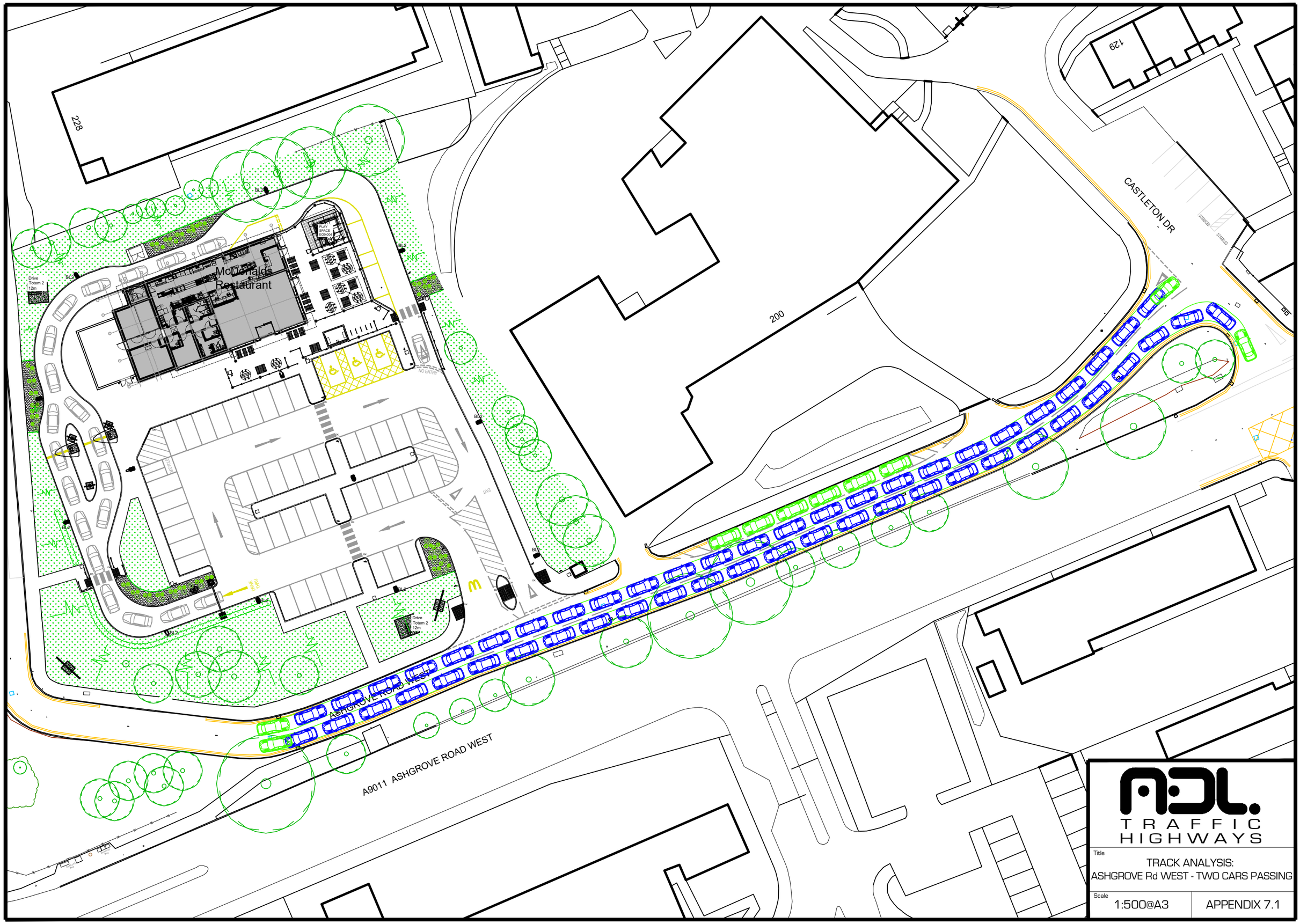
APPENDIX 7.0

TRACK ANALYSIS



MDL TRAFFIC HIGHWAYS

Title
TRACK ANALYSIS:
ASHGROVE Rd WEST - TWO CARS PASSING

Scale
1:500@A3

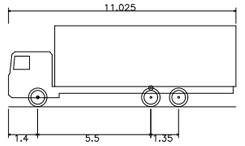
APPENDIX 7.1

McDonalds
Restaurant

200

ROAD WEST

Drive Thru Totem 2 12m



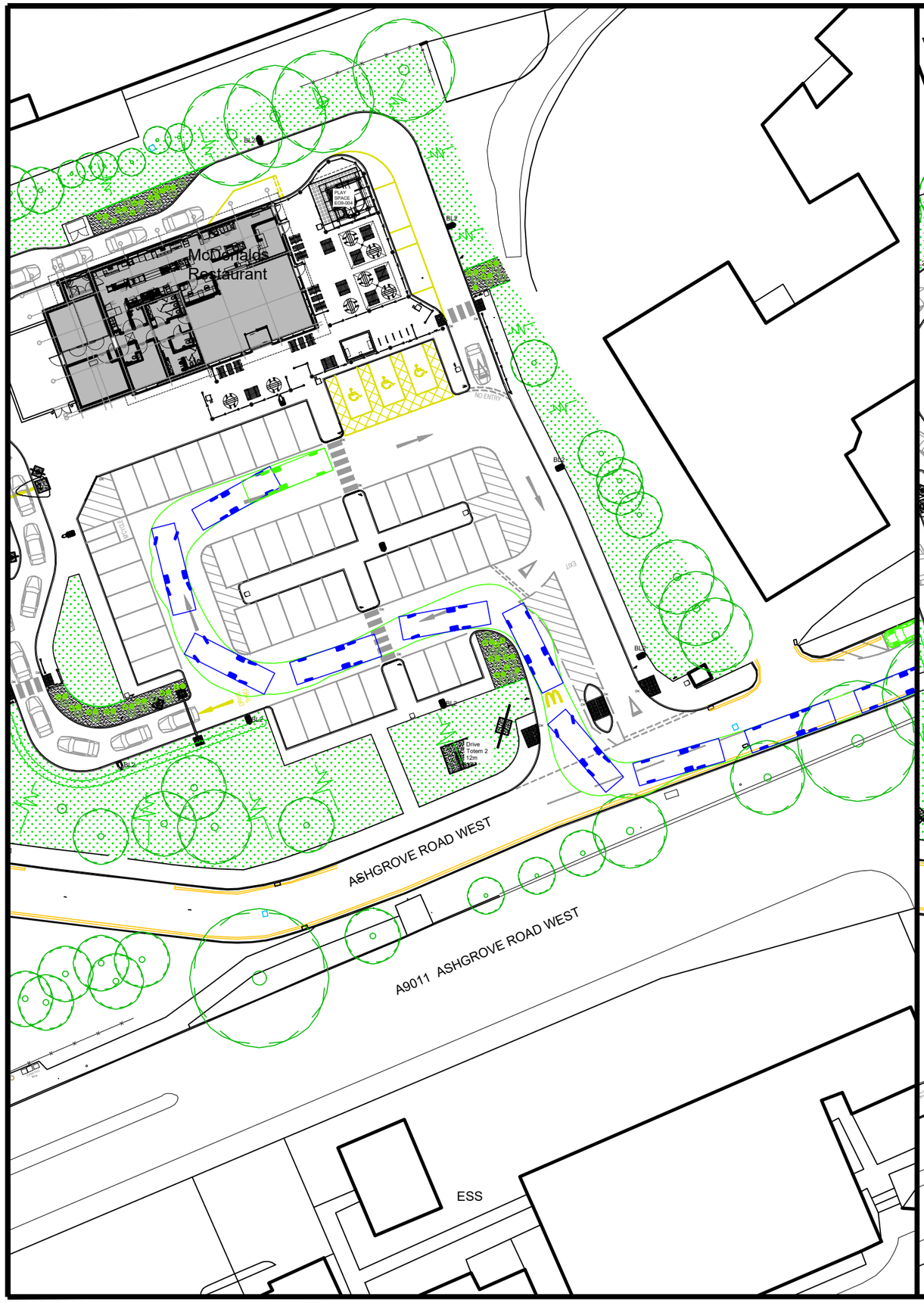
Mercedes Carrier 26T 11.025m	
Overall Length	11.025m
Overall Width	2.600m
Overall Body Height	3.923m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Wall to Wall Turning Radius	9.403m

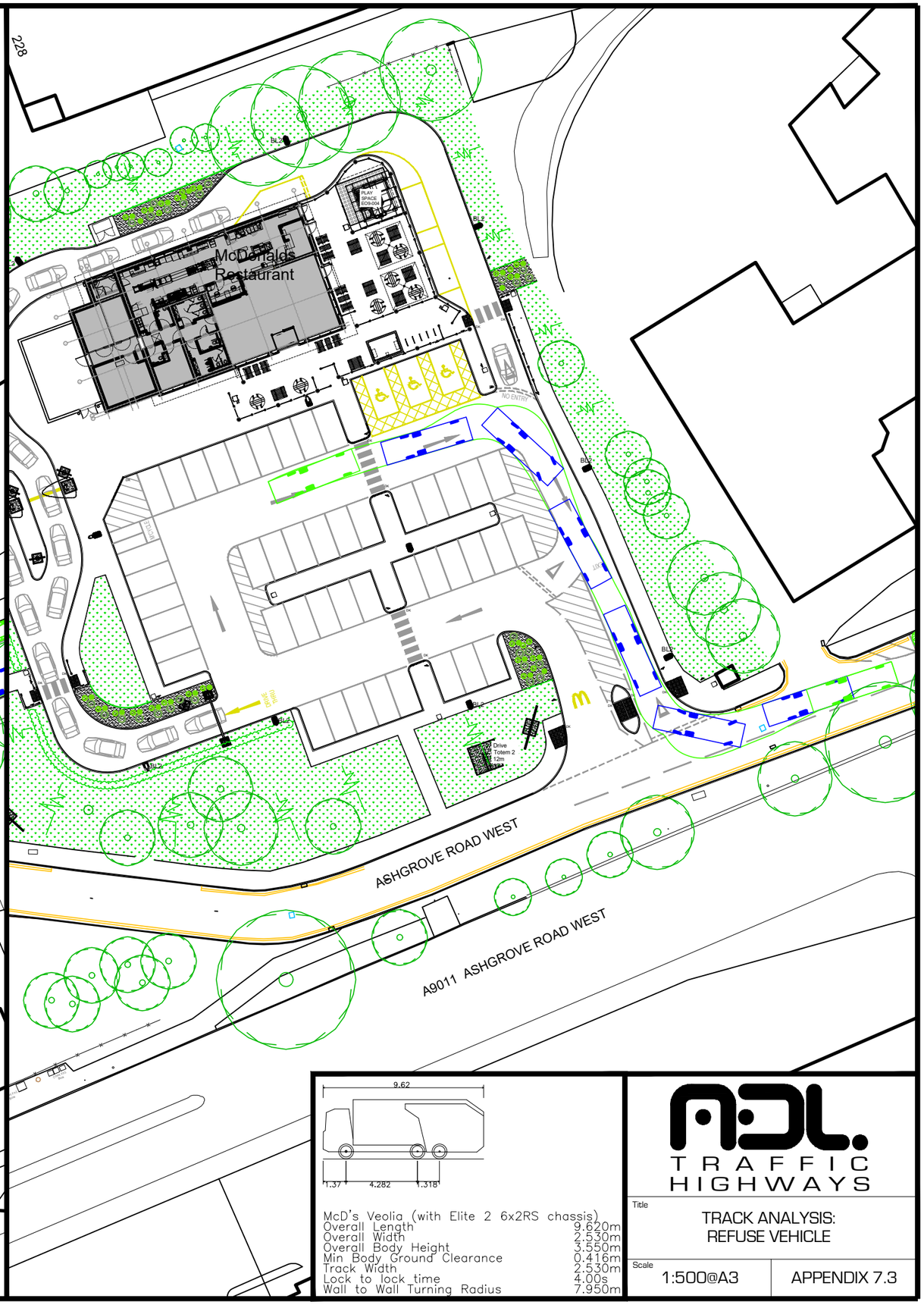
MDL TRAFFIC HIGHWAYS

Title: TRACK ANALYSIS: DELIVERY VEHICLE

Scale: 1:500@A3

APPENDIX 7.2





McD's Veolia (with Elite 2 6x2RS chassis)

Overall Length	9.620m
Overall Width	2.530m
Overall Body Height	3.550m
Min Body Ground Clearance	0.416m
Track Width	2.530m
Lock to lock time	4.00s
Wall to Wall Turning Radius	7.950m

MDL TRAFFIC HIGHWAYS

Title: TRACK ANALYSIS: REFUSE VEHICLE

Scale: 1:500@A3

APPENDIX 7.3

Shelter

N ANDERSON DR

ASHGROVE ROAD WEST

ASHGROVE ROAD WEST

A9011 ASHGROVE ROAD WEST

228

200

McDonalds Restaurant

PLAY SPACE 609.00sq

Drive Totem 2 12m

Drive Totem 2 12m

BL2

TRAFFIC HIGHWAYS

Title

TRACK ANALYSIS:
DRIVE THRU LANE

Scale

1:500@A3

APPENDIX 7.4

APPENDIX 8.0

SUMMARY OF McDONALD'S SURVEY INFORMATION

McDonald's survey data

Traffic flows

Friday

Time	Swaythling In	Swaythling Out	Rawtenstall In	Rawtenstall Out	Average In	Average Out
16:00 - 17:00	100	100	115	114	108	107
17:00 - 18:00	113	118	117	117	115	118
18:00 - 19:00	85	90	115	115	100	103
Total	**298**	**308**	**347**	**346**	323	328

Saturday

Time	Swaythling In	Swaythling Out	Rawtenstall In	Rawtenstall Out	Average In	Average Out
11:00 - 12:00	90	81	94	94	92	88
12:00 - 13:00	128	121	144	143	136	132
13:00 - 14:00	127	136	144	132	136	134
14:00 - 15:00	110	115	113	135	112	125
Total	**455**	**453**	**495**	**504**	476	479

Pedestrians

Friday

Time	Swaythling In	Swaythling Out	Rawtenstall In	Rawtenstall Out	Average In	Average Out
16:00	44	54	19	21	32	38
17:00	52	59	19	10	36	35
18:00	42	38	37	40	40	39
Total	**138**	**151**	**75**	**71**	108	112

Saturday

Time	Swaythling In	Swaythling Out	Rawtenstall In	Rawtenstall Out	Average In	Average Out
11:00	21	21	27	12	24	17
12:00	49	41	25	32	37	37
13:00	25	32	39	32	32	32
14:00	25	27	35	39	30	33
Total	**120**	**121**	**126**	**115**	123	119

Parking

Spaces occupied
(Recorded by beat survey)

Friday

Time	Swaythling Occupied	Rawtenstall Occupied	Average Occupied
16:00	24	28	26
16:15	20	21	21
16:30	23	21	22
16:45	16	25	21
17:00	21	31	26
17:15	26	27	27
17:30	23	30	27
17:45	25	23	24
18:00	17	20	19
18:15	19	25	22
18:30	15	25	20
18:45	16	30	23
19:00	14	22	18

Average of all sites	
Parking demand	
Minimum	18
Maximum	27
Average	23

Saturday

Time	Swaythling Occupied	Rawtenstall Occupied	Average Occupied
11:00	18	23	21
11:15	19	14	17
11:30	23	13	18
11:45	24	23	24
12:00	24	26	25
12:15	24	32	28
12:30	22	32	27
12:45	27	27	27
13:00	28	25	27
13:15	30	28	29
13:30	31	30	31
13:45	25	24	25
14:00	19	31	25
14:15	23	25	24
14:30	20	24	22
14:45	18	20	19
15:00	17	20	19

Average of all sites	
Parking demand	
Minimum	17
Maximum	31
Average	24

McDonald's survey data - Customer Activity and Trip Type analysis

Customer activity types

		Swaythling Friday	Swaythling Saturday	Rawtenstall Friday	Rawtenstall Saturday	Total Friday	Total Saturday	Total % Friday	Total % Saturday
1	Drive in, park, use restaurant, drive out	38	97	82	119	120	216	20%	24%
2	Drive in, park, use restaurant, eat in vehicle, drive out	17	28	1	15	18	43	3%	5%
3	Drive in, drive thru, drive out	155	238	153	250	308	488	51%	54%
4	Drive in, use drive thru, park, eat in vehicle, drive out	46	44	74	79	120	123	20%	14%
5/6/7	Other	27	31	12	8	39	39	6%	4%
Total		**283**	**438**	322	471	**605**	**909**	**100%**	**100%**

Customer trips

		Swaythling Friday	Swaythling Saturday	Rawtenstall Friday	Rawtenstall Saturday	Total Friday	Total Saturday	Total % Friday	Total % Saturday
Additional	Same origin/destination	35	37	65	35	100	72	31%	19%
Existing	Different O/D *or* Same O/D McDonald's not sole purpose for journey	49	61	55	106	104	167	32%	44%
Shared	Shared with local uses	0	0	120	141	120	141	37%	37%
Total		**84**	**98**	**240**	**282**	**324**	**380**	**100%**	**100%**

APPENDIX 8.0
SUMMARY OF McDONALDS
SURVEY INFORMATION

FRIDAY

Swaythling TIME	Swaythling QUEUE LENGTHS DRIVE THRU	Rawtenstall TIME	Rawtenstall QUEUE LENGTHS DRIVE THRU	Average
16:00	4	16:00	7	6
16:02	2	16:02	8	5
16:04	2	16:04	7	5
16:06	3	16:06	7	5
16:08	3	16:08	10	2
16:10	5	16:10	4	3
16:12	6	16:12	8	7
16:14	7	16:14	6	7
16:16	7	16:16	5	4
16:18	4	16:18	7	6
16:20	3	16:20	7	5
16:22	6	16:22	10	4
16:24	7	16:24	9	4
16:26	4	16:26	8	6
16:28	4	16:28	10	7
16:30	6	16:30	10	8
16:32	7	16:32	10	9
16:34	8	16:34	8	6
16:36	6	16:36	2	5
16:38	4	16:38	4	3
16:40	4	16:40	5	3
16:42	5	16:42	2	3
16:44	6	16:44	3	5
16:46	8	16:46	2	5
16:48	6	16:48	5	4
16:50	9	16:50	6	6
16:52	8	16:52	6	6
16:54	9	16:54	6	8
16:56	7	16:56	3	5
16:58	6	16:58	1	5
17:00	6	17:00	3	5
17:02	3	17:02	3	4
17:04	3	17:04	3	3
17:06	3	17:06	5	3
17:08	3	17:08	6	2
17:10	5	17:10	6	6
17:12	4	17:12	5	5
17:14	2	17:14	7	2
17:16	4	17:16	4	3
17:18	4	17:18	8	3
17:20	3	17:20	11	3
17:22	3	17:22	10	3
17:24	3	17:24	10	3
17:26	4	17:26	12	4
17:28	7	17:28	12	10
17:30	8	17:30	9	5
17:32	10	17:32	11	11
17:34	11	17:34	12	12
17:36	12	17:36	10	9
17:38	11	17:38	12	12
17:40	8	17:40	6	7
17:42	4	17:42	5	5
17:44	2	17:44	5	4
17:46	4	17:46	4	4
17:48	7	17:48	4	5
17:50	8	17:50	0	4
17:52	6	17:52	7	6
17:54	5	17:54	9	7
17:56	3	17:56	6	4
17:58	5	17:58	6	4
18:00	7	18:00	4	5
18:02	7	18:02	4	5
18:04	6	18:04	8	4
18:06	3	18:06	11	7
18:08	3	18:08	9	3
18:10	6	18:10	4	5
18:12	5	18:12	6	4
18:14	4	18:14	7	4
18:16	5	18:16	9	7
18:18	4	18:18	7	6
18:20	5	18:20	9	7
18:22	4	18:22	7	6
18:24	6	18:24	6	6
18:26	6	18:26	5	6
18:28	4	18:28	5	5
18:30	5	18:30	4	5
18:32	3	18:32	5	3
18:34	2	18:34	9	6
18:36	3	18:36	7	4
18:38	4	18:38	9	7
18:40	4	18:40	10	4
18:42	4	18:42	10	7
18:44	5	18:44	11	4
18:46	5	18:46	12	4
18:48	3	18:48	5	4
18:50	5	18:50	10	8
18:52	5	18:52	8	7
18:54	4	18:54	8	3
18:56	4	18:56	5	3
18:58	3	18:58	2	3
19:00	4	19:00	2	3

Summary

Min	2
Max	12
Average	5

SATURDAY

Swaythling TIME	Swaythling QUEUE LENGTHS DRIVE THRU	Rawtenstall TIME	Rawtenstall QUEUE LENGTHS DRIVE THRU	Average
11:00	2	11:00	8	5
11:02	3	11:02	11	3
11:04	4	11:04	9	3
11:06	3	11:06	10	3
11:08	1	11:08	9	5
11:10	1	11:10	5	3
11:12	1	11:12	1	2
11:14	1	11:14	3	2
11:16	2	11:16	5	4
11:18	3	11:18	6	4
11:20	3	11:20	6	5
11:22	4	11:22	1	3
11:24	5	11:24	1	4
11:26	5	11:26	2	4
11:28	6	11:28	3	4
11:30	6	11:30	3	5
11:32	7	11:32	2	4
11:34	6	11:34	3	5
11:36	6	11:36	7	7
11:38	5	11:38	8	7
11:40	5	11:40	4	5
11:42	5	11:42	1	3
11:44	5	11:44	2	4
11:46	5	11:46	4	5
11:48	3	11:48	5	4
11:50	3	11:50	5	3
11:52	6	11:52	4	5
11:54	9	11:54	5	7
11:56	7	11:56	6	5
11:58	6	11:58	6	4
12:00	6	12:00	5	4
12:02	7	12:02	5	5
12:04	5	12:04	9	7
12:06	6	12:06	12	4
12:08	3	12:08	11	7
12:10	3	12:10	14	3
12:12	5	12:12	13	9
12:14	5	12:14	13	9
12:16	4	12:16	11	8
12:18	3	12:18	13	6
12:20	5	12:20	11	6
12:22	8	12:22	10	9
12:24	8	12:24	6	6
12:26	10	12:26	9	10
12:28	9	12:28	6	8
12:30	10	12:30	7	8
12:32	11	12:32	5	8
12:34	9	12:34	10	8
12:36	8	12:36	9	9
12:38	7	12:38	11	6
12:40	8	12:40	9	6
12:42	7	12:42	8	8
12:44	3	12:44	15	9
12:46	4	12:46	14	5
12:48	2	12:48	15	5
12:50	4	12:50	12	7
12:52	6	12:52	14	7
12:54	5	12:54	15	10
12:56	8	12:56	11	10
12:58	8	12:58	9	9
13:00	9	13:00	11	9
13:02	6	13:02	8	6
13:04	5	13:04	12	9
13:06	5	13:06	12	9
13:08	8	13:08	10	7
13:10	10	13:10	11	9
13:12	12	13:12	9	11
13:14	13	13:14	8	11
13:16	11	13:16	13	12
13:18	11	13:18	11	12
13:20	11	13:20	11	11
13:22	11	13:22	11	11
13:24	13	13:24	9	11
13:26	13	13:26	12	13
13:28	13	13:28	11	12
13:30	13	13:30	11	12
13:32	13	13:32	10	9
13:34	13	13:34	9	11
13:36	12	13:36	7	10
13:38	13	13:38	6	10
13:40	12	13:40	9	11
13:42	11	13:42	11	11
13:44	10	13:44	11	11
13:46	7	13:46	10	9
13:48	5	13:48	8	8
13:50	4	13:50	14	7
13:52	6	13:52	11	9
13:54	7	13:54	9	8
13:56	5	13:56	9	7
13:58	7	13:58	9	8
14:00	7	14:00	13	5
14:02	7	14:02	10	6
14:04	6	14:04	11	9
14:06	4	14:06	11	8
14:08	6	14:08	12	9
14:10	7	14:10	13	10
14:12	7	14:12	10	5
14:14	10	14:14	12	6
14:16	9	14:16	6	8
14:18	11	14:18	5	8
14:20	9	14:20	8	6
14:22	10	14:22	8	9
14:24	11	14:24	9	8
14:26	10	14:26	10	10
14:28	9	14:28	10	10
14:30	6	14:30	12	9
14:32	6	14:32	8	7
14:34	8	14:34	4	6
14:36	9	14:36	6	6
14:38	8	14:38	9	6
14:40	7	14:40	6	5
14:42	8	14:42	5	7
14:44	8	14:44	5	6
14:46	8	14:46	4	6
14:48	10	14:48	4	7
14:50	8	14:50	5	7
14:52	7	14:52	5	6
14:54	4	14:54	4	4
14:56	5	14:56	2	4
14:58	6	14:58	5	5
15:00	5	15:00	2	4

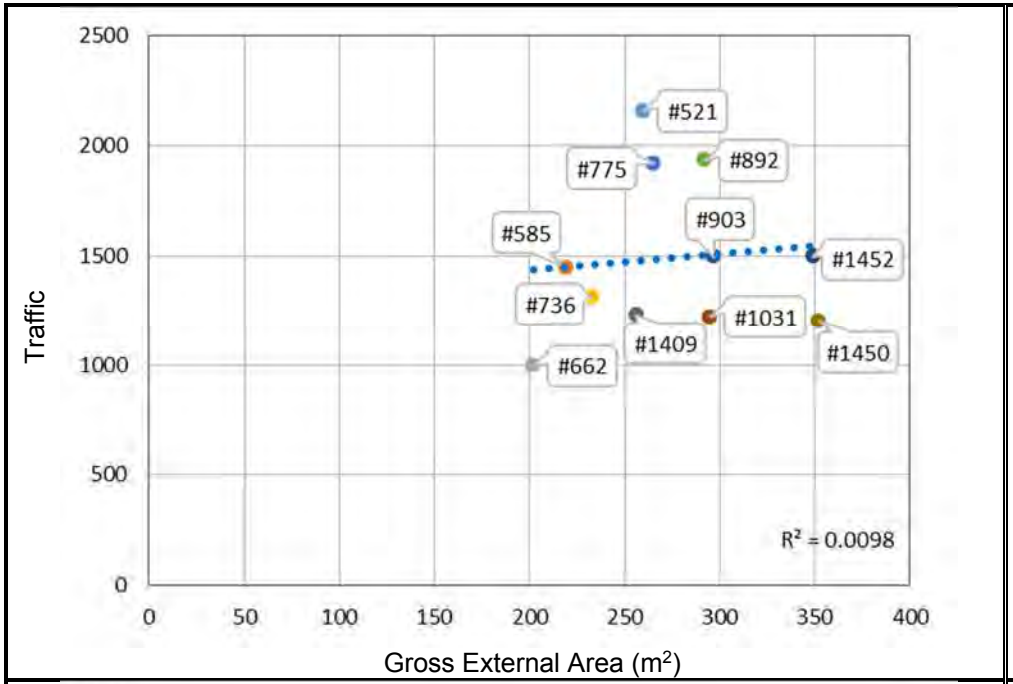
Summary

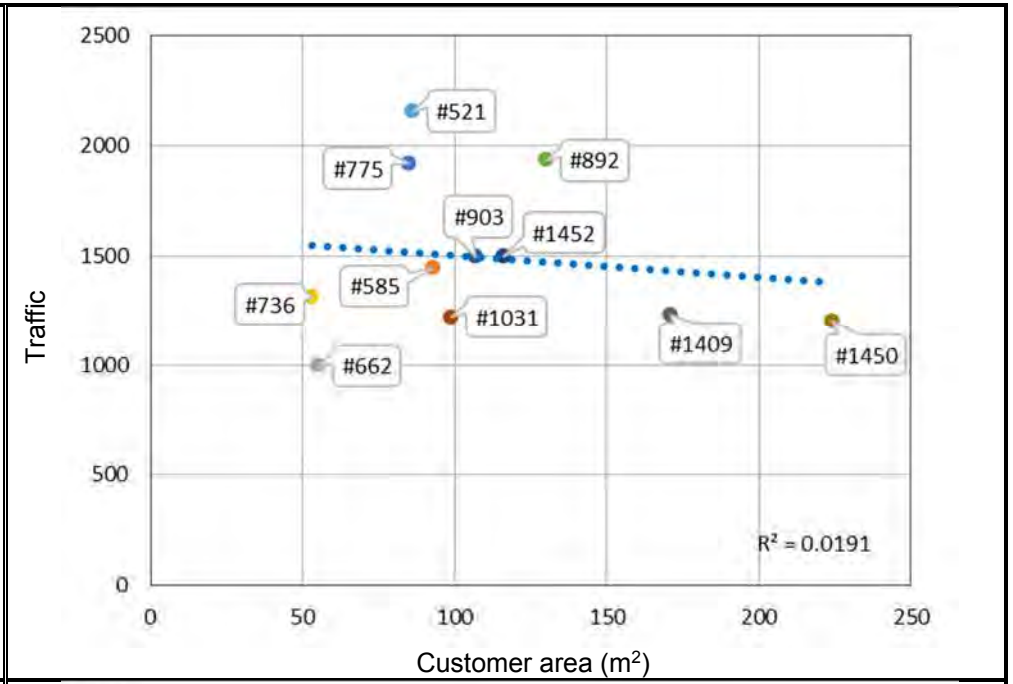
Min	2
Max	13
Average	7

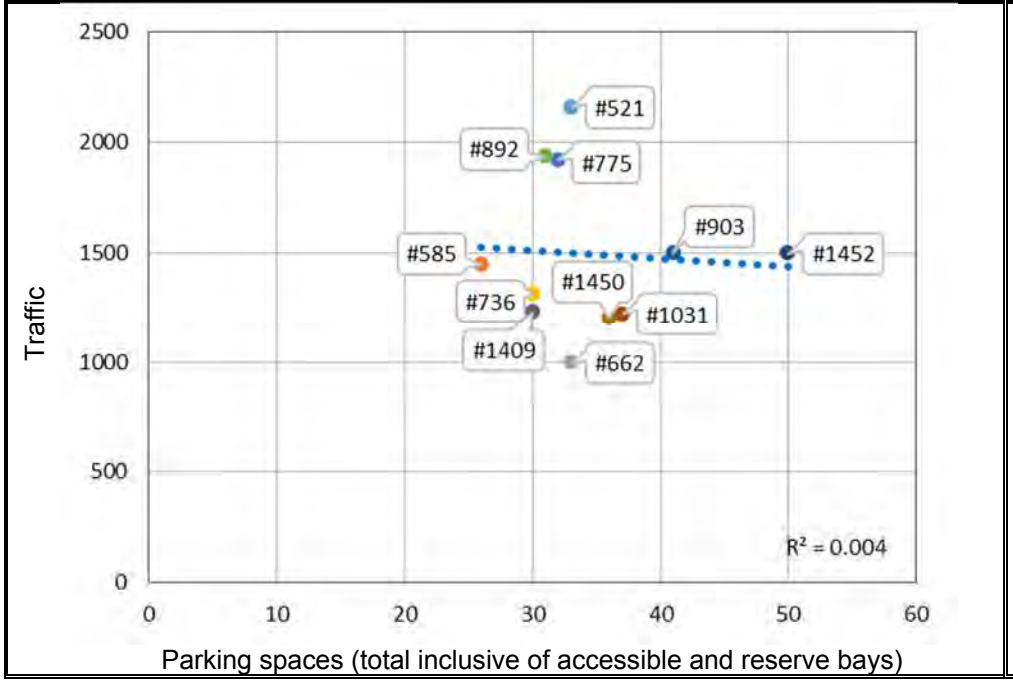
	Friday			Saturday		
	In	DT	CP	In	DT	CP
0	33	18	15	48	31	18
1	21	12	8	31	19	12
2	12	4	9	21	11	10
3	6	5	1	12	9	4
4	10	5	5	11	4	7
5	18	12	6	18	12	6
6	52	33	18	31	24	7
7	71	47	24	54	34	20
8	72	51	20	70	48	22
9	75	43	32	85	52	33
10	64	37	27	99	61	38
11	94	55	39	92	56	36
12	102	64	37	136	82	54
13	92	57	35	136	78	58
14	82	48	34	112	70	42
15	96	59	36	85	52	33
16	108	71	37	91	62	29
17	115	76	39	106	68	38
18	100	60	40	94	58	36
19	101	60	41	71	36	35
20	74	49	25	58	36	21
21	64	41	23	47	24	22
22	48	34	15	50	32	19
23	41	26	15	49	27	22
	1550	970	580	1609	985	624

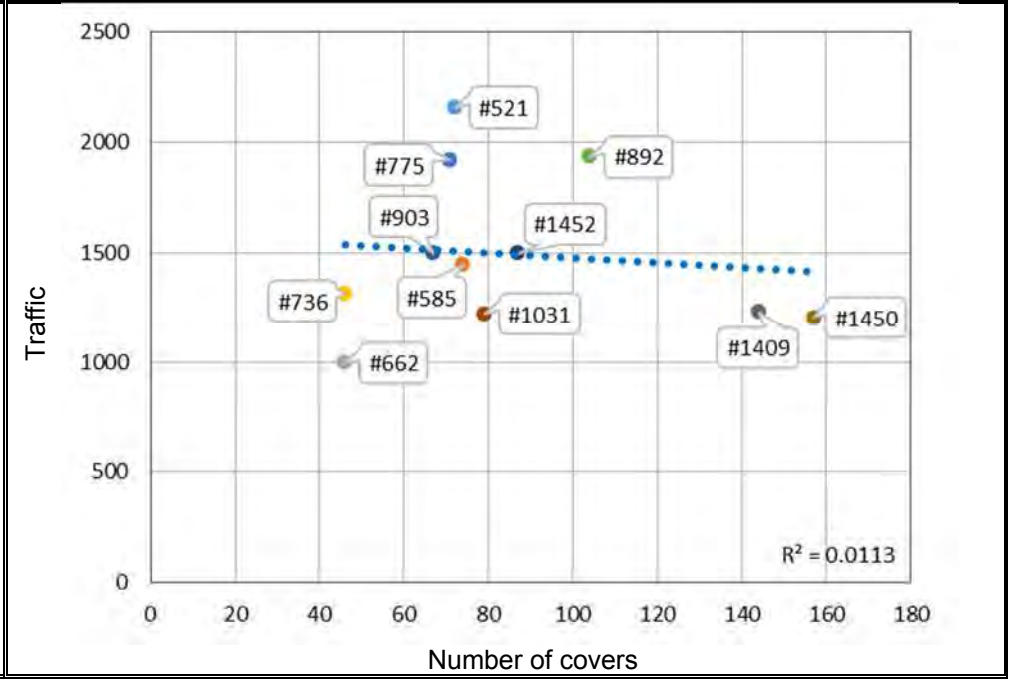
APPENDIX 9.0

GRAPHS SHOWING RELATIONSHIP BETWEEN McDONALD'S TRAFFIC AND STORE FACTORS









APPENDIX 9.0

GRAPHS SHOWING RELATIONSHIP BETWEEN McDONALD'S TRAFFIC AND STORE FACTORS

Key to store numbers:

521	Leamington Spa, Warkwickshire
585	Burgess Hill, West Sussex
662	Sheene Road, Bristol
736	Hamilton, South Lanarkshire
775	Folkstone, Kent
892	North Cheam, London Borough of Sutton
903	Fenton, Staffordshire
1031	Arbroath, Angus
1409	Milton Keynes
1450	Stretford, Trafford
1452	Norton Park, Staffordshire

APPENDIX 10.0

TRICS DATA: McDONALD'S

9.1	Weekday
9.2	Saturday
9.3	TRICS Survey Results

Calculation Reference: AUDIT-733701-220106-0159

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	BR	BRISTOL CITY	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days
10	WALES		
	VG	VALE OF GLAMORGAN	1 days
11	SCOTLAND		
	AD	ABERDEEN CITY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 210 to 472 (units: sqm)
Range Selected by User: 182 to 800 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 24/04/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Thursday	1 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
Residential Zone	1
Retail Zone	1

APPENDIX 10.1
TRICS DATA: McDONALDS - WEEKDAY

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

Not Known	8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	1 days
125,001 to 250,000	5 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	8 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 AD-06-D-01 MCDONALD ' S ABERDEEN CITY
BEDFORD ROAD
ABERDEEN
KITTYBREWSTER RET. PK
Edge of Town Centre
Retail Zone
Total Gross floor area: 472 sqm
Survey date: TUESDAY *19/11/19* *Survey Type: MANUAL*

2 BR-06-D-01 MCDONALD'S BRISTOL CITY
SHEENE ROAD
BRISTOL
BEDMINSTER
Neighbourhood Centre (PPS6 Local Centre)
High Street
Total Gross floor area: 210 sqm
Survey date: MONDAY *21/09/15* *Survey Type: MANUAL*

3 CA-06-D-02 MCDONALD'S CAMBRIDGESHIRE
NEWMARKET ROAD
CAMBRIDGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 435 sqm
Survey date: TUESDAY *19/09/17* *Survey Type: MANUAL*

4 LN-06-D-01 MCDONALD'S LINCOLNSHIRE
RUSTON WAY
LINCOLN

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 435 sqm
Survey date: FRIDAY *28/06/19* *Survey Type: MANUAL*

5 MS-06-D-01 MCDONALD'S MERSEYSIDE
SAINT HELENS LINKWAY
SAINT HELENS

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 463 sqm
Survey date: FRIDAY *16/04/21* *Survey Type: MANUAL*

6 SY-06-D-02 MCDONALD'S SOUTH YORKSHIRE
UPPER NEW STREET
BARNSLEY

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 415 sqm
Survey date: TUESDAY *08/09/20* *Survey Type: MANUAL*

7 TV-06-D-01 MCDONALD'S TEES VALLEY
BURN ROAD
HARTLEPOOL

Edge of Town Centre
Industrial Zone
Total Gross floor area: 400 sqm
Survey date: FRIDAY *04/09/20* *Survey Type: MANUAL*

8 VG-06-D-01 MCDONALD'S VALE OF GLAMORGAN
CARDIFF ROAD
BARRY

Edge of Town
Industrial Zone
Total Gross floor area: 405 sqm
Survey date: THURSDAY *24/09/20* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
AD-06-D-02	Burger King
FI-06-D-02	KFC
WO-06-D-01	KFC

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	5	431	7.378	5	431	6.265	5	431	13.643
07:00 - 08:00	7	400	13.964	7	400	12.071	7	400	26.035
08:00 - 09:00	7	400	17.036	7	400	16.286	7	400	33.322
09:00 - 10:00	7	400	17.964	7	400	18.321	7	400	36.285
10:00 - 11:00	8	404	17.558	8	404	17.465	8	404	35.023
11:00 - 12:00	8	404	17.620	8	404	16.816	8	404	34.436
12:00 - 13:00	8	404	23.864	8	404	23.215	8	404	47.079
13:00 - 14:00	8	404	22.071	8	404	22.844	8	404	44.915
14:00 - 15:00	8	404	16.600	8	404	17.125	8	404	33.725
15:00 - 16:00	8	404	20.618	8	404	19.536	8	404	40.154
16:00 - 17:00	8	404	20.711	8	404	21.113	8	404	41.824
17:00 - 18:00	8	404	22.720	8	404	22.937	8	404	45.657
18:00 - 19:00	8	404	22.566	8	404	23.586	8	404	46.152
19:00 - 20:00	8	404	19.073	8	404	20.124	8	404	39.197
20:00 - 21:00	8	404	17.063	8	404	17.929	8	404	34.992
21:00 - 22:00	8	404	14.436	8	404	14.436	8	404	28.872
22:00 - 23:00	5	424	14.967	5	424	15.722	5	424	30.689
23:00 - 24:00	5	424	7.602	5	424	8.687	5	424	16.289
Total Rates:			313.811			314.478			628.289

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	210 - 472 (units: sqm)
Survey date date range:	01/01/13 - 24/04/21
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-733701-220106-0112

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	DV	DEVON	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
10	WALES		
	CE	CEREDIGION	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 350 to 447 (units: sqm)
Range Selected by User: 182 to 800 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 24/04/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:
Saturday 3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual count 3 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:
Town Centre 1
Suburban Area (PPS6 Out of Centre) 1
Edge of Town 1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:
Retail Zone 2
Built-Up Zone 1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

APPENDIX 10.2
TRICS DATA: McDONALDS - SATURDAY

Secondary Filtering selection:

Use Class:

Not Known	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	1 days
20,001 to 25,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	3 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CE-06-D-01 MCDONALD'S CEREDIGION
FFORDD PARC Y LLYN
ABERYSTWYTH

Edge of Town
Retail Zone
Total Gross floor area: 350 sqm
Survey date: SATURDAY *09/05/15* *Survey Type: MANUAL*

2 DV-06-D-01 MCDONALD'S DEVON
HELE ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Retail Zone
Total Gross floor area: 447 sqm
Survey date: SATURDAY *30/03/19* *Survey Type: MANUAL*

3 WY-06-D-01 MCDONALD'S WEST YORKSHIRE
NORTHGATE
HECKMONDWIKE

Town Centre
Built-Up Zone
Total Gross floor area: 420 sqm
Survey date: SATURDAY *20/05/17* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
GS-06-D-01	COVID Indoor dining closed
TW-06-D-01	kfc

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	350	1.429	1	350	0.857	1	350	2.286
06:00 - 07:00	1	350	7.714	1	350	5.143	1	350	12.857
07:00 - 08:00	2	399	14.680	2	399	13.174	2	399	27.854
08:00 - 09:00	2	399	19.322	2	399	18.821	2	399	38.143
09:00 - 10:00	2	399	28.105	2	399	24.592	2	399	52.697
10:00 - 11:00	3	406	19.556	3	406	21.035	3	406	40.591
11:00 - 12:00	3	406	23.911	3	406	21.611	3	406	45.522
12:00 - 13:00	3	406	31.717	3	406	30.074	3	406	61.791
13:00 - 14:00	3	406	29.088	3	406	30.896	3	406	59.984
14:00 - 15:00	3	406	26.048	3	406	25.226	3	406	51.274
15:00 - 16:00	3	406	21.200	3	406	22.843	3	406	44.043
16:00 - 17:00	3	406	23.829	3	406	23.829	3	406	47.658
17:00 - 18:00	3	406	23.172	3	406	23.911	3	406	47.083
18:00 - 19:00	3	406	25.144	3	406	24.486	3	406	49.630
19:00 - 20:00	3	406	20.378	3	406	21.857	3	406	42.235
20:00 - 21:00	3	406	15.941	3	406	16.352	3	406	32.293
21:00 - 22:00	3	406	13.887	3	406	13.640	3	406	27.527
22:00 - 23:00	3	406	9.203	3	406	10.353	3	406	19.556
23:00 - 24:00	3	406	8.217	3	406	8.381	3	406	16.598
Total Rates:			362.541			357.081			719.622

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	350 - 447 (units: sqm)
Survey date date range:	01/01/13 - 24/04/21
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

WEEKDAY

	TRICS																			
	Kitty Brewster		Sheene Rd Bristol		Newmarket Rd Cambridge		Ruston Way Lincoln		Upper New St Barnsley		Burn Rd Hartlepool		St Helens		Cardiff Rd Barry		Average		Proposed Traffic	
Floor Area	472		210		435		435		415		400		463		405		404.375		377	
Time	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
08:00	26	18	57	60	14	16			67	64	95	89	94	91	124	118	**68**	**65**	**72**	**72**
09:00	43	47	62	67	14	15			70	67	99	98	92	93	123	126	**72**	**73**	**75**	**75**
16:00	68	70	46	29	19	22	113	115	106	105	139	157	93	96	104	116	**86**	**89**	**108**	**107**
17:00	81	80	44	57	22	22	107	97	130	142	153	140	91	99	123	115	**94**	**94**	**115**	**118**

SATURDAY

	TRICS									
	Aberystwyth		Torquay		Heckmondwicke		Average		Proposed Traffic	
Floor Area	350		447		420		406		377	
Time	In	Out	In	Out	In	Out	In	Out	In	Out
12:00	153	146	158	145	49	41	**120**	**111**	**136**	**132**
13:00	129	148	147	150	59	65	**112**	**121**	**136**	**134**

APPENDIX 10.3
TRICS SURVEY RESULTS

APPENDIX 11.0

TRAFFIC PREDICTIONS/SURVEY COMPARISONS ANALYSIS

APPENDIX 11.0

Store #1432, Wigan

ADL prepared and supplied a Transport Assessment dated January 2013 in respect of store #1432. The key data in terms of traffic flows are shown in Table A.

Table A #1432 Wigan Traffic Comparison

		Predicted		Surveyed		Difference relative to prediction		
		In	Out	In	Out	In	Out	2-way
Friday	16:00-17:00	*98*	*85*	76	79	-22	-6	-28
	17:00-18:00	89	103	93	96	+4	-7	-3
	18:00-19:00	*109*	*106*	88	91	-21	-15	-36
	Total	*296*	*294*	257	266	-39	-28	-67
Saturday	11:00-12:00	*68*	*61*	62	56	-6	-5	-11
	12:00-13:00	81	81	94	77	+13	-4	+9
	13:00-14:00	*101*	*93*	104	115	+3	+22	+25
	14:00-15:00	*98*	*115*	85	88	-13	-27	-40
	Total	*348*	*350*	345	336	-3	-14	-17
Grand Total		*644*	*644*	602	602	-42	-42	-84

Figures in italics not supplied at planning

The difference in predicted and surveyed traffic has been calculated, with the total surveyed two-way traffic as a percentage of that which was predicted and provides the following results shown relative to 100%, i.e. a figure less than 100% indicates a lower amount of surveyed traffic than predicted and a figure above 100% shows a greater amount of surveyed traffic than was predicated:

- Friday $\frac{257 + 266}{296 + 294} = \frac{523}{590} = 87\%$
- Saturday $\frac{345 + 336}{348 + 350} = \frac{681}{698} = 98\%$
- Friday + Saturday $\frac{523 + 681}{590 + 698} = \frac{1204}{1288} = 93\%$

Store #1446, Monks Cross

ADL prepared and supplied a Transport Assessment dated November 2013 in respect of store #1446. The key data in terms of traffic flows and parking demand are shown in Table B.

Table B #1446 Monks Cross Traffic Comparison

		Predicted		Surveyed		Difference relative to predicted		
		In	Out	In	Out	In	Out	2-way
Friday	16:00-17:00	93	91	64	62	-29	-29	-58
	17:00-18:00	108	104	85	84	-23	-20	-43
	18:00-19:00	112	114	91	88	-21	-26	-47
	Total	313	309	240	234	-73	-75	-148
Saturday	11:00-12:00	74	70	89	72	+15	+2	+17
	12:00-13:00	123	110	154	140	+31	+30	+61
	13:00-14:00	149	144	178	187	+29	+43	+72
	14:00-15:00	126	132	113	126	-13	-6	-19
	Total	472	456	534	525	+62	+69	+131
Grand Total		785	765	774	759	-11	-6	-17

The difference in predicated and surveyed traffic has been calculated as the total surveyed two-way traffic as a percentage of that which was predicted and provides the following results:

- Friday = 76%
- Saturday = 114%
- Friday + Saturday = 99%

Store #1450, Stretford

ADL prepared and supplied a Transport Assessment dated July 2013 in respect of store #1450. The key data in terms of traffic flows and parking demand are shown in Table C.

Table C #1450 Stretford Traffic Comparison

		Predicted		Surveyed		Difference relative to predicted		
		In	Out	In	Out	In	Out	2-way
Friday	16:00-17:00	84	80	67	67	-17	-13	-30
	17:00-18:00	93	94	87	84	-6	-10	-16
	18:00-19:00	73	76	76	80	-3	4	7
	Total	250	250	230	231	-20	-19	-39
Saturday	11:00-12:00	84	69	65	60	-19	-9	-28
	12:00-13:00	103	109	111	105	+8	-4	+4
	13:00-14:00	101	99	112	108	+11	+9	+20
	14:00-15:00	88	93	87	96	-1	+3	+2
	Total	376	370	375	369	-1	-1	-2
Grand Total		626	620	605	600	-21	-20	-41

The difference in predicated and surveyed traffic has been calculated as the total surveyed two-way traffic as a percentage of that which was predicted and provides the following results:

- Friday = 92%
- Saturday = 100%
- Friday + Saturday = 97%

Store #1452, Norton Park

ADL prepared and supplied a Transport Assessment dated March 2104 in respect of store #1452. The key data in terms of traffic flows and parking demand are shown in Table D.

Table D #1452 Norton Park Traffic Comparison

		Predicted		Surveyed		Difference relative to predicated		
		In	Out	In	Out	In	Out	2-way
Friday	16:00-17:00	101	99	89	81	-12	-18	-30
	17:00-18:00	116	110	107	99	-9	-11	-20
	18:00-19:00	107	116	94	103	-13	-13	-26
	Total	324	325	290	283	-34	-42	-76
Saturday	11:00-12:00	69	57	74	57	+5	0	+5
	12:00-13:00	136	131	133	130	-3	-1	-4
	13:00-14:00	139	139	147	141	+8	+2	+10
	14:00-15:00	136	136	117	126	-19	-10	-29
	Total	480	463	471	454	-10	-9	-19
Grand Total		804	788	761	737	-44	-51	-95

The difference in predicated and surveyed traffic has been calculated as the total surveyed two-way traffic as a percentage of that which was predicted and provides the following results:

- Friday = 88%
- Saturday = 98%
- Friday + Saturday = 94%

Store #1409, Brickhill

ADL prepared and supplied a Transport Assessment dated May 2012. The key data in terms of traffic flows and parking demand are shown in Table E below.

Table E #1409 Brickhill Traffic Comparison

		Predicted		Surveyed		Difference relative to predicated		
		In	Out	In	Out	In	Out	2-way
Friday	16:00	71	67	75	74	+4	+7	11
	17:00	90	94	77	80	-13	-6	-19
	18:00	84	81	79	84	-5	+3	-2
	Total	245	242	231	238	-14	-4	-18
Saturday	11:00	72	60	57	47	-15	-13	-28
	12:00	102	95	122	118	+20	+23	+43
	13:00	101	111	121	116	+20	+5	+25
	14:00	63	61	84	99	+21	+38	+59
	Total	338	332	384	380	+46	+48	+94

The difference in predicated and surveyed traffic has been calculated as the total surveyed two-way traffic as a percentage of that which was predicted and provides the following results:

- Friday = 96%
- Saturday = 114%
- Friday + Saturday = 106%

Store #1506 Rawtenstall

ADL prepared and supplied a Transport Assessment dated October 2015. The key data in terms of traffic flows and parking demand are shown in Table F below.

Table F #1506 Rawtenstall Traffic Comparison

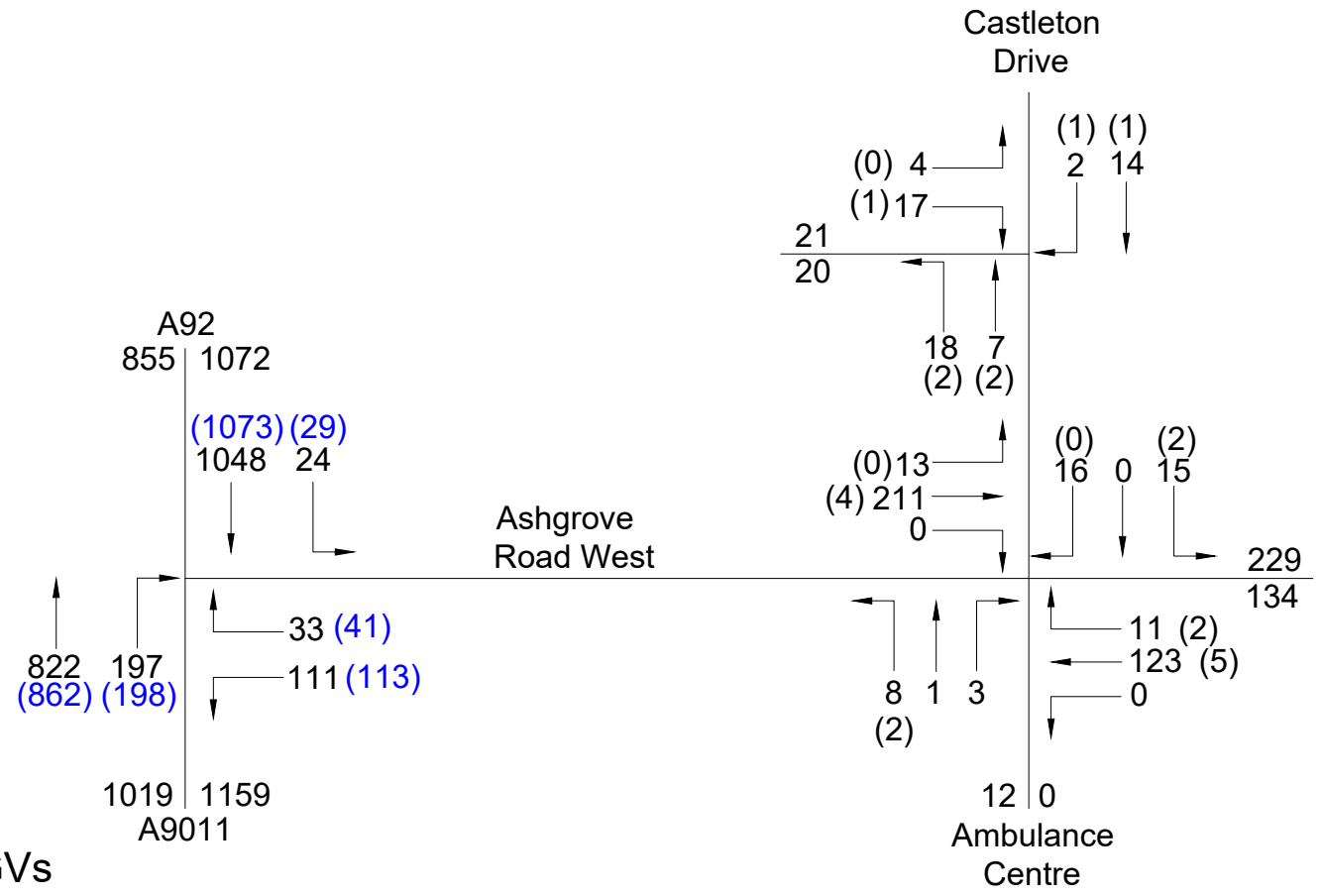
		Predicted		Surveyed		Difference relative to predicated		
		In	Out	In	Out	In	Out	2-way
Friday	16:00	110	104	115	114	+5	+10	+15
	17:00	121	122	117	117	-4	-5	-9
	18:00	95	98	115	115	+20	+17	+37
	Total	326	324	347	346	+21	+22	+43
Saturday	11:00	110	90	94	94	-16	+4	-12
	12:00	134	141	144	143	+10	-2	5
	13:00	131	128	144	132	+13	+4	+15
	14:00	114	120	113	135	+1	+15	+16
	Total	489	479	495	504	+6	+21	+27

The difference in predicated and surveyed traffic has been calculated as the total surveyed two-way traffic as a percentage of that which was predicted and provides the following results:

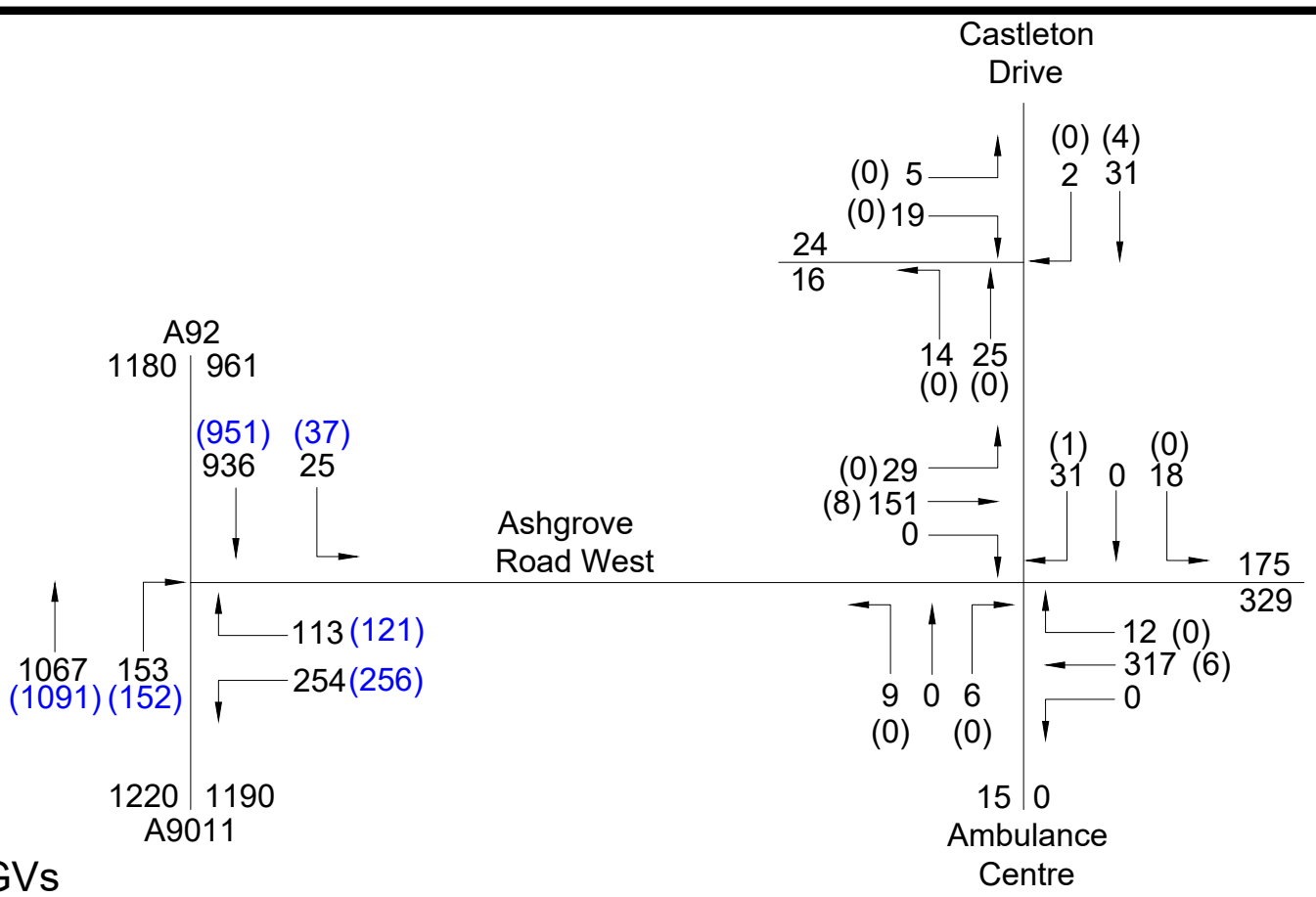
- Friday = 106%
- Saturday = 103%
- Friday + Saturday = 105%

APPENDIX 12.0

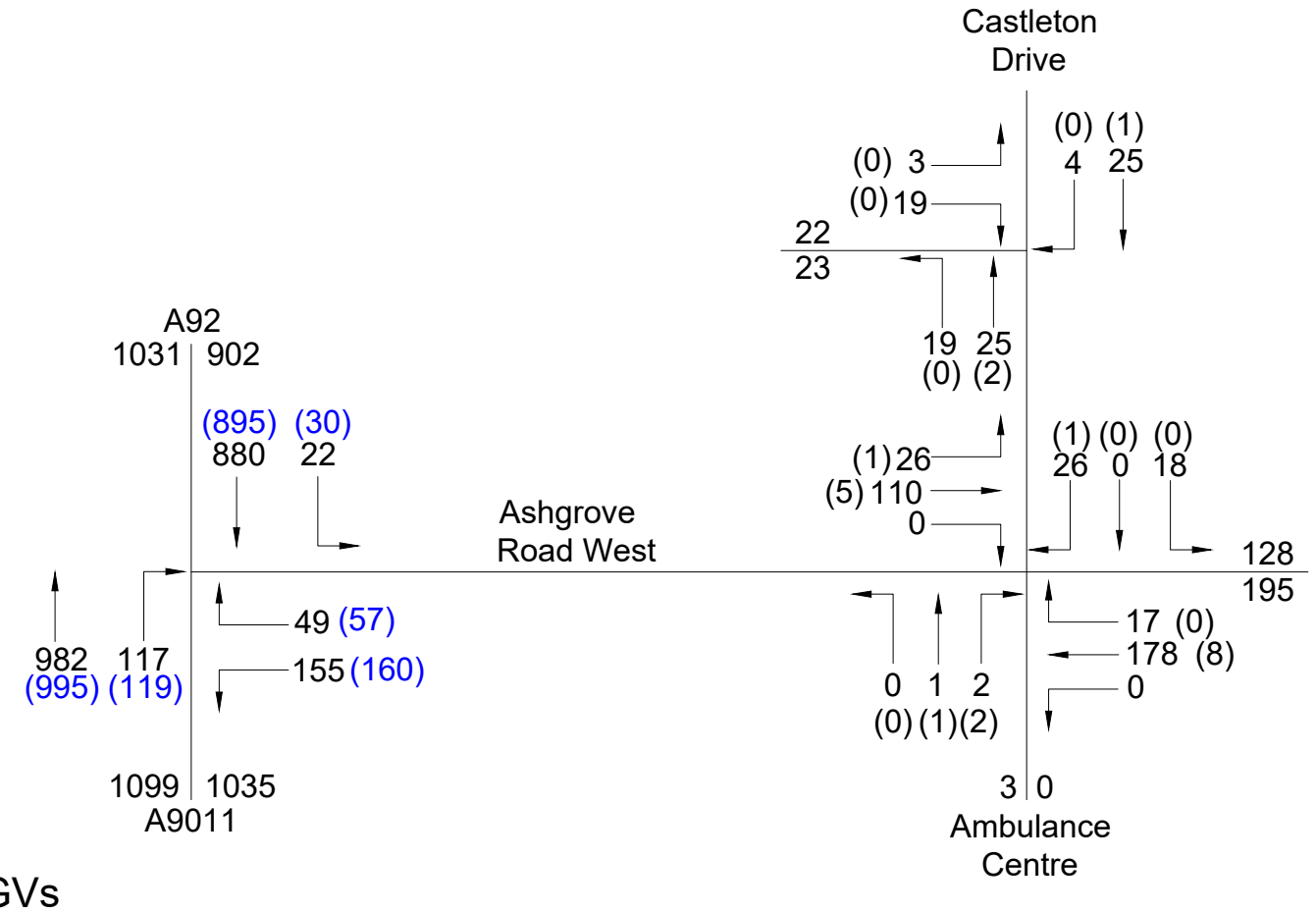
2021 SURVEYED TRAFFIC FLOWS



( ) = PCUs
( ) = No HGVs
Am Peak 08:00 - 09:00 Hours



( ) = PCUs
( ) = No HGVs
Pm Peak 16:00 - 17:00 Hours



( ) = PCUs
( ) = No HGVs
Saturday Peak 12:00 - 13:00 Hours

ADL TRAFFIC HIGHWAYS

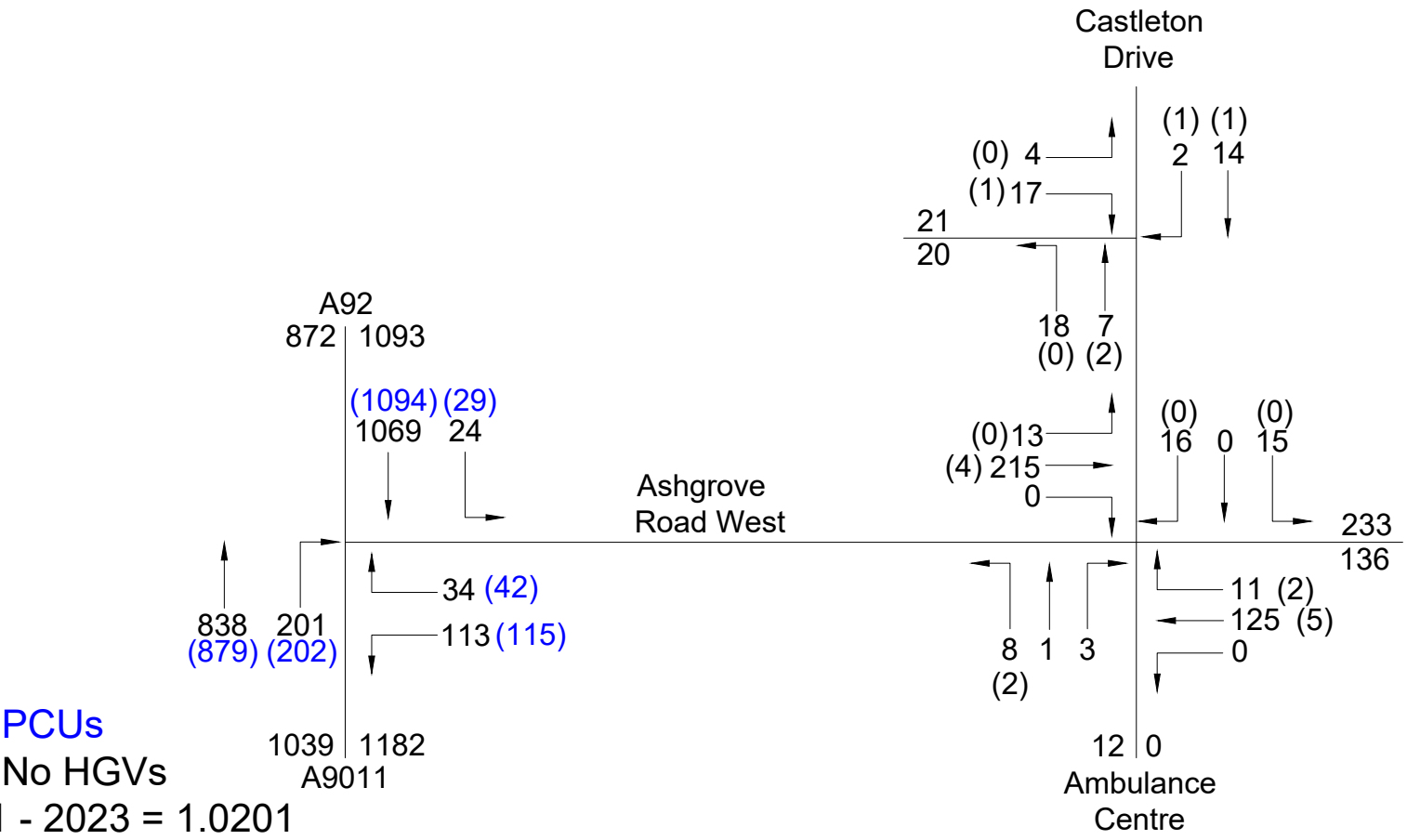
Title: 2021 SURVEYED FLOWS

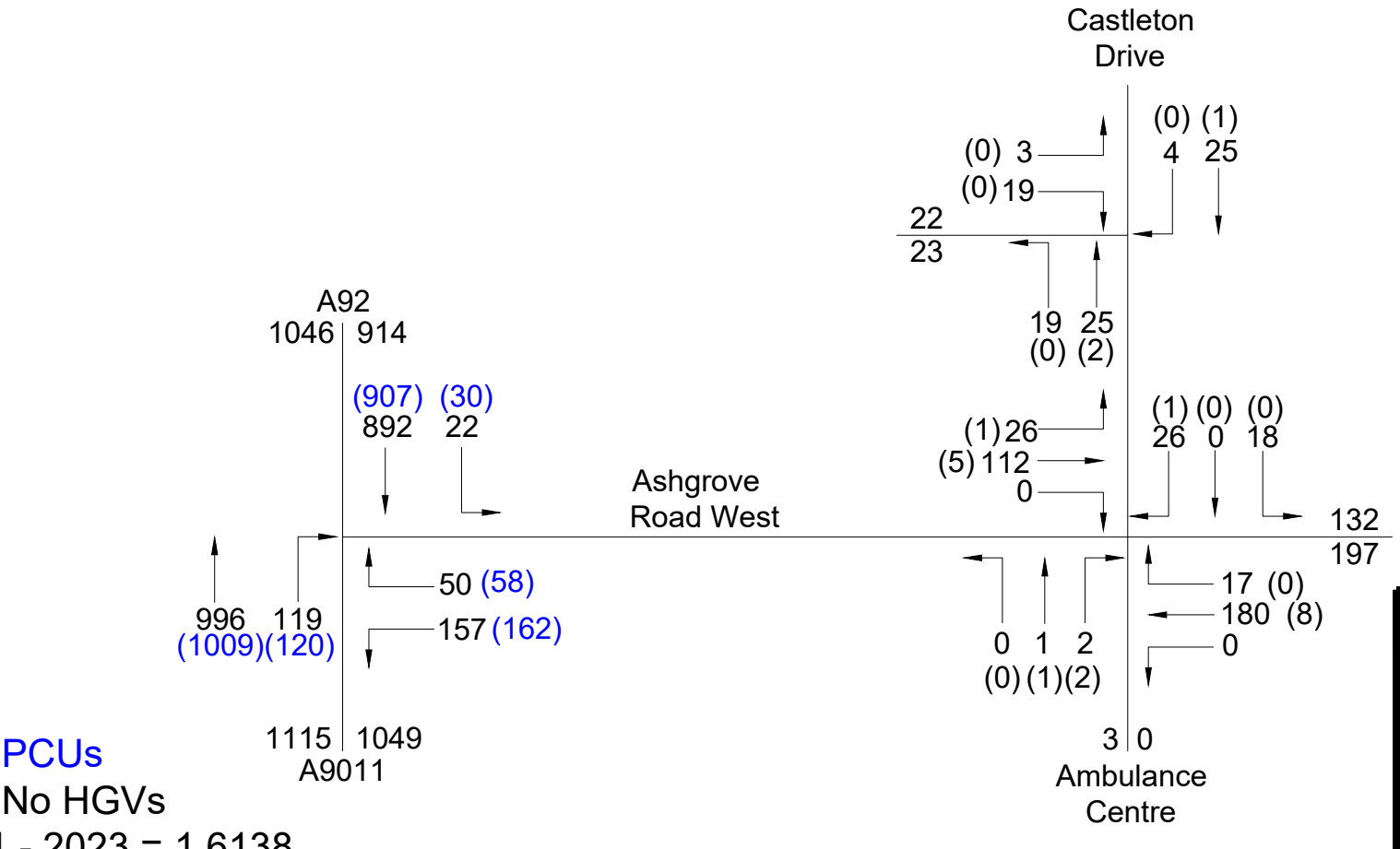
Scale: NTS@A3

APPENDIX 12.0

APPENDIX 13.0

2023 BASE TRAFFIC FLOWS





ADL TRAFFIC HIGHWAYS

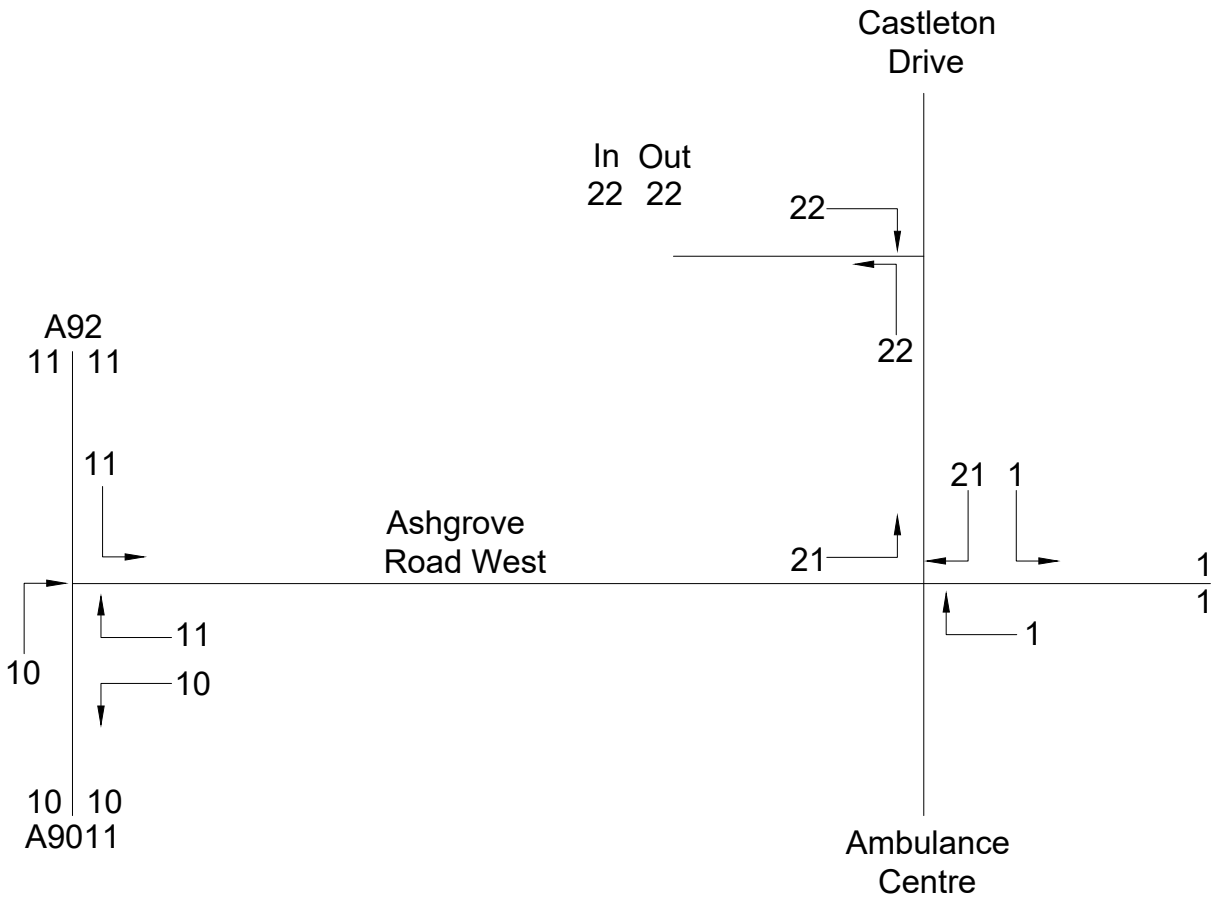
Title: 2023 BASE FLOWS

Scale: NTS@A3

APPENDIX 13.0

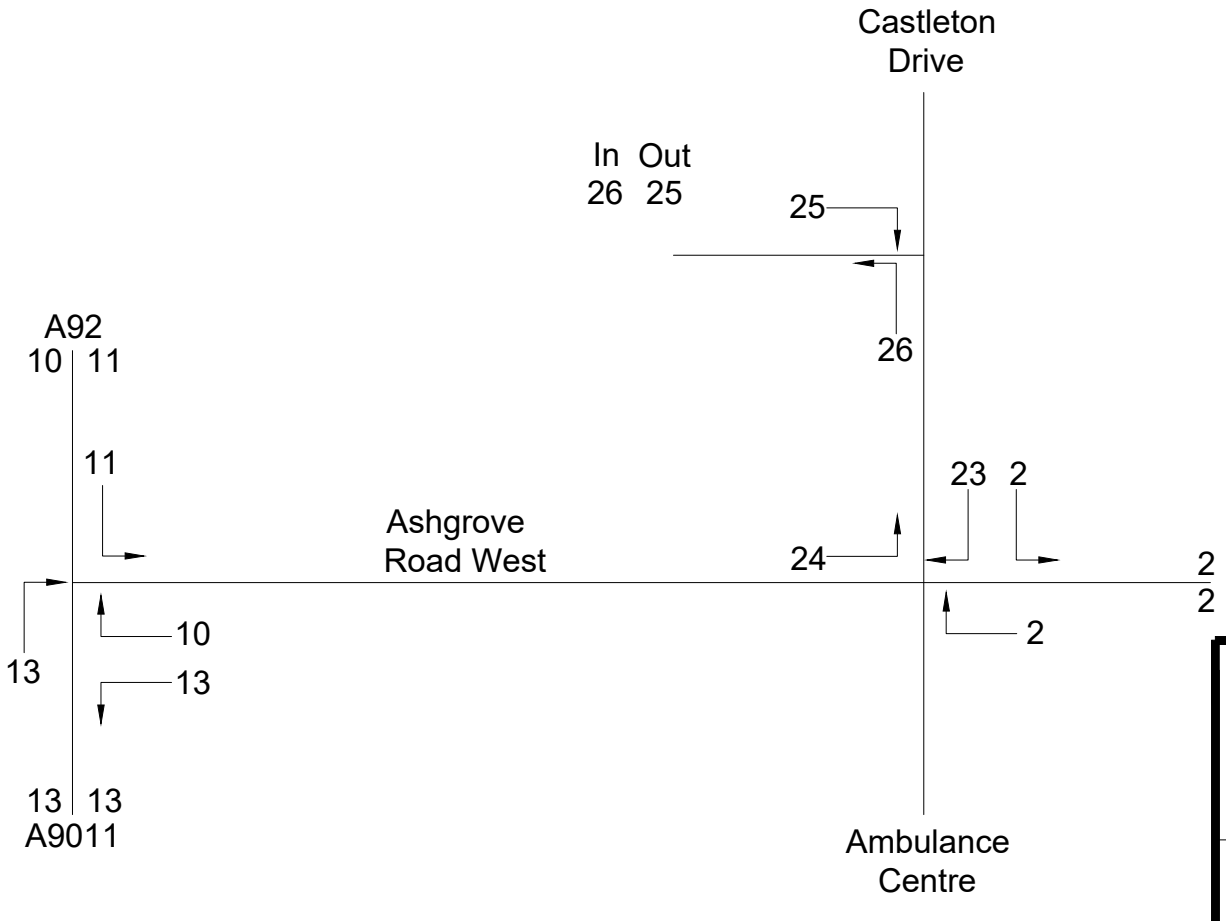
APPENDIX 14.0

PROPOSED McDONALD'S TRAFFIC



Am Peak

Pm Peak



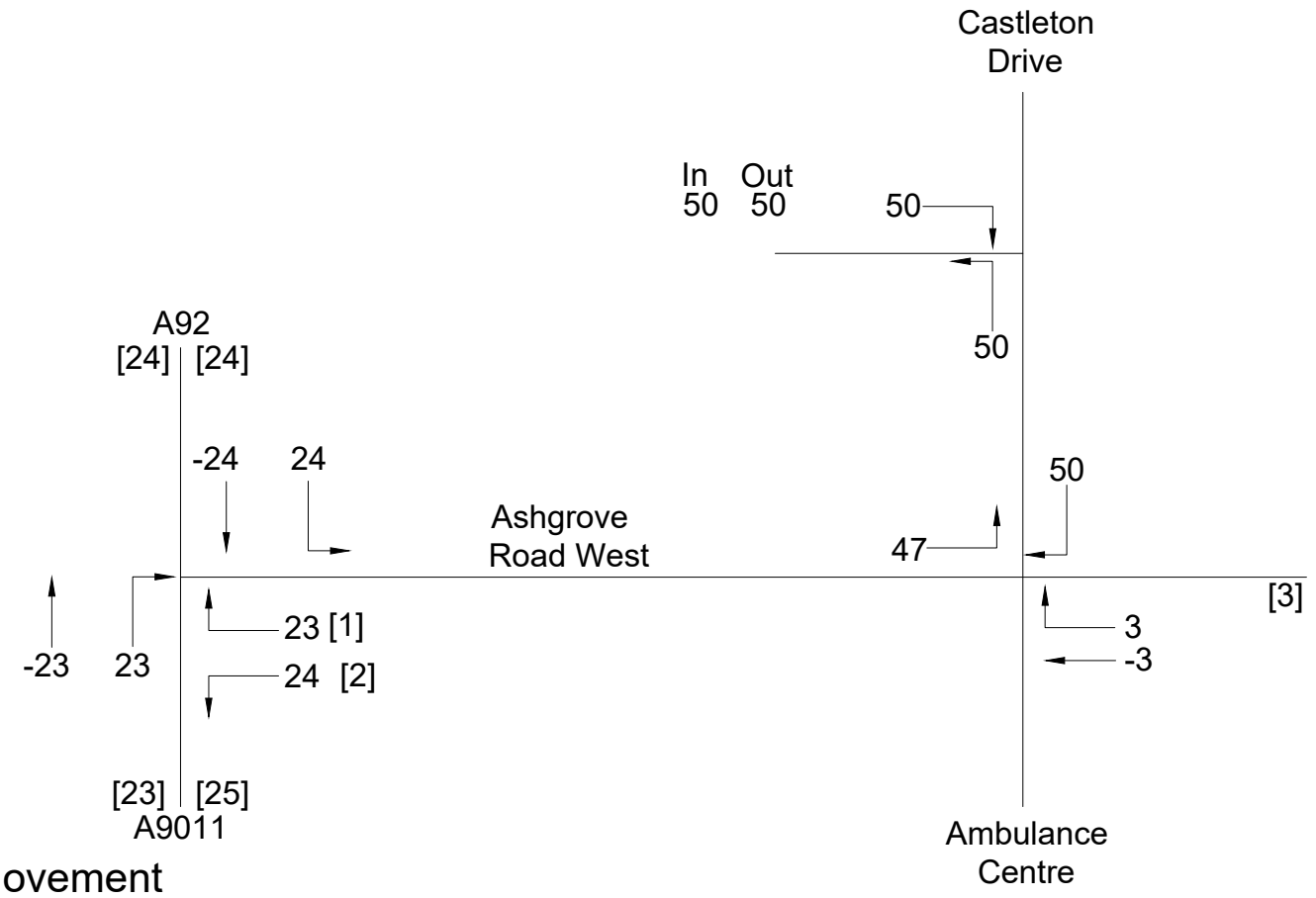
Saturday Peak

ADL TRAFFIC HIGHWAYS

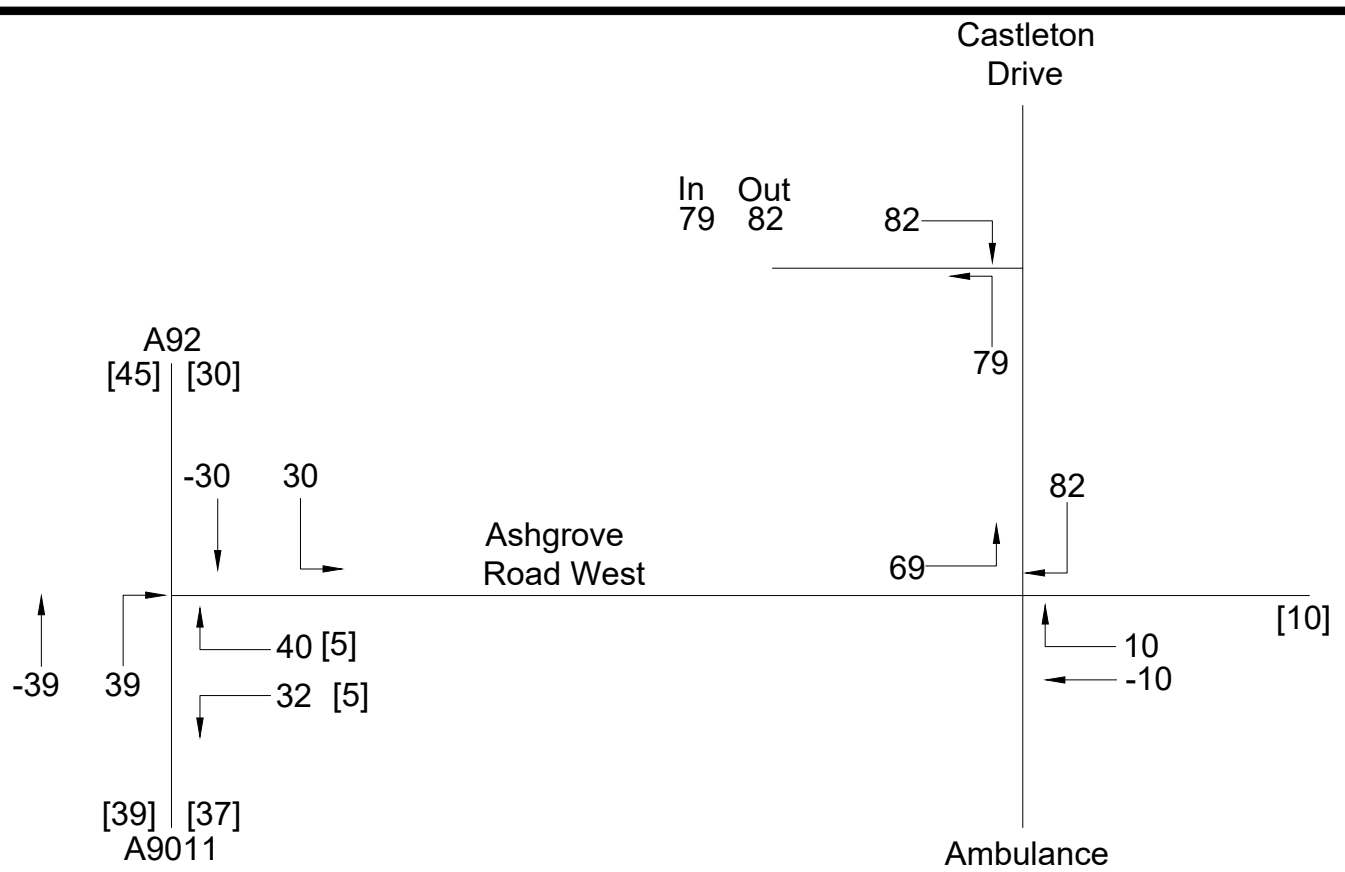
Title
McDONALDS ADDITIONAL TRIPS

Scale
NTS@A3

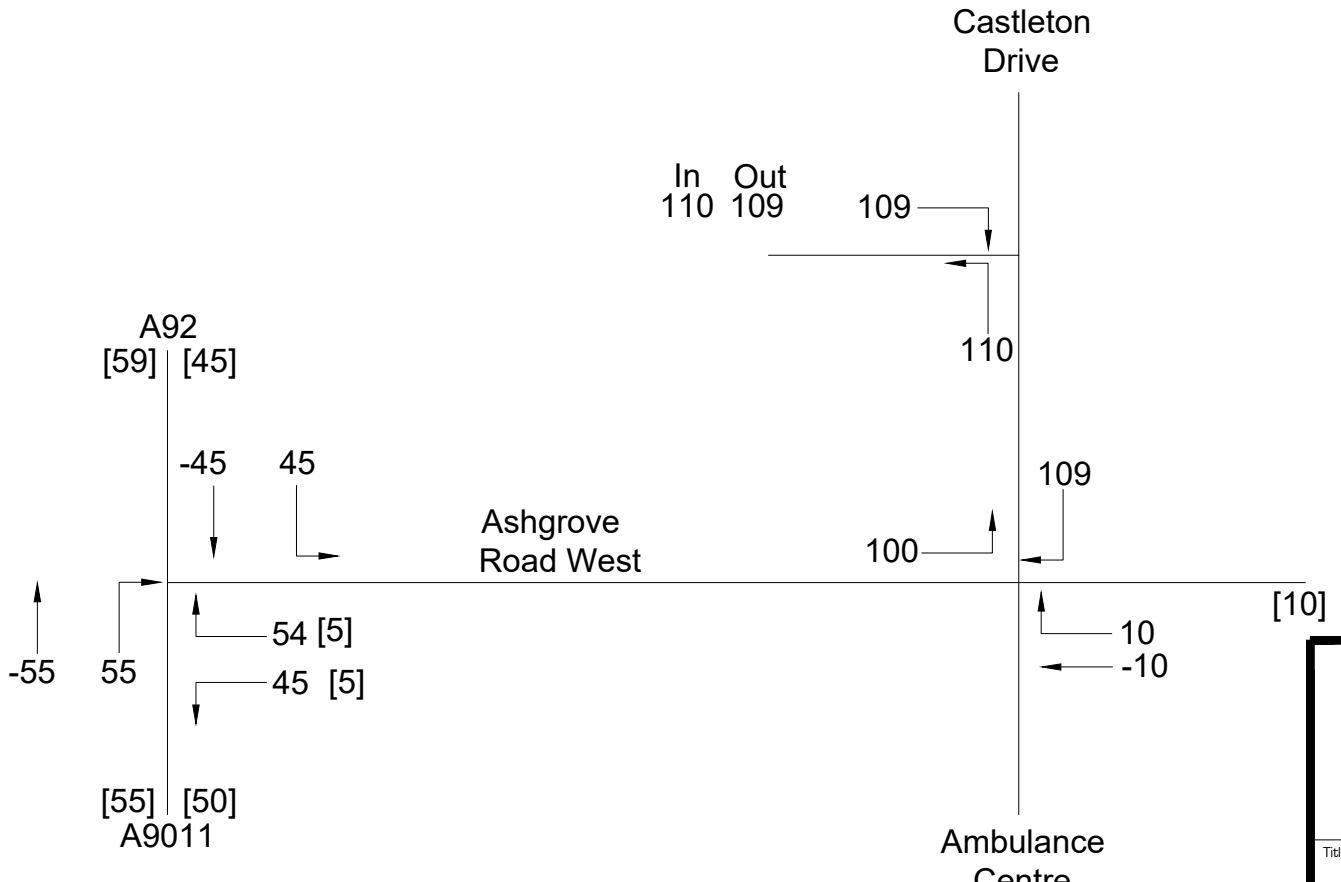
APPENDIX 14.1



[ ] = Existing Movement
Am Peak



[ ] = Existing Movement
Pm Peak



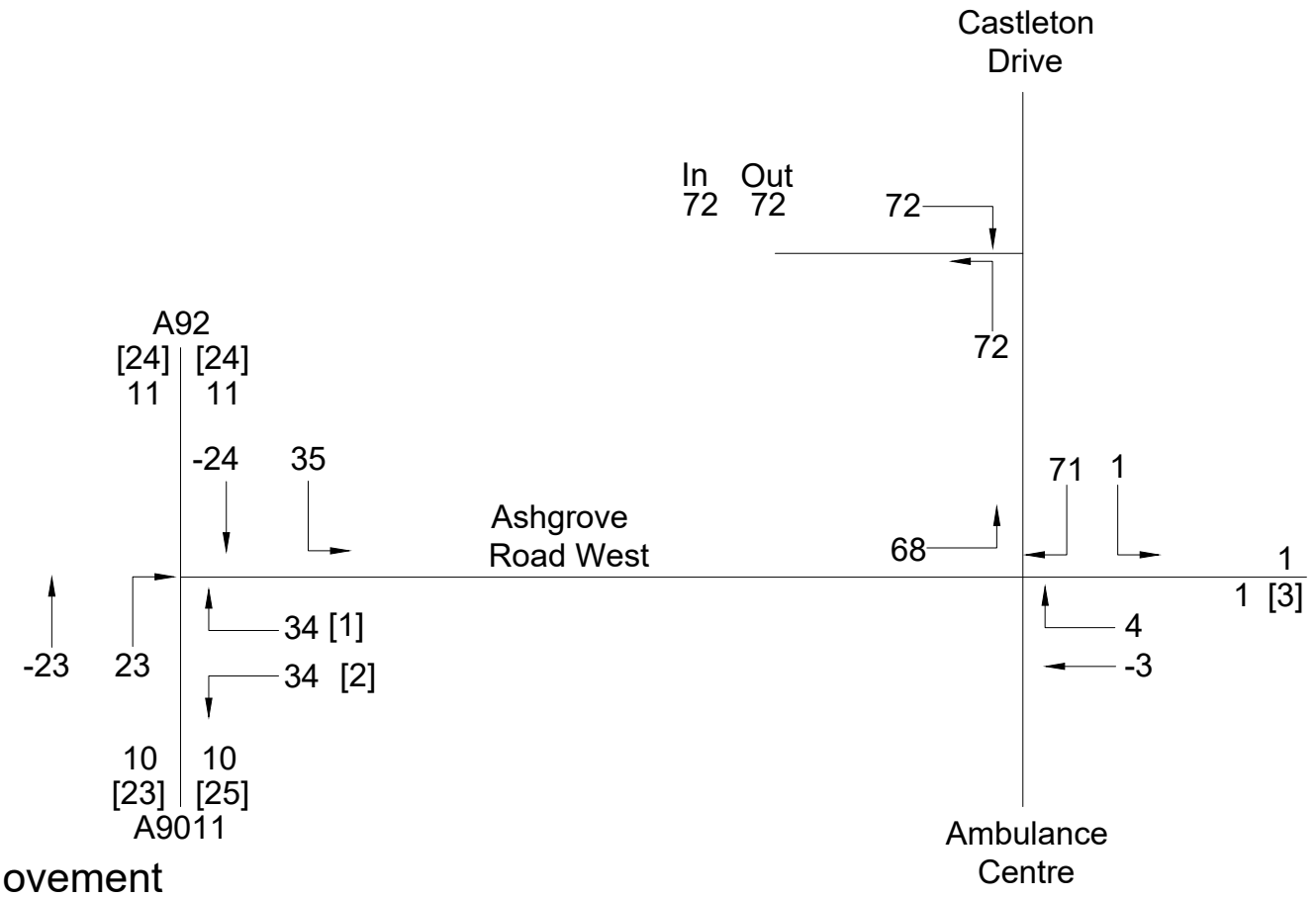
[ ] = Existing Movement
Saturday Peak

TRAFFIC
HIGHWAYS

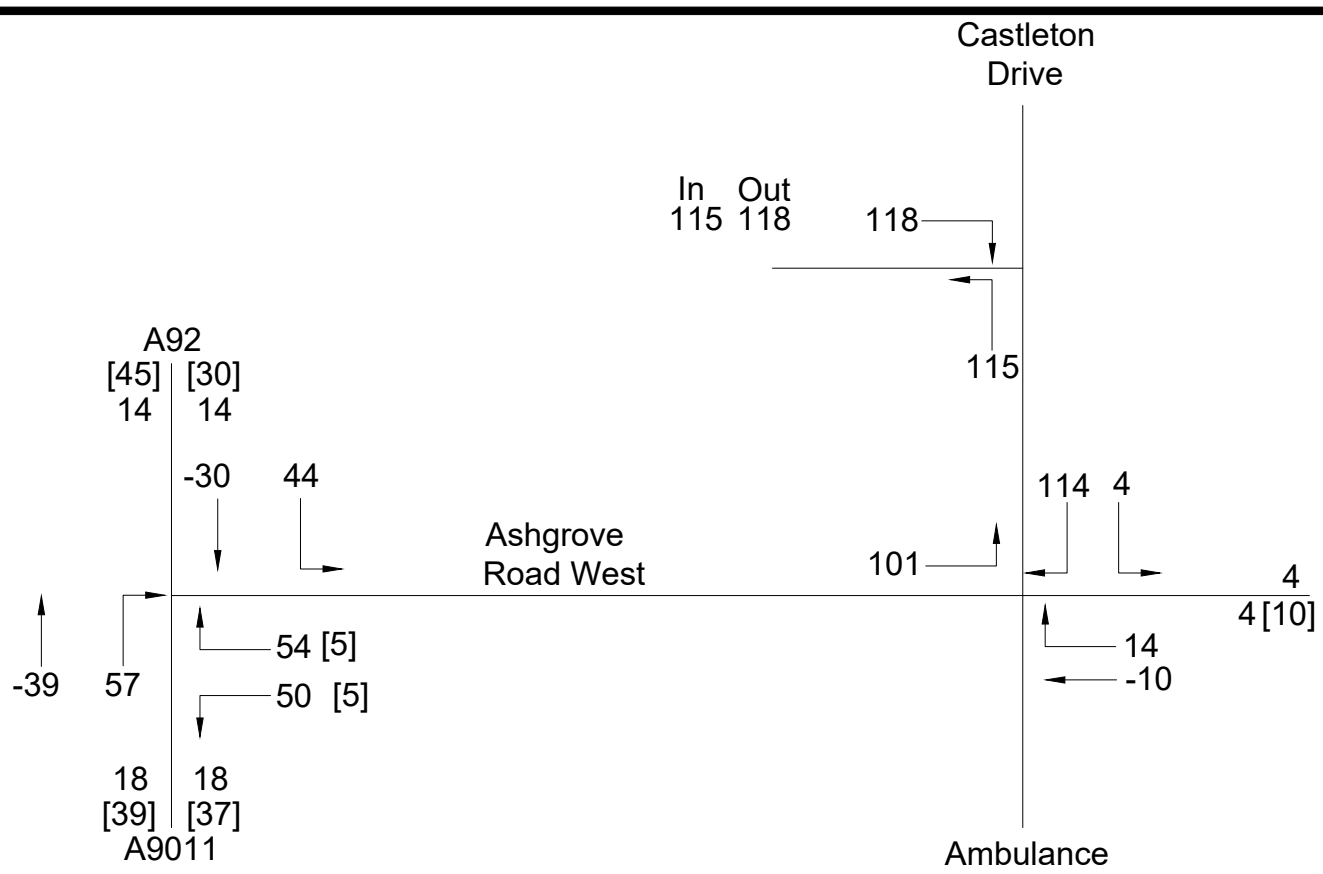
Title
McDONALDS EXISTING TRIPS

Scale
NTS@A3

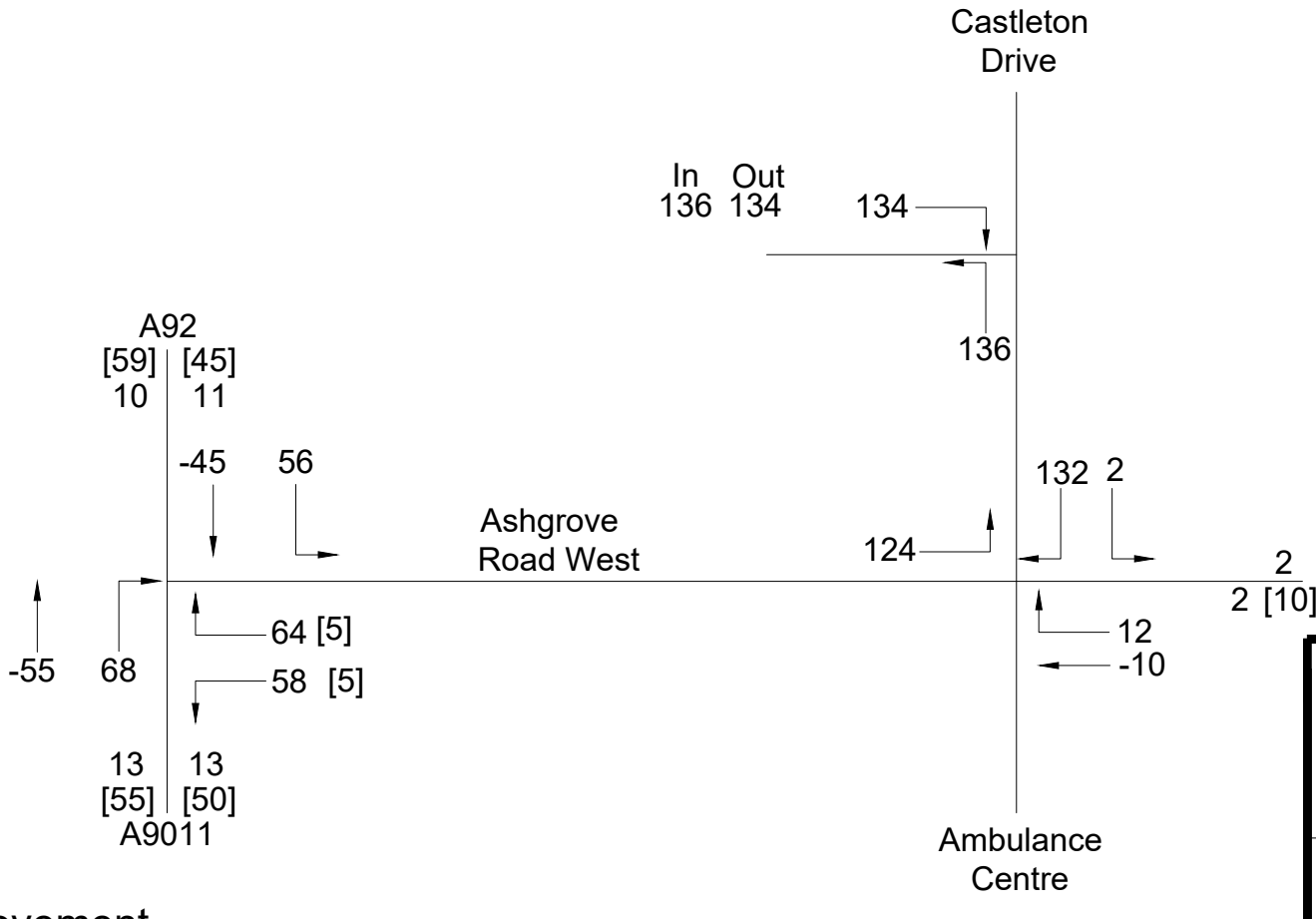
APPENDIX 14.2



[ ] = Existing Movement
Am Peak



[ ] = Existing Movement
Pm Peak



[ ] = Existing Movement
Saturday Peak

ADL TRAFFIC HIGHWAYS

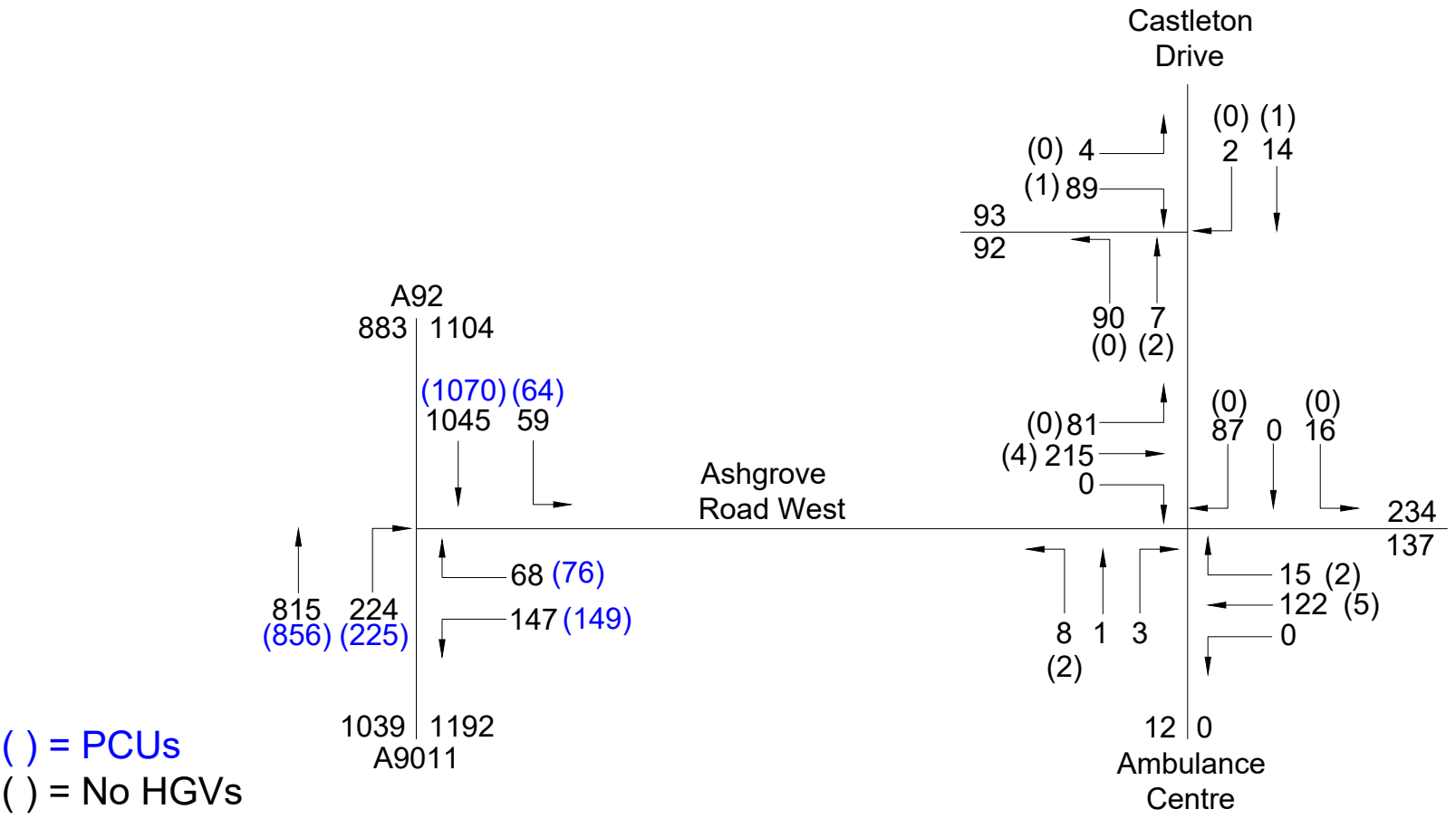
Title: McDONALDS TOTAL TRIPS

Scale: NTS@A3

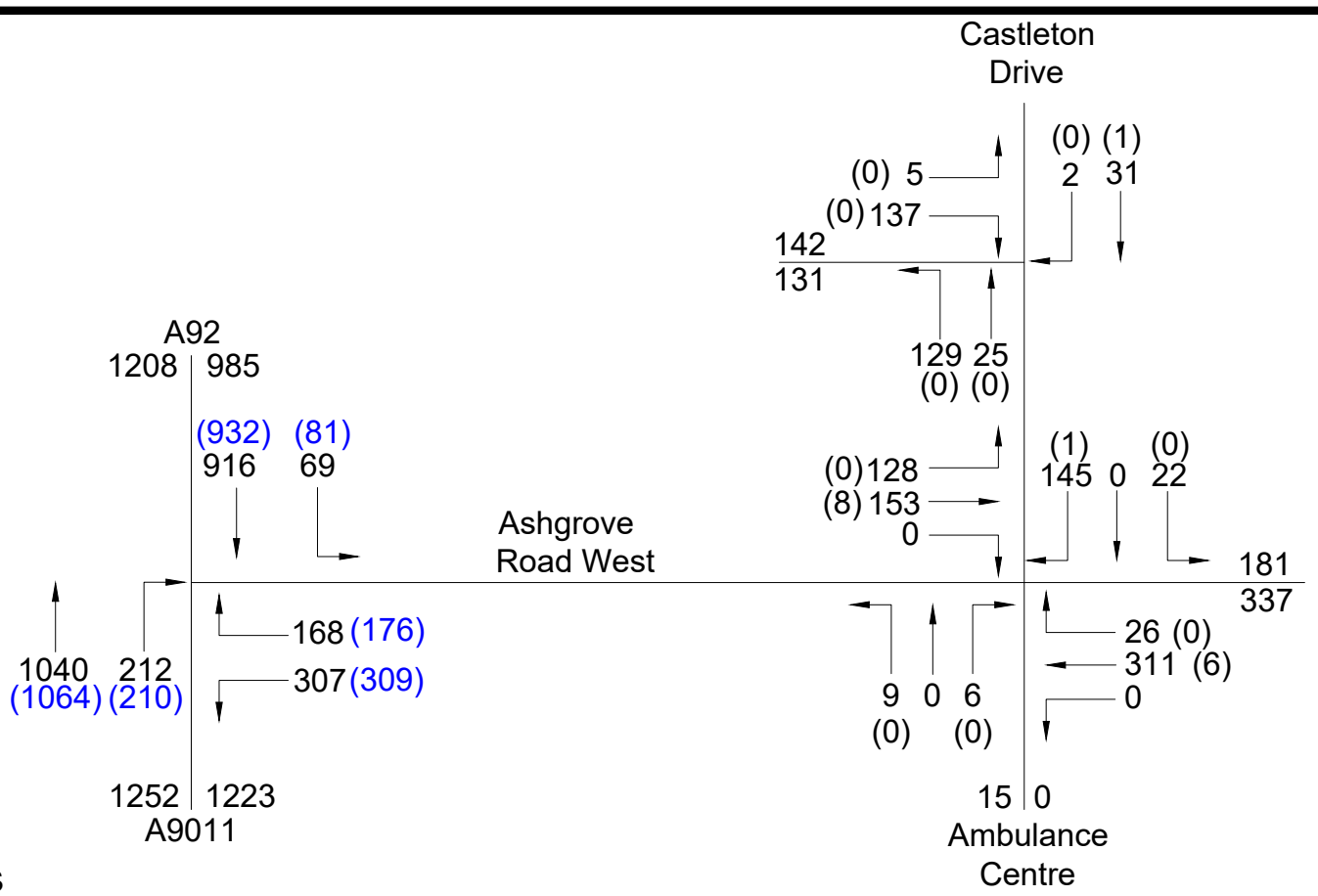
APPENDIX 14.3

APPENDIX 15.0

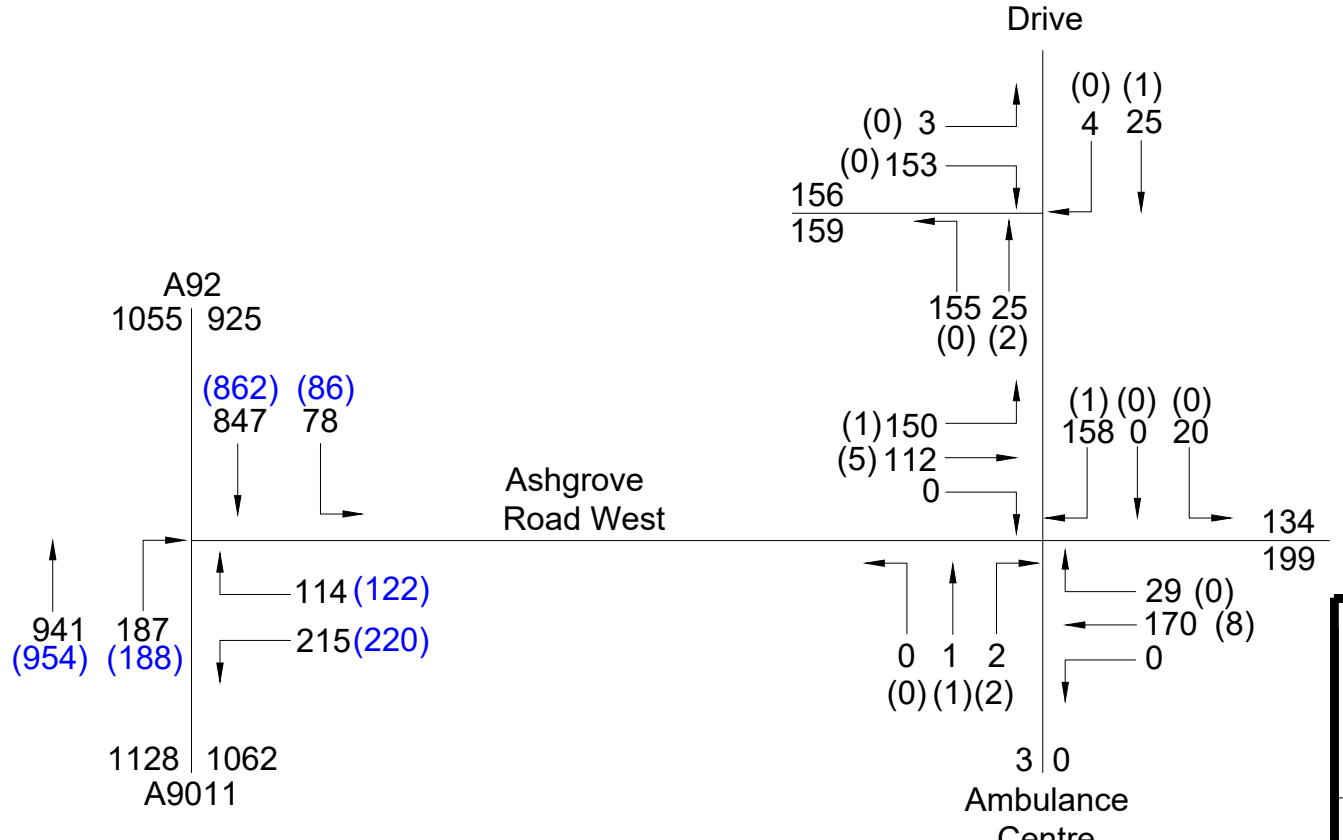
2023 TOTAL FLOWS



( ) = PCUs
( ) = No HGVs
Am Peak



( ) = PCUs
( ) = No HGVs
Pm Peak



( ) = PCUs
( ) = No HGVs
Saturday Peak

ADL TRAFFIC HIGHWAYS

Title: 2023 TOTAL FLOWS

Scale: NTS@A3

APPENDIX 15.0

APPENDIX 16.0

PICADY RESULTS: ASHGROVE ROAD WEST/CASTLETON DRIVE JUNCTION

10 to 16

32.90

9.38

3.22m

3.09m

3.48

19.07

2.84

2.79

2.75

APPENDIX 16.1
ASHGROVE ROAD WEST/ CASTLETON DRIVE JUNCTION GEOMETRY

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Castleton Drive.j9
Path: D:\5242 Aberdeen
Report generation date: 28/10/2021 09:45:06

Summary of junction performance

	Friday AM							Friday PM							Saturday Peak						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2023 Base																				
Stream B-AC	0.1	8.05	0.05	A	2.87	A	900 %	0.1	7.76	0.05	A	2.05	A	900 %	0.1	7.87	0.05	A	2.03	A	900 %
Stream C-AB	0.0	6.14	0.00	A			[]	0.0	6.07	0.00	A			[]	0.0	6.13	0.01	A			[]
	2023 Total																				
Stream B-AC	0.3	9.89	0.22	A	4.48	A	230 %	0.5	11.85	0.34	B	5.14	A	114 %	0.6	12.68	0.38	B	5.45	A	94 %
Stream C-AB	0.0	6.32	0.00	A			[Stream B-AC]	0.0	6.32	0.00	A			[Stream B-AC]	0.0	6.47	0.01	A			[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	28/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADLUK\Junction
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	Friday AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 Base	Friday PM	ONE HOUR	15:45	17:15	15	✓
D3	2023 Base	Saturday Peak	ONE HOUR	11:45	13:15	15	✓
D4	2023 Total	Friday AM	ONE HOUR	07:45	09:15	15	✓
D5	2023 Total	Friday PM	ONE HOUR	15:45	17:15	15	✓
D6	2023 Total	Saturday Peak	ONE HOUR	11:45	13:15	15	✓

Analysis Set Details

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

APPENDIX 16.2
ASHGROVE ROAD WEST/ CASTLETON DRIVE OUTPUT RESULTS

2023 Base, Friday AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive Junction	T-Junction	Two-way	2.87	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Arms

Arms

Arm	Name	Description	Arm type
A	Castleton Drive (S)		Major
B	Ashgrove Road W		Minor
C	Castleton Drive (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.45			21.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.65	32	19

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	480	0.086	0.217	0.136	0.309
1	B-C	614	0.092	0.233	-	-
1	C-B	586	0.223	0.223	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	Friday 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		ONE HOUR	✓	25	100.000
B		ONE HOUR	✓	21	100.000
C		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	18	7
	B	17	0	4
	C	14	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	30
	B	6	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	8.05	0.1	A	19	29
C-AB	0.00	6.14	0.0	A	2	3
C-A					13	19
A-B					17	25
A-C					6	10

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)	LOS
B-AC	16	4	472	0.033	16	0.0	0.0	7.882	A
C-AB	2	0.38	588	0.003	2	0.0	0.0	6.132	A
C-A	11	3			11				
A-B	14	3			14				
A-C	5	1			5				

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)	LOS
B-AC	19	5	471	0.040	19	0.0	0.0	7.954	A
C-AB	2	0.46	589	0.003	2	0.0	0.0	6.130	A
C-A	13	3			13				
A-B	16	4			16				
A-C	6	2			6				

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)	LOS
B-AC	23	6	470	0.049	23	0.0	0.1	8.050	A
C-AB	2	0.57	590	0.004	2	0.0	0.0	6.127	A
C-A	15	4			15				
A-B	20	5			20				
A-C	8	2			8				

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)	LOS
B-AC	23	6	470	0.049	23	0.1	0.1	8.050	A
C-AB	2	0.57	590	0.004	2	0.0	0.0	6.128	A
C-A	15	4			15				
A-B	20	5			20				
A-C	8	2			8				

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)	LOS
B-AC	19	5	471	0.040	19	0.1	0.0	7.957	A
C-AB	2	0.46	589	0.003	2	0.0	0.0	6.132	A
C-A	13	3			13				
A-B	16	4			16				
A-C	6	2			6				

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)	LOS
B-AC	16	4	472	0.033	16	0.0	0.0	7.889	A
C-AB	2	0.38	588	0.003	2	0.0	0.0	6.136	A
C-A	11	3			11				
A-B	14	3			14				
A-C	5	1			5				

2023 Base, Friday PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive Junction	T-Junction	Two-way	2.05	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	Friday PM	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	39	100.000
B		ONE HOUR	✓	24	100.000
C		ONE HOUR	✓	33	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	14	25
	B	19	0	5
	C	31	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	7.76	0.1	A	22	33
C-AB	0.00	6.07	0.0	A	2	3
C-A					28	43
A-B					13	19
A-C					23	34

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	18	5	494	0.037	18	0.0	0.0	7.554	A
C-AB	2	0.39	595	0.003	2	0.0	0.0	6.063	A
C-A	23	6			23				
A-B	11	3			11				
A-C	19	5			19				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	5	493	0.044	22	0.0	0.0	7.639	A
C-AB	2	0.47	597	0.003	2	0.0	0.0	6.048	A
C-A	28	7			28				
A-B	13	3			13				
A-C	22	6			22				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	490	0.054	26	0.0	0.1	7.757	A
C-AB	2	0.58	599	0.004	2	0.0	0.0	6.027	A
C-A	34	8			34				
A-B	15	4			15				
A-C	28	7			28				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	490	0.054	26	0.1	0.1	7.757	A
C-AB	2	0.58	599	0.004	2	0.0	0.0	6.028	A
C-A	34	8			34				
A-B	15	4			15				
A-C	28	7			28				

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)	LOS
B-AC	22	5	493	0.044	22	0.1	0.0	7.644	A
C-AB	2	0.47	597	0.003	2	0.0	0.0	6.050	A
C-A	28	7			28				
A-B	13	3			13				
A-C	22	6			22				

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)	LOS
B-AC	18	5	494	0.037	18	0.0	0.0	7.561	A
C-AB	2	0.39	595	0.003	2	0.0	0.0	6.067	A
C-A	23	6			23				
A-B	11	3			11				
A-C	19	5			19				

2023 Base, Saturday Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive Junction	T-Junction	Two-way	2.03	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

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	2023 Base	Saturday Peak	ONE HOUR	11:45	13:15	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		ONE HOUR	✓	44	100.000
B		ONE HOUR	✓	22	100.000
C		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	19	25
	B	19	0	3
	C	25	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	7.87	0.1	A	20	30
C-AB	0.01	6.13	0.0	A	4	6
C-A					23	34
A-B					17	26
A-C					23	34

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	17	4	486	0.034	16	0.0	0.0	7.671	A
C-AB	3	0.78	591	0.005	3	0.0	0.0	6.122	A
C-A	19	5			19				
A-B	14	4			14				
A-C	19	5			19				

12:00 - 12:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	20	5	484	0.041	20	0.0	0.0	7.757	A
C-AB	4	0.93	592	0.006	4	0.0	0.0	6.118	A
C-A	22	6			22				
A-B	17	4			17				
A-C	22	6			22				

12:15 - 12:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	481	0.050	24	0.0	0.1	7.874	A
C-AB	5	1	593	0.008	5	0.0	0.0	6.113	A
C-A	27	7			27				
A-B	21	5			21				
A-C	28	7			28				

12:30 - 12:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	481	0.050	24	0.1	0.1	7.874	A
C-AB	5	1	593	0.008	5	0.0	0.0	6.116	A
C-A	27	7			27				
A-B	21	5			21				
A-C	28	7			28				

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	20	5	484	0.041	20	0.1	0.0	7.759	A
C-AB	4	0.93	592	0.006	4	0.0	0.0	6.122	A
C-A	22	6			22				
A-B	17	4			17				
A-C	22	6			22				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	17	4	486	0.034	17	0.0	0.0	7.676	A
C-AB	3	0.78	591	0.005	3	0.0	0.0	6.125	A
C-A	19	5			19				
A-B	14	4			14				
A-C	19	5			19				

2023 Total, Friday AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive Junction	T-Junction	Two-way	4.48	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	230	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023 Total	Friday 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		ONE HOUR	✓	97	100.000
B		ONE HOUR	✓	93	100.000
C		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	90	7
	B	89	0	4
	C	14	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	30
	B	1	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	9.89	0.3	A	85	128
C-AB	0.00	6.32	0.0	A	2	3
C-A					13	19
A-B					83	124
A-C					6	10

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)	LOS
B-AC	70	18	471	0.149	69	0.0	0.2	8.957	A
C-AB	2	0.38	576	0.003	2	0.0	0.0	6.260	A
C-A	11	3			11				
A-B	68	17			68				
A-C	5	1			5				

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)	LOS
B-AC	84	21	469	0.178	83	0.2	0.2	9.338	A
C-AB	2	0.46	575	0.003	2	0.0	0.0	6.283	A
C-A	13	3			13				
A-B	81	20			81				
A-C	6	2			6				

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)	LOS
B-AC	102	26	466	0.220	102	0.2	0.3	9.877	A
C-AB	2	0.57	572	0.004	2	0.0	0.0	6.315	A
C-A	15	4			15				
A-B	99	25			99				
A-C	8	2			8				

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)	LOS
B-AC	102	26	466	0.220	102	0.3	0.3	9.891	A
C-AB	2	0.57	572	0.004	2	0.0	0.0	6.316	A
C-A	15	4			15				
A-B	99	25			99				
A-C	8	2			8				

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)	LOS
B-AC	84	21	469	0.178	84	0.3	0.2	9.357	A
C-AB	2	0.46	575	0.003	2	0.0	0.0	6.285	A
C-A	13	3			13				
A-B	81	20			81				
A-C	6	2			6				

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)	LOS
B-AC	70	18	471	0.149	70	0.2	0.2	8.996	A
C-AB	2	0.38	576	0.003	2	0.0	0.0	6.261	A
C-A	11	3			11				
A-B	68	17			68				
A-C	5	1			5				

2023 Total, Friday PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive Junction	T-Junction	Two-way	5.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	114	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Total	Friday PM	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	154	100.000
B		ONE HOUR	✓	142	100.000
C		ONE HOUR	✓	33	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	129	25
	B	137	0	5
	C	31	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.34	11.85	0.5	B	130	195
C-AB	0.00	6.32	0.0	A	2	3
C-A					28	43
A-B					118	178
A-C					23	34

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	107	27	467	0.229	106	0.0	0.3	9.921	A
C-AB	2	0.39	576	0.003	2	0.0	0.0	6.264	A
C-A	23	6			23				
A-B	97	24			97				
A-C	19	5			19				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	128	32	464	0.275	127	0.3	0.4	10.671	B
C-AB	2	0.47	574	0.003	2	0.0	0.0	6.287	A
C-A	28	7			28				
A-B	116	29			116				
A-C	22	6			22				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	156	39	460	0.340	156	0.4	0.5	11.812	B
C-AB	2	0.59	572	0.004	2	0.0	0.0	6.320	A
C-A	34	8			34				
A-B	142	36			142				
A-C	28	7			28				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	156	39	460	0.340	156	0.5	0.5	11.852	B
C-AB	2	0.59	572	0.004	2	0.0	0.0	6.321	A
C-A	34	8			34				
A-B	142	36			142				
A-C	28	7			28				

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)	LOS
B-AC	128	32	464	0.275	128	0.5	0.4	10.726	B
C-AB	2	0.47	574	0.003	2	0.0	0.0	6.289	A
C-A	28	7			28				
A-B	116	29			116				
A-C	22	6			22				

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)	LOS
B-AC	107	27	467	0.229	107	0.4	0.3	10.005	B
C-AB	2	0.39	576	0.003	2	0.0	0.0	6.267	A
C-A	23	6			23				
A-B	97	24			97				
A-C	19	5			19				

2023 Total, Saturday Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive Junction	T-Junction	Two-way	5.45	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	94	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Total	Saturday Peak	ONE HOUR	11:45	13:15	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		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	156	100.000
C		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	155	25
	B	153	0	3
	C	25	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	12.68	0.6	B	143	215
C-AB	0.01	6.47	0.0	A	4	6
C-A					23	34
A-B					142	213
A-C					23	34

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	117	29	464	0.253	116	0.0	0.3	10.313	B
C-AB	3	0.78	568	0.005	3	0.0	0.0	6.366	A
C-A	19	5			19				
A-B	117	29			117				
A-C	19	5			19				

12:00 - 12:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	140	35	460	0.305	140	0.3	0.4	11.217	B
C-AB	4	0.94	565	0.007	4	0.0	0.0	6.411	A
C-A	22	6			22				
A-B	139	35			139				
A-C	22	6			22				

12:15 - 12:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	172	43	456	0.377	171	0.4	0.6	12.634	B
C-AB	5	1	561	0.008	5	0.0	0.0	6.474	A
C-A	27	7			27				
A-B	171	43			171				
A-C	28	7			28				

12:30 - 12:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	172	43	456	0.377	172	0.6	0.6	12.680	B
C-AB	5	1	561	0.008	5	0.0	0.0	6.475	A
C-A	27	7			27				
A-B	171	43			171				
A-C	28	7			28				

12:45 - 13:00

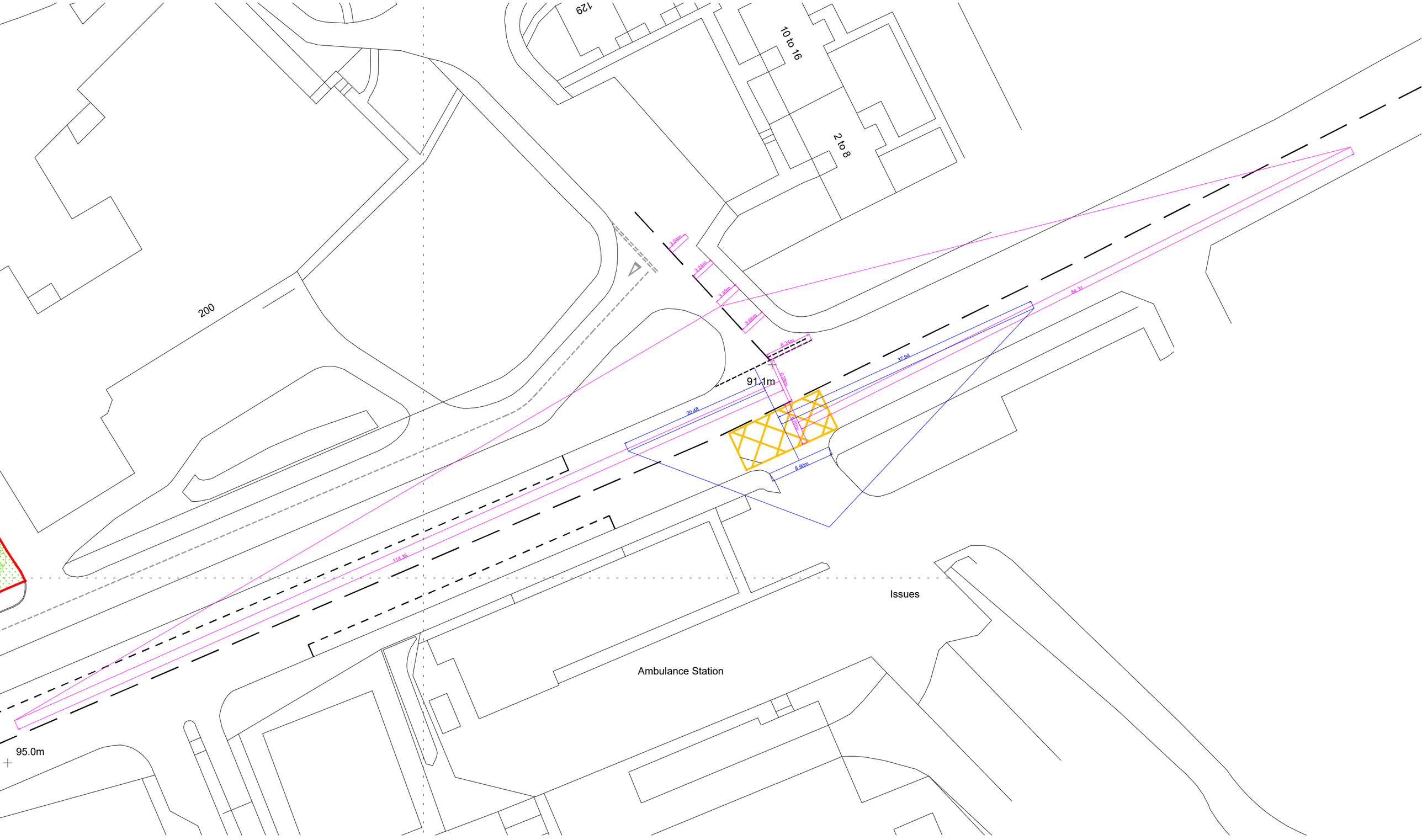
Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	140	35	460	0.305	141	0.6	0.4	11.287	B
C-AB	4	0.94	565	0.007	4	0.0	0.0	6.412	A
C-A	22	6			22				
A-B	139	35			139				
A-C	22	6			22				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	117	29	464	0.253	118	0.4	0.3	10.417	B
C-AB	3	0.78	568	0.005	3	0.0	0.0	6.367	A
C-A	19	5			19				
A-B	117	29			117				
A-C	19	5			19				

APPENDIX 17.0

PICADY RESULTS: CASTLETON DRIVE/A9011 JUNCTION



APPENDIX 17.1
CASTLETON DRIVE/ A9011
JUNCTION GEOMETRY

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947

Filename: A9011.j9
Path: D:\5242 Aberdeen
Report generation date: 28/10/2021 10:30:12

Summary of junction performance

	Friday AM							Friday PM							Saturday Peak						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2023 Base																				
Stream B-ACD	0.0	6.64	0.03	A	0.98	A	422 % [Stream D-ABC]	0.0	6.17	0.03	A	0.92	A	284 % [Stream D-ABC]	0.0	0.00	0.00	A	1.06	A	419 % [Stream D-ABC]
Stream A-BCD	0.0	6.46	0.03	A				0.0	4.79	0.03	A				0.0	5.27	0.04	A			
Stream D-ABC	0.1	6.45	0.06	A				0.1	7.20	0.10	A				0.1	6.69	0.08	A			
Stream C-ABD	0.0	0.00	0.00	A				0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2023 Total																				
Stream B-ACD	0.0	6.69	0.03	A	2.00	A	166 % [Stream D-ABC]	0.0	6.25	0.03	A	2.74	A	77 % [Stream D-ABC]	0.0	0.00	0.00	A	3.22	A	90 % [Stream D-ABC]
Stream A-BCD	0.1	6.61	0.04	A				0.1	5.01	0.06	A				0.1	5.53	0.06	A			
Stream D-ABC	0.3	8.51	0.21	A				0.6	11.33	0.37	B				0.6	10.60	0.37	B			
Stream C-ABD	0.0	0.00	0.00	A				0.0	0.00	0.00	A				0.0	0.00	0.00	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	28/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADLUK\Junction
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	Friday AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 Base	Friday PM	ONE HOUR	15:45	17:15	15	✓
D3	2023 Base	Saturday Peak	ONE HOUR	11:45	13:15	15	✓
D4	2023 Total	Friday AM	ONE HOUR	07:45	09:15	15	✓
D5	2023 Total	Friday PM	ONE HOUR	15:45	17:15	15	✓
D6	2023 Total	Saturday Peak	ONE HOUR	11:45	13:15	15	✓

Analysis Set Details

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

APPENDIX 17.2
CASTLETON DRIVE/ A9011
OUTPUT RESULTS

2023 Base, Friday AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive/A9011	Crossroads	Two-way	0.98	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	422	Stream D-ABC

Arms

Arms

Arm	Name	Description	Arm type
A	A9011 (E)		Major
B	Ambulance Service		Minor
C	A9011 (W)		Major
D	Castleton Drive		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	12.03			100.0	✓	0.00
C	12.03			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	5.00	21	38
D	One lane	3.66	84	114

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	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
1	A-D	632	-	-	-	-	-	-	0.181	0.258	0.181	-	-	-
1	B-A	604	0.081	0.205	0.205	-	-	-	0.129	0.293	-	0.205	0.205	0.102
1	B-C	778	0.088	0.222	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	604	0.081	0.205	0.205	-	-	-	0.129	0.293	0.129	-	-	-
1	B-D, offside lane	604	0.081	0.205	0.205	-	-	-	0.129	0.293	0.129	-	-	-
1	C-B	632	0.181	0.181	0.258	-	-	-	-	-	-	-	-	-
1	D-A	742	-	-	-	-	-	-	0.212	-	0.084	-	-	-
1	D-B, nearside lane	599	0.128	0.128	0.291	-	-	-	0.204	0.204	0.081	-	-	-
1	D-B, offside lane	599	0.128	0.128	0.291	-	-	-	0.204	0.204	0.081	-	-	-
1	D-C	599	-	0.128	0.291	0.102	0.204	0.204	0.204	0.204	0.081	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	Friday 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		ONE HOUR	✓	136	100.000
B		ONE HOUR	✓	14	100.000
C		ONE HOUR	✓	228	100.000
D		ONE HOUR	✓	31	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	125	11
	B	3	0	8	3
	C	215	0	0	13
	D	15	0	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	20
	B	0	0	30	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	6.64	0.0	A	13	19
A-BCD	0.03	6.46	0.0	A	13	19
A-B					0	0
A-C					112	168
D-ABC	0.06	6.45	0.1	A	28	43
C-ABD	0.00	0.00	0.0	A	0	0
C-D					12	18
C-A					197	296

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)	LOS
B-ACD	11	3	571	0.018	10	0.0	0.0	6.422	A
A-BCD	10	2	567	0.018	10	0.0	0.0	6.459	A
A-B	0	0			0				
A-C	92	23			92				
D-ABC	23	6	614	0.038	23	0.0	0.0	6.090	A
C-ABD	0	0	609	0.000	0	0.0	0.0	0.000	A
C-D	10	2			10				
C-A	162	40			162				

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)	LOS
B-ACD	13	3	565	0.022	13	0.0	0.0	6.513	A
A-BCD	12	3	575	0.021	12	0.0	0.0	6.404	A
A-B	0	0			0				
A-C	110	27			110				
D-ABC	28	7	605	0.046	28	0.0	0.0	6.237	A
C-ABD	0	0	605	0.000	0	0.0	0.0	0.000	A
C-D	12	3			12				
C-A	193	48			193				

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)	LOS
B-ACD	15	4	557	0.028	15	0.0	0.0	6.644	A
A-BCD	16	4	587	0.027	16	0.0	0.0	6.317	A
A-B	0	0			0				
A-C	134	33			134				
D-ABC	34	9	592	0.058	34	0.0	0.1	6.449	A
C-ABD	0	0	599	0.000	0	0.0	0.0	0.000	A
C-D	14	4			14				
C-A	237	59			237				

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)	LOS
B-ACD	15	4	557	0.028	15	0.0	0.0	6.644	A
A-BCD	16	4	587	0.027	16	0.0	0.0	6.305	A
A-B	0	0			0				
A-C	134	33			134				
D-ABC	34	9	592	0.058	34	0.1	0.1	6.449	A
C-ABD	0	0	599	0.000	0	0.0	0.0	0.000	A
C-D	14	4			14				
C-A	237	59			237				

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)	LOS
B-ACD	13	3	565	0.022	13	0.0	0.0	6.514	A
A-BCD	12	3	576	0.021	12	0.0	0.0	6.372	A
A-B	0	0			0				
A-C	110	27			110				
D-ABC	28	7	605	0.046	28	0.1	0.0	6.241	A
C-ABD	0	0	605	0.000	0	0.0	0.0	0.000	A
C-D	12	3			12				
C-A	193	48			193				

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)	LOS
B-ACD	11	3	571	0.018	11	0.0	0.0	6.422	A
A-BCD	10	2	567	0.018	10	0.0	0.0	6.447	A
A-B	0	0			0				
A-C	92	23			92				
D-ABC	23	6	614	0.038	23	0.0	0.0	6.094	A
C-ABD	0	0	609	0.000	0	0.0	0.0	0.000	A
C-D	10	2			10				
C-A	162	40			162				

2023 Base, Friday PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive/A9011	Crossroads	Two-way	0.92	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	284	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	Friday PM	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	333	100.000
B		ONE HOUR	✓	15	100.000
C		ONE HOUR	✓	180	100.000
D		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	321	12
	B	6	0	9	0
	C	153	0	0	27
	D	18	0	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	0
	B	0	0	0	0
	C	6	0	0	0
	D	0	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	6.17	0.0	A	14	21
A-BCD	0.03	4.79	0.0	A	18	27
A-B					0	0
A-C					288	432
D-ABC	0.10	7.20	0.1	A	45	67
C-ABD	0.00	0.00	0.0	A	0	0
C-D					25	37
C-A					140	211

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	11	3	631	0.018	11	0.0	0.0	5.807	A
A-BCD	13	3	765	0.017	13	0.0	0.0	4.789	A
A-B	0	0			0				
A-C	237	59			237				
D-ABC	37	9	579	0.064	37	0.0	0.1	6.638	A
C-ABD	0	0	576	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	115	29			115				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	13	3	618	0.022	13	0.0	0.0	5.953	A
A-BCD	17	4	791	0.021	17	0.0	0.0	4.646	A
A-B	0	0			0				
A-C	282	71			282				
D-ABC	44	11	568	0.078	44	0.1	0.1	6.867	A
C-ABD	0	0	567	0.000	0	0.0	0.0	0.000	A
C-D	24	6			24				
C-A	138	34			138				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	17	4	600	0.028	16	0.0	0.0	6.168	A
A-BCD	23	6	829	0.028	23	0.0	0.0	4.466	A
A-B	0	0			0				
A-C	344	86			344				
D-ABC	54	13	554	0.097	54	0.1	0.1	7.204	A
C-ABD	0	0	555	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	168	42			168				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	17	4	600	0.028	17	0.0	0.0	6.168	A
A-BCD	23	6	829	0.028	23	0.0	0.0	4.470	A
A-B	0	0			0				
A-C	344	86			344				
D-ABC	54	13	554	0.097	54	0.1	0.1	7.205	A
C-ABD	0	0	555	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	168	42			168				

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)	LOS
B-ACD	13	3	618	0.022	14	0.0	0.0	5.954	A
A-BCD	17	4	791	0.022	17	0.0	0.0	4.652	A
A-B	0	0			0				
A-C	282	71			282				
D-ABC	44	11	568	0.078	44	0.1	0.1	6.873	A
C-ABD	0	0	567	0.000	0	0.0	0.0	0.000	A
C-D	24	6			24				
C-A	138	34			138				

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)	LOS
B-ACD	11	3	631	0.018	11	0.0	0.0	5.810	A
A-BCD	13	3	765	0.017	13	0.0	0.0	4.792	A
A-B	0	0			0				
A-C	237	59			237				
D-ABC	37	9	579	0.064	37	0.1	0.1	6.645	A
C-ABD	0	0	576	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	115	29			115				

2023 Base, Saturday Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive/A9011	Crossroads	Two-way	1.06	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	419	Stream D-ABC

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	2023 Base	Saturday Peak	ONE HOUR	11:45	13:15	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		ONE HOUR	✓	197	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	138	100.000
D		ONE HOUR	✓	44	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	180	17
	B	2	0	0	1
	C	112	0	0	26
	D	18	0	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	5	0
	B	100	0	0	100
	C	5	0	0	3
	D	0	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.04	5.27	0.0	A	20	31
A-B					0	0
A-C					160	240
D-ABC	0.08	6.69	0.1	A	40	61
C-ABD	0.00	0.00	0.0	A	0	0
C-D					24	36
C-A					103	154

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	340	0.000	0	0.0	0.0	0.000	A
A-BCD	16	4	699	0.023	16	0.0	0.0	5.266	A
A-B	0	0			0				
A-C	132	33			132				
D-ABC	33	8	603	0.055	33	0.0	0.1	6.310	A
C-ABD	0	0	591	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	84	21			84				

12:00 - 12:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	335	0.000	0	0.0	0.0	0.000	A
A-BCD	20	5	713	0.028	20	0.0	0.0	5.190	A
A-B	0	0			0				
A-C	157	39			157				
D-ABC	40	10	596	0.066	40	0.1	0.1	6.467	A
C-ABD	0	0	586	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	101	25			101				

12:15 - 12:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	328	0.000	0	0.0	0.0	0.000	A
A-BCD	26	6	732	0.035	26	0.0	0.0	5.094	A
A-B	0	0			0				
A-C	191	48			191				
D-ABC	48	12	587	0.083	48	0.1	0.1	6.688	A
C-ABD	0	0	578	0.000	0	0.0	0.0	0.000	A
C-D	29	7			29				
C-A	123	31			123				

12:30 - 12:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	328	0.000	0	0.0	0.0	0.000	A
A-BCD	26	6	732	0.035	26	0.0	0.0	5.102	A
A-B	0	0			0				
A-C	191	48			191				
D-ABC	48	12	587	0.083	48	0.1	0.1	6.688	A
C-ABD	0	0	578	0.000	0	0.0	0.0	0.000	A
C-D	29	7			29				
C-A	123	31			123				

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	335	0.000	0	0.0	0.0	0.000	A
A-BCD	20	5	713	0.028	20	0.0	0.0	5.202	A
A-B	0	0			0				
A-C	157	39			157				
D-ABC	40	10	596	0.066	40	0.1	0.1	6.471	A
C-ABD	0	0	585	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	101	25			101				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	340	0.000	0	0.0	0.0	0.000	A
A-BCD	16	4	699	0.023	16	0.0	0.0	5.274	A
A-B	0	0			0				
A-C	132	33			132				
D-ABC	33	8	603	0.055	33	0.1	0.1	6.319	A
C-ABD	0	0	591	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	84	21			84				

2023 Total, Friday AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive/A9011	Crossroads	Two-way	2.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	166	Stream D-ABC

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	2023 Total	Friday 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		ONE HOUR	✓	137	100.000
B		ONE HOUR	✓	14	100.000
C		ONE HOUR	✓	296	100.000
D		ONE HOUR	✓	103	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	122	15
	B	3	0	8	3
	C	215	0	0	81
	D	16	0	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	20
	B	0	0	30	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	6.69	0.0	A	13	19
A-BCD	0.04	6.61	0.1	A	17	26
A-B					0	0
A-C					108	163
D-ABC	0.21	8.51	0.3	A	95	142
C-ABD	0.00	0.00	0.0	A	0	0
C-D					74	111
C-A					197	296

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)	LOS
B-ACD	11	3	568	0.019	10	0.0	0.0	6.452	A
A-BCD	14	3	558	0.024	13	0.0	0.0	6.607	A
A-B	0	0			0				
A-C	90	22			90				
D-ABC	78	19	562	0.138	77	0.0	0.2	7.407	A
C-ABD	0	0	608	0.000	0	0.0	0.0	0.000	A
C-D	61	15			61				
C-A	162	40			162				

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)	LOS
B-ACD	13	3	562	0.022	13	0.0	0.0	6.551	A
A-BCD	17	4	565	0.030	17	0.0	0.0	6.579	A
A-B	0	0			0				
A-C	106	27			106				
D-ABC	93	23	551	0.168	92	0.2	0.2	7.840	A
C-ABD	0	0	604	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	193	48			193				

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)	LOS
B-ACD	15	4	553	0.028	15	0.0	0.0	6.694	A
A-BCD	22	5	574	0.038	22	0.0	0.1	6.529	A
A-B	0	0			0				
A-C	129	32			129				
D-ABC	113	28	536	0.211	113	0.2	0.3	8.499	A
C-ABD	0	0	598	0.000	0	0.0	0.0	0.000	A
C-D	89	22			89				
C-A	237	59			237				

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)	LOS
B-ACD	15	4	553	0.028	15	0.0	0.0	6.694	A
A-BCD	22	5	574	0.038	22	0.1	0.1	6.516	A
A-B	0	0			0				
A-C	129	32			129				
D-ABC	113	28	536	0.211	113	0.3	0.3	8.509	A
C-ABD	0	0	598	0.000	0	0.0	0.0	0.000	A
C-D	89	22			89				
C-A	237	59			237				

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)	LOS
B-ACD	13	3	562	0.022	13	0.0	0.0	6.555	A
A-BCD	17	4	565	0.030	17	0.1	0.0	6.547	A
A-B	0	0			0				
A-C	106	27			106				
D-ABC	93	23	551	0.168	93	0.3	0.2	7.854	A
C-ABD	0	0	604	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	193	48			193				

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)	LOS
B-ACD	11	3	568	0.019	11	0.0	0.0	6.456	A
A-BCD	14	3	558	0.024	14	0.0	0.0	6.595	A
A-B	0	0			0				
A-C	90	22			90				
D-ABC	78	19	562	0.138	78	0.2	0.2	7.431	A
C-ABD	0	0	608	0.000	0	0.0	0.0	0.000	A
C-D	61	15			61				
C-A	162	40			162				

2023 Total, Friday PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive/A9011	Crossroads	Two-way	2.74	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	77	Stream D-ABC

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	2023 Total	Friday PM	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	337	100.000
B		ONE HOUR	✓	15	100.000
C		ONE HOUR	✓	281	100.000
D		ONE HOUR	✓	167	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	311	26
	B	6	0	9	0
	C	153	0	0	128
	D	22	0	145	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	0
	B	0	0	0	0
	C	6	0	0	0
	D	0	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	6.25	0.0	A	14	21
A-BCD	0.06	5.01	0.1	A	38	58
A-B					0	0
A-C					271	406
D-ABC	0.37	11.33	0.6	B	153	230
C-ABD	0.00	0.00	0.0	A	0	0
C-D					117	176
C-A					140	211

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	11	3	626	0.018	11	0.0	0.0	5.855	A
A-BCD	28	7	748	0.038	28	0.0	0.1	5.001	A
A-B	0	0			0				
A-C	225	56			225				
D-ABC	126	31	533	0.236	125	0.0	0.3	8.795	A
C-ABD	0	0	575	0.000	0	0.0	0.0	0.000	A
C-D	96	24			96				
C-A	115	29			115				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	13	3	612	0.022	13	0.0	0.0	6.016	A
A-BCD	37	9	772	0.048	37	0.1	0.1	4.895	A
A-B	0	0			0				
A-C	266	67			266				
D-ABC	150	38	520	0.289	150	0.3	0.4	9.724	A
C-ABD	0	0	566	0.000	0	0.0	0.0	0.000	A
C-D	115	29			115				
C-A	138	34			138				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	17	4	592	0.028	16	0.0	0.0	6.253	A
A-BCD	50	12	805	0.062	50	0.1	0.1	4.763	A
A-B	0	0			0				
A-C	321	80			321				
D-ABC	184	46	502	0.367	183	0.4	0.6	11.279	B
C-ABD	0	0	553	0.000	0	0.0	0.0	0.000	A
C-D	141	35			141				
C-A	168	42			168				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	17	4	592	0.028	17	0.0	0.0	6.254	A
A-BCD	50	12	805	0.062	50	0.1	0.1	4.767	A
A-B	0	0			0				
A-C	321	80			321				
D-ABC	184	46	502	0.367	184	0.6	0.6	11.328	B
C-ABD	0	0	553	0.000	0	0.0	0.0	0.000	A
C-D	141	35			141				
C-A	168	42			168				

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)	LOS
B-ACD	13	3	612	0.022	14	0.0	0.0	6.017	A
A-BCD	37	9	772	0.048	37	0.1	0.1	4.905	A
A-B	0	0			0				
A-C	266	67			266				
D-ABC	150	38	520	0.289	151	0.6	0.4	9.780	A
C-ABD	0	0	566	0.000	0	0.0	0.0	0.000	A
C-D	115	29			115				
C-A	138	34			138				

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)	LOS
B-ACD	11	3	626	0.018	11	0.0	0.0	5.857	A
A-BCD	29	7	748	0.038	29	0.1	0.1	5.008	A
A-B	0	0			0				
A-C	225	56			225				
D-ABC	126	31	533	0.236	126	0.4	0.3	8.868	A
C-ABD	0	0	575	0.000	0	0.0	0.0	0.000	A
C-D	96	24			96				
C-A	115	29			115				

2023 Total, Saturday Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Castleton Drive/A9011	Crossroads	Two-way	3.22	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	90	Stream D-ABC

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	2023 Total	Saturday Peak	ONE HOUR	11:45	13:15	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		ONE HOUR	✓	199	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	262	100.000
D		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	170	29
	B	2	0	0	1
	C	112	0	0	150
	D	20	0	158	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	5	0
	B	100	0	0	100
	C	5	0	0	1
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.06	5.53	0.1	A	35	52
A-B					0	0
A-C					148	222
D-ABC	0.37	10.60	0.6	B	163	245
C-ABD	0.00	0.00	0.0	A	0	0
C-D					138	206
C-A					103	154

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	334	0.000	0	0.0	0.0	0.000	A
A-BCD	27	7	679	0.040	27	0.0	0.1	5.519	A
A-B	0	0			0				
A-C	123	31			123				
D-ABC	134	34	558	0.240	133	0.0	0.3	8.437	A
C-ABD	0	0	593	0.000	0	0.0	0.0	0.000	A
C-D	113	28			113				
C-A	84	21			84				

12:00 - 12:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	328	0.000	0	0.0	0.0	0.000	A
A-BCD	34	8	689	0.049	33	0.1	0.1	5.491	A
A-B	0	0			0				
A-C	145	36			145				
D-ABC	160	40	549	0.292	160	0.3	0.4	9.244	A
C-ABD	0	0	587	0.000	0	0.0	0.0	0.000	A
C-D	135	34			135				
C-A	101	25			101				

12:15 - 12:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	320	0.000	0	0.0	0.0	0.000	A
A-BCD	44	11	702	0.062	44	0.1	0.1	5.461	A
A-B	0	0			0				
A-C	175	44			175				
D-ABC	196	49	535	0.366	195	0.4	0.6	10.565	B
C-ABD	0	0	579	0.000	0	0.0	0.0	0.000	A
C-D	165	41			165				
C-A	123	31			123				

12:30 - 12:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	320	0.000	0	0.0	0.0	0.000	A
A-BCD	44	11	702	0.062	44	0.1	0.1	5.466	A
A-B	0	0			0				
A-C	175	44			175				
D-ABC	196	49	535	0.366	196	0.6	0.6	10.603	B
C-ABD	0	0	579	0.000	0	0.0	0.0	0.000	A
C-D	165	41			165				
C-A	123	31			123				

12:45 - 13:00

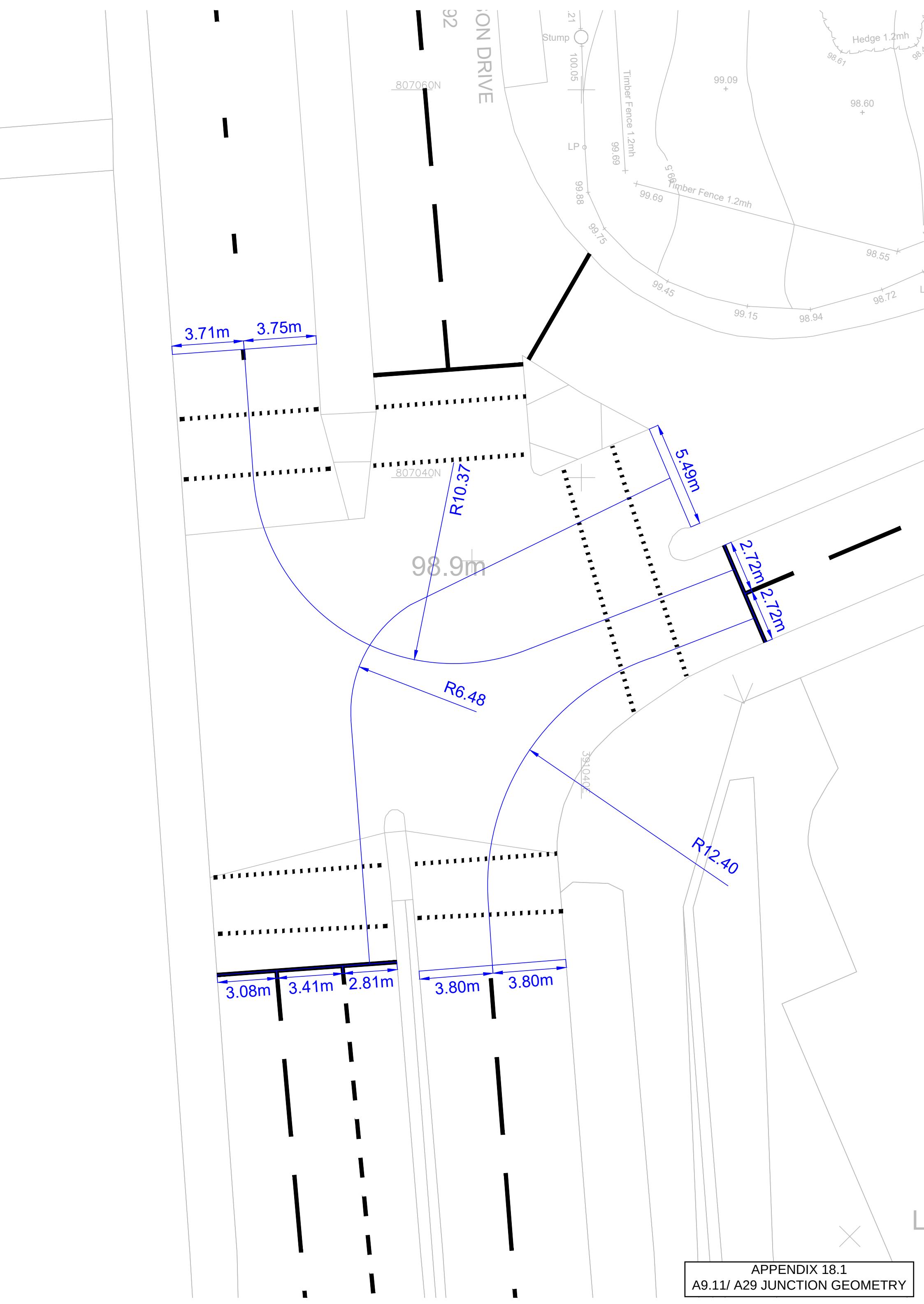
Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	328	0.000	0	0.0	0.0	0.000	A
A-BCD	34	8	689	0.049	34	0.1	0.1	5.506	A
A-B	0	0			0				
A-C	145	36			145				
D-ABC	160	40	549	0.292	161	0.6	0.4	9.293	A
C-ABD	0	0	587	0.000	0	0.0	0.0	0.000	A
C-D	135	34			135				
C-A	101	25			101				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	0	0	334	0.000	0	0.0	0.0	0.000	A
A-BCD	27	7	679	0.040	27	0.1	0.1	5.529	A
A-B	0	0			0				
A-C	123	31			123				
D-ABC	134	34	558	0.240	134	0.4	0.3	8.503	A
C-ABD	0	0	593	0.000	0	0.0	0.0	0.000	A
C-D	113	28			113				
C-A	84	21			84				

APPENDIX 18.0

LINSIG RESULTS: A9011/A29 JUNCTION



APPENDIX 18.1
A9.11/ A29 JUNCTION GEOMETRY

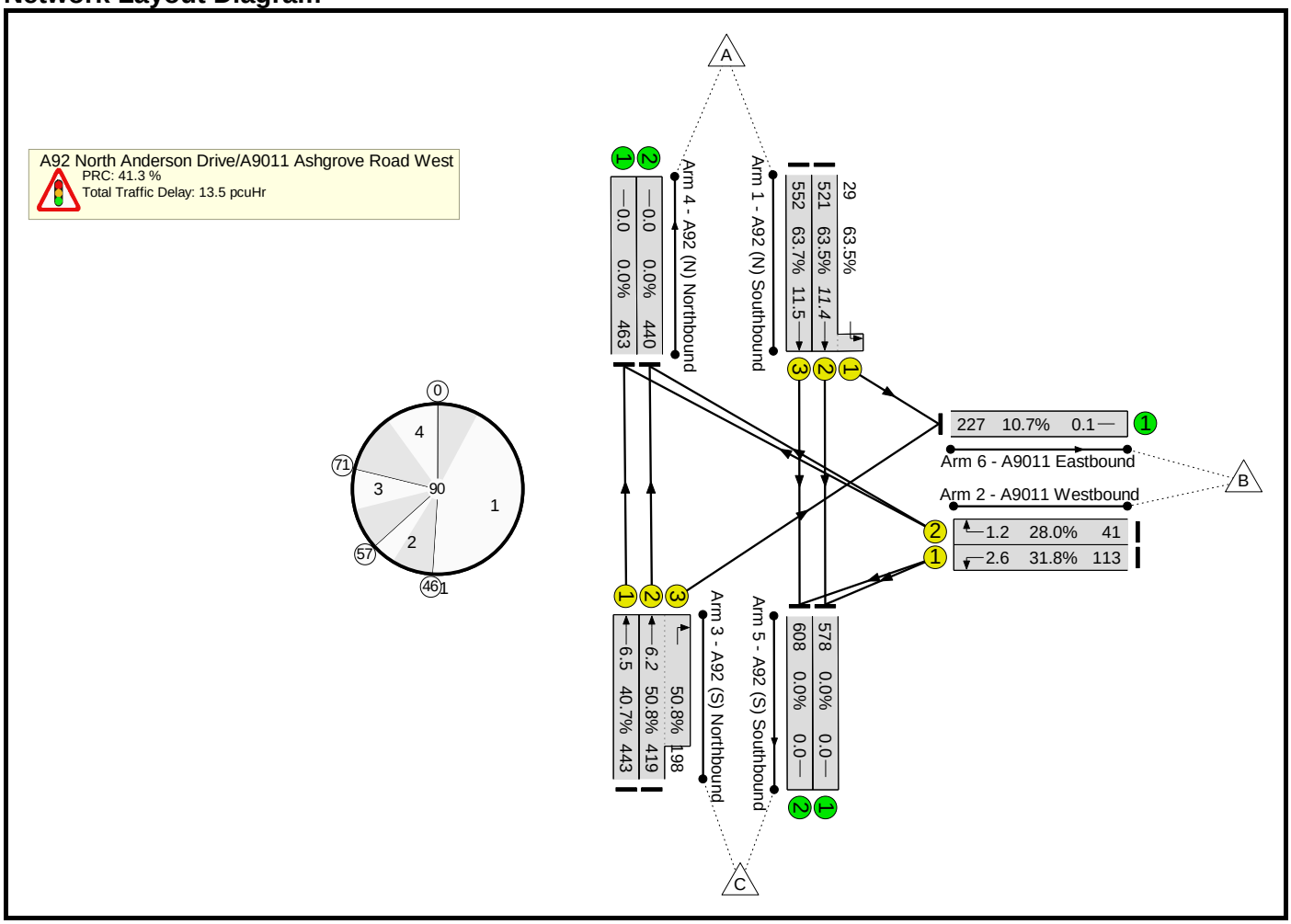
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	5242 Aberdeen.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2021 Surveyed AM' (FG1: '2021 Surveyed AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

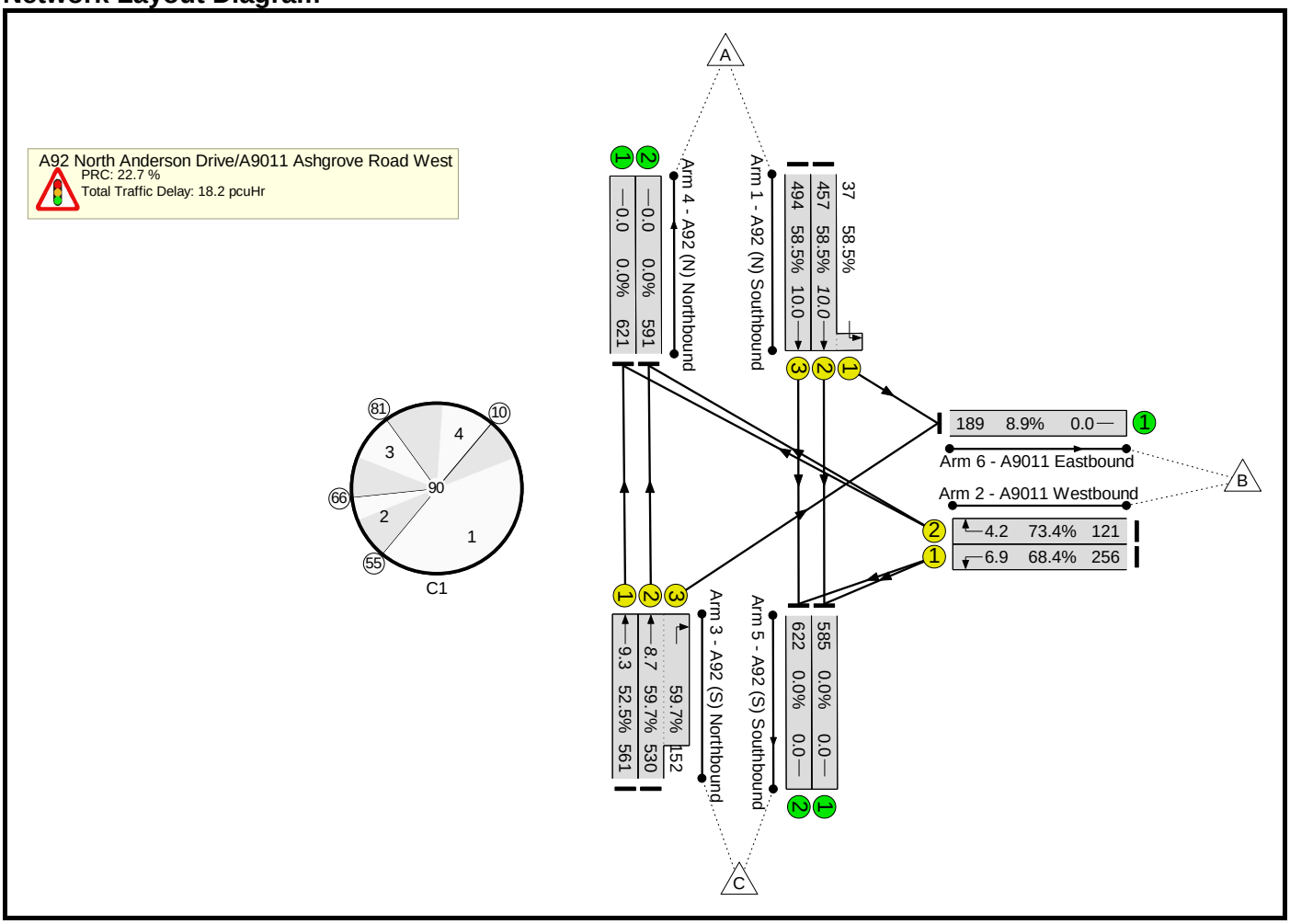
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**63.7%**	**0**	**0**	**0**	**13.5**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**63.7%**	**0**	**0**	**0**	**13.5**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	39	-	550	1950:1950	820+46	63.5 : 63.5%	-	-	-	3.8	25.1	11.4
1/3	A92 (N) Southbound Ahead	U	A		1	39	-	552	1950	867	63.7%	-	-	-	3.8	25.1	11.5
2/1	A9011 Westbound Left	U	F		1	18	-	113	1683	355	31.8%	-	-	-	1.2	37.4	2.6
2/2	A9011 Westbound Right	U	C		1	7	-	41	1649	147	28.0%	-	-	-	0.6	55.3	1.2
3/1	A92 (S) Northbound Ahead	U	B		1	50	-	443	1923	1090	40.7%	-	-	-	1.7	13.8	6.5
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	50	4	617	1956:1540	825+390	50.8 : 50.8%	-	-	-	2.3	13.4	6.2
6/1	A9011 Eastbound	U	-		-	-	-	227	2115	2115	10.7%	-	-	-	0.1	1.0	0.1

C1 PRC for Signalled Lanes (%): 41.3 Total Delay for Signalled Lanes (pcuHr): 13.47 Cycle Time (s): 90
PRC Over All Lanes (%): 41.3 Total Delay Over All Lanes(pcuHr): 13.53

Basic Results Summary

Scenario 2: '2021 Surveyed PM' (FG2: '2021 Surveyed PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

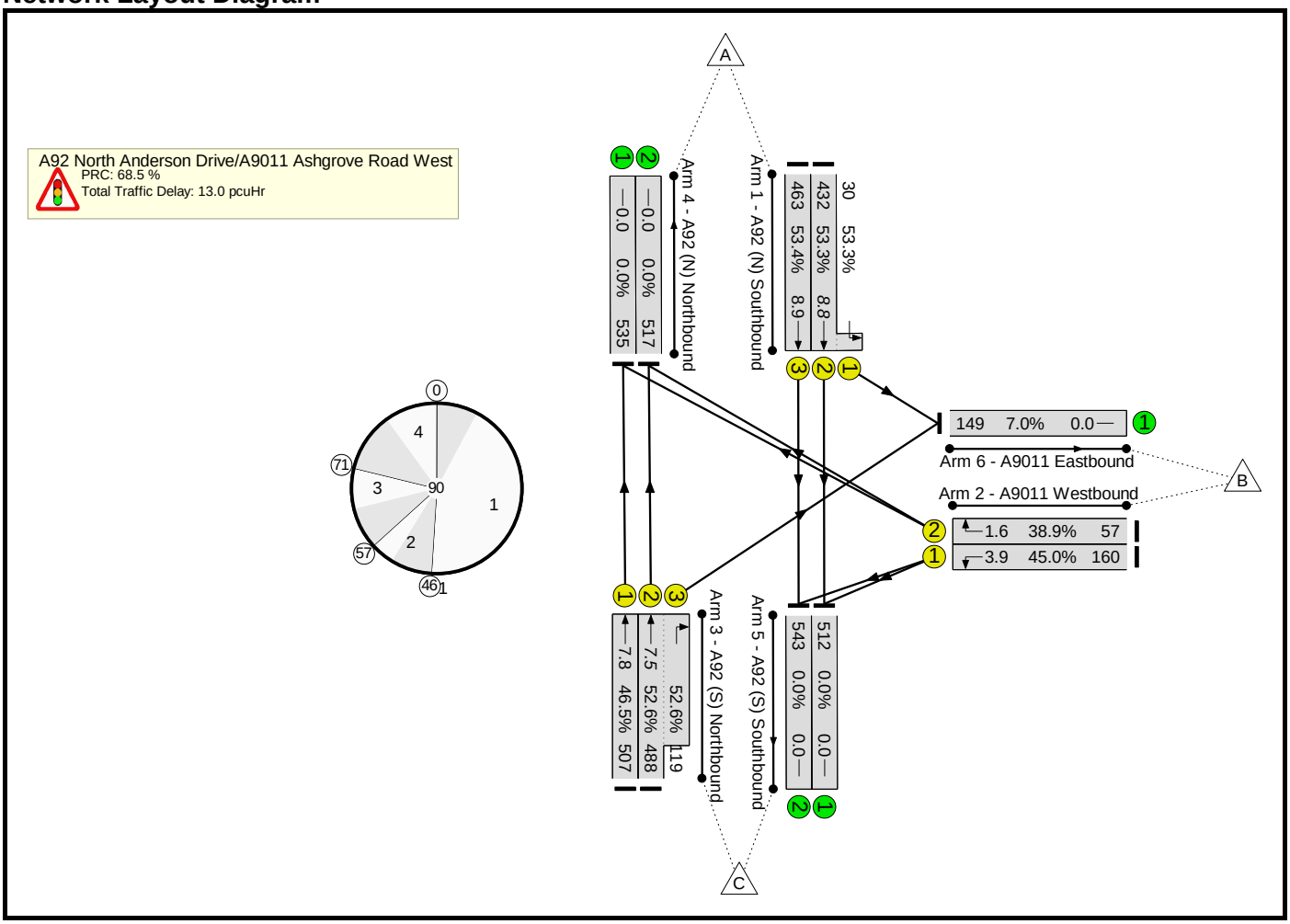
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**73.4%**	**0**	**0**	**0**	**18.2**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**73.4%**	**0**	**0**	**0**	**18.2**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	38	-	494	1950:1950	782+63	58.5 : 58.5%	-	-	-	3.4	24.5	10.0
1/3	A92 (N) Southbound Ahead	U	A		1	38	-	494	1950	845	58.5%	-	-	-	3.4	24.5	10.0
2/1	A9011 Westbound Left	U	F		1	19	-	256	1683	374	68.4%	-	-	-	3.3	47.1	6.9
2/2	A9011 Westbound Right	U	C		1	8	-	121	1649	165	73.4%	-	-	-	2.6	78.1	4.2
3/1	A92 (S) Northbound Ahead	U	B		1	49	-	561	1923	1068	52.5%	-	-	-	2.5	16.1	9.3
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	49	4	682	1956:1540	889+255	59.7 : 59.7%	-	-	-	2.9	15.6	8.7
6/1	A9011 Eastbound	U	-		-	-	-	189	2115	2115	8.9%	-	-	-	0.0	0.9	0.0

C1 PRC for Signalled Lanes (%): 22.7 Total Delay for Signalled Lanes (pcuHr): 18.14 Cycle Time (s): 90
PRC Over All Lanes (%): 22.7 Total Delay Over All Lanes(pcuHr): 18.19

Basic Results Summary

Scenario 3: '2021 Surveyed Saturday' (FG3: '2021 Surveyed Saturday', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

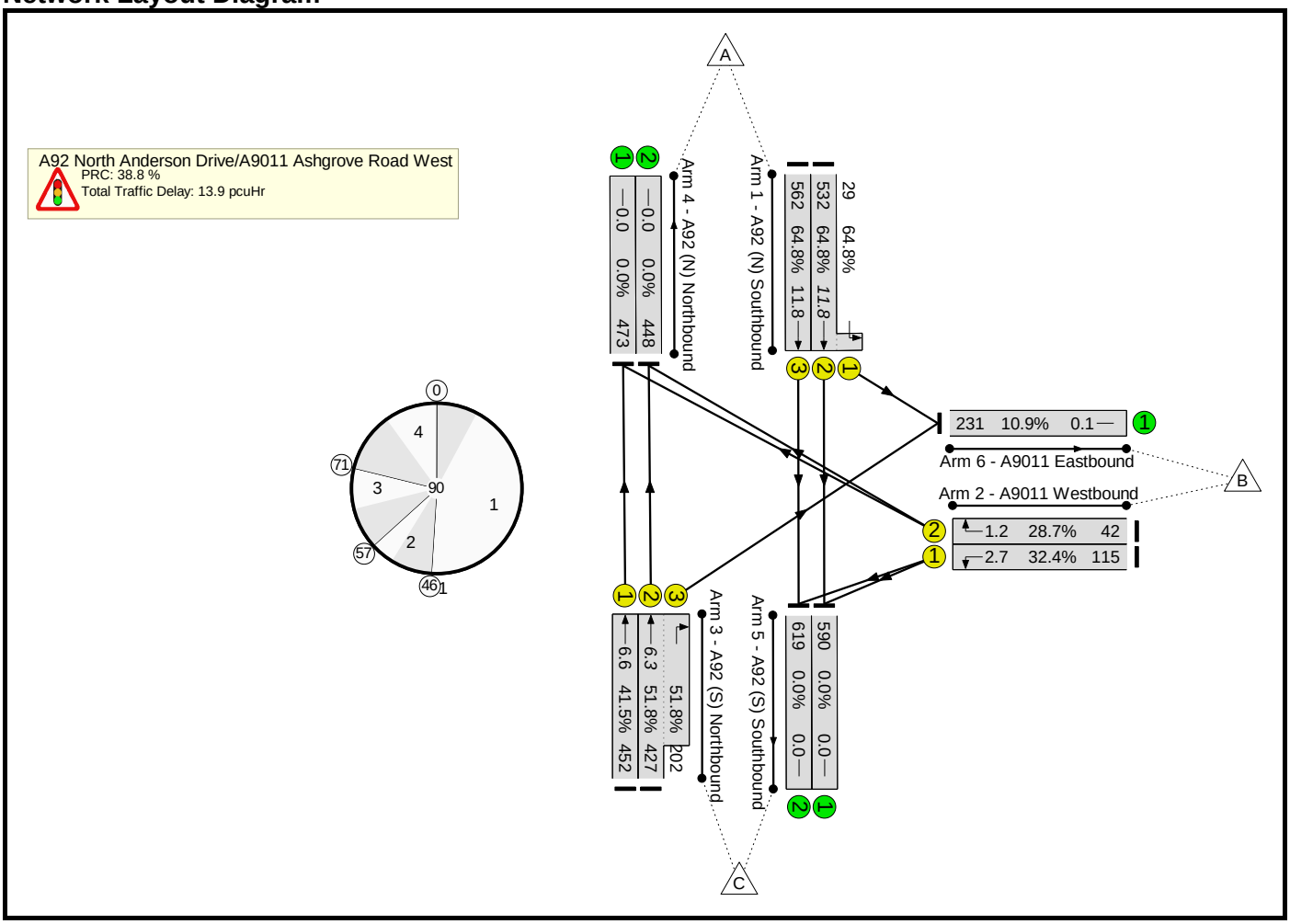
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**53.4%**	**0**	**0**	**0**	**13.0**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**53.4%**	**0**	**0**	**0**	**13.0**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	39	-	462	1950:1950	810+56	53.3 : 53.3%	-	-	-	2.9	22.7	8.8
1/3	A92 (N) Southbound Ahead	U	A		1	39	-	463	1950	867	53.4%	-	-	-	2.9	22.7	8.9
2/1	A9011 Westbound Left	U	F		1	18	-	160	1683	355	45.0%	-	-	-	1.8	40.1	3.9
2/2	A9011 Westbound Right	U	C		1	7	-	57	1649	147	38.9%	-	-	-	0.9	58.7	1.6
3/1	A92 (S) Northbound Ahead	U	B		1	50	-	507	1923	1090	46.5%	-	-	-	2.1	14.6	7.8
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	50	4	607	1956:1540	927+226	52.6 : 52.6%	-	-	-	2.4	14.1	7.5
6/1	A9011 Eastbound	U	-		-	-	-	149	2115	2115	7.0%	-	-	-	0.0	0.9	0.0

C1 PRC for Signalled Lanes (%): 68.5 Total Delay for Signalled Lanes (pcuHr): 12.97 Cycle Time (s): 90
PRC Over All Lanes (%): 68.5 Total Delay Over All Lanes(pcuHr): 13.01

Basic Results Summary

Scenario 4: '2023 Base AM' (FG4: '2023 Base AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

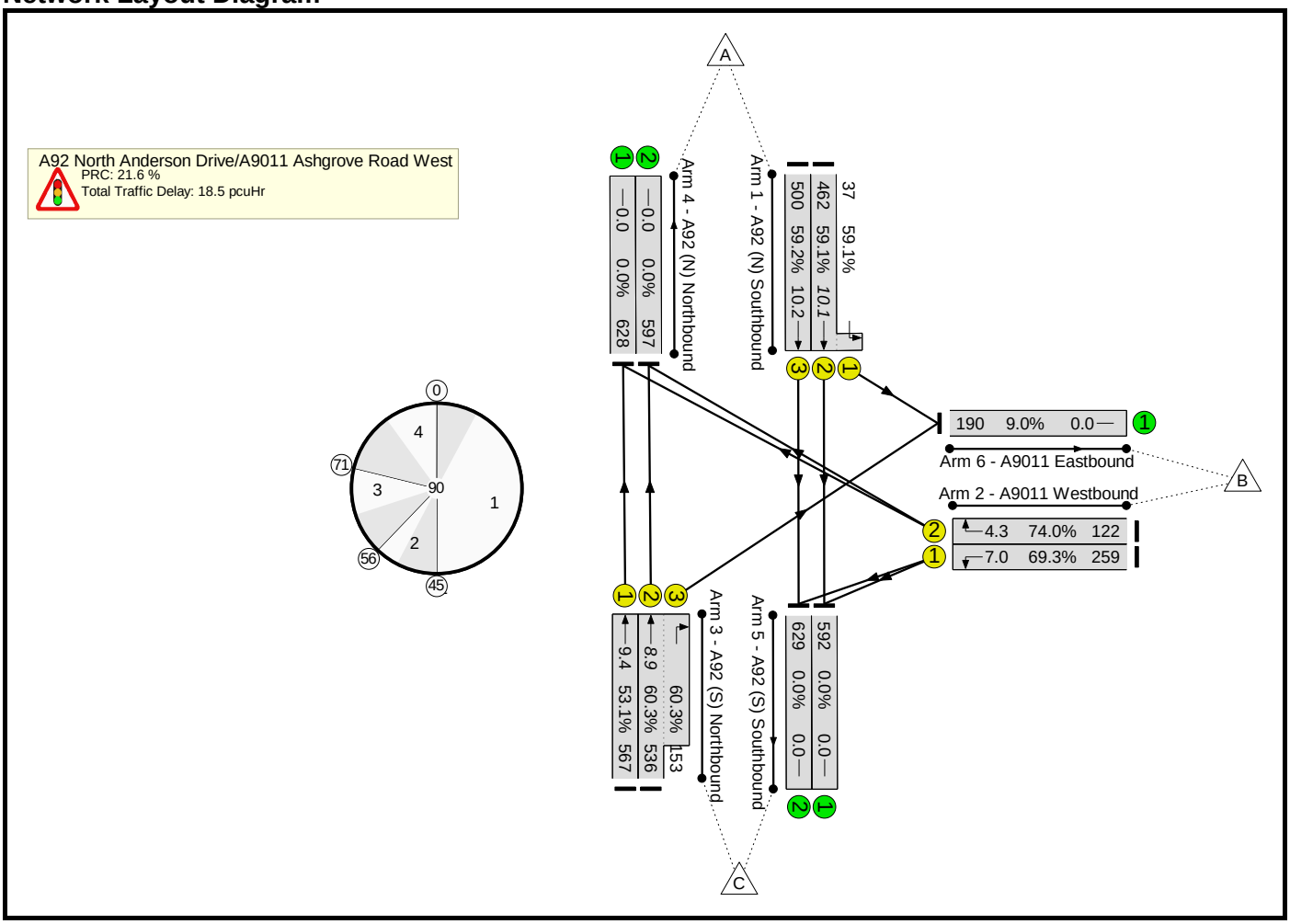
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**64.8%**	**0**	**0**	**0**	**13.9**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**64.8%**	**0**	**0**	**0**	**13.9**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	39	-	561	1950:1950	821+45	64.8 : 64.8%	-	-	-	4.0	25.4	11.8
1/3	A92 (N) Southbound Ahead	U	A		1	39	-	562	1950	867	64.8%	-	-	-	4.0	25.4	11.8
2/1	A9011 Westbound Left	U	F		1	18	-	115	1683	355	32.4%	-	-	-	1.2	37.5	2.7
2/2	A9011 Westbound Right	U	C		1	7	-	42	1649	147	28.7%	-	-	-	0.6	55.5	1.2
3/1	A92 (S) Northbound Ahead	U	B		1	50	-	452	1923	1090	41.5%	-	-	-	1.7	13.9	6.6
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	50	4	629	1956:1540	825+390	51.8 : 51.8%	-	-	-	2.4	13.5	6.3
6/1	A9011 Eastbound	U	-		-	-	-	231	2115	2115	10.9%	-	-	-	0.1	1.0	0.1

C1 PRC for Signalled Lanes (%): 38.8 Total Delay for Signalled Lanes (pcuHr): 13.88 Cycle Time (s): 90
PRC Over All Lanes (%): 38.8 Total Delay Over All Lanes(pcuHr): 13.94

Basic Results Summary

Scenario 5: '2023 Base PM' (FG5: '2023 Base PM', 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	-	-	-		-	-	-	-	-	-	**74.0%**	**0**	**0**	**0**	**18.5**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**74.0%**	**0**	**0**	**0**	**18.5**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	38	-	499	1950:1950	782+63	59.1 : 59.1%	-	-	-	3.4	24.6	10.1
1/3	A92 (N) Southbound Ahead	U	A		1	38	-	500	1950	845	59.2%	-	-	-	3.4	24.6	10.2
2/1	A9011 Westbound Left	U	F		1	19	-	259	1683	374	69.3%	-	-	-	3.4	47.5	7.0
2/2	A9011 Westbound Right	U	C		1	8	-	122	1649	165	74.0%	-	-	-	2.7	78.9	4.3
3/1	A92 (S) Northbound Ahead	U	B		1	49	-	567	1923	1068	53.1%	-	-	-	2.6	16.2	9.4
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	49	4	689	1956:1540	889+254	60.3 : 60.3%	-	-	-	3.0	15.7	8.9
6/1	A9011 Eastbound	U	-		-	-	-	190	2115	2115	9.0%	-	-	-	0.0	0.9	0.0

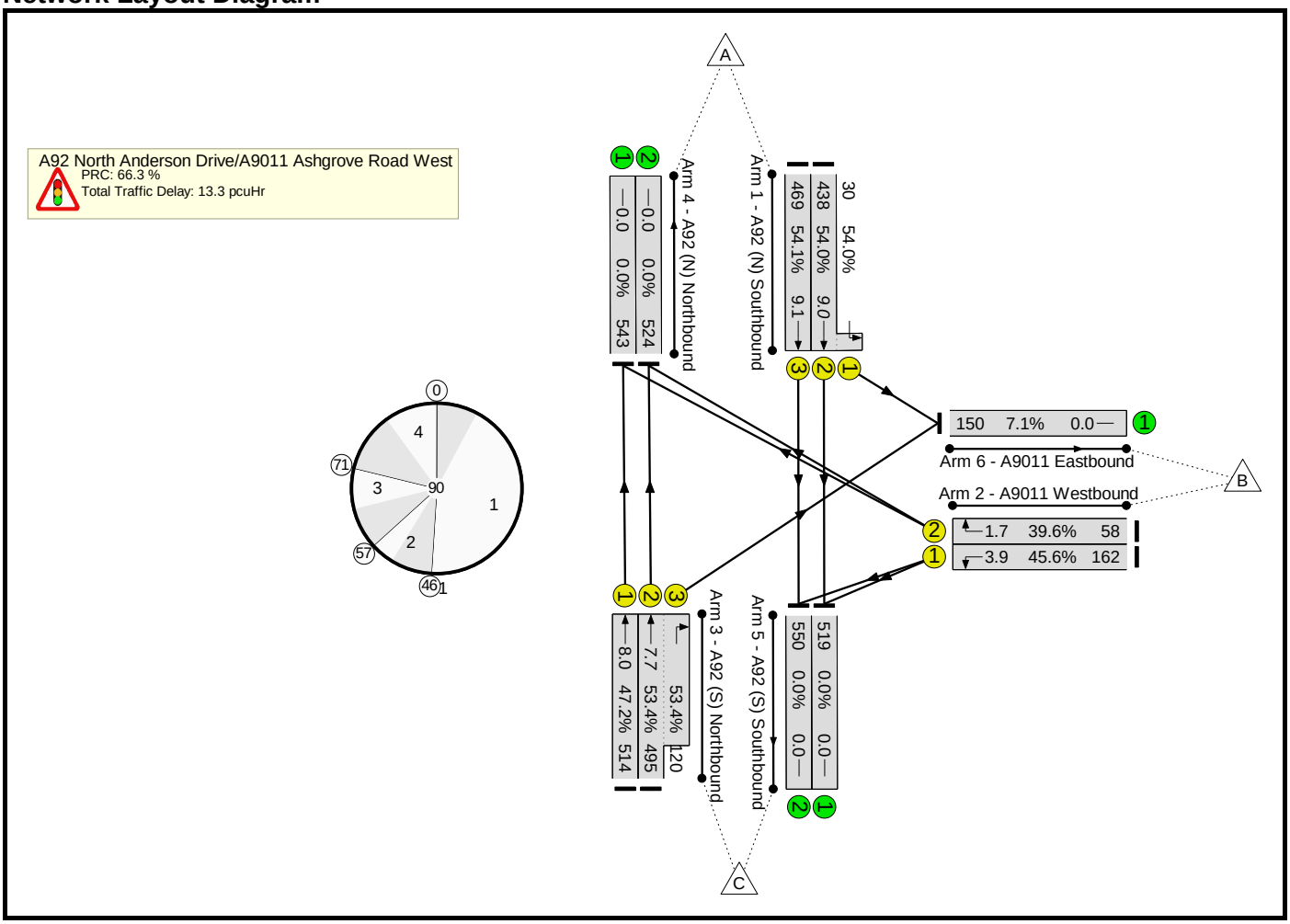
C1 PRC for Signalled Lanes (%): 21.6 Total Delay for Signalled Lanes (pcuHr): 18.47 Cycle Time (s): 90

PRC Over All Lanes (%): 21.6 Total Delay Over All Lanes(pcuHr): 18.52

Basic Results Summary

Scenario 6: '2023 Base Saturday' (FG6: '2023 Base Saturday ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

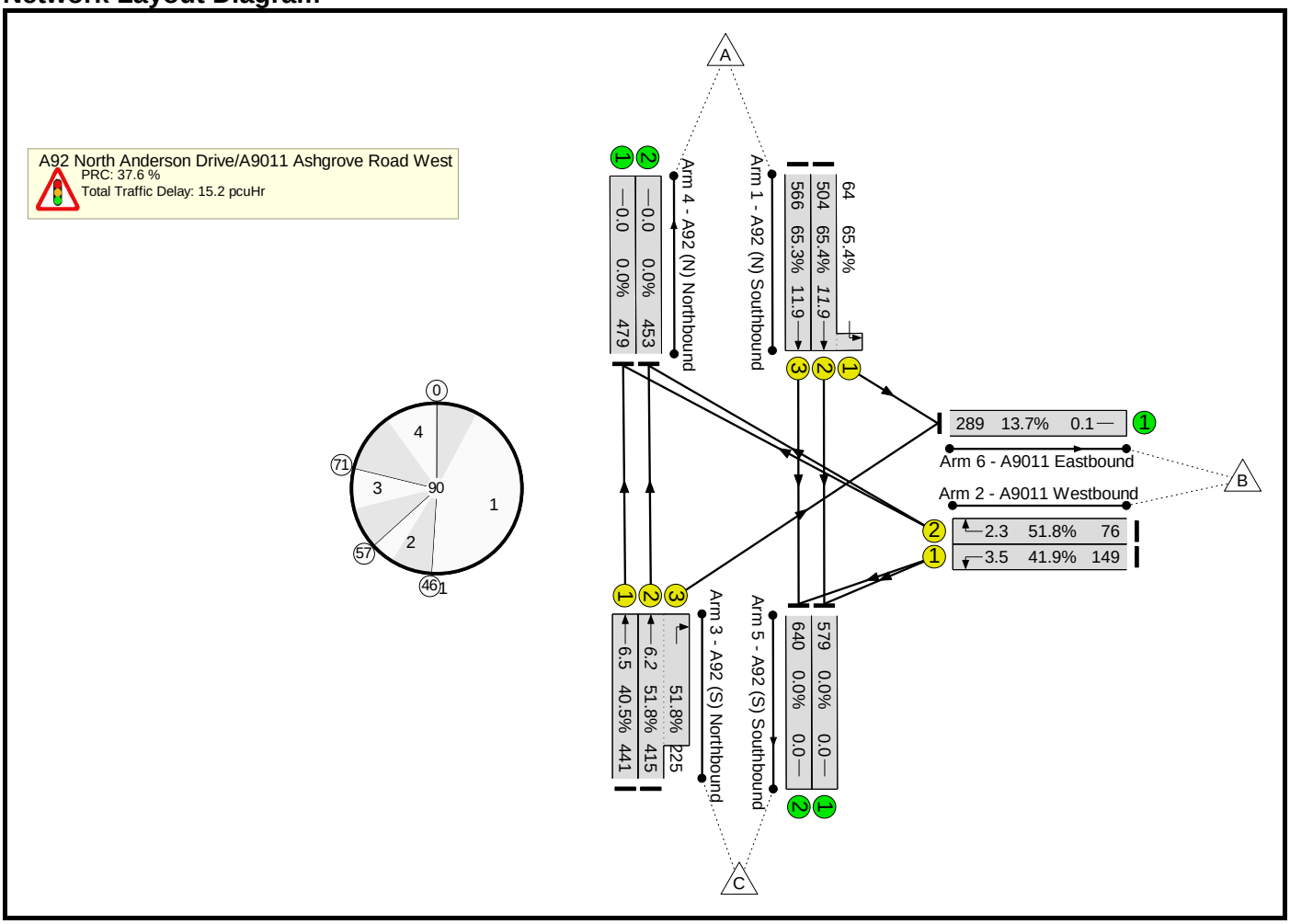
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**54.1%**	**0**	**0**	**0**	**13.3**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**54.1%**	**0**	**0**	**0**	**13.3**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	39	-	468	1950:1950	811+56	54.0 : 54.0%	-	-	-	3.0	22.8	9.0
1/3	A92 (N) Southbound Ahead	U	A		1	39	-	469	1950	867	54.1%	-	-	-	3.0	22.8	9.1
2/1	A9011 Westbound Left	U	F		1	18	-	162	1683	355	45.6%	-	-	-	1.8	40.3	3.9
2/2	A9011 Westbound Right	U	C		1	7	-	58	1649	147	39.6%	-	-	-	0.9	58.9	1.7
3/1	A92 (S) Northbound Ahead	U	B		1	50	-	514	1923	1090	47.2%	-	-	-	2.1	14.7	8.0
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	50	4	615	1956:1540	928+225	53.4 : 53.4%	-	-	-	2.4	14.2	7.7
6/1	A9011 Eastbound	U	-		-	-	-	150	2115	2115	7.1%	-	-	-	0.0	0.9	0.0

C1 PRC for Signalled Lanes (%): 66.3 Total Delay for Signalled Lanes (pcuHr): 13.22 Cycle Time (s): 90
PRC Over All Lanes (%): 66.3 Total Delay Over All Lanes(pcuHr): 13.26

Basic Results Summary

Scenario 7: '2023 Total AM' (FG7: '2023 Total AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

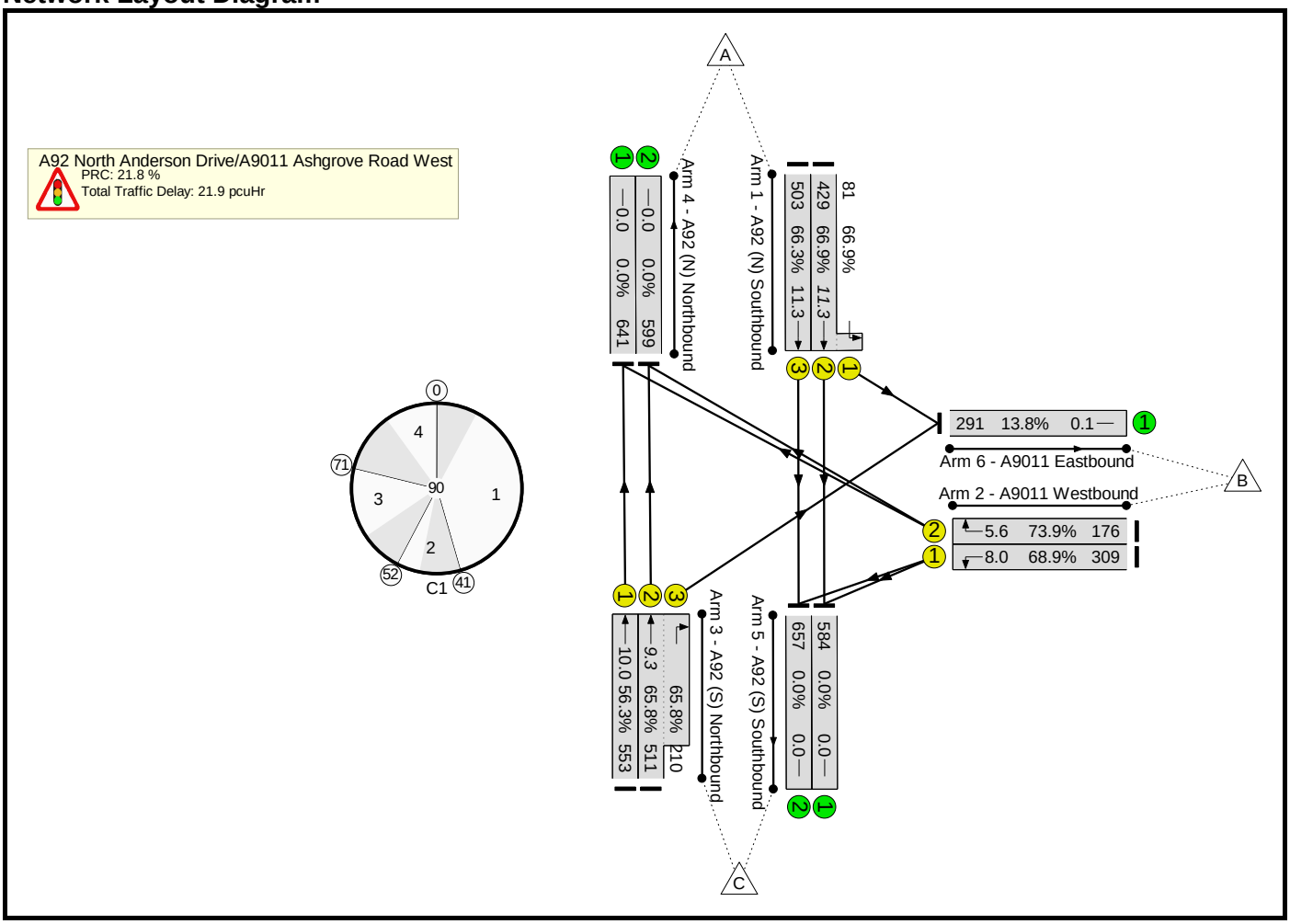
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**65.4%**	**0**	**0**	**0**	**15.2**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**65.4%**	**0**	**0**	**0**	**15.2**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	39	-	568	1950:1950	771+98	65.4 : 65.4%	-	-	-	4.0	25.5	11.9
1/3	A92 (N) Southbound Ahead	U	A		1	39	-	566	1950	867	65.3%	-	-	-	4.0	25.5	11.9
2/1	A9011 Westbound Left	U	F		1	18	-	149	1683	355	41.9%	-	-	-	1.6	39.4	3.5
2/2	A9011 Westbound Right	U	C		1	7	-	76	1649	147	51.8%	-	-	-	1.4	64.3	2.3
3/1	A92 (S) Northbound Ahead	U	B		1	50	-	441	1923	1090	40.5%	-	-	-	1.7	13.7	6.5
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	50	4	640	1956:1540	801+434	51.8 : 51.8%	-	-	-	2.4	13.5	6.2
6/1	A9011 Eastbound	U	-		-	-	-	289	2115	2115	13.7%	-	-	-	0.1	1.0	0.1

C1 PRC for Signalled Lanes (%): 37.6 Total Delay for Signalled Lanes (pcuHr): 15.10 Cycle Time (s): 90
PRC Over All Lanes (%): 37.6 Total Delay Over All Lanes(pcuHr): 15.18

Basic Results Summary

Scenario 8: '2023 Total PM' (FG8: '2023 Total PM', 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	-	-	-		-	-	-	-	-	-	**73.9%**	**0**	**0**	**0**	**21.9**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**73.9%**	**0**	**0**	**0**	**21.9**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	34	-	510	1950:1950	641+121	66.9 : 66.9%	-	-	-	4.2	29.7	11.3
1/3	A92 (N) Southbound Ahead	U	A		1	34	-	503	1950	758	66.3%	-	-	-	4.1	29.6	11.3
2/1	A9011 Westbound Left	U	F		1	23	-	309	1683	449	68.9%	-	-	-	3.6	42.3	8.0
2/2	A9011 Westbound Right	U	C		1	12	-	176	1649	238	73.9%	-	-	-	3.2	64.6	5.6
3/1	A92 (S) Northbound Ahead	U	B		1	45	-	553	1923	983	56.3%	-	-	-	3.0	19.3	10.0
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	45	4	721	1956:1540	777+319	65.8 : 65.8%	-	-	-	3.7	18.7	9.3
6/1	A9011 Eastbound	U	-		-	-	-	291	2115	2115	13.8%	-	-	-	0.1	1.0	0.1

C1

PRC for Signalled Lanes (%): 21.8
PRC Over All Lanes (%): 21.8

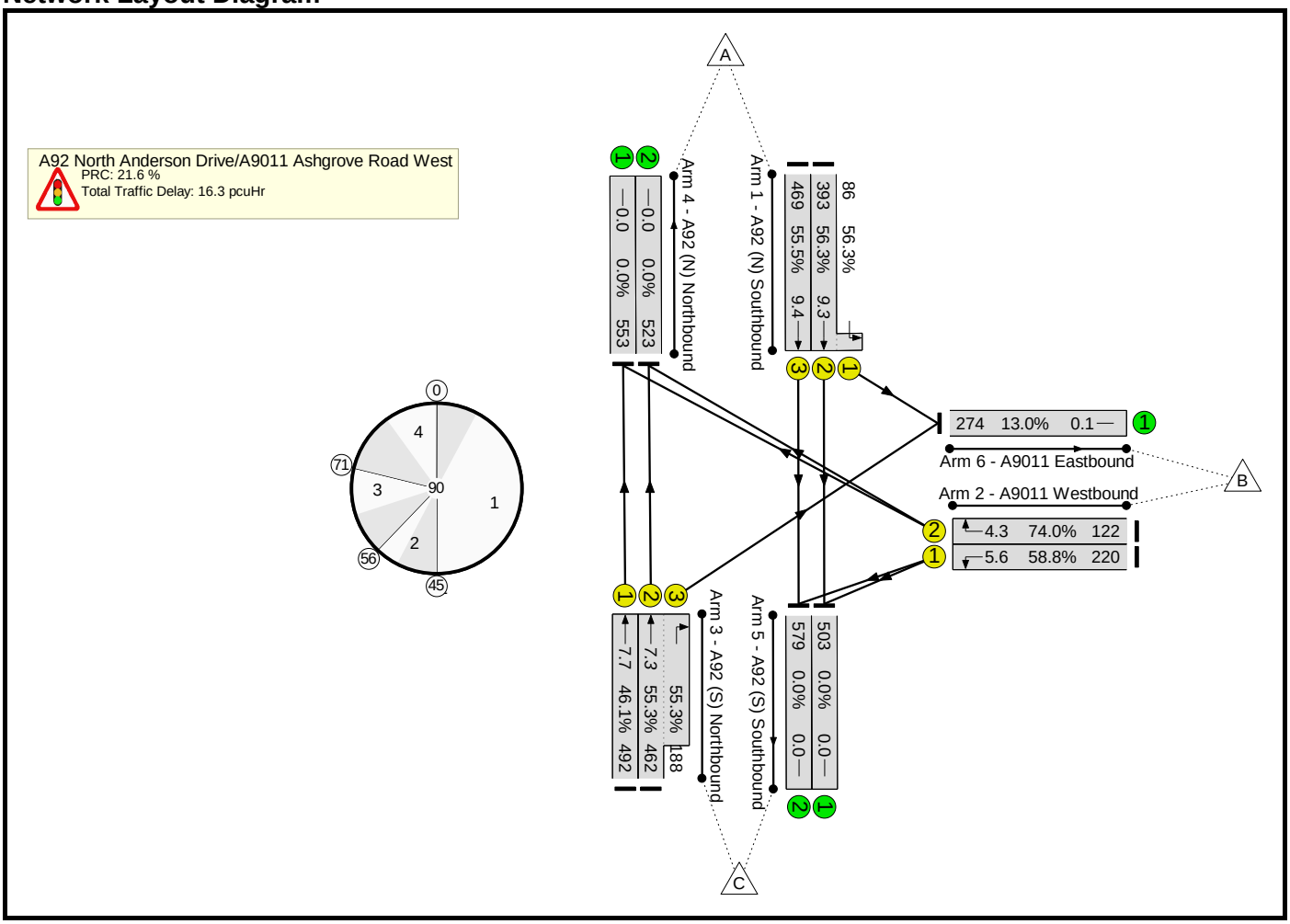
Total Delay for Signalled Lanes (pcuHr): 21.85
Total Delay Over All Lanes(pcuHr): 21.93

Cycle Time (s): 90

Basic Results Summary

Scenario 9: '2023 Total Saturday' (FG9: '2023 Total Saturday', 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	-	-	-		-	-	-	-	-	-	**74.0%**	**0**	**0**	**0**	**16.3**	-	-
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	-		-	-	-	-	-	-	**74.0%**	**0**	**0**	**0**	**16.3**	-	-
1/2+1/1	A92 (N) Southbound Ahead Left	U	A		1	38	-	479	1950:1950	698+153	56.3 : 56.3%	-	-	-	3.2	23.8	9.3
1/3	A92 (N) Southbound Ahead	U	A		1	38	-	469	1950	845	55.5%	-	-	-	3.1	23.8	9.4
2/1	A9011 Westbound Left	U	F		1	19	-	220	1683	374	58.8%	-	-	-	2.6	42.9	5.6
2/2	A9011 Westbound Right	U	C		1	8	-	122	1649	165	74.0%	-	-	-	2.7	78.9	4.3
3/1	A92 (S) Northbound Ahead	U	B		1	49	-	492	1923	1068	46.1%	-	-	-	2.1	15.1	7.7
3/2+3/3	A92 (S) Northbound Ahead Right	U	B	E	1	49	4	650	1956:1540	836+340	55.3 : 55.3%	-	-	-	2.6	14.6	7.3
6/1	A9011 Eastbound	U	-		-	-	-	274	2115	2115	13.0%	-	-	-	0.1	1.0	0.1

C1

PRC for Signalled Lanes (%): 21.6
PRC Over All Lanes (%): 21.6

Total Delay for Signalled Lanes (pcuHr): 16.26
Total Delay Over All Lanes(pcuHr): 16.34

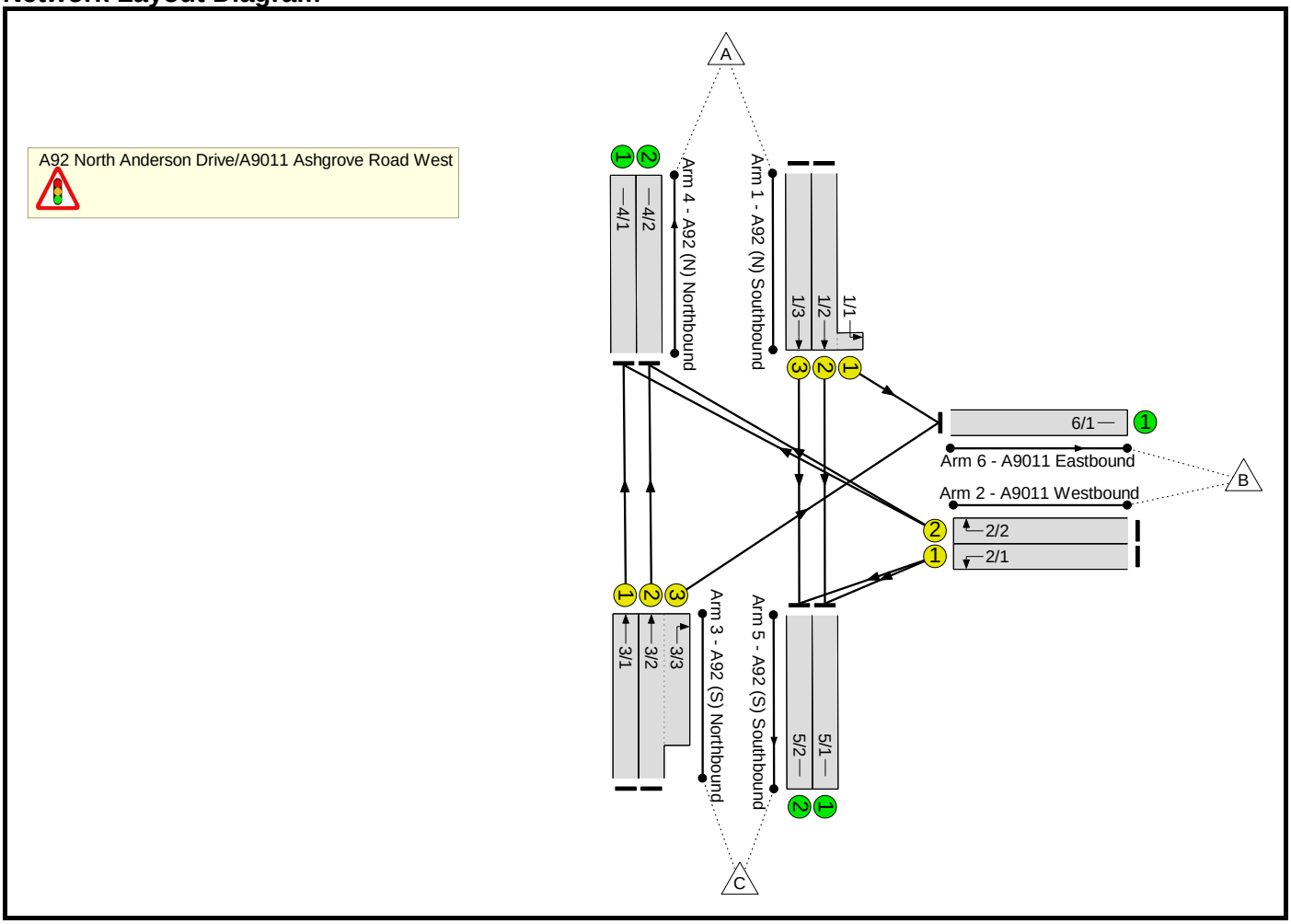
Cycle Time (s): 90

Full Input Data And Results

User and Project Details

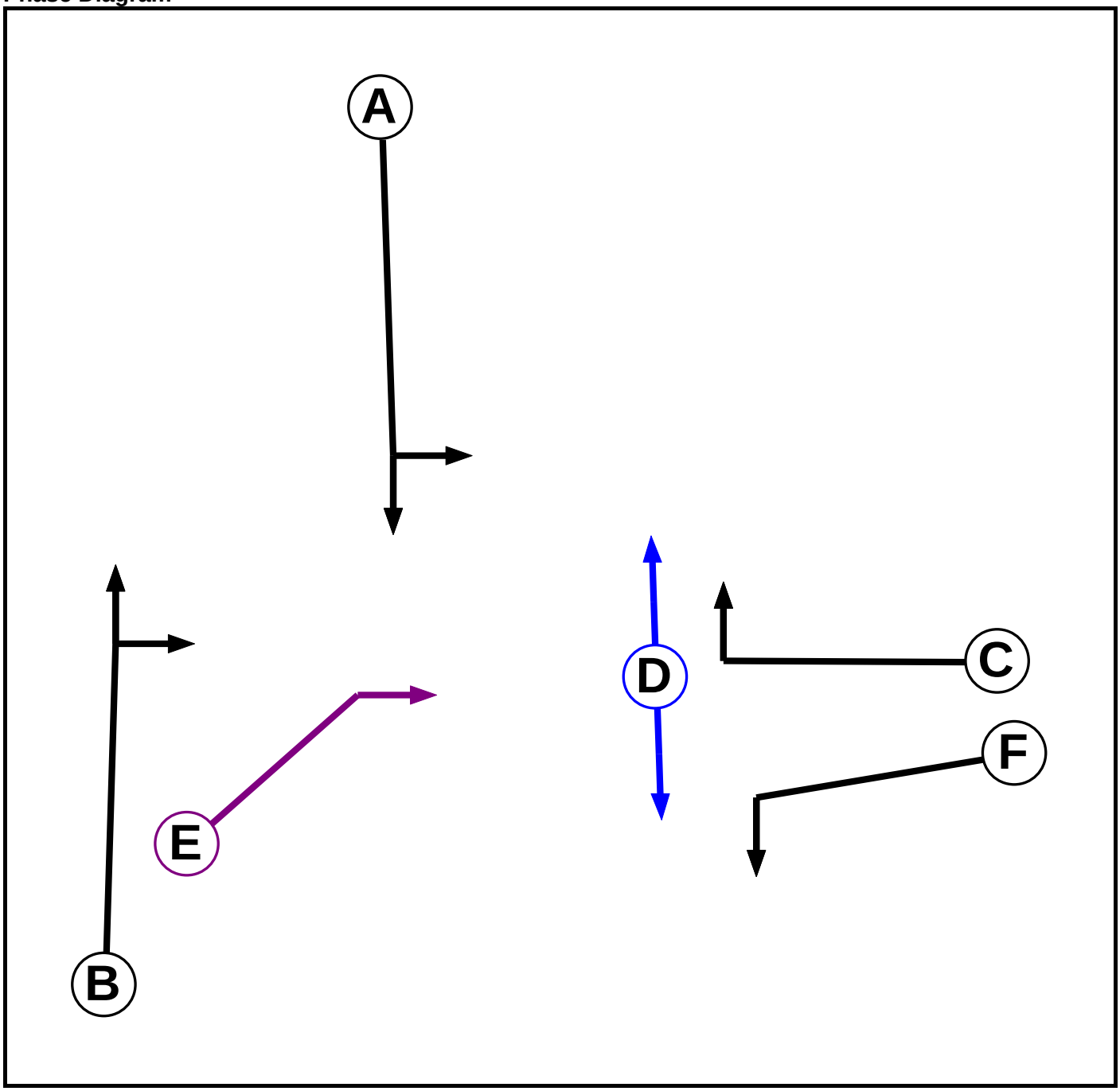
Project:	
Title:	
Location:	
Additional detail:	
File name:	5242 Aberdeen.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

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	7
D	Pedestrian		9	9
E	Ind. Arrow	B	4	4
F	Traffic		4	4

Full Input Data And Results

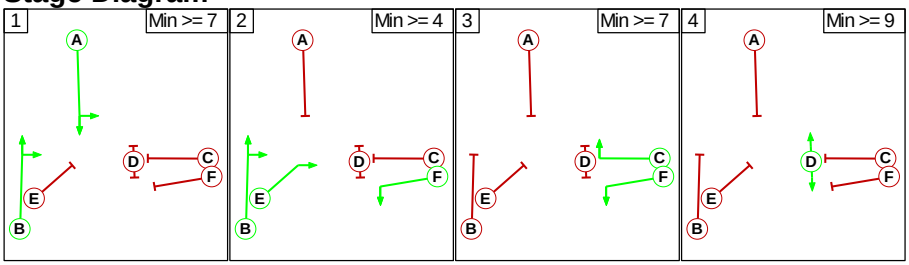
Phase Intergreens Matrix

		Starting Phase					
		A	B	C	D	E	F
Terminating Phase	A		-	7	10	7	7
	B	-		7	10	-	-
	C	7	7		10	7	-
	D	7	7	7		7	7
	E	5	-	7	10		-
	F	5	-	-	10	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	B E F
3	C F
4	D

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		7	7	10
	2	5		7	10
	3	7	7		10
	4	7	7	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West

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 (A92 (N) Southbound)	U	A	2	3	1.0	Geom	-	3.35	0.00	Y	Arm 6 Left	Inf
1/2 (A92 (N) Southbound)	U	A	2	3	60.0	Geom	-	3.35	0.00	Y	Arm 5 Ahead	Inf
1/3 (A92 (N) Southbound)	U	A	2	3	60.0	Geom	-	3.35	0.00	Y	Arm 5 Ahead	Inf
2/1 (A9011 Westbound)	U	F	2	3	60.0	Geom	-	2.72	0.00	Y	Arm 5 Left	12.40
2/2 (A9011 Westbound)	U	C	2	3	60.0	Geom	-	2.72	0.00	Y	Arm 4 Right	10.37
3/1 (A92 (S) Northbound)	U	B	2	3	60.0	Geom	-	3.08	0.00	Y	Arm 4 Ahead	Inf
3/2 (A92 (S) Northbound)	U	B	2	3	60.0	Geom	-	3.41	0.00	Y	Arm 4 Ahead	Inf
3/3 (A92 (S) Northbound)	U	B E	2	3	9.1	Geom	-	2.81	0.00	Y	Arm 6 Right	6.48
4/1 (A92 (N) Northbound)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (A92 (N) Northbound)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A92 (S) Southbound)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (A92 (S) Southbound)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A9011 Eastbound)	U		2	3	60.0	Geom	-	5.00	0.00	Y		

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2021 Surveyed AM'	08:00	09:00	01:00	
2: '2021 Surveyed PM'	16:00	17:00	01:00	
3: '2021 Surveyed Saturday'	12:00	13:00	01:00	
4: '2023 Base AM'	08:00	09:00	01:00	
5: '2023 Base PM'	16:00	17:00	01:00	
6: '2023 Base Saturday '	12:00	13:00	01:00	
7: '2023 Total AM'	08:00	09:00	01:00	
8: '2023 Total PM'	16:00	17:00	01:00	
9: '2023 Total Saturday'	12:00	13:00	01:00	

Scenario 1: '2021 Surveyed AM' (FG1: '2021 Surveyed AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	29	1073	1102
	B	41	0	113	154
	C	862	198	0	1060
	Tot.	903	227	1186	2316

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2021 Surveyed AM
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	29
1/2 (with short)	550(In) 521(Out)
1/3	552
2/1	113
2/2	41
3/1	443
3/2 (with short)	617(In) 419(Out)
3/3 (short)	198
4/1	463
4/2	440
5/1	578
5/2	608
6/1	227

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 2: '2021 Surveyed PM' (FG2: '2021 Surveyed PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	37	951	988
	B	121	0	256	377
	C	1091	152	0	1243
	Tot.	1212	189	1207	2608

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2021 Surveyed PM
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	37
1/2 (with short)	494(In) 457(Out)
1/3	494
2/1	256
2/2	121
3/1	561
3/2 (with short)	682(In) 530(Out)
3/3 (short)	152
4/1	621
4/2	591
5/1	585
5/2	622
6/1	189

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 3: '2021 Surveyed Saturday' (FG3: '2021 Surveyed Saturday', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	30	895	925
	B	57	0	160	217
	C	995	119	0	1114
	Tot.	1052	149	1055	2256

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2021 Surveyed Saturday
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	30
1/2 (with short)	462(In) 432(Out)
1/3	463
2/1	160
2/2	57
3/1	507
3/2 (with short)	607(In) 488(Out)
3/3 (short)	119
4/1	535
4/2	517
5/1	512
5/2	543
6/1	149

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 4: '2023 Base AM' (FG4: '2023 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	29	1094	1123
	B	42	0	115	157
	C	879	202	0	1081
	Tot.	921	231	1209	2361

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2023 Base AM
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	29
1/2 (with short)	561(In) 532(Out)
1/3	562
2/1	115
2/2	42
3/1	452
3/2 (with short)	629(In) 427(Out)
3/3 (short)	202
4/1	473
4/2	448
5/1	590
5/2	619
6/1	231

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 5: '2023 Base PM' (FG5: '2023 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	37	962	999
	B	122	0	259	381
	C	1103	153	0	1256
	Tot.	1225	190	1221	2636

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2023 Base PM
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	37
1/2 (with short)	499(In) 462(Out)
1/3	500
2/1	259
2/2	122
3/1	567
3/2 (with short)	689(In) 536(Out)
3/3 (short)	153
4/1	628
4/2	597
5/1	592
5/2	629
6/1	190

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 6: '2023 Base Saturday' (FG6: '2023 Base Saturday ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	30	907	937
	B	58	0	162	220
	C	1009	120	0	1129
	Tot.	1067	150	1069	2286

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2023 Base Saturday
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	30
1/2 (with short)	468(In) 438(Out)
1/3	469
2/1	162
2/2	58
3/1	514
3/2 (with short)	615(In) 495(Out)
3/3 (short)	120
4/1	543
4/2	524
5/1	519
5/2	550
6/1	150

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 7: '2023 Total AM' (FG7: '2023 Total AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	64	1070	1134
	B	76	0	149	225
	C	856	225	0	1081
	Tot.	932	289	1219	2440

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2023 Total AM
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	64
1/2 (with short)	568(In) 504(Out)
1/3	566
2/1	149
2/2	76
3/1	441
3/2 (with short)	640(In) 415(Out)
3/3 (short)	225
4/1	479
4/2	453
5/1	579
5/2	640
6/1	289

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 8: '2023 Total PM' (FG8: '2023 Total PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	81	932	1013
	B	176	0	309	485
	C	1064	210	0	1274
	Tot.	1240	291	1241	2772

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2023 Total PM
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	81
1/2 (with short)	510(In) 429(Out)
1/3	503
2/1	309
2/2	176
3/1	553
3/2 (with short)	721(In) 511(Out)
3/3 (short)	210
4/1	641
4/2	599
5/1	584
5/2	657
6/1	291

Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 9: '2023 Total Saturday' (FG9: '2023 Total Saturday', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	86	862	948
	B	122	0	220	342
	C	954	188	0	1142
	Tot.	1076	274	1082	2432

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2023 Total Saturday
Junction: A92 North Anderson Drive/A9011 Ashgrove Road West	
1/1 (short)	86
1/2 (with short)	479(In) 393(Out)
1/3	469
2/1	220
2/2	122
3/1	492
3/2 (with short)	650(In) 462(Out)
3/3 (short)	188
4/1	553
4/2	523
5/1	503
5/2	579
6/1	274

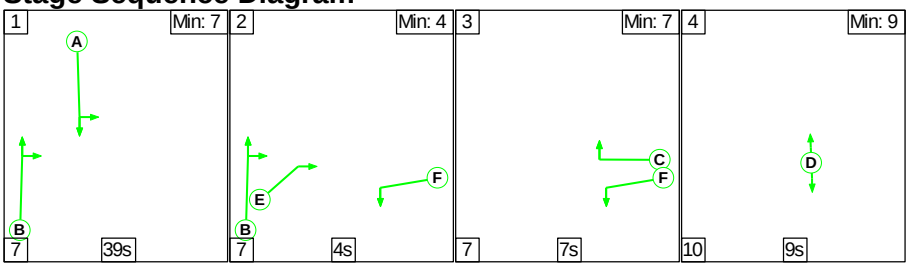
Full Input Data And Results

Lane Saturation Flows

Junction: A92 North Anderson Drive/A9011 Ashgrove Road West								
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 (A92 (N) Southbound)	3.35	0.00	Y	Arm 6 Left	Inf	100.0 %	1950	1950
1/2 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
1/3 (A92 (N) Southbound)	3.35	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1950	1950
2/1 (A9011 Westbound)	2.72	0.00	Y	Arm 5 Left	12.40	100.0 %	1683	1683
2/2 (A9011 Westbound)	2.72	0.00	Y	Arm 4 Right	10.37	100.0 %	1649	1649
3/1 (A92 (S) Northbound)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
3/2 (A92 (S) Northbound)	3.41	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1956	1956
3/3 (A92 (S) Northbound)	2.81	0.00	Y	Arm 6 Right	6.48	100.0 %	1540	1540
4/1 (A92 (N) Northbound Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A92 (N) Northbound Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A92 (S) Southbound Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A92 (S) Southbound Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A9011 Eastbound)	5.00	0.00	Y				2115	2115

Scenario 1: '2021 Surveyed AM' (FG1: '2021 Surveyed AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

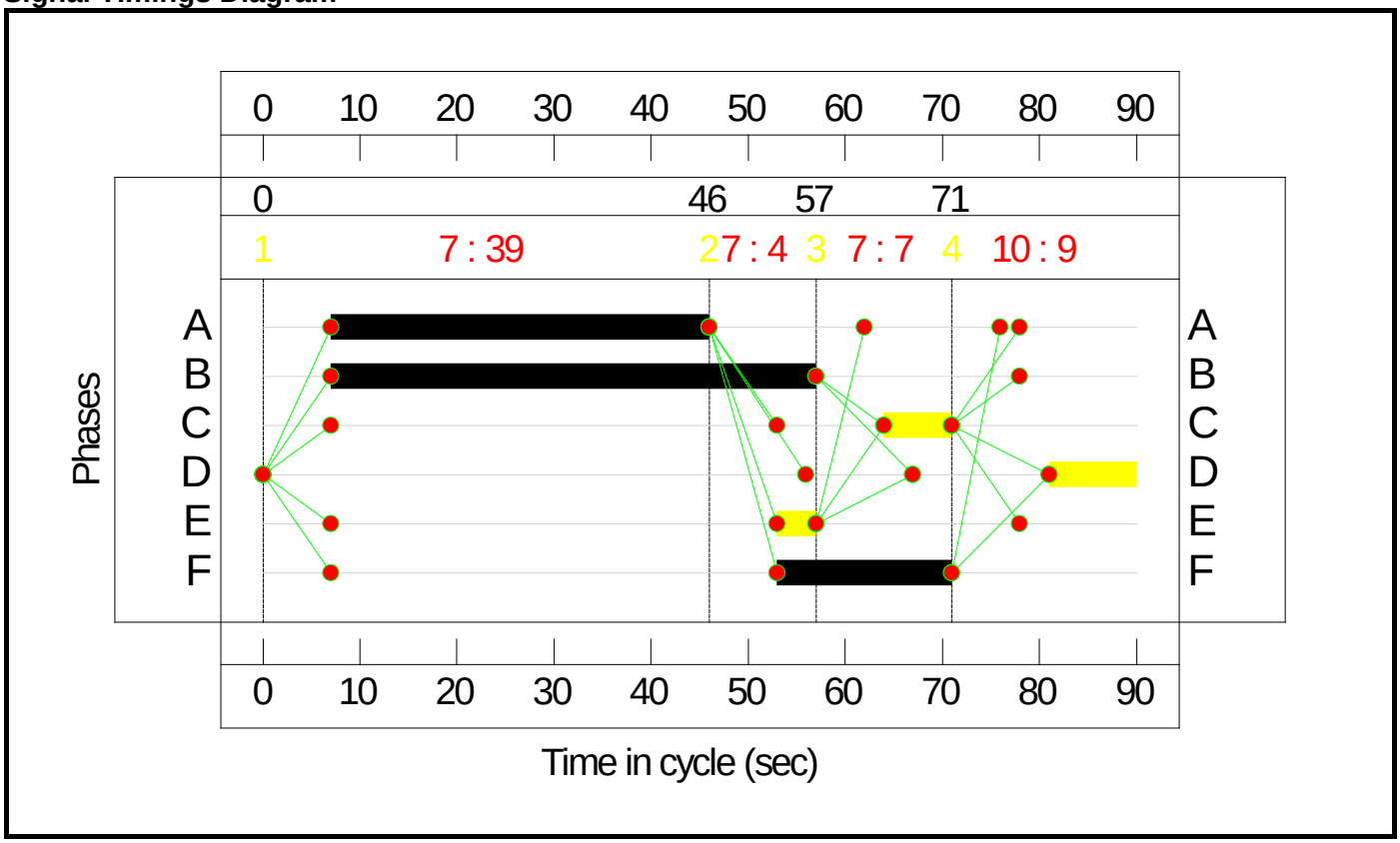


Stage Timings

Stage	1	2	3	4
Duration	39	4	7	9
Change Point	0	46	57	71

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

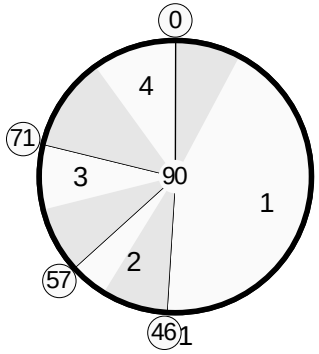
Network Layout Diagram

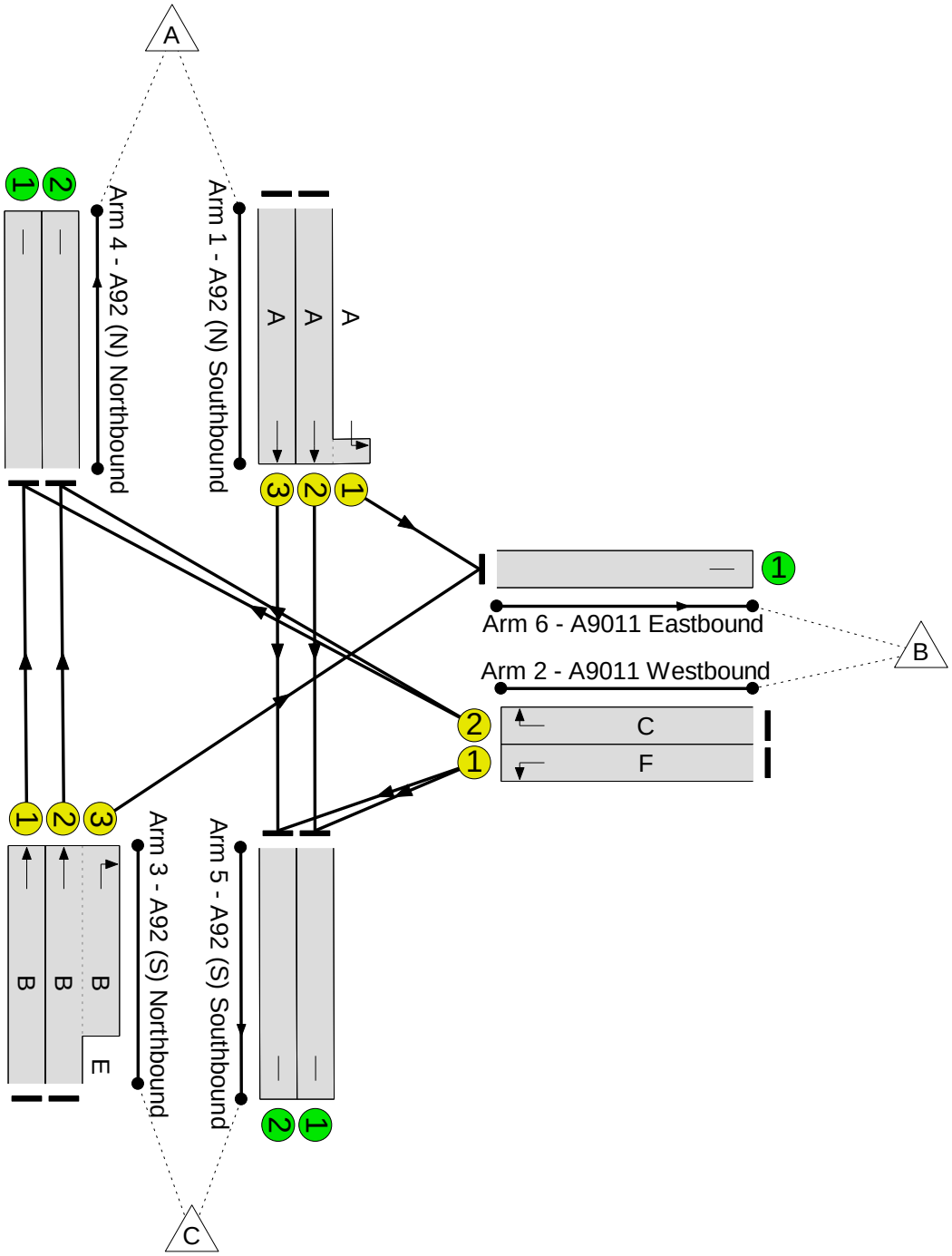
Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West

PRC: 41.3 %

Total Traffic Delay: 13.5 pcuHr





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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	39	-	550	1950:1950	820+46	63.5 : 63.5%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	39	-	552	1950	867	63.7%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	18	-	113	1683	355	31.8%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	7	-	41	1649	147	28.0%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	50	-	443	1923	1090	40.7%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	50	4	617	1956:1540	825+390	50.8 : 50.8%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	440	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	578	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	608	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	227	2115	2115	10.7%

Full Input Data And Results

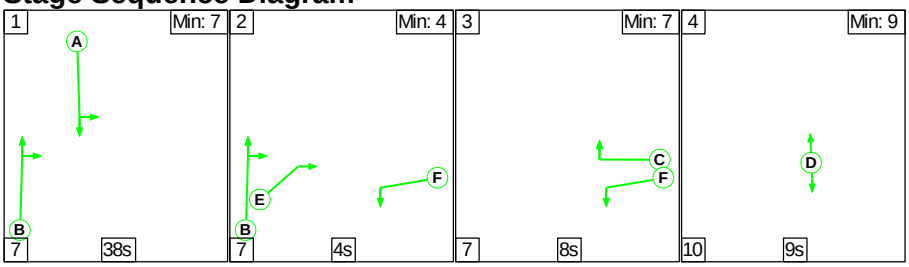
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.4**	**3.1**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**10.4**	**3.1**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
1/2+1/1	550	550	-	-	-	3.0	0.9	-	3.8	25.1	10.5	0.9	11.4
1/3	552	552	-	-	-	3.0	0.9	-	3.8	25.1	10.6	0.9	11.5
2/1	113	113	-	-	-	0.9	0.2	-	1.2	37.4	2.4	0.2	2.6
2/2	41	41	-	-	-	0.4	0.2	-	0.6	55.3	1.0	0.2	1.2
3/1	443	443	-	-	-	1.4	0.3	-	1.7	13.8	6.2	0.3	6.5
3/2+3/3	617	617	-	-	-	1.8	0.5	-	2.3	13.4	5.7	0.5	6.2
4/1	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	578	578	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	227	227	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1

C1 PRC for Signalled Lanes (%): 41.3 Total Delay for Signalled Lanes (pcuHr): 13.47 Cycle Time (s): 90
PRC Over All Lanes (%): 41.3 Total Delay Over All Lanes(pcuHr): 13.53

Full Input Data And Results

Scenario 2: '2021 Surveyed PM' (FG2: '2021 Surveyed PM', Plan 1: 'Network Control Plan 1')

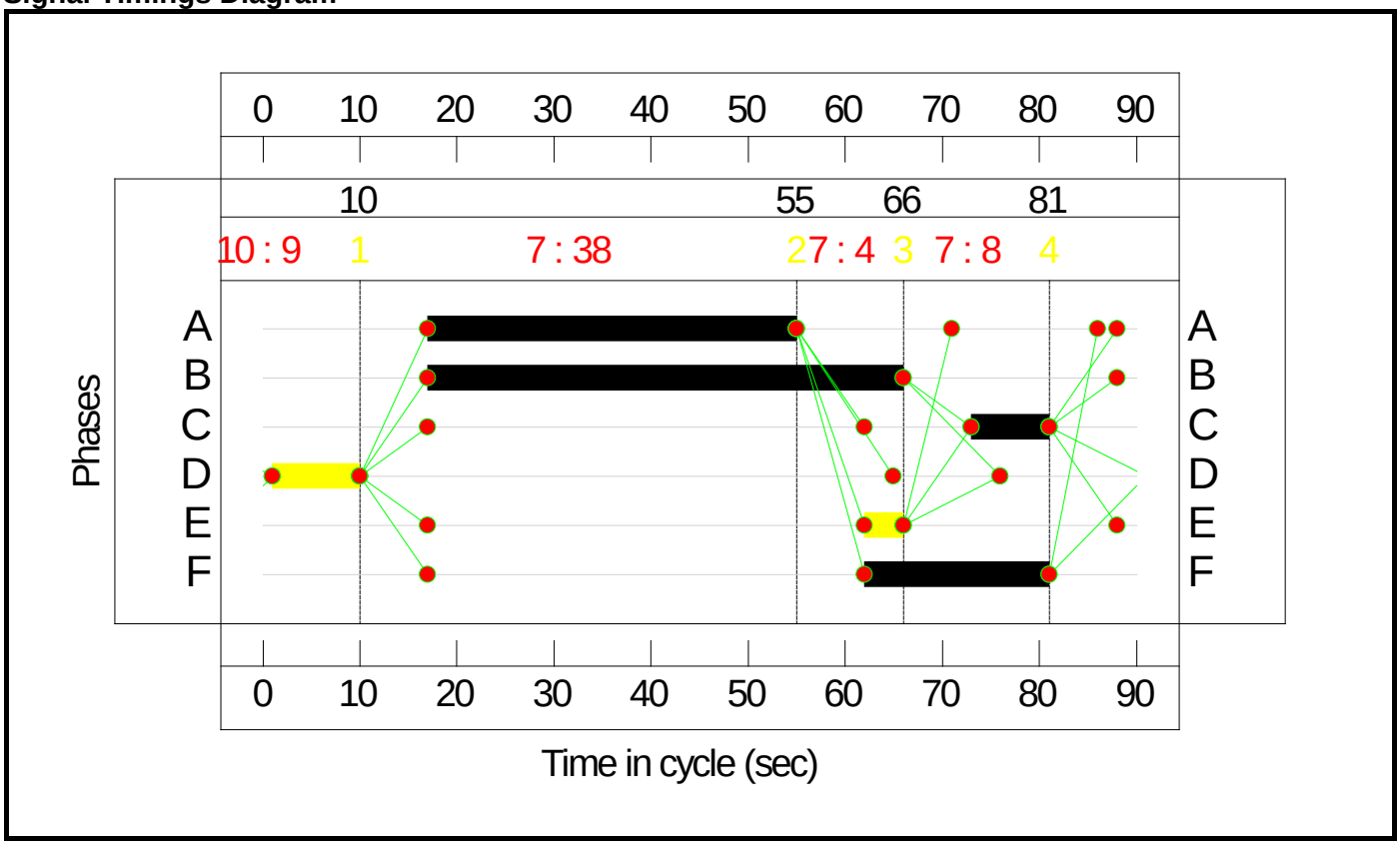
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	38	4	8	9
Change Point	10	55	66	81

Signal Timings Diagram



Full Input Data And Results

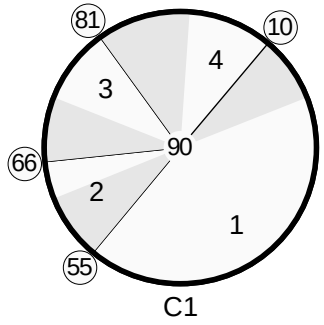
Network Layout Diagram

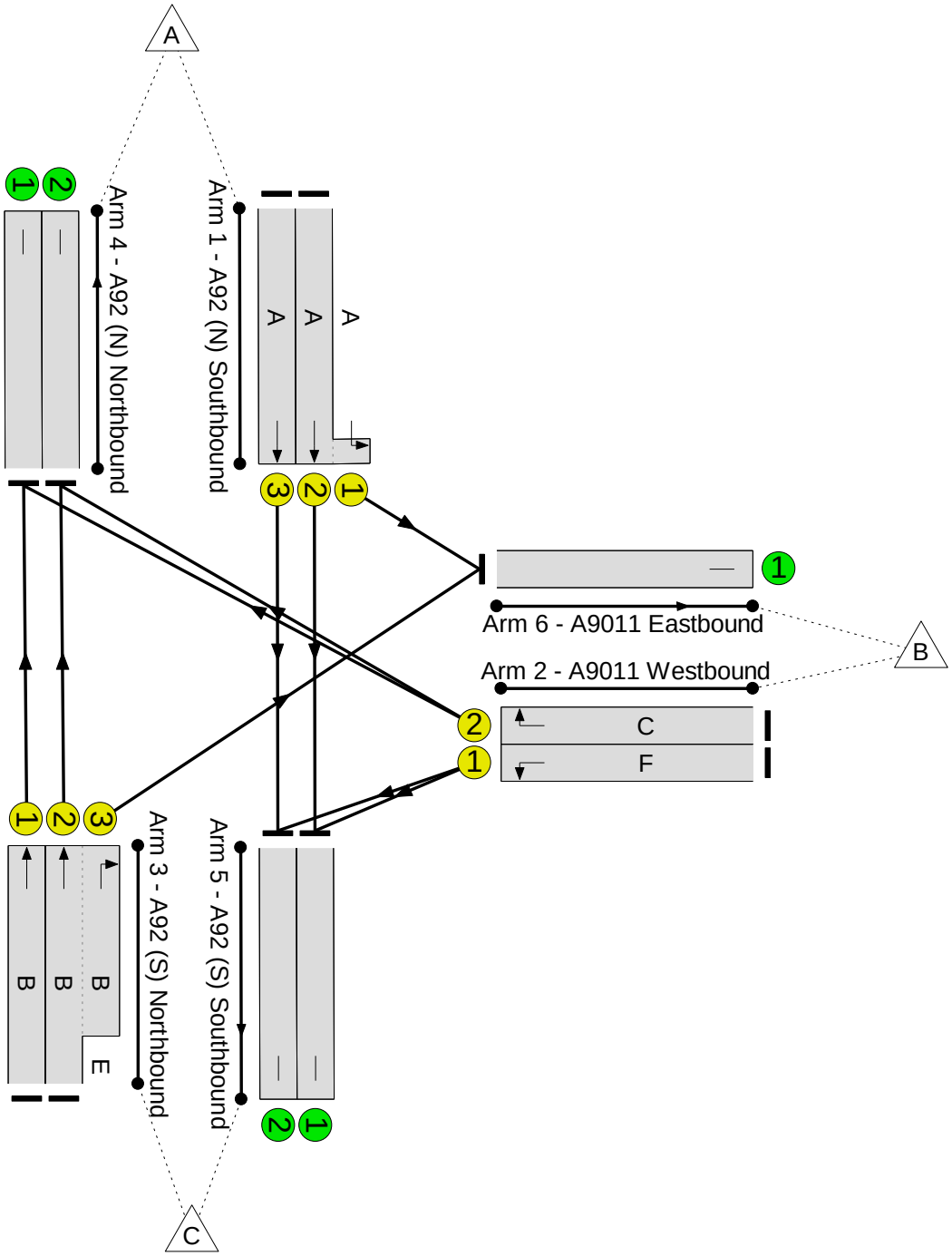
Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West

PRC: 22.7 %

Total Traffic Delay: 18.2 pcuHr





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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.4%**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.4%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	38	-	494	1950:1950	782+63	58.5 : 58.5%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	38	-	494	1950	845	58.5%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	19	-	256	1683	374	68.4%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	8	-	121	1649	165	73.4%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	49	-	561	1923	1068	52.5%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	49	4	682	1956:1540	889+255	59.7 : 59.7%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	585	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	189	2115	2115	8.9%

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	**-**	**-**	**0**	**0**	**0**	**13.1**	**5.1**	**0.0**	**18.2**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**13.1**	**5.1**	**0.0**	**18.2**	**-**	**-**	**-**	**-**
1/2+1/1	494	494	-	-	-	2.7	0.7	-	3.4	24.5	9.3	0.7	10.0
1/3	494	494	-	-	-	2.7	0.7	-	3.4	24.5	9.3	0.7	10.0
2/1	256	256	-	-	-	2.3	1.1	-	3.3	47.1	5.8	1.1	6.9
2/2	121	121	-	-	-	1.3	1.3	-	2.6	78.1	2.9	1.3	4.2
3/1	561	561	-	-	-	2.0	0.6	-	2.5	16.1	8.7	0.6	9.3
3/2+3/3	682	682	-	-	-	2.2	0.7	-	2.9	15.6	7.9	0.7	8.7
4/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	189	189	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 22.7
PRC Over All Lanes (%): 22.7

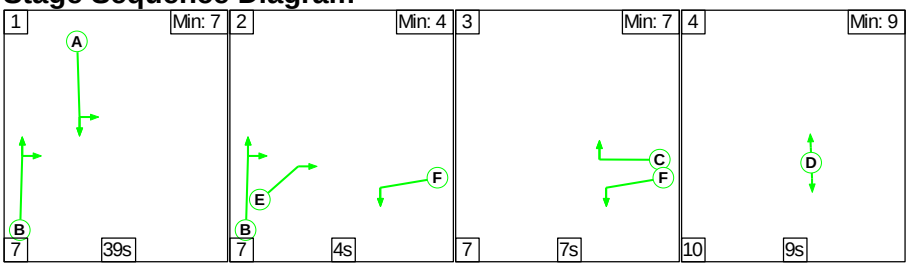
Total Delay for Signalled Lanes (pcuHr): 18.14
Total Delay Over All Lanes(pcuHr): 18.19

Cycle Time (s): 90

Full Input Data And Results

Scenario 3: '2021 Surveyed Saturday' (FG3: '2021 Surveyed Saturday', Plan 1: 'Network Control Plan 1')

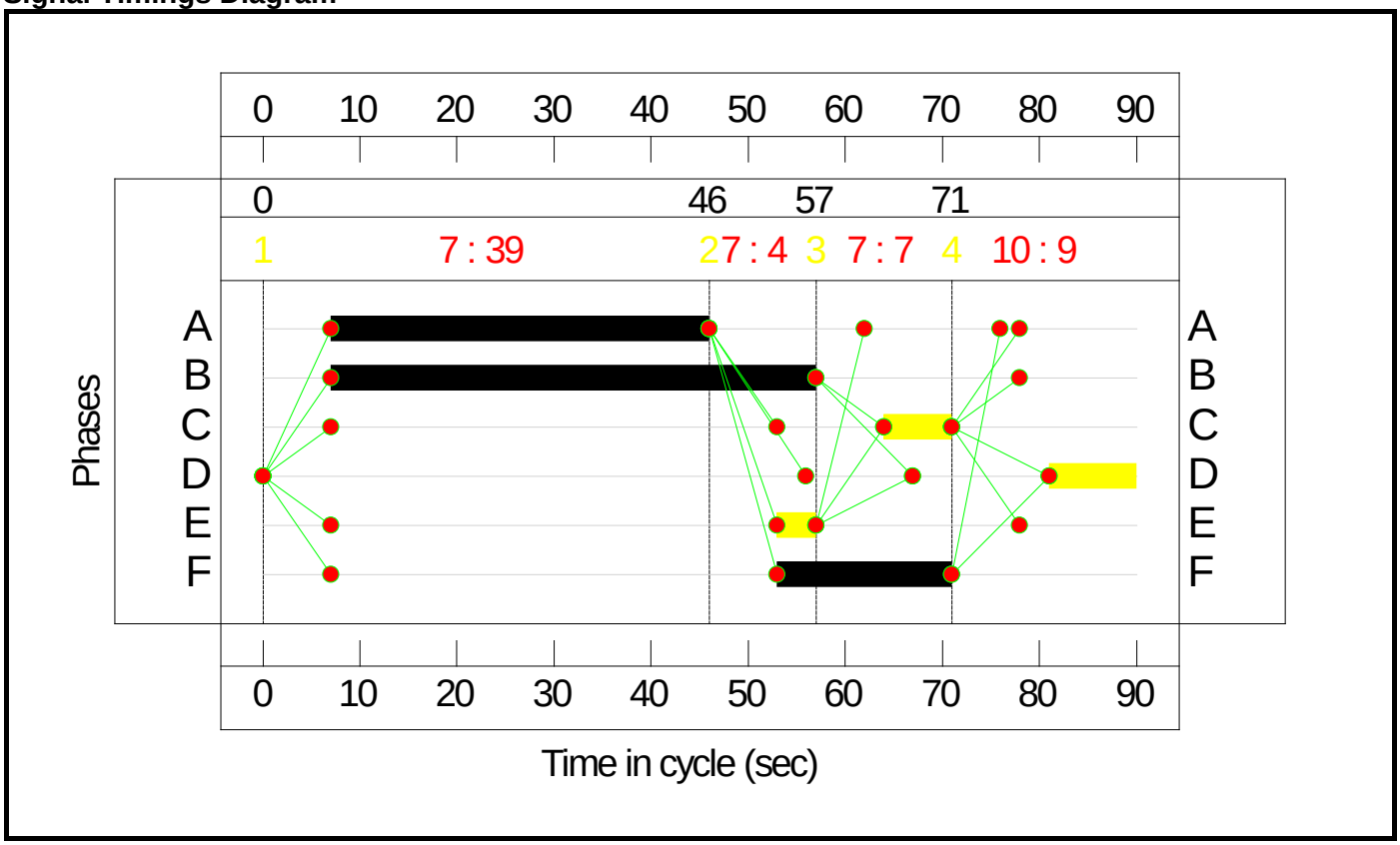
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	39	4	7	9
Change Point	0	46	57	71

Signal Timings Diagram



Full Input Data And Results

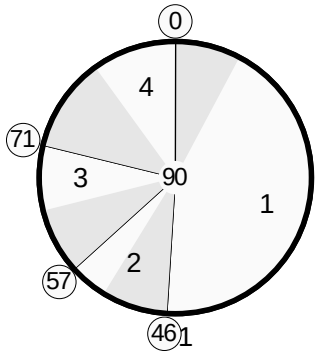
Network Layout Diagram

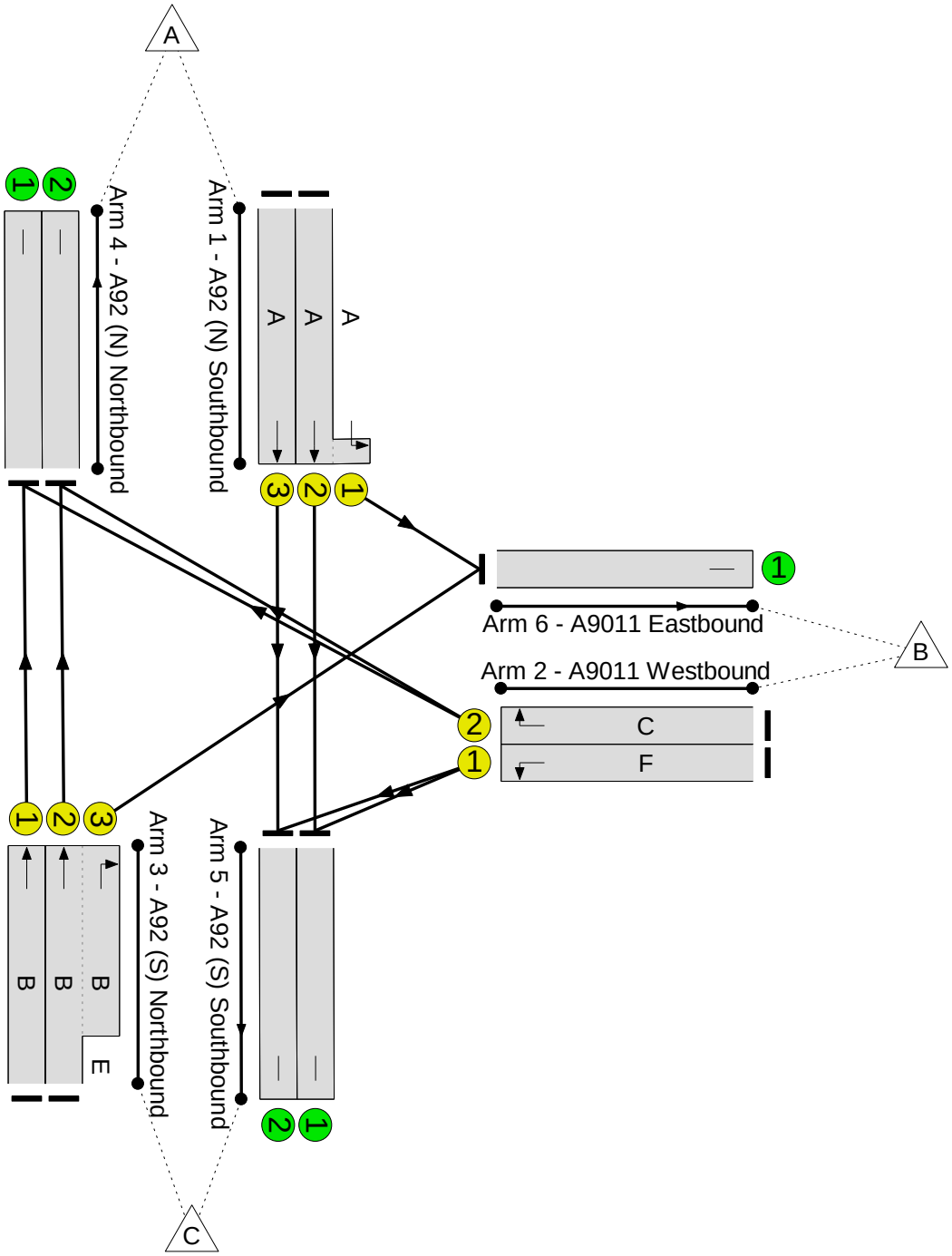
Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West

PRC: 68.5 %

Total Traffic Delay: 13.0 pcuHr





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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.4%**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.4%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	39	-	462	1950:1950	810+56	53.3 : 53.3%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	39	-	463	1950	867	53.4%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	18	-	160	1683	355	45.0%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	7	-	57	1649	147	38.9%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	50	-	507	1923	1090	46.5%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	50	4	607	1956:1540	927+226	52.6 : 52.6%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	535	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	517	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	149	2115	2115	7.0%

Full Input Data And Results

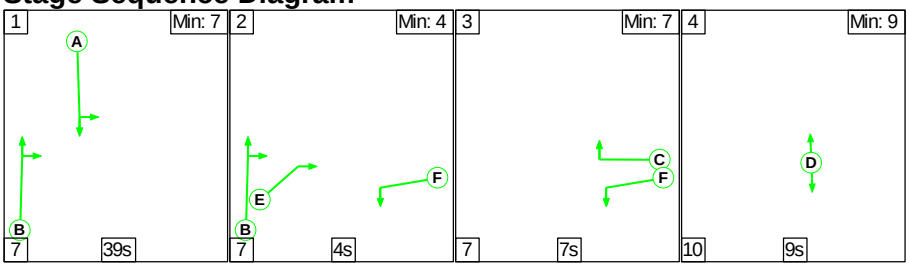
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.1**	**2.9**	**0.0**	**13.0**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**10.1**	**2.9**	**0.0**	**13.0**	**-**	**-**	**-**	**-**
1/2+1/1	462	462	-	-	-	2.3	0.6	-	2.9	22.7	8.3	0.6	8.8
1/3	463	463	-	-	-	2.3	0.6	-	2.9	22.7	8.4	0.6	8.9
2/1	160	160	-	-	-	1.4	0.4	-	1.8	40.1	3.5	0.4	3.9
2/2	57	57	-	-	-	0.6	0.3	-	0.9	58.7	1.3	0.3	1.6
3/1	507	507	-	-	-	1.6	0.4	-	2.1	14.6	7.3	0.4	7.8
3/2+3/3	607	607	-	-	-	1.8	0.6	-	2.4	14.1	6.9	0.6	7.5
4/1	535	535	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	517	517	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	149	149	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 68.5 Total Delay for Signalled Lanes (pcuHr): 12.97 Cycle Time (s): 90
PRC Over All Lanes (%): 68.5 Total Delay Over All Lanes(pcuHr): 13.01

Full Input Data And Results

Scenario 4: '2023 Base AM' (FG4: '2023 Base AM', Plan 1: 'Network Control Plan 1')

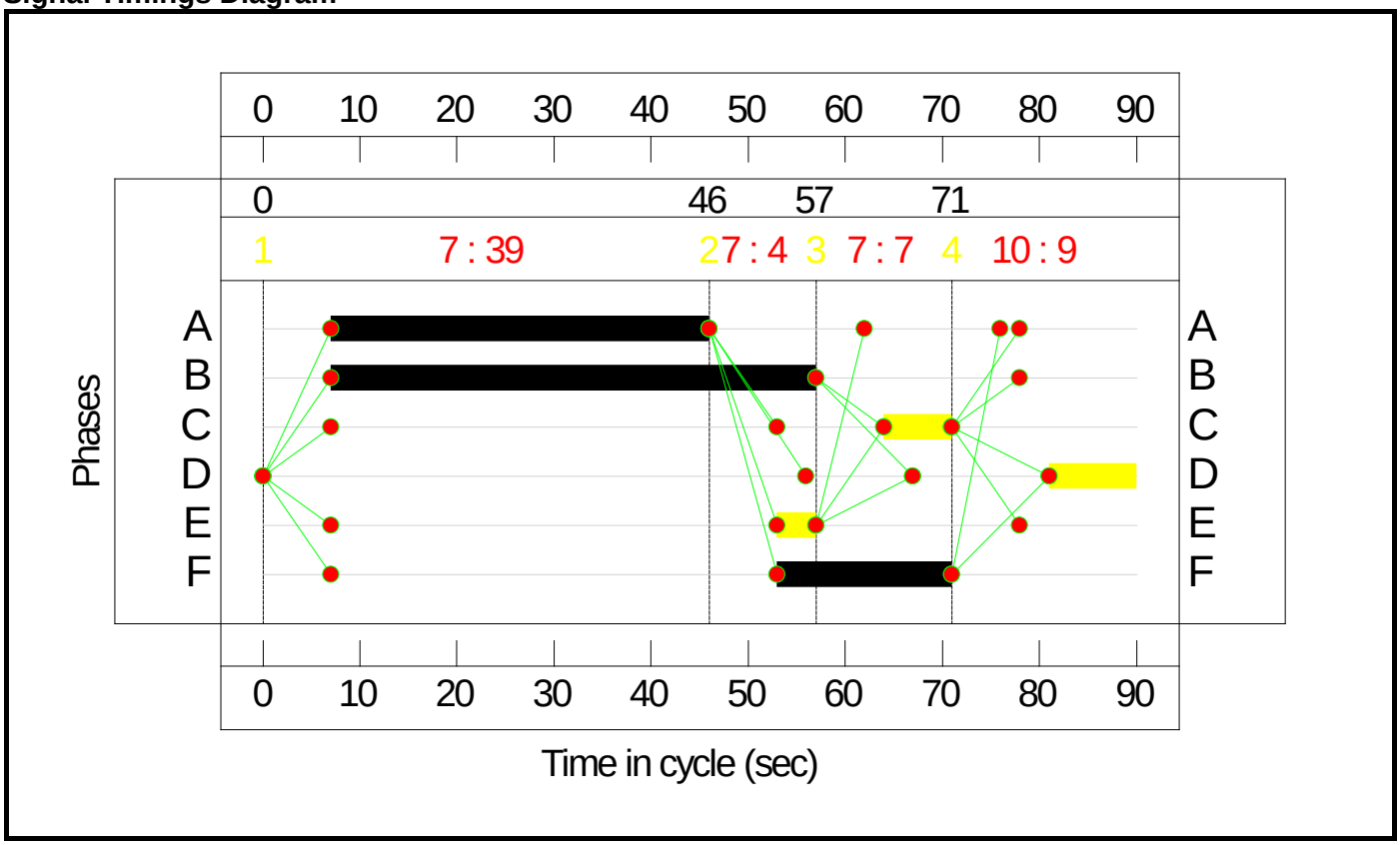
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	39	4	7	9
Change Point	0	46	57	71

Signal Timings Diagram



Full Input Data And Results

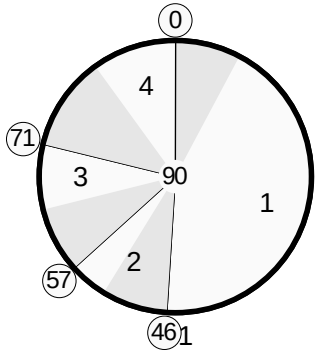
Network Layout Diagram

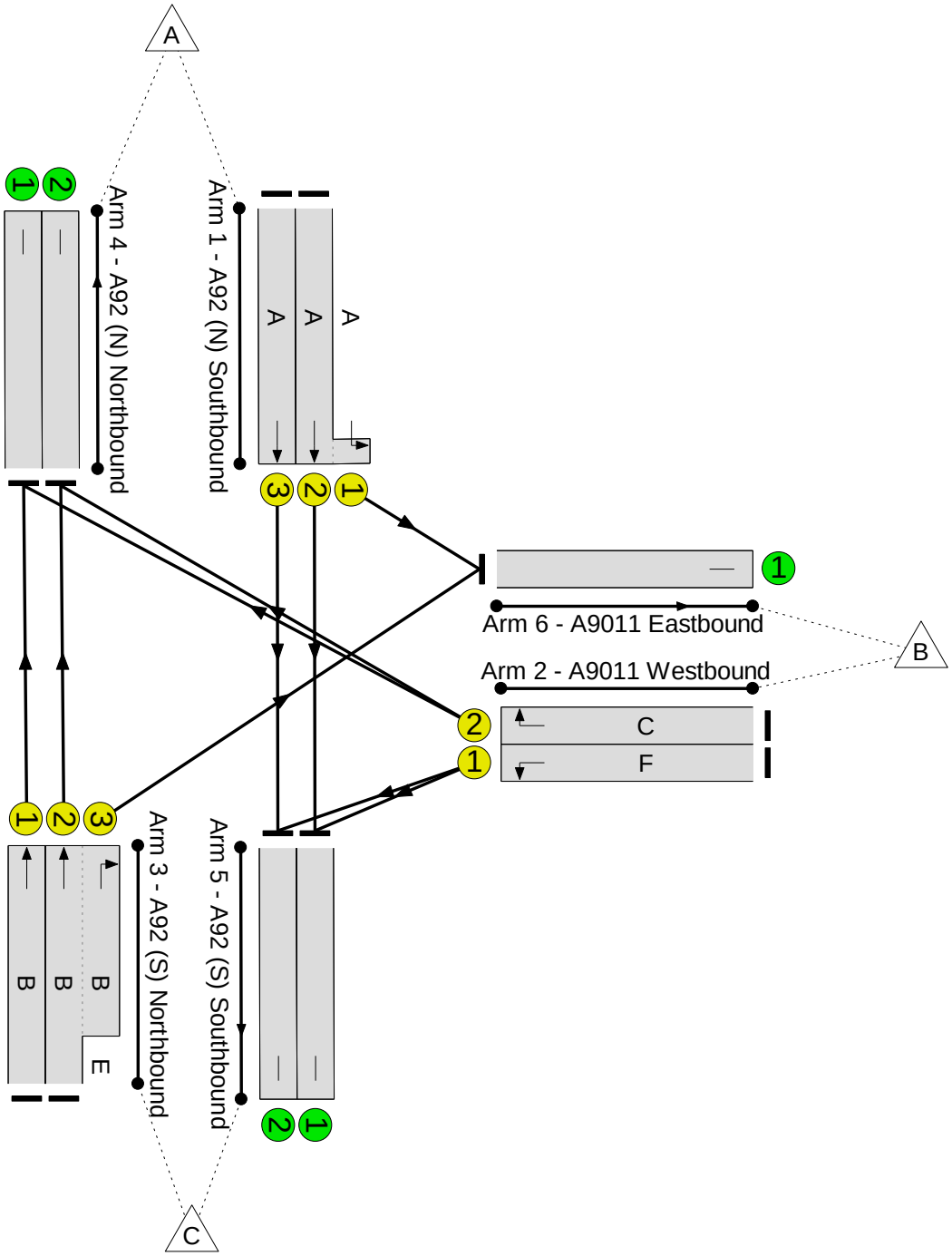
Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West

PRC: 38.8 %

Total Traffic Delay: 13.9 pcuHr





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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.8%**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.8%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	39	-	561	1950:1950	821+45	64.8 : 64.8%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	39	-	562	1950	867	64.8%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	18	-	115	1683	355	32.4%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	7	-	42	1649	147	28.7%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	50	-	452	1923	1090	41.5%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	50	4	629	1956:1540	825+390	51.8 : 51.8%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	448	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	619	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	231	2115	2115	10.9%

Full Input Data And Results

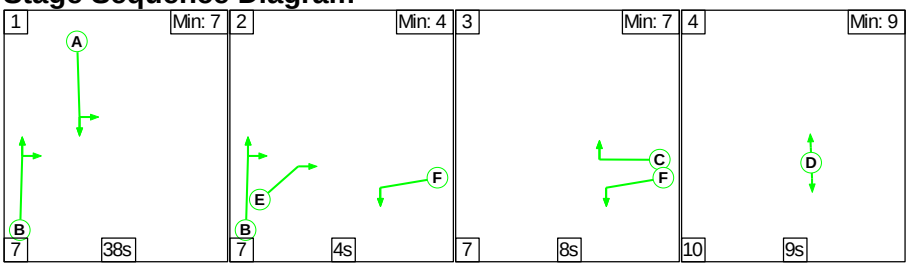
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.7**	**3.2**	**0.0**	**13.9**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**10.7**	**3.2**	**0.0**	**13.9**	**-**	**-**	**-**	**-**
1/2+1/1	561	561	-	-	-	3.0	0.9	-	4.0	25.4	10.9	0.9	11.8
1/3	562	562	-	-	-	3.0	0.9	-	4.0	25.4	10.9	0.9	11.8
2/1	115	115	-	-	-	1.0	0.2	-	1.2	37.5	2.4	0.2	2.7
2/2	42	42	-	-	-	0.4	0.2	-	0.6	55.5	1.0	0.2	1.2
3/1	452	452	-	-	-	1.4	0.4	-	1.7	13.9	6.3	0.4	6.6
3/2+3/3	629	629	-	-	-	1.8	0.5	-	2.4	13.5	5.8	0.5	6.3
4/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	448	448	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	619	619	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	231	231	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1

C1 PRC for Signalled Lanes (%): 38.8 Total Delay for Signalled Lanes (pcuHr): 13.88 Cycle Time (s): 90
PRC Over All Lanes (%): 38.8 Total Delay Over All Lanes(pcuHr): 13.94

Full Input Data And Results

Scenario 5: '2023 Base PM' (FG5: '2023 Base PM', Plan 1: 'Network Control Plan 1')

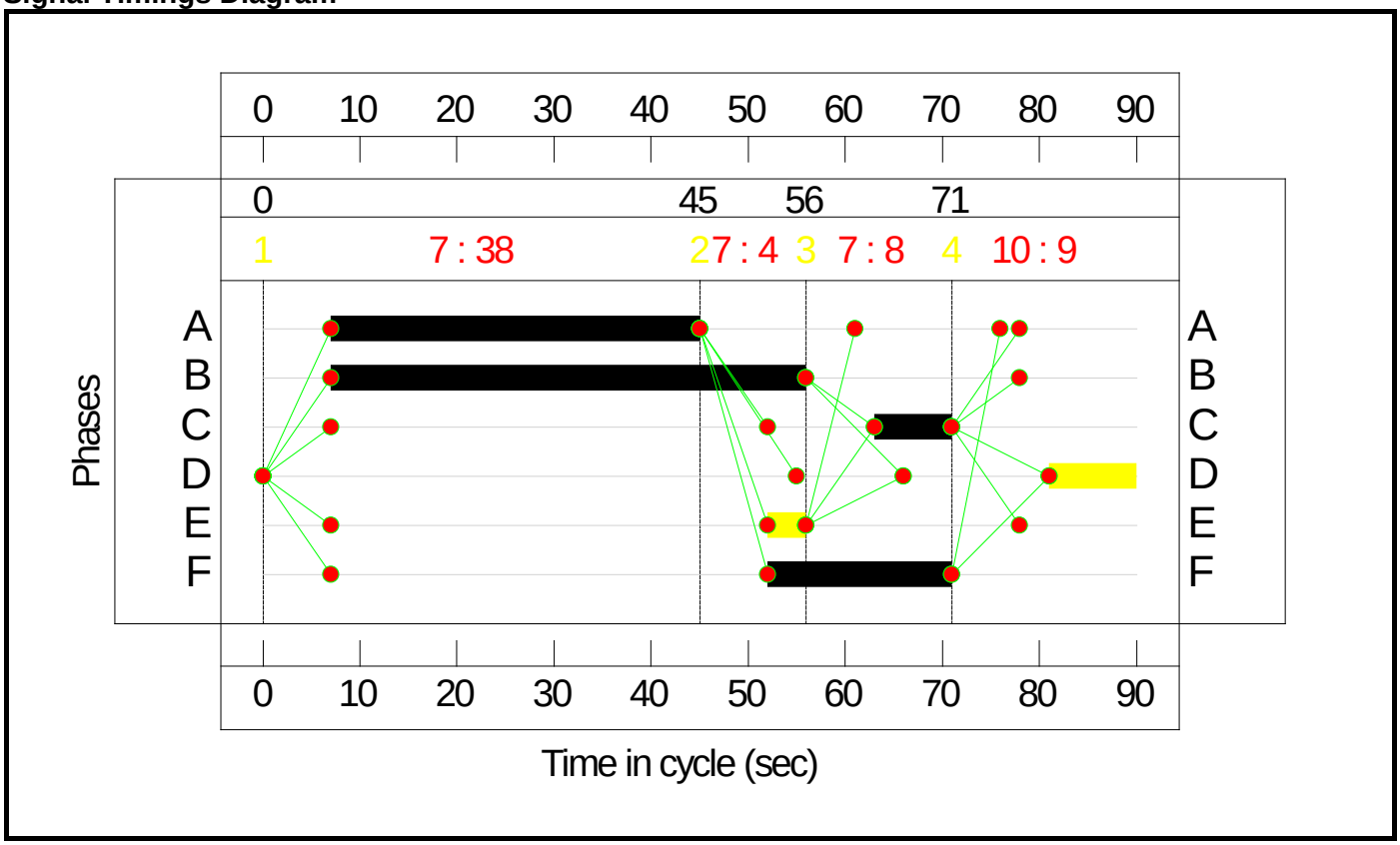
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	38	4	8	9
Change Point	0	45	56	71

Signal Timings Diagram



Full Input Data And Results

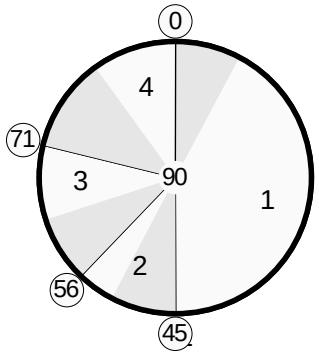
Network Layout Diagram

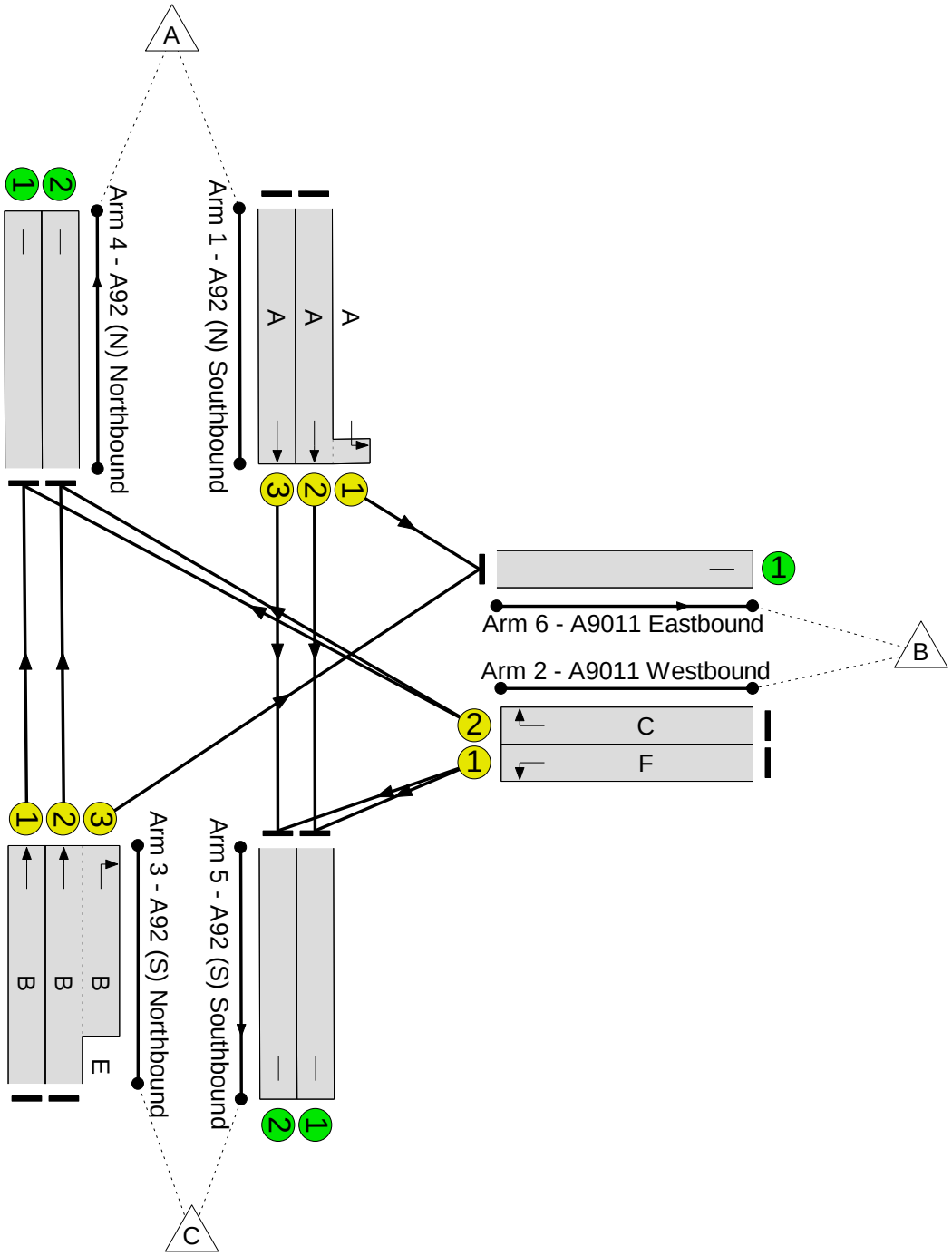
Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West

PRC: 21.6 %

Total Traffic Delay: 18.5 pcuHr





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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.0%**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.0%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	38	-	499	1950:1950	782+63	59.1 : 59.1%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	38	-	500	1950	845	59.2%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	19	-	259	1683	374	69.3%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	8	-	122	1649	165	74.0%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	49	-	567	1923	1068	53.1%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	49	4	689	1956:1540	889+254	60.3 : 60.3%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	190	2115	2115	9.0%

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	**-**	**-**	**0**	**0**	**0**	**13.3**	**5.3**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**13.3**	**5.3**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
1/2+1/1	499	499	-	-	-	2.7	0.7	-	3.4	24.6	9.3	0.7	10.1
1/3	500	500	-	-	-	2.7	0.7	-	3.4	24.6	9.4	0.7	10.2
2/1	259	259	-	-	-	2.3	1.1	-	3.4	47.5	5.9	1.1	7.0
2/2	122	122	-	-	-	1.3	1.3	-	2.7	78.9	2.9	1.3	4.3
3/1	567	567	-	-	-	2.0	0.6	-	2.6	16.2	8.8	0.6	9.4
3/2+3/3	689	689	-	-	-	2.2	0.8	-	3.0	15.7	8.2	0.8	8.9
4/1	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	190	190	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 21.6
PRC Over All Lanes (%): 21.6

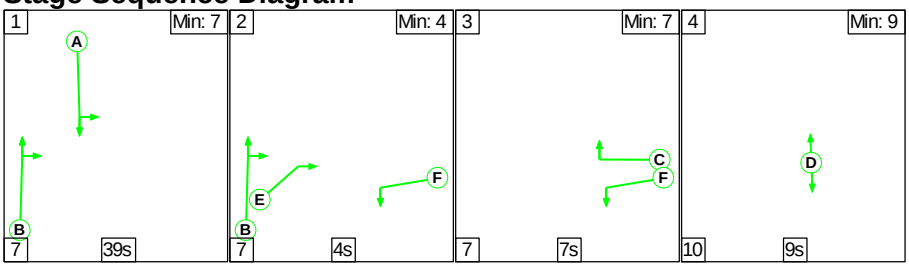
Total Delay for Signalled Lanes (pcuHr): 18.47
Total Delay Over All Lanes(pcuHr): 18.52

Cycle Time (s): 90

Full Input Data And Results

Scenario 6: '2023 Base Saturday' (FG6: '2023 Base Saturday ', Plan 1: 'Network Control Plan 1')

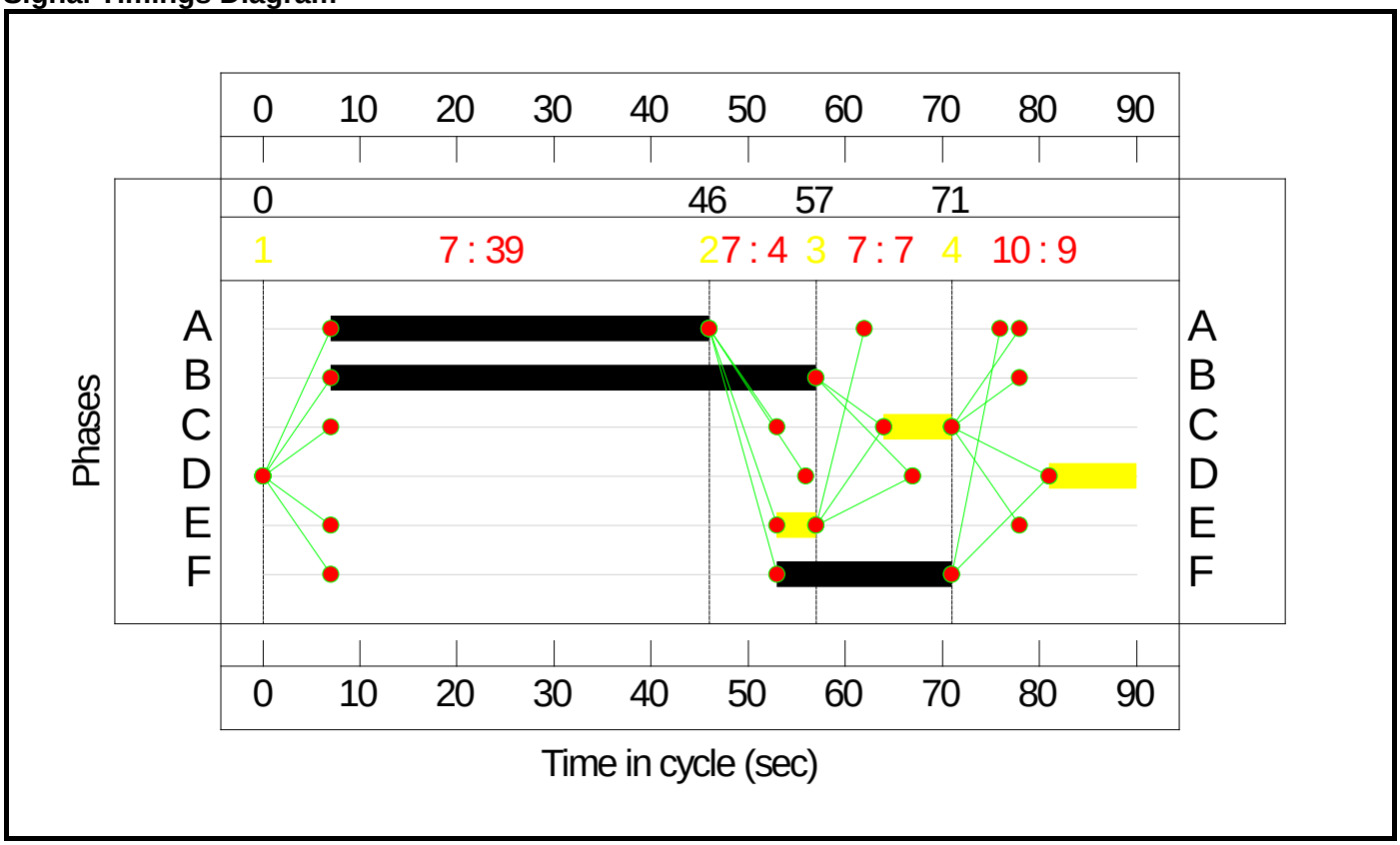
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	39	4	7	9
Change Point	0	46	57	71

Signal Timings Diagram

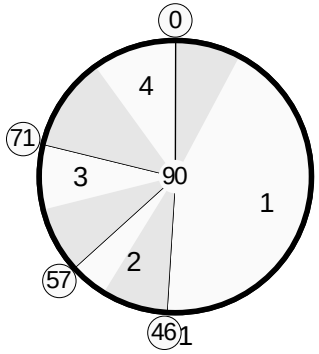


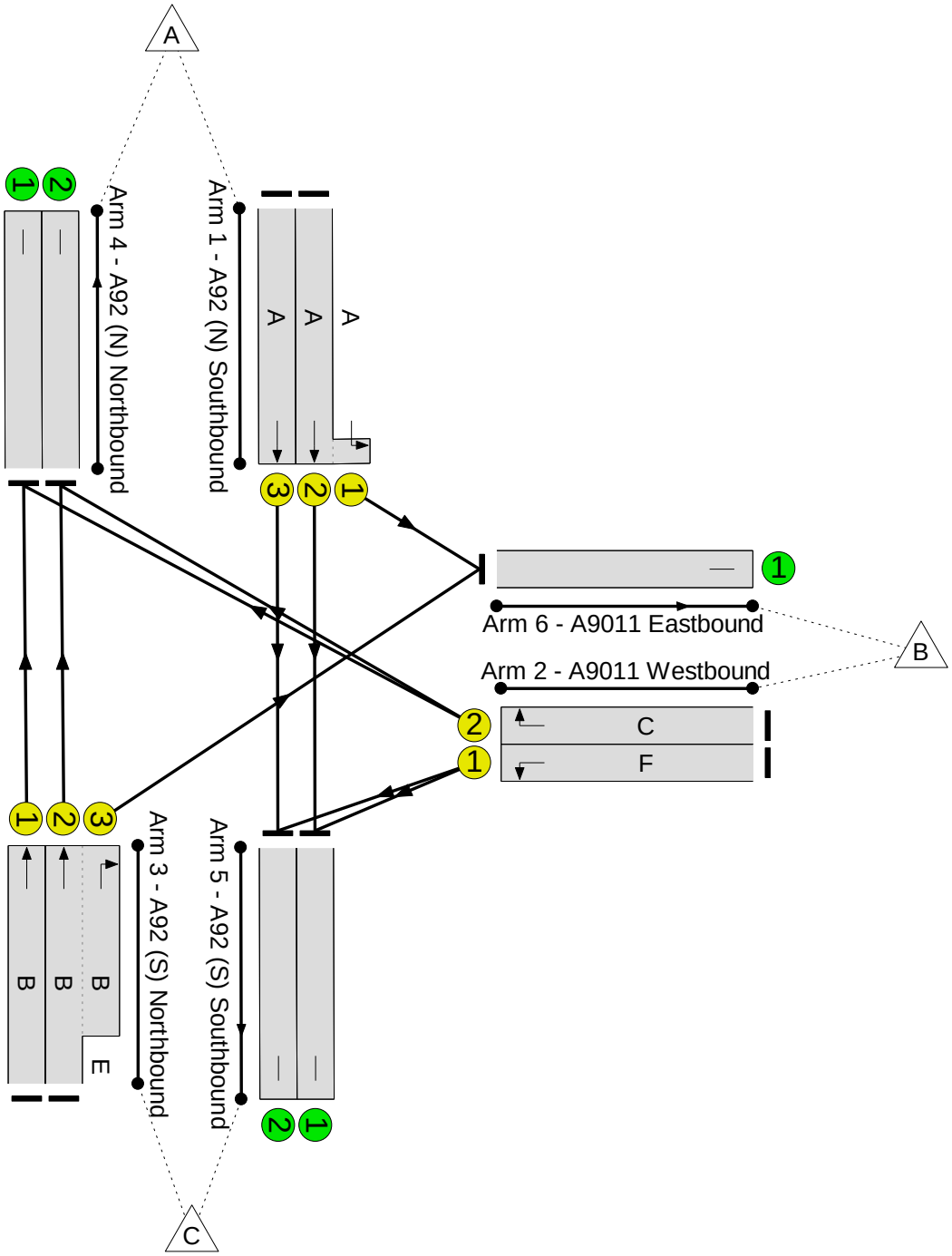
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West
PRC: 66.3 %
Total Traffic Delay: 13.3 pcuHr





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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**54.1%**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**54.1%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	39	-	468	1950:1950	811+56	54.0 : 54.0%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	39	-	469	1950	867	54.1%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	18	-	162	1683	355	45.6%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	7	-	58	1649	147	39.6%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	50	-	514	1923	1090	47.2%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	50	4	615	1956:1540	928+225	53.4 : 53.4%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	550	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	150	2115	2115	7.1%

Full Input Data And Results

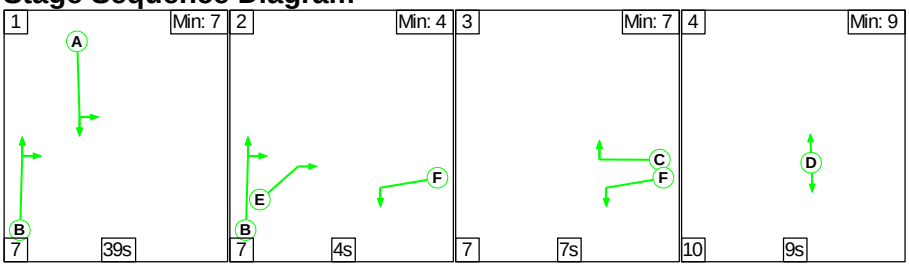
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.3**	**3.0**	**0.0**	**13.3**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**10.3**	**3.0**	**0.0**	**13.3**	**-**	**-**	**-**	**-**
1/2+1/1	468	468	-	-	-	2.4	0.6	-	3.0	22.8	8.4	0.6	9.0
1/3	469	469	-	-	-	2.4	0.6	-	3.0	22.8	8.5	0.6	9.1
2/1	162	162	-	-	-	1.4	0.4	-	1.8	40.3	3.5	0.4	3.9
2/2	58	58	-	-	-	0.6	0.3	-	0.9	58.9	1.4	0.3	1.7
3/1	514	514	-	-	-	1.6	0.4	-	2.1	14.7	7.6	0.4	8.0
3/2+3/3	615	615	-	-	-	1.9	0.6	-	2.4	14.2	7.2	0.6	7.7
4/1	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	550	550	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	150	150	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 66.3 Total Delay for Signalled Lanes (pcuHr): 13.22 Cycle Time (s): 90
PRC Over All Lanes (%): 66.3 Total Delay Over All Lanes(pcuHr): 13.26

Full Input Data And Results

Scenario 7: '2023 Total AM' (FG7: '2023 Total AM', Plan 1: 'Network Control Plan 1')

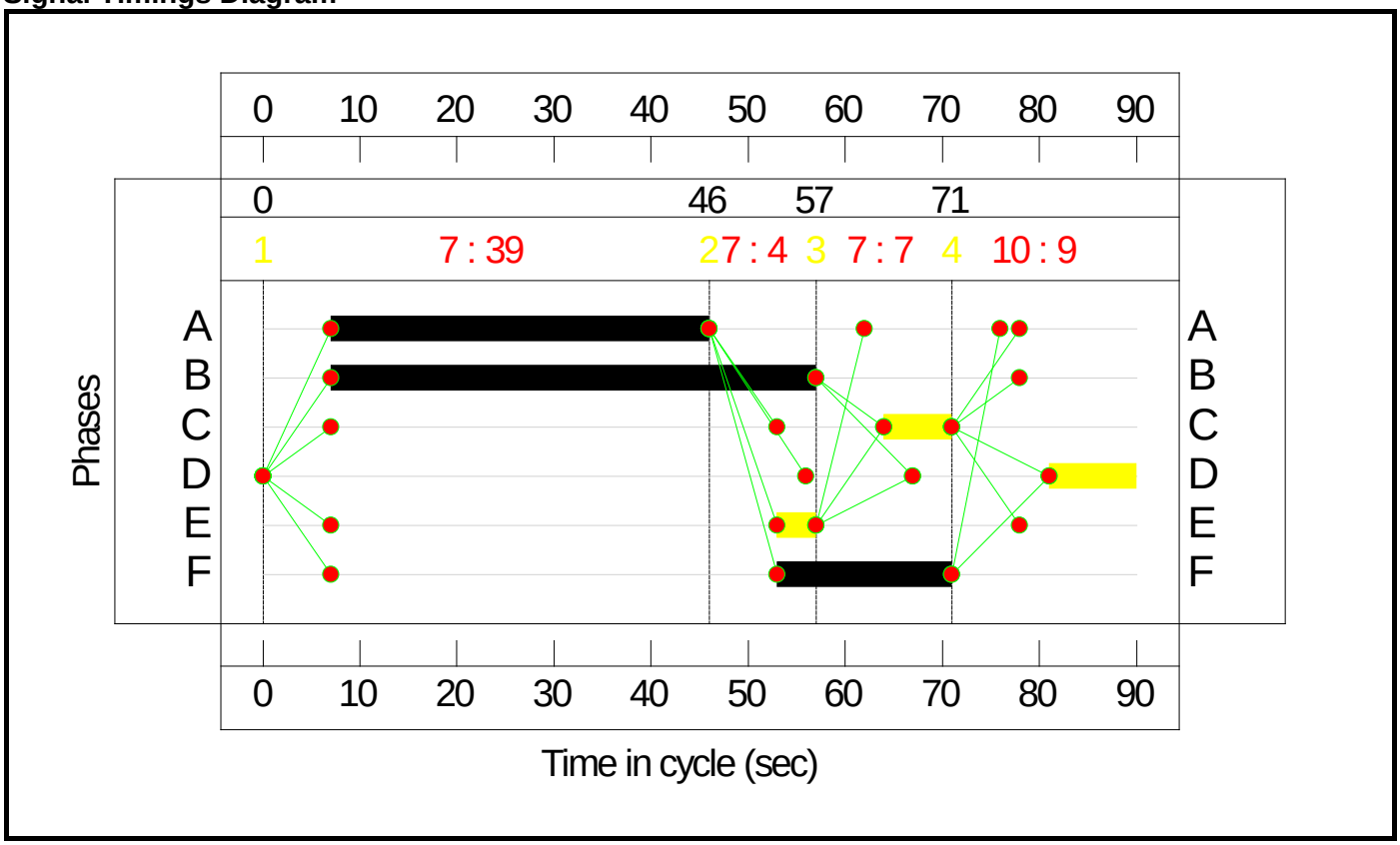
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	39	4	7	9
Change Point	0	46	57	71

Signal Timings Diagram



Full Input Data And Results

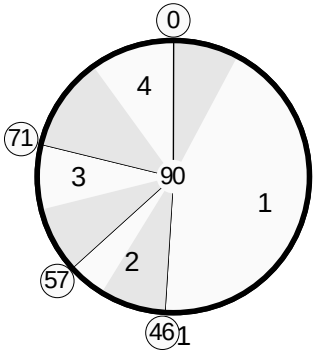
Network Layout Diagram

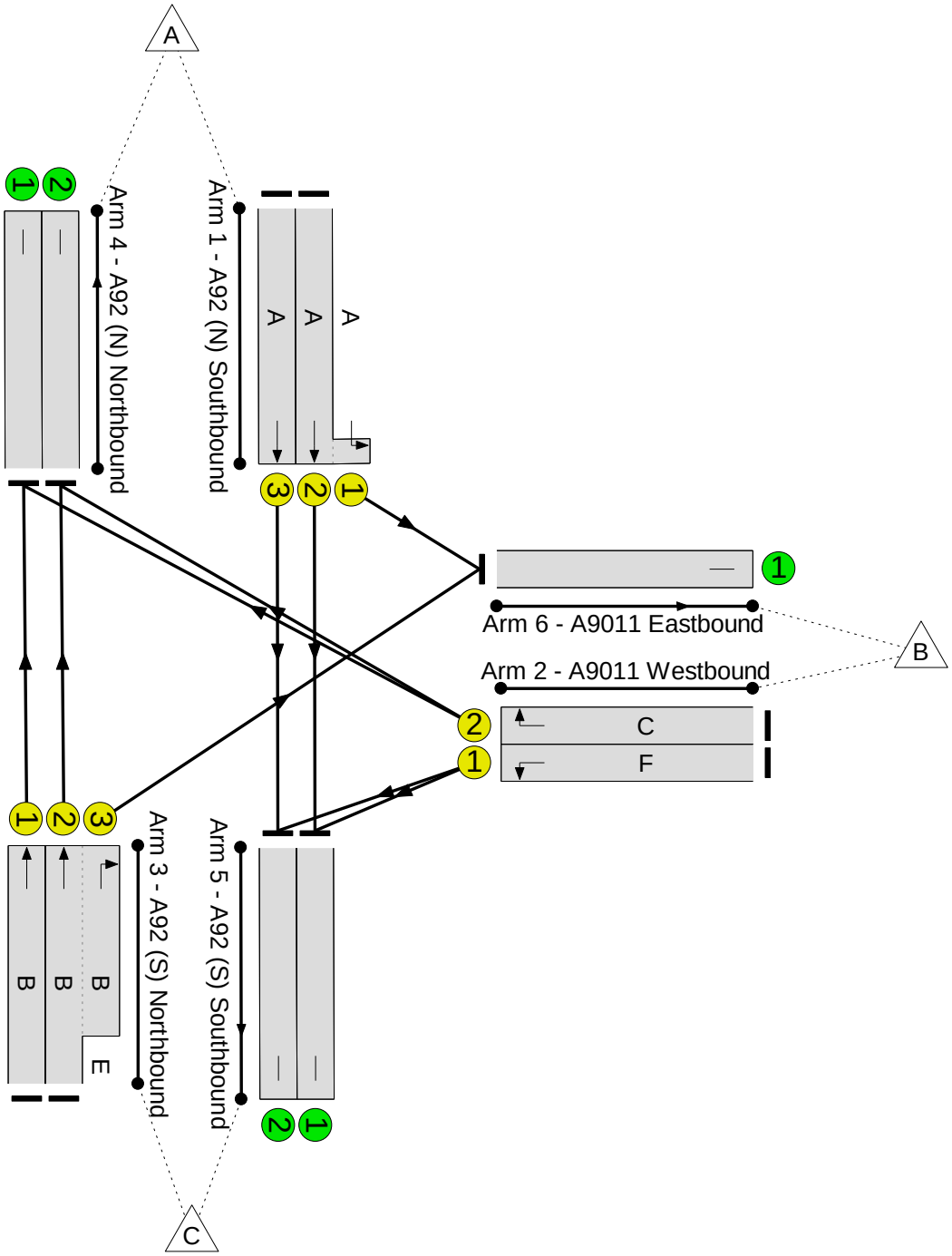
Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West

PRC: 37.6 %

Total Traffic Delay: 15.2 pcuHr





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	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.4%**
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.4%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	39	-	568	1950:1950	771+98	65.4 : 65.4%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	39	-	566	1950	867	65.3%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	18	-	149	1683	355	41.9%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	7	-	76	1649	147	51.8%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	50	-	441	1923	1090	40.5%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	50	4	640	1956:1540	801+434	51.8 : 51.8%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	479	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	640	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	289	2115	2115	13.7%

Full Input Data And Results

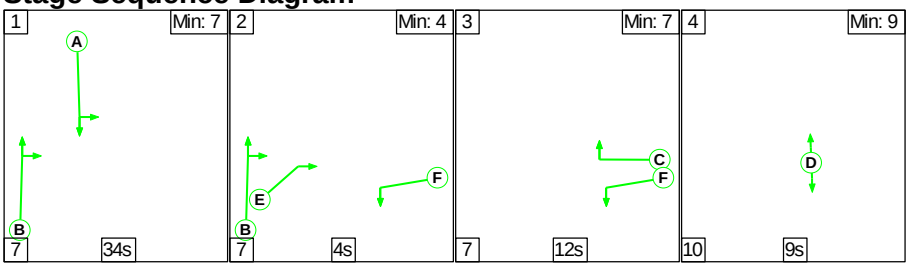
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**11.5**	**3.7**	**0.0**	**15.2**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**11.5**	**3.7**	**0.0**	**15.2**	**-**	**-**	**-**	**-**
1/2+1/1	568	568	-	-	-	3.1	0.9	-	4.0	25.5	10.9	0.9	11.9
1/3	566	566	-	-	-	3.1	0.9	-	4.0	25.5	11.0	0.9	11.9
2/1	149	149	-	-	-	1.3	0.4	-	1.6	39.4	3.2	0.4	3.5
2/2	76	76	-	-	-	0.8	0.5	-	1.4	64.3	1.8	0.5	2.3
3/1	441	441	-	-	-	1.3	0.3	-	1.7	13.7	6.1	0.3	6.5
3/2+3/3	640	640	-	-	-	1.9	0.5	-	2.4	13.5	5.6	0.5	6.2
4/1	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	289	289	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1

C1 PRC for Signalled Lanes (%): 37.6 Total Delay for Signalled Lanes (pcuHr): 15.10 Cycle Time (s): 90
PRC Over All Lanes (%): 37.6 Total Delay Over All Lanes(pcuHr): 15.18

Full Input Data And Results

Scenario 8: '2023 Total PM' (FG8: '2023 Total PM', Plan 1: 'Network Control Plan 1')

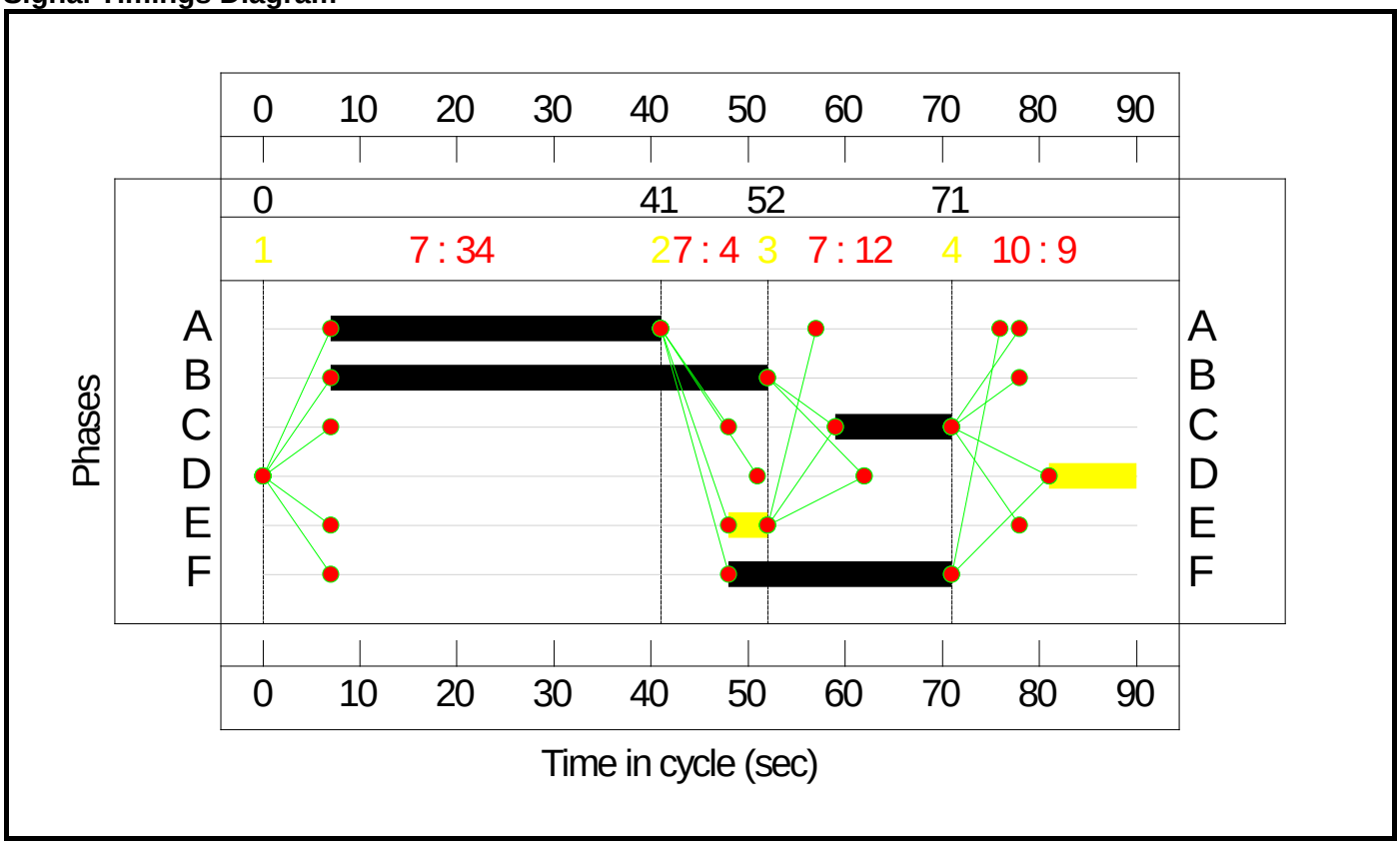
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	34	4	12	9
Change Point	0	41	52	71

Signal Timings Diagram

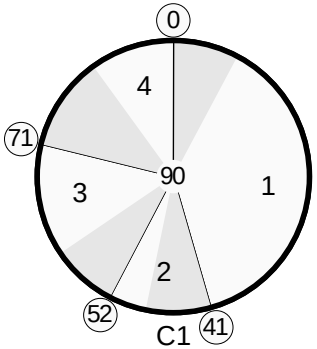


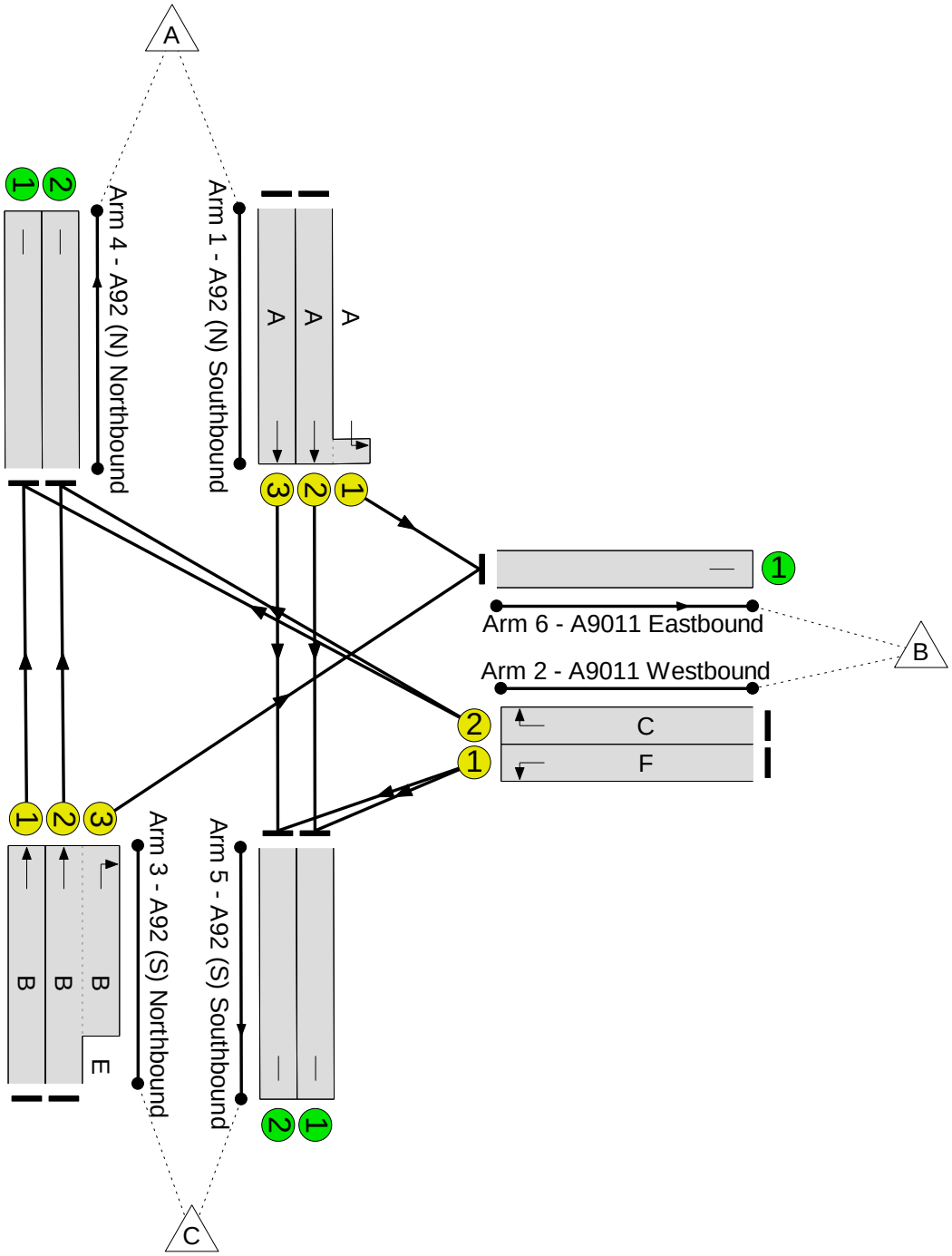
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West
PRC: 21.8 %
Total Traffic Delay: 21.9 pcuHr





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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	34	-	510	1950:1950	641+121	66.9 : 66.9%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	34	-	503	1950	758	66.3%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	23	-	309	1683	449	68.9%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	12	-	176	1649	238	73.9%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	45	-	553	1923	983	56.3%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	45	4	721	1956:1540	777+319	65.8 : 65.8%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	641	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	599	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	657	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	291	2115	2115	13.8%

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	**-**	**-**	**0**	**0**	**0**	**15.8**	**6.1**	**0.0**	**21.9**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**15.8**	**6.1**	**0.0**	**21.9**	**-**	**-**	**-**	**-**
1/2+1/1	510	510	-	-	-	3.2	1.0	-	4.2	29.7	10.3	1.0	11.3
1/3	503	503	-	-	-	3.2	1.0	-	4.1	29.6	10.3	1.0	11.3
2/1	309	309	-	-	-	2.5	1.1	-	3.6	42.3	6.9	1.1	8.0
2/2	176	176	-	-	-	1.8	1.4	-	3.2	64.6	4.2	1.4	5.6
3/1	553	553	-	-	-	2.3	0.6	-	3.0	19.3	9.4	0.6	10.0
3/2+3/3	721	721	-	-	-	2.8	1.0	-	3.7	18.7	8.4	1.0	9.3
4/1	641	641	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	291	291	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1

C1

PRC for Signalled Lanes (%): 21.8
PRC Over All Lanes (%): 21.8

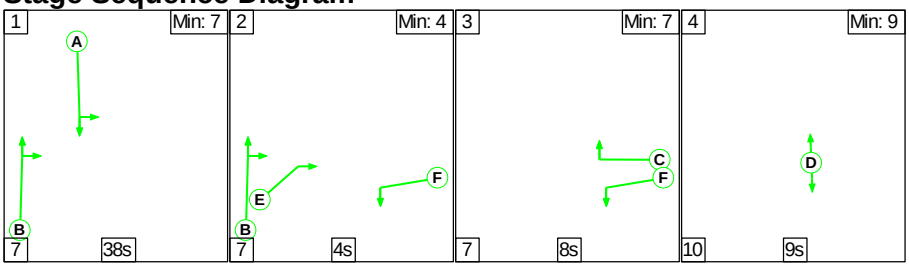
Total Delay for Signalled Lanes (pcuHr): 21.85
Total Delay Over All Lanes(pcuHr): 21.93

Cycle Time (s): 90

Full Input Data And Results

Scenario 9: '2023 Total Saturday' (FG9: '2023 Total Saturday', Plan 1: 'Network Control Plan 1')

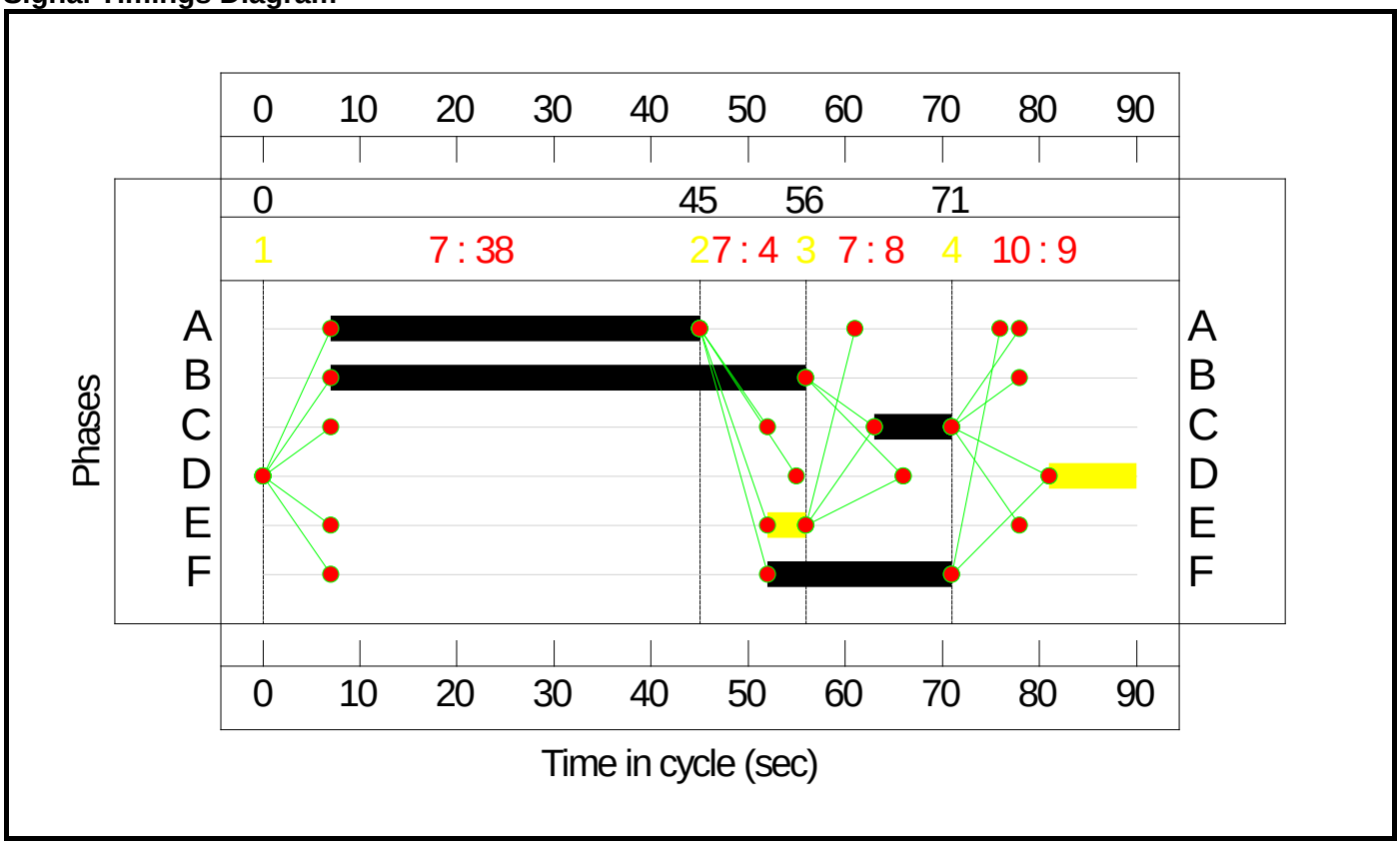
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	38	4	8	9
Change Point	0	45	56	71

Signal Timings Diagram



Full Input Data And Results

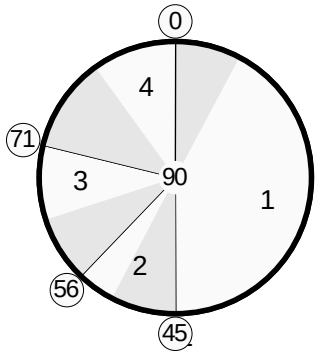
Network Layout Diagram

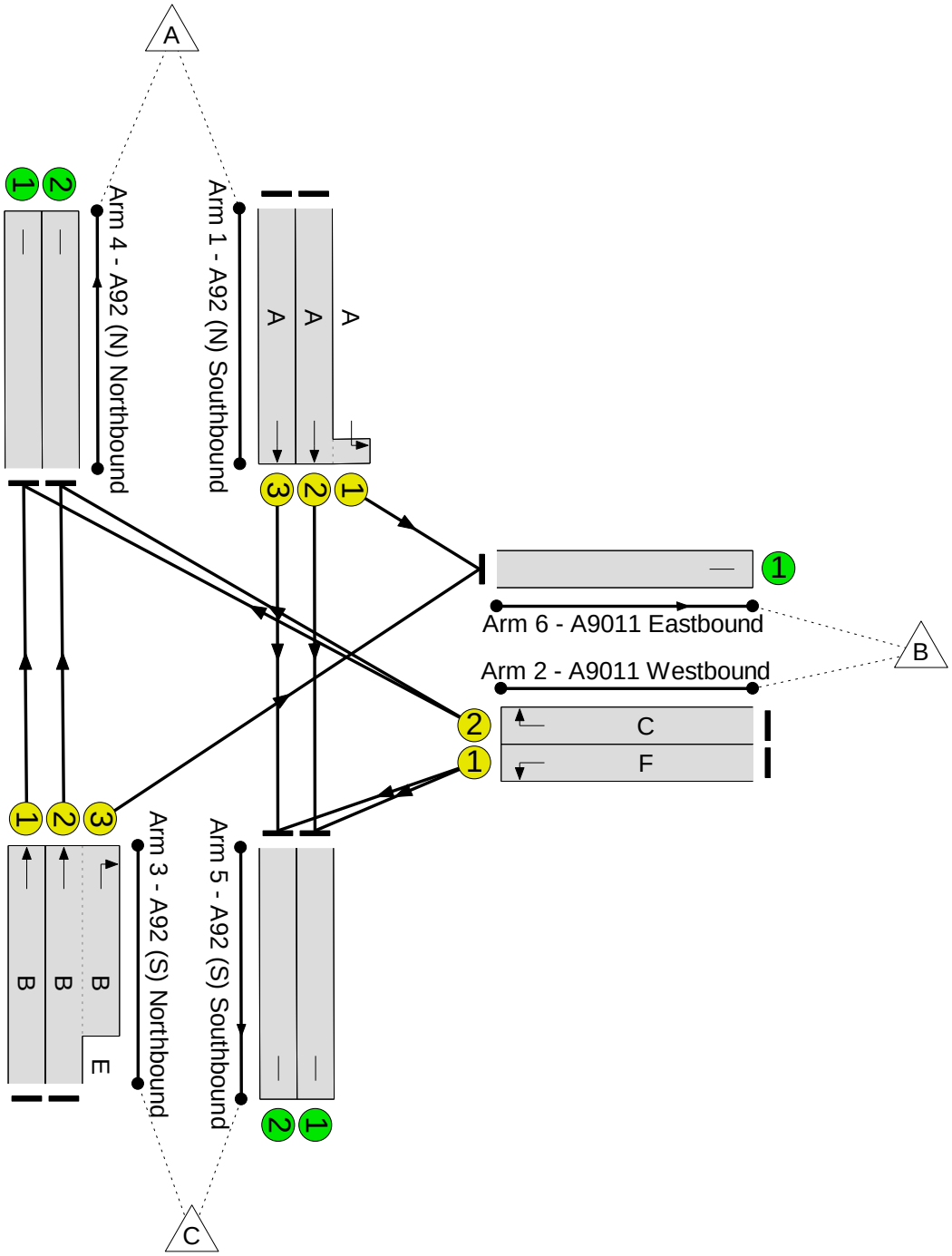
Full Input Data And Results

A92 North Anderson Drive/A9011 Ashgrove Road West

PRC: 21.6 %

Total Traffic Delay: 16.3 pcuHr





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	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.0%**
A92 North Anderson Drive/A9011 Ashgrove Road West	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.0%**
1/2+1/1	A92 (N) Southbound Ahead Left	U	N/A	N/A	A		1	38	-	479	1950:1950	698+153	56.3 : 56.3%
1/3	A92 (N) Southbound Ahead	U	N/A	N/A	A		1	38	-	469	1950	845	55.5%
2/1	A9011 Westbound Left	U	N/A	N/A	F		1	19	-	220	1683	374	58.8%
2/2	A9011 Westbound Right	U	N/A	N/A	C		1	8	-	122	1649	165	74.0%
3/1	A92 (S) Northbound Ahead	U	N/A	N/A	B		1	49	-	492	1923	1068	46.1%
3/2+3/3	A92 (S) Northbound Ahead Right	U	N/A	N/A	B	E	1	49	4	650	1956:1540	836+340	55.3 : 55.3%
4/1	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%
4/2	A92 (N) Northbound	U	N/A	N/A	-		-	-	-	523	Inf	Inf	0.0%
5/1	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
5/2	A92 (S) Southbound	U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
6/1	A9011 Eastbound	U	N/A	N/A	-		-	-	-	274	2115	2115	13.0%

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	**-**	**-**	**0**	**0**	**0**	**11.9**	**4.4**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
A92 North Anderson Drive/A9011 Ashgrove Road West	**-**	**-**	**0**	**0**	**0**	**11.9**	**4.4**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
1/2+1/1	479	479	-	-	-	2.5	0.6	-	3.2	23.8	8.7	0.6	9.3
1/3	469	469	-	-	-	2.5	0.6	-	3.1	23.8	8.7	0.6	9.4
2/1	220	220	-	-	-	1.9	0.7	-	2.6	42.9	4.9	0.7	5.6
2/2	122	122	-	-	-	1.3	1.3	-	2.7	78.9	2.9	1.3	4.3
3/1	492	492	-	-	-	1.6	0.4	-	2.1	15.1	7.2	0.4	7.7
3/2+3/3	650	650	-	-	-	2.0	0.6	-	2.6	14.6	6.7	0.6	7.3
4/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	523	523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	274	274	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1

C1

PRC for Signalled Lanes (%): 21.6
PRC Over All Lanes (%): 21.6

Total Delay for Signalled Lanes (pcuHr): 16.26
Total Delay Over All Lanes(pcuHr): 16.34

Cycle Time (s): 90