

PHASING SUMMARY

■ 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)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 66 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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

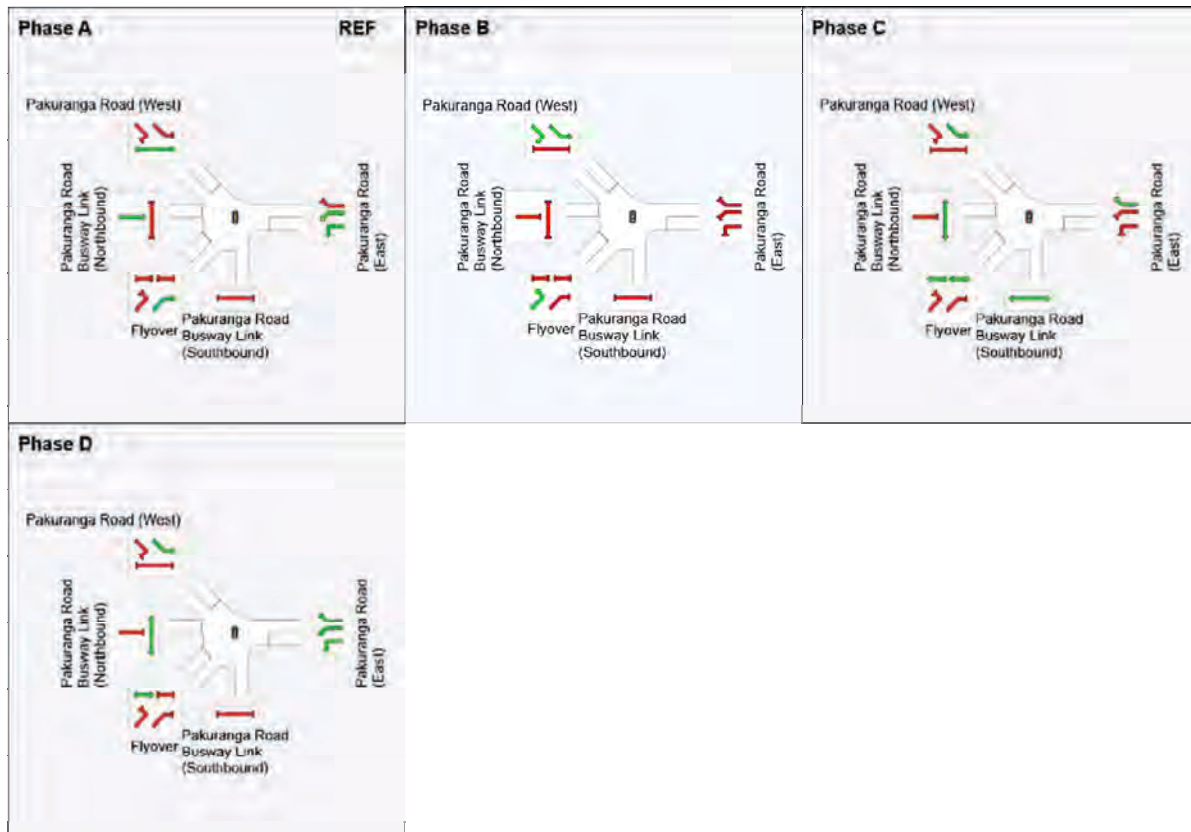
Phase Timing Summary

Phase	A	B	C	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

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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

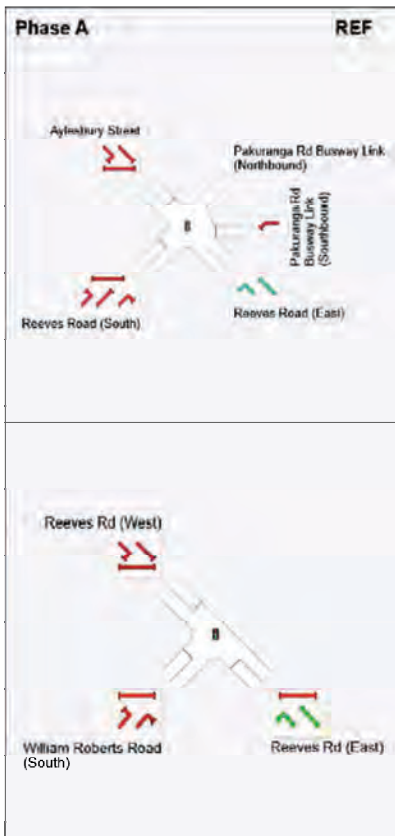
Output Phase Sequence: A, B, C, C2, D, E

Phase Timing Summary (CCG)

Phase	A	B	C	C2	D	E
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)



Phase B



Phase C

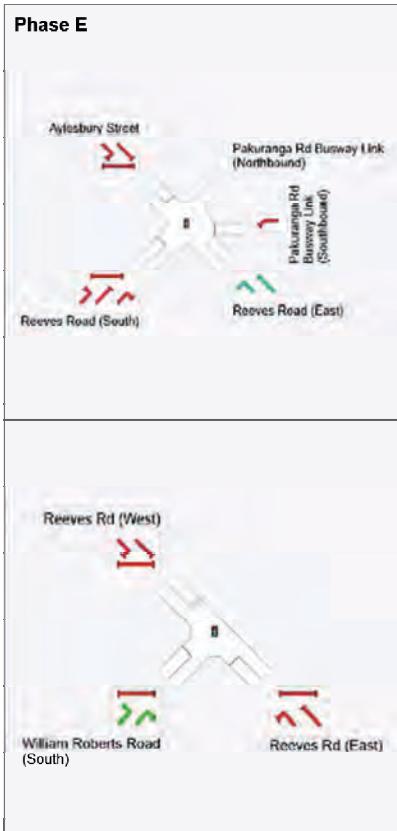


Phase C2

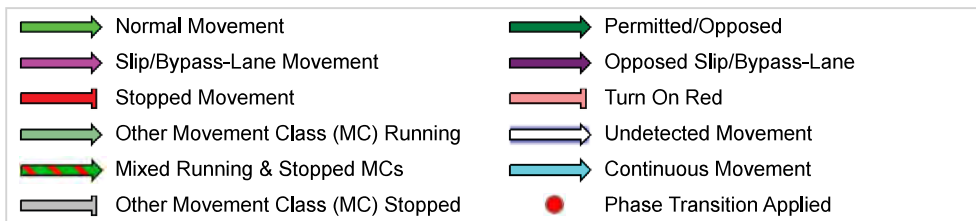


Phase D





REF: Reference Phase
 VAR: Variable Phase



PHASING SUMMARY

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	A	B	C	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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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

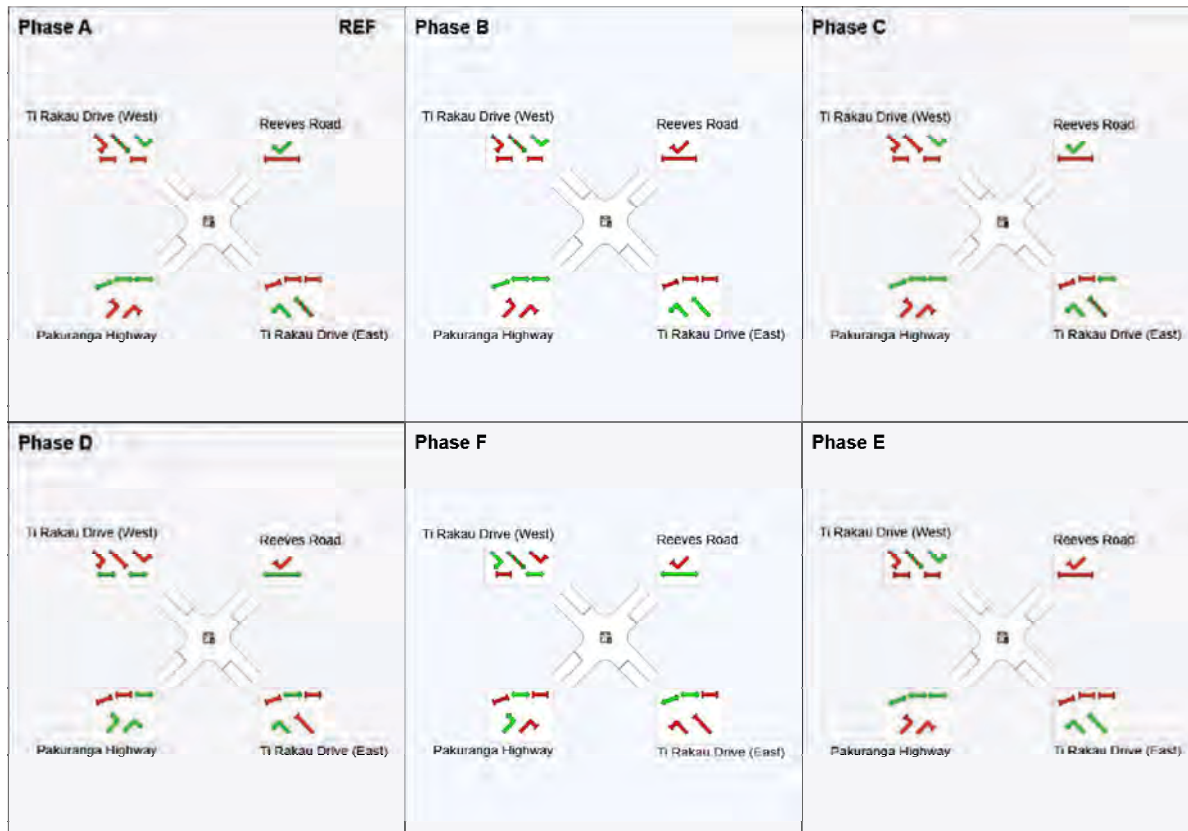
Output Phase Sequence: A, B, C, D, F, E

Phase Timing Summary

Phase	A	B	C	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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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

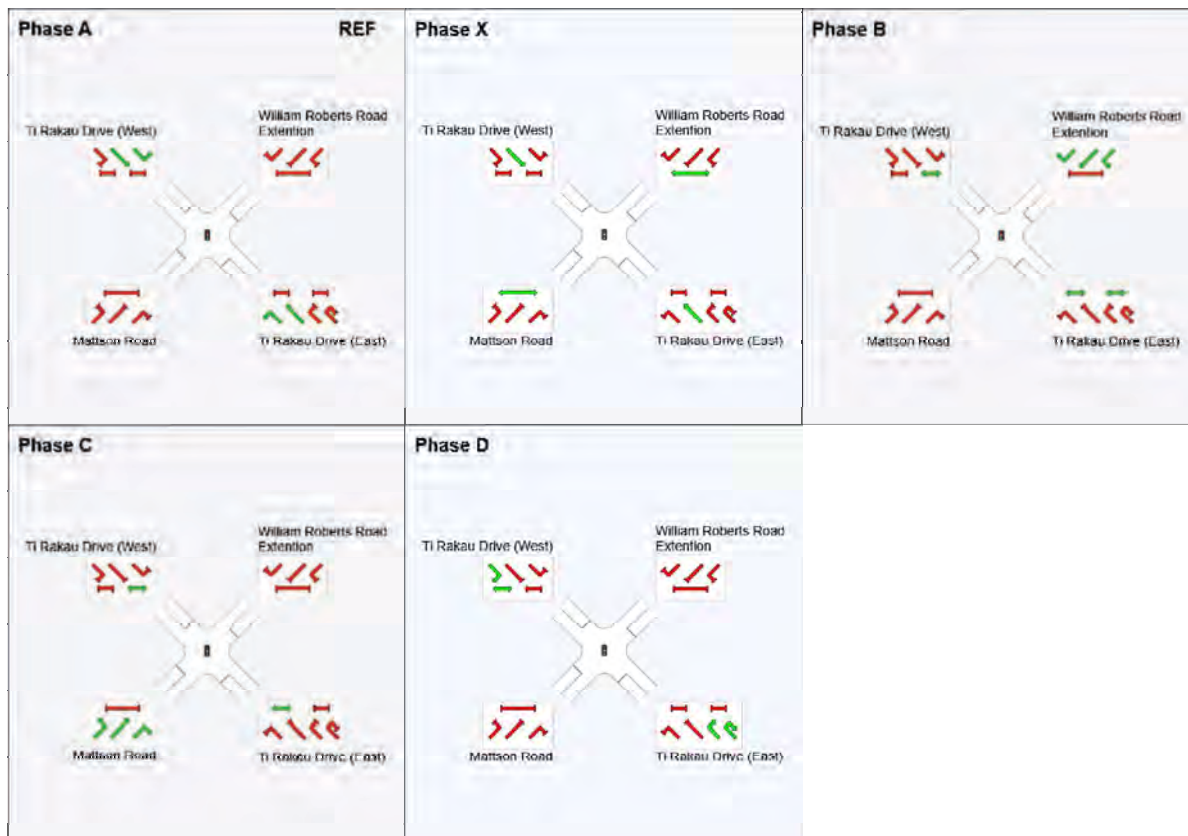
Output Phase Sequence: A, X, B, C, D

Phase Timing Summary

Phase	A	X	B	C	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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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

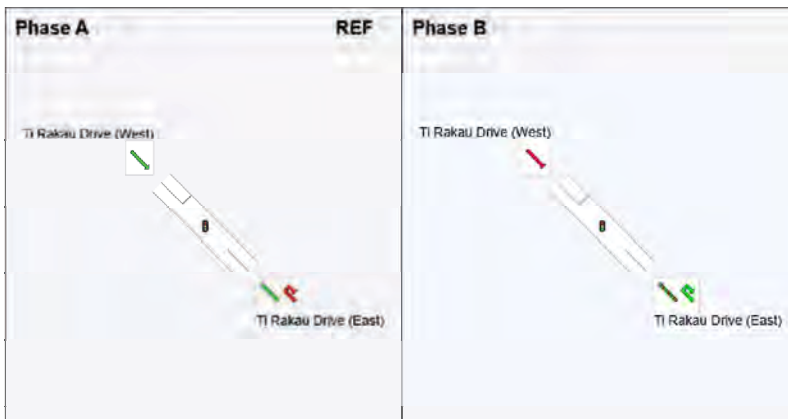
Output Phase Sequence: A, B

Phase Timing Summary

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

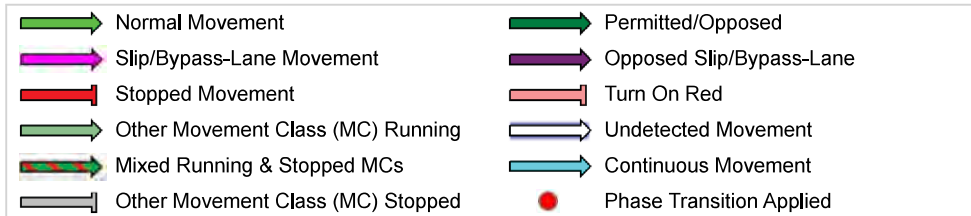
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



PHASING SUMMARY

🚶 Site: 9.1 [9.1 Staggered Crossing - East of Marriot Rd - Import (Site Folder: PM)]
 📍 Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)
 Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 42 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, C
Output Phase Sequence: A, B, C

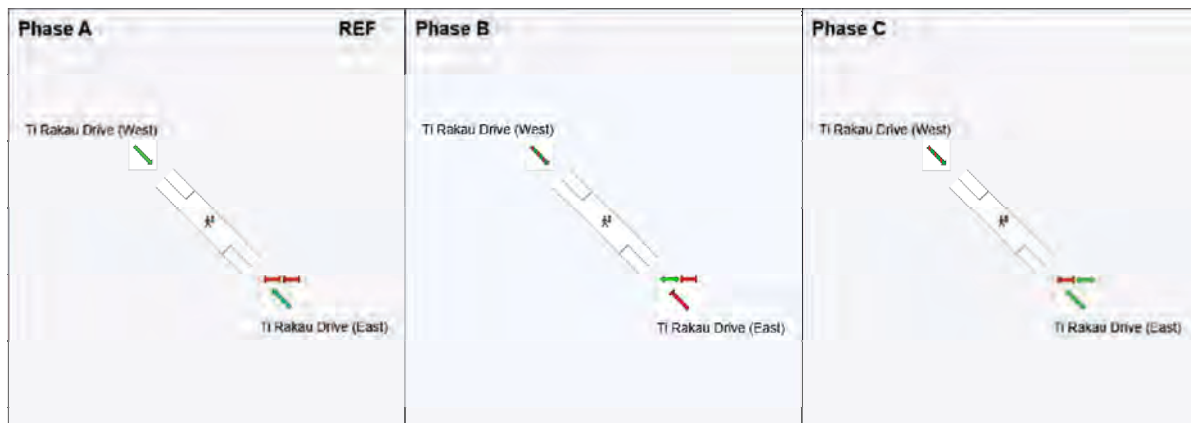
Phase Timing Summary

Phase	A	B	C
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



REF: Reference Phase
 VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

PHASING SUMMARY

🚶 Site: 9.2 [9.2 Staggered Crossing - East of Marriot Rd - Import (Site Folder: PM)]
 📍 Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)
 Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 49 seconds (Site Practical Cycle Time)

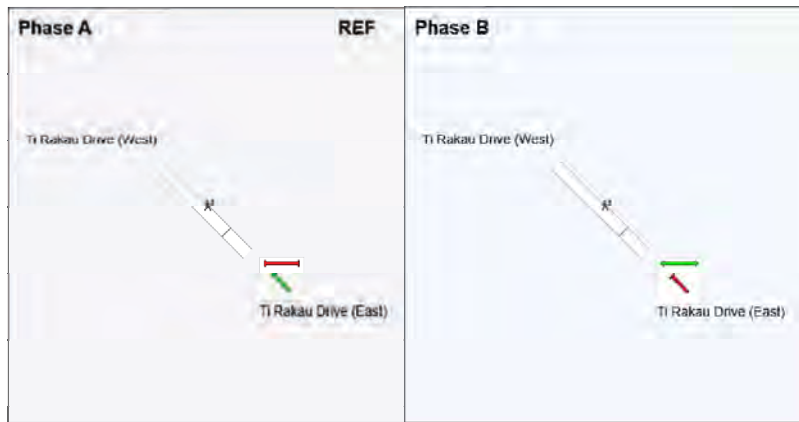
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: Two-Phase
Reference Phase: Phase A
Input Phase Sequence: A, B
Output Phase Sequence: A, B

Phase Timing Summary

Phase	A	B
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



REF: Reference Phase
 VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 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, D*, C

Output Phase Sequence: A, B, C

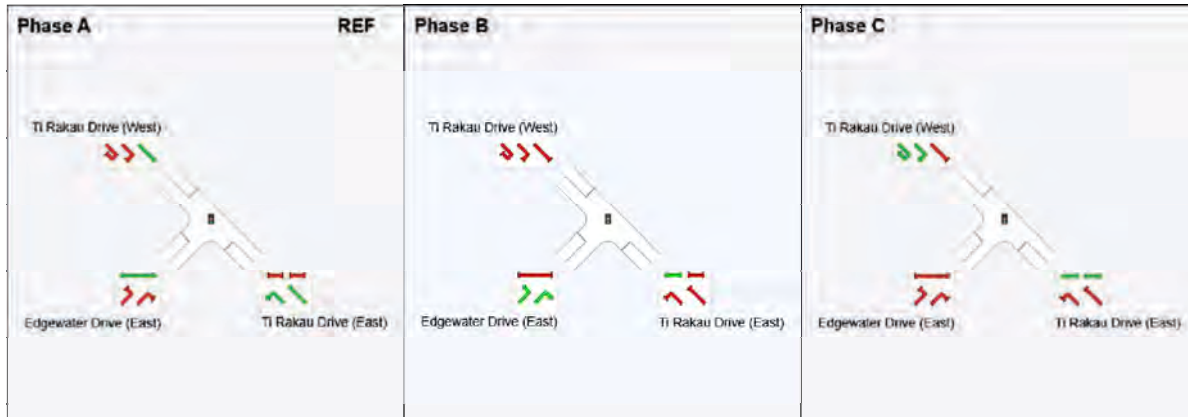
(* Variable Phase)

Phase Timing Summary

Phase	A	B	C
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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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	A	B	C	D	E	F
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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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

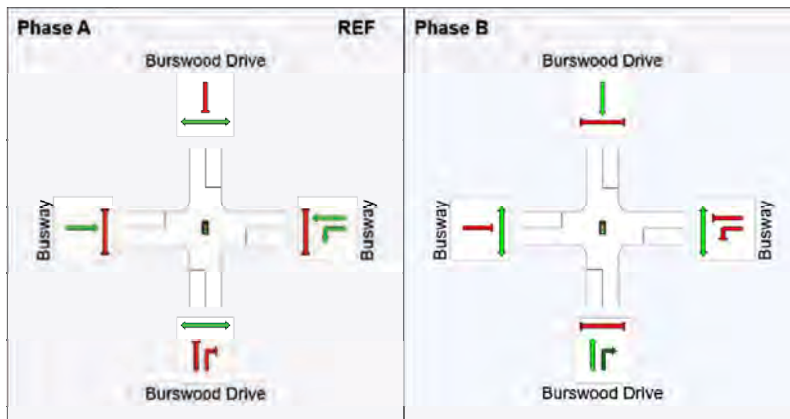
Output Phase Sequence: A, B

Phase Timing Summary

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

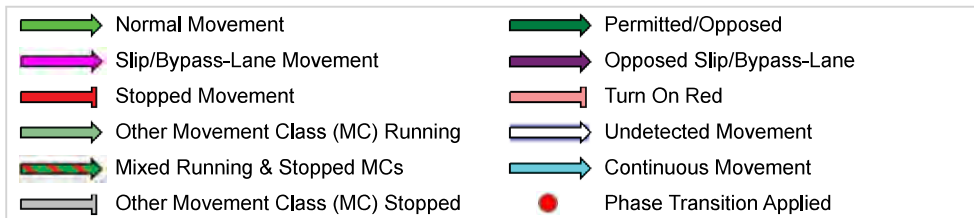
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



PHASING SUMMARY

Site: 18.B [18.B Burswood Dr (East) / New Offline Busway Rd - V2 - 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 = 52 seconds (Site Practical Cycle Time)

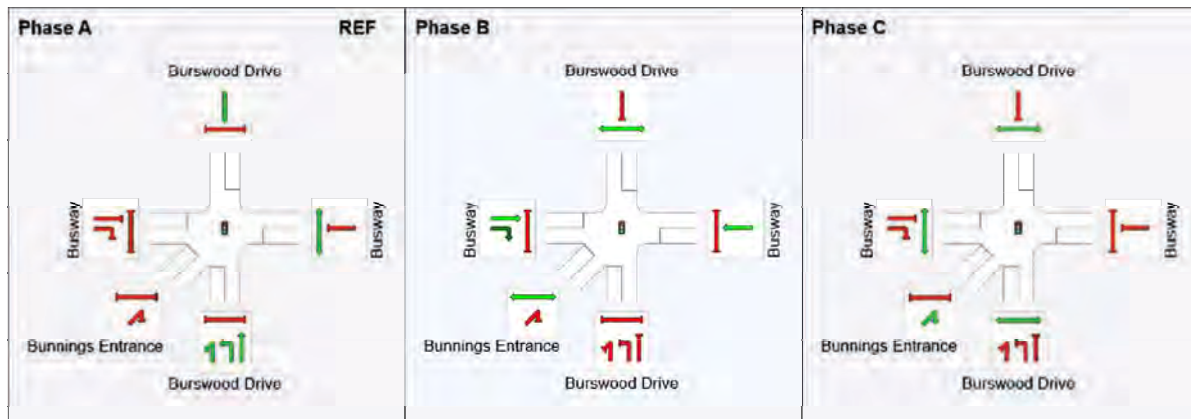
Timings based on settings in the Site Phasing & Timing dialog
 Phase Times determined by the program
 Downstream lane blockage effects included in determining phase times
 Phase Sequence: Leading Right Turn
 Reference Phase: Phase A
 Input Phase Sequence: A, B, C
 Output Phase Sequence: A, B, C

Phase Timing Summary

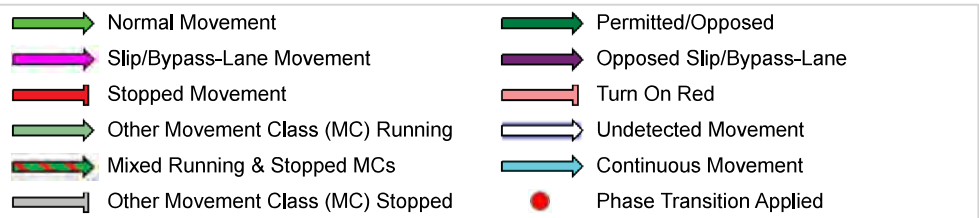
Phase	A	B	C
Phase Change Time (sec)	0	22	34
Green Time (sec)	16	6	12
Phase Time (sec)	22	12	18
Phase Split	42%	23%	35%

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



REF: Reference Phase
 VAR: Variable Phase



TIME - DISTANCE DIAGRAM

Time – Distance Diagram for the Selected Route

Movement Class: Light Vehicles

⇒ Route: R101 [Route1]

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

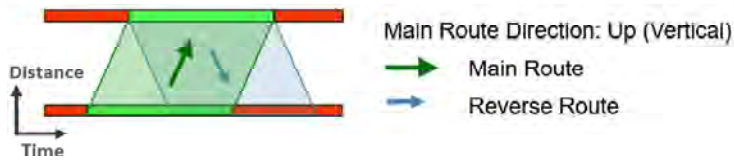
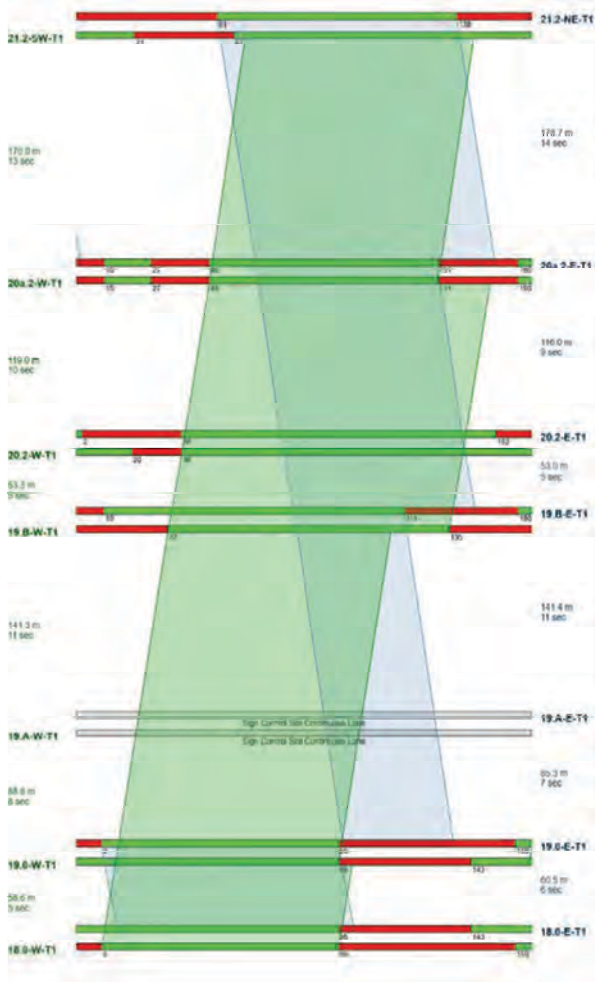
New Route

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)

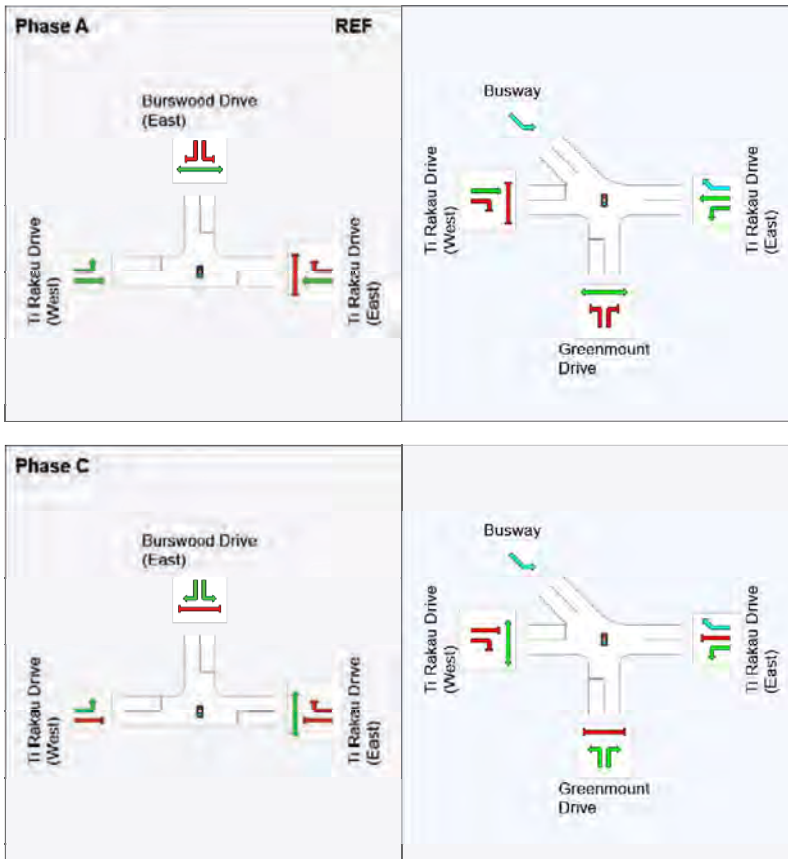
Timings based on settings in the Network Timing dialog
 Phase Times determined by the program
 Downstream lane blockage effects included in determining phase times
 Green Split Priority has been specified
 Phase Sequence: CCG Phasing
 Reference Phase: Phase A
 Input Phase Sequence: A, C, E
 Output Phase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

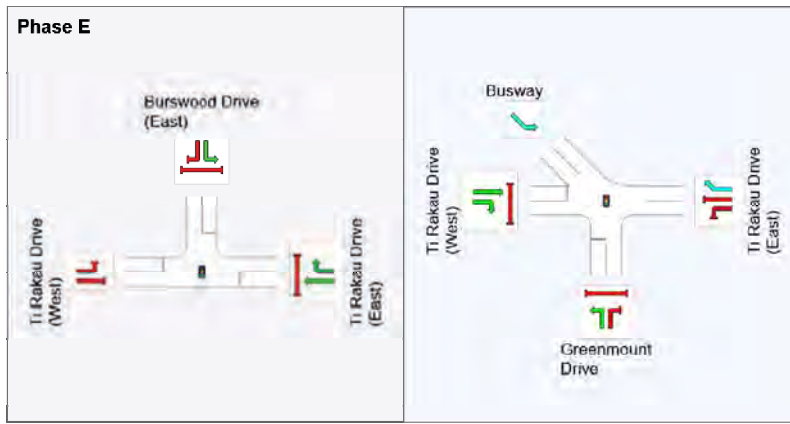
Phase Timing Summary (CCG)

Phase	A	C	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%

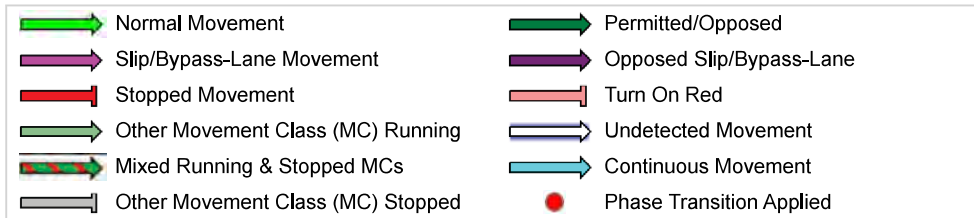
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence (CCG)





REF: Reference Phase
 VAR: Variable Phase



PHASING SUMMARY

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

Input Phase Sequence: A, B, C

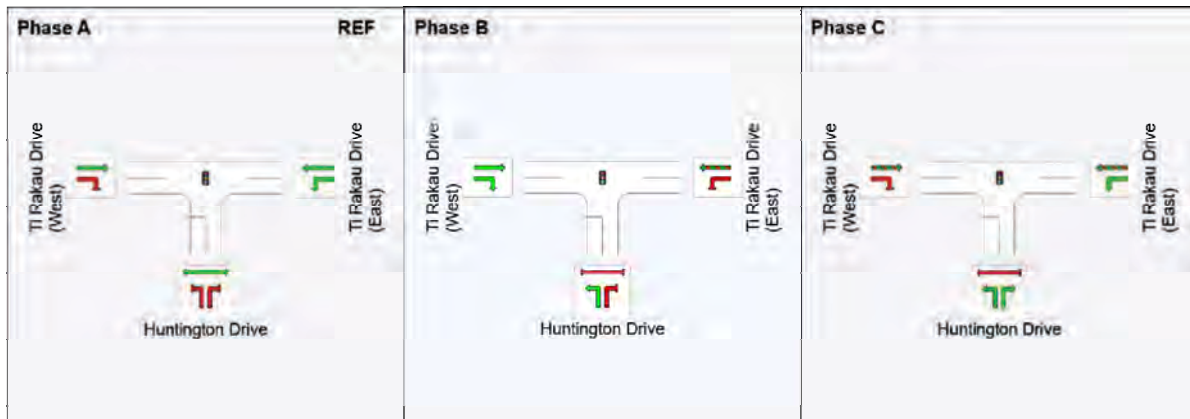
Output Phase Sequence: A, B, C

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	29	149	17
Green Time (sec)	114	12	6
Phase Time (sec)	120	18	12
Phase Split	80%	12%	8%

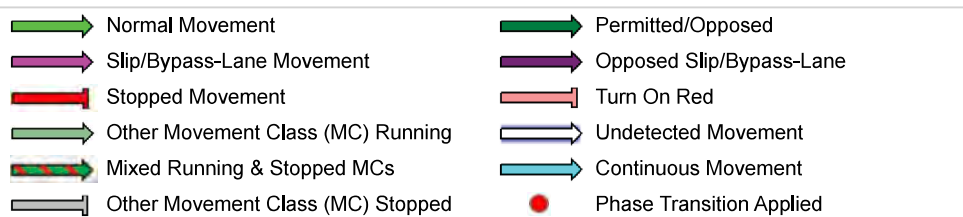
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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PHASING SUMMARY

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 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, B, A2, B2

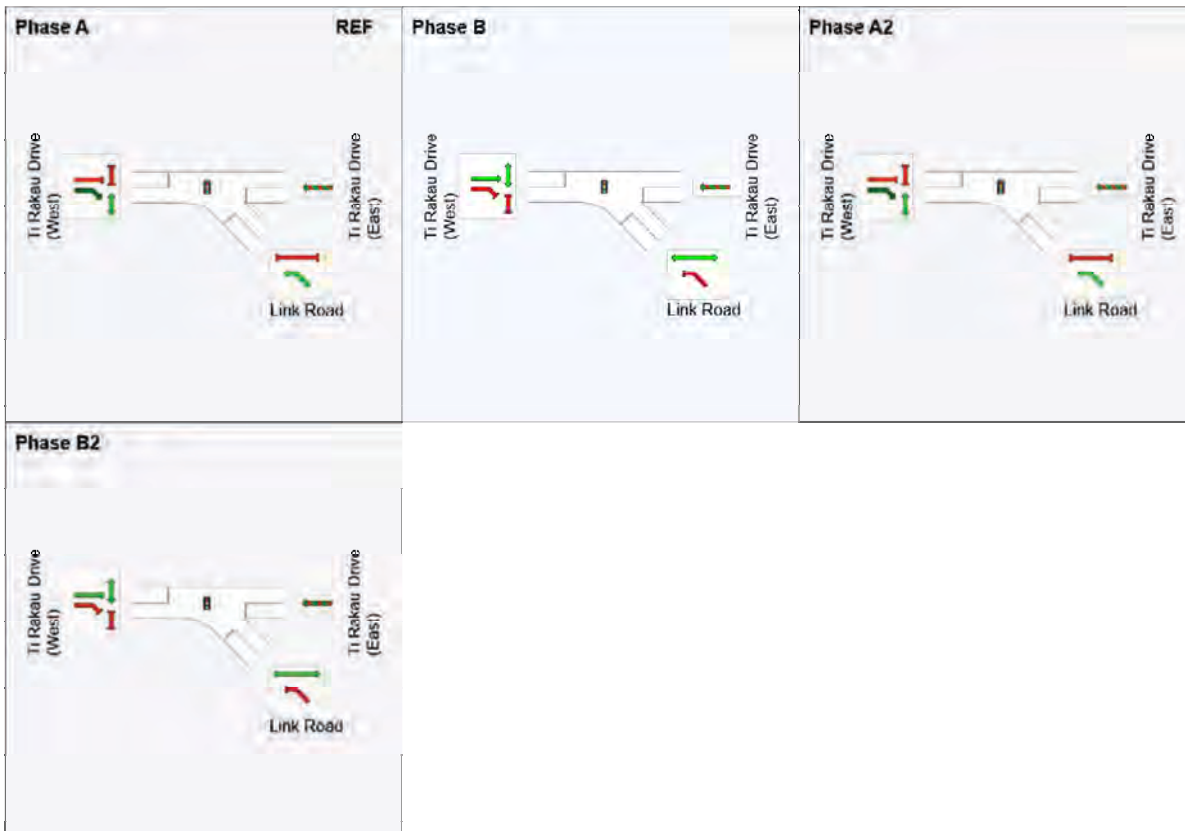
Output Phase Sequence: A, B, A2, B2

Phase Timing Summary

Phase	A	B	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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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

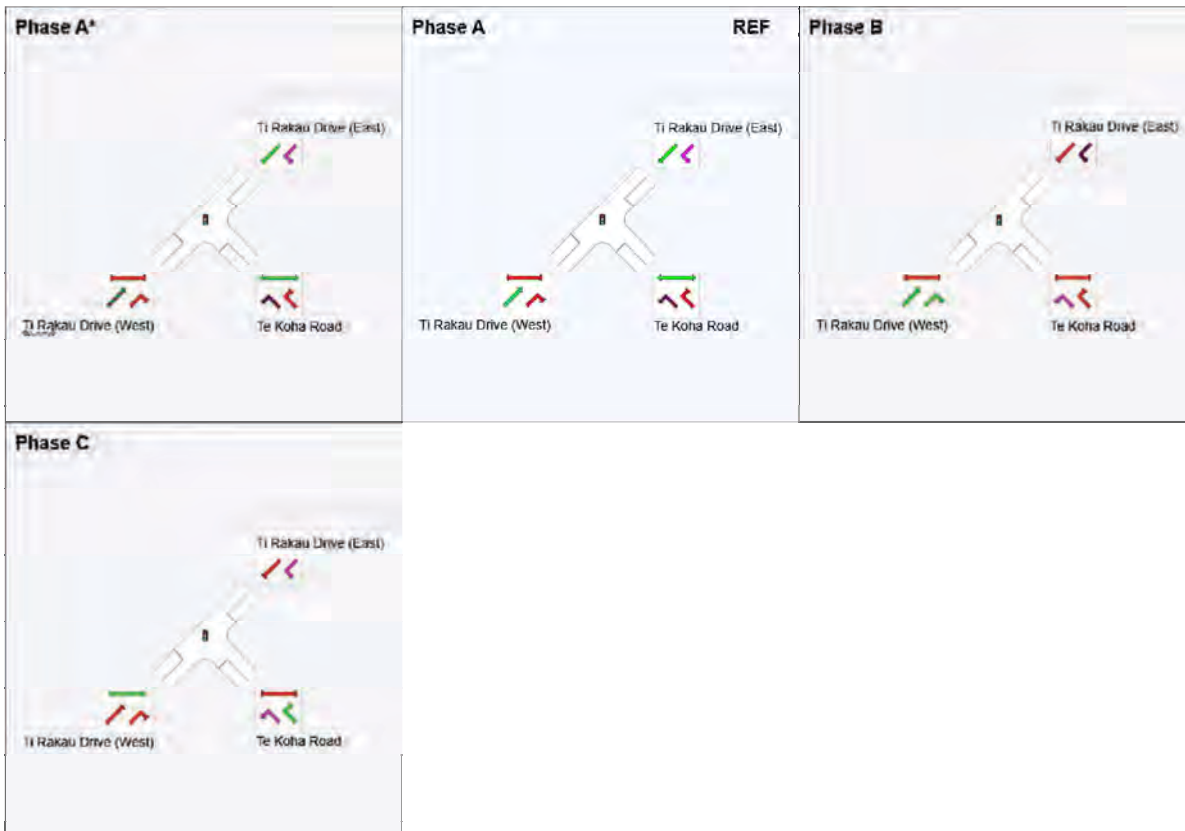
Output Phase Sequence: A*, A, B, C

Phase Timing Summary

Phase	A*	A	B	C
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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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PHASING SUMMARY

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)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 109 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: Variable Phasing (phase reduction applied)

Reference Phase: Phase A

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

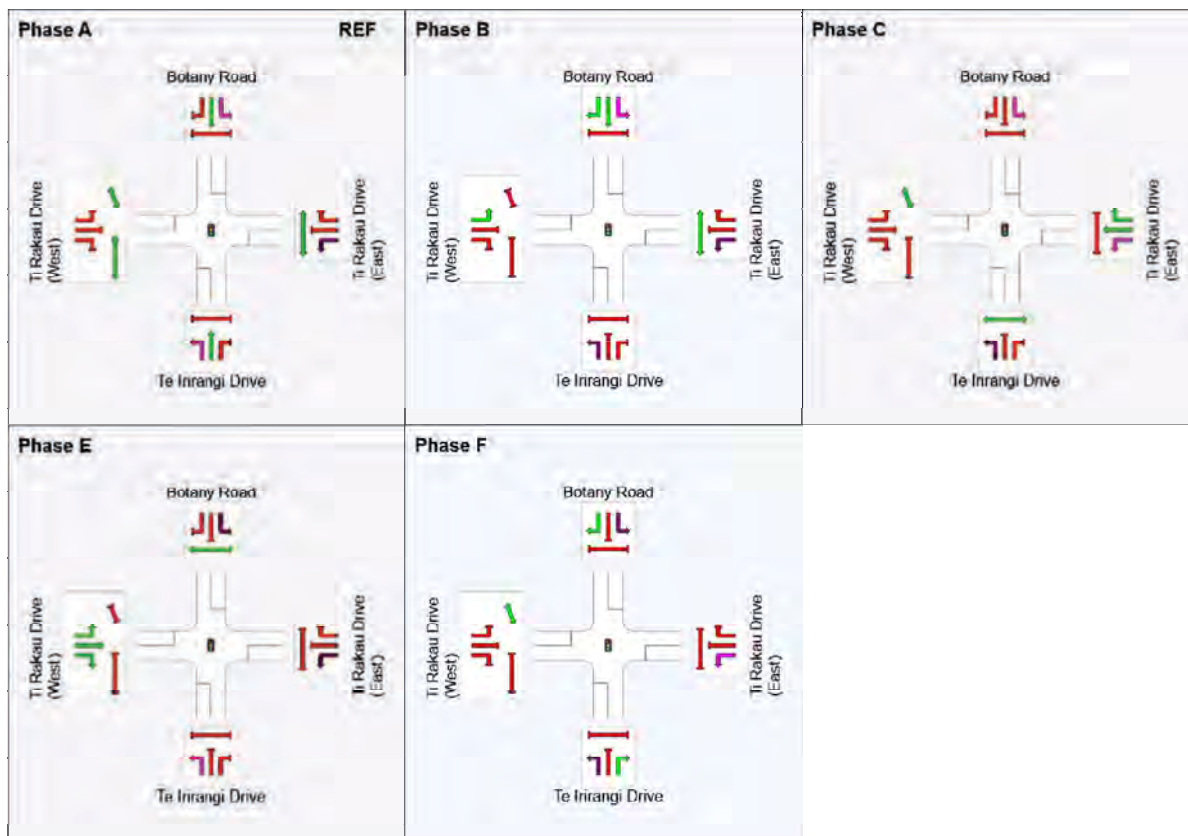
Output Phase Sequence: A, B, C, E, F

Phase Timing Summary

Phase	A	B	C	E	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



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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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)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 165 seconds (Site User-Given Phase Times)

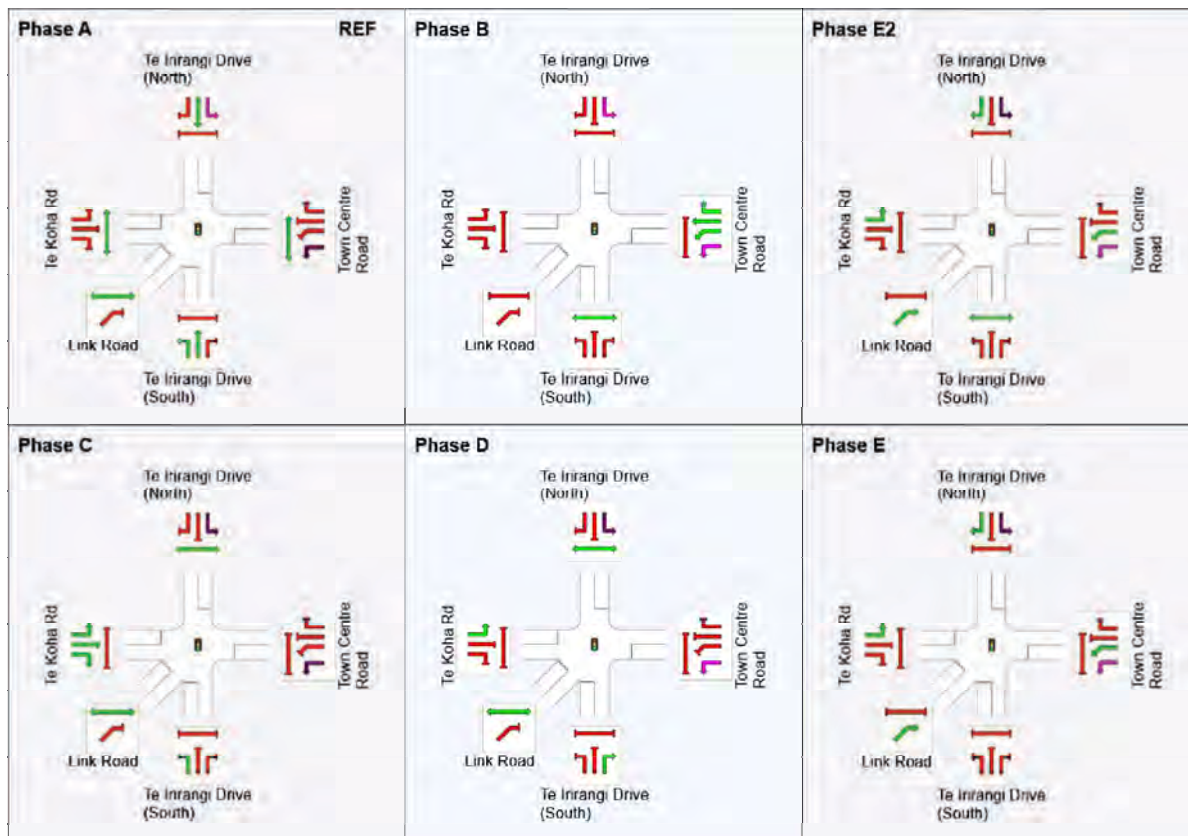
Timings based on settings in the Site Phasing & Timing dialog
 Phase Times specified by the user
 Phase Sequence: Leading Right Turn
 Reference Phase: Phase A
 Input Phase Sequence: A, B, E2, C, D, E
 Output Phase Sequence: A, B, E2, C, D, E

Phase Timing Summary











Phase	A	B	E2	C	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

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Appendix H

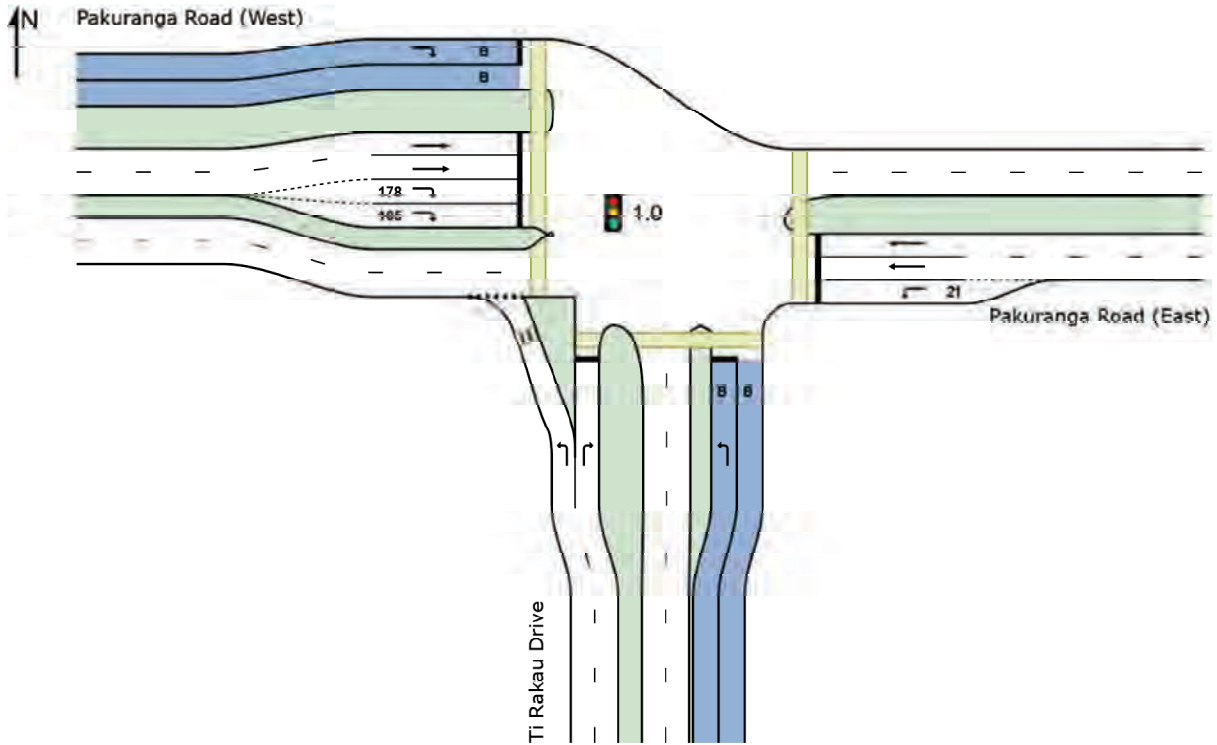
EB2/EB3/EB4i/L Scenario – Lane Performance Summaries

SITE LAYOUT

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



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: Pakuranga Road (West)									
Mov. From W To Exit:	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	E	S							
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	18.7	4
Approach	617	637	1254	13.6		0.778			
Total %HV Deg. Satn (v/c)									
Intersection	3308	11.3		0.899					

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.

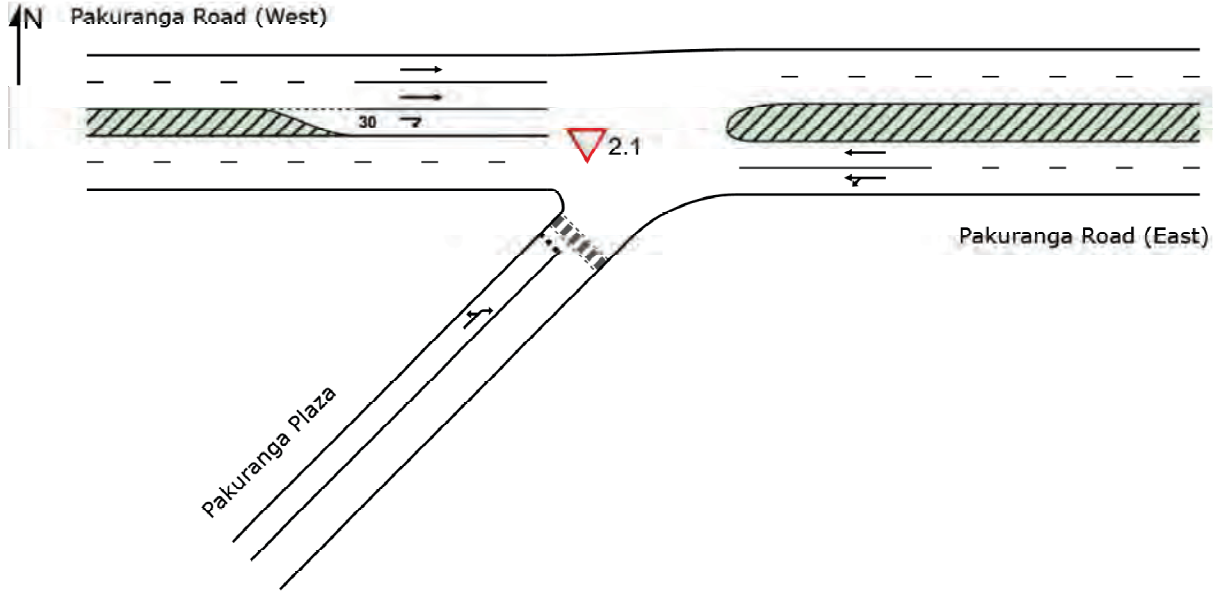
Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Capacity Rate veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
South Exit: Ti Rakau Drive											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
Full Length Lane	2										Merge Analysis not applied.
Full Length Lane	3										Merge Analysis not applied.
East Exit: Pakuranga Road (East)											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
Full Length Lane	2										Merge Analysis not applied.
West Exit: Pakuranga Road (West)											
Merge Type: Not Applied											
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 LAYOUT

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

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

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



LANE SUMMARY

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															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist] m				
East: Pakuranga Road (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: Pakuranga 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	-27.9 ^{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: Pakuranga 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				
Intersection	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 (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.

^{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 (veh/h)										
East: Pakuranga Road (East)										
Mov.	L1	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
From E To Exit:	SW	W								
Lane 1	52	420	472	5.2	1795	0.263	100	NA	NA	
Lane 2	-	493	493	5.4	1874	0.263	100	NA	NA	
Approach	52	913	965	5.3		0.263				
West: Pakuranga Road (West)										
Mov.	T1	R3	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
From W To Exit:	E	SW								
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: Pakuranga Plaza									
Mov. From SW To Exit:	L3 W	R1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	11	43	54	5.6	52	1.036	100	NA	NA
Approach	11	43	54	5.6	1.036				
Total %HV Deg. Satn (v/c)									
Intersection	1914	6.2	1.036						

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

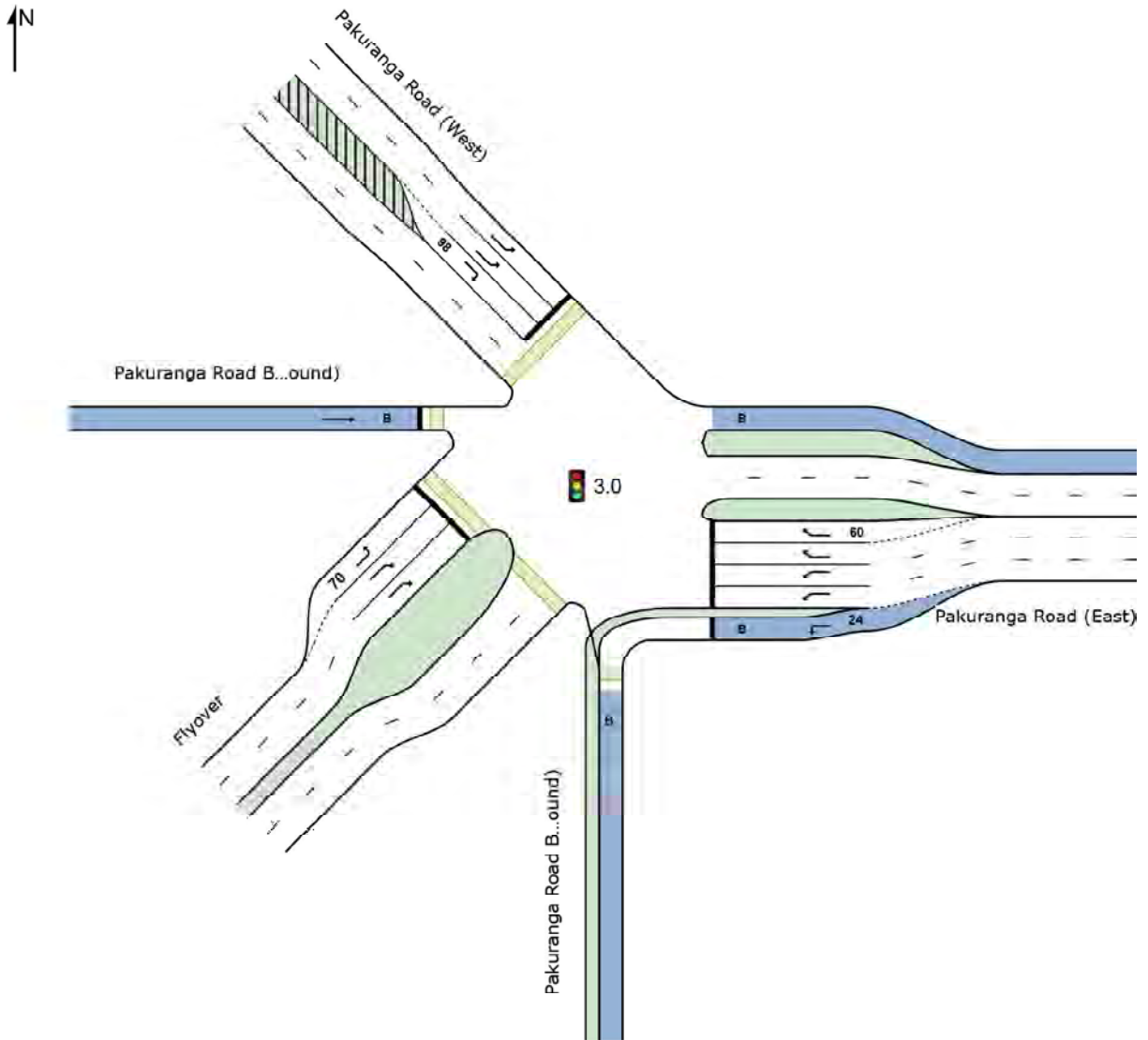
Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Lane Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
East Exit: Pakuranga Road (East)											
Merge Type: Not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

SITE LAYOUT

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.



LANE SUMMARY

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

Site Category: (None)

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

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist m]				
East: Pakuranga Road (East)															
Lane 1 (B)	28	100.0	28	100.0	687	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 ¹	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	1153	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	627 ¹	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 ¹	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: Pakuranga Road (West)															
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	27.9 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: Pakuranga Road Busway Link (Northbound)															
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: Flyover															
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 ¹	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				
Intersection	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.

- 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.
- Probability of Blockage has been set on the basis of a queue that overflows from a short lane.

Approach Lane Flows (veh/h)											
East: Pakuranga Road (East)											
Mov. From E To Exit:	L2	L1	R1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
	S	SW	NW								
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	89.1	4
Approach	28	2097	818	2943	5.7		0.928			
NorthWest: Pakuranga Road (West)										
Mov. From NW To Exit:	L1	R2	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	E	SW								
Lane 1	328	-	328	5.8		1231	0.266	100	NA	NA
Lane 2	328	-	328	5.8		1231	0.266	100	NA	NA
Lane 3	-	252	252	10.7		286	0.881	100	47.4	2
Approach	655	252	907	7.2			0.881			
West: Pakuranga Road Busway Link (Northbound)										
Mov. From W To Exit:	T1	Total	%HV			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	E									
Lane 1	9	9	100.0			295	0.031	100	NA	NA
Approach	9	9	100.0				0.031			
SouthWest: Flyover										
Mov. From SW To Exit:	L2	R1	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	NW	E								
Lane 1	150	-	150	8.0		300	0.499	100	11.8	2
Lane 2	-	325	325	4.6		409 ¹	0.794	100	NA	NA
Lane 3	-	372	372	4.6		469	0.794	100	NA	NA
Approach	150	697	847	5.2			0.794			
Total %HV Deg. Satn (v/c)										
Intersection	4706	6.1		0.928						

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											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Pakuranga Road Busway Link (Southbound)											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
East Exit: Pakuranga Road (East)											
Merge Type: Not Applied											
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: Pakuranga Road (West)											
Merge Type: Not Applied											
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.									

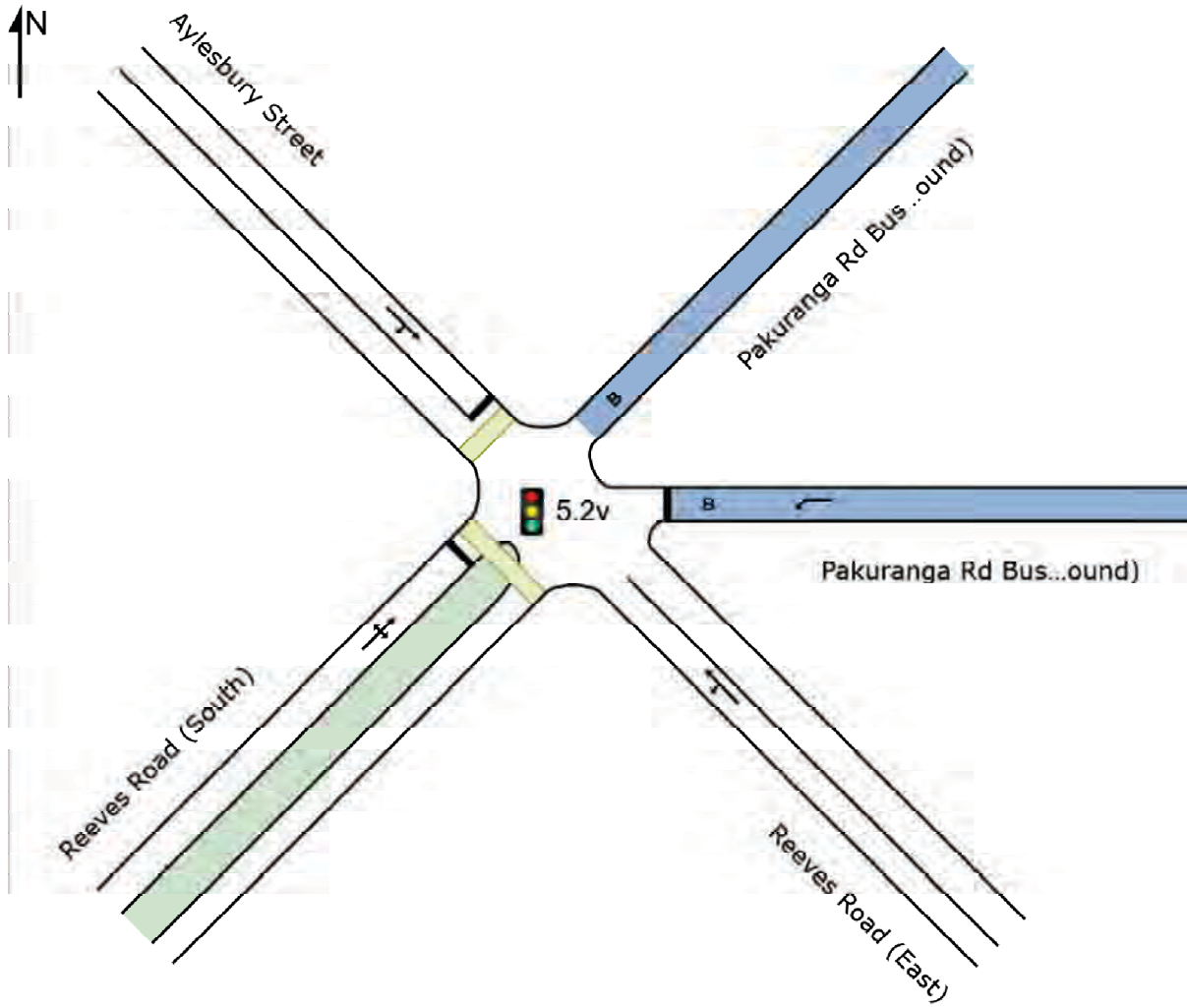
Organisation: AECOM AUSTRALIA PTY LTD | Licence: NETWORK / Enterprise | Processed: Friday, 18 August 2023 2:01:55 PM
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EB2,3R,3C,4i\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final AM 2028_JV Edits_Updates.sip9

SITE LAYOUT

**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.

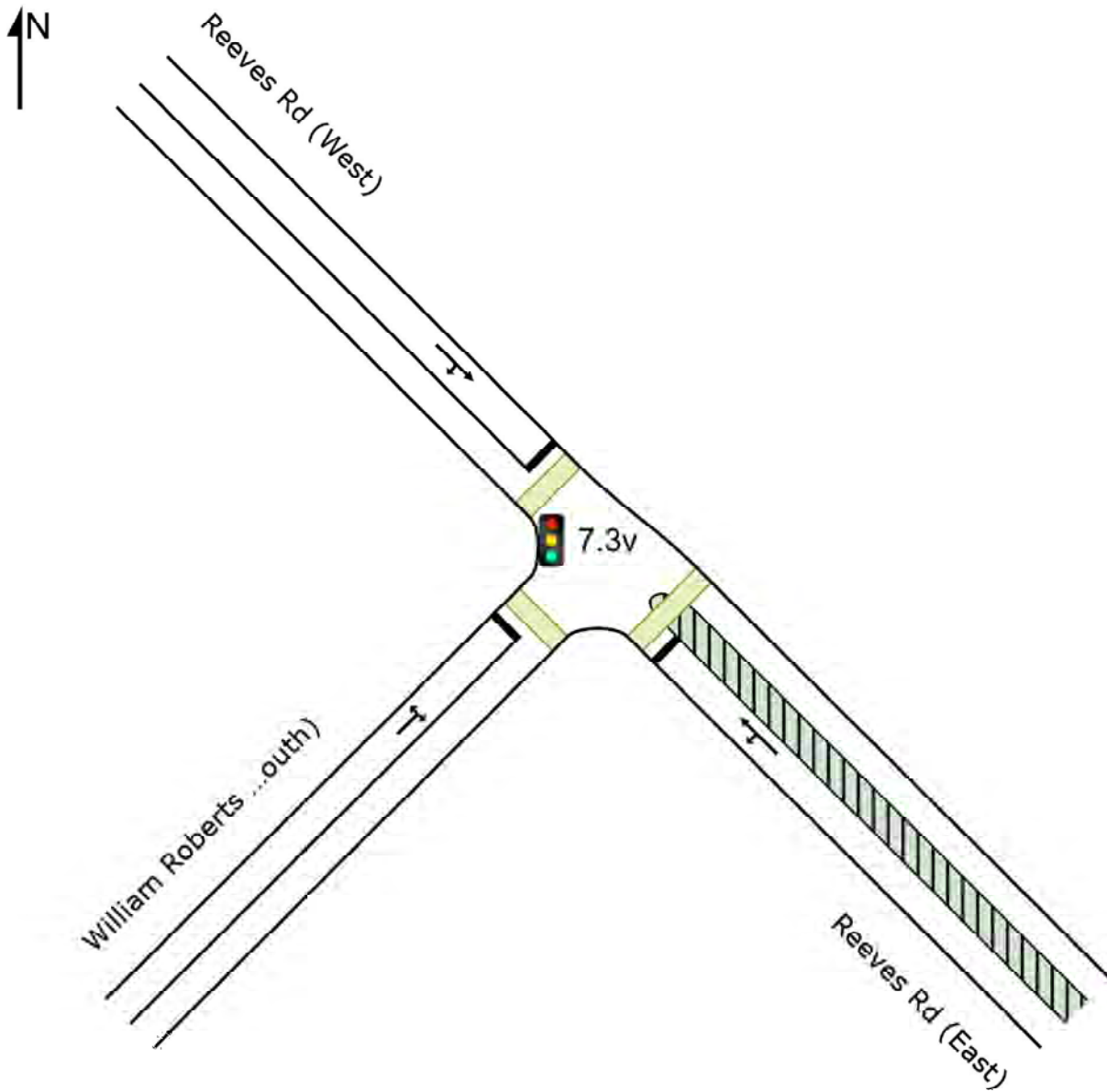


SITE LAYOUT

 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 Performance (CCG)															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total	HV]	[Total	HV]						[Veh	Dist]				
	veh/h	%	veh/h	%						m	m				
Site: 5.2v [5.2 Aylesbury St/ Reeves Rd/ Busway Link signalised - Import]															
SouthEast: Reeves Road (East)															
Lane 1	260	7.7	260	7.7	1769	0.147	100	1.9	LOS A	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: Pakuranga Rd Busway Link (Southbound)															
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: Aylesbury Street															
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: Reeves Road (South)															
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				
Intersection	404	17.6	404	17.6		0.675		28.6	LOS C	6.3	53.3				
Site: 7.3v [7.3 William Roberts Rd / Reeves Rd signalised - Import]															
SouthEast: Reeves Rd (East)															
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: Reeves Rd (West)															
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: William Roberts Road (South)															
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				
Intersection	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. From SE To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	183	77	260	7.7	1769	0.147	100	NA	NA	
Approach	183	77	260	7.7		0.147				
East: Pakuranga Rd Busway Link (Southbound)										
Mov. From E To Exit:	L1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.		
Lane 1	28	28	100.0	121	0.231	100	NA	NA		
Approach	28	28	100.0		0.231					
NorthWest: Aylesbury Street										
Mov. From NW To Exit:	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	12	10	22	0.0	71	0.308	100	NA	NA	
Approach	12	10	22	0.0		0.308				
SouthWest: Reeves Road (South)										
Mov. From SW To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	12	9	73	94	24.6	139	0.675	100	NA	NA
Approach	12	9	73	94	24.6		0.675			
Total %HV Deg.Satn (v/c)										
Intersection	404	17.6		0.675						
Site: 7.3v [7.3 William Roberts Rd / Reeves Rd signalised - Import]										
SouthEast: Reeves Rd (East)										
Mov. From SE To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	180	214	394	8.9	479	0.822	100	NA	NA	
Approach	180	214	394	8.9		0.822				
NorthWest: Reeves Rd (West)										
Mov. From NW To Exit:	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	59	25	84	15.5	474	0.177	100	NA	NA	
Approach	59	25	84	15.5		0.177				
SouthWest: William Roberts Road (South)										
Mov. From SW To Exit:	L2	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	45	189	234	8.1	339	0.689	100	NA	NA	
Approach	45	189	234	8.1		0.689				

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

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

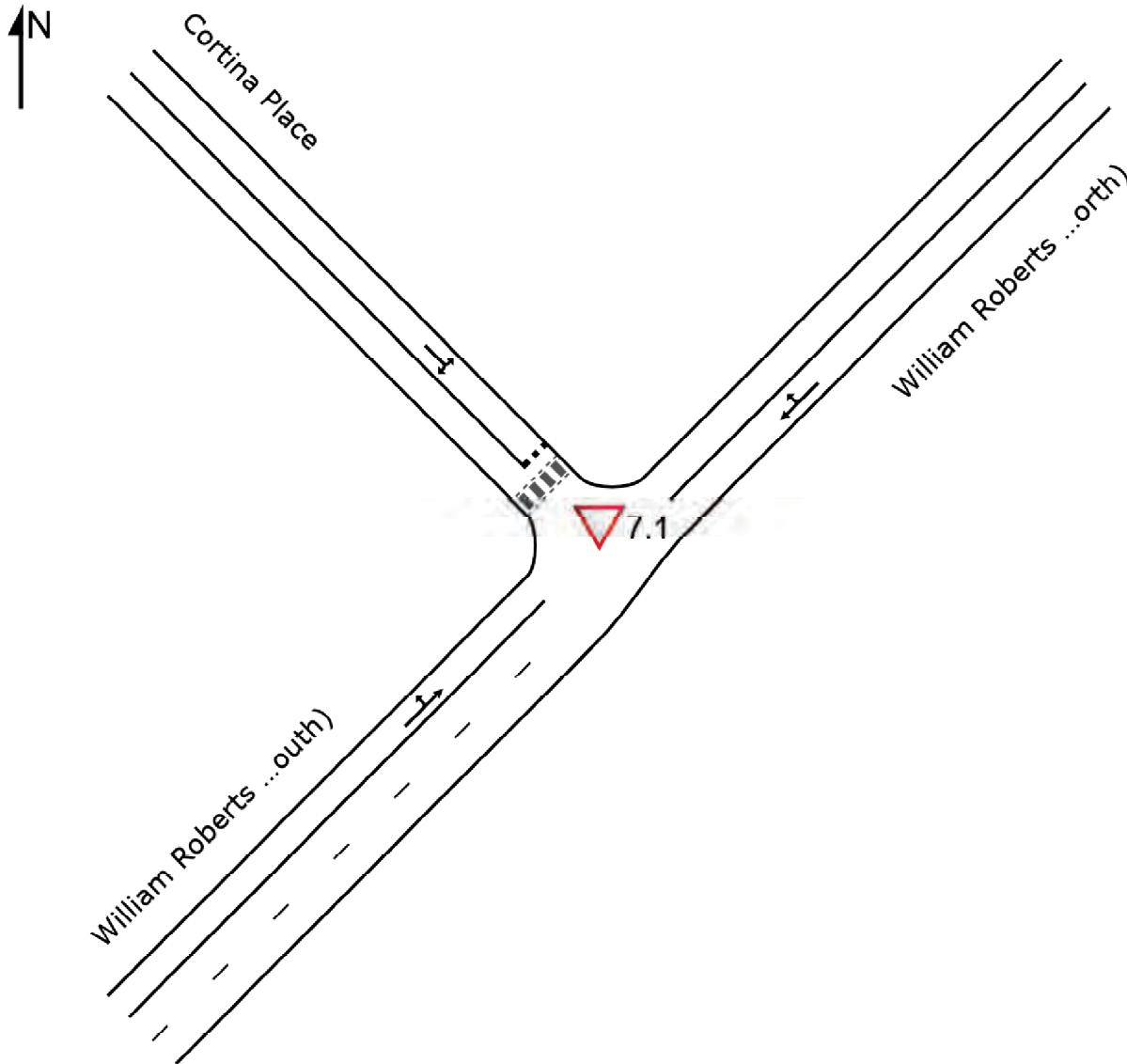
Merge Analysis (CCG)											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Lane Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
Site: 5.2v [5.2 Aylesbury St/ Reeves Rd/ Busway Link signalised - Import]											
SouthEast Exit: Reeves Road (East)											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
NorthEast Exit: Pakuranga Rd Busway Link (Northbound)											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
NorthWest Exit: Aylesbury Street											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
SouthWest Exit: Reeves Road (South)											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
Site: 7.3v [7.3 William Roberts Rd / Reeves Rd signalised - Import]											
SouthEast Exit: Reeves Rd (East)											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
NorthWest Exit: Reeves Rd (West)											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.
SouthWest Exit: William Roberts Road (South)											
Merge Type: Not Applied											
Full Length Lane	1										Merge Analysis not applied.

SITE LAYOUT

▽ Site: 7.1 [7.1 William Roberts Rd / Cortina Pl - 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.



LANE SUMMARY

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 and Performance															
	DEMAND FLOWS [Total HV] veh/h %		ARRIVAL FLOWS [Total HV] veh/h %		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE [Veh Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %	
NorthEast: William Roberts Road (North)															
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 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: William Roberts Road (South)															
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				
Intersection	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 Lane Flows (veh/h)										
NorthEast: William Roberts Road (North)										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Prob. Ov.	Ov. Lane No.
From NE					Cap. veh/h	v/c	%	%		
To Exit:	SW	NW								
Lane 1	162	62	224	9.8	1570	0.143	100	NA	NA	
Approach	162	62	224	9.8		0.143				
NorthWest: Cortina Place										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Prob. Ov.	Ov. Lane No.
From NW					Cap. veh/h	v/c	%	%		
To Exit:	NE	SW								
Lane 1	45	58	103	12.6	924	0.111	100	NA	NA	
Approach	45	58	103	12.6		0.111				
SouthWest: William Roberts Road (South)										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Prob. Ov.	Ov. Lane No.
From SW					Cap. veh/h	v/c	%	%		
To Exit:	NW	NE								
Lane 1	111	205	316	8.2	1529	0.207	100	NA	NA	
Approach	111	205	316	8.2		0.207				
Total %HV Deg.Satn (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.

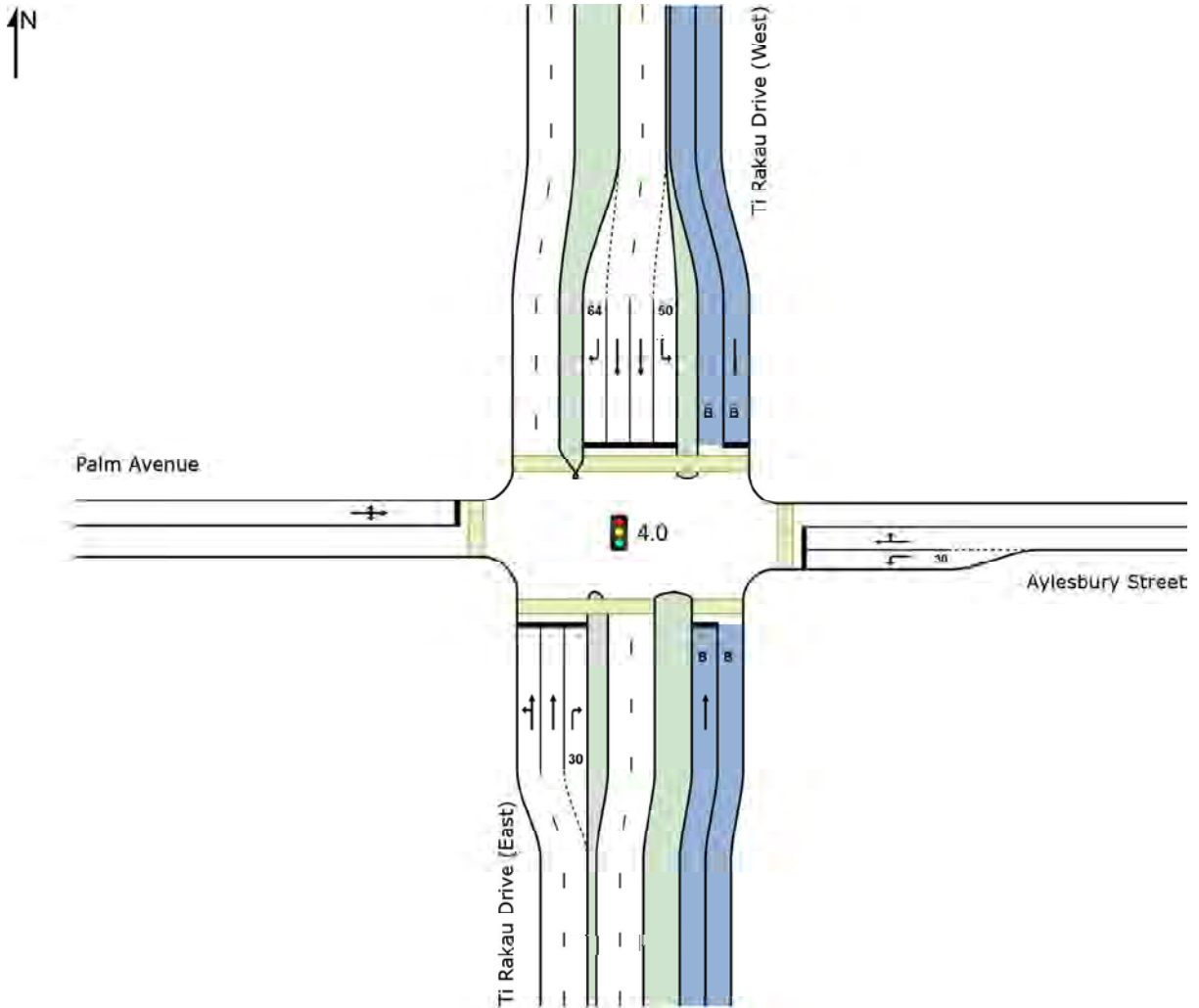
Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
NorthEast Exit: William Roberts Road (North) Merge Type: Not Applied											
Full Length Lane	1		Merge Analysis not applied.								
NorthWest Exit: Cortina Place Merge Type: Not Applied											
Full Length Lane	1		Merge Analysis not applied.								
SouthWest Exit: William Roberts Road (South) Merge Type: Not Applied											
Full Length Lane	1		Merge Analysis not applied.								
Full Length Lane	2		Merge Analysis not applied.								

SITE LAYOUT

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



LANE SUMMARY

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 Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist m]				
South: Ti Rakau Drive (East)															
Lane 1	321	10.1	321	10.1	383	0.838	100	64.0	LOS E	21.1 ^{N4}	160.7 ^{N4}	Full	110	-45.4 ^{N3}	50.0
Lane 2	616	9.2	616	9.2	736 ¹	0.838	100	45.5	LOS D	21.3 ^{N4}	160.7 ^{N4}	Full	110	0.0	50.0
Lane 3	31	3.2	31	3.2	69	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	613	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: Aylesbury Street															
Lane 1	77	9.1	77	9.1	140	0.548	100	42.5	LOS D	3.4	25.7	Short	30	-6.7 ^{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	50.0
Approach	232	8.6	232	8.6		0.953		80.8	LOS F	7.8	58.4				
North: Ti Rakau Drive (West)															
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	-6.7 ^{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 Avenue															
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				
Intersection	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 Lane Flows (veh/h)										
South: Ti Rakau Drive (East)										
Mov. From S To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.
	W	N	E							
Lane 1	54	267	-	321	10.1	383	0.838	100	NA	NA
Lane 2	-	616	-	616	9.2	736 ¹	0.838	100	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: Aylesbury Street										
Mov. From E To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	S	W	N							
Lane 1	77	-	-	77	9.1	140	0.548	100	1.1	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 Rakau Drive (West)										
Mov. From N To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	E	S	W							
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 Avenue										
Mov. From W To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	N	E	S							
Lane 1	52	21	40	113	5.3	162	0.698	100	NA	NA
Approach	52	21	40	113	5.3		0.698			
Total %HV Deg. Satn (v/c)										
Intersection	2066	14.5		0.953						

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.

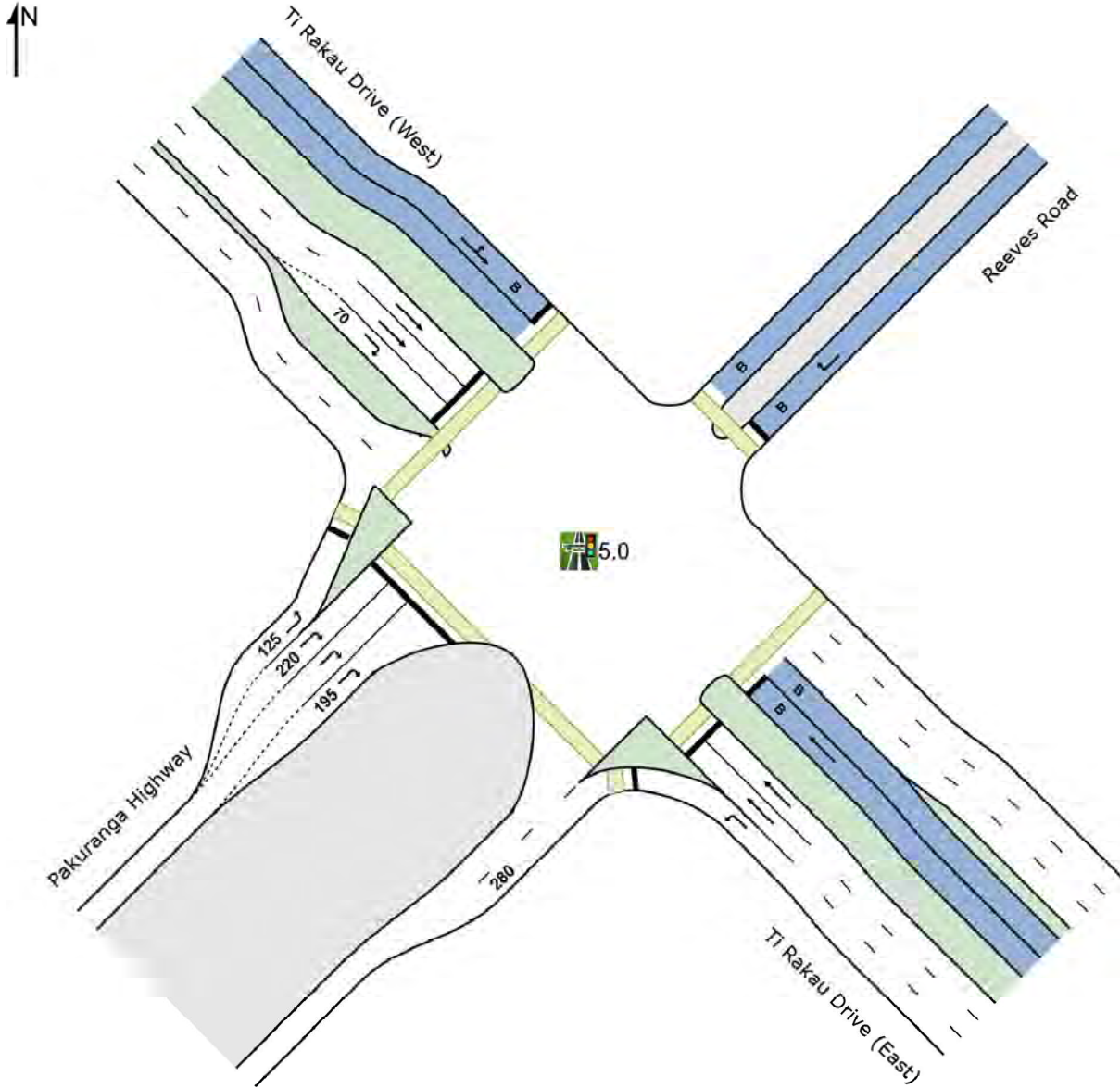
Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Capacity Flow Rate veh/h	Lane Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Ti Rakau Drive (East)											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
Full Length Lane	3	Merge Analysis not applied.									
East Exit: Aylesbury Street											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
North Exit: Ti Rakau Drive (West)											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
Full Length Lane	3	Merge Analysis not applied.									
West Exit: Palm Avenue											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

SITE LAYOUT

 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.



LANE SUMMARY

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)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]				
SouthEast: Ti Rakau Drive (East)															
Lane 1	860	12.1	860	12.1	1327	0.648	100	12.4	LOS B	17.0 ^{N4}	131.5 ^{N4}	Full	90	0.0	50.0
Lane 2	433	10.1	432	10.1	498	0.869	100	48.4	LOS D	17.3 ^{N4}	131.5 ^{N4}	Full	90	-50.0 ^{N7}	50.0
Lane 3	433	10.1	432	10.1	498	0.869	100	48.4	LOS D	12.3 ^{N5}	93.7 ^{N5}	Full	90	-50.0 ^{N3}	18.7
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 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 Rakau Drive (West)															
Lane 1 (B)	22	100.0	22	100.0	225	0.098	100	34.0	LOS C	0.8	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	6.7
Lane 3	282	17.4	281	17.4	500	0.563	100	32.6	LOS C	12.5	100.3	Full	110	0.0	6.7
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: Pakuranga Highway															
Lane 1	113	5.3	113	5.3	325	0.347	100	45.6	LOS D	5.5	40.1	Short	125	-50.0 ^{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				
Intersection	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 Flows (veh/h)										
SouthEast: Ti Rakau Drive (East)										
Mov. From SE To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
	SW	NW								
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: Reeves Road											
Mov. From NE To Exit:	R2	Total	%HV			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
	NW										
Lane 1	28	28	100.0			292	0.096	100	NA	NA	
Approach	28	28	100.0				0.096				
NorthWest: Ti Rakau Drive (West)											
Mov. From NW To Exit:	L2	T1	R2	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	NE	SE	SW								
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	26.5	3	
Approach	9	576	156	741	17.8		0.786				
SouthWest: Pakuranga Highway											
Mov. From SW To Exit:	L2	R2	Total	%HV			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	NW	SE									
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	4.7	3	
Approach	113	907	1020	11.4			0.905				
Total %HV Deg. Satn (v/c)											
Intersection	3539	13.9		0.905							

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	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
SouthEast 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.									
Full Length Lane	3		Merge Analysis not applied.									
Full Length Lane	4		Merge Analysis not applied.									
NorthEast Exit: Reeves Road												
Merge Type: Not Applied												
Full Length Lane	1		Merge Analysis not applied.									
NorthWest Exit: Ti Rakau Drive (West)												
Merge Type: Not Applied												
Full Length Lane	1		Merge Analysis not applied.									
Full Length Lane	2		Merge Analysis not applied.									
Full Length Lane	3		Merge Analysis not applied.									
SouthWest Exit: Pakuranga Highway												
Merge Type: Zipper												

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

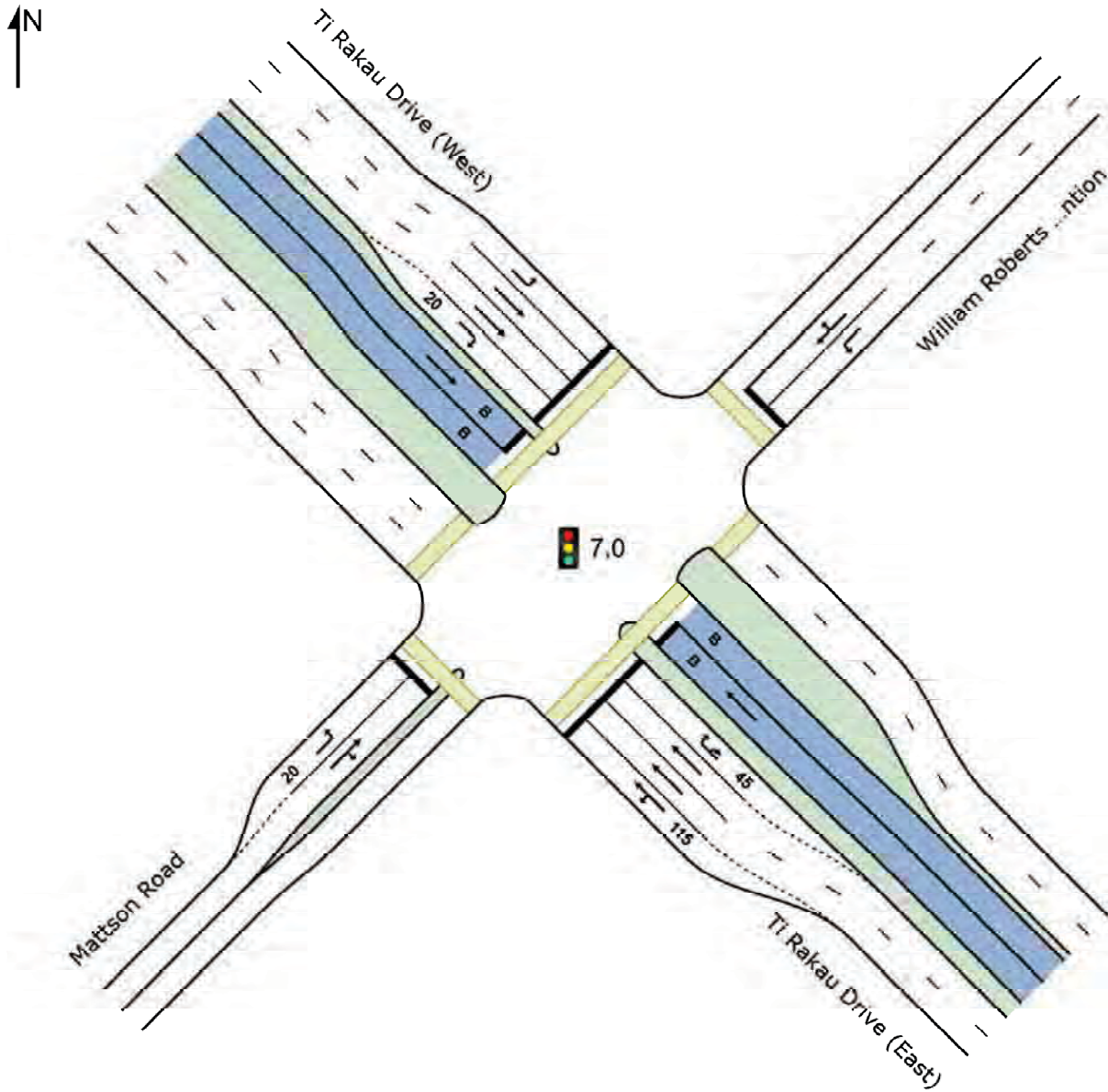
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SITE LAYOUT

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.



LANE SUMMARY

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

Scheme Design

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 96 seconds (Site Practical Cycle Time)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist] m				
SouthEast: Ti Rakau Drive (East)															
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	751	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 ¹	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 Roberts Road Extention															
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 Rakau Drive (West)															
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	50.0
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	50.0
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: Mattson Road															
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				
Intersection	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 Lane Flows (veh/h)													
SouthEast: Ti Rakau Drive (East)													
Mov. From SE To Exit:	L2	T1	R2	U	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.		
	SW	NW	NE	SE									
Lane 1	35	380	-	-	415	11.2	554	0.750	100	23.0	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: William Roberts Road Extention											
Mov. From NE To Exit:	L2	T1	R2	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	SE	SW	NW								
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: Ti Rakau Drive (West)											
Mov. From NW To Exit:	L2	T1	R2	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	NE	SE	SW								
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: Mattson Road											
Mov. From SW To Exit:	L2	T1	R2	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	NW	NE	SE								
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 %HV Deg. Satn (v/c)											
Intersection	3414	13.4		0.889							

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											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast 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.								
Full Length Lane	3		Merge Analysis not applied.								
NorthEast Exit: William Roberts Road Extention											
Merge Type: Not Applied											
Full Length Lane	1		Merge Analysis not applied.								
NorthWest Exit: Ti Rakau Drive (West)											
Merge Type: Not Applied											
Full Length Lane	1		Merge Analysis not applied.								
Full Length Lane	2		Merge Analysis not applied.								
Full Length Lane	3		Merge Analysis not applied.								
Full Length Lane	4		Merge Analysis not applied.								
SouthWest Exit: Mattson Road											

Merge Type: Not Applied

Full Length Lane	1	Merge Analysis not applied.
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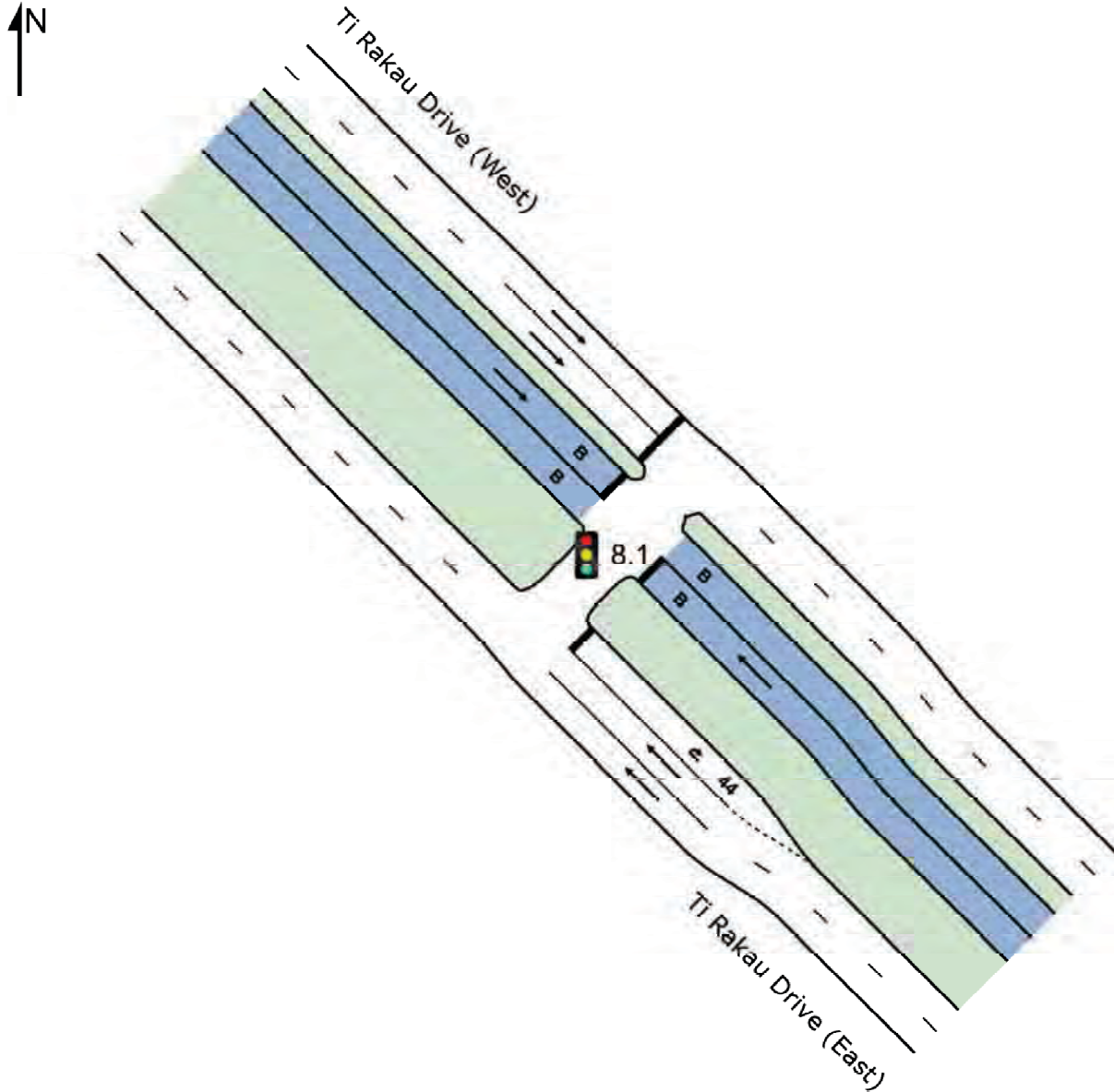
SITE LAYOUT

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.



LANE SUMMARY

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 Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist] m				
SouthEast: Ti Rakau Drive (East)															
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	LOS A	0.7	5.3				
NorthWest: Ti Rakau Drive (West)															
Lane 1	662	14.7	661	14.7	759	0.872	100	16.5	LOS B	11.1	87.2	Full	73	0.0	31.3
Lane 2	662	14.7	661	14.7	759	0.872	100	16.5	LOS B	11.1	87.2	Full	73	0.0	31.3
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				
Intersection	2978	13.7	2978	13.7		0.872		7.7	LOS A	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 Lane Flows (veh/h)									
SouthEast: Ti Rakau Drive (East)									
Mov. From SE To Exit:	T1	U	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.
	NW	SE							
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			
NorthWest: Ti Rakau Drive (West)									
Mov. From NW To Exit:	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
	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 %HV Deg.Satn (v/c)									
Intersection	2978	13.7			0.872				

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	Short Lane Length m	Percent Opng in Lane	Oposing Flow Rate % veh/h	Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast 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.									
	Full Length Lane	3	Merge Analysis not applied.									
NorthWest Exit: Ti Rakau Drive (West)												
Merge Type: Not Applied												
	Full Length Lane	1	Merge Analysis not applied.									
	Full Length Lane	2	Merge Analysis not applied.									
	Full Length Lane	3	Merge Analysis not applied.									

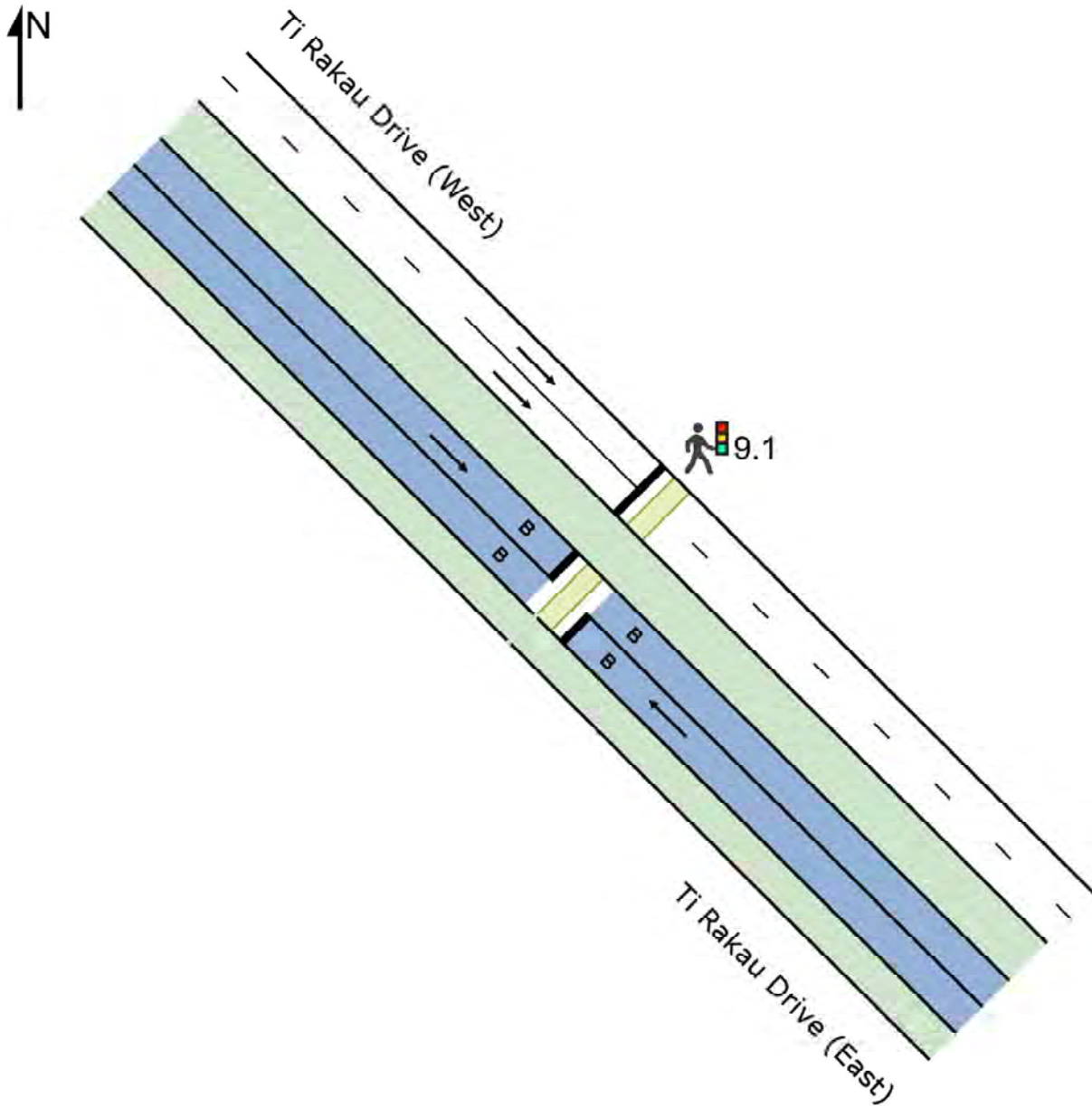
SITE LAYOUT

 **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.



LANE SUMMARY

Site: 9.1 [9.1 Staggered Crossing - East of Marriot Rd - Import (Site Folder: AM)] Network: N101 [AM_Town 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 Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist m]				
SouthEast: Ti Rakau Drive (East)															
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 Rakau Drive (West)															
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	50.0
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	50.0
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				
Intersection	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 Lane Flows (veh/h)									
SouthEast: Ti Rakau Drive (East)									
Mov. From SE To Exit:	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
Lane 1	25	25	100.0	390	0.064	100	NA	NA	
Approach	25	25	100.0		0.064				
NorthWest: Ti Rakau Drive (West)									
Mov. From NW To Exit:	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	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 %HV 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.

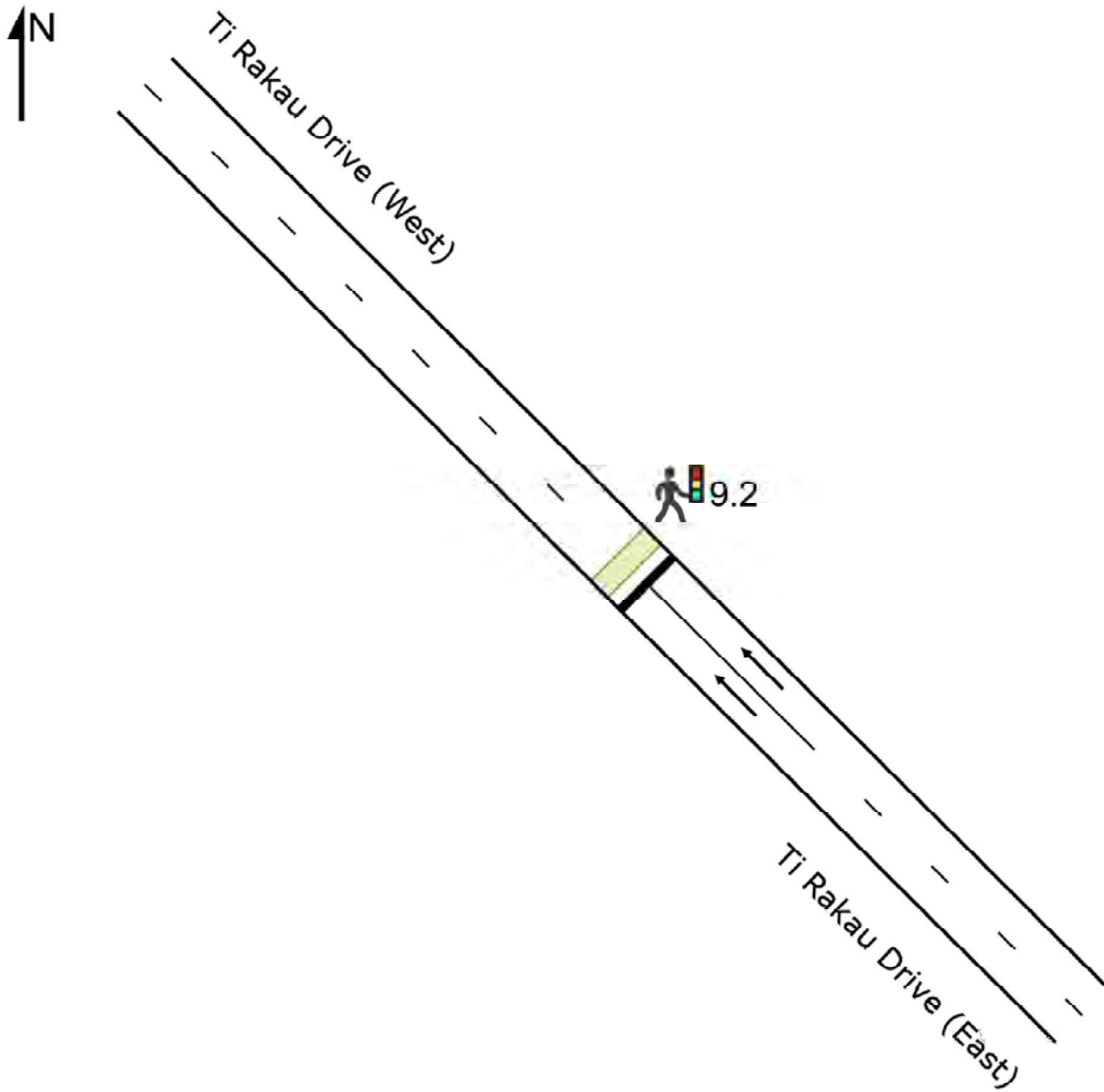
Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Ti Rakau Drive (East)											
Merge Type: Not Applied											
	Full Length Lane	1	Merge Analysis not applied.								
	Full Length Lane	2	Merge Analysis not applied.								
	Full Length Lane	3	Merge Analysis not applied.								
NorthWest Exit: Ti Rakau Drive (West)											
Merge Type: Not Applied											
	Full Length Lane	1	Merge Analysis not applied.								

SITE LAYOUT

 **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.



LANE SUMMARY

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

Site Category: (None)
 Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 45 seconds (Site Practical Cycle Time)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h	HV %	[Total veh/h	HV %						[Veh	Dist] m				
SouthEast: Ti Rakau Drive (East)															
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	50.0
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	50.0
Approach	1620	10.9	1620	10.9		0.879		23.3	LOS C	8.6	65.8				
Intersection	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 Lane Flows (veh/h)									
SouthEast: Ti Rakau Drive (East)									
Mov. From SE To Exit:	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
	NW								
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.

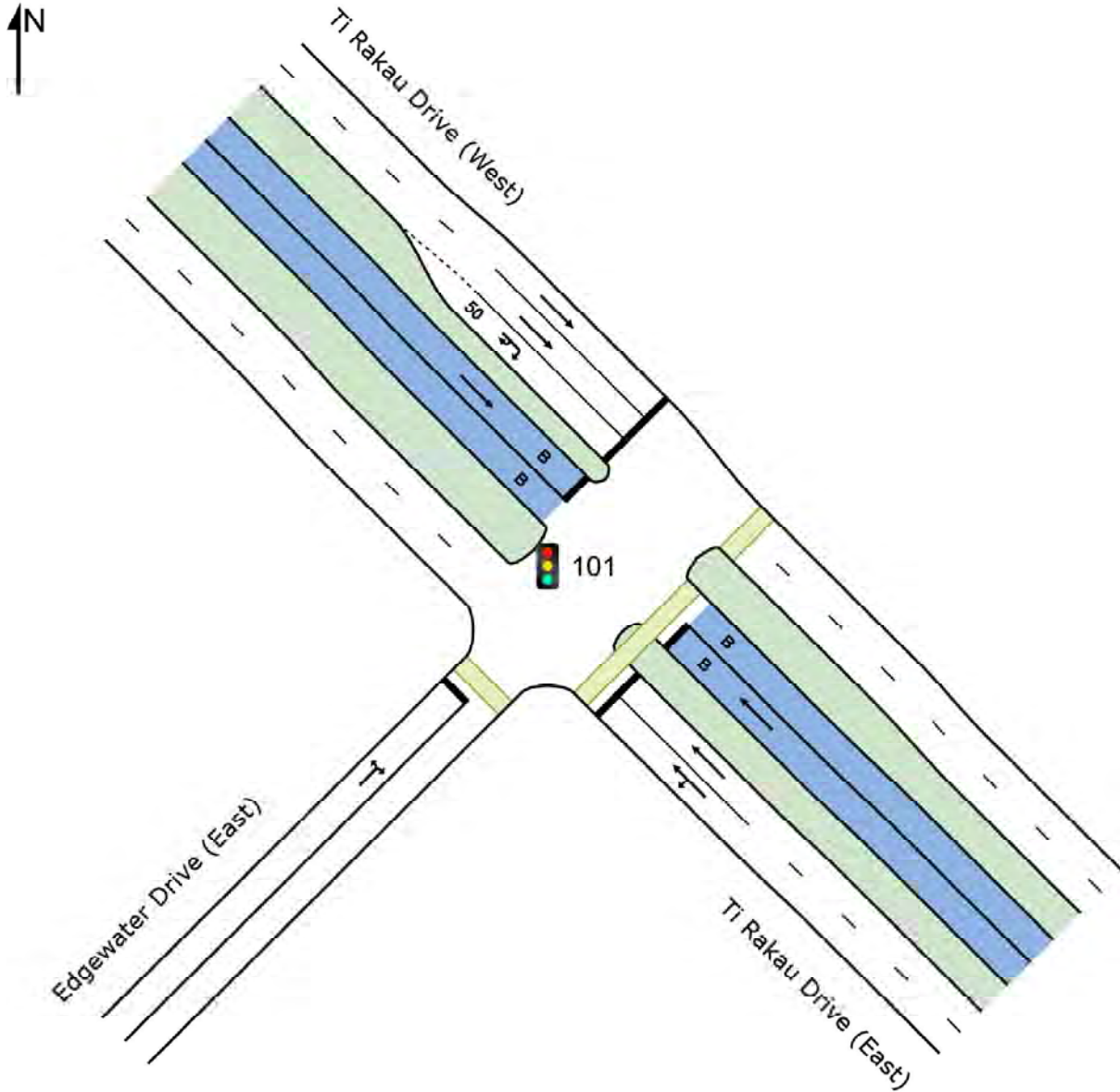
Merge Analysis											
Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap sec	Follow-up Headway sec	Lane Capacity Rate veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
NorthWest Exit: Ti Rakau Drive (West)											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									

SITE LAYOUT

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

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

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



LANE SUMMARY

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)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total]	[HV]	[Total]	[HV]						[Veh]	[Dist]				
SouthEast: Ti Rakau Drive (East)															
Lane 1	767	10.6	767	10.6	1066	0.720	100	14.4	LOS B	21.4	163.6	Full	445	0.0	0.0
Lane 2	768	10.9	768	10.9	1067	0.720	100	14.1	LOS B	21.4	164.0	Full	445	0.0	0.0
Lane 3 (B)	25	100.0	25	100.0	703	0.036	100	8.3	LOS A	0.4	5.3	Full	445	0.0	0.0
Approach	1560	12.2	1560	12.2		0.720		14.2	LOS B	21.4	164.0				
NorthWest: Ti Rakau Drive (West)															
Lane 1	670	13.0	670	13.0	755 ¹	0.888	100	33.4	LOS C	20.5 ^{N4}	159.3 ^{N4}	Full	109	-28.3 ^{N3}	50.0
Lane 2	581	13.0	581	13.0	654 ¹	0.888	100	33.6	LOS C	20.5 ^{N4}	159.3 ^{N4}	Full	109	-29.6 ^{N3}	50.0
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: Edgewater Drive (East)															
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				
Intersection	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 Lane Flows (veh/h)										
SouthEast: Ti Rakau Drive (East)										
Mov. From SE To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
	SW	NW								
Lane 1	36	731	767	10.6	1066	0.720	100	NA	NA	
Lane 2	-	768	768	10.9	1067	0.720	100	NA	NA	
Lane 3	-	25	25	100.0	703	0.036	100	NA	NA	
Approach	36	1524	1560	12.2		0.720				
NorthWest: Ti Rakau Drive (West)										
Mov. From NW To Exit:	T1	R2	U	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.
	SE	SW	NW							
Lane 1	670	-	-	670	13.0	755 ¹	0.888	100	NA	NA
Lane 2	581	-	-	581	13.0	654 ¹	0.888	100	NA	NA

Lane 3	-	15	118	133	13.5	146	0.910	100	16.9	2
Lane 4	14	-	-	14	100.0	703	0.019	100	NA	NA
Approach	1265	15	118	1398	13.9		0.910			
SouthWest: Edgewater Drive (East)										
Mov.	L2	R2	Total	%HV		Cap.	Deg.	Lane	Prob.	Ov.
From SW						veh/h	Satn	Util.	SL	Lane
To Exit:	NW	SE					v/c	%	%	No.
Lane 1	11	13	23	0.0		125	0.185	100	NA	NA
Approach	11	13	23	0.0			0.185			
Total %HV Deg.Satn (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												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate % veh/h	pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast 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.									
Full Length Lane	3		Merge Analysis not applied.									
NorthWest Exit: Ti Rakau Drive (West)												
Merge Type: Not Applied												
Full Length Lane	1		Merge Analysis not applied.									
Full Length Lane	2		Merge Analysis not applied.									
Full Length Lane	3		Merge Analysis not applied.									
SouthWest Exit: Edgewater Drive (East)												
Merge Type: Not Applied												
Full Length Lane	1		Merge Analysis not applied.									

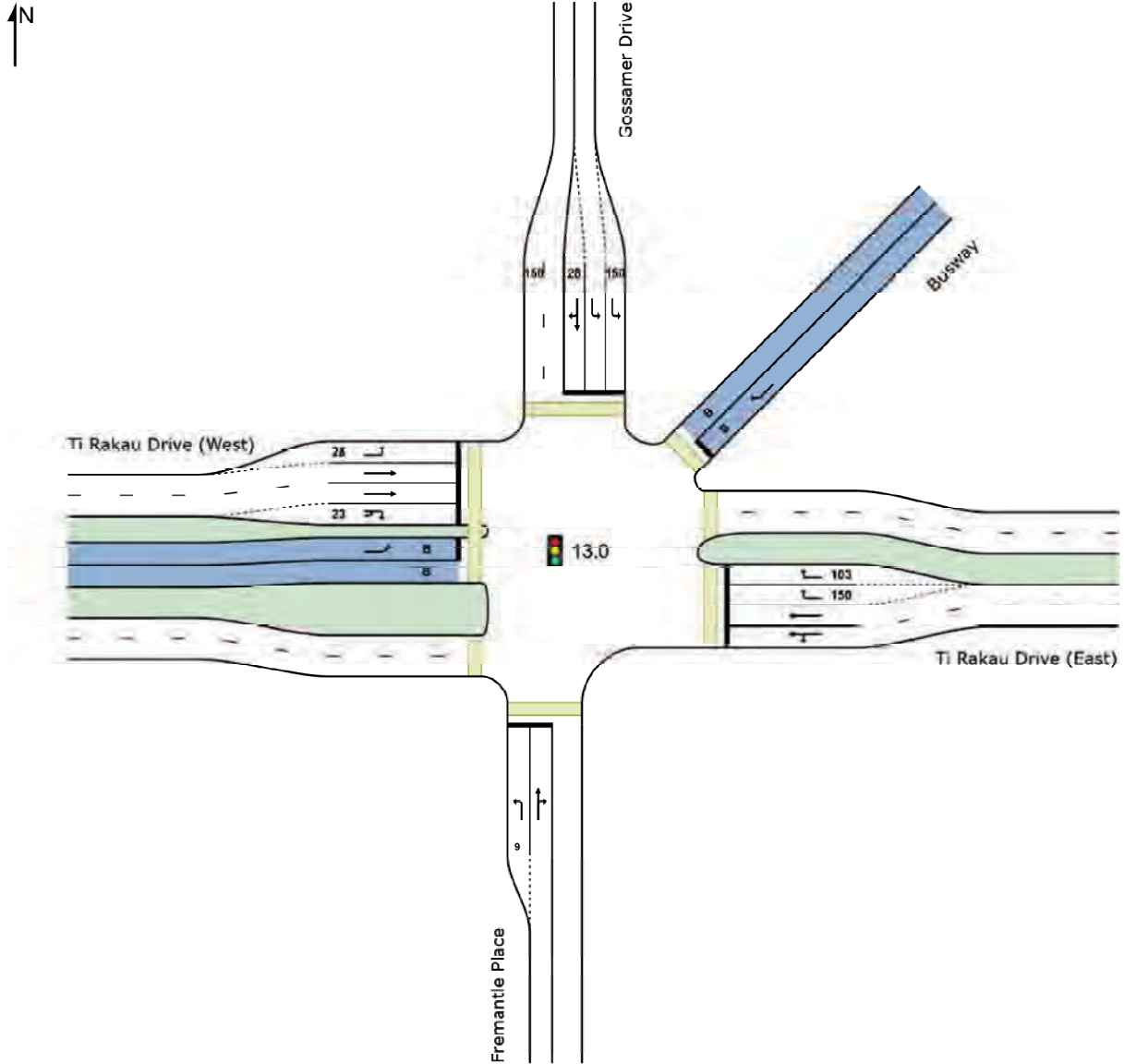
SITE LAYOUT

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.



LANE SUMMARY

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															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	85% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist] m				
South: Fremantle Place															
Lane 1	19	5.3	19	5.3	69	0.276	100	84.0	LOS F	1.3	9.5	Short	9	0.0	NA
Lane 2	21	4.8	21	4.8	70	0.298	100	84.7	LOS F	1.4	10.4	Full	285	0.0	0.0
Approach	40	5.0	40	5.0		0.298		84.4	LOS F	1.4	10.4				
East: Ti Rakau Drive (East)															
Lane 1	772	10.6	772	10.6	840	0.919	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	0.919	100	57.8	LOS E	48.1	367.6	Full	636	0.0	0.0
Lane 3	172	8.1	172	8.1	200	0.861	82 ⁶	84.2	LOS F	12.3	92.4	Short	150	0.0	NA
Lane 4	210	8.1	210	8.1	200	1.050	100	150.4	LOS F	21.1	157.7	Short	103	0.0	NA
Approach	1858	10.2	1858	10.2		1.050		72.5	LOS E	54.9	419.0				
NorthEast: Busway															
Lane 1 (B)	25	100.0	25	100.0	167	0.150	100	35.0	LOS C	0.9	12.1	Full	963	0.0	0.0
Approach	25	100.0	25	100.0		0.150		35.0	LOS C	0.9	12.1				
North: Gossamer Drive															
Lane 1	354	8.1	354	8.1	330	1.074	100	130.7	LOS F	32.5	243.5	Short	150	0.0	NA
Lane 2	352	8.1	352	8.1	328 ¹	1.074	100	130.7	LOS F	32.3	241.9	Full	1010	0.0	0.0
Lane 3	51	7.8	51	7.8	135	0.379	100	77.6	LOS E	3.3	24.6	Short	28	0.0	NA
Approach	757	8.1	757	8.1		1.074		127.1	LOS F	32.5	243.5				
West: Ti Rakau Drive (West)															
Lane 1	41	2.4	41	2.4	912	0.045	100	13.0	LOS B	0.7	4.9	Short	28	0.0	NA
Lane 2	638	11.7	638	11.7	609 ¹	1.048	100	138.5	LOS F	66.8	514.7	Full	445	0.0	28.3
Lane 3	648	11.7	648	11.7	618 ¹	1.048	100	138.2	LOS F	67.8	522.0	Full	445	0.0	29.6
Lane 4	23	13.0	23	13.0	168	0.137	100	69.0	LOS E	1.4	10.7	Short	23	0.0	NA
Lane 5 (B)	13	100.0	13	100.0	167	0.078	100	34.7	LOS C	0.5	6.1	Full	445	0.0	0.0
Approach	1363	12.3	1363	12.3		1.048		132.4	LOS F	67.8	522.0				
Intersection	4043	11.0	4043	11.0		1.074		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 Flows (veh/h)										
South: Fremantle Place										
Mov.	L2	T1	R2	Total	%HV	Deg.	Lane	Prob.	Ov.	

From S To Exit:	W	N	E			Cap. veh/h	Satn v/c	Util. %	SL %	Ov. %	Lane No.		
Lane 1	19	-	-	19	5.3	69	0.276	100	19.5		2		
Lane 2	-	10	11	21	4.8	70	0.298	100	NA		NA		
Approach	19	10	11	40	5.0		0.298						
East: Ti Rakau Drive (East)													
Mov. From E To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. %	Ov. Lane No.		
	S	W	N										
Lane 1	16	756	-	772	10.6	840	0.919	100	NA		NA		
Lane 2	-	704	-	704	10.8	766 ¹	0.919	100	NA		NA		
Lane 3	-	-	172	172	8.1	200	0.861	82 ⁶	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. From NE To Exit:	R1	Total	%HV			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. %	Ov. Lane No.		
	W												
Lane 1	25	25	100.0			167	0.150	100	NA		NA		
Approach	25	25	100.0				0.150						
North: Gossamer Drive													
Mov. From N To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. %	Ov. Lane No.		
	E	S	W										
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						
West: Ti Rakau Drive (West)													
Mov. From W To Exit:	L2	L1	T1	R2	U	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. %	Ov. Lane No.
	N	NE	E	S	W								
Lane 1	41	-	-	-	-	41	2.4	912	0.045	100	0.0		2
Lane 2	-	-	638	-	-	638	11.7	609 ¹	1.048	100	NA		NA
Lane 3	-	-	648	-	-	648	11.7	618 ¹	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)													
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 Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Capacity Rate veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay 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 Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										