Appendix 14.3

Junction Analyses Report

Proposed RB Central Apartments Development, Sandyford, Dublin 18

On behalf of

IRES Residential Properties Limited

Prepared by

CST GROUP Chartered Consulting Engineers
1, O'Connell St, Sligo, F91 W7YV

March 2019

Civil
Structural
Traffic

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Appendices:

Report By: _____

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Date 28 March 2019

Approved By: _____

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Date 28 March 2019

Revision History

Revision History:	R0	R1	R2						
Purpose of Issue: P=Preliminary PG=Progress C=Comment I=Information FC=Fire Cert Q=Quotation PL=Planning T=Tender CN=construction CT=Contract	C	PL	PL						
Date:	17 10 18	07 12 18	28 03 19						
Originator:	PB	PB	PB						
Checked By:	FF	FF	FF						
Approved By:	FF	FF	FF						

1. Introduction

CST Group Chartered Consulting Engineers has carried out an assessment of five junctions in the vicinity of the development site. These include the following junctions:

- Junction 1 Blackthorn Dr/Carmanhall Rd/Birch Ave four-arm signalised junction
- Junction 2 Carmanhall Rd/Site Access – three-arm priority junction
- Junction 3 Carmanhall Rd/Corrig Rd – three-arm priority junction
- Junction 4 Carmanhall Rd/Blackthorn Rd – three-arm priority junction
- Junction 5 Blackthorn Dr/Site Access – three-arm priority junction

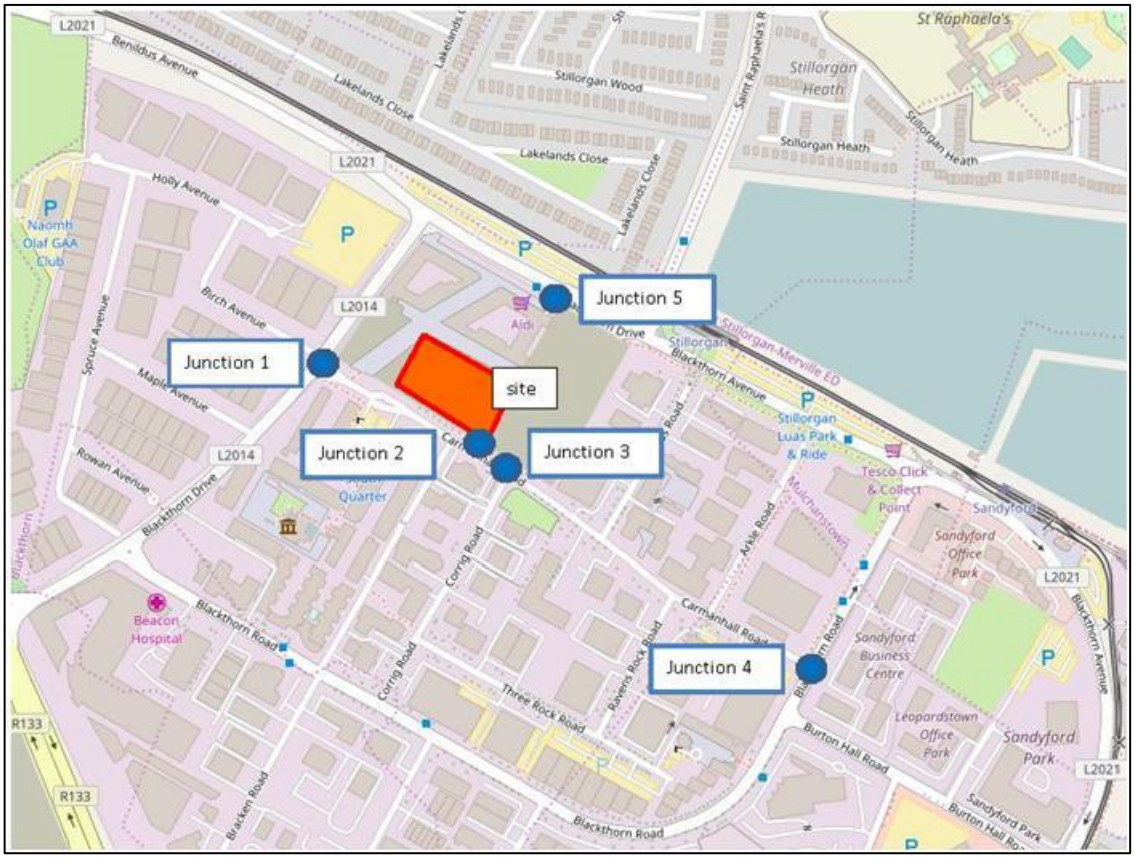


Figure 1: Junction Locations © *OpenStreetMap contributors*

Junction Locations – for assessment

It is anticipated that the year of opening of the development would be 2021. It has been agreed with DLRCC that the junction assessments will be carried out for the year of opening as well as the 10-year horizon.

2. Traffic Surveys

Traffic Surveys were carried out at junctions 1, 3, 4 and 5 on Thursday 08/12/16 between 07.00 – 10.00 hours and 16.00-19.00 hours. The Travel Habit Surveys were also carried out on the same day.

Additionally, traffic counts were taken within the existing development car park on the car park ramps since the car parking is allocated on the basis of upper basement (-1 level) – retail units (including Aldi and EZ Living), and lower basement (-2 level) – residential units (419 total). This provided a clear breakdown of the trip generation for the existing residential units and retail units. These trip profiles were subsequently used for the trip generation for the proposed 428 no. residential units now proposed under the scheme.

The peak traffic hours were 08.15 to 09.15 hours, and 17.00 to 18.00 hours for the respective AM and PM peaks.

The Traffic survey information is summarised in Appendix A.

Existing Traffic Flows for the 2016 peak hours are shown on Appendix B - Figure 1.

3. Committed Development

There are a number of sites which have been received planning approval by DLRCC, which are assumed to be committed development, which will have an impact on the roads in the vicinity of the RB Central site. They are:

1. Avid site – (D16A/0158) – 147 apartments plus minor retail/office space;
2. Wexele site (D15A/0827) – 21,099m^2 offices;
3. Febvre site (D15A/0827) – 27,751m^2 offices;
4. Ulster Bank Site (D15A/0560) – 41,871m^2 offices;
5. Microsoft Site (South County Business Park) (D14A/0351) 34,554 m^2 offices;
6. South County Gateway site (South County Business Park) (D15A/0695) 26,525 m^2 offices;
7. Tivway site (ABP-301428-18) 459 apartments plus crèche.
8. Sentinel Office Block 13,287m^2 offices (within the overall Rockbrook site but currently frame only works carried out).

The development locations are shown in the figure below

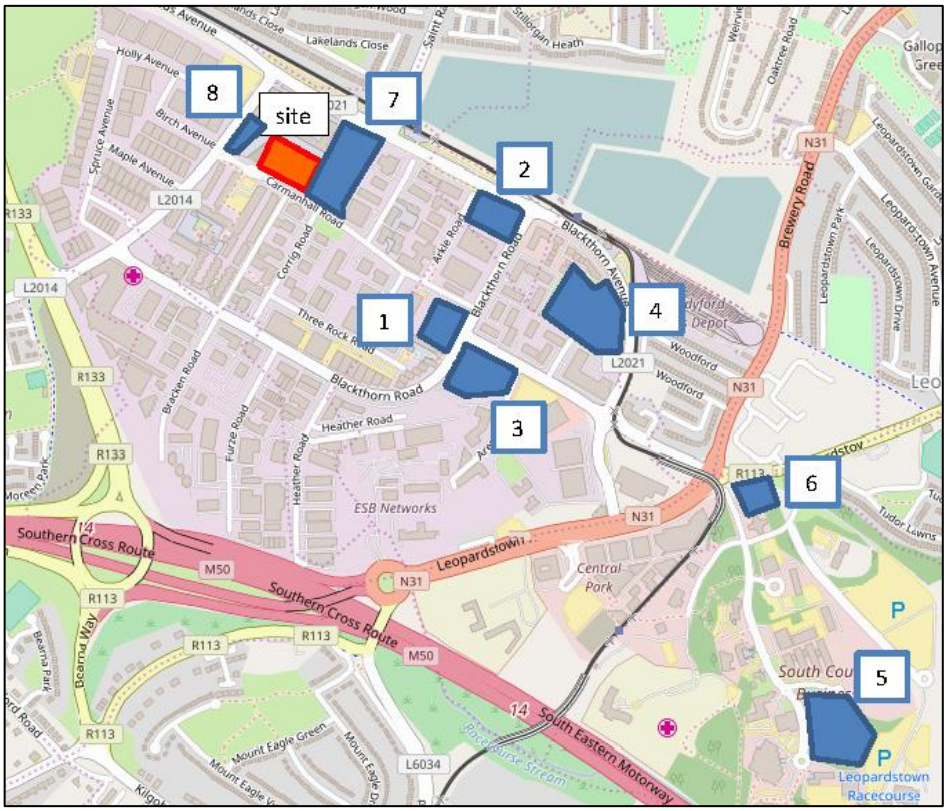


Figure 2: Development Locations © *OpenStreetMap contributors*

Assumptions:

- That the committed developments are completed and occupied by the 2021 opening year. This is a very conservative approach considering the quantum of development.
- That the peak hour flows for the committed sites coincide with the peak hour flows surveyed for the junctions assessed.
- That the traffic flows derived for each of the sites is as was assessed with each of the Transport Assessments which accompanied the relevant planning applications.

4. Road Improvement Schemes

The SUFP identified a number of road improvement schemes which would be needed to ensure adequate capacity for further development within the Sandyford District under a six-year time frame. These include (numbers as per the SUFP numbering system):

(1) M50 Diverge Ramp to ESB Link Road (preferred) or Heather Road;

(2a) Leopardstown Link Road;

(3) Bracken Road Extension;

(6) ESB Link Road & Link to Arena Road;

(7) Leopardstown Roundabout Reconfiguration;

(9) Bus Priority Schemes.

The locations of the schemes are set out in the figure below:

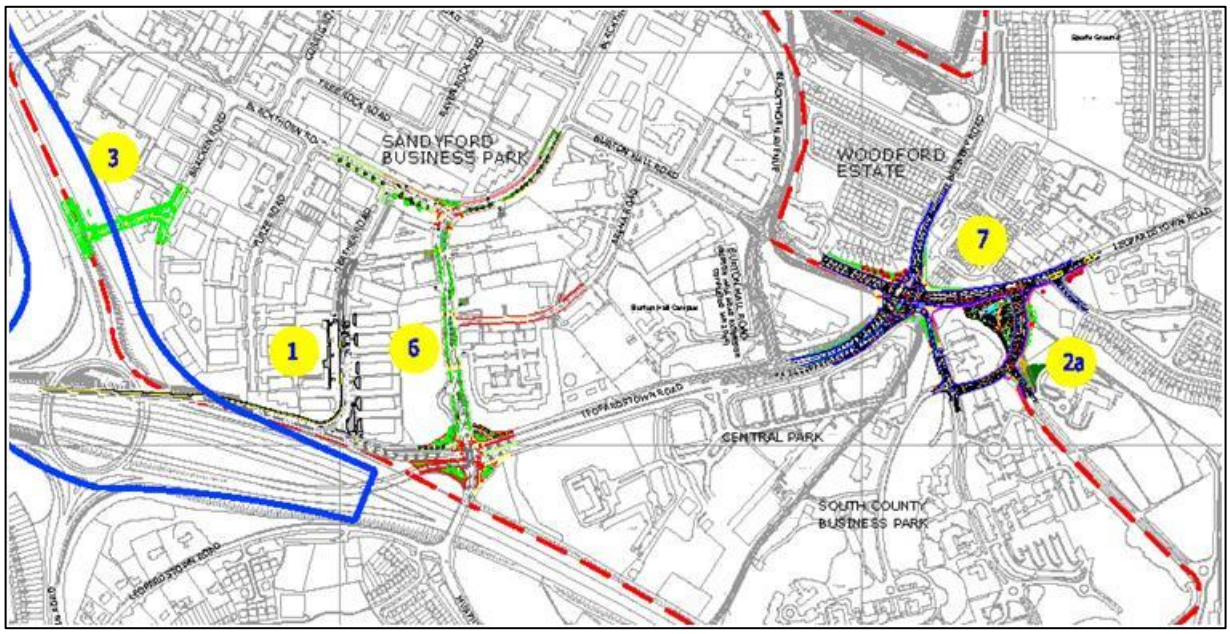


Figure 3: 6 Year Road Infrastructure Objectives Excerpt from SUFP Drawing 8

Of these schemes, 2a and 7 have recently been completed and are opened to the public whilst scheme 6 has planning approval and will be expected to be complete by 2021 These proposed and completed road schemes will further enhance capacity within the Sandyford district.

The committed development proposals for Sites 1, 2, and 3 traffic assessments take account of Scheme 6 – ESB Link Road being constructed and open at year of opening. The layout of the scheme is set out in the figure below.

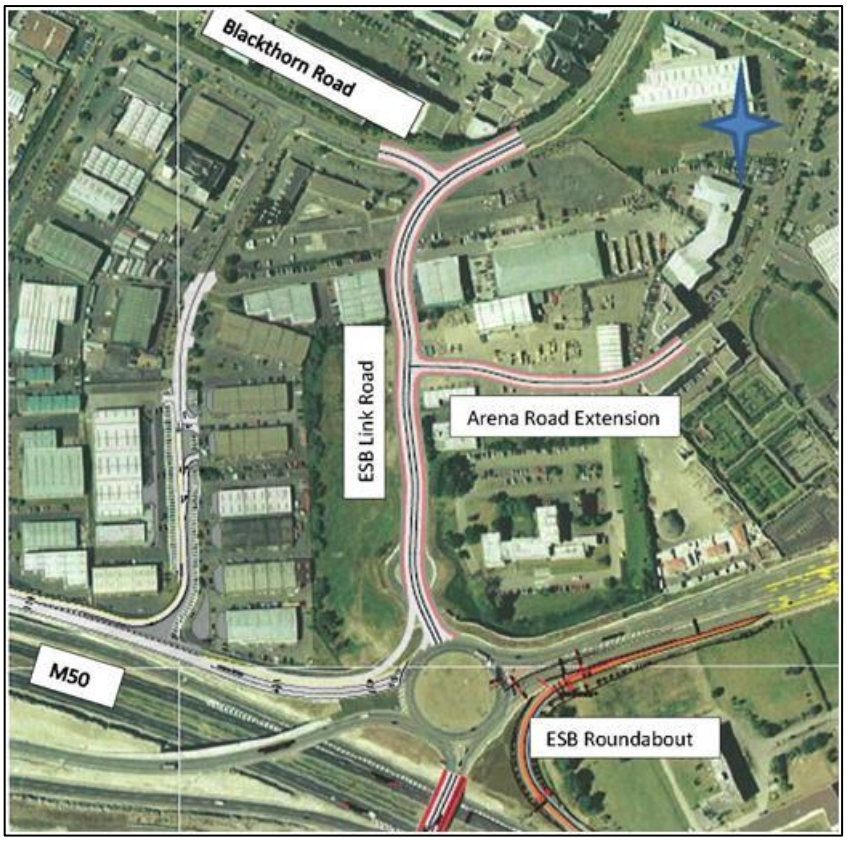


Figure 4: Scheme 6 Layout

5. Committed Development Trip Generation

Resultant traffic flows were derived for the 2021 opening year with the road network as currently in place as well as for 2031 – 10 years after opening. For the latter scenario it is assumed that the ESB link road, which has planning permission, will be completed and open. The traffic movements for each of the various committed developments for sites 1, 2 and 3 will be impacted by the construction of the ESB Link Road.

The figures for the traffic movements for each of the committed development sites are shown in Appendix B as follows:

1. Avid site – (D16A/0158) – Figure 4
2. Wexele site (D15A/0827) – Figure 5;
3. Febvre site (D15A/0827) – Figure 6;
4. Ulster Bank Site (D15A/0560) – Figure 7;
5. Microsoft Site (South County Business Park) (D14A/0351) Figure 8;
6. South County Gateway site (South County Business Park) Figure 9;
7. Tivway site (ABP-301428-18) Figure 10
8. Rockbrook (Sentinel) Office Block - Figures 12 & 13

The resultant combined traffic flows for the committed development are shown in Figures 14 for the peak hours.

6. Background Traffic Growth

It is considered reasonable to use central growth figures for the background traffic in deriving the 2021 and 2031 traffic flows. The TII document Unit 5.3 PAG –for National Roads Unit 5.3 – Travel Demand Projections October 2016 Figure 5.3.2 – Central Growth gives a figure of 1.0134 for the 2016 – 2030 period and 1.0038 for the 2030-2031 period.

Table 5.3.2: Link-Based Growth Rates: Annual Growth Factors

Region		Low Sensitivity Growth				Central Growth				High Sensitivity Growth			
		2013 - 2030		2030 - 2050		2013 - 2030		2030 - 2050		2013 - 2030		2030 - 2050	
		LV	*HV*	*LV*	*HV*	*LV*	*HV*	*LV*	*HV*	*LV*	*HV*	*LV*	*HV*
1	**Dublin**	1.0089	1.0221	1.0004	1.0135	1.0134	1.0237	1.0038	1.0176	1.0149	1.0242	1.0054	1.0195
2	**Mid-East** *Kildare Meath Wicklow*	1.0109	1.0221	1.0018	1.0135	1.0140	1.0237	1.0048	1.0176	1.0154	1.0242	1.0054	1.0195
3	**Midland** *Laois Longford*	1.0088	1.0221	0.9997	1.0135	1.0120	1.0237	1.0030	1.0176	1.0131	1.0242	1.0018	1.0195

Extract from Unit 5.3 Link-Based Traffic Growth Forecasting Figure 5.3.2

Using this growth rate the following factors will be used:

2021 - 1.069 (6.9%)
2031 - 1.209 (20.9%)

The resultant background traffic flows for the 2021 and 2031 are set out in Appendix B Figures 2 and 3.

7. Trip Generation

The trip generation at the existing site was measured to determine the split between the retail and residential elements of the existing scheme. It was important to establish this as the proposals for the scheme are that the existing residential traffic and also the new residential element will be routed via the Carmanhall access. The recorded trips for the existing 419 units is set out below, together with relevant new trip generation for the new 428 apartment development.

		In	Out
AM	Existing trips	21	58
	trip rate / apartment	0.050	0.138
	New Trips	**21**	**59**
PM	Existing trips	38	17
	trip rate / apartment	0.091	0.041
	New Trips	**39**	**17**

Table 1: Trip Generation

It is worth noting that these trip rates are considerably lower than those used for the original planning application for the site (by up to 75%). These significant reductions are reflective of the high update of alternative means of transport – refer to Baseline Travel Plan survey results.

The turning proportions for the development traffic from Rockbrook as proposed under the original Transportation Assessment D07A/0975 for the scheme have been used:

- 10% of arrivals from Stillorgan/Goatstown – via St Raphael's Road;
- 10% of arrivals from Brewery Road via Burton Hall Road;
- 20% of arrivals from Leopardstown Road via Burton Hall Road;
- 40% of arrivals from M50 via Blackthorn Drive;
- 10% of arrivals via Drumartin Link Road via Benildus Avenue. (Note under the 2005 application this traffic was routed via Drumartin Link and Blackthown Drive – but Benildus Avenue was constructed in the interim);
- 10% from Sandyford Road via Blackthorn Drive.

These proportions compared well with the turning proportions to and from the existing site access on Blackthorn Drive and so it is considered appropriate to use the same for this study. The resultant turning proportions and volumes are set out in Appendix B Figures 15 and 16 respectively.

As the existing residential (419 apartments) will enter and leave the basement car park via the new Carmanhall Road access it is necessary to reroute associated traffic from the existing access on Blackthorn Road. The resultant turning volumes are set out in Appendix B Figure 17.

The combined traffic turning numbers for the rerouted existing residential traffic and new residential traffic are set out in Appendix B Figure 18.

Assessments for the following scenarios were carried out:

- 2016 Existing Flows
- 2021 (Year of Opening) – Do Nothing –Grown 2016 traffic flows + development flows from existing permitted/committed developments which will impact the traffic in the vicinity of the development, but excluding the proposed Rockbrook Apartment Development (resultant traffic flows are set out in Appendix B Figure 19);
- 2021– Do Nothing as above but including proposed RB Central Apartment Development (resultant traffic flows are set out in Appendix B Figure 20);
- 2031 – Do Nothing (resultant traffic flows are set out in Appendix B Figure 21);
- 2031 – Do Something (resultant traffic flows are set out in Appendix B Figure 22).

The traffic generated for this development includes for the rerouting of the existing occupied apartments via the Carmanhall Road/Site junction.

8. Impact of the Proposed Development Traffic on the Junctions

The percentage uplift of traffic on existing junctions was established by calculating the total additional traffic at the junction due to the development as a percentage of the total traffic on the junction in 2021. This was used to assess the relative impact of the works on the traffic flows and is set out in Table 2 below.

Year/ Peak	Junction 1 Blackthorn Dr/Carmanhall Rd/Birch Ave	Junction 2 Carmanhall Rd/Site Access (new)	Junction 3 Carmanhall Rd/Corrig Rd	Junction 4 Carmanhall Rd/Blackthorn Rd	Junction 5 Blackthorn Dr/Site Access
2021 AM	4.3%	**16.4%**	**5.9%**	3.3%	0.0%
2031 AM	3.8%	**15.1%**	**5.3%**	3.0%	0.0%
2021 PM	2.5%	**10.8%**	3.7%	1.9%	2.3%
2031 PM	2.3%	**10.0%**	3.3%	1.7%	2.1%

Table 2: Additional Traffic at junctions due to the development

Under the requirements of National Roads Authority's (now TII) Traffic and Transport Assessment Guidelines 2014 if the impact of a new development amounts more than 10% additional traffic on the local network the impact is considered material even if the local network is not experiencing prolonged congestion. Where the network is experiencing prolonged congestion during peak period this threshold is reduced to 5%.

The table above shows the additional traffic added to the junctions due to the development, even assuming all junctions are congested, would not be considered to have a material impact for Junctions 1, 4 and 5.

However, for completeness, quantitative assessments of all junctions have been carried out.

9. Junction Capacity Assessments

The operational assessment of the local road network has been undertaken using LinSig software for the signalised junction (Junction 1) and TRL PICADY software for the priority junctions – Junctions 2 - 5.

All junction analysis output is set out in Appendix C. Discussion of the results is set out in the EIAR Chapter 14.

9.1 Junction 1 Blackthorn Dr/Carmanhall Rd/Birch Ave

When considering signalised junctions a positive Percentage Residual Capacity (PRC) would indicate that a junction has sufficient spare capacity.

This four arm signalised junction was assessed using LinSig software. The results are set out in Table 3 below:

	PRC (%)	Ave Queue (pcu's)
2016 AM Existing	71.4	8.2
2021 AM Do Nothing	5.2	15.9
2021 AM Do Something	0.8	18.6
2031 AM Do Nothing	-11.3	33.7
2031 AM Do Something	-16.2	52.4
2016 PM Existing	75.1	12.3
2021 PM Do Nothing	25.6	16.8
2021 PM Do Something	20.5	21.0
2031 PM Do Nothing	1.3	31.8
2031 PM Do Something	2.9	34.2

Table 3: Junction 1 PRC and Queue

9.2 Junction 2 Carmanhall Rd/Site Access

This priority junction was analysed using PICADY software. When considering priority controlled junctions a Ratio of Flow to Capacity (RFC) of greater than 85% (0.850) would indicate that is junction is nearing capacity.

The results of the operational assessment of this priority junction during the weekday morning and evening peaks is summarised in Table 4 below.

The arms are labelled as below:

Arm A: Carmanhall Rd West
Arm B: Development
Arm C: Carmanhall Rd East

	Arm	RFC (Max)	Max. Queue (pcu's)
2016 AM Existing	B-AC	-	-
	C-AB	-	-
2021 AM Do Nothing	B-AC	0.139	0.1
	C-AB	0.221	0.2
2021 AM Do Something	B-AC	0.540	1.1
	C-AB	0.260	0.4
2031 AM Do Nothing	B-AC	0.146	0.2
	C-AB	0.228	0.3
2031 AM Do Something	B-AC	0.571	1.3
	C-AB	0.268	0.4
2016 PM Existing	B-AC	-	-
	C-AB	-	-
2021 PM Do Nothing	B-AC	0.683	2.0
	C-AB	0.026	0.0
2021 PM Do Something	B-AC	0.803	3.7
	C-AB	0.077	0.1
2031 PM Do Nothing	B-AC	0.708	2.3
	C-AB	0.026	0.0
2031 PM Do Something	B-AC	0.834	1.8
	C-AB	0.062	0.1

Table 4: Junction 2 RFC and Queue

9.3 Junction 3 Carmanhall Rd/Corrig Rd

The results of the operational assessment of this priority junction during the weekday morning and evening peaks is summarised in Table 5 below:

The arms are labelled as below:

Arm A: Carmanhall Rd East
Arm B: Corrig Road
Arm C: Carmanhall Rd West

	Arm	RFC (Max)	Max. Queue (pcu's)
2016 AM Existing	B-AC	0.515	1.0
	C-AB	0.147	1.5
2021 AM Do Nothing	B-AC	0.614	1.5
	C-AB	0.180	0.3
2021 AM Do Something	B-AC	0.630	1.7
	C-AB	0.181	0.3
2031 AM Do Nothing	B-AC	0.723	2.4
	C-AB	0.203	0.3
2031 AM Do Something	B-AC	0.743	2.7
	C-AB	0.205	0.3
2016 PM Existing	B-AC	0.439	0.8
	C-AB	0.066	0.1
2021 PM Do Nothing	B-AC	0.501	1.0
	C-AB	0.078	0.1
2021 PM Do Something	B-AC	0.509	1.0
	C-AB	0.078	0.1
2031 PM Do Nothing	B-AC	0.580	1.3
	C-AB	0.089	0.1
2031 PM Do Something	B-AC	0.590	0.9
	C-AB	0.071	0.1

Table 5: Junction 3 RFC and Queue

9.4 Junction 4 Carmanhall Rd/Blackthorn Rd

The results of the operational assessment of this priority junction during the weekday morning and evening peaks is summarised in Table 6 below.

The arms are labelled as below:

Arm A: Blackthorn Rd South
Arm B: Carmanhall Road
Arm C: Blackthorn Rd North

	Arm	RFC (Max)	Max. Queue (pcu's)
2016 AM Existing	B-AC	0.416	0.7
	C-AB	0.262	0.4
2021 AM Do Nothing	B-AC	0.715	2.3
	C-AB	0.374	0.6
2021 AM Do Something	B-AC	0.833	3.9
	C-AB	0.350	0.6
2031 AM Do Nothing	B-AC	0.855	4.9
	C-AB	0.471	0.9
2031 AM Do Something	B-AC	0.985	12
	C-AB	0.482	0.9
2016 PM Existing	B-AC	0.875	5.7
	C-AB	0.106	0.1
2021 PM Do Nothing	B-AC	**1.690**	**83**
	C-AB	0.194	0.2
2021 PM Do Something	B-AC	**1.758**	**176**
	C-AB	0.201	0.3
2031 PM Do Nothing	B-AC	**2.089**	**248**
	C-AB	0.247	0.3
2031 PM Do Something	B-AC	**2.171**	**227**
	C-AB	0.257	0.2

Table 6: Junction 2 RFC and Queue

9.5 Junction 5 Blackthorn Dr/Site Access

The results of the operational assessment of this priority junction during the weekday morning and evening peaks is summarised in Table 8 below.

The arms are labelled as below:

Arm A: Blackthorn Drive East
Arm B: Site Access
Arm C: Blackthorn Drive West

	Arm	RFC (Max)	Max. Queue (pcu's)
2016 AM Existing	B-AC	0.142	0.2
	C-AB	0.088	0.1
2021 AM Do Nothing	B-AC	0.158	0.2
	C-AB	0.096	0.1
2021 AM Do Something	B-AC	0.043	0.0
	C-AB	0.119	0.1
2031 AM Do Nothing	B-AC	0.185	0.2
	C-AB	0.111	0.1
2031 AM Do Something	B-AC	0.064	0.1
	C-AB	0.134	0.2
2016 PM Existing	B-AC	0.222	0.3
	C-AB	0.079	0.1
2021 PM Do Nothing	B-AC	0.250	0.3
	C-AB	0.088	0.1
2021 PM Do Something	B-AC	0.305	0.4
	C-AB	0.088	0.1
2031 PM Do Nothing	B-AC	0.300	0.4
	C-AB	0.102	0.1
2031 PM Do Something	B-AC	0.350	0.5
	C-AB	0.102	0.1

Table 8: Junction 5 RFC and Queue

APPENDIX A

SURVEY DATA

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 1
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

Entry : Arm A - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	10	1	0	0	0	1	0	0	12	5	0	0	0	0	0	1	0	6	24
07:15	0	0	0	0	0	0	0	0	0	11	2	0	0	0	0	1	0	14	12	1	0	0	0	4	0	0	17	4	0	0	0	0	0	0	0	4	35
07:30	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	1	16	31	1	0	0	2	0	0	0	34	9	0	0	0	0	0	0	0	9	59
07:45	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	23	37	4	0	0	0	0	0	0	41	11	0	1	0	0	0	0	0	12	76
1 Hr	0	0	0	0	0	0	0	0	0	54	3	0	0	0	0	1	1	59	90	7	0	0	6	1	0	0	104	29	0	1	0	0	0	1	0	31	194
08:00	0	0	0	0	0	0	0	0	0	19	4	0	0	0	2	1	0	26	46	0	0	0	3	2	0	1	52	6	0	0	0	0	0	0	0	6	84
08:15	0	0	0	0	0	0	0	0	0	29	2	0	0	0	0	1	0	32	54	1	0	0	0	0	0	1	56	17	2	0	0	0	0	0	0	19	107
08:30	0	0	0	0	0	0	0	0	0	36	2	0	0	0	0	1	0	39	43	2	0	0	2	2	1	0	50	15	0	0	0	0	0	0	0	15	104
08:45	0	0	0	0	0	0	0	0	0	55	3	0	0	0	2	0	2	62	52	2	0	0	1	1	0	2	58	20	2	0	0	0	0	0	0	22	142
1 Hr	0	0	0	0	0	0	0	0	0	139	11	0	0	0	4	3	2	159	195	5	0	0	6	5	1	4	216	58	4	0	0	0	0	0	0	62	437
09:00	0	0	0	0	0	0	0	0	0	41	2	1	0	0	0	0	1	45	44	2	2	1	1	1	1	0	52	18	0	0	0	0	0	2	0	20	117
09:15	0	0	0	0	0	0	0	0	0	36	4	0	0	0	0	0	0	40	54	2	0	0	2	2	0	0	60	20	7	0	0	0	0	0	0	27	127
09:30	0	0	0	0	0	0	0	0	0	19	3	0	0	0	2	0	0	24	38	4	0	0	2	1	0	0	45	12	0	1	0	0	0	0	0	13	82
09:45	0	0	0	0	0	0	0	0	0	21	1	0	0	0	2	0	0	24	23	4	1	0	0	1	0	0	29	11	1	0	0	0	0	0	0	12	65
1 Hr	0	0	0	0	0	0	0	0	0	117	10	1	0	0	4	0	1	133	159	12	3	1	5	5	1	0	186	61	8	1	0	0	0	2	0	72	391
3 Hrs	0	0	0	0	0	0	0	0	0	310	24	1	0	0	8	4	4	351	444	24	3	1	17	11	2	4	506	148	12	2	0	0	0	3	0	165	1022

Entry : Arm A - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	0	15	51	4	1	1	2	1	1	0	61	5	4	0	0	0	0	0	0	9	85
16:15	0	0	0	0	0	0	0	0	0	15	1	0	0	0	1	0	0	17	48	5	0	0	0	0	0	0	53	4	1	0	0	0	1	1	0	7	77
16:30	0	0	0	0	0	0	0	0	0	19	2	0	0	0	0	0	0	21	44	5	2	0	1	1	0	0	53	10	0	0	0	0	1	1	0	12	86
16:45	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	2	25	37	2	0	0	1	2	0	0	42	11	3	0	0	0	0	0	0	14	81
1 Hr	0	0	0	0	0	0	0	0	0	71	4	0	0	0	1	0	2	78	180	16	3	1	4	4	1	0	209	30	8	0	0	0	2	2	0	42	329
17:00	0	0	0	0	0	0	0	0	0	17	1	0	0	0	1	0	0	19	37	3	0	0	0	2	0	2	44	11	4	0	0	0	0	0	0	15	78
17:15	0	0	0	0	0	0	0	0	0	24	0	0	0	0	1	0	0	25	24	5	0	0	3	0	0	1	33	6	2	0	0	0	0	0	0	8	66
17:30	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	1	0	14	39	4	0	0	1	0	0	1	45	5	0	0	0	0	0	0	0	5	64
17:45	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20	47	0	0	0	1	0	0	1	49	3	2	0	0	0	0	0	0	5	74
1 Hr	0	0	0	0	0	0	0	0	0	73	2	0	0	0	2	1	0	78	147	12	0	0	5	2	0	5	171	25	8	0	0	0	0	0	0	33	282
18:00	0	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	0	13	37	3	0	1	1	0	0	3	45	4	0	0	0	0	0	0	0	4	62
18:15	0	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	0	13	51	1	0	0	1	1	1	0	55	6	0	0	0	0	0	0	0	6	74
18:30	0	0	0	0	0	0	0	0	0	18	1	0	0	0	0	0	1	20	51	0	0	0	2	1	0	0	54	3	0	0	0	0	0	0	0	3	77
18:45	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10	39	2	0	0	1	2	0	0	44	6	2	0	0	0	0	0	0	8	62
1 Hr	0	0	0	0	0	0	0	0	0	50	5	0	0	0	0	0	1	56	178	6	0	1	5	4	1	3	198	19	2	0	0	0	0	0	0	21	275
3 Hrs	0	0	0	0	0	0	0	0	0	194	11	0	0	0	3	1	3	212	505	34	3	2	14	10	2	8	578	74	18	0	0	0	2	2	0	96	886
Total	0	0	0	0	0	0	0	0	0	504	35	1	0	0	11	5	7	563	949	58	6	3	31	21	4	12	1084	222	30	2	0	0	2	5	0	261	1908
Check									0									563									1084									261	1908

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 1
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

Entry : Arm B - Carmanhall Road

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	6	2	0	0	0	1	0	0	9	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	1	8	1	1	0	0	0	0	0	0	2	19
07:15	4	3	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	0	13	7	1	0	0	0	0	0	0	8	28
07:30	11	3	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	12	0	2	0	0	0	0	0	14	5	0	0	0	0	0	0	0	5	33
07:45	10	2	0	0	0	0	0	1	13	0	0	0	0	0	0	0	0	0	19	3	1	0	0	1	0	1	25	10	0	0	0	0	0	0	0	10	48
1 Hr	31	10	0	0	0	1	0	1	43	0	0	0	0	0	0	0	0	0	48	6	3	0	0	1	0	2	60	23	2	0	0	0	0	0	0	25	128
08:00	13	1	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	13	0	2	0	0	0	0	0	15	8	1	0	0	0	0	0	0	9	38
08:15	5	1	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	13	2	1	0	0	0	1	0	17	16	1	0	0	0	0	0	0	17	40
08:30	16	2	0	0	0	1	0	0	19	0	0	0	0	0	0	0	0	0	14	4	0	0	0	1	1	0	20	12	0	1	0	0	0	0	0	13	52
08:45	10	3	0	0	0	1	0	0	14	0	0	0	0	0	0	0	0	0	22	4	3	1	0	0	0	0	30	17	0	0	0	0	0	0	0	17	61
1 Hr	44	7	0	0	0	2	0	0	53	0	0	0	0	0	0	0	0	0	62	10	6	1	0	1	2	0	82	53	2	1	0	0	0	0	0	56	191
09:00	18	3	1	0	0	0	1	0	23	0	0	0	0	0	0	0	0	0	13	3	0	0	0	1	0	0	17	10	1	0	0	0	0	2	0	13	53
09:15	12	1	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	20	4	3	0	0	0	0	0	27	15	4	0	0	0	0	0	0	19	59
09:30	11	5	1	0	0	1	0	1	19	0	0	0	0	0	0	0	0	0	25	4	0	0	0	1	0	0	30	18	2	0	0	0	0	0	0	20	69
09:45	9	4	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	21	3	0	0	0	1	0	0	25	6	1	0	0	0	0	0	0	7	45
1 Hr	50	13	2	0	0	1	1	1	68	0	0	0	0	0	0	0	0	0	79	14	3	0	0	3	0	0	99	49	8	0	0	0	0	2	0	59	226
3 Hrs	125	30	2	0	0	4	1	2	164	0	0	0	0	0	0	0	0	0	189	30	12	1	0	5	2	2	241	125	12	1	0	0	0	2	0	140	545

Entry : Arm B - Carmanhall Road

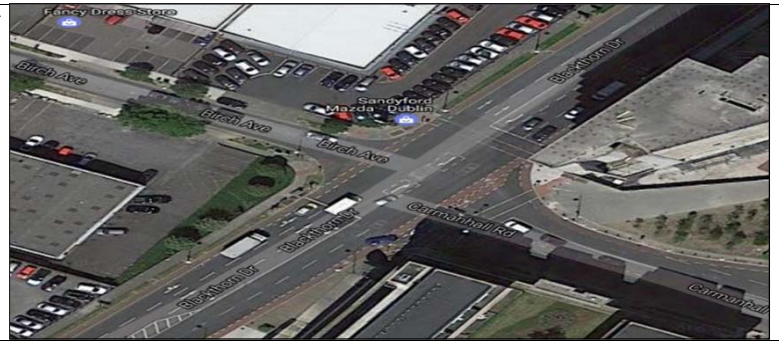
	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	27	3	0	0	0	0	1	0	31	0	0	0	0	0	0	0	0	0	89	4	1	0	0	2	2	0	98	5	6	0	0	0	0	0	0	11	140
16:15	24	2	0	0	0	1	1	1	29	0	0	0	0	0	0	0	0	0	79	5	0	0	0	1	1	1	87	4	0	0	0	0	0	0	0	4	120
16:30	51	4	0	0	0	0	1	0	56	0	0	0	0	0	0	0	0	0	109	9	0	0	0	1	0	0	119	5	0	0	0	0	0	0	0	5	180
16:45	51	2	0	0	0	0	0	2	55	0	0	0	0	0	0	0	0	0	87	8	2	0	0	2	1	1	101	5	0	0	0	0	0	0	0	5	161
1 Hr	153	11	0	0	0	1	3	3	171	0	0	0	0	0	0	0	0	0	364	26	3	0	0	6	4	2	405	19	6	0	0	0	0	0	0	25	601
17:00	58	1	0	0	0	2	0	1	62	0	0	0	0	0	0	0	0	0	82	5	0	0	0	1	1	1	90	5	0	0	0	0	0	0	0	5	157
17:15	56	1	0	0	0	0	1	0	58	0	0	0	0	0	0	0	0	0	71	3	1	0	0	1	0	1	77	10	1	0	0	0	0	0	0	11	146
17:30	53	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	76	2	1	0	0	0	0	1	80	10	0	0	0	0	0	0	2	12	145
17:45	65	3	0	0	0	0	0	0	68	0	0	0	0	0	0	0	0	0	77	1	0	0	0	2	0	0	80	11	2	0	0	0	0	0	1	14	162
1 Hr	232	5	0	0	0	2	1	1	241	0	0	0	0	0	0	0	0	0	306	11	2	0	0	4	1	3	327	36	3	0	0	0	0	0	3	42	610
18:00	33	0	0	0	0	1	2	1	37	0	0	0	0	0	0	0	0	0	74	2	0	0	0	0	1	1	78	7	0	0	0	0	0	0	0	7	122
18:15	33	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	80	2	0	0	0	1	1	2	86	7	1	0	0	0	0	0	0	8	127
18:30	34	1	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	57	3	0	0	0	1	0	1	62	2	0	0	0	0	0	0	0	2	99
18:45	25	1	0	0	0	0	0	1	27	0	0	0	0	0	0	0	0	0	71	3	0	0	0	0	1	0	75	8	0	0	0	0	0	0	0	8	110
1 Hr	125	2	0	0	0	1	2	2	132	0	0	0	0	0	0	0	0	0	282	10	0	0	0	2	3	4	301	24	1	0	0	0	0	0	0	25	458
3 Hrs	510	18	0	0	0	4	6	6	544	0	0	0	0	0	0	0	0	0	952	47	5	0	0	12	8	9	1033	79	10	0	0	0	0	0	3	92	1669
Total	635	48	2	0	0	8	7	8	708	0	0	0	0	0	0	0	0	0	1141	77	17	1	0	17	10	11	1274	204	22	1	0	0	0	2	3	232	2214
Check									708									0									1274									232	2214

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 1
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -



Entry : Arm C - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	45	1	1	0	0	0	0	1	48	31	8	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	0	17	104
07:15	79	8	0	0	0	1	1	0	89	42	1	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	18	3	0	0	0	0	0	0	21	153
07:30	117	6	0	0	1	2	1	0	127	38	2	3	0	0	2	0	0	45	0	0	0	0	0	0	0	0	0	19	3	0	0	0	0	0	0	22	194
07:45	126	11	0	0	0	2	0	2	141	61	3	0	0	0	0	0	1	65	0	0	0	0	0	0	0	0	0	18	3	0	0	0	0	0	0	21	227
1 Hr	367	26	1	0	1	5	2	3	405	172	14	3	0	0	2	0	1	192	0	0	0	0	0	0	0	0	0	70	11	0	0	0	0	0	0	81	678
08:00	129	8	0	0	0	2	0	1	140	53	3	0	0	0	0	0	1	57	0	0	0	0	0	0	0	0	0	26	3	0	0	0	0	0	0	29	226
08:15	110	8	2	0	0	2	0	3	125	78	3	0	0	0	2	1	1	85	0	0	0	0	0	0	0	0	0	28	3	0	0	0	0	0	1	32	242
08:30	109	8	4	1	0	3	1	1	127	76	5	0	0	0	0	2	2	85	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	27	239
08:45	87	5	1	0	0	4	0	3	100	73	3	2	0	0	0	0	2	80	0	0	0	0	0	0	0	0	0	26	3	0	0	0	0	0	1	30	210
1 Hr	435	29	7	1	0	11	1	8	492	280	14	2	0	0	2	3	6	307	0	0	0	0	0	0	0	0	0	107	9	0	0	0	0	0	2	118	917
09:00	79	9	2	0	0	1	0	1	92	77	3	0	0	0	1	0	1	82	0	0	0	0	0	0	0	0	0	29	1	0	1	0	0	0	0	31	205
09:15	70	6	1	0	1	1	0	0	79	81	3	1	0	0	1	0	0	86	0	0	0	0	0	0	0	0	0	25	6	0	0	0	0	0	0	31	196
09:30	89	7	2	1	1	3	0	0	103	59	6	0	0	0	1	1	1	68	0	0	0	0	0	0	0	0	0	38	8	1	0	0	0	0	0	47	218
09:45	59	4	0	1	0	4	0	1	69	38	8	1	0	0	1	0	1	49	0	0	0	0	0	0	0	0	0	13	2	2	0	0	0	0	0	17	135
1 Hr	297	26	5	2	2	9	0	2	343	255	20	2	0	0	4	1	3	285	0	0	0	0	0	0	0	0	0	105	17	3	1	0	0	0	0	126	754
3 Hrs	1099	81	13	3	3	25	3	13	1240	707	48	7	0	0	8	4	10	784	0	0	0	0	0	0	0	0	0	282	37	3	1	0	0	0	2	325	2349

Entry : Arm C - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	61	2	1	0	0	0	0	1	65	27	3	0	0	0	3	0	1	34	0	0	0	0	0	0	0	0	0	7	2	1	0	0	0	0	0	10	109
16:15	82	4	1	0	0	1	0	2	90	25	2	0	0	0	0	1	0	28	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	0	13	131
16:30	70	5	1	0	0	0	0	1	77	19	3	0	0	0	1	1	0	24	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	7	108
16:45	66	5	0	0	0	1	0	2	74	24	6	1	0	0	0	0	1	32	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	113
1 Hr	279	16	3	0	0	2	0	6	306	95	14	1	0	0	4	2	2	118	0	0	0	0	0	0	0	0	0	31	5	1	0	0	0	0	0	37	461
17:00	82	7	0	1	0	1	1	2	94	30	3	1	0	0	1	1	0	36	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	138
17:15	64	7	0	0	0	2	0	1	74	20	3	0	0	0	0	1	1	25	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10	109
17:30	77	0	1	0	0	1	1	2	82	28	1	0	0	0	1	0	0	30	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	5	117
17:45	67	7	0	0	0	2	0	1	77	22	1	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	106
1 Hr	290	21	1	1	0	6	2	6	327	100	8	1	0	0	2	2	1	114	0	0	0	0	0	0	0	0	0	28	1	0	0	0	0	0	0	29	470
18:00	61	3	0	0	0	0	0	2	66	28	4	0	0	0	0	0	1	33	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4	103
18:15	68	5	0	0	0	2	0	1	76	26	0	0	0	0	0	0	1	27	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	108
18:30	56	4	0	0	1	0	1	1	63	32	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	102
18:45	62	3	0	0	0	1	2	1	69	25	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	97
1 Hr	247	15	0	0	1	3	3	5	274	111	4	0	0	0	0	0	2	117	0	0	0	0	0	0	0	0	0	17	2	0	0	0	0	0	0	19	410
3 Hrs	816	52	4	1	1	11	5	17	907	306	26	2	0	0	6	4	5	349	0	0	0	0	0	0	0	0	0	76	8	1	0	0	0	0	0	85	1341
Total	1915	133	17	4	4	36	8	30	2147	1013	74	9	0	0	14	8	15	1133	0	0	0	0	0	0	0	0	0	358	45	4	1	0	0	0	2	410	3690
Check									2147									1133									0									410	3690

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 1
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

Entry : Arm D - Birch Avenue

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	4	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	1	4	2	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	12
07:15	3	2	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	8
07:30	5	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	2	7	1	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	15
07:45	4	1	0	0	0	1	0	0	6	0	1	0	0	0	0	0	0	1	3	1	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	12
1 Hr	16	3	0	0	0	1	0	0	20	3	1	0	0	0	0	0	0	4	16	5	2	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	47
08:00	2	1	1	0	0	0	0	0	4	2	0	0	0	0	0	0	0	2	3	2	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	12
08:15	3	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	4	5	3	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	16
08:30	3	0	0	0	0	0	0	0	3	3	1	0	0	0	0	0	0	4	3	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	11
08:45	5	1	0	0	0	0	0	0	6	7	0	1	0	0	0	0	0	8	7	2	1	0	0	1	0	0	11	0	0	0	0	0	0	0	0	0	25
1 Hr	13	2	1	0	0	0	0	0	16	16	1	1	0	0	0	0	0	18	18	8	2	1	0	1	0	0	30	0	0	0	0	0	0	0	0	0	64
09:00	3	3	0	0	0	0	0	0	6	1	1	0	0	0	0	0	0	2	1	4	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	14
09:15	7	5	0	0	0	0	0	0	12	7	3	0	0	0	0	0	0	10	6	1	2	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0	32
09:30	18	4	0	0	0	0	0	0	22	7	1	0	0	0	0	2	0	10	11	4	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	47
09:45	10	1	0	0	0	0	0	0	11	6	1	0	0	0	0	0	0	7	12	5	0	0	0	1	0	0	18	0	0	0	0	0	0	0	0	0	36
1 Hr	38	13	0	0	0	0	0	0	51	21	6	0	0	0	0	2	0	29	30	14	3	1	0	1	0	0	49	0	0	0	0	0	0	0	0	0	129
3 Hrs	67	18	1	0	0	1	0	0	87	40	8	1	0	0	0	2	0	51	64	27	7	2	0	2	0	0	102	0	0	0	0	0	0	0	0	0	240

Entry : Arm D - Birch Avenue

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	10	3	0	0	0	0	0	0	13	4	4	2	0	0	0	0	0	10	30	5	0	0	0	1	0	0	36	0	0	0	0	0	0	0	0	0	59
16:15	21	3	0	0	0	1	0	0	25	8	0	2	0	0	0	0	0	10	10	4	0	0	0	0	1	0	15	0	0	0	0	0	0	0	0	0	50
16:30	25	2	0	0	0	0	0	0	27	4	2	0	0	0	0	0	0	6	13	1	0	0	0	0	1	0	15	0	0	0	0	0	0	0	0	0	48
16:45	18	1	0	0	0	0	0	0	19	4	0	0	0	0	0	0	0	4	16	2	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	41
1 Hr	74	9	0	0	0	1	0	0	84	20	6	4	0	0	0	0	0	30	69	12	0	0	0	1	2	0	84	0	0	0	0	0	0	0	0	0	198
17:00	43	1	0	0	0	0	0	0	44	5	0	0	0	0	0	0	0	5	33	2	0	0	0	0	1	0	36	0	0	0	0	0	0	0	0	0	85
17:15	30	3	0	0	0	0	0	1	34	2	0	0	0	0	0	0	0	2	26	1	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	63
17:30	49	3	0	0	0	1	1	0	54	6	0	0	0	0	0	0	0	6	29	2	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	91
17:45	31	0	0	0	0	0	0	0	31	7	1	0	0	0	0	0	0	8	21	1	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	61
1 Hr	153	7	0	0	0	1	1	1	163	20	1	0	0	0	0	0	0	21	109	6	0	0	0	0	1	0	116	0	0	0	0	0	0	0	0	0	300
18:00	17	1	0	0	0	0	0	0	18	5	0	0	0	0	0	0	0	5	20	2	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	45
18:15	23	0	0	0	0	0	0	0	23	1	0	0	0	0	0	0	0	1	15	1	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	40
18:30	14	0	0	0	0	0	0	0	14	4	0	0	0	0	0	0	0	4	18	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	36
18:45	3	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	4	21	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	28
1 Hr	57	1	0	0	0	0	0	0	58	14	0	0	0	0	0	0	0	14	74	3	0	0	0	0	0	0	77	0	0	0	0	0	0	0	0	0	149
3 Hrs	284	17	0	0	0	2	1	1	305	54	7	4	0	0	0	0	0	65	252	21	0	0	0	1	3	0	277	0	0	0	0	0	0	0	0	0	647
Total	351	35	1	0	0	3	1	1	392	94	15	5	0	0	0	2	0	116	316	48	7	2	0	3	3	0	379	0	0	0	0	0	0	0	0	0	887
Check									392									116									379									0	887

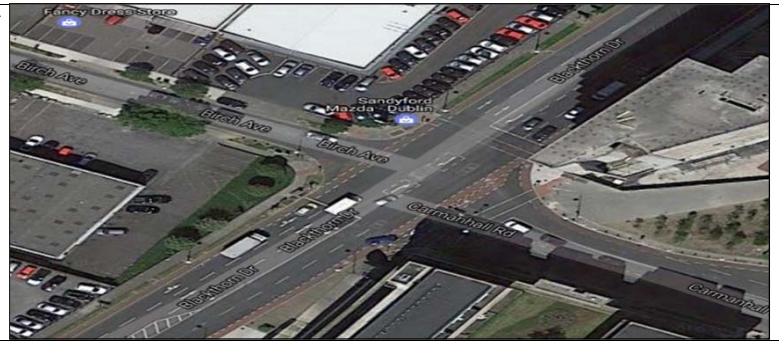
ORIGIN SUMMARY

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 1
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -



	Origin : Arm A - Blackthorn Drive									Origin : Arm B - Carmanhall Road									Origin : Arm C - Blackthorn Drive									Origin : Arm D - Birch Avenue									Origin Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	21	1	0	0	0	1	1	0	24	12	5	0	0	0	1	0	1	19	91	11	1	0	0	0	0	1	104	9	2	1	0	0	0	0	0	12	159
07:15	27	3	0	0	4	0	1	0	35	23	5	0	0	0	0	0	0	28	139	12	0	0	0	1	1	0	153	5	3	0	0	0	0	0	0	8	224
07:30	54	2	0	0	2	0	0	1	59	28	3	2	0	0	0	0	0	33	174	11	3	0	1	4	1	0	194	14	1	0	0	0	0	0	0	15	301
07:45	71	4	1	0	0	0	0	0	76	39	5	1	0	0	1	0	2	48	205	17	0	0	0	2	0	3	227	7	3	1	0	0	1	0	0	12	363
1 Hr	173	10	1	0	6	1	2	1	194	102	18	3	0	0	2	0	3	128	609	51	4	0	1	7	2	4	678	35	9	2	0	0	1	0	0	47	1047
08:00	71	4	0	0	3	4	1	1	84	34	2	2	0	0	0	0	0	38	208	14	0	0	0	2	0	2	226	7	3	1	1	0	0	0	0	12	360
08:15	100	5	0	0	0	0	1	1	107	34	4	1	0	0	0	1	0	40	216	14	2	0	0	4	1	5	242	12	3	1	0	0	0	0	0	16	405
08:30	94	4	0	0	2	2	2	0	104	42	6	1	0	0	2	1	0	52	212	13	4	1	0	3	3	3	239	9	2	0	0	0	0	0	0	11	406
08:45	127	7	0	0	1	3	0	4	142	49	7	3	1	0	1	0	0	61	186	11	3	0	0	4	0	6	210	19	3	2	0	0	1	0	0	25	438
1 Hr	392	20	0	0	6	9	4	6	437	159	19	7	1	0	3	2	0	191	822	52	9	1	0	13	4	16	917	47	11	4	1	0	1	0	0	64	1609
09:00	103	4	3	1	1	1	3	1	117	41	7	1	0	0	1	3	0	53	185	13	2	1	0	2	0	2	205	5	8	1	0	0	0	0	0	14	389
09:15	110	13	0	0	2	2	0	0	127	47	9	3	0	0	0	0	0	59	176	15	2	0	1	2	0	0	196	20	9	2	1	0	0	0	0	32	414
09:30	69	7	1	0	2	3	0	0	82	54	11	1	0	0	2	0	1	69	186	21	3	1	1	4	1	1	218	36	9	0	0	0	0	2	0	47	416
09:45	55	6	1	0	0	3	0	0	65	36	8	0	0	0	1	0	0	45	110	14	3	1	0	5	0	2	135	28	7	0	0	0	1	0	0	36	281
1 Hr	337	30	5	1	5	9	3	1	391	178	35	5	0	0	4	3	1	226	657	63	10	3	2	13	1	5	754	89	33	3	1	0	1	2	0	129	1500
3 Hrs	902	60	6	1	17	19	9	8	1022	439	72	15	1	0	9	5	4	545	2088	166	23	4	3	33	7	25	2349	171	53	9	2	0	3	2	0	240	4156

ORIGIN SUMMARY

	Origin : Arm A - Blackthorn Drive									Origin : Arm B - Carmanhall Road									Origin : Arm C - Blackthorn Drive									Origin : Arm D - Birch Avenue									Origin Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	70	9	1	1	2	1	1	0	85	121	13	1	0	0	2	3	0	140	95	7	2	0	0	3	0	2	109	44	12	2	0	0	1	0	0	59	393
16:15	67	7	0	0	0	2	1	0	77	107	7	0	0	0	2	2	2	120	119	7	1	0	0	1	1	2	131	39	7	2	0	0	1	1	0	50	378
16:30	73	7	2	0	1	2	1	0	86	165	13	0	0	0	1	1	0	180	94	10	1	0	0	1	1	1	108	42	5	0	0	0	0	1	0	48	422
16:45	71	5	0	0	1	2	0	2	81	143	10	2	0	0	2	1	3	161	97	11	1	0	0	1	0	3	113	38	3	0	0	0	0	0	0	41	396
1 Hr	281	28	3	1	4	7	3	2	329	536	43	3	0	0	7	7	5	601	405	35	5	0	0	6	2	8	461	163	27	4	0	0	2	2	0	198	1589
17:00	65	8	0	0	0	3	0	2	78	145	6	0	0	0	3	1	2	157	120	10	1	1	0	2	2	2	138	81	3	0	0	0	0	1	0	85	458
17:15	54	7	0	0	3	1	0	1	66	137	5	1	0	0	1	1	1	146	94	10	0	0	0	2	1	2	109	58	4	0	0	0	0	0	1	63	384
17:30	56	5	0	0	1	0	1	1	64	139	2	1	0	0	0	0	3	145	109	2	1	0	0	2	1	2	117	84	5	0	0	0	1	1	0	91	417
17:45	70	2	0	0	1	0	0	1	74	153	6	0	0	0	2	0	1	162	95	8	0	0	0	2	0	1	106	59	2	0	0	0	0	0	0	61	403
1 Hr	245	22	0	0	5	4	1	5	282	574	19	2	0	0	6	2	7	610	418	30	2	1	0	8	4	7	470	282	14	0	0	0	1	2	1	300	1662
18:00	52	5	0	1	1	0	0	3	62	114	2	0	0	0	1	3	2	122	91	9	0	0	0	0	0	3	103	42	3	0	0	0	0	0	0	45	332
18:15	68	3	0	0	1	1	1	0	74	120	3	0	0	0	1	1	2	127	99	5	0	0	0	2	0	2	108	39	1	0	0	0	0	0	0	40	349
18:30	72	1	0	0	2	1	0	1	77	93	4	0	0	0	1	0	1	99	95	4	0	0	1	0	1	1	102	36	0	0	0	0	0	0	0	36	314
18:45	55	4	0	0	1	2	0	0	62	104	4	0	0	0	0	1	1	110	90	3	0	0	0	1	2	1	97	28	0	0	0	0	0	0	0	28	297
1 Hr	247	13	0	1	5	4	1	4	275	431	13	0	0	0	3	5	6	458	375	21	0	0	1	3	3	7	410	145	4	0	0	0	0	0	0	149	1292
3 Hrs	773	63	3	2	14	15	5	11	886	1541	75	5	0	0	16	14	18	1669	1198	86	7	1	1	17	9	22	1341	590	45	4	0	0	3	4	1	647	4543
Total	1675	123	9	3	31	34	14	19	1908	1980	147	20	1	0	25	19	22	2214	3286	252	30	5	4	50	16	47	3690	761	98	13	2	0	6	6	1	887	8699
Check									1908									2214									3690									887	8699

DESTINATION SUMMARY

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 1
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Dest
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	55	3	1	0	0	1	0	1	61	38	8	0	0	0	0	0	0	46	19	5	1	0	0	1	0	1	27	21	3	0	0	0	0	1	0	25	159
07:15	86	13	0	0	0	1	1	0	101	53	3	0	0	0	0	1	0	57	26	3	0	0	4	0	0	0	33	29	4	0	0	0	0	0	0	33	224
07:30	133	9	0	0	1	2	1	0	146	54	3	3	0	0	2	0	1	63	50	2	2	0	2	0	0	0	56	33	3	0	0	0	0	0	0	36	301
07:45	140	14	0	0	0	3	0	3	160	84	4	0	0	0	0	0	1	89	59	8	2	0	0	1	0	1	71	39	3	1	0	0	0	0	0	43	363
1 Hr	414	39	1	0	1	7	2	4	468	229	18	3	0	0	2	1	2	255	154	18	5	0	6	2	0	2	187	122	13	1	0	0	0	1	0	137	1047
08:00	144	10	1	0	0	2	0	1	158	74	7	0	0	0	2	1	1	85	62	2	2	1	3	2	0	1	73	40	4	0	0	0	0	0	0	44	360
08:15	118	9	2	0	0	2	0	3	134	111	5	0	0	0	2	2	1	121	72	6	2	0	0	0	1	1	82	61	6	0	0	0	0	0	1	68	405
08:30	128	10	4	1	0	4	1	1	149	115	8	0	0	0	0	3	2	128	60	7	0	0	2	3	2	0	74	54	0	1	0	0	0	0	0	55	406
08:45	102	9	1	0	0	5	0	3	120	135	6	3	0	0	2	0	4	150	81	8	4	1	1	2	0	2	99	63	5	0	0	0	0	0	1	69	438
1 Hr	492	38	8	1	0	13	1	8	561	435	26	3	0	0	6	6	8	484	275	23	8	2	6	7	3	4	328	218	15	1	0	0	0	0	2	236	1609
09:00	100	15	3	0	0	1	1	1	121	119	6	1	0	0	1	0	2	129	58	9	3	1	1	2	1	0	75	57	2	0	1	0	0	4	0	64	389
09:15	89	12	1	0	1	1	0	0	104	124	10	1	0	0	1	0	0	136	80	7	5	1	2	2	0	0	97	60	17	0	0	0	0	0	0	77	414
09:30	118	16	3	1	1	4	0	1	144	85	10	0	0	0	3	3	1	102	74	12	0	0	2	2	0	0	90	68	10	2	0	0	0	0	0	80	416
09:45	78	9	0	1	0	4	0	1	93	65	10	1	0	0	3	0	1	80	56	12	1	0	0	3	0	0	72	30	4	2	0	0	0	0	0	36	281
1 Hr	385	52	7	2	2	10	1	3	462	393	36	3	0	0	8	3	4	447	268	40	9	2	5	9	1	0	334	215	33	4	1	0	0	4	0	257	1500
3 Hrs	1291	129	16	3	3	30	4	15	1491	1057	80	9	0	0	16	10	14	1186	697	81	22	4	17	18	4	6	849	555	61	6	1	0	0	5	2	630	4156

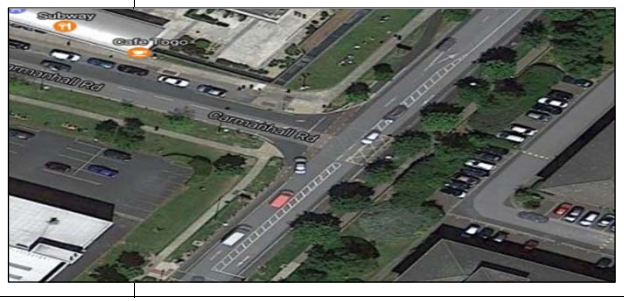
DESTINATION SUMMARY

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Carmanhall Road									Destination : Arm C - Blackthorn Drive									Destination : Arm D - Birch Avenue									Dest
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	98	8	1	0	0	0	1	1	109	45	8	2	0	0	3	0	1	59	170	13	2	1	2	4	3	0	195	17	12	1	0	0	0	0	0	30	393
16:15	127	9	1	0	0	3	1	3	144	48	3	2	0	0	1	1	0	55	137	14	0	0	0	1	2	1	155	20	2	0	0	0	1	1	0	24	378
16:30	146	11	1	0	0	0	1	1	160	42	7	0	0	0	1	1	0	51	166	15	2	0	1	2	1	0	187	20	2	0	0	0	1	1	0	24	422
16:45	135	8	0	0	0	1	0	4	148	51	6	1	0	0	0	0	3	61	140	12	2	0	1	4	1	1	161	23	3	0	0	0	0	0	0	26	396
1 Hr	506	36	3	0	0	4	3	9	561	186	24	5	0	0	5	2	4	226	613	54	6	1	4	11	7	2	698	80	19	1	0	0	2	2	0	104	1589
17:00	183	9	0	1	0	3	1	3	200	52	4	1	0	0	2	1	0	60	152	10	0	0	0	3	2	3	170	24	4	0	0	0	0	0	0	28	458
17:15	150	11	0	0	0	2	1	2	166	46	3	0	0	0	1	1	1	52	121	9	1	0	3	1	0	2	137	26	3	0	0	0	0	0	0	29	384
17:30	179	3	1	0	0	2	2	2	189	46	2	0	0	0	1	1	0	50	144	8	1	0	1	0	0	2	156	19	1	0	0	0	0	0	2	22	417
17:45	163	10	0	0	0	2	0	1	176	49	2	0	0	0	0	0	0	51	145	2	0	0	1	2	0	1	151	20	4	0	0	0	0	0	1	25	403
1 Hr	675	33	1	1	0	9	4	8	731	193	11	1	0	0	4	3	1	213	562	29	2	0	5	6	2	8	614	89	12	0	0	0	0	0	3	104	1662
18:00	111	4	0	0	0	1	2	3	121	44	6	0	0	0	0	0	1	51	131	7	0	1	1	0	1	4	145	13	2	0	0	0	0	0	0	15	332
18:15	124	5	0	0	0	2	0	1	132	38	2	0	0	0	0	0	1	41	146	4	0	0	1	2	2	2	157	18	1	0	0	0	0	0	0	19	349
18:30	104	5	0	0	1	0	1	1	112	54	1	0	0	0	0	0	1	56	126	3	0	0	2	2	0	1	134	12	0	0	0	0	0	0	0	12	314
18:45	90	4	0	0	0	1	2	2	99	39	0	0	0	0	0	0	0	39	131	5	0	0	1	2	1	0	140	17	2	0	0	0	0	0	0	19	297
1 Hr	429	18	0	0	1	4	5	7	464	175	9	0	0	0	0	0	3	187	534	19	0	1	5	6	4	7	576	60	5	0	0	0	0	0	0	65	1292
3 Hrs	1610	87	4	1	1	17	12	24	1756	554	44	6	0	0	9	5	8	626	1709	102	8	2	14	23	13	17	1888	229	36	1	0	0	2	2	3	273	4543
Total	2901	216	20	4	4	47	16	39	3247	1611	124	15	0	0	25	15	22	1812	2406	183	30	6	31	41	17	23	2737	784	97	7	1	0	2	7	5	903	8699
Check									3247									1812									2737									903	8699

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 2
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear



Notes: -

Entry : Arm A - Burton Hall Road

	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	3	0	1	0	0	1	0	0	5	8
07:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	1	2	0	0	0	0	0	0	3	5
07:30	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	6	7	0	0	0	0	0	0	0	7	13
07:45	0	0	0	0	0	0	0	0	0	10	1	1	0	0	1	0	0	13	13	0	0	0	0	1	0	1	15	28
1 Hr	0	0	0	0	0	0	0	0	0	19	1	1	0	0	3	0	0	24	24	2	1	0	0	2	0	1	30	54
08:00	0	0	0	0	0	0	0	0	0	19	1	1	0	0	1	0	2	24	14	1	0	0	0	0	1	0	16	40
08:15	0	0	0	0	0	0	0	0	0	15	3	0	0	0	0	0	1	19	22	1	0	0	0	0	0	0	23	42
08:30	0	0	0	0	0	0	0	0	0	15	2	0	0	0	1	1	2	21	17	1	0	0	0	1	0	0	19	40
08:45	0	0	0	0	0	0	0	0	0	20	2	0	0	0	1	0	3	26	22	3	1	0	0	1	0	0	27	53
1 Hr	0	0	0	0	0	0	0	0	0	69	8	1	0	0	3	1	8	90	75	6	1	0	0	2	1	0	85	175
09:00	0	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	1	17	22	2	1	0	0	1	0	0	26	43
09:15	0	0	0	0	0	1	0	0	1	12	1	0	0	0	0	0	0	13	22	1	0	0	0	0	0	0	23	37
09:30	0	0	0	0	0	0	0	0	0	10	1	1	0	0	0	0	0	12	11	2	0	0	0	0	0	0	13	25
09:45	0	0	0	0	0	0	0	0	0	9	1	0	0	0	1	0	0	11	8	0	0	0	0	0	0	0	8	19
1 Hr	0	0	0	0	0	1	0	0	1	46	4	1	0	0	1	0	1	53	63	5	1	0	0	1	0	0	70	124
3 Hrs	0	0	0	0	0	1	0	0	1	134	13	3	0	0	7	1	9	167	162	13	3	0	0	5	1	1	185	353

Entry : Arm A - Burton Hall Road

	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	0	0	0	0	0	0	0	0	0	22	1	0	0	0	0	0	0	23	12	4	0	0	0	1	0	0	17	40
16:15	0	0	0	0	0	0	0	0	0	8	3	0	0	0	0	0	0	11	9	3	0	0	0	1	0	0	13	24
16:30	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	5	10	0	1	0	0	0	0	0	11	16
16:45	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	10	11	1	0	0	0	1	0	0	13	23
1 Hr	0	0	0	0	0	0	0	0	0	43	6	0	0	0	0	0	0	49	42	8	1	0	0	3	0	0	54	103
17:00	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	8	2	0	0	0	0	0	0	10	13
17:15	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	1	14	7	1	0	0	0	0	0	0	8	22
17:30	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	1	13	8	0	0	0	0	0	0	1	9	22
17:45	0	0	0	0	0	0	0	0	0	8	2	0	0	1	0	0	0	11	9	1	0	0	0	0	0	0	10	21
1 Hr	0	0	0	0	0	0	0	0	0	34	4	0	0	1	0	0	2	41	32	4	0	0	0	0	0	1	37	78
18:00	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	0	13	4	0	0	0	0	0	1	0	5	18
18:15	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	4	8	0	0	0	0	1	0	0	9	13
18:30	0	0	0	0	0	0	0	0	0	7	0	0	0	1	0	0	0	8	5	1	0	0	0	1	0	0	7	15
18:45	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	4	7
1 Hr	0	0	0	0	0	0	0	0	0	25	1	0	0	1	0	0	1	28	21	1	0	0	0	2	1	0	25	53
3 Hrs	0	0	0	0	0	0	0	0	0	102	11	0	0	2	0	0	3	118	95	13	1	0	0	5	1	1	116	234
Total	0	0	0	0	0	1	0	0	1	236	24	3	0	2	7	1	12	285	257	26	4	0	0	10	2	2	301	587
Check									1									285									301	587

Entry : Arm B - Burton Hall Road

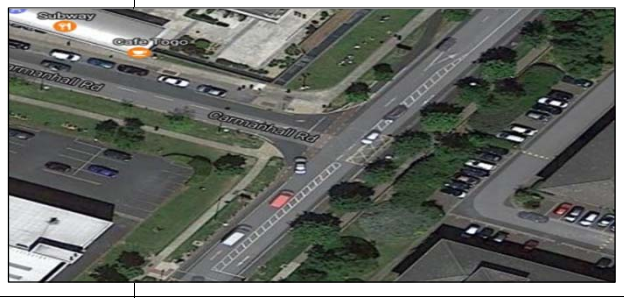
	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	54	5	2	0	3	2	1	0	67	0	0	0	0	0	0	0	0	0	41	4	1	0	0	1	1	1	49	116
07:15	99	14	2	0	6	1	0	3	125	0	0	0	0	0	0	0	0	0	56	10	2	0	0	1	0	0	69	194
07:30	150	9	2	0	3	2	0	0	166	0	0	0	0	0	0	0	0	0	58	5	0	0	0	1	0	0	64	230
07:45	170	5	2	0	3	2	0	0	182	0	0	0	0	0	0	0	0	0	85	2	2	0	0	0	1	1	91	273
1 Hr	473	33	8	0	15	7	1	3	540	0	0	0	0	0	0	0	0	0	240	21	5	0	0	3	2	2	273	813
08:00	169	16	4	1	5	6	0	1	202	0	0	0	0	0	0	0	0	0	63	5	0	0	0	2	0	0	70	272
08:15	163	6	1	0	5	7	0	1	183	0	0	0	0	0	0	0	0	0	78	8	1	0	0	4	1	1	93	276
08:30	159	10	2	0	2	7	1	0	181	0	0	0	0	0	0	0	0	0	91	8	2	0	0	1	2	2	106	287
08:45	139	7	1	1	4	2	0	3	157	0	0	0	0	0	0	0	0	0	84	7	1	1	0	0	1	3	97	254
1 Hr	630	39	8	2	16	22	1	5	723	0	0	0	0	0	0	0	0	0	316	28	4	1	0	7	4	6	366	1089
09:00	136	16	0	1	3	7	0	0	163	0	0	0	0	0	0	0	0	0	81	13	2	0	0	2	0	1	99	262
09:15	123	16	3	0	3	3	1	1	150	0	0	0	0	0	0	0	0	0	82	11	0	0	1	3	0	0	97	247
09:30	119	17	0	0	2	7	1	0	146	0	0	0	0	0	0	0	0	0	65	6	1	0	0	1	0	2	75	221
09:45	115	21	4	0	3	6	2	0	151	0	0	0	0	0	0	0	0	0	54	10	0	0	0	3	0	0	67	218
1 Hr	493	70	7	1	11	23	4	1	610	0	0	0	0	0	0	0	0	0	282	40	3	0	1	9	0	3	338	948

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 2
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -



3 Hrs	1596	142	23	3	42	52	6	9	1873	0	0	0	0	0	0	0	0	0	838	89	12	1	1	19	6	11	977	2850

Entry : Arm B - Burton Hall Road

	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	180	26	0	0	2	7	3	5	223	0	0	0	0	0	0	0	0	0	29	6	1	0	0	4	1	0	41	264
16:15	169	24	1	0	2	3	0	0	199	0	0	0	0	0	0	0	0	0	36	8	0	0	0	0	1	1	46	245
16:30	185	8	3	0	4	3	4	3	210	0	0	0	0	0	0	0	0	0	22	2	0	0	0	2	1	0	27	237
16:45	163	13	2	0	3	8	1	1	191	0	0	0	0	0	0	0	0	0	37	5	2	0	0	2	1	1	48	239
1 Hr	697	71	6	0	11	21	8	9	823	0	0	0	0	0	0	0	0	0	124	21	3	0	0	8	4	2	162	985
17:00	213	12	0	0	4	4	0	3	236	0	0	0	0	0	0	0	0	0	40	4	0	0	0	2	0	0	46	282
17:15	209	8	0	0	3	6	0	5	231	0	0	0	0	0	0	0	0	0	35	3	1	0	0	1	2	3	45	276
17:30	224	10	0	0	5	2	0	10	251	0	0	0	0	0	0	0	0	0	41	2	1	0	0	1	0	2	47	298
17:45	218	3	1	0	3	3	3	3	234	0	0	0	0	0	0	0	0	0	46	3	0	0	0	2	0	1	52	286
1 Hr	864	33	1	0	15	15	3	21	952	0	0	0	0	0	0	0	0	0	162	12	2	0	0	6	2	6	190	1142
18:00	179	7	1	1	3	4	2	3	200	0	0	0	0	0	0	0	0	0	33	1	0	0	0	0	1	2	37	237
18:15	168	4	0	0	3	2	1	5	183	0	0	0	0	0	0	0	0	0	42	2	0	0	0	0	0	0	44	227
18:30	151	3	0	0	5	2	0	5	166	0	0	0	0	0	0	0	0	0	32	3	0	0	0	3	0	1	39	205
18:45	147	3	0	0	3	2	1	3	159	0	0	0	0	0	0	0	0	0	25	1	0	0	0	0	0	1	27	186
1 Hr	645	17	1	1	14	10	4	16	708	0	0	0	0	0	0	0	0	0	132	7	0	0	0	3	1	4	147	855
3 Hrs	2206	121	8	1	40	46	15	46	2483	0	0	0	0	0	0	0	0	0	418	40	5	0	0	17	7	12	499	2982
Total	3802	263	31	4	82	98	21	55	4356	0	0	0	0	0	0	0	0	0	1256	129	17	1	1	36	13	23	1476	5832
Check									4356									0									1476	5832

Entry : Arm C - Carmanhall Road

	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	10	1	1	0	0	1	0	0	13	3	1	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	1	18
07:15	25	6	1	0	0	2	0	0	34	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	36
07:30	22	6	1	1	0	1	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
07:45	29	7	1	0	0	0	0	0	37	2	3	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	42
1 Hr	86	20	4	1	0	4	0	0	115	6	5	0	0	0	0	0	0	11	0	1	0	0	0	0	0	0	1	127
08:00	29	4	0	0	0	4	0	0	37	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	38
08:15	30	10	0	0	0	2	0	0	42	2	0	0	0	0	1	0	3	6	0	0	0	0	0	0	0	0	0	48
08:30	32	14	1	0	0	2	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
08:45	21	9	2	0	0	1	1	0	34	3	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	39
1 Hr	112	37	3	0	0	9	1	0	162	5	1	0	0	0	1	0	5	12	0	0	0	0	0	0	0	0	0	174
09:00	32	10	2	0	0	1	0	1	46	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	47
09:15	29	8	2	0	0	4	0	0	43	0	2	0	0	0	1	0	2	5	0	0	0	0	0	0	0	0	0	48
09:30	20	12	1	0	0	1	0	1	35	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	37
09:45	31	13	2	0	0	1	1	1	49	1	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	51
1 Hr	112	43	7	0	0	7	1	3	173	3	3	1	0	0	1	0	2	10	0	0	0	0	0	0	0	0	0	183
3 Hrs	310	100	14	1	0	20	2	3	450	14	9	1	0	0	2	0	7	33	0	1	0	0	0	0	0	0	1	484

Entry : Arm C - Carmanhall Road

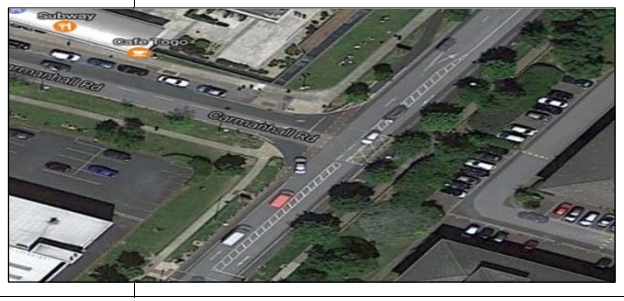
	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	81	12	1	0	0	2	1	0	97	3	1	0	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	102
16:15	81	4	2	0	0	3	2	2	94	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	97
16:30	76	5	2	0	0	3	2	0	88	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	90
16:45	92	9	2	0	1	4	1	1	110	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	113
1 Hr	330	30	7	0	1	12	6	3	389	11	1	0	0	0	1	0	0	13	0	0	0	0	0	0	0	0	0	402
17:00	89	1	1	0	0	0	0	0	91	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	92
17:15	89	4	1	0	0	2	1	1	98	2	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	101
17:30	65	1	0	0	0	2	1	0	69	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	70
17:45	88	5	0	0	0	0	1	0	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
1 Hr	331	11	2	0	0	4	3	1	352	4	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	357
18:00	77	5	0	0	0	0	2	1	85	3	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	89
18:15	72	1	0	0	0	1	1	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
18:30	60	0	0	0	0	1	0	0	61	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	63
18:45	41	3	0	0	0	1	0	0	45	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	46

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 2
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -



1 Hr	250	9	0	0	0	3	3	1	266	5	1	0	0	0	0	0	1	7	0	0	0	0	0	0	0	0	273
3 Hrs	911	50	9	0	1	19	12	5	1007	20	2	0	0	0	1	0	2	25	0	0	0	0	0	0	0	0	1032
Total	1221	150	23	1	1	39	14	8	1457	34	11	1	0	0	3	0	9	58	0	1	0	0	0	0	0	1	1516
Check									1457									58								1	1516

ORIGIN SUMMARY

	Origin : Arm A - Burton Hall Road									Origin : Arm B - Burton Hall Road									Origin : Arm C - Carmanhall Road									Origin Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	6	0	1	0	0	1	0	0	8	95	9	3	0	3	3	2	1	116	13	3	1	0	0	1	0	0	18	142
07:15	2	2	0	0	0	1	0	0	5	155	24	4	0	6	2	0	3	194	26	7	1	0	0	2	0	0	36	235
07:30	12	0	0	0	0	1	0	0	13	208	14	2	0	3	3	0	0	230	22	6	1	1	0	1	0	0	31	274
07:45	23	1	1	0	0	2	0	1	28	255	7	4	0	3	2	1	1	273	31	10	1	0	0	0	0	0	42	343
1 Hr	43	3	2	0	0	5	0	1	54	713	54	13	0	15	10	3	5	813	92	26	4	1	0	4	0	0	127	994
08:00	33	2	1	0	0	1	1	2	40	232	21	4	1	5	8	0	1	272	29	5	0	0	0	4	0	0	38	350
08:15	37	4	0	0	0	0	0	1	42	241	14	2	0	5	11	1	2	276	32	10	0	0	0	3	0	3	48	366
08:30	32	3	0	0	0	2	1	2	40	250	18	4	0	2	8	3	2	287	32	14	1	0	0	2	0	0	49	376
08:45	42	5	1	0	0	2	0	3	53	223	14	2	2	4	2	1	6	254	24	9	2	0	0	1	1	2	39	346
1 Hr	144	14	2	0	0	5	2	8	175	946	67	12	3	16	29	5	11	1089	117	38	3	0	0	10	1	5	174	1438
09:00	37	3	1	0	0	1	0	1	43	217	29	2	1	3	9	0	1	262	32	11	2	0	0	1	0	1	47	352
09:15	34	2	0	0	0	1	0	0	37	205	27	3	0	4	6	1	1	247	29	10	2	0	0	5	0	2	48	332
09:30	21	3	1	0	0	0	0	0	25	184	23	1	0	2	8	1	2	221	22	12	1	0	0	1	0	1	37	283
09:45	17	1	0	0	0	1	0	0	19	169	31	4	0	3	9	2	0	218	32	13	3	0	0	1	1	1	51	288
1 Hr	109	9	2	0	0	3	0	1	124	775	110	10	1	12	32	4	4	948	115	46	8	0	0	8	1	5	183	1255
3 Hrs	296	26	6	0	0	13	2	10	353	2434	231	35	4	43	71	12	20	2850	324	110	15	1	0	22	2	10	484	3687

ORIGIN SUMMARY

	Origin : Arm A - Burton Hall Road									Origin : Arm B - Burton Hall Road									Origin : Arm C - Carmanhall Road									Origin Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	34	5	0	0	0	1	0	0	40	209	32	1	0	2	11	4	5	264	84	13	1	0	0	3	1	0	102	406
16:15	17	6	0	0	0	1	0	0	24	205	32	1	0	2	3	1	1	245	84	4	2	0	0	3	2	2	97	366
16:30	14	1	1	0	0	0	0	0	16	207	10	3	0	4	5	5	3	237	78	5	2	0	0	3	2	0	90	343
16:45	20	2	0	0	0	1	0	0	23	200	18	4	0	3	10	2	2	239	95	9	2	0	1	4	1	1	113	375
1 Hr	85	14	1	0	0	3	0	0	103	821	92	9	0	11	29	12	11	985	341	31	7	0	1	13	6	3	402	1490
17:00	11	2	0	0	0	0	0	0	13	253	16	0	0	4	6	0	3	282	90	1	1	0	0	0	0	0	92	387
17:15	20	1	0	0	0	0	0	1	22	244	11	1	0	3	7	2	8	276	91	4	1	0	0	2	1	2	101	399
17:30	18	2	0	0	0	0	0	2	22	265	12	1	0	5	3	0	12	298	66	1	0	0	0	2	1	0	70	390
17:45	17	3	0	0	1	0	0	0	21	264	6	1	0	3	5	3	4	286	88	5	0	0	0	0	1	0	94	401
1 Hr	66	8	0	0	1	0	0	3	78	1026	45	3	0	15	21	5	27	1142	335	11	2	0	0	4	3	2	357	1577
18:00	16	1	0	0	0	0	1	0	18	212	8	1	1	3	4	3	5	237	80	6	0	0	0	0	2	1	89	344
18:15	11	0	0	0	0	1	0	1	13	210	6	0	0	3	2	1	5	227	72	1	0	0	0	1	1	0	75	315
18:30	12	1	0	0	1	1	0	0	15	183	6	0	0	5	5	0	6	205	61	0	0	0	0	1	0	1	63	283
18:45	7	0	0	0	0	0	0	0	7	172	4	0	0	3	2	1	4	186	42	3	0	0	0	1	0	0	46	239
1 Hr	46	2	0	0	1	2	1	1	53	777	24	1	1	14	13	5	20	855	255	10	0	0	0	3	3	2	273	1181
3 Hrs	197	24	1	0	2	5	1	4	234	2624	161	13	1	40	63	22	58	2982	931	52	9	0	1	20	12	7	1032	4248
Total	493	50	7	0	2	18	3	14	587	5058	392	48	5	83	134	34	78	5832	1255	162	24	1	1	42	14	17	1516	7935
Check									587									5832									1516	7935

DESTINATION SUMMARY

	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Dest Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	64	6	3	0	3	3	1	0	80	6	1	0	0	0	0	0	0	7	44	5	2	0	0	2	1	1	55	142
07:15	124	20	3	0	6	3	0	3	159	2	1	0	0	0	1	0	0	4	57	12	2	0	0	1	0	0	72	235
07:30	172	15	3	1	3	3	0	0	197	5	0	0	0	0	1	0	0	6	65	5	0	0	0	1	0	0	71	274
07:45	199	12	3	0	3	2	0	0	219	12	4	1	0	0	1	0	0	18	98	2	2	0	0	1	1	2	106	343
1 Hr	559	53	12	1	15	11	1	3	655	25	6	1	0	0	3	0	0	35	264	24	6	0	0	5	2	3	304	994
08:00	198	20	4	1	5	10	0	1	239	19	2	1	0	0	1	0	2	25	77	6	0	0	0	2	1	0	86	350
08:15	193	16	1	0	5	9	0	1	225	17	3	0	0	0	1	0	4	25	100	9	1	0	0	4	1	1	116	366
08:30	191	24	3	0	2	9	1	0	230	15	2	0	0	0	1	1	2	21	108	9	2	0	0	2	2	2	125	376
08:45	160	16	3	1	4	3	1	3	191	23	2	0	0	0	1	0	5	31	106	10	2	1	0	1	1	3	124	346
1 Hr	742	76	11	2	16	31	2	5	885	74	9	1	0	0	4	1	13	102	391	34	5	1	0	9	5	6	451	1438

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 2
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

09:00	168	26	2	1	3	8	0	1	209	15	2	0	0	0	0	0	1	18	103	15	3	0	0	3	0	1	125	352
09:15	152	24	5	0	3	8	1	1	194	12	3	0	0	0	1	0	2	18	104	12	0	0	1	3	0	0	120	332
09:30	139	29	1	0	2	8	1	1	181	12	1	1	0	0	0	0	0	14	76	8	1	0	0	1	0	2	88	283
09:45	146	34	6	0	3	7	3	1	200	10	1	1	0	0	1	0	0	13	62	10	0	0	0	3	0	0	75	288
1 Hr	605	113	14	1	11	31	5	4	784	49	7	2	0	0	2	0	3	63	345	45	4	0	1	10	0	3	408	1255
3 Hrs	1906	242	37	4	42	73	8	12	2324	148	22	4	0	0	9	1	16	200	1000	103	15	1	1	24	7	12	1163	3687

DESTINATION SUMMARY

	Destination : Arm A - Burton Hall Road									Destination : Arm B - Burton Hall Road									Destination : Arm C - Carmanhall Road									Dest Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	261	38	1	0	2	9	4	5	320	25	2	0	0	0	1	0	0	28	41	10	1	0	0	5	1	0	58	406
16:15	250	28	3	0	2	6	2	2	293	11	3	0	0	0	0	0	0	14	45	11	0	0	0	1	1	1	59	366
16:30	261	13	5	0	4	6	6	3	298	6	1	0	0	0	0	0	0	7	32	2	1	0	0	2	1	0	38	343
16:45	255	22	4	0	4	12	2	2	301	12	1	0	0	0	0	0	0	13	48	6	2	0	0	3	1	1	61	375
1 Hr	1027	101	13	0	12	33	14	12	1212	54	7	0	0	0	1	0	0	62	166	29	4	0	0	11	4	2	216	1490
17:00	302	13	1	0	4	4	0	3	327	4	0	0	0	0	0	0	0	4	48	6	0	0	0	2	0	0	56	387
17:15	298	12	1	0	3	8	1	6	329	15	0	0	0	0	0	0	2	17	42	4	1	0	0	1	2	3	53	399
17:30	289	11	0	0	5	4	1	10	320	11	2	0	0	0	0	0	1	14	49	2	1	0	0	1	0	3	56	390
17:45	306	8	1	0	3	3	4	3	328	8	2	0	0	1	0	0	0	11	55	4	0	0	0	2	0	1	62	401
1 Hr	1195	44	3	0	15	19	6	22	1304	38	4	0	0	1	0	0	3	46	194	16	2	0	0	6	2	7	227	1577
18:00	256	12	1	1	3	4	4	4	285	15	2	0	0	0	0	0	0	17	37	1	0	0	0	0	2	2	42	344
18:15	240	5	0	0	3	3	2	5	258	3	0	0	0	0	0	0	1	4	50	2	0	0	0	1	0	0	53	315
18:30	211	3	0	0	5	3	0	5	227	8	0	0	0	1	0	0	1	10	37	4	0	0	0	4	0	1	46	283
18:45	188	6	0	0	3	3	1	3	204	4	0	0	0	0	0	0	0	4	29	1	0	0	0	0	0	1	31	239
1 Hr	895	26	1	1	14	13	7	17	974	30	2	0	0	1	0	0	2	35	153	8	0	0	0	5	2	4	172	1181
3 Hrs	3117	171	17	1	41	65	27	51	3490	122	13	0	0	2	1	0	5	143	513	53	6	0	0	22	8	13	615	4248
Total	5023	413	54	5	83	138	35	63	5814	270	35	4	0	2	10	1	21	343	1513	156	21	1	1	46	15	25	1778	7935
Check									5814									343									1778	7935

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 3
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

Entry : Arm A - Carmanhall Road

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	0	0	0	0	0	0	0	0	0	21	3	0	0	0	0	0	0	24	3	1	0	0	0	0	0	0	4	28
07:15	0	0	0	0	0	0	0	0	0	35	1	0	0	0	0	0	0	36	5	1	0	0	0	0	0	0	6	42
07:30	0	0	0	0	0	0	0	0	0	38	3	0	0	0	0	0	0	41	9	1	0	0	0	0	0	1	11	52
07:45	1	0	0	0	0	0	0	0	1	53	0	0	0	0	0	0	1	54	10	1	0	0	0	0	0	1	12	67
1 Hr	1	0	0	0	0	0	0	0	1	147	7	0	0	0	0	0	1	155	27	4	0	0	0	0	0	2	33	189
08:00	0	0	0	0	0	0	0	0	0	59	5	0	0	0	0	0	0	64	11	0	0	0	0	1	1	0	13	77
08:15	0	0	0	0	0	0	0	0	0	81	5	0	0	0	0	1	4	91	17	1	0	0	0	0	0	0	18	109
08:30	1	0	0	0	0	0	0	0	1	72	3	0	0	0	0	1	1	77	11	4	0	0	0	0	1	0	16	94
08:45	0	0	0	0	0	0	0	0	0	68	3	1	0	0	1	0	3	76	30	0	1	0	0	1	0	0	32	108
1 Hr	1	0	0	0	0	0	0	0	1	280	16	1	0	0	1	2	8	308	69	5	1	0	0	2	2	0	79	388
09:00	0	0	0	0	0	0	0	0	0	69	3	2	0	0	0	0	1	75	14	2	0	0	0	1	0	0	17	92
09:15	0	0	0	0	0	0	0	0	0	69	5	0	0	0	1	0	2	77	18	1	0	0	0	0	0	0	19	96
09:30	0	0	0	0	0	0	0	0	0	38	6	0	0	0	1	2	1	48	10	1	0	0	0	0	0	0	11	59
09:45	0	0	0	0	0	0	0	0	0	29	6	0	0	0	0	1	1	37	8	1	1	0	0	2	0	0	12	49
1 Hr	0	0	0	0	0	0	0	0	0	205	20	2	0	0	2	3	5	237	50	5	1	0	0	3	0	0	59	296
3 Hrs	2	0	0	0	0	0	0	0	2	632	43	3	0	0	3	5	14	700	146	14	2	0	0	5	2	2	171	873

Entry : Arm A - Carmanhall Road

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	0	0	0	0	0	0	0	0	0	16	7	0	0	0	1	0	3	27	6	3	2	0	0	1	0	0	12	39
16:15	0	0	0	0	0	0	0	0	0	29	1	1	0	0	0	1	0	32	11	1	1	0	0	1	0	0	14	46
16:30	0	0	0	0	0	0	0	0	0	19	2	0	0	0	0	0	0	21	8	3	0	0	0	0	0	0	11	32
16:45	1	0	0	0	0	0	0	0	1	23	5	1	0	0	0	0	2	31	8	0	0	0	0	0	0	0	8	40
1 Hr	1	0	0	0	0	0	0	0	1	87	15	2	0	0	1	1	5	111	33	7	3	0	0	2	0	0	45	157
17:00	0	0	0	0	0	0	0	0	0	20	0	1	0	0	0	0	0	21	7	1	0	0	0	1	0	0	9	30
17:15	0	0	0	0	0	0	0	0	0	26	5	0	0	0	0	0	0	31	10	1	0	0	0	0	0	0	11	42
17:30	0	0	0	0	0	0	0	0	0	18	2	0	0	0	0	0	0	20	6	0	0	0	0	0	1	0	7	27
17:45	0	0	0	0	0	0	0	0	0	21	2	0	0	0	0	0	0	23	6	1	0	0	0	0	0	0	7	30
1 Hr	0	0	0	0	0	0	0	0	0	85	9	1	0	0	0	0	0	95	29	3	0	0	0	1	1	0	34	129
18:00	1	0	0	0	0	0	0	0	1	22	1	0	0	0	0	0	1	24	4	3	0	0	0	0	0	0	7	32
18:15	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	22	4	0	0	0	0	0	0	0	4	26
18:30	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	17	6	1	0	0	0	0	0	0	7	24
18:45	1	0	0	0	0	0	0	0	1	16	0	0	0	0	0	0	0	16	6	0	0	0	0	0	0	0	6	23
1 Hr	2	0	0	0	0	0	0	0	2	77	1	0	0	0	0	0	1	79	20	4	0	0	0	0	0	0	24	105
3 Hrs	3	0	0	0	0	0	0	0	3	249	25	3	0	0	1	1	6	285	82	14	3	0	0	3	1	0	103	391
Total	5	0	0	0	0	0	0	0	5	881	68	6	0	0	4	6	20	985	228	28	5	0	0	8	3	2	274	1264
Check									5									985									274	1264

Entry : Arm B - Carmanhall Road

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 3
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

07:00	8	2	0	0	0	0	0	1	11	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	1	7	18
07:15	13	4	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4	21
07:30	20	2	2	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	29
07:45	33	1	1	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	36
1 Hr	74	9	3	0	0	0	0	1	87	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	1	1	17	104
08:00	20	0	1	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	24
08:15	23	2	0	0	0	0	1	0	26	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	34
08:30	25	6	1	0	0	1	1	0	34	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	2	10	44
08:45	37	4	1	1	0	0	0	1	44	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	0	0	8	52
1 Hr	105	12	3	1	0	1	2	1	125	0	0	0	0	0	0	0	0	0	25	1	1	0	0	0	0	2	29	154
09:00	26	5	2	0	0	1	0	1	35	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	1	8	43
09:15	35	7	0	0	0	1	0	0	43	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	0	9	52
09:30	45	6	0	0	0	0	0	0	51	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	10	61
09:45	25	4	0	0	0	1	0	1	31	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4	35
1 Hr	131	22	2	0	0	3	0	2	160	0	0	0	0	0	0	0	0	0	26	3	0	0	1	0	0	1	31	191
3 Hrs	310	43	8	1	0	4	2	4	372	0	0	0	0	0	0	0	0	0	65	5	1	0	1	0	1	4	77	449

Entry : Arm B - Carmanhall Road

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	65	8	0	0	0	0	2	0	75	0	0	0	0	0	0	0	0	0	9	3	0	0	0	1	2	1	16	91
16:15	56	5	0	0	0	0	0	3	64	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	1	0	7	71
16:30	89	8	0	0	0	0	1	0	98	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	1	5	103
16:45	73	4	2	0	0	2	1	3	85	0	0	1	0	0	0	0	0	1	6	0	0	0	0	0	0	0	6	92
1 Hr	283	25	2	0	0	2	4	6	322	0	0	1	0	0	0	0	0	1	22	5	1	0	0	1	3	2	34	357
17:00	81	0	0	0	0	2	0	1	84	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	1	6	90
17:15	76	3	1	0	0	0	1	2	83	1	0	0	0	0	0	0	0	1	8	1	0	0	0	0	0	0	9	93
17:30	85	3	1	0	0	1	0	1	91	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	95
17:45	74	3	0	0	0	2	0	4	83	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	89
1 Hr	316	9	2	0	0	5	1	8	341	1	0	0	0	0	0	0	0	1	23	1	0	0	0	0	0	1	25	367
18:00	59	1	0	0	0	0	1	0	61	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	5	66
18:15	51	3	0	0	0	1	0	2	57	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	59
18:30	53	1	0	0	0	0	0	2	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	57
18:45	52	0	0	0	0	0	0	1	53	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	54
1 Hr	215	5	0	0	0	1	1	5	227	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	1	1	9	236
3 Hrs	814	39	4	0	0	8	6	19	890	1	0	1	0	0	0	0	0	2	52	6	1	0	0	1	4	4	68	960
Total	1124	82	12	1	0	12	8	23	1262	1	0	1	0	0	0	0	0	2	117	11	2	0	1	1	5	8	145	1409
Check									1262									2									145	1409

Entry : Arm C - Corrig Road

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	3	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	6
07:15	3	2	0	0	0	0	0	0	5	8	2	0	0	0	1	0	0	11	0	0	0	0	0	0	0	0	0	16
07:30	8	1	0	0	0	0	0	0	9	10	0	0	0	0	0	0	1	11	0	0	0	0	0	0	0	0	0	20
07:45	7	3	0	0	0	0	0	0	10	11	3	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	24

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 3
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

1 Hr	21	6	0	0	0	0	0	0	27	32	5	0	0	0	1	0	1	39	0	0	0	0	0	0	0	0	0	66
08:00	16	1	1	0	0	0	0	0	18	12	2	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	32
08:15	14	1	0	0	0	0	0	0	15	13	0	1	0	0	0	1	1	16	0	0	0	0	0	0	0	0	0	31
08:30	14	2	1	0	0	0	0	0	17	16	2	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	36
08:45	12	4	0	0	0	1	0	0	17	10	2	1	0	0	0	1	1	15	0	0	0	0	0	0	0	0	0	32
1 Hr	56	8	2	0	0	1	0	0	67	51	6	3	0	0	0	2	2	64	0	0	0	0	0	0	0	0	0	131
09:00	18	2	0	0	0	1	1	2	24	13	1	0	0	0	1	0	0	15	0	0	0	0	0	0	0	0	0	39
09:15	12	0	1	0	0	1	0	0	14	15	2	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	31
09:30	11	0	1	0	0	0	0	0	12	13	3	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	30
09:45	7	1	0	0	0	1	0	0	9	10	2	1	0	0	0	0	1	14	0	0	0	0	0	0	0	0	0	23
1 Hr	48	3	2	0	0	3	1	2	59	51	8	3	0	0	1	0	1	64	0	0	0	0	0	0	0	0	0	123
3 Hrs	125	17	4	0	0	4	1	2	153	134	19	6	0	0	2	2	4	167	0	0	0	0	0	0	0	0	0	320

Entry : Arm C - Corrig Road

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	22	4	0	0	0	2	1	0	29	14	2	1	0	0	1	0	0	18	0	0	0	0	0	0	0	0	0	47
16:15	24	3	0	0	0	1	1	0	29	9	0	2	0	0	1	2	1	15	0	0	0	0	0	0	0	0	0	44
16:30	45	5	0	0	0	0	0	0	50	6	2	0	0	0	1	0	0	9	0	0	0	0	0	0	0	0	0	59
16:45	38	5	0	0	0	0	0	1	44	11	0	0	0	1	0	0	1	13	0	0	0	0	0	0	0	0	0	57
1 Hr	129	17	0	0	0	3	2	1	152	40	4	3	0	1	3	2	2	55	0	0	0	0	0	0	0	0	0	207
17:00	54	2	0	0	0	1	1	1	59	11	0	0	0	0	1	0	0	12	0	0	0	0	0	0	0	0	0	71
17:15	27	3	0	0	0	1	0	2	33	7	0	0	0	0	2	0	1	10	0	0	0	0	0	0	0	0	0	43
17:30	51	0	0	0	0	0	0	1	52	10	0	0	0	0	0	1	0	11	0	0	0	0	0	0	0	0	0	63
17:45	49	3	0	0	0	1	0	0	53	6	1	0	0	0	0	0	2	9	0	0	0	0	0	0	0	0	0	62
1 Hr	181	8	0	0	0	3	1	4	197	34	1	0	0	0	3	1	3	42	0	0	0	0	0	0	0	0	0	239
18:00	16	1	0	0	0	1	1	0	19	6	0	0	0	0	0	1	0	7	0	0	0	0	0	0	0	0	0	26
18:15	20	0	0	0	0	0	0	0	20	11	0	0	0	0	1	1	2	15	0	0	0	0	0	0	0	0	0	35
18:30	14	1	0	0	0	0	0	0	15	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	20
18:45	11	0	0	0	0	0	1	0	12	8	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	20
1 Hr	61	2	0	0	0	1	2	0	66	30	0	0	0	0	1	2	2	35	0	0	0	0	0	0	0	0	0	101
3 Hrs	371	27	0	0	0	7	5	5	415	104	5	3	0	1	7	5	7	132	0	0	0	0	0	0	0	0	0	547
Total	496	44	4	0	0	11	6	7	568	238	24	9	0	1	9	7	11	299	0	0	0	0	0	0	0	0	0	867
Check									568									299									0	867

ORIGIN SUMMARY

	Origin : Arm A - Carmanhall Road									Origin : Arm B - Carmanhall Road									Origin : Arm C - Corrig Road									Origin
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	24	4	0	0	0	0	0	0	28	13	2	0	0	0	0	1	2	18	6	0	0	0	0	0	0	0	6	52
07:15	40	2	0	0	0	0	0	0	42	16	5	0	0	0	0	0	0	21	11	4	0	0	0	1	0	0	16	79
07:30	47	4	0	0	0	0	0	1	52	25	2	2	0	0	0	0	0	29	18	1	0	0	0	0	0	1	20	101
07:45	64	1	0	0	0	0	0	2	67	34	1	1	0	0	0	0	0	36	18	6	0	0	0	0	0	0	24	127
1 Hr	175	11	0	0	0	0	0	3	189	88	10	3	0	0	0	1	2	104	53	11	0	0	0	1	0	1	66	359
08:00	70	5	0	0	0	1	1	0	77	23	0	1	0	0	0	0	0	24	28	3	1	0	0	0	0	0	32	133
08:15	98	6	0	0	0	0	1	4	109	31	2	0	0	0	0	1	0	34	27	1	1	0	0	0	1	1	31	174
08:30	84	7	0	0	0	0	2	1	94	32	7	1	0	0	1	1	2	44	30	4	2	0	0	0	0	0	36	174

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 3
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

	Arm A - Carmanhall Road									Arm B - Carmanhall Road									Arm C - Corrig Road									
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
08:45	98	3	2	0	0	2	0	3	108	44	4	2	1	0	0	0	1	52	22	6	1	0	0	1	1	1	32	192
1 Hr	350	21	2	0	0	3	4	8	388	130	13	4	1	0	1	2	3	154	107	14	5	0	0	1	2	2	131	673
09:00	83	5	2	0	0	1	0	1	92	32	6	2	0	0	1	0	2	43	31	3	0	0	0	2	1	2	39	174
09:15	87	6	0	0	0	1	0	2	96	43	7	0	0	1	1	0	0	52	27	2	1	0	0	1	0	0	31	179
09:30	48	7	0	0	0	1	2	1	59	54	7	0	0	0	0	0	0	61	24	3	3	0	0	0	0	0	30	150
09:45	37	7	1	0	0	2	1	1	49	28	5	0	0	0	1	0	1	35	17	3	1	0	0	1	0	1	23	107
1 Hr	255	25	3	0	0	5	3	5	296	157	25	2	0	1	3	0	3	191	99	11	5	0	0	4	1	3	123	610
3 Hrs	780	57	5	0	0	8	7	16	873	375	48	9	1	1	4	3	8	449	259	36	10	0	0	6	3	6	320	1642
16:00	22	10	2	0	0	2	0	3	39	74	11	0	0	0	1	4	1	91	36	6	1	0	0	3	1	0	47	177
16:15	40	2	2	0	0	1	1	0	46	60	7	0	0	0	0	1	3	71	33	3	2	0	0	2	3	1	44	161
16:30	27	5	0	0	0	0	0	0	32	92	8	1	0	0	0	1	1	103	51	7	0	0	0	1	0	0	59	194
16:45	32	5	1	0	0	0	0	2	40	79	4	3	0	0	2	1	3	92	49	5	0	0	1	0	0	2	57	189
1 Hr	121	22	5	0	0	3	1	5	157	305	30	4	0	0	3	7	8	357	169	21	3	0	1	6	4	3	207	721
17:00	27	1	1	0	0	1	0	0	30	86	0	0	0	0	2	0	2	90	65	2	0	0	0	2	1	1	71	191
17:15	36	6	0	0	0	0	0	0	42	85	4	1	0	0	0	1	2	93	34	3	0	0	0	3	0	3	43	178
17:30	24	2	0	0	0	0	1	0	27	89	3	1	0	0	1	0	1	95	61	0	0	0	0	0	1	1	63	185
17:45	27	3	0	0	0	0	0	0	30	80	3	0	0	0	2	0	4	89	55	4	0	0	0	1	0	2	62	181
1 Hr	114	12	1	0	0	1	1	0	129	340	10	2	0	0	5	1	9	367	215	9	0	0	0	6	2	7	239	735
18:00	27	4	0	0	0	0	0	1	32	63	1	0	0	0	0	1	1	66	22	1	0	0	0	1	2	0	26	124
18:15	26	0	0	0	0	0	0	0	26	53	3	0	0	0	1	0	2	59	31	0	0	0	0	1	1	2	35	120
18:30	23	1	0	0	0	0	0	0	24	53	1	0	0	0	0	1	2	57	19	1	0	0	0	0	0	0	20	101
18:45	23	0	0	0	0	0	0	0	23	53	0	0	0	0	0	0	1	54	19	0	0	0	0	0	1	0	20	97
1 Hr	99	5	0	0	0	0	0	1	105	222	5	0	0	0	1	2	6	236	91	2	0	0	0	2	4	2	101	442
3 Hrs	334	39	6	0	0	4	2	6	391	867	45	6	0	0	9	10	23	960	475	32	3	0	1	14	10	12	547	1898
Total	1114	96	11	0	0	12	9	22	1264	1242	93	15	1	1	13	13	31	1409	734	68	13	0	1	20	13	18	867	3540
Check									1264									1409									867	3540

ORIGIN SUMMARY

DESTINATION SUMMARY

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Dest
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	11	2	0	0	0	0	0	1	14	24	3	0	0	0	0	0	0	27	8	1	0	0	0	0	1	1	11	52
07:15	16	6	0	0	0	0	0	0	22	43	3	0	0	0	1	0	0	47	8	2	0	0	0	0	0	0	10	79
07:30	28	3	2	0	0	0	0	0	33	48	3	0	0	0	0	0	1	52	14	1	0	0	0	0	0	1	16	101
07:45	41	4	1	0	0	0	0	0	46	64	3	0	0	0	0	0	1	68	11	1	0	0	0	0	0	1	13	127
1 Hr	96	15	3	0	0	0	0	1	115	179	12	0	0	0	1	0	2	194	41	5	0	0	0	0	1	3	50	359
08:00	36	1	2	0	0	0	0	0	39	71	7	0	0	0	0	0	0	78	14	0	0	0	0	1	1	0	16	133
08:15	37	3	0	0	0	0	1	0	41	94	5	1	0	0	0	2	5	107	25	1	0	0	0	0	0	0	26	174
08:30	40	8	2	0	0	1	1	0	52	88	5	1	0	0	0	1	1	96	18	5	0	0	0	0	1	2	26	174
08:45	49	8	1	1	0	1	0	1	61	78	5	2	0	0	1	1	4	91	37	0	2	0	0	1	0	0	40	192
1 Hr	162	20	5	1	0	2	2	1	193	331	22	4	0	0	1	4	10	372	94	6	2	0	0	2	2	2	108	673
09:00	44	7	2	0	0	2	1	3	59	82	4	2	0	0	1	0	1	90	20	3	0	0	0	1	0	1	25	174
09:15	47	7	1	0	0	2	0	0	57	84	7	0	0	0	1	0	2	94	26	1	0	0	1	0	0	0	28	179

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 3
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

09:30	56	6	1	0	0	0	0	0	63	51	9	2	0	0	1	2	1	66	19	2	0	0	0	0	0	0	21	150
09:45	32	5	0	0	0	2	0	1	40	39	8	1	0	0	0	1	2	51	11	2	1	0	0	2	0	0	16	107
1 Hr	179	25	4	0	0	6	1	4	219	256	28	5	0	0	3	3	6	301	76	8	1	0	1	3	0	1	90	610
3 Hrs	437	60	12	1	0	8	3	6	527	766	62	9	0	0	5	7	18	867	211	19	3	0	1	5	3	6	248	1642

DESTINATION SUMMARY

	Destination : Arm A - Carmanhall Road									Destination : Arm B - Carmanhall Road									Destination : Arm C - Corrig Road									Dest Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	87	12	0	0	0	2	3	0	104	30	9	1	0	0	2	0	3	45	15	6	2	0	0	2	2	1	28	177
16:15	80	8	0	0	0	1	1	3	93	38	1	3	0	0	1	3	1	47	15	3	1	0	0	1	1	0	21	161
16:30	134	13	0	0	0	0	1	0	148	25	4	0	0	0	1	0	0	30	11	3	1	0	0	0	0	1	16	194
16:45	112	9	2	0	0	2	1	4	130	34	5	2	0	1	0	0	3	45	14	0	0	0	0	0	0	0	14	189
1 Hr	413	42	2	0	0	5	6	7	475	127	19	6	0	1	4	3	7	167	55	12	4	0	0	3	3	2	79	721
17:00	135	2	0	0	0	3	1	2	143	31	0	1	0	0	1	0	0	33	12	1	0	0	0	1	0	1	15	191
17:15	103	6	1	0	0	1	1	4	116	34	5	0	0	0	2	0	1	42	18	2	0	0	0	0	0	0	20	178
17:30	136	3	1	0	0	1	0	2	143	28	2	0	0	0	0	1	0	31	10	0	0	0	0	0	1	0	11	185
17:45	123	6	0	0	0	3	0	4	136	27	3	0	0	0	0	0	2	32	12	1	0	0	0	0	0	0	13	181
1 Hr	497	17	2	0	0	8	2	12	538	120	10	1	0	0	3	1	3	138	52	4	0	0	0	1	1	1	59	735
18:00	76	2	0	0	0	1	2	0	81	28	1	0	0	0	0	1	1	31	8	3	0	0	0	0	0	1	12	124
18:15	71	3	0	0	0	1	0	2	77	33	0	0	0	0	1	1	2	37	6	0	0	0	0	0	0	0	6	120
18:30	67	2	0	0	0	0	0	2	71	22	0	0	0	0	0	0	0	22	6	1	0	0	0	0	1	0	8	101
18:45	64	0	0	0	0	0	1	1	66	24	0	0	0	0	0	0	0	24	7	0	0	0	0	0	0	0	7	97
1 Hr	278	7	0	0	0	2	3	5	295	107	1	0	0	0	1	2	3	114	27	4	0	0	0	0	1	1	33	442
3 Hrs	1188	66	4	0	0	15	11	24	1308	354	30	7	0	1	8	6	13	419	134	20	4	0	0	4	5	4	171	1898
Total	1625	126	16	1	0	23	14	30	1835	1120	92	16	0	1	13	13	31	1286	345	39	7	0	1	9	8	10	419	3540

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 4
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes:

Entry : Arm A - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	0	0	0	0	0	0	0	0	0	49	3	1	0	0	1	0	2	56	4	0	0	0	0	0	0	0	4	60
07:15	0	0	0	0	0	0	0	0	0	98	12	1	0	0	2	1	3	117	1	1	0	0	0	0	0	0	2	119
07:30	0	0	0	0	0	0	0	0	0	125	4	1	0	1	2	1	5	139	7	0	0	0	0	0	0	0	7	146
07:45	2	0	0	0	0	0	0	0	2	143	8	0	0	0	2	2	3	158	9	0	0	0	0	0	0	0	9	169
1 Hr	2	0	0	0	0	0	0	0	2	415	27	3	0	1	7	4	13	470	21	1	0	0	0	0	0	0	22	494
08:00	0	0	0	0	0	0	0	0	0	169	12	1	0	0	1	0	2	185	8	0	0	0	0	0	0	0	8	193
08:15	0	0	0	0	0	0	0	0	0	141	6	3	0	0	1	1	6	158	7	0	0	0	0	0	0	0	7	165
08:30	0	0	0	0	0	0	0	0	0	157	8	3	2	0	0	0	11	181	14	2	0	0	0	0	0	0	16	197
08:45	0	0	0	0	0	0	0	0	0	113	7	1	0	0	4	3	14	142	17	0	0	0	0	0	0	0	17	159
1 Hr	0	0	0	0	0	0	0	0	0	580	33	8	2	0	6	4	33	666	46	2	0	0	0	0	0	0	48	714
09:00	0	0	0	0	0	0	0	0	0	108	11	1	0	0	7	1	7	135	16	0	0	0	0	0	0	0	16	151
09:15	0	0	0	0	0	0	0	0	0	104	9	2	0	1	2	0	3	121	12	1	0	0	0	0	0	1	14	135
09:30	1	0	0	0	0	0	0	0	1	97	11	2	1	0	3	1	2	117	17	4	0	0	0	0	0	0	21	139
09:45	0	0	0	0	0	0	0	0	0	96	9	0	0	0	8	1	0	114	11	0	0	0	0	1	0	0	12	126
1 Hr	1	0	0	0	0	0	0	0	1	405	40	5	1	1	20	3	12	487	56	5	0	0	0	1	0	1	63	551
3 Hrs	3	0	0	0	0	0	0	0	3	1400	100	16	3	2	33	11	58	1623	123	8	0	0	0	1	0	1	133	1759

Entry : Arm A - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	0	0	0	0	0	0	0	0	0	80	6	1	0	0	1	2	1	91	12	0	0	0	0	0	0	0	12	103
16:15	0	0	0	0	0	0	0	0	0	106	5	2	0	0	1	1	2	117	8	0	0	0	0	0	0	0	8	125
16:30	2	0	0	0	0	0	0	0	2	81	7	0	0	0	0	1	2	91	11	0	0	0	0	0	0	0	11	104
16:45	0	0	0	0	0	0	0	0	0	91	4	0	0	0	0	0	2	97	6	0	0	0	0	0	0	0	6	103
1 Hr	2	0	0	0	0	0	0	0	2	358	22	3	0	0	2	4	7	396	37	0	0	0	0	0	0	0	37	435
17:00	0	0	0	0	0	0	0	0	0	114	4	0	0	0	1	1	1	121	13	0	0	0	0	0	0	1	14	135
17:15	0	0	0	0	0	1	0	0	1	119	4	0	1	0	1	1	3	129	10	0	0	0	0	0	0	0	10	140
17:30	0	0	0	0	0	0	0	0	0	114	0	0	0	0	0	2	1	117	11	1	0	0	0	0	0	0	12	129
17:45	1	1	0	0	0	0	0	0	2	129	6	1	0	0	1	0	1	138	12	0	0	0	0	0	0	1	13	153
1 Hr	1	1	0	0	0	1	0	0	3	476	14	1	1	0	3	4	6	505	46	1	0	0	0	0	0	2	49	557
18:00	0	0	0	0	0	0	0	0	0	90	3	0	0	0	0	1	3	97	12	0	0	0	0	0	0	0	12	109
18:15	2	0	0	0	0	0	0	0	2	123	6	0	0	0	0	0	1	130	12	0	0	0	0	0	0	0	12	144
18:30	0	0	0	0	0	0	0	0	0	88	1	0	0	1	0	0	1	91	10	0	0	0	0	1	0	1	12	103
18:45	0	0	0	0	0	0	0	0	0	84	5	0	0	0	1	0	0	90	10	0	0	0	0	0	0	0	10	100
1 Hr	2	0	0	0	0	0	0	0	2	385	15	0	0	1	1	1	5	408	44	0	0	0	0	1	0	1	46	456
3 Hrs	5	1	0	0	0	1	0	0	7	1219	51	4	1	1	6	9	18	1309	127	1	0	0	0	1	0	3	132	1448
Total	8	1	0	0	0	1	0	0	10	2619	151	20	4	3	39	20	76	2932	250	9	0	0	0	2	0	4	265	3207
Check									10									2932									265	3207

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 4
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes:

Entry : Arm B - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	19	1	0	0	0	0	1	0	21	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	22
07:15	21	3	0	0	4	0	1	1	30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	32
07:30	35	0	0	0	2	0	0	2	39	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	40
07:45	40	4	1	1	1	1	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
1 Hr	115	8	1	1	7	1	2	3	138	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	142
08:00	65	2	0	0	2	1	0	2	72	2	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	5	79
08:15	68	8	0	0	0	1	0	1	78	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	83
08:30	64	3	0	0	2	2	1	0	72	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	1	11	83
08:45	74	2	2	0	1	4	0	3	86	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	1	16	102
1 Hr	271	15	2	0	5	8	1	6	308	2	0	0	0	0	0	0	0	2	33	2	0	0	0	0	0	2	37	347
09:00	70	6	1	1	1	1	2	0	82	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	1	25	107
09:15	88	10	1	0	2	2	0	2	105	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	1	18	123
09:30	48	2	1	0	2	2	0	0	55	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	17	72
09:45	58	8	1	0	0	3	1	0	71	0	0	0	0	0	0	0	0	0	18	1	0	0	0	0	0	1	20	91
1 Hr	264	26	4	1	5	8	3	2	313	0	0	0	0	0	0	0	0	0	76	1	0	0	0	0	0	3	80	393
3 Hrs	650	49	7	2	17	17	6	11	759	2	0	0	0	0	0	0	0	2	113	3	0	0	0	0	0	5	121	882

Entry : Arm B - Blackthorn Drive

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Arm Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	92	12	1	0	2	3	1	2	113	0	0	0	0	0	0	0	0	0	17	1	0	0	0	0	0	1	19	132
16:15	75	10	0	0	0	2	0	0	87	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14	101
16:30	79	11	1	0	1	2	1	1	96	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	2	13	109
16:45	83	3	0	0	1	0	0	5	92	0	0	0	0	0	0	0	0	0	19	2	0	0	0	0	0	2	23	115
1 Hr	329	36	2	0	4	7	2	8	388	0	0	0	0	0	0	0	0	0	61	3	0	0	0	0	0	5	69	457
17:00	87	7	0	0	0	1	0	7	102	0	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	2	14	116
17:15	80	4	0	0	3	0	0	3	90	1	0	0	0	0	0	0	0	1	15	2	0	0	0	0	0	2	19	110
17:30	73	6	0	0	1	2	0	10	92	1	0	0	0	0	0	0	0	1	12	0	0	0	0	0	0	0	12	105
17:45	108	2	0	0	1	0	0	4	115	3	0	0	0	0	0	0	0	3	16	0	0	0	0	0	0	0	16	134
1 Hr	348	19	0	0	5	3	0	24	399	5	0	0	0	0	0	0	0	5	54	3	0	0	0	0	0	4	61	465
18:00	62	6	0	1	1	0	0	5	75	1	0	0	0	0	0	0	0	1	13	0	0	0	0	0	0	3	16	92
18:15	79	2	0	0	2	0	1	3	87	0	0	0	0	0	0	0	0	0	20	1	0	0	0	0	0	0	21	108
18:30	78	0	0	0	1	1	0	2	82	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	1	11	93
18:45	63	3	0	0	1	0	0	6	73	0	0	0	0	0	0	0	0	0	12	0	0	0	0	1	0	0	13	86
1 Hr	282	11	0	1	5	1	1	16	317	1	0	0	0	0	0	0	0	1	55	1	0	0	0	1	0	4	61	379
3 Hrs	959	66	2	1	14	11	3	48	1104	6	0	0	0	0	0	0	0	6	170	7	0	0	0	1	0	13	191	1301
Total	1609	115	9	3	31	28	9	59	1863	8	0	0	0	0	0	0	0	8	283	10	0	0	0	1	0	18	312	2183
Check									1863									8									312	2183

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 4
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes:

Entry : Arm C - Rockbrook Entrance

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	2	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	5
07:15	3	1	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	6
07:30	5	1	0	0	0	0	0	0	6	9	1	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	16
07:45	12	0	0	0	0	0	0	0	12	6	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	18
1 Hr	22	2	0	0	0	0	0	0	24	20	1	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	45
08:00	6	0	0	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	11
08:15	9	0	0	0	0	0	0	2	11	6	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	17
08:30	9	2	0	0	0	0	0	1	12	9	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	21
08:45	12	1	0	0	0	0	0	1	14	6	0	0	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0	21
1 Hr	36	3	0	0	0	0	0	4	43	26	0	0	0	0	0	0	1	27	0	0	0	0	0	0	0	0	0	70
09:00	6	1	0	0	0	0	0	0	7	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	12
09:15	20	0	0	0	0	0	0	0	20	4	1	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	25
09:30	17	1	0	0	0	0	0	0	18	10	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	28
09:45	9	1	0	0	0	0	0	0	10	13	1	0	0	0	0	0	1	15	0	0	0	0	0	0	0	0	0	25
1 Hr	52	3	0	0	0	0	0	0	55	32	2	0	0	0	0	0	1	35	0	0	0	0	0	0	0	0	0	90
3 Hrs	110	8	0	0	0	0	0	4	122	78	3	0	0	0	0	0	2	83	0	0	0	0	0	0	0	0	0	205

Entry : Arm C - Rockbrook Entrance

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Arm
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	17	2	0	1	0	0	1	0	21	10	0	0	0	0	1	0	0	11	0	0	1	0	0	0	0	0	1	33
16:15	20	1	0	0	0	0	0	0	21	14	0	0	0	0	0	0	0	14	0	0	1	0	0	0	0	0	1	36
16:30	17	0	1	0	0	1	0	0	19	10	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	29
16:45	18	0	0	0	0	0	0	1	19	17	0	0	0	0	0	0	1	18	0	0	0	0	0	0	0	0	0	37
1 Hr	72	3	1	1	0	1	1	1	80	51	0	0	0	0	1	0	1	53	0	0	2	0	0	0	0	0	2	135
17:00	6	0	0	0	0	0	0	0	6	12	2	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	20
17:15	12	1	0	0	0	0	0	0	13	10	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	23
17:30	19	0	0	0	0	0	0	1	20	13	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	33
17:45	14	0	0	0	0	0	0	0	14	14	0	0	0	0	0	0	1	15	0	0	0	0	0	0	0	0	0	29
1 Hr	51	1	0	0	0	0	0	1	53	49	2	0	0	0	0	0	1	52	0	0	0	0	0	0	0	0	0	105
18:00	16	1	0	0	0	0	0	0	17	15	0	0	0	0	1	0	0	16	0	0	0	0	0	0	0	0	0	33
18:15	17	1	0	0	0	0	0	0	18	3	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	22
18:30	18	0	0	0	0	0	0	0	18	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	34
18:45	14	0	0	0	0	0	0	0	14	10	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	24
1 Hr	65	2	0	0	0	0	0	0	67	44	0	0	0	0	1	0	1	46	0	0	0	0	0	0	0	0	0	113
3 Hrs	188	6	1	1	0	1	1	2	200	144	2	0	0	0	2	0	3	151	0	0	2	0	0	0	0	0	2	353
Total	298	14	1	1	0	1	1	6	322	222	5	0	0	0	2	0	5	234	0	0	2	0	0	0	0	0	2	558
Check									322									234									2	558

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 4
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes:

ORIGIN SUMMARY

	Origin : Arm A - Blackthorn Drive									Origin : Arm B - Blackthorn Drive									Origin : Arm C - Rockbrook Entrance									Origin Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
07:00	53	3	1	0	0	1	0	2	60	20	1	0	0	0	0	1	0	22	5	0	0	0	0	0	0	0	5	87
07:15	99	13	1	0	0	2	1	3	119	23	3	0	0	4	0	1	1	32	5	1	0	0	0	0	0	0	6	157
07:30	132	4	1	0	1	2	1	5	146	36	0	0	0	2	0	0	2	40	14	2	0	0	0	0	0	0	16	202
07:45	154	8	0	0	0	2	2	3	169	40	4	1	1	1	1	0	0	48	18	0	0	0	0	0	0	0	18	235
1 Hr	438	28	3	0	1	7	4	13	494	119	8	1	1	7	1	2	3	142	42	3	0	0	0	0	0	0	45	681
08:00	177	12	1	0	0	1	0	2	193	70	4	0	0	2	1	0	2	79	11	0	0	0	0	0	0	0	11	283
08:15	148	6	3	0	0	1	1	6	165	73	8	0	0	0	1	0	1	83	15	0	0	0	0	0	0	2	17	265
08:30	171	10	3	2	0	0	0	11	197	74	3	0	0	2	2	1	1	83	18	2	0	0	0	0	0	1	21	301
08:45	130	7	1	0	0	4	3	14	159	89	2	2	0	1	4	0	4	102	18	1	0	0	0	0	0	2	21	282
1 Hr	626	35	8	2	0	6	4	33	714	306	17	2	0	5	8	1	8	347	62	3	0	0	0	0	0	5	70	1131
09:00	124	11	1	0	0	7	1	7	151	94	6	1	1	1	1	2	1	107	11	1	0	0	0	0	0	0	12	270
09:15	116	10	2	0	1	2	0	4	135	105	10	1	0	2	2	0	3	123	24	1	0	0	0	0	0	0	25	283
09:30	115	15	2	1	0	3	1	2	139	65	2	1	0	2	2	0	0	72	27	1	0	0	0	0	0	0	28	239
09:45	107	9	0	0	0	9	1	0	126	76	9	1	0	0	3	1	1	91	22	2	0	0	0	0	0	1	25	242
1 Hr	462	45	5	1	1	21	3	13	551	340	27	4	1	5	8	3	5	393	84	5	0	0	0	0	0	1	90	1034
3 Hrs	1526	108	16	3	2	34	11	59	1759	765	52	7	2	17	17	6	16	882	188	11	0	0	0	0	0	6	205	2846

ORIGIN SUMMARY

	Origin : Arm A - Blackthorn Drive									Origin : Arm B - Blackthorn Drive									Origin : Arm C - Rockbrook Entrance									Origin Totals
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	
16:00	92	6	1	0	0	1	2	1	103	109	13	1	0	2	3	1	3	132	27	2	1	1	0	1	1	0	33	268
16:15	114	5	2	0	0	1	1	2	125	89	10	0	0	0	2	0	0	101	34	1	1	0	0	0	0	0	36	262
16:30	94	7	0	0	0	0	1	2	104	90	11	1	0	1	2	1	3	109	27	0	1	0	0	1	0	0	29	242
16:45	97	4	0	0	0	0	0	2	103	102	5	0	0	1	0	0	7	115	35	0	0	0	0	0	0	2	37	255
1 Hr	397	22	3	0	0	2	4	7	435	390	39	2	0	4	7	2	13	457	123	3	3	1	0	2	1	2	135	1027
17:00	127	4	0	0	0	1	1	2	135	98	8	0	0	0	1	0	9	116	18	2	0	0	0	0	0	0	20	271
17:15	129	4	0	1	0	2	1	3	140	96	6	0	0	3	0	0	5	110	22	1	0	0	0	0	0	0	23	273
17:30	125	1	0	0	0	0	2	1	129	86	6	0	0	1	2	0	10	105	32	0	0	0	0	0	0	1	33	267
17:45	142	7	1	0	0	1	0	2	153	127	2	0	0	1	0	0	4	134	28	0	0	0	0	0	0	1	29	316
1 Hr	523	16	1	1	0	4	4	8	557	407	22	0	0	5	3	0	28	465	100	3	0	0	0	0	0	2	105	1127
18:00	102	3	0	0	0	0	1	3	109	76	6	0	1	1	0	0	8	92	31	1	0	0	0	1	0	0	33	234
18:15	137	6	0	0	0	0	0	1	144	99	3	0	0	2	0	1	3	108	20	1	0	0	0	0	0	1	22	274
18:30	98	1	0	0	1	1	0	2	103	88	0	0	0	1	1	0	3	93	34	0	0	0	0	0	0	0	34	230
18:45	94	5	0	0	0	1	0	0	100	75	3	0	0	1	1	0	6	86	24	0	0	0	0	0	0	0	24	210
1 Hr	431	15	0	0	1	2	1	6	456	338	12	0	1	5	2	1	20	379	109	2	0	0	0	1	0	1	113	948
3 Hrs	1351	53	4	1	1	8	9	21	1448	1135	73	2	1	14	12	3	61	1301	332	8	3	1	0	3	1	5	353	3102
Total	2877	161	20	4	3	42	20	80	3207	1900	125	9	3	31	29	9	77	2183	520	19	3	1	0	3	1	11	558	5948
Check									3207									2183									558	5948

Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE
Site: Site 4
Date: 08/12/2016

Weather AM: Rainy
Weather PM: Cloudy & Clear

Notes: -

DESTINATION SUMMARY

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Dest
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
07:00	21	1	0	0	0	0	1	0	23	52	3	1	0	0	1	0	2	59	5	0	0	0	0	0	0	0	5	87
07:15	24	4	0	0	4	0	1	1	34	100	12	1	0	0	2	1	3	119	3	1	0	0	0	0	0	0	4	157
07:30	40	1	0	0	2	0	0	2	45	134	5	1	0	1	2	1	5	149	8	0	0	0	0	0	0	0	8	202
07:45	54	4	1	1	1	1	0	0	62	149	8	0	0	0	2	2	3	164	9	0	0	0	0	0	0	0	9	235
1 Hr	139	10	1	1	7	1	2	3	164	435	28	3	0	1	7	4	13	491	25	1	0	0	0	0	0	0	26	681
08:00	71	2	0	0	2	1	0	2	78	176	12	1	0	0	1	0	2	192	11	2	0	0	0	0	0	0	13	283
08:15	77	8	0	0	0	1	0	3	89	147	6	3	0	0	1	1	6	164	12	0	0	0	0	0	0	0	12	265
08:30	73	5	0	0	2	2	1	1	84	166	8	3	2	0	0	0	11	190	24	2	0	0	0	0	0	1	27	301
08:45	86	3	2	0	1	4	0	4	100	119	7	1	0	0	4	3	15	149	32	0	0	0	0	0	0	1	33	282
1 Hr	307	18	2	0	5	8	1	10	351	608	33	8	2	0	6	4	34	695	79	4	0	0	0	0	0	2	85	1131
09:00	76	7	1	1	1	1	2	0	89	113	11	1	0	0	7	1	7	140	40	0	0	0	0	0	0	1	41	270
09:15	108	10	1	0	2	2	0	2	125	108	10	2	0	1	2	0	3	126	29	1	0	0	0	0	0	2	32	283
09:30	66	3	1	0	2	2	0	0	74	107	11	2	1	0	3	1	2	127	34	4	0	0	0	0	0	0	38	239
09:45	67	9	1	0	0	3	1	0	81	109	10	0	0	0	8	1	1	129	29	1	0	0	0	1	0	1	32	242
1 Hr	317	29	4	1	5	8	3	2	369	437	42	5	1	1	20	3	13	522	132	6	0	0	0	1	0	4	143	1034
3 Hrs	763	57	7	2	17	17	6	15	884	1480	103	16	3	2	33	11	60	1708	236	11	0	0	0	1	0	6	254	2846

DESTINATION SUMMARY

	Destination : Arm A - Blackthorn Drive									Destination : Arm B - Blackthorn Drive									Destination : Arm C - Rockbrook Entrance									Dest
	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	CAR	LGV	OGV1	OGV2	BUS	LTAX	MC	PC	Total	Totals
16:00	109	14	1	1	2	3	2	2	134	90	6	1	0	0	2	2	1	102	29	1	1	0	0	0	0	1	32	268
16:15	95	11	0	0	0	2	0	0	108	120	5	2	0	0	1	1	2	131	22	0	1	0	0	0	0	0	23	262
16:30	98	11	2	0	1	3	1	1	117	91	7	0	0	0	0	1	2	101	22	0	0	0	0	0	0	2	24	242
16:45	101	3	0	0	1	0	0	6	111	108	4	0	0	0	0	0	3	115	25	2	0	0	0	0	0	2	29	255
1 Hr	403	39	3	1	4	8	3	9	470	409	22	3	0	0	3	4	8	449	98	3	2	0	0	0	0	5	108	1027
17:00	93	7	0	0	0	1	0	7	108	126	6	0	0	0	1	1	1	135	24	1	0	0	0	0	0	3	28	271
17:15	92	5	0	0	3	1	0	3	104	130	4	0	1	0	1	1	3	140	25	2	0	0	0	0	0	2	29	273
17:30	92	6	0	0	1	2	0	11	112	128	0	0	0	0	0	2	1	131	23	1	0	0	0	0	0	0	24	267
17:45	123	3	0	0	1	0	0	4	131	146	6	1	0	0	1	0	2	156	28	0	0	0	0	0	0	1	29	316
1 Hr	400	21	0	0	5	4	0	25	455	530	16	1	1	0	3	4	7	562	100	4	0	0	0	0	0	6	110	1127
18:00	78	7	0	1	1	0	0	5	92	106	3	0	0	0	1	1	3	114	25	0	0	0	0	0	0	3	28	234
18:15	98	3	0	0	2	0	1	3	107	126	6	0	0	0	0	0	2	134	32	1	0	0	0	0	0	0	33	274
18:30	96	0	0	0	1	1	0	2	100	104	1	0	0	1	0	0	1	107	20	0	0	0	0	1	0	2	23	230
18:45	77	3	0	0	1	0	0	6	87	94	5	0	0	0	1	0	0	100	22	0	0	0	0	1	0	0	23	210
1 Hr	349	13	0	1	5	1	1	16	386	430	15	0	0	1	2	1	6	455	99	1	0	0	0	2	0	5	107	948
3 Hrs	1152	73	3	2	14	13	4	50	1311	1369	53	4	1	1	8	9	21	1466	297	8	2	0	0	2	0	16	325	3102
Total	1915	130	10	4	31	30	10	65	2195	2849	156	20	4	3	41	20	81	3174	533	19	2	0	0	3	0	22	579	5948
Check									2195									3174									579	5948

Checks

Arms Tot	5948	5948
Origin Tot	5948	5948
Dest Tot	5948	5948

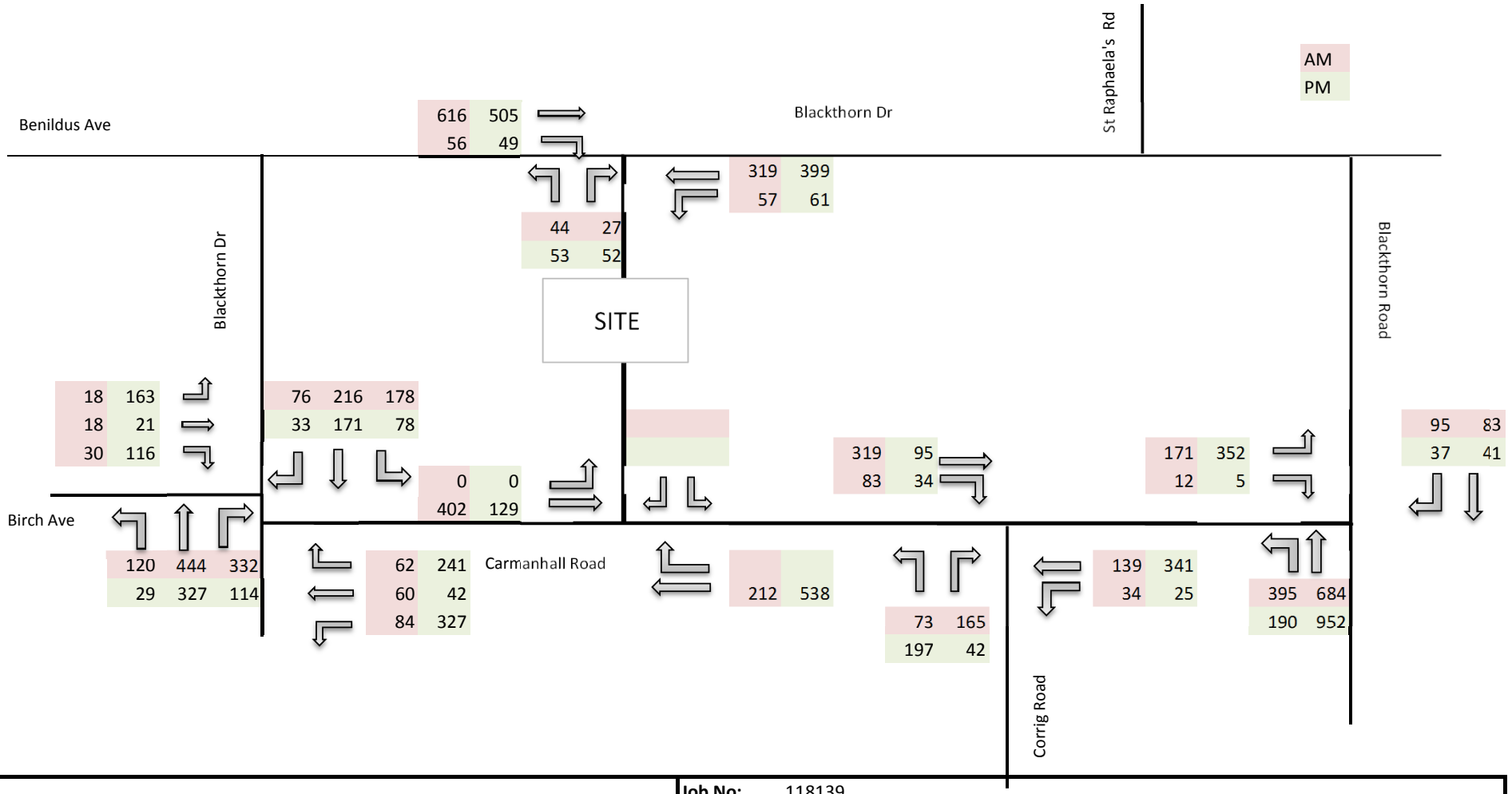
Tracsis plc
Traffic and Data Services

Client: CST Group
Project: 3142-IRE Rockbrook Apartments, Sandyford
Site: 1
Date: 08/12/2016

	Entry									Exit								
	CAR	LGV	OGV1	OGV2	PSV	TAXI	MC	PC	Total	CAR	LGV	OGV1	OGV2	PSV	TAXI	MC	PC	Total
07:00	4	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	4
07:15	1	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	4
07:30	3	0	0	0	0	0	0	0	3	15	1	0	0	0	0	0	0	16
07:45	1	1	0	0	0	0	0	0	2	18	0	0	0	0	0	0	0	18
1 Hr	9	1	0	0	0	0	0	0	10	41	1	0	0	0	0	0	0	42
08:00	6	1	0	0	0	0	0	0	7	9	0	0	0	0	0	0	0	9
08:15	2	0	0	0	0	0	0	0	2	14	0	0	0	0	0	0	2	16
08:30	1	1	0	0	0	0	0	0	2	20	0	0	0	0	0	0	0	20
08:45	9	1	0	0	0	0	0	0	10	13	2	0	0	0	0	0	0	15
1 Hr	18	3	0	0	0	0	0	0	21	56	2	0	0	0	0	0	2	60
09:00	7	0	0	0	0	0	0	0	7	5	2	0	0	0	0	0	0	7
09:15	6	1	0	0	0	0	0	1	8	5	0	0	0	0	0	0	0	5
09:30	3	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	2
09:45	4	0	0	0	0	0	0	1	5	7	0	0	0	0	0	0	0	7
1 Hr	20	1	0	0	0	0	0	2	23	19	2	0	0	0	0	0	0	21
3 Hr Total	47	5	0	0	0	0	0	2	54	116	5	0	0	0	0	0	2	123
16:00	3	0	0	0	0	0	0	0	3	2	0	1	0	0	0	0	0	3
16:15	4	0	1	0	0	0	0	0	5	2	0	1	0	0	0	0	0	3
16:30	5	0	1	0	0	0	0	0	6	5	0	1	0	0	0	0	0	6
16:45	4	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	4
1 Hr	16	0	2	0	0	0	0	0	18	13	0	3	0	0	0	0	0	16
17:00	8	0	0	0	0	0	0	0	8	1	0	0	0	0	0	0	0	1
17:15	9	1	0	0	0	0	0	0	10	5	0	0	0	0	0	0	0	5
17:30	9	0	0	0	0	0	0	0	9	3	0	0	0	0	0	0	1	4
17:45	10	0	0	0	0	0	0	1	11	6	0	0	0	0	0	0	1	7
1 Hr	36	1	0	0	0	0	0	1	38	15	0	0	0	0	0	0	2	17
18:00	6	0	0	0	0	1	0	1	8	4	0	0	0	0	1	0	0	5
18:15	12	0	0	0	0	0	0	0	12	4	0	0	0	0	0	0	0	4
18:30	9	0	0	0	0	0	0	1	10	3	0	0	0	0	0	0	0	3
18:45	5	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	5
1 Hr	32	0	0	0	0	1	0	2	35	16	0	0	0	0	1	0	0	17
3 Hr Total	84	1	2	0	0	1	0	3	91	44	0	3	0	0	1	0	2	50
Total	131	6	2	0	0	1	0	5	145	160	5	3	0	0	1	0	4	173

APPENDIX B

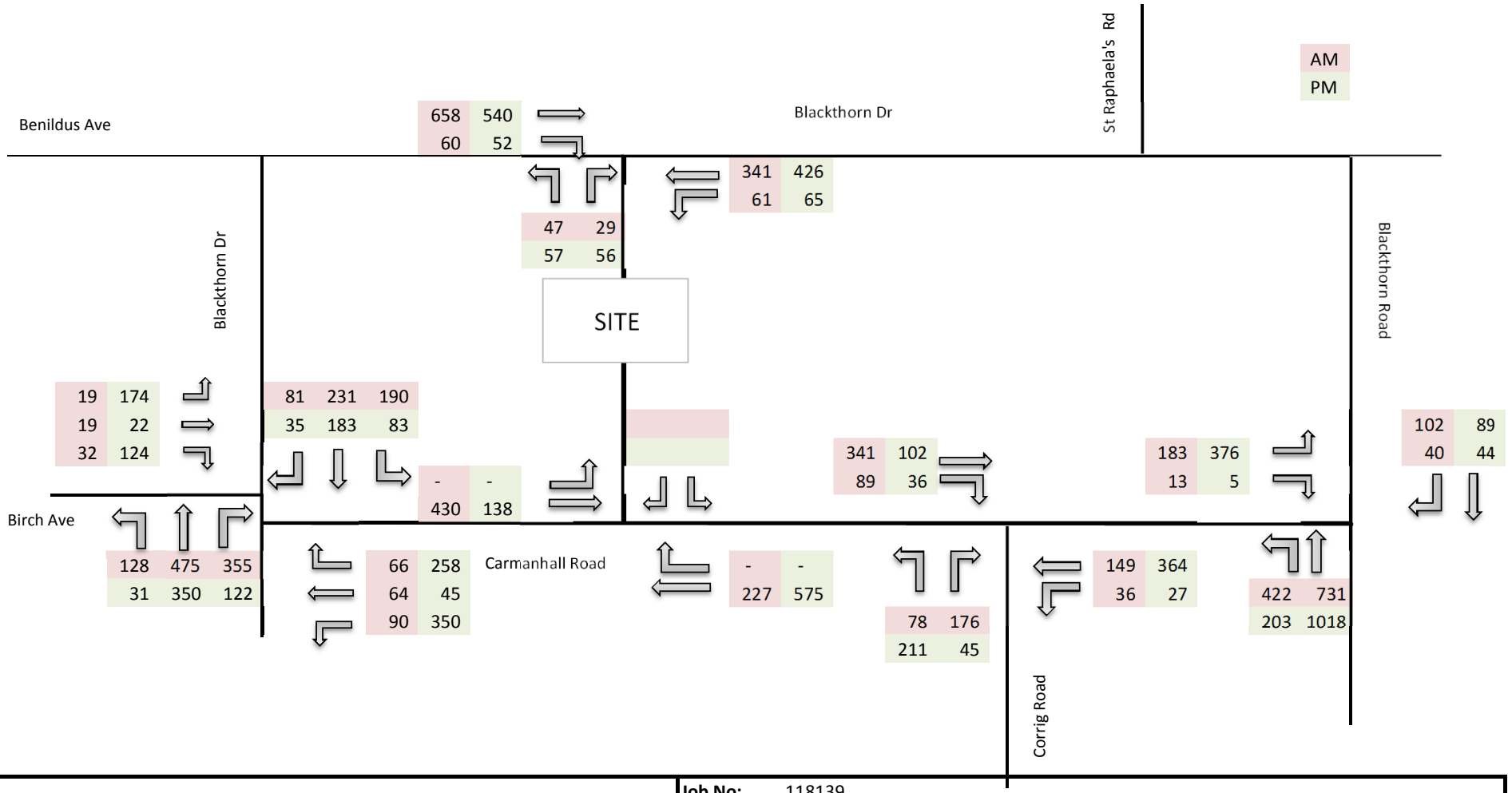
TRAFFIC FLOW FIGURES



CST Group
Chartered Consulting Engineers

Job No: 118139
Job Title: Rockbrook

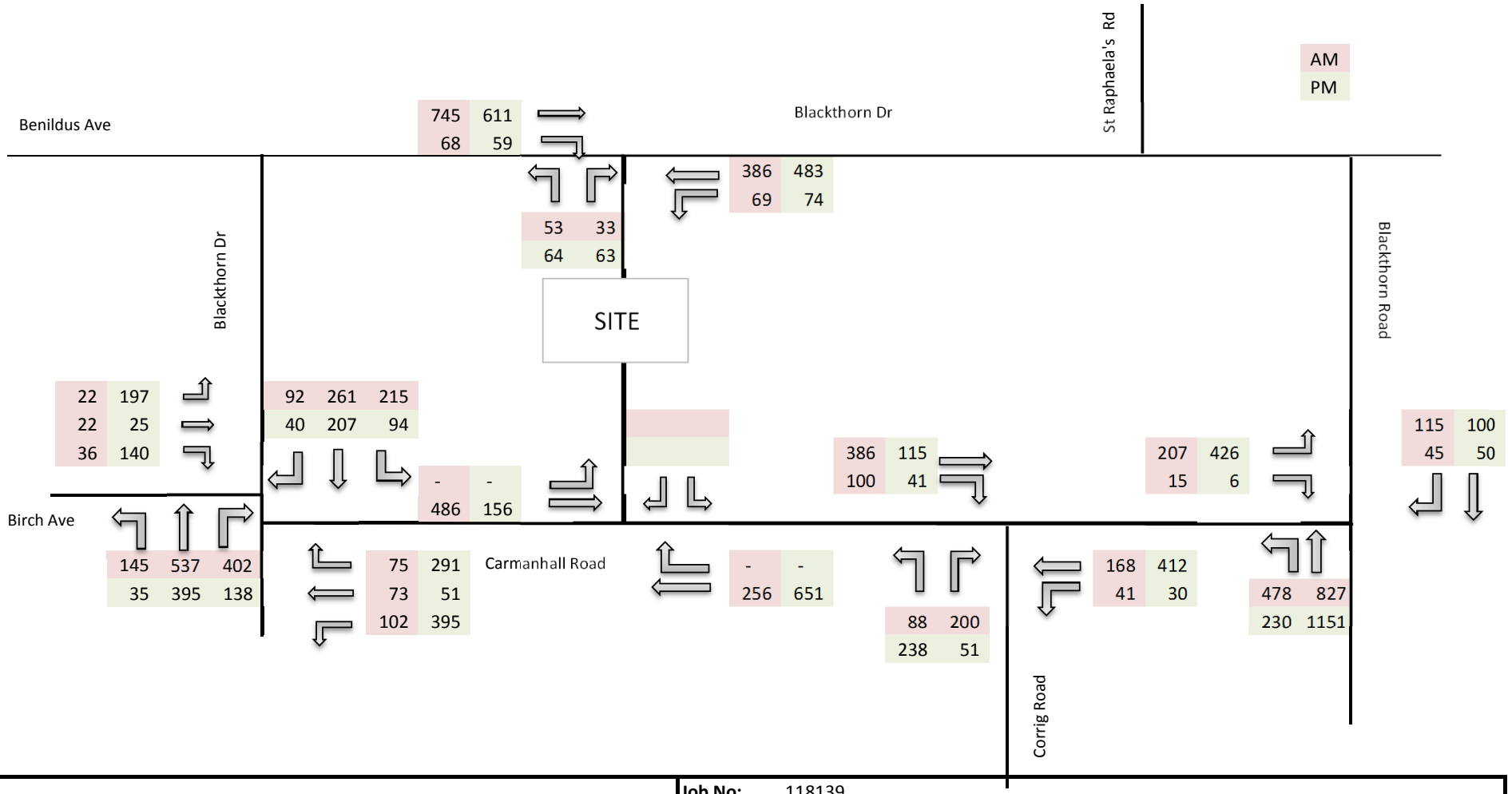
Existing Traffic 2016 - Figure 1



CST Group
Chartered Consulting Engineers

Job No: 118139
Job Title: Rockbrook

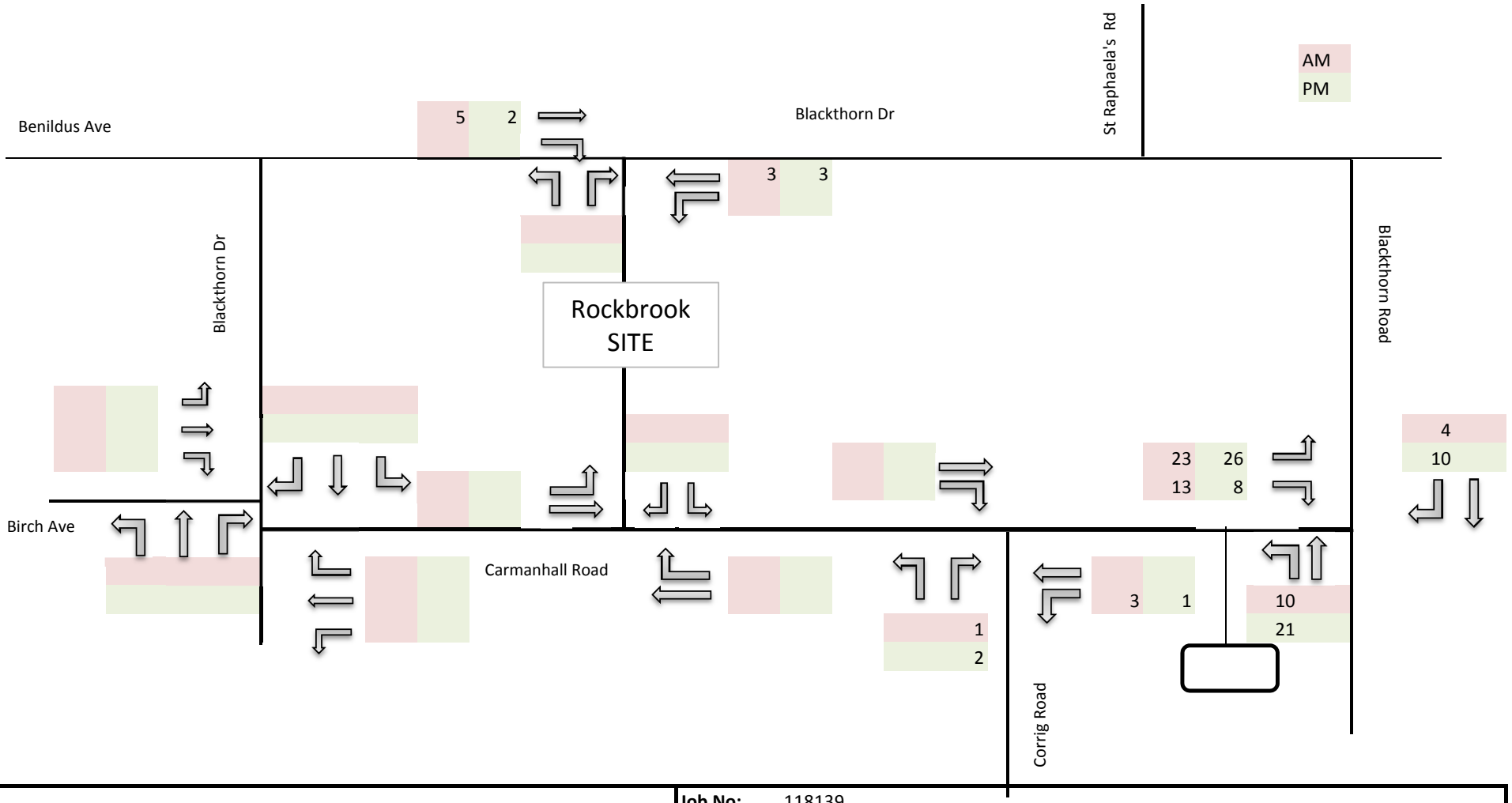
Existing Traffic 2021 - Figure 2



Job No:	118139
Job Title:	Rockbrook

CST Group
Chartered Consulting Engineers

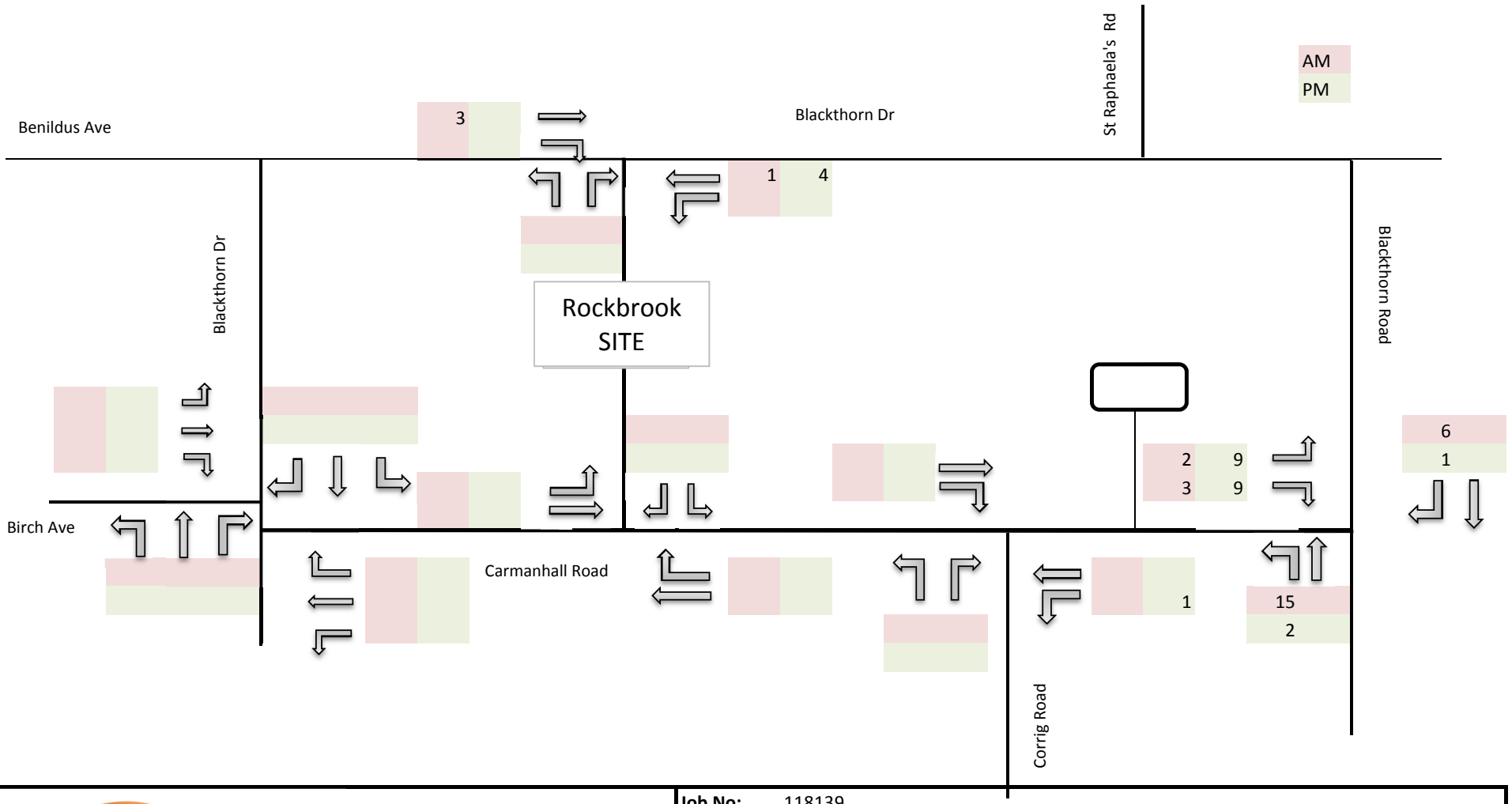
Existing Traffic 2031 - Figure 3



CST Group
Chartered Consulting Engineers

Job No: 118139
Job Title: Rockbrook

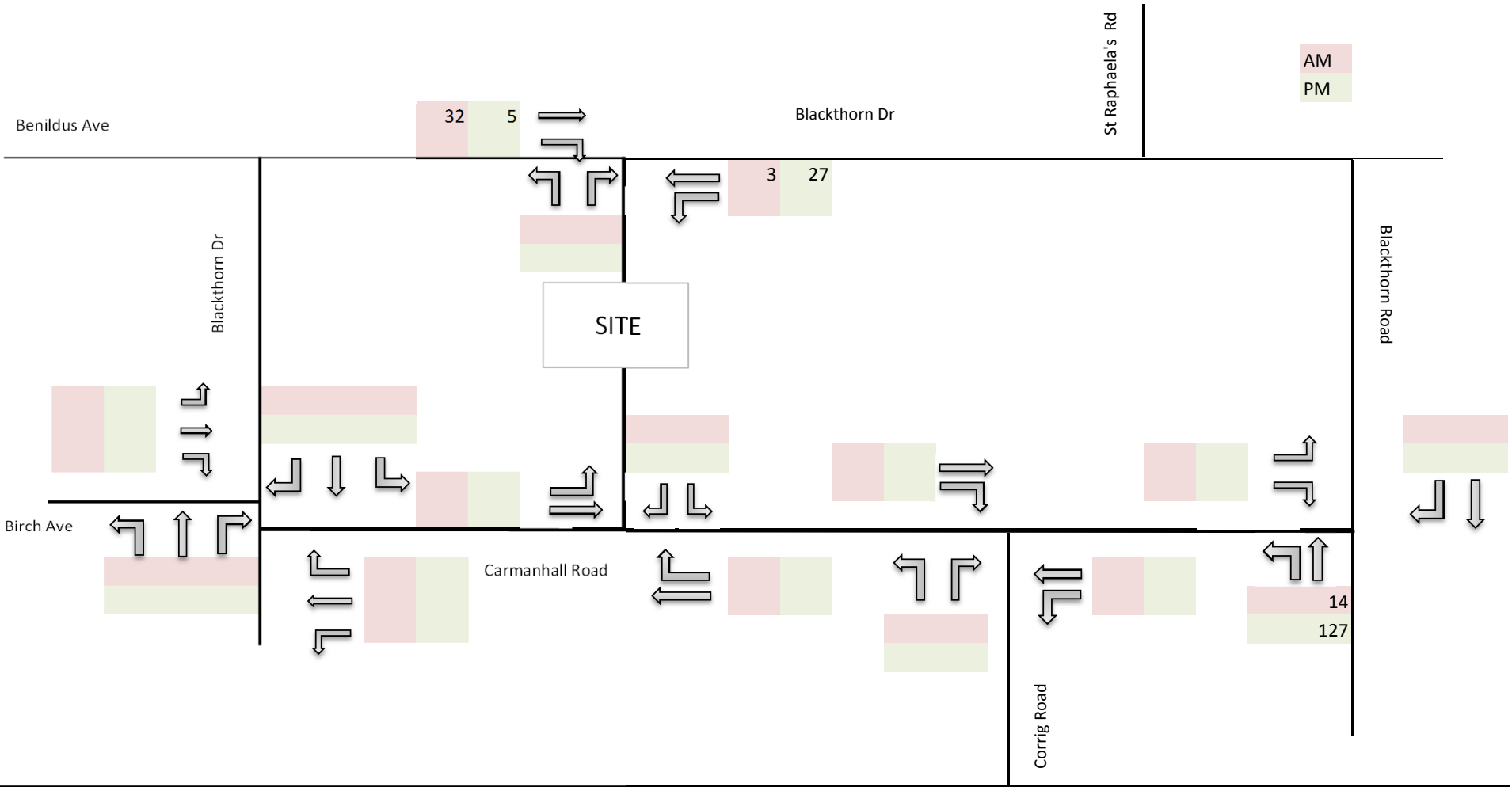
Site 1 Development Traffic - Figure 4



CST Group
Chartered Consulting Engineers

Job No: 118139
Job Title: Rockbrook

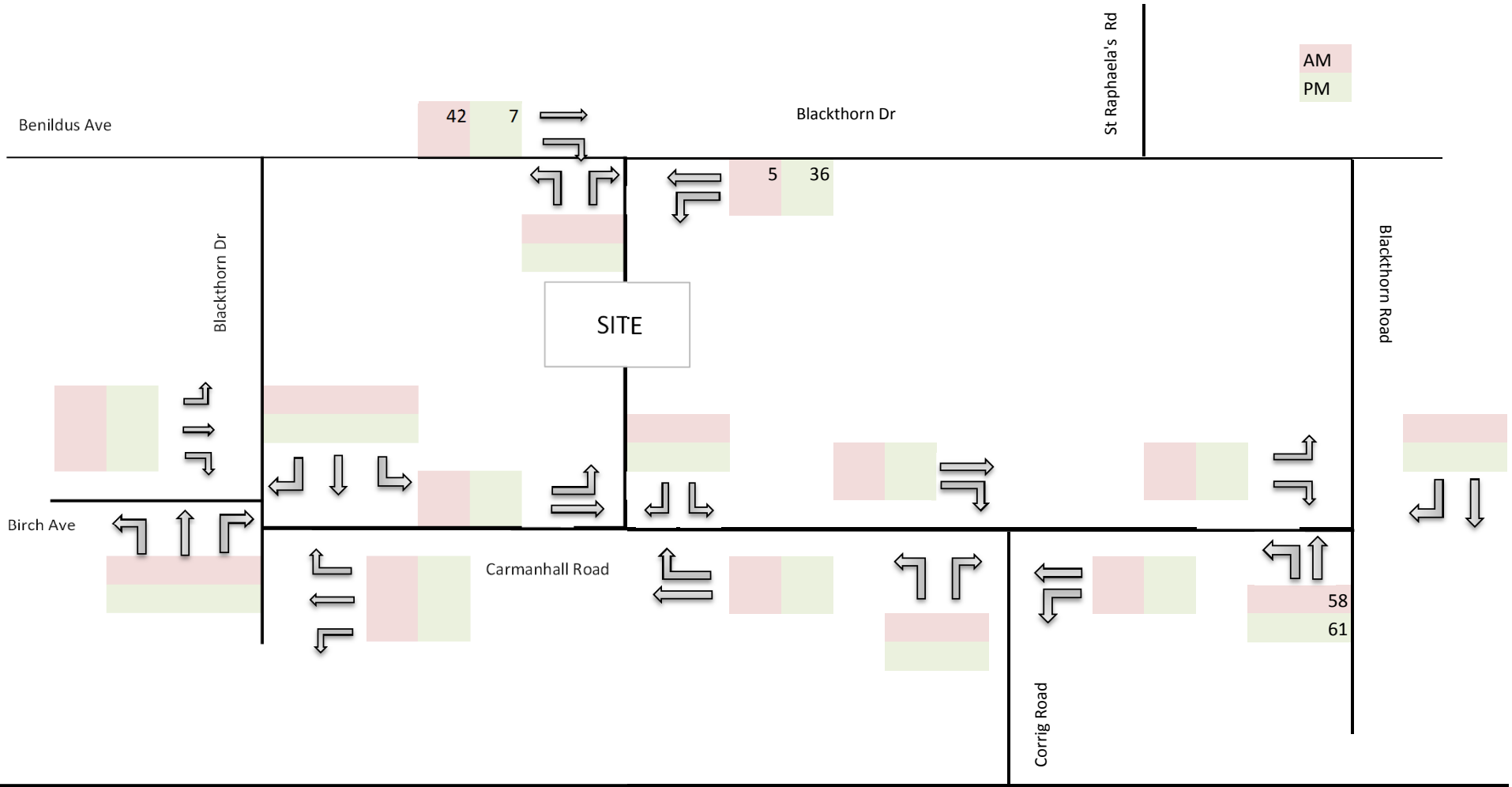
Site 2 Development Traffic 2031 - Figure 5



CST Group
Chartered Consulting Engineers

Job No: 118139
Job Title: Rockbrook

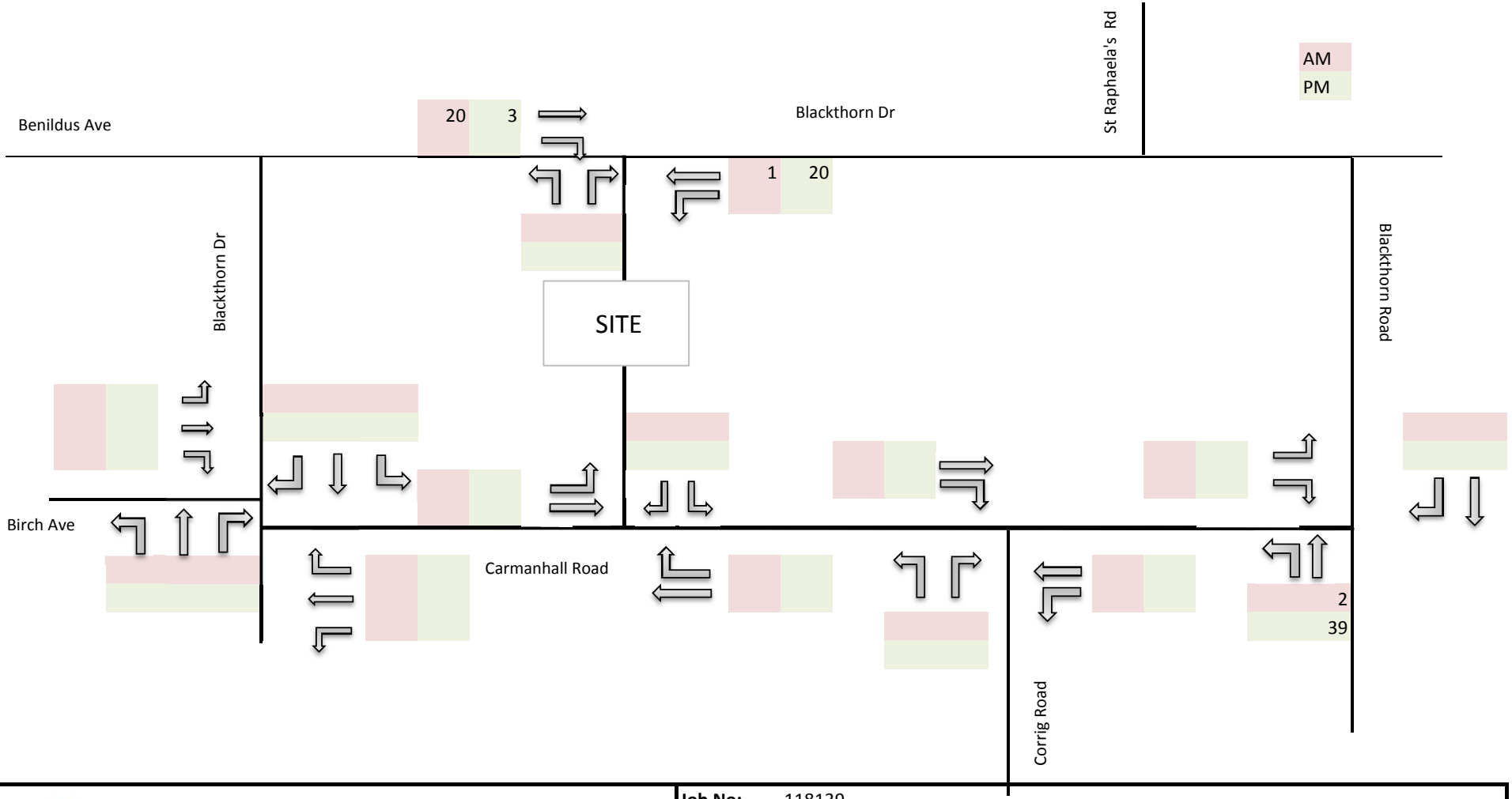
Site 3 Development Traffic 2031 - Figure 6



CST Group
Chartered Consulting Engineers

Job No: 118139
Job Title: Rockbrook

Site 4 Development Traffic - Figure 7

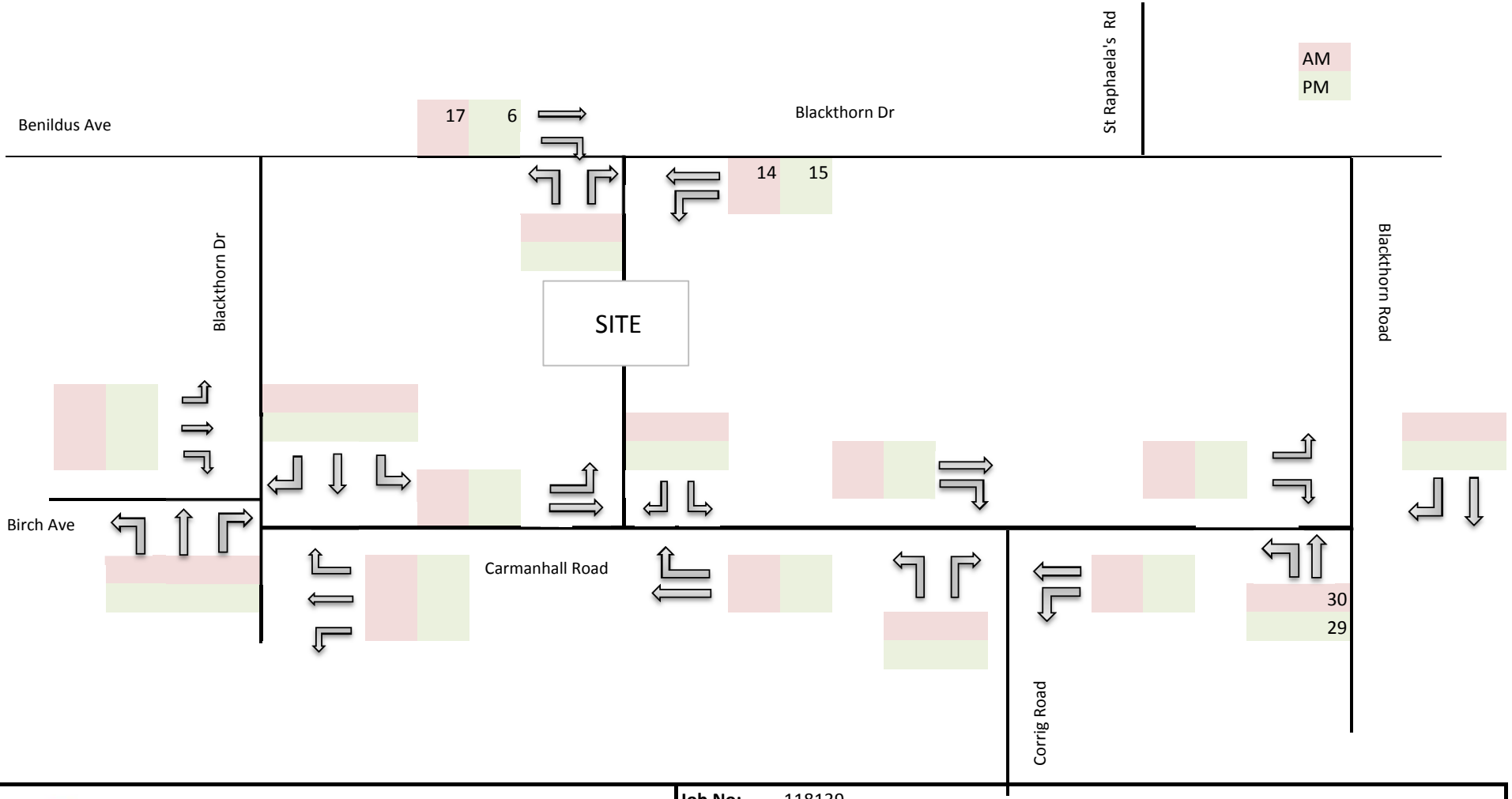


CST Group Consulting Engineers

Job No: 118139

Job Title: Rockbrook

Site 5 Development Traffic - Figure 8

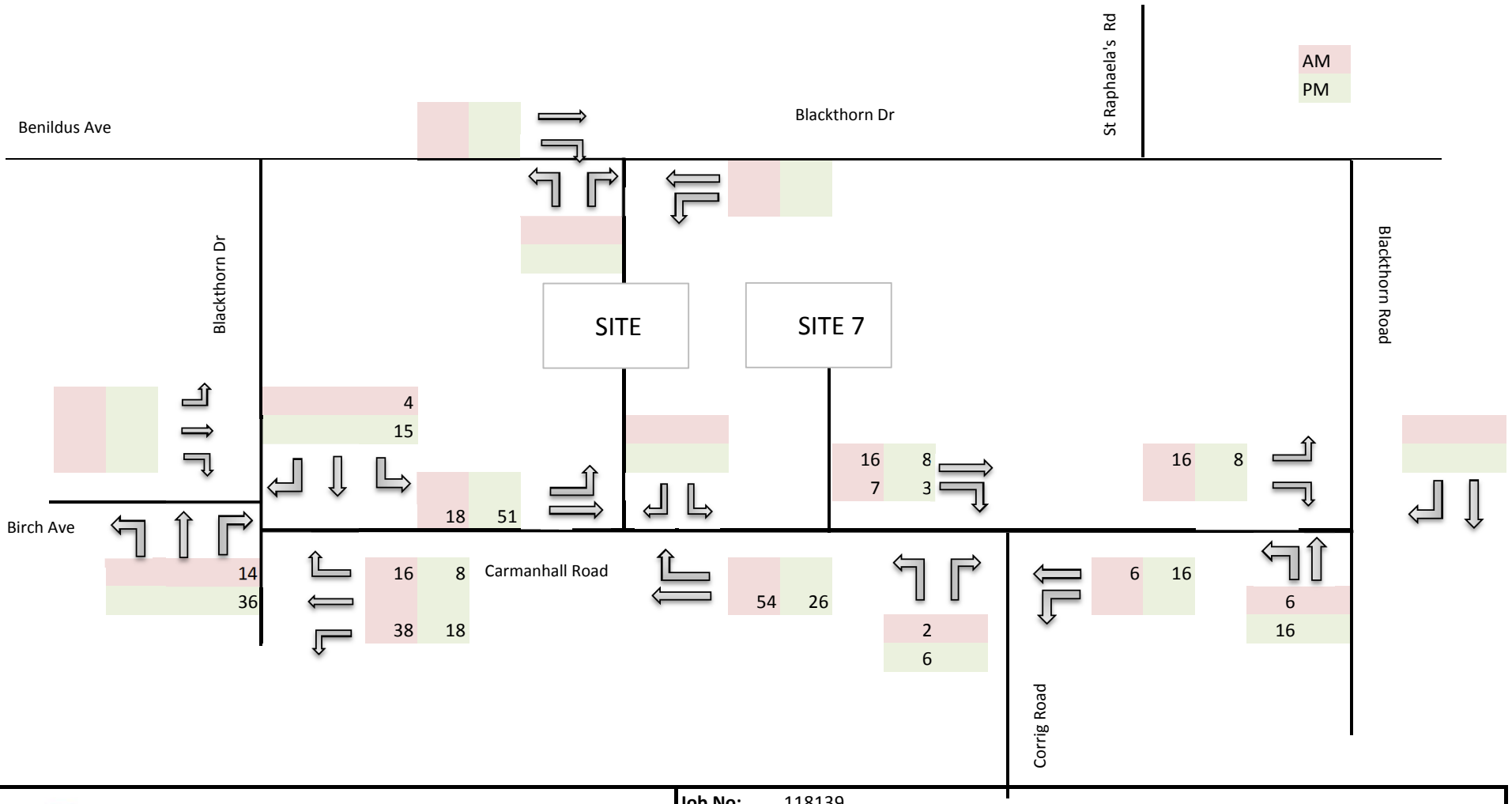


CST Group Consulting Engineers

Job No: 118139

Job Title: Rockbrook

Site 6 Development Traffic - Figure 9

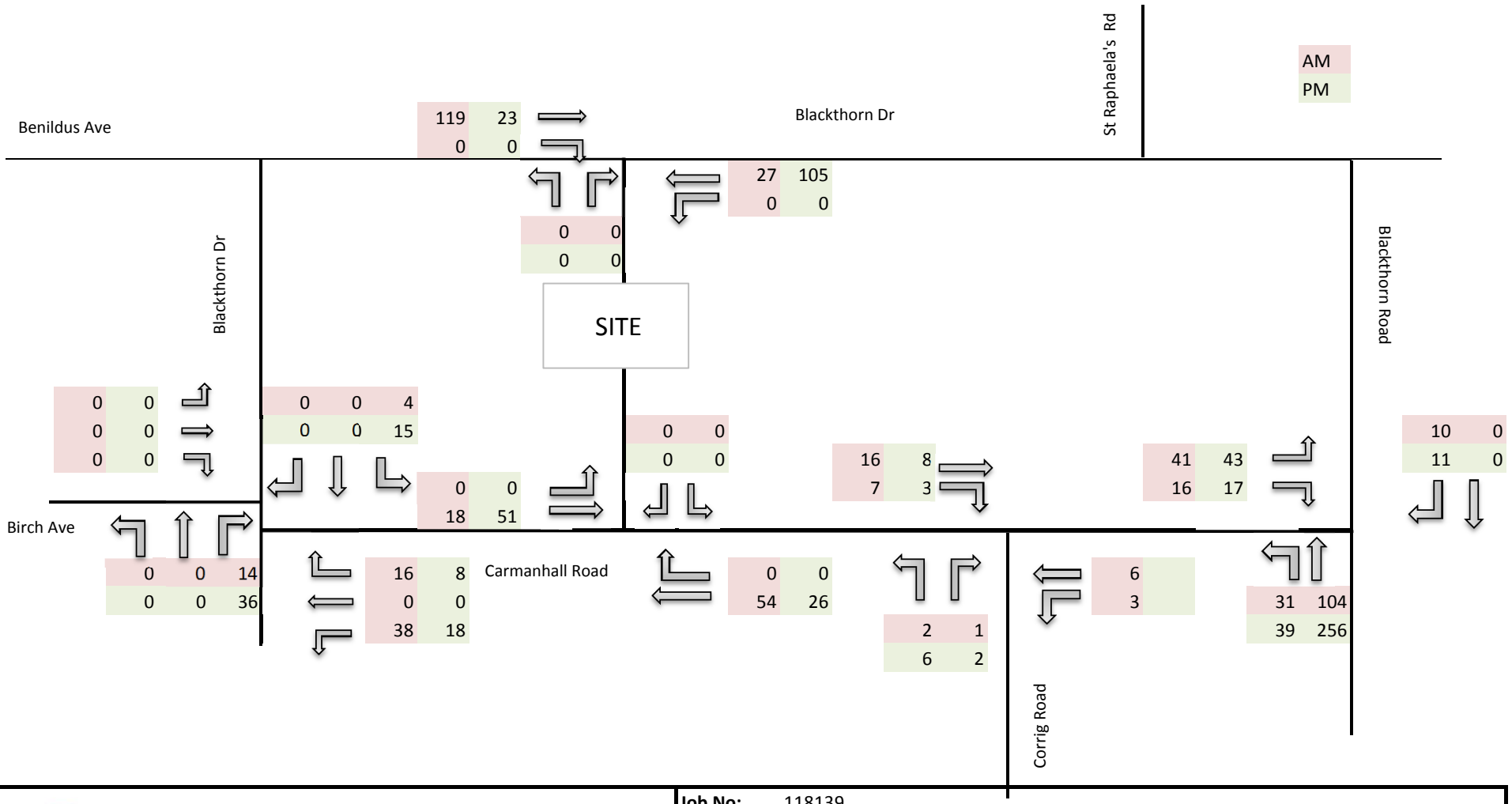


CST Group Consulting Engineers

Job No: 118139

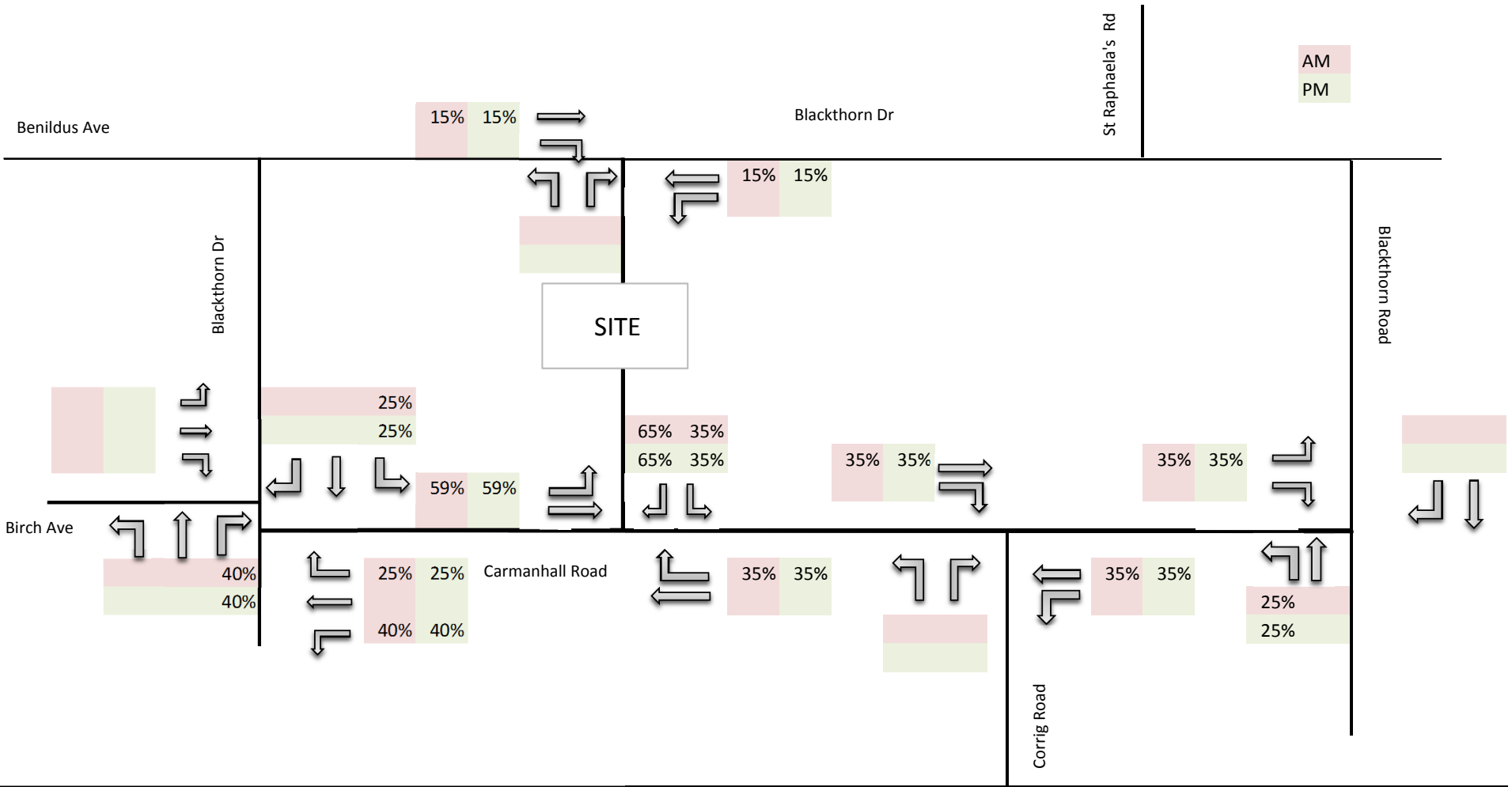
Job Title: Rockbrook

Site 7 Development Traffic - Figure 10



Job No:	118139
Job Title:	Rockbrook

Total Other Development Traffic - Figure 11

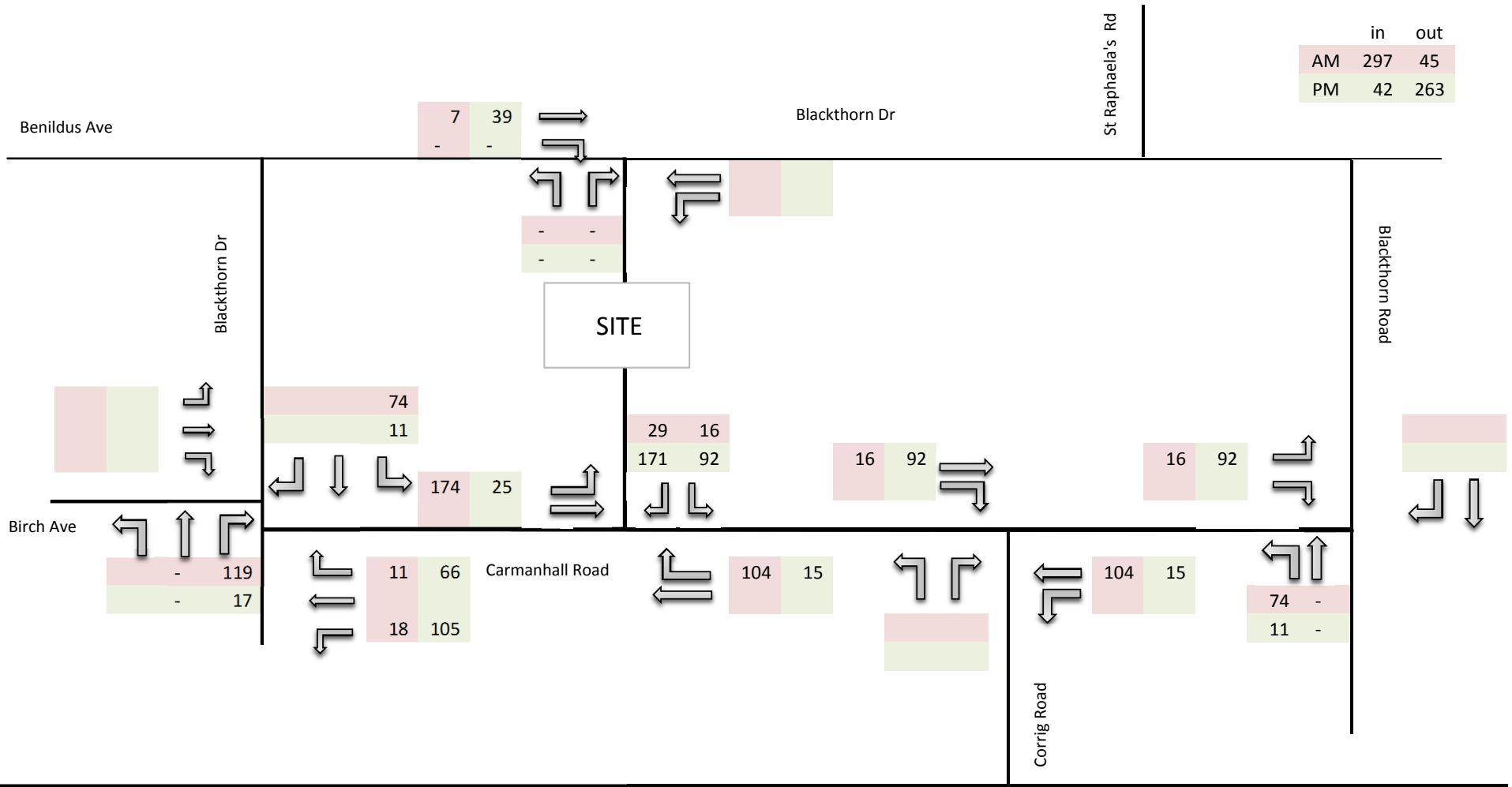


CST Group Consulting Engineers

Job No: 118139

Job Title: Rockbrook

Rockbrook Office Development Traffic (%) - Figure 12

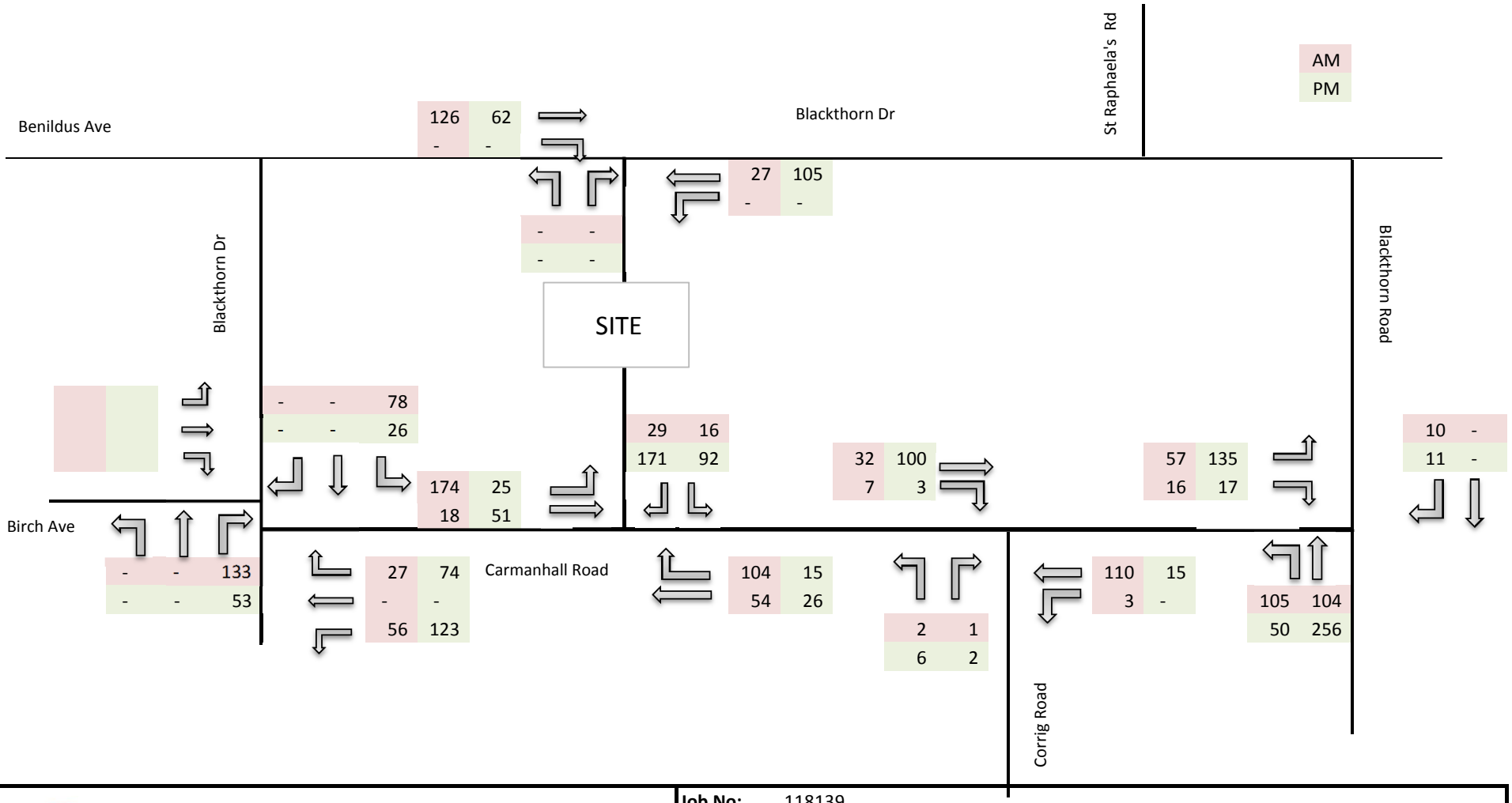


CST Group Consulting Engineers

Job No: 118139

Job Title: Rockbrook

Rockbrook Office Development Traffic - Figure 13

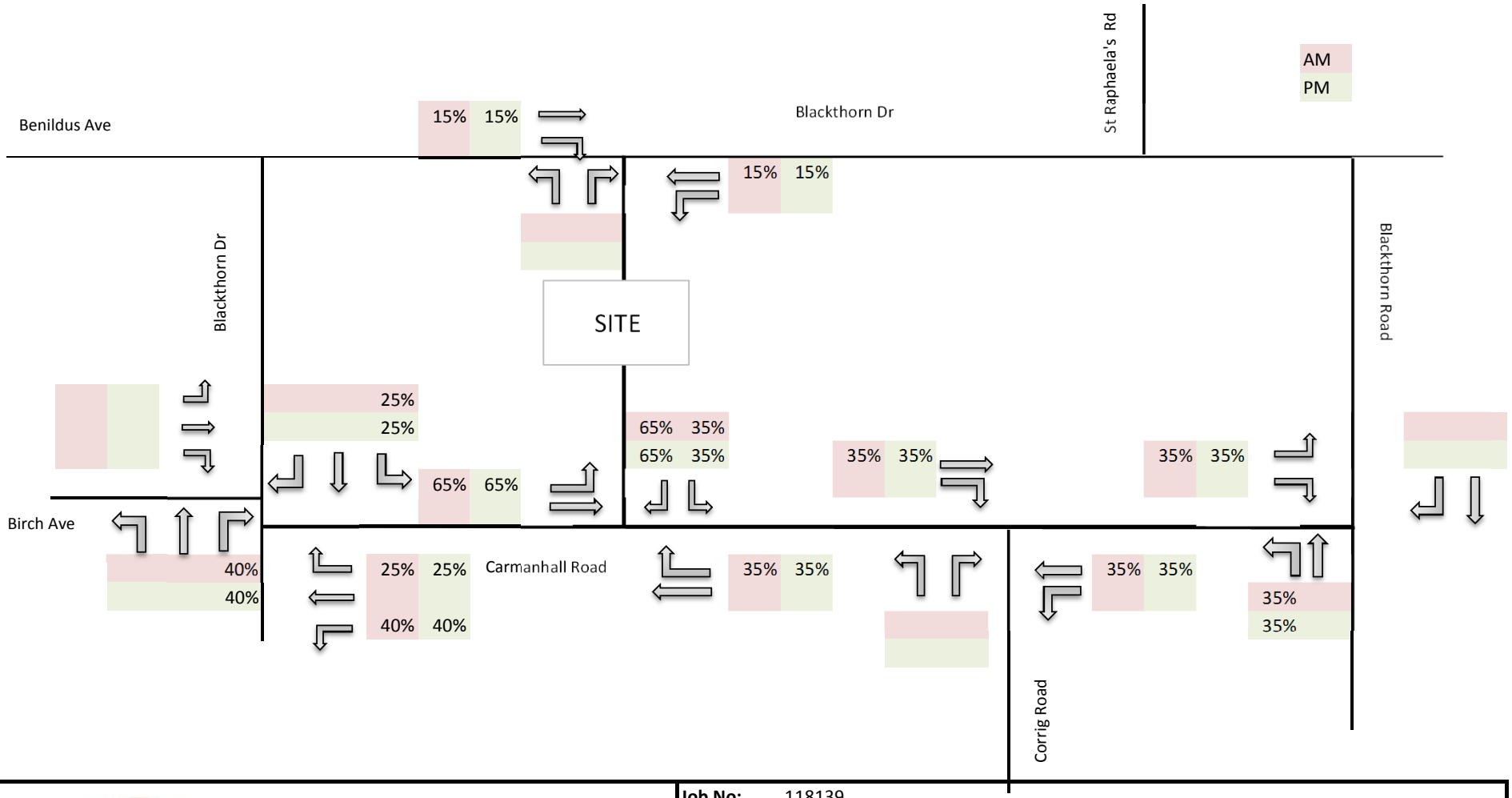


CST Group Consulting Engineers

Job No: 118139

Job Title: Rockbrook

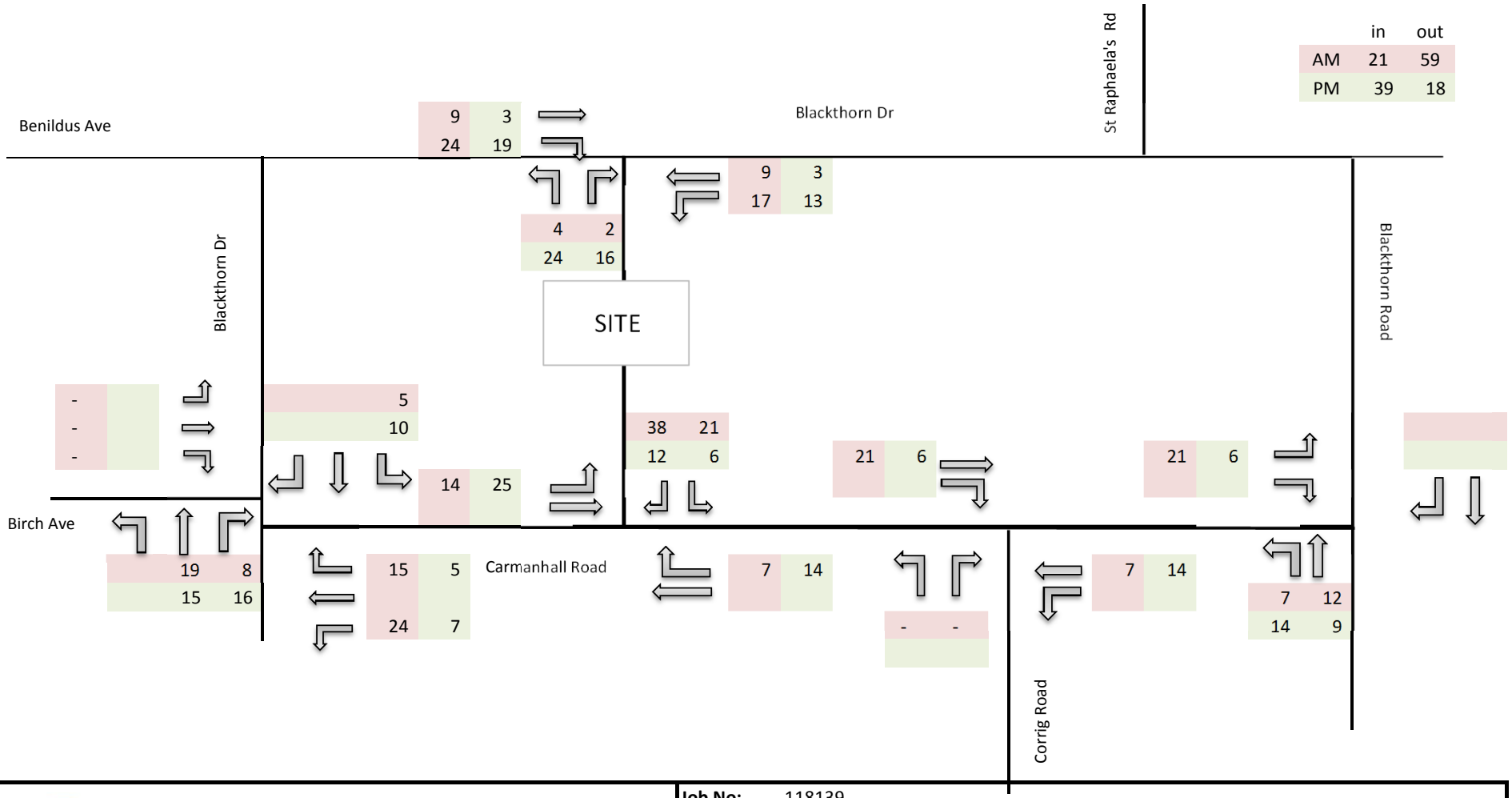
Other Developments with Rockbrook Office Figure 14



CST Group
Chartered Consulting Engineers

Job No: 118139
Job Title: Rockbrook

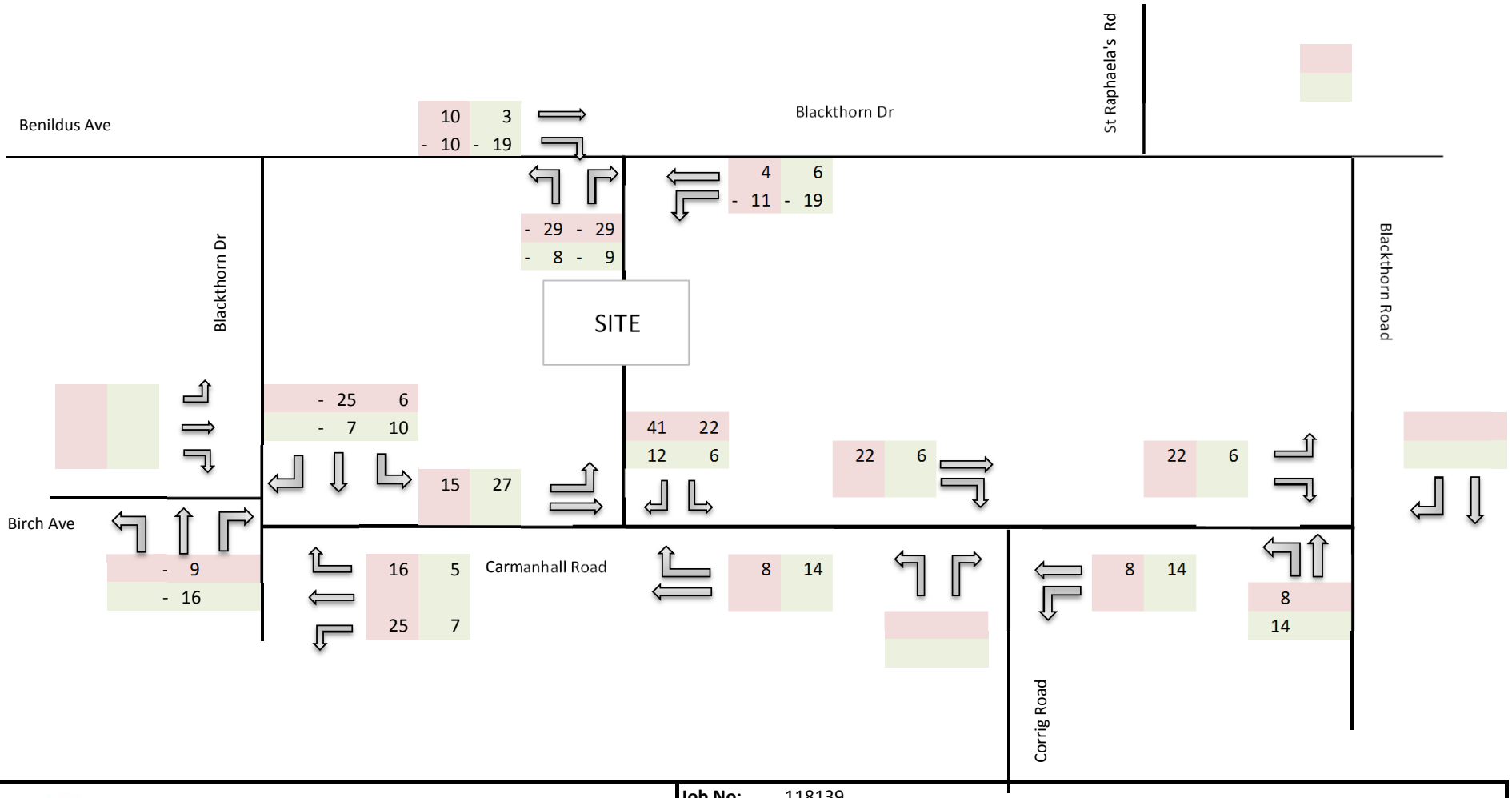
Rockbrook new Residential Development Traffic (%) - Figure 15



CST Group Consulting Engineers

Job No: 118139
Job Title: Rockbrook

Rockbrook New Development Traffic - Figure 16

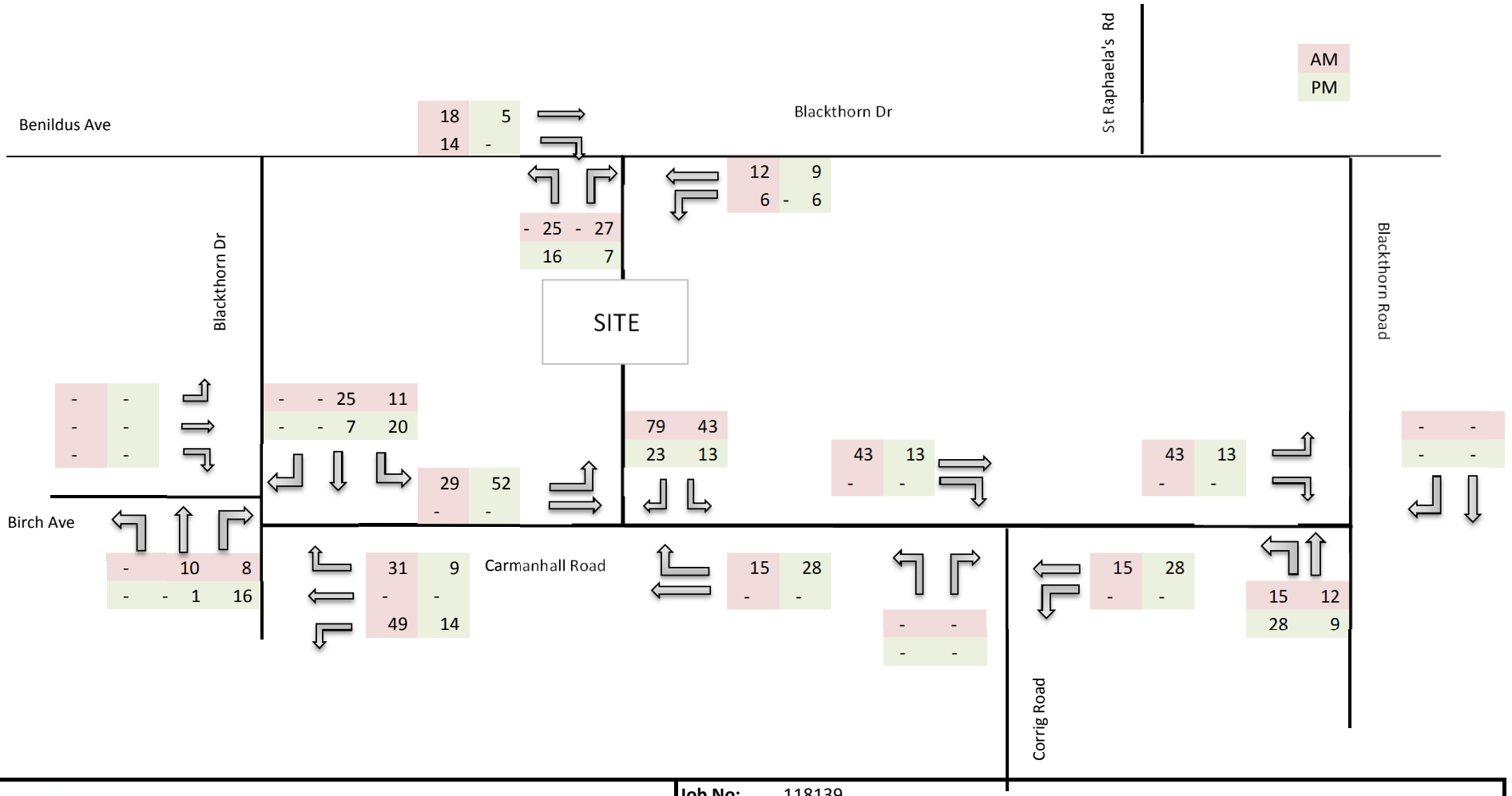


CST Group Consulting Engineers

Job No: 118139

Job Title: Rockbrook

Rerouted Residential Traffic (Existing) Figure 17



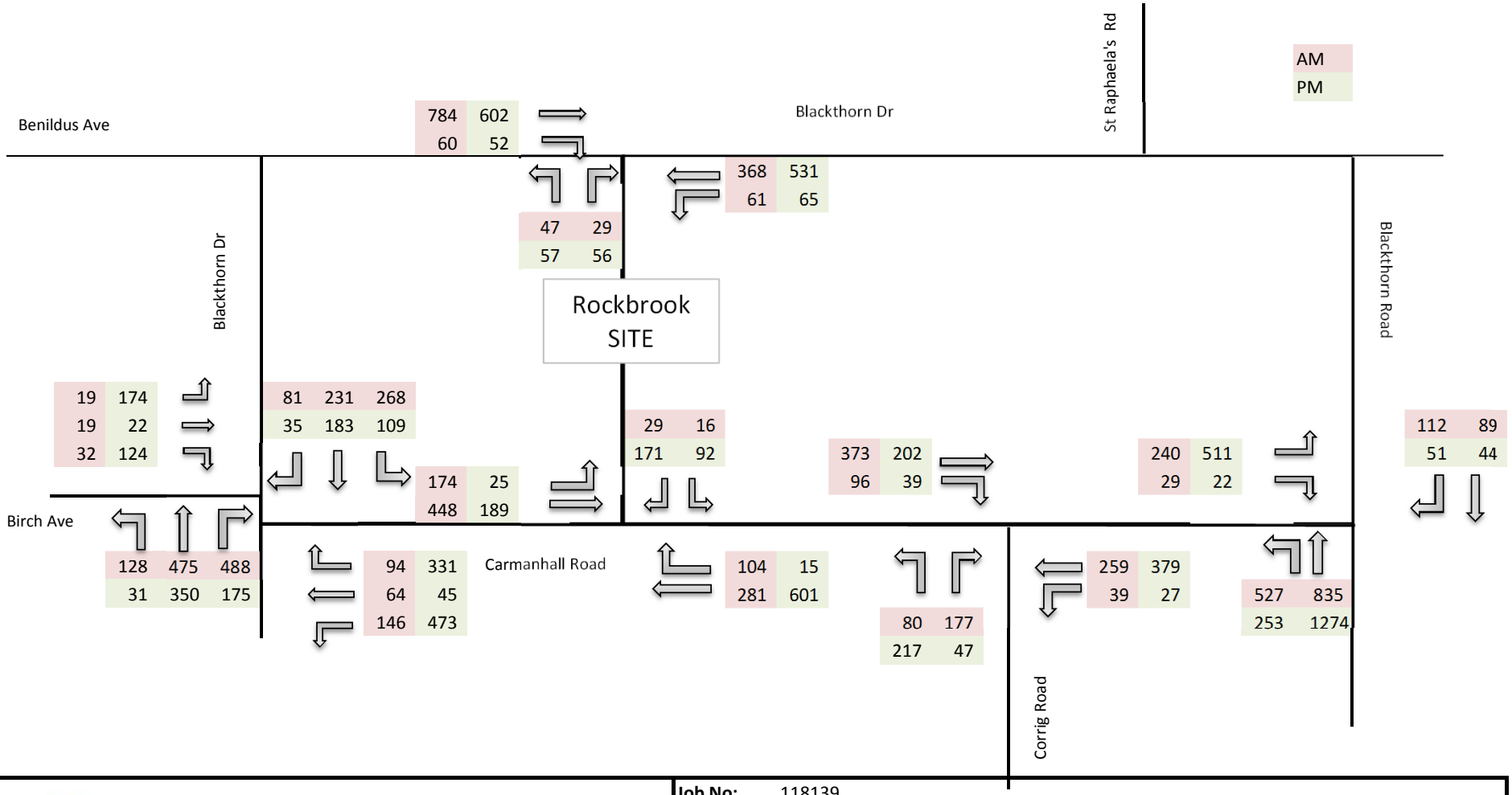
CST Group Consulting Engineers

Job No: 118139

Job Title: Rockbrook

Existing Rockbrook Residential & New Development Traffic

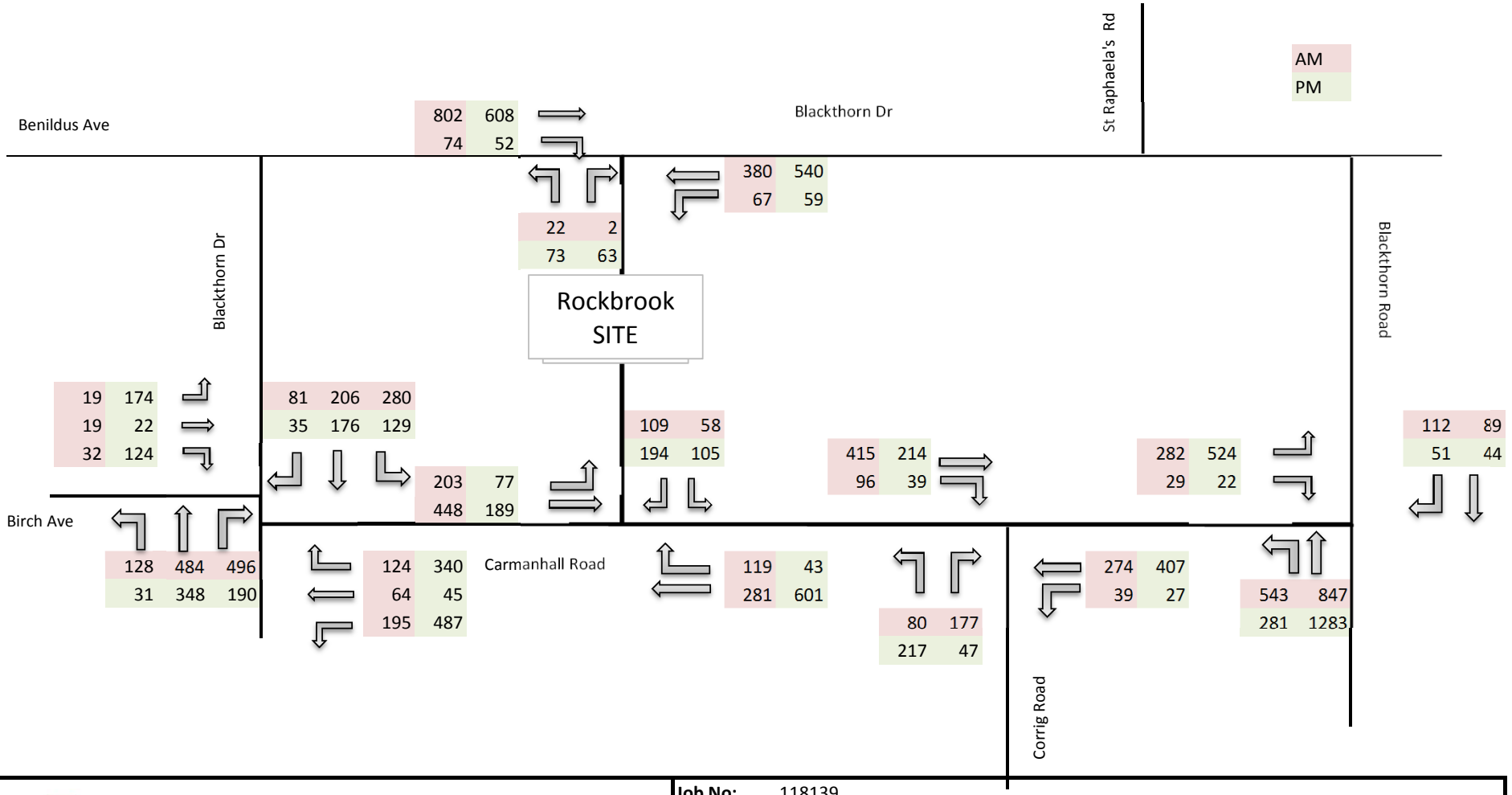
Figure 18



CST Group Consulting Engineers

Job No: 118139
Job Title: Rockbrook

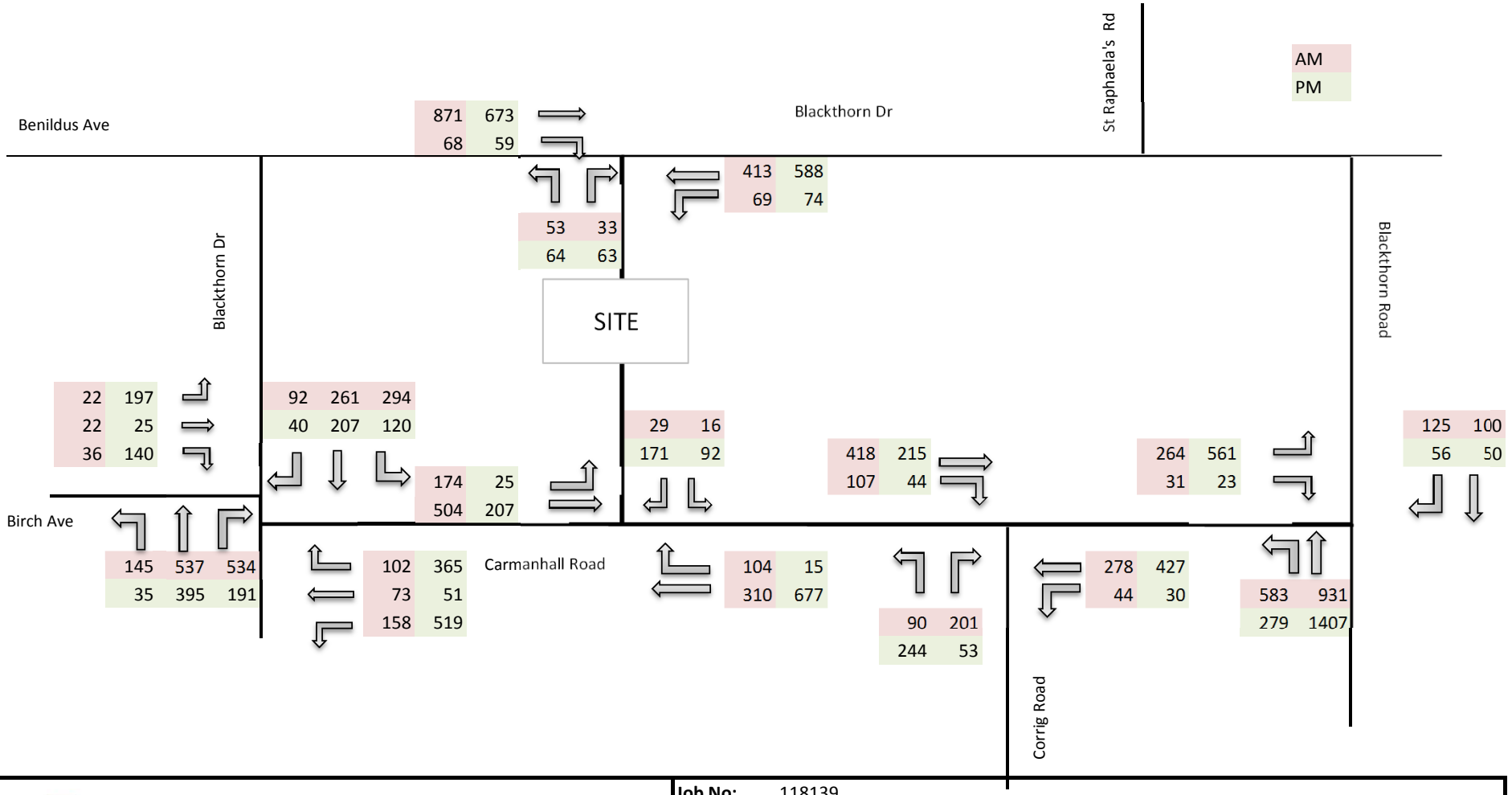
Do Nothing 2021 - Figure 19



CST Group Consulting Engineers

Job No: 118139
Job Title: Rockbrook

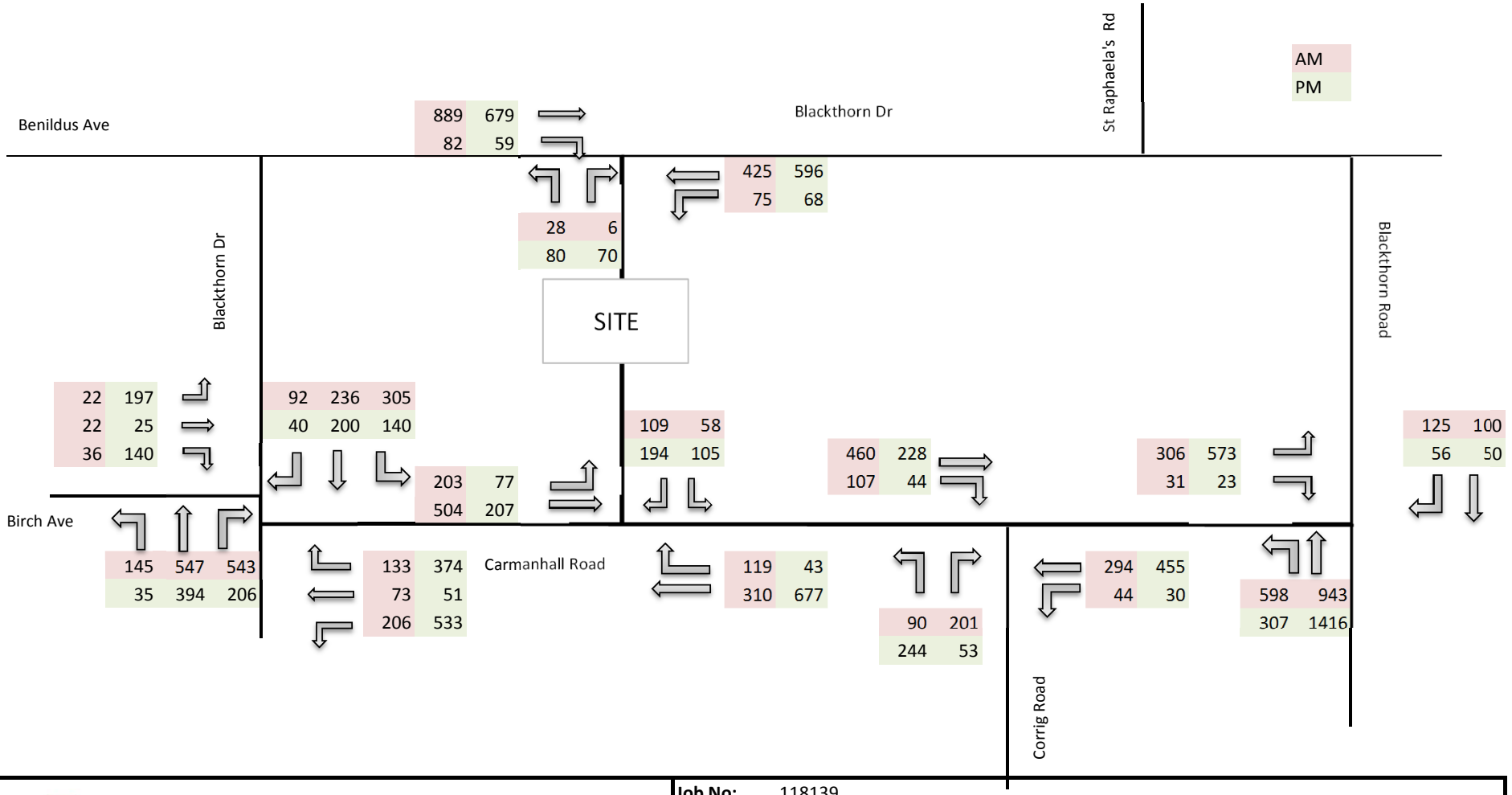
Do Something 2021 - Figure 20



CST Group Consulting Engineers

Job No: 118139
Job Title: Rockbrook

Do Nothing 2031 - Figure 21



CST Group Consulting Engineers

Job No: 118139
Job Title: Rockbrook

Do Something 2031 - Figure 22

APPENDIX C

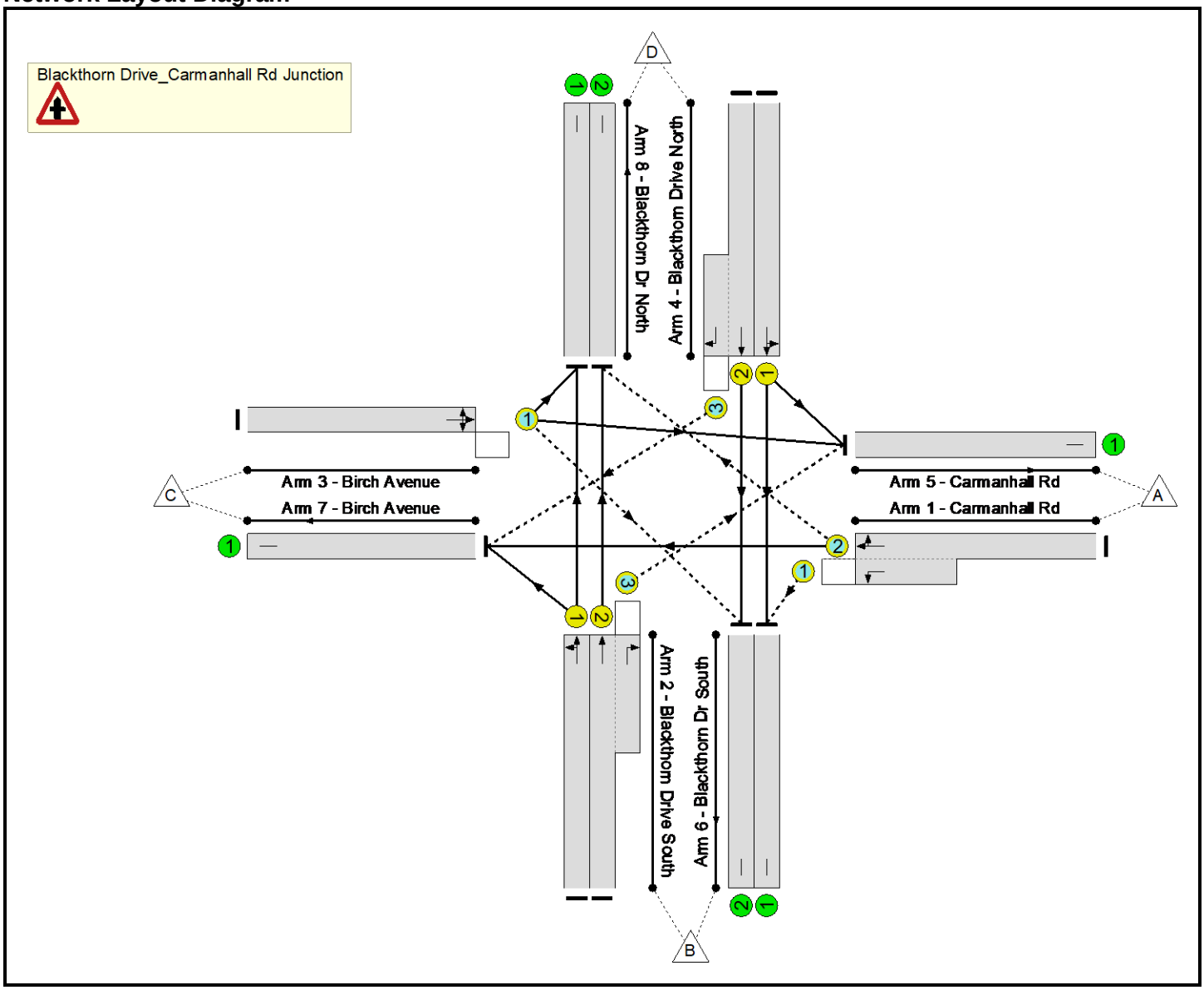
JUNCTION ANALYSIS OUTPUTS

Full Input Data And Results

User and Project Details

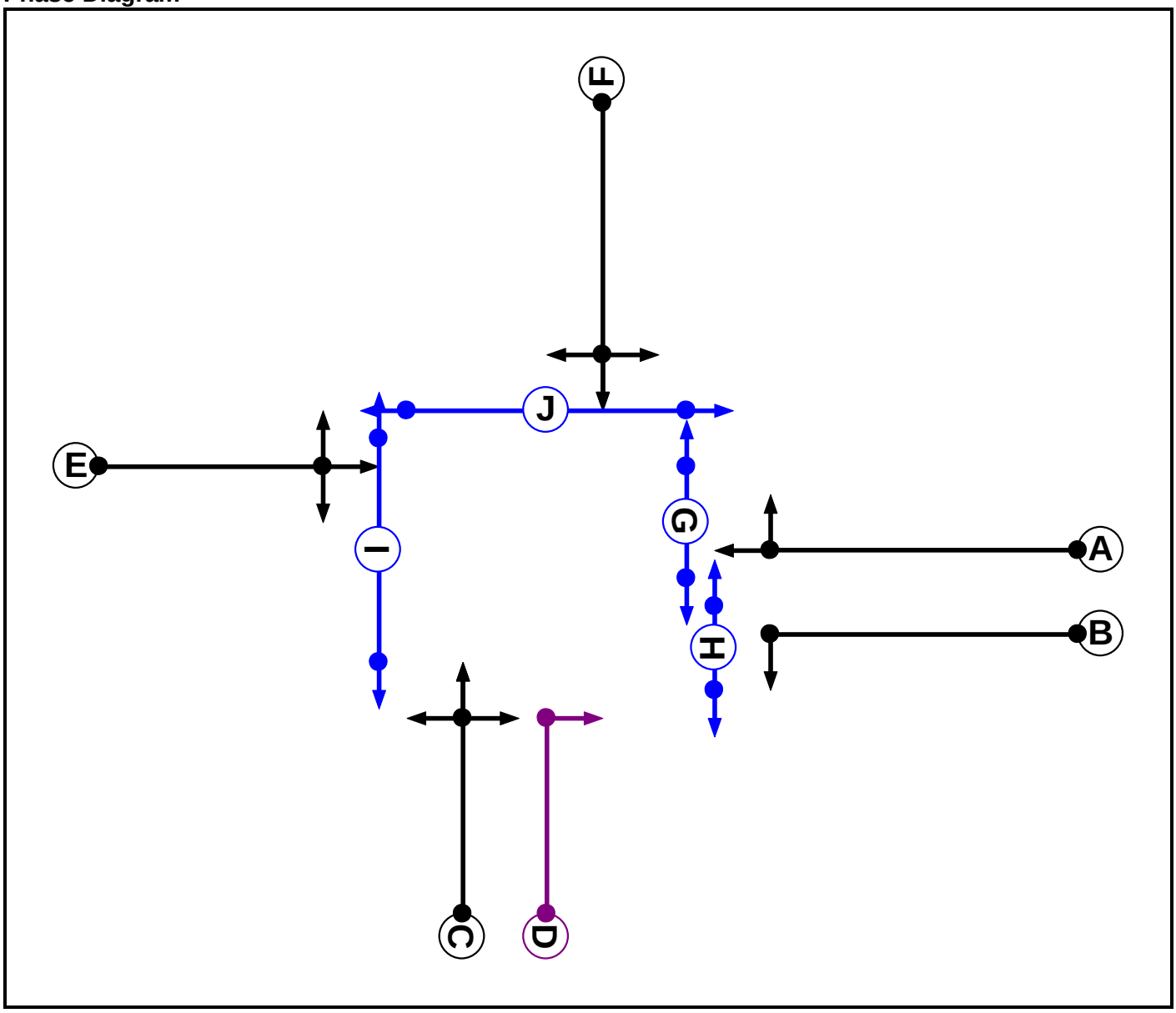
Project:	**118139 Rockbrook**
Title:	**Rockbrook**
Location:	
File name:	118139 Blackthorn Dr_Carmanhall Rd Junction 2018 10 11.lsg3x
Author:	J Noone
Company:	CST Group
Address:	1 O'Connell Street, Sligo
Notes:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

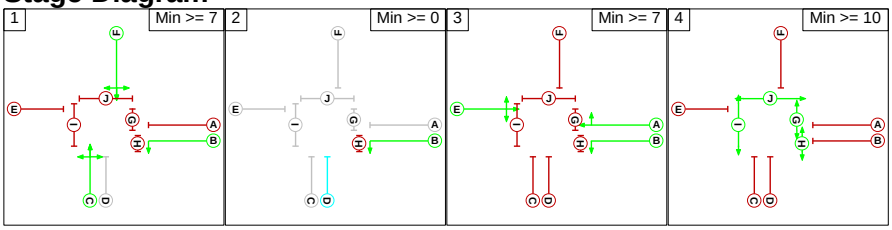
Phase Name	Phase type	Assoc Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Ind. Arrow	C	4	4
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		10	10
H	Pedestrian		10	10
I	Pedestrian		10	10
J	Pedestrian		10	10

Full Input Data And Results

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J
A		-	5	5	-	5	5	-	5	5
B	-		-	-	-	-	-	5	-	-
C	5	-		-	5	-	5	-	5	5
D	5	-	-		5	-	5	-	5	5
E	-	-	5	5		5	5	-	5	5
F	5	-	-	-	5		5	-	5	5
G	11	-	11	11	11	11		-	-	-
H	-	7	-	-	-	-	-		-	-
I	9	-	9	9	9	9	-	-		-
J	15	-	15	15	15	15	-	-	-	

Stage Diagram



Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2016 AM Do Nothing - Existing Flows'	08:00	09:00	01:00	
2: '2021 AM Do Nothing - Existing Flows + Permitted Dev'	08:00	09:00	01:00	
3: '2021 AM Do Something - Existing Flows+Permitted Dev+New Dev'	08:00	09:00	01:00	
4: '2031 AM Do Nothing - Existing Flows + Permitted Dev'	08:00	09:00	01:00	
5: '2031 AM Do Something - Existing Flows+Permitted Dev+New Dev'	08:00	09:00	01:00	
6: '2016 PM Do Nothing - Existing Flows'	17:00	18:00	01:00	
7: '2021 PM Do Nothing - Existing Flows + Permitted Dev'	17:00	18:00	01:00	
8: '2021 PM Do Something - Existing Flows+Permitted Dev+New Dev'	17:00	18:00	01:00	
9: '2031 PM Do Nothing - Existing Flows + Permitted Dev'	17:00	18:00	01:00	
10: '2031 PM Do Something - Existing Flows+Permitted Dev+New Dev'	17:00	18:00	01:00	

Scenario 1: '2016 AM Existing Flows' (FG1: '2016 AM Do Nothing - Existing Flows', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	84	60	62	206
	B	332	0	120	444	896
	C	18	30	0	18	66
	D	178	216	76	0	470
	Tot.	528	330	256	524	1638

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	49.2 %	1815
				Arm 8 Right	12.00	50.8 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	30.4 %	1823
				Arm 8 Ahead	Inf	69.6 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	27.3 %	1760
				Arm 6 Right	12.00	45.5 %	
				Arm 8 Left	9.00	27.3 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	82.8 %	1683
				Arm 6 Ahead	Inf	17.2 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 2: '2021 AM Do Nothing' (FG2: '2021 AM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	146	64	94	304
	B	488	0	128	475	1091
	C	19	32	0	19	70
	D	268	231	81	0	580
	Tot.	775	409	273	588	2045

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	40.5 %	1796
				Arm 8 Right	12.00	59.5 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	21.4 %	1849
				Arm 8 Ahead	Inf	78.6 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	27.1 %	1760
				Arm 6 Right	12.00	45.7 %	
				Arm 8 Left	9.00	27.1 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	93.4 %	1657
				Arm 6 Ahead	Inf	6.6 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 3: '2021 AM Do Something' (FG3: '2021 AM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	196	64	125	385
	B	497	0	128	484	1109
	C	19	32	0	19	70
	D	280	206	81	0	567
	Tot.	796	434	273	628	2131

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	33.9 %	1783
				Arm 8 Right	12.00	66.1 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	21.1 %	1850
				Arm 8 Ahead	Inf	78.9 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	27.1 %	1760
				Arm 6 Right	12.00	45.7 %	
				Arm 8 Left	9.00	27.1 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	94.6 %	1654
				Arm 6 Ahead	Inf	5.4 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 4: '2031 AM Do Nothing' (FG4: '2031 AM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	158	73	102	333
	B	534	0	145	537	1216
	C	22	36	0	22	80
	D	294	261	92	0	647
	Tot.	850	455	310	661	2276

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	41.7 %	1799
				Arm 8 Right	12.00	58.3 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	21.4 %	1849
				Arm 8 Ahead	Inf	78.6 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	27.5 %	1760
				Arm 6 Right	12.00	45.0 %	
				Arm 8 Left	9.00	27.5 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	92.7 %	1659
				Arm 6 Ahead	Inf	7.3 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 5: '2031 AM Do Something' (FG5: '2031 AM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	208	73	134	415
	B	544	0	145	547	1236
	C	22	36	0	22	80
	D	305	236	92	0	633
	Tot.	871	480	310	703	2364

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	35.3 %	1786
				Arm 8 Right	12.00	64.7 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	21.1 %	1850
				Arm 8 Ahead	Inf	78.9 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	27.5 %	1760
				Arm 6 Right	12.00	45.0 %	
				Arm 8 Left	9.00	27.5 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	93.3 %	1657
				Arm 6 Ahead	Inf	6.7 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 6: '2016 PM Existing Flows' (FG6: '2016 PM Do Nothing - Existing Flows', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	327	42	241	610
	B	114	0	29	327	470
	C	21	116	0	163	300
	D	78	171	33	0	282
	Tot.	213	614	104	731	1662

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	14.8 %	1744
				Arm 8 Right	12.00	85.2 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	18.1 %	1859
				Arm 8 Ahead	Inf	81.9 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	7.0 %	1703
				Arm 6 Right	12.00	38.7 %	
				Arm 8 Left	9.00	54.3 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	66.1 %	1725
				Arm 6 Ahead	Inf	33.9 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 7: '2021 PM Do Nothing' (FG7: '2021 PM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	473	45	331	849
	B	175	0	31	350	556
	C	22	124	0	174	320
	D	109	183	35	0	327
	Tot.	306	780	111	855	2052

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	12.0 %	1739
				Arm 8 Right	12.00	88.0 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	14.0 %	1871
				Arm 8 Ahead	Inf	86.0 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	6.9 %	1703
				Arm 6 Right	12.00	38.8 %	
				Arm 8 Left	9.00	54.4 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	80.7 %	1688
				Arm 6 Ahead	Inf	19.3 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 8: '2021 PM Do Something' (FG8: '2021 PM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	487	45	340	872
	B	191	0	31	348	570
	C	22	124	0	174	320
	D	129	176	35	0	340
	Tot.	342	787	111	862	2102

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	11.7 %	1738
				Arm 8 Right	12.00	88.3 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	10.7 %	1882
				Arm 8 Ahead	Inf	89.3 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	6.9 %	1703
				Arm 6 Right	12.00	38.8 %	
				Arm 8 Left	9.00	54.4 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	89.0 %	1668
				Arm 6 Ahead	Inf	11.0 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 9: '2031 PM Do Nothing' (FG9: '2031 PM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	519	51	365	935
	B	191	0	35	395	621
	C	25	140	0	197	362
	D	120	207	40	0	367
	Tot.	336	866	126	957	2285

Full Input Data And Results

Traffic Lane Flows

Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	12.3 %	1739
				Arm 8 Right	12.00	87.7 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	8.2 %	1889
				Arm 8 Ahead	Inf	91.8 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	6.9 %	1703
				Arm 6 Right	12.00	38.7 %	
				Arm 8 Left	9.00	54.4 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	38.3 %	1800
				Arm 6 Ahead	Inf	61.7 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 10: '2031 PM Do Something' (FG10: '2031 PM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	533	51	374	958
	B	207	0	35	394	636
	C	25	140	0	197	362
	D	140	200	40	0	380
	Tot.	372	873	126	965	2336

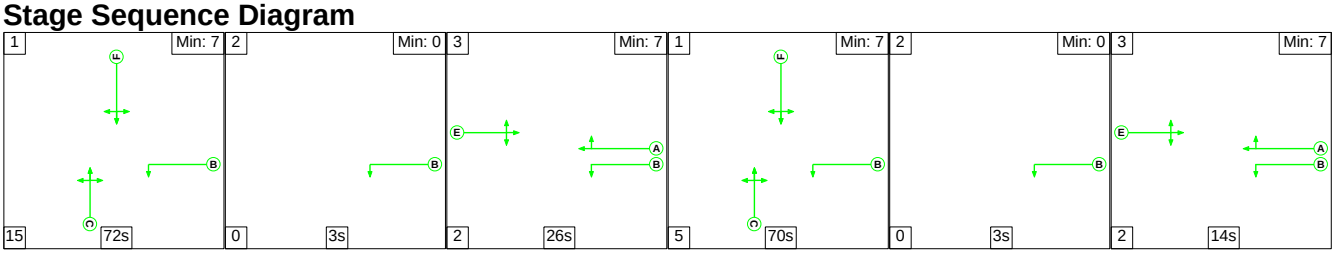
Full Input Data And Results

Traffic Lane Flows

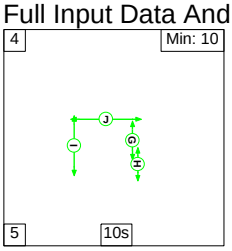
Junction: Blackthorn Drive_Carmanhall Rd Junction							
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat flow (PCU/Hr)**
1/1 (Carmanhall Rd)	2.65	0.00	Y	Arm 6 Left	12.00	100.0 %	1671
1/2 (Carmanhall Rd)	3.15	0.00	Y	Arm 7 Ahead	Inf	12.0 %	1739
				Arm 8 Right	12.00	88.0 %	
2/1 (Blackthorn Drive South)	3.00	0.00	Y	Arm 7 Left	9.00	8.3 %	1889
				Arm 8 Ahead	Inf	91.7 %	
2/2 (Blackthorn Drive South)	3.00	0.00	N	Arm 8 Ahead	Inf	100.0 %	2055
2/3 (Blackthorn Drive South)	3.00	0.00	N	Arm 5 Right	12.00	100.0 %	1827
3/1 (Birch Avenue)	3.25	0.00	Y	Arm 5 Ahead	Inf	6.9 %	1703
				Arm 6 Right	12.00	38.7 %	
				Arm 8 Left	9.00	54.4 %	
4/1 (Blackthorn Drive North)	3.00	0.00	Y	Arm 5 Left	9.00	67.3 %	1722
				Arm 6 Ahead	Inf	32.7 %	
4/2 (Blackthorn Drive North)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055
4/3 (Blackthorn Drive North)	3.00	0.00	N	Arm 7 Right	12.00	100.0 %	1827
5/1 (Carmanhall Rd Lane 1)	Infinite Saturation Flow						Inf
6/1 (Blackthorn Dr South Lane 1)	Infinite Saturation Flow						Inf
6/2 (Blackthorn Dr South Lane 2)	Infinite Saturation Flow						Inf
7/1 (Birch Avenue Lane 1)	Infinite Saturation Flow						Inf
8/1 (Blackthorn Dr North Lane 1)	Infinite Saturation Flow						Inf
8/2 (Blackthorn Dr North Lane 2)	Infinite Saturation Flow						Inf

Scenario 1: '2016 AM Existing Flows' (FG1: '2016 AM Do Nothing - Existing Flows', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



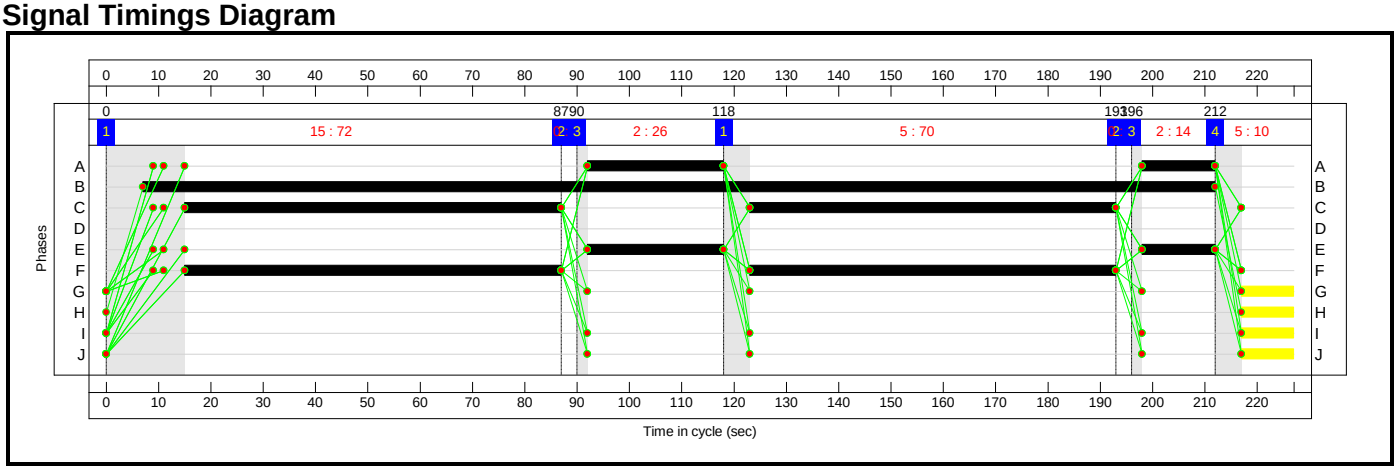
Full Input Data And Results



Stage Timings

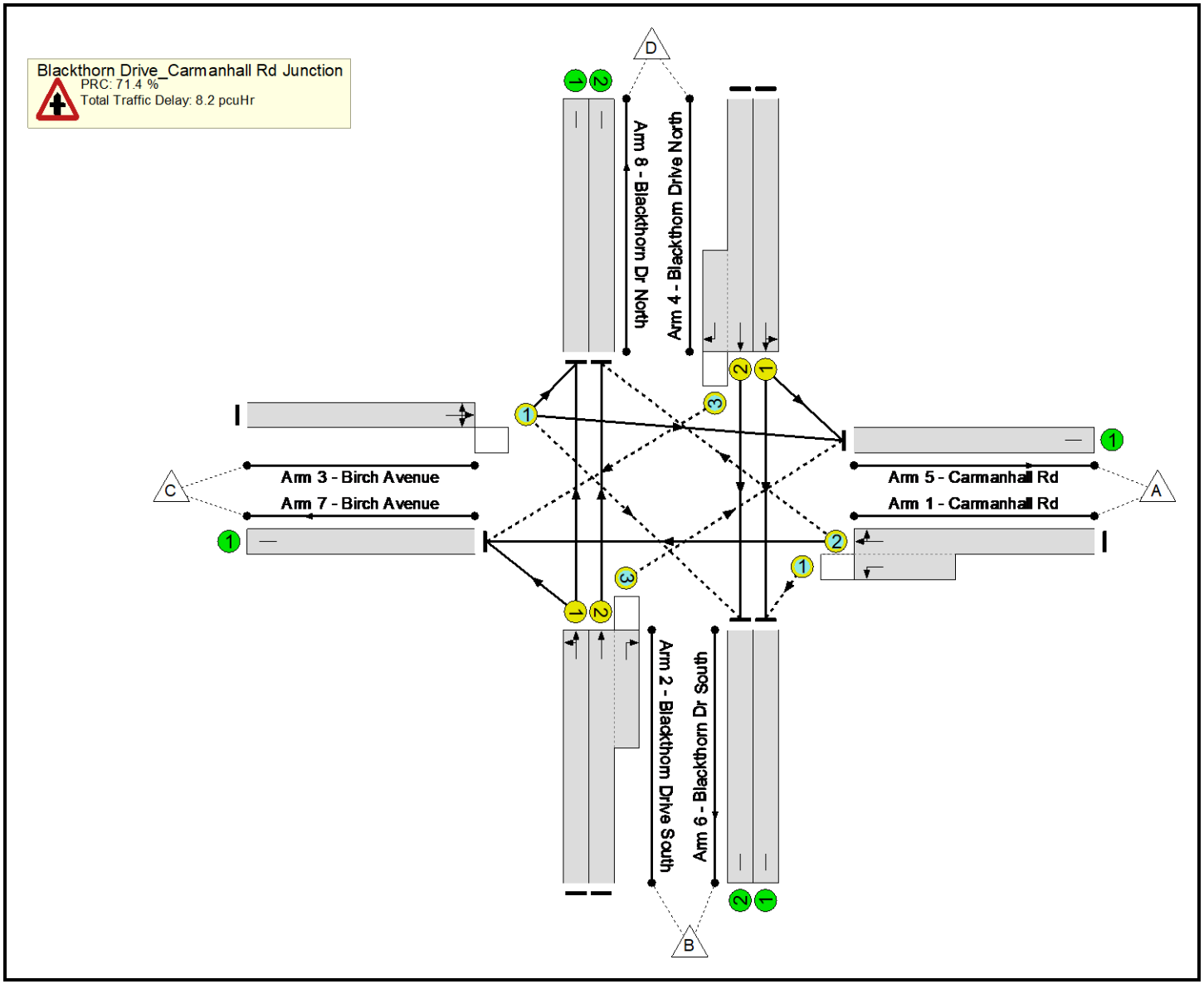
Stage	1	2	3	1	2	3	4
Duration	72	3	26	70	3	14	10
Change Point	0	87	90	118	193	196	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**52.5%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**52.5%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	40:205		206	1815:1671	392	52.5%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	142	-	395	1823	1156	34.2%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	142		501	2055:1827	954	52.5%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	40	-	66	1760	326	20.3%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	142	-	215	1683	1068	20.1%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	142		255	2055:1827	1336	19.1%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	528	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	121	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	209	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	256	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	293	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	231	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**572**	**11**	**1**	**6.0**	**1.7**	**0.4**	**8.2**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**572**	**11**	**1**	**6.0**	**1.7**	**0.4**	**8.2**	**-**	**-**	**-**	**-**
1/2+1/1	206	206	134	11	1	1.6	0.5	0.0	2.1	37.0	4.0	0.5	4.6
2/1	395	395	-	-	-	1.1	0.3	-	1.3	12.3	6.7	0.3	7.0
2/2+2/3	501	501	332	0	0	1.5	0.6	0.3	2.4	16.9	6.8	0.6	7.4
3/1	66	66	30	0	0	0.7	0.1	0.0	0.9	46.9	2.0	0.1	2.1
4/1	215	215	-	-	-	0.5	0.1	-	0.7	11.0	3.3	0.1	3.4
4/2+4/3	255	255	76	0	0	0.6	0.1	0.1	0.8	11.9	2.6	0.1	2.7
5/1	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	209	209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	256	256	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 71.4

PRC Over All Lanes (%): 71.4

Total Delay for Signalled Lanes (pcuHr): 8.18

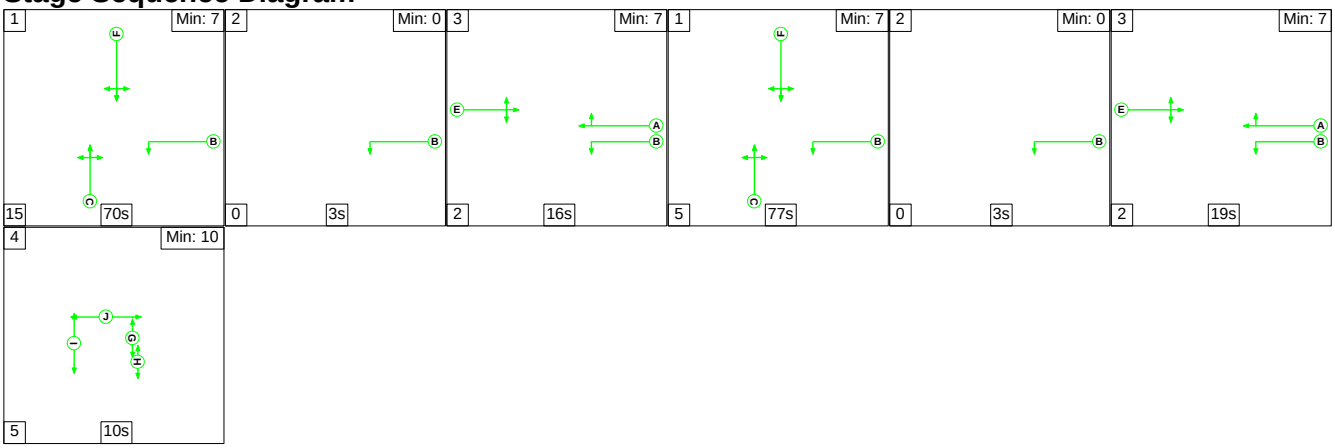
Total Delay Over All Lanes(pcuHr): 8.18

Cycle Time (s): 227

Full Input Data And Results

Scenario 2: '2021 AM Do Nothing' (FG2: '2021 AM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

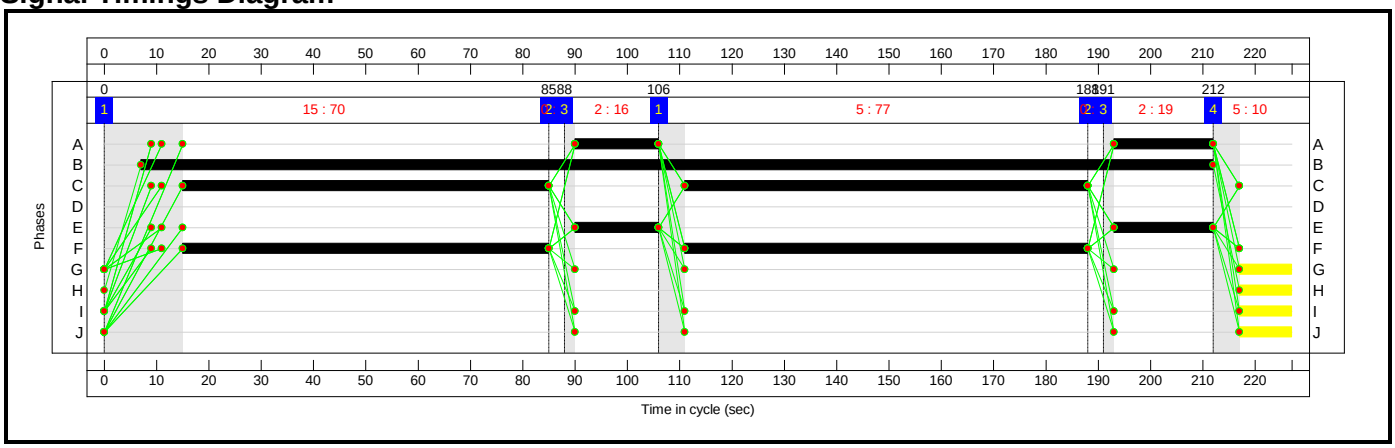
Stage Sequence Diagram



Stage Timings

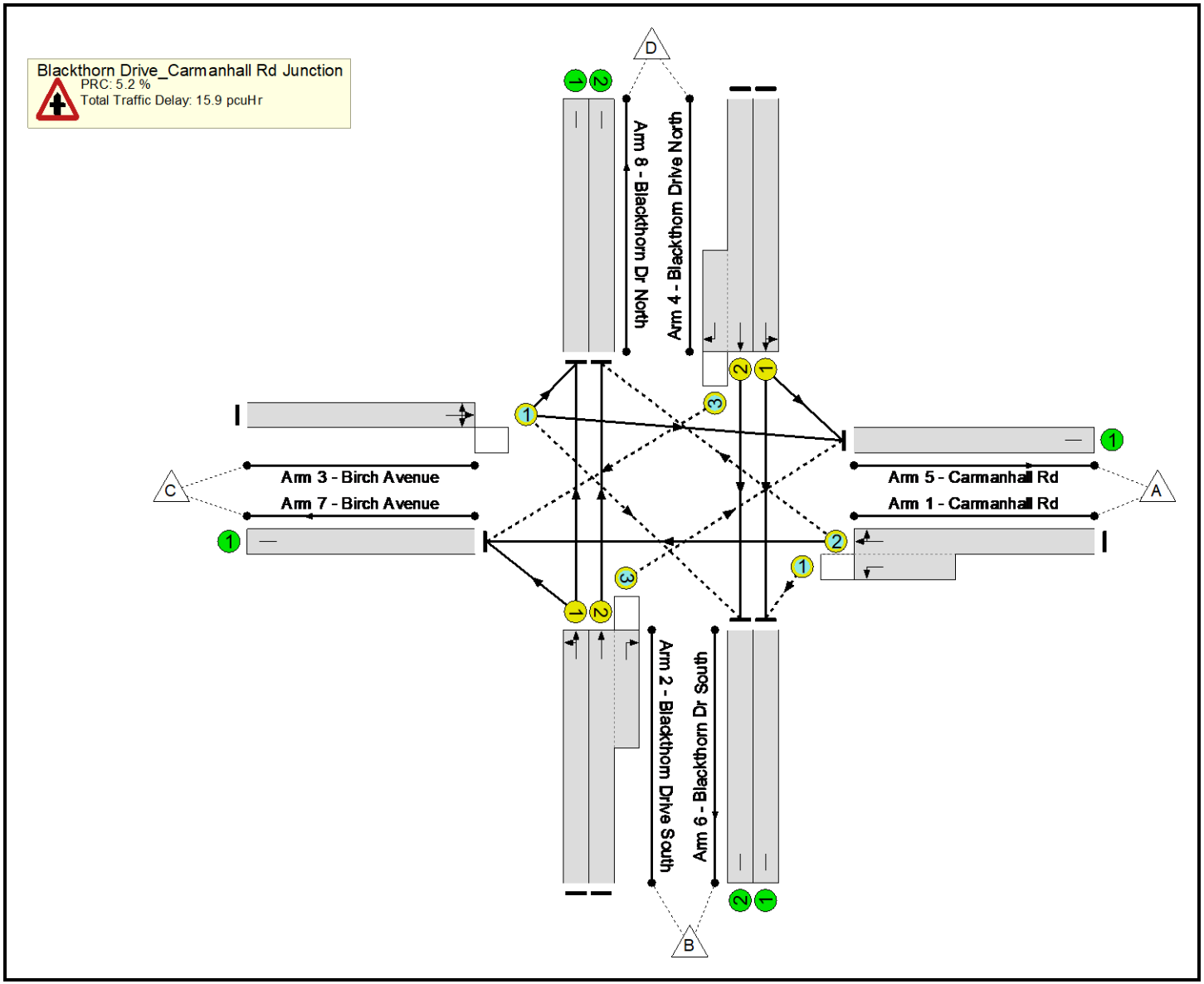
Stage	1	2	3	1	2	3	4
Duration	70	3	16	77	3	19	10
Change Point	0	85	88	106	188	191	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**85.5%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**85.5%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	35:205		304	1796:1671	367	82.8%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	147	-	597	1849	1214	49.2%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	147		494	2055:1827	577	85.5%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	35	-	70	1760	287	24.4%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	147	-	287	1657	1088	26.4%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	147		293	2055:1827	1374	21.3%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	775	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	165	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	244	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	273	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	488	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	100	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**796**	**20**	**25**	**8.9**	**6.0**	**1.0**	**15.9**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**796**	**20**	**25**	**8.9**	**6.0**	**1.0**	**15.9**	**-**	**-**	**-**	**-**
1/2+1/1	304	304	219	20	1	2.2	2.2	0.0	4.5	52.8	5.3	2.2	7.6
2/1	597	597	-	-	-	1.9	0.5	-	2.3	14.1	12.9	0.5	13.4
2/2+2/3	494	494	464	0	24	2.6	2.8	0.7	6.2	44.9	16.8	2.8	19.6
3/1	70	70	32	0	0	0.8	0.2	0.0	1.0	50.1	2.1	0.2	2.3
4/1	287	287	-	-	-	0.7	0.2	-	0.9	11.4	5.1	0.2	5.3
4/2+4/3	293	293	81	0	0	0.7	0.1	0.2	1.0	12.9	3.5	0.1	3.6
5/1	775	775	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	244	244	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	488	488	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	100	100	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 5.2

PRC Over All Lanes (%): 5.2

Total Delay for Signalled Lanes (pcuHr): 15.89

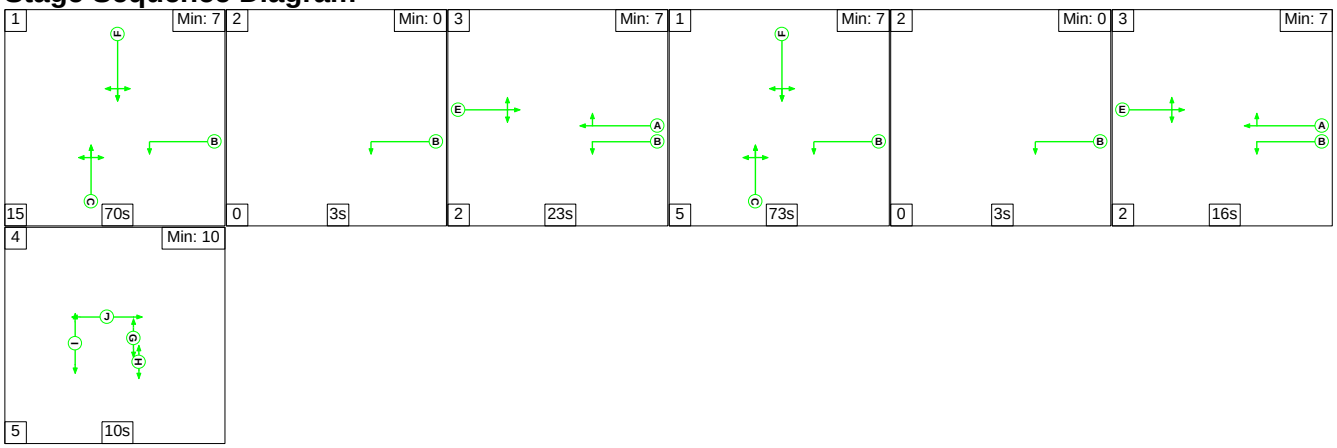
Total Delay Over All Lanes(pcuHr): 15.89

Cycle Time (s): 227

Full Input Data And Results

Scenario 3: '2021 AM Do Something' (FG3: '2021 AM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

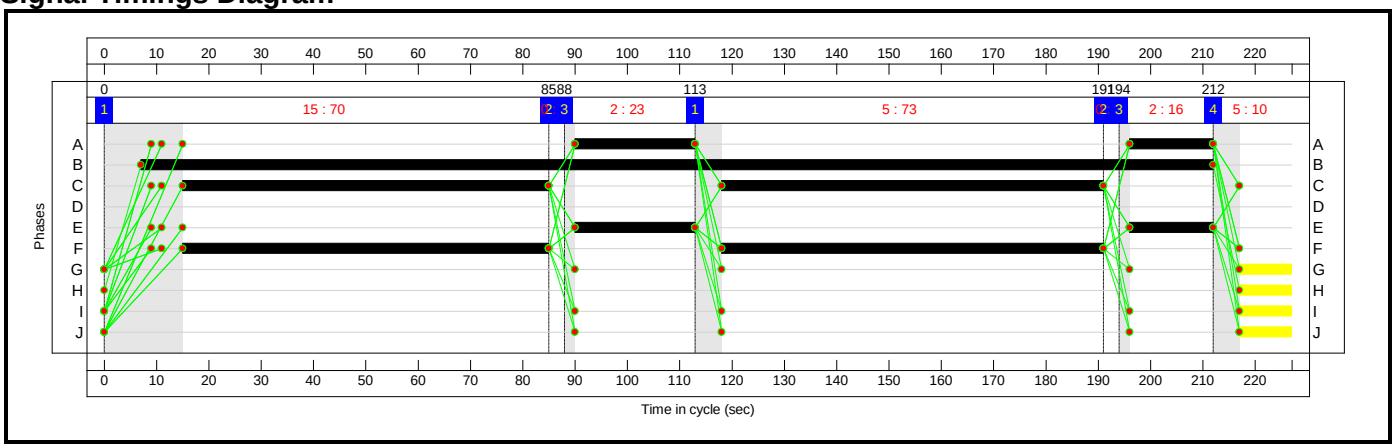
Stage Sequence Diagram



Stage Timings

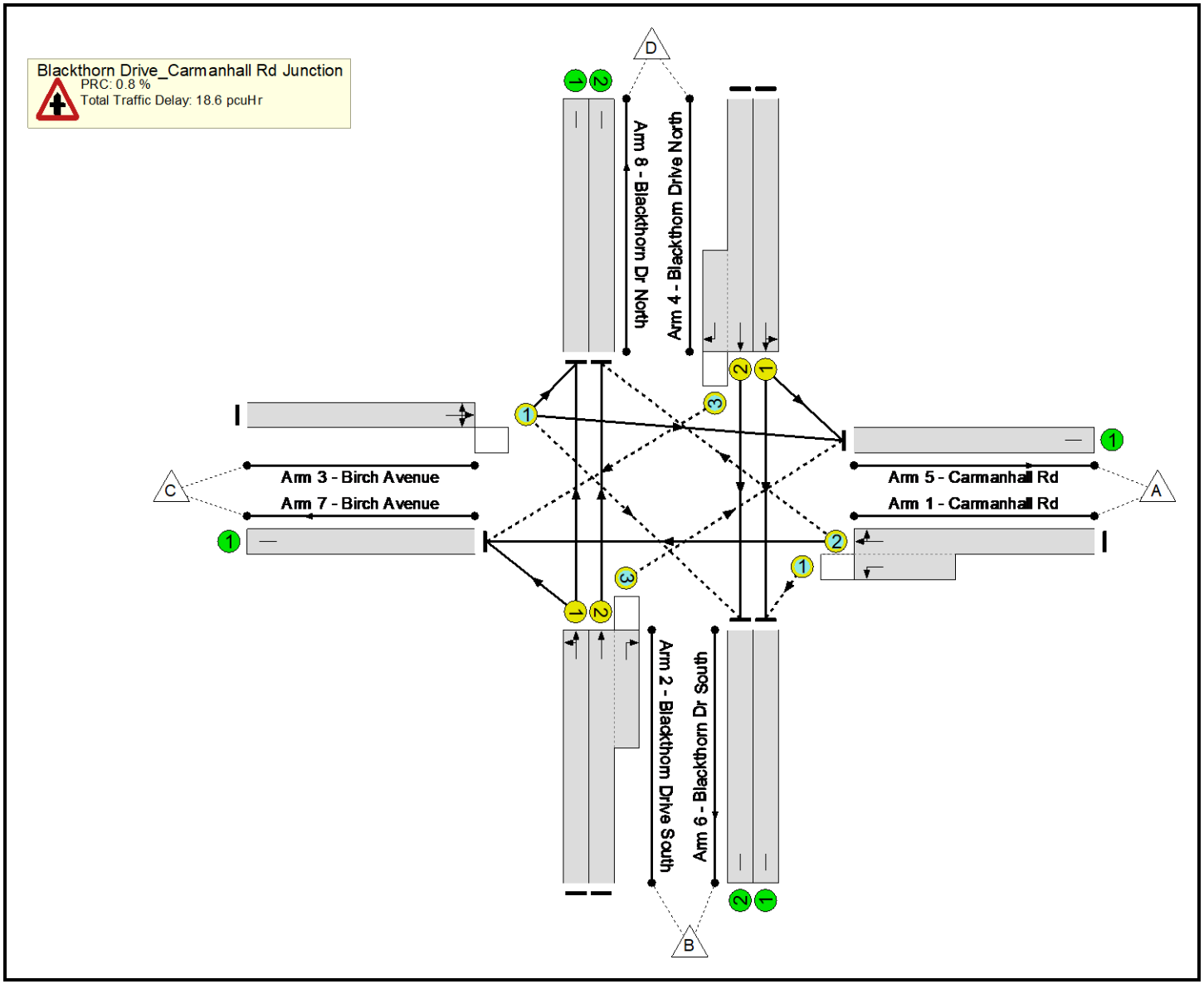
Stage	1	2	3	1	2	3	4
Duration	70	3	23	73	3	16	10
Change Point	0	85	88	113	191	194	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**89.3%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**89.3%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	39:205		385	1783:1671	435	88.5%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	143	-	607	1850	1182	51.4%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	143		502	2055:1827	562	89.3%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	39	-	70	1760	318	22.0%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	143	-	296	1654	1057	28.0%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	143		271	2055:1827	1345	20.2%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	796	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	212	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	222	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	273	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	498	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	130	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**879**	**27**	**25**	**9.5**	**8.1**	**1.1**	**18.6**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**879**	**27**	**25**	**9.5**	**8.1**	**1.1**	**18.6**	**-**	**-**	**-**	**-**
1/2+1/1	385	385	293	27	2	2.6	3.4	0.0	6.0	56.2	6.5	3.4	9.9
2/1	607	607	-	-	-	1.9	0.5	-	2.5	14.7	12.5	0.5	13.0
2/2+2/3	502	502	473	0	24	2.7	3.7	0.8	7.2	51.7	16.7	3.7	20.4
3/1	70	70	32	0	0	0.8	0.1	0.0	0.9	47.5	2.1	0.1	2.2
4/1	296	296	-	-	-	0.8	0.2	-	1.0	11.8	4.9	0.2	5.1
4/2+4/3	271	271	81	0	0	0.6	0.1	0.3	1.0	13.5	2.9	0.1	3.0
5/1	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	212	212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	222	222	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	498	498	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	130	130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 0.8

PRC Over All Lanes (%): 0.8

Total Delay for Signalled Lanes (pcuHr): 18.61

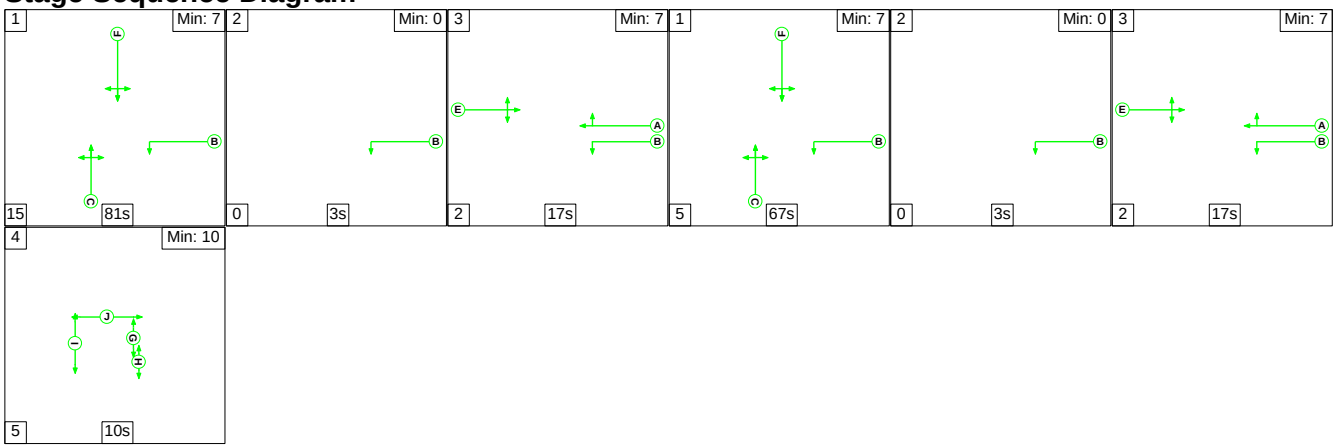
Total Delay Over All Lanes(pcuHr): 18.61

Cycle Time (s): 227

Full Input Data And Results

Scenario 4: '2031 AM Do Nothing' (FG4: '2031 AM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

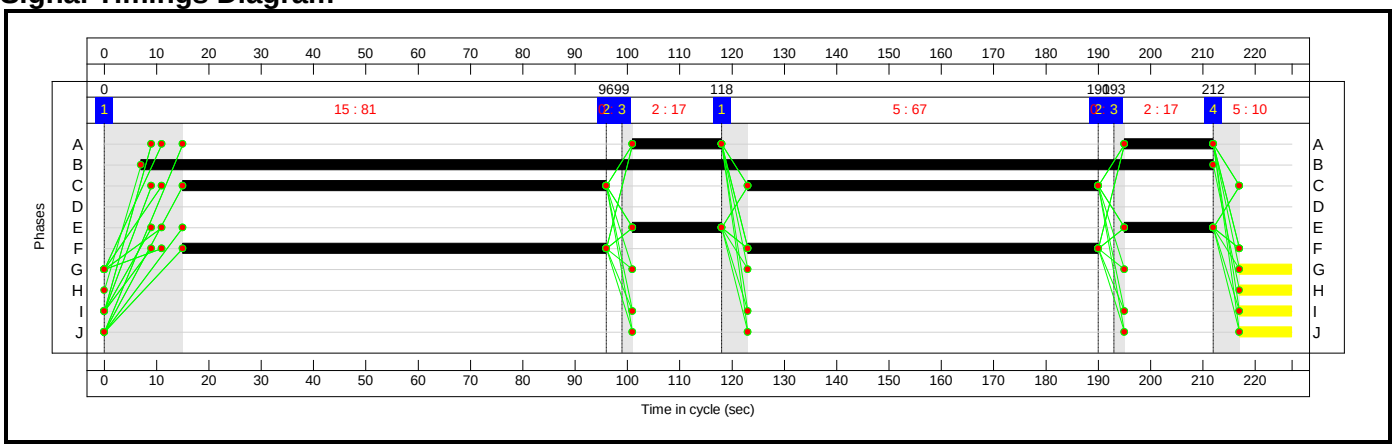
Stage Sequence Diagram



Stage Timings

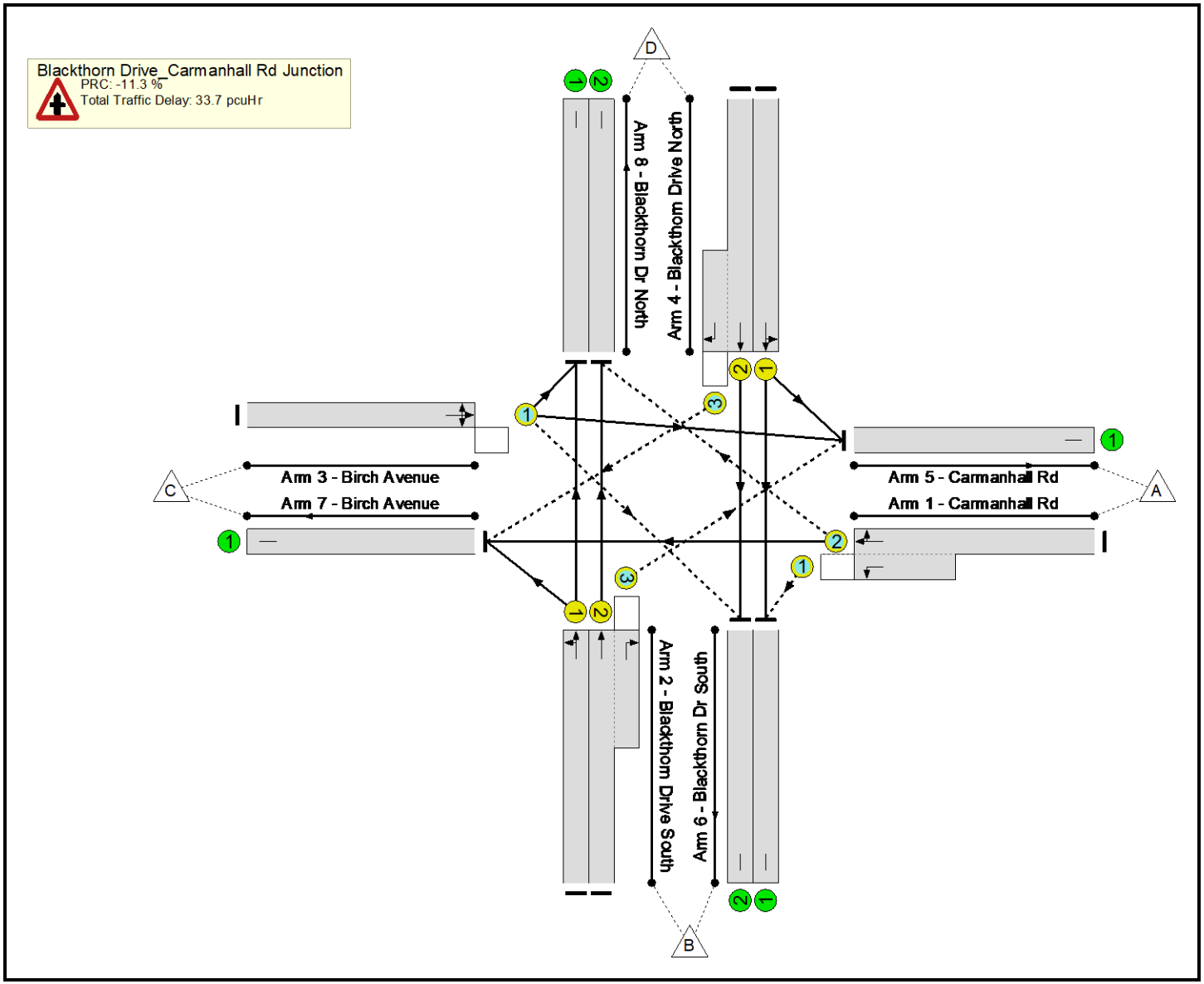
Stage	1	2	3	1	2	3	4
Duration	81	3	17	67	3	17	10
Change Point	0	96	99	118	190	193	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**100.2%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**100.2%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	34:205		333	1799:1671	340	98.0%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	148	-	677	1849	1222	55.4%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	148		539	2055:1827	538	100.2%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	34	-	80	1760	279	28.7%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	148	-	317	1659	1096	28.9%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	148		330	2055:1827	1339	24.6%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	850	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	181	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	274	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	310	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	554	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	107	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**849**	**22**	**50**	**11.7**	**20.6**	**1.4**	**33.7**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**849**	**22**	**50**	**11.7**	**20.6**	**1.4**	**33.7**	**-**	**-**	**-**	**-**
1/2+1/1	333	333	237	22	1	3.0	7.5	0.0	10.6	114.2	6.6	7.5	14.2
2/1	677	677	-	-	-	2.1	0.6	-	2.8	14.7	15.0	0.6	15.7
2/2+2/3	539	538	484	0	49	4.1	11.8	1.0	17.0	113.4	19.8	11.8	31.6
3/1	80	80	36	0	0	1.0	0.2	0.0	1.2	52.9	2.7	0.2	2.9
4/1	317	317	-	-	-	0.8	0.2	-	1.0	11.2	5.5	0.2	5.8
4/2+4/3	330	330	92	0	0	0.7	0.2	0.3	1.2	13.5	3.8	0.2	3.9
5/1	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	554	554	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): -11.3

PRC Over All Lanes (%): -11.3

Total Delay for Signalled Lanes (pcuHr): 33.71

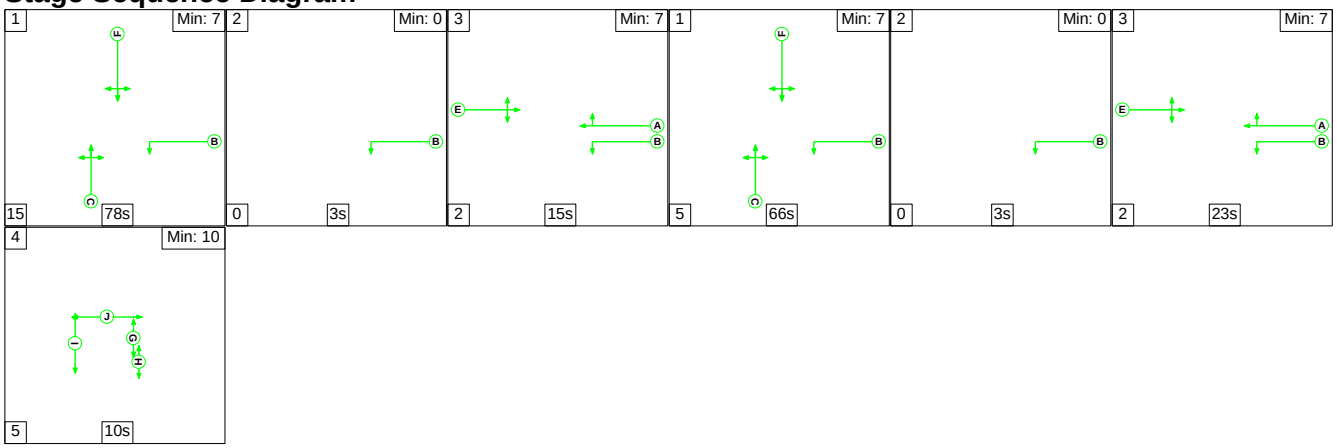
Total Delay Over All Lanes(pcuHr): 33.71

Cycle Time (s): 227

Full Input Data And Results

Scenario 5: '2031 AM Do Something' (FG5: '2031 AM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

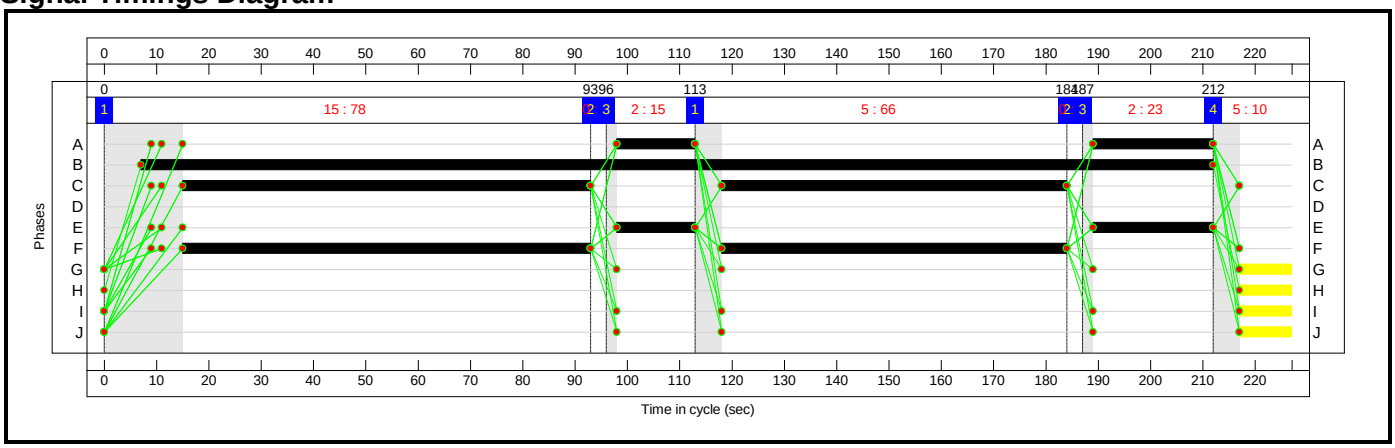
Stage Sequence Diagram



Stage Timings

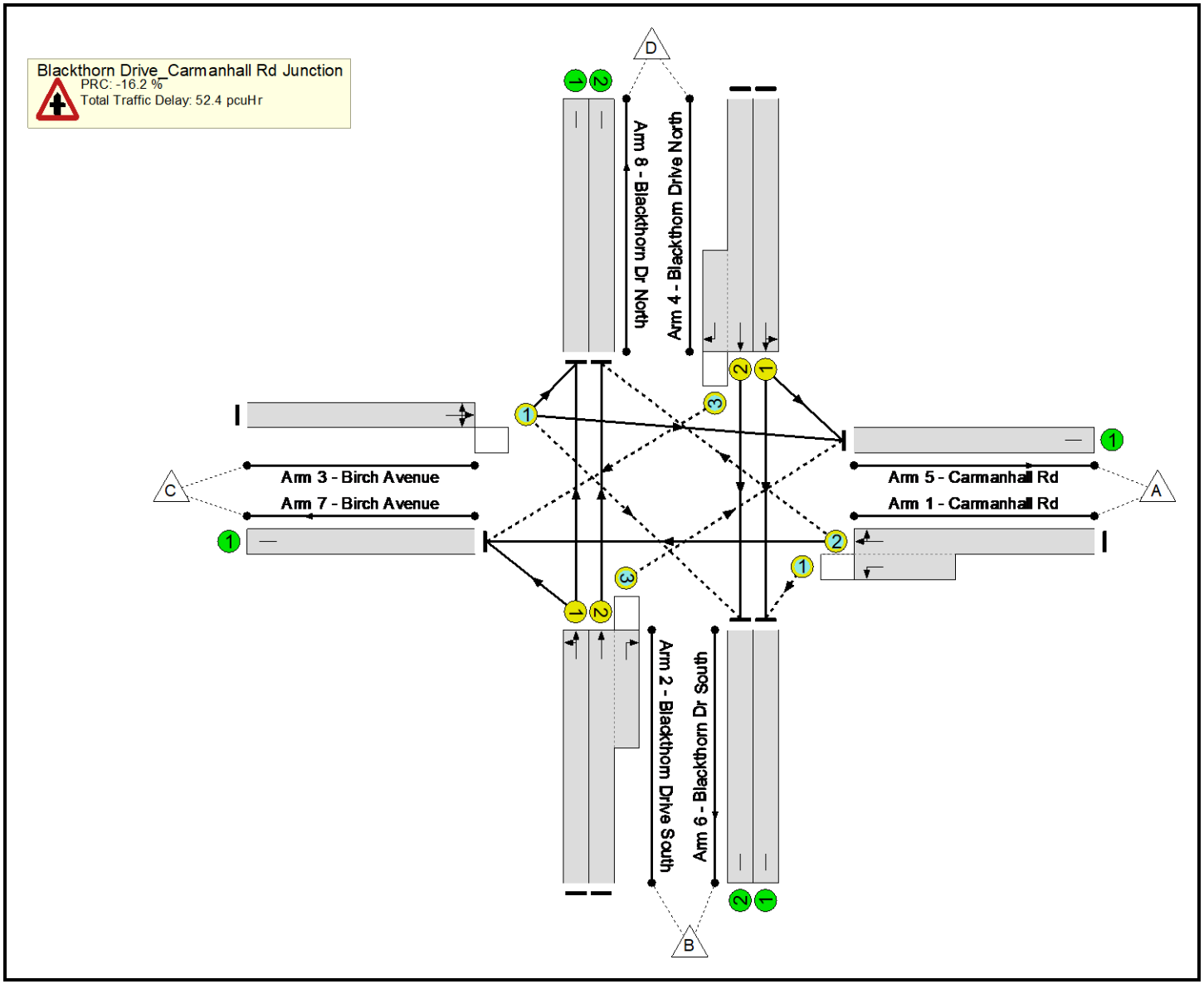
Stage	1	2	3	1	2	3	4
Duration	78	3	15	66	3	23	10
Change Point	0	93	96	113	184	187	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**104.5%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**104.5%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	38:205		415	1786:1671	404	102.7%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	144	-	687	1850	1190	57.7%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	144		549	2055:1827	525	104.5%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	38	-	80	1760	310	25.8%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	144	-	327	1657	1066	30.7%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	144		306	2055:1827	1149	26.6%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	871	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	230	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	250	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	310	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	564	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	139	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**894**	**31**	**56**	**17.3**	**33.7**	**1.4**	**52.4**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**894**	**31**	**56**	**17.3**	**33.7**	**1.4**	**52.4**	**-**	**-**	**-**	**-**
1/2+1/1	415	404	294	31	8	5.0	13.3	0.0	18.4	159.2	12.3	13.3	25.6
2/1	687	687	-	-	-	2.6	0.7	-	3.2	17.0	17.2	0.7	17.9
2/2+2/3	549	525	472	0	48	7.1	19.1	1.0	27.2	178.2	22.0	19.1	41.2
3/1	80	80	36	0	0	0.9	0.2	0.0	1.1	49.8	2.6	0.2	2.8
4/1	327	327	-	-	-	1.0	0.2	-	1.2	12.9	6.4	0.2	6.7
4/2+4/3	306	306	92	0	0	0.8	0.2	0.4	1.4	16.2	3.7	0.2	3.9
5/1	847	847	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	250	250	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): -16.2

PRC Over All Lanes (%): -16.2

Total Delay for Signalled Lanes (pcuHr): 52.42

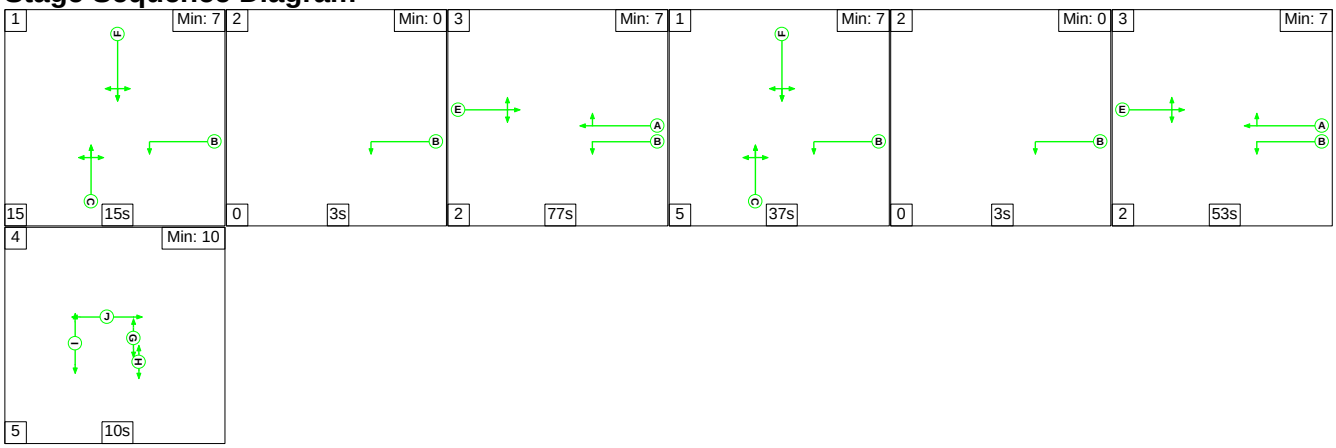
Total Delay Over All Lanes(pcuHr): 52.42

Cycle Time (s): 227

Full Input Data And Results

Scenario 6: '2016 PM Existing Flows' (FG6: '2016 PM Do Nothing - Existing Flows', Plan 1: 'Network Control Plan 1')

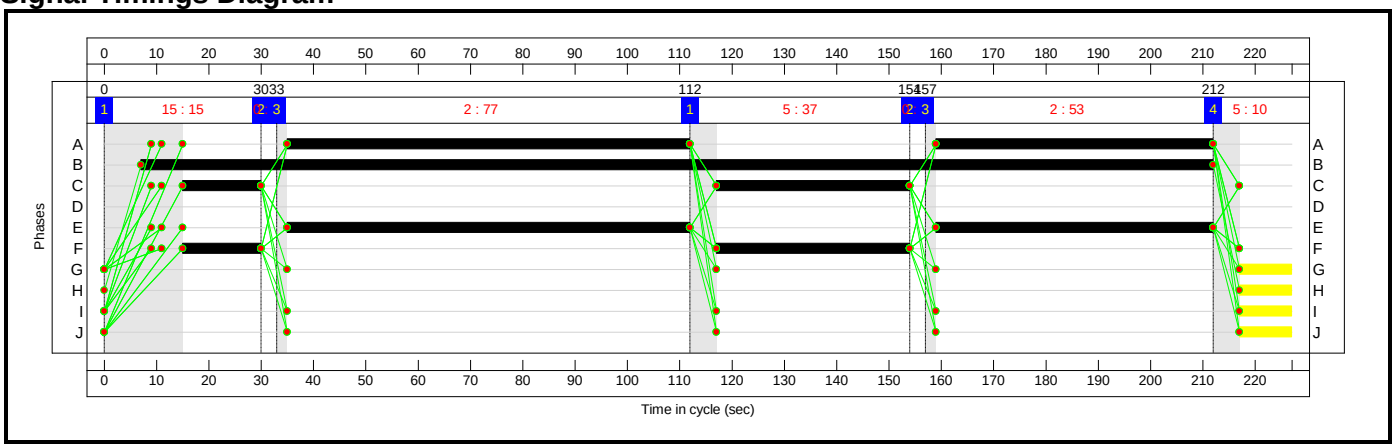
Stage Sequence Diagram



Stage Timings

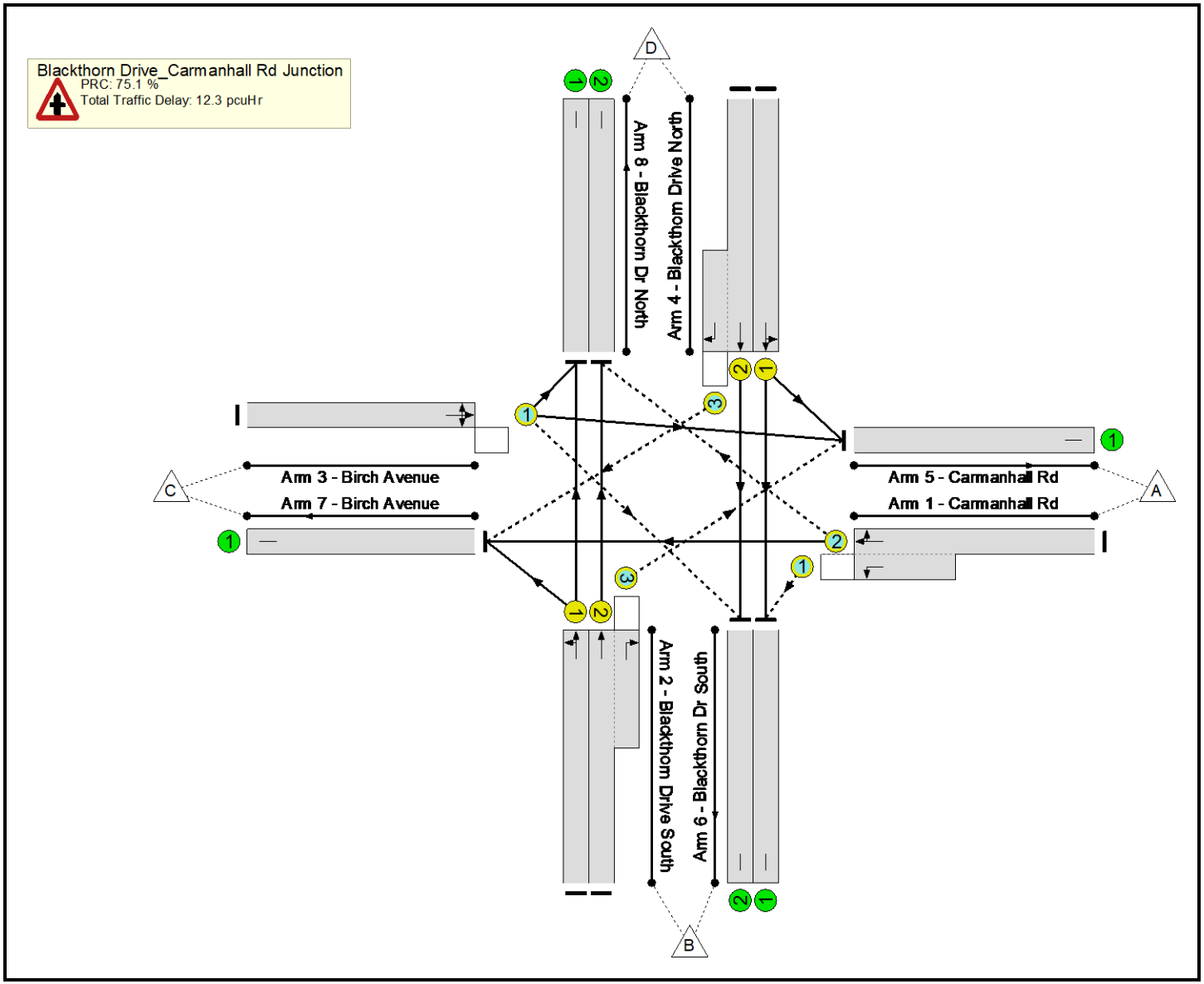
Stage	1	2	3	1	2	3	4
Duration	15	3	77	37	3	53	10
Change Point	0	30	33	112	154	157	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**51.4%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**51.4%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	130:205		610	1744:1671	1187	51.4%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	52	-	160	1859	442	36.2%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	52		310	2055:1827	611	50.8%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	130	-	300	1703	990	30.3%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	52	-	118	1725	410	28.8%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	52		164	2055:1827	521	31.5%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	213	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	367	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	247	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	104	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	294	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	437	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**780**	**45**	**6**	**10.0**	**2.0**	**0.3**	**12.3**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**780**	**45**	**6**	**10.0**	**2.0**	**0.3**	**12.3**	**-**	**-**	**-**	**-**
1/2+1/1	610	610	520	45	3	1.5	0.5	0.0	2.1	12.3	5.9	0.5	6.4
2/1	160	160	-	-	-	1.6	0.3	-	1.9	42.4	4.2	0.3	4.5
2/2+2/3	310	310	111	0	3	3.2	0.5	0.2	3.8	44.5	5.2	0.5	5.7
3/1	300	300	116	0	0	1.0	0.2	0.0	1.2	14.7	4.9	0.2	5.1
4/1	118	118	-	-	-	1.2	0.2	-	1.4	41.5	3.0	0.2	3.2
4/2+4/3	164	164	33	0	0	1.6	0.2	0.1	1.9	41.6	3.3	0.2	3.6
5/1	213	213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	247	247	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	104	104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 75.1

PRC Over All Lanes (%): 75.1

Total Delay for Signalled Lanes (pcuHr): 12.28

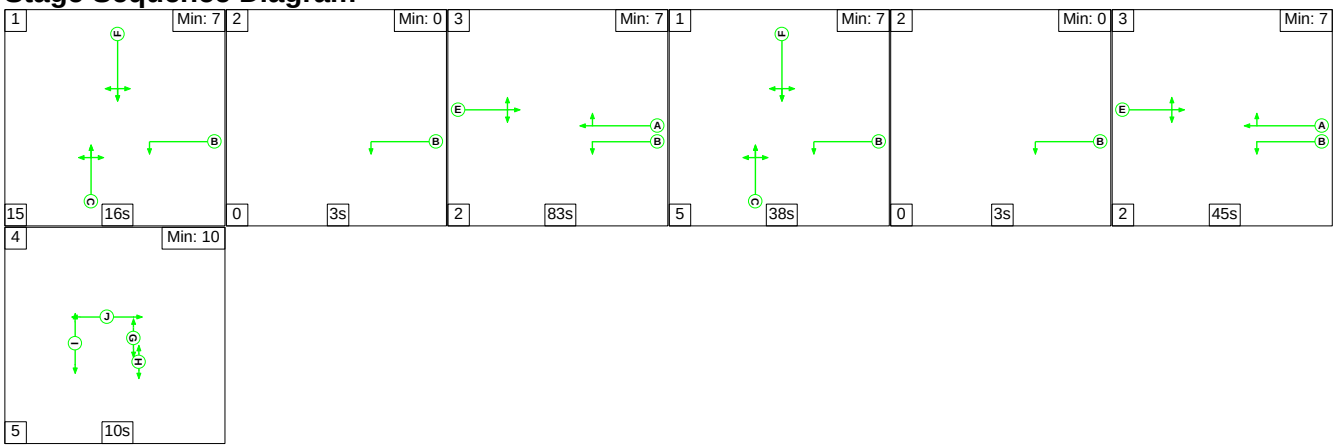
Total Delay Over All Lanes(pcuHr): 12.28

Cycle Time (s): 227

Full Input Data And Results

Scenario 7: '2021 PM Do Nothing' (FG7: '2021 PM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

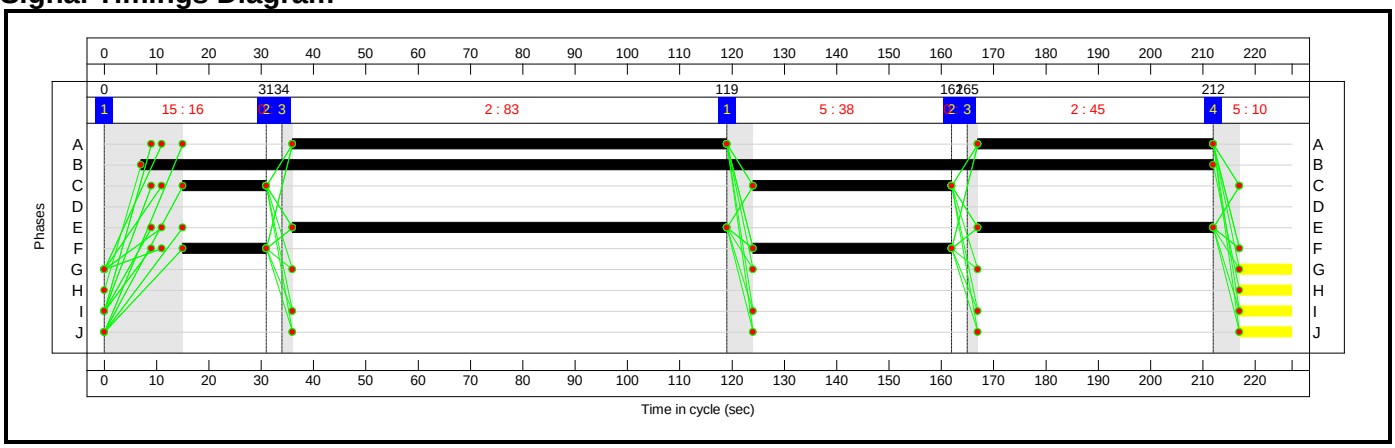
Stage Sequence Diagram



Stage Timings

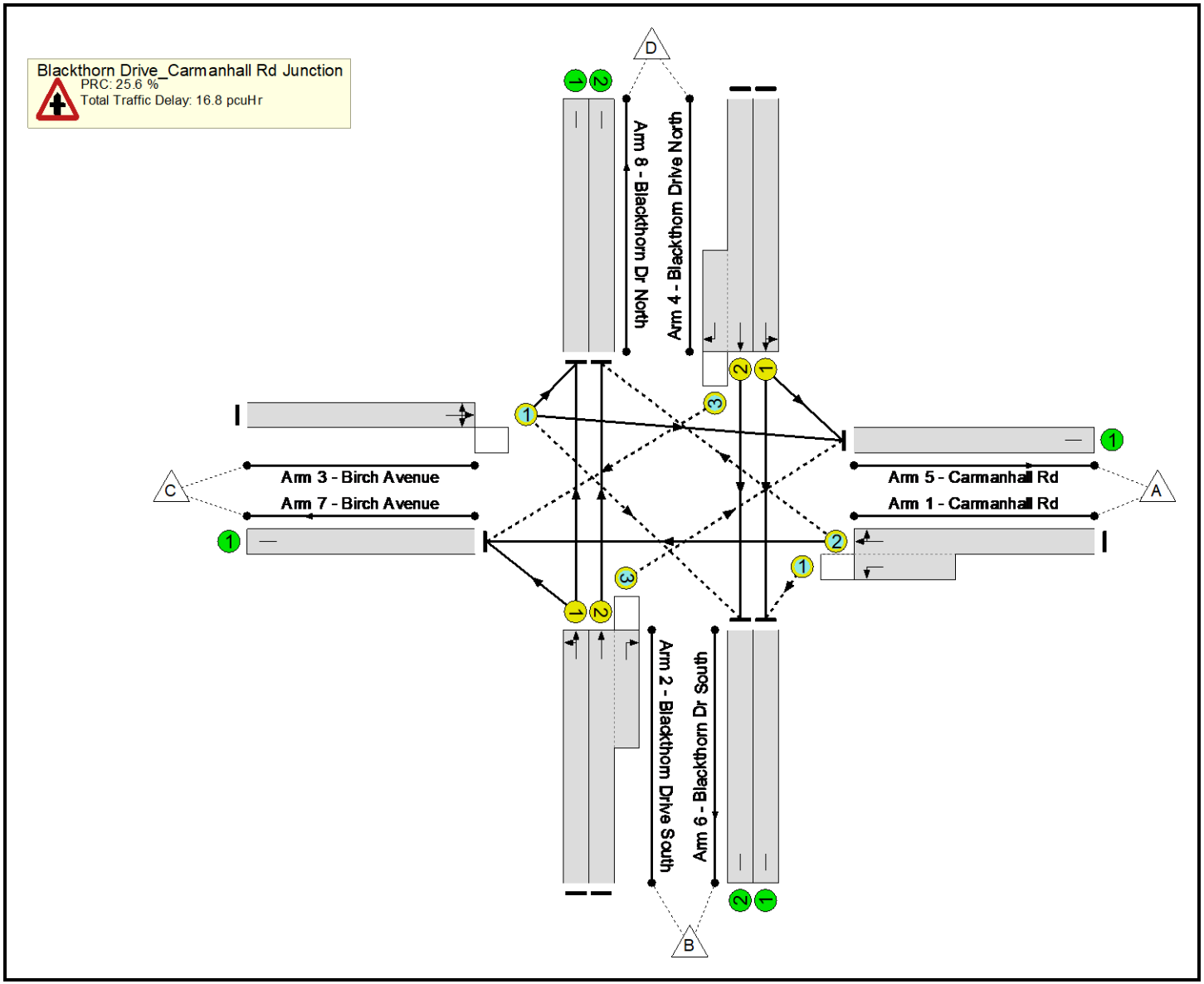
Stage	1	2	3	1	2	3	4
Duration	16	3	83	38	3	45	10
Change Point	0	31	34	119	162	165	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**71.7%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**71.7%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	128:205		849	1739:1671	1184	71.7%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	54	-	222	1871	462	48.1%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	54		334	2055:1827	470	71.1%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	128	-	320	1703	975	32.8%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	54	-	135	1688	416	32.4%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	54		192	2055:1827	534	36.0%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	306	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	499	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	281	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	111	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	365	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	490	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**1059**	**53**	**26**	**12.6**	**3.7**	**0.5**	**16.8**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**1059**	**53**	**26**	**12.6**	**3.7**	**0.5**	**16.8**	**-**	**-**	**-**	**-**
1/2+1/1	849	849	747	53	4	2.4	1.3	0.1	3.8	16.2	9.5	1.3	10.8
2/1	222	222	-	-	-	2.3	0.5	-	2.7	44.2	6.4	0.5	6.9
2/2+2/3	334	334	153	0	22	3.6	1.2	0.3	5.0	54.4	5.7	1.2	6.9
3/1	320	320	124	0	0	1.1	0.2	0.0	1.4	15.5	5.4	0.2	5.7
4/1	135	135	-	-	-	1.3	0.2	-	1.6	41.6	3.7	0.2	4.0
4/2+4/3	192	192	35	0	0	1.9	0.3	0.1	2.2	41.9	4.3	0.3	4.6
5/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	111	111	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 25.6

PRC Over All Lanes (%): 25.6

Total Delay for Signalled Lanes (pcuHr): 16.77

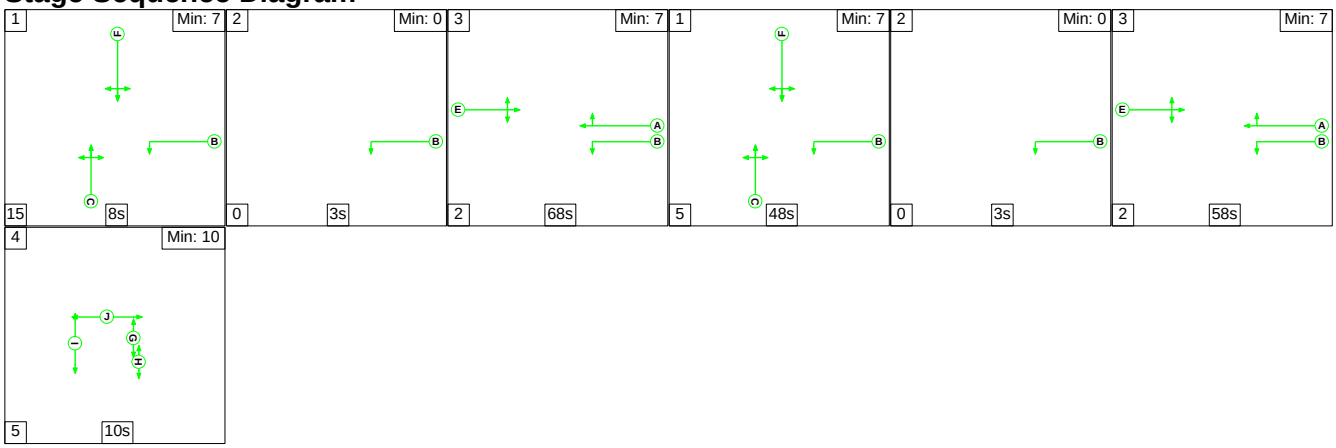
Total Delay Over All Lanes(pcuHr): 16.77

Cycle Time (s): 227

Full Input Data And Results

Scenario 8: '2021 PM Do Something' (FG8: '2021 PM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

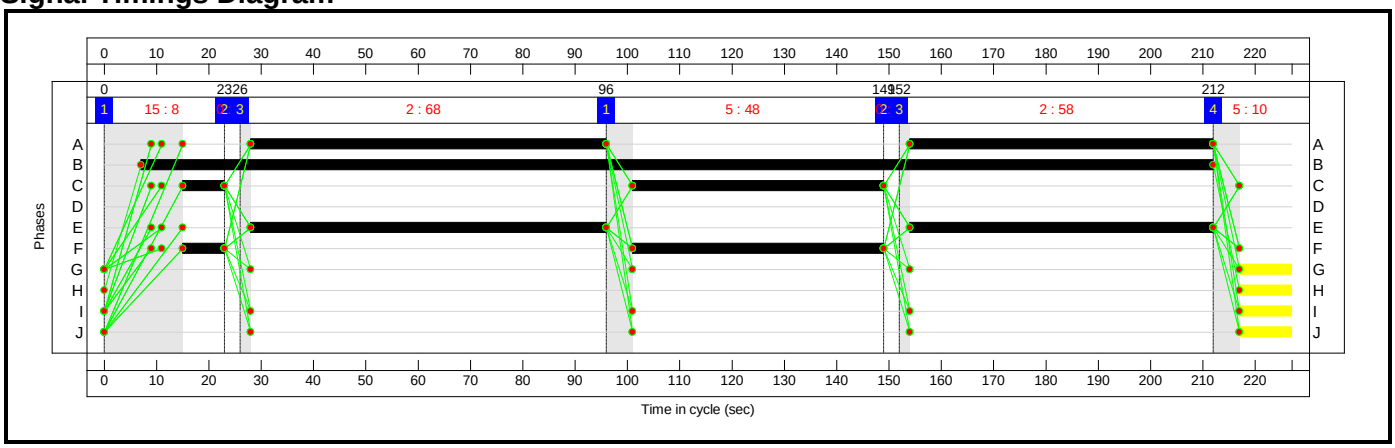
Stage Sequence Diagram



Stage Timings

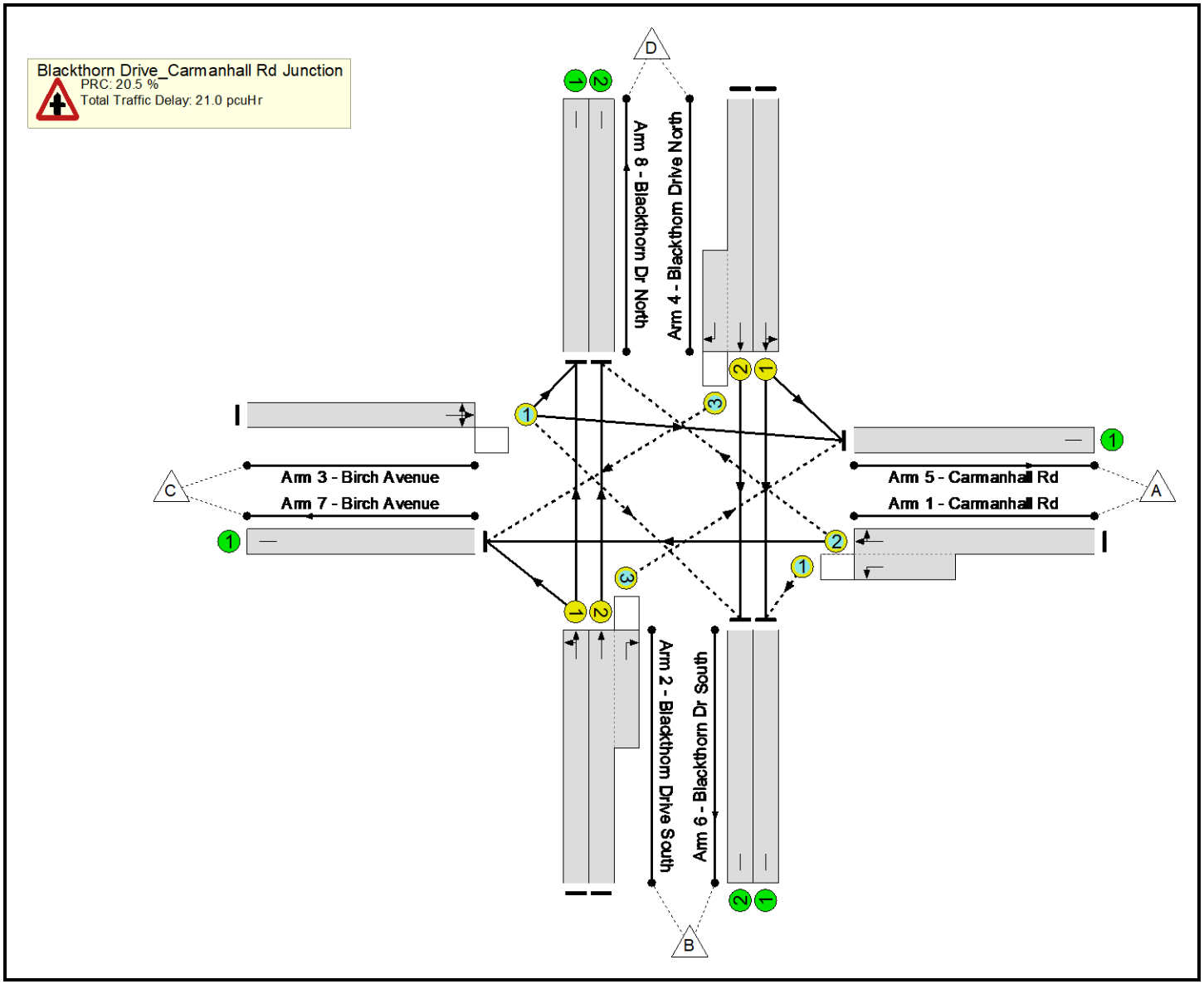
Stage	1	2	3	1	2	3	4
Duration	8	3	68	48	3	58	10
Change Point	0	23	26	96	149	152	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**74.7%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**74.7%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	126:205		872	1738:1671	1167	74.7%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	56	-	291	1882	481	60.5%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	56		279	2055:1827	374	74.6%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	126	-	320	1703	960	33.3%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	56	-	145	1668	426	34.0%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	56		195	2055:1827	552	35.3%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	342	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	503	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	284	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	111	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	434	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	428	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**1062**	**63**	**52**	**16.0**	**4.4**	**0.6**	**21.0**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**1062**	**63**	**52**	**16.0**	**4.4**	**0.6**	**21.0**	**-**	**-**	**-**	**-**
1/2+1/1	872	872	760	63	4	2.8	1.5	0.2	4.4	18.3	14.2	1.5	15.7
2/1	291	291	-	-	-	4.4	0.8	-	5.2	64.1	11.4	0.8	12.1
2/2+2/3	279	279	159	0	32	4.4	1.4	0.3	6.1	78.4	9.1	1.4	10.6
3/1	320	320	124	0	0	1.2	0.2	0.0	1.5	16.4	6.2	0.2	6.5
4/1	145	145	-	-	-	1.4	0.3	-	1.7	41.1	4.0	0.3	4.3
4/2+4/3	195	195	19	0	16	1.8	0.3	0.1	2.2	41.4	4.4	0.3	4.7
5/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	284	284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	111	111	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 20.5
PRC Over All Lanes (%): 20.5

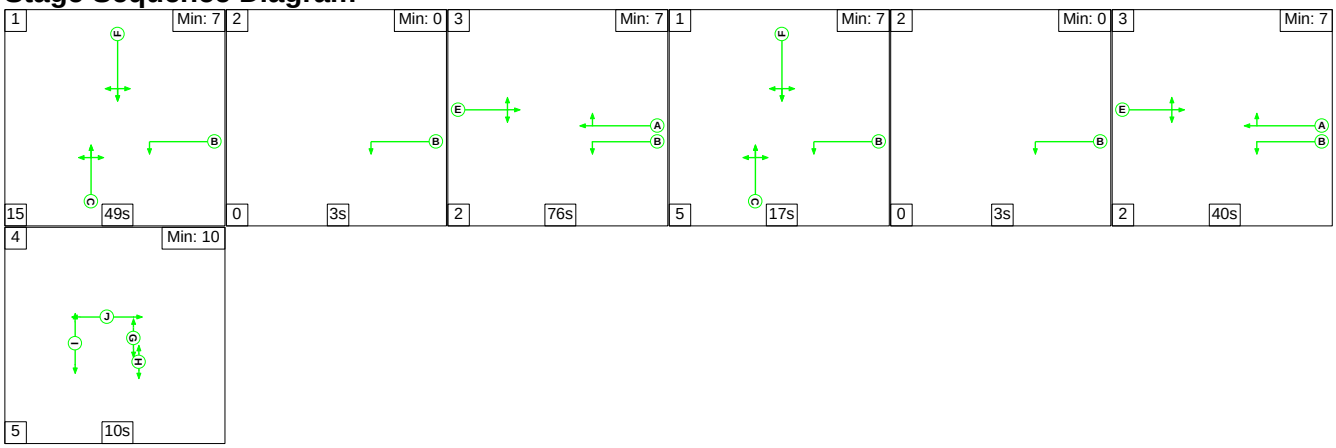
Total Delay for Signalled Lanes (pcuHr): 21.04
Total Delay Over All Lanes(pcuHr): 21.04

Cycle Time (s): 227

Full Input Data And Results

Scenario 9: '2031 PM Do Nothing' (FG9: '2031 PM Do Nothing - Existing Flows + Permitted Dev', Plan 1: 'Network Control Plan 1')

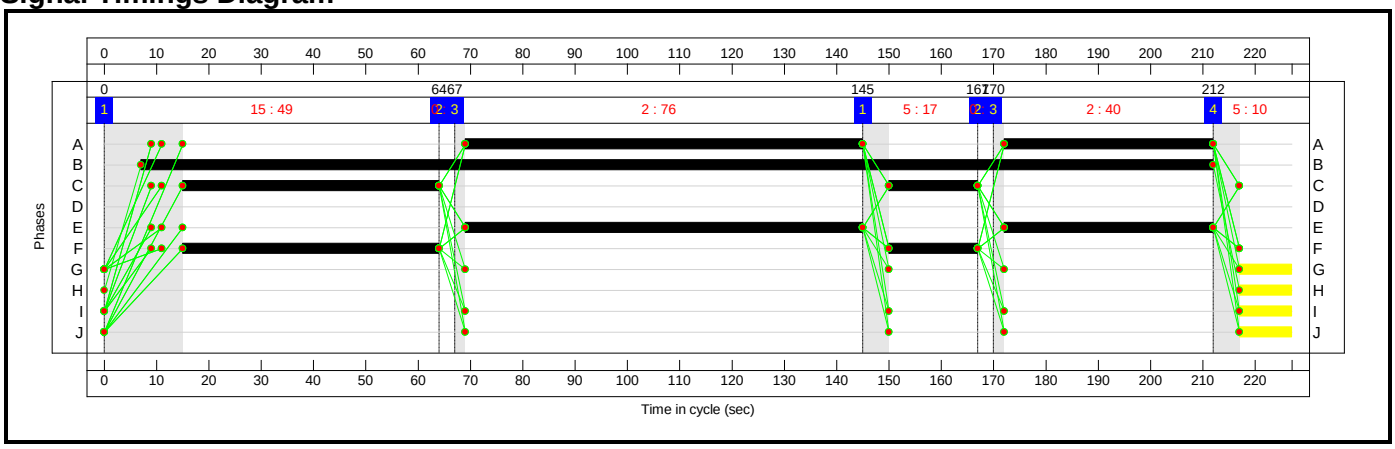
Stage Sequence Diagram



Stage Timings

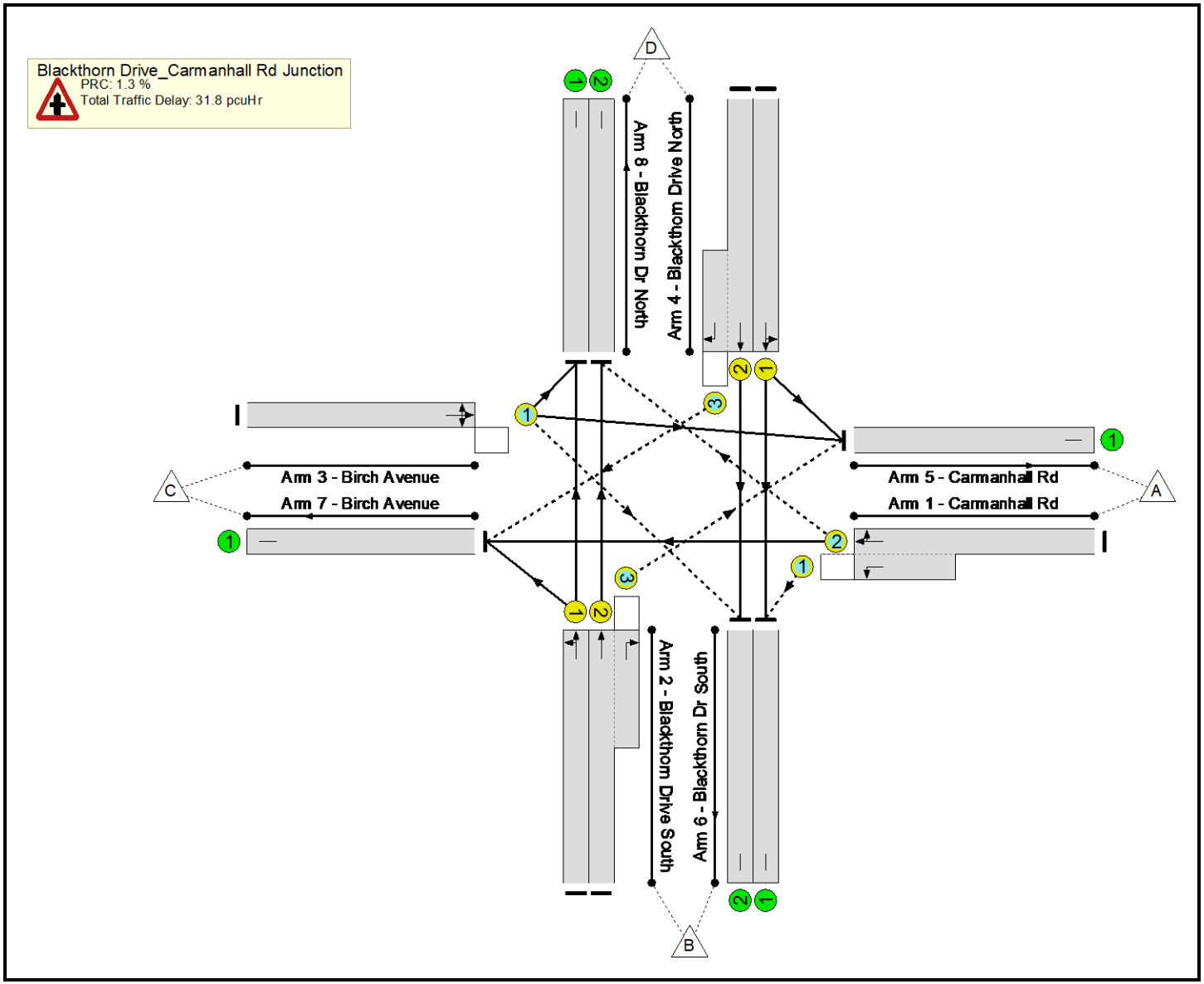
Stage	1	2	3	1	2	3	4
Duration	49	3	76	17	3	40	10
Change Point	0	64	67	145	167	170	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**88.9%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**88.9%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	116:205		935	1739:1671	1052	88.9%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	66	-	426	1889	566	75.3%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	66		195	2055:1827	221	88.1%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	116	-	362	1703	885	40.9%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	66	-	313	1800	539	58.0%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	66		54	2055:1827	198	27.2%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	336	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	712	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	154	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	126	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	588	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	369	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**1138**	**59**	**58**	**21.3**	**9.5**	**1.1**	**31.8**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**1138**	**59**	**58**	**21.3**	**9.5**	**1.1**	**31.8**	**-**	**-**	**-**	**-**
1/2+1/1	935	935	817	59	8	6.6	3.7	0.4	10.7	41.4	35.9	3.7	39.6
2/1	426	426	-	-	-	5.4	1.5	-	6.9	58.5	14.8	1.5	16.3
2/2+2/3	195	195	159	0	32	3.7	3.0	0.5	7.2	133.2	9.7	3.0	12.7
3/1	362	362	140	0	0	2.1	0.3	0.0	2.5	24.6	10.6	0.3	10.9
4/1	313	313	-	-	-	2.9	0.7	-	3.6	41.8	8.9	0.7	9.6
4/2+4/3	54	54	22	0	18	0.4	0.2	0.2	0.8	55.4	1.0	0.2	1.1
5/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	154	154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	126	126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	588	588	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 1.3

PRC Over All Lanes (%): 1.3

Total Delay for Signalled Lanes (pcuHr): 31.82

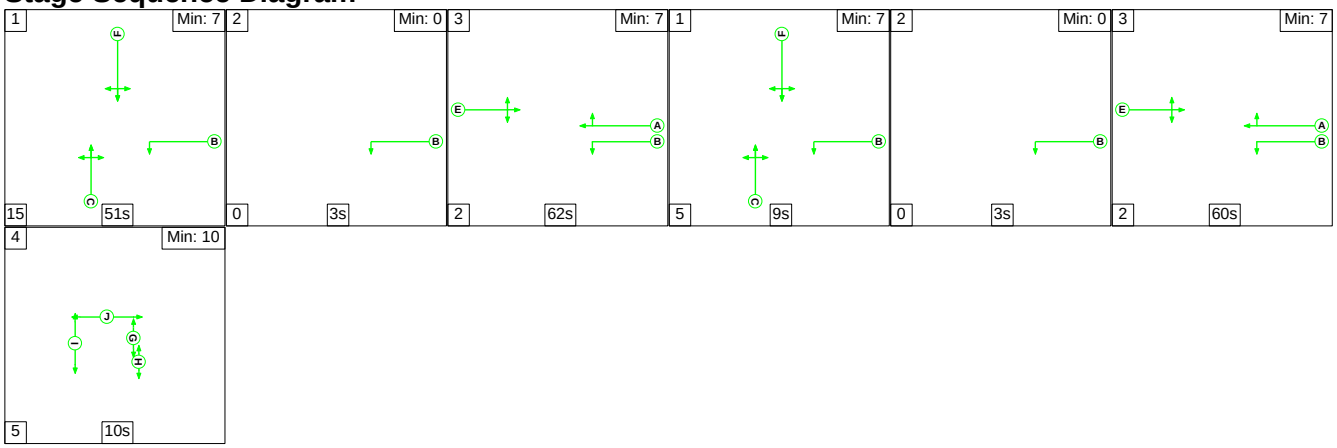
Total Delay Over All Lanes(pcuHr): 31.82

Cycle Time (s): 227

Full Input Data And Results

Scenario 10: '2031 PM Do Something' (FG10: '2031 PM Do Something - Existing Flows+Permitted Dev+New Dev', Plan 1: 'Network Control Plan 1')

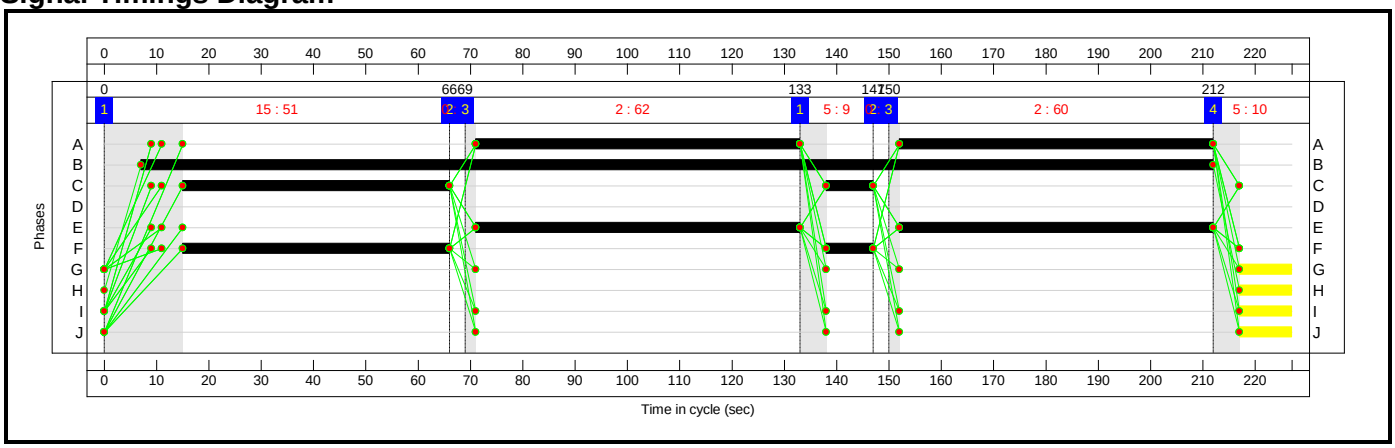
Stage Sequence Diagram



Stage Timings

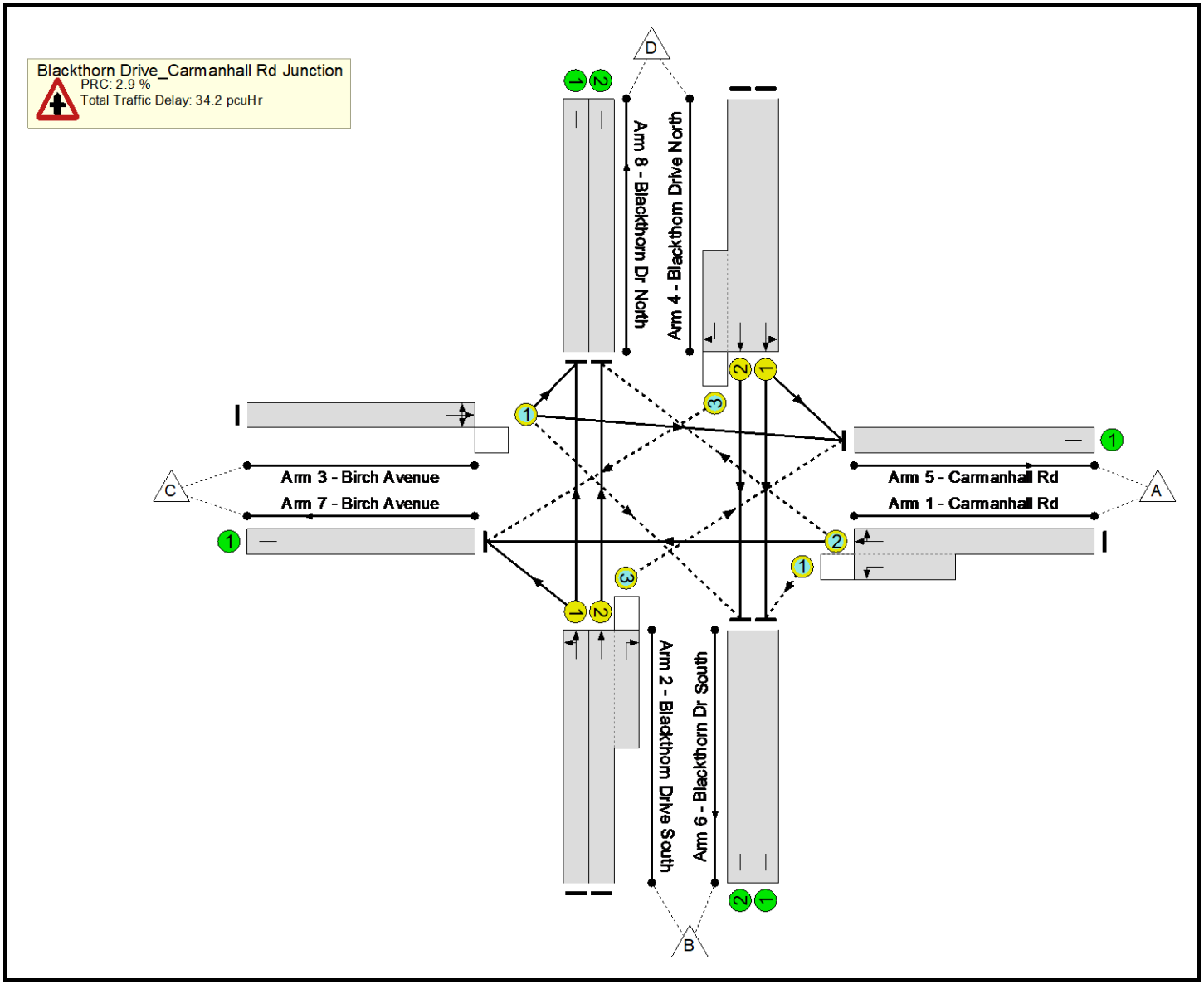
Stage	1	2	3	1	2	3	4
Duration	51	3	62	9	3	60	10
Change Point	0	66	69	133	147	150	212

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Rockbrook	-	-	-	-	-	-	-	-	-	-	-	-	**87.4%**
Blackthorn Drive_Carmanhall Rd Junction	-	-	-	-	-	-	-	-	-	-	-	-	**87.4%**
1/2+1/1	Carmanhall Rd Left Ahead Right	O	N/A	N/A	A B		2:1	122:205		958	1739:1671	1096	87.4%
2/1	Blackthorn Drive South Left Ahead	U	N/A	N/A	C		2	60	-	422	1889	516	81.8%
2/2+2/3	Blackthorn Drive South Right Ahead	U+O	N/A	N/A	C	- D	2	60		214	2055:1827	246	87.1%
3/1	Birch Avenue Ahead Right Left	O	N/A	N/A	E		2	122	-	362	1703	930	38.9%
4/1	Blackthorn Drive North Left Ahead	U	N/A	N/A	F		2	60	-	208	1722	470	44.2%
4/2+4/3	Blackthorn Drive North Ahead Right	U+O	N/A	N/A	F		2	60		172	2055:1827	498	34.5%
5/1	Carmanhall Rd	U	N/A	N/A	-		-	-	-	372	1	Inf	0.0%
6/1	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	601	1	Inf	0.0%
6/2	Blackthorn Dr South	U	N/A	N/A	-		-	-	-	272	1	Inf	0.0%
7/1	Birch Avenue	U	N/A	N/A	-		-	-	-	126	1	Inf	0.0%
8/1	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	584	1	Inf	0.0%
8/2	Blackthorn Dr North	U	N/A	N/A	-		-	-	-	381	1	Inf	0.0%

Full Input Data And Results

Item	Entering (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 Veh (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Rockbrook	**-**	**-**	**1181**	**59**	**54**	**23.9**	**9.3**	**1.0**	**34.2**	**-**	**-**	**-**	**-**
Blackthorn Drive_Carmanhall Rd Junction	**-**	**-**	**1181**	**59**	**54**	**23.9**	**9.3**	**1.0**	**34.2**	**-**	**-**	**-**	**-**
1/2+1/1	958	958	840	59	8	7.4	3.3	0.3	11.0	41.5	41.7	3.3	45.0
2/1	422	422	-	-	-	6.9	2.1	-	9.0	77.0	19.6	2.1	21.8
2/2+2/3	214	214	175	0	32	3.9	2.9	0.4	7.2	120.8	10.5	2.9	13.4
3/1	362	362	140	0	0	2.1	0.3	0.0	2.4	24.3	10.8	0.3	11.1
4/1	208	208	-	-	-	2.0	0.4	-	2.4	41.6	6.1	0.4	6.5
4/2+4/3	172	172	26	0	14	1.5	0.3	0.3	2.1	43.3	3.7	0.3	3.9
5/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	601	601	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	126	126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 2.9

PRC Over All Lanes (%): 2.9

Total Delay for Signalled Lanes (pcuHr): 34.15

Total Delay Over All Lanes(pcuHr): 34.15

Cycle Time (s): 227

PICADY

GUI Version: 5.1 AD
Analysis Program Release: 4.0 (SEPT 2008)

For sales and distribution information, program advice and maintenance, contact:

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E-mail: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run Analysis

Parameter	Values
File Run	I:\..\Carmanhall Rd_Development\118139 Carmanhall Rd_Development T-Junction 2018 10 11.vpi
Date Run	16 October 2018
Time Run	16:22:12
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	Carmanhall Rd West	100
Arm B	Development	100
Arm C	Carmanhall Rd East	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Carmanhall Rd/Development T-Junction
Location	Sandyford, Dublin 18
Date	11 October 2018
Enumerator	J Noone
Job Number	118139
Status	TIA
Client	IRES Residential Properties Ltd
Description	-

Geometric Data

Geometric Parameters

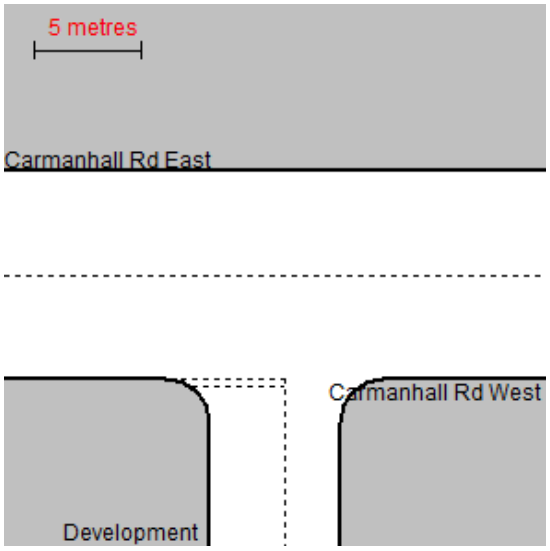
Parameter	Minor Arm B
Major Road Carriageway Width (m)	7.30
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	2.20
Minor Road First Lane Width (m)	3.50
Minor Road Visibility To Right (m)	10
Minor Road Visibility To Left (m)	10
Major Road Right Turn Visibility (m)	200
Major Road Right Turn Blocks Traffic	Yes

Slope and Intercept Values

Stream	Intercept for Stream B-A	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	510.177	0.088	0.222	0.139	0.317
B-C	661.780	0.096	0.242	-	-
C-B	689.785	0.252	0.252	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	07:45-09:15	90	15
Second Modelling Period	16:45-18:15	90	15

ODTAB Turning Counts

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	174.0	448.0
Arm B	29.0	0.0	16.0
Arm C	281.0	104.0	0.0

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	25.0	189.0
Arm B	171.0	0.0	92.0
Arm C	601.0	15.0	0.0

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	204.0	448.0
Arm B	111.0	0.0	60.0
Arm C	281.0	120.0	0.0

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	78.0	189.0
Arm B	194.0	0.0	105.0
Arm C	601.0	43.0	0.0

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	174.0	504.0
Arm B	29.0	0.0	16.0
Arm C	310.0	104.0	0.0

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	204.0	504.0
Arm B	111.0	0.0	60.0
Arm C	310.0	120.0	0.0

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	25.0	207.0
Arm B	171.0	0.0	92.0
Arm C	677.0	15.0	0.0

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	78.0	207.0
Arm B	194.0	0.0	105.0
Arm C	677.0	43.0	0.0

ODTAB Synthesised Flows

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh/min)	Peak Time	Peak Flow (veh/min)	Falling Time	Falling Flow (veh/min)
Arm A	08:00	7.775	08:30	11.663	09:00	7.775
Arm B	08:00	0.563	08:30	0.844	09:00	0.563
Arm C	08:00	4.813	08:30	7.219	09:00	4.813

Heavy Vehicles Percentages

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Queues & Delays

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.56	7.03	0.080	-	0.00	0.09	-	1.2	0.15
	C-AB	1.30	9.53	0.137	-	0.00	0.16	-	2.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.18	-	-	-	-	-	-	-	-
	A-C	5.62	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.67	6.59	0.102	-	0.09	0.11	-	1.6	0.17
	C-AB	1.56	9.15	0.170	-	0.16	0.22	-	3.3	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.61	-	-	-	-	-	-	-	-
	A-C	6.71	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.83	5.96	0.138	-	0.11	0.16	-	2.3	0.19
	C-AB	1.91	8.62	0.221	-	0.22	0.32	-	4.7	0.15
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.19	-	-	-	-	-	-	-	-
	A-C	8.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.83	5.96	0.139	-	0.16	0.16	-	2.4	0.19
	C-AB	1.91	8.62	0.221	-	0.32	0.32	-	4.8	0.15
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.19	-	-	-	-	-	-	-	-
	A-C	8.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.67	6.58	0.102	-	0.16	0.12	-	1.8	0.17
	C-AB	1.56	9.15	0.170	-	0.32	0.22	-	3.4	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.61	-	-	-	-	-	-	-	-
	A-C	6.71	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.56	7.03	0.080	-	0.12	0.09	-	1.4	0.15
	C-AB	1.30	9.53	0.137	-	0.22	0.17	-	2.5	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.18	-	-	-	-	-	-	-	-
	A-C	5.62	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.30	7.77	0.424	-	0.00	0.72	-	10.1	0.22
	C-AB	0.19	10.82	0.017	-	0.00	0.02	-	0.3	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	2.37	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	3.94	7.48	0.527	-	0.72	1.07	-	15.2	0.28
	C-AB	0.22	10.69	0.021	-	0.02	0.02	-	0.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.37	-	-	-	-	-	-	-	-

	A-C	2.83	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	4.83	7.06	0.683	-	1.07	1.99	-	26.9	0.42
	C-AB	0.28	10.51	0.026	-	0.02	0.03	-	0.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.46	-	-	-	-	-	-	-	-
	A-C	3.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	4.83	7.06	0.683	-	1.99	2.07	-	30.5	0.44
	C-AB	0.28	10.51	0.026	-	0.03	0.03	-	0.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.46	-	-	-	-	-	-	-	-
	A-C	3.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	3.94	7.48	0.527	-	2.07	1.16	-	18.7	0.29
	C-AB	0.22	10.69	0.021	-	0.03	0.02	-	0.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.37	-	-	-	-	-	-	-	-
	A-C	2.83	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.30	7.77	0.424	-	1.16	0.76	-	11.9	0.23
	C-AB	0.19	10.82	0.017	-	0.02	0.02	-	0.3	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	2.37	-	-	-	-	-	-	-	-

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	2.15	6.93	0.310	-	0.00	0.44	-	6.2	0.21
	C-AB	1.51	9.43	0.160	-	0.00	0.20	-	3.0	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.56	-	-	-	-	-	-	-	-
	A-C	5.62	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	2.56	6.47	0.396	-	0.44	0.64	-	9.1	0.25
	C-AB	1.80	9.03	0.199	-	0.20	0.27	-	4.0	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.06	-	-	-	-	-	-	-	-
	A-C	6.71	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	3.14	5.81	0.540	-	0.64	1.12	-	15.5	0.37
	C-AB	2.20	8.48	0.260	-	0.27	0.40	-	6.0	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.74	-	-	-	-	-	-	-	-
	A-C	8.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	3.14	5.81	0.540	-	1.12	1.14	-	17.0	0.37
	C-AB	2.20	8.48	0.260	-	0.40	0.40	-	6.1	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.74	-	-	-	-	-	-	-	-
	A-C	8.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	2.56	6.46	0.397	-	1.14	0.67	-	10.7	0.26
	C-AB	1.80	9.03	0.199	-	0.40	0.28	-	4.2	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.06	-	-	-	-	-	-	-	-
	A-C	6.71	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	2.15	6.93	0.310	-	0.67	0.46	-	7.2	0.21
	C-AB	1.51	9.43	0.160	-	0.28	0.20	-	3.1	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.56	-	-	-	-	-	-	-	-

	A-C	5.62	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.75	7.62	0.492	-	0.00	0.94	-	13.0	0.25
	C-AB	0.54	10.65	0.051	-	0.00	0.05	-	0.8	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.98	-	-	-	-	-	-	-	-
	A-C	2.37	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	4.48	7.29	0.614	-	0.94	1.51	-	20.9	0.35
	C-AB	0.64	10.49	0.061	-	0.05	0.07	-	1.0	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.17	-	-	-	-	-	-	-	-
	A-C	2.83	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	5.49	6.83	0.803	-	1.51	3.39	-	43.2	0.63
	C-AB	0.79	10.26	0.077	-	0.07	0.09	-	1.3	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.43	-	-	-	-	-	-	-	-
	A-C	3.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	5.49	6.83	0.803	-	3.39	3.67	-	53.4	0.71
	C-AB	0.79	10.26	0.077	-	0.09	0.09	-	1.4	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.43	-	-	-	-	-	-	-	-
	A-C	3.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	4.48	7.29	0.614	-	3.67	1.68	-	28.3	0.39
	C-AB	0.64	10.49	0.061	-	0.09	0.07	-	1.0	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.17	-	-	-	-	-	-	-	-
	A-C	2.83	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.75	7.62	0.492	-	1.68	1.00	-	16.0	0.26
	C-AB	0.54	10.65	0.051	-	0.07	0.06	-	0.8	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.98	-	-	-	-	-	-	-	-
	A-C	2.37	-	-	-	-	-	-	-	-

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.56	6.83	0.083	-	0.00	0.09	-	1.3	0.16
	C-AB	1.30	9.35	0.140	-	0.00	0.17	-	2.5	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.18	-	-	-	-	-	-	-	-
	A-C	6.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.67	6.34	0.106	-	0.09	0.12	-	1.7	0.18
	C-AB	1.56	8.94	0.174	-	0.17	0.23	-	3.4	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.61	-	-	-	-	-	-	-	-
	A-C	7.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.83	5.65	0.146	-	0.12	0.17	-	2.4	0.21
	C-AB	1.91	8.36	0.228	-	0.23	0.34	-	5.0	0.15
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.19	-	-	-	-	-	-	-	-
	A-C	9.25	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.83	5.65	0.146	-	0.17	0.17	-	2.5	0.21
	C-AB	1.91	8.36	0.228	-	0.34	0.34	-	5.1	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.19	-	-	-	-	-	-	-	-

	A-C	9.25	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.67	6.33	0.106	-	0.17	0.12	-	1.9	0.18
	C-AB	1.56	8.94	0.174	-	0.34	0.23	-	3.5	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.61	-	-	-	-	-	-	-	-
	A-C	7.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.56	6.82	0.083	-	0.12	0.09	-	1.4	0.16
	C-AB	1.30	9.35	0.140	-	0.23	0.17	-	2.6	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.18	-	-	-	-	-	-	-	-
	A-C	6.32	-	-	-	-	-	-	-	-

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	2.15	6.72	0.319	-	0.00	0.46	-	6.5	0.22
	C-AB	1.51	9.26	0.163	-	0.00	0.21	-	3.0	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.56	-	-	-	-	-	-	-	-
	A-C	6.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	2.56	6.21	0.412	-	0.46	0.68	-	9.7	0.27
	C-AB	1.80	8.82	0.204	-	0.21	0.28	-	4.2	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.06	-	-	-	-	-	-	-	-
	A-C	7.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	3.14	5.50	0.571	-	0.68	1.25	-	17.2	0.41
	C-AB	2.20	8.22	0.268	-	0.28	0.42	-	6.3	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.74	-	-	-	-	-	-	-	-
	A-C	9.25	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	3.14	5.50	0.571	-	1.25	1.29	-	19.1	0.42
	C-AB	2.20	8.22	0.268	-	0.42	0.43	-	6.5	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.74	-	-	-	-	-	-	-	-
	A-C	9.25	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	2.56	6.21	0.413	-	1.29	0.72	-	11.6	0.28
	C-AB	1.80	8.82	0.204	-	0.43	0.29	-	4.3	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.06	-	-	-	-	-	-	-	-
	A-C	7.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	2.15	6.72	0.319	-	0.72	0.48	-	7.5	0.22
	C-AB	1.51	9.26	0.163	-	0.29	0.21	-	3.2	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.56	-	-	-	-	-	-	-	-
	A-C	6.32	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.30	7.61	0.434	-	0.00	0.75	-	10.4	0.23
	C-AB	0.19	10.76	0.017	-	0.00	0.02	-	0.3	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	2.60	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	3.94	7.28	0.541	-	0.75	1.13	-	16.0	0.29
	C-AB	0.22	10.62	0.021	-	0.02	0.02	-	0.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.37	-	-	-	-	-	-	-	-

	A-C	3.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	4.83	6.81	0.709	-	1.13	2.21	-	29.5	0.47
	C-AB	0.28	10.42	0.026	-	0.02	0.03	-	0.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.46	-	-	-	-	-	-	-	-
	A-C	3.80	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	4.83	6.81	0.709	-	2.21	2.31	-	34.0	0.50
	C-AB	0.28	10.42	0.026	-	0.03	0.03	-	0.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.46	-	-	-	-	-	-	-	-
	A-C	3.80	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	3.94	7.28	0.541	-	2.31	1.23	-	20.0	0.31
	C-AB	0.22	10.62	0.021	-	0.03	0.02	-	0.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.37	-	-	-	-	-	-	-	-
	A-C	3.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.30	7.61	0.434	-	1.23	0.79	-	12.4	0.24
	C-AB	0.19	10.76	0.017	-	0.02	0.02	-	0.3	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	2.60	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.75	7.46	0.503	-	0.00	0.98	-	13.5	0.26
	C-AB	0.54	10.59	0.051	-	0.00	0.06	-	0.8	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.98	-	-	-	-	-	-	-	-
	A-C	2.60	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	4.48	7.09	0.632	-	0.98	1.61	-	22.3	0.37
	C-AB	0.64	10.42	0.062	-	0.06	0.07	-	1.0	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.17	-	-	-	-	-	-	-	-
	A-C	3.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	5.49	6.58	0.834	-	1.61	3.93	-	48.8	0.72
	C-AB	0.79	10.18	0.078	-	0.07	0.09	-	1.4	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.43	-	-	-	-	-	-	-	-
	A-C	3.80	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	5.49	6.58	0.834	-	3.93	4.35	-	62.6	0.85
	C-AB	0.79	10.18	0.078	-	0.09	0.09	-	1.4	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.43	-	-	-	-	-	-	-	-
	A-C	3.80	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	4.48	7.09	0.632	-	4.35	1.83	-	31.6	0.43
	C-AB	0.64	10.42	0.062	-	0.09	0.07	-	1.1	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.17	-	-	-	-	-	-	-	-
	A-C	3.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.75	7.46	0.503	-	1.83	1.05	-	16.8	0.28
	C-AB	0.54	10.59	0.051	-	0.07	0.06	-	0.8	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.98	-	-	-	-	-	-	-	-

	A-C	2.60	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	61.9	41.3	10.7	0.2	10.7	0.2
C-AB	143.1	95.4	21.2	0.1	21.2	0.1
C-A	-	-	-	-	-	-
A-B	239.5	159.7	-	-	-	-
A-C	616.6	411.1	-	-	-	-
All	**1448.0**	**965.3**	**31.9**	**0.0**	**31.9**	**0.0**

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	362.0	241.3	113.4	0.3	113.4	0.3
C-AB	20.6	13.8	2.0	0.1	2.0	0.1
C-A	-	-	-	-	-	-
A-B	34.4	22.9	-	-	-	-
A-C	260.1	173.4	-	-	-	-
All	**1504.4**	**1003.0**	**115.4**	**0.1**	**115.4**	**0.1**

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	235.4	156.9	65.8	0.3	65.8	0.3
C-AB	165.2	110.1	26.2	0.2	26.2	0.2
C-A	-	-	-	-	-	-
A-B	280.8	187.2	-	-	-	-
A-C	616.6	411.1	-	-	-	-
All	**1684.7**	**1123.2**	**92.0**	**0.1**	**92.0**	**0.1**

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	411.6	274.4	174.8	0.4	174.9	0.4
C-AB	59.2	39.5	6.4	0.1	6.4	0.1
C-A	-	-	-	-	-	-
A-B	107.4	71.6	-	-	-	-
A-C	260.1	173.4	-	-	-	-
All	**1665.5**	**1110.3**	**181.2**	**0.1**	**181.3**	**0.1**

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	61.9	41.3	11.3	0.2	11.3	0.2
C-AB	143.1	95.4	22.2	0.2	22.2	0.2
C-A	-	-	-	-	-	-
A-B	239.5	159.7	-	-	-	-
A-C	693.7	462.5	-	-	-	-
All	**1565.0**	**1043.3**	**33.5**	**0.0**	**33.5**	**0.0**

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	235.4	156.9	71.6	0.3	71.6	0.3
C-AB	165.2	110.1	27.6	0.2	27.6	0.2
C-A	-	-	-	-	-	-
A-B	280.8	187.2	-	-	-	-
A-C	693.7	462.5	-	-	-	-
All	**1801.7**	**1201.2**	**99.2**	**0.1**	**99.2**	**0.1**

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	362.0	241.3	122.3	0.3	122.4	0.3
C-AB	20.6	13.8	2.0	0.1	2.0	0.1
C-A	-	-	-	-	-	-
A-B	34.4	22.9	-	-	-	-
A-C	284.9	189.9	-	-	-	-
All	**1633.8**	**1089.2**	**124.4**	**0.1**	**124.4**	**0.1**

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	411.6	274.4	195.6	0.5	195.7	0.5
C-AB	59.2	39.5	6.5	0.1	6.5	0.1
C-A	-	-	-	-	-	-
A-B	107.4	71.6	-	-	-	-
A-C	284.9	189.9	-	-	-	-
All	**1794.9**	**1196.6**	**202.1**	**0.1**	**202.2**	**0.1**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

PICADY

GUI Version: 5.1 AD
Analysis Program Release: 4.0 (SEPT 2008)

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Run Analysis

Parameter	Values
File Run	I:\..\Carmanhall Rd_Corrig Rd\118139 Carmanhall Rd_Corrig Rd T-Junction 2018 10 11.vpi
Date Run	16 October 2018
Time Run	16:06:09
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	Carmanhall Rd East	100
Arm B	Corrig Rd	100
Arm C	Carmanhall Rd West	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Carmanhall Rd/Corrig Rd T-Junction
Location	Sandyford, Dublin 18
Date	11 October 2018
Enumerator	J Noone
Job Number	118139
Status	TIA
Client	IRES Residential Properties Ltd
Description	-

Geometric Data

Geometric Parameters

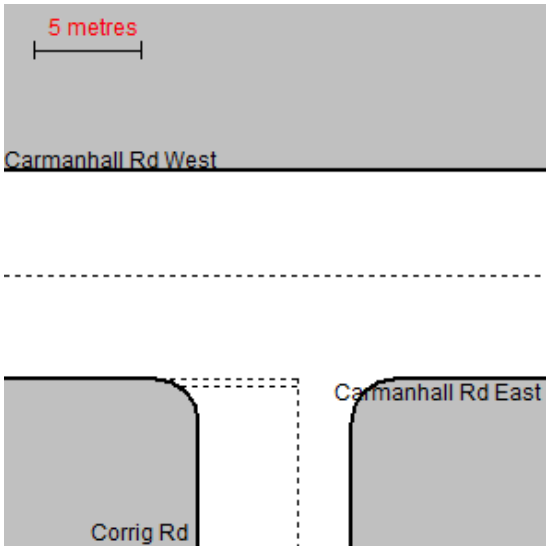
Parameter	Minor Arm B
Major Road Carriageway Width (m)	7.30
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	2.20
Minor Road First Lane Width (m)	4.50
Minor Road Visibility To Right (m)	40
Minor Road Visibility To Left (m)	40
Major Road Right Turn Visibility (m)	160
Major Road Right Turn Blocks Traffic	Yes

Slope and Intercept Values

Stream	Intercept for Stream B-A	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	586.875	0.101	0.255	0.160	0.364
B-C	746.600	0.108	0.273	-	-
C-B	666.621	0.244	0.244	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	07:45-09:15	90	15
Second Modelling Period	16:45-18:15	90	15

ODTAB Turning Counts

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	34.0	139.0
Arm B	165.0	0.0	73.0
Arm C	319.0	83.0	0.0

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	25.0	341.0
Arm B	42.0	0.0	197.0
Arm C	95.0	34.0	0.0

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	39.0	259.0
Arm B	177.0	0.0	80.0
Arm C	373.0	96.0	0.0

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	27.0	379.0
Arm B	47.0	0.0	217.0
Arm C	202.0	39.0	0.0

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	39.0	275.0
Arm B	177.0	0.0	80.0
Arm C	417.0	96.0	0.0

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	27.0	408.0
Arm B	47.0	0.0	217.0
Arm C	214.0	39.0	0.0

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	44.0	278.0
Arm B	201.0	0.0	90.0
Arm C	418.0	107.0	0.0

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	44.0	294.0
Arm B	201.0	0.0	90.0
Arm C	462.0	107.0	0.0

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	30.0	427.0
Arm B	53.0	0.0	244.0
Arm C	215.0	44.0	0.0

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	30.0	456.0
Arm B	53.0	0.0	244.0
Arm C	228.0	44.0	0.0

ODTAB Synthesised Flows

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh/min)	Peak Time	Peak Flow (veh/min)	Falling Time	Falling Flow (veh/min)
Arm A	08:00	2.162	08:30	3.244	09:00	2.162
Arm B	08:00	2.975	08:30	4.462	09:00	2.975
Arm C	08:00	5.025	08:30	7.538	09:00	5.025

Heavy Vehicles Percentages

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Queues & Delays

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	2.99	9.13	0.327	-	0.00	0.48	-	6.8	0.16
	C-AB	1.04	10.58	0.098	-	0.00	0.11	-	1.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.43	-	-	-	-	-	-	-	-
	A-C	1.74	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	3.57	8.86	0.402	-	0.48	0.66	-	9.5	0.19
	C-AB	1.24	10.48	0.119	-	0.11	0.14	-	2.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.51	-	-	-	-	-	-	-	-
	A-C	2.08	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	4.37	8.49	0.515	-	0.66	1.03	-	14.6	0.24
	C-AB	1.52	10.34	0.147	-	0.14	0.19	-	2.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.62	-	-	-	-	-	-	-	-
	A-C	2.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	4.37	8.49	0.515	-	1.03	1.04	-	15.6	0.24
	C-AB	1.52	10.34	0.147	-	0.19	0.19	-	2.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.62	-	-	-	-	-	-	-	-
	A-C	2.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	3.57	8.86	0.403	-	1.04	0.69	-	10.8	0.19
	C-AB	1.24	10.48	0.119	-	0.19	0.14	-	2.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.51	-	-	-	-	-	-	-	-
	A-C	2.08	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	2.99	9.13	0.327	-	0.69	0.49	-	7.7	0.16
	C-AB	1.04	10.58	0.098	-	0.14	0.11	-	1.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.43	-	-	-	-	-	-	-	-
	A-C	1.74	-	-	-	-	-	-	-	-

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.00	10.59	0.283	-	0.00	0.39	-	5.6	0.13
	C-AB	0.43	9.99	0.043	-	0.00	0.04	-	0.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	4.28	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	3.58	10.33	0.347	-	0.39	0.52	-	7.6	0.15
	C-AB	0.51	9.77	0.052	-	0.04	0.06	-	0.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.37	-	-	-	-	-	-	-	-
	A-C	5.11	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	4.39	9.98	0.439	-	0.52	0.77	-	11.1	0.18
	C-AB	0.62	9.47	0.066	-	0.06	0.07	-	1.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.46	-	-	-	-	-	-	-	-
	A-C	6.26	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	4.39	9.98	0.439	-	0.77	0.78	-	11.6	0.18
	C-AB	0.62	9.47	0.066	-	0.07	0.07	-	1.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.46	-	-	-	-	-	-	-	-

	A-C	6.26	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	3.58	10.33	0.347	-	0.78	0.54	-	8.4	0.15
	C-AB	0.51	9.77	0.052	-	0.07	0.06	-	0.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.37	-	-	-	-	-	-	-	-
	A-C	5.11	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.00	10.59	0.283	-	0.54	0.40	-	6.2	0.13
	C-AB	0.43	9.99	0.043	-	0.06	0.05	-	0.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	4.28	-	-	-	-	-	-	-	-

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	3.22	8.60	0.375	-	0.00	0.59	-	8.3	0.18
	C-AB	1.20	10.20	0.118	-	0.00	0.14	-	2.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.49	-	-	-	-	-	-	-	-
	A-C	3.25	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	3.85	8.22	0.469	-	0.59	0.86	-	12.3	0.23
	C-AB	1.44	10.02	0.144	-	0.14	0.18	-	2.7	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.58	-	-	-	-	-	-	-	-
	A-C	3.88	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	4.72	7.69	0.614	-	0.86	1.51	-	20.9	0.33
	C-AB	1.76	9.78	0.180	-	0.18	0.24	-	3.7	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.72	-	-	-	-	-	-	-	-
	A-C	4.75	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	4.72	7.69	0.614	-	1.51	1.54	-	22.9	0.34
	C-AB	1.76	9.78	0.180	-	0.24	0.25	-	3.7	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.72	-	-	-	-	-	-	-	-
	A-C	4.75	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	3.85	8.21	0.469	-	1.54	0.91	-	14.4	0.23
	C-AB	1.44	10.02	0.144	-	0.25	0.18	-	2.7	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.58	-	-	-	-	-	-	-	-
	A-C	3.88	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	3.22	8.59	0.375	-	0.91	0.61	-	9.6	0.19
	C-AB	1.20	10.20	0.118	-	0.18	0.14	-	2.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.49	-	-	-	-	-	-	-	-
	A-C	3.25	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.31	10.38	0.319	-	0.00	0.46	-	6.6	0.14
	C-AB	0.49	9.87	0.050	-	0.00	0.05	-	0.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.34	-	-	-	-	-	-	-	-
	A-C	4.76	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	3.96	10.08	0.392	-	0.46	0.63	-	9.2	0.16
	C-AB	0.58	9.63	0.061	-	0.05	0.07	-	1.0	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.40	-	-	-	-	-	-	-	-

	A-C	5.68	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	4.84	9.67	0.501	-	0.63	0.98	-	14.0	0.21
	C-AB	0.72	9.29	0.077	-	0.07	0.09	-	1.3	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.50	-	-	-	-	-	-	-	-
	A-C	6.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	4.84	9.67	0.501	-	0.98	0.99	-	14.8	0.21
	C-AB	0.72	9.29	0.077	-	0.09	0.09	-	1.3	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.50	-	-	-	-	-	-	-	-
	A-C	6.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	3.96	10.08	0.392	-	0.99	0.66	-	10.3	0.16
	C-AB	0.58	9.63	0.061	-	0.09	0.07	-	1.0	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.40	-	-	-	-	-	-	-	-
	A-C	5.68	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.31	10.37	0.319	-	0.66	0.48	-	7.4	0.14
	C-AB	0.49	9.87	0.050	-	0.07	0.05	-	0.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.34	-	-	-	-	-	-	-	-
	A-C	4.76	-	-	-	-	-	-	-	-

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	3.22	8.47	0.381	-	0.00	0.60	-	8.5	0.19
	C-AB	1.20	10.15	0.119	-	0.00	0.14	-	2.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.49	-	-	-	-	-	-	-	-
	A-C	3.45	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	3.85	8.06	0.478	-	0.60	0.89	-	12.7	0.24
	C-AB	1.44	9.96	0.144	-	0.14	0.18	-	2.7	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.58	-	-	-	-	-	-	-	-
	A-C	4.12	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	4.72	7.49	0.629	-	0.89	1.60	-	22.1	0.35
	C-AB	1.76	9.71	0.181	-	0.18	0.25	-	3.7	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.72	-	-	-	-	-	-	-	-
	A-C	5.05	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	4.72	7.49	0.630	-	1.60	1.65	-	24.5	0.36
	C-AB	1.76	9.71	0.181	-	0.25	0.25	-	3.8	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.72	-	-	-	-	-	-	-	-
	A-C	5.05	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	3.85	8.06	0.478	-	1.65	0.94	-	15.1	0.24
	C-AB	1.44	9.96	0.144	-	0.25	0.19	-	2.8	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.58	-	-	-	-	-	-	-	-
	A-C	4.12	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	3.22	8.46	0.381	-	0.94	0.63	-	9.8	0.19
	C-AB	1.20	10.15	0.119	-	0.19	0.14	-	2.2	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.49	-	-	-	-	-	-	-	-

	A-C	3.45	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.31	10.27	0.323	-	0.00	0.47	-	6.7	0.14
	C-AB	0.49	9.78	0.050	-	0.00	0.05	-	0.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.34	-	-	-	-	-	-	-	-
	A-C	5.12	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	3.96	9.95	0.397	-	0.47	0.65	-	9.4	0.17
	C-AB	0.58	9.52	0.061	-	0.05	0.07	-	1.0	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.40	-	-	-	-	-	-	-	-
	A-C	6.11	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	4.84	9.51	0.509	-	0.65	1.01	-	14.4	0.21
	C-AB	0.72	9.17	0.078	-	0.07	0.09	-	1.3	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.50	-	-	-	-	-	-	-	-
	A-C	7.49	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	4.84	9.51	0.509	-	1.01	1.02	-	15.3	0.21
	C-AB	0.72	9.17	0.078	-	0.09	0.09	-	1.3	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.50	-	-	-	-	-	-	-	-
	A-C	7.49	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	3.96	9.95	0.397	-	1.02	0.67	-	10.5	0.17
	C-AB	0.58	9.52	0.061	-	0.09	0.07	-	1.0	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.40	-	-	-	-	-	-	-	-
	A-C	6.11	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.31	10.27	0.323	-	0.67	0.48	-	7.5	0.14
	C-AB	0.49	9.78	0.050	-	0.07	0.05	-	0.8	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.34	-	-	-	-	-	-	-	-
	A-C	5.12	-	-	-	-	-	-	-	-

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	3.65	8.40	0.435	-	0.00	0.75	-	10.5	0.21
	C-AB	1.34	10.13	0.133	-	0.00	0.16	-	2.4	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	3.49	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	4.36	7.98	0.547	-	0.75	1.16	-	16.4	0.27
	C-AB	1.60	9.93	0.161	-	0.16	0.21	-	3.1	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.66	-	-	-	-	-	-	-	-
	A-C	4.17	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	5.34	7.39	0.723	-	1.16	2.36	-	31.4	0.45
	C-AB	1.96	9.67	0.203	-	0.21	0.29	-	4.4	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.81	-	-	-	-	-	-	-	-
	A-C	5.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	5.34	7.39	0.723	-	2.36	2.47	-	36.4	0.48
	C-AB	1.96	9.67	0.203	-	0.29	0.29	-	4.4	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.81	-	-	-	-	-	-	-	-

	A-C	5.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	4.36	7.97	0.547	-	2.47	1.25	-	20.3	0.29
	C-AB	1.60	9.93	0.161	-	0.29	0.21	-	3.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.66	-	-	-	-	-	-	-	-
	A-C	4.17	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	3.65	8.39	0.435	-	1.25	0.79	-	12.5	0.21
	C-AB	1.34	10.13	0.133	-	0.21	0.16	-	2.5	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	3.49	-	-	-	-	-	-	-	-

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	3.65	8.27	0.442	-	0.00	0.77	-	10.8	0.21
	C-AB	1.34	10.08	0.133	-	0.00	0.16	-	2.4	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	3.69	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	4.36	7.82	0.558	-	0.77	1.21	-	17.0	0.28
	C-AB	1.60	9.88	0.162	-	0.16	0.21	-	3.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.66	-	-	-	-	-	-	-	-
	A-C	4.40	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	5.34	7.19	0.742	-	1.21	2.57	-	33.8	0.49
	C-AB	1.96	9.60	0.205	-	0.21	0.30	-	4.5	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.81	-	-	-	-	-	-	-	-
	A-C	5.40	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	5.34	7.19	0.743	-	2.57	2.71	-	39.8	0.53
	C-AB	1.96	9.60	0.205	-	0.30	0.30	-	4.6	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.81	-	-	-	-	-	-	-	-
	A-C	5.40	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	4.36	7.82	0.558	-	2.71	1.31	-	21.5	0.30
	C-AB	1.60	9.88	0.162	-	0.30	0.22	-	3.3	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.66	-	-	-	-	-	-	-	-
	A-C	4.40	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	3.65	8.26	0.442	-	1.31	0.81	-	12.9	0.22
	C-AB	1.34	10.08	0.133	-	0.22	0.17	-	2.5	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	3.69	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.73	10.19	0.366	-	0.00	0.57	-	8.1	0.15
	C-AB	0.55	9.71	0.057	-	0.00	0.06	-	0.9	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.38	-	-	-	-	-	-	-	-
	A-C	5.36	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	4.45	9.86	0.451	-	0.57	0.81	-	11.6	0.18
	C-AB	0.66	9.44	0.070	-	0.06	0.08	-	1.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.45	-	-	-	-	-	-	-	-

	A-C	6.40	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	5.45	9.40	0.580	-	0.81	1.33	-	18.7	0.25
	C-AB	0.81	9.07	0.089	-	0.08	0.10	-	1.5	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	7.84	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	5.45	9.40	0.580	-	1.33	1.35	-	20.2	0.25
	C-AB	0.81	9.07	0.089	-	0.10	0.10	-	1.5	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	7.84	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	4.45	9.86	0.451	-	1.35	0.84	-	13.3	0.19
	C-AB	0.66	9.44	0.070	-	0.10	0.08	-	1.2	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.45	-	-	-	-	-	-	-	-
	A-C	6.40	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.73	10.19	0.366	-	0.84	0.59	-	9.1	0.16
	C-AB	0.55	9.71	0.057	-	0.08	0.06	-	0.9	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.38	-	-	-	-	-	-	-	-
	A-C	5.36	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	3.73	10.08	0.370	-	0.00	0.58	-	8.2	0.16
	C-AB	0.55	9.62	0.057	-	0.00	0.06	-	0.9	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.38	-	-	-	-	-	-	-	-
	A-C	5.72	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	4.45	9.73	0.457	-	0.58	0.82	-	11.9	0.19
	C-AB	0.66	9.34	0.071	-	0.06	0.08	-	1.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.45	-	-	-	-	-	-	-	-
	A-C	6.83	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	5.45	9.24	0.590	-	0.82	1.38	-	19.4	0.26
	C-AB	0.81	8.94	0.090	-	0.08	0.10	-	1.5	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	8.37	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	5.45	9.24	0.590	-	1.38	1.41	-	21.0	0.26
	C-AB	0.81	8.94	0.090	-	0.10	0.10	-	1.6	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.55	-	-	-	-	-	-	-	-
	A-C	8.37	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	4.45	9.73	0.457	-	1.41	0.86	-	13.6	0.19
	C-AB	0.66	9.34	0.071	-	0.10	0.08	-	1.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.45	-	-	-	-	-	-	-	-
	A-C	6.83	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	3.73	10.08	0.370	-	0.86	0.60	-	9.3	0.16
	C-AB	0.55	9.62	0.057	-	0.08	0.06	-	0.9	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.38	-	-	-	-	-	-	-	-

	A-C	5.72	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	327.6	218.4	65.0	0.2	65.0	0.2
C-AB	114.2	76.2	13.2	0.1	13.2	0.1
C-A	-	-	-	-	-	-
A-B	46.8	31.2	-	-	-	-
A-C	191.3	127.5	-	-	-	-
All	**1119.0**	**746.0**	**78.2**	**0.1**	**78.2**	**0.1**

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	329.0	219.3	50.4	0.2	50.4	0.2
C-AB	46.8	31.2	5.1	0.1	5.1	0.1
C-A	-	-	-	-	-	-
A-B	34.4	22.9	-	-	-	-
A-C	469.4	312.9	-	-	-	-
All	**1010.3**	**673.5**	**55.5**	**0.1**	**55.6**	**0.1**

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	353.7	235.8	88.5	0.3	88.5	0.3
C-AB	132.1	88.1	17.0	0.1	17.0	0.1
C-A	-	-	-	-	-	-
A-B	53.7	35.8	-	-	-	-
A-C	356.5	237.7	-	-	-	-
All	**1409.5**	**939.6**	**105.5**	**0.1**	**105.5**	**0.1**

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	363.4	242.3	62.2	0.2	62.2	0.2
C-AB	53.7	35.8	6.1	0.1	6.1	0.1
C-A	-	-	-	-	-	-
A-B	37.2	24.8	-	-	-	-
A-C	521.7	347.8	-	-	-	-
All	**1253.9**	**835.9**	**68.3**	**0.1**	**68.4**	**0.1**

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	353.7	235.8	92.6	0.3	92.7	0.3
C-AB	132.1	88.1	17.3	0.1	17.3	0.1
C-A	-	-	-	-	-	-
A-B	53.7	35.8	-	-	-	-
A-C	378.5	252.3	-	-	-	-
All	**1492.0**	**994.7**	**110.0**	**0.1**	**110.0**	**0.1**

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	363.4	242.3	63.8	0.2	63.8	0.2
C-AB	53.7	35.8	6.2	0.1	6.2	0.1
C-A	-	-	-	-	-	-
A-B	37.2	24.8	-	-	-	-
A-C	561.6	374.4	-	-	-	-
All	**1310.4**	**873.6**	**70.0**	**0.1**	**70.0**	**0.1**

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	400.5	267.0	127.5	0.3	127.6	0.3
C-AB	147.3	98.2	20.1	0.1	20.1	0.1
C-A	-	-	-	-	-	-
A-B	60.6	40.4	-	-	-	-
A-C	382.6	255.1	-	-	-	-
All	**1566.4**	**1044.2**	**147.6**	**0.1**	**147.6**	**0.1**

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	400.5	267.0	135.8	0.3	135.8	0.3
C-AB	147.3	98.2	20.5	0.1	20.5	0.1
C-A	-	-	-	-	-	-
A-B	60.6	40.4	-	-	-	-
A-C	404.7	269.8	-	-	-	-
All	**1649.0**	**1099.3**	**156.3**	**0.1**	**156.3**	**0.1**

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	408.8	272.5	81.0	0.2	81.0	0.2
C-AB	60.6	40.4	7.2	0.1	7.2	0.1
C-A	-	-	-	-	-	-
A-B	41.3	27.5	-	-	-	-
A-C	587.7	391.8	-	-	-	-
All	**1394.3**	**929.5**	**88.2**	**0.1**	**88.2**	**0.1**

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	408.8	272.5	83.4	0.2	83.4	0.2
C-AB	60.6	40.4	7.3	0.1	7.3	0.1
C-A	-	-	-	-	-	-
A-B	41.3	27.5	-	-	-	-
A-C	627.7	418.4	-	-	-	-
All	**1452.1**	**968.1**	**90.7**	**0.1**	**90.7**	**0.1**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

PICADY

GUI Version: 5.1 AD
Analysis Program Release: 4.0 (SEPT 2008)

For sales and distribution information, program advice and maintenance, contact:

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Run Analysis

Parameter	Values
File Run	I:\..\Blackthorn Rd_Carmanhall Rd\118139 Blackthorn Rd_Carmanhall Rd T-Junction 2018 10 11.vpi
Date Run	16 October 2018
Time Run	16:03:24
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	Blackthorn Rd South	100
Arm B	Carmanhall Rd	100
Arm C	Blackthorn Rd North	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Blackthorn Rd/Carmanhall Rd T-Junction
Location	Sandyford, Dublin 18
Date	11 October 2018
Enumerator	J Noone
Job Number	118139
Status	TIA
Client	IRES Residential Properties Ltd
Description	-

Geometric Data

Geometric Parameters

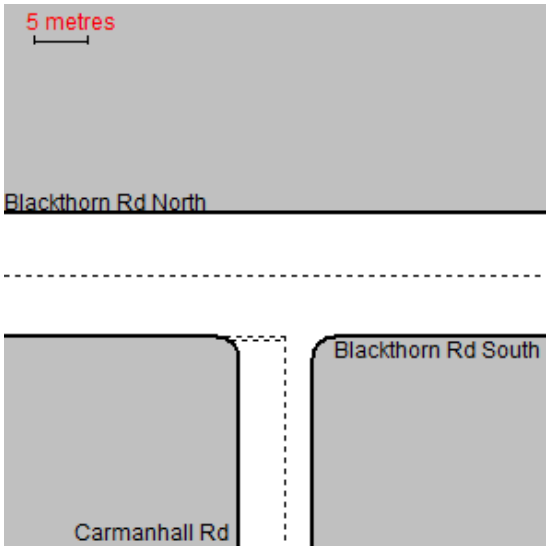
Parameter	Minor Arm B
Major Road Carriageway Width (m)	9.00
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	2.20
Minor Road First Lane Width (m)	4.10
Minor Road Visibility To Right (m)	55
Minor Road Visibility To Left (m)	40
Major Road Right Turn Visibility (m)	160
Major Road Right Turn Blocks Traffic	Yes

Slope and Intercept Values

Stream	Intercept for Stream B-A	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	574.682	0.091	0.230	0.145	0.329
B-C	731.087	0.097	0.246	-	-
C-B	666.621	0.225	0.225	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	07:45-09:15	90	15
Second Modelling Period	16:45-18:15	90	15

ODTAB Turning Counts

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	395.0	684.0
Arm B	12.0	0.0	171.0
Arm C	83.0	95.0	0.0

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	190.0	952.0
Arm B	5.0	0.0	352.0
Arm C	41.0	37.0	0.0

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	527.0	835.0
Arm B	29.0	0.0	240.0
Arm C	89.0	112.0	0.0

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	253.0	1274.0
Arm B	22.0	0.0	511.0
Arm C	44.0	51.0	0.0

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	544.0	847.0
Arm B	29.0	0.0	284.0
Arm C	89.0	112.0	0.0

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	281.0	1283.0
Arm B	22.0	0.0	524.0
Arm C	44.0	51.0	0.0

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	583.0	931.0
Arm B	31.0	0.0	264.0
Arm C	100.0	125.0	0.0

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	599.0	943.0
Arm B	31.0	0.0	308.0
Arm C	100.0	125.0	0.0

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	279.0	1407.0
Arm B	23.0	0.0	561.0
Arm C	50.0	56.0	0.0

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	308.0	1416.0
Arm B	23.0	0.0	573.0
Arm C	50.0	56.0	0.0

ODTAB Synthesised Flows

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh/min)	Peak Time	Peak Flow (veh/min)	Falling Time	Falling Flow (veh/min)
Arm A	08:00	13.488	08:30	20.231	09:00	13.488
Arm B	08:00	2.287	08:30	3.431	09:00	2.287
Arm C	08:00	2.225	08:30	3.337	09:00	2.225

Heavy Vehicles Percentages

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Queues & Delays

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	2.30	9.31	0.247	-	0.00	0.32	-	4.6	0.14
	C-AB	1.19	8.07	0.148	-	0.00	0.17	-	2.5	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.96	-	-	-	-	-	-	-	-
	A-C	8.58	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	2.74	8.79	0.312	-	0.32	0.45	-	6.5	0.16
	C-AB	1.42	7.48	0.190	-	0.17	0.23	-	3.5	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.92	-	-	-	-	-	-	-	-
	A-C	10.25	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	3.36	8.07	0.416	-	0.45	0.70	-	10.0	0.21
	C-AB	1.74	6.66	0.262	-	0.23	0.35	-	5.2	0.20
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.25	-	-	-	-	-	-	-	-
	A-C	12.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	3.36	8.07	0.416	-	0.70	0.70	-	10.5	0.21
	C-AB	1.74	6.66	0.262	-	0.35	0.35	-	5.3	0.20
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.25	-	-	-	-	-	-	-	-
	A-C	12.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	2.74	8.79	0.312	-	0.70	0.46	-	7.2	0.17
	C-AB	1.42	7.48	0.190	-	0.35	0.24	-	3.6	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.92	-	-	-	-	-	-	-	-
	A-C	10.25	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	2.30	9.31	0.247	-	0.46	0.33	-	5.1	0.14
	C-AB	1.19	8.07	0.148	-	0.24	0.18	-	2.6	0.15
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.96	-	-	-	-	-	-	-	-
	A-C	8.58	-	-	-	-	-	-	-	-

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	4.48	8.96	0.500	-	0.00	0.97	-	13.5	0.22
	C-AB	0.46	7.89	0.059	-	0.00	0.06	-	0.9	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.38	-	-	-	-	-	-	-	-
	A-C	11.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	5.35	8.34	0.641	-	0.97	1.69	-	23.4	0.32
	C-AB	0.55	7.27	0.076	-	0.06	0.08	-	1.2	0.15
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.85	-	-	-	-	-	-	-	-
	A-C	14.26	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	6.55	7.49	**0.875**	-	1.69	4.99	-	59.8	0.75
	C-AB	0.68	6.40	0.106	-	0.08	0.12	-	1.8	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.49	-	-	-	-	-	-	-	-
	A-C	17.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	6.55	7.49	**0.875**	-	4.99	5.69	-	80.9	0.93
	C-AB	0.68	6.40	0.106	-	0.12	0.12	-	1.8	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.49	-	-	-	-	-	-	-	-

	A-C	17.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	5.35	8.34	0.641	-	5.69	1.90	-	34.4	0.39
	C-AB	0.55	7.27	0.076	-	0.12	0.08	-	1.3	0.15
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.85	-	-	-	-	-	-	-	-
	A-C	14.26	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	4.48	8.96	0.500	-	1.90	1.03	-	16.5	0.23
	C-AB	0.46	7.89	0.059	-	0.08	0.06	-	0.9	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	2.38	-	-	-	-	-	-	-	-
	A-C	11.95	-	-	-	-	-	-	-	-

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	3.38	8.50	0.397	-	0.00	0.65	-	9.1	0.19
	C-AB	1.41	7.27	0.193	-	0.00	0.24	-	3.5	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	6.61	-	-	-	-	-	-	-	-
	A-C	10.48	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	4.03	7.83	0.515	-	0.65	1.02	-	14.5	0.26
	C-AB	1.68	6.53	0.257	-	0.24	0.34	-	5.1	0.21
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.90	-	-	-	-	-	-	-	-
	A-C	12.51	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	4.94	6.91	0.715	-	1.02	2.27	-	30.0	0.47
	C-AB	2.06	5.50	0.374	-	0.34	0.58	-	8.7	0.29
	C-A	-	-	-	-	-	-	-	-	-
	A-B	9.67	-	-	-	-	-	-	-	-
	A-C	15.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	4.94	6.90	0.715	-	2.27	2.37	-	35.0	0.50
	C-AB	2.06	5.50	0.374	-	0.58	0.59	-	9.0	0.29
	C-A	-	-	-	-	-	-	-	-	-
	A-B	9.67	-	-	-	-	-	-	-	-
	A-C	15.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	4.03	7.83	0.515	-	2.37	1.10	-	17.9	0.28
	C-AB	1.68	6.53	0.257	-	0.59	0.35	-	5.4	0.21
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.90	-	-	-	-	-	-	-	-
	A-C	12.51	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	3.38	8.49	0.397	-	1.10	0.67	-	10.6	0.20
	C-AB	1.41	7.27	0.193	-	0.35	0.24	-	3.7	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	6.61	-	-	-	-	-	-	-	-
	A-C	10.48	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
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Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	6.69	7.78	**0.860**	-	0.00	4.57	-	53.1	0.62
	C-AB	0.64	6.81	0.094	-	0.00	0.10	-	1.5	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.17	-	-	-	-	-	-	-	-
	A-C	15.99	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	7.99	6.95	**1.150**	-	4.57	22.65	-	210.6	2.45
	C-AB	0.76	5.97	0.128	-	0.10	0.14	-	2.2	0.19
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.79	-	-	-	-	-	-	-	-

	A-C	19.09	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	9.78	5.79	**1.690**	-	22.65	82.65	-	790.1	9.40
	C-AB	0.94	4.82	0.194	-	0.14	0.24	-	3.5	0.26
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.64	-	-	-	-	-	-	-	-
	A-C	23.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	9.78	5.79	**1.690**	-	82.65	142.57	-	1689.2	17.58
	C-AB	0.94	4.82	0.194	-	0.24	0.24	-	3.6	0.26
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.64	-	-	-	-	-	-	-	-
	A-C	23.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	7.99	6.95	**1.150**	-	142.57	158.20	-	2255.8	21.10
	C-AB	0.76	5.97	0.128	-	0.24	0.15	-	2.2	0.19
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.79	-	-	-	-	-	-	-	-
	A-C	19.09	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	6.69	7.78	**0.860**	-	158.20	142.54	-	2255.5	19.46
	C-AB	0.64	6.81	0.094	-	0.15	0.11	-	1.6	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.17	-	-	-	-	-	-	-	-
	A-C	15.99	-	-	-	-	-	-	-	-

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Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	3.93	8.50	0.462	-	0.00	0.84	-	11.7	0.21
	C-AB	1.41	7.19	0.195	-	0.00	0.24	-	3.5	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	6.83	-	-	-	-	-	-	-	-
	A-C	10.63	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	4.69	7.83	0.599	-	0.84	1.42	-	19.8	0.31
	C-AB	1.68	6.43	0.261	-	0.24	0.35	-	5.2	0.21
	C-A	-	-	-	-	-	-	-	-	-
	A-B	8.15	-	-	-	-	-	-	-	-
	A-C	12.69	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	5.74	6.89	0.833	-	1.42	3.93	-	48.5	0.69
	C-AB	2.06	5.38	0.382	-	0.35	0.60	-	9.0	0.30
	C-A	-	-	-	-	-	-	-	-	-
	A-B	9.98	-	-	-	-	-	-	-	-
	A-C	15.54	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	5.74	6.89	0.833	-	3.93	4.35	-	62.6	0.81
	C-AB	2.06	5.38	0.382	-	0.60	0.61	-	9.3	0.30
	C-A	-	-	-	-	-	-	-	-	-
	A-B	9.98	-	-	-	-	-	-	-	-
	A-C	15.54	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	4.69	7.83	0.599	-	4.35	1.57	-	27.3	0.36
	C-AB	1.68	6.43	0.261	-	0.61	0.36	-	5.5	0.21
	C-A	-	-	-	-	-	-	-	-	-
	A-B	8.15	-	-	-	-	-	-	-	-
	A-C	12.69	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	3.93	8.50	0.462	-	1.57	0.88	-	14.0	0.22
	C-AB	1.41	7.19	0.195	-	0.36	0.25	-	3.7	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	6.83	-	-	-	-	-	-	-	-

	A-C	10.63	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
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Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	6.85	7.72	**0.887**	-	0.00	5.31	-	59.9	0.69
	C-AB	0.64	6.70	0.095	-	0.00	0.10	-	1.5	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.53	-	-	-	-	-	-	-	-
	A-C	16.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	8.18	6.88	**1.190**	-	5.31	26.73	-	245.4	2.84
	C-AB	0.76	5.85	0.131	-	0.10	0.15	-	2.2	0.20
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.21	-	-	-	-	-	-	-	-
	A-C	19.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	10.02	5.70	**1.758**	-	26.73	91.59	-	887.6	10.67
	C-AB	0.94	4.67	0.201	-	0.15	0.25	-	3.7	0.27
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.16	-	-	-	-	-	-	-	-
	A-C	23.54	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	10.02	5.70	**1.758**	-	91.59	156.40	-	1860.0	21.99
	C-AB	0.94	4.67	0.201	-	0.25	0.25	-	3.8	0.27
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.16	-	-	-	-	-	-	-	-
	A-C	23.54	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	8.18	6.88	**1.190**	-	156.40	176.00	-	2493.0	23.33
	C-AB	0.76	5.85	0.131	-	0.25	0.15	-	2.3	0.20
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.21	-	-	-	-	-	-	-	-
	A-C	19.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	6.85	7.72	**0.887**	-	176.00	163.59	-	2546.9	22.12
	C-AB	0.64	6.70	0.095	-	0.15	0.11	-	1.6	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.53	-	-	-	-	-	-	-	-
	A-C	16.10	-	-	-	-	-	-	-	-

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Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	3.70	8.12	0.456	-	0.00	0.82	-	11.4	0.22
	C-AB	1.57	6.84	0.229	-	0.00	0.29	-	4.3	0.19
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.32	-	-	-	-	-	-	-	-
	A-C	11.68	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	4.42	7.38	0.599	-	0.82	1.42	-	19.7	0.33
	C-AB	1.87	6.02	0.311	-	0.29	0.44	-	6.6	0.24
	C-A	-	-	-	-	-	-	-	-	-
	A-B	8.74	-	-	-	-	-	-	-	-
	A-C	13.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	5.41	6.33	**0.855**	-	1.42	4.31	-	51.8	0.79
	C-AB	2.29	4.87	0.471	-	0.44	0.86	-	12.7	0.38
	C-A	-	-	-	-	-	-	-	-	-
	A-B	10.70	-	-	-	-	-	-	-	-
	A-C	17.08	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	5.41	6.33	**0.855**	-	4.31	4.88	-	69.6	0.97
	C-AB	2.29	4.87	0.471	-	0.86	0.88	-	13.5	0.39
	C-A	-	-	-	-	-	-	-	-	-
	A-B	10.70	-	-	-	-	-	-	-	-

	A-C	17.08	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	4.42	7.38	0.599	-	4.88	1.58	-	28.4	0.39
	C-AB	1.87	6.02	0.311	-	0.88	0.46	-	7.1	0.24
	C-A	-	-	-	-	-	-	-	-	-
	A-B	8.74	-	-	-	-	-	-	-	-
	A-C	13.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	3.70	8.12	0.456	-	1.58	0.86	-	13.7	0.23
	C-AB	1.57	6.84	0.229	-	0.46	0.30	-	4.6	0.19
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.32	-	-	-	-	-	-	-	-
	A-C	11.68	-	-	-	-	-	-	-	-

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Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	4.25	8.12	0.524	-	0.00	1.06	-	14.6	0.25
	C-AB	1.57	6.77	0.232	-	0.00	0.30	-	4.4	0.19
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.52	-	-	-	-	-	-	-	-
	A-C	11.83	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	5.08	7.37	0.689	-	1.06	2.04	-	27.6	0.41
	C-AB	1.87	5.92	0.316	-	0.30	0.45	-	6.8	0.25
	C-A	-	-	-	-	-	-	-	-	-
	A-B	8.97	-	-	-	-	-	-	-	-
	A-C	14.13	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	6.22	6.32	**0.984**	-	2.04	8.78	-	92.1	1.28
	C-AB	2.29	4.76	0.482	-	0.45	0.90	-	13.2	0.40
	C-A	-	-	-	-	-	-	-	-	-
	A-B	10.99	-	-	-	-	-	-	-	-
	A-C	17.30	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	6.22	6.32	**0.985**	-	8.78	12.03	-	157.6	2.00
	C-AB	2.29	4.76	0.482	-	0.90	0.93	-	14.2	0.40
	C-A	-	-	-	-	-	-	-	-	-
	A-B	10.99	-	-	-	-	-	-	-	-
	A-C	17.30	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	5.08	7.37	0.689	-	12.03	2.46	-	65.5	0.77
	C-AB	1.87	5.92	0.316	-	0.93	0.47	-	7.3	0.25
	C-A	-	-	-	-	-	-	-	-	-
	A-B	8.97	-	-	-	-	-	-	-	-
	A-C	14.13	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	4.25	8.12	0.524	-	2.46	1.14	-	18.6	0.27
	C-AB	1.57	6.77	0.232	-	0.47	0.31	-	4.6	0.19
	C-A	-	-	-	-	-	-	-	-	-
	A-B	7.52	-	-	-	-	-	-	-	-
	A-C	11.83	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	7.33	7.34	**0.998**	-	0.00	9.91	-	97.0	1.08
	C-AB	0.70	6.36	0.110	-	0.00	0.12	-	1.8	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.50	-	-	-	-	-	-	-	-
	A-C	17.65	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	8.75	6.42	**1.363**	-	9.91	45.43	-	416.7	5.00
	C-AB	0.84	5.44	0.154	-	0.12	0.18	-	2.7	0.22
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.18	-	-	-	-	-	-	-	-

	A-C	21.08	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	10.72	5.13	**2.089**	-	45.43	129.25	-	1310.2	16.95
	C-AB	1.03	4.16	0.247	-	0.18	0.32	-	4.8	0.32
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.12	-	-	-	-	-	-	-	-
	A-C	25.82	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	10.72	5.13	**2.089**	-	129.25	213.06	-	2567.4	33.60
	C-AB	1.03	4.16	0.247	-	0.32	0.32	-	4.9	0.32
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.12	-	-	-	-	-	-	-	-
	A-C	25.82	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	8.75	6.42	**1.363**	-	213.06	248.06	-	3458.4	33.46
	C-AB	0.84	5.44	0.154	-	0.32	0.19	-	2.8	0.22
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.18	-	-	-	-	-	-	-	-
	A-C	21.08	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	7.33	7.34	**0.998**	-	248.06	248.15	-	3721.6	33.95
	C-AB	0.70	6.36	0.110	-	0.19	0.13	-	1.9	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.50	-	-	-	-	-	-	-	-
	A-C	17.65	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	7.48	7.28	**1.027**	-	0.00	11.63	-	109.8	1.21
	C-AB	0.70	6.25	0.112	-	0.00	0.12	-	1.8	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.86	-	-	-	-	-	-	-	-
	A-C	17.77	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	8.93	6.35	**1.407**	-	11.63	50.80	-	469.5	5.69
	C-AB	0.84	5.31	0.158	-	0.12	0.18	-	2.8	0.22
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.61	-	-	-	-	-	-	-	-
	A-C	21.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	10.94	5.04	**2.170**	-	50.80	139.29	-	1425.7	18.60
	C-AB	1.03	4.01	0.257	-	0.18	0.34	-	5.0	0.33
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.65	-	-	-	-	-	-	-	-
	A-C	25.98	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	10.94	5.04	**2.171**	-	139.29	227.76	-	2752.9	36.66
	C-AB	1.03	4.01	0.257	-	0.34	0.34	-	5.2	0.34
	C-A	-	-	-	-	-	-	-	-	-
	A-B	5.65	-	-	-	-	-	-	-	-
	A-C	25.98	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	8.93	6.34	**1.407**	-	227.76	266.55	-	3707.3	36.05
	C-AB	0.84	5.31	0.158	-	0.34	0.19	-	2.9	0.22
	C-A	-	-	-	-	-	-	-	-	-
	A-B	4.61	-	-	-	-	-	-	-	-
	A-C	21.22	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	7.48	7.28	**1.027**	-	266.55	269.58	-	4020.9	36.98
	C-AB	0.70	6.25	0.112	-	0.19	0.13	-	1.9	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	3.86	-	-	-	-	-	-	-	-

	A-C	17.77	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	251.9	167.9	43.9	0.2	43.9	0.2
C-AB	130.8	87.2	22.8	0.2	22.8	0.2
C-A	-	-	-	-	-	-
A-B	543.7	362.5	-	-	-	-
A-C	941.5	627.7	-	-	-	-
All	**1982.1**	**1321.4**	**66.7**	**0.0**	**66.7**	**0.0**

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	491.4	327.6	228.4	0.5	228.4	0.5
C-AB	50.9	34.0	7.9	0.2	7.9	0.2
C-A	-	-	-	-	-	-
A-B	261.5	174.3	-	-	-	-
A-C	1310.4	873.6	-	-	-	-
All	**2170.6**	**1447.1**	**236.3**	**0.1**	**236.3**	**0.1**

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	370.3	246.8	117.1	0.3	117.1	0.3
C-AB	154.2	102.8	35.3	0.2	35.3	0.2
C-A	-	-	-	-	-	-
A-B	725.4	483.6	-	-	-	-
A-C	1149.3	766.2	-	-	-	-
All	**2521.6**	**1681.1**	**152.3**	**0.1**	**152.4**	**0.1**

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	733.6	489.1	7254.3	9.9	8560.1	11.7
C-AB	70.2	46.8	14.7	0.2	14.7	0.2
C-A	-	-	-	-	-	-
A-B	348.2	232.2	-	-	-	-
A-C	1753.6	1169.0	-	-	-	-
All	**2966.2**	**1977.5**	**7269.0**	**2.5**	**8574.8**	**2.9**

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	430.8	287.2	183.9	0.4	184.0	0.4
C-AB	154.2	102.8	36.2	0.2	36.2	0.2
C-A	-	-	-	-	-	-
A-B	748.8	499.2	-	-	-	-
A-C	1165.8	777.2	-	-	-	-
All	**2622.1**	**1748.1**	**220.1**	**0.1**	**220.2**	**0.1**

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	751.5	501.0	8092.8	10.8	9825.8	13.1
C-AB	70.2	46.8	15.1	0.2	15.1	0.2
C-A	-	-	-	-	-	-
A-B	386.8	257.9	-	-	-	-
A-C	1766.0	1177.3	-	-	-	-
All	**3035.0**	**2023.3**	**8107.9**	**2.7**	**9840.9**	**3.2**

Demand Set: 2031 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	406.0	270.7	194.5	0.5	194.6	0.5
C-AB	172.1	114.7	48.8	0.3	48.8	0.3
C-A	-	-	-	-	-	-
A-B	802.5	535.0	-	-	-	-
A-C	1281.5	854.3	-	-	-	-
All	**2799.7**	**1866.4**	**243.4**	**0.1**	**243.4**	**0.1**

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	466.6	311.1	376.0	0.8	376.1	0.8
C-AB	172.1	114.7	50.5	0.3	50.5	0.3
C-A	-	-	-	-	-	-
A-B	824.5	549.7	-	-	-	-
A-C	1298.0	865.3	-	-	-	-
All	**2898.8**	**1932.5**	**426.4**	**0.1**	**426.5**	**0.1**

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	803.8	535.9	11571.4	14.4	15766.2	19.6
C-AB	77.1	51.4	18.9	0.2	18.9	0.2
C-A	-	-	-	-	-	-
A-B	384.0	256.0	-	-	-	-
A-C	1936.6	1291.1	-	-	-	-
All	**3270.4**	**2180.3**	**11590.2**	**3.5**	**15785.1**	**4.8**

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	820.3	546.9	12486.2	15.2	17477.7	21.3
C-AB	77.1	51.4	19.6	0.3	19.6	0.3
C-A	-	-	-	-	-	-
A-B	423.9	282.6	-	-	-	-
A-C	1949.0	1299.3	-	-	-	-
All	**3339.2**	**2226.1**	**12505.8**	**3.7**	**17497.3**	**5.2**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

PICADY

GUI Version: 5.1 AD
Analysis Program Release: 4.0 (SEPT 2008)

For sales and distribution information, program advice and maintenance, contact:

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Run Analysis

Parameter	Values
File Run	I:\..\Blackthorn Dr_Development\118139 Blackthorn Dr_Development T-Junction 2018 10 11.vpi
Date Run	16 October 2018
Time Run	14:44:23
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	Blackthorn Dr East	100
Arm B	Development	100
Arm C	Blackthorn Dr West	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Blackthorn Dr/Development T-Junction
Location	Sandyford, Dublin 18
Date	11 October 2018
Enumerator	J Noone
Job Number	118139
Status	TIA
Client	IRES Residential Properties Ltd
Description	-

Geometric Data

Geometric Parameters

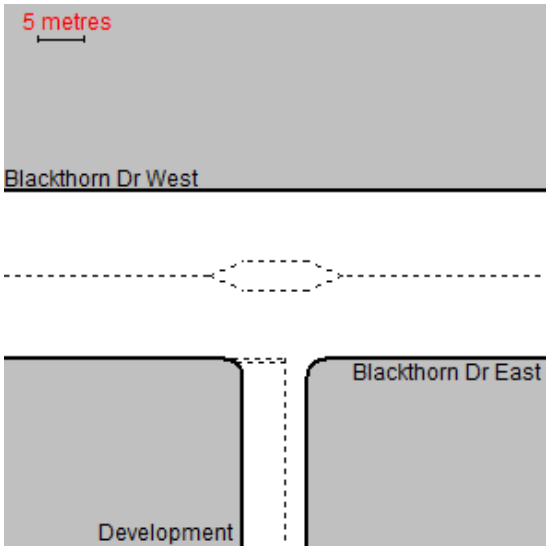
Parameter	Minor Arm B
Major Road Carriageway Width (m)	15.00
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	3.30
Minor Road First Lane Width (m)	4.40
Minor Road Visibility To Right (m)	31
Minor Road Visibility To Left (m)	32
Major Road Right Turn Visibility (m)	200
Major Road Right Turn Blocks Traffic	Yes

Slope and Intercept Values

Stream	Intercept for Stream B-A	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	573.725	0.064	0.161	0.101	0.230
B-C	733.641	0.068	0.173	-	-
C-B	772.365	0.182	0.182	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	07:45-09:15	90	15
Second Modelling Period	16:45-18:15	90	15

ODTAB Turning Counts

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	57.0	319.0
Arm B	27.0	0.0	44.0
Arm C	616.0	56.0	0.0

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	61.0	399.0
Arm B	52.0	0.0	53.0
Arm C	505.0	49.0	0.0

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	61.0	368.0
Arm B	29.0	0.0	47.0
Arm C	784.0	60.0	0.0

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	65.0	531.0
Arm B	56.0	0.0	57.0
Arm C	602.0	52.0	0.0

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	67.0	381.0
Arm B	2.0	0.0	22.0
Arm C	803.0	74.0	0.0

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	59.0	540.0
Arm B	63.0	0.0	73.0
Arm C	608.0	52.0	0.0

Demand Set: 2031 AM Do Nothing - Existing Traffic+Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	69.0	413.0
Arm B	33.0	0.0	53.0
Arm C	871.0	68.0	0.0

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	75.0	426.0
Arm B	6.0	0.0	28.0
Arm C	890.0	82.0	0.0

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	74.0	588.0
Arm B	63.0	0.0	64.0
Arm C	673.0	59.0	0.0

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	68.0	596.0
Arm B	70.0	0.0	80.0
Arm C	679.0	59.0	0.0

ODTAB Synthesised Flows

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh/min)	Peak Time	Peak Flow (veh/min)	Falling Time	Falling Flow (veh/min)
Arm A	08:00	4.700	08:30	7.050	09:00	4.700
Arm B	08:00	0.887	08:30	1.331	09:00	0.887
Arm C	08:00	8.400	08:30	12.600	09:00	8.400

Heavy Vehicles Percentages

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Nothing - Existing Traffic+Permitted Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Queues & Delays

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.89	9.81	0.091	-	0.00	0.10	-	1.4	0.11
	C-AB	0.70	12.01	0.058	-	0.00	0.06	-	0.9	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.72	-	-	-	-	-	-	-	-
	A-C	4.00	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	1.06	9.56	0.111	-	0.10	0.12	-	1.8	0.12
	C-AB	0.84	11.85	0.071	-	0.06	0.08	-	1.1	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.85	-	-	-	-	-	-	-	-
	A-C	4.78	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	1.30	9.21	0.142	-	0.12	0.16	-	2.4	0.13
	C-AB	1.03	11.62	0.088	-	0.08	0.10	-	1.4	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.05	-	-	-	-	-	-	-	-
	A-C	5.85	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	1.30	9.21	0.142	-	0.16	0.16	-	2.5	0.13
	C-AB	1.03	11.62	0.088	-	0.10	0.10	-	1.5	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.05	-	-	-	-	-	-	-	-
	A-C	5.85	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	1.06	9.56	0.111	-	0.16	0.13	-	1.9	0.12
	C-AB	0.84	11.85	0.071	-	0.10	0.08	-	1.2	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.85	-	-	-	-	-	-	-	-
	A-C	4.78	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.89	9.81	0.091	-	0.13	0.10	-	1.5	0.11
	C-AB	0.70	12.01	0.058	-	0.08	0.06	-	0.9	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.72	-	-	-	-	-	-	-	-
	A-C	4.00	-	-	-	-	-	-	-	-

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	1.32	9.34	0.141	-	0.00	0.16	-	2.4	0.12
	C-AB	0.61	11.82	0.052	-	0.00	0.05	-	0.8	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.77	-	-	-	-	-	-	-	-
	A-C	5.01	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	1.57	9.06	0.174	-	0.16	0.21	-	3.0	0.13
	C-AB	0.73	11.62	0.063	-	0.05	0.07	-	1.0	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.91	-	-	-	-	-	-	-	-
	A-C	5.98	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	1.93	8.66	0.222	-	0.21	0.28	-	4.1	0.15
	C-AB	0.90	11.34	0.079	-	0.07	0.09	-	1.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.12	-	-	-	-	-	-	-	-
	A-C	7.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	1.93	8.66	0.222	-	0.28	0.28	-	4.3	0.15
	C-AB	0.90	11.34	0.079	-	0.09	0.09	-	1.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.12	-	-	-	-	-	-	-	-

	A-C	7.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	1.57	9.05	0.174	-	0.28	0.21	-	3.3	0.13
	C-AB	0.73	11.62	0.063	-	0.09	0.07	-	1.0	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.91	-	-	-	-	-	-	-	-
	A-C	5.98	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	1.32	9.34	0.141	-	0.21	0.17	-	2.5	0.12
	C-AB	0.61	11.82	0.052	-	0.07	0.06	-	0.8	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.77	-	-	-	-	-	-	-	-
	A-C	5.01	-	-	-	-	-	-	-	-

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.95	9.57	0.100	-	0.00	0.11	-	1.6	0.12
	C-AB	0.75	11.89	0.063	-	0.00	0.07	-	1.0	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.77	-	-	-	-	-	-	-	-
	A-C	4.62	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	1.14	9.26	0.123	-	0.11	0.14	-	2.0	0.12
	C-AB	0.90	11.70	0.077	-	0.07	0.08	-	1.2	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.91	-	-	-	-	-	-	-	-
	A-C	5.51	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	1.39	8.83	0.158	-	0.14	0.19	-	2.7	0.13
	C-AB	1.10	11.44	0.096	-	0.08	0.11	-	1.6	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.12	-	-	-	-	-	-	-	-
	A-C	6.75	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	1.39	8.83	0.158	-	0.19	0.19	-	2.8	0.13
	C-AB	1.10	11.44	0.096	-	0.11	0.11	-	1.6	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.12	-	-	-	-	-	-	-	-
	A-C	6.75	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	1.14	9.26	0.123	-	0.19	0.14	-	2.2	0.12
	C-AB	0.90	11.70	0.077	-	0.11	0.08	-	1.3	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.91	-	-	-	-	-	-	-	-
	A-C	5.51	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.95	9.56	0.100	-	0.14	0.11	-	1.7	0.12
	C-AB	0.75	11.89	0.063	-	0.08	0.07	-	1.0	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.77	-	-	-	-	-	-	-	-
	A-C	4.62	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	1.42	8.96	0.158	-	0.00	0.19	-	2.7	0.13
	C-AB	0.65	11.51	0.057	-	0.00	0.06	-	0.9	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.82	-	-	-	-	-	-	-	-
	A-C	6.66	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	1.69	8.60	0.197	-	0.19	0.24	-	3.5	0.14
	C-AB	0.78	11.25	0.069	-	0.06	0.07	-	1.1	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.97	-	-	-	-	-	-	-	-

	A-C	7.96	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	2.07	8.10	0.256	-	0.24	0.34	-	4.9	0.17
	C-AB	0.95	10.88	0.088	-	0.07	0.10	-	1.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.19	-	-	-	-	-	-	-	-
	A-C	9.74	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	2.07	8.10	0.256	-	0.34	0.34	-	5.1	0.17
	C-AB	0.95	10.88	0.088	-	0.10	0.10	-	1.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.19	-	-	-	-	-	-	-	-
	A-C	9.74	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	1.69	8.60	0.197	-	0.34	0.25	-	3.8	0.15
	C-AB	0.78	11.25	0.069	-	0.10	0.07	-	1.1	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.97	-	-	-	-	-	-	-	-
	A-C	7.96	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	1.42	8.96	0.158	-	0.25	0.19	-	2.9	0.13
	C-AB	0.65	11.51	0.057	-	0.07	0.06	-	0.9	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.82	-	-	-	-	-	-	-	-
	A-C	6.66	-	-	-	-	-	-	-	-

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.30	10.88	0.028	-	0.00	0.03	-	0.4	0.09
	C-AB	0.93	11.85	0.078	-	0.00	0.08	-	1.3	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.84	-	-	-	-	-	-	-	-
	A-C	4.78	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.36	10.66	0.034	-	0.03	0.03	-	0.5	0.10
	C-AB	1.11	11.65	0.095	-	0.08	0.10	-	1.6	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.00	-	-	-	-	-	-	-	-
	A-C	5.71	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.44	10.36	0.043	-	0.03	0.04	-	0.6	0.10
	C-AB	1.36	11.38	0.119	-	0.10	0.13	-	2.0	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.23	-	-	-	-	-	-	-	-
	A-C	6.99	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.44	10.36	0.043	-	0.04	0.04	-	0.7	0.10
	C-AB	1.36	11.38	0.119	-	0.13	0.14	-	2.0	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.23	-	-	-	-	-	-	-	-
	A-C	6.99	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.36	10.66	0.034	-	0.04	0.04	-	0.5	0.10
	C-AB	1.11	11.65	0.095	-	0.14	0.11	-	1.6	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.00	-	-	-	-	-	-	-	-
	A-C	5.71	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.30	10.88	0.028	-	0.04	0.03	-	0.4	0.09
	C-AB	0.93	11.85	0.078	-	0.11	0.09	-	1.3	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.84	-	-	-	-	-	-	-	-

	A-C	4.78	-	-	-	-	-	-	-	-

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	1.71	9.05	0.189	-	0.00	0.23	-	3.3	0.14
	C-AB	0.65	11.50	0.057	-	0.00	0.06	-	0.9	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.74	-	-	-	-	-	-	-	-
	A-C	6.78	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	2.04	8.69	0.234	-	0.23	0.30	-	4.4	0.15
	C-AB	0.78	11.24	0.069	-	0.06	0.07	-	1.1	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.88	-	-	-	-	-	-	-	-
	A-C	8.09	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	2.50	8.19	0.305	-	0.30	0.43	-	6.2	0.18
	C-AB	0.95	10.87	0.088	-	0.07	0.10	-	1.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.08	-	-	-	-	-	-	-	-
	A-C	9.91	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	2.50	8.19	0.305	-	0.43	0.43	-	6.5	0.18
	C-AB	0.95	10.87	0.088	-	0.10	0.10	-	1.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.08	-	-	-	-	-	-	-	-
	A-C	9.91	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	2.04	8.69	0.234	-	0.43	0.31	-	4.8	0.15
	C-AB	0.78	11.24	0.069	-	0.10	0.07	-	1.1	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.88	-	-	-	-	-	-	-	-
	A-C	8.09	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	1.71	9.05	0.189	-	0.31	0.23	-	3.6	0.14
	C-AB	0.65	11.50	0.057	-	0.07	0.06	-	0.9	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.74	-	-	-	-	-	-	-	-
	A-C	6.78	-	-	-	-	-	-	-	-

Demand Set: 2031 AM Do Nothing - Existing Traffic+Permitted Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	1.08	9.37	0.115	-	0.00	0.13	-	1.9	0.12
	C-AB	0.85	11.77	0.072	-	0.00	0.08	-	1.2	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.87	-	-	-	-	-	-	-	-
	A-C	5.18	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	1.29	9.02	0.143	-	0.13	0.16	-	2.4	0.13
	C-AB	1.02	11.56	0.088	-	0.08	0.10	-	1.4	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.03	-	-	-	-	-	-	-	-
	A-C	6.19	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	1.58	8.53	0.185	-	0.16	0.22	-	3.3	0.14
	C-AB	1.25	11.26	0.111	-	0.10	0.12	-	1.9	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.27	-	-	-	-	-	-	-	-
	A-C	7.58	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	1.58	8.53	0.185	-	0.22	0.23	-	3.4	0.14
	C-AB	1.25	11.26	0.111	-	0.12	0.12	-	1.9	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.27	-	-	-	-	-	-	-	-

	A-C	7.58	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	1.29	9.02	0.143	-	0.23	0.17	-	2.6	0.13
	C-AB	1.02	11.56	0.088	-	0.12	0.10	-	1.5	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.03	-	-	-	-	-	-	-	-
	A-C	6.19	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	1.08	9.37	0.115	-	0.17	0.13	-	2.0	0.12
	C-AB	0.85	11.77	0.072	-	0.10	0.08	-	1.2	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.87	-	-	-	-	-	-	-	-
	A-C	5.18	-	-	-	-	-	-	-	-

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.43	10.25	0.042	-	0.00	0.04	-	0.6	0.10
	C-AB	1.03	11.73	0.088	-	0.00	0.10	-	1.4	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.94	-	-	-	-	-	-	-	-
	A-C	5.35	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.51	9.96	0.051	-	0.04	0.05	-	0.8	0.11
	C-AB	1.23	11.51	0.107	-	0.10	0.12	-	1.8	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.12	-	-	-	-	-	-	-	-
	A-C	6.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.62	9.55	0.065	-	0.05	0.07	-	1.0	0.11
	C-AB	1.50	11.20	0.134	-	0.12	0.15	-	2.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.38	-	-	-	-	-	-	-	-
	A-C	7.82	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.62	9.55	0.065	-	0.07	0.07	-	1.0	0.11
	C-AB	1.50	11.20	0.134	-	0.15	0.15	-	2.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.38	-	-	-	-	-	-	-	-
	A-C	7.82	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.51	9.96	0.051	-	0.07	0.05	-	0.8	0.11
	C-AB	1.23	11.51	0.107	-	0.15	0.12	-	1.8	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.12	-	-	-	-	-	-	-	-
	A-C	6.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.43	10.25	0.042	-	0.05	0.04	-	0.7	0.10
	C-AB	1.03	11.73	0.088	-	0.12	0.10	-	1.5	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.94	-	-	-	-	-	-	-	-
	A-C	5.35	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	1.59	8.75	0.182	-	0.00	0.22	-	3.2	0.14
	C-AB	0.74	11.36	0.065	-	0.00	0.07	-	1.0	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.93	-	-	-	-	-	-	-	-
	A-C	7.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	1.90	8.35	0.228	-	0.22	0.29	-	4.3	0.15
	C-AB	0.88	11.07	0.080	-	0.07	0.09	-	1.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.11	-	-	-	-	-	-	-	-

	A-C	8.81	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	2.33	7.78	0.300	-	0.29	0.42	-	6.1	0.18
	C-AB	1.08	10.66	0.102	-	0.09	0.11	-	1.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.36	-	-	-	-	-	-	-	-
	A-C	10.79	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	2.33	7.78	0.300	-	0.42	0.42	-	6.3	0.18
	C-AB	1.08	10.66	0.102	-	0.11	0.11	-	1.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.36	-	-	-	-	-	-	-	-
	A-C	10.79	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	1.90	8.35	0.228	-	0.42	0.30	-	4.6	0.16
	C-AB	0.88	11.07	0.080	-	0.11	0.09	-	1.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.11	-	-	-	-	-	-	-	-
	A-C	8.81	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	1.59	8.75	0.182	-	0.30	0.23	-	3.5	0.14
	C-AB	0.74	11.36	0.065	-	0.09	0.07	-	1.1	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.93	-	-	-	-	-	-	-	-
	A-C	7.38	-	-	-	-	-	-	-	-

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	1.88	8.83	0.213	-	0.00	0.27	-	3.8	0.14
	C-AB	0.74	11.36	0.065	-	0.00	0.07	-	1.0	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.85	-	-	-	-	-	-	-	-
	A-C	7.48	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	2.25	8.43	0.267	-	0.27	0.36	-	5.2	0.16
	C-AB	0.88	11.06	0.080	-	0.07	0.09	-	1.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.02	-	-	-	-	-	-	-	-
	A-C	8.93	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	2.75	7.87	0.350	-	0.36	0.53	-	7.6	0.19
	C-AB	1.08	10.65	0.102	-	0.09	0.11	-	1.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.25	-	-	-	-	-	-	-	-
	A-C	10.94	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	2.75	7.87	0.350	-	0.53	0.53	-	8.0	0.20
	C-AB	1.08	10.65	0.102	-	0.11	0.11	-	1.7	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.25	-	-	-	-	-	-	-	-
	A-C	10.94	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	2.25	8.43	0.267	-	0.53	0.37	-	5.7	0.16
	C-AB	0.88	11.06	0.080	-	0.11	0.09	-	1.3	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.02	-	-	-	-	-	-	-	-
	A-C	8.93	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	1.88	8.83	0.213	-	0.37	0.27	-	4.2	0.14
	C-AB	0.74	11.36	0.065	-	0.09	0.07	-	1.1	0.09
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.85	-	-	-	-	-	-	-	-

	A-C	7.48	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2016 AM Existing Traffic
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	97.7	65.2	11.6	0.1	11.6	0.1
C-AB	77.1	51.4	7.0	0.1	7.0	0.1
C-A	-	-	-	-	-	-
A-B	78.5	52.3	-	-	-	-
A-C	439.1	292.7	-	-	-	-
All	**1540.2**	**1026.8**	**18.6**	**0.0**	**18.6**	**0.0**

Demand Set: 2016 PM Existing Traffic
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	144.5	96.3	19.6	0.1	19.6	0.1
C-AB	67.4	45.0	6.2	0.1	6.2	0.1
C-A	-	-	-	-	-	-
A-B	84.0	56.0	-	-	-	-
A-C	549.2	366.1	-	-	-	-
All	**1540.2**	**1026.8**	**25.8**	**0.0**	**25.8**	**0.0**

Demand Set: 2021 AM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	104.6	69.7	13.0	0.1	13.0	0.1
C-AB	82.6	55.1	7.7	0.1	7.7	0.1
C-A	-	-	-	-	-	-
A-B	84.0	56.0	-	-	-	-
A-C	506.5	337.7	-	-	-	-
All	**1856.8**	**1237.9**	**20.7**	**0.0**	**20.7**	**0.0**

Demand Set: 2021 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	155.5	103.7	23.0	0.1	23.0	0.1
C-AB	71.6	47.7	6.9	0.1	6.9	0.1
C-A	-	-	-	-	-	-
A-B	89.5	59.6	-	-	-	-
A-C	730.9	487.3	-	-	-	-
All	**1876.1**	**1250.7**	**29.9**	**0.0**	**29.9**	**0.0**

Demand Set: 2021 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	33.0	22.0	3.2	0.1	3.2	0.1
C-AB	101.9	67.9	9.8	0.1	9.8	0.1
C-A	-	-	-	-	-	-
A-B	92.2	61.5	-	-	-	-
A-C	524.4	349.6	-	-	-	-
All	**1856.8**	**1237.9**	**13.0**	**0.0**	**13.0**	**0.0**

Demand Set: 2021 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	187.2	124.8	28.9	0.2	28.9	0.2
C-AB	71.6	47.7	6.9	0.1	6.9	0.1
C-A	-	-	-	-	-	-
A-B	81.2	54.1	-	-	-	-
A-C	743.3	495.5	-	-	-	-
All	**1920.1**	**1280.1**	**35.8**	**0.0**	**35.8**	**0.0**

Demand Set: 2031 AM Do Nothing - Existing Traffic+Permitted Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	118.4	78.9	15.5	0.1	15.5	0.1
C-AB	93.6	62.4	9.0	0.1	9.0	0.1
C-A	-	-	-	-	-	-
A-B	95.0	63.3	-	-	-	-
A-C	568.5	379.0	-	-	-	-
All	**2074.3**	**1382.8**	**24.5**	**0.0**	**24.5**	**0.0**

Demand Set: 2031 AM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	46.8	31.2	5.0	0.1	5.0	0.1
C-AB	112.9	75.2	11.1	0.1	11.1	0.1
C-A	-	-	-	-	-	-
A-B	103.2	68.8	-	-	-	-
A-C	586.4	390.9	-	-	-	-
All	**2074.3**	**1382.8**	**16.1**	**0.0**	**16.1**	**0.0**

Demand Set: 2031 PM Do Nothing - Existing Traffic + Permitted Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	174.8	116.5	28.0	0.2	28.0	0.2
C-AB	81.2	54.1	8.1	0.1	8.1	0.1
C-A	-	-	-	-	-	-
A-B	101.9	67.9	-	-	-	-
A-C	809.3	539.6	-	-	-	-
All	**2093.5**	**1395.7**	**36.0**	**0.0**	**36.0**	**0.0**

Demand Set: 2031 PM Do Something - Existing Traffic+Permitted Dev+New Dev
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	206.5	137.6	34.6	0.2	34.6	0.2
C-AB	81.2	54.1	8.1	0.1	8.1	0.1
C-A	-	-	-	-	-	-
A-B	93.6	62.4	-	-	-	-
A-C	820.3	546.9	-	-	-	-
All	**2136.2**	**1424.1**	**42.7**	**0.0**	**42.7**	**0.0**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful