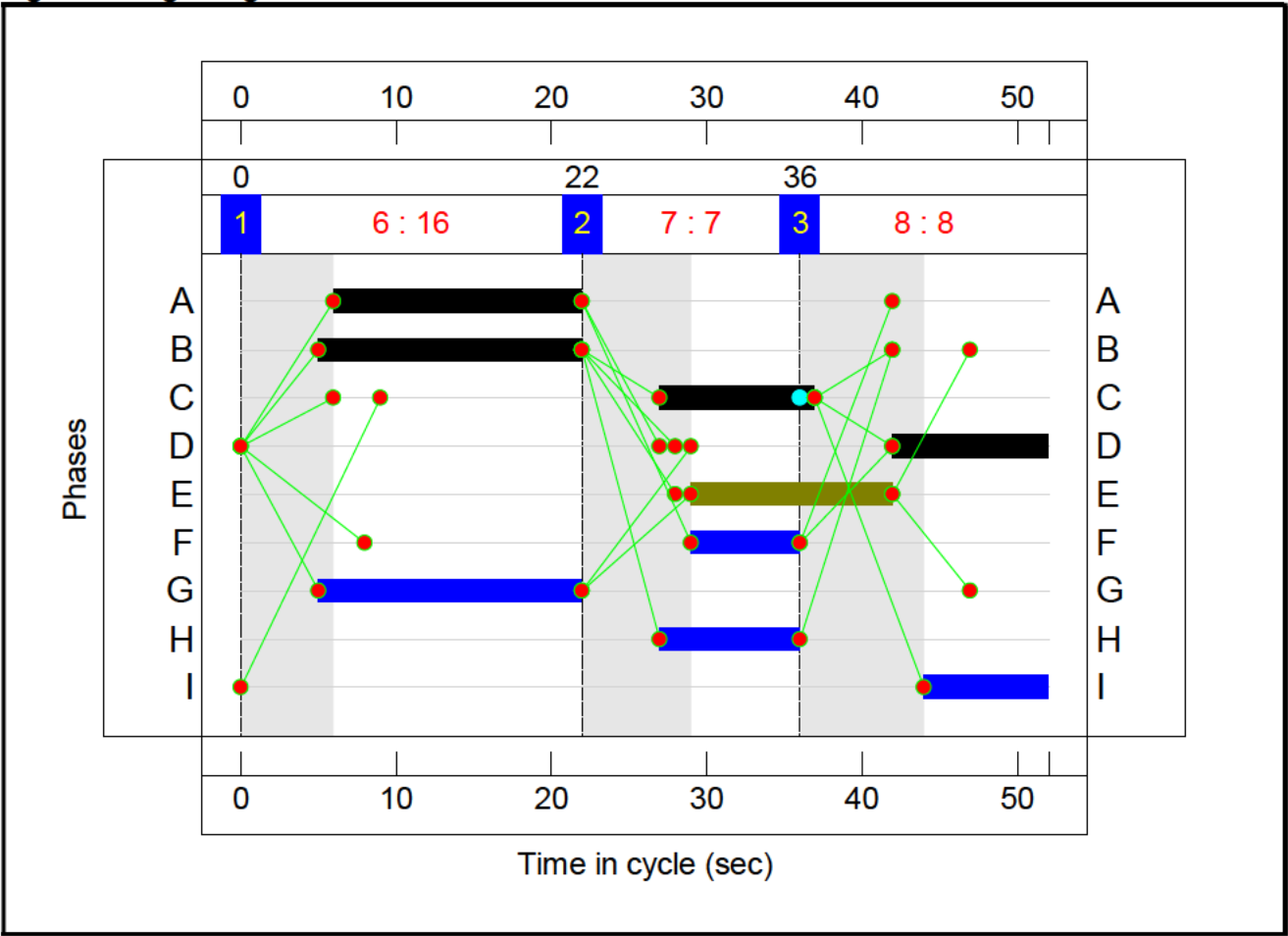
Stage Sequence Diagram



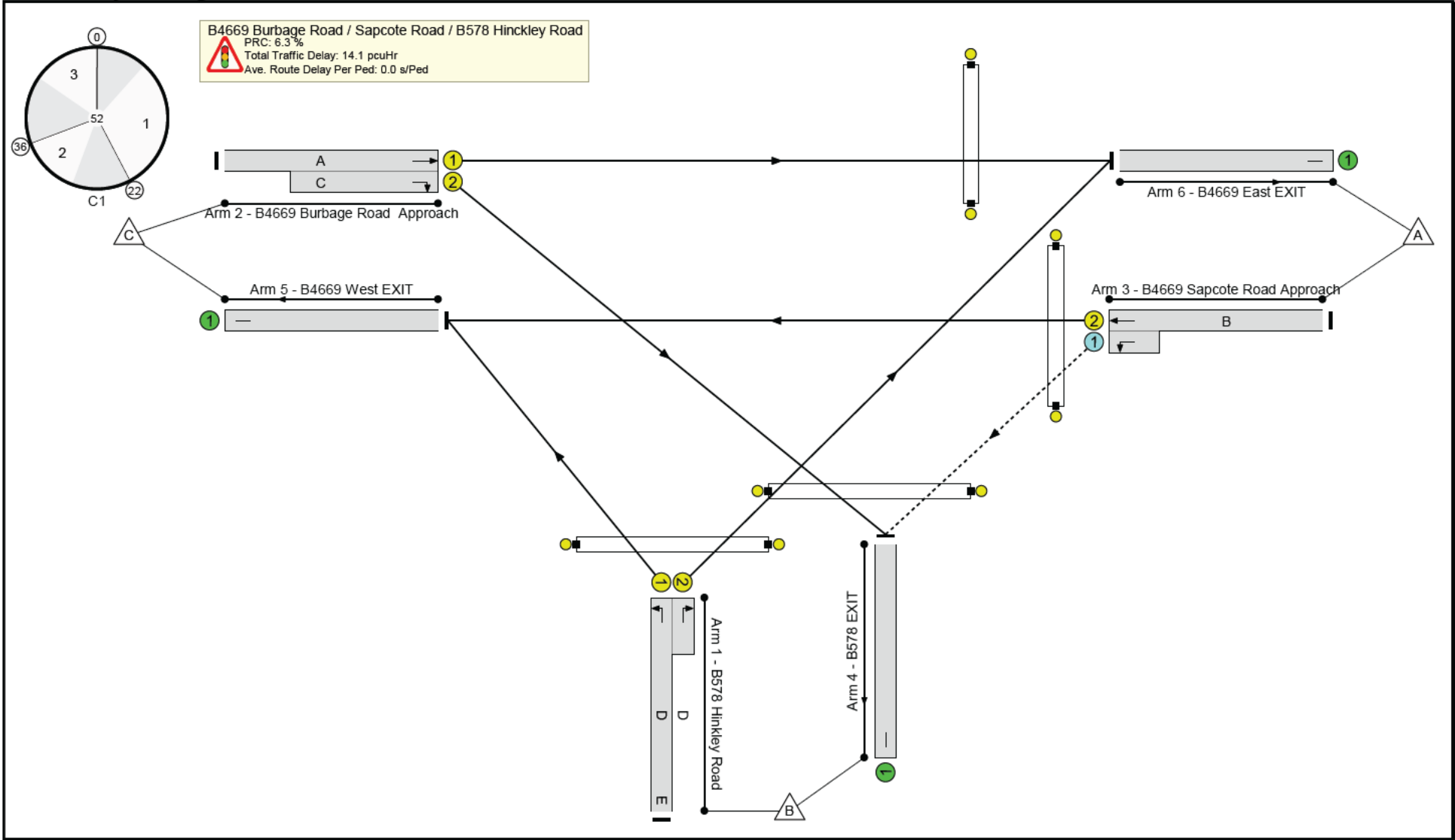
Stage Timings

Stage	1	2	3
Duration	16	7	8
Change Point	0	22	36

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

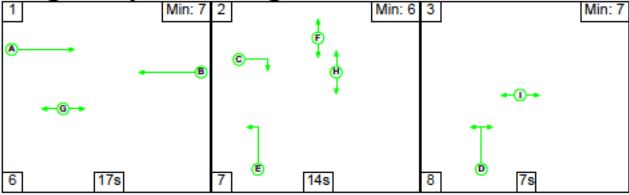
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Signalisation of the B4669 / B578 Junction	-	-	N/A	-	-		-	-	-	-	-	-	84.7%
B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	-	-	N/A	-	-		-	-	-	-	-	-	84.7%
1/1+1/2	B578 Hinckley Road Left Right	U	N/A	N/A	D	E	1	23:10	13	594	1759:1720	390+322	83.4 : 83.4%
2/1+2/2	B4669 Burbage Road Approach Right Ahead	U	N/A	N/A	A C		1	16:10	-	857	2015:1752	659+354	84.7 : 84.6%
3/2+3/1	B4669 Sapcote Road Approach Left Ahead	U+O	N/A	N/A	B -		1	17	-	697	2095:1752	472+484	72.9 : 72.9%
4/1	B578 EXIT	U	N/A	N/A	-		-	-	-	652	Inf	Inf	0.0%
5/1	B4669 West EXIT	U	N/A	N/A	-		-	-	-	669	Inf	Inf	0.0%
6/1	B4669 East EXIT	U	N/A	N/A	-		-	-	-	827	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	17	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	9	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	8	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results
Scenario 3: '2026 + Dev AM' (FG3: '2026 + Dev AM', Plan 1: 'Control Plan')

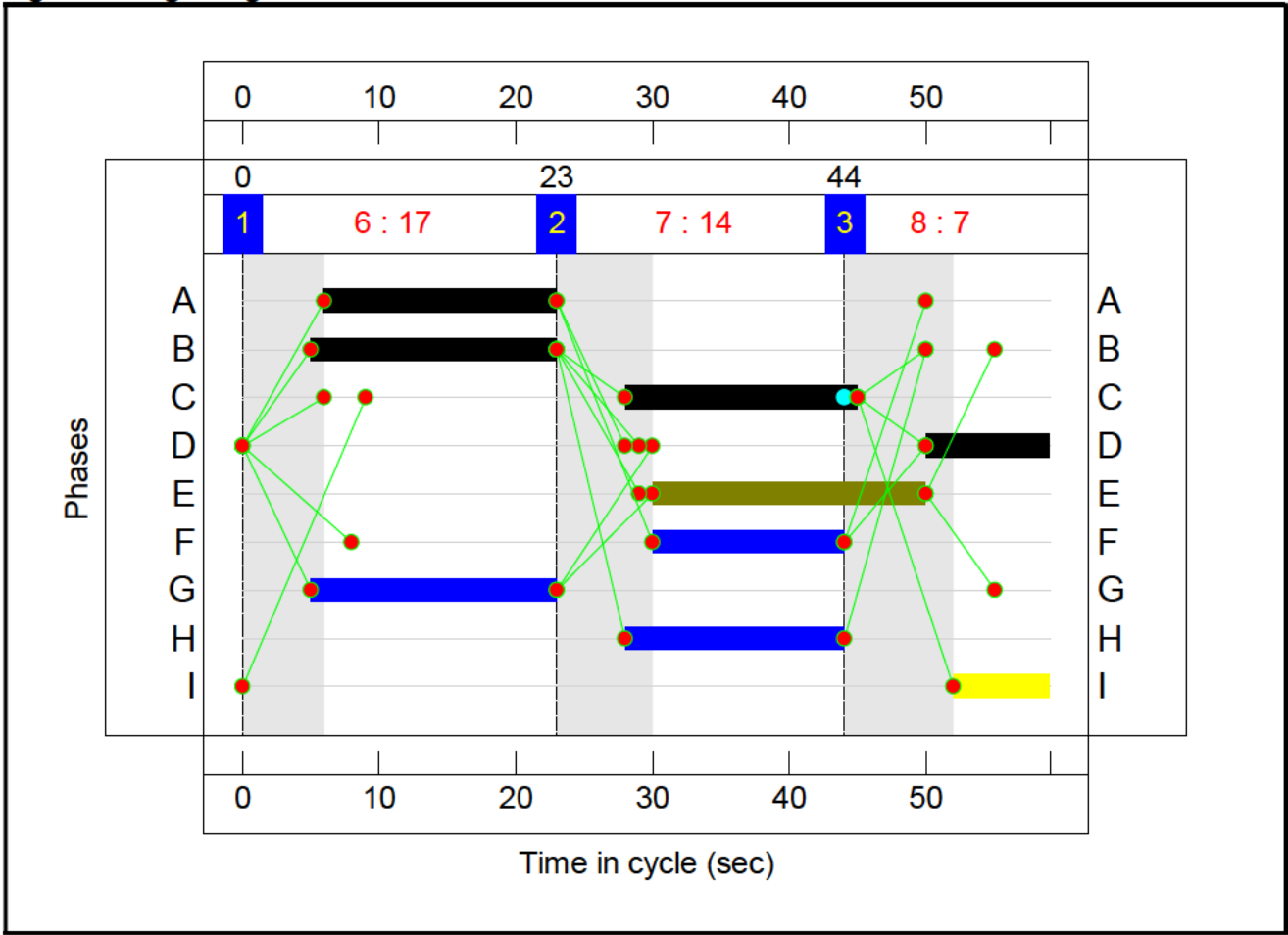
Stage Sequence Diagram



Stage Timings

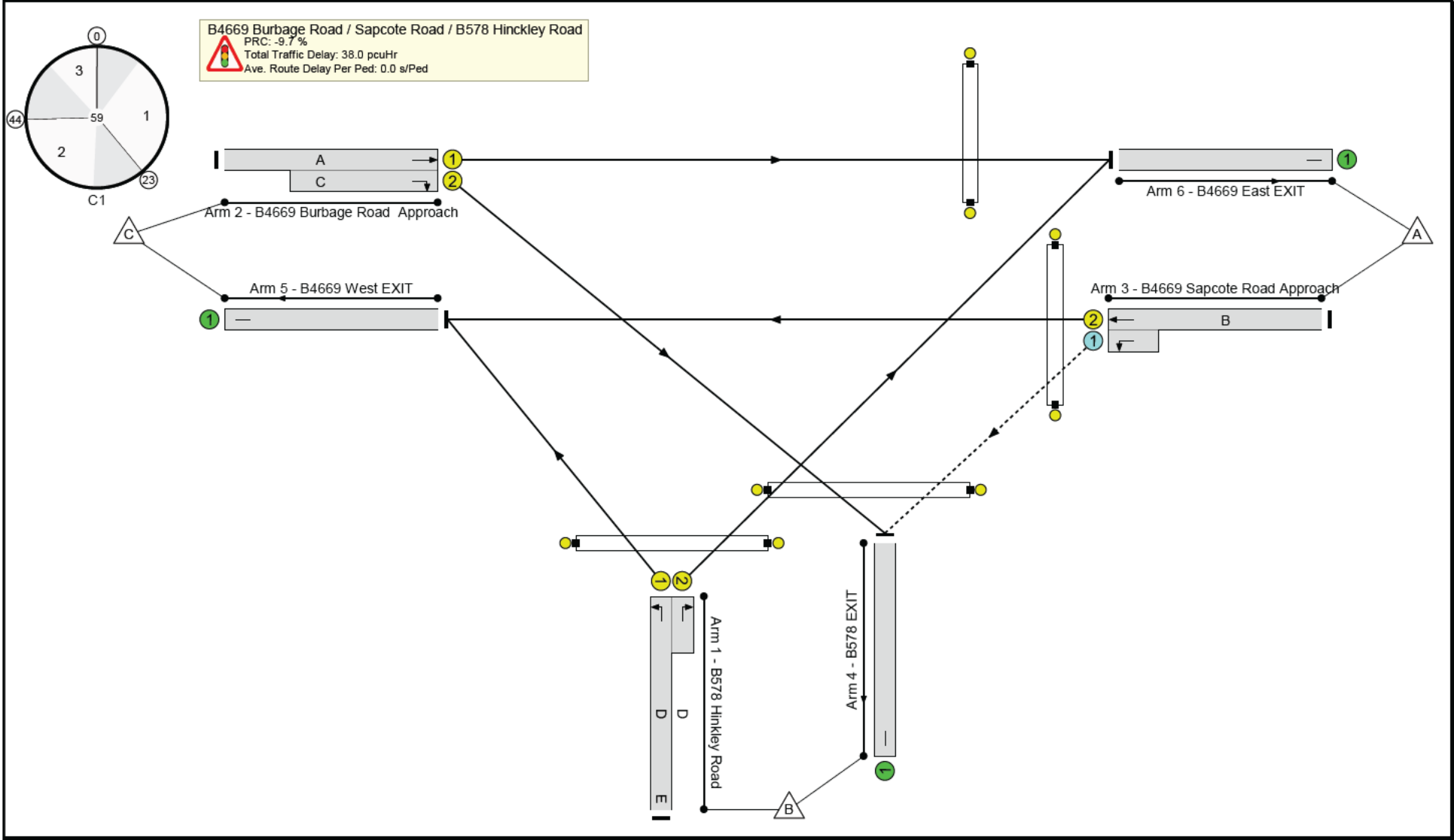
Stage	1	2	3
Duration	17	14	7
Change Point	0	23	44

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

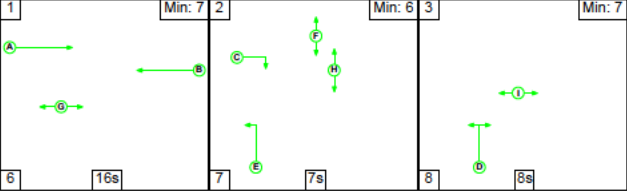
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Signalisation of the B4669 / B578 Junction	-	-	N/A	-	-		-	-	-	-	-	-	98.7%
B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	-	-	N/A	-	-		-	-	-	-	-	-	98.7%
1/1+1/2	B578 Hinckley Road Left Right	U	N/A	N/A	D	E	1	29:9	20	498	1759:1720	233+276	97.8 : 97.8%
2/1+2/2	B4669 Burbage Road Approach Right Ahead	U	N/A	N/A	A C		1	17	-	899	2015:1752	409+535	93.7 : 96.5%
3/2+3/1	B4669 Sapcote Road Approach Left Ahead	U+O	N/A	N/A	B -		1	18	-	755	2095:1752	528+237	98.7 : 98.7%
4/1	B578 EXIT	U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
5/1	B4669 West EXIT	U	N/A	N/A	-		-	-	-	749	Inf	Inf	0.0%
6/1	B4669 East EXIT	U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	18	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	16	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	7	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results
Scenario 4: '2026 + Dev PM' (FG4: '2026 + Dev PM', Plan 1: 'Control Plan')

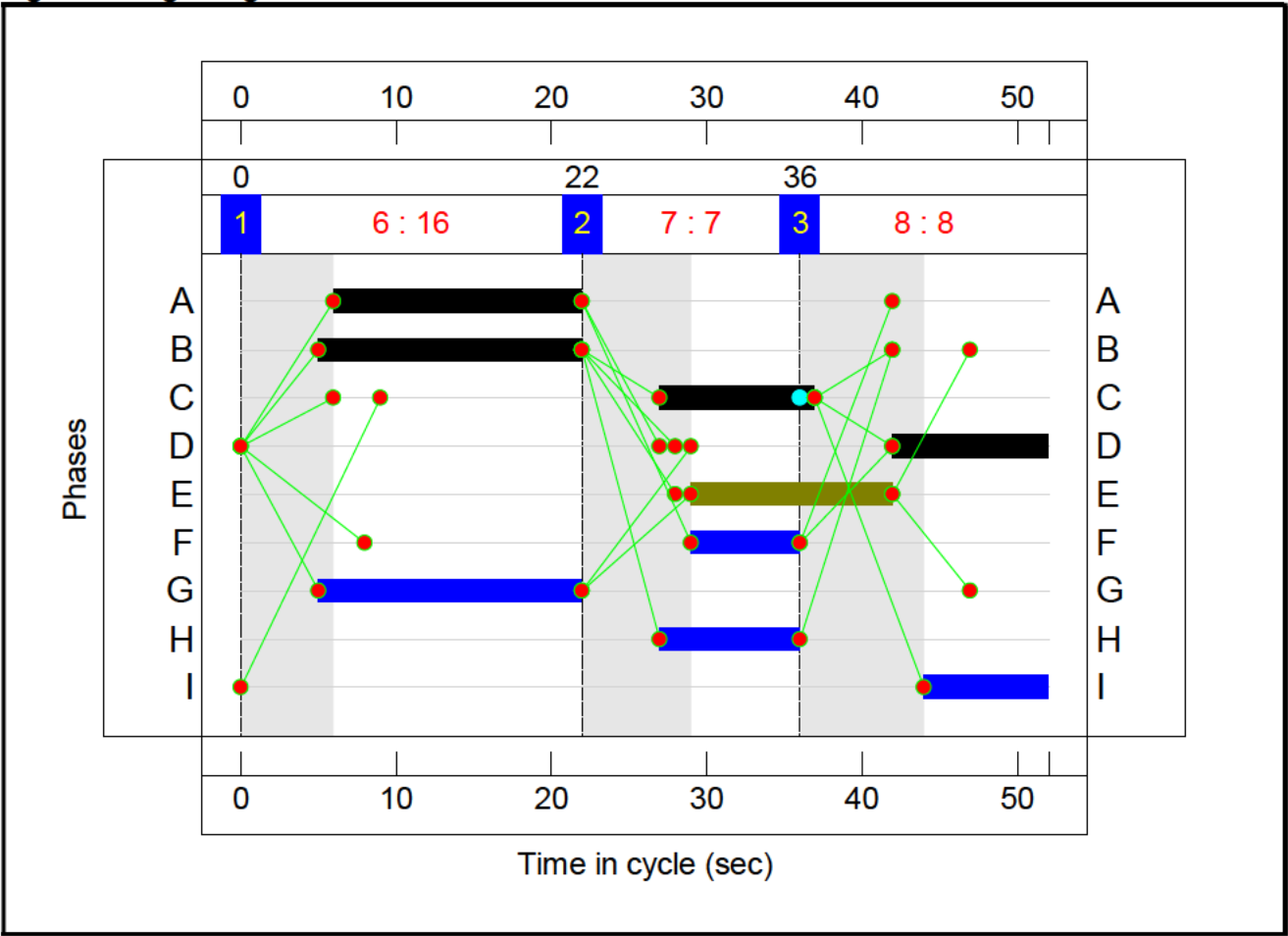
Stage Sequence Diagram



Stage Timings

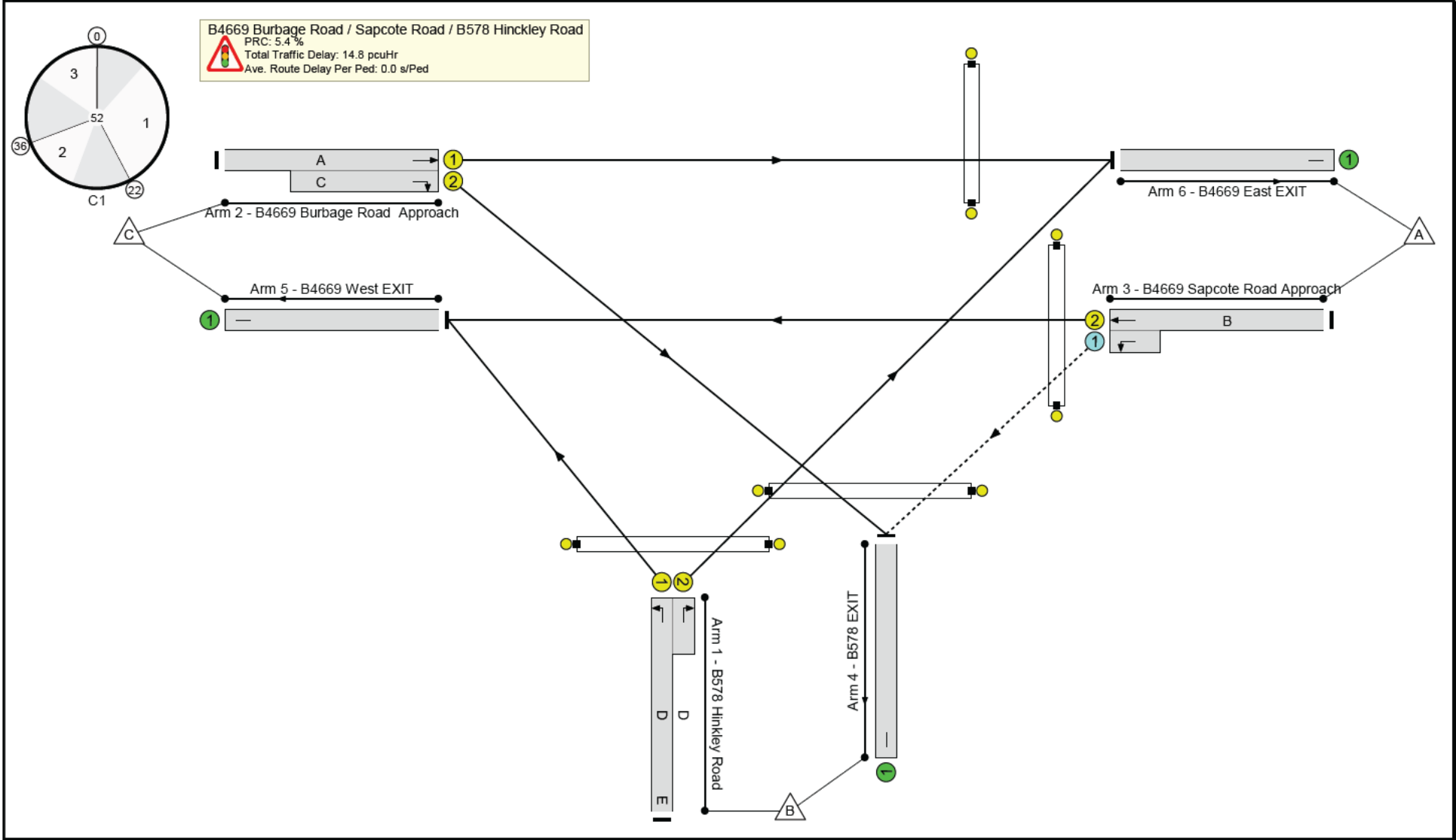
Stage	1	2	3
Duration	16	7	8
Change Point	0	22	36

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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: Signalisation of the B4669 / B578 Junction	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
1/1+1/2	B578 Hinckley Road Left Right	U	N/A	N/A	D	E	1	23:10	13	614	1759:1720	397+322	85.4 : 85.4%
2/1+2/2	B4669 Burbage Road Approach Right Ahead	U	N/A	N/A	A C		1	16:10	-	870	2015:1752	659+371	84.7 : 84.2%
3/2+3/1	B4669 Sapcote Road Approach Left Ahead	U+O	N/A	N/A	B -		1	17	-	732	2095:1752	460+519	74.8 : 74.8%
4/1	B578 EXIT	U	N/A	N/A	-		-	-	-	700	Inf	Inf	0.0%
5/1	B4669 West EXIT	U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
6/1	B4669 East EXIT	U	N/A	N/A	-		-	-	-	833	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	17	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	9	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	8	-	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: Signalisation of the B4669 / B578 Junction	-	-	82	306	0	7.9	6.9	0.0	14.8	-	-	-	-
B4669 Burbage Road / Sapcote Road / B578 Hinckley Road	-	-	82	306	0	7.9	6.9	0.0	14.8	-	-	-	-
1/1+1/2	614	614	-	-	-	2.4	2.8	-	5.1	30.1	3.7	2.8	6.4
2/1+2/2	870	870	-	-	-	4.2	2.6	-	6.9	28.4	7.4	2.6	10.1
3/2+3/1	732	732	82	306	0	1.3	1.5	-	2.8	13.6	4.3	1.5	5.8
4/1	700	700	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	833	833	-	-	-	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 (%):		5.4	Total Delay for Signalled Lanes (pcuHr):		14.77	Cycle Time (s):		52		
			PRC Over All Lanes (%):		5.4	Total Delay Over All Lanes(pcuHr):		14.77					

Appendix QQ: A5 / B578 Lutterworth Road Junctions 10 Report

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
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Filename: A5_Lutterworth Road_Existing Layout.j10
Path: P:\2021\P21-390\T&T\Capacity Assessments\Junctions 10
Report generation date: 27/10/2023 14:07:34

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

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
Stream B-C	D1	0.6	10.59	0.38	B	D2	0.2	7.26	0.17	A
Stream B-A		0.1	25.42	0.10	D		0.0	30.26	0.04	D
Stream C-AB		0.3	9.64	0.21	A		0.8	12.65	0.44	B
	2026									
Stream B-C	D3	1.0	13.25	0.50	B	D4	0.3	8.76	0.24	A
Stream B-A		0.1	29.05	0.12	D		0.1	64.12	0.07	F
Stream C-AB		0.3	9.48	0.21	A		0.9	15.09	0.48	C
	2026 + Dev									
Stream B-C	D5	1.2	14.55	0.55	B	D6	0.3	9.03	0.26	A
Stream B-A		0.2	30.31	0.14	D		0.1	94.77	0.10	F
Stream C-AB		0.3	9.62	0.22	A		1.3	17.74	0.56	C

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

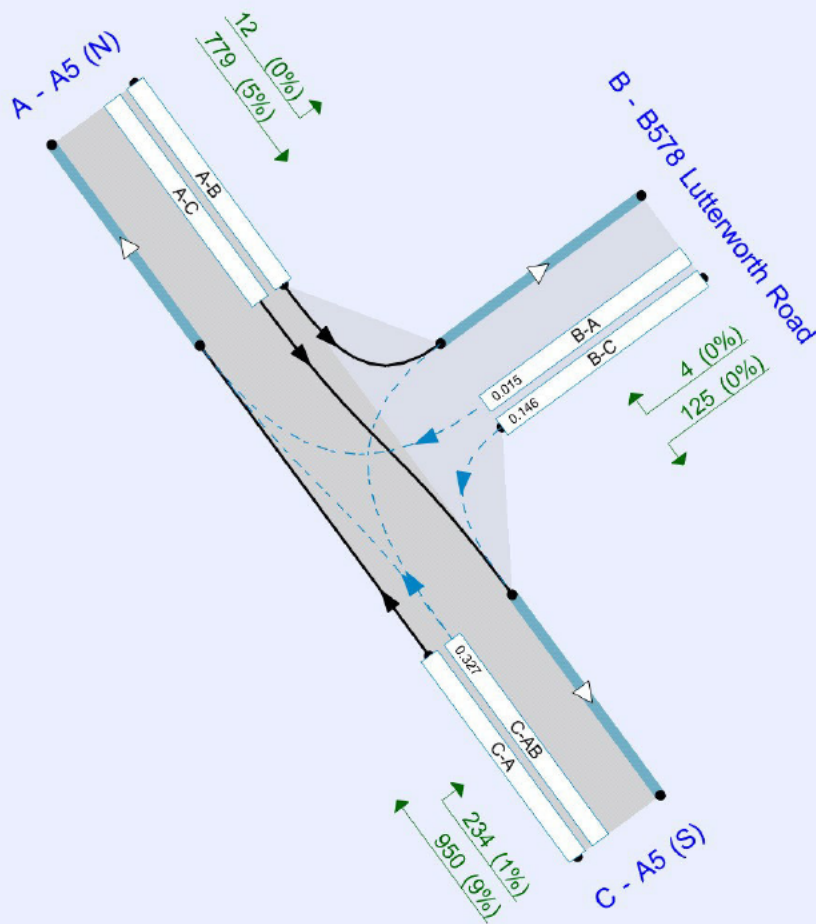
File summary

File Description

Title	A5 Watling Street / B578 Lutterworth Road Junction
Location	Burbage
Site number	
Date	27/10/2023
Version	
Status	Existing
Identifier	
Client	Redrow Homes
Jobnumber	P21-390
Enumerator	
Description	

Units

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



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

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

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

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		1.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.75	A

Arms

Arms

Arm	Name	Description	Arm type
A	A5 (N)		Major
B	B578 Lutterworth Road		Minor
C	A5 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A5 (S)	6.00		✓	3.00	150.0	✓	11.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B578 Lutterworth Road	One lane plus flare	10.00	9.20	5.50	4.80	4.60	✓	3.00	135	152

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for AB	Slope for AC	Slope for C-A	Slope for C-B
B-A	544	0.099	0.250	0.158	0.358
B-C	845	0.130	0.328	-	-
C-B	718	0.278	0.278	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		✓	709	100.000
B - B578 Lutterworth Road		✓	201	100.000
C - A5 (S)		✓	807	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	6	703
	B - B578 Lutterworth Road	14	0	187
	C - A5 (S)	715	92	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.38	10.59	0.6	B
B-A	0.10	25.42	0.1	D
C-AB	0.21	9.64	0.3	A
C-A				
AB				
AC				

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-C	141	642	0.219	140	0.3	7.157	A
B-A	11	280	0.038	10	0.0	13.337	B
C-AB	69	550	0.126	69	0.1	7.475	A
C-A	538			538			
AB	5			5			
AC	529			529			

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-C	168	602	0.279	168	0.4	8.276	A
B-A	13	229	0.055	13	0.1	16.654	C
C-AB	83	518	0.160	83	0.2	8.259	A
C-A	643			643			
AB	5			5			
AC	632			632			

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-C	206	546	0.377	205	0.6	10.528	B
B-A	15	157	0.098	15	0.1	25.333	D
C-AB	101	475	0.213	101	0.3	9.622	A
C-A	787			787			
AB	7			7			
AC	774			774			

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-C	206	546	0.377	206	0.6	10.585	B
B-A	15	157	0.098	15	0.1	25.424	D
C-AB	101	475	0.213	101	0.3	9.637	A
C-A	787			787			
AB	7			7			
AC	774			774			

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-C	168	602	0.279	169	0.4	8.329	A
B-A	13	228	0.055	13	0.1	16.708	C
C-AB	83	518	0.160	83	0.2	8.279	A
C-A	643			643			
AB	5			5			
AC	632			632			

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-C	141	641	0.220	141	0.3	7.206	A
B-A	11	280	0.038	11	0.0	13.370	B
C-AB	69	550	0.126	69	0.1	7.502	A
C-A	538			538			
AB	5			5			
AC	529			529			

2021 , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		1.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.79	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		✓	653	100.000
B - B578 Lutterworth Road		✓	97	100.000
C - A5 (S)		✓	1007	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	12	641
	B - B578 Lutterworth Road	4	0	93
	C - A5 (S)	808	199	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.17	7.26	0.2	A
B-A	0.04	30.26	0.0	D
C-AB	0.44	12.65	0.8	B
C-A				
AB				
AC				

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-C	70	679	0.103	70	0.1	5.901	A
B-A	3	256	0.012	3	0.0	14.218	B
C-AB	150	569	0.263	148	0.4	8.529	A
C-A	608			608			
AB	9			9			
AC	483			483			

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-C	84	646	0.129	83	0.1	6.401	A
B-A	4	200	0.018	4	0.0	18.291	C
C-AB	179	542	0.330	178	0.5	9.897	A
C-A	726			726			
AB	11			11			
AC	576			576			

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-C	102	598	0.171	102	0.2	7.255	A
B-A	4	124	0.036	4	0.0	30.126	D
C-AB	219	503	0.435	218	0.8	12.565	B
C-A	890			890			
AB	13			13			
AC	706			706			

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-C	102	598	0.171	102	0.2	7.263	A
B-A	4	123	0.036	4	0.0	30.260	D
C-AB	219	504	0.435	219	0.8	12.654	B
C-A	890			890			
AB	13			13			
AC	706			706			

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-C	84	645	0.130	84	0.1	6.413	A
B-A	4	200	0.018	4	0.0	18.361	C
C-AB	179	542	0.330	180	0.5	9.983	A
C-A	726			726			
AB	11			11			
AC	576			576			

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-C	70	679	0.103	70	0.1	5.912	A
B-A	3	255	0.012	3	0.0	14.262	B
C-AB	150	569	0.263	150	0.4	8.609	A
C-A	608			608			
AB	9			9			
AC	483			483			

2026, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		2.34	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.34	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		✓	697	100.000
B - B578 Lutterworth Road		✓	267	100.000
C - A5 (S)		✓	893	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	6	691
	B - B578 Lutterworth Road	16	0	251
	C - A5 (S)	803	90	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.50	13.25	1.0	B
B-A	0.12	29.05	0.1	D
C-AB	0.21	9.48	0.3	A
C-A				
AB				
AC				

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-C	189	645	0.293	187	0.4	7.845	A
B-A	12	271	0.044	12	0.0	13.887	B
C-AB	68	552	0.123	67	0.1	7.414	A
C-A	605			605			
AB	5			5			
AC	520			520			

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-C	226	605	0.373	225	0.6	9.445	A
B-A	14	217	0.066	14	0.1	17.739	C
C-AB	81	521	0.155	81	0.2	8.164	A
C-A	722			722			
AB	5			5			
AC	621			621			

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-C	276	548	0.504	275	1.0	13.089	B
B-A	18	142	0.124	17	0.1	28.886	D
C-AB	99	479	0.207	99	0.3	9.465	A
C-A	884			884			
AB	7			7			
AC	761			761			

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-C	276	548	0.504	276	1.0	13.250	B
B-A	18	141	0.125	18	0.1	29.050	D
C-AB	99	479	0.207	99	0.3	9.480	A
C-A	884			884			
AB	7			7			
AC	761			761			

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-C	226	605	0.373	227	0.6	9.568	A
B-A	14	217	0.066	15	0.1	17.819	C
C-AB	81	521	0.155	81	0.2	8.183	A
C-A	722			722			
AB	5			5			
AC	621			621			

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-C	189	644	0.293	190	0.4	7.932	A
B-A	12	271	0.045	12	0.0	13.934	B
C-AB	68	552	0.123	68	0.1	7.436	A
C-A	605			605			
AB	5			5			
AC	520			520			

2026, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		2.01	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.01	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		✓	791	100.000
B - B578 Lutterworth Road		✓	122	100.000
C - A5 (S)		✓	1126	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	12	779
	B - B578 Lutterworth Road	4	0	118
	C - A5 (S)	925	201	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.24	8.76	0.3	A
B-A	0.07	64.12	0.1	F
C-AB	0.48	15.09	0.9	C
C-A				
AB				
AC				

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-C	89	644	0.138	88	0.2	6.471	A
B-A	3	213	0.014	3	0.0	17.134	C
C-AB	151	539	0.281	150	0.4	9.213	A
C-A	696			696			
AB	9			9			
AC	586			586			

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-C	106	603	0.176	106	0.2	7.239	A
B-A	4	149	0.024	4	0.0	24.747	C
C-AB	181	506	0.357	180	0.5	11.034	B
C-A	832			832			
AB	11			11			
AC	700			700			

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-C	130	542	0.240	130	0.3	8.725	A
B-A	4	61	0.072	4	0.1	63.190	F
C-AB	221	460	0.482	220	0.9	14.925	B
C-A	1018			1018			
AB	13			13			
AC	858			858			

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-C	130	541	0.240	130	0.3	8.757	A
B-A	4	61	0.073	4	0.1	64.121	F
C-AB	221	460	0.482	221	0.9	15.093	C
C-A	1018			1018			
AB	13			13			
AC	858			858			

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-C	106	602	0.176	106	0.2	7.263	A
B-A	4	148	0.024	4	0.0	24.947	C
C-AB	181	506	0.357	182	0.6	11.173	B
C-A	832			832			
AB	11			11			
AC	700			700			

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-C	89	644	0.138	89	0.2	6.494	A
B-A	3	212	0.014	3	0.0	17.215	C
C-AB	151	539	0.281	152	0.4	9.317	A
C-A	696			696			
AB	9			9			
AC	586			586			

2026 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		2.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.68	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		✓	697	100.000
B - B578 Lutterworth Road		✓	289	100.000
C - A5 (S)		✓	898	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	6	691
	B - B578 Lutterworth Road	17	0	272
	C - A5 (S)	803	95	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.55	14.55	1.2	B
B-A	0.14	30.31	0.2	D
C-AB	0.22	9.62	0.3	A
C-A				
AB				
AC				

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-C	205	644	0.318	203	0.5	8.126	A
B-A	13	269	0.048	13	0.0	14.019	B
C-AB	72	552	0.129	71	0.1	7.469	A
C-A	605			605			
AB	5			5			
AC	520			520			

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-C	245	605	0.404	244	0.7	9.948	A
B-A	15	215	0.071	15	0.1	18.028	C
C-AB	85	521	0.164	85	0.2	8.249	A
C-A	722			722			
AB	5			5			
AC	621			621			

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-C	299	547	0.548	297	1.2	14.317	B
B-A	19	138	0.136	18	0.2	30.088	D
C-AB	105	479	0.218	104	0.3	9.602	A
C-A	884			884			
AB	7			7			
AC	761			761			

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-C	299	547	0.548	299	1.2	14.555	B
B-A	19	137	0.136	19	0.2	30.313	D
C-AB	105	479	0.218	105	0.3	9.619	A
C-A	884			884			
AB	7			7			
AC	761			761			

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-C	245	604	0.405	247	0.7	10.115	B
B-A	15	214	0.071	16	0.1	18.125	C
C-AB	85	521	0.164	86	0.2	8.269	A
C-A	722			722			
AB	5			5			
AC	621			621			

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-C	205	644	0.318	206	0.5	8.231	A
B-A	13	269	0.048	13	0.1	14.069	B
C-AB	72	552	0.129	72	0.2	7.492	A
C-A	605			605			
AB	5			5			
AC	520			520			

2026 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		2.56	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.56	A

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		✓	791	100.000
B - B578 Lutterworth Road		✓	129	100.000
C - A5 (S)		✓	1184	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	12	779
	B - B578 Lutterworth Road	4	0	125
	C - A5 (S)	950	234	0

Vehicle Mix

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.26	9.03	0.3	A
B-A	0.10	94.77	0.1	F
C-AB	0.56	17.74	1.3	C
C-A				
AB				
AC				

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-C	94	644	0.146	93	0.2	6.530	A
B-A	3	201	0.015	3	0.0	18.188	C
C-AB	176	539	0.327	174	0.5	9.818	A
C-A	715			715			
AB	9			9			
AC	586			586			

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-C	112	603	0.186	112	0.2	7.336	A
B-A	4	134	0.027	4	0.0	27.517	D
C-AB	210	506	0.416	210	0.7	12.118	B
C-A	854			854			
AB	11			11			
AC	700			700			

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-C	138	538	0.256	137	0.3	8.983	A
B-A	4	43	0.102	4	0.1	91.811	F
C-AB	259	461	0.561	257	1.2	17.400	C
C-A	1045			1045			
AB	13			13			
AC	858			858			

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-C	138	536	0.257	138	0.3	9.034	A
B-A	4	42	0.104	4	0.1	94.767	F
C-AB	259	461	0.561	259	1.3	17.735	C
C-A	1045			1045			
AB	13			13			
AC	858			858			

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-C	112	602	0.187	113	0.2	7.366	A
B-A	4	133	0.027	4	0.0	27.888	D
C-AB	210	506	0.416	212	0.7	12.362	B
C-A	854			854			
AB	11			11			
AC	700			700			

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-C	94	644	0.146	94	0.2	6.554	A
B-A	3	200	0.015	3	0.0	18.304	C
C-AB	176	539	0.327	177	0.5	9.971	A
C-A	715			715			
AB	9			9			
AC	586			586			

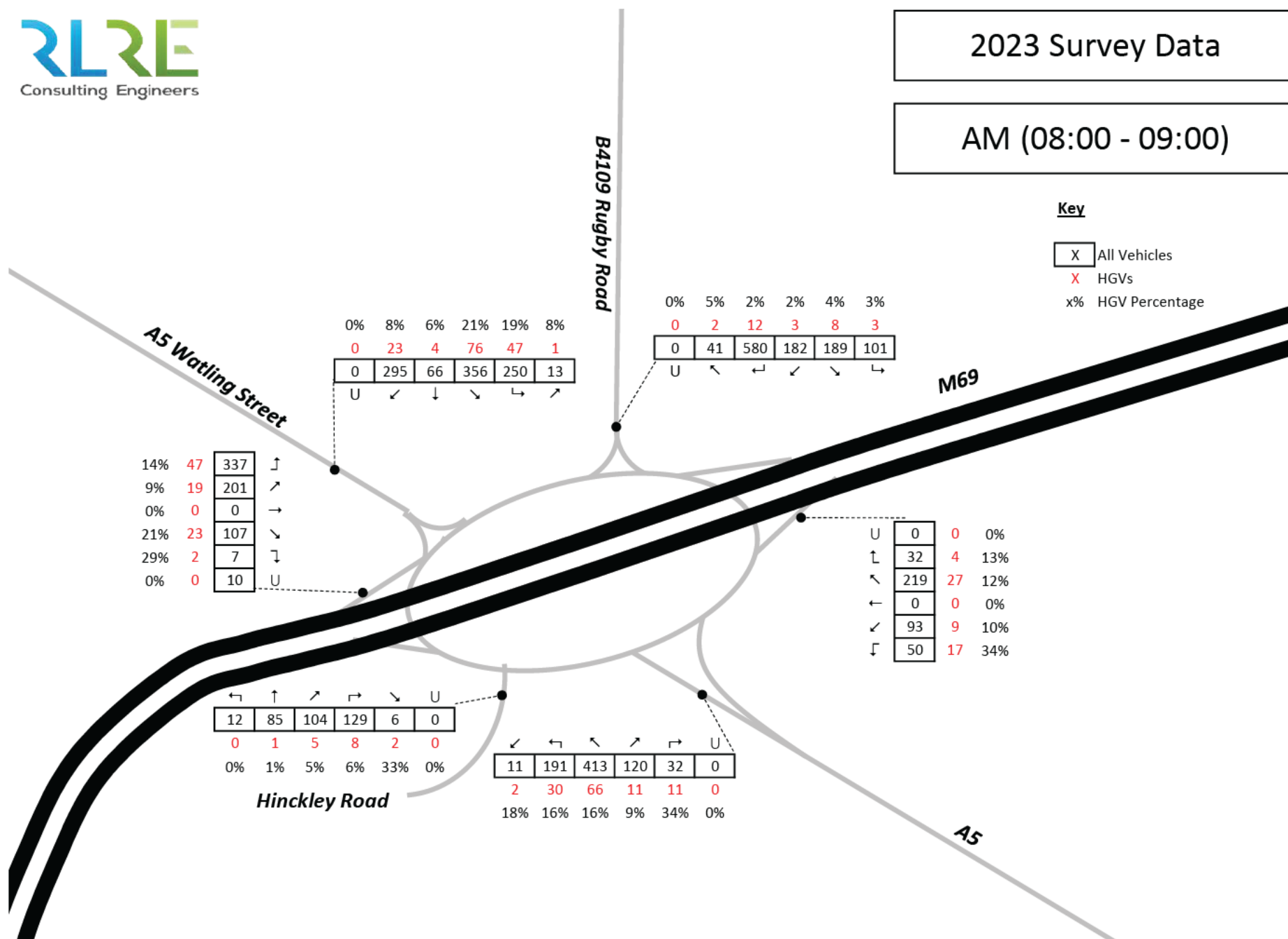
Appendix RR: M69 Junction 1 Traffic Survey Data

2023 Survey Data

AM (08:00 - 09:00)

Key

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

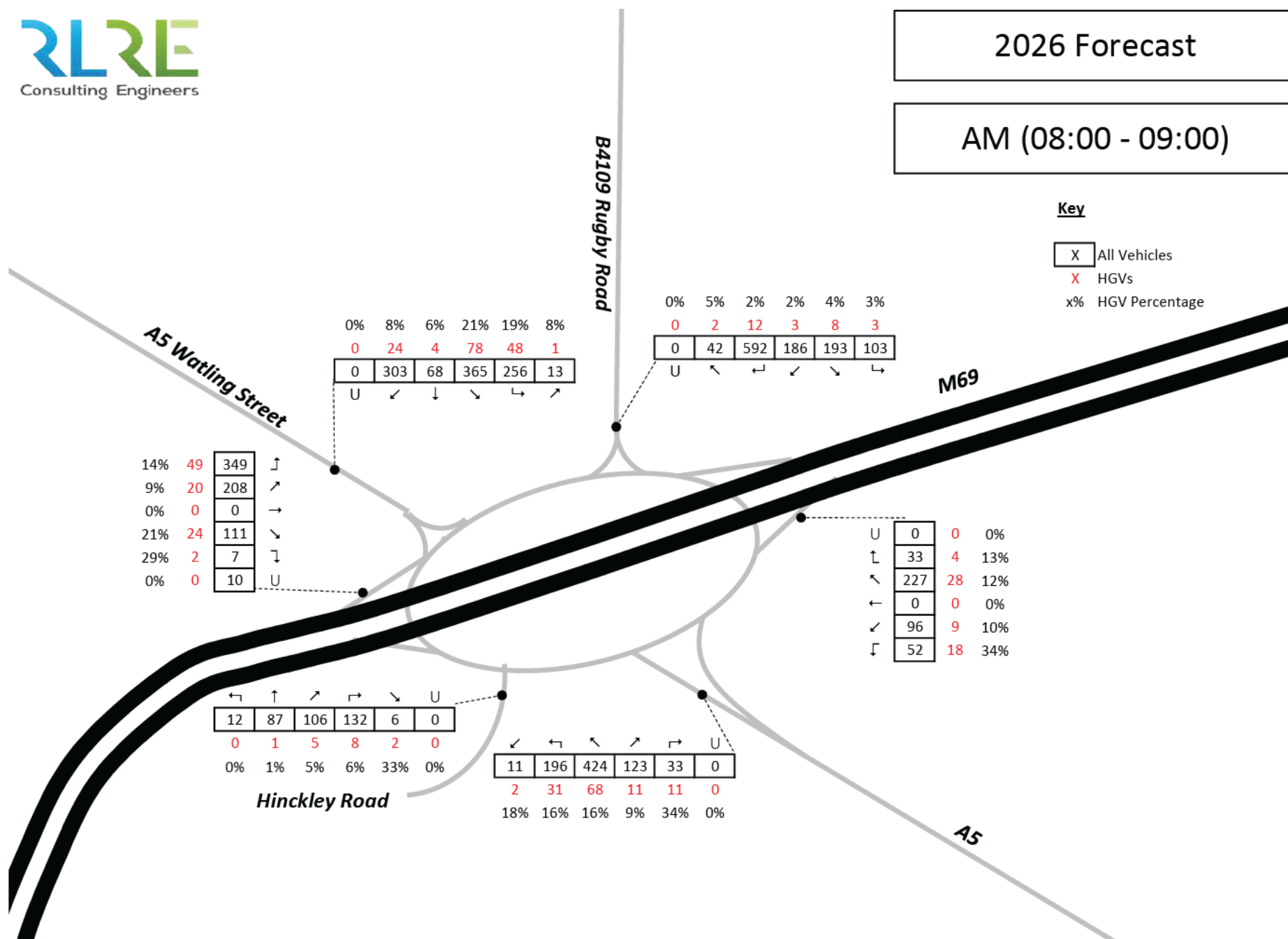


2026 Forecast

AM (08:00 - 09:00)

Key

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

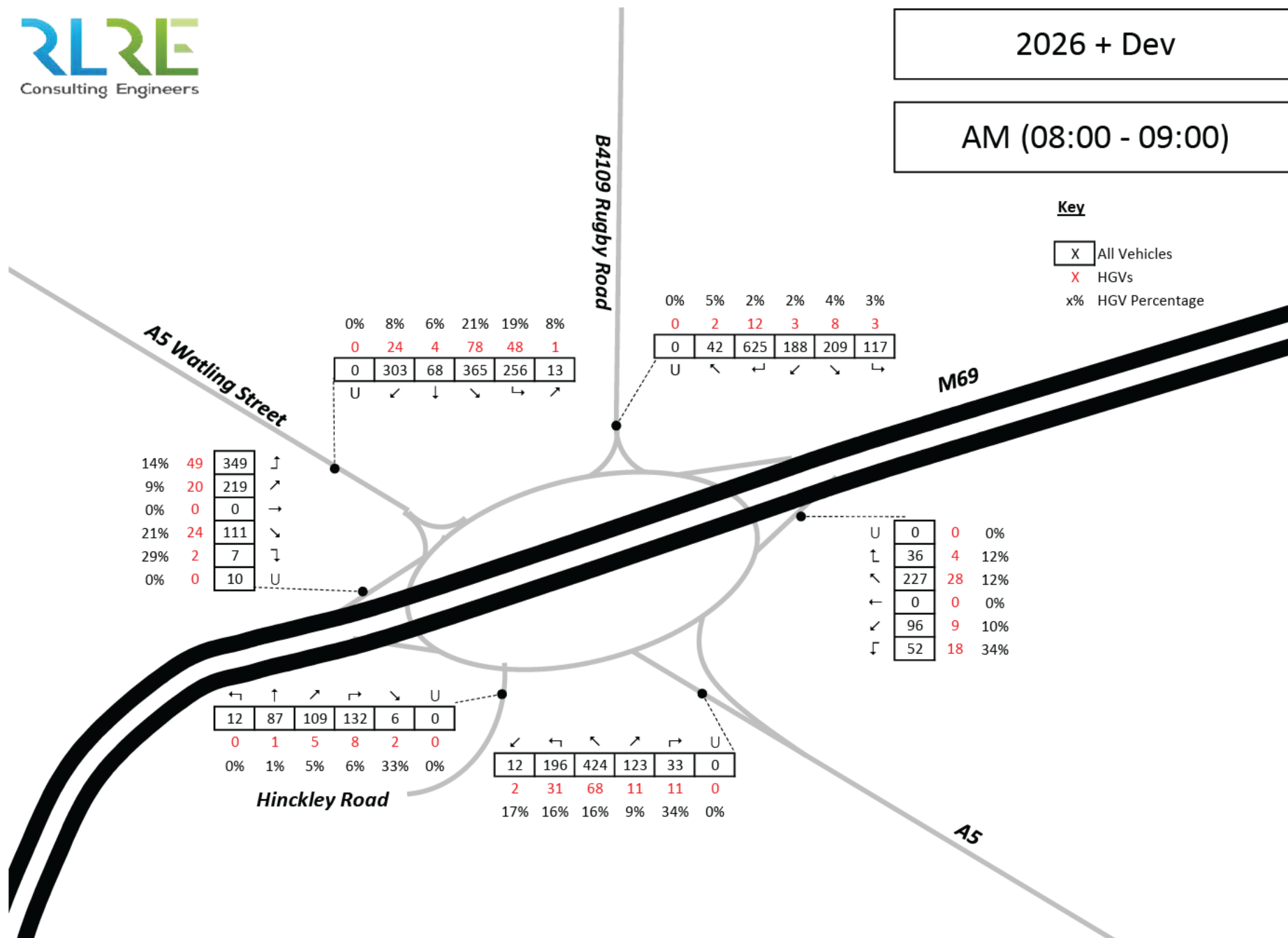


2026 + Dev

AM (08:00 - 09:00)

Key

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

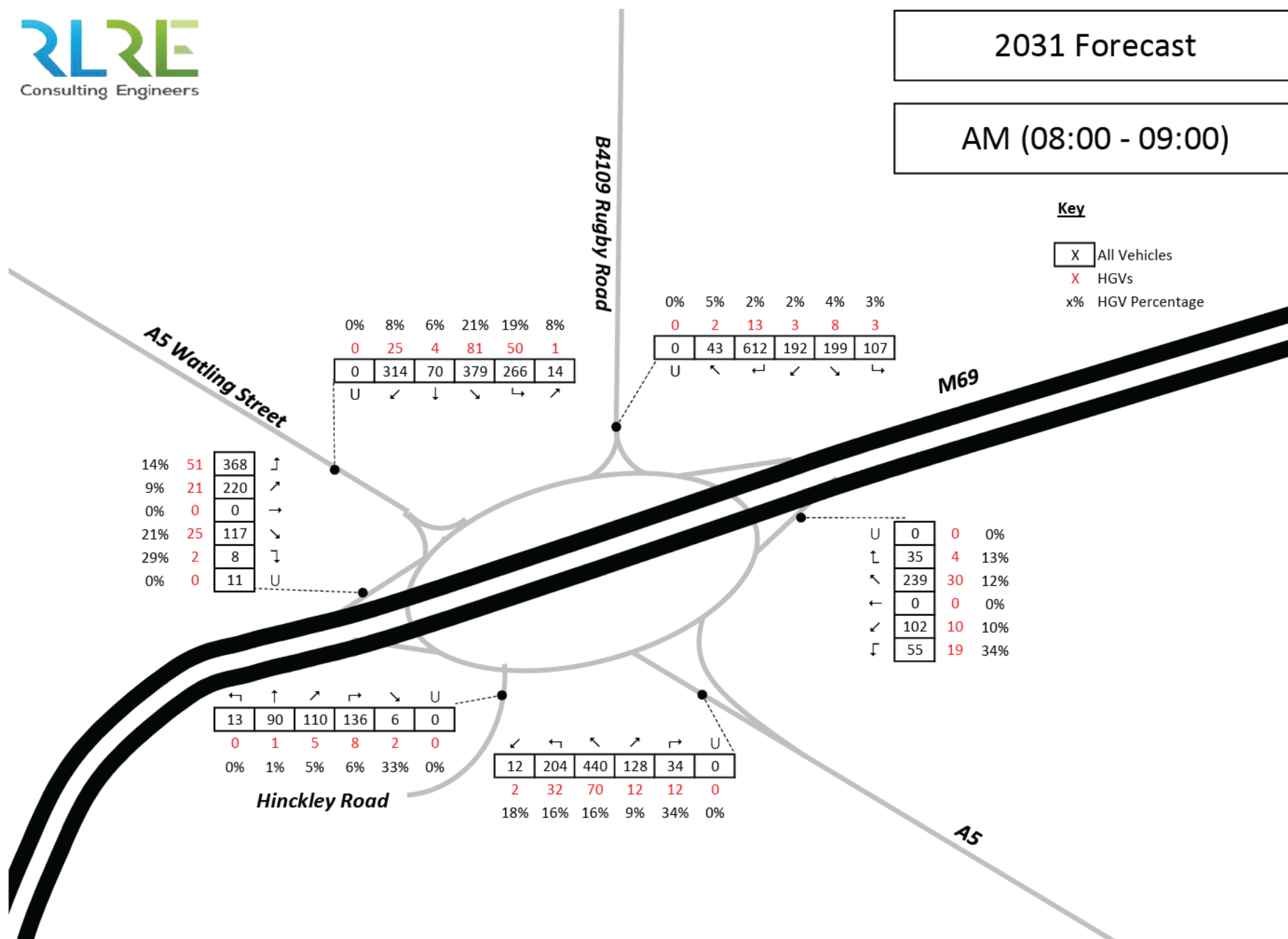


2031 Forecast

AM (08:00 - 09:00)

Key

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

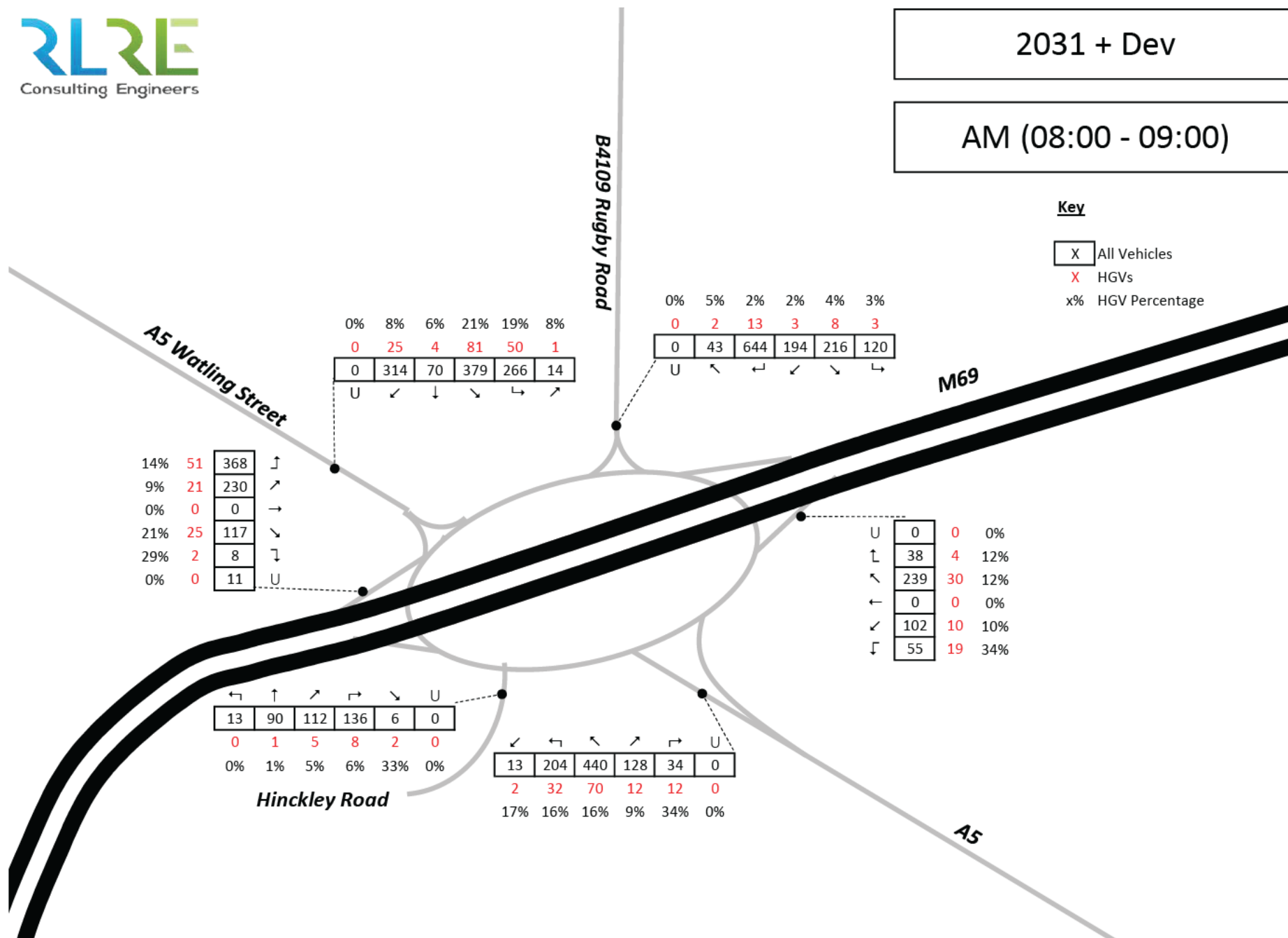


2031 + Dev

AM (08:00 - 09:00)

Key

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

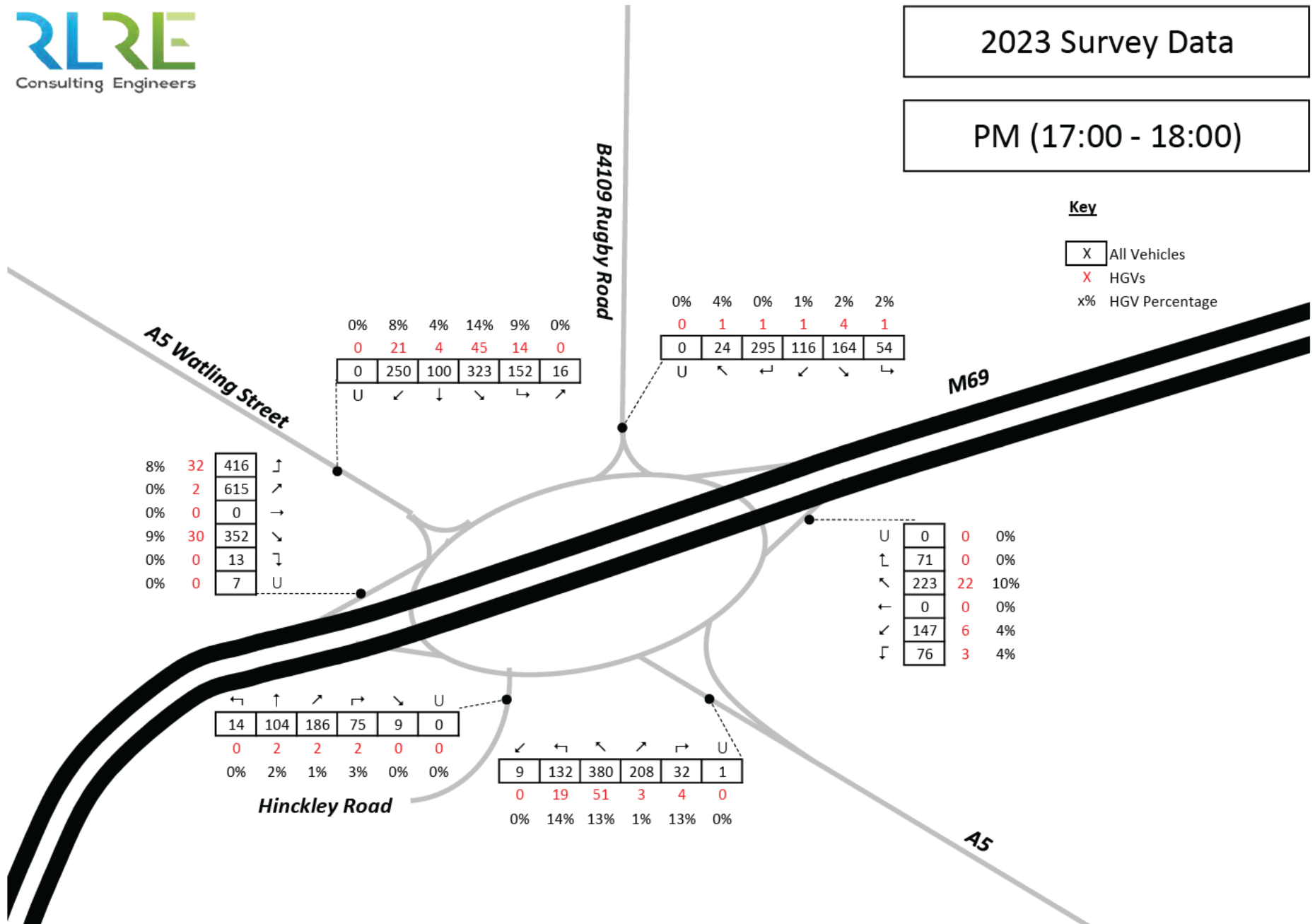


2023 Survey Data

PM (17:00 - 18:00)

Key

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

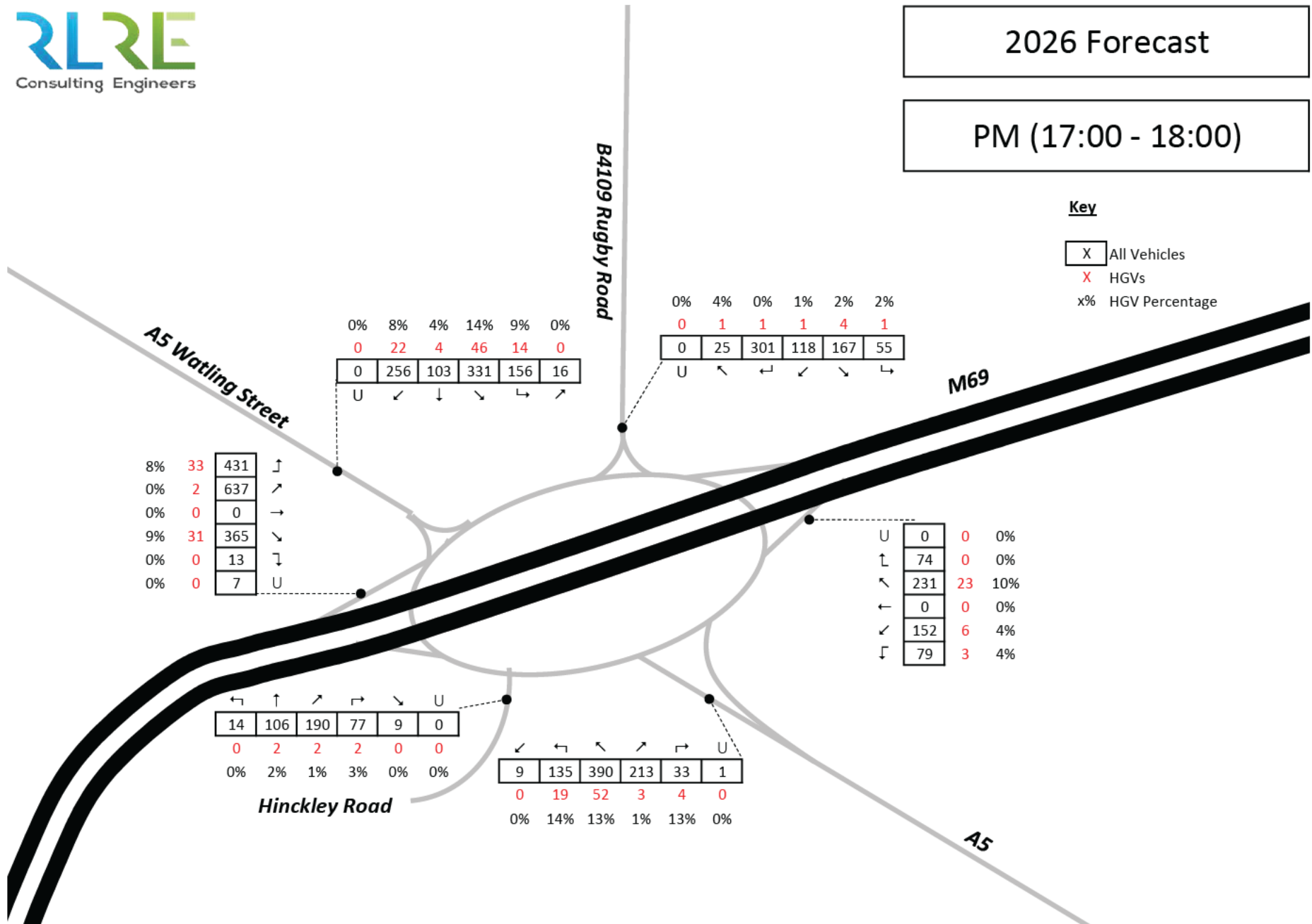


2026 Forecast

PM (17:00 - 18:00)

Key

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

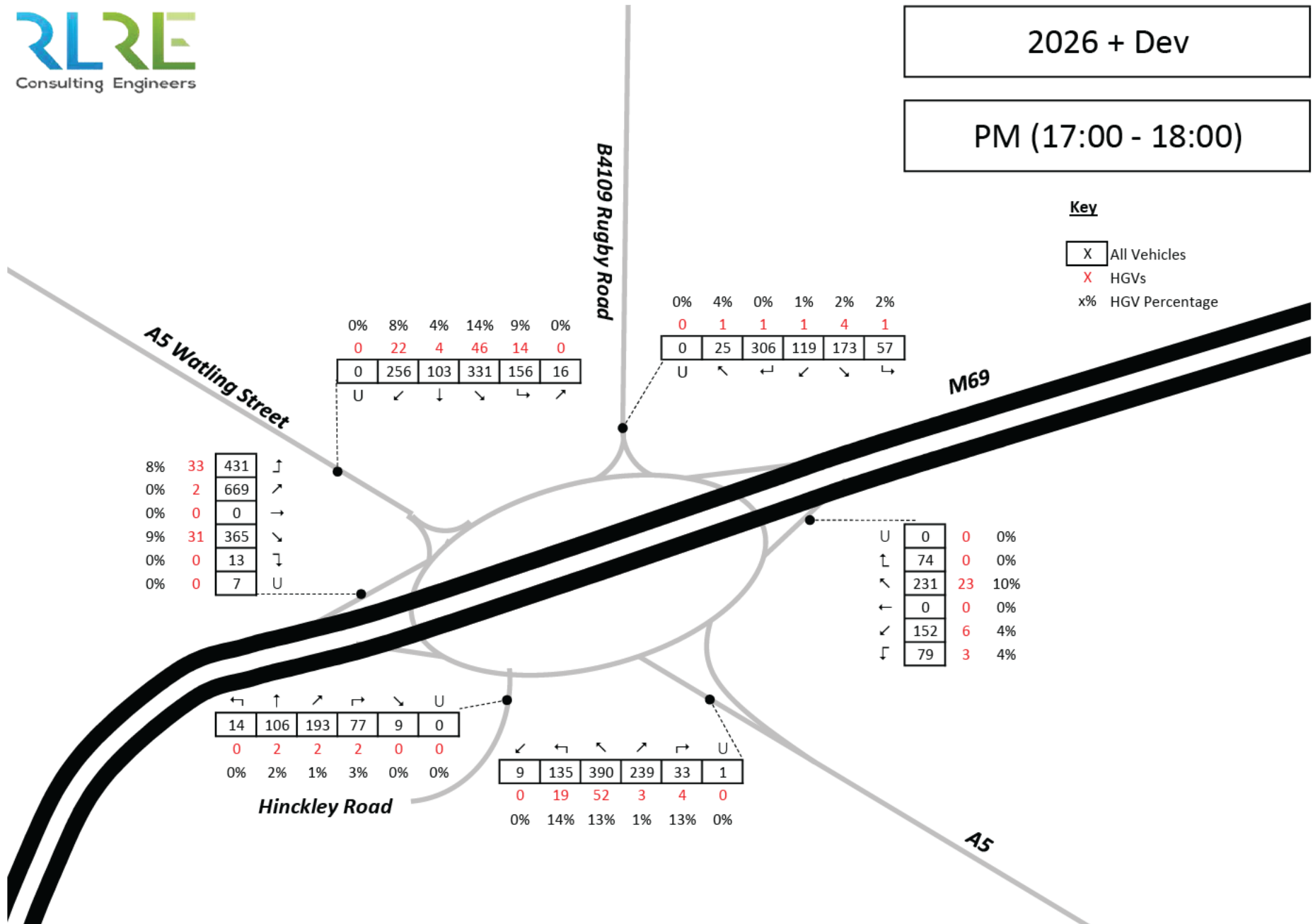


2026 + Dev

PM (17:00 - 18:00)

Key

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

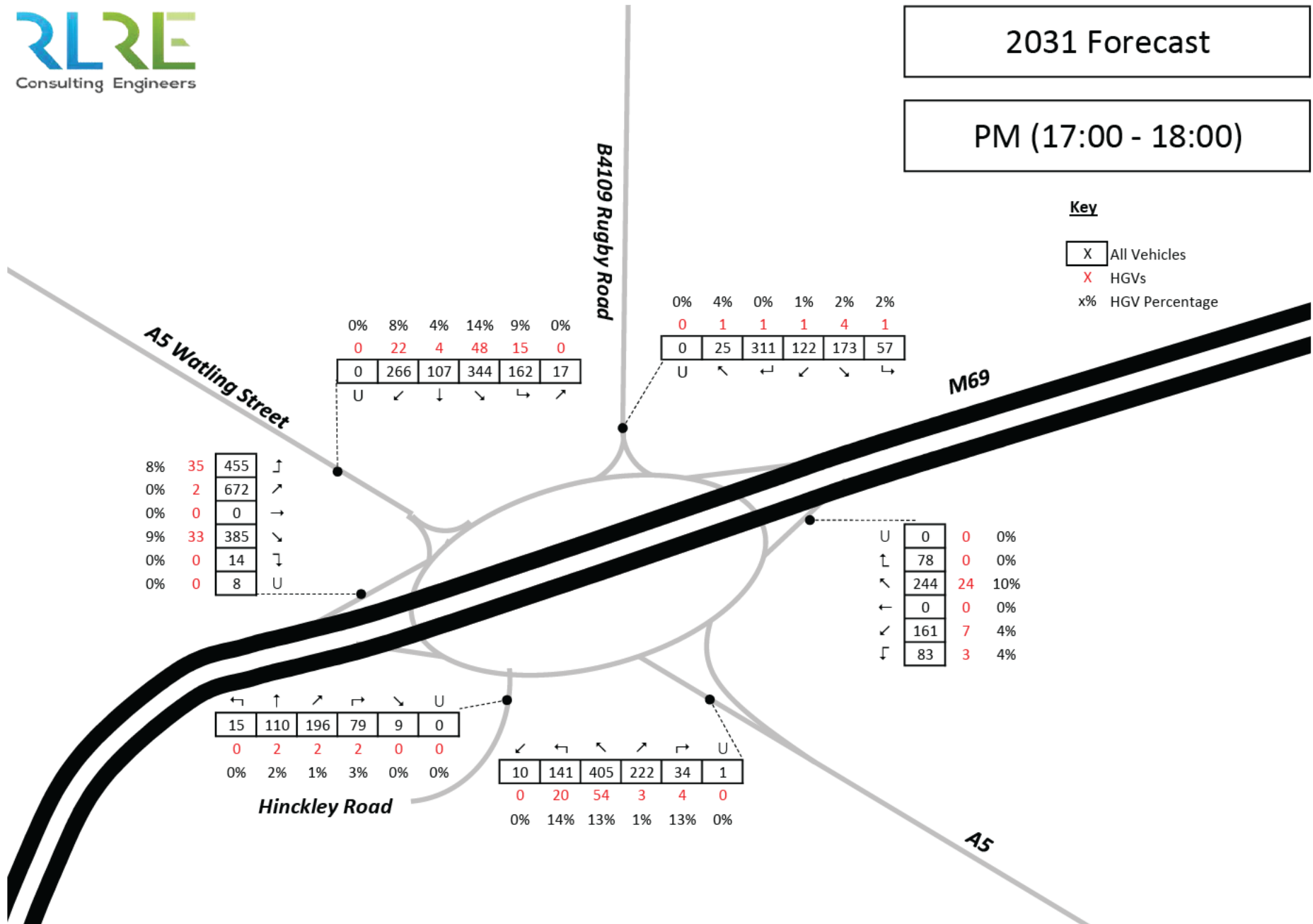


2031 Forecast

PM (17:00 - 18:00)

Key

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

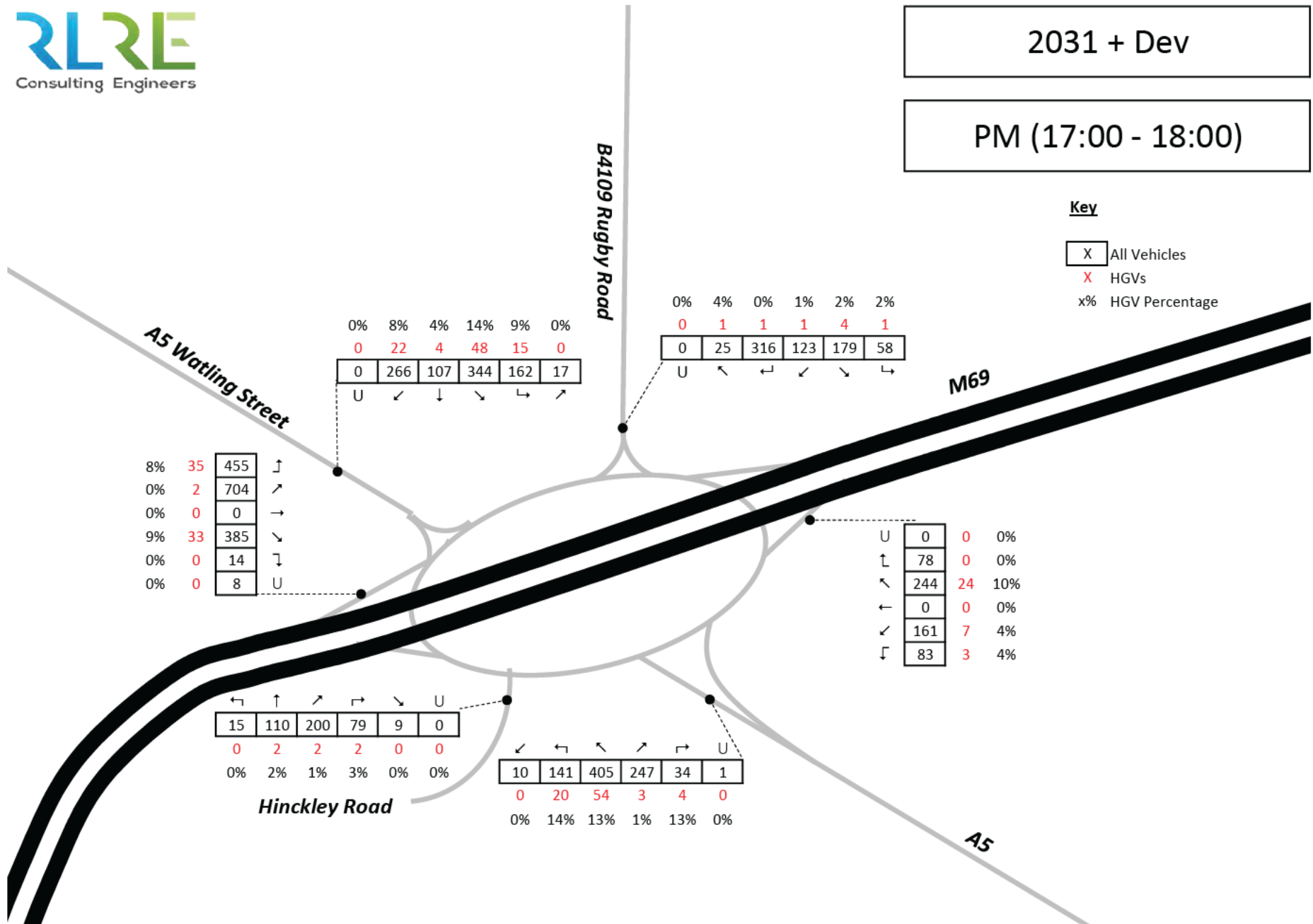


2031 + Dev

PM (17:00 - 18:00)

Key

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



Appendix SS: M69 Junction 1 LinSig Results

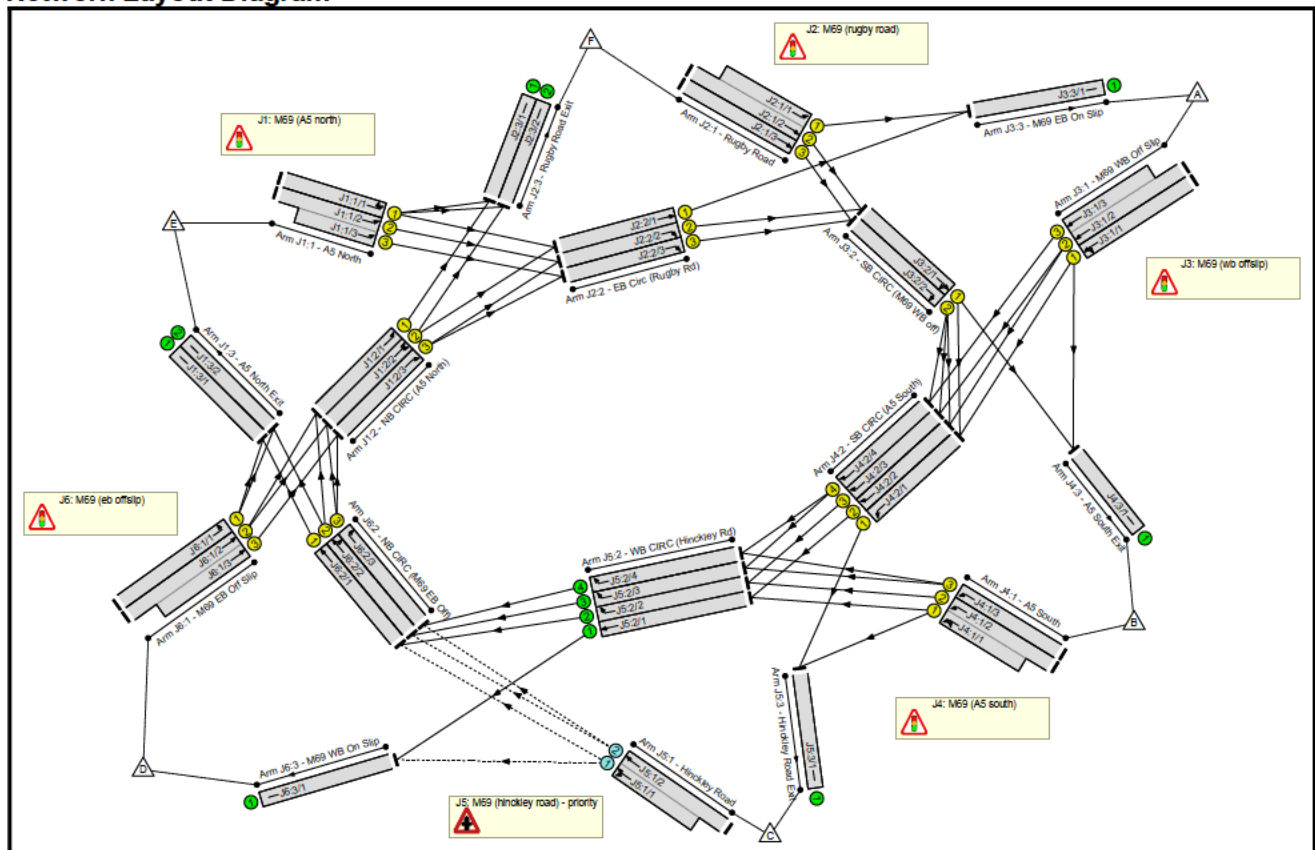
Full Input Data And Results

Full Input Data And Results

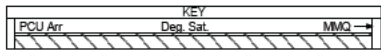
User and Project Details

Project:	Land South of Burbage, Leicestershire
Title:	M69 Junction 1 - Existing Layout
Location:	Burbage, Leicestershire
Client:	Redrow Homes
Design Layout Ref:	Existing Layout
Additional detail:	
File name:	M69 J1.lsg3x
Author:	T&T
Company:	Rodgers Leask Ltd
Address:	St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ

Network Layout Diagram



Results For Scenario: 2023 AM
 Cycle Time: 60 PRC: 2.9% Tot Delay (pcu/hr): 50.30



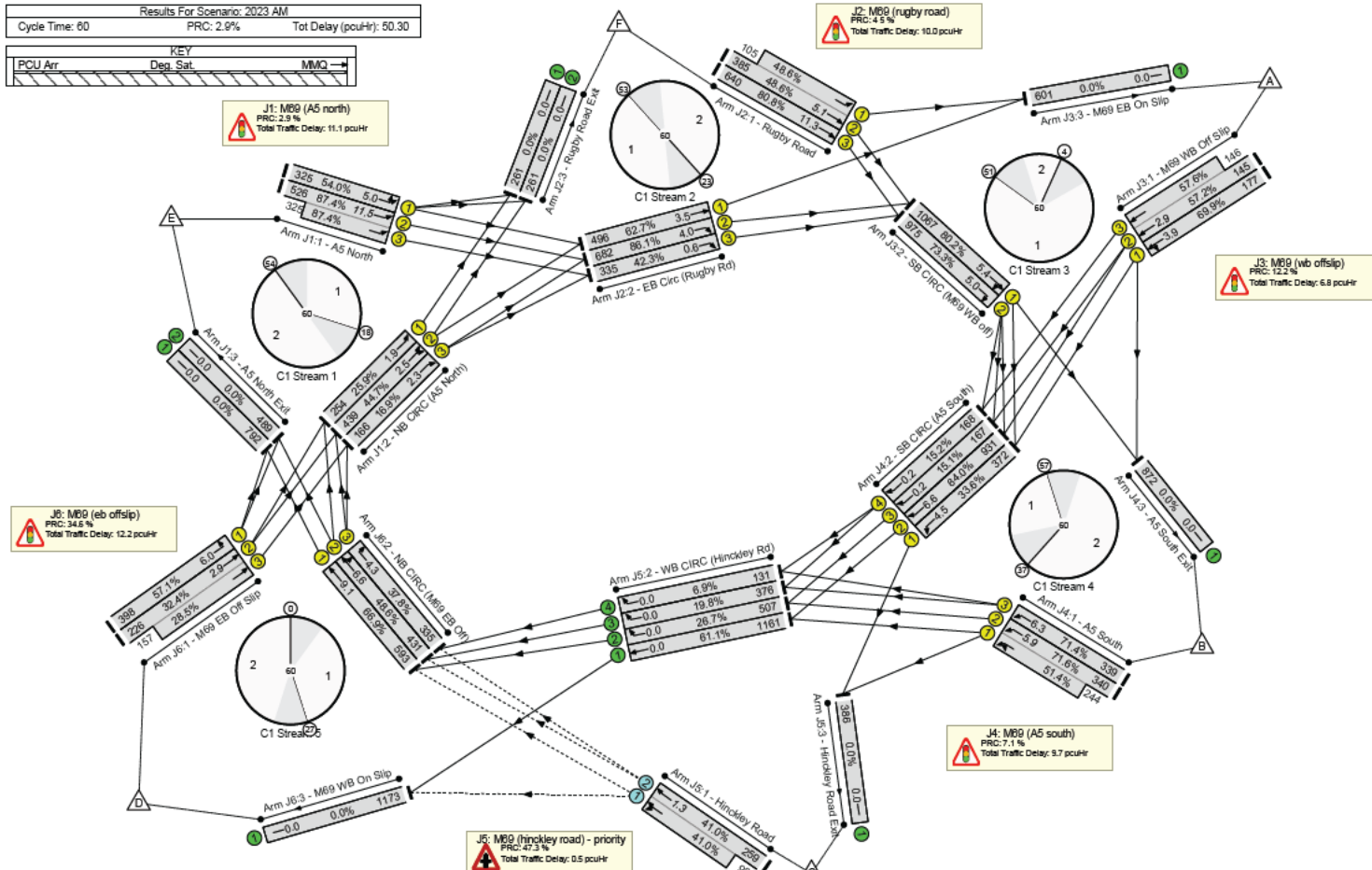
J1: M69 (A5 north)
 PRC: 2.9 %
 Total Traffic Delay: 11.1 pcu/hr

J2: M69 (rugby road)
 PRC: 4.5 %
 Total Traffic Delay: 10.0 pcu/hr

J3: M69 (wb offslip)
 PRC: 12.3 %
 Total Traffic Delay: 6.8 pcu/hr

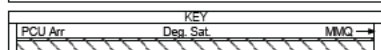
J6: M69 (eb offslip)
 PRC: 34.6 %
 Total Traffic Delay: 12.2 pcu/hr

J5: M69 (hinckley road) - priority
 PRC: 47.3 %
 Total Traffic Delay: 0.5 pcu/hr



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2026 AM
Cycle Time: 60 PRC: 0.5% Tot Delay (pcu/hr): 53.24



J1: M69 (A5 north)
PRC: 0.5 %
Total Traffic Delay: 12.1 pcu/hr

J2: M69 (rugby road)
PRC: 1.9 %
Total Traffic Delay: 10.6 pcu/hr

J3: M69 (vib offslip)
PRC: 3.4 %
Total Traffic Delay: 7.3 pcu/hr

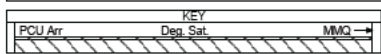
J6: M69 (eb offslip)
PRC: 30.8 %
Total Traffic Delay: 12.6 pcu/hr

J5: M69 (hinckley road) - priority
PRC: 44.1 %
Total Traffic Delay: 0.5 pcu/hr

J4: M69 (A5 south)
PRC: 4.9 %
Total Traffic Delay: 10.1 pcu/hr

Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2026 + Dev AM
Cycle Time: 60 PRC: 0.5% Tot Delay (pcul/h): 54.81



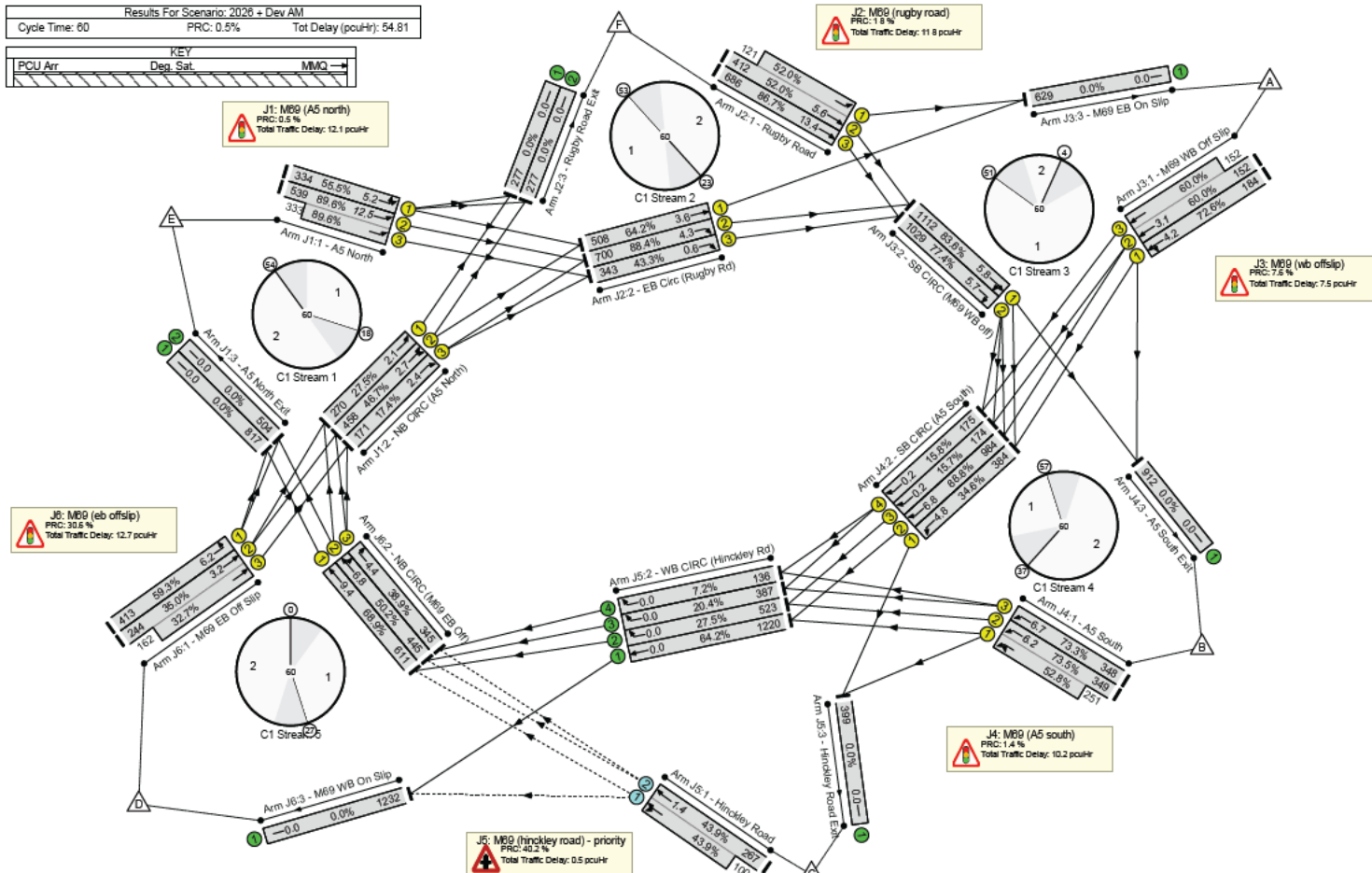
J1: M69 (A5 north)
PRC: 0.5 %
Total Traffic Delay: 12.1 pcul/h

J2: M69 (rugby road)
PRC: 1.9 %
Total Traffic Delay: 11.8 pcul/h

J3: M69 (vib offslip)
PRC: 1.2 %
Total Traffic Delay: 7.5 pcul/h

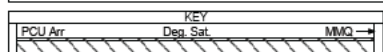
J6: M69 (eb offslip)
PRC: 30.6 %
Total Traffic Delay: 12.7 pcul/h

J5: M69 (hincley road) - priority
PRC: 40.2 %
Total Traffic Delay: 0.5 pcul/h



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2031 AM
 Cycle Time: 60 PRC: -2.5% Tot Delay (pcu/hr): 58.79



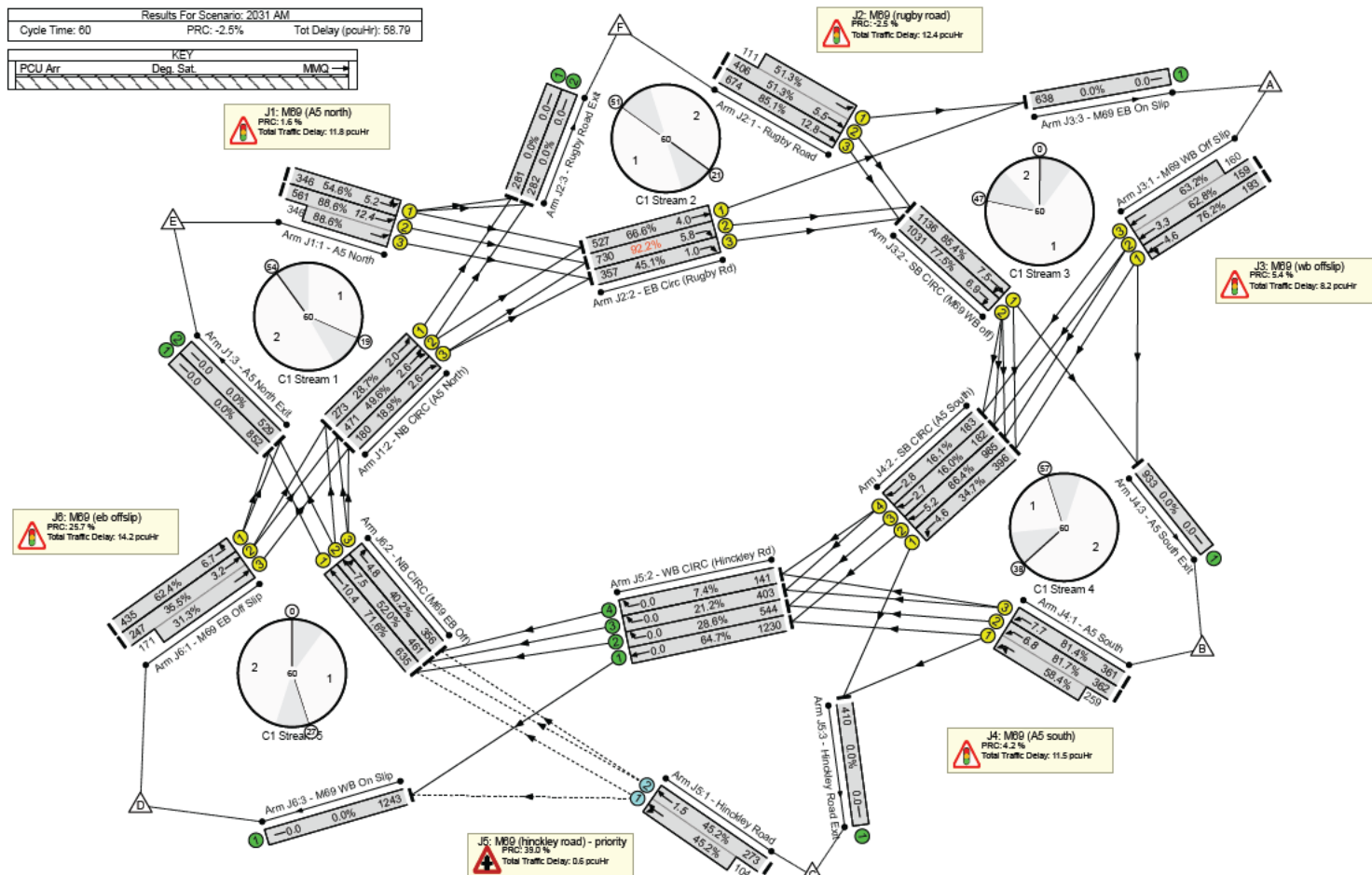
J1: M69 (A5 north)
 PRC: 1.6%
 Total Traffic Delay: 11.8 pcu/hr

J2: M69 (rugby road)
 PRC: 2.5%
 Total Traffic Delay: 12.4 pcu/hr

J3: M69 (wb offslip)
 PRC: 3.4%
 Total Traffic Delay: 8.2 pcu/hr

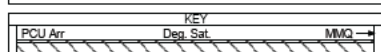
J6: M69 (eb offslip)
 PRC: 25.7%
 Total Traffic Delay: 14.2 pcu/hr

J5: M69 (hincley road) - priority
 PRC: 39.0%
 Total Traffic Delay: 0.6 pcu/hr



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2031 + Dev AM
Cycle Time: 60 PRC: -2.5% Tot Delay (pou/hr): 60.71



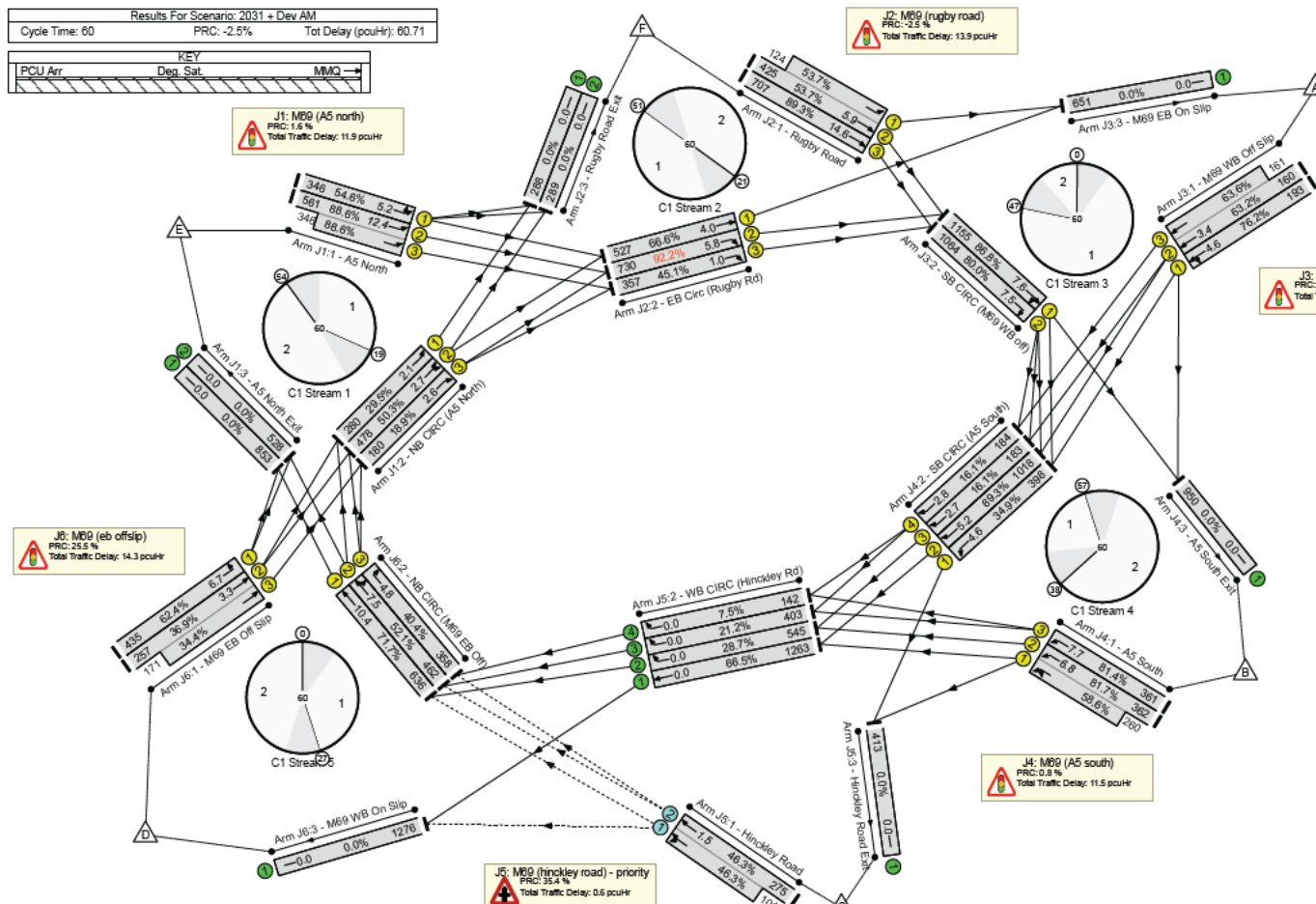
J1: M69 (A5 north)
PRC: 1.6 %
Total Traffic Delay: 11.9 pou/hr

J2: M69 (rugby road)
PRC: 2.5 %
Total Traffic Delay: 13.9 pou/hr

J3: M69 (vib offslip)
PRC: 3.6 %
Total Traffic Delay: 8.5 pou/hr

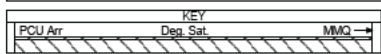
J6: M69 (eb offslip)
PRC: 25.5 %
Total Traffic Delay: 14.3 pou/hr

J5: M69 (hinckley road) - priority
PRC: 35.4 %
Total Traffic Delay: 0.6 pou/hr



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2023 PM
Cycle Time: 60 PRC: -3.1% Tot Delay (pou/hr): 55.79



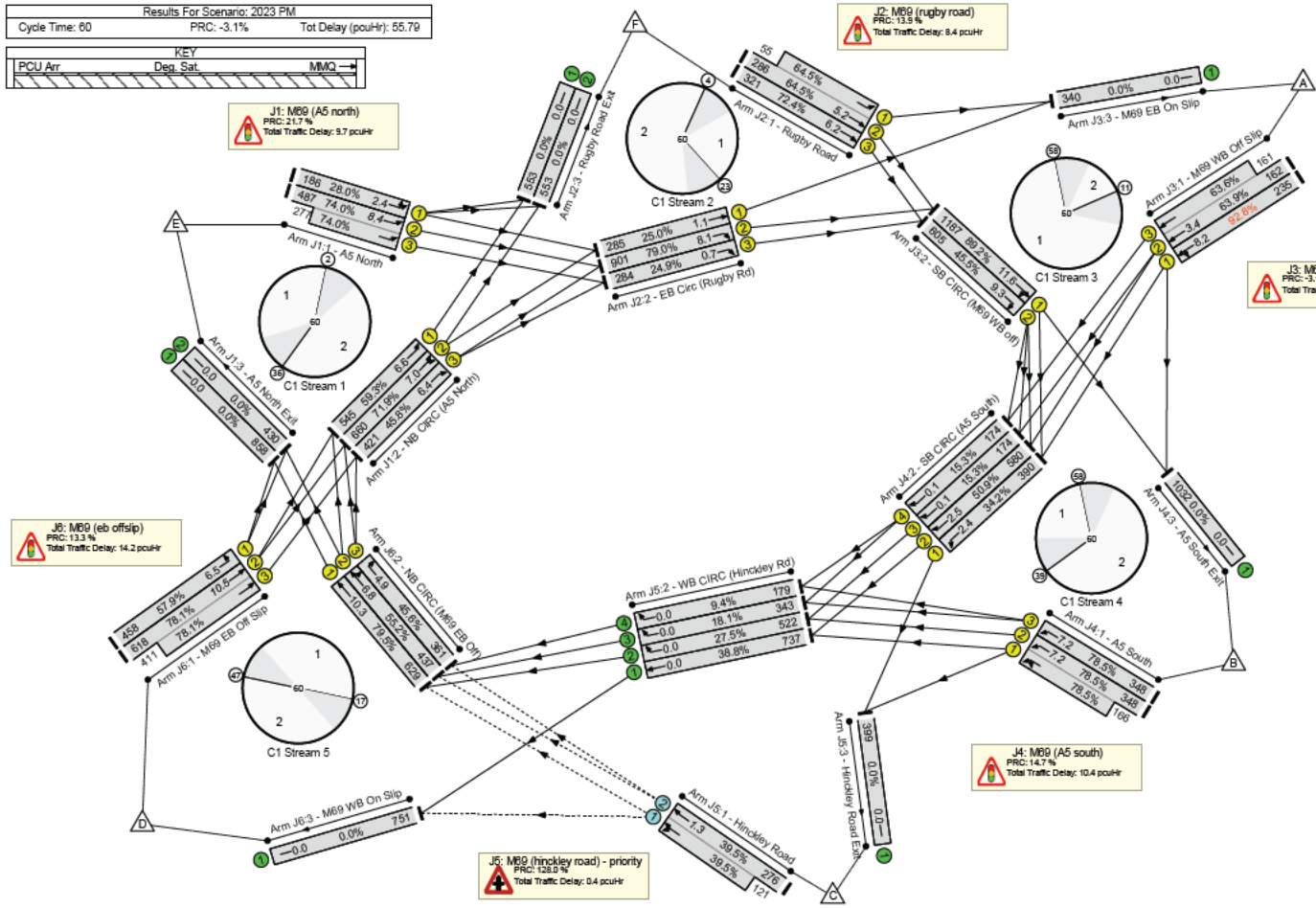
J1: M69 (A5 north)
PRC: 21.7%
Total Traffic Delay: 9.7 pou/hr

J2: M69 (rugby road)
PRC: 13.3%
Total Traffic Delay: 8.4 pou/hr

J3: M69 (wb offslip)
PRC: -3.1%
Total Traffic Delay: 12.6 pou/hr

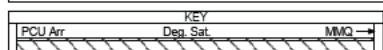
J6: M69 (eb offslip)
PRC: 13.3%
Total Traffic Delay: 14.2 pou/hr

J5: M69 (hinckley road) - priority
PRC: 128.0%
Total Traffic Delay: 0.4 pou/hr



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2026 PM
Cycle Time: 60 PRC: -6.6% Tot Delay (pcul/hr): 56.97



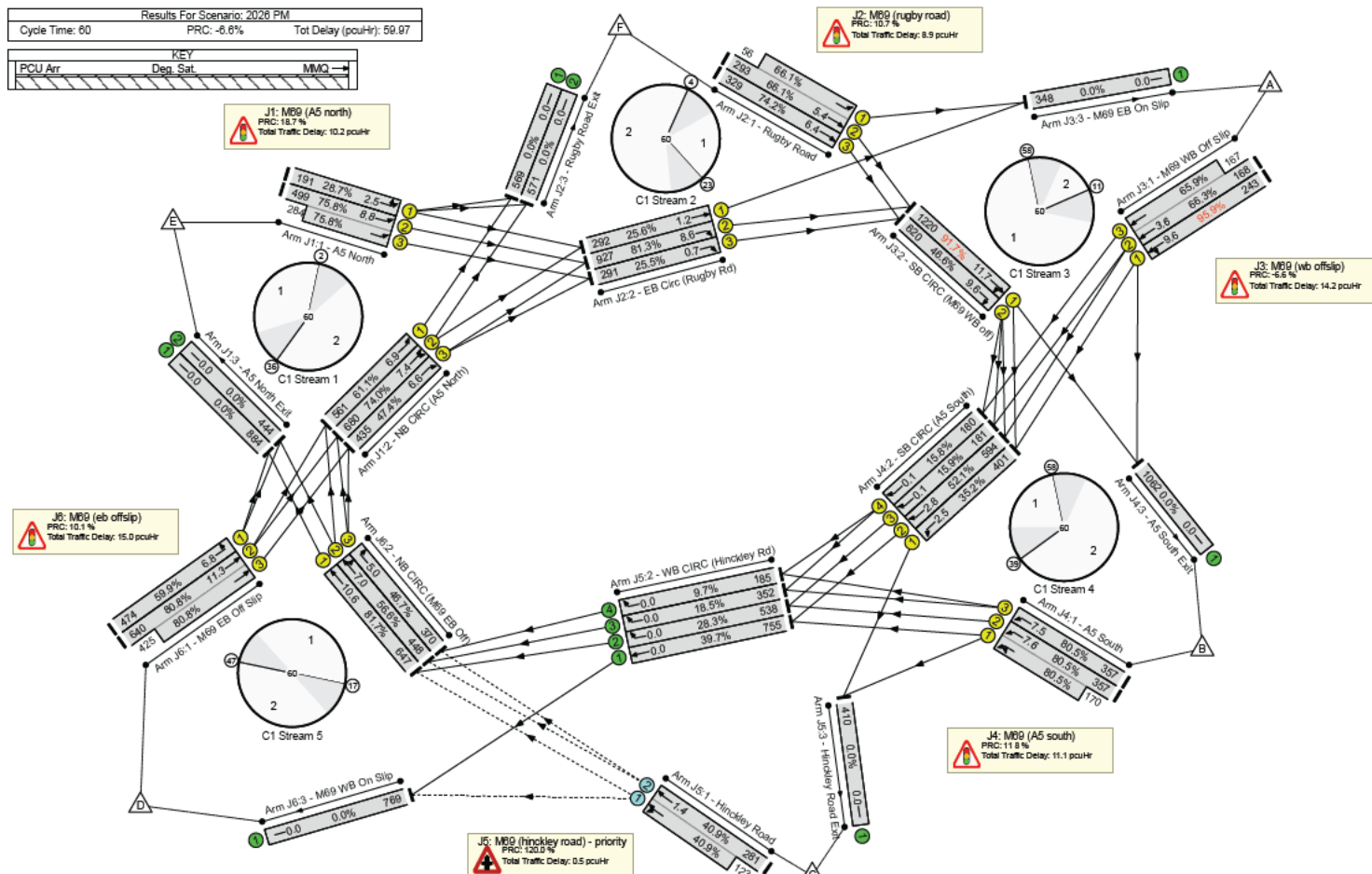
J1: M69 (A5 north)
PRC: 18.7%
Total Traffic Delay: 10.2 pcul/hr

J2: M69 (rugby road)
PRC: 10.3%
Total Traffic Delay: 8.9 pcul/hr

J3: M69 (wb offslip)
PRC: 5.8%
Total Traffic Delay: 14.2 pcul/hr

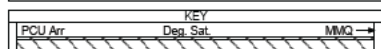
J6: M69 (eb offslip)
PRC: 10.1%
Total Traffic Delay: 15.0 pcul/hr

J5: M69 (hincley road) - priority
PRC: 120.0%
Total Traffic Delay: 0.5 pcul/hr



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2026 + Dev PM
 Cycle Time: 60 PRC: -6.6% Tot Delay (pou/hr): 62.56



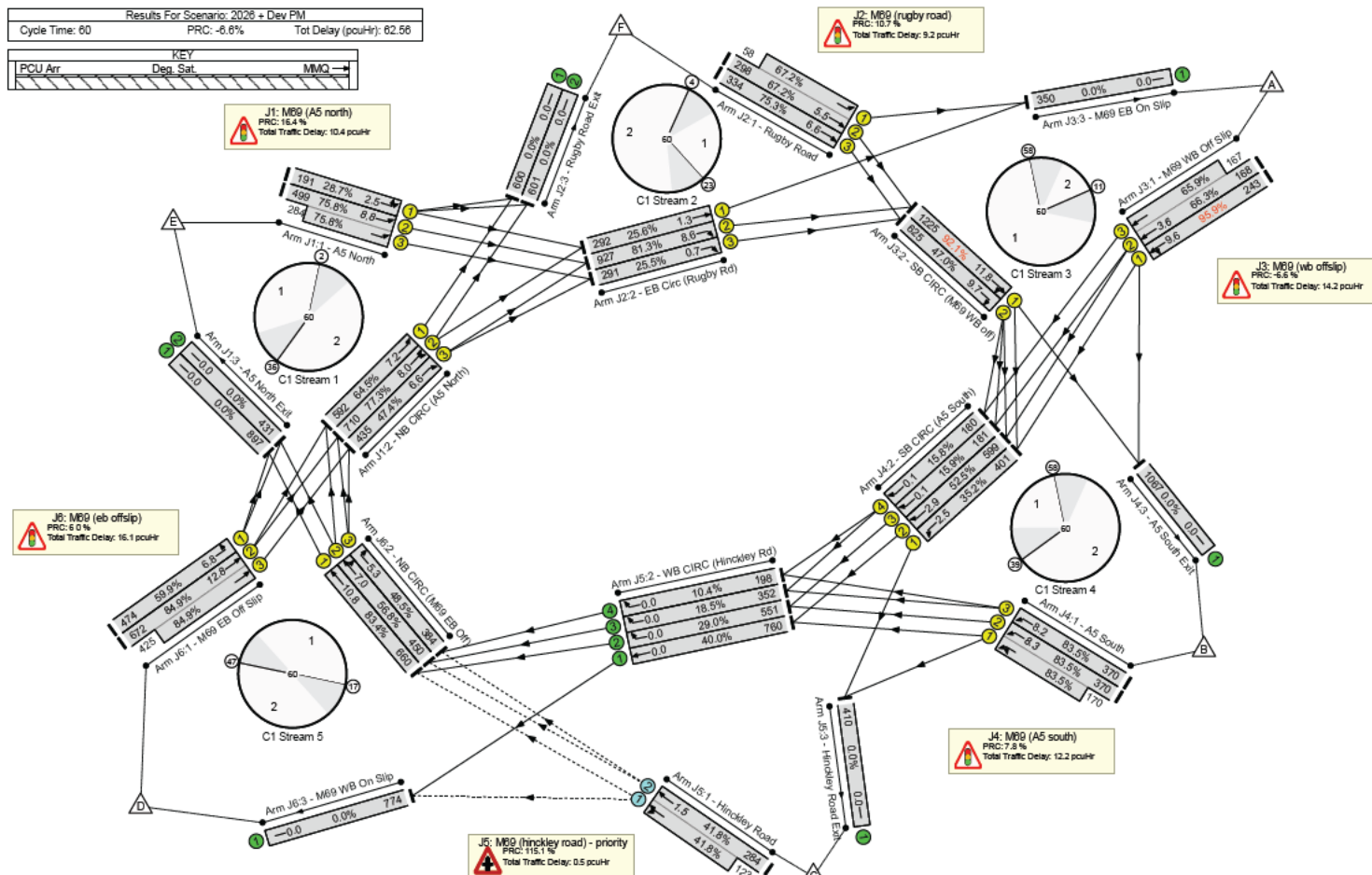
J1: M69 (A5 north)
 PRC: 16.4%
 Total Traffic Delay: 10.4 pou/hr

J2: M69 (rugby road)
 PRC: 10.3%
 Total Traffic Delay: 9.2 pou/hr

J3: M69 (wb offslip)
 PRC: -5.8%
 Total Traffic Delay: 14.2 pou/hr

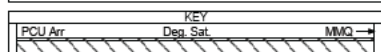
J6: M69 (eb offslip)
 PRC: 6.0%
 Total Traffic Delay: 16.1 pou/hr

J5: M69 (hincley road) - priority
 PRC: 115.1%
 Total Traffic Delay: 0.5 pou/hr



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Results For Scenario: 2031 + Dev PM
Cycle Time: 60 PRC: -12.3% Tot Delay (pouHr): 71.21



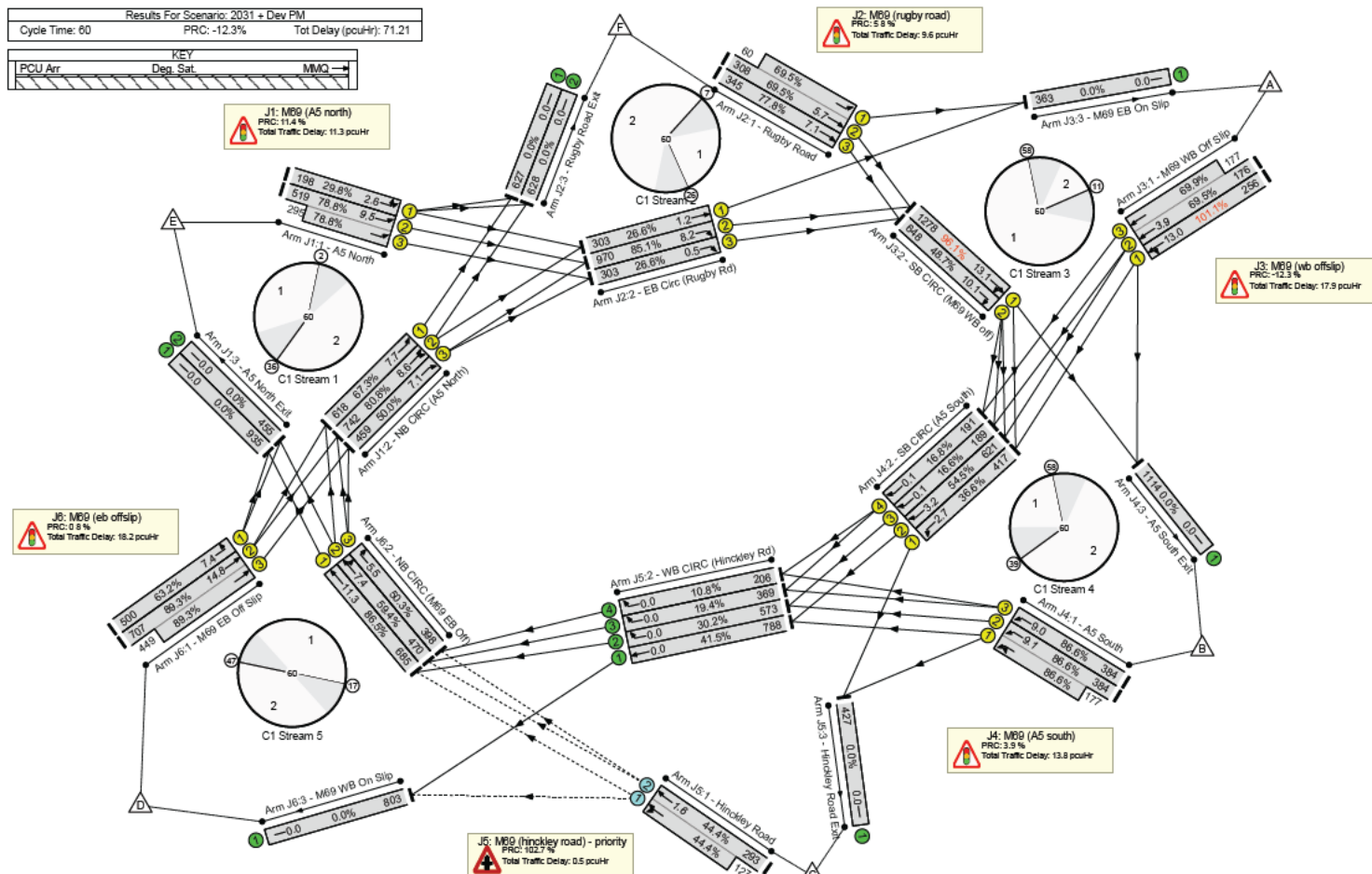
J1: M69 (A5 north)
PRC: 11.4%
Total Traffic Delay: 11.3 pouHr

J2: M69 (rugby road)
PRC: 5.9%
Total Traffic Delay: 9.6 pouHr

J3: M69 (wb offslip)
PRC: -12.3%
Total Traffic Delay: 17.9 pouHr

J6: M69 (eb offslip)
PRC: 0.5%
Total Traffic Delay: 18.2 pouHr

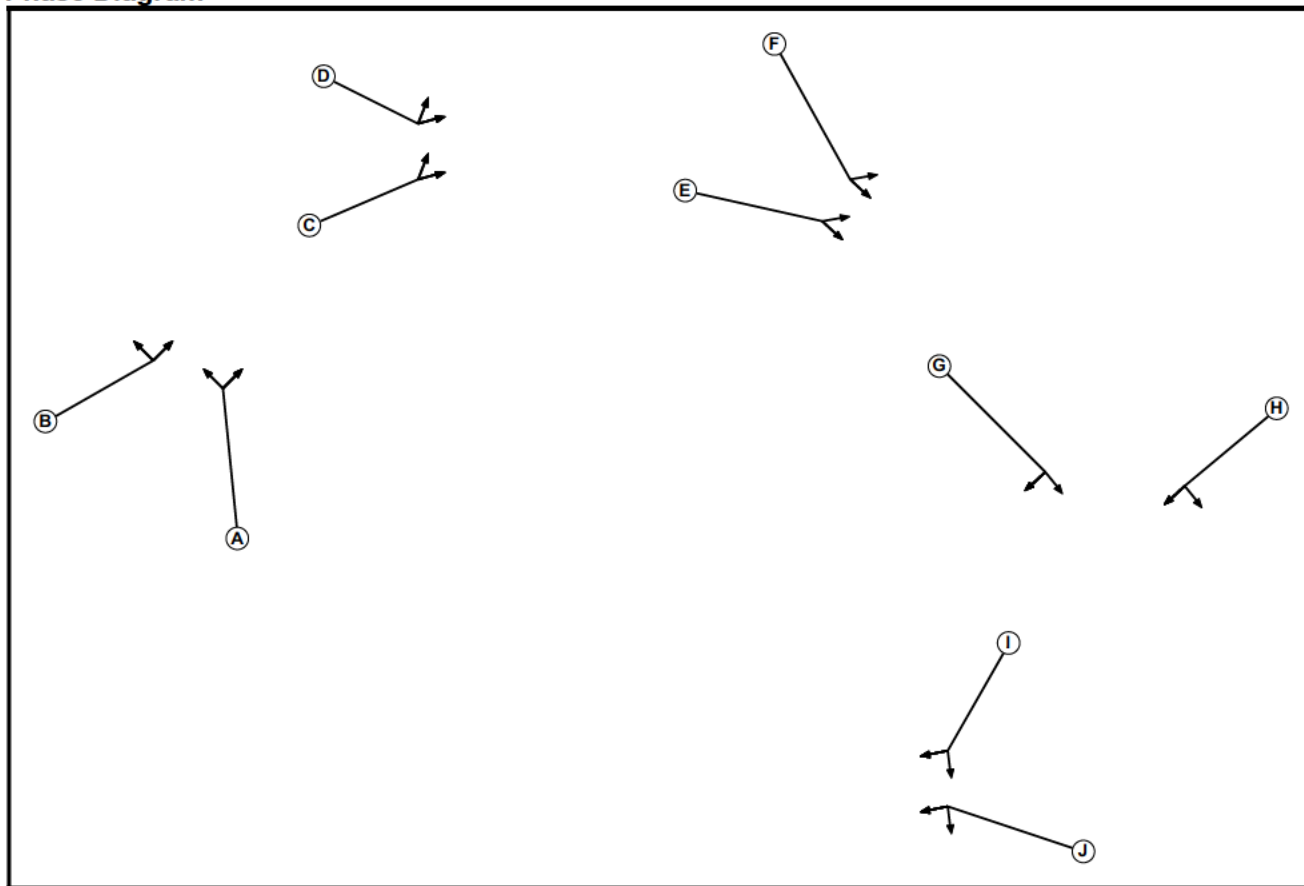
J5: M69 (hinckley road) - priority
PRC: 102.7%
Total Traffic Delay: 0.5 pouHr



Project Name		
Land South of Burbage, Leicestershire		
Company		
Rodgers Leask Ltd		
Address		
St James House, St Mary's Wharf, Mansfield Road, Derby, DE1 3TQ		
Author	Date	Scale
T&T	27 Oct 2023	NTS
Project Location		
Burbage, Leicestershire		
Project Title		
M69 Junction 1 - Existing Layout		
Drawing Title		
Network Layout		
FileName		
M69 J1.lsg3x		

Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	5		7	7
B	Traffic	5		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Traffic	2		7	7
F	Traffic	2		7	7
G	Traffic	3		7	7
H	Traffic	3		7	7
I	Traffic	4		7	7
J	Traffic	4		7	7

Full Input Data And Results

Phase Intergreens Matrix

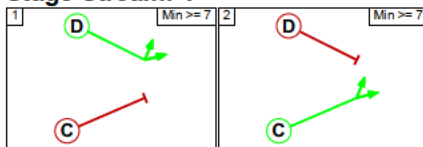
		Starting Phase									
Terminating Phase		A	B	C	D	E	F	G	H	I	J
	A		6	-	-	-	-	-	-	-	-
	B	6		-	-	-	-	-	-	-	-
	C	-	-		6	-	-	-	-	-	-
	D	-	-	6		-	-	-	-	-	-
	E	-	-	-	-		6	-	-	-	-
	F	-	-	-	-	6		-	-	-	-
	G	-	-	-	-	-	-		6	-	-
	H	-	-	-	-	-	6			-	-
	I	-	-	-	-	-	-	-			6
	J	-	-	-	-	-	-	-	6		

Phases in Stage

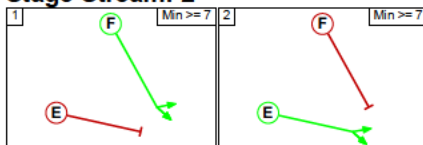
Stream	Stage No.	Phases in Stage
1	1	D
1	2	C
2	1	F
2	2	E
3	1	H
3	2	G
4	1	J
4	2	I
5	1	B
5	2	A

Stage Diagram

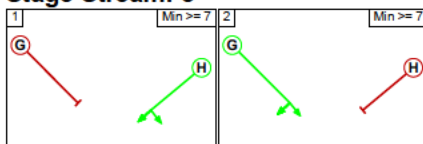
Stage Stream: 1



Stage Stream: 2

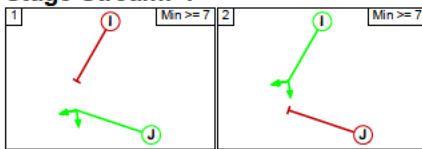


Stage Stream: 3

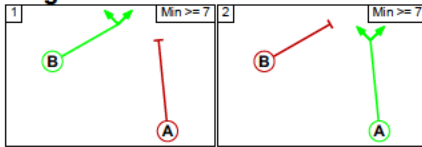


Full Input Data And Results

Stage Stream: 4



Stage Stream: 5



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 4

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 5

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

	To Stage	
From Stage		
	1	2
	1	6
	2	6

Stage Stream: 2

	To Stage	
From Stage		
	1	2
	1	6
	2	6

Full Input Data And Results

Stage Stream: 3

	To Stage		
From Stage		1	2
	1		6
	2	6	

Stage Stream: 4

	To Stage		
From Stage		1	2
	1		6
	2	6	

Stage Stream: 5

	To Stage		
From Stage		1	2
	1		6
	2	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: M69 (A5 north)
There are no Opposed Lanes in this Junction

Junction: J2: M69 (rugby road)
There are no Opposed Lanes in this Junction

Junction: J3: M69 (wb offslip)
There are no Opposed Lanes in this Junction

Junction: J4: M69 (A5 south)
There are no Opposed Lanes in this Junction

Full Input Data And Results

Junction: J5: M69 (hinckley road) - priority											
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)
J5:1/1 (Hinckley Road)	J6:2/1 (Ahead)	1155	0	J5:2/2	0.27	All	-	-	-	-	-
				J5:2/3	0.27	All					
				J5:2/4	0.27	None					
				J5:2/1	0.27	All					
	J6:3/1 (Left)	1155	0	J5:2/1	0.27	All					
J5:1/2 (Hinckley Road)	J6:2/2 (Ahead)	1155	0	J5:2/1	0.27	All	-	-	-	-	-
				J5:2/2	0.27	All					
				J5:2/3	0.27	All					
				J5:2/4	0.27	All					
	J6:2/3 (Ahead)	1155	0	J5:2/1	0.27	All					
				J5:2/2	0.27	All					
				J5:2/3	0.27	All					
				J5:2/4	0.27	All					

Junction: J6: M69 (eb offslip)

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: J1: M69 (A5 north)												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (A5 North)	U	D	2	3	60.0	User	1900	-	-	-	-	-
J1:1/2 (A5 North)	U	D	2	3	60.0	User	1900	-	-	-	-	-
J1:1/3 (A5 North)	U	D	2	3	10.4	User	1900	-	-	-	-	-
J1:2/1 (NB CIRC (A5 North))	U	C	2	3	7.8	User	1900	-	-	-	-	-
J1:2/2 (NB CIRC (A5 North))	U	C	2	3	11.3	User	1900	-	-	-	-	-
J1:2/3 (NB CIRC (A5 North))	U	C	2	3	11.3	User	1900	-	-	-	-	-
J1:3/1 (A5 North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:3/2 (A5 North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: M69 (rugby road)												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (Rugby Road)	U	F	2	3	20.0	User	1900	-	-	-	-	-
J2:1/2 (Rugby Road)	U	F	2	3	60.0	User	1900	-	-	-	-	-
J2:1/3 (Rugby Road)	U	F	2	3	60.0	User	1900	-	-	-	-	-
J2:2/1 (EB Circ (Rugby Rd))	U	E	2	3	9.9	User	1900	-	-	-	-	-
J2:2/2 (EB Circ (Rugby Rd))	U	E	2	3	14.8	User	1900	-	-	-	-	-
J2:2/3 (EB Circ (Rugby Rd))	U	E	2	3	14.8	User	1900	-	-	-	-	-
J2:3/1 (Rugby Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:3/2 (Rugby Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J3: M69 (wb offslip)												
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)
J3:1/1 (M69 WB Off Slip)	U	G	2	3	60.0	User	1900	-	-	-	-	-
J3:1/2 (M69 WB Off Slip)	U	G	2	3	60.0	User	1900	-	-	-	-	-
J3:1/3 (M69 WB Off Slip)	U	G	2	3	20.9	User	1900	-	-	-	-	-
J3:2/1 (SB CIRC (M69 WB off))	U	H	2	3	16.5	User	1900	-	-	-	-	-
J3:2/2 (SB CIRC (M69 WB off))	U	H	2	3	16.5	User	1900	-	-	-	-	-
J3:3/1 (M69 EB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J4: M69 (A5 south)												
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)
J4:1/1 (A5 South)	U	J	2	3	19.1	User	1900	-	-	-	-	-
J4:1/2 (A5 South)	U	J	2	3	60.0	User	1900	-	-	-	-	-
J4:1/3 (A5 South)	U	J	2	3	60.0	User	1900	-	-	-	-	-
J4:2/1 (SB CIRC (A5 South))	U	I	2	3	12.2	User	1900	-	-	-	-	-
J4:2/2 (SB CIRC (A5 South))	U	I	2	3	12.2	User	1900	-	-	-	-	-
J4:2/3 (SB CIRC (A5 South))	U	I	2	3	12.2	User	1900	-	-	-	-	-
J4:2/4 (SB CIRC (A5 South))	U	I	2	3	12.2	User	1900	-	-	-	-	-
J4:3/1 (A5 South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J5: M69 (hinckley road) - priority												
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)
J5:1/1 (Hinckley Road)	O		2	3	17.4	User	1900	-	-	-	-	-
J5:1/2 (Hinckley Road)	O		2	3	60.0	User	1900	-	-	-	-	-
J5:2/1 (WB CIRC (Hinckley Rd))	U		2	3	10.4	User	1900	-	-	-	-	-
J5:2/2 (WB CIRC (Hinckley Rd))	U		2	3	10.4	User	1900	-	-	-	-	-
J5:2/3 (WB CIRC (Hinckley Rd))	U		2	3	10.4	User	1900	-	-	-	-	-
J5:2/4 (WB CIRC (Hinckley Rd))	U		2	3	10.4	User	1900	-	-	-	-	-
J5:3/1 (Hinckley Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J6: M69 (eb offslip)												
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)
J6:1/1 (M69 EB Off Slip)	U	B	2	3	60.0	User	1900	-	-	-	-	-
J6:1/2 (M69 EB Off Slip)	U	B	2	3	60.0	User	1900	-	-	-	-	-
J6:1/3 (M69 EB Off Slip)	U	B	2	3	18.3	User	1900	-	-	-	-	-
J6:2/1 (NB CIRC (M69 EB Off))	U	A	2	3	14.8	User	1900	-	-	-	-	-
J6:2/2 (NB CIRC (M69 EB Off))	U	A	2	3	14.8	User	1900	-	-	-	-	-
J6:2/3 (NB CIRC (M69 EB Off))	U	A	2	3	14.8	User	1900	-	-	-	-	-
J6:3/1 (M69 WB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 AM'	08:00	09:00	01:00	
2: '2023 PM'	17:00	18:00	01:00	
3: '2026 AM'	08:00	09:00	01:00	
4: '2026 PM'	17:00	18:00	01:00	
5: '2026 + Dev AM'	08:00	09:00	01:00	
6: '2026 + Dev PM'	17:00	18:00	01:00	
7: '2031 AM'	08:00	09:00	01:00	
8: '2031 PM'	17:00	18:00	01:00	
9: '2031 + Dev AM'	08:00	09:00	01:00	
10: '2031 + Dev PM'	17:00	18:00	01:00	

Scenario 1: '2023 AM' (FG1: '2023 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	72	105	0	254	37	468
	B	46	0	14	230	499	134	923
	C	139	9	0	12	86	111	357
	D	0	137	10	10	398	226	781
	E	311	455	71	325	0	14	1176
	F	105	199	186	596	44	0	1130
	Tot.	601	872	386	1173	1281	522	4835

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2023 AM
Junction: J1: M69 (A5 north)	
J1:1/1	325
J1:1/2 (with short)	851(In) 526(Out)
J1:1/3 (short)	325
J1:2/1	254
J1:2/2	439
J1:2/3	166
J1:3/1	792
J1:3/2	489
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	105
J2:1/2 (with short)	490(In) 385(Out)
J2:1/3	640
J2:2/1	496
J2:2/2	682
J2:2/3	335
J2:3/1	261
J2:3/2	261
Junction: J3: M69 (wb offslip)	
J3:1/1	177
J3:1/2 (with short)	291(In) 145(Out)
J3:1/3 (short)	146
J3:2/1	1067
J3:2/2	975
J3:3/1	601
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	244
J4:1/2 (with short)	584(In) 340(Out)
J4:1/3	339
J4:2/1	372
J4:2/2	931
J4:2/3	167
J4:2/4	168
J4:3/1	872
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	98

Full Input Data And Results

J5:1/2 (with short)	357(In) 259(Out)
J5:2/1	1161
J5:2/2	507
J5:2/3	376
J5:2/4	131
J5:3/1	386
Junction: J6: M69 (eb offslip)	
J6:1/1	398
J6:1/2 (with short)	383(In) 226(Out)
J6:1/3 (short)	157
J6:2/1	593
J6:2/2	431
J6:2/3	335
J6:3/1	1173

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2026 AM' (FG3: '2026 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	75	109	0	263	39	486
	B	47	0	14	236	512	138	947
	C	142	9	0	12	88	113	364
	D	0	142	10	10	413	234	809
	E	319	466	73	333	0	15	1206
	F	107	204	190	608	45	0	1154
	Tot.	615	896	396	1199	1321	539	4966

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2026 AM
Junction: J1: M69 (A5 north)	
J1:1/1	334
J1:1/2 (with short)	872(In) 539(Out)
J1:1/3 (short)	333
J1:2/1	262
J1:2/2	451
J1:2/3	171
J1:3/1	816
J1:3/2	505
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	107
J2:1/2 (with short)	501(In) 394(Out)
J2:1/3	653
J2:2/1	508
J2:2/2	700
J2:2/3	343
J2:3/1	269
J2:3/2	270
Junction: J3: M69 (wb offslip)	
J3:1/1	184
J3:1/2 (with short)	302(In) 151(Out)
J3:1/3 (short)	151
J3:2/1	1094
J3:2/2	996
J3:3/1	615
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	250
J4:1/2 (with short)	599(In) 349(Out)
J4:1/3	348
J4:2/1	382
J4:2/2	951
J4:2/3	173
J4:2/4	174
J4:3/1	896
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	100

Full Input Data And Results

J5:1/2 (with short)	364(In) 264(Out)
J5:2/1	1187
J5:2/2	522
J5:2/3	387
J5:2/4	135
J5:3/1	396
Junction: J6: M69 (eb offslip)	
J6:1/1	413
J6:1/2 (with short)	396(In) 234(Out)
J6:1/3 (short)	162
J6:2/1	610
J6:2/2	443
J6:2/3	343
J6:3/1	1199

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2026 + Dev AM' (FG5: '2026 + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	75	109	0	263	41	488
	B	47	0	15	236	512	138	948
	C	142	9	0	12	88	116	367
	D	0	142	10	10	413	244	819
	E	319	466	73	333	0	15	1206
	F	121	220	192	641	45	0	1219
	Tot.	629	912	399	1232	1321	554	5047

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2026 + Dev AM
Junction: J1: M69 (A5 north)	
J1:1/1	334
J1:1/2 (with short)	872(In) 539(Out)
J1:1/3 (short)	333
J1:2/1	270
J1:2/2	458
J1:2/3	171
J1:3/1	817
J1:3/2	504
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	121
J2:1/2 (with short)	533(In) 412(Out)
J2:1/3	686
J2:2/1	508
J2:2/2	700
J2:2/3	343
J2:3/1	277
J2:3/2	277
Junction: J3: M69 (wb offslip)	
J3:1/1	184
J3:1/2 (with short)	304(In) 152(Out)
J3:1/3 (short)	152
J3:2/1	1112
J3:2/2	1029
J3:3/1	629
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	251
J4:1/2 (with short)	600(In) 349(Out)
J4:1/3	348
J4:2/1	384
J4:2/2	984
J4:2/3	174
J4:2/4	175
J4:3/1	912
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	100

Full Input Data And Results

J5:1/2 (with short)	367(In) 267(Out)
J5:2/1	1220
J5:2/2	523
J5:2/3	387
J5:2/4	136
J5:3/1	399
Junction: J6: M69 (eb offslip)	
J6:1/1	413
J6:1/2 (with short)	406(In) 244(Out)
J6:1/3 (short)	162
J6:2/1	611
J6:2/2	445
J6:2/3	345
J6:3/1	1232

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2031 AM' (FG7: '2031 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	79	114	0	278	41	512
	B	49	0	14	245	531	143	982
	C	147	9	0	13	91	117	377
	D	0	150	10	11	435	247	853
	E	331	485	76	346	0	15	1253
	F	111	210	196	628	46	0	1191
	Tot.	638	933	410	1243	1381	563	5168

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2031 AM
Junction: J1: M69 (A5 north)	
J1:1/1	346
J1:1/2 (with short)	907(In) 561(Out)
J1:1/3 (short)	346
J1:2/1	273
J1:2/2	471
J1:2/3	180
J1:3/1	852
J1:3/2	529
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	111
J2:1/2 (with short)	517(In) 406(Out)
J2:1/3	674
J2:2/1	527
J2:2/2	730
J2:2/3	357
J2:3/1	281
J2:3/2	282
Junction: J3: M69 (wb offslip)	
J3:1/1	193
J3:1/2 (with short)	319(In) 159(Out)
J3:1/3 (short)	160
J3:2/1	1136
J3:2/2	1031
J3:3/1	638
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	259
J4:1/2 (with short)	621(In) 362(Out)
J4:1/3	361
J4:2/1	396
J4:2/2	985
J4:2/3	182
J4:2/4	183
J4:3/1	933
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	104

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J5:1/2 (with short)	377(In) 273(Out)
J5:2/1	1230
J5:2/2	544
J5:2/3	403
J5:2/4	141
J5:3/1	410
Junction: J6: M69 (eb offslip)	
J6:1/1	435
J6:1/2 (with short)	418(In) 247(Out)
J6:1/3 (short)	171
J6:2/1	635
J6:2/2	461
J6:2/3	356
J6:3/1	1243

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2031 + Dev AM' (FG9: '2031 + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	79	114	0	278	43	514
	B	49	0	15	245	531	143	983
	C	147	9	0	13	91	119	379
	D	0	150	10	11	435	257	863
	E	331	485	76	346	0	15	1253
	F	124	227	198	661	46	0	1256
	Tot.	651	950	413	1276	1381	577	5248

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2031 + Dev AM
Junction: J1: M69 (A5 north)	
J1:1/1	346
J1:1/2 (with short)	907(In) 561(Out)
J1:1/3 (short)	346
J1:2/1	280
J1:2/2	478
J1:2/3	180
J1:3/1	853
J1:3/2	528
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	124
J2:1/2 (with short)	549(In) 425(Out)
J2:1/3	707
J2:2/1	527
J2:2/2	730
J2:2/3	357
J2:3/1	288
J2:3/2	289
Junction: J3: M69 (wb offslip)	
J3:1/1	193
J3:1/2 (with short)	321(In) 160(Out)
J3:1/3 (short)	161
J3:2/1	1155
J3:2/2	1064
J3:3/1	651
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	260
J4:1/2 (with short)	622(In) 362(Out)
J4:1/3	361
J4:2/1	398
J4:2/2	1018
J4:2/3	183
J4:2/4	184
J4:3/1	950
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	104

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J5:1/2 (with short)	379(In) 275(Out)
J5:2/1	1263
J5:2/2	545
J5:2/3	403
J5:2/4	142
J5:3/1	413
Junction: J6: M69 (eb offslip)	
J6:1/1	435
J6:1/2 (with short)	428(In) 257(Out)
J6:1/3 (short)	171
J6:2/1	636
J6:2/2	462
J6:2/3	358
J6:3/1	1276

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2023 PM' (FG2: '2023 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	80	155	0	252	71	558
	B	37	1	9	157	446	212	862
	C	78	9	0	14	107	189	397
	D	0	391	13	7	458	618	1487
	E	170	382	105	277	0	16	950
	F	55	169	117	296	25	0	662
	Tot.	340	1032	399	751	1288	1106	4916

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2023 PM
Junction: J1: M69 (A5 north)	
J1:1/1	186
J1:1/2 (with short)	764(In) 487(Out)
J1:1/3 (short)	277
J1:2/1	545
J1:2/2	660
J1:2/3	421
J1:3/1	858
J1:3/2	430
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	55
J2:1/2 (with short)	341(In) 286(Out)
J2:1/3	321
J2:2/1	285
J2:2/2	901
J2:2/3	284
J2:3/1	553
J2:3/2	553
Junction: J3: M69 (wb offslip)	
J3:1/1	235
J3:1/2 (with short)	323(In) 162(Out)
J3:1/3 (short)	161
J3:2/1	1187
J3:2/2	605
J3:3/1	340
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	166
J4:1/2 (with short)	514(In) 348(Out)
J4:1/3	348
J4:2/1	390
J4:2/2	580
J4:2/3	174
J4:2/4	174
J4:3/1	1032
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	121

Full Input Data And Results

J5:1/2 (with short)	397(In) 276(Out)
J5:2/1	737
J5:2/2	522
J5:2/3	343
J5:2/4	179
J5:3/1	399
Junction: J6: M69 (eb offslip)	
J6:1/1	458
J6:1/2 (with short)	1029(In) 618(Out)
J6:1/3 (short)	411
J6:2/1	629
J6:2/2	437
J6:2/3	361
J6:3/1	751

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2026 PM' (FG4: '2026 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	83	160	0	261	74	578
	B	38	1	9	161	458	217	884
	C	79	9	0	14	109	193	404
	D	0	405	13	7	474	640	1539
	E	175	391	108	284	0	16	974
	F	56	173	120	303	26	0	678
	Tot.	348	1062	410	769	1328	1140	5057

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2026 PM
Junction: J1: M69 (A5 north)	
J1:1/1	191
J1:1/2 (with short)	783(In) 499(Out)
J1:1/3 (short)	284
J1:2/1	561
J1:2/2	680
J1:2/3	435
J1:3/1	884
J1:3/2	444
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	56
J2:1/2 (with short)	349(In) 293(Out)
J2:1/3	329
J2:2/1	292
J2:2/2	927
J2:2/3	291
J2:3/1	569
J2:3/2	571
Junction: J3: M69 (wb offslip)	
J3:1/1	243
J3:1/2 (with short)	335(In) 168(Out)
J3:1/3 (short)	167
J3:2/1	1220
J3:2/2	620
J3:3/1	348
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	170
J4:1/2 (with short)	527(In) 357(Out)
J4:1/3	357
J4:2/1	401
J4:2/2	594
J4:2/3	181
J4:2/4	180
J4:3/1	1062
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	123

Full Input Data And Results

J5:1/2 (with short)	404(In) 281(Out)
J5:2/1	755
J5:2/2	538
J5:2/3	352
J5:2/4	185
J5:3/1	410
Junction: J6: M69 (eb offslip)	
J6:1/1	474
J6:1/2 (with short)	1065(In) 640(Out)
J6:1/3 (short)	425
J6:2/1	647
J6:2/2	448
J6:2/3	370
J6:3/1	769

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2026 + Dev PM' (FG6: '2026 + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	83	160	0	261	74	578
	B	38	1	9	161	458	243	910
	C	79	9	0	14	109	196	407
	D	0	405	13	7	474	672	1571
	E	175	391	108	284	0	16	974
	F	58	178	120	308	26	0	690
	Tot.	350	1067	410	774	1328	1201	5130

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2026 + Dev PM
Junction: J1: M69 (A5 north)	
J1:1/1	191
J1:1/2 (with short)	783(In) 499(Out)
J1:1/3 (short)	284
J1:2/1	592
J1:2/2	710
J1:2/3	435
J1:3/1	897
J1:3/2	431
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	58
J2:1/2 (with short)	356(In) 298(Out)
J2:1/3	334
J2:2/1	292
J2:2/2	927
J2:2/3	291
J2:3/1	600
J2:3/2	601
Junction: J3: M69 (wb offslip)	
J3:1/1	243
J3:1/2 (with short)	335(In) 168(Out)
J3:1/3 (short)	167
J3:2/1	1225
J3:2/2	625
J3:3/1	350
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	170
J4:1/2 (with short)	540(In) 370(Out)
J4:1/3	370
J4:2/1	401
J4:2/2	599
J4:2/3	181
J4:2/4	180
J4:3/1	1067
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	123

Full Input Data And Results

J5:1/2 (with short)	407(In) 284(Out)
J5:2/1	760
J5:2/2	551
J5:2/3	352
J5:2/4	198
J5:3/1	410
Junction: J6: M69 (eb offslip)	
J6:1/1	474
J6:1/2 (with short)	1097(In) 672(Out)
J6:1/3 (short)	425
J6:2/1	660
J6:2/2	450
J6:2/3	384
J6:3/1	774

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2031 PM' (FG8: '2031 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	87	169	0	275	78	609
	B	40	1	10	167	476	226	920
	C	82	9	0	15	112	199	417
	D	0	427	14	8	500	675	1624
	E	181	407	112	295	0	17	1012
	F	58	178	124	313	27	0	700
	Tot.	361	1109	429	798	1390	1195	5282

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2031 PM
Junction: J1: M69 (A5 north)	
J1:1/1	198
J1:1/2 (with short)	814(In) 519(Out)
J1:1/3 (short)	295
J1:2/1	588
J1:2/2	712
J1:2/3	459
J1:3/1	923
J1:3/2	467
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	58
J2:1/2 (with short)	360(In) 302(Out)
J2:1/3	340
J2:2/1	303
J2:2/2	970
J2:2/3	303
J2:3/1	597
J2:3/2	598
Junction: J3: M69 (wb offslip)	
J3:1/1	256
J3:1/2 (with short)	353(In) 176(Out)
J3:1/3 (short)	177
J3:2/1	1272
J3:2/2	643
J3:3/1	361
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	177
J4:1/2 (with short)	549(In) 372(Out)
J4:1/3	371
J4:2/1	419
J4:2/2	616
J4:2/3	189
J4:2/4	191
J4:3/1	1109
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	127

Full Input Data And Results

J5:1/2 (with short)	417(In) 290(Out)
J5:2/1	783
J5:2/2	561
J5:2/3	369
J5:2/4	193
J5:3/1	429
Junction: J6: M69 (eb offslip)	
J6:1/1	500
J6:1/2 (with short)	1124(In) 675(Out)
J6:1/3 (short)	449
J6:2/1	673
J6:2/2	468
J6:2/3	384
J6:3/1	798

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2031 + Dev PM' (FG10: '2031 + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	87	169	0	275	78	609
	B	40	1	10	167	476	251	945
	C	82	9	0	15	112	202	420
	D	0	427	14	8	500	707	1656
	E	181	407	112	295	0	17	1012
	F	60	184	124	318	27	0	713
	Tot.	363	1115	429	803	1390	1255	5355

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2031 + Dev PM
Junction: J1: M69 (A5 north)	
J1:1/1	198
J1:1/2 (with short)	814(In) 519(Out)
J1:1/3 (short)	295
J1:2/1	618
J1:2/2	742
J1:2/3	459
J1:3/1	935
J1:3/2	455
Junction: J2: M69 (rugby road)	
J2:1/1 (short)	60
J2:1/2 (with short)	368(In) 308(Out)
J2:1/3	345
J2:2/1	303
J2:2/2	970
J2:2/3	303
J2:3/1	627
J2:3/2	628
Junction: J3: M69 (wb offslip)	
J3:1/1	256
J3:1/2 (with short)	353(In) 176(Out)
J3:1/3 (short)	177
J3:2/1	1278
J3:2/2	648
J3:3/1	363
Junction: J4: M69 (A5 south)	
J4:1/1 (short)	177
J4:1/2 (with short)	561(In) 384(Out)
J4:1/3	384
J4:2/1	419
J4:2/2	621
J4:2/3	189
J4:2/4	191
J4:3/1	1115
Junction: J5: M69 (hinckley road) - priority	
J5:1/1 (short)	127

Full Input Data And Results

J5:1/2 (with short)	420(In) 293(Out)
J5:2/1	788
J5:2/2	573
J5:2/3	369
J5:2/4	206
J5:3/1	429
Junction: J6: M69 (eb offslip)	
J6:1/1	500
J6:1/2 (with short)	1156(In) 707(Out)
J6:1/3 (short)	449
J6:2/1	685
J6:2/2	470
J6:2/3	398
J6:3/1	803

Lane Saturation Flows

Junction: J1: M69 (A5 north)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A5 North Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/2 (A5 North Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:1/3 (A5 North Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/1 (NB CIRC (A5 North) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/2 (NB CIRC (A5 North) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J1:2/3 (NB CIRC (A5 North) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J1:3/1 (A5 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:3/2 (A5 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: M69 (rugby road)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Rugby Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/2 (Rugby Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:1/3 (Rugby Road Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/1 (EB Circ (Rugby Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/2 (EB Circ (Rugby Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J2:2/3 (EB Circ (Rugby Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J2:3/1 (Rugby Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:3/2 (Rugby Road Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Junction: J3: M69 (wb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (M69 WB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/2 (M69 WB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:1/3 (M69 WB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/1 (SB CIRC (M69 WB off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J3:2/2 (SB CIRC (M69 WB off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J3:3/1 (M69 EB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J4: M69 (A5 south)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (A5 South Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/2 (A5 South Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:1/3 (A5 South Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/1 (SB CIRC (A5 South) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/2 (SB CIRC (A5 South) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/3 (SB CIRC (A5 South) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J4:2/4 (SB CIRC (A5 South) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J4:3/1 (A5 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: M69 (hinckley road) - priority								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (Hinckley Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:1/2 (Hinckley Road Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/1 (WB CIRC (Hinckley Rd) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/2 (WB CIRC (Hinckley Rd) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/3 (WB CIRC (Hinckley Rd) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J5:2/4 (WB CIRC (Hinckley Rd) Lane 4)	This lane uses a directly entered Saturation Flow						1900	1900
J5:3/1 (Hinckley Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

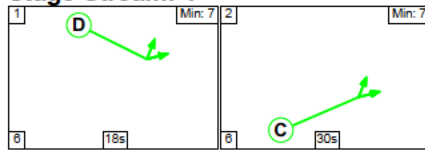
Full Input Data And Results

Junction: J6: M69 (eb offslip)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (M69 EB Off Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/2 (M69 EB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:1/3 (M69 EB Off Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/1 (NB CIRC (M69 EB Off) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/2 (NB CIRC (M69 EB Off) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
J6:2/3 (NB CIRC (M69 EB Off) Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
J6:3/1 (M69 WB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf

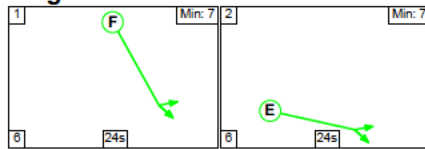
Scenario 1: '2023 AM' (FG1: '2023 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

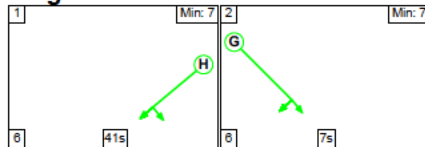
Stage Stream: 1



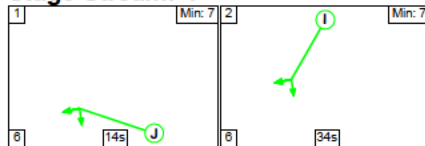
Stage Stream: 2



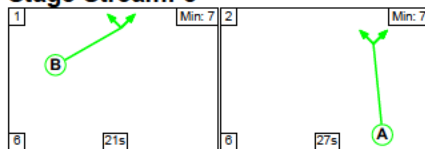
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Full Input Data And Results

Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	30
Change Point	54	18

Stage Stream: 2

Stage	1	2
Duration	24	24
Change Point	23	53

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	4	51

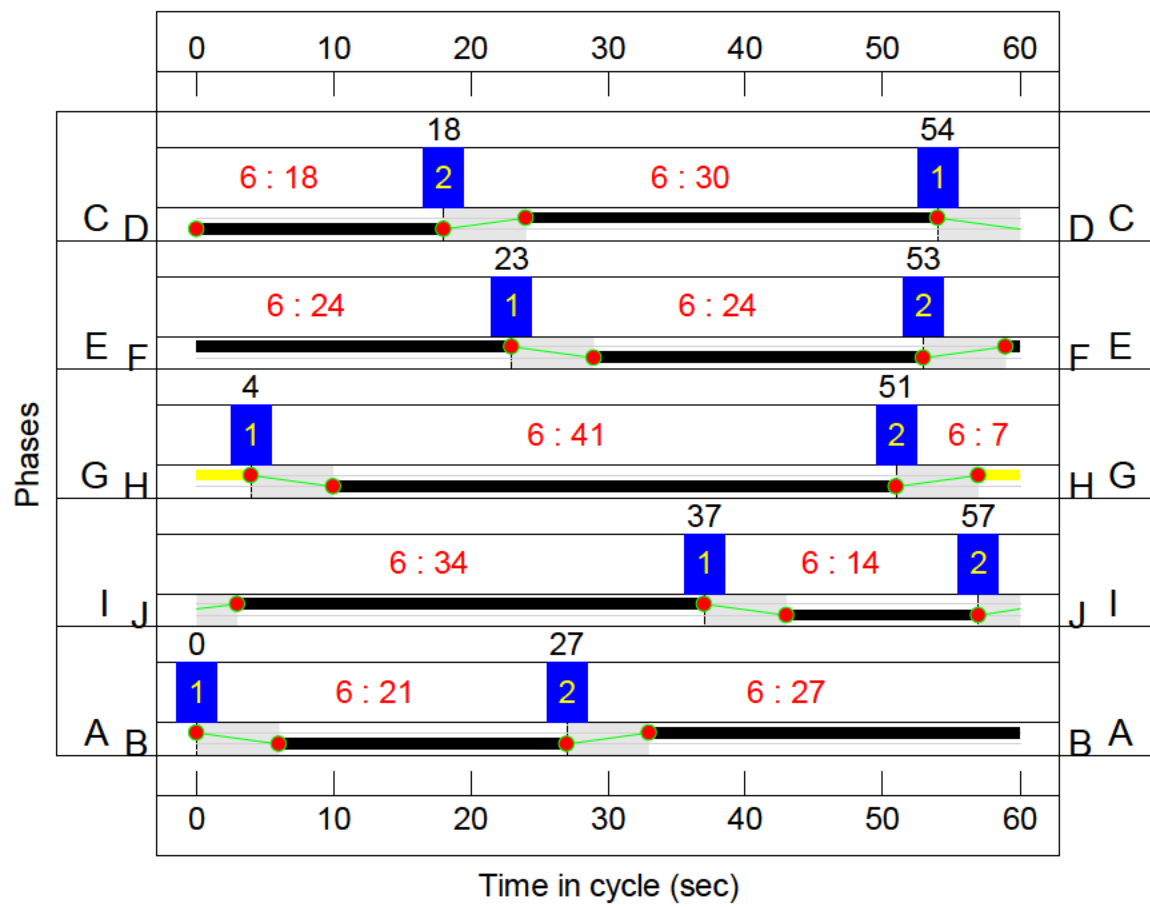
Stage Stream: 4

Stage	1	2
Duration	14	34
Change Point	37	57

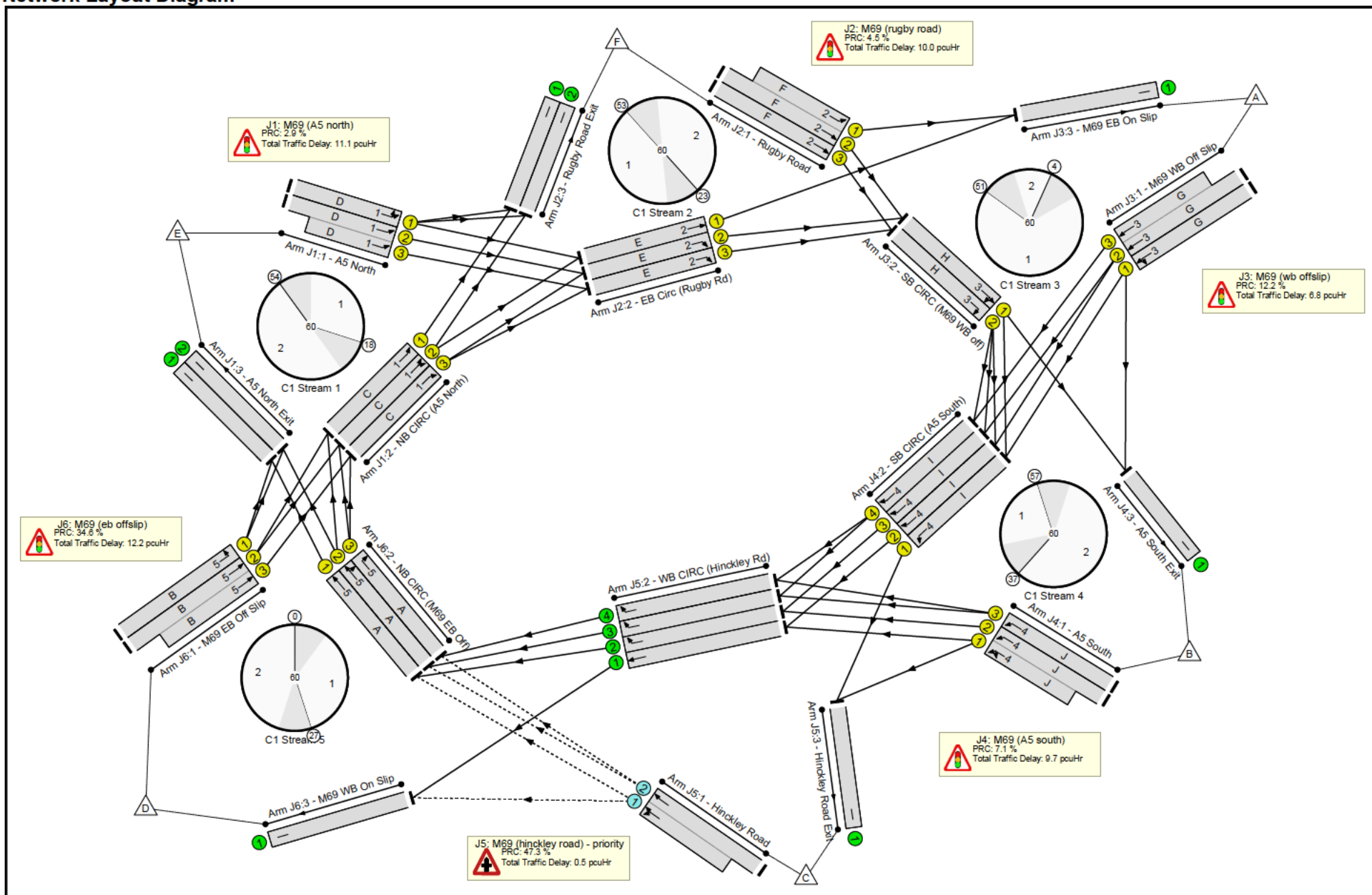
Stage Stream: 5

Stage	1	2
Duration	21	27
Change Point	0	27

Signal Timings Diagram



Full Input Data And Results Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	87.4%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	87.4%
1/1	A5 North Ahead Left	U	1	N/A	D		1	18	-	325	1900	602	54.0%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	18	-	851	1900:1900	602+372	87.4 : 87.4%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	30	-	254	1900	982	25.9%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	30	-	439	1900	982	44.7%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	30	-	166	1900	982	16.9%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	792	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	86.1%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	24	-	490	1900:1900	792+216	48.6 : 48.6%
1/3	Rugby Road Ahead	U	2	N/A	F		1	24	-	640	1900	792	80.8%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	24	-	496	1900	792	62.7%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	682	1900	792	86.1%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	335	1900	792	42.3%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	80.2%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	177	1900	253	69.9%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	291	1900:1900	253+253	57.2 : 57.6%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1067	1900	1330	80.2%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	975	1900	1330	73.3%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	601	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	84.0%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	14	-	584	1900:1900	475+475	71.6 : 51.4%
1/3	A5 South Ahead	U	4	N/A	J		1	14	-	339	1900	475	71.4%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	34	-	372	1900	1108	33.6%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	931	1900	1108	84.0%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	167	1900	1108	15.1%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	168	1900	1108	15.2%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	872	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	61.1%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	357	1900:1900	632+239	41.0 : 41.0%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	1161	1900	1900	61.1%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	507	1900	1900	26.7%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	376	1900	1900	19.8%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	131	1900	1900	6.9%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	386	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	66.9%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	21	-	398	1900	697	57.1%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	21	-	383	1900:1900	697+550	32.4 : 28.5%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	27	-	593	1900	887	66.9%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	27	-	431	1900	887	48.6%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	27	-	335	1900	887	37.8%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	1173	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	714	0	0	38.8	11.5	0.0	50.3	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	7.2	3.9	0.0	11.1	-	-	-	-
1/1	325	325	-	-	-	1.5	0.6	-	2.1	23.4	4.4	0.6	5.0
1/2+1/3	851	851	-	-	-	4.4	3.3	-	7.7	32.4	8.2	3.3	11.5
2/1	254	254	-	-	-	0.4	0.0	-	0.4	5.1	1.9	0.0	1.9
2/2	439	439	-	-	-	0.6	0.0	-	0.6	5.0	2.5	0.0	2.5
2/3	166	166	-	-	-	0.4	0.0	-	0.4	8.5	2.3	0.0	2.3
3/1	792	792	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	7.5	2.5	0.0	10.0	-	-	-	-
1/2+1/1	490	490	-	-	-	1.7	0.5	-	2.2	15.8	4.6	0.5	5.1
1/3	640	640	-	-	-	2.7	2.1	-	4.8	27.0	9.2	2.1	11.3
2/1	496	496	-	-	-	0.8	0.0	-	0.8	6.0	3.5	0.0	3.5
2/2	682	682	-	-	-	1.9	0.0	-	1.9	10.2	4.0	0.0	4.0
2/3	335	335	-	-	-	0.3	0.0	-	0.3	3.4	0.6	0.0	0.6
3/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	5.0	1.8	0.0	6.8	-	-	-	-
1/1	177	177	-	-	-	1.2	1.1	-	2.3	47.8	2.8	1.1	3.9
1/2+1/3	291	291	-	-	-	2.0	0.7	-	2.6	32.7	2.3	0.7	2.9
2/1	1067	1067	-	-	-	0.5	0.0	-	0.5	1.6	5.4	0.0	5.4
2/2	975	975	-	-	-	1.3	0.0	-	1.3	4.9	5.0	0.0	5.0
3/1	601	601	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

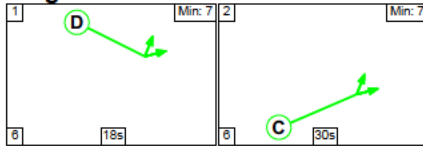
Input Data and Results													
J4: M69 (A5 south)	-	-	0	0	0	7.7	2.0	0.0	9.7	-	-	-	-
1/2+1/1	584	584	-	-	-	3.3	0.8	-	4.0	25.0	5.1	0.8	5.9
1/3	339	339	-	-	-	1.9	1.2	-	3.2	33.5	5.1	1.2	6.3
2/1	372	372	-	-	-	0.7	0.0	-	0.7	6.6	4.5	0.0	4.5
2/2	931	931	-	-	-	1.8	0.0	-	1.8	6.8	6.6	0.0	6.6
2/3	167	167	-	-	-	0.0	0.0	-	0.0	0.7	0.2	0.0	0.2
2/4	168	168	-	-	-	0.0	0.0	-	0.0	0.7	0.2	0.0	0.2
3/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: M69 (hinckley road) - priority	-	-	714	0	0	0.1	0.3	0.0	0.5	-	-	-	-
1/2+1/1	357	357	714	0	0	0.1	0.3	-	0.5	4.7	0.9	0.3	1.3
2/1	1161	1161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/4	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J6: M69 (eb offslip)	-	-	0	0	0	11.3	0.9	0.0	12.2	-	-	-	-
1/1	398	398	-	-	-	1.7	0.7	-	2.3	21.2	5.3	0.7	6.0
1/2+1/3	383	383	-	-	-	1.4	0.2	-	1.7	15.5	2.7	0.2	2.9
2/1	593	593	-	-	-	4.1	0.0	-	4.1	24.8	9.1	0.0	9.1
2/2	431	431	-	-	-	2.6	0.0	-	2.6	21.8	6.6	0.0	6.6
2/3	335	335	-	-	-	1.5	0.0	-	1.5	15.8	4.3	0.0	4.3
3/1	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%):	2.9					Total Delay for Signalled Lanes (pcuHr):	11.13		Cycle Time (s):	60			
C1 Stream: 2 PRC for Signalled Lanes (%):	4.5					Total Delay for Signalled Lanes (pcuHr):	10.02		Cycle Time (s):	60			
C1 Stream: 3 PRC for Signalled Lanes (%):	12.2					Total Delay for Signalled Lanes (pcuHr):	6.80		Cycle Time (s):	60			
C1 Stream: 4 PRC for Signalled Lanes (%):	7.1					Total Delay for Signalled Lanes (pcuHr):	9.72		Cycle Time (s):	60			
C1 Stream: 5 PRC for Signalled Lanes (%):	34.6					Total Delay for Signalled Lanes (pcuHr):	12.17		Cycle Time (s):	60			
PRC Over All Lanes (%):	2.9					Total Delay Over All Lanes(pcuHr):	50.30						

Full Input Data And Results

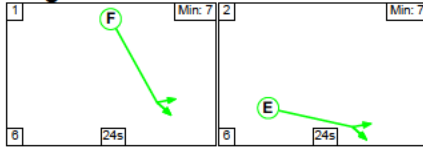
Scenario 2: '2026 AM' (FG3: '2026 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

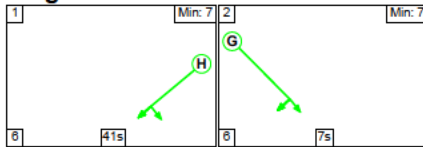
Stage Stream: 1



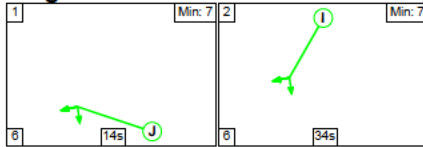
Stage Stream: 2



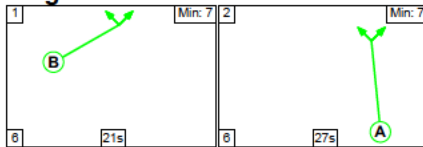
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	30
Change Point	54	18

Stage Stream: 2

Stage	1	2
Duration	24	24
Change Point	23	53

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	4	51

Full Input Data And Results

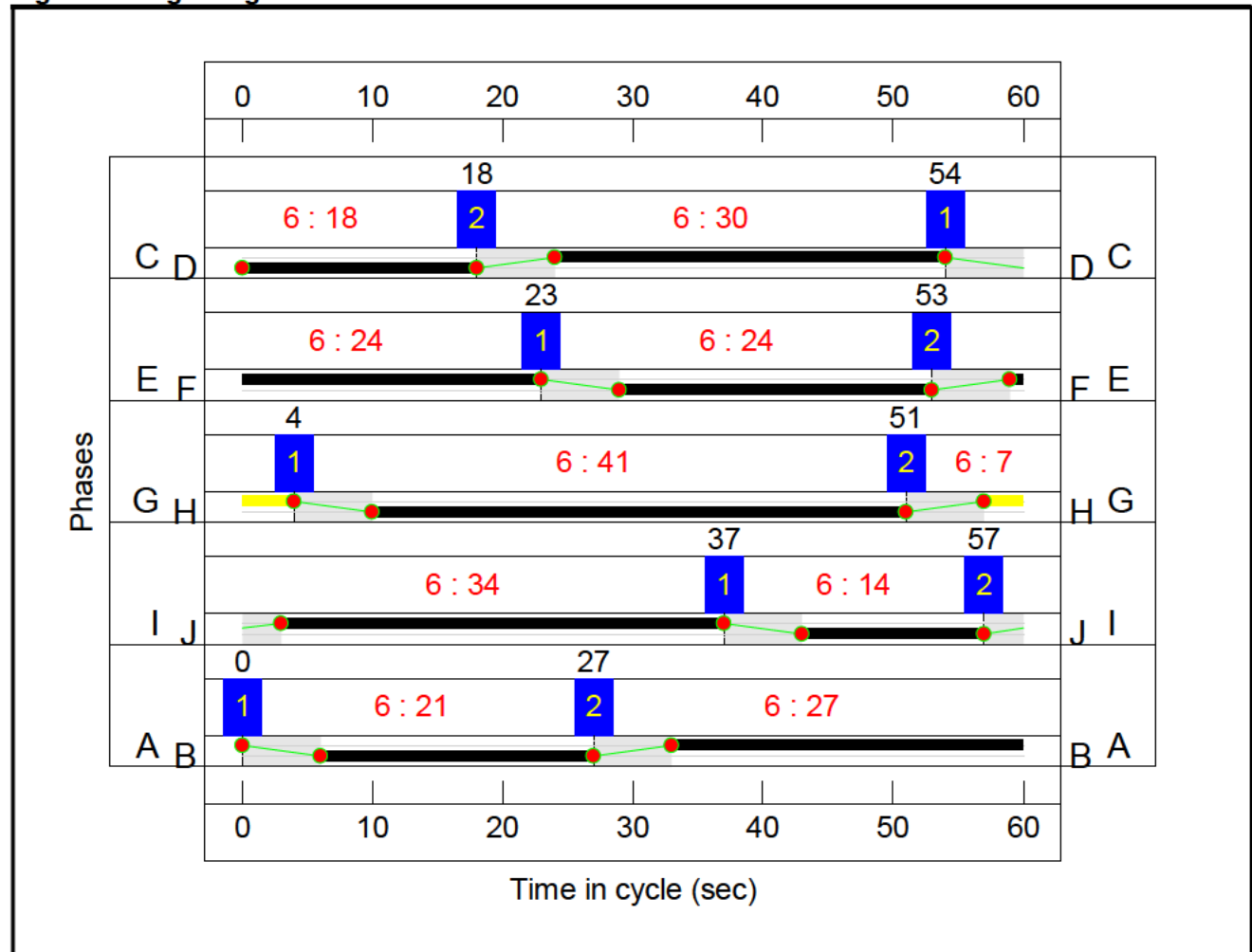
Stage Stream: 4

Stage	1	2
Duration	14	34
Change Point	37	57

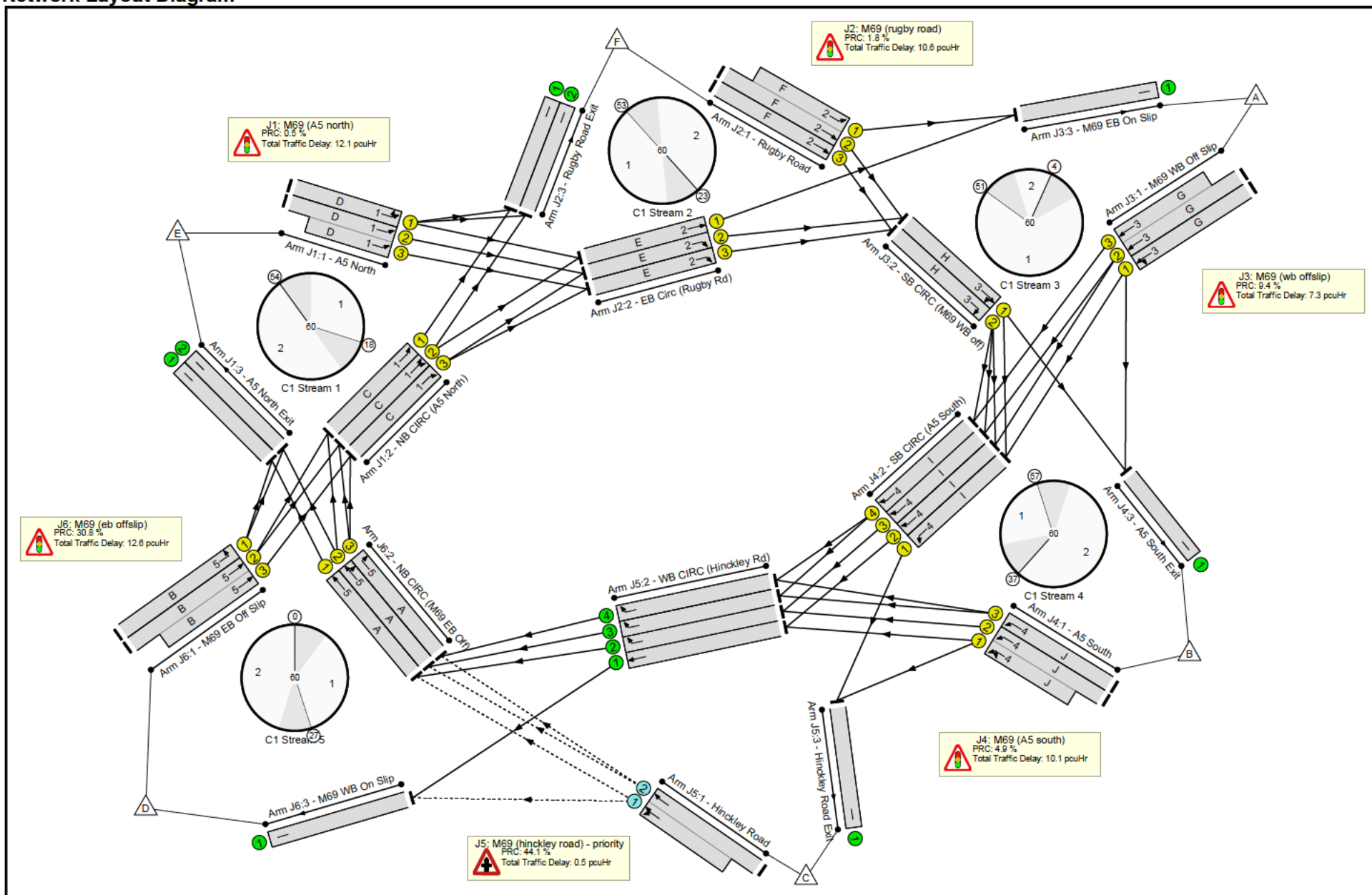
Stage Stream: 5

Stage	1	2
Duration	21	27
Change Point	0	27

Signal Timings Diagram



Full Input Data And Results Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
1/1	A5 North Ahead Left	U	1	N/A	D		1	18	-	334	1900	602	55.5%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	18	-	872	1900:1900	602+372	89.6 : 89.6%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	30	-	262	1900	982	26.7%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	30	-	451	1900	982	45.9%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	30	-	171	1900	982	17.4%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	816	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	88.4%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	24	-	501	1900:1900	792+215	49.8 : 49.8%
1/3	Rugby Road Ahead	U	2	N/A	F		1	24	-	653	1900	792	82.5%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	24	-	508	1900	792	64.2%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	700	1900	792	88.4%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	343	1900	792	43.3%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	269	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	270	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	184	1900	253	72.6%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	302	1900:1900	253+253	59.6 : 59.6%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1094	1900	1330	82.3%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	996	1900	1330	74.9%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	85.8%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	14	-	599	1900:1900	475+475	73.5 : 52.6%
1/3	A5 South Ahead	U	4	N/A	J		1	14	-	348	1900	475	73.3%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	34	-	382	1900	1108	34.5%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	951	1900	1108	85.8%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	173	1900	1108	15.6%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	174	1900	1108	15.7%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	62.5%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	364	1900:1900	618+234	42.7 : 42.7%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	1187	1900	1900	62.5%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	522	1900	1900	27.5%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	387	1900	1900	20.4%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	135	1900	1900	7.1%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	68.8%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	21	-	413	1900	697	59.3%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	21	-	396	1900:1900	697+546	33.6 : 29.7%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	27	-	610	1900	887	68.8%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	27	-	443	1900	887	50.0%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	27	-	343	1900	887	38.7%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	1199	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	728	0	0	40.3	12.9	0.0	53.2	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	7.5	4.6	0.0	12.1	-	-	-	-
1/1	334	334	-	-	-	1.6	0.6	-	2.2	23.7	4.5	0.6	5.2
1/2+1/3	872	872	-	-	-	4.5	4.0	-	8.5	35.0	8.5	4.0	12.5
2/1	262	262	-	-	-	0.4	0.0	-	0.4	5.1	2.0	0.0	2.0
2/2	451	451	-	-	-	0.6	0.0	-	0.6	5.0	2.6	0.0	2.6
2/3	171	171	-	-	-	0.4	0.0	-	0.4	8.6	2.4	0.0	2.4
3/1	816	816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	505	505	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	7.8	2.8	0.0	10.6	-	-	-	-
1/2+1/1	501	501	-	-	-	1.7	0.5	-	2.2	16.0	4.8	0.5	5.3
1/3	653	653	-	-	-	2.8	2.3	-	5.1	28.1	9.6	2.3	11.9
2/1	508	508	-	-	-	0.8	0.0	-	0.8	6.0	3.6	0.0	3.6
2/2	700	700	-	-	-	2.1	0.0	-	2.1	10.9	4.3	0.0	4.3
2/3	343	343	-	-	-	0.3	0.0	-	0.3	3.3	0.6	0.0	0.6
3/1	269	269	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	270	270	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	5.2	2.0	0.0	7.3	-	-	-	-
1/1	184	184	-	-	-	1.3	1.3	-	2.6	50.0	2.9	1.3	4.2
1/2+1/3	302	302	-	-	-	2.1	0.7	-	2.8	33.2	2.3	0.7	3.1
2/1	1094	1094	-	-	-	0.5	0.0	-	0.5	1.6	5.7	0.0	5.7
2/2	996	996	-	-	-	1.4	0.0	-	1.4	5.1	5.2	0.0	5.2
3/1	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

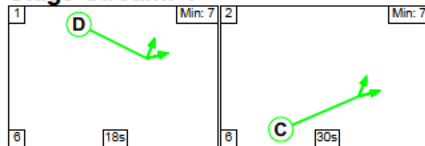
J4: M69 (A5 south)	-	-	0	0	0	7.9	2.2	0.0	10.1	-	-	-	-
1/2+1/1	599	599	-	-	-	3.4	0.8	-	4.2	25.3	5.3	0.8	6.2
1/3	348	348	-	-	-	2.0	1.3	-	3.3	34.5	5.3	1.3	6.7
2/1	382	382	-	-	-	0.7	0.0	-	0.7	6.6	4.5	0.0	4.5
2/2	951	951	-	-	-	1.8	0.0	-	1.8	7.0	6.8	0.0	6.8
2/3	173	173	-	-	-	0.0	0.0	-	0.0	0.6	0.2	0.0	0.2
2/4	174	174	-	-	-	0.0	0.0	-	0.0	0.7	0.2	0.0	0.2
3/1	896	896	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: M69 (hinckley road) - priority	-	-	728	0	0	0.1	0.4	0.0	0.5	-	-	-	-
1/2+1/1	364	364	728	0	0	0.1	0.4	-	0.5	5.0	1.0	0.4	1.3
2/1	1187	1187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	387	387	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/4	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J6: M69 (eb offslip)	-	-	0	0	0	11.7	1.0	0.0	12.6	-	-	-	-
1/1	413	413	-	-	-	1.8	0.7	-	2.5	21.7	5.5	0.7	6.2
1/2+1/3	396	396	-	-	-	1.5	0.2	-	1.7	15.6	2.8	0.2	3.0
2/1	610	610	-	-	-	4.2	0.0	-	4.2	25.0	9.4	0.0	9.4
2/2	443	443	-	-	-	2.7	0.0	-	2.7	21.9	6.8	0.0	6.8
2/3	343	343	-	-	-	1.5	0.0	-	1.5	15.8	4.4	0.0	4.4
3/1	1199	1199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%)					0.5	Total Delay for Signalled Lanes (pcuHr):	12.09	Cycle Time (s):	60				
C1 Stream: 2 PRC for Signalled Lanes (%)					1.8	Total Delay for Signalled Lanes (pcuHr):	10.61	Cycle Time (s):	60				
C1 Stream: 3 PRC for Signalled Lanes (%)					9.4	Total Delay for Signalled Lanes (pcuHr):	7.25	Cycle Time (s):	60				
C1 Stream: 4 PRC for Signalled Lanes (%)					4.9	Total Delay for Signalled Lanes (pcuHr):	10.14	Cycle Time (s):	60				
C1 Stream: 5 PRC for Signalled Lanes (%)					30.8	Total Delay for Signalled Lanes (pcuHr):	12.64	Cycle Time (s):	60				
PRC Over All Lanes (%)					0.5	Total Delay Over All Lanes(pcuHr):	53.24						

Full Input Data And Results

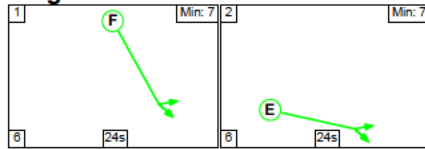
Scenario 3: '2026 + Dev AM' (FG5: '2026 + Dev AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

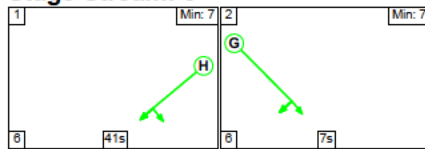
Stage Stream: 1



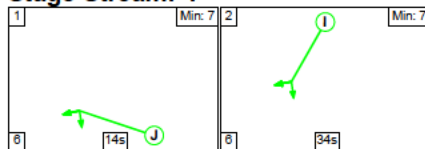
Stage Stream: 2



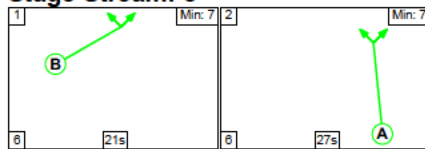
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	30
Change Point	54	18

Stage Stream: 2

Stage	1	2
Duration	24	24
Change Point	23	53

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	4	51

Full Input Data And Results

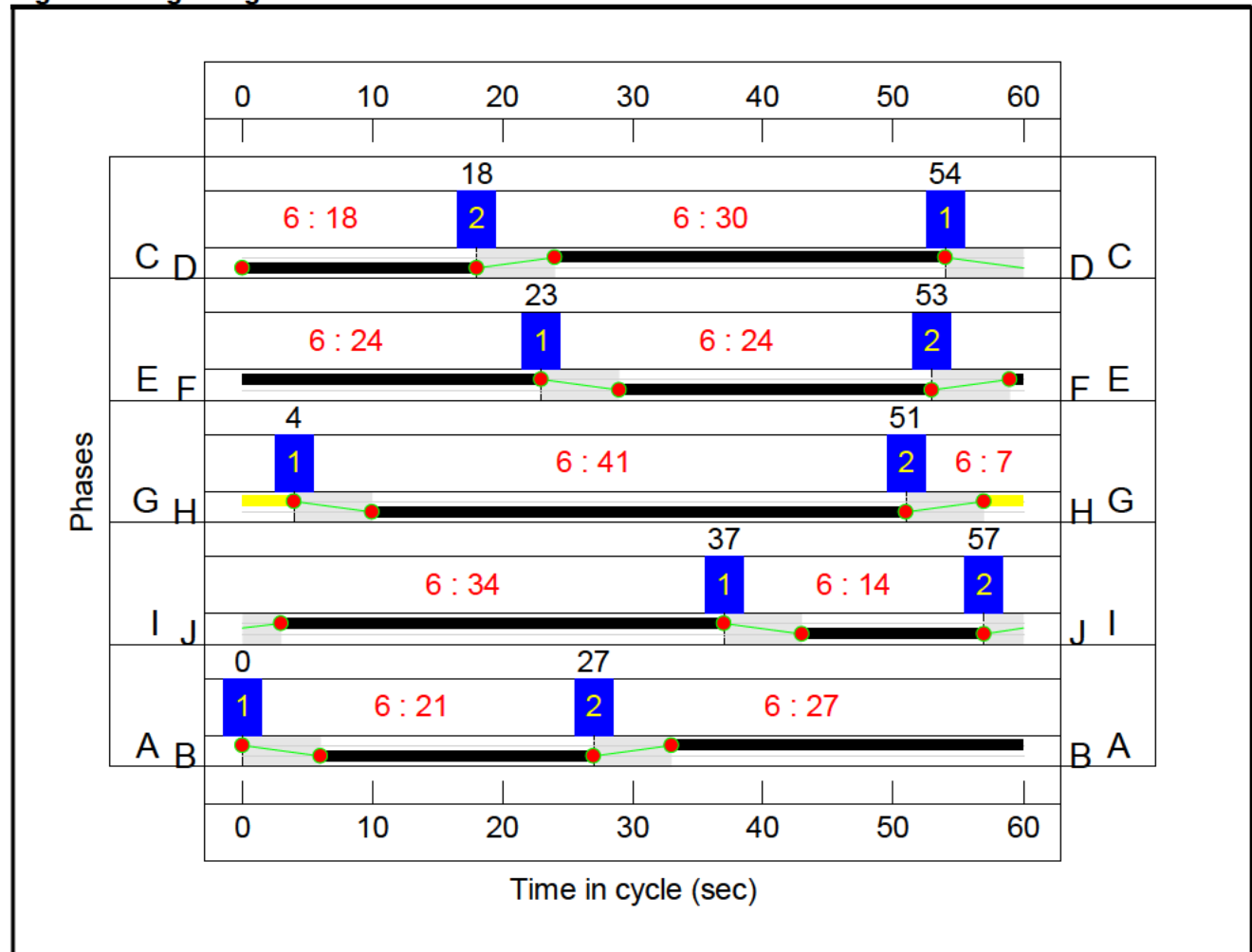
Stage Stream: 4

Stage	1	2
Duration	14	34
Change Point	37	57

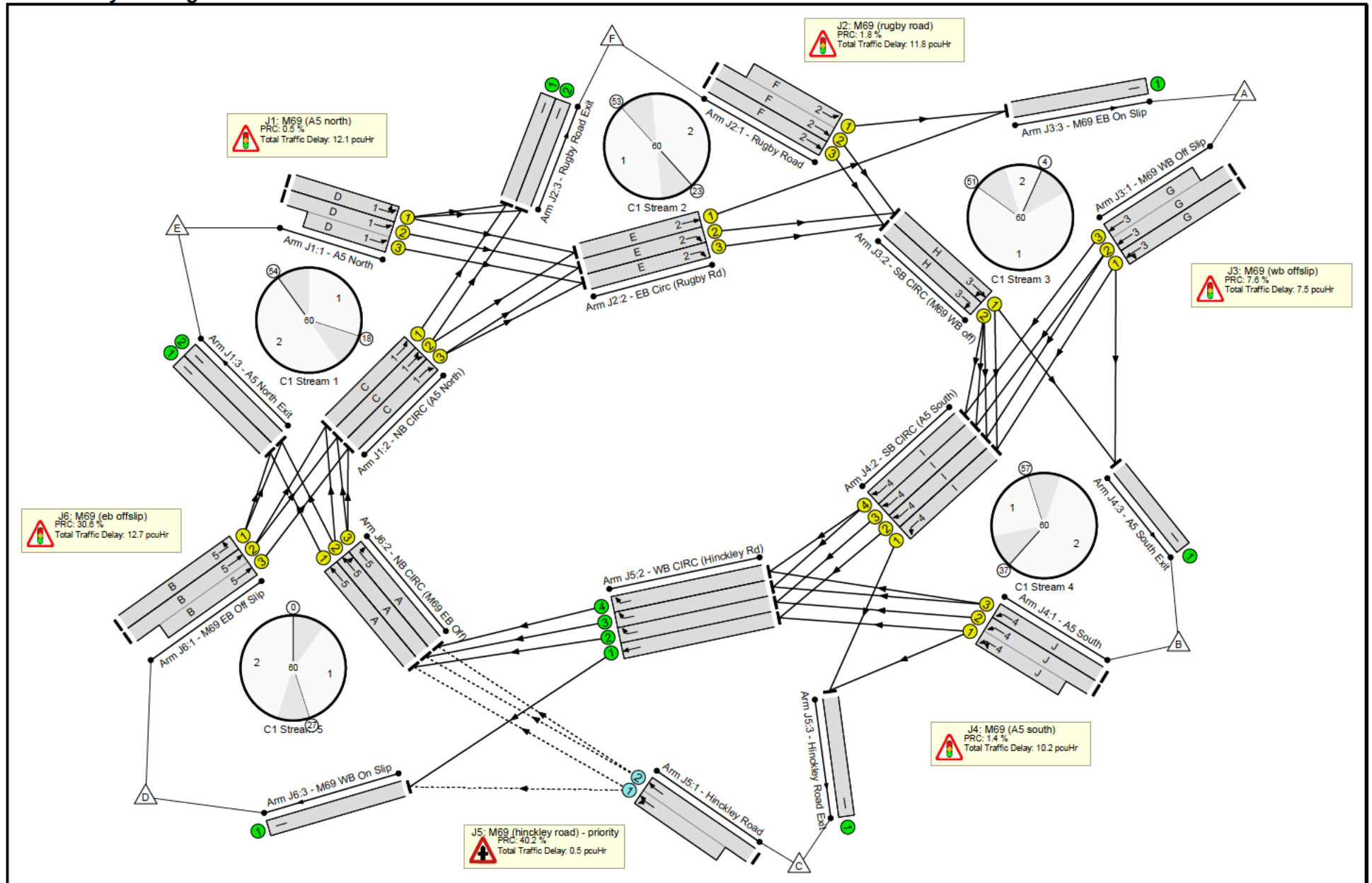
Stage Stream: 5

Stage	1	2
Duration	21	27
Change Point	0	27

Signal Timings Diagram



Full Input Data And Results Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
1/1	A5 North Ahead Left	U	1	N/A	D		1	18	-	334	1900	602	55.5%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	18	-	872	1900:1900	602+372	89.6 : 89.6%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	30	-	270	1900	982	27.5%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	30	-	458	1900	982	46.7%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	30	-	171	1900	982	17.4%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	88.4%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	24	-	533	1900:1900	792+233	52.0 : 52.0%
1/3	Rugby Road Ahead	U	2	N/A	F		1	24	-	686	1900	792	86.7%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	24	-	508	1900	792	64.2%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	700	1900	792	88.4%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	343	1900	792	43.3%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	83.6%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	184	1900	253	72.6%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	304	1900:1900	253+253	60.0 : 60.0%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1112	1900	1330	83.6%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	1029	1900	1330	77.4%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	88.8%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	14	-	600	1900:1900	475+475	73.5 : 52.8%
1/3	A5 South Ahead	U	4	N/A	J		1	14	-	348	1900	475	73.3%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	34	-	384	1900	1108	34.6%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	984	1900	1108	88.8%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	174	1900	1108	15.7%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	34	-	175	1900	1108	15.8%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	912	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	64.2%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	367	1900:1900	609+228	43.9 : 43.9%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	1220	1900	1900	64.2%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	523	1900	1900	27.5%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	387	1900	1900	20.4%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	136	1900	1900	7.2%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	68.9%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	21	-	413	1900	697	59.3%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	21	-	406	1900:1900	697+495	35.0 : 32.7%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	27	-	611	1900	887	68.9%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	27	-	445	1900	887	50.2%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	27	-	345	1900	887	38.9%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	1232	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	734	0	0	41.0	13.8	0.0	54.8	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	7.5	4.6	0.0	12.1	-	-	-	-
1/1	334	334	-	-	-	1.6	0.6	-	2.2	23.7	4.5	0.6	5.2
1/2+1/3	872	872	-	-	-	4.5	4.0	-	8.5	35.0	8.5	4.0	12.5
2/1	270	270	-	-	-	0.4	0.0	-	0.4	5.1	2.1	0.0	2.1
2/2	458	458	-	-	-	0.6	0.0	-	0.6	5.0	2.7	0.0	2.7
2/3	171	171	-	-	-	0.4	0.0	-	0.4	8.6	2.4	0.0	2.4
3/1	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	8.2	3.6	0.0	11.8	-	-	-	-
1/2+1/1	533	533	-	-	-	1.9	0.5	-	2.4	16.2	5.0	0.5	5.6
1/3	686	686	-	-	-	3.0	3.1	-	6.1	32.1	10.3	3.1	13.4
2/1	508	508	-	-	-	0.8	0.0	-	0.8	6.0	3.6	0.0	3.6
2/2	700	700	-	-	-	2.1	0.0	-	2.1	10.9	4.3	0.0	4.3
2/3	343	343	-	-	-	0.3	0.0	-	0.3	3.3	0.6	0.0	0.6
3/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	5.5	2.0	0.0	7.5	-	-	-	-
1/1	184	184	-	-	-	1.3	1.3	-	2.6	50.0	2.9	1.3	4.2
1/2+1/3	304	304	-	-	-	2.1	0.7	-	2.8	33.3	2.4	0.7	3.1
2/1	1112	1112	-	-	-	0.5	0.0	-	0.5	1.7	5.8	0.0	5.8
2/2	1029	1029	-	-	-	1.6	0.0	-	1.6	5.6	5.7	0.0	5.7
3/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

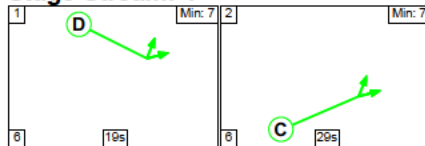
Input Data and Results														
J4: M69 (A5 south)	-	-	0	0	0	8.0	2.2	0.0	10.2	-	-	-	-	
1/2+1/1	600	600	-	-	-	3.4	0.9	-	4.2	25.3	5.3	0.9	6.2	
1/3	348	348	-	-	-	2.0	1.3	-	3.3	34.5	5.3	1.3	6.7	
2/1	384	384	-	-	-	0.7	0.0	-	0.7	6.5	4.8	0.0	4.8	
2/2	984	984	-	-	-	1.8	0.0	-	1.8	6.8	6.8	0.0	6.8	
2/3	174	174	-	-	-	0.0	0.0	-	0.0	0.6	0.2	0.0	0.2	
2/4	175	175	-	-	-	0.0	0.0	-	0.0	0.6	0.2	0.0	0.2	
3/1	912	912	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J5: M69 (hinckley road) - priority	-	-	734	0	0	0.1	0.4	0.0	0.5	-	-	-	-	
1/2+1/1	367	367	734	0	0	0.1	0.4	-	0.5	5.2	1.0	0.4	1.4	
2/1	1220	1220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	523	523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	387	387	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/4	136	136	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J6: M69 (eb offslip)	-	-	0	0	0	11.7	1.0	0.0	12.7	-	-	-	-	
1/1	413	413	-	-	-	1.8	0.7	-	2.5	21.7	5.5	0.7	6.2	
1/2+1/3	406	406	-	-	-	1.5	0.3	-	1.8	15.9	2.9	0.3	3.2	
2/1	611	611	-	-	-	4.2	0.0	-	4.2	25.0	9.4	0.0	9.4	
2/2	445	445	-	-	-	2.7	0.0	-	2.7	21.8	6.8	0.0	6.8	
2/3	345	345	-	-	-	1.5	0.0	-	1.5	15.8	4.4	0.0	4.4	
3/1	1232	1232	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 Stream: 1 PRC for Signalled Lanes (%): 0.5 Total Delay for Signalled Lanes (pcuHr): 12.12 Cycle Time (s): 60														
C1 Stream: 2 PRC for Signalled Lanes (%): 1.8 Total Delay for Signalled Lanes (pcuHr): 11.79 Cycle Time (s): 60														
C1 Stream: 3 PRC for Signalled Lanes (%): 7.6 Total Delay for Signalled Lanes (pcuHr): 7.49 Cycle Time (s): 60														
C1 Stream: 4 PRC for Signalled Lanes (%): 1.4 Total Delay for Signalled Lanes (pcuHr): 10.15 Cycle Time (s): 60														
C1 Stream: 5 PRC for Signalled Lanes (%): 30.6 Total Delay for Signalled Lanes (pcuHr): 12.72 Cycle Time (s): 60														
PRC Over All Lanes (%): 0.5 Total Delay Over All Lanes(pcuHr): 54.81														

Full Input Data And Results

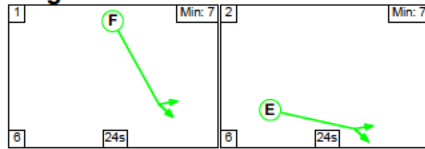
Scenario 4: '2031 AM' (FG7: '2031 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

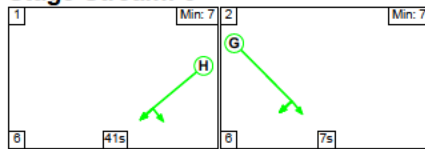
Stage Stream: 1



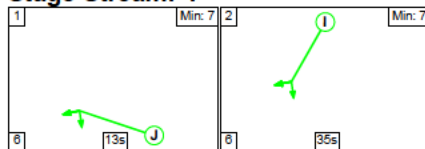
Stage Stream: 2



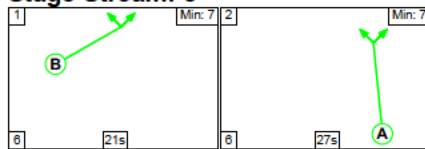
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	19	29
Change Point	54	19

Stage Stream: 2

Stage	1	2
Duration	24	24
Change Point	21	51

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	0	47

Full Input Data And Results

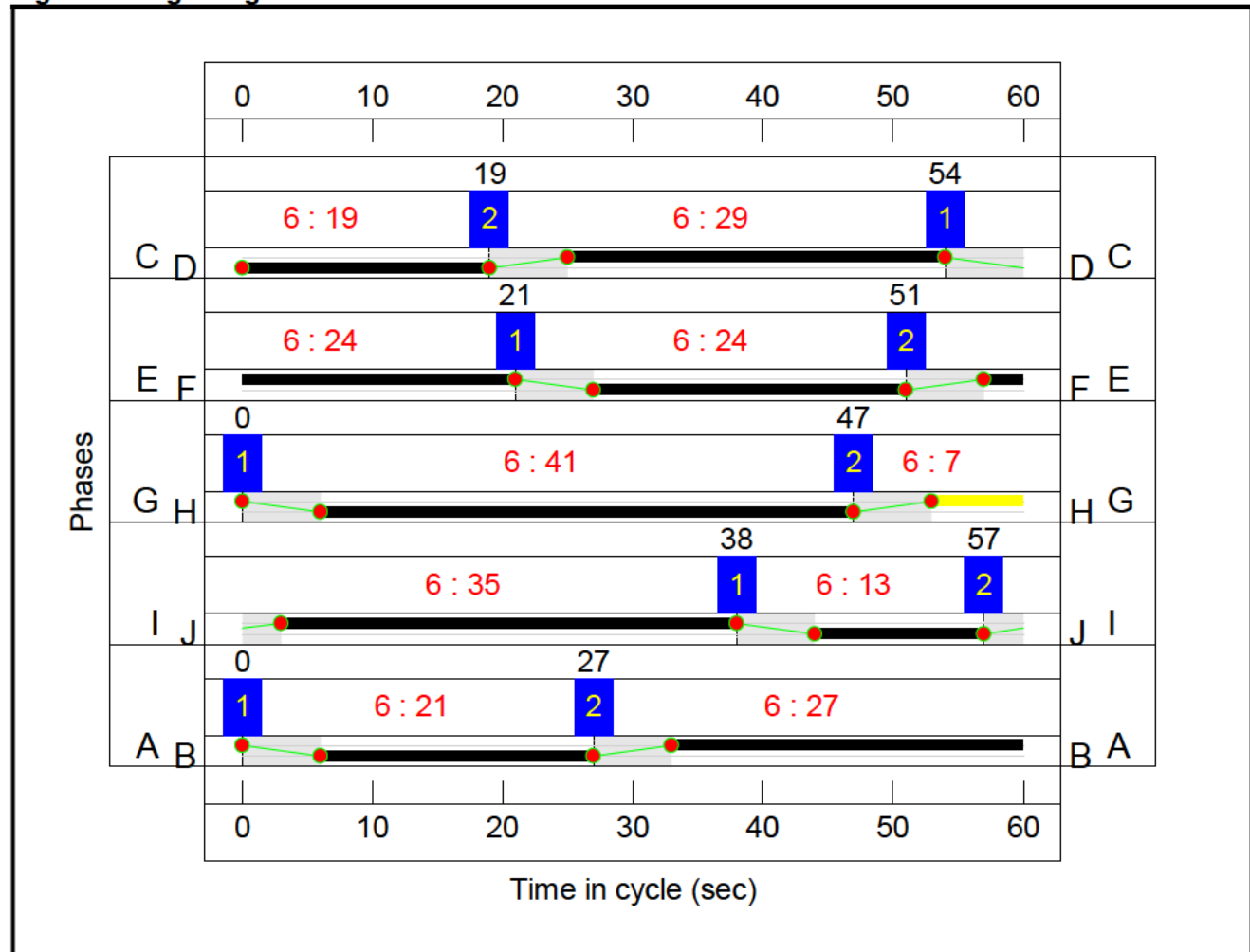
Stage Stream: 4

Stage	1	2
Duration	13	35
Change Point	38	57

Stage Stream: 5

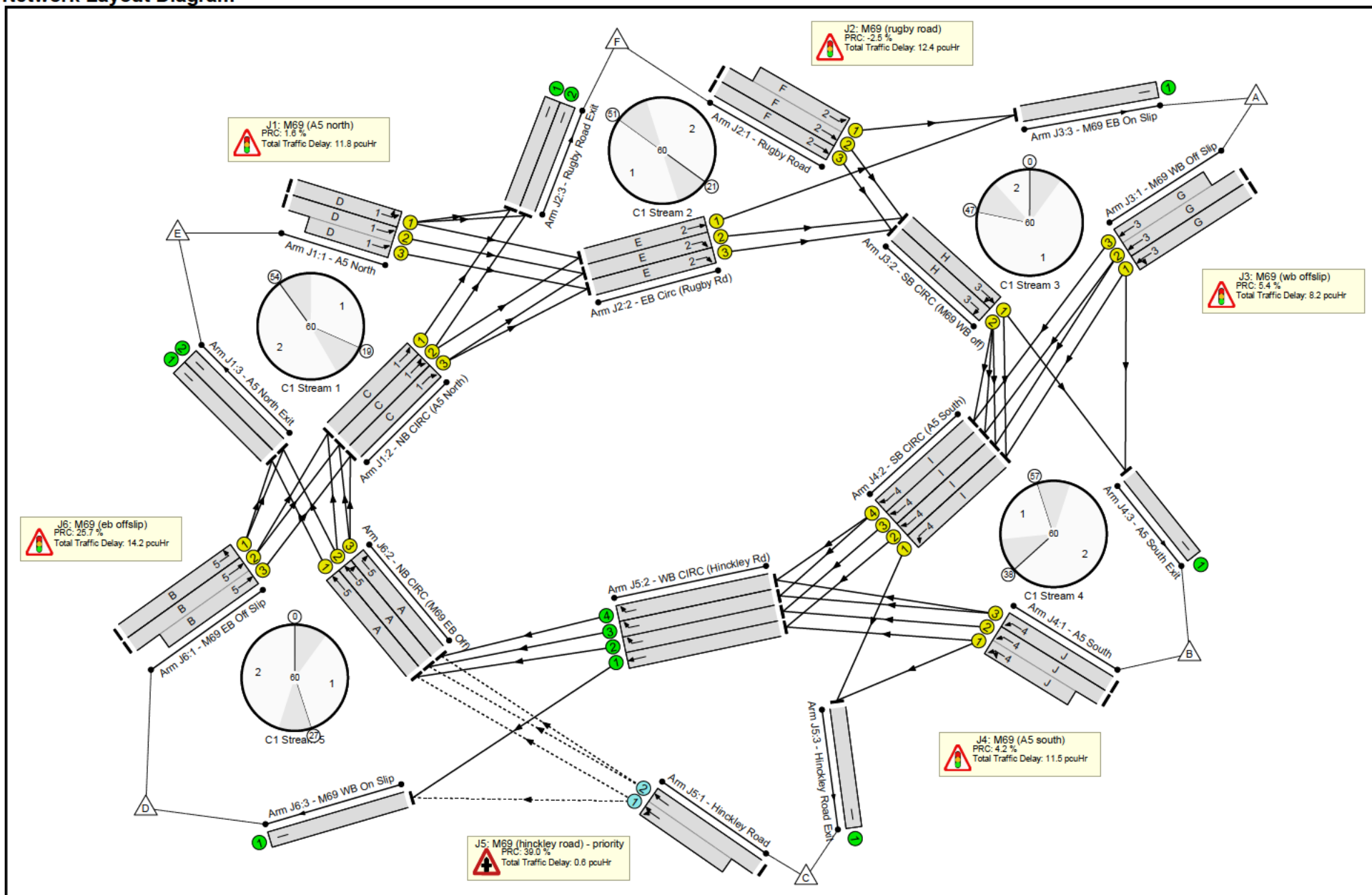
Stage	1	2
Duration	21	27
Change Point	0	27

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	92.2%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	88.6%
1/1	A5 North Ahead Left	U	1	N/A	D		1	19	-	346	1900	633	54.6%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	19	-	907	1900:1900	633+391	88.6 : 88.6%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	29	-	273	1900	950	28.7%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	29	-	471	1900	950	49.6%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	29	-	180	1900	950	18.9%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	852	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	92.2%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	24	-	517	1900:1900	792+216	51.3 : 51.3%
1/3	Rugby Road Ahead	U	2	N/A	F		1	24	-	674	1900	792	85.1%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	24	-	527	1900	792	66.6%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	730	1900	792	92.2%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	357	1900	792	45.1%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	193	1900	253	76.2%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	319	1900:1900	253+253	62.8 : 63.2%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1136	1900	1330	85.4%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	1031	1900	1330	77.5%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	638	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	86.4%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	13	-	621	1900:1900	443+443	81.7 : 58.4%
1/3	A5 South Ahead	U	4	N/A	J		1	13	-	361	1900	443	81.4%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	35	-	396	1900	1140	34.7%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	985	1900	1140	86.4%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	182	1900	1140	16.0%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	183	1900	1140	16.1%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	933	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	64.7%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	377	1900:1900	603+230	45.2 : 45.2%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	1230	1900	1900	64.7%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	544	1900	1900	28.6%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	403	1900	1900	21.2%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	141	1900	1900	7.4%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	71.6%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	21	-	435	1900	697	62.4%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	21	-	418	1900:1900	697+546	35.5 : 31.3%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	27	-	635	1900	887	71.6%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	27	-	461	1900	887	52.0%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	27	-	356	1900	887	40.2%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	1243	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	754	0	0	44.2	14.6	0.0	58.8	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	7.6	4.2	0.0	11.8	-	-	-	-
1/1	346	346	-	-	-	1.6	0.6	-	2.2	22.5	4.6	0.6	5.2
1/2+1/3	907	907	-	-	-	4.5	3.7	-	8.2	32.4	8.7	3.7	12.4
2/1	273	273	-	-	-	0.4	0.0	-	0.4	5.1	2.0	0.0	2.0
2/2	471	471	-	-	-	0.6	0.0	-	0.6	4.9	2.6	0.0	2.6
2/3	180	180	-	-	-	0.5	0.0	-	0.5	9.5	2.6	0.0	2.6
3/1	852	852	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	9.1	3.3	0.0	12.4	-	-	-	-
1/2+1/1	517	517	-	-	-	1.8	0.5	-	2.3	16.2	5.0	0.5	5.5
1/3	674	674	-	-	-	3.0	2.7	-	5.7	30.4	10.1	2.7	12.8
2/1	527	527	-	-	-	0.9	0.0	-	0.9	6.1	4.0	0.0	4.0
2/2	730	730	-	-	-	3.0	0.0	-	3.0	14.8	5.8	0.0	5.8
2/3	357	357	-	-	-	0.5	0.0	-	0.5	4.7	1.0	0.0	1.0
3/1	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	282	282	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	5.9	2.4	0.0	8.2	-	-	-	-
1/1	193	193	-	-	-	1.3	1.5	-	2.9	53.5	3.1	1.5	4.6
1/2+1/3	319	319	-	-	-	2.2	0.8	-	3.0	34.1	2.5	0.8	3.3
2/1	1136	1136	-	-	-	0.5	0.0	-	0.5	1.5	7.5	0.0	7.5
2/2	1031	1031	-	-	-	1.9	0.0	-	1.9	6.6	6.9	0.0	6.9
3/1	638	638	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

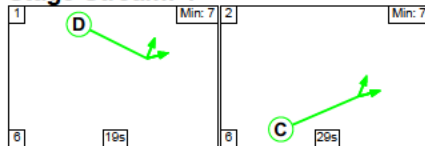
All Input Data / and Results														
J4: M69 (A5 south)	-	-	0	0	0	8.3	3.2	0.0	11.5	-	-	-	-	
1/2+1/1	621	621	-	-	-	3.7	1.2	-	4.8	27.9	5.6	1.2	6.8	
1/3	361	361	-	-	-	2.2	2.1	-	4.3	42.6	5.6	2.1	7.7	
2/1	396	396	-	-	-	0.8	0.0	-	0.8	7.2	4.6	0.0	4.6	
2/2	985	985	-	-	-	1.4	0.0	-	1.4	5.3	5.2	0.0	5.2	
2/3	182	182	-	-	-	0.1	0.0	-	0.1	1.8	2.7	0.0	2.7	
2/4	183	183	-	-	-	0.1	0.0	-	0.1	1.8	2.8	0.0	2.8	
3/1	933	933	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J5: M69 (hinckley road) - priority	-	-	754	0	0	0.2	0.4	0.0	0.6	-	-	-	-	
1/2+1/1	377	377	754	0	0	0.2	0.4	-	0.6	5.5	1.1	0.4	1.5	
2/1	1230	1230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/4	141	141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J6: M69 (eb offslip)	-	-	0	0	0	13.2	1.1	0.0	14.2	-	-	-	-	
1/1	435	435	-	-	-	1.9	0.8	-	2.7	22.4	5.9	0.8	6.7	
1/2+1/3	418	418	-	-	-	1.6	0.3	-	1.8	15.8	3.0	0.3	3.2	
2/1	635	635	-	-	-	4.9	0.0	-	4.9	27.9	10.4	0.0	10.4	
2/2	461	461	-	-	-	3.1	0.0	-	3.1	24.4	7.5	0.0	7.5	
2/3	356	356	-	-	-	1.7	0.0	-	1.7	16.8	4.8	0.0	4.8	
3/1	1243	1243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
			C1 Stream: 1 PRC for Signalised Lanes (%):	1.6	Total Delay for Signalised Lanes (pcuHr):			11.83	Cycle Time (s):			60		
			C1 Stream: 2 PRC for Signalised Lanes (%):	-2.5	Total Delay for Signalised Lanes (pcuHr):			12.38	Cycle Time (s):			60		
			C1 Stream: 3 PRC for Signalised Lanes (%):	5.4	Total Delay for Signalised Lanes (pcuHr):			8.25	Cycle Time (s):			60		
			C1 Stream: 4 PRC for Signalised Lanes (%):	4.2	Total Delay for Signalised Lanes (pcuHr):			11.50	Cycle Time (s):			60		
			C1 Stream: 5 PRC for Signalised Lanes (%):	25.7	Total Delay for Signalised Lanes (pcuHr):			14.25	Cycle Time (s):			60		
			PRC Over All Lanes (%):	-2.5	Total Delay Over All Lanes(pcuHr):			58.79						

Full Input Data And Results

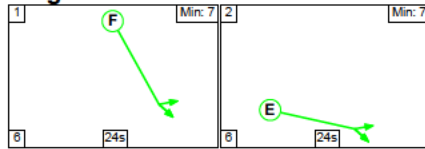
Scenario 5: '2031 + Dev AM' (FG9: '2031 + Dev AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

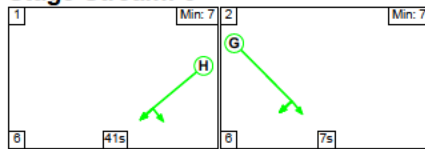
Stage Stream: 1



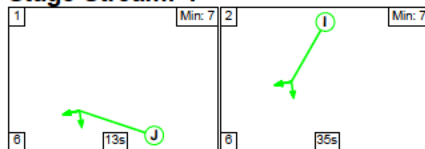
Stage Stream: 2



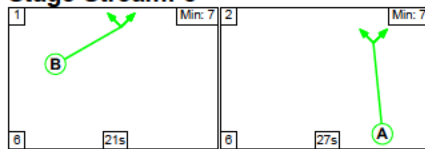
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	19	29
Change Point	54	19

Stage Stream: 2

Stage	1	2
Duration	24	24
Change Point	21	51

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	0	47

Full Input Data And Results

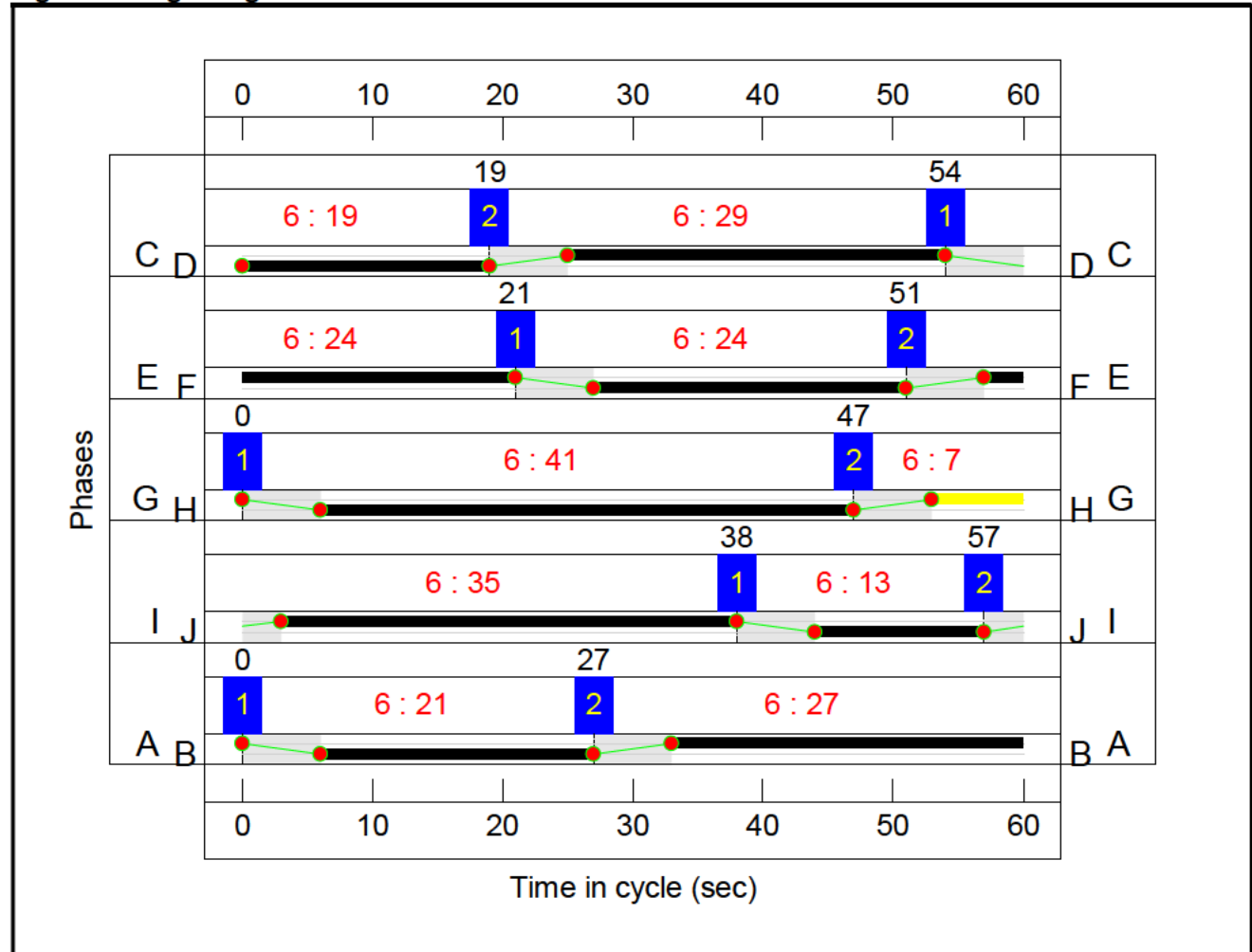
Stage Stream: 4

Stage	1	2
Duration	13	35
Change Point	38	57

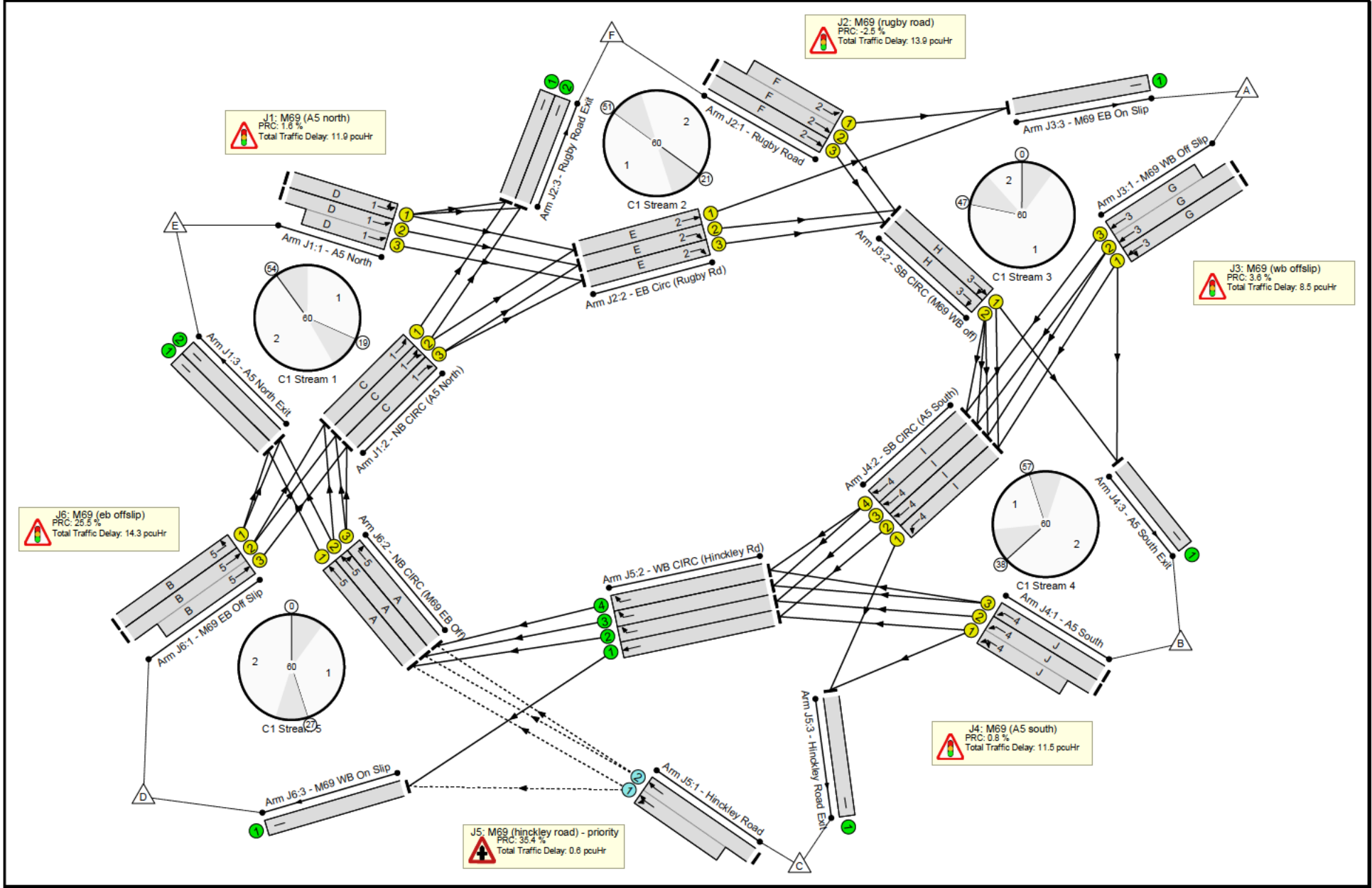
Stage Stream: 5

Stage	1	2
Duration	21	27
Change Point	0	27

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	92.2%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	88.6%
1/1	A5 North Ahead Left	U	1	N/A	D		1	19	-	346	1900	633	54.6%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	19	-	907	1900:1900	633+391	88.6 : 88.6%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	29	-	280	1900	950	29.5%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	29	-	478	1900	950	50.3%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	29	-	180	1900	950	18.9%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	92.2%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	24	-	549	1900:1900	792+231	53.7 : 53.7%
1/3	Rugby Road Ahead	U	2	N/A	F		1	24	-	707	1900	792	89.3%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	24	-	527	1900	792	66.6%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	730	1900	792	92.2%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	24	-	357	1900	792	45.1%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	288	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	86.8%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	193	1900	253	76.2%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	321	1900:1900	253+253	63.2 : 63.6%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1155	1900	1330	86.8%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	1064	1900	1330	80.0%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	89.3%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	13	-	622	1900:1900	443+443	81.7 : 58.6%
1/3	A5 South Ahead	U	4	N/A	J		1	13	-	361	1900	443	81.4%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	35	-	398	1900	1140	34.9%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	1018	1900	1140	89.3%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	183	1900	1140	16.1%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	184	1900	1140	16.1%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	950	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	66.5%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	379	1900:1900	594+225	46.3 : 46.3%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	1263	1900	1900	66.5%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	545	1900	1900	28.7%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	403	1900	1900	21.2%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	142	1900	1900	7.5%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	71.7%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	21	-	435	1900	697	62.4%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	21	-	428	1900:1900	697+497	36.9 : 34.4%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	27	-	636	1900	887	71.7%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	27	-	462	1900	887	52.1%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	27	-	358	1900	887	40.4%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	1276	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	758	0	0	44.9	15.8	0.0	60.7	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	7.6	4.2	0.0	11.9	-	-	-	-
1/1	346	346	-	-	-	1.6	0.6	-	2.2	22.5	4.6	0.6	5.2
1/2+1/3	907	907	-	-	-	4.5	3.7	-	8.2	32.4	8.7	3.7	12.4
2/1	280	280	-	-	-	0.4	0.0	-	0.4	5.1	2.1	0.0	2.1
2/2	478	478	-	-	-	0.7	0.0	-	0.7	4.9	2.7	0.0	2.7
2/3	180	180	-	-	-	0.5	0.0	-	0.5	9.5	2.6	0.0	2.6
3/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	9.5	4.4	0.0	13.9	-	-	-	-
1/2+1/1	549	549	-	-	-	1.9	0.6	-	2.5	16.4	5.3	0.6	5.9
1/3	707	707	-	-	-	3.2	3.8	-	7.0	35.8	10.8	3.8	14.6
2/1	527	527	-	-	-	0.9	0.0	-	0.9	6.1	4.0	0.0	4.0
2/2	730	730	-	-	-	3.0	0.0	-	3.0	14.8	5.8	0.0	5.8
2/3	357	357	-	-	-	0.5	0.0	-	0.5	4.7	1.0	0.0	1.0
3/1	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	6.1	2.4	0.0	8.5	-	-	-	-
1/1	193	193	-	-	-	1.3	1.5	-	2.9	53.5	3.1	1.5	4.6
1/2+1/3	321	321	-	-	-	2.2	0.9	-	3.1	34.2	2.5	0.9	3.4
2/1	1155	1155	-	-	-	0.5	0.0	-	0.5	1.6	7.6	0.0	7.6
2/2	1064	1064	-	-	-	2.1	0.0	-	2.1	7.1	7.5	0.0	7.5
3/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

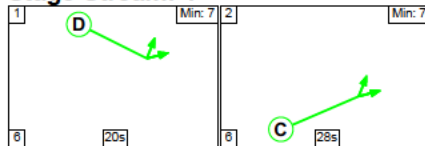
All Input Data / and Results														
J4: M69 (A5 south)	-	-	0	0	0	8.3	3.3	0.0	11.5	-	-	-	-	
1/2+1/1	622	622	-	-	-	3.7	1.2	-	4.8	28.0	5.6	1.2	6.8	
1/3	361	361	-	-	-	2.2	2.1	-	4.3	42.6	5.6	2.1	7.7	
2/1	398	398	-	-	-	0.8	0.0	-	0.8	7.1	4.6	0.0	4.6	
2/2	1018	1018	-	-	-	1.4	0.0	-	1.4	5.1	5.2	0.0	5.2	
2/3	183	183	-	-	-	0.1	0.0	-	0.1	1.7	2.7	0.0	2.7	
2/4	184	184	-	-	-	0.1	0.0	-	0.1	1.7	2.8	0.0	2.8	
3/1	950	950	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J5: M69 (hinckley road) - priority	-	-	758	0	0	0.2	0.4	0.0	0.6	-	-	-	-	
1/2+1/1	379	379	758	0	0	0.2	0.4	-	0.6	5.7	1.1	0.4	1.5	
2/1	1263	1263	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/4	142	142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J6: M69 (eb offslip)	-	-	0	0	0	13.2	1.1	0.0	14.3	-	-	-	-	
1/1	435	435	-	-	-	1.9	0.8	-	2.7	22.4	5.9	0.8	6.7	
1/2+1/3	428	428	-	-	-	1.6	0.3	-	1.9	16.0	3.1	0.3	3.3	
2/1	636	636	-	-	-	4.9	0.0	-	4.9	27.8	10.4	0.0	10.4	
2/2	462	462	-	-	-	3.1	0.0	-	3.1	24.3	7.5	0.0	7.5	
2/3	358	358	-	-	-	1.7	0.0	-	1.7	16.8	4.8	0.0	4.8	
3/1	1276	1276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 Stream: 1 PRC for Signalised Lanes (%): 1.6 Total Delay for Signalised Lanes (pcuHr): 11.85 Cycle Time (s): 60														
C1 Stream: 2 PRC for Signalised Lanes (%): -2.5 Total Delay for Signalised Lanes (pcuHr): 13.89 Cycle Time (s): 60														
C1 Stream: 3 PRC for Signalised Lanes (%): 3.6 Total Delay for Signalised Lanes (pcuHr): 8.53 Cycle Time (s): 60														
C1 Stream: 4 PRC for Signalised Lanes (%): 0.8 Total Delay for Signalised Lanes (pcuHr): 11.51 Cycle Time (s): 60														
C1 Stream: 5 PRC for Signalised Lanes (%): 25.5 Total Delay for Signalised Lanes (pcuHr): 14.33 Cycle Time (s): 60														
PRC Over All Lanes (%): -2.5 Total Delay Over All Lanes(pcuHr): 60.71														

Full Input Data And Results

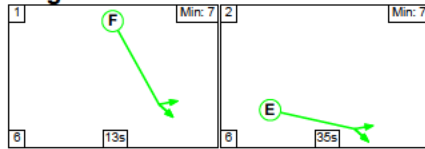
Scenario 6: '2023 PM' (FG2: '2023 PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

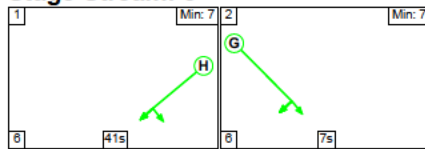
Stage Stream: 1



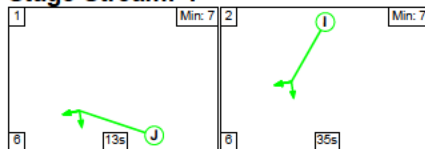
Stage Stream: 2



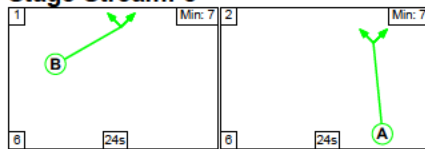
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	20	28
Change Point	36	2

Stage Stream: 2

Stage	1	2
Duration	13	35
Change Point	4	23

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	11	58

Full Input Data And Results

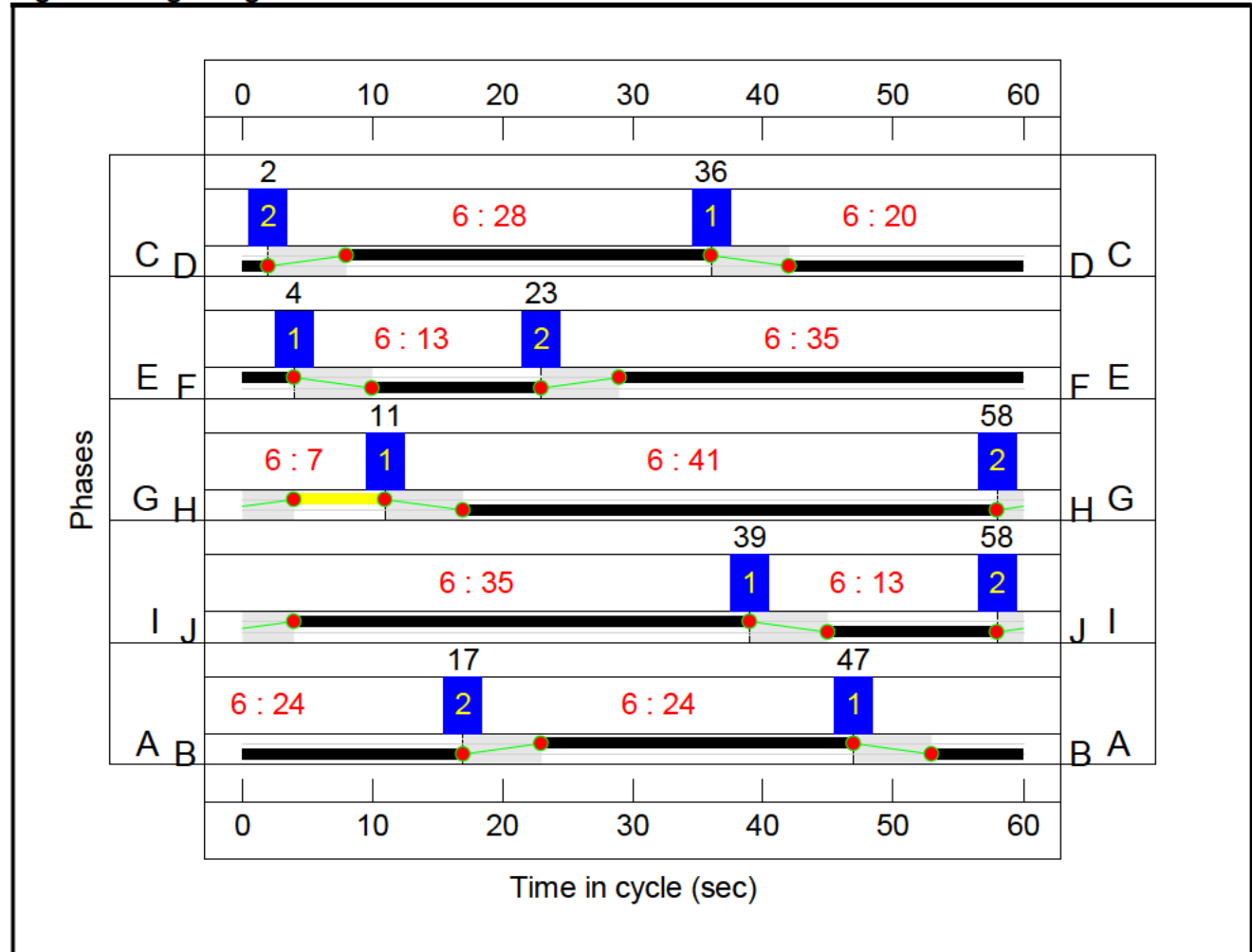
Stage Stream: 4

Stage	1	2
Duration	13	35
Change Point	39	58

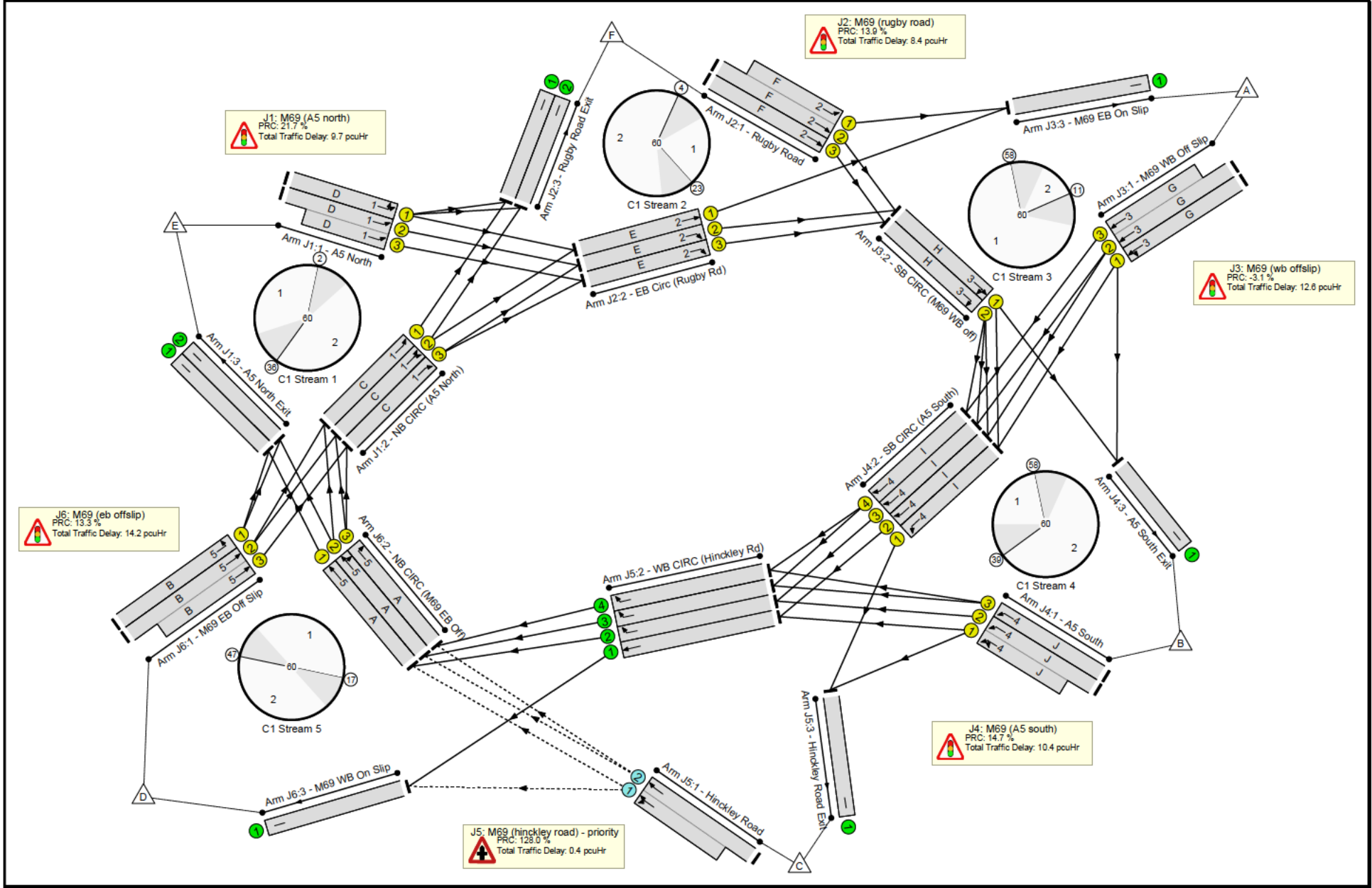
Stage Stream: 5

Stage	1	2
Duration	24	24
Change Point	47	17

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	92.8%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	74.0%
1/1	A5 North Ahead Left	U	1	N/A	D		1	20	-	186	1900	665	28.0%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	20	-	764	1900:1900	658+374	74.0 : 74.0%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	545	1900	918	59.3%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	28	-	660	1900	918	71.9%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	421	1900	918	45.8%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	858	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	430	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	79.0%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	13	-	341	1900:1900	443+85	64.5 : 64.5%
1/3	Rugby Road Ahead	U	2	N/A	F		1	13	-	321	1900	443	72.4%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	35	-	285	1900	1140	25.0%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	901	1900	1140	79.0%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	284	1900	1140	24.9%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	92.8%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	235	1900	253	92.8%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	323	1900:1900	253+253	63.9 : 63.6%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1187	1900	1330	89.2%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	605	1900	1330	45.5%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	78.5%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	13	-	514	1900:1900	443+211	78.5 : 78.5%
1/3	A5 South Ahead	U	4	N/A	J		1	13	-	348	1900	443	78.5%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	35	-	390	1900	1140	34.2%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	580	1900	1140	50.9%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	174	1900	1140	15.3%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	174	1900	1140	15.3%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	1032	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	39.5%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	397	1900:1900	699+307	39.5 : 39.5%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	737	1900	1900	38.8%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	522	1900	1900	27.5%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	343	1900	1900	18.1%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	179	1900	1900	9.4%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	79.5%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	24	-	458	1900	792	57.9%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	24	-	1029	1900:1900	792+526	78.1 : 78.1%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	24	-	629	1900	792	79.5%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	24	-	437	1900	792	55.2%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	24	-	361	1900	792	45.6%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	751	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	794	0	0	40.5	15.3	0.0	55.8	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	8.1	1.6	0.0	9.7	-	-	-	-
1/1	186	186	-	-	-	0.7	0.2	-	0.9	17.8	2.2	0.2	2.4
1/2+1/3	764	764	-	-	-	3.4	1.4	-	4.9	22.9	7.0	1.4	8.4
2/1	545	545	-	-	-	1.4	0.0	-	1.4	9.5	6.6	0.0	6.6
2/2	660	660	-	-	-	1.7	0.0	-	1.7	9.1	7.0	0.0	7.0
2/3	421	421	-	-	-	0.8	0.0	-	0.8	6.9	6.4	0.0	6.4
3/1	858	858	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	430	430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	6.2	2.2	0.0	8.4	-	-	-	-
1/2+1/1	341	341	-	-	-	1.9	0.9	-	2.8	29.9	4.3	0.9	5.2
1/3	321	321	-	-	-	1.9	1.3	-	3.2	35.6	4.9	1.3	6.2
2/1	285	285	-	-	-	0.3	0.0	-	0.3	3.2	1.1	0.0	1.1
2/2	901	901	-	-	-	1.9	0.0	-	1.9	7.8	8.1	0.0	8.1
2/3	284	284	-	-	-	0.2	0.0	-	0.2	2.8	0.7	0.0	0.7
3/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	7.4	5.2	0.0	12.6	-	-	-	-
1/1	235	235	-	-	-	1.7	4.3	-	6.0	92.3	3.9	4.3	8.2
1/2+1/3	323	323	-	-	-	2.2	0.9	-	3.1	34.3	2.5	0.9	3.4
2/1	1187	1187	-	-	-	2.3	0.0	-	2.3	7.0	11.6	0.0	11.6
2/2	605	605	-	-	-	1.2	0.0	-	1.2	7.2	9.3	0.0	9.3
3/1	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

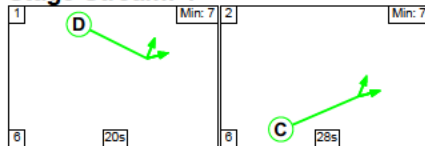
Input Data and Results														
J4: M69 (A5 south)	-	-	0	0	0	6.9	3.5	0.0	10.4	-	-	-	-	
1/2+1/1	514	514	-	-	-	3.0	1.8	-	4.8	33.3	5.4	1.8	7.2	
1/3	348	348	-	-	-	2.1	1.8	-	3.8	39.8	5.4	1.8	7.2	
2/1	390	390	-	-	-	0.8	0.0	-	0.8	7.4	2.4	0.0	2.4	
2/2	580	580	-	-	-	0.9	0.0	-	0.9	5.9	2.5	0.0	2.5	
2/3	174	174	-	-	-	0.0	0.0	-	0.0	0.6	0.1	0.0	0.1	
2/4	174	174	-	-	-	0.0	0.0	-	0.0	0.6	0.1	0.0	0.1	
3/1	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J5: M69 (hinckley road) - priority	-	-	794	0	0	0.1	0.3	0.0	0.4	-	-	-	-	
1/2+1/1	397	397	794	0	0	0.1	0.3	-	0.4	3.9	1.0	0.3	1.3	
2/1	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	343	343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/4	179	179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J6: M69 (eb offslip)	-	-	0	0	0	11.8	2.4	0.0	14.2	-	-	-	-	
1/1	458	458	-	-	-	1.7	0.7	-	2.4	18.8	5.9	0.7	6.5	
1/2+1/3	1029	1029	-	-	-	4.1	1.8	-	5.8	20.4	8.8	1.8	10.5	
2/1	629	629	-	-	-	3.0	0.0	-	3.0	17.2	10.3	0.0	10.3	
2/2	437	437	-	-	-	1.6	0.0	-	1.6	13.0	6.8	0.0	6.8	
2/3	361	361	-	-	-	1.4	0.0	-	1.4	13.8	4.9	0.0	4.9	
3/1	751	751	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 Stream: 1 PRC for Signalled Lanes (%): 21.7 C1 Stream: 2 PRC for Signalled Lanes (%): 13.9 C1 Stream: 3 PRC for Signalled Lanes (%): -3.1 C1 Stream: 4 PRC for Signalled Lanes (%): 14.7 C1 Stream: 5 PRC for Signalled Lanes (%): 13.3 PRC Over All Lanes (%): -3.1 Total Delay for Signalled Lanes (pcuHr): 9.70 Total Delay for Signalled Lanes (pcuHr): 8.43 Total Delay for Signalled Lanes (pcuHr): 12.62 Total Delay for Signalled Lanes (pcuHr): 10.41 Total Delay for Signalled Lanes (pcuHr): 14.20 Total Delay Over All Lanes (pcuHr): 55.79 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60														

Full Input Data And Results

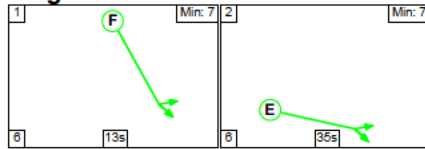
Scenario 7: '2026 PM' (FG4: '2026 PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

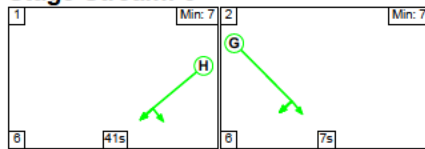
Stage Stream: 1



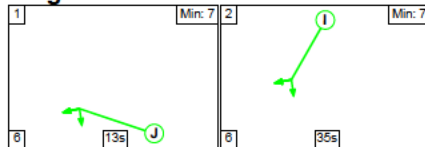
Stage Stream: 2



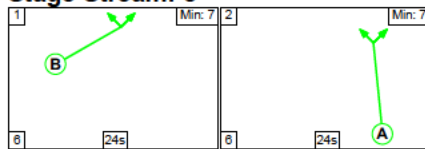
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	20	28
Change Point	36	2

Stage Stream: 2

Stage	1	2
Duration	13	35
Change Point	4	23

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	11	58

Full Input Data And Results

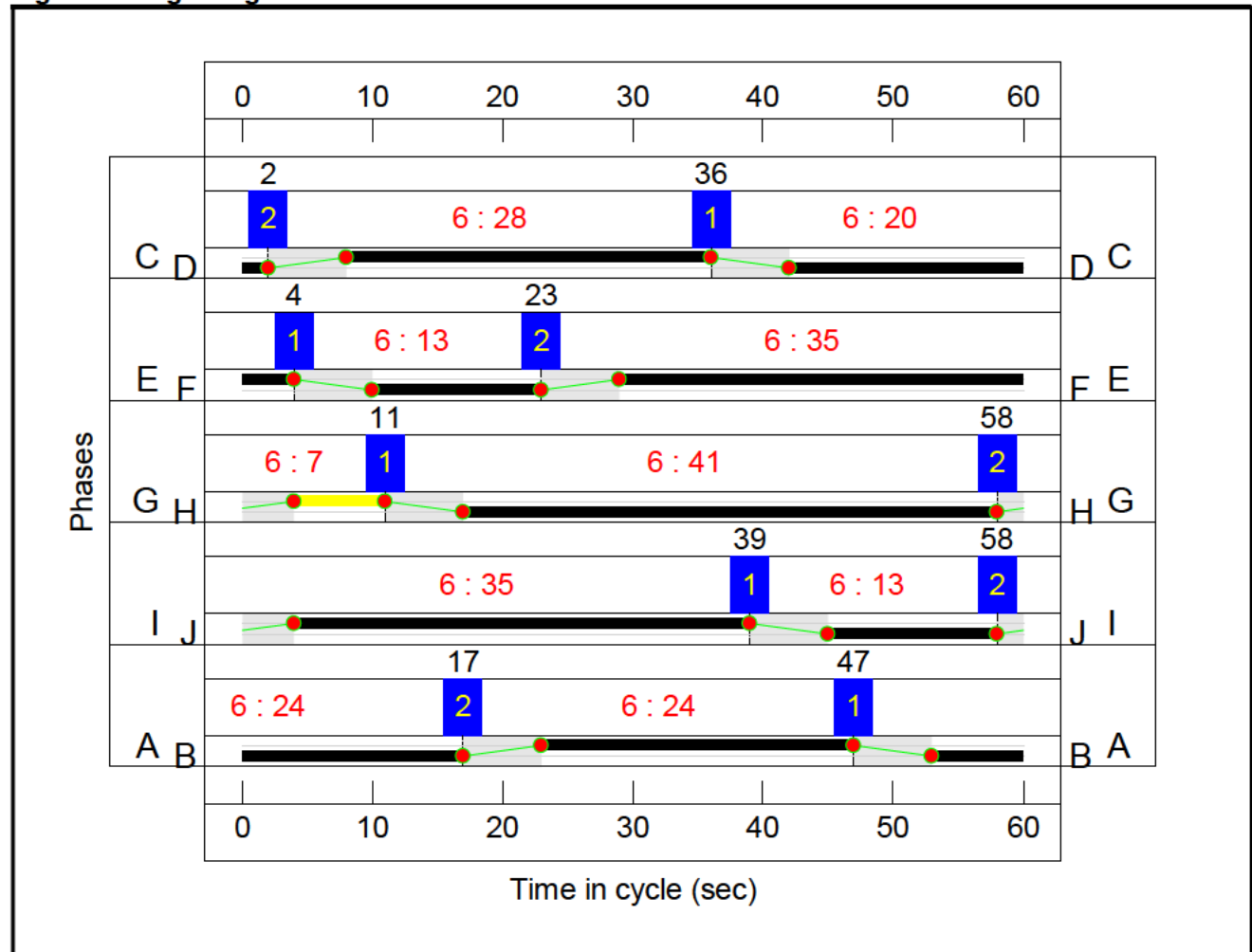
Stage Stream: 4

Stage	1	2
Duration	13	35
Change Point	39	58

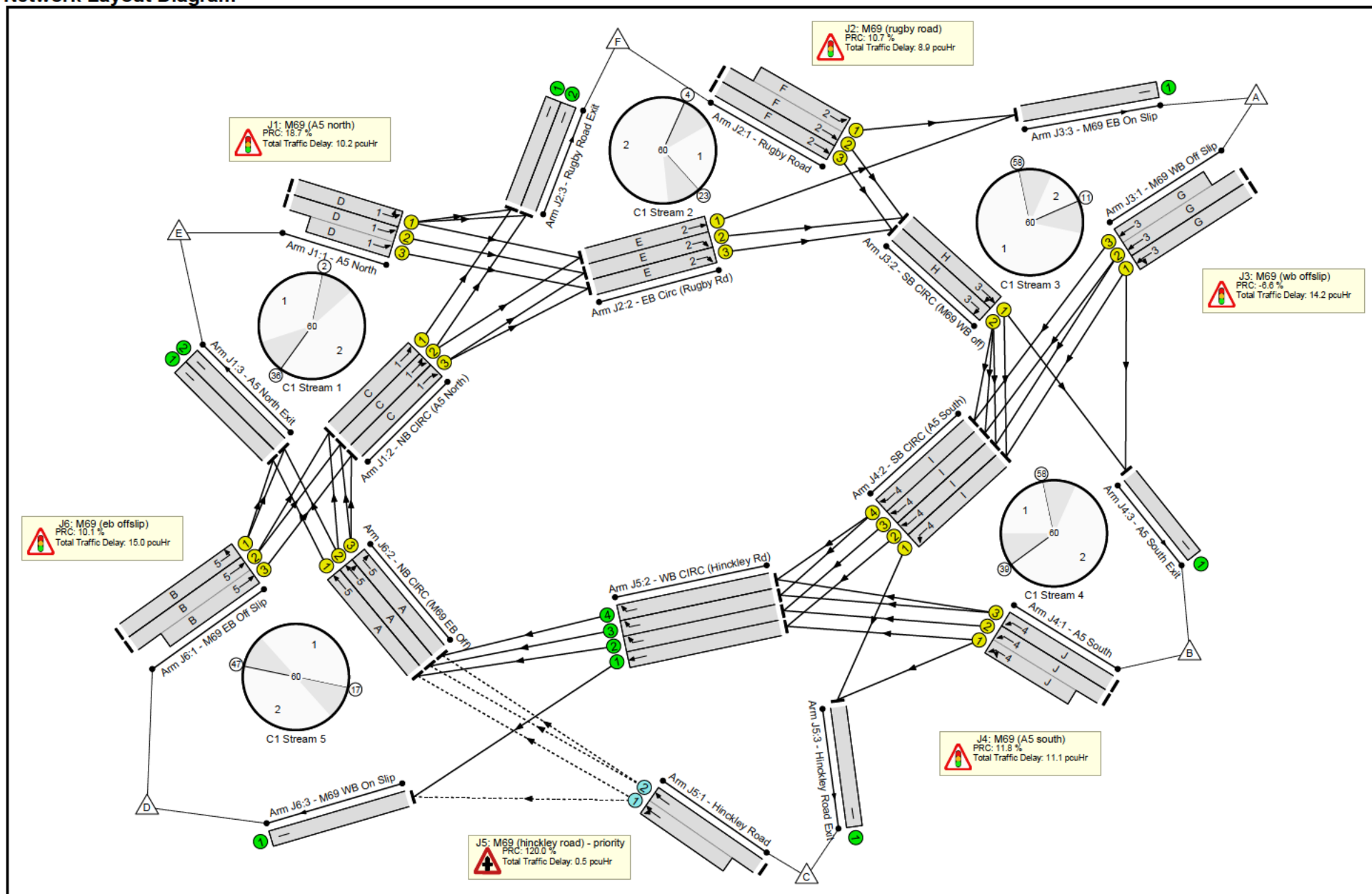
Stage Stream: 5

Stage	1	2
Duration	24	24
Change Point	47	17

Signal Timings Diagram



Full Input Data And Results Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	95.9%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	75.8%
1/1	A5 North Ahead Left	U	1	N/A	D		1	20	-	191	1900	665	28.7%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	20	-	783	1900:1900	658+375	75.8 : 75.8%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	561	1900	918	61.1%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	28	-	680	1900	918	74.0%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	435	1900	918	47.4%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	884	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	444	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	81.3%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	13	-	349	1900:1900	443+85	66.1 : 66.1%
1/3	Rugby Road Ahead	U	2	N/A	F		1	13	-	329	1900	443	74.2%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	35	-	292	1900	1140	25.6%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	927	1900	1140	81.3%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	291	1900	1140	25.5%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	569	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	571	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	95.9%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	243	1900	253	95.9%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	335	1900:1900	253+253	66.3 : 65.9%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1220	1900	1330	91.7%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	620	1900	1330	46.6%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	80.5%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	13	-	527	1900:1900	443+211	80.5 : 80.5%
1/3	A5 South Ahead	U	4	N/A	J		1	13	-	357	1900	443	80.5%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	35	-	401	1900	1140	35.2%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	594	1900	1140	52.1%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	181	1900	1140	15.9%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	180	1900	1140	15.8%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	40.9%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	404	1900:1900	687+301	40.9 : 40.9%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	755	1900	1900	39.7%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	538	1900	1900	28.3%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	352	1900	1900	18.5%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	185	1900	1900	9.7%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	81.7%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	24	-	474	1900	792	59.9%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	24	-	1065	1900:1900	792+526	80.8 : 80.8%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	24	-	647	1900	792	81.7%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	24	-	448	1900	792	56.6%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	24	-	370	1900	792	46.7%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	769	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	808	0	0	42.1	17.9	0.0	60.0	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	8.4	1.7	0.0	10.2	-	-	-	-
1/1	191	191	-	-	-	0.7	0.2	-	0.9	17.9	2.3	0.2	2.5
1/2+1/3	783	783	-	-	-	3.6	1.5	-	5.1	23.5	7.2	1.5	8.8
2/1	561	561	-	-	-	1.5	0.0	-	1.5	9.7	6.9	0.0	6.9
2/2	680	680	-	-	-	1.8	0.0	-	1.8	9.4	7.4	0.0	7.4
2/3	435	435	-	-	-	0.8	0.0	-	0.8	7.0	6.6	0.0	6.6
3/1	884	884	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	6.6	2.4	0.0	8.9	-	-	-	-
1/2+1/1	349	349	-	-	-	2.0	1.0	-	2.9	30.4	4.4	1.0	5.4
1/3	329	329	-	-	-	1.9	1.4	-	3.4	36.7	5.0	1.4	6.4
2/1	292	292	-	-	-	0.3	0.0	-	0.3	3.3	1.2	0.0	1.2
2/2	927	927	-	-	-	2.1	0.0	-	2.1	8.3	8.6	0.0	8.6
2/3	291	291	-	-	-	0.2	0.0	-	0.2	2.8	0.7	0.0	0.7
3/1	569	569	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	7.6	6.6	0.0	14.2	-	-	-	-
1/1	243	243	-	-	-	1.7	5.6	-	7.4	109.2	4.0	5.6	9.6
1/2+1/3	335	335	-	-	-	2.3	1.0	-	3.3	35.1	2.7	1.0	3.6
2/1	1220	1220	-	-	-	2.3	0.0	-	2.3	6.8	11.7	0.0	11.7
2/2	620	620	-	-	-	1.3	0.0	-	1.3	7.4	9.6	0.0	9.6
3/1	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

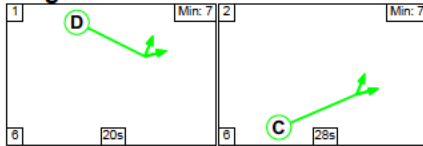
Input Data and Results													
J4: M69 (A5 south)	-	-	0	0	0	7.2	4.0	0.0	11.1	-	-	-	-
1/2+1/1	527	527	-	-	-	3.1	2.0	-	5.1	34.7	5.6	2.0	7.6
1/3	357	357	-	-	-	2.2	2.0	-	4.1	41.7	5.6	2.0	7.5
2/1	401	401	-	-	-	0.8	0.0	-	0.8	7.4	2.5	0.0	2.5
2/2	594	594	-	-	-	1.0	0.0	-	1.0	6.3	2.8	0.0	2.8
2/3	181	181	-	-	-	0.0	0.0	-	0.0	0.6	0.1	0.0	0.1
2/4	180	180	-	-	-	0.0	0.0	-	0.0	0.6	0.1	0.0	0.1
3/1	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: M69 (hinckley road) - priority	-	-	808	0	0	0.1	0.3	0.0	0.5	-	-	-	-
1/2+1/1	404	404	808	0	0	0.1	0.3	-	0.5	4.1	1.1	0.3	1.4
2/1	755	755	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	538	538	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/4	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J6: M69 (eb offslip)	-	-	0	0	0	12.2	2.8	0.0	15.0	-	-	-	-
1/1	474	474	-	-	-	1.8	0.7	-	2.5	19.2	6.1	0.7	6.8
1/2+1/3	1065	1065	-	-	-	4.3	2.1	-	6.4	21.5	9.2	2.1	11.3
2/1	647	647	-	-	-	3.1	0.0	-	3.1	17.3	10.6	0.0	10.6
2/2	448	448	-	-	-	1.6	0.0	-	1.6	12.9	7.0	0.0	7.0
2/3	370	370	-	-	-	1.4	0.0	-	1.4	13.8	5.0	0.0	5.0
3/1	769	769	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 18.7 C1 Stream: 2 PRC for Signalled Lanes (%): 10.7 C1 Stream: 3 PRC for Signalled Lanes (%): -6.6 C1 Stream: 4 PRC for Signalled Lanes (%): 11.8 C1 Stream: 5 PRC for Signalled Lanes (%): 10.1 PRC Over All Lanes (%): -6.6					Total Delay for Signalled Lanes (pcuHr): 10.19 Total Delay for Signalled Lanes (pcuHr): 8.93 Total Delay for Signalled Lanes (pcuHr): 14.22 Total Delay for Signalled Lanes (pcuHr): 11.14 Total Delay for Signalled Lanes (pcuHr): 15.04 Total Delay Over All Lanes (pcuHr): 59.97				Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60				

Full Input Data And Results

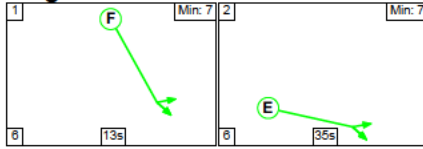
Scenario 8: '2026 + Dev PM' (FG6: '2026 + Dev PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

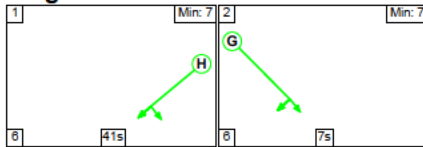
Stage Stream: 1



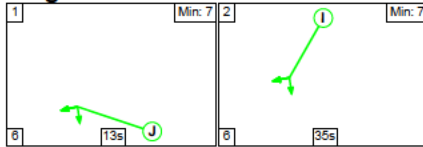
Stage Stream: 2



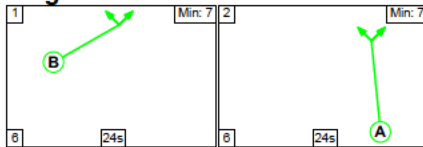
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	20	28
Change Point	36	2

Stage Stream: 2

Stage	1	2
Duration	13	35
Change Point	4	23

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	11	58

Full Input Data And Results

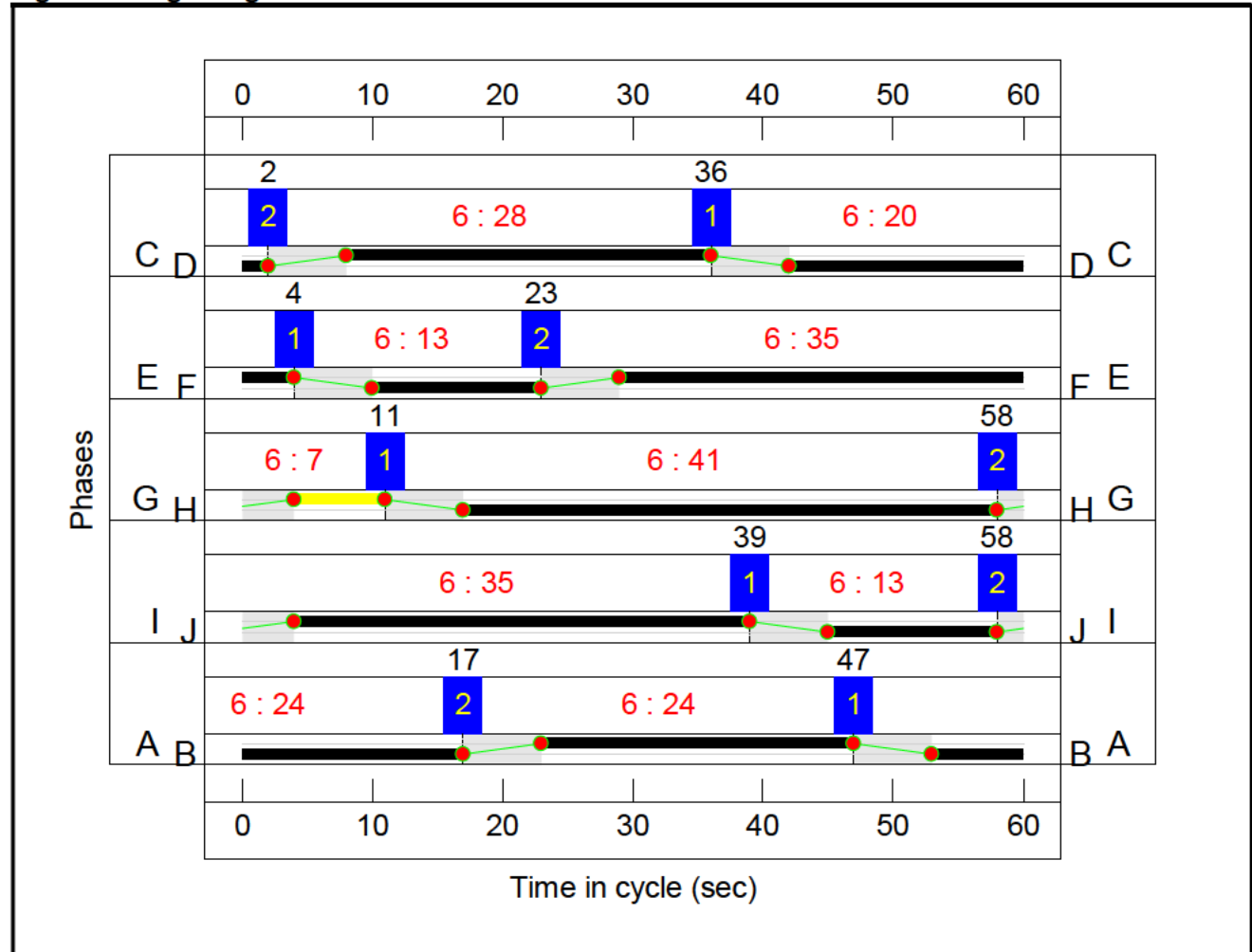
Stage Stream: 4

Stage	1	2
Duration	13	35
Change Point	39	58

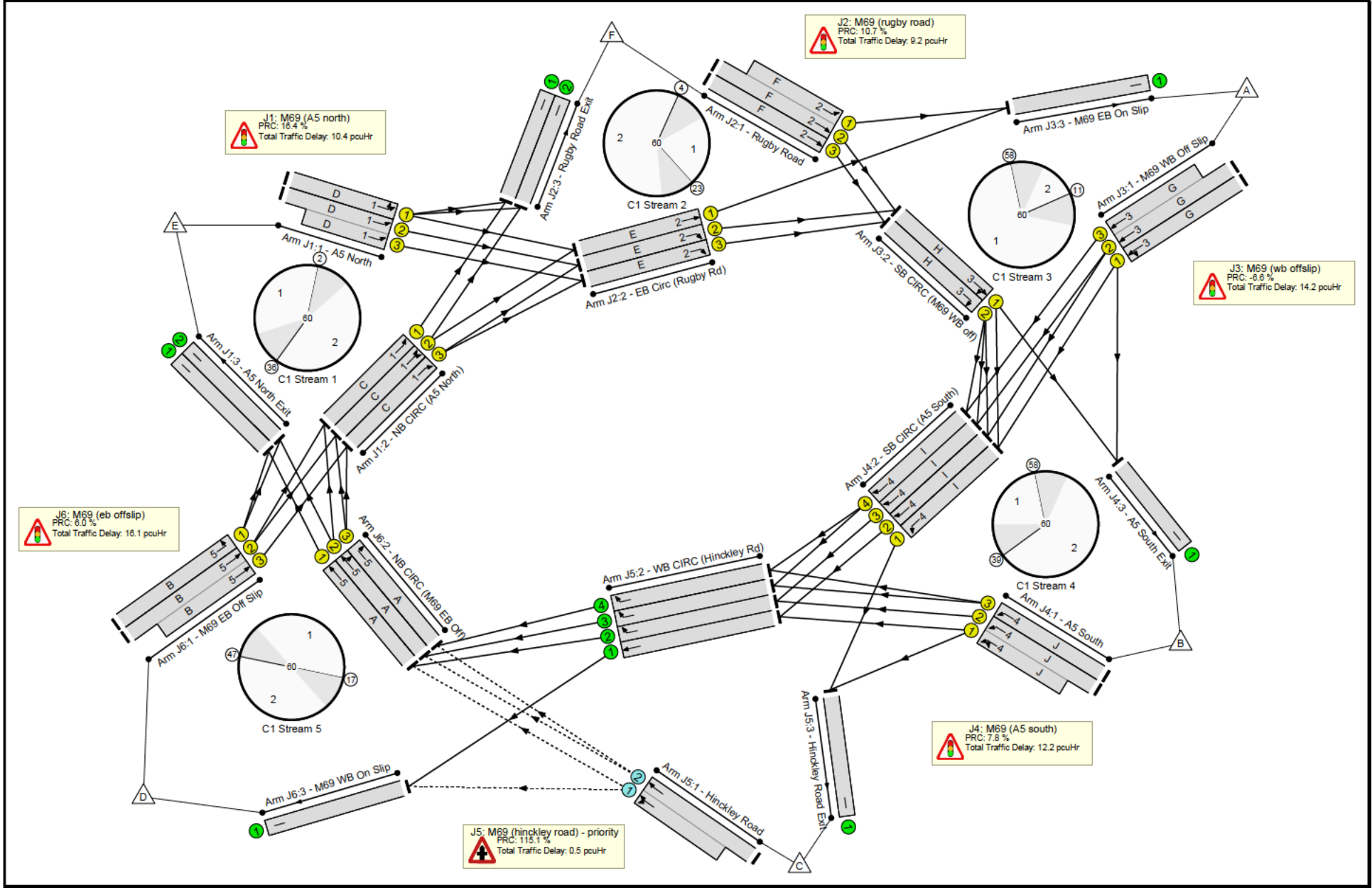
Stage Stream: 5

Stage	1	2
Duration	24	24
Change Point	47	17

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	95.9%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	77.3%
1/1	A5 North Ahead Left	U	1	N/A	D		1	20	-	191	1900	665	28.7%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	20	-	783	1900:1900	658+375	75.8 : 75.8%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	592	1900	918	64.5%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	28	-	710	1900	918	77.3%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	435	1900	918	47.4%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	897	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	81.3%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	13	-	356	1900:1900	443+86	67.2 : 67.2%
1/3	Rugby Road Ahead	U	2	N/A	F		1	13	-	334	1900	443	75.3%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	35	-	292	1900	1140	25.6%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	927	1900	1140	81.3%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	291	1900	1140	25.5%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	601	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	95.9%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	243	1900	253	95.9%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	335	1900:1900	253+253	66.3 : 65.9%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1225	1900	1330	92.1%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	625	1900	1330	47.0%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	350	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	83.5%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	13	-	540	1900:1900	443+204	83.5 : 83.5%
1/3	A5 South Ahead	U	4	N/A	J		1	13	-	370	1900	443	83.5%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	35	-	401	1900	1140	35.2%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	599	1900	1140	52.5%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	181	1900	1140	15.9%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	180	1900	1140	15.8%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	1067	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	41.8%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	407	1900:1900	679+294	41.8 : 41.8%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	760	1900	1900	40.0%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	551	1900	1900	29.0%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	352	1900	1900	18.5%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	198	1900	1900	10.4%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	84.9%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	24	-	474	1900	792	59.9%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	24	-	1097	1900:1900	792+501	84.9 : 84.9%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	24	-	660	1900	792	83.4%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	24	-	450	1900	792	56.8%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	24	-	384	1900	792	48.5%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	774	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	814	0	0	43.1	19.5	0.0	62.6	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	8.7	1.7	0.0	10.4	-	-	-	-
1/1	191	191	-	-	-	0.7	0.2	-	0.9	17.9	2.3	0.2	2.5
1/2+1/3	783	783	-	-	-	3.6	1.5	-	5.1	23.5	7.2	1.5	8.8
2/1	592	592	-	-	-	1.6	0.0	-	1.6	9.4	7.2	0.0	7.2
2/2	710	710	-	-	-	2.0	0.0	-	2.0	9.9	8.0	0.0	8.0
2/3	435	435	-	-	-	0.9	0.0	-	0.9	7.1	6.6	0.0	6.6
3/1	897	897	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	431	431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	6.7	2.5	0.0	9.2	-	-	-	-
1/2+1/1	356	356	-	-	-	2.0	1.0	-	3.0	30.7	4.5	1.0	5.5
1/3	334	334	-	-	-	2.0	1.5	-	3.5	37.4	5.1	1.5	6.6
2/1	292	292	-	-	-	0.3	0.0	-	0.3	3.5	1.3	0.0	1.3
2/2	927	927	-	-	-	2.1	0.0	-	2.1	8.3	8.6	0.0	8.6
2/3	291	291	-	-	-	0.2	0.0	-	0.2	2.8	0.7	0.0	0.7
3/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	601	601	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	7.6	6.6	0.0	14.2	-	-	-	-
1/1	243	243	-	-	-	1.7	5.6	-	7.4	109.2	4.0	5.6	9.6
1/2+1/3	335	335	-	-	-	2.3	1.0	-	3.3	35.1	2.7	1.0	3.6
2/1	1225	1225	-	-	-	2.3	0.0	-	2.3	6.8	11.8	0.0	11.8
2/2	625	625	-	-	-	1.3	0.0	-	1.3	7.3	9.7	0.0	9.7
3/1	350	350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

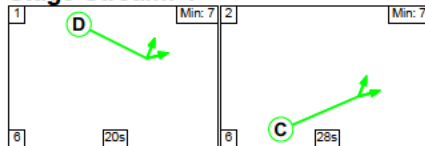
Input Data and Results													
J4: M69 (A5 south)	-	-	0	0	0	7.4	4.8	0.0	12.2	-	-	-	-
1/2+1/1	540	540	-	-	-	3.2	2.4	-	5.6	37.2	5.9	2.4	8.3
1/3	370	370	-	-	-	2.3	2.4	-	4.6	45.0	5.9	2.4	8.2
2/1	401	401	-	-	-	0.8	0.0	-	0.8	7.4	2.5	0.0	2.5
2/2	599	599	-	-	-	1.1	0.0	-	1.1	6.4	2.9	0.0	2.9
2/3	181	181	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1
2/4	180	180	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1
3/1	1067	1067	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: M69 (hinckley road) - priority	-	-	814	0	0	0.1	0.4	0.0	0.5	-	-	-	-
1/2+1/1	407	407	814	0	0	0.1	0.4	-	0.5	4.2	1.1	0.4	1.5
2/1	760	760	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	551	551	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/3	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/4	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J6: M69 (eb offslip)	-	-	0	0	0	12.6	3.5	0.0	16.1	-	-	-	-
1/1	474	474	-	-	-	1.8	0.7	-	2.5	19.2	6.1	0.7	6.8
1/2+1/3	1097	1097	-	-	-	4.5	2.7	-	7.2	23.7	10.1	2.7	12.8
2/1	660	660	-	-	-	3.2	0.0	-	3.2	17.6	10.8	0.0	10.8
2/2	450	450	-	-	-	1.6	0.0	-	1.6	12.9	7.0	0.0	7.0
2/3	384	384	-	-	-	1.5	0.0	-	1.5	14.1	5.3	0.0	5.3
3/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 16.4 C1 Stream: 2 PRC for Signalled Lanes (%): 10.7 C1 Stream: 3 PRC for Signalled Lanes (%): -6.6 C1 Stream: 4 PRC for Signalled Lanes (%): 7.8 C1 Stream: 5 PRC for Signalled Lanes (%): 6.0 PRC Over All Lanes (%): -6.6					Total Delay for Signalled Lanes (pcuHr): 10.42 Total Delay for Signalled Lanes (pcuHr): 9.16 Total Delay for Signalled Lanes (pcuHr): 14.24 Total Delay for Signalled Lanes (pcuHr): 12.16 Total Delay for Signalled Lanes (pcuHr): 16.09 Total Delay Over All Lanes (pcuHr): 62.56				Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60				

Full Input Data And Results

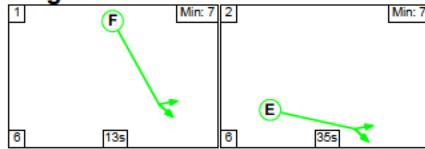
Scenario 9: '2031 PM' (FG8: '2031 PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

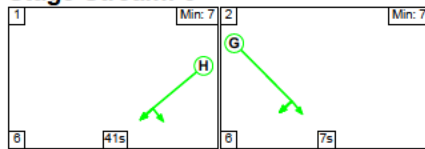
Stage Stream: 1



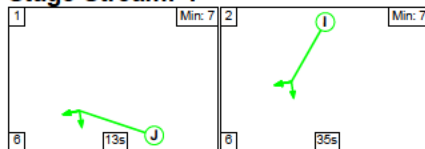
Stage Stream: 2



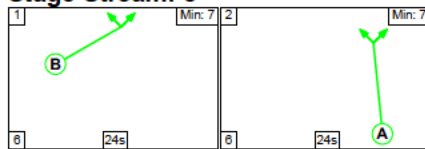
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	20	28
Change Point	36	2

Stage Stream: 2

Stage	1	2
Duration	13	35
Change Point	7	26

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	11	58

Full Input Data And Results

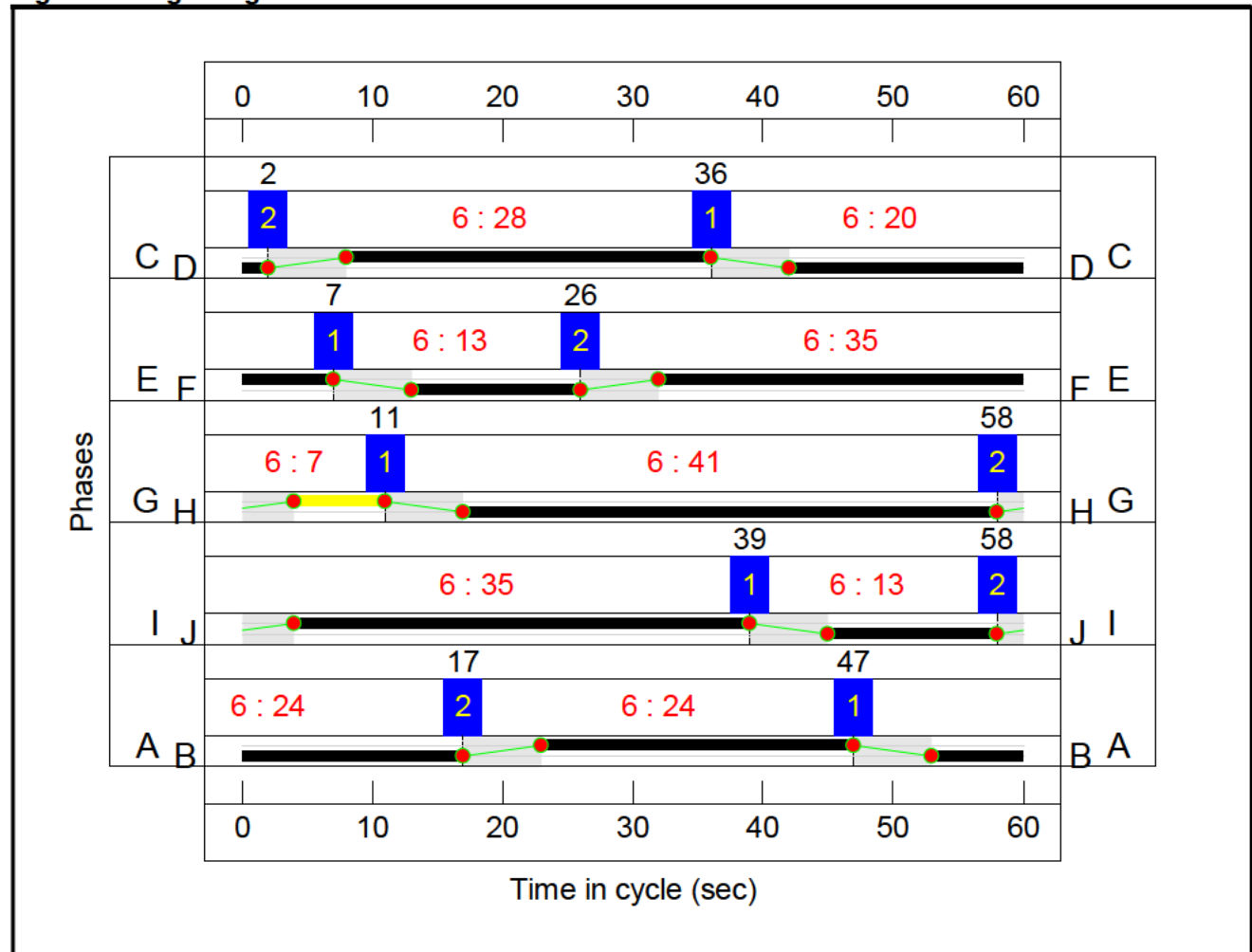
Stage Stream: 4

Stage	1	2
Duration	13	35
Change Point	39	58

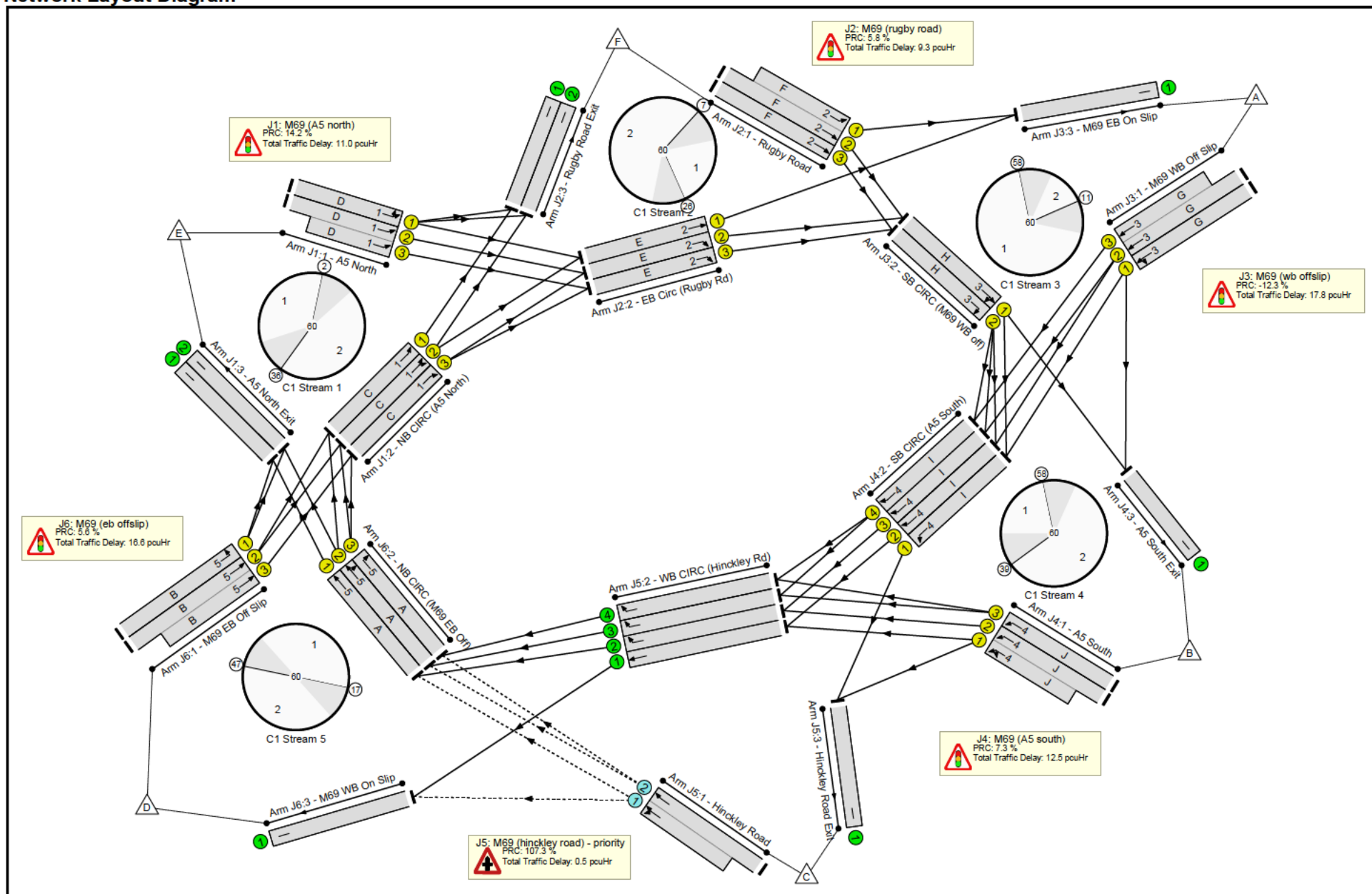
Stage Stream: 5

Stage	1	2
Duration	24	24
Change Point	47	17

Signal Timings Diagram



Full Input Data And Results Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	101.1%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	78.8%
1/1	A5 North Ahead Left	U	1	N/A	D		1	20	-	198	1900	665	29.8%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	20	-	814	1900:1900	658+374	78.8 : 78.8%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	588	1900	918	64.0%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	28	-	712	1900	918	77.5%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	459	1900	918	50.0%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	923	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	85.1%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	13	-	360	1900:1900	443+85	68.1 : 68.1%
1/3	Rugby Road Ahead	U	2	N/A	F		1	13	-	340	1900	443	76.7%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	35	-	303	1900	1140	26.6%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	970	1900	1140	85.1%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	303	1900	1140	26.6%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	101.1%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	256	1900	253	101.1%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	353	1900:1900	253+253	69.5 : 69.9%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1272	1900	1330	95.6%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	643	1900	1330	48.3%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	83.9%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	13	-	549	1900:1900	443+211	83.9 : 83.9%
1/3	A5 South Ahead	U	4	N/A	J		1	13	-	371	1900	443	83.7%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	35	-	419	1900	1140	36.6%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	616	1900	1140	54.0%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	189	1900	1140	16.6%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	191	1900	1140	16.8%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	1109	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	43.4%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	417	1900:1900	668+292	43.4 : 43.4%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	783	1900	1900	41.2%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	561	1900	1900	29.5%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	369	1900	1900	19.4%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	193	1900	1900	10.2%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	85.3%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	24	-	500	1900	792	63.2%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	24	-	1124	1900:1900	792+527	85.3 : 85.3%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	24	-	673	1900	792	85.0%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	24	-	468	1900	792	59.1%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	24	-	384	1900	792	48.5%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	798	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	834	0	0	44.4	23.5	0.0	67.8	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	9.0	2.0	0.0	11.0	-	-	-	-
1/1	198	198	-	-	-	0.8	0.2	-	1.0	18.0	2.4	0.2	2.6
1/2+1/3	814	814	-	-	-	3.7	1.8	-	5.6	24.7	7.6	1.8	9.5
2/1	588	588	-	-	-	1.6	0.0	-	1.6	9.8	7.4	0.0	7.4
2/2	712	712	-	-	-	2.0	0.0	-	2.0	9.9	8.1	0.0	8.1
2/3	459	459	-	-	-	0.9	0.0	-	0.9	7.2	7.1	0.0	7.1
3/1	923	923	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	6.7	2.7	0.0	9.3	-	-	-	-
1/2+1/1	360	360	-	-	-	2.1	1.1	-	3.1	31.1	4.5	1.1	5.6
1/3	340	340	-	-	-	2.0	1.6	-	3.6	38.4	5.3	1.6	6.9
2/1	303	303	-	-	-	0.3	0.0	-	0.3	3.4	1.1	0.0	1.1
2/2	970	970	-	-	-	2.2	0.0	-	2.2	8.0	8.2	0.0	8.2
2/3	303	303	-	-	-	0.2	0.0	-	0.2	2.0	0.5	0.0	0.5
3/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	8.0	9.8	0.0	17.8	-	-	-	-
1/1	256	253	-	-	-	1.9	8.7	-	10.6	149.4	4.3	8.7	13.0
1/2+1/3	353	353	-	-	-	2.4	1.1	-	3.6	36.4	2.8	1.1	3.9
2/1	1272	1272	-	-	-	2.5	0.0	-	2.5	7.1	13.0	0.0	13.0
2/2	643	643	-	-	-	1.1	0.0	-	1.1	6.4	9.9	0.0	9.9
3/1	361	361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

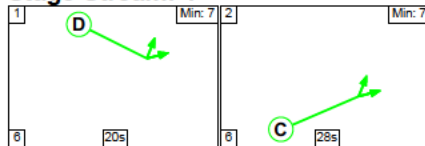
Input Data and Results														
J4: M69 (A5 south)	-	-	0	0	0	7.6	4.9	0.0	12.5	-	-	-	-	-
1/2+1/1	549	549	-	-	-	3.2	2.5	-	5.7	37.5	5.9	2.5	8.4	
1/3	371	371	-	-	-	2.3	2.4	-	4.7	45.3	5.9	2.4	8.3	
2/1	417	417	-	-	-	0.8	0.0	-	0.8	7.2	2.7	0.0	2.7	
2/2	616	616	-	-	-	1.2	0.0	-	1.2	6.8	3.1	0.0	3.1	
2/3	189	189	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1	
2/4	191	191	-	-	-	0.0	0.0	-	0.0	0.8	0.1	0.0	0.1	
3/1	1108	1108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J5: M69 (hinckley road) - priority	-	-	834	0	0	0.1	0.4	0.0	0.5	-	-	-	-	
1/2+1/1	417	417	834	0	0	0.1	0.4	-	0.5	4.4	1.2	0.4	1.6	
2/1	783	783	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/4	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J6: M69 (eb offslip)	-	-	0	0	0	13.0	3.7	0.0	16.6	-	-	-	-	
1/1	500	500	-	-	-	1.9	0.9	-	2.8	20.0	6.5	0.9	7.4	
1/2+1/3	1124	1124	-	-	-	4.6	2.8	-	7.4	23.9	10.1	2.8	12.9	
2/1	673	673	-	-	-	3.3	0.0	-	3.3	17.5	11.1	0.0	11.1	
2/2	468	468	-	-	-	1.7	0.0	-	1.7	12.9	7.3	0.0	7.3	
2/3	384	384	-	-	-	1.5	0.0	-	1.5	13.8	5.1	0.0	5.1	
3/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
					C1 Stream: 1 PRC for Signalled Lanes (%):	14.2	Total Delay for Signalled Lanes (pcuHr):			11.04	Cycle Time (s): 60			
					C1 Stream: 2 PRC for Signalled Lanes (%):	5.8	Total Delay for Signalled Lanes (pcuHr):			9.34	Cycle Time (s): 60			
					C1 Stream: 3 PRC for Signalled Lanes (%):	-12.3	Total Delay for Signalled Lanes (pcuHr):			17.84	Cycle Time (s): 60			
					C1 Stream: 4 PRC for Signalled Lanes (%):	7.3	Total Delay for Signalled Lanes (pcuHr):			12.45	Cycle Time (s): 60			
					C1 Stream: 5 PRC for Signalled Lanes (%):	5.6	Total Delay for Signalled Lanes (pcuHr):			16.64	Cycle Time (s): 60			
					PRC Over All Lanes (%):	-12.3	Total Delay Over All Lanes (pcuHr):			67.83				

Full Input Data And Results

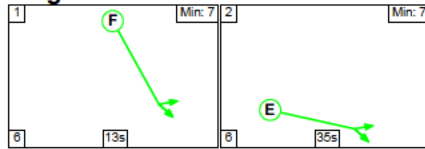
Scenario 10: '2031 + Dev PM' (FG10: '2031 + Dev PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

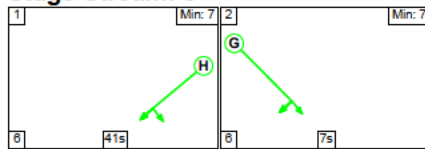
Stage Stream: 1



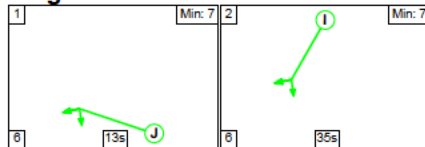
Stage Stream: 2



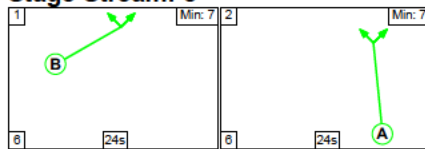
Stage Stream: 3



Stage Stream: 4



Stage Stream: 5



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	20	28
Change Point	36	2

Stage Stream: 2

Stage	1	2
Duration	13	35
Change Point	7	26

Stage Stream: 3

Stage	1	2
Duration	41	7
Change Point	11	58

Full Input Data And Results

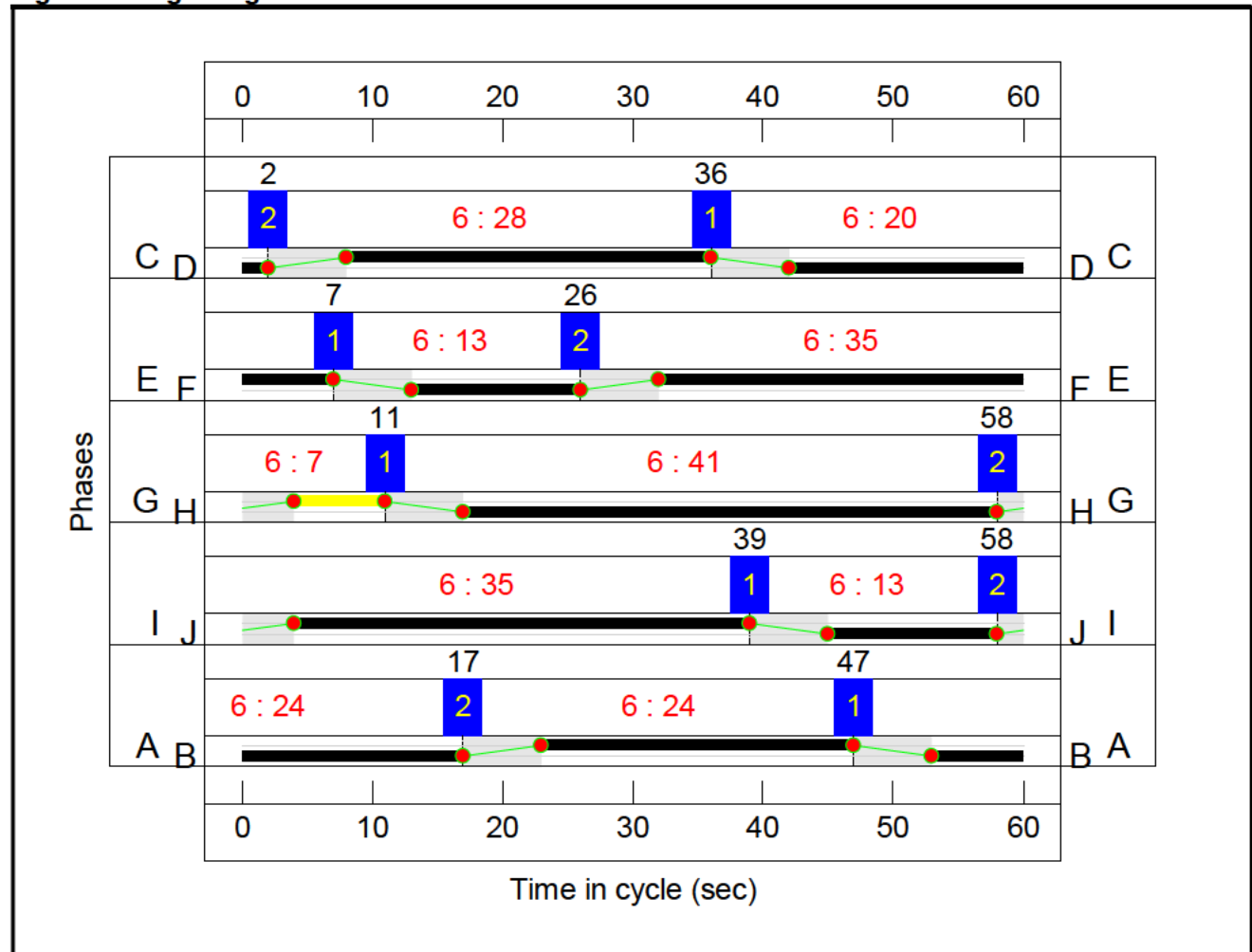
Stage Stream: 4

Stage	1	2
Duration	13	35
Change Point	39	58

Stage Stream: 5

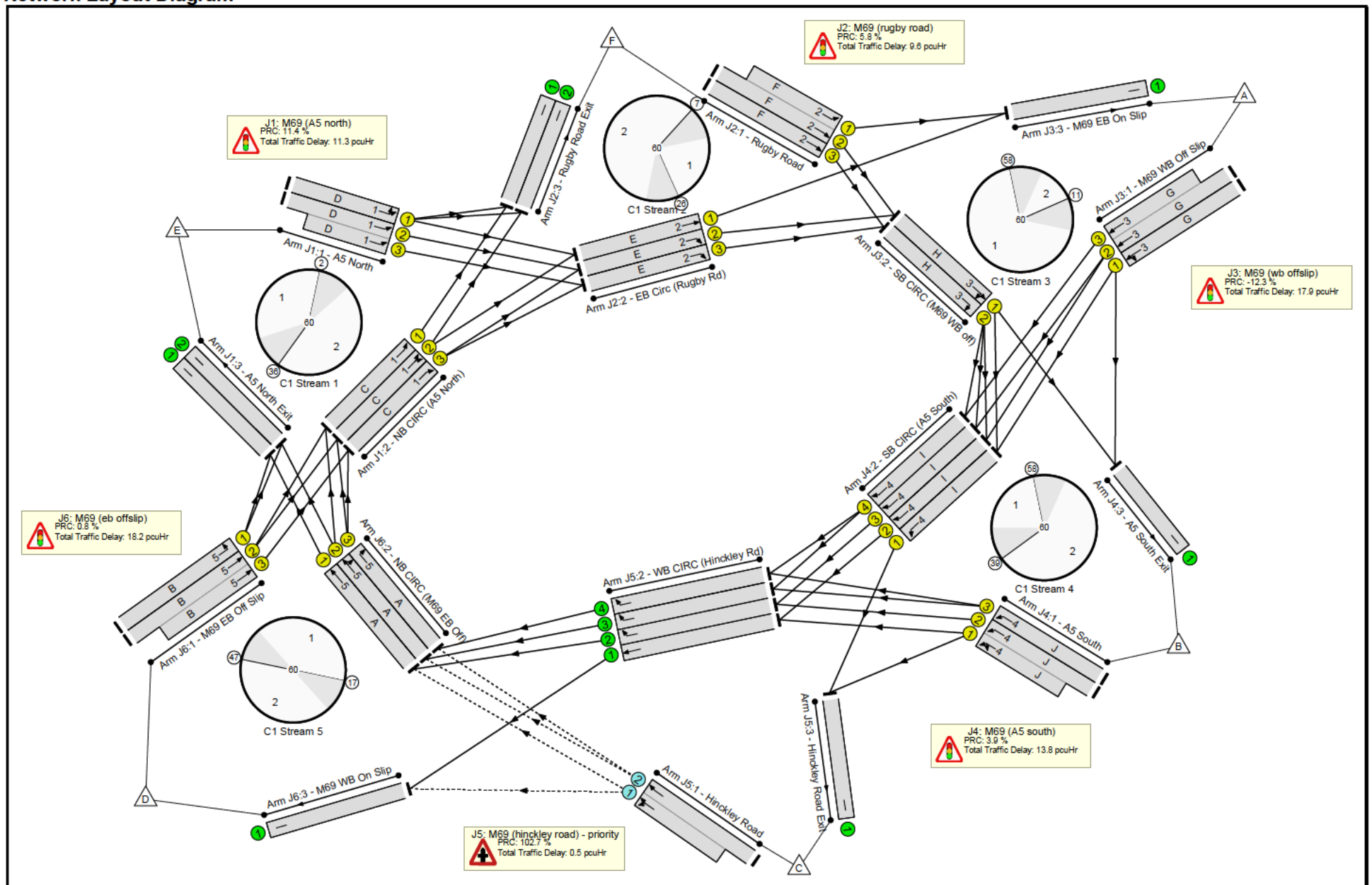
Stage	1	2
Duration	24	24
Change Point	47	17

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

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: M69 Junction 1 - Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	101.1%
J1: M69 (A5 north)	-	-	N/A	-	-		-	-	-	-	-	-	80.8%
1/1	A5 North Ahead Left	U	1	N/A	D		1	20	-	198	1900	665	29.8%
1/2+1/3	A5 North Ahead	U	1	N/A	D		1	20	-	814	1900:1900	658+374	78.8 : 78.8%
2/1	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	618	1900	918	67.3%
2/2	NB CIRC (A5 North) Ahead Ahead2	U	1	N/A	C		1	28	-	742	1900	918	80.8%
2/3	NB CIRC (A5 North) Ahead	U	1	N/A	C		1	28	-	459	1900	918	50.0%
3/1	A5 North Exit	U	N/A	N/A	-		-	-	-	935	Inf	Inf	0.0%
3/2	A5 North Exit	U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
J2: M69 (rugby road)	-	-	N/A	-	-		-	-	-	-	-	-	85.1%
1/2+1/1	Rugby Road Ahead Ahead2	U	2	N/A	F		1	13	-	368	1900:1900	443+86	69.5 : 69.5%
1/3	Rugby Road Ahead	U	2	N/A	F		1	13	-	345	1900	443	77.8%
2/1	EB Circ (Rugby Rd) Ahead	U	2	N/A	E		1	35	-	303	1900	1140	26.6%
2/2	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	970	1900	1140	85.1%
2/3	EB Circ (Rugby Rd) Right	U	2	N/A	E		1	35	-	303	1900	1140	26.6%
3/1	Rugby Road Exit	U	N/A	N/A	-		-	-	-	627	Inf	Inf	0.0%
3/2	Rugby Road Exit	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%

Full Input Data And Results

J3: M69 (wb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	101.1%
1/1	M69 WB Off Slip Ahead Left	U	3	N/A	G		1	7	-	256	1900	253	101.1%
1/2+1/3	M69 WB Off Slip Ahead	U	3	N/A	G		1	7	-	353	1900:1900	253+253	69.5 : 69.9%
2/1	SB CIRC (M69 WB off) Right Ahead	U	3	N/A	H		1	41	-	1278	1900	1330	96.1%
2/2	SB CIRC (M69 WB off) Right	U	3	N/A	H		1	41	-	648	1900	1330	48.7%
3/1	M69 EB On Slip	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
J4: M69 (A5 south)	-	-	N/A	-	-		-	-	-	-	-	-	86.6%
1/2+1/1	A5 South Ahead Left	U	4	N/A	J		1	13	-	561	1900:1900	443+204	86.6 : 86.6%
1/3	A5 South Ahead	U	4	N/A	J		1	13	-	384	1900	443	86.6%
2/1	SB CIRC (A5 South) Left	U	4	N/A	I		1	35	-	419	1900	1140	36.6%
2/2	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	621	1900	1140	54.5%
2/3	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	189	1900	1140	16.6%
2/4	SB CIRC (A5 South) Ahead	U	4	N/A	I		1	35	-	191	1900	1140	16.8%
3/1	A5 South Exit	U	N/A	N/A	-		-	-	-	1115	Inf	Inf	0.0%
J5: M69 (hinckley road) - priority	-	-	N/A	-	-		-	-	-	-	-	-	44.4%
1/2+1/1	Hinckley Road Ahead Left	O	N/A	N/A	-		-	-	-	420	1900:1900	660+286	44.4 : 44.4%
2/1	WB CIRC (Hinckley Rd) Ahead	U	N/A	N/A	-		-	-	-	788	1900	1900	41.5%
2/2	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	573	1900	1900	30.2%

Full Input Data And Results

2/3	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	369	1900	1900	19.4%
2/4	WB CIRC (Hinckley Rd) Right	U	N/A	N/A	-		-	-	-	206	1900	1900	10.8%
3/1	Hinckley Road Exit	U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
J6: M69 (eb offslip)	-	-	N/A	-	-		-	-	-	-	-	-	89.3%
1/1	M69 EB Off Slip Left	U	5	N/A	B		1	24	-	500	1900	792	63.2%
1/2+1/3	M69 EB Off Slip Ahead	U	5	N/A	B		1	24	-	1156	1900:1900	792+503	89.3 : 89.3%
2/1	NB CIRC (M69 EB Off) Ahead	U	5	N/A	A		1	24	-	685	1900	792	86.5%
2/2	NB CIRC (M69 EB Off) Right Ahead	U	5	N/A	A		1	24	-	470	1900	792	59.4%
2/3	NB CIRC (M69 EB Off) Right	U	5	N/A	A		1	24	-	398	1900	792	50.3%
3/1	M69 WB On Slip	U	N/A	N/A	-		-	-	-	803	Inf	Inf	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: M69 Junction 1 - Existing Layout	-	-	840	0	0	45.4	25.9	0.0	71.2	-	-	-	-
J1: M69 (A5 north)	-	-	0	0	0	9.2	2.0	0.0	11.3	-	-	-	-
1/1	198	198	-	-	-	0.8	0.2	-	1.0	18.0	2.4	0.2	2.6
1/2+1/3	814	814	-	-	-	3.7	1.8	-	5.6	24.7	7.6	1.8	9.5
2/1	618	618	-	-	-	1.7	0.0	-	1.7	9.7	7.7	0.0	7.7
2/2	742	742	-	-	-	2.1	0.0	-	2.1	10.3	8.6	0.0	8.6
2/3	459	459	-	-	-	0.9	0.0	-	0.9	7.2	7.1	0.0	7.1
3/1	935	935	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: M69 (rugby road)	-	-	0	0	0	6.8	2.8	0.0	9.6	-	-	-	-
1/2+1/1	368	368	-	-	-	2.1	1.1	-	3.2	31.6	4.6	1.1	5.7
1/3	345	345	-	-	-	2.1	1.7	-	3.8	39.2	5.4	1.7	7.1
2/1	303	303	-	-	-	0.3	0.0	-	0.3	3.6	1.2	0.0	1.2
2/2	970	970	-	-	-	2.2	0.0	-	2.2	8.0	8.2	0.0	8.2
2/3	303	303	-	-	-	0.2	0.0	-	0.2	2.0	0.5	0.0	0.5
3/1	627	627	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: M69 (wb offslip)	-	-	0	0	0	8.0	9.8	0.0	17.9	-	-	-	-
1/1	256	253	-	-	-	1.9	8.7	-	10.6	149.4	4.3	8.7	13.0
1/2+1/3	353	353	-	-	-	2.4	1.1	-	3.6	36.4	2.8	1.1	3.9
2/1	1278	1278	-	-	-	2.5	0.0	-	2.5	7.1	13.1	0.0	13.1
2/2	648	648	-	-	-	1.1	0.0	-	1.1	6.4	10.1	0.0	10.1
3/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

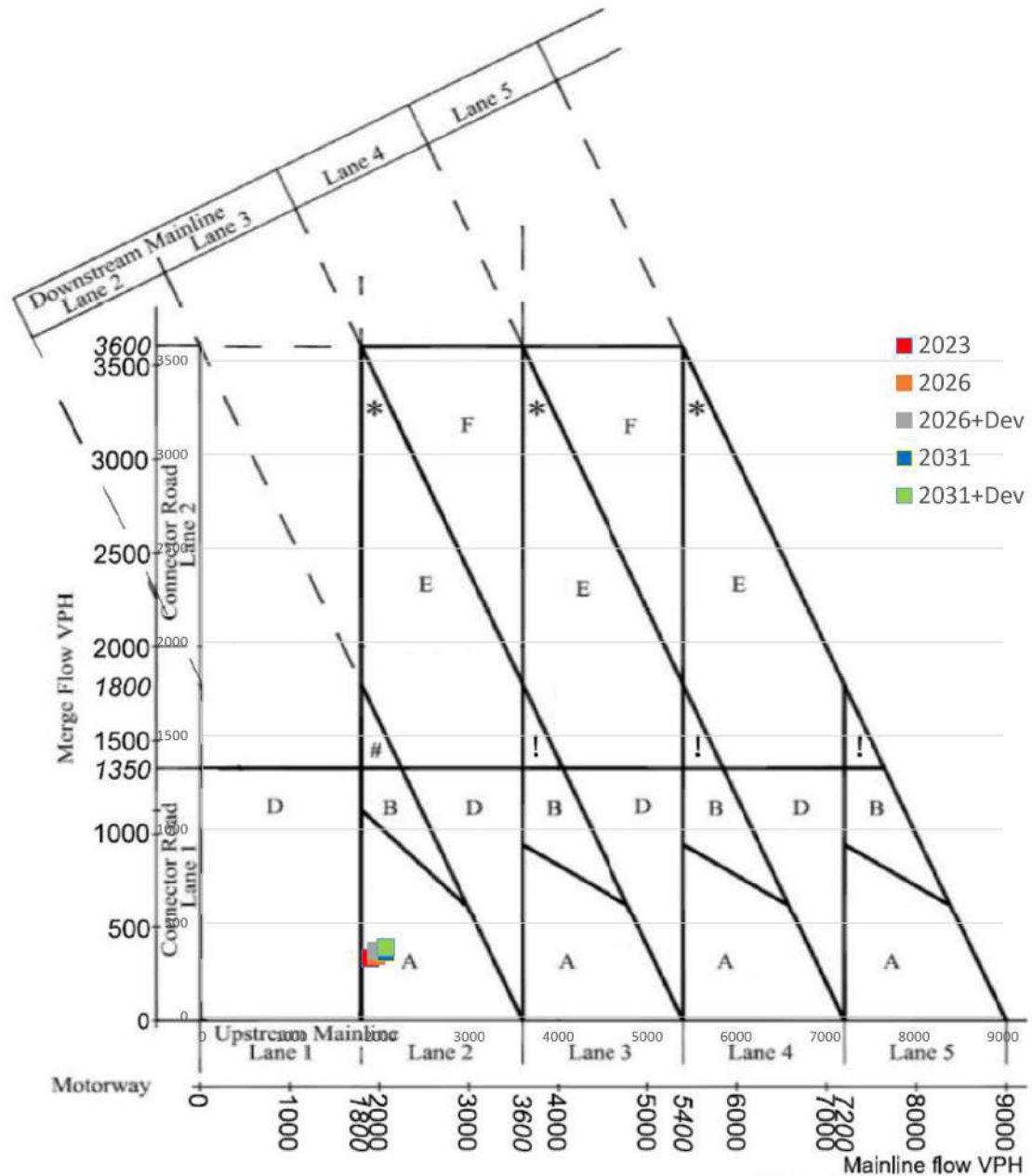
Sat Input Data A and Results														
J4: M69 (A5 south)	-	-	0	0	0	7.8	6.0	0.0	13.8	-	-	-	-	-
1/2+1/1	561	561	-	-	-	3.3	3.0	-	6.3	40.7	6.1	3.0	9.1	
1/3	384	384	-	-	-	2.4	2.9	-	5.3	49.7	6.1	2.9	9.0	
2/1	417	417	-	-	-	0.8	0.0	-	0.8	7.1	2.7	0.0	2.7	
2/2	621	621	-	-	-	1.2	0.0	-	1.2	7.0	3.2	0.0	3.2	
2/3	189	189	-	-	-	0.0	0.0	-	0.0	0.7	0.1	0.0	0.1	
2/4	191	191	-	-	-	0.0	0.0	-	0.0	0.8	0.1	0.0	0.1	
3/1	1114	1114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
J5: M69 (hinckley road) - priority	-	-	840	0	0	0.1	0.4	0.0	0.5	-	-	-	-	-
1/2+1/1	420	420	840	0	0	0.1	0.4	-	0.5	4.6	1.2	0.4	1.6	
2/1	788	788	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
2/2	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
2/3	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
2/4	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
3/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
J6: M69 (eb offslip)	-	-	0	0	0	13.4	4.8	0.0	18.2	-	-	-	-	-
1/1	500	500	-	-	-	1.9	0.9	-	2.8	20.0	6.5	0.9	7.4	
1/2+1/3	1156	1156	-	-	-	4.9	3.9	-	8.8	27.4	10.8	3.9	14.8	
2/1	685	685	-	-	-	3.4	0.0	-	3.4	17.7	11.3	0.0	11.3	
2/2	470	470	-	-	-	1.7	0.0	-	1.7	12.8	7.4	0.0	7.4	
2/3	398	398	-	-	-	1.6	0.0	-	1.6	14.0	5.5	0.0	5.5	
3/1	803	803	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 11.4 Total Delay for Signalled Lanes (pcuHr): 11.28 Cycle Time (s): 60														
C1 Stream: 2 PRC for Signalled Lanes (%): 5.8 Total Delay for Signalled Lanes (pcuHr): 9.61 Cycle Time (s): 60														
C1 Stream: 3 PRC for Signalled Lanes (%): -12.3 Total Delay for Signalled Lanes (pcuHr): 17.86 Cycle Time (s): 60														
C1 Stream: 4 PRC for Signalled Lanes (%): 3.9 Total Delay for Signalled Lanes (pcuHr): 13.75 Cycle Time (s): 60														
C1 Stream: 5 PRC for Signalled Lanes (%): 0.8 Total Delay for Signalled Lanes (pcuHr): 18.18 Cycle Time (s): 60														
PRC Over All Lanes (%): -12.3 Total Delay Over All Lanes(pcuHr): 71.21														

Appendix TT: Merge Assessments

Downloaded from <https://www.standardsforhighways.co.uk> on 30-Mar-2023, CD 122 Version 1.1.1, published: 31-Jan-2022

M69 Junction 1 North-Eastbound PM Merge Assessment

Figure 3.12b Motorway merging diagram



NOTE 1 As an example of how to use Figures 3.12a and 3.12b, if the merge flow is 2000 vph and the upstream mainline flow is 4000 vph, this would give a Type E layout with 3 lanes upstream and 4 lanes downstream.

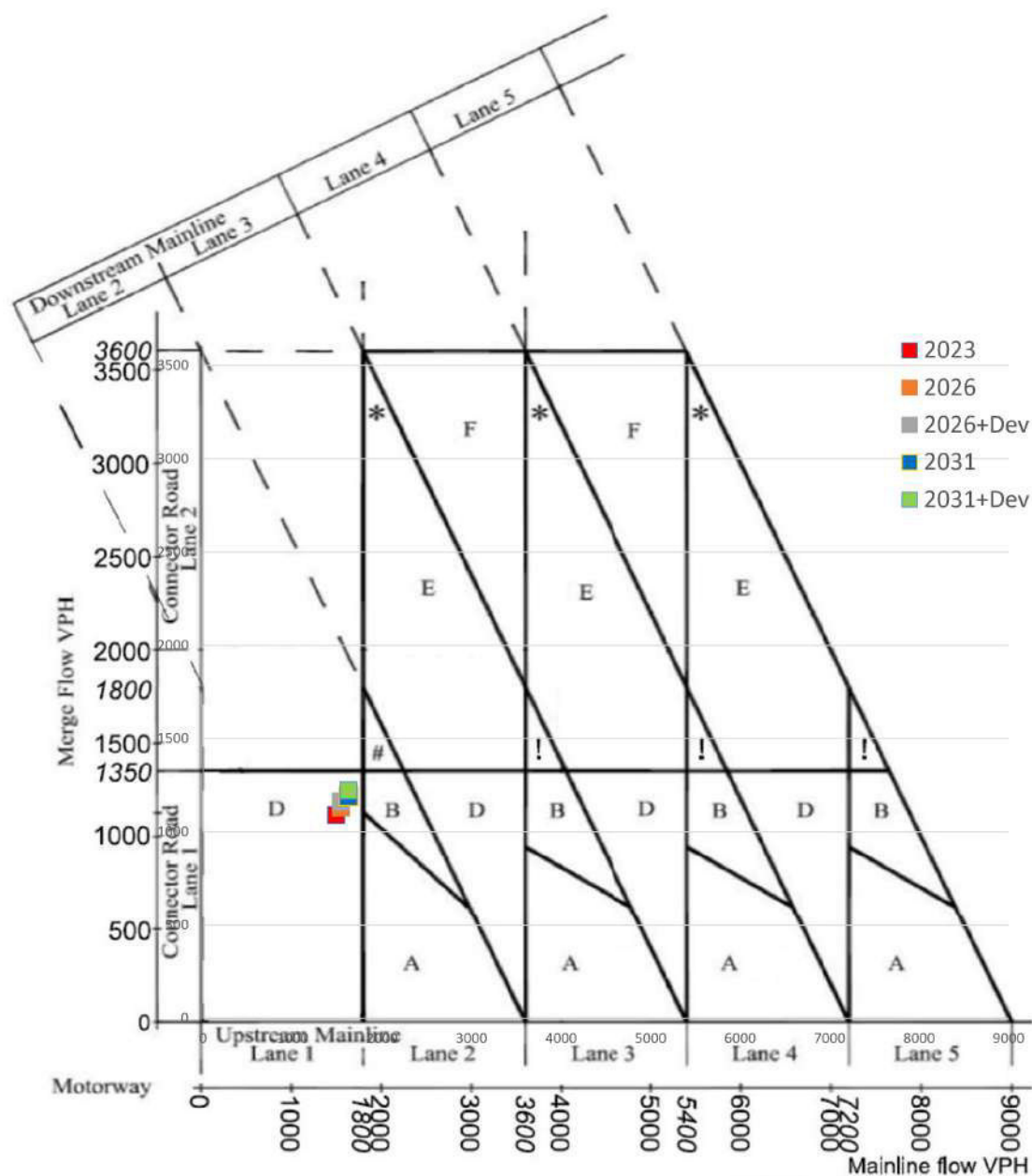
NOTE 2 On Figures 3.12a and 3.12b, the # symbol indicates areas of uncertainty and the choice depends on the upstream and downstream provision and the ability for the mainline to accept the flows from the merge.

NOTE 3 On Figures 3.12a and 3.12b, the ! symbol indicates that the minimum layout to be provided is:

- 1) Layout C for rural roads; or,
- 2) Layout A Option 2 for urban roads.

M69 Junction 1 South-Westbound AM Merge Assessment

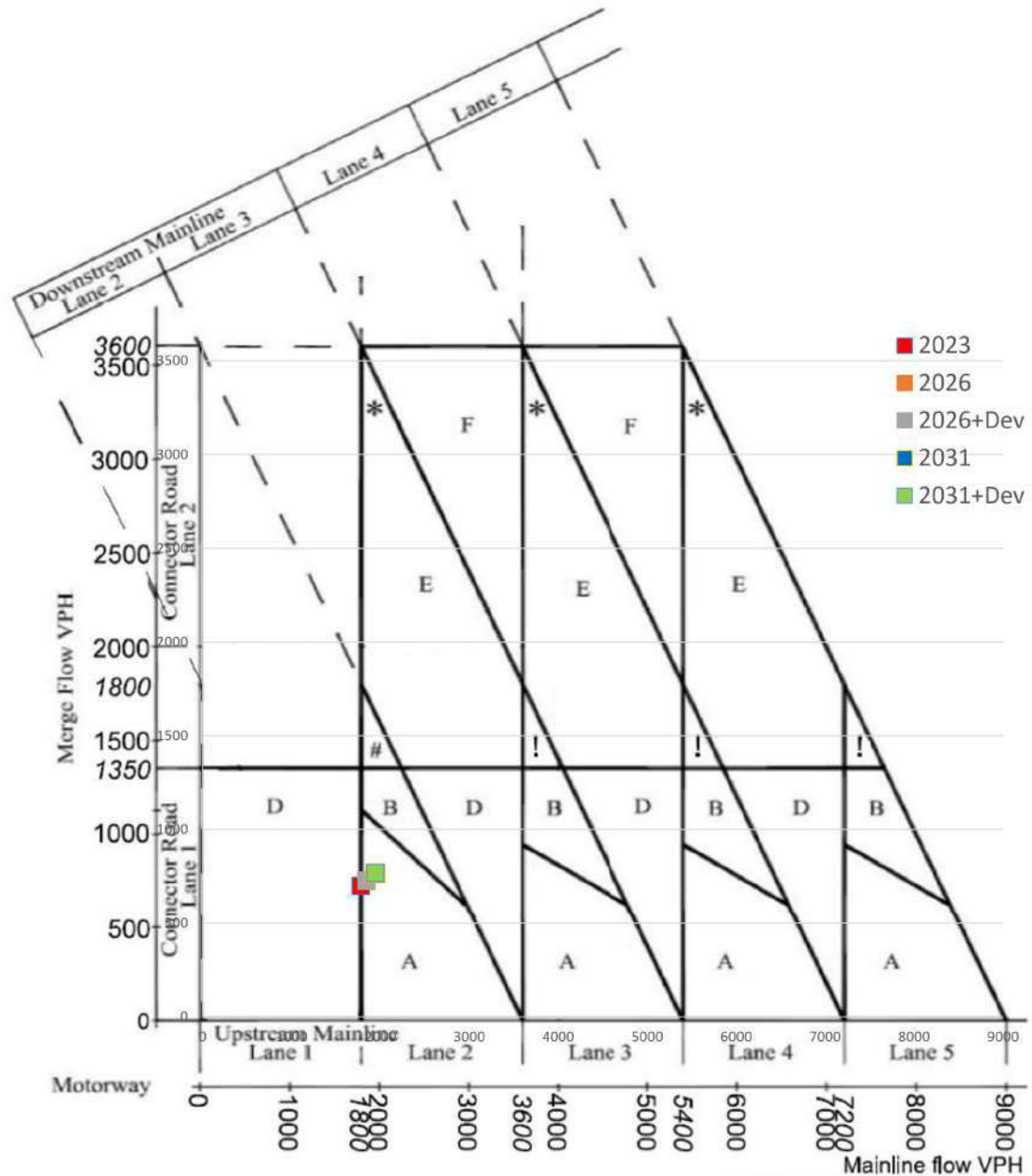
Figure 3.12b Motorway merging diagram



- NOTE 1** As an example of how to use Figures 3.12a and 3.12b, if the merge flow is 2000 vph and the upstream mainline flow is 4000 vph, this would give a Type E layout with 3 lanes upstream and 4 lanes downstream.
- NOTE 2** On Figures 3.12a and 3.12b, the # symbol indicates areas of uncertainty and the choice depends on the upstream and downstream provision and the ability for the mainline to accept the flows from the merge.
- NOTE 3** On Figures 3.12a and 3.12b, the ! symbol indicates that the minimum layout to be provided is:
- 1) Layout C for rural roads; or,
 - 2) Layout A Option 2 for urban roads.

M69 Junction 1 South-Westbound PM Merge Assessment

Figure 3.12b Motorway merging diagram



NOTE 1 As an example of how to use Figures 3.12a and 3.12b, if the merge flow is 2000 vph and the upstream mainline flow is 4000 vph, this would give a Type E layout with 3 lanes upstream and 4 lanes downstream.

NOTE 2 On Figures 3.12a and 3.12b, the # symbol indicates areas of uncertainty and the choice depends on the upstream and downstream provision and the ability for the mainline to accept the flows from the merge.

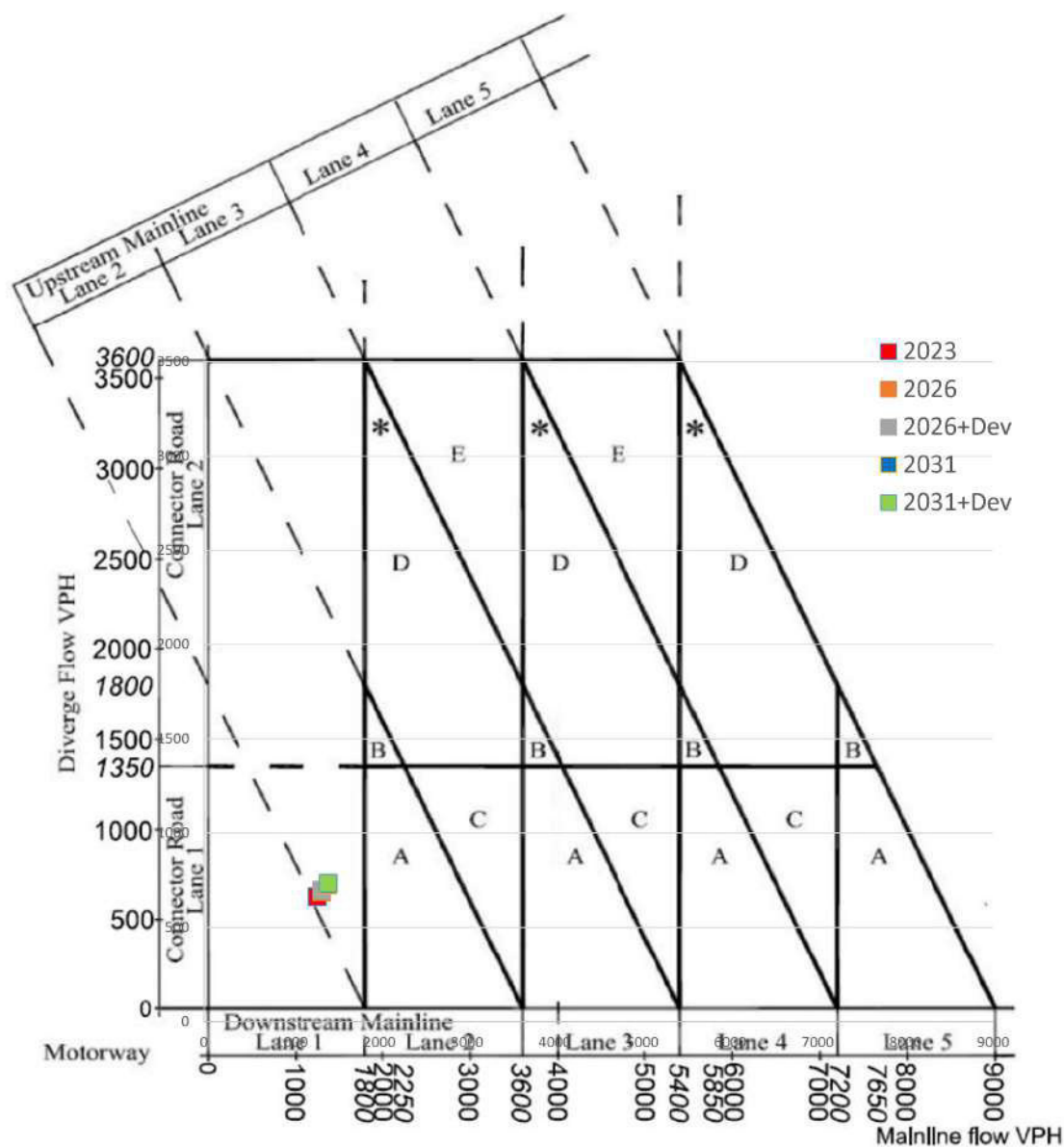
NOTE 3 On Figures 3.12a and 3.12b, the ! symbol indicates that the minimum layout to be provided is:

- 1) Layout C for rural roads; or,
- 2) Layout A Option 2 for urban roads.

Appendix UU: Diverge Assessments

M69 Junction 1 North-Eastbound AM Diverge Assessment

Figure 3.26b Motorway diverging diagram



NOTE As an example of how to use Figures 3.24a and 3.24b, if the diverge flow is 2000 vph and the downstream mainline flow is 4000 vph, this would give a Type D layout with 3 lanes downstream and 4 lanes upstream.

3.26.1 Where the flows are in the region indicated by the * symbol in Figures 3.25b and Layout D option 2 is to be used, an extended auxiliary lane should be provided instead of a taper diverge.

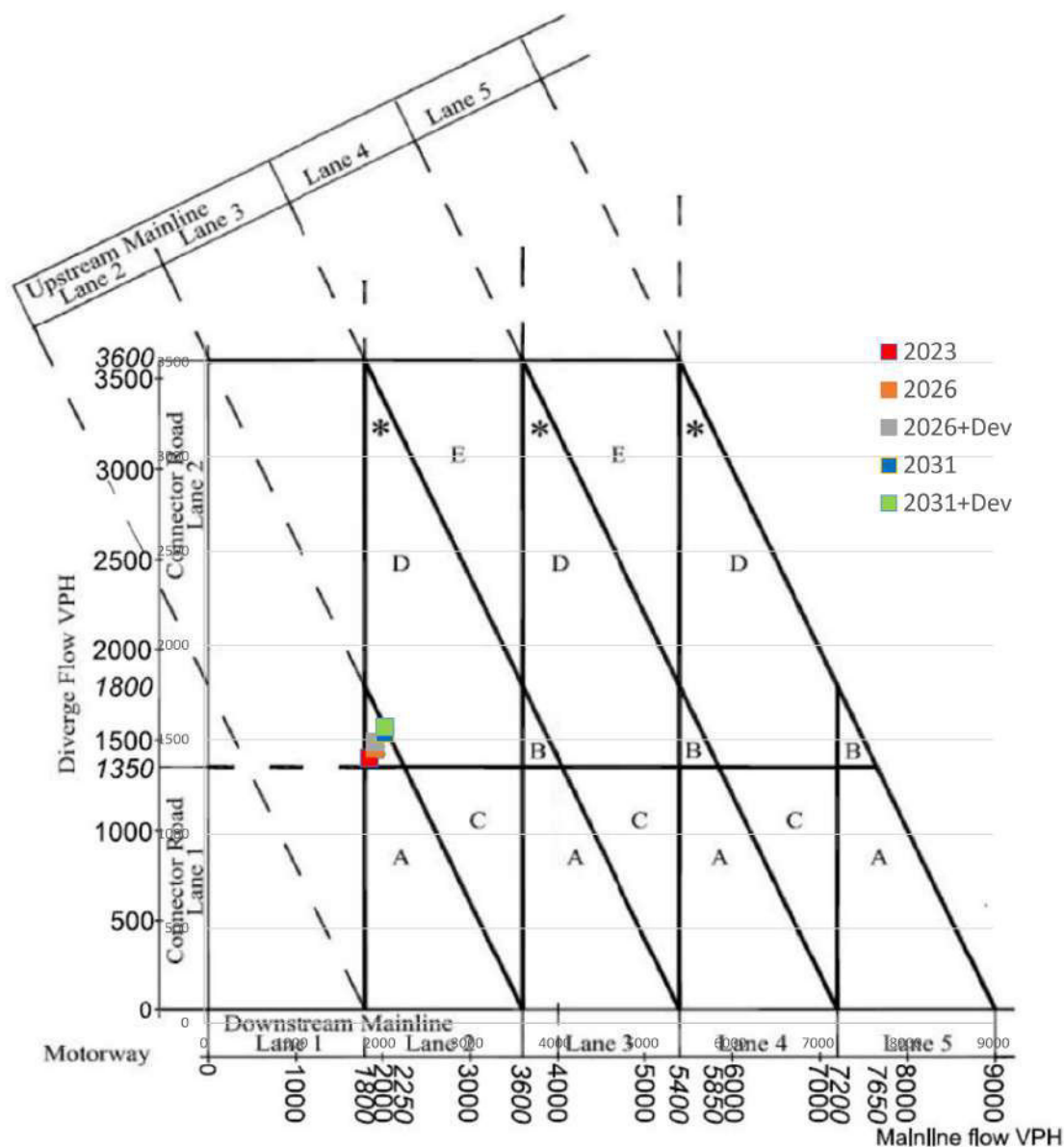
3.26.2 A diverge layout that offers a higher level of capacity than the worst case peak flow may be provided, for example Layout C instead of Layout A.

NOTE A diverge layout that offers less capacity than the worst case peak flow cannot be used, such as a Layout C instead of Layout E.

3.27 For 3-lane diverges from the main carriageway, Layout F or G shall be used based on the number of

M69 Junction 1 North-Eastbound PM Diverge Assessment

Figure 3.26b Motorway diverging diagram



NOTE As an example of how to use Figures 3.24a and 3.24b, if the diverge flow is 2000 vph and the downstream mainline flow is 4000 vph, this would give a Type D layout with 3 lanes downstream and 4 lanes upstream.

3.26.1 Where the flows are in the region indicated by the * symbol in Figures 3.25b and Layout D option 2 is to be used, an extended auxiliary lane should be provided instead of a taper diverge.

3.26.2 A diverge layout that offers a higher level of capacity than the worst case peak flow may be provided, for example Layout C instead of Layout A.

NOTE A diverge layout that offers less capacity than the worst case peak flow cannot be used, such as a Layout C instead of Layout E.

3.27 For 3-lane diverges from the main carriageway, Layout F or G shall be used based on the number of

The graph illustrates the relationship between Mainline flow VPH (X-axis) and Diverge Flow VPH (Y-axis) for various lane configurations. The X-axis ranges from 0 to 9000 VPH, and the Y-axis ranges from 0 to 3600 VPH. The graph is divided into regions A, B, C, D, and E, representing different lane configurations. A dashed line indicates the relationship between the two flows.

Legend:

- 2023 (Red square)
- 2026 (Orange square)
- 2026+Dev (Grey square)
- 2031 (Blue square)
- 2031+Dev (Green square)

Regions and Lane Configurations:

- Region A:** Downstream Mainline Lane 1
- Region B:** Downstream Mainline Lane 2
- Region C:** Downstream Mainline Lane 3
- Region D:** Downstream Mainline Lane 4
- Region E:** Downstream Mainline Lane 5

Connector Road Lane 1: 0 to 1350 VPH

Connector Road Lane 2: 1350 to 3600 VPH

Upstream Mainline Lane 3: 0 to 1350 VPH

Upstream Mainline Lane 4: 1350 to 3600 VPH

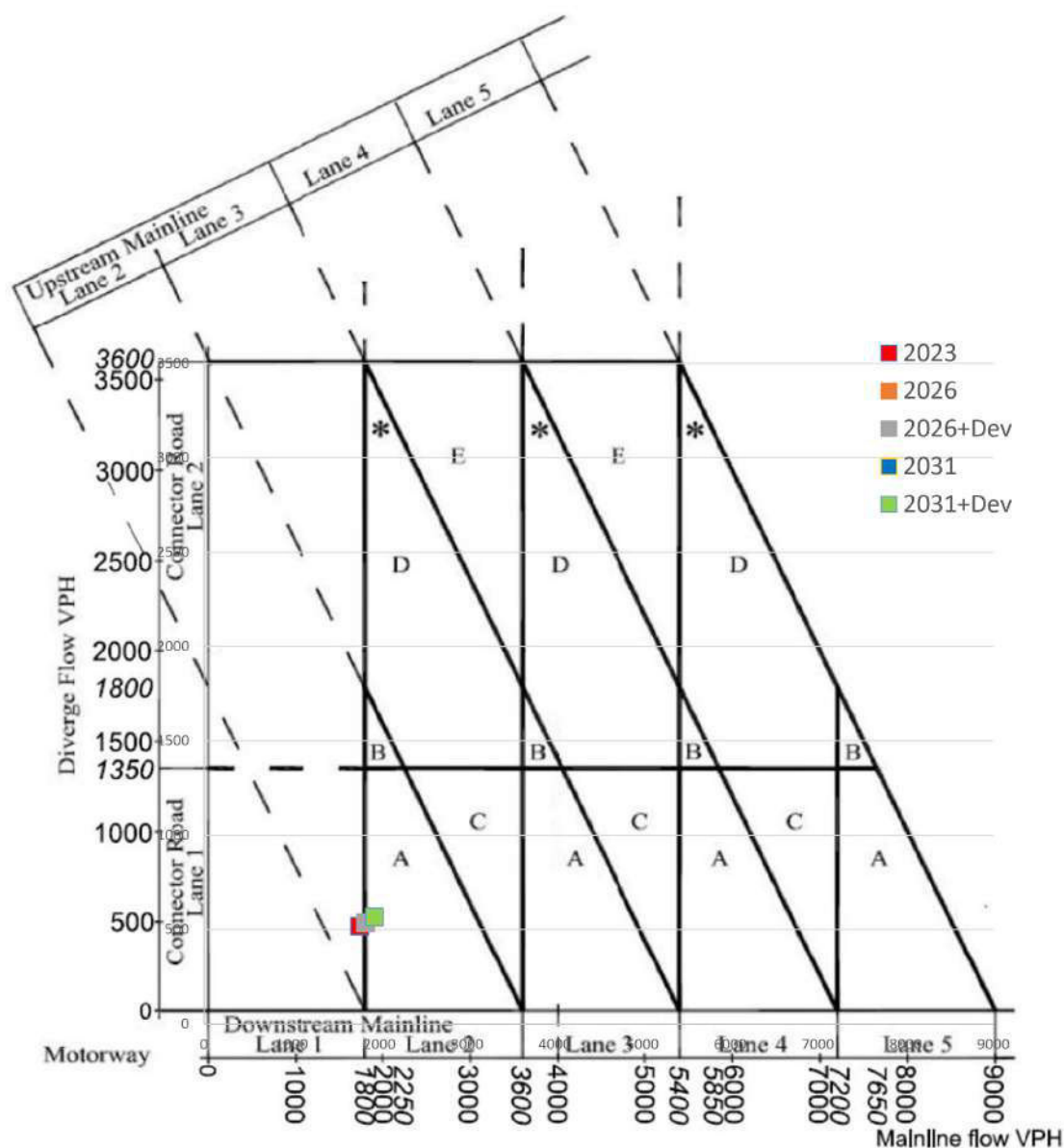
Upstream Mainline Lane 5: 3600 to 5400 VPH

Motorway: 0 to 9000 VPH

3.27 For 3-lane diverges from the main carriageway, Layout F or G shall be used based on the number of

M69 Junction 1 South-Westbound PM Diverge Assessment

Figure 3.26b Motorway diverging diagram



NOTE As an example of how to use Figures 3.24a and 3.24b, if the diverge flow is 2000 vph and the downstream mainline flow is 4000 vph, this would give a Type D layout with 3 lanes downstream and 4 lanes upstream.

3.26.1 Where the flows are in the region indicated by the * symbol in Figures 3.25b and Layout D option 2 is to be used, an extended auxiliary lane should be provided instead of a taper diverge.

3.26.2 A diverge layout that offers a higher level of capacity than the worst case peak flow may be provided, for example Layout C instead of Layout A.

NOTE A diverge layout that offers less capacity than the worst case peak flow cannot be used, such as a Layout C instead of Layout E.

3.27 For 3-lane diverges from the main carriageway, Layout F or G shall be used based on the number of

