Site: 3.0 [3.0 Pakuranga Highway / Pakuranga Rd - Import (Site Folder: PM)]

Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C, D Output Phase Sequence: A, B, C, D

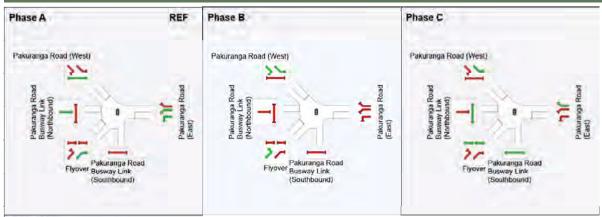
Phase Timing Summary

Phase	Α	В	С	D
Phase Change Time (sec)	0	37	49	60
Green Time (sec)	31	6	5	***
Phase Time (sec)	37	12	11	6
Phase Split	56%	18%	17%	9%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

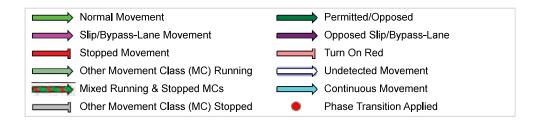
*** No green time has been calculated for this phase because the next phase starts during its intergreen time. This occurs with overlap phasing where there is no single movement connecting this phase to the next, or where the only such movement is a dummy movement with zero minimum green time specified. If a green time is required for this phase, specify a dummy movement with a non-zero minimum green time.

Output Phase Sequence





REF: Reference Phase



CCG PHASING SUMMARY

□□ Common Control Group: CCG3 [Aylesbury/WR/Reeves Rd]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 118 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: CCG Phasing Reference Phase: Phase A

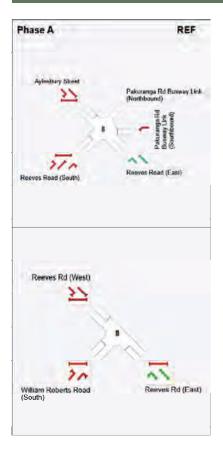
Input Phase Sequence: A, B, C, C2, D, E Output Phase Sequence: A, B, C, C2, D, E

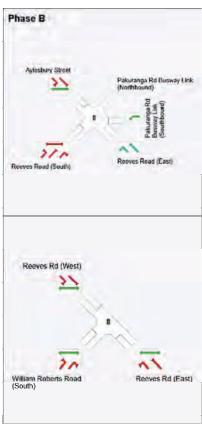
Phase Timing Summary (CCG)

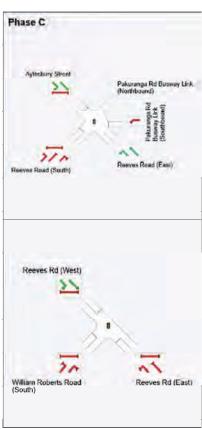
Phase	Α	В	С	C2	D	Е
Phase Change Time (sec)	0	15	35	50	68	86
Green Time (sec)	9	14	8	12	12	26
Phase Time (sec)	15	21	14	18	18	32
Phase Split	13%	18%	12%	15%	15%	27%

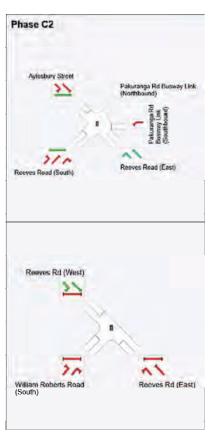
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

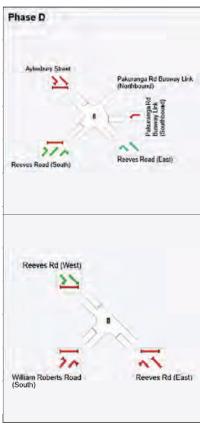
Output Phase Sequence (CCG)

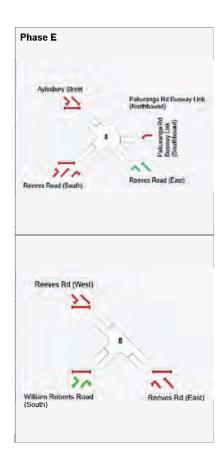




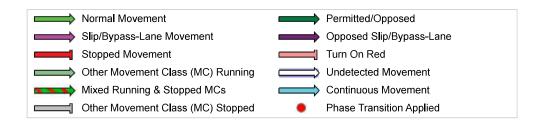








REF: Reference Phase VAR: Variable Phase



Site: 4.0 [4.0 Palm Ave / Aylesbury St - Import (Site Folder: PM)]

Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog

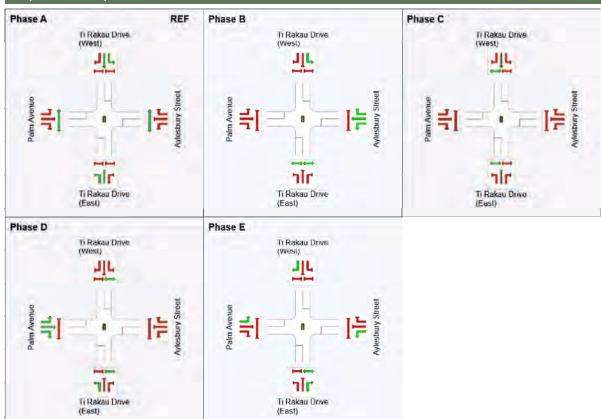
Phase Times specified by the user Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C, D, E Output Phase Sequence: A, B, C, D, E

Phase Timing Summary

Phase	Α	В	С	D	E
Phase Change Time (sec)	0	72	96	113	139
Green Time (sec)	66	18	11	20	6
Phase Time (sec)	72	24	17	25	12
Phase Split	48%	16%	11%	17%	8%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





Site: 5.0 [5.0 Pakuranga Highway / Reeves Rd - Import (Site

Folder: PM)]

Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Single Point Interchange (Signals) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times specified by the user Phase Sequence: Variable Phasing Reference Phase: Phase A

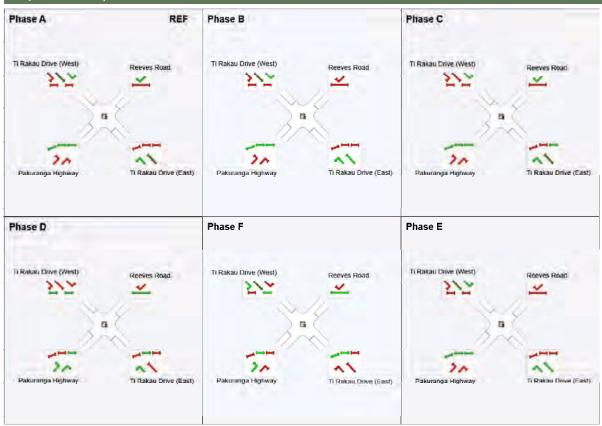
Input Phase Sequence: A, B, C, D, F, E Output Phase Sequence: A, B, C, D, F, E

Filase Hilling Sullinary	Pł	hase	Timino	g Summary	1
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Phase	Α	В	С	D	F	E
Phase Change Time (sec)	0	17	34	55	97	117
Green Time (sec)	11	11	15	37	12	25
Phase Time (sec)	17	17	20	45	20	31
Phase Split	11%	11%	13%	30%	13%	21%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





Site: 7.0 [7.0 William Roberts Rd/ Mattson Rd/ Ti Rakau Drive -■■ Network: N101 [PM - Town Import (Site Folder: PM)] Centre Drive four lanes

(Network Folder: General)]

Scheme Design Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog

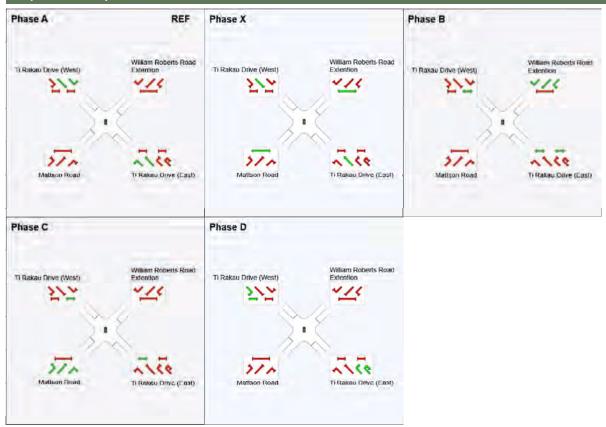
Phase Times specified by the user Phase Sequence: Leading Right Turn Reference Phase: Phase A Input Phase Sequence: A, X, B, C, D Output Phase Sequence: A, X, B, C, D

Phase Timing Summary

Phase	Α	Х	В	С	D
Phase Change Time (sec)	0	37	62	88	102
Green Time (sec)	29	19	20	6	12
Phase Time (sec)	35	25	28	12	20
Phase Split	29%	21%	23%	10%	17%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





Site: 8.1 [8.1 U-turn - West of Marriot Rd (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 29 seconds (Site Practical Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Opposed Turns Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

Phase Timing Summary

Phase	Α	В
Phase Change Time (sec)	0	18
Green Time (sec)	13	6
Phase Time (sec)	18	11
Phase Split	62%	38%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





🏄 Site: 9.1 [9.1 Staggered Crossing - East of Marriot Rd - Import ■■ Network: N101 [PM - Town (Site Folder: PM)]

Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Practical Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Two-Phase Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Phase Timing Summary

Phase	Α	В	С
Phase Change Time (sec)	0	5	26
Green Time (sec)	***	16	11
Phase Time (sec)	5	21	16
Phase Split	12%	50%	38%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

*** No green time has been calculated for this phase because the next phase starts during its intergreen time. This occurs with overlap phasing where there is no single movement connecting this phase to the next, or where the only such movement is a dummy movement with zero minimum green time specified. If a green time is required for this phase, specify a dummy movement with a non-zero minimum green time.

Output Phase Sequence Phase C Phase A REF Phase B Ti Rakau Drive (West)



🏄 Site: 9.2 [9.2 Staggered Crossing - East of Marriot Rd - Import ■■ Network: N101 [PM - Town (Site Folder: PM)]

Centre Drive four lanes

(Network Folder: General)]

Site Category: (None)

Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

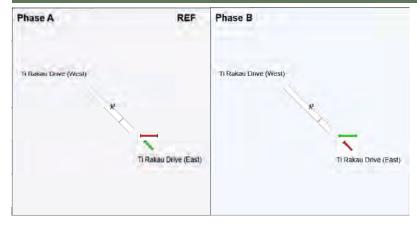
Phase Sequence: Two-Phase Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

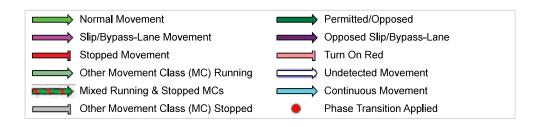
Phase Timing Summary

Phase	Α	В
Phase Change Time (sec)	0	33
Green Time (sec)	28	11
Phase Time (sec)	33	16
Phase Split	67%	33%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





Project: C:\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final PM 2028_EC - Copy.sip9

Site: 101 [12.0 Edgewater Dr (East) / Ti Rakau Dr -Signalised - Import - Import - Import (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

New Site

Site Category: (None)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Leading Right Turn Reference Phase: Phase A Input Phase Sequence: A, B, D*, C Output Phase Sequence: A, B, C

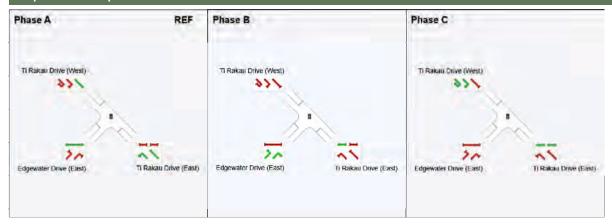
(* Variable Phase)

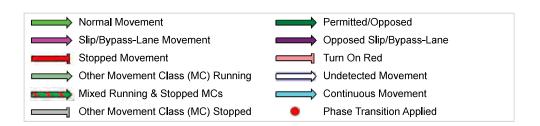
Phase Timing Summary

Phase	Α	В	С
Phase Change Time (sec)	0	114	127
Green Time (sec)	107	6	16
Phase Time (sec)	114	13	23
Phase Split	76%	9%	15%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





Project: C:\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final PM 2028_EC - Copy.sip9

Site: 13.0 [13.0 Gossamer Dr / Ti Rakau Dr (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 152 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog

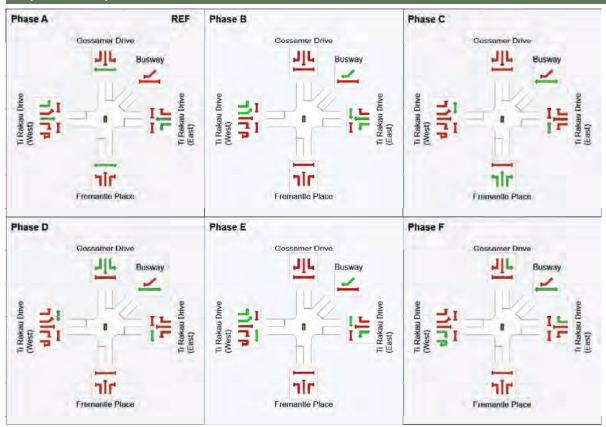
Phase Times specified by the user Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C, D, E, F Output Phase Sequence: A, B, C, D, E, F

Phase Timing Summary

Phase	۸	В		n		F
Filase	Α		U	U		Г
Phase Change Time (sec)	0	66	85	98	110	128
Green Time (sec)	60	13	7	7	13	18
Phase Time (sec)	66	19	12	12	19	24
Phase Split	43%	13%	8%	8%	13%	16%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





Site: 15.B [15.B Burwood Dr (West) / New Offline Busway Rd (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 41 seconds (Site Practical Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

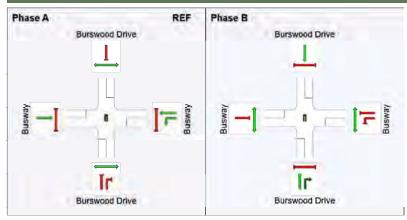
Phase Sequence: Two-Phase Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

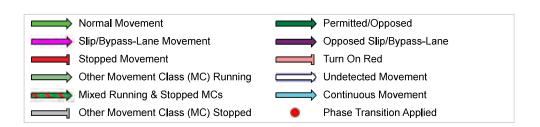
Phase Timing Summary

Phase	Α	В
Phase Change Time (sec)	0	22
Green Time (sec)	16	13
Phase Time (sec)	22	19
Phase Split	54%	46%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





Site: 18.B [18.B Burswood Dr (East) / New Offline Busway Rd - Network: N101 [PM - Town V2 - Import (Site Folder: PM)] Centre Drive four lanes

(Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 52 seconds (Site Practical Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Leading Right Turn

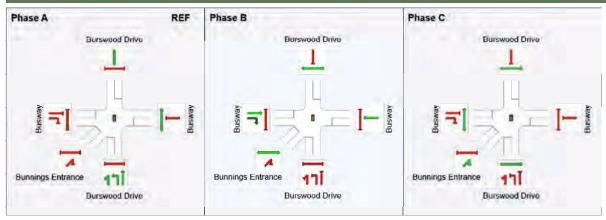
Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

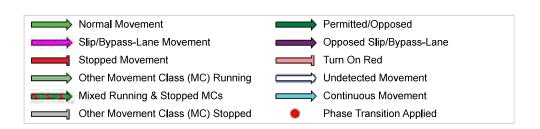
Phase Timing Summary

Phase	Α	В	С
Phase Change Time (sec)	0	22	34
Green Time (sec)	16	6	12
Phase Time (sec)	22	12	18
Phase Split	42%	23%	35%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





TIME - DISTANCE DIAGRAM

Time – Distance Diagram for the Selected Route

Movement Class: Light Vehicles

I Route: R101 [Route1]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

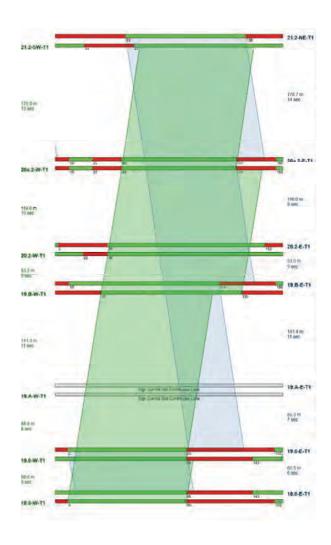
New Route

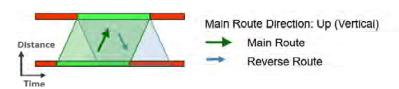
Network Category: (None)

Network Cycle Time = 150 seconds (Network User-Given Cycle Time)

Signal Offsets option used: User

Interactive Offsets





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CCG PHASING SUMMARY

□□ Common Control Group: CCG1 [Burswood E/ Greenmount]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

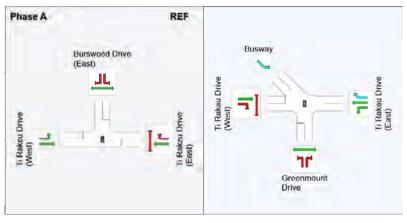
Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Green Split Priority has been specified
Phase Sequence: CCG Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C, E
Output Phase Sequence: A, C, E

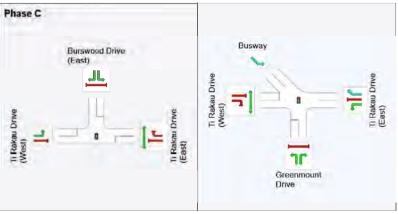
Phase Timing Summary (CCG)

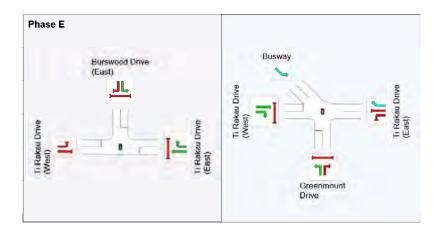
Phase	Α	С	E
Phase Change Time (sec)	0	92	134
Green Time (sec)	86	36	10
Phase Time (sec)	92	42	16
Phase Split	61%	28%	11%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence (CCG)







REF: Reference Phase VAR: Variable Phase



Site: 20.2 [20.2 Huntington Dr / Ti Rakau Dr (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Green Split Priority has been specified
Phase Sequence: Variable Phasing
Reference Phase: Phase A

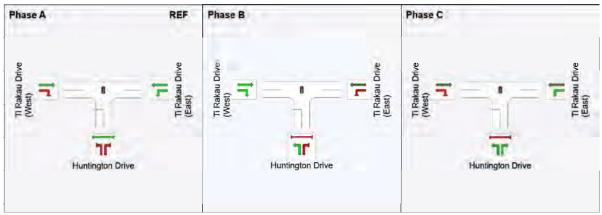
Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

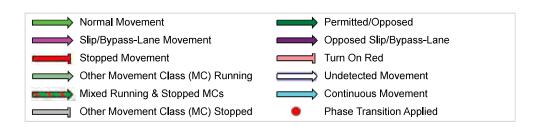
Phase Timing Summary

Phase	Α	В	С
Phase Change Time (sec)	29	149	17
Green Time (sec)	114	12	6
Phase Time (sec)	120	18	12
Phase Split	80%	12%	8%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





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Site: 20a.2 [20a.2 Ti Rakau Dr Busway crossover - EB4i,EB4L (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Site User-Given Phase

Timings based on settings in the Network Timing dialog

Phase Times specified by the user Phase Sequence: Leading Right Turn Reference Phase: Phase A

Input Phase Sequence: A, B, A2, B2

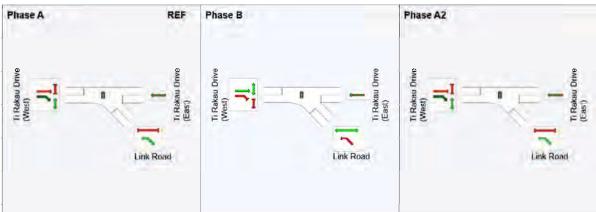
Output Phase Sequence: A, B, A2, B2

Phase Timing Summary

Phase	Α	В	A2	B2
Phase Change Time (sec)	24	41	128	1
Green Time (sec)	11	83	17	17
Phase Time (sec)	15	89	23	23
Phase Split	10%	59%	15%	15%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence







Site: 21.2 [21.2 Te Koha Rd/ Ti Rakau Dr - EB4i (Site Folder: PM)]

Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user Phase Sequence: Leading Right Turn

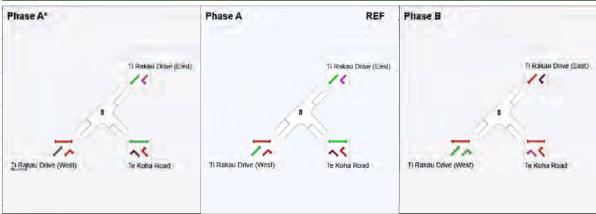
Reference Phase: Phase A Input Phase Sequence: A*, A, B, C Output Phase Sequence: A*, A, B, C

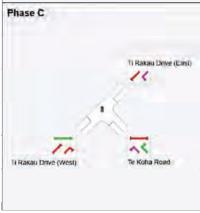
Phase Timing Summary

Phase	A*	Α	В	С
Phase Change Time (sec)	43	54	135	18
Green Time (sec)	6	81	27	19
Phase Time (sec)	6	87	33	24
Phase Split	4%	58%	22%	16%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence







Site: 22.0 [22.0 Te Irirangi Dr / Ti Rakau Dr - EB4i (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Variable Phasing (phase reduction applied)

Reference Phase: Phase A

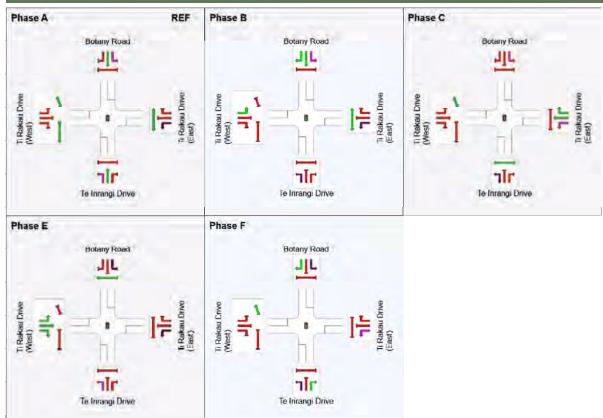
Input Phase Sequence: A, B, C, D, E, F Output Phase Sequence: A, B, C, E, F

Phase Timing Summary

Phase	Α	В	С	Е	F
Phase Change Time (sec)	0	29	47	70	96
Green Time (sec)	23	12	17	20	7
Phase Time (sec)	29	18	23	26	13
Phase Split	27%	17%	21%	24%	12%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





PHASING SUMMARY

Site: 23.2 [23.2a Te Irirangi Dr / Te Koha Rd / Town Centre Dr - EB4i,EB4L 2 (Site Folder: PM)]

Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Timings based on settings in the Site Phasing & Timing dialog

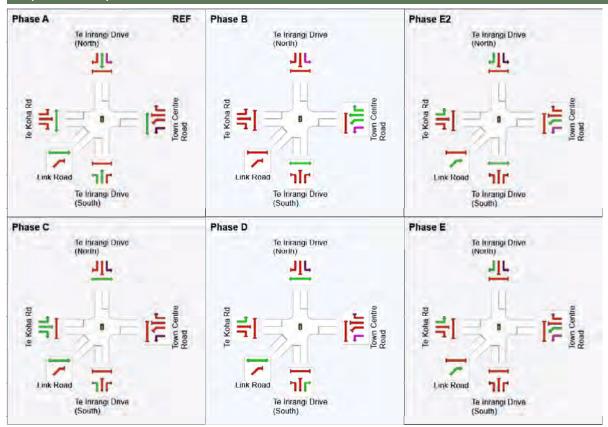
Phase Times specified by the user Phase Sequence: Leading Right Turn Reference Phase: Phase A Input Phase Sequence: A, B, E2, C, D, E Output Phase Sequence: A, B, E2, C, D, E

Phase Timing Summary

Phase	Α	В	E2	С	D	E
Phase Change Time (sec)	0	60	78	106	122	138
Green Time (sec)	55	12	22	11	13	21
Phase Time (sec)	61	18	27	14	19	26
Phase Split	37%	11%	16%	8%	12%	16%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase VAR: Variable Phase





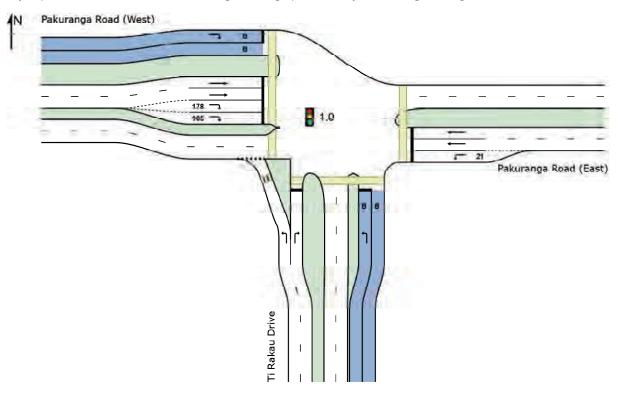
Appendix H

EB2/EB3/EB4i/L Scenario – Lane Performance Summaries

Site: 1.0 [1.0 Pakuranga Rd / Ti Rakau Dr - Import (Site Folder:

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 1.0 [1.0 Pakuranga Rd / Ti Rakau Dr - Import (Site Folder: Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Phase Times)

Lane Use	and P	erforn	nance	!											
	DEM FLC [Total)WS		NIVAL DWS HV]	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Ti R	akau D	rive													
Lane 1	868	9.1	868	9.1	965	0.899	100	32.5	LOS C	33.7 ^{N4}	254.3 ^{N4}	Full	174	0.0	<mark>50.0</mark>
Lane 2	226	9.3	226	9.3	433	0.522	100	40.0	LOS D	8.7	65.4	Full	174	0.0	0.0
Lane 3 (B)	53	100.0	53	100.0	279	0.190	100	27.7	LOS C	1.4	17.7	Full	174	0.0	0.0
Approach	1147	13.3	1147	13.3		0.899		33.8	LOS C	33.7	254.3				
East: Paku	ranga F	Road (E	ast)												
Lane 1	75	5.3	75	5.3	605	0.124	100	29.0	LOS C	2.2	16.4	Short	21	0.0	NA
Lane 2	389	5.4	389	5.4	559 ¹	0.696	100	29.8	LOS C	14.2	104.2	Full	98	0.0	<mark>20.6</mark>
Lane 3	443	5.4	443	5.4	637	0.696	100	30.9	LOS C	16.8	123.3	Full	98	0.0	<mark>36.1</mark>
Approach	907	5.4	907	5.4		0.696		30.3	LOS C	16.8	123.3				
West: Paku	ıranga	Road (\	(Vest)												
Lane 1 (B)	23	100.0	23	100.0	263	0.087	100	27.4	LOS C	0.6	7.3	Full	380	0.0	0.0
Lane 2	309	6.6	309	6.6	632	0.488	100	28.2	LOS C	10.7	79.2	Full	380	0.0	0.0
Lane 3	309	6.6	309	6.6	632	0.488	100	28.2	LOS C	10.7	79.2	Full	380	0.0	0.0
Lane 4	307	17.4	307	17.4	394	0.778	100	47.1	LOS D	13.6	109.4	Short	178	0.0	NA
Lane 5	307	17.4	307	17.4	394	0.778	100	47.1	LOS D	13.6	109.4	Short	105	0.0	NA
Approach	1254	13.6	1254	13.6		0.778		37.5	LOS D	13.6	109.4				
Intersectio n	3308	11.3	3308	11.3		0.899		34.2	LOS C	33.7	254.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

N4 Average back of gueue has been restricted to the available gueue storage space.

South: Ti Rakau Drive Mov. L2 R2 Total %HV Deg. Cap. Sath Veh/h Lane Prob. Ov. Util. SL Ov. Lane Veh/h Ov. Weh/h No. Lane 1 868 - 868 9.1 965 0.899 100 NA NA Lane 2 - 226 226 9.3 433 0.522 100 NA NA
From S To Exit: W E Cap. veh/h Satn veh/h Util. SL Ov. % Lane No. Lane 1 868 - 868 9.1 965 0.899 100 NA NA Lane 2 - 226 226 9.3 433 0.522 100 NA NA
Lane 1 868 - 868 9.1 965 0.899 100 NA NA Lane 2 - 226 226 9.3 433 0.522 100 NA NA
Lane 2 - 226 226 9.3 433 0.522 100 NA NA
Lane 3 53 - 53 100.0 279 0.190 100 NA NA
Approach 921 226 1147 13.3 0.899
East: Pakuranga Road (East)
Mov. L2 T1 Total %HV Deg. Lane Prob. Ov. From E Cap. Satn Util. SL Ov. Lane To Exit: S W veh/h v/c % % No.

Lane 1	75	_	75	5.3	605	0.124	100	0.0	2
Lane 2	-	389	389	5.4	559 ¹	0.696	100	NA	NA
Lane 3	_	443	443	5.4	637	0.696	100	NA	NA
Approach	75	832	907	5.4		0.696			
West: Pakura	anga Ro	ad (We	st)						
Mov. From W To Exit:	T1 E	R2 S	Tota l	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	_	23	23	100.0	263	0.087	100	NA	NA
Lane 2	309	-	309	6.6	632	0.488	100	NA	NA
Lane 3	309	-	309	6.6	632	0.488	100	NA	NA
Lane 4	-	307	307	17.4	394	0.778	100	0.0	3
Lane 5	-	307	307	17.4	394	0.778	100	<mark>18.7</mark>	4
Approach	617	637	1254	13.6		0.778			
	Total	%HV[Deg.Sat	n (v/c)					
Intersection	3308	11.3		0.899					

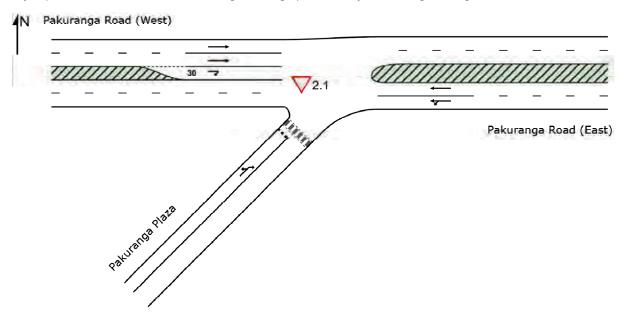
1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis					
Exit Lane Number	Lane Opng in Flow Rate	Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn Delay	Merge De l ay sec
South Exit: Ti Rakau Drive Merge Type: Not Applied					
Full Length Lane 1 Full Length Lane 2 Full Length Lane 3	Merge Analysis not applied.				
East Exit: Pakuranga Road Merge Type: Not Applied	l (East)				
Full Length Lane 1 Full Length Lane 2					
West Exit: Pakuranga Road Merge Type: Not Applied	d (West)				
Full Length Lane 1	Merge Analysis not applied.				
Full Length Lane 2	Merge Analysis not applied.				
Full Length Lane 3	Merge Analysis not applied.				

Site: 2.1 [2.1 Pakuranga Plaza / Pakuranga Rd (Site Folder:

Site Category: (None) Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 2.1 [2.1 Pakuranga Plaza / Pakuranga Rd (Site Folder: AM)]

Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None) Give-Way (Two-Way)

Lane Use and Performance															
	DEM/ FLO [Total	WS HV]	ARRI FLO [Total	WS	Сар.	Deg. Satn	Lane Util.		Level of Service	85% B <i>A</i> QUE [Veh		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
East: Paku	ranga R	load (E	East)												
Lane 1	472	5.2	472	5.2	1795	0.263	100	0.6	LOS A	0.3	2.1	Full	121	0.0	0.0
Lane 2	493	5.4	493	5.4	1874	0.263	100	0.0	LOS A	0.0	0.0	Full	121	0.0	0.0
Approach	965	5.3	965	5.3		0.263		0.3	NA	0.3	2.1				
West: Paku	uranga F	Road (West)												
Lane 1	503	7.3	503	7.3	1852	0.272	100	0.0	LOS A	0.0	0.0	Full	108	0.0	0.0
Lane 2	358	7.3	358	7.3	1315	0.272	100	0.0	LOS A	0.0	0.0	Full	108	<mark>-27.9</mark> N3	0.0
Lane 3	34	3.1	34	3.1	552	0.061	100	12.3	LOS B	0.2	1.2	Short	30	0.0	NA
Approach	895	7.2	895	7.2		0.272		0.5	NA	0.2	1.2				
SouthWest	t: Pakura	anga F	Plaza												
Lane 1	54	5.6	54	5.6	52	1.036	100	224.6	LOS F	4.2	31.0	Full	196	-23.5 ^{N7}	0.0
Approach	54	5.6	54	5.6		1.036		224.6	LOS F	4.2	31.0				
Intersectio n	1914	6.2	1914	6.2		1.036		6.7	NA	4.2	31.0				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach L	_ane Flo	ows (v	reh/h)							
East: Pakura	nga Roa	d (Eas	t)							
Mov. From E To Exit:	L1 SW	T1 W	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2	52 -	420 493	472 493	5.2 5.4		0.263 0.263	100 100	NA NA	NA NA	
Approach	52	913	965	5.3		0.263				
West: Pakura	anga Roa	ad (We	st)							
Mov. From W To Exit:	T1 E	R3 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	503	-	503	7.3	1852	0.272	100	NA	NA	
Lane 2	358	-	358	7.3	1315	0.272	100	NA	NA	
Lane 3	-	34	34	3.1	552	0.061	100	0.0	2	

Approach	861	34	895	7.2		0.272			
SouthWest: I	Pakuran	ga P l az	:a						
Mov. From SW To Exit:	L3 W	R1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	
Lane 1	11	43	54	5.6	52	1.036	100	NA	NA
Approach	11	43	54	5.6		1.036			
	Total	%HV[Deg.Sat	tn (v/c)					
Intersection	1914	6.2		1.036					

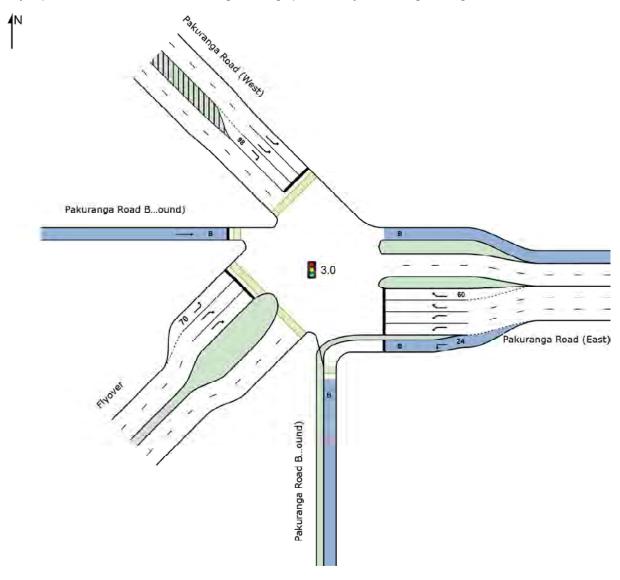
Merge Analysis	
Exit Lane Number	Short Percent Opposing Critical Follow-up Lane Capacity Deg. Min. Merge Lane Opng in Flow Rate Gap Headway Flow Satn Delay Delay Length Lane Rate m %veh/h pcu/h sec sec veh/h veh/h v/c sec sec
East Exit: Pakuranga Roac Merge Type: Not Applied	
Full Length Lane 1 Full Length Lane 2	Merge Analysis not applied. Merge Analysis not applied.
West Exit: Pakuranga Roa Merge Type: Not Applied	i (West)
Full Length Lane 1 Full Length Lane 2	Merge Analysis not applied. Merge Analysis not applied.
SouthWest Exit: Pakuranga Merge Type: Not Applied	ı Plaza
Full Length Lane 1	Merge Analysis not applied.

Site: 3.0 [3.0 Pakuranga Highway / Pakuranga Rd (Site Folder:

AM)

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 3.0 [3.0 Pakuranga Highway / Pakuranga Rd (Site Folder: Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None)

Lane Use	and P	erforn	nance												
		IAND IWS HV 1		NIVAL DWS HV 1	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	% -	veh/h	%	veh/h	v/c	%	sec			m ¹		m	%	%
East: Paku	ranga F	Road (E	ast)												
Lane 1 (B)	28	100.0	28	100.0		0.041	100	16.6	LOS B	0.7	8.9	Short	24	0.0	NA
Lane 2	1027	4.8	1027	4.8	1107	0.928	100	42.4	LOS D	65.8	479.5	Full	183	0.0	100.0
Lane 3	1070	4.8	1070	4.8		0.928	100	42.4	LOS D	70.9	516.4	Full	183	0.0	100.0
Lane 4	409	4.8	409	4.8		0.652	100	32.5	LOS C	18.1	131.6	Full	183	0.0	0.0
Lane 5	409	4.8	409	4.8	627	0.652	100	32.5	LOS C	18.1	131.6	Short	60	0.0	NA
Approach	2943	5.7	2943	5.7		0.928		39.4	LOS D	70.9	516.4				
NorthWest	Pakur	anga R	oad (V	Vest)											
Lane 1	328	5.8	328	5.8	1231	0.266	100	13.5	LOS B	8.3	61.1	Full	121	0.0	0.0
Lane 2	328	5.8	328	5.8	1231	0.266	100	13.5	LOS B	8.3	61.1	Full	121	0.0	<mark>27.9</mark> 8
Lane 3	252	10.7	252	10.7	286	0.881	100	82.6	LOS F	18.2	139.3	Short	98	0.0	NA
Approach	907	7.2	907	7.2		0.881		32.7	LOS C	18.2	139.3				
West: Paku	ıranga	Road B	usway	Link (l	Northb	ound)									
Lane 1 (B)	9	100.0	9	100.0	295	0.031	100	45.9	LOS D	0.4	5.8	Full	215	0.0	0.0
Approach	9	100.0	9	100.0		0.031		45.9	LOS D	0.4	5.8				
SouthWest	: Flyov	er													
Lane 1	150	8.0	150	8.0	300	0.499	100	67.5	LOS E	9.0	67.6	Short	70	0.0	NA
Lane 2	325	4.6	325	4.6	409	0.794	100	62.9	LOS E	20.2	146.8	Full	1162	0.0	0.0
Lane 3	372	4.6	372	4.6	469	0.794	100	63.9	LOS E	23.6	171.7	Full	1162	0.0	0.0
Approach	847	5.2	847	5.2		0.794		64.2	LOS E	23.6	171.7				
Intersectio n	4706	6.1	4706	6.1		0.928		42.6	LOS D	70.9	516.4				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- 8 Probability of Blockage has been set on the basis of a queue that overflows from a short lane.

Approach L	_ane Fl	lows (v	eh/h)							
East: Pakura	nga Roa	ad (East	:)							
Mov. From E To Exit:	L2 S	L1 SW	R1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	
Lane 1	28	-	-	28	100.0	687	0.041	100	0.0	2
Lane 2	-	1027	-	1027	4.8	1107 ¹	0.928	100	NA	NA
Lane 3	-	1070	-	1070	4.8	1153	0.928	100	NA	NA
Lane 4	-	-	409	409	4.8	627 ¹	0.652	100	NA	NA

Lane 5	-	-	409	409	4.8	627 ¹	0.652	100	<mark>89.1</mark>	4	
Approach	28	2097	818	2943	5.7		0.928				
NorthWest: P	akuran	ga Roa	d (West	t)							
Mov. From NW To Exit:	L1 E	R2 SW	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2	328 328	- 252	328 328 252	5.8 5.8 10.7		1231 1231	0.266 0.266 0.881	100 100 100	NA NA <mark>47.4</mark>	NA NA 2	
Lane 3 Approach	655	252	907	7.2		200	0.881	100	47.4		
West: Pakura	anga Ro	ad Bus	sway Lir	ık (North	bound)						
Mov. From W To Exit:	T1 E	Total	%HV			Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	9	9	100.0			295	0.031	100	NA	NA	
Approach	9	9	100.0				0.031				
SouthWest: F	lyover										
Mov. From SW To Exit:	L2 NW	R1 E	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2 Lane 3	150 - -	325 372	150 325 372	8.0 4.6 4.6		300 409 ¹ 469	0.499 0.794 0.794	100 100 100	11.8 NA NA	2 NA NA	
Approach	150	697	847	5.2		100	0.794	100	101	14/	
	Total	%HVI	Deg.Sat	tn (v/c)							
Intersection	4706	6.1		0.928							

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

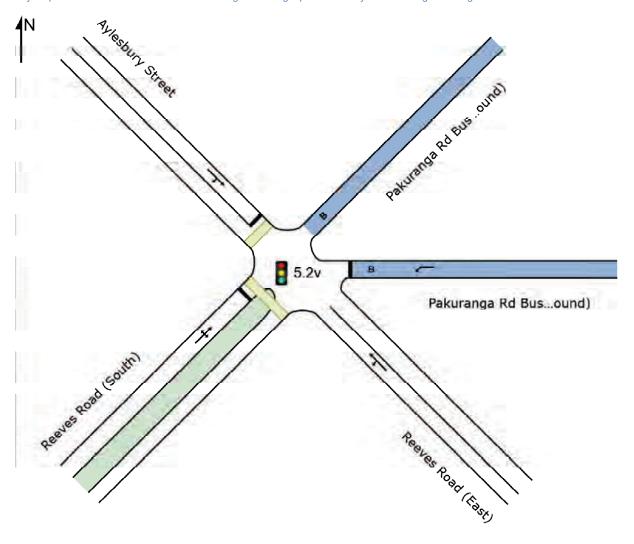
Merge Analysis					
E: Lar Numb		Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn Delay	Merge De l ay sec
South Exit: Pakuranga R Merge Type: Not Applie	Road Busway Link (Southbound)				
Full Length Lane	1 Merge Analysis not applied.				
East Exit: Pakuranga Ro Merge Type: Not Applie					
Full Length Lane	1 Merge Analysis not applied.				
Full Length Lane	2 Merge Analysis not applied.				
Full Length Lane	3 Merge Analysis not applied.				
NorthWest Exit: Pakuran Merge Type: Not Applie					
Full Length Lane	1 Merge Analysis not applied.				
Full Length Lane	2 Merge Analysis not applied.				
SouthWest Exit: Flyover Merge Type: Not Applied					
Full Length Lane	1 Merge Analysis not applied.				
Full Length Lane	2 Merge Analysis not applied.				

Organisation: AECOM AUSTRALIA PTY LTD | Licence: NETWORK / Enterprise | Processed: Friday, 18 August 2023 2:01:55 PM Project: C:\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final AM 2028_JV Edits_Updates.sip9

Site: 5.2v [5.2 Aylesbury St/ Reeves Rd/ Busway Link signalised - Import (Site Folder: AM)]

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

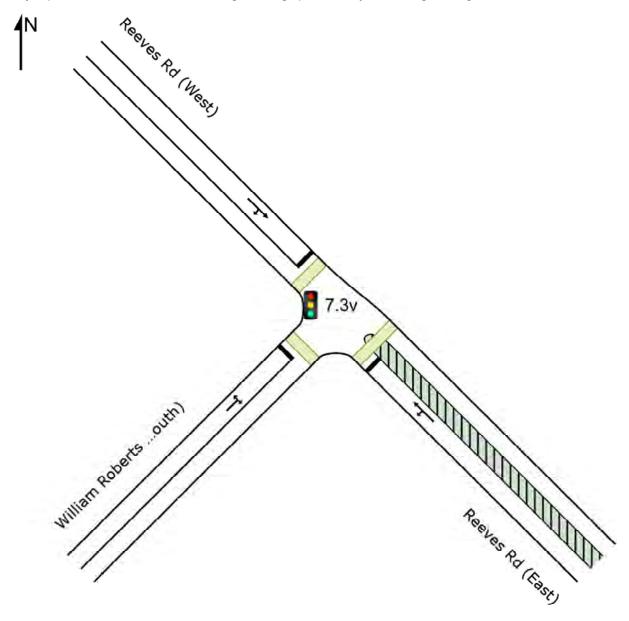
Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 7.3v [7.3 William Roberts Rd / Reeves Rd signalised - Import (Site Folder: AM)]

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



CCG LANE SUMMARY

□□ Common Control Group: CCG3 [Aylesbury/ WR/ Reeves Rd]

► Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Lane Use	and P	erform	nance	(CCG)										
	DEM FLC	IAND DWS	ARF FLC	RIVAL DWS	, Cap.	Deg. Satn			Level of Service	85% BA	EUE		Lane Length	Cap. Adj.	Prob. B l ock.
	[Total veh/h	HV] %	l Total		veh/h	v/c	%	sec		[Veh	Dist] m		m	%	%
Site: 5.2v [5.2 Ay l e	esbury S	St/ Ree	eves Ro	l/ Busv	vay Linl	c signal	lised - Im	nport]						
SouthEast:	Reeve	s Road	(East))											
Lane 1	260	7.7	260	7.7	1769	0.147	100	1.9	LOSA	0.0	0.0	Full	27	0.0	0.0
Approach	260	7.7	260	7.7		0.147		1.9	LOS A	0.0	0.0				
East: Paku	ranga F	Rd Busv	vay Lir	nk (Sou	thbour	nd)									
Lane 1 (B)	28	100.0	28	100.0	121	0.231	100	73.3	LOS E	1.8	22.8	Full	203	0.0	0.0
Approach	28	100.0	28	100.0		0.231		73.3	LOS E	1.8	22.8				
NorthWest:	Aylesb	oury Stre	eet												
Lane 1	22	0.0	22	0.0	71	0.308	100	80.7	LOS F	1.5	10.5	Full	284	0.0	0.0
Approach	22	0.0	22	0.0		0.308		80.7	LOS F	1.5	10.5				
SouthWest	: Reeve	es Road	d (Sout	:h)											
Lane 1	94	24.6	94	24.6	139	0.675	100	77.3	LOS E	6.3	53.3	Full	180	-3.8 ^{N7}	0.0
Approach	94	24.6	94	24.6		0.675		77.3	LOS E	6.3	53.3				
Intersectio n	404	17.6	404	17.6		0.675		28.6	LOS C	6.3	53.3				
Site: 7.3v [7	7.3 Will	iam Rol	berts F	Rd / Red	eves R	d signa	lised -	Import]							
SouthEast:	Reeve	s Rd (E	ast)												
Lane 1	394	8.9	394	8.9	479	0.822	100	63.5	LOS E	25.6	192.7	Full	810	0.0	0.0
Approach	394	8.9	394	8.9		0.822		63.5	LOS E	25.6	192.7				
NorthWest:	Reeve	s Rd (V	Vest)												
Lane 1	84	15.5	84	15.5	474	0.177	100	1.9	LOS A	0.1	1.0	Full	27	0.0	0.0
Approach	84	15.5	84	15.5		0.177		1.9	LOS A	0.1	1.0				
SouthWest	: Williar	m Robe	rts Ro	ad (Sou	uth)										
Lane 1	234	8.1	234	8.1	339	0.689	100	63.7	LOS E	14.5	108.2	Full	223	0.0	0.0
Approach	234	8.1	234	8.1		0.689		63.7	LOS E	14.5	108.2				
Intersectio n	712	9.4	712	9.4		0.822		56.3	LOS E	25.6	192.7				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach Lane Flows (CCG) (veh/h)

Site: 5.2v [5.2 Aylesbury St/ Reeves Rd/ Busway Link signalised - Import]

SouthEast: Reeves Road (East)

Mov.	L2	T1	Total	%HV			Deg.	Lane	Prob.	Ov.	
From SE	SW	NW				Cap. veh/h	Satn v/c	Util. %	SL Ov.	Lane No.	
To Exit:											
Lane 1	183	77	260	7.7		1769	0.147	100	NA	NA	
Approac h	183	77	260	7.7			0.147				
East: Paku	ıranga	Rd Bus	way Lin	ık (South	nbound)						
Mov.	L1	Total	%HV				Deg.	Lane	Prob.	Ov.	
From E To Exit:	SW					Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	28	28	100.0			121	0.231	100	NA	NA	
Approac h	28	28	100.0				0.231				
NorthWest	: Avles	burv Str	reet								
Mov.	T1	R2	Total	%HV			Deg.	Lane	Prob.	Ov.	
From NVV To Exit:	SE	SW				Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	12	10	22	0.0		71	0.308	100	NA	NA	
Approac	12	10	22	0.0			0.308	,,,,			
Courth\Aloo	t. Daay	D	ط (۲۵۰۰۰	L \							
SouthWes	t: Reev L2	es Roa T1	a (Souti R2	n) Total	%HV		Deg.	Lane	Prob.	Ov.	
From SW	NW	NE	SE	Total	701 TV	Cap. veh/h	Satn v/c		SL Ov.	Lane No.	
To Exit:	INVV	INL	OL.								
Lane 1	12	9	73	94	24.6	139	0.675	100	NA	NA	
Approac h	12	9	73	94	24.6		0.675				
	Total	%HV I	Deg . Sa	tn (v/c)							
Intersec tion		%HV I	Deg . Sa	tn (v/c)		۰	۰	۰	۰	۰	
tion	404	17.6		0.675	ves Rd signa l i	sed - Im	port]				
tion	404 [7.3 Wi : Reeve	17.6 Iliam Ro	oberts R East)	0.675 Rd / Ree	ves Rd signa l i:	sed - Im	port]				
tion Site: 7.3v SouthEast Mov.	404 [7.3 Wi	17.6 Iliam Ro	oberts R	0.675 Rd / Ree		Deg.	Lane	Prob.	Ov.		
tion Site: 7.3v SouthEast	404 [7.3 Wi : Reeve	17.6 Iliam Ro es Rd (E	oberts R East)	0.675 Rd / Ree	ves Rd signali: Cap. veh/h	Deg. Satn	Lane	Prob. SL Ov. %	Ov. Lane No.		
site: 7.3v SouthEast Mov. From SE	404 [7.3 Wi : Reeve L2	17.6 Iliam Ro es Rd (E	oberts R East)	0.675 Rd / Ree	Cap.	Deg. Satn v/c	Lane Util.	SL Ov.	Lane		
site: 7.3v SouthEast Mov. From SE To Exit:	404 [7.3 Wi : Reeve L2 SW	17.6 Iliam Ro es Rd (E T1 NW	oberts R East) Total	0.675 Rd / Ree ^v %HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	SL Ov. %	Lane No.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h	404 [7.3 Wi : Reeve L2 SW 180 180	17.6 Illiam Roes Rd (I T1 NW 214 214	oberts R East) Total 394 394	0.675 Rd / Ree* %HV 8.9	Cap. veh/h	Deg. Satn v/c	Lane Util. %	SL Ov. %	Lane No.		
site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac	404 [7.3 Wi : Reeve L2 SW 180 180	17.6 Illiam Roes Rd (I T1 NW 214 214	oberts R East) Total 394 394	0.675 Rd / Ree* %HV 8.9 8.9	Cap. veh/h	Deg. Satn v/c	Lane Util. % 100	SL Ov. % NA Prob.	Lane No.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW	404 [7.3 Wi : Reeve L2 SW 180 180	17.6 Iliam Roes Rd (I T1 NW 214 214	oberts REast) Total 394 394 West)	0.675 Rd / Ree* %HV 8.9 8.9	Cap. veh/h	Deg. Satn v/c 0.822 0.822 Deg. Satn	Lane Util. % 100	SL Ov. % NA	Lane No.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW To Exit:	404 [7.3 Wi : Reeve L2 SW 180 180 180	17.6 Iliam Roes Rd (ET1 NW 214 214 es Rd (R2 SW	oberts REast) Total 394 394 West) Total	0.675 Rd / Ree* %HV 8.9 8.9	Cap. veh/h 479 Cap. veh/h	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c	Lane Util. % 100 Lane Util. %	SL Ov. % NA Prob. SL Ov. %	NA Ov. Lane No.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW	404 [7.3 Wi : Reeve L2 SW 180 180 180 :: Reeve T1 SE 59	17.6 Iliam Roes Rd (ET1 NW 214 214 es Rd (R2 SW 25	oberts REast) Total 394 394 West) Total	0.675 Rd / Ree* %HV 8.9 8.9	Cap. veh/h 479 Cap. veh/h	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c 0.177	Lane Util. % 100 Lane Util.	SL Ov. % NA Prob. SL Ov.	NA Ov. Lane		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW To Exit: Lane 1 Approac h	404 [7.3 Wi : Reeve L2 SW 180 180 :: Reeve T1 SE 59	17.6 Iliam Roes Rd (ET1 NW 214 214 214 es Rd (R2 SW 25 25	Specifical	0.675 Rd / Ree %HV 8.9 8.9 %HV 15.5	Cap. veh/h 479 Cap. veh/h	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c	Lane Util. % 100 Lane Util. %	SL Ov. % NA Prob. SL Ov. %	NA Ov. Lane No.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW To Exit: Lane 1 Approac h SouthWest	404 [7.3 Wi : Reeve L2 SW 180 180 180 :: Reeve T1 SE 59 59	17.6 Iliam Roes Rd (ET1 NW 214 214 214 es Rd (IR2 SW 25 25	Subserved Frageria Subserved Frageria Subserved Frageria Subserved Frageria Subserved Frageria Frageria Subserved Frageria Subs	0.675 Rd / Ree* %HV 8.9 8.9 %HV 15.5 15.5	Cap. veh/h 479 Cap. veh/h	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c 0.177 0.177	Lane Util. % 100 Lane Util. % 100	SL Ov. % NA Prob. SL Ov. % NA	NA Ov. Lane No.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW To Exit: Lane 1 Approac h SouthWest Mov.	404 [7.3 Wi : Reeve L2 SW 180 180 :: Reeve T1 SE 59	17.6 Iliam Roes Rd (ET1 NW 214 214 214 es Rd (R2 SW 25 25	Specifical	0.675 Rd / Ree* %HV 8.9 8.9 %HV 15.5 15.5	Cap. veh/h 479 Cap. veh/h 474	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c 0.177 0.177	Lane Util. % 100 Lane Util. % 100	SL Ov. % NA Prob. SL Ov. % NA	NA Ov. Lane No. NA Ov. Cov.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW To Exit: Lane 1 Approac h SouthWest	404 [7.3 Wi : Reeve L2 SW 180 180 180 :: Reeve T1 SE 59 59	17.6 Iliam Roes Rd (ET1 NW 214 214 214 es Rd (IR2 SW 25 25	Subserved Frageria Subserved Frageria Subserved Frageria Subserved Frageria Subserved Frageria Frageria Subserved Frageria Subs	0.675 Rd / Ree* %HV 8.9 8.9 %HV 15.5 15.5	Cap. veh/h 479 Cap. veh/h	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c 0.177 0.177 Deg. Satn	Lane Util. % 100 Lane Util. % 100	SL Ov. % NA Prob. SL Ov. % NA	NA Ov. Lane No.		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW To Exit: Lane 1 Approac h SouthWest Mov. From SW To Exit: Lane 1	404 [7.3 Wi : Reeve L2 SW 180 180 180 E: Reeve T1 SE 59 59 t: Willia	17.6 Iliam Roes Rd (ET1 NW 214 214 214 es Rd (R2 SW 25 25 am Rober R2	Subserved Frageria Subserved Frageria Subserved Frageria Subserved Frageria Subserved Frageria Frageria Subserved Frageria Subs	0.675 Rd / Ree* %HV 8.9 8.9 %HV 15.5 15.5	Cap. veh/h 479 Cap. veh/h 474 h)	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c 0.177 0.177 Deg. Satn v/c	Lane Util. % 100 Lane Util. % 100 Lane Util. %	SL Ov. % NA Prob. SL Ov. % NA Prob. SL Ov. SL Ov.	NA Ov. Lane No. NA		
tion Site: 7.3v SouthEast Mov. From SE To Exit: Lane 1 Approac h NorthWest Mov. From NW To Exit: Lane 1 Approac h SouthWest Mov. From SW To Exit:	404 [7.3 Wi : Reeve L2 SW 180 180 180 SE 59 59 t: Willia L2 NW	17.6 Iliam Roes Rd (ET1 NW 214 214 214 es Rd (R2 SW 25 25 am Rober R2 SE	Specifical	0.675 Rd / Ree %HV 8.9 8.9 %HV 15.5 15.5 ad (Sout	Cap. veh/h 479 Cap. veh/h 474 h) Cap. veh/h	Deg. Satn v/c 0.822 0.822 Deg. Satn v/c 0.177 0.177 Deg. Satn v/c	Lane Util. % 100 Lane Util. % 100 Lane Util. %	Prob. SL Ov. % NA Prob. SL Ov. % NA Prob. SL Ov. %	NA Ov. Lane No. NA		

	Total	%HV De	eg.Satn (v/c)			
Intersec tion	712	9.4	0.822			

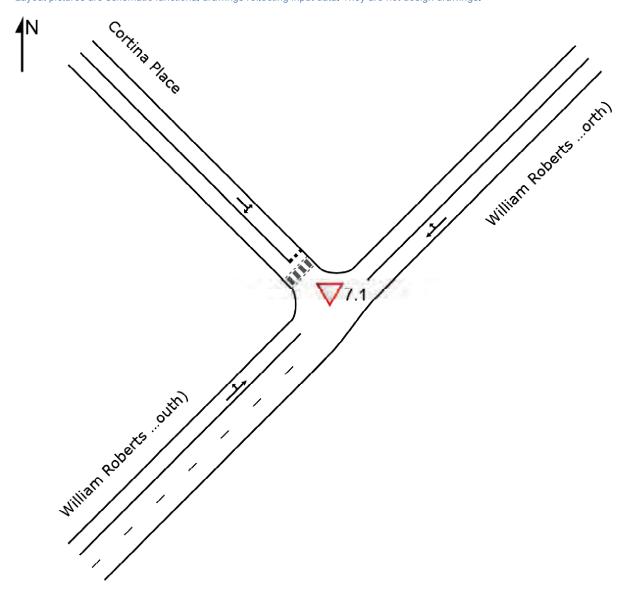
Merge Analysis (CCG	i)										
Lai		Lane	Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critical Gap sec	Follow-up Headway		Capacity veh/h	Satn [Min. De l ay	Merge De l ay sec
Site: 5.2v [5.2 Aylesbury	St/ Re						VCIIIII	VC11/11	•//	300	300
SouthEast Exit: Reeves I Merge Type: Not Applied	,	(East)									
Full Length Lane	1 N	Merge /	Ana l ysis	not applied.							
NorthEast Exit: Pakurang Merge Type: Not Applie	•	Buswa	ay Link (N	Northbound)							
Full Length Lane	1 N	Merge /	Analysis	not applied.							
NorthWest Exit: Aylesbur Merge Type: Not Applie	•	et									
Full Length Lane	1 N	Merge /	Ana l ysis	not applied.							
SouthWest Exit: Reeves Merge Type: Not Applied		(South	1)								
Full Length Lane	1 N	Merge /	Ana l ysis	not applied.							
Site: 7.3v [7.3 William Ro	berts	Rd/R	eeves R	d signa l ised ·	- Import]						
SouthEast Exit: Reeves I Merge Type: Not Applie	,	ast)									
Full Length Lane	1 N	Merge /	Ana l ysis	not applied.							
NorthWest Exit: Reeves Merge Type: Not Applie	,	(est)									
Full Length Lane	1 N	Merge /	Analysis	not applied.							
SouthWest Exit: William Merge Type: Not Applied		ts Roa	d (South)							
Full Length Lane	1 N	Merge /	Analysis	not applied.							

V Site: 7.1 [7.1 William Roberts Rd / Cortina PI - Import (Site

Folder: AM)]

Site Category: (None) Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



V Site: 7.1 [7.1 William Roberts Rd / Cortina PI - Import (Site

Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None) Give-Way (Two-Way)

Lane Use	Lane Use and Performance														
	DEM. FLO [Total veh/h	WS	ARR FLC [Tota l veh/h	WS	Cap.	Deg. Satn	Lane Util. %		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
NorthEast:	William	Robei	ts Roa	d (Nor	th)										
Lane 1	224	9.8	224	9.8	1570	0.143	100	1.7	LOS A	0.4	3.0	Full	223	0.0	0.0
Approach	224	9.8	224	9.8		0.143		1.7	NA	0.4	3.0				
NorthWest	Cortina	a Place	;												
Lane 1	103	12.6	103	12.6	924	0.111	100	2.7	LOS A	0.3	2.6	Full	177	0.0	0.0
Approach	103	12.6	103	12.6		0.111		2.7	LOS A	0.3	2.6				
SouthWest	: Williar	n Robe	erts Ro	ad (So	uth)										
Lane 1	316	8.2	316	8.2	1529	0.207	100	1.0	LOS A	0.5	3.7	Full	110	0.0	0.0
Approach	316	8.2	316	8.2		0.207		1.0	NA	0.5	3.7				
Intersectio n	643	9.5	643	9.5		0.207		1.5	NA	0.5	3.7				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Approach I	_ane Fl	ows (v	eh/h)							
NorthEast: W	/illiam R	oberts I	Road (N	North)						
Mov. From NE To Exit:	T1 SW	R2 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	162	62	224	9.8	1570	0.143	100	NA	NA	
Approach	162	62	224	9.8		0.143				
NorthWest: C	Cortina P	lace								
Mov. From NW	L2	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane	
To Exit:	NE	SW			ven/m	V/C	70	70	No.	
Lane 1	45	58	103	12.6	924	0.111	100	NA	NA	
Approach	45	58	103	12.6		0.111				
SouthWest: \	/Villiam F	Roberts	Road ((South)						
Mov. From SW To Exit:	L2 NW	T1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	111	205	316	8.2	1529	0.207	100	NA	NA	
Approach	111	205	316	8.2		0.207				
	Total	%HV [Deg.Sat	n (v/c)						

Intersection 643 9.5 0.207

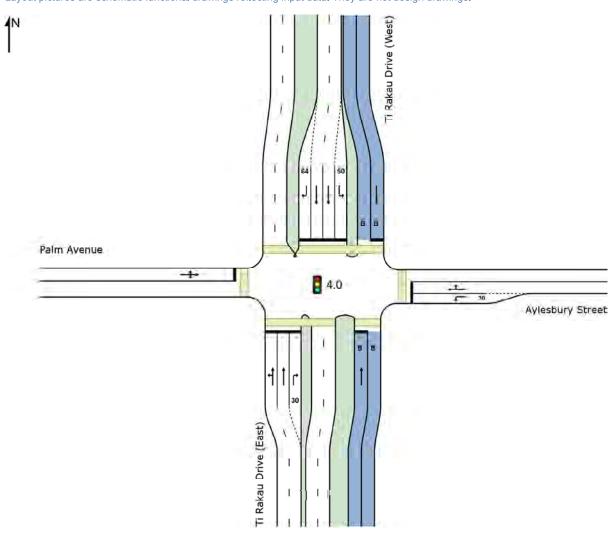
Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit ane ber		Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critical Gap sec	Follow-up Headway		Capacity veh/h	Deg. Satn I	Min. De l ay sec	Merge Delay sec
NorthEast Exit: William I Merge Type: Not Applie				verim peam	300	300	VCII/II	VCII/II	V/C	300	300
Full Length Lane	1	Merge	Ana l ysis	not applied.							
NorthWest Exit: Cortina Merge Type: Not Applie		e									
Full Length Lane	1	Merge	Ana l ysis	not applied.							
SouthWest Exit: William Merge Type: Not Applie		erts Roa	ad (South)							
Full Length Lane Full Length Lane	1 2		,	not applied. not applied.							

Site: 4.0 [4.0 Palm Ave / Aylesbury St - Import (Site Folder:

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 4.0 [4.0 Palm Ave / Aylesbury St - Import (Site Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Lane Use	and P	erforn	nance												
	DEM FLC [Tota l	AND WS HV]	ARR FLC [Tota l	WS HV]	Сар.	0 0.1	Lane Util.	Delay	Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
0 " = 5	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Ti R		rive (Ea	ast)							NA	NA			N3	
Lane 1	321	10.1	321	10.1		0.838	100	64.0	LOS E	21.1 ^{N4}	160.7 ^{N4}	Full	110	<mark>-45.4</mark> N3	
Lane 2	616	9.2	616	9.2		0.838	100	45.5	LOS D			Full	110	0.0	<mark>50.0</mark>
Lane 3	31	3.2	31	3.2		0.450	100	85.3	LOS F	2.1	15.4	Short	30	0.0	NA
Lane 4 (B)	53	100.0	53	100.0		0.086	100	14.5	LOS B	1.0	13.4	Full	110	0.0	0.0
Approach	1021	14.0	1021	14.0		0.838		50.9	LOS D	21.3	160.7				
East: Ayles	bury St	reet													
Lane 1	77	9.1	77	9.1	140	0.548	100	42.5	LOS D	3.4	25.7	Short	30	<mark>-6.7</mark> N7	NA
Lane 2	155	8.4	155	8.4	163 ¹	0.953	100	99.9	LOS F	7.8 ^{N4}	58.4 ^{N4}	Full	40	0.0	<mark>50.0</mark>
Approach	232	8.6	232	8.6		0.953		80.8	LOS F	7.8	58.4				
North: Ti Ra	akau D	rive (W	est)												
Lane 1 (B)	23	100.0	23	100.0	613	0.038	100	4.4	LOS A	0.0	0.2	Full	174	0.0	0.0
Lane 2	64	12.5	64	12.5	841	0.076	100	22.6	LOS C	2.0	15.8	Short	50	0.0	NA
Lane 3	295	16.7	295	16.7	648 ¹	0.456	100	34.3	LOS C	13.2	105.7	Full	174	-6.7 ^{N7}	0.0
Lane 4	303	16.7	303	16.7	665 ¹	0.456	100	34.5	LOS C	13.6	109.1	Full	174	<mark>-6.7</mark> N7	0.0
Lane 5	15	0.0	15	0.0	70	0.213	100	83.5	LOS F	1.0	7.1	Short	64	0.0	NA
Approach	700	18.7	700	18.7		0.456		33.4	LOS C	13.6	109.1				
West: Palm	Avenu	ie													
Lane 1	113	5.3	113	5.3	162	0.698	100	74.7	LOS E	7.5	55.0	Full	87	-32.7 ^{N7}	0.0
Approach	113	5.3	113	5.3		0.698		74.7	LOS E	7.5	55.0				
Intersectio n	2066	14.5	2066	14.5		0.953		49.7	LOS D	21.3	160.7				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach L	_ane Flo	ows (ve	eh/h)								
South: Ti Rakau Drive (East)											
Mov. From S To Exit:	L2 W	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %		
Lane 1 Lane 2	54 -	267 616	-	321 616	10.1 9.2	383 736 ¹	0.838 0.838	100 100	NA NA	NA NA	

Lane 3	_	_	31	31	3.2	69	0.450	100	0.0	2	
Lane 4	_	53	_	53	100.0	613	0.086	100	NA	NA	
Approach	54	936	31	1021	14.0		0.838				
East: Aylesbu	ury Stre	et									
Mov.	L2	T1	R2	Total	%HV		Deg.		Prob.	Ov.	
From E						Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	S	W	N			Veri/ii	V/C	70	70	INU.	
Lane 1	77	-	-	77	9.1	140	0.548	100	<mark>1.1</mark>	2	
Lane 2	_	10	145	155	8.4	163 ¹	0.953	100	NA	NA	
Approach	77	10	145	232	8.6		0.953				
North: Ti Rak	au Driv	e (West))								
Mov.	L2	T1	R2	Total	%HV		Deg.		Prob.	Ov.	
From N						Cap.	Satn		SL Ov.	Lane	
To Exit:	Е	S	W			veh/h	v/c	%	%	No.	
Lane 1	-	23	-	23	100.0	613	0.038	100	NA	NA	
Lane 2	64	-	-	64	12.5	841	0.076	100	0.0	3	
Lane 3	-	295	-	295	16.7	648 ¹	0.456	100	NA	NA	
Lane 4	-	303	-	303	16.7	665 ¹	0.456	100	NA	NA	
Lane 5	_	-	15	15	0.0	70	0.213	100	0.0	4	
Approach	64	621	15	700	18.7		0.456				
West: Palm A	venue										
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From W						Cap.	Satn		SL Ov.	Lane	
To Exit:	Ν	Е	S			veh/h	v/c	%	%	No.	
Lane 1	52	21	40	113	5.3	162	0.698	100	NA	NA	
Approach	52	21	40	113	5.3		0.698				
	Total	%HVC	eg.Sat	n (v/c)							
Intersection	2066	14.5		0.953							

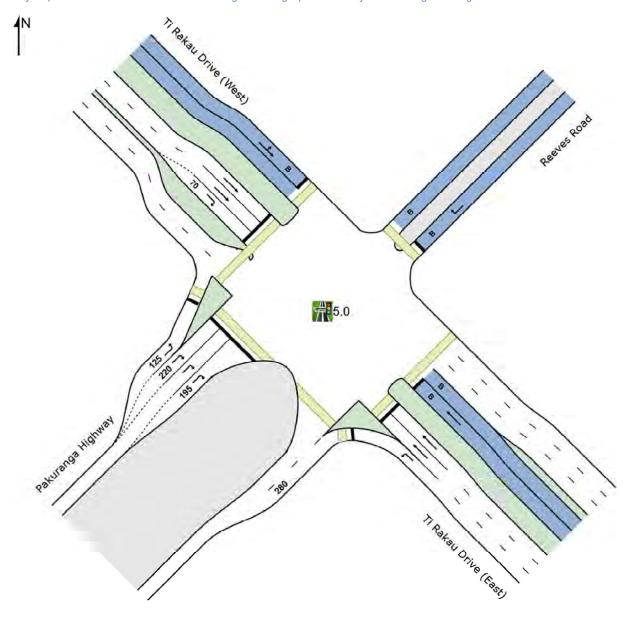
1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis					
Exi Lane Numbe	e Lane Opng in F l ow Rate	Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn Delay	Merge De l ay sec
South Exit: Ti Rakau Drive Merge Type: Not Applied					
Full Length Lane	 Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied. 				
East Exit: Aylesbury Stree Merge Type: Not Applied					
Full Length Lane	1 Merge Analysis not applied.				
North Exit: Ti Rakau Drive Merge Type: Not Applied	,				
Full Length Lane	 Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied. 				
West Exit: Palm Avenue Merge Type: Not Applied					
Full Length Lane	1 Merge Analysis not applied.				

Site: 5.0 [5.0 Pakuranga Highway / Reeves Rd - Import (Site Folder: AM)]

Site Category: (None) Single Point Interchange (Signals) - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 5.0 [5.0 Pakuranga Highway / Reeves Rd - Import (Site

Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

Site Category: (None)

Single Point Interchange (Signals) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Laure Hea	I D														
Lane Use										050/ D					D 1
	DEM FLC			NAL WS	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE	Lane Config	Lane Length	Cap. Adj.	Prob. B l ock.
	[Total	HV]	[Tota	HV]				20.03	33,1,33	[Veh	Dist]				
	veh/h	%	veh/h		veh/h	v/c	%	sec			m		m	%	%
SouthEast:	Ti Rak	au Driv	e (Eas	t)						NIA	NIA				
Lane 1	860	12.1	860	12.1	1327	0.648	100	12.4	LOS B		131.5 ^{N4}	Full	90	0.0	<mark>50.0</mark>
Lane 2	433	10.1	432	10.1		0.869	100	48.4	LOS D		131.5 ^{N4}	Full	90	-50.0 ^{N7}	<mark>50.0</mark>
Lane 3	433	10.1	432	10.1		0.869	100	48.4	LOS D	12.3 ^{N5}		Full	90	<mark>-50.0</mark> ^{N3}	
Lane 4 (B)	25	100.0	25	100.0	199	0.126	100	35.0	LOS C	1.0	12.6	Full	90	0.0	0.0
Approach	1750	12.3	1750	12.3		0.869		30.5	LOS C	17.3	131.5				
NorthEast:	Reeves	s Road													
Lane 1 (B)	28	100.0	28	100.0	292	0.096	100	31.0	LOS C	1.0	12.4	Full	50	0.0	0.0
Approach	28	100.0	28	100.0		0.096		31.0	LOS C	1.0	12.4				
NorthWest:	Ti Rak	au Driv	e (We	st)											
Lane 1 (B)	22	100.0	22	100.0	225	0.098	100	34.0	LOS C	8.0	10.4	Full	110	0.0	0.0
Lane 2	282	17.4	281	17.4	500	0.563	100	32.6	LOS C	12.5	100.3	Full	110	0.0	<mark>6.7</mark>
Lane 3	282	17.4	281	17.4	500	0.563	100	32.6	LOS C	12.5	100.3	Full	110	0.0	<mark>6.7</mark>
Lane 4	156	7.7	156	7.7	198	0.786	100	80.5	LOS F	10.6	79.4	Short	70	0.0	NA
Approach	741	17.8	741	17.8		0.786		42.7	LOS D	12.5	100.3				
SouthWest	: Pakur	anga H	ighwa	y											
Lane 1	113	5.3	113	5.3	325	0.347	100	45.6	LOS D	5.5	40.1	Short	125	<mark>-50.0</mark> N7	NA
Lane 2	302	12.1	302	12.1	334	0.905	100	87.2	LOS F	22.5	174.0	Short	220	0.0	NA
Lane 3	302	12.1	302	12.1	334	0.905	100	87.2	LOS F	22.5	174.0	Full	623	0.0	0.0
Lane 4	302	12.1	302	12.1	334	0.905	100	87.2	LOS F	22.5	174.0	Short	195	0.0	NA
Approach	1020	11.4	1020	11.4		0.905		82.6	LOS F	22.5	174.0				
Intersectio n	3539	13.9	3539	13.9		0.905		48.1	LOS D	22.5	174.0				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.
- N5 Continuous Lane results determined by Back of Queue values of downstream lanes (proportional to lane movement flows).
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach	Lane Flo	ows (v	/eh/h)							
SouthEast: 7	Γi Rakau	Drive (East)							
Mov. From SE To Exit:	L2 SW	T1 NW	Total	%HV	Cap. veh/h		Util.	Prob. SL Ov. %	Lane	
Lane 1	860	-	860	12.1	1327	0.648	100	NA	NA	

Lane 2	-	432	432	10.1		498	0.869	100	NA	NA	
Lane 3	=	432	432	10.1		498	0.869	100	NA	NA	
Lane 4	_	25	25	100.0		199	0.126	100	NA	NA	
Approach	860	890	1750	12.3			0.869				
NorthEast: R	eeves F	Road									
Mov.	R2	Total	%HV				Deg.		Prob.	Ov.	
From NE						Cap. veh/h	Satn v/c	Util. %	SL Ov.	Lane No.	
To Exit:	NW					venim	V/C	70	70	INO.	
Lane 1	28	28	100.0			292	0.096	100	NA	NA	
Approach	28	28	100.0				0.096				
NorthWest: T	ī Rakau	Drive	(West)								
Mov.	L2	T1	R2	Total	%HV		Deg.		Prob.	Ov.	
From NW						Cap. veh/h	Satn	Util. %	SL Ov.	Lane	
To Exit:	NE	SE	SW			ven/n	v/c	%	%	No.	
Lane 1	9	13	-	22	100.0	225	0.098	100	NA	NA	
Lane 2	-	281	-	281	17.4	500	0.563	100	NA	NA	
Lane 3	-	281	-	281	17.4	500	0.563	100	NA	NA	
Lane 4	_	-	156	156	7.7	198	0.786	100	<mark>26.5</mark>	3	
Approach	9	576	156	741	17.8		0.786				
SouthWest: I	Pakuran	ga Hig	hway								
Mov.	L2	R2	Total	%HV			Deg.		Prob.	Ov.	
From SW						Cap.	Satn		SL Ov.	Lane	
To Exit:	NW	SE				veh/h	v/c	%	%	No.	
Lane 1	113	-	113	5.3		325	0.347	100	0.0	2	
Lane 2	=	302	302	12.1		334	0.905	100	0.0	3	
Lane 3	-	302	302	12.1		334	0.905	100	NA	NA	
Lane 4	-	302	302	12.1		334	0.905	100	<mark>4.7</mark>	3	
Approach	113	907	1020	11.4			0.905				
	Total	%HV	Deg . Sat	tn (v/c)							
Intersection	3539	13.9		0.905							

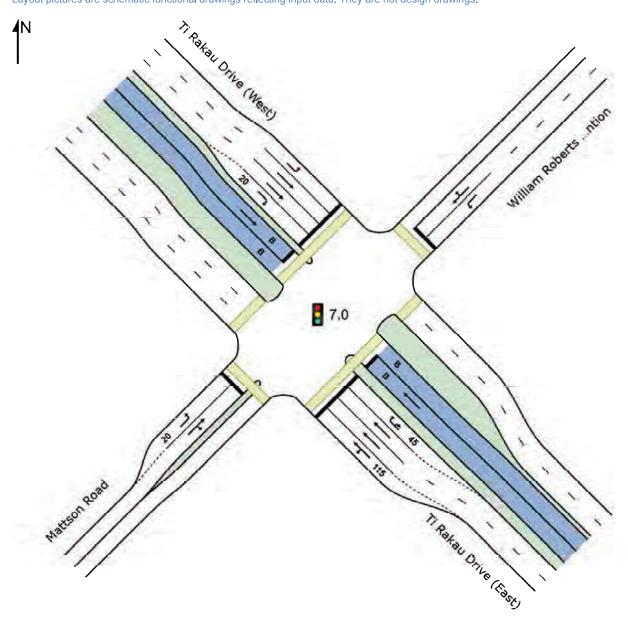
Merge Analysis							
Exit Lane Number	Lane	Percent Opposing Opng in Flow Rate Lane % veh/h pcu/h	Critica l Gap n sec	Headway	Lane Capacity Flow Rate veh/h veh/h	Satn De	Merge Delay sec
SouthEast Exit: Ti Rakau I Merge Type: Not Applied	rive (Eas	t)					
Full Length Lane 1 Full Length Lane 2 Full Length Lane 3 Full Length Lane 4	Merge Merge	Analysis not applied. Analysis not applied. Analysis not applied. Analysis not applied.					
NorthEast Exit: Reeves Ro Merge Type: Not Applied	ad						
Full Length Lane 1	Merge	Analysis not applied	-				
NorthWest Exit: Ti Rakau I Merge Type: Not Applied	rive (Wes	st)					
Full Length Lane 1 Full Length Lane 2 Full Length Lane 3	Merge	Analysis not applied. Analysis not applied. Analysis not applied.	-				
SouthWest Exit: Pakurange Merge Type: Zipper	a Highway	1					

Exit Short Lane	1	280	50.0 78	81	2.50	2.00 860	1708 0.503	0.0	0.1
Merge Lane	2	-	50.0 430	456	2.50	2.00 156	1201 0.130	0.5	0.7

Site: 7.0 [7.0 William Roberts Rd/ Mattson Rd/ Ti Rakau Drive - Import (Site Folder: AM)]

Scheme Design Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 7.0 [7.0 William Roberts Rd/ Mattson Rd/ Ti Rakau Drive - Network: N101 [AM_Town Import (Site Folder: AM)] centre drive four lanes (Network Folder: General)]

Scheme Design Site Category: (None)

Lane Use	and P	erforn	nance												
	DEM FLC [Total veh/h)WS			Cap.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
SouthEast:	Ti Rak	au Driv	e (Eas	it)											
Lane 1	415	11.2	415	11.2	554	0.750	100	34.3	LOS C	16.4	125.6	Short	115	0.0	NA
Lane 2	564	11.7	564	11.7		0.750	100	26.3	LOS C	20.4	157.3	Full	207	0.0	0.0
Lane 3	506	11.7	506	11.7	675	0.750	100	25.7	LOS C	17.8	136.7	Full	207	0.0	0.0
Lane 4	81	3.8	81	3.8	214	0.376	100	48.2	LOS D	3.2	23.4	Short	45	0.0	NA
Lane 5 (B)	25	100.0	25	100.0	498	0.050	100	5.1	LOS A	0.2	2.4	Full	207	0.0	0.0
Approach	1591	12.5	1591	12.5		0.750		29.0	LOS C	20.4	157.3				
NorthEast:	William	Rober	ts Roa	d Exte	ntion										
Lane 1	63	14.3	63	14.3	175	0.361	100	47.4	LOS D	2.6	20.4	Full	112	0.0	0.0
Lane 2	161	9.3	161	9.3	181	0.889	100	59.2	LOS E	7.9	59.9	Full	110	0.0	0.0
Approach	224	10.7	224	10.7		0.889		55.9	LOS E	7.9	59.9				
NorthWest:	Ti Rak	au Driv	e (We	st)											
Lane 1	220	10.5	220	10.5	269	0.819	100	53.6	LOS D	10.0	76.5	Full	107	0.0	0.0
Lane 2	627	14.7	627	14.7	738	0.849	100	34.3	LOS C	19.8 ^{N4}	156.4 ^{N4}	Full	107	0.0	<mark>50.0</mark>
Lane 3	601	14.7	601	14.7	708 ¹	0.849	100	34.1	LOS C	19.8 ^{N4}	156.4 ^{N4}	Full	107	0.0	<mark>50.0</mark>
Lane 4	26	23.1	26	23.1	198	0.131	100	46.4	LOS D	1.0	8.4	Short	20	0.0	NA
Lane 5 (B)	13	100.0	13	100.0	498	0.026	100	5.0	LOS A	0.1	1.2	Full	107	0.0	0.0
Approach	1487	15.0	1487	15.0		0.849		37.0	LOS D	19.8	156.4				
SouthWest	: Matts	on Roa	d												
Lane 1	49	6.1	49	6.1	111	0.441	100	55.0	LOS E	2.1	15.8	Short	20	0.0	NA
Lane 2	63	11.1	63	11.1	110	0.571	100	55.4	LOS E	2.8	21.5	Full	282	0.0	0.0
Approach	112	8.9	112	8.9		0.571		55.3	LOS E	2.8	21.5				
Intersectio n	3414	13.4	3414	13.4		0.889		35.1	LOS D	20.4	157.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

N4 Average back of queue has been restricted to the available queue storage space.

Approach L	ane Fl	ows (v	eh/h)									
SouthEast: Ti	i Rakau	Drive (E	East)									
Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	U SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. 8 %	Prob. SL Ov. %		
Lane 1	35	380	-	-	415	11.2	554	0.750	100	<mark>23.0</mark>	2	
Lane 2	-	564	-	-	564	11.7	751	0.750	100	NA	NA	

Lane 3	-	506	-	-	506	11.7	675 ¹	0.750	100	NA	NA	
Lane 4	-	-	69	12	81	3.8	214	0.376	100	0.0	3	
Lane 5	_	25	-	-	25	100.0	498	0.050	100	NA	NA	
Approach	35	1475	69	12	1591	12.5		0.750				
NorthEast: W	∕illiam F	Roberts I	Road E									
Mov.	L2	T1	R2	Total	%HV		Cap.	Deg. Satn	Lane	Prob. SL Ov.	Ov. Lane	
From NE To Exit:	SE	SW	NW				veh/h	v/c	%	%	No.	
Lane 1	63	-	-	63	14.3		175	0.361	100	NA	NA	
Lane 2	-	11	150	161	9.3		181	0.889	100	NA	NA	
Approach	63	11	150	224	10.7			0.889				
NorthWest: T	ī Rakau	ı Drive (West)									
Mov.	L2	T1	R2	Total	%HV			Deg.	Lane	Prob.	Ov.	
From NW							Cap. veh/h	Satn		SL Ov.	Lane	
To Exit:	NE	SE	SW				ven/n	v/c	%	%	No.	
Lane 1	220	-	-	220	10.5		269	0.819	100	NA	NA	
Lane 2	-	627	-	627	14.7		738	0.849	100	NA	NA	
Lane 3	-	601	-	601	14.7		708 ¹	0.849	100	NA	NA	
Lane 4	-	-	26	26	23.1		198	0.131	100	0.0	3	
Lane 5	_	13	_	13	100.0		498	0.026	100	NA	NA	
Approach	220	1241	26	1487	15.0			0.849				
SouthWest: N	Mattson	Road										
Mov.	L2	T1	R2	Total	%HV			Deg.	Lane	Prob.	Ov.	
From SW							Cap.	Satn	Util.	SL Ov.	Lane	
To Exit:	NW	NE	SE				veh/h	v/c	%	%	No.	
Lane 1	49	-	-	49	6.1		111	0.441	100	0.0	2	
Lane 2	-	30	33	63	11.1		110	0.571	100	NA	NA	
Approach	49	30	33	112	8.9			0.571				
	Total	%HVE	Deg.Sat	n (v/c)								
Intersection	3414	13.4		0.889								

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis									
	Exit Lane nber		Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critica l Gap sec	Follow-up Headway sec	capacity veh/h	Satn	Merge Delay sec
SouthEast Exit: Ti Rak Merge Type: Not Appl		ve (East)						
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge	Ana l ysis	not applied. not applied. not applied.					
NorthEast Exit: William Merge Type: Not Appl		erts Road	d Extention	on					
Full Length Lane	1	Merge.	Analysis	not applied.					
NorthWest Exit: Ti Rak Merge Type: Not Appl		ive (Wes	t)						
Full Length Lane	1	Merge	Ana l ysis	not applied.					
Full Length Lane	2	Merge	Ana l ysis	not applied.					
Full Length Lane	3	Merge.	Ana l ysis	not applied.					
Full Length Lane	4	Merge.	Ana l ysis	not applied.					
SouthWest Exit: Matts	on Ro	ad							

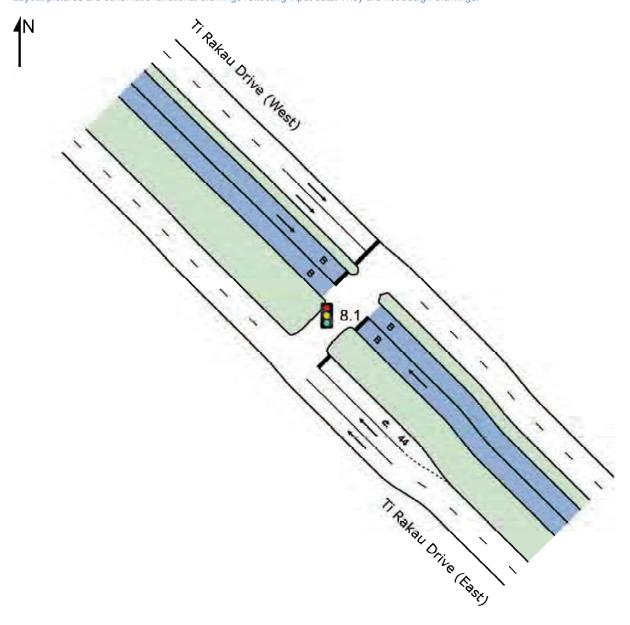
			_	
Merge T	MDA.	Not	Δnn	hail
WICIGO	VDC.	1106	$\neg \nu \nu$	III C U

Full Length Lane 1 Merge Analysis not applied.

Site: 8.1 [8.1 U-turn - West of Marriot Rd (Site Folder: AM)]

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 8.1 [8.1 U-turn - West of Marriot Rd (Site Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 28 seconds (Site Practical Cycle Time)

Lane Use	and P	erforn	nance												
	DEM FLC [Tota l			IVAL WS HV]	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
SouthEast:	Ti Rak	au Driv	e (Eas	t)											
Lane 1	777	11.1	777	11.1	1809	0.429	100	0.1	LOS A	0.0	0.0	Full	147	0.0	0.0
Lane 2	777	11.1	777	11.1	1809	0.429	100	0.1	LOS A	0.0	0.0	Full	147	0.0	0.0
Lane 3	64	6.3	64	6.3	285	0.224	100	16.9	LOS B	0.7	5.3	Short	44	0.0	NA
Lane 4 (B)	25	100.0	25	100.0	512	0.049	100	1.3	LOS A	0.0	0.6	Full	147	0.0	0.0
Approach	1642	12.3	1642	12.3		0.429		0.7	LOSA	0.7	5.3				
NorthWest	: Ti Rak	au Driv	e (We	st)											
Lane 1	662	14.7	661	14.7	759	0.872	100	16.5	LOS B	11.1	87.2	Full	73	0.0	<mark>31.3</mark>
Lane 2	662	14.7	661	14.7	759	0.872	100	16.5	LOS B	11.1	87.2	Full	73	0.0	<mark>31.3</mark>
Lane 3 (B)	13	100.0	13	100.0	512	0.025	100	1.3	LOS A	0.0	0.3	Full	73	0.0	0.0
Approach	1336	15.5	1336	15.5		0.872		16.3	LOS B	11.1	87.2				
Intersectio n	2978	13.7	2978	13.7		0.872		7.7	LOSA	11.1	87.2				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

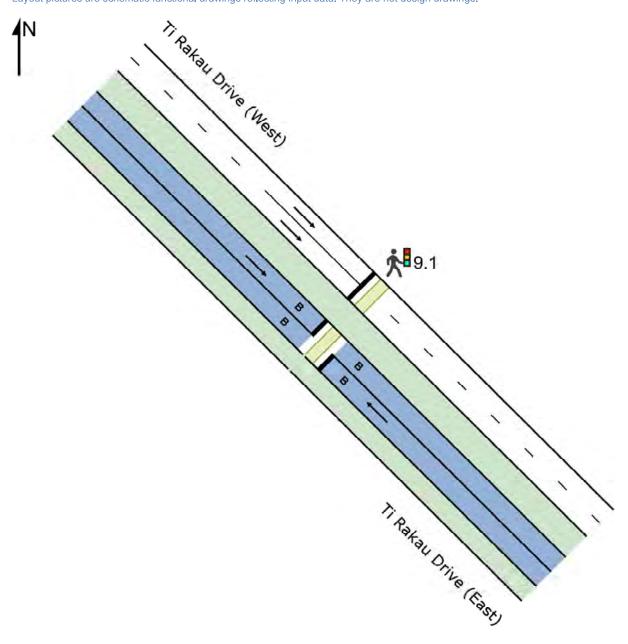
Approach L	ane F	ows (veh/h)							
SouthEast: T	i Rakau	Drive ((East)							
Mov.	T1	U	Total	%HV		Deg.		Prob.	Ov.	
From SE					Cap.	Satn		SL Ov.	Lane	
To Exit:	NW	SE			veh/h	v/c	%	%	No.	
Lane 1	777	-	777	11.1	1809	0.429	100	NA	NA	
Lane 2	777	-	777	11.1	1809	0.429	100	NA	NA	
Lane 3	_	64	64	6.3	285	0.224	100	0.0	2	
Lane 4	25	_	25	100.0	512	0.049	100	NA	NA	
Approach	1578	64	1642	12.3		0.429				
		. .	011 ()							
NorthWest: T			,							
Mov.	T1	Total	%HV		Con	Deg.		Prob.	Ov.	
From NW To Exit:	0=				Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
IO EXIL.	SE									
Lane 1	661	661	14.7		759	0.872	100	NA	NA	
Lane 2	661	661	14.7		759	0.872	100	NA	NA	
Lane 3	13	13	100.0		512	0.025	100	NA	NA	
Approach	1336	1336	15.5			0.872				
	Total	0/ LI\ / I	Dog So	tn () (/a)						
	Total	70HVI	Deg.Sa	tii (∀/C)						
Intersection	2978	13.7		0.872						
Intersection	2810	13,7		0.072						

Merge Analysis											
	Exit ₋ane nber		Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critica l Gap sec	Follow-up Headway	F l ow Rate	Capacity veh/h	Deg. Satn	Min. De l ay sec	Merge Delay sec
m % veh/h pcu/h sec sec veh/h veh/h v/c sec sec SouthEast Exit: Ti Rakau Drive (East) Merge Type: Not Applied											
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge /	Analysis	not applied. not applied. not applied.							
NorthWest Exit: Ti Rakau Drive (West) Merge Type: Not Applied											
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge /	Analysis	not applied. not applied. not applied.							

Site: 9.1 [9.1 Staggered Crossing - East of Marriot Rd - Import (Site Folder: AM)]

Site Category: (None)
Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 9.1 [9.1 Staggered Crossing - East of Marriot Rd - Import Network: N101 [AM_Town (Site Folder: AM)] centre drive four lanes (Network Folder: General)]

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 38 seconds (Site Practical Cycle Time)

Lane Use	and F	erform	nance)											
		IAND DWS HV] %	FLC		Cap.	Deg. Satn v/c	Lane Util.		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. B l ock.
SouthEast:		- ' -			VCII/II	V /C		300			- ''			70	70
Lane 1 (B)	25	100.0	25	100.0	390	0.064	100	4.6	LOS A	0.1	1.9	Full	45	0.0	0.0
Approach	25	100.0	25	100.0		0.064		4.6	LOS A	0.1	1.9				
NorthWest:	Ti Rak	au Driv	e (We	st)											
Lane 1	658	13.1	658	13.1	763	0.862	100	18.9	LOS B	2.3 ^{N4}	17.5 ^{N4}	Full	12	0.0	<mark>50.0</mark>
Lane 2	658	13.1	658	13.1	763	0.862	100	18.9	LOS B	2.3 ^{N4}	17.5 ^{N4}	Full	12	0.0	<mark>50.0</mark>
Lane 3 (B)	13	100.0	13	100.0	390	0.033	100	4.5	LOS A	0.1	0.9	Full	12	0.0	0.0
Approach	1328	13.9	1328	13.9		0.862		18.8	LOS B	2.3	17.5				
Intersectio n	1353	15.5	1353	15.5		0.862		18.5	LOS B	2.3	17.5				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N4 Average back of queue has been restricted to the available queue storage space.

Approach L	_ane F	lows (v	veh/h)						
SouthEast: T	i Rakau	Drive ((East)						
Mov. From SE To Exit:	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	25	25	100.0	390	0.064	100	NA	NA	
Approach	25	25	100.0		0.064				
NorthWest: T	ï Rakaı	Drive	(West)						
Mov. From NW To Exit:	T1 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	658	658	13.1	763	0.862	100	NA	NA	
Lane 2	658	658	13.1	763	0.862	100	NA	NA	
Lane 3	13	13	100.0	390	0.033	100	NA	NA	
Approach	1328	1328	13.9		0.862				
	Total	%HVI	Deg.Satn	(v/c)					
Intersection	1353	15.5	(0.862					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis									
E: Lar Numb			Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	Deg. Satn I v/c	Merge De l ay sec
SouthEast Exit: Ti Rakau Merge Type: Not Applie		e (East))						
Full Length Lane	1	Merge	Ana l ysis ı	not applied.					
Full Length Lane	2	Merge .	Ana l ysis ı	not applied.					
Full Length Lane	3	Merge	Ana l ysis ı	not applied.					
NorthWest Exit: Ti Rakau Merge Type: Not Applie		ve (Wes	t)						
Full Length Lane	1	Merge .	Ana l ysis ı	not applied.					

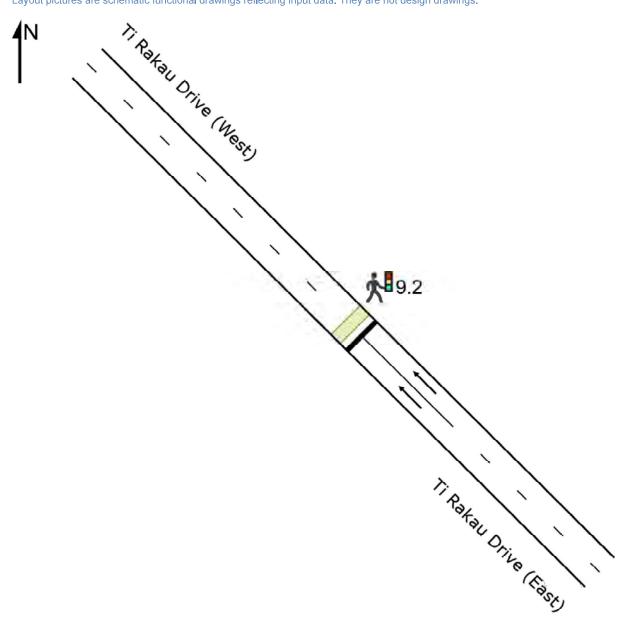
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Project: C:\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 EB2,3R,3C,4i\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final AM 2028_JV Edits_Updates.sip9

M Site: 9.2 [9.2 Staggered Crossing - East of Marriot Rd - Import

(Site Folder: AM)]

Site Category: (None)
Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 9.2 [9.2 Staggered Crossing - East of Marriot Rd - Import Network: N101 [AM_Town (Site Folder: AM)] centre drive four lanes (Network Folder: General)]

Site Category: (None)

Lane Use	and P	erforr	nance												
		WS HV]	ARR FLO [Total	WS HV]	Cap.	Satn	Lane Util.	Delay	Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
SouthEast	veh/h : Ti Rak	% au Driv	veh/h /e (East		veh/h	v/c	%	sec			m		m	%	%
Lane 1	810	10.9	810	10.9	921	0.879	100	23.3	LOS C	8.6 ^{N4}	65.8 ^{N4}	Full	45	0.0	<mark>50.0</mark>
Lane 2	810	10.9	810	10.9	921	0.879	100	23.3	LOS C	8.6 ^{N4}	65.8 ^{N4}	Full	45	0.0	<mark>50.0</mark>
Approach	1620	10.9	1620	10.9		0.879		23.3	LOS C	8.6	65.8				
Intersectio n	1620	10.9	1620	10.9		0.879		23.3	LOS C	8.6	65.8				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N4 Average back of queue has been restricted to the available queue storage space.

Approach l	_ane F	lows (v	/eh/h)					
SouthEast: T	i Rakau	Drive (East)					
Mov. From SE To Exit:	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	810	810	10.9	921	0.879	100	NA	NA
Lane 2	810	810	10.9	921	0.879	100	NA	NA
Approach	1620	1620	10.9		0.879			
	Total	%HV[Deg.Satn (v/c)					
Intersection	1620	10.9	0.879					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis								
	Exit Lane Number		Percent Opposing Opng in Flow Rate Lane % veh/h pcu/h	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	Deg. Satn I	Merge De l ay sec
NorthWest Exit: Ti Merge Type: Not A		ive (Wes	t)					
Full Length Lane Full Length Lane	1 2	•	Analysis not applied. Analysis not applied.					

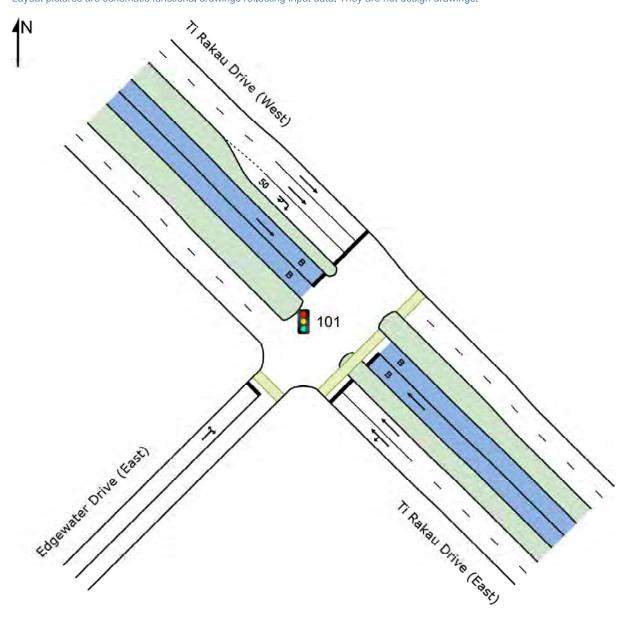
EB2,3R,3C,4i\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final AM 2028_JV Edits_Updates.sip9

Site: 101 [12.0 Edgewater Dr (East) / Ti Rakau Dr -Signalised -

Import - Import (Site Folder: AM)]

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 101 [12.0 Edgewater Dr (East) / Ti Rakau Dr -Signalised - Import - Import (Site Folder: AM)]

Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

New Site

Site Category: (None)

Lane Use	Lane Use and Performance														
	DEM FLC [Total veh/h			WS HV]	Cap.	Deg. Satn v/c	Lane Util. %		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
SouthEast:	Ti Rak	au Driv	e (Eas	t)											
Lane 1 Lane 2	767 768	10.6 10.9	767 768	10.6 10.9	1067	0.720	100 100	14.4 14.1	LOS B	21.4	163.6 164.0	Full Full	445 445	0.0	0.0
Lane 3 (B) Approach	25 1560	100.0 12.2	25 1560	100.0 12.2	703	0.036 0.720	100	8.3 14.2	LOS A	0.4 21.4	5.3 164.0	Full	445	0.0	0.0
NorthWest:	Ti Rak	au Driv	e (We	st)											
Lane 1	670	13.0	670	13.0		888.0	100	33.4	LOS C		159.3 ^{N4}	Full	109	-28.3 ^{N3}	
Lane 2	581	13.0	581	13.0	654	888.0	100	33.6	LOS C	20.5 ^{N4}	159.3 ^{N4}	Full	109	<mark>-29.6</mark>	⁵ 0.0
Lane 3	133	13.5	133	13.5	146	0.910	100	66.6	LOS E	6.5	51.0	Short	50	0.0	NA
Lane 4 (B)	14	100.0	14	100.0	703	0.019	100	8.2	LOS A	0.2	2.9	Full	109	0.0	0.0
Approach	1398	13.9	1398	13.9		0.910		36.4	LOS D	20.5	159.3				
SouthWest	: Edgev	water D	rive (E	ast)											
Lane 1	23	0.0	23	0.0	125	0.185	100	51.0	LOS D	0.9	6.4	Full	789	0.0	0.0
Approach	23	0.0	23	0.0		0.185		51.0	LOS D	0.9	6.4				
Intersectio n	2981	12.9	2981	12.9		0.910		24.9	LOS C	21.4	164.0				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.

Approach L	_ane Fl	ows (v	/eh/h)								
SouthEast: T	ï Rakau	Drive (East)								
Mov. From SE To Exit:	L2 SW	T1 NW	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2 Lane 3	36 - -	731 768 25	767 768 25	10.6 10.9 100.0			0.720 0.720 0.036	100 100 100	NA NA NA	NA NA NA	
Approach	36	1524	1560	12.2		700	0.720	100	, , , ,		
NorthWest: T	ī Rakau	Drive (West)								
Mov. From NW To Exit:	T1 SE	R2 SW	U NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2	670 581	-	-	670 581	13.0 13.0	755 654 ¹	0.888 0.888	100 100	NA NA	NA NA	

Lane 3	-	15	118	133	13.5		0.910	100		2	
Lane 4 Approach	14 1265	15	118	1398	100.0	703	0.019	100	NA	NA	
SouthWest: I	Edgewa	ter Drive	e (East))							
Mov. From SW To Exit:	L2 NW	R2 SE	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	11	13	23	0.0		125	0.185	100	NA	NA	
Approach	11	13	23	0.0			0.185				
	Total	%HVE	Deg.Sat	n (v/c)							
Intersection	2981	12.9		0.910							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

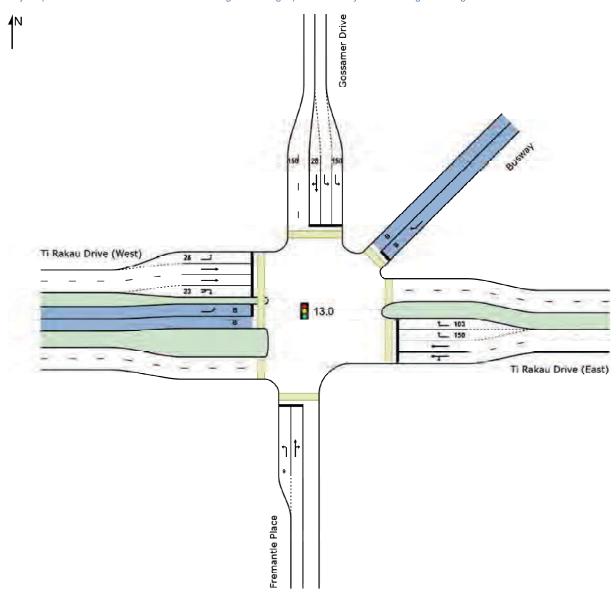
Merge Analysis									
E La Numb		Short Percent Opposin Lane Opng in Flow Ra Length Lane m % veh/h pct	te	Critica l Gap sec	Follow-up Headway sec	Lane C F l ow Rate veh/h	capacity veh/h	Deg. Satn I	Merge Delay sec
SouthEast Exit: Ti Rakau Merge Type: Not Applie		ve (East)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Analysis not applie Merge Analysis not applie Merge Analysis not applie	ed.						
NorthWest Exit: Ti Rakau Merge Type: Not Applie		ive (West)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Analysis not applie Merge Analysis not applie Merge Analysis not applie	ed.						
SouthWest Exit: Edgewa Merge Type: Not Applie		Drive (East)							
Full Length Lane	1	Merge Analysis not applie	ed.						

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Project: C:\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 EB2,3R,3C,4\\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final AM 2028_JV Edits_Updates.sip9

Site: 13.0 [13.0 Gossamer Dr / Ti Rakau Dr (Site Folder: AM)]

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Site: 13.0 [13.0 Gossamer Dr / Ti Rakau Dr (Site Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site Practical Cycle Time)

Lane Use and Performance														
	DEM FLC [Total	WS		IVAL WS HV 1	De Cap. Sa			Level of Service		ACK OF EUE Dist]		Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	%	veh/h v	/c %	sec		[• 511	m		m	%	%
South: Fren	mantle	Place												
Lane 1	19	5.3	19	5.3	69 0.27	6 100	84.0	LOS F	1.3	9.5	Short	9	0.0	NA
Lane 2	21	4.8	21	4.8	70 0.29	8 100	84.7	LOS F	1.4	10.4	Full	285	0.0	0.0
Approach	40	5.0	40	5.0	0.29	8	84.4	LOS F	1.4	10.4				
East: Ti Ra	kau Dri	ve (Eas	st)											
Lane 1	772	10.6	772	10.6	840 0.91	9 100	62.1	LOS E	54.9	419.0	Full	636	0.0	0.0
Lane 2	704	10.8	704	10.8	766 ¹ 0.91		57.8	LOS E	48.1	367.6	Full	636	0.0	0.0
Lane 3	172	8.1	172	8.1	200 0.86	1 82 ⁶	84.2	LOS F	12.3	92.4	Short	150	0.0	NA
Lane 4	210	8.1	210	8.1	200 1.05	0 100	150.4	LOS F	21.1	157.7	Short	103	0.0	NA
Approach	1858	10.2	1858	10.2	1.05	0	72.5	LOS E	54.9	419.0				
NorthEast:	Buswa	у												
Lane 1 (B)	25	100.0	25	100.0	167 0.15	0 100	35.0	LOS C	0.9	12.1	Full	963	0.0	0.0
Approach	25	100.0	25	100.0	0.15	0	35.0	LOS C	0.9	12.1				
North: Gos	samer	Drive												
Lane 1	354	8.1	354	8.1	330 1.07	4 100	130.7	LOS F	32.5	243.5	Short	150	0.0	NA
Lane 2	352	8.1	352	8.1	328 ¹ 1.07	4 100	130.7	LOS F	32.3	241.9	Full	1010	0.0	0.0
Lane 3	51	7.8	51	7.8	135 0.37	9 100	77.6	LOS E	3.3	24.6	Short	28	0.0	NA
Approach	757	8.1	757	8.1	1.07	4	127.1	LOS F	32.5	243.5				
West: Ti Ra	akau Dr	ive (We	est)											
Lane 1	41	2.4	41	2.4	912 0.04	5 100	13.0	LOS B	0.7	4.9	Short	28	0.0	NA
Lane 2	638	11.7	638	11.7	609 ¹ 1.04	8 100	138.5	LOS F	66.8	514.7	Full	445	0.0	<mark>28.3</mark>
Lane 3	648	11.7	648	11.7	618 ¹ 1.04	8 100	138.2	LOS F	67.8	522.0	Full	445	0.0	<mark>29.6</mark>
Lane 4	23	13.0	23	13.0	168 0.13	7 100	69.0	LOS E	1.4	10.7	Short	23	0.0	NA
Lane 5 (B)	13	100.0	13	100.0	167 0.07	8 100	34.7	LOS C	0.5	6.1	Full	445	0.0	0.0
Approach	1363	12.3	1363	12.3	1.04	8	132.4	LOS F	67.8	522.0				
Intersectio n	4043	11.0	4043	11.0	1.07	4	102.8	LOS F	67.8	522.0				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- 6 Lane under-utilisation due to downstream effects

Approach	Lane Flo	ows (ve	eh/h)						
South: Frem	nant i e Plad	се							
Mov.	L2	T1	R2	Total	%HV	Deg.	Lane	Prob.	Ov.

Lane 1	From S To Exit:	W	N	E					Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Approach	Lane 1	19												
Mov. L2	Lane 2	_	10	11					70		100	NA	NA	
Mov. L2	Approach	19	10	11	40	5.0				0.298				
From E To Exit: S W N Lane 1 16 756 - 772 10.6 840 0.919 100 NA NA Lane 2 - 704 - 704 10.8 766 0.919 100 NA NA Lane 3 - 172 172 8.1 200 0.861 82 19.5 2 Lane 4 210 210 8.1 200 1.050 100 54.4 3 Approach 16 1460 382 1858 10.2 1.050 NorthEast: Busway Mov. R1 Total %HV Cap. Sath vehyln veh														
Lane 1	From E				Total	%HV				Satn	Util.	SL Ov.	Lane	
Lane 2 - 704 - 704 10.8 766 0.919 100 NA NA Lane 3 - 172 172 8.1 200 0.861 82 19.6 2 Lane 4 210 210 8.1 200 1.050 100 54.4 3 Approach 16 1460 382 1858 10.2 1.050 NorthEast: Busway Mov. R1 Total %HV From NE To Exit: W Mov. L2 T1 R2 Total %HV From N To Exit: E S W Mov. L2 T1 R2 Total %HV From N To Exit: E S W Mov. L2 T1 R2 Total %HV From N To Exit: E S W Mov. L2 T1 R2 Total %HV From N To Exit: D Satu Util. SL Ov. Lane Veh/h V/c % No. Lane 1 354 - 354 8.1 330 1.074 100 59.9 2 Lane 2 352 - 352 8.1 328 1.074 100 NA NA Lane 3 - 10 41 51 7.8 132 328 1.074 100 NA NA Lane 3 - 10 41 757 8.1 1.074 West: TI Rakau Drive (West) Mov. L2 L1 T1 R2 U Total %HV Nov. L2 L2 L1 T1 R2 U Total %HV Nov. L2 L1 T1 R2 U Total %HV Nov. L2 L2 L1 T1 R2 R2 U Total %HV Nov. L2 L2	Lane 1				772	10.6			840	0.919	100	NA	NA	
Lane 3 172 172 172 8.1 200 0.861 82 19.6 2 Lane 4 210 210 8.1 200 1.050 100 54.4 3 Approach 16 1460 382 1858 10.2 1.050 NorthEast: Busway Mov. R1 Total %HV From NE To Exit: W Mov. L2 T1 R2 Total %HV From N To Exit: E S W Mov. L2 T1 R2 Total %HV To Exit: E S W Lane 1 354 354 8.1 328 10.0 1.074 Lane 2 352 352 8.1 328 10.0 NA														
Approach		_		172										
NorthEast: Busway	Lane 4	_	-	210	210	8.1			200	1.050	100	<mark>54.4</mark>	3	
Mov. R1 Total %HV Cap. Deg. Sath veh/h Lane Prob. Ov. Lane To Exit: W W Lane No. Veh/h W W No. Lane 1 25 25 100.0 167 0.150 100 NA NA Approach 25 25 100.0 0.150 0.150 NA NA North: Gossamer Drive Wov. L2 T1 R2 Total %HV Deg. Lane Prob. Ov. Cap. Sath Util. SL Ov. Lane Veh/h Veh/h Veh/h % % No. No. Lane 1 354 - - 354 8.1 330 1.074 100 59.9 2 2 Lane 2 352 8.1 328 1 1.074 100 NA NA Lane 3 - 10 41 757 8.1 1.074 Veh/h Veh/h Veh/h Veh/h Veh/h Veh/h Veh/h No. Na Na Lane 1 1.074 Veh/h <td>Approach</td> <td>16</td> <td>1460</td> <td>382</td> <td>1858</td> <td>10.2</td> <td></td> <td></td> <td></td> <td>1.050</td> <td></td> <td></td> <td></td> <td></td>	Approach	16	1460	382	1858	10.2				1.050				
From NE To Exit: W	NorthEast: B	usway												
To Exit: W veh/h v/c % % No. Lane 1 25 25 100.0		R1	Total	%HV										
Approach 25 25 100.0 0.150 North: Gossamer Drive Mov.		W												
North: Gossamer Drive Mov.	Lane 1	25	25	100.0					167	0.150	100	NA	NA	
Mov. L2 T1 R2 Total %HV Cap. veh/h Deg. Satn v/c Lane Prob. Util. SL Ov. Lane Veh/h Ov. Lane Veh/h Vic % % No. Lane 1 354 - - 354 8.1 330 1.074 100 59.9 2 Lane 2 352 - - 352 8.1 328 ¹ 1.074 100 NA NA Lane 3 - 10 41 51 7.8 135 0.379 100 3.4 2 Approach 706 10 41 757 8.1 1.074 1.074 West: Ti Rakau Drive (West) Mov. L2 L1 T1 R2 U Total %HV Deg. Lane Prob. Ov. Cap. Satn Util. SL Ov. Lane Veh/h Vic % % No. Lane 1 41 - - - 41 2.4 912 0.045 100 0.0 2 Lane 2 - 638 -	Approach	25	25	100.0						0.150				
From N To Exit: E S W Cap. Satin veh/h v/c W6 No. Lane 1 354 354 8.1 330 1.074 100 59.9 2 Lane 2 352 352 8.1 328¹ 1.074 100 NA NA Lane 3 - 10 41 51 7.8 135 0.379 100 3.4 2 Approach 706 10 41 757 8.1 West: Ti Rakau Drive (West) Mov. L2 L1 T1 R2 U Total %HV From W To Exit: N NE E S W Cap. Satin Util. SL Ov. Lane Veh/h v/c West: Ti Rakau Drive (West) Lane 1 41 41 2.4 912 0.045 100 0.0 2 Lane 2 - 638 - 638 11.7 609¹ 1.048 100 NA NA Lane 3 - 648 - 648 11.7 618¹ 1.048 100 NA NA Lane 4 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 13 100.0 Total %HV Deg.Satin (v/c)	North: Gossa	ımer Dri	ve											
To Exit: E S W	Mov.	L2	T1	R2	Total	%HV								
Lane 2 352 352 8.1 328 ¹ 1.074 100 NA NA Lane 3 - 10 41 51 7.8 135 0.379 100 3.4 2 Approach 706 10 41 757 8.1 1.074 West: Ti Rakau Drive (West) Mov.		Е	S	W										
Lane 3 - 10 41 51 7.8 135 0.379 100 3.4 2 Approach 706 10 41 757 8.1 1.074 West: Ti Rakau Drive (West) Mov. L2 L1 T1 R2 U Total %HV Deg. Lane Prob. Ov. Cap. Satn Util. SL Ov. Lane Veh/h v/c % % No. Lane 1 41 - - - 41 2.4 912 0.045 100 0.0 2 Lane 2 - - 638 11.7 609¹ 1.048 100 NA NA Lane 3 - - 648 - - 648 11.7 618¹ 1.048 100 NA NA Lane 4 - - - 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 - - 13 100.0 167 0.078 100 NA NA Total %HV Deg.Satn (Lane 1	354	-	-	354	8.1			330	1.074	100	<mark>59.9</mark>	2	
Approach 706 10 41 757 8.1 1.074 West: Ti Rakau Drive (West) Mov. L2 L1 T1 R2 U Total %HV Deg. Lane Prob. Ov. Util. SL Ov. Lane Veh/h Veh/h W No. Lane 1 41 - - - 41 2.4 912 0.045 100 0.0 2 Lane 2 - - 638 11.7 609¹ 1.048 100 NA NA Lane 3 - - 648 11.7 618¹ 1.048 100 NA NA Lane 4 - - - 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 - - 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048	Lane 2	352	-	-	352	8.1			328 ¹	1.074	100	NA	NA	
West: Ti Rakau Drive (West) Mov. L2 L1 T1 R2 U Total %HV Deg. Cap. Satn veh/h Lane Prob. Ov. Util. SL Ov. Lane Veh/h No. Lane 1 41 - - - 41 2.4 912 0.045 100 0.0 2 Lane 2 - - 638 - - 638 11.7 609¹ 1.048 100 NA NA Lane 3 - - 648 - - 648 11.7 618¹ 1.048 100 NA NA Lane 4 - - - 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 - - 13 100.0 167 0.078 100 NA NA Total %HV Deg.Satn (v/c)	Lane 3	_	10	41	51	7.8			135	0.379	100	<mark>3.4</mark>	2	
Mov. L2 L1 T1 R2 U Total %HV Deg. Cap. Satn veh/h Lane Prob. Ov. Util. SL Ov. Lane Veh/h Ov. Weh/h V/c % % No. Lane Veh/h V/c % % No.	Approach	706	10	41	757	8.1				1.074				
From W To Exit: N NE E S W Cap. Satin veh/h v/c % % No. Lane 1 41 41 2.4 912 0.045 100 0.0 2 Lane 2 - 638 - 638 11.7 609 1.048 100 NA NA Lane 3 - 648 - 648 11.7 618 1.048 100 NA NA Lane 4 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)	West: Ti Rak	au Drive	e (West)										
To Exit: N NE E S W Veh/h V/c % % No. Lane 1 41 41 2.4 912 0.045 100 0.0 2 Lane 2 - 638 - 638 11.7 609 1.048 100 NA NA Lane 3 - 648 - 648 11.7 618 1.048 100 NA NA Lane 4 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)		L2	L1	T1	R2	U	Total	%HV						
Lane 1 41 41 2.4 912 0.045 100 0.0 2 Lane 2 - 638 - 638 11.7 609 1.048 100 NA NA Lane 3 - 648 - 648 11.7 618 1.048 100 NA NA Lane 4 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)		N	NF	F	S	W								
Lane 2 638 638 11.7 609 1.048 100 NA NA Lane 3 648 648 11.7 618 1.048 100 NA NA Lane 4 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)							41	2.4	912	0.045	100	0.0	2	
Lane 3 648 648 11.7 618 1.048 100 NA NA Lane 4 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)		_	_	638	_									
Lane 4 12 11 23 13.0 168 0.137 100 0.0 3 Lane 5 - 13 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)		_	_		_	_								
Lane 5 - 13 13 100.0 167 0.078 100 NA NA Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)		_	_	_	12	11								
Approach 41 13 1286 12 11 1363 12.3 1.048 Total %HV Deg.Satn (v/c)		_	13	-										
		41	13			11	1363	12.3						
Intersection 4043 11.0 1.074		Total	%HVI	Deg . Sat	n (v/c)									
	Intersection	4043	11.0		1.074									

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- 6 Lane under-utilisation due to downstream effects

Merge Analysis									
Exit Lane Number	Short Percent Opposing Lane Opng in Flow Rate Length Lane	Critica l Gap	Follow-up Lane Capacity Headway Flow Rate	Deg. Min. Satn De l ay	Merge De l ay				
	m % veh/h pcu/h	sec	sec veh/h veh/h	v/c sec	sec				
South Exit: Fremantle Place Merge Type: Not Applied									
Full Length Lane 1	Merge Analysis not applied.								

East Exit: Ti Rakau Drive (East) Merge Type: Not Applied												
Full Length Lane 1 Merge Analysis not applied. Full Length Lane 2 Merge Analysis not applied.												
NorthEast Exit: Busway Merge Type: Not Applied												
Full Length Lane 1 Merge Analysis not applied.												
North Exit: Gossamer Drive Merge Type: Zipper												
Exit Short Lane	1	150	50.0	100	104	2.50	2.00	223	1681 0.133	0.0	0.0	
Merge Lane	2	-	50.0	112	115	2.50	2.00	200	1668 0.120	0.0	0.0	
West Exit: Ti Rakau Drive (West) Merge Type: Not Applied												
Full Length Lane	1	Merge Ar	alysis	not ap	plied.							
Full Length Lane	2	2 Merge Analysis not applied.										
Full Length Lane	3	Merge Ar	alysis ı	not ap	oplied.							

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