

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.0.1.1519									
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Filename: P.Church Street_Leicester Road.j10

Path: C:\Users\NCS04445\WSP 0365\Ayyapusetty, Jayakrishna - 46_Earl Shilton - Junction modelling\03 WIP\TP\02 CAD BIM Models\Junction Models

Report generation date: 10/01/2024 17:30:26

»Base 2023, AM
»Base 2023, PM
»2036 DM, AM
»2036 DM, PM
»2036 DS, AM
»2036 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base 2023									
Stream B-C	D1	0.1	6.79	0.11	A	D2	0.1	7.36	0.12	A
Stream B-A		0.2	10.56	0.20	B		0.2	11.49	0.18	B
Stream C-AB		0.1	7.04	0.10	A		0.1	7.68	0.10	A
	2036 DM									
Stream B-C	D3	0.3	8.42	0.24	A	D4	0.5	10.49	0.36	B
Stream B-A		0.3	11.57	0.22	B		0.3	12.93	0.21	B
Stream C-AB		0.1	7.50	0.12	A		0.1	7.91	0.11	A
	2036 DS									
Stream B-C	D5	0.4	9.56	0.29	A	D6	0.6	11.63	0.39	B
Stream B-A		0.3	13.75	0.26	B		0.4	15.51	0.26	C
Stream C-AB		0.1	7.96	0.13	A		0.2	8.37	0.13	A

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

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

10/01/2024 17:30:26

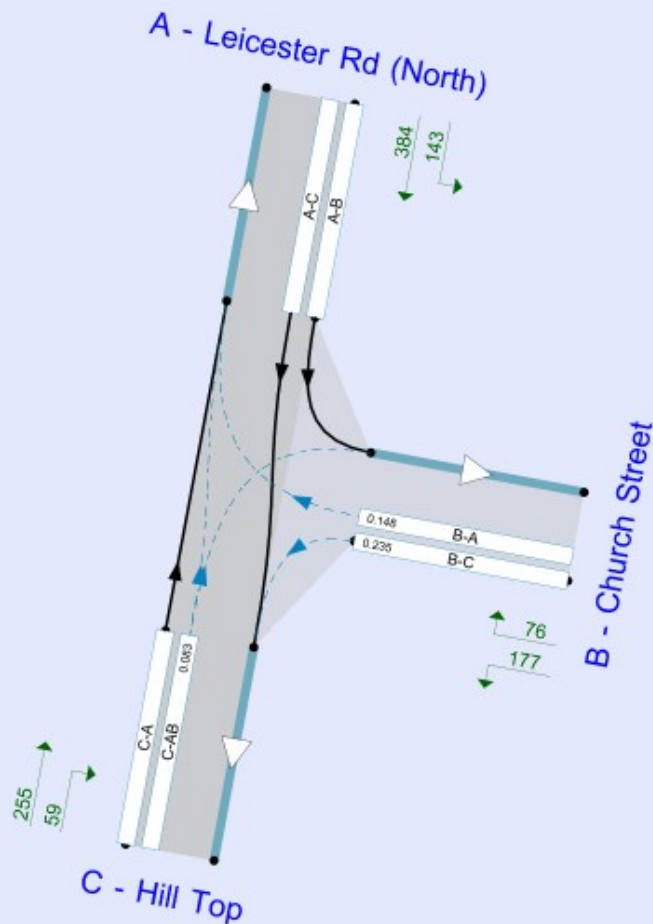
File summary

File Description

Title	Church Street_Leicester Road
Location	
Site number	
Date	29/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INCS04445
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 RFG (%)

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	Base 2023	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2023	PM	ONE HOUR	16:45	18:15	15	✓
D3	2036 DM	AM	ONE HOUR	07:45	09:15	15	✓
D4	2036 DM	PM	ONE HOUR	16:45	18:15	15	✓
D5	2036 DS	AM	ONE HOUR	07:45	09:15	15	✓
D6	2036 DS	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Base 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Church Street - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Church Street_Leicester Road	T-Junction	Two-way	Two-way	Two-way		2.26	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.26	A

Arms

Arms

Arm	Name	Description	Arm type
A	Leicester Rd (North)		Major
B	Church Street		Minor
C	Hill Top		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 - Hill Top	6.45		✓	2.46	68.8	✓	2.00

Major Arm Geometry Notes

Arm	Notes
C - Hill Top	C-B traffic blocks C-A traffic

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 - Church Street	One lane plus flare	10.00	5.98	3.41	2.69	2.52	✓	1.00	25	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	556	0.101	0.255	0.160	0.364
B-C	693	0.102	0.259	-	-
C-B	631	0.240	0.240	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2023	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Leicester Rd (North)		ONE HOUR	✓	238	100.000
B - Church Street		ONE HOUR	✓	137	100.000
C - Hill Top		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0	63	175
	B - Church Street	76	0	61
	C - Hill Top	258	52	0

Proportions

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0.00	0.26	0.74
	B - Church Street	0.55	0.00	0.45
	C - Hill Top	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0	2	5
	B - Church Street	1	0	0
	C - Hill Top	3	0	0

Average PCU Per Veh

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	1.000	1.020	1.050
	B - Church Street	1.010	1.000	1.000
	C - Hill Top	1.030	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Leicester Rd (North)	07:45-08:00	179	187
	08:00-08:15	214	223
	08:15-08:30	262	273
	08:30-08:45	262	273
	08:45-09:00	214	223
	09:00-09:15	179	187
B - Church Street	07:45-08:00	103	104
	08:00-08:15	123	124
	08:15-08:30	151	152
	08:30-08:45	151	152
	08:45-09:00	123	124
	09:00-09:15	103	104
C - Hill Top	07:45-08:00	233	239
	08:00-08:15	279	286
	08:15-08:30	341	350
	08:30-08:45	341	350
	08:45-09:00	279	286
	09:00-09:15	233	239

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	6.79	0.1	A	56	84
B-A	0.20	10.56	0.2	B	70	105
C-AB	0.10	7.04	0.1	A	48	72
C-A					237	355
A-B					58	87
A-C					161	241

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	631	0.073	46	0.0	0.1	6.149	A
B-A	57	14	465	0.123	57	0.0	0.1	8.805	A
C-AB	39	10	588	0.067	39	0.0	0.1	6.559	A
C-A	194	49			194				
A-B	47	12			47				
A-C	132	33			132				

07:45-08:00

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	617	0.089	55	0.1	0.1	6.402	A
B-A	68	17	448	0.152	68	0.1	0.2	9.471	A
C-AB	47	12	579	0.081	47	0.1	0.1	6.758	A
C-A	232	58			232				
A-B	57	14			57				
A-C	157	39			157				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	597	0.112	67	0.1	0.1	6.788	A
B-A	84	21	425	0.197	83	0.2	0.2	10.544	B
C-AB	58	14	569	0.101	57	0.1	0.1	7.039	A
C-A	284	71			284				
A-B	69	17			69				
A-C	193	48			193				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	597	0.113	67	0.1	0.1	6.793	A
B-A	84	21	425	0.197	84	0.2	0.2	10.558	B
C-AB	58	14	569	0.101	58	0.1	0.1	7.039	A
C-A	284	71			284				
A-B	69	17			69				
A-C	193	48			193				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	617	0.089	55	0.1	0.1	6.408	A
B-A	68	17	448	0.152	69	0.2	0.2	9.492	A
C-AB	47	12	580	0.081	47	0.1	0.1	6.763	A
C-A	232	58			232				
A-B	57	14			57				
A-C	157	39			157				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	630	0.073	46	0.1	0.1	6.163	A
B-A	57	14	465	0.123	57	0.2	0.1	8.837	A
C-AB	39	10	588	0.067	39	0.1	0.1	6.566	A
C-A	194	49			194				
A-B	47	12			47				
A-C	132	33			132				

Base 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Church Street - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Church Street_Leicester Road	T-Junction	Two-way	Two-way	Two-way		1.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.91	A

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Leicester Rd (North)		ONE HOUR	✓	413	100.000
B - Church Street		ONE HOUR	✓	122	100.000
C - Hill Top		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0	89	324
	B - Church Street	61	0	61
	C - Hill Top	213	49	0

Proportions

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0.00	0.22	0.78
	B - Church Street	0.50	0.00	0.50
	C - Hill Top	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
	A - Leicester Rd (North)	0	1	2
	B - Church Street	2	0	2
	C - Hill Top	3	0	0

Average PCU Per Veh

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
	A - Leicester Rd (North)	1.000	1.010	1.020
	B - Church Street	1.020	1.000	1.020
	C - Hill Top	1.030	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Leicester Rd (North)	16:45-17:00	311	316
	17:00-17:15	371	378
	17:15-17:30	455	463
	17:30-17:45	455	463
	17:45-18:00	371	378
	18:00-18:15	311	316
B - Church Street	16:45-17:00	92	94
	17:00-17:15	110	112
	17:15-17:30	134	137
	17:30-17:45	134	137
	17:45-18:00	110	112
	18:00-18:15	92	94
C - Hill Top	16:45-17:00	197	202
	17:00-17:15	236	241
	17:15-17:30	288	296
	17:30-17:45	288	296
	17:45-18:00	236	241
	18:00-18:15	197	202

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	7.36	0.1	A	56	84
B-A	0.18	11.49	0.2	B	56	84
C-AB	0.10	7.68	0.1	A	45	68
C-A					195	293
A-B					82	123
A-C					297	446

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	602	0.076	46	0.0	0.1	6.473	A
B-A	46	11	430	0.107	45	0.0	0.1	9.338	A
C-AB	37	9	556	0.066	37	0.0	0.1	6.925	A
C-A	160	40			160				
A-B	67	17			67				
A-C	244	61			244				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	583	0.094	55	0.1	0.1	6.815	A
B-A	55	14	410	0.134	55	0.1	0.2	10.139	B
C-AB	44	11	542	0.081	44	0.1	0.1	7.229	A
C-A	191	48			191				
A-B	80	20			80				
A-C	291	73			291				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	557	0.121	67	0.1	0.1	7.351	A
B-A	67	17	381	0.177	67	0.2	0.2	11.472	B
C-AB	54	14	523	0.104	54	0.1	0.1	7.676	A
C-A	234	59			234				
A-B	98	24			98				
A-C	357	89			357				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	556	0.121	67	0.1	0.1	7.357	A
B-A	67	17	380	0.177	67	0.2	0.2	11.488	B
C-AB	54	14	523	0.104	54	0.1	0.1	7.679	A
C-A	234	59			234				
A-B	98	24			98				
A-C	357	89			357				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	583	0.094	55	0.1	0.1	6.824	A
B-A	55	14	410	0.134	55	0.2	0.2	10.162	B
C-AB	44	11	542	0.081	44	0.1	0.1	7.235	A
C-A	191	48			191				
A-B	80	20			80				
A-C	291	73			291				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	601	0.076	46	0.1	0.1	6.485	A
B-A	46	11	430	0.107	46	0.2	0.1	9.367	A
C-AB	37	9	556	0.066	37	0.1	0.1	6.936	A
C-A	160	40			160				
A-B	67	17			67				
A-C	244	61			244				

2036 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Church Street - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Church Street_Leicester Road	T-Junction	Two-way	Two-way	Two-way		2.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.92	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	2036 DM	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Leicester Rd (North)		ONE HOUR	✓	336	100.000
B - Church Street		ONE HOUR	✓	202	100.000
C - Hill Top		ONE HOUR	✓	264	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0	170	166
	B - Church Street	81	0	121
	C - Hill Top	207	57	0

Proportions

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0.00	0.51	0.49
	B - Church Street	0.40	0.00	0.60
	C - Hill Top	0.78	0.22	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		0	1	5
B - Church Street		1	0	0
C - Hill Top		3	0	0

Average PCU Per Veh

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		1.000	1.010	1.050
B - Church Street		1.010	1.000	1.000
C - Hill Top		1.030	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Leicester Rd (North)	07:45-08:00	253	260
	08:00-08:15	302	311
	08:15-08:30	370	381
	08:30-08:45	370	381
	08:45-09:00	302	311
	09:00-09:15	253	260
B - Church Street	07:45-08:00	152	153
	08:00-08:15	182	182
	08:15-08:30	222	223
	08:30-08:45	222	223
	08:45-09:00	182	182
	09:00-09:15	152	153
C - Hill Top	07:45-08:00	199	203
	08:00-08:15	237	243
	08:15-08:30	291	298
	08:30-08:45	291	298
	08:45-09:00	237	243
	09:00-09:15	199	203

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.42	0.3	A	111	167
B-A	0.22	11.57	0.3	B	74	111
C-AB	0.12	7.50	0.1	A	52	79
C-A					190	285
A-B					156	234
A-C					152	228

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	599	0.152	90	0.0	0.2	7.064	A
B-A	61	15	443	0.138	60	0.0	0.2	9.390	A
C-AB	43	11	570	0.075	43	0.0	0.1	6.823	A
C-A	156	39			156				
A-B	128	32			128				
A-C	125	31			125				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	584	0.186	109	0.2	0.2	7.572	A
B-A	73	18	426	0.171	73	0.2	0.2	10.195	B
C-AB	51	13	558	0.092	51	0.1	0.1	7.099	A
C-A	186	46			186				
A-B	153	38			153				
A-C	149	37			149				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	561	0.238	133	0.2	0.3	8.413	A
B-A	89	22	400	0.223	89	0.2	0.3	11.548	B
C-AB	63	16	543	0.116	63	0.1	0.1	7.495	A
C-A	228	57			228				
A-B	187	47			187				
A-C	183	46			183				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	561	0.238	133	0.3	0.3	8.423	A
B-A	89	22	400	0.223	89	0.3	0.3	11.573	B
C-AB	63	16	543	0.116	63	0.1	0.1	7.498	A
C-A	228	57			228				
A-B	187	47			187				
A-C	183	46			183				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	583	0.186	109	0.3	0.2	7.592	A
B-A	73	18	425	0.171	73	0.3	0.2	10.225	B
C-AB	51	13	558	0.092	52	0.1	0.1	7.105	A
C-A	186	46			186				
A-B	153	38			153				
A-C	149	37			149				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	599	0.152	91	0.2	0.2	7.095	A
B-A	61	15	443	0.138	61	0.2	0.2	9.431	A
C-AB	43	11	570	0.075	43	0.1	0.1	6.836	A
C-A	156	39			156				
A-B	128	32			128				
A-C	125	31			125				

2036 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Church Street - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Church Street_Leicester Road	T-Junction	Two-way	Two-way	Two-way		3.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.38	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2036 DM	PM	ONE HOUR	18:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Leicester Rd (North)		ONE HOUR	✓	448	100.000
B - Church Street		ONE HOUR	✓	239	100.000
C - Hill Top		ONE HOUR	✓	219	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0	143	305
	B - Church Street	67	0	172
	C - Hill Top	166	53	0

Proportions

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0.00	0.32	0.68
	B - Church Street	0.28	0.00	0.72
	C - Hill Top	0.76	0.24	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		0	1	2
B - Church Street		1	0	1
C - Hill Top		4	0	0

Average PCU Per Veh

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		1.000	1.010	1.020
B - Church Street		1.010	1.000	1.010
C - Hill Top		1.040	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Leicester Rd (North)	16:45-17:00	337	343
	17:00-17:15	403	410
	17:15-17:30	493	502
	17:30-17:45	493	502
	17:45-18:00	403	410
	18:00-18:15	337	343
B - Church Street	16:45-17:00	180	182
	17:00-17:15	215	217
	17:15-17:30	263	266
	17:30-17:45	263	266
	17:45-18:00	215	217
	18:00-18:15	180	182
C - Hill Top	16:45-17:00	165	170
	17:00-17:15	197	203
	17:15-17:30	241	248
	17:30-17:45	241	248
	17:45-18:00	197	203
	18:00-18:15	165	170

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.36	10.49	0.5	B	158	237
B-A	0.21	12.93	0.3	B	61	92
C-AB	0.11	7.91	0.1	A	49	73
C-A					152	228
A-B					131	197
A-C					280	420

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	581	0.223	128	0.0	0.3	7.934	A
B-A	50	13	409	0.123	50	0.0	0.1	10.022	B
C-AB	40	10	550	0.073	40	0.0	0.1	7.051	A
C-A	125	31			125				
A-B	108	27			108				
A-C	230	57			230				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	155	39	561	0.275	154	0.3	0.4	8.833	A
B-A	60	15	386	0.156	60	0.1	0.2	11.035	B
C-AB	48	12	534	0.089	48	0.1	0.1	7.396	A
C-A	149	37			149				
A-B	129	32			129				
A-C	274	69			274				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	189	47	533	0.355	189	0.4	0.5	10.443	B
B-A	74	18	352	0.209	73	0.2	0.3	12.889	B
C-AB	59	15	514	0.114	59	0.1	0.1	7.910	A
C-A	182	46			182				
A-B	157	39			157				
A-C	336	84			336				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	189	47	533	0.356	189	0.5	0.5	10.489	B
B-A	74	18	352	0.209	74	0.3	0.3	12.926	B
C-AB	59	15	514	0.114	59	0.1	0.1	7.913	A
C-A	182	46			182				
A-B	157	39			157				
A-C	336	84			336				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	155	39	561	0.276	155	0.5	0.4	8.885	A
B-A	60	15	386	0.156	61	0.3	0.2	11.076	B
C-AB	48	12	534	0.089	48	0.1	0.1	7.402	A
C-A	149	37			149				
A-B	129	32			129				
A-C	274	69			274				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	581	0.223	130	0.4	0.3	7.994	A
B-A	50	13	408	0.124	51	0.2	0.1	10.070	B
C-AB	40	10	550	0.073	40	0.1	0.1	7.064	A
C-A	125	31			125				
A-B	108	27			108				
A-C	230	57			230				

2036 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Church Street - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Church Street_Leicester Road	T-Junction	Two-way	Two-way	Two-way		2.88	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.88	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	2036 DS	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Leicester Rd (North)		ONE HOUR	✓	438	100.000
B - Church Street		ONE HOUR	✓	222	100.000
C - Hill Top		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0	183	255
	B - Church Street	82	0	140
	C - Hill Top	301	60	0

Proportions

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0.00	0.42	0.58
	B - Church Street	0.37	0.00	0.63
	C - Hill Top	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		0	0	3
B - Church Street		1	0	0
C - Hill Top		2	0	0

Average PCU Per Veh

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		1.000	1.000	1.030
B - Church Street		1.010	1.000	1.000
C - Hill Top		1.020	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Leicester Rd (North)	07:45-08:00	330	336
	08:00-08:15	394	401
	08:15-08:30	482	491
	08:30-08:45	482	491
	08:45-09:00	394	401
	09:00-09:15	330	336
B - Church Street	07:45-08:00	167	168
	08:00-08:15	200	200
	08:15-08:30	244	245
	08:30-08:45	244	245
	08:45-09:00	200	200
	09:00-09:15	167	168
C - Hill Top	07:45-08:00	272	276
	08:00-08:15	325	330
	08:15-08:30	397	404
	08:30-08:45	397	404
	08:45-09:00	325	330
	09:00-09:15	272	276

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.29	9.56	0.4	A	128	193
B-A	0.26	13.75	0.3	B	75	113
C-AB	0.13	7.96	0.1	A	55	83
C-A					276	414
A-B					168	252
A-C					234	351

Report generated by Junctions 10 v10.0.1.1519 on 10/01/2024 17:30:33

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	105	26	582	0.181	105	0.0	0.2	7.526	A
B-A	62	15	410	0.151	61	0.0	0.2	10.292	B
C-AB	45	11	552	0.082	45	0.0	0.1	7.088	A
C-A	226	57			226				
A-B	138	34			138				
A-C	192	48			192				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	126	31	582	0.224	126	0.2	0.3	8.249	A
B-A	74	18	386	0.191	73	0.2	0.2	11.494	B
C-AB	54	14	538	0.101	54	0.1	0.1	7.438	A
C-A	270	68			270				
A-B	165	41			165				
A-C	229	57			229				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	39	531	0.290	154	0.3	0.4	9.531	A
B-A	90	23	352	0.256	90	0.2	0.3	13.700	B
C-AB	67	17	519	0.129	67	0.1	0.1	7.951	A
C-A	331	83			331				
A-B	201	50			201				
A-C	281	70			281				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	39	531	0.291	154	0.4	0.4	9.563	A
B-A	90	23	352	0.256	90	0.3	0.3	13.746	B
C-AB	67	17	519	0.129	67	0.1	0.1	7.957	A
C-A	331	83			331				
A-B	201	50			201				
A-C	281	70			281				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	126	31	561	0.224	126	0.4	0.3	8.286	A
B-A	74	18	386	0.191	74	0.3	0.2	11.543	B
C-AB	54	14	538	0.101	54	0.1	0.1	7.443	A
C-A	270	68			270				
A-B	165	41			165				
A-C	229	57			229				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	105	26	581	0.181	105	0.3	0.2	7.572	A
B-A	62	15	410	0.151	62	0.2	0.2	10.352	B
C-AB	45	11	553	0.082	45	0.1	0.1	7.102	A
C-A	226	57			226				
A-B	138	34			138				
A-C	192	48			192				

2036 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Church Street - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Church Street_Leicester Road	T-Junction	Two-way	Two-way	Two-way		3.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.39	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	2036 DS	PM	ONE HOUR	18:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Leicester Rd (North)		ONE HOUR	✓	527	100.000
B - Church Street		ONE HOUR	✓	253	100.000
C - Hill Top		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0	143	384
	B - Church Street	76	0	177
	C - Hill Top	255	59	0

Proportions

	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
From	A - Leicester Rd (North)	0.00	0.27	0.73
	B - Church Street	0.30	0.00	0.70
	C - Hill Top	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		0	1	1
B - Church Street		1	0	0
C - Hill Top		2	0	0

Average PCU Per Veh

From	To			
		A - Leicester Rd (North)	B - Church Street	C - Hill Top
A - Leicester Rd (North)		1.000	1.010	1.010
B - Church Street		1.010	1.000	1.000
C - Hill Top		1.020	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Leicester Rd (North)	16:45-17:00	397	401
	17:00-17:15	474	478
	17:15-17:30	580	586
	17:30-17:45	580	586
	17:45-18:00	474	478
	18:00-18:15	397	401
B - Church Street	16:45-17:00	190	191
	17:00-17:15	227	228
	17:15-17:30	279	279
	17:30-17:45	279	279
	17:45-18:00	227	228
	18:00-18:15	190	191
C - Hill Top	16:45-17:00	236	240
	17:00-17:15	282	287
	17:15-17:30	346	351
	17:30-17:45	346	351
	17:45-18:00	282	287
	18:00-18:15	236	240

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.39	11.63	0.6	B	162	244
B-A	0.26	15.51	0.4	C	70	105
C-AB	0.13	8.37	0.2	A	54	82
C-A					234	350
A-B					131	197
A-C					352	529

2024-01-10 17:30:33

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	567	0.235	132	0.0	0.3	8.280	A
B-A	57	14	386	0.148	57	0.0	0.2	10.908	B
C-AB	45	11	537	0.083	44	0.0	0.1	7.305	A
C-A	192	48			192				
A-B	108	27			108				
A-C	289	72			289				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	159	40	542	0.294	159	0.3	0.4	9.378	A
B-A	68	17	358	0.191	68	0.2	0.2	12.410	B
C-AB	53	13	519	0.103	53	0.1	0.1	7.725	A
C-A	229	57			229				
A-B	129	32			129				
A-C	345	86			345				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	195	49	505	0.386	194	0.4	0.6	11.557	B
B-A	84	21	316	0.265	83	0.2	0.4	15.427	C
C-AB	66	16	496	0.132	65	0.1	0.2	8.363	A
C-A	280	70			280				
A-B	157	39			157				
A-C	423	106			423				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	195	49	504	0.386	195	0.6	0.6	11.631	B
B-A	84	21	316	0.265	84	0.4	0.4	15.505	C
C-AB	66	16	496	0.132	66	0.2	0.2	8.368	A
C-A	280	70			280				
A-B	157	39			157				
A-C	423	106			423				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	159	40	542	0.294	160	0.6	0.4	9.452	A
B-A	68	17	358	0.191	69	0.4	0.2	12.483	B
C-AB	53	13	519	0.103	53	0.2	0.1	7.734	A
C-A	229	57			229				
A-B	129	32			129				
A-C	345	86			345				

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18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	566	0.235	134	0.4	0.3	8.333	A
B-A	57	14	386	0.148	57	0.2	0.2	10.979	B
C-AB	45	11	537	0.083	45	0.1	0.1	7.317	A
C-A	192	48			192				
A-B	108	27			108				
A-C	289	72			289				

Basic Results Summary

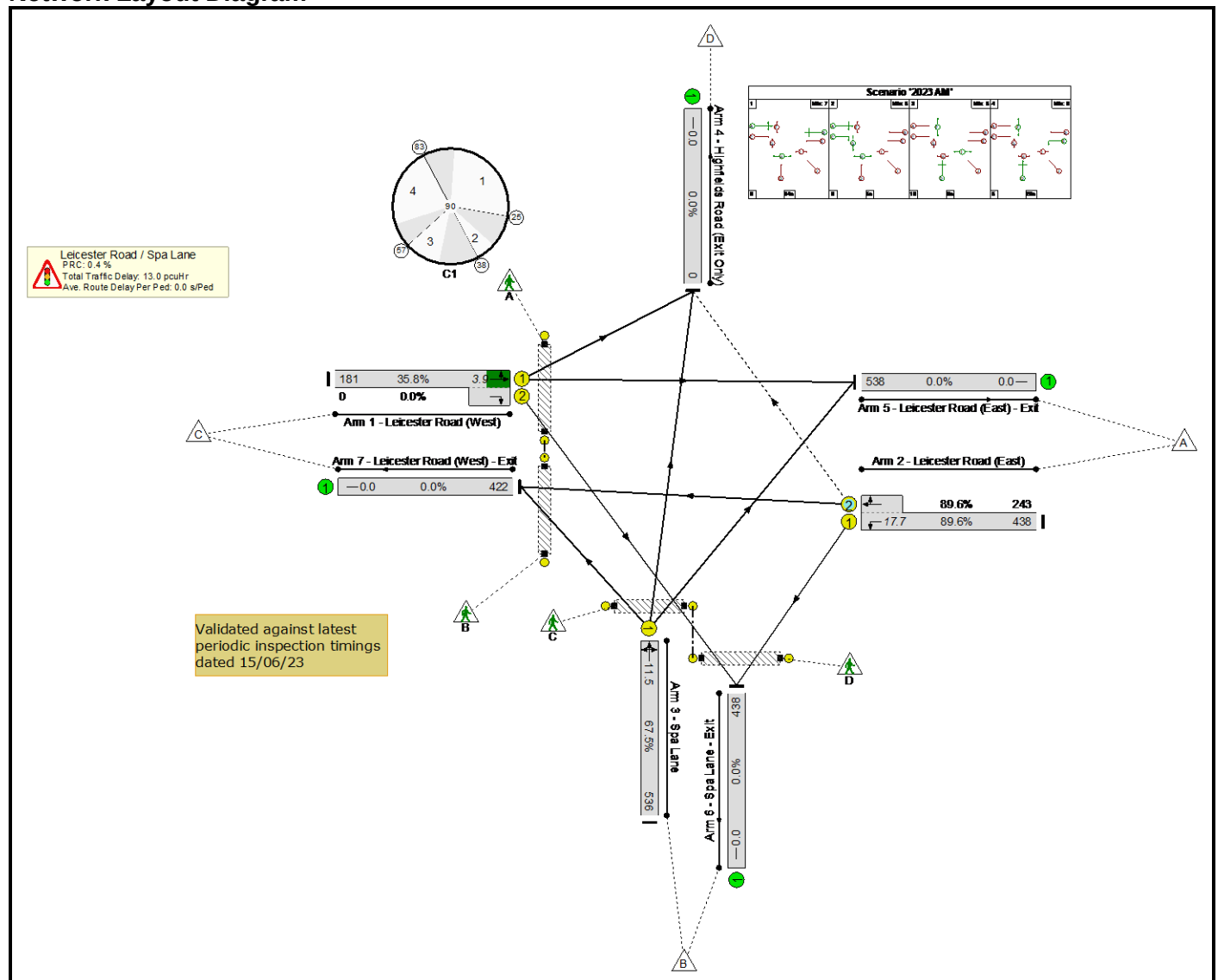
Basic Results Summary

Project and User Details

Project:	
Title:	Spa Lane B590/Leicester Lane B4668
Location:	Leicester Road/ Spa lane
Model Assumptions:	The model was supplied to WSP by LCC and WSP has used the same model and then updated the Traffic Flows.
Additional detail:	
File name:	Q.Leicester Road_Spa Lane Junction LCC Model.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 2, 44, 1

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

Network Layout Diagram

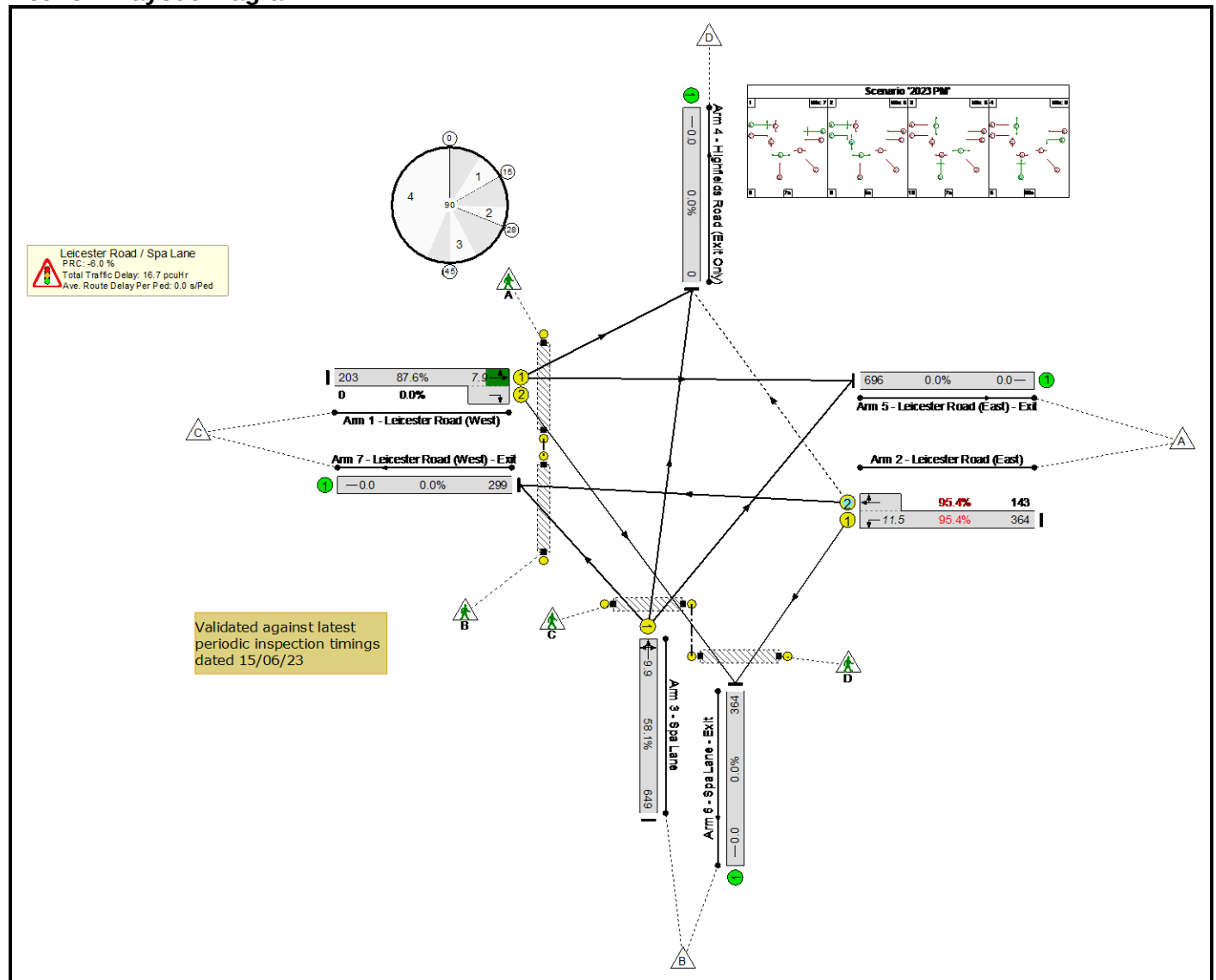


Network Results

Basic Results Summary

Scenario 2: '2023 PM' (FG2: '2023 PM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

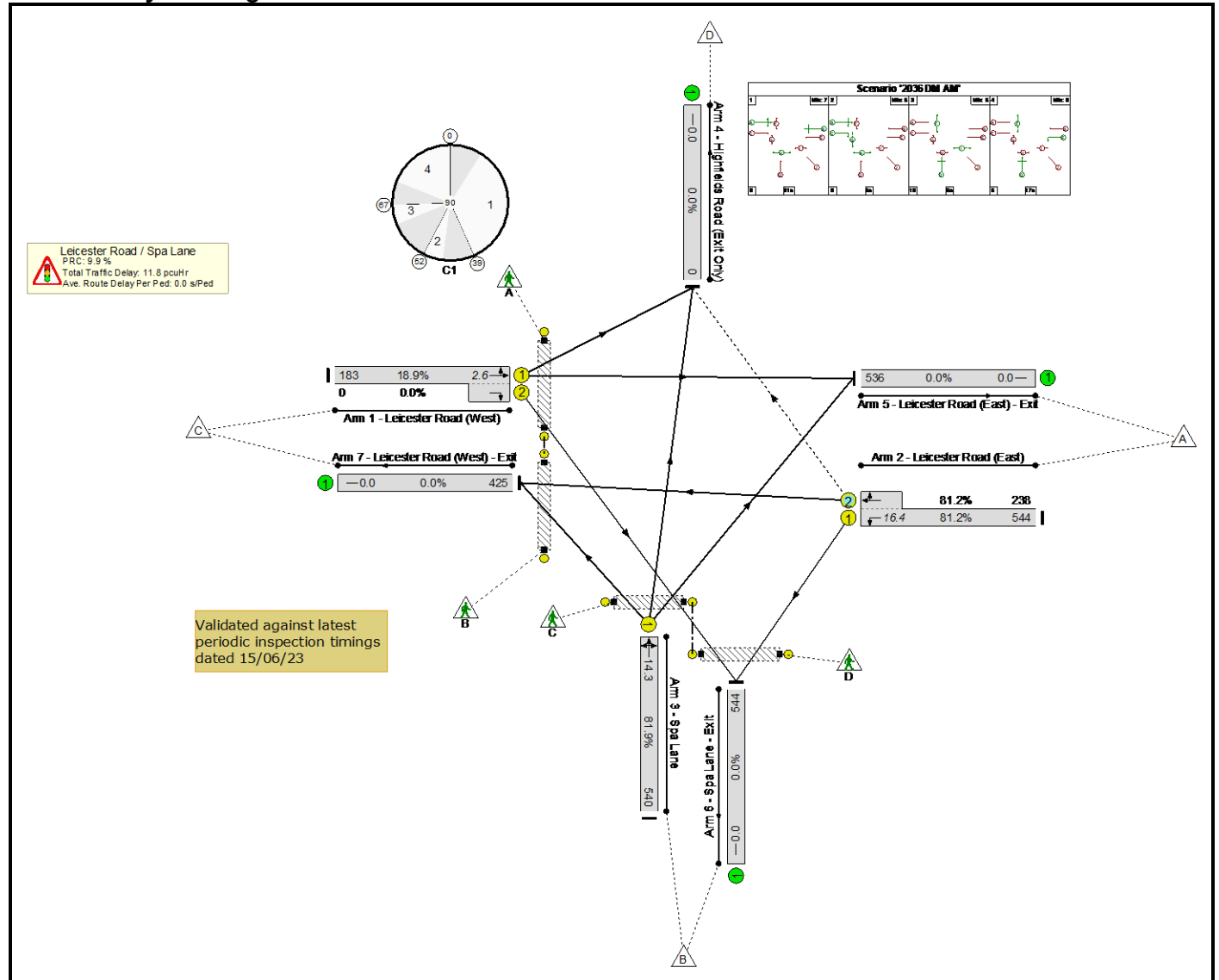


Network Results

Basic Results Summary

Scenario 3: '2036 DM AM' (FG3: '2036 DM AM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

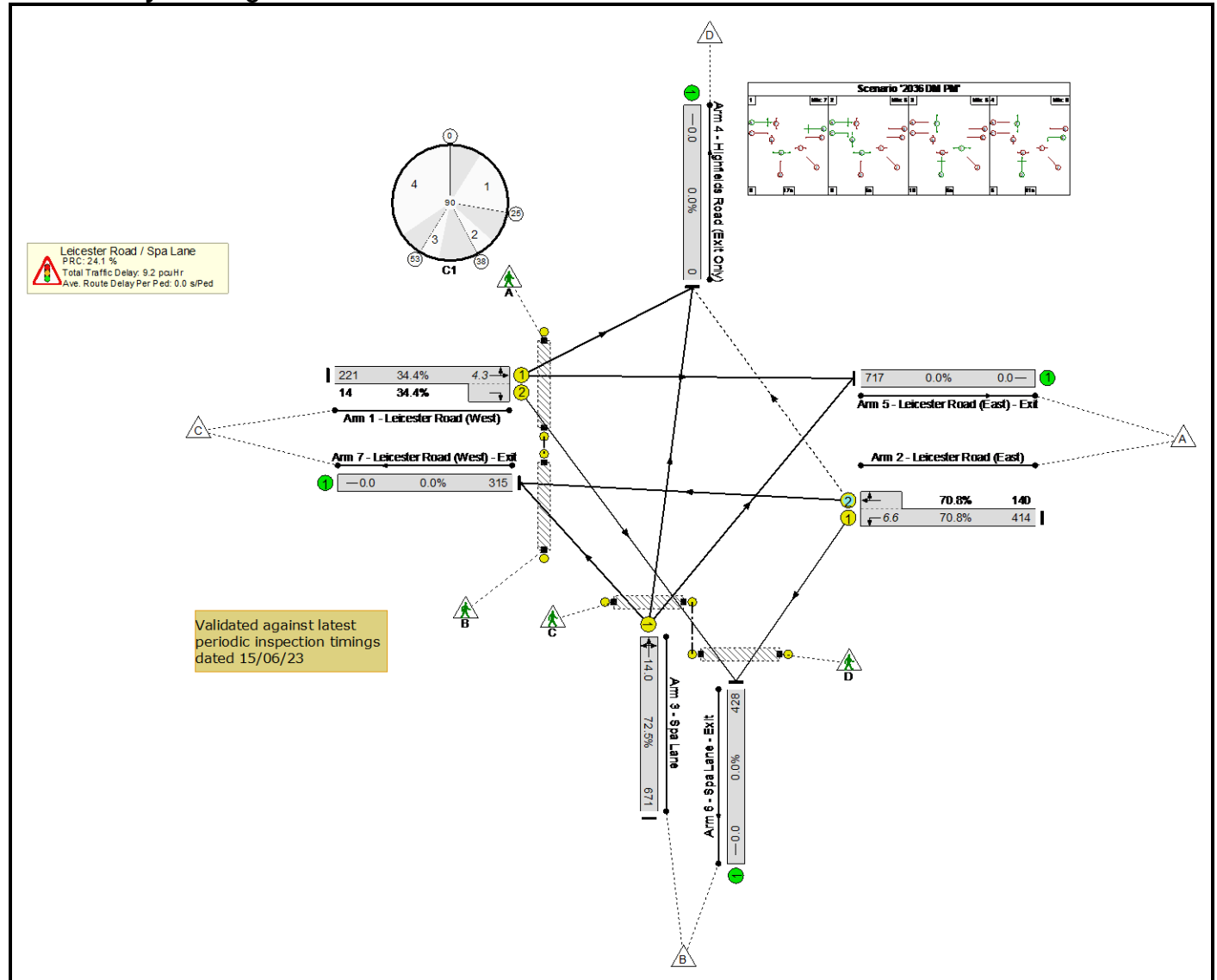
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Spa Lane B590/Leicester Lane B4668	-	-	-		-	-	-	-	-	-	81.9%	0	0	0	11.8	-	-
Leicester Road / Spa Lane	-	-	-		-	-	-	-	-	-	81.9%	0	0	0	11.8	-	-
1/1+1/2	Leicester Road (West) Left Ahead Right	U	A	C	1	45	9	183	1895:1895	969+0	18.9 : 0.0%	-	-	-	0.7	14.2	2.6
2/1+2/2	Leicester Road (East) Right Left Ahead	U+O	B	E	1	56:31	25	782	1699:1895	670+293	81.2 : 81.2%	0	0	0	5.1	23.7	16.4
3/1	Spa Lane Ahead Right Left	U	D		1	33	-	540	1746	660	81.9%	-	-	-	6.0	39.7	14.3
Ped Link: P1	Spa Lane Entry	-	H		1	45	-	0	-	36000	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	F		1	32	-	0	-	25600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	I		1	5	-	0	-	4000	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P4	Unnamed Ped Link	-	G		1	5	-	0	-	4000	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 9.9 PRC Over All Lanes (%): 9.9 Total Delay for Signalled Lanes (pcuHr): 11.82 Total Delay Over All Lanes(pcuHr): 11.82 Cycle Time (s): 90																	

Basic Results Summary

Scenario 4: '2036 DM PM' (FG4: '2036 DM PM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

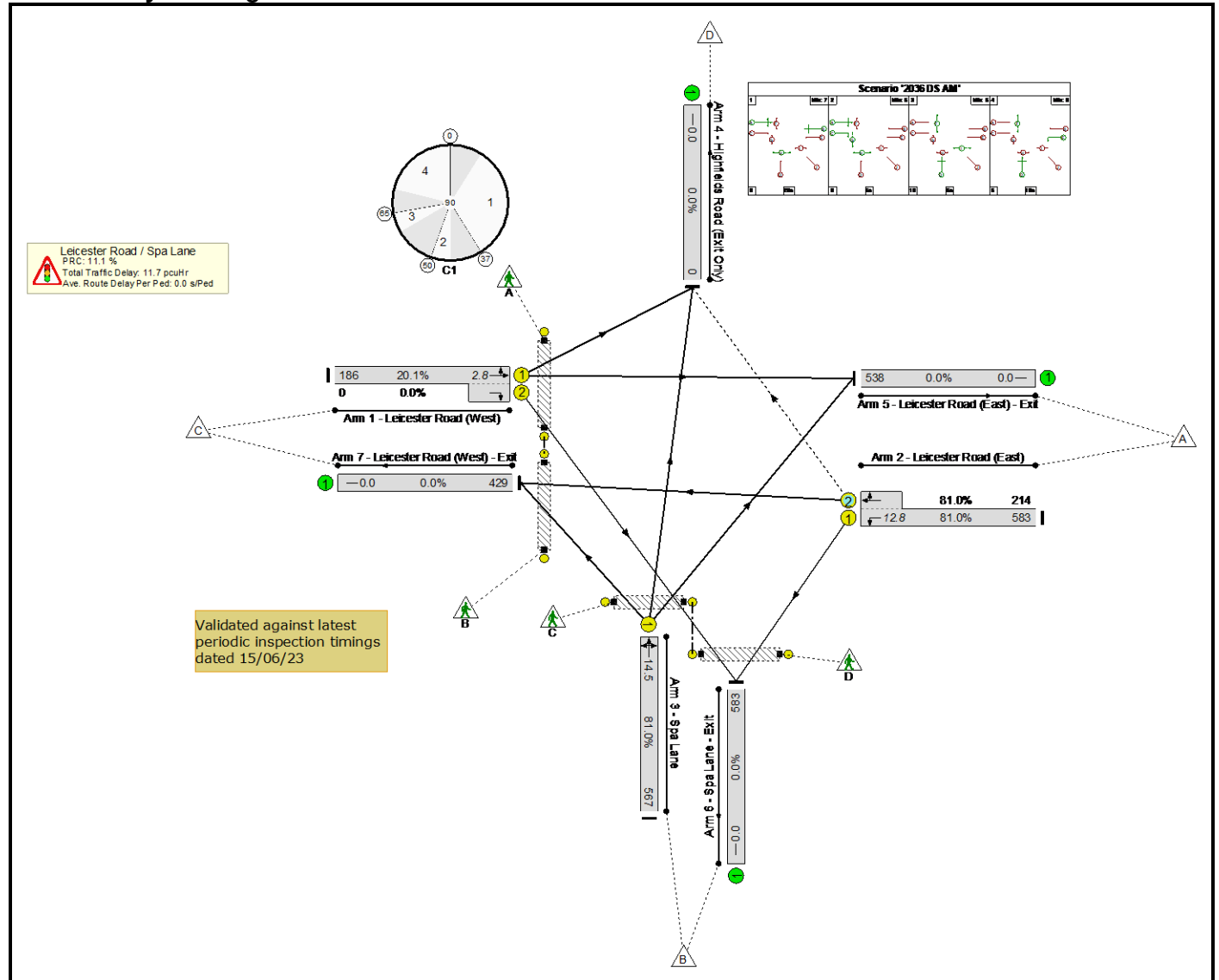
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Spa Lane B590/Leicester Lane B4668	-	-	-		-	-	-	-	-	-	72.5%	0	0	0	9.2	-	-
Leicester Road / Spa Lane	-	-	-		-	-	-	-	-	-	72.5%	0	0	0	9.2	-	-
1/1+1/2	Leicester Road (West) Left Ahead Right	U	A	C	1	31	9	235	1895:1741	643+41	34.4 : 34.4%	-	-	-	1.6	25.1	4.3
2/1+2/2	Leicester Road (East) Right Left Ahead	U+O	B	E	1	56:17	39	554	1699:1895	585+198	70.8 : 70.8%	0	0	0	3.3	21.6	6.6
3/1	Spa Lane Ahead Right Left	U	D		1	47	-	671	1735	925	72.5%	-	-	-	4.3	23.0	14.0
Ped Link: P1	Spa Lane Entry	-	H		1	31	-	0	-	24800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	F		1	46	-	0	-	36800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	I		1	5	-	0	-	4000	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P4	Unnamed Ped Link	-	G		1	5	-	0	-	4000	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Basic Results Summary

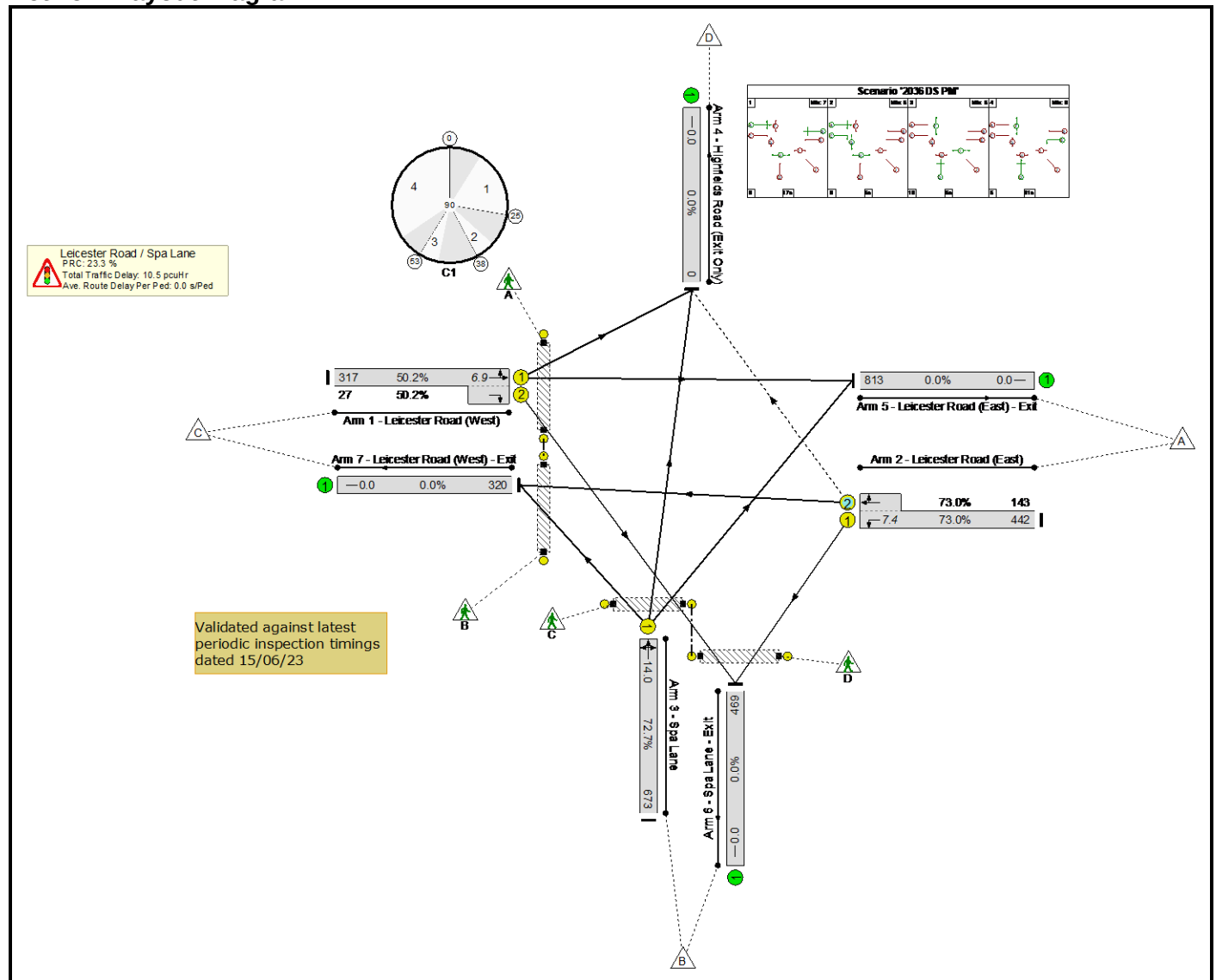
Scenario 5: '2036 DS AM' (FG5: '2036 DS AM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Network Layout Diagram



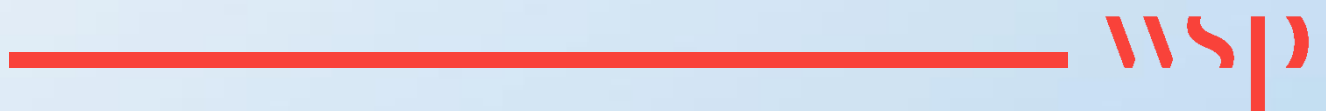
Basic Results Summary

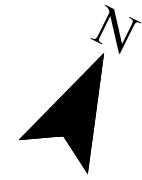
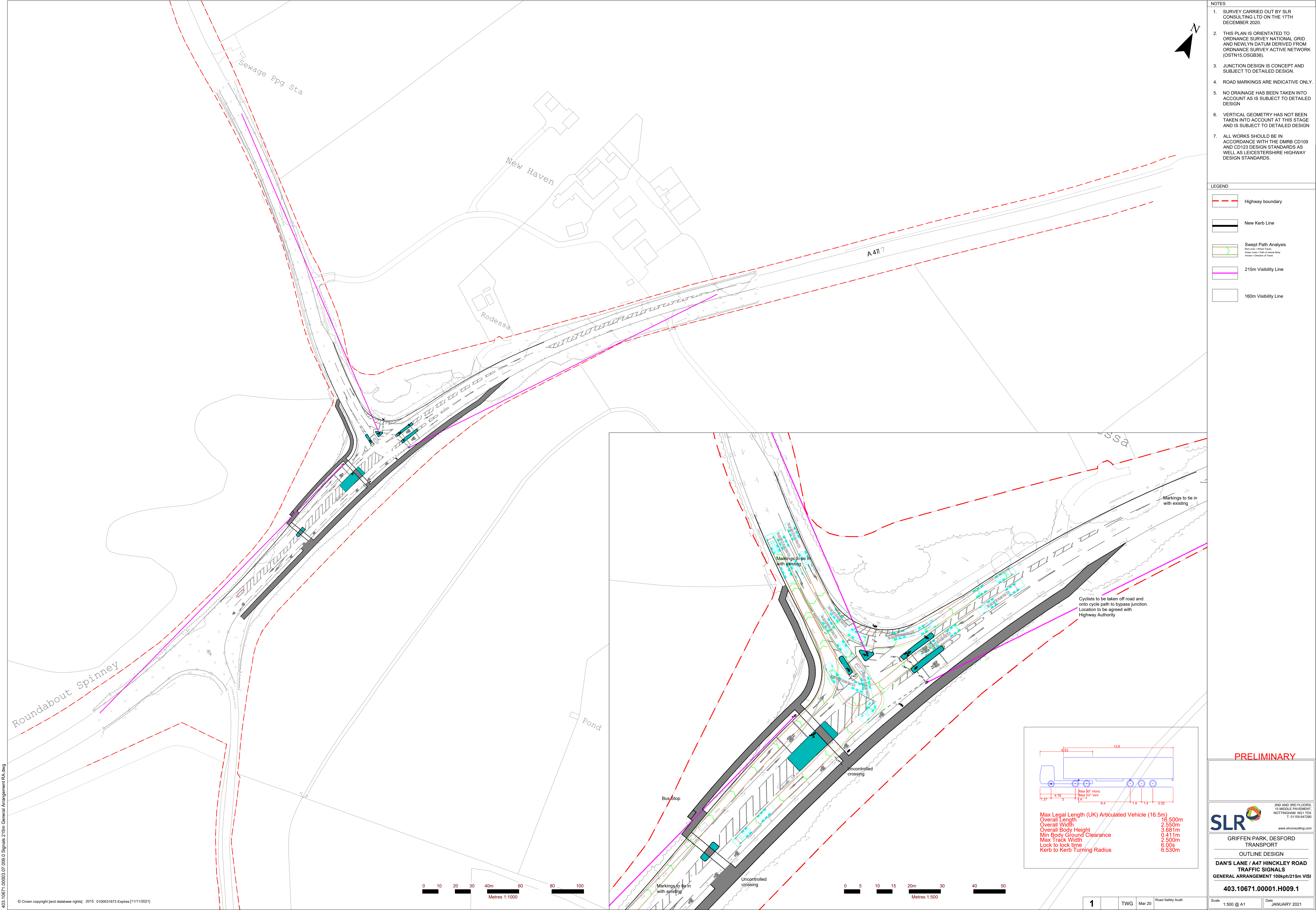
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Spa Lane B590/Leicester Lane B4668	-	-	-		-	-	-	-	-	-	73.0%	0	0	0	10.5	-	-
Leicester Road / Spa Lane	-	-	-		-	-	-	-	-	-	73.0%	0	0	0	10.5	-	-
1/1+1/2	Leicester Road (West) Left Ahead Right	U	A	C	1	31	9	344	1895:1741	632+54	50.2 : 50.2%	-	-	-	2.6	27.6	6.9
2/1+2/2	Leicester Road (East) Right Left Ahead	U+O	B	E	1	56:17	39	585	1699:1895	606+196	73.0 : 73.0%	0	0	0	3.6	22.0	7.4
3/1	Spa Lane Ahead Right Left	U	D		1	47	-	673	1735	925	72.7%	-	-	-	4.3	23.1	14.0
Ped Link: P1	Spa Lane Entry	-	H		1	31	-	0	-	24800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	F		1	46	-	0	-	36800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	I		1	5	-	0	-	4000	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P4	Unnamed Ped Link	-	G		1	5	-	0	-	4000	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Appendix M

COMMITTED MITIGATION SCHEMES





- NOTES
1. SURVEY CARRIED OUT BY SLR CONSULTING LTD ON THE 17TH DECEMBER 2020.
 2. THIS PLAN IS ORIENTATED TO ORDNANCE SURVEY NATIONAL GRID AND NEWLYN DATUM DERIVED FROM ORDNANCE SURVEY ACTIVE NETWORK (OSTN15.OSGB36).
 3. JUNCTION DESIGN IS CONCEPT AND SUBJECT TO DETAILED DESIGN.
 4. ROAD MARKINGS ARE INDICATIVE ONLY.
 5. NO DRAINAGE HAS BEEN TAKEN INTO ACCOUNT AS IS SUBJECT TO DETAILED DESIGN
 6. VERTICAL GEOMETRY HAS NOT BEEN TAKEN INTO ACCOUNT AT THIS STAGE AND IS SUBJECT TO DETAILED DESIGN
 7. ALL WORKS SHOULD BE IN ACCORDANCE WITH THE DMRB CD109 AND CD123 DESIGN STANDARDS AS WELL AS LEICESTERSHIRE HIGHWAY DESIGN STANDARDS.

- LEGEND
- Highway boundary
 - New Kerb Line
 - Swept Path Analysis
 - Red Lines = Wheel Tracks
 - Green Lines = Path of vehicle Body
 - Arrows = Direction of Travel
 - 215m Visibility Line
 - 160m Visibility Line

PRELIMINARY

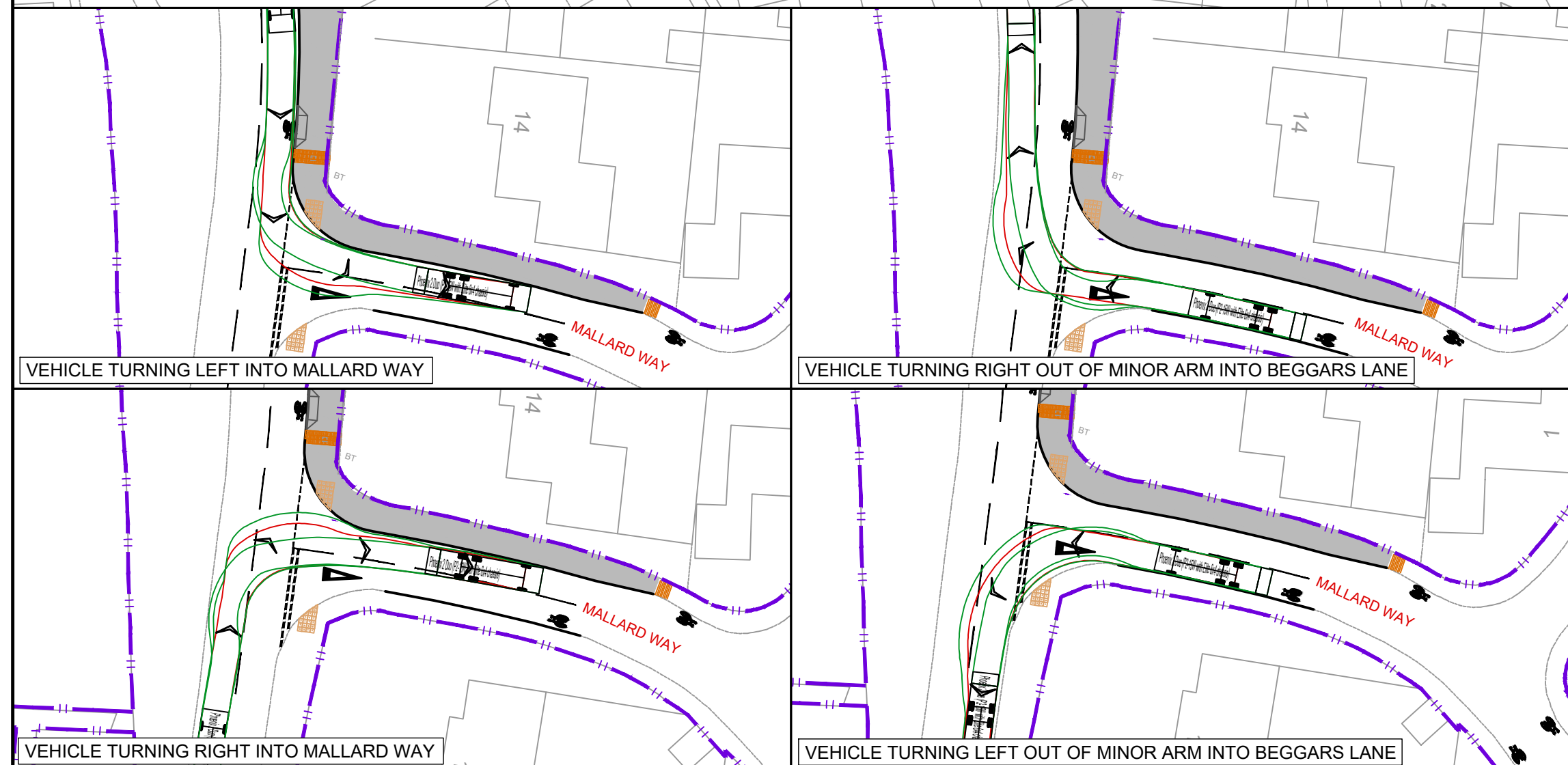
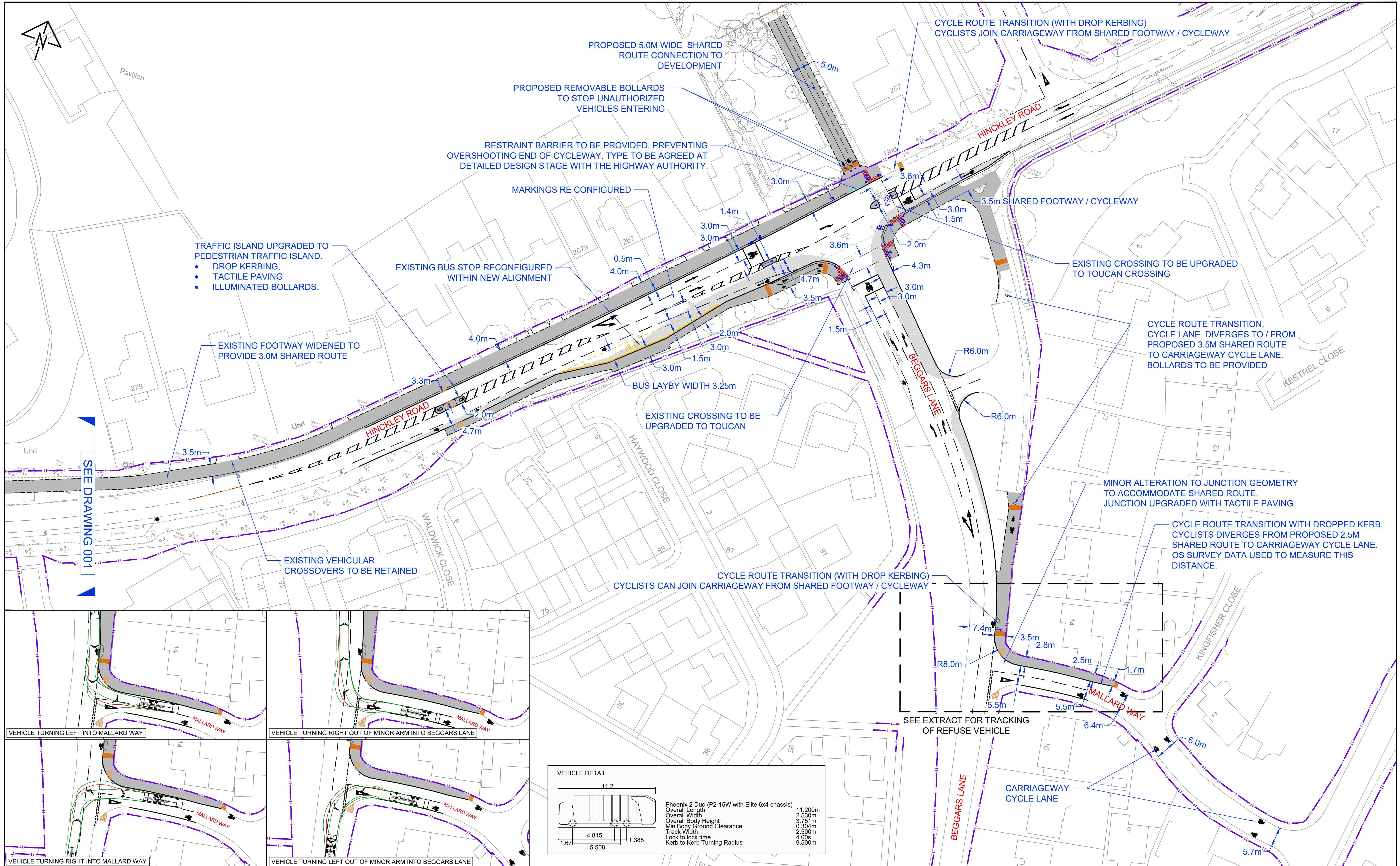


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TRAFFIC SIGNALS
GENERAL ARRANGEMENT 100kph/215m VISI
403.10671.00001.H009.1

Scale	1:500 @ A1	Date	JANUARY 2021
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403.10671.00003.07.009.0 Signals 215m General Arrangement RA.dwg

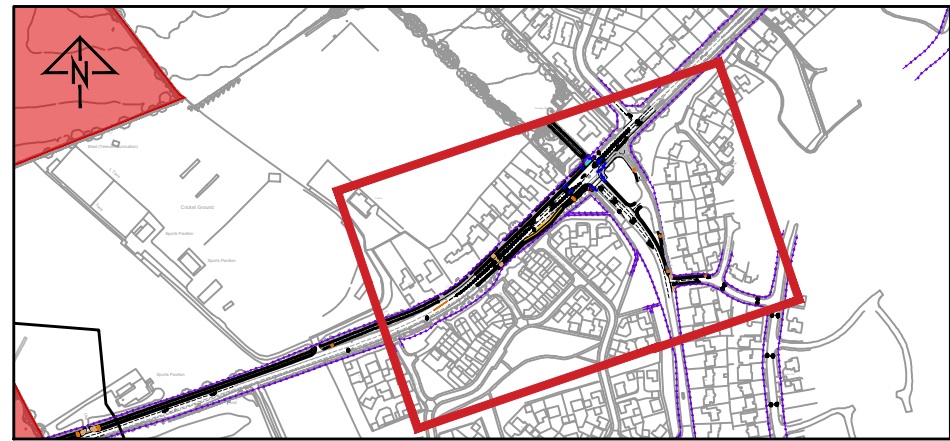


Vehicle Detail	
	Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

REV.	DETAILS	DRAWN	CHECKED	DATE
G	UPDATED FOLLOWING HA COMMENTS	SCJ	IS	02/09/22
H	LAYOUT UPDATED FOLLOWING HA COMMENTS. REFUSE VEHICLE TRACKING UPDATED WITH PHOENIX 2 DUO (P2-15W WITH ELITE 6X4 CHASSIS)	SCJ	DS	11/10/22

STATUS:

INFORMATION ONLY

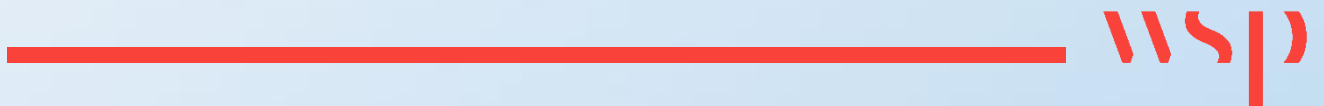


KEY	
	PROPOSED KERB LINE
	PROPOSED EDGING
	PROPOSED WHITE OR YELLOW ROAD MARKINGS
	PROPOSED FOOTWAY / SHARED ROUTE
	PROPOSED CARRIAGEWAY
	PROPOSED TRAFFIC SIGNALS
	TACTILE PAVING (BUFF)
	TACTILE PAVING (RED) - SIGNAL CONTROLLED
	CORDUROY PAVING
	HIGHWAY BOUNDARY

PROJECT: Kirby Muxloe - Leicester				CLIENT: L&Q Estates	
DRAWING TITLE: A47 HINKLEY ROAD / BEGGARS LANE PROPOSED JUNCTION IMPROVEMENT AND HINKLEY RD, BEGGARS LANE & MALLARD WAY PROPOSED CYCLE / SHARED ROUTE GENERAL ARRANGEMENT PLAN				PART OF vectos. SLR	
DRAWN: SCJ	CHECKED: IS	DATE: 11/11/20	SCALES: 1:500 @ A1	DRAWING NUMBER: 173159-TP-101	REVISION: H

Appendix N

**A5 VISSIM TECHNICAL NOTE (DOC
REF: 42523-WSPE-XX-XX-TN-OT-
00005_S2_P01.1)**





TECHNICAL NOTE: A5 VISSIM

DATE:	20 November 2023	CONFIDENTIALITY:	Public
SUBJECT:	A5 VISSIM		
PROJECT:	Earl Shilton Sustainable Urban Extension	AUTHOR:	Bev Coupe
CHECKED:	Sam Gardner	APPROVED:	Neil Hall

1. INTRODUCTION

Overview

WSP UK Limited (WSP), formerly Wood E&IS UK Limited, has been commissioned by Bloor Homes Ltd, Jelson Limited and Barwood Strategic Land II LLP (the 'Applicants') to submit two outline planning applications (OPA) for a comprehensive residential led mixed-use development known as the Earl Shilton Sustainable Urban Extension (SUE). The two separate, but aligned, OPAs are referred to as application A and B. Application B for Bloor Homes and Jelson was submitted in December 2021 and Application A for Barwood Strategic Land was submitted in March 2023.

Both applications have been prepared to work in combination to deliver the majority of the overall allocation requirements, providing up to 1,500 new dwellings, up to 5.3 hectares of employment land, a new community hub that will comprise a two-form entry primary school and local retail facilities as well as improved sports provision, new play areas, public open space, landscaping, access and drainage. This is referred to herein as 'the Proposed Development'.

One Transport Assessment (TA) and Framework Travel Plan (FTP) was produced to support both Applications and was submitted in December 2021.

Comments from the Leicestershire County Council (LCC) Highways Development Management (HDM) team identified the need for agreements on the traffic modelling and transport assessment approach and for further testing using the Pan Regional Traffic Model (PRTM). Further PRTM modelling has been undertaken in consultation with LCC HDM, National Highways and Warwickshire County Council (WCC) Highways, collectively referred to herein as the 'highway authorities'. The Applicants commissioned AECOM to carry out the PRTM modelling. The PRTM modelling is based on the full allocation of 1,600 dwellings.

National Highways has recommended a holding objection, requesting further work on the traffic modelling to ascertain the suitability of the development proposals on the Strategic Road Network (SRN).

Consultation has been undertaken with National Highways officers and their transport consultants to identify the requirements for the additional traffic modelling. This has comprised the use of National Highways' A5 VISSIM model of the A5/A47/B4666 Dodwells Roundabout and the A5/A47 The Long Shoot signal junction.

Purposed of Technical Note

The purpose of this technical note (TN) is to set out the methodology and results of the A5 VISSIM modelling.

Content of the Technical Note

The TN is set out as follows:

- Section 2 – Methodology;
- Section 3 – Results; and
- Section 4 – Summary and Conclusions.

TECHNICAL NOTE: A5 VISSIM

DATE:	20 November 2023	CONFIDENTIALITY:	Public
SUBJECT:	A5 VISSIM		
PROJECT:	Earl Shilton Sustainable Urban Extension	AUTHOR:	Bev Coupe
CHECKED:	Sam Gardner	APPROVED:	Neil Hall

2. A5 VISSIM METHODOLOGY

Overview

The A5 is part of the SRN and National Highways has a VISSIM model for two junctions on the A5 between Nuneaton and Hinckley, the A5/A47/B4666 Dodwells Roundabout and the A5/A47 The Long Shoot signal junction. Dodwells Roundabout is within Hinckley and Bosworth Borough in Leicestershire County and the A5/The Long Shoot is within Nuneaton and Bedworth Borough within Warwickshire County. The base model was developed in 2018 and a number of forecast scenarios have been produced on behalf of National Highways. The forecast scenarios comprise reference flows which incorporate traffic generated by committed developments (those with planning permissions) and sites allocated in the local plans. The site allocations within the Hinckley and Bosworth Borough Council (HBBC) Local Plan include the Earl Shilton SUE as well as the neighbouring Barwell SUE which comprises 2,500 dwellings, 6.2 ha employment, primary school, health centre, retail and community facilities. Therefore, the forecast scenarios within the National Highways' A5 VISSIM include the Earl Shilton SUE.

The A5 VISSIM has been used to test the impact of a planning application for a major B2/B8 employment development, Padge Hall Farm (PHF), to the south of Dodwells Roundabout. The development scheme includes an improvement to the roundabout through localised widening on land within the site boundary. The planning application was granted consent by HBBC, Rugby Borough Council (RBS), and Nuneaton and Bedworth Borough Council (NBBC). The modelling undertaken to support the PHF planning application included the Earl Shilton SUE in the reference flows, and therefore the mitigation scheme assessment that was accepted by National Highways accounted for the traffic generated by the Earl Shilton SUE as well.

Consultation with National Highways

Consultation has been undertaken with National Highways' officers and their transport consultants regarding the A5 VISSIM modelling.

National Highways advised that the methodology should align with the approach taken by the transport consultants for the Barwell SUE. The Barwell SUE planning application had a similar holding objection to Earl Shilton SUE. This was lifted on 31st August 2023 following the satisfactory conclusion of the A5 VISSIM modelling exercise.

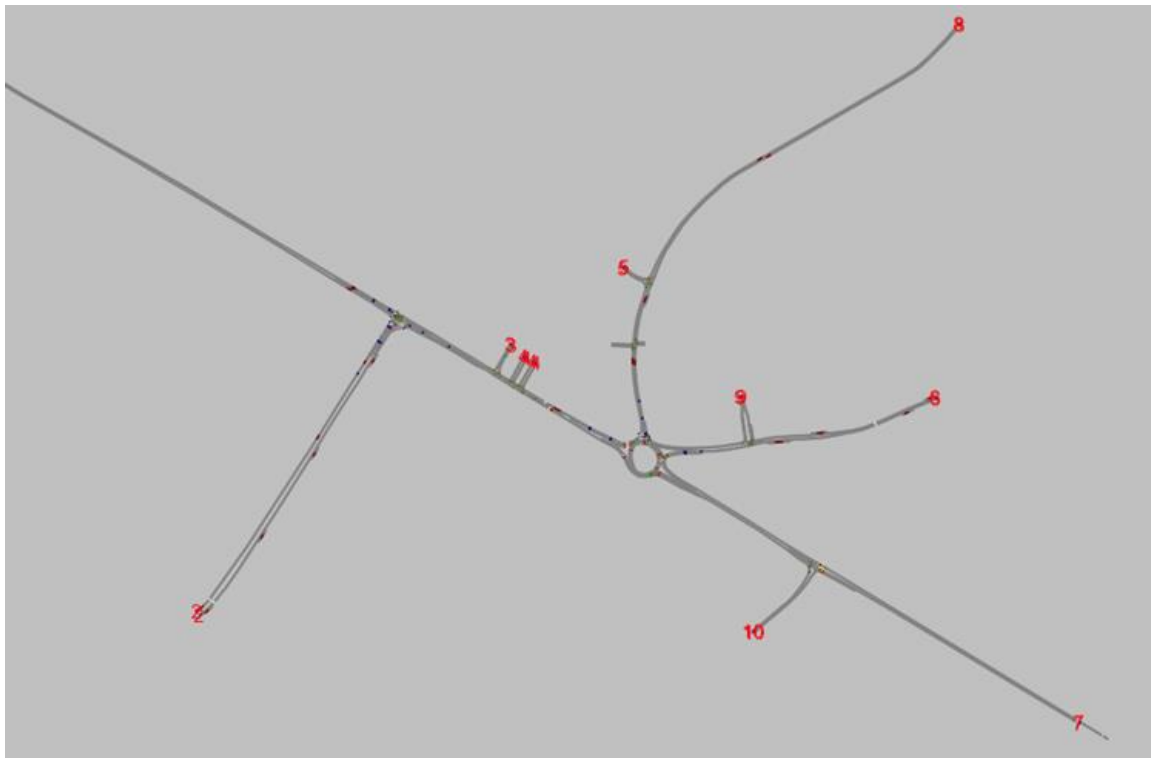
Whilst PHF is a committed development following granting of planning permission, National Highways emphasised the need to undertake modelling of a scenario without PHF (traffic flows and mitigation scheme) in the event that the development is not delivered or there are delays to delivery.

The A5 VISSIM model has been provided by the National Highways' transport consultants and covers the area shown in **Figure 1**.

TECHNICAL NOTE: A5 VISSIM

DATE:	20 November 2023	CONFIDENTIALITY:	Public
SUBJECT:	A5 VISSIM		
PROJECT:	Earl Shilton Sustainable Urban Extension	AUTHOR:	Bev Coupe
CHECKED:	Sam Gardner	APPROVED:	Neil Hall

Figure 1 A5 VISSIM Area



The A5 VISSIM comprises the following scenarios:

- Base: Base situation in 2018
- 2023 Ref: 2023 Reference Case (matrix/demand changes from the Base)
- 2023 DM: 2023 Reference Case + PHF Site Access + PHF Demand
- 2023 DS: 2023 Reference Case + PHF Site Access + PHF Demand + PHF Mitigation
- 2031 Ref: 2031 Reference Case (matrix/demand changes from the Base)
- 2031 DM: 2031 Reference Case + PHF Site Access + PHF Demand
- 2031 DS: 2031 Reference Case + PHF Site Access + PHF Demand + PHF Mitigation

Methodology

The methodology has been identified through discussion with National Highways and their transport consultants, as well as the transport consultants for the Barwell SUE. The methodology is as follows:

Assess the operation of The Long Shoot junction and Dodwells Roundabout using the A5 VISSIM model, based on the following A5 VISSIM scenarios:

- 2031 Reference Case (matrix/demand changes from the Base) – the ‘without PHF’ scenario

TECHNICAL NOTE: A5 VISSIM

DATE:	20 November 2023	CONFIDENTIALITY:	Public
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CHECKED:	Sam Gardner	APPROVED:	Neil Hall

- 2031 Reference Case + PHF Site Access + PHF Demand + PHF Mitigation – the ‘with PHF’ scenario

1. Extract the Earl Shilton site traffic flows from the above modelling. This has been based on the Earl Shilton select link analysis (SLA) plots from the PRTM testing which is included in **Appendix A**.

It is noted that there is a large number of trips to/from the employment area north of the Dodwells Roundabout off the B4666. This is traffic from the residential element of Earl Shilton SUE that is routing towards employment. The SLA shows a disproportionately high-volume routing to/from the B4666 access point. This does not reflect the number of access points to the employment area, as illustrated in **Figure 2**, and in reality, the residential to employment traffic flow routing onto Dodwells would be much lower. The modelling therefore overestimates the impact on Dodwells Roundabout.

Figure 2 Employment Accesses North of Dodwells Roundabout



2. Growth the traffic flows to 2036 after extraction of the Earl Shilton SUE development trips. The growth rates have been derived from TEMPro v8.0 for the Leicestershire area and are 1.0263 for the AM peak and 1.0252 for the PM peak. The heavy good vehicle (HGV) growth factors are based on the National Road Traffic Projections (N RTP) 2022 for A Roads in the East Midlands and is 1.00741.
3. Run the model for the 2036 ‘without development’ (i.e. without Earl Shilton SUE) reference scenario.
4. Add the Earl Shilton SUE site traffic and run the model for the ‘with development’ scenario.

TECHNICAL NOTE: A5 VISSIM

DATE:	20 November 2023	CONFIDENTIALITY:	Public
SUBJECT:	A5 VISSIM		
PROJECT:	Earl Shilton Sustainable Urban Extension	AUTHOR:	Bev Coupe
CHECKED:	Sam Gardner	APPROVED:	Neil Hall

3. RESULTS

The results from the A5 VISSIM modelling are provided in **Appendix B**. A summary is provided in **Table 1**. This shows the difference between the Reference Case scenario without and with the Earl Shilton SUE in the without PHF and with PHF scenarios.

Table 1 Summary of A5 VISSIM Results - 2036

Parameter	AM Peak			PM Peak		
	Reference	Reference + Earl Shilton	Difference	Reference	Reference + Earl Shilton	Difference
Without PHF						
Avg Delay (s/veh)	91.1	92.4	1.2	71.1	75.2	4.1
Avg Speed (mph)	20.5	20.4	-0.1	22.4	22.0	-0.4
Total Vehicles	4221.0	4292.0	71.0	4379.0	4442.0	63.0
Unmet demand (veh)	0	0	0	10	21	11
With PHF						
Avg Delay (s/veh)	92.5	100.1	7.5	75.1	77.9	2.8
Avg Speed (mph)	20.2	19.6	-0.6	22.0	21.7	-0.3
Total Vehicles	4470.0	4549.0	79.0	4549.0	4606.0	57.0
Unmet demand (veh)	0	0	0	12	15	3

The more detailed results in **Appendix B** show increases in travel time delay of over 10 seconds in the AM peak without PHF on routes from the A47 at Dodwells Roundabout (from Hinckley) (Link 8) to the B4666 (Link 6) to the A47 The Long Shoot (Link 2), Aldi, and the A5 (W) (Link 1). As identified earlier, the simplification of the employment zone north of Dodwells Roundabout has resulted in an overestimation of Earl Shilton SUE trips from the A47 onto the roundabout. In the PM peak there is delay of over 10s on the B4666 (Link 6) to the A5 E (Link 7). This can be attributed to the volume of Earl Shilton SUE trips from the B4666 employment access, so again, is a result of the coding of the employment zone in PRTM.

In the AM peak in the with PHF scenario, the increases in travel delay are higher than the without PHF scenario and all are from the A47 arm (Link 8).

As noted previously, the Earl Shilton SUE is included within the reference flows of the A5 VISSIM model that was used to test the PHF development impact and proposed mitigation scheme.

4. SUMMARY AND CONCLUSIONS

At the request of National Highways, modelling of the Earl Shilton SUE trips has been undertaken based on the A5 VISSIM of the Dodwells Roundabout and A5/A47 The Long Shoot. The methodology has been consistent with the approach taken for the Barwell SUE. As allocated sites, the Earl Shilton SUE and the Barwell SUE are included within the reference flows of the A5 VISSIM that was used to test the recently permitted employment site, PHF, to the south of Dodwells Roundabout, including the proposed mitigation scheme.



TECHNICAL NOTE: A5 VISSIM

DATE:	20 November 2023	CONFIDENTIALITY:	Public
SUBJECT:	A5 VISSIM		
PROJECT:	Earl Shilton Sustainable Urban Extension	AUTHOR:	Bev Coupe
CHECKED:	Sam Gardner	APPROVED:	Neil Hall

The Earl Shilton SUE flows have been extracted from the reference flows based on the SLA produced from PRTM runs to test the SUE. The results indicate that the highest delays are on the routes from the A47 arm of Dodwells Roundabout. This can be attributed to the coding of the employment zone in PRTM resulting in overestimation of Earl Shilton SUE trips on the A47 routeing to the B4666 employment access.



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Appendix A

SELECT LINK ANALYSIS

	Without Padge Hall Farm				With Padge Hall Farm			
	AM		PM		AM		PM	
	In	Out	In	Out	In	Out	In	Out
A47 / A5 / B4666 – Dodwells Roundabout	10	56	45	17	10	58	42	17
A5 / The Longshoot	8	10	11	9	8	10	9	9
Total	18	66	56	26	18	68	51	26

2036_WSch_AM_WoPHF_Total_In

Notes



2036_WSch_AM_WithPHF_Total_In

Notes











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Appendix B

A5 VISSIM RESULTS

Vehicle Travel Times Zone O-D

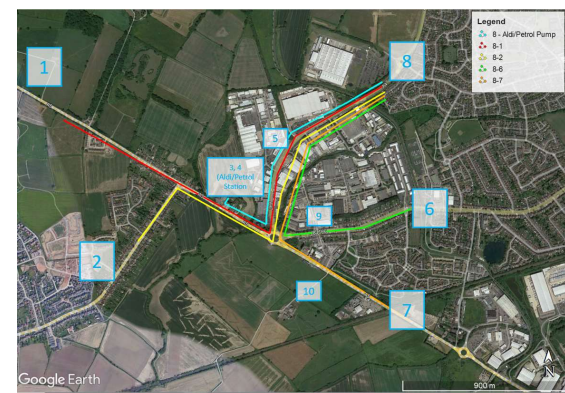
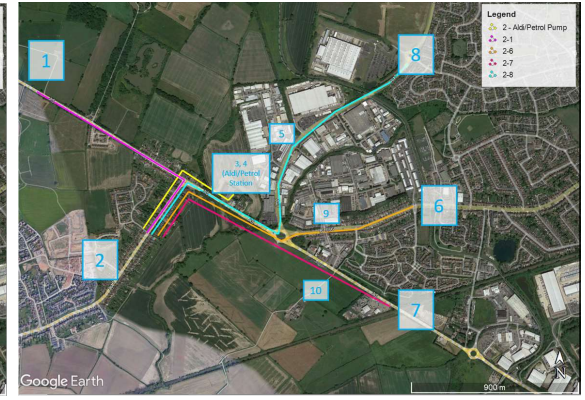
Key

Travel time increase with ES by up to 10

Travel time increase with ES by more than 10

Travel time decrease with ES

Route	Without PHF						With PHF					
	AM Peak			PM Peak			AM Peak			PM Peak		
	Reference	Reference+Earl Shilton	Difference	Reference	Reference+Earl Shilton	Difference	Reference	Reference+Earl Shilton	Difference	Reference	Reference+Earl Shilton	Difference
1: 7 - 1	268	269	1.2	273	273	0.1	288	289	0.5	295	293	-1.6
2: 7 - 2	206	205	-1.1	205	205	0.0	225	226	1.6	224	224	0.2
3: 7 - 8	218	219	0.9	221	221	0.1	226	227	0.8	229	232	2.1
4: 7 - 6	156	160	4.0	154	154	-0.5	166	167	0.7	166	166	0.0
5: 7 - Aldi/Petrol Pump	106	105	-0.6	110	110	-0.2	128	128	-0.1	132	131	-0.6
6: 2 - 1	197	202	4.9	194	197	2.4	199	201	2.1	197	196	-1.0
7: 2 - 8	329	334	5.4	308	311	3.3	329	335	6.2	307	309	2.4
8: 2 - 6	254	260	5.8	232	235	2.9	256	264	7.2	235	235	0.0
9: 2 - 7	419	415	-4.2	277	281	3.6	419	424	5.3	281	281	-0.1
10: 2 - Aldi/Petrol Pump	158	163	4.6	143	146	3.0	161	166	5.3	144	144	0.4
11: 1 - 8	346	345	-0.6	328	331	2.7	348	353	5.4	331	331	-0.1
12: 1 - 6	271	273	1.1	255	259	3.6	274	280	5.2	256	257	0.6
13: 1 - 7	429	420	-8.9	302	303	1.3	428	436	8.3	306	306	0.3
14: 1 - 2	186	188	1.6	183	184	1.5	187	191	3.9	183	184	1.2
15: 1 - Aldi/Petrol Pump	176	176	0.3	165	167	2.0	179	183	4.5	166	166	0.0
16: 8 - 7	373	379	5.8	267	264	-2.6	373	399	26.3	262	264	2.0
17: 8 - 6	210	226	16.1	212	213	0.9	215	242	27.3	207	209	2.2
18: 8 - 2	307	322	14.5	312	312	0.1	321	342	21.4	316	319	3.6
19: 8 - Aldi/Petrol Pump	207	220	13.5	214	214	-0.2	220	243	23.1	219	222	3.0
20: 8 - 1	368	382	13.7	373	374	0.9	379	404	24.9	381	383	2.6
21: 6 - 7	295	284	-11.2	169	180	10.9	287	289	2.1	178	177	-1.0
22: 6 - 2	210	210	-0.7	217	224	7.1	220	219	-1.0	230	235	5.5
23: 6 - 1	272	271	-1.3	281	287	5.4	282	283	1.1	293	298	5.5
24: 6 - 8	243	247	3.5	257	262	5.0	247	246	-1.4	262	267	5.1
25: 6 - Aldi/Petrol Pump	111	110	-1.1	121	128	7.0	120	119	-0.5	132	138	5.5
26: Aldi/Petrol Pump - 2	100	100	0.5	96	97	0.2	100	100	-0.1	96	96	0.2
27: Aldi/Petrol Pump - 1	162	163	1.1	162	163	0.4	161	162	0.9	162	162	-0.3
28: Aldi/Petrol Pump - 8	169	169	0.4	165	166	0.8	166	168	1.7	165	165	0.6
29: Aldi/Petrol Pump - 6	97	97	0.7	90	90	0.2	97	98	1.1	90	90	-0.1
30: Aldi/Petrol Pump - 7	255	246	-9.1	137	136	-0.5	251	254	3.0	139	139	0.2





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