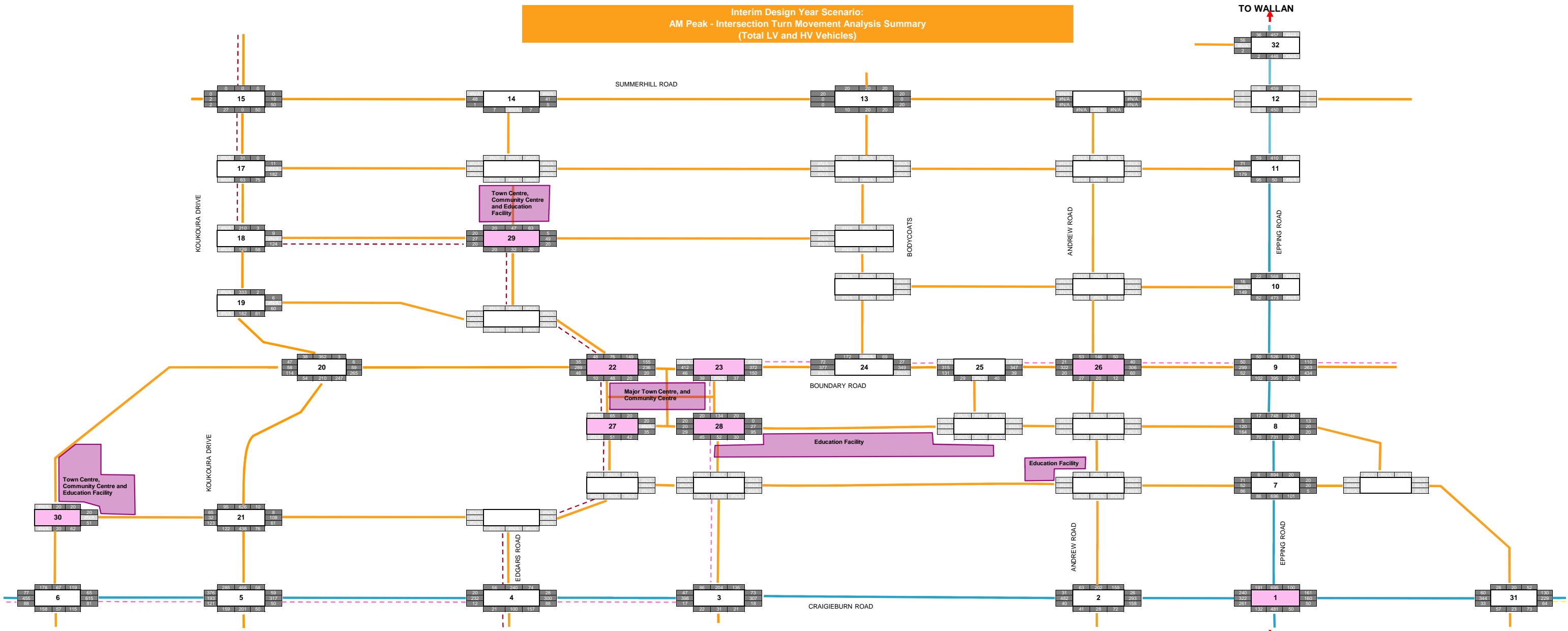


D R A F T

Appendix A

Intersection Results - Interim Scenario

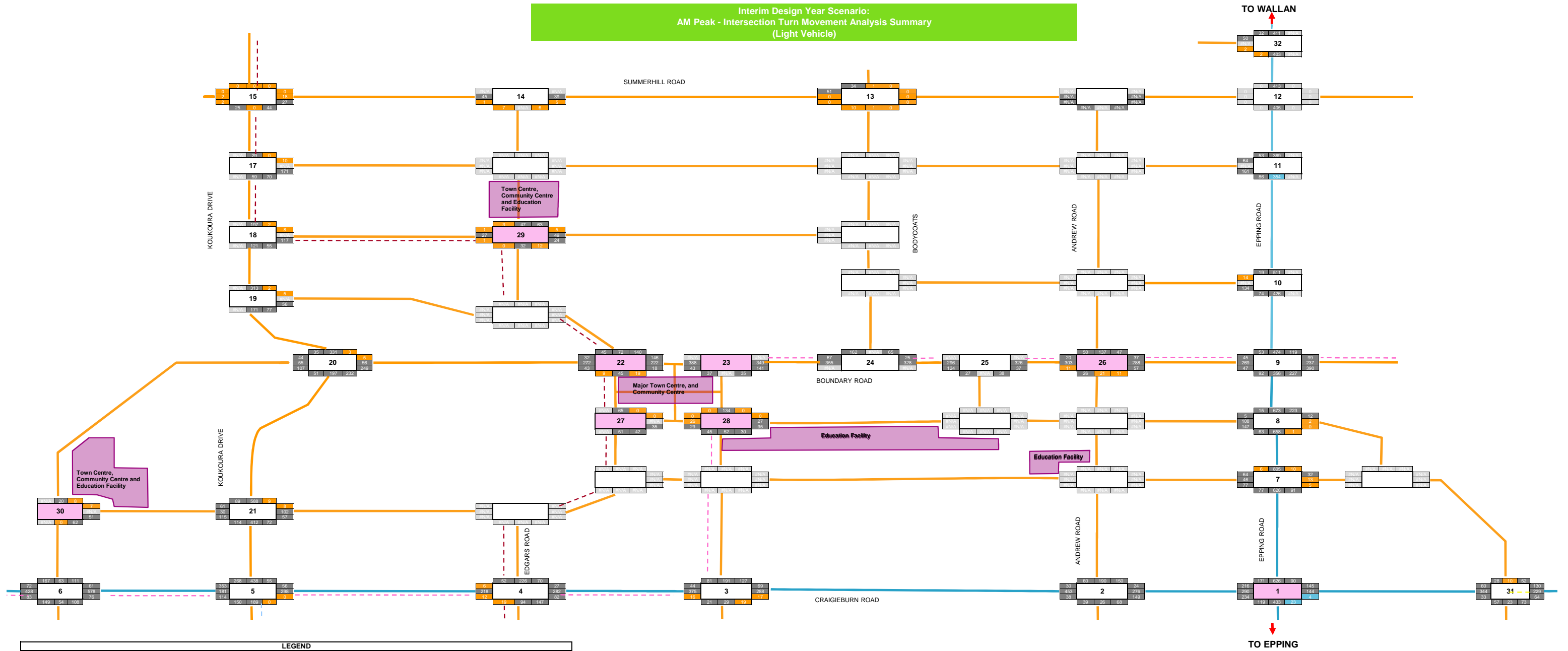
Interim Design Year Scenario:
AM Peak - Intersection Turn Movement Analysis Summary
(Total LV and HV Vehicles)



LEGEND

- Intersection with 50 pedestrians at each approach
- Intersection with 20 pedestrians at each approach
- Six traffic lane Arterial Road (three lanes in each direction)
- Four traffic lane Arterial Road (two lanes in each direction)
- Two traffic lane Arterial Road (one lane in each direction)
- Two traffic lane Collector Road (one lane in each direction)
- Bus priority route

West Approach - Left Turn	398	308	192
West Approach - Through	143	308	0
West Approach - Right Turn	0	0	0
North Approach - Left Turn	292	1040	96
North Approach - Through	0	0	0
North Approach - Right Turn	0	0	0
South Approach - Left Turn	0	0	0
South Approach - Through	0	0	0
South Approach - Right Turn	0	0	0



LEGEND

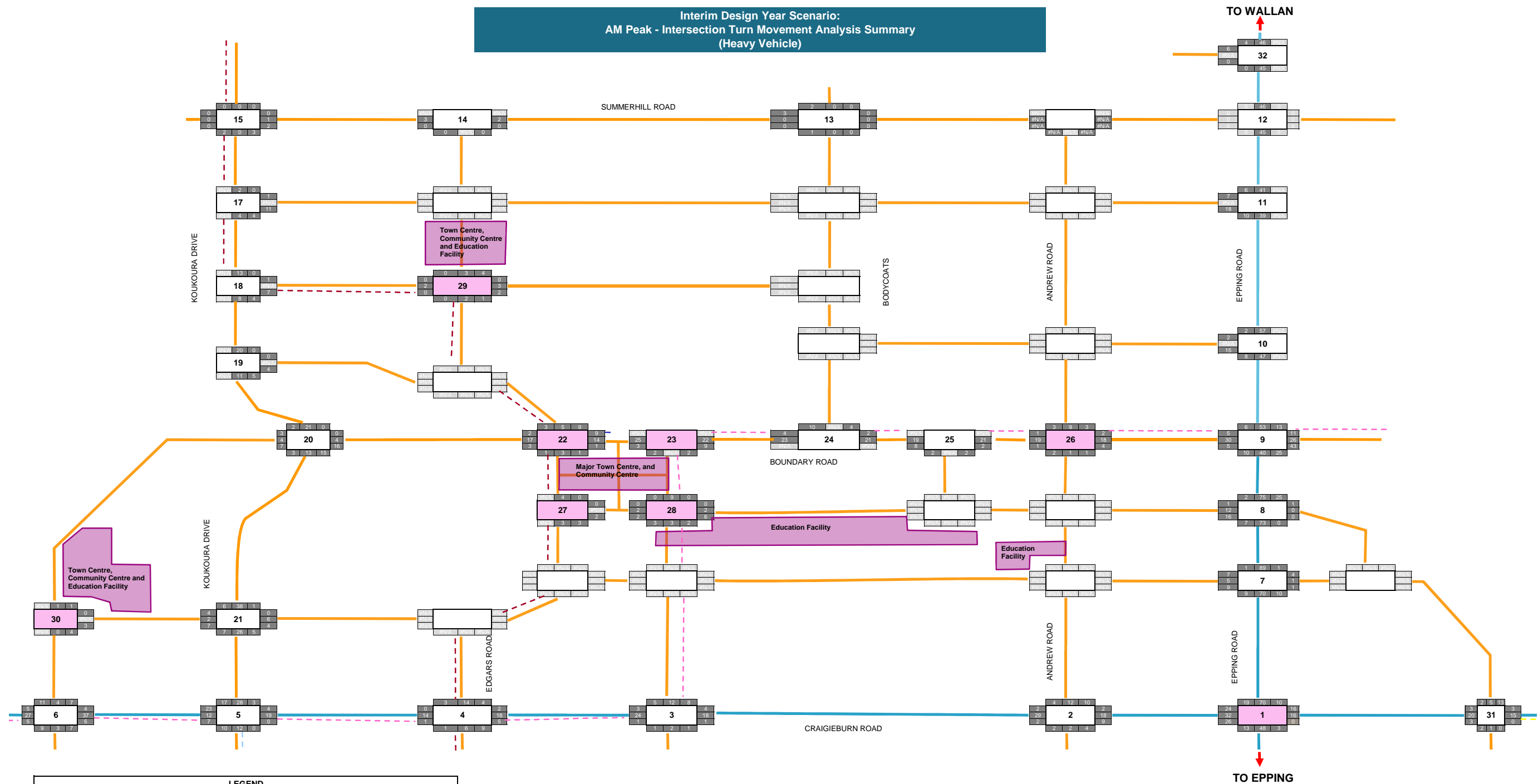
- A minimum total vehicle of 20 vehicles (LV + HV). If the total volumes less than 20 vehicles, an additional LV of up to 20 will be added to the turn movement to meet the minimum total vehicles.
eg. input = total volumes (LV & HV)
- A minimum total vehicle of 50 vehicles (LV + HV). If the total volumes less than 50 vehicles, an additional LV of up to 50 will be added to the turn movement to meet the minimum total vehicles.
eg. input = total volumes (LV & HV)
- Intersection with 50 pedestrians at each approach
- Intersection with 20 pedestrians at each approach
- Six traffic lane Arterial Road (three lanes in each direction)
- Four traffic lane Arterial Road (two lanes in each direction)
- Two traffic lane Arterial Road (one lane in each direction)
- Two traffic lane Collector Road (one lane in each direction)
- Bus priority route

Intersection 5 Data:

Approach	Left Turn	Through	Right Turn
North Approach	398	292	1040
West Approach	308	308	192
East Approach	82	500	0
South Approach	143	308	0

Intersection 5 Labels:

- North Approach - Left Turn
- North Approach - Through
- North Approach - Right Turn
- West Approach - Left Turn
- West Approach - Through
- West Approach - Right Turn
- East Approach - Right Turn
- East Approach - Through
- East Approach - Left Turn
- South Approach - Left Turn
- South Approach - Through
- South Approach - Right Turn



LEGEND

- Intersection with 50 pedestrians at each approach
- Intersection with 20 pedestrians at each approach
- Six traffic lane Arterial Road (three lanes in each direction)
- Four traffic lane Arterial Road (two lanes in each direction)
- Two traffic lane Arterial Road (one lane in each direction)
- Two traffic lane Collector Road (one lane in each direction)
- Bus priority route

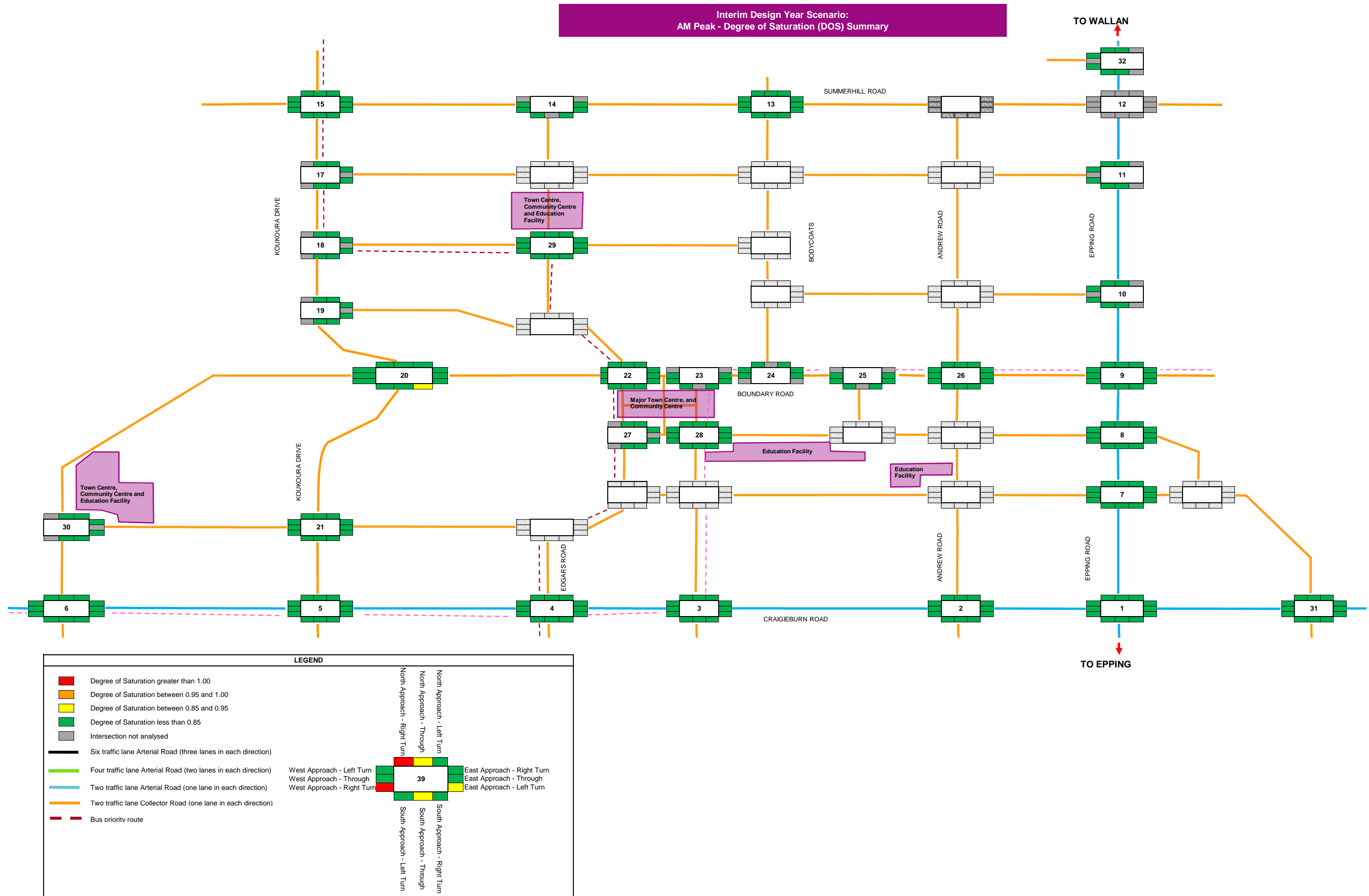
North Approach - Left Turn
North Approach - Through
North Approach - Right Turn

West Approach - Left Turn
West Approach - Through
West Approach - Right Turn

East Approach - Right Turn
East Approach - Through
East Approach - Left Turn

South Approach - Right Turn
South Approach - Through
South Approach - Left Turn

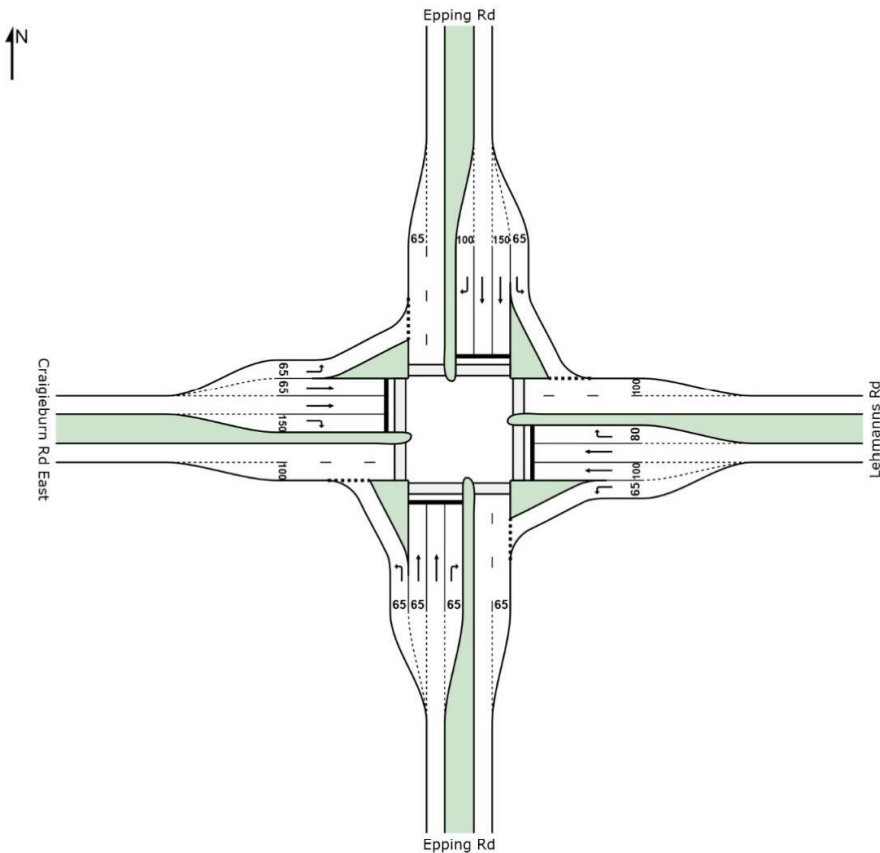
Heavy Vehicle Assumptions:
10% of LV are HV on Epping Road applied on all approaches
6% of LV are HV on all other roads applied on all approaches



SITE LAYOUT

 **Site: Intersection 1 AM 2026**

New Site
Signals - Fixed Time



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INTERSECTION 6**

MOVEMENT SUMMARY

 **Site: Intersection 1 AM 2026**

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd											
1	L2	132	9.8	0.105	11.2	LOS B	1.6	12.1	0.27	0.69	63.7
2	T1	481	10.0	0.617	40.8	LOS D	16.6	126.1	0.87	0.80	41.2
3	R2	50	6.0	0.225	60.5	LOS E	2.7	19.9	0.94	0.75	34.6
Approach		663	9.7	0.617	36.4	LOS D	16.6	126.1	0.76	0.77	43.6
East: Lehmanns Rd											
4	L2	50	0.0	0.055	18.5	LOS B	1.2	8.7	0.49	0.69	57.7
5	T1	160	10.0	0.314	46.7	LOS D	5.2	39.7	0.91	0.71	39.7
6	R2	161	9.9	0.484	54.7	LOS D	8.5	64.9	0.94	0.81	33.6
Approach		371	8.6	0.484	46.4	LOS D	8.5	64.9	0.87	0.75	38.3
North: Epping Rd											
7	L2	160	43.8	0.150	8.6	LOS A	1.9	18.5	0.27	0.61	47.8
8	T1	645	2.9	0.770	53.8	LOS D	24.7	177.5	0.92	1.08	41.1
9	R2	171	0.0	0.737	63.8	LOS E	10.2	71.7	1.00	0.86	30.5
Approach		976	9.1	0.770	48.1	LOS D	24.7	177.5	0.83	0.97	39.6
West: Craigieburn Rd East											
10	L2	240	10.0	0.244	14.3	LOS B	5.1	38.5	0.44	0.72	53.3
11	T1	322	9.9	0.632	49.4	LOS D	11.2	85.3	0.96	0.79	38.6
12	R2	260	10.0	0.783	61.4	LOS E	15.5	117.9	1.00	0.89	33.6
Approach		822	10.0	0.783	43.0	LOS D	15.5	117.9	0.82	0.80	39.9
All Vehicles		2832	9.4	0.783	43.6	LOS D	24.7	177.5	0.81	0.84	40.4

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	50	40.1	LOS E	0.1	0.1	0.82	0.82
P3	North Full Crossing	50	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	50	40.1	LOS E	0.1	0.1	0.82	0.82
All Pedestrians		200	47.2	LOS E			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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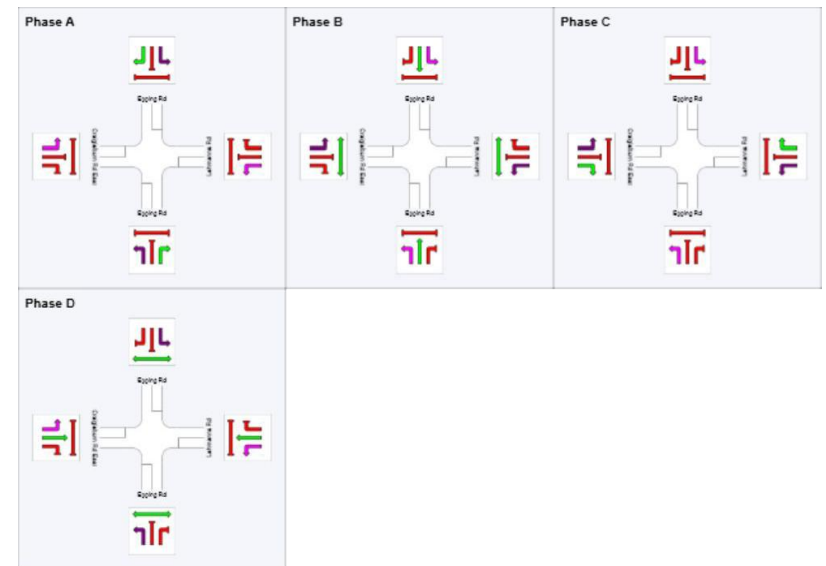
PHASING SUMMARY

 **Site: Intersection 1 AM 2026**

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	21	64	93
Green Time (sec)	15	37	23	21
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	21	43	29	27
Phase Split	18 %	36 %	24 %	23 %



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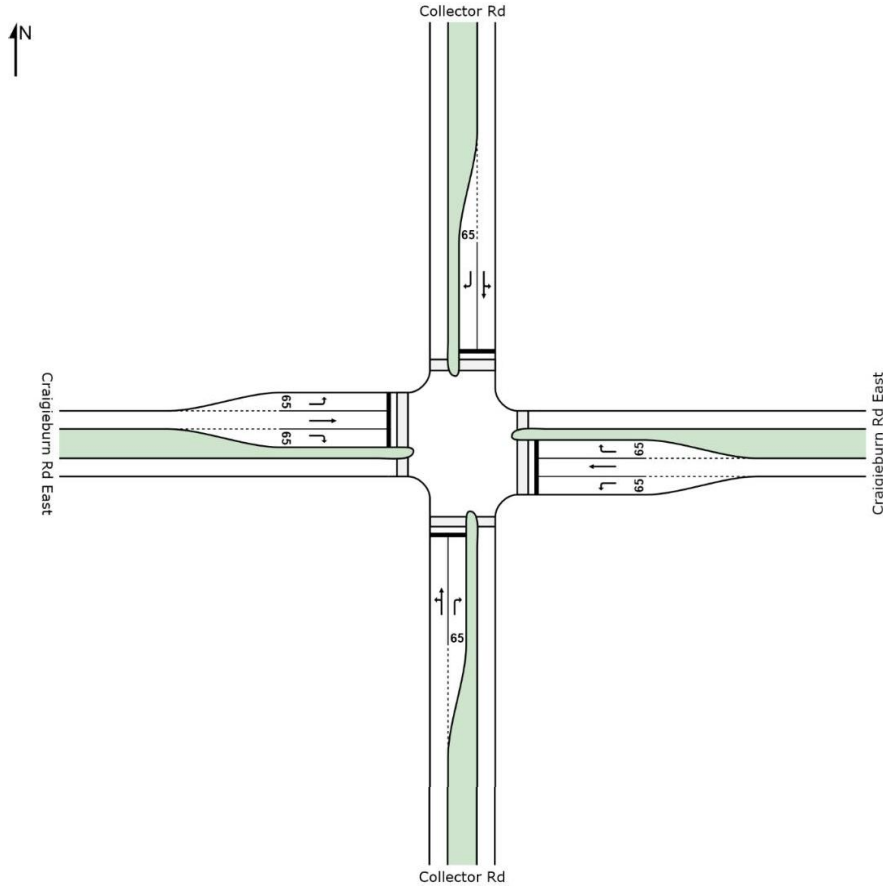
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INTERSECTION 6**

SITE LAYOUT

Site: Intersection 2 AM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 2 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	41	4.9	0.146	29.2	LOS C	2.1	15.4	0.80	0.69	39.9
2	T1	28	7.1	0.146	24.6	LOS C	2.1	15.4	0.80	0.69	36.4
3	R2	72	5.6	0.537	46.4	LOS D	2.9	21.6	1.00	0.77	33.0
Approach		141	5.7	0.537	37.1	LOS D	2.9	21.6	0.90	0.73	35.4
East: Craigieburn Rd East											
4	L2	158	5.7	0.186	20.0	LOS C	3.5	26.0	0.61	0.75	45.7
5	T1	294	6.1	0.482	23.6	LOS C	9.3	68.6	0.85	0.72	52.7
6	R2	26	7.7	0.197	47.0	LOS D	1.0	7.6	0.97	0.71	34.0
Approach		478	6.1	0.482	23.7	LOS C	9.3	68.6	0.78	0.73	48.8
North: Collector Rd											
7	L2	160	6.3	0.809	40.4	LOS D	15.0	110.2	1.00	0.98	35.7
8	T1	202	5.9	0.809	35.8	LOS D	15.0	110.2	1.00	0.98	33.0
9	R2	64	6.3	0.480	46.0	LOS D	2.6	19.2	1.00	0.75	33.1
Approach		426	6.1	0.809	39.1	LOS D	15.0	110.2	1.00	0.95	33.9
West: Craigieburn Rd East											
10	L2	32	6.3	0.038	19.0	LOS B	0.7	4.9	0.56	0.70	46.3
11	T1	482	6.0	0.813	31.5	LOS C	19.2	141.3	0.97	0.93	47.3
12	R2	40	5.0	0.297	47.4	LOS D	1.6	11.6	0.98	0.73	33.9
Approach		554	6.0	0.813	31.9	LOS C	19.2	141.3	0.95	0.90	46.0
All Vehicles		1599	6.0	0.813	31.8	LOS C	19.2	141.3	0.91	0.85	41.7

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	24.8	LOS C	0.0	0.0	0.79	0.79
P2	East Full Crossing	20	34.3	LOS D	0.0	0.0	0.93	0.93
P3	North Full Crossing	20	24.8	LOS C	0.0	0.0	0.79	0.79
P4	West Full Crossing	20	34.3	LOS D	0.0	0.0	0.93	0.93
All Pedestrians		80	29.5	LOS C			0.86	0.86

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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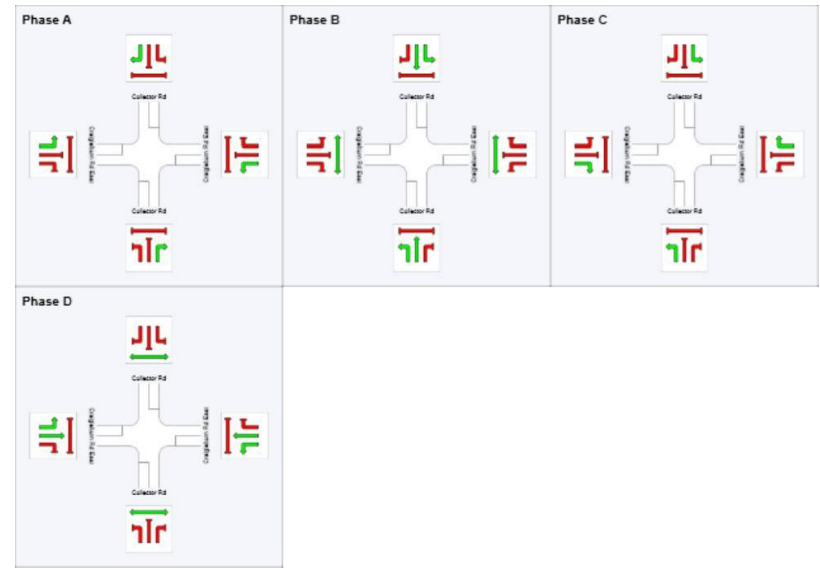
PHASING SUMMARY

Site: Intersection 2 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Split Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	12	36	48
Green Time (sec)	6	18	6	26
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	12	24	12	32
Phase Split	15 %	30 %	15 %	40 %



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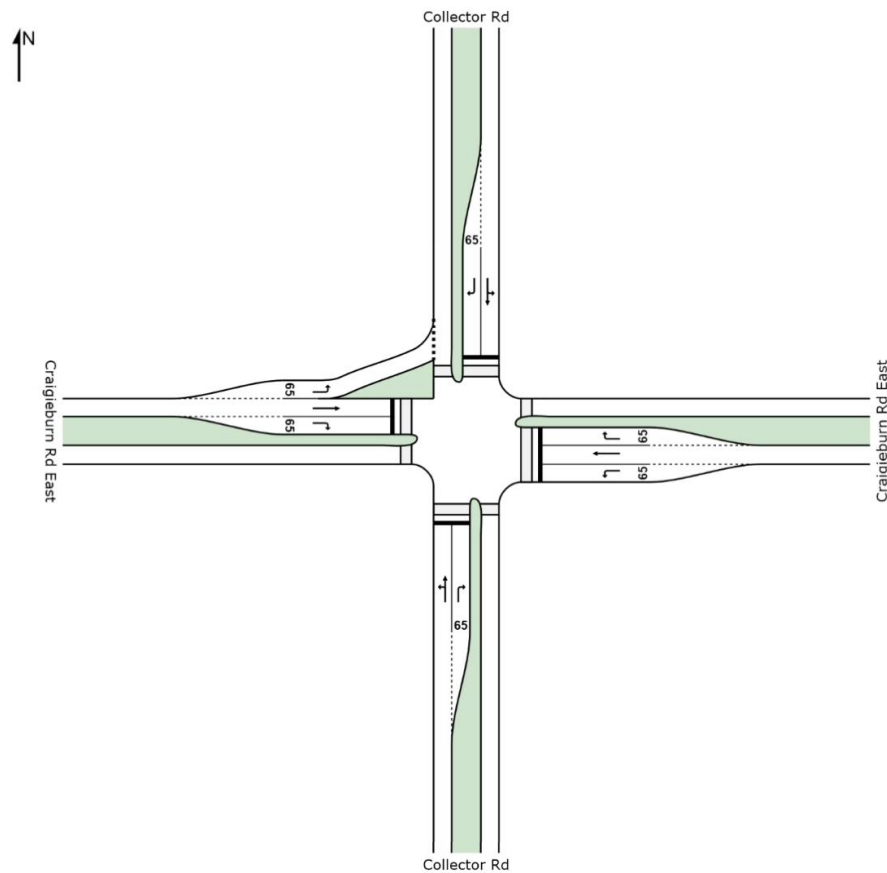
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INTERSECTION 6

SITE LAYOUT

 **Site: Intersection 3 AM 2026**

New Site
Signals - Fixed Time



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**SIDRA
INTERSECTION 6**

MOVEMENT SUMMARY

 **Site: Intersection 3 AM 2026**

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	22	4.5	0.101	32.5	LOS C	1.9	13.9	0.76	0.64	38.9
2	T1	31	6.5	0.101	27.9	LOS C	1.9	13.9	0.76	0.64	35.5
3	R2	20	5.0	0.139	52.9	LOS D	1.0	6.9	0.96	0.70	31.2
Approach		73	5.5	0.139	36.1	LOS D	1.9	13.9	0.82	0.66	35.1
East: Craigieburn Rd East											
4	L2	20	5.0	0.023	21.4	LOS C	0.5	3.7	0.55	0.69	44.9
5	T1	306	5.9	0.479	28.1	LOS C	11.8	86.8	0.84	0.72	49.5
6	R2	73	5.5	0.583	59.3	LOS E	3.7	27.3	1.00	0.78	30.5
Approach		399	5.8	0.583	33.5	LOS C	11.8	86.8	0.85	0.73	44.3
North: Collector Rd											
7	L2	135	5.9	0.650	38.4	LOS D	14.6	107.4	0.93	0.82	36.5
8	T1	203	5.9	0.650	33.8	LOS C	14.6	107.4	0.93	0.82	33.6
9	R2	86	5.8	0.603	56.0	LOS E	4.4	32.0	1.00	0.80	30.3
Approach		424	5.9	0.650	39.8	LOS D	14.6	107.4	0.95	0.81	33.7
West: Craigieburn Rd East											
10	L2	47	6.4	0.034	8.3	LOS A	0.3	1.9	0.18	0.64	54.4
11	T1	399	6.0	0.641	29.9	LOS C	16.4	120.7	0.90	0.78	48.3
12	R2	20	5.0	0.159	56.6	LOS E	1.0	7.1	0.97	0.70	31.2
Approach		466	6.0	0.641	28.9	LOS C	16.4	120.7	0.83	0.76	47.7
All Vehicles		1362	5.9	0.650	34.0	LOS C	16.4	120.7	0.87	0.76	40.7

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	28.1	LOS C	0.0	0.0	0.75	0.75
P2	East Full Crossing	20	36.2	LOS D	0.0	0.0	0.85	0.85
P3	North Full Crossing	20	28.1	LOS C	0.0	0.0	0.75	0.75
P4	West Full Crossing	20	33.6	LOS D	0.0	0.0	0.82	0.82
All Pedestrians		80	31.5	LOS D			0.79	0.79

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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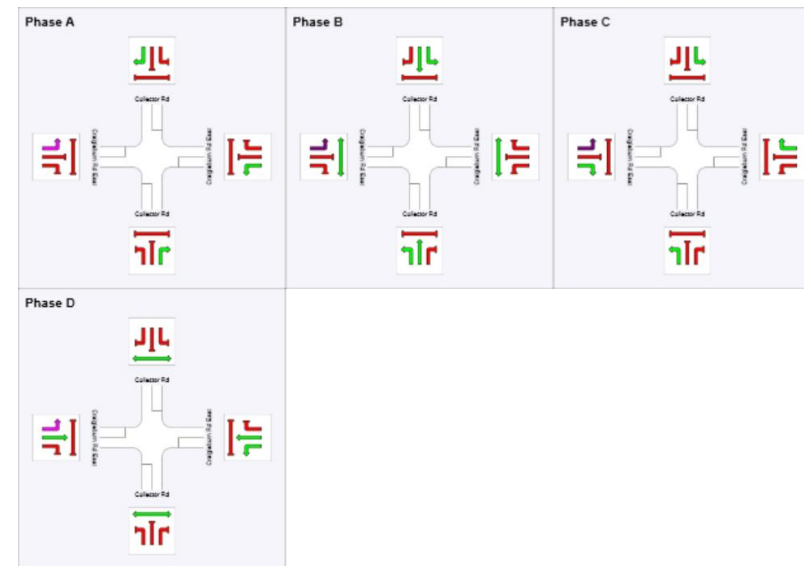
PHASING SUMMARY

 **Site: Intersection 3 AM 2026**

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	14	47	60
Green Time (sec)	8	27	7	34
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	14	33	13	40
Phase Split	14 %	33 %	13 %	40 %



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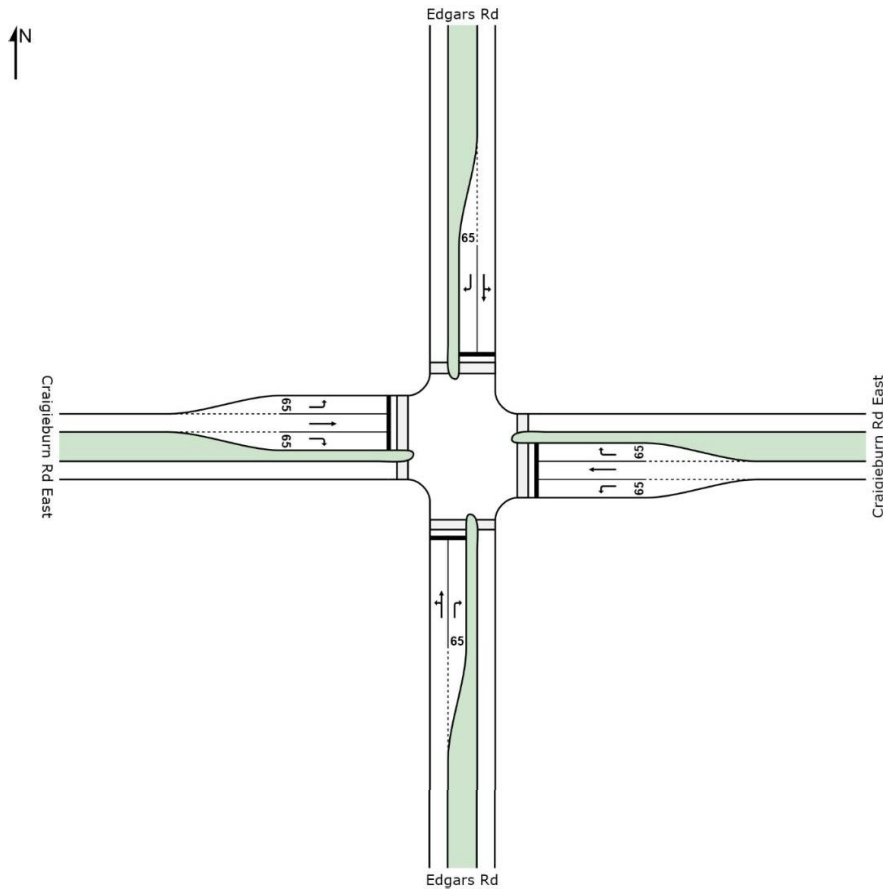
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**SIDRA
INTERSECTION 6**

SITE LAYOUT

Site: Intersection 4 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 4 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Edgars Rd											
1	L2	20	5.0	0.253	31.1	LOS C	3.8	27.6	0.83	0.71	42.7
2	T1	100	6.0	0.253	26.7	LOS C	3.8	27.6	0.83	0.71	38.8
3	R2	156	5.8	0.636	43.1	LOS D	6.1	45.1	0.99	0.83	36.1
Approach		276	5.8	0.636	36.3	LOS D	6.1	45.1	0.92	0.78	37.4
East: Craigieburn Rd East											
4	L2	87	5.7	0.108	20.7	LOS C	2.0	14.3	0.61	0.73	48.3
5	T1	300	6.0	0.673	31.1	LOS C	11.1	81.4	0.96	0.83	47.6
6	R2	29	6.9	0.218	47.1	LOS D	1.1	8.5	0.97	0.72	34.0
Approach		416	6.0	0.673	30.0	LOS C	11.1	81.4	0.89	0.80	46.4
North: Edgars Rd											
7	L2	74	5.4	0.657	33.8	LOS C	11.3	82.6	0.95	0.83	38.6
8	T1	240	5.8	0.657	30.9	LOS C	11.3	82.6	0.95	0.83	37.6
9	R2	55	5.5	0.224	39.0	LOS D	2.0	14.6	0.93	0.74	35.4
Approach		369	5.7	0.657	32.7	LOS C	11.3	82.6	0.94	0.82	37.4
West: Craigieburn Rd East											
10	L2	20	0.0	0.024	19.9	LOS B	0.4	3.0	0.58	0.69	45.8
11	T1	232	6.0	0.521	29.3	LOS C	8.1	59.5	0.92	0.77	48.7
12	R2	20	5.0	0.149	46.6	LOS D	0.8	5.7	0.97	0.70	35.8
Approach		272	5.5	0.521	29.9	LOS C	8.1	59.5	0.90	0.75	47.2
All Vehicles		1333	5.8	0.673	32.0	LOS C	11.3	82.6	0.91	0.79	41.7

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	30.7	LOS D	0.0	0.0	0.88	0.88
P2	East Full Crossing	20	32.4	LOS D	0.0	0.0	0.90	0.90
P3	North Full Crossing	20	30.7	LOS D	0.0	0.0	0.88	0.88
P4	West Full Crossing	20	32.4	LOS D	0.0	0.0	0.90	0.90
All Pedestrians		80	31.5	LOS D			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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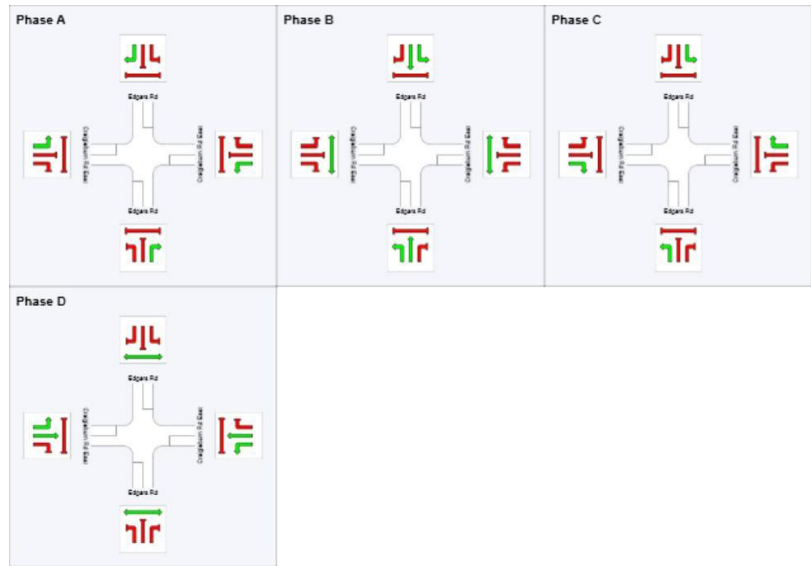
PHASING SUMMARY

Site: Intersection 4 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	17	43	55
Green Time (sec)	11	20	6	19
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	17	26	12	25
Phase Split	21 %	33 %	15 %	31 %



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SIDRA INTERSECTION 6.0.22.4722
Project: C:\Users\malonej\Desktop\MODELS\Intersection 4 2026.sip6
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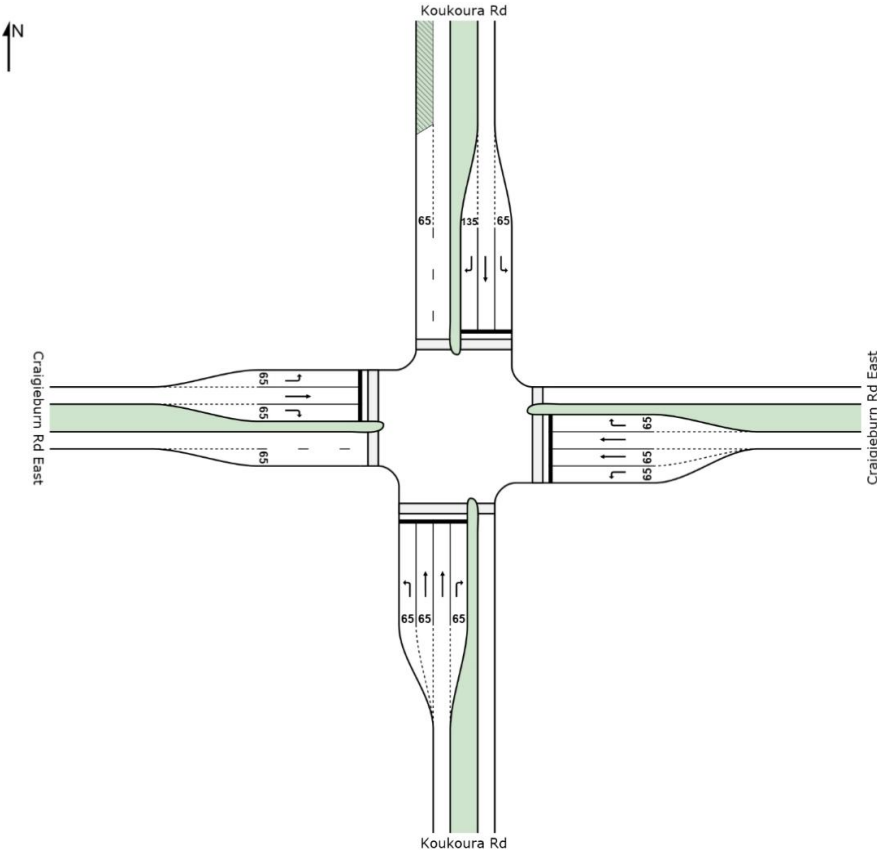
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 5 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 5 AM 2026

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Rd											
1	L2	160	6.3	0.189	24.9	LOS C	5.3	39.2	0.61	0.73	43.9
2	T1	201	6.0	0.223	29.6	LOS C	5.9	43.5	0.74	0.60	40.4
3	R2	50	0.0	0.135	48.2	LOS D	2.4	16.9	0.86	0.73	35.0
Approach		411	5.4	0.223	30.0	LOS C	5.9	43.5	0.70	0.67	40.9
East: Craigieburn Rd East											
4	L2	50	0.0	0.063	28.4	LOS C	1.7	11.9	0.62	0.72	43.9
5	T1	387	4.9	0.833	55.1	LOS E	17.1	124.9	0.98	0.88	36.3
6	R2	60	6.7	0.406	66.0	LOS E	3.5	25.9	0.99	0.76	31.3
Approach		497	4.6	0.833	53.8	LOS D	17.1	124.9	0.94	0.85	36.3
North: Koukoura Rd											
7	L2	109	2.8	0.126	25.6	LOS C	3.5	25.1	0.59	0.74	48.6
8	T1	477	5.9	0.814	43.9	LOS D	26.3	193.7	0.95	0.90	37.8
9	R2	285	6.0	0.800	61.4	LOS E	17.1	126.1	1.00	0.89	32.8
Approach		871	5.5	0.814	47.3	LOS D	26.3	193.7	0.92	0.88	36.9
West: Craigieburn Rd East											
10	L2	376	6.1	0.513	33.9	LOS C	15.9	117.3	0.78	0.82	43.2
11	T1	193	6.2	0.588	49.9	LOS D	10.6	78.1	0.97	0.80	38.3
12	R2	121	5.8	0.814	73.0	LOS E	7.7	56.7	1.00	0.90	28.8
Approach		690	6.1	0.814	45.3	LOS D	15.9	117.3	0.87	0.83	38.5
All Vehicles		2469	5.5	0.833	45.1	LOS D	26.3	193.7	0.88	0.82	37.8

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	54.2	LOS E	0.1	0.1	0.95	0.95
P2	East Full Crossing	20	36.8	LOS D	0.1	0.1	0.78	0.78
P3	North Full Crossing	20	54.2	LOS E	0.1	0.1	0.95	0.95
P4	West Full Crossing	20	36.8	LOS D	0.1	0.1	0.78	0.78
All Pedestrians		80	45.5	LOS E			0.87	0.87

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Thursday, 21 August 2014 1:13:19 PM
SIDRA INTERSECTION 6.0.22.4722
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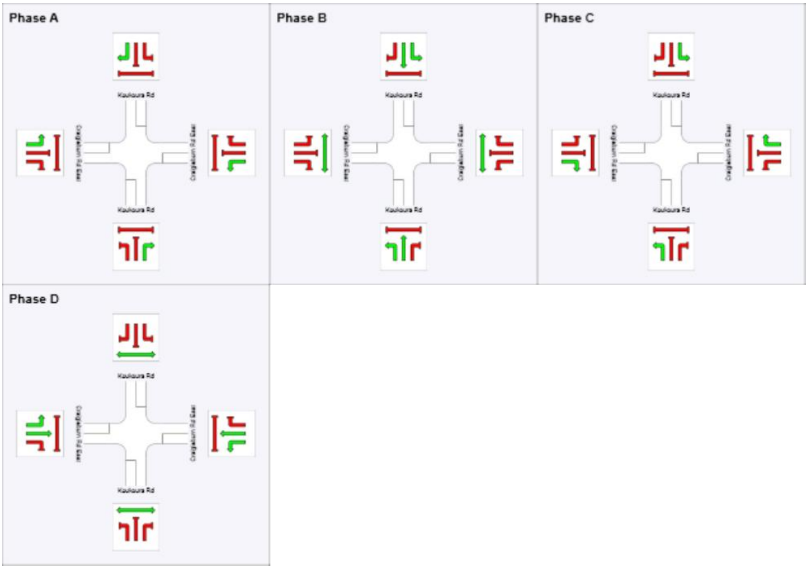
PHASING SUMMARY

Site: Intersection 5 PM 2026

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	34	70	86
Green Time (sec)	28	30	10	28
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	34	36	16	34
Phase Split	28 %	30 %	13 %	28 %



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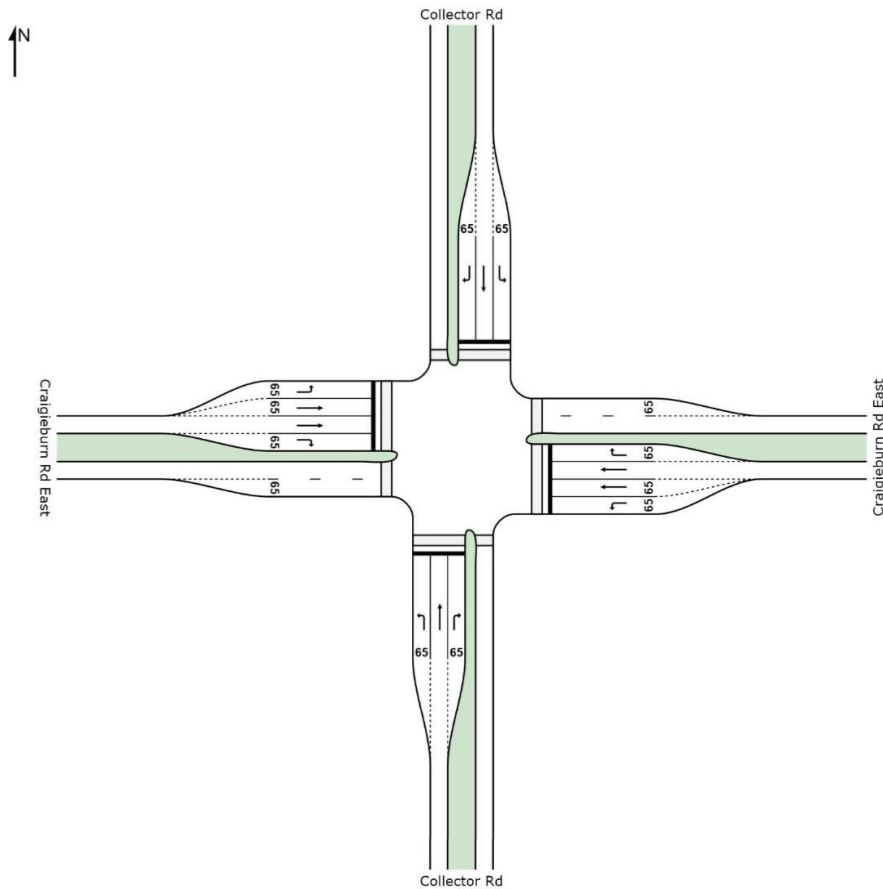
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 6 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 6 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	158	5.7	0.246	28.8	LOS C	5.4	39.7	0.74	0.75	39.2
2	T1	57	5.3	0.131	33.1	LOS C	2.2	16.2	0.83	0.64	34.5
3	R2	115	6.1	0.497	49.9	LOS D	5.4	40.0	0.98	0.79	32.1
Approach		330	5.8	0.497	36.9	LOS D	5.4	40.0	0.84	0.74	35.6
East: Craigieburn Rd East											
4	L2	81	6.2	0.088	19.8	LOS B	2.0	14.4	0.53	0.72	45.8
5	T1	615	6.0	0.751	31.2	LOS C	19.1	140.7	0.89	0.78	47.5
6	R2	65	6.2	0.522	59.0	LOS E	3.3	24.2	1.00	0.76	30.9
Approach		761	6.0	0.751	32.4	LOS C	19.1	140.7	0.86	0.77	45.3
North: Collector Rd											
7	L2	118	5.9	0.184	28.1	LOS C	3.9	28.9	0.72	0.73	39.4
8	T1	67	6.0	0.155	33.3	LOS C	2.6	19.3	0.84	0.65	34.4
9	R2	178	6.2	0.770	54.7	LOS D	9.2	67.6	1.00	0.91	30.8
Approach		363	6.1	0.770	42.1	LOS D	9.2	67.6	0.88	0.80	33.8
West: Craigieburn Rd East											
10	L2	77	6.5	0.083	19.8	LOS B	1.9	13.7	0.53	0.72	45.8
11	T1	455	5.9	0.528	28.4	LOS C	13.0	95.7	0.83	0.71	49.4
12	R2	88	5.7	0.704	61.2	LOS E	4.6	33.8	1.00	0.83	30.3
Approach		620	6.0	0.704	32.0	LOS C	13.0	95.7	0.82	0.72	44.9
All Vehicles		2074	6.0	0.770	34.7	LOS C	19.1	140.7	0.85	0.76	41.0

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	31.2	LOS D	0.0	0.0	0.79	0.79
P2	East Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
P3	North Full Crossing	20	31.2	LOS D	0.0	0.0	0.79	0.79
P4	West Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
All Pedestrians		80	37.7	LOS D			0.87	0.87

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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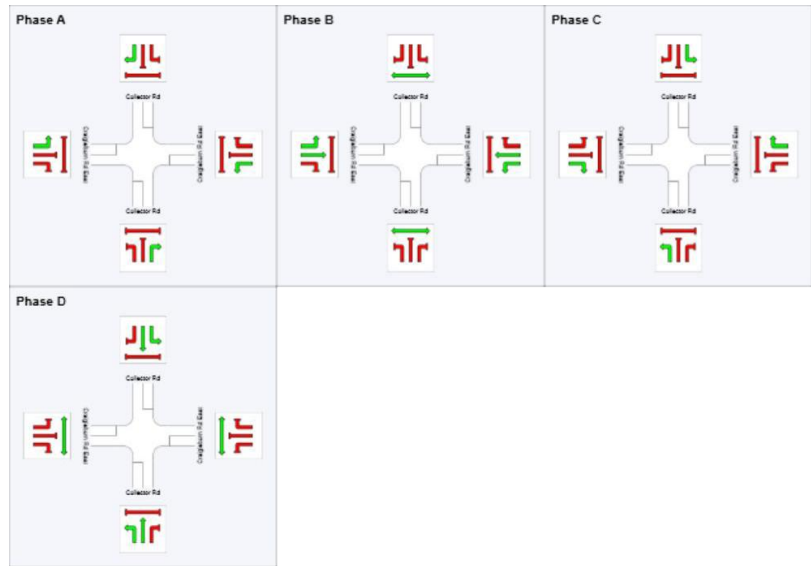
PHASING SUMMARY

Site: Intersection 6 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	19	58	71
Green Time (sec)	13	33	7	23
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	19	39	13	29
Phase Split	19 %	39 %	13 %	29 %



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Project: C:\Users\malonej\Desktop\MODELS\Intersection 6 2026.sip6
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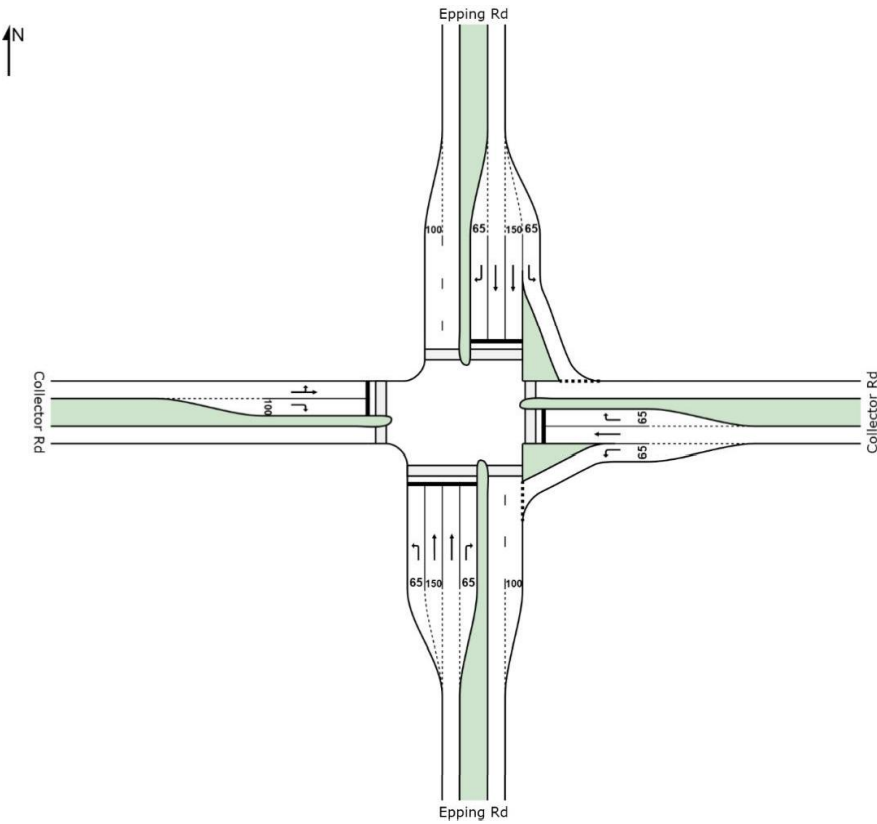
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SITE LAYOUT

Site: Intersection 7 AM 2026

New Site
Signals - Fixed Time



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MOVEMENT SUMMARY

Site: Intersection 7 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd											
1	L2	86	10.5	0.098	19.1	LOS B	2.1	16.3	0.54	0.70	42.1
2	T1	696	10.1	0.676	25.1	LOS C	16.6	126.5	0.82	0.71	42.5
3	R2	101	9.9	0.728	59.2	LOS E	5.3	40.2	1.00	0.86	28.9
Approach		883	10.1	0.728	28.4	LOS C	16.6	126.5	0.81	0.72	40.3
East: Collector Rd											
4	L2	20	5.0	0.022	12.8	LOS B	0.4	2.8	0.46	0.60	45.1
5	T1	20	5.0	0.046	32.2	LOS C	0.8	5.5	0.81	0.58	34.8
6	R2	36	11.1	0.349	57.0	LOS E	1.8	13.9	0.99	0.73	29.1
Approach		76	7.9	0.349	38.8	LOS D	1.8	13.9	0.81	0.66	33.7
North: Epping Rd											
7	L2	20	5.0	0.015	6.8	LOS A	0.1	0.9	0.20	0.58	49.7
8	T1	894	10.0	0.815	30.0	LOS C	26.7	203.1	0.89	0.83	40.2
9	R2	20	5.0	0.139	53.9	LOS D	1.0	6.9	0.96	0.70	30.1
Approach		934	9.7	0.815	30.0	LOS C	26.7	203.1	0.88	0.82	40.1
West: Collector Rd											
10	L2	71	9.9	0.267	36.6	LOS D	4.8	36.3	0.84	0.73	35.2
11	T1	51	9.8	0.267	32.0	LOS C	4.8	36.3	0.84	0.73	34.0
12	R2	86	10.5	0.829	63.3	LOS E	4.8	36.3	1.00	0.96	27.7
Approach		208	10.1	0.829	46.5	LOS D	4.8	36.3	0.90	0.82	31.4
All Vehicles		2101	9.9	0.829	31.3	LOS C	26.7	203.1	0.85	0.78	38.8

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
P2	East Full Crossing	20	24.5	LOS C	0.0	0.0	0.70	0.70
P3	North Full Crossing	20	42.4	LOS E	0.1	0.1	0.92	0.92
P4	West Full Crossing	20	24.5	LOS C	0.0	0.0	0.70	0.70
All Pedestrians		80	33.9	LOS D			0.82	0.82

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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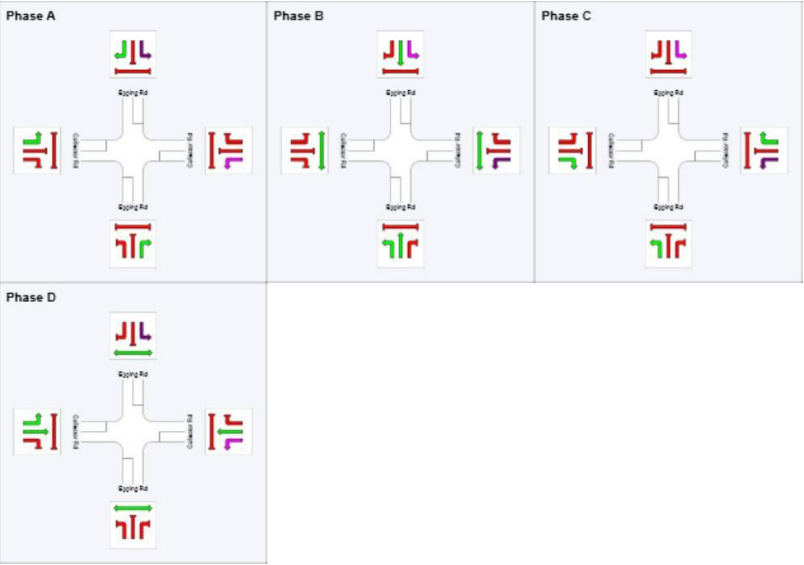
PHASING SUMMARY

Site: Intersection 7 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	14	59	71
Green Time (sec)	8	39	6	23
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	14	45	12	29
Phase Split	14 %	45 %	12 %	29 %



Processed: Friday, 25 July 2014 7:44:56 AM
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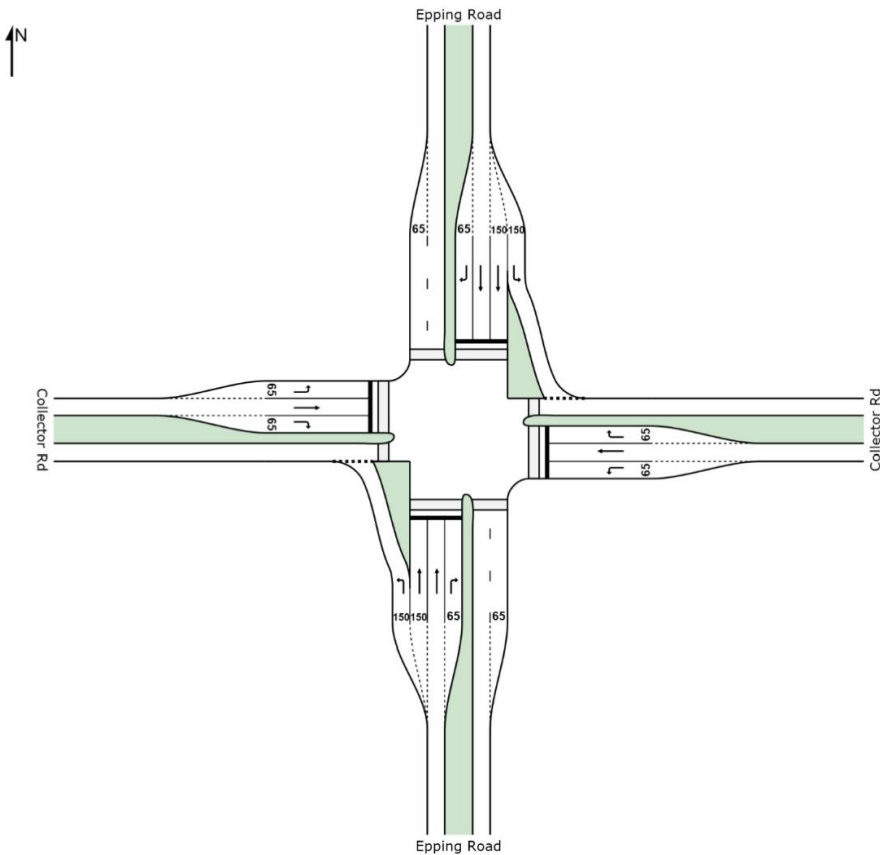
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SITE LAYOUT

Site: Intersection 8 AM 2026

New Site
Signals - Fixed Time



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MOVEMENT SUMMARY

Site: Intersection 8 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Road											
1	L2	70	10.0	0.048	6.2	LOS A	0.3	1.9	0.14	0.58	50.0
2	T1	731	10.0	0.787	30.1	LOS C	23.8	180.6	0.89	0.81	40.2
3	R2	20	0.0	0.179	56.7	LOS E	1.0	6.9	0.98	0.70	29.5
Approach		821	9.7	0.787	28.7	LOS C	23.8	180.6	0.83	0.79	40.5
East: Collector Rd											
4	L2	20	0.0	0.033	28.7	LOS C	0.7	4.6	0.70	0.67	37.5
5	T1	20	0.0	0.049	33.9	LOS C	0.8	5.4	0.83	0.59	34.2
6	R2	20	5.0	0.093	47.8	LOS D	0.9	6.5	0.92	0.70	31.5
Approach		60	1.7	0.093	36.8	LOS D	0.9	6.5	0.82	0.65	34.2
North: Epping Road											
7	L2	248	10.1	0.181	6.9	LOS A	1.8	13.4	0.23	0.61	49.6
8	T1	748	10.0	0.806	31.1	LOS C	25.0	190.0	0.90	0.83	39.7
9	R2	20	10.0	0.192	57.1	LOS E	1.0	7.5	0.98	0.70	29.4
Approach		1016	10.0	0.806	25.7	LOS C	25.0	190.0	0.74	0.78	41.5
West: Collector Rd											
10	L2	20	5.0	0.034	28.7	LOS C	0.7	4.8	0.70	0.67	37.4
11	T1	120	10.0	0.312	36.5	LOS D	5.0	38.2	0.89	0.71	33.4
12	R2	163	9.8	0.783	56.2	LOS E	8.5	64.6	1.00	0.92	29.3
Approach		303	9.6	0.783	46.6	LOS D	8.5	64.6	0.94	0.82	31.3
All Vehicles		2200	9.6	0.806	30.0	LOS C	25.0	190.0	0.80	0.78	39.1

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
P2	East Full Crossing	20	28.1	LOS C	0.0	0.0	0.75	0.75
P3	North Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
P4	West Full Crossing	20	28.1	LOS C	0.0	0.0	0.75	0.75
All Pedestrians		80	36.2	LOS D			0.85	0.85

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SIDRA INTERSECTION 6.0.22.4722
Project: P:\60313908\4. Tech work area\4.5 Planning\SIDRA MODEL\Interim\MODELS\Intersection 8 2026.sip6
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**SIDRA
INTERSECTION 6**

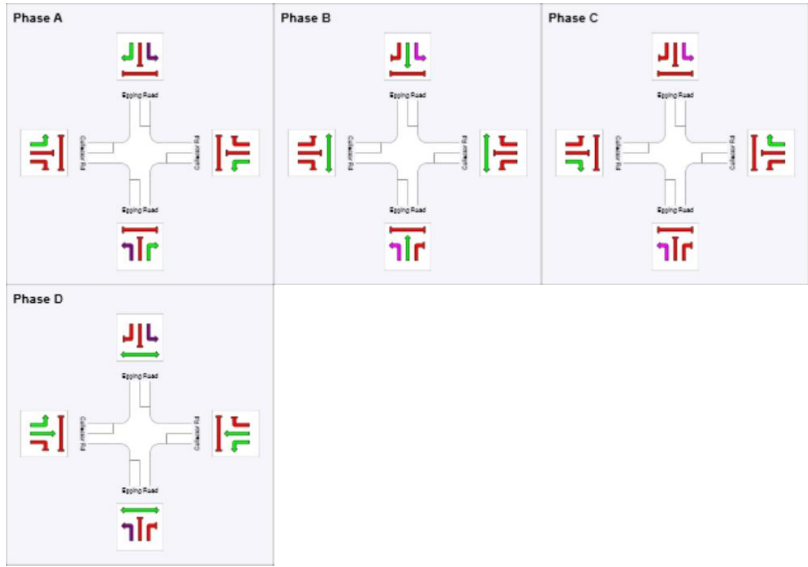
PHASING SUMMARY

Site: Intersection 8 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	12	55	73
Green Time (sec)	6	37	12	21
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	12	43	18	27
Phase Split	12 %	43 %	18 %	27 %



Processed: Thursday, 21 August 2014 1:09:23 PM
SIDRA INTERSECTION 6.0.22.4722
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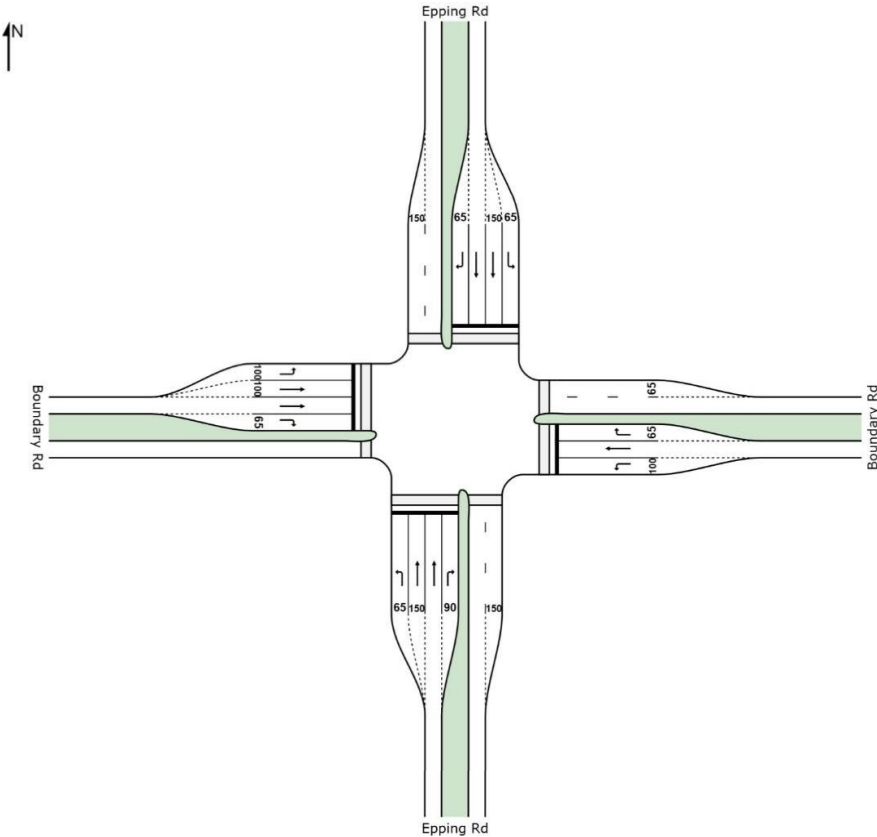
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**SIDRA
INTERSECTION 6**

SITE LAYOUT

Site: Intersection 9 AM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 9 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd											
1	L2	102	9.8	0.159	28.2	LOS C	3.3	25.2	0.70	0.74	40.0
2	T1	396	10.1	0.562	38.5	LOS D	9.6	73.3	0.94	0.77	36.8
3	R2	252	9.9	0.660	45.1	LOS D	11.5	87.7	0.97	0.84	35.1
Approach		750	10.0	0.660	39.3	LOS D	11.5	87.7	0.92	0.79	36.6
East: Boundary Rd											
4	L2	433	9.9	0.490	24.3	LOS C	13.7	104.2	0.70	0.81	46.0
5	T1	263	9.9	0.624	40.2	LOS D	11.8	89.2	0.95	0.82	39.3
6	R2	110	10.0	0.635	57.2	LOS E	5.5	41.9	1.00	0.81	32.8
Approach		806	9.9	0.635	34.0	LOS C	13.7	104.2	0.82	0.81	41.4
North: Epping Rd											
7	L2	124	4.0	0.186	28.4	LOS C	4.1	29.5	0.71	0.74	42.4
8	T1	487	2.7	0.660	39.4	LOS D	12.2	87.1	0.96	0.80	36.5
9	R2	59	10.2	0.155	40.0	LOS D	2.3	17.9	0.84	0.74	35.8
Approach		670	3.6	0.660	37.4	LOS D	12.2	87.1	0.90	0.79	37.4
West: Boundary Rd											
10	L2	50	10.0	0.057	18.7	LOS B	1.2	9.2	0.53	0.68	44.7
11	T1	299	10.0	0.500	40.8	LOS D	9.1	69.1	0.90	0.84	41.0
12	R2	52	9.6	0.299	52.8	LOS D	2.5	18.7	0.97	0.75	31.8
Approach		401	10.0	0.500	39.6	LOS D	9.1	69.1	0.86	0.81	39.9
All Vehicles		2627	8.3	0.660	37.2	LOS D	13.7	104.2	0.88	0.80	38.7

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
P2	East Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
P3	North Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
P4	West Full Crossing	20	44.2	LOS E	0.1	0.1	0.94	0.94
All Pedestrians		80	44.2	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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INTERSECTION 6

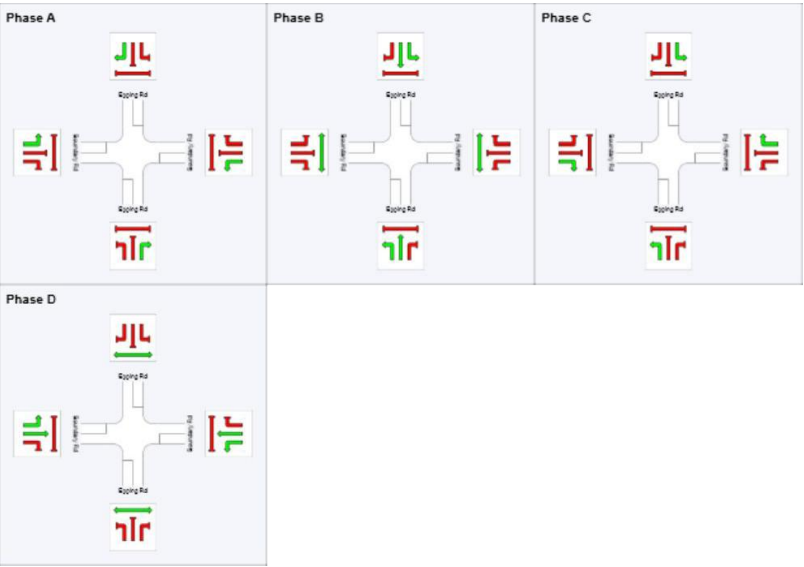
PHASING SUMMARY

Site: Intersection 9 AM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	28	55	71
Green Time (sec)	22	21	10	23
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	28	27	16	29
Phase Split	28 %	27 %	16 %	29 %



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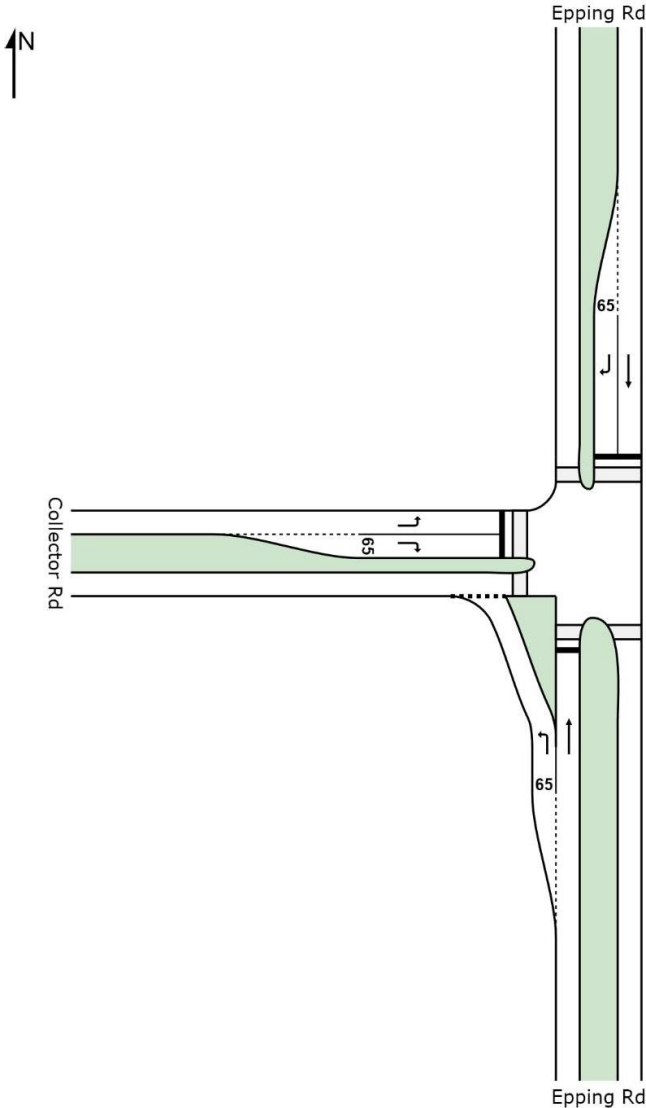
SIDRA
INTERSECTION 6

SITE LAYOUT

28

Site: Intersection 10 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

29

Site: Intersection 10 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (Practical Cycle Time)

Movement Performance - Vehicles										
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh
South: Epping Rd										
1	L2	82	9.8	0.060	6.2	LOS A	0.3	1.9	0.17	0.59
2	T1	473	9.9	0.646	21.1	LOS C	15.1	114.5	0.87	0.76
Approach		555	9.9	0.646	18.9	LOS B	15.1	114.5	0.76	0.73
North: Epping Rd										
8	T1	568	10.0	0.790	25.8	LOS C	21.0	159.7	0.93	0.89
9	R2	21	9.5	0.064	34.9	LOS C	0.7	5.2	0.85	0.70
Approach		589	10.0	0.790	26.1	LOS C	21.0	159.7	0.93	0.89
West: Collector Rd										
10	L2	20	10.0	0.026	17.6	LOS B	0.4	3.3	0.58	0.64
12	R2	149	10.1	0.459	36.9	LOS D	5.4	40.8	0.94	0.79
Approach		169	10.1	0.459	34.6	LOS C	5.4	40.8	0.89	0.77
All Vehicles		1313	10.0	0.790	24.2	LOS C	21.0	159.7	0.85	0.81

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	34.3	LOS D	0.0	0.0	0.93	0.93
P3	North Full Crossing	20	34.3	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	20	20.3	LOS C	0.0	0.0	0.71	0.71
All Pedestrians		60	29.6	LOS C			0.85	0.85

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

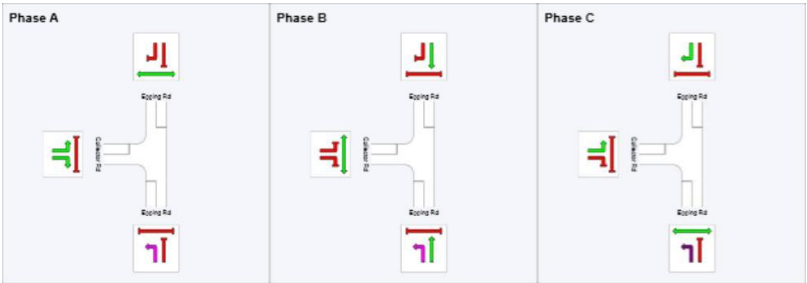
30

Site: Intersection 10 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

Phase Timing Results			
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	59
Green Time (sec)	15	32	15
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	38	21
Phase Split	26 %	48 %	26 %

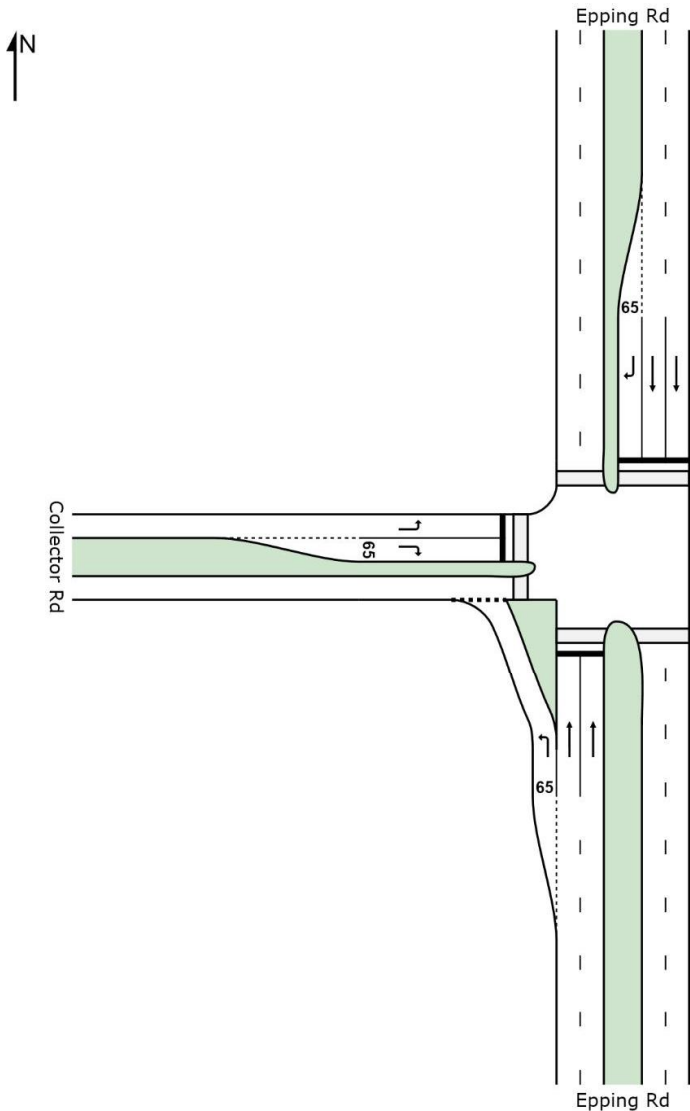


SITE LAYOUT

31

Site: Intersection 11 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

32

Site: Intersection 11 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (Practical Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles										
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh
South: Epping Rd										
1	L2	96	10.4	0.074	6.4	LOS A	0.4	3.0	0.20	0.60
2	T1	393	9.9	0.429	27.7	LOS C	6.6	50.0	0.89	0.73
Approach		489	10.0	0.429	23.6	LOS C	6.6	50.0	0.75	0.71
North: Epping Rd										
8	T1	410	10.0	0.448	27.9	LOS C	6.9	52.5	0.89	0.74
9	R2	59	10.2	0.130	30.2	LOS C	1.8	13.5	0.80	0.73
Approach		469	10.0	0.448	28.2	LOS C	6.9	52.5	0.88	0.74
West: Collector Rd										
10	L2	71	9.9	0.068	11.7	LOS B	1.1	8.6	0.44	0.64
12	R2	179	10.1	0.394	31.3	LOS C	5.9	44.7	0.87	0.78
Approach		250	10.0	0.394	25.8	LOS C	5.9	44.7	0.75	0.74
All Vehicles		1208	10.0	0.448	25.8	LOS C	6.9	52.5	0.80	0.73

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued
P1	South Full Crossing	20	34.3	LOS D	0.0	0.0	0.93
P3	North Full Crossing	20	34.3	LOS D	0.0	0.0	0.93
P4	West Full Crossing	20	29.8	LOS C	0.0	0.0	0.86
All Pedestrians		60	32.8	LOS D			0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

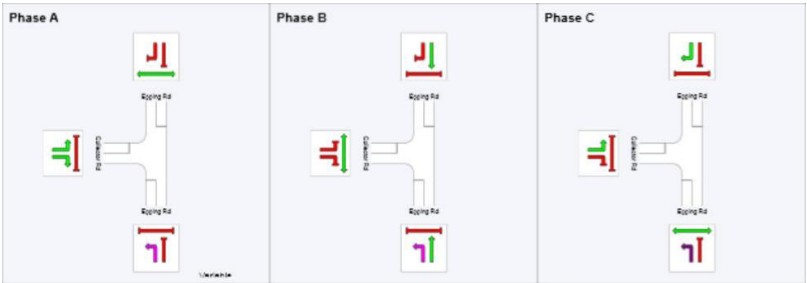
33

Site: Intersection 11 AM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (Practical Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

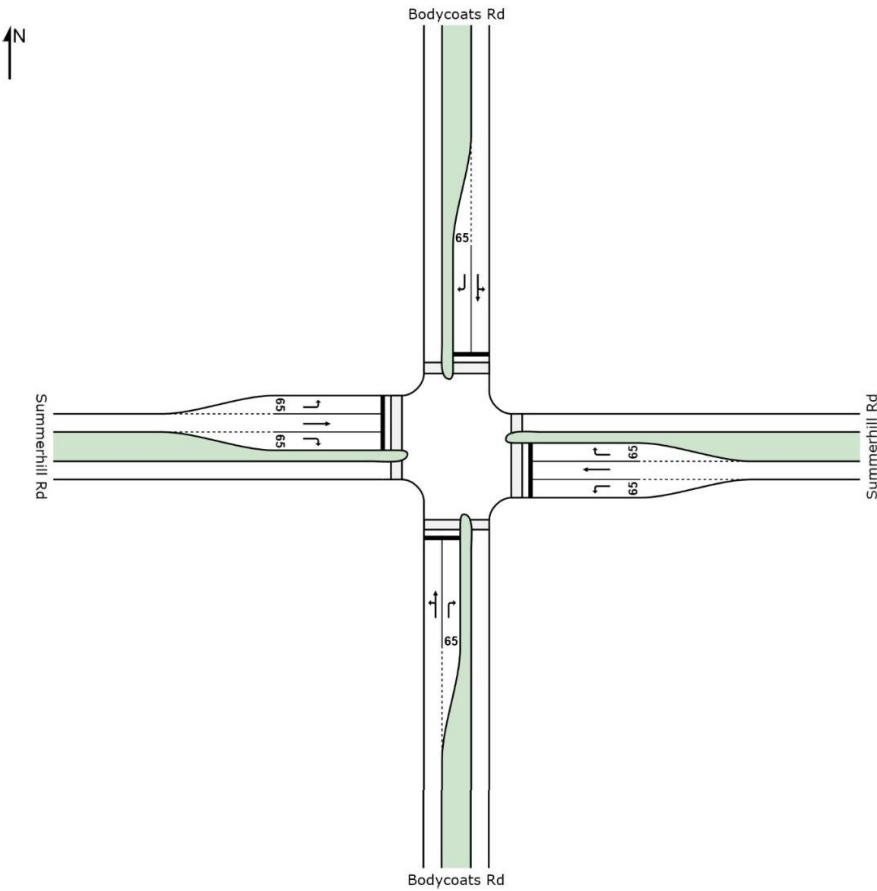
Phase Timing Results			
Phase	A	B	C
Reference Phase	No	Yes	No
Phase Change Time (sec)	53	0	26
Green Time (sec)	21	20	21
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	27	26	27
Phase Split	34 %	33 %	34 %



SITE LAYOUT

Site: Intersection 13 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 13 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Bodycoats Rd											
1	L2	20	5.0	0.075	24.4	LOS C	1.0	7.2	0.76	0.63	42.3
2	T1	20	0.0	0.075	19.8	LOS B	1.0	7.2	0.76	0.63	38.4
3	R2	20	0.0	0.108	37.1	LOS D	0.7	4.6	0.94	0.69	36.6
Approach		60	1.7	0.108	27.1	LOS C	1.0	7.2	0.82	0.65	39.0
East: Summerhill Rd											
4	L2	20	0.0	0.027	20.5	LOS C	0.4	2.9	0.63	0.69	45.4
5	T1	20	0.0	0.048	23.8	LOS C	0.5	3.8	0.82	0.59	52.6
6	R2	20	0.0	0.126	40.7	LOS D	0.7	4.7	0.95	0.70	36.2
Approach		60	0.0	0.126	28.3	LOS C	0.7	4.7	0.80	0.66	43.7
North: Bodycoats Rd											
7	L2	20	0.0	0.074	24.3	LOS C	1.0	7.0	0.76	0.63	43.0
8	T1	20	0.0	0.074	19.8	LOS B	1.0	7.0	0.76	0.63	38.4
9	R2	36	5.6	0.202	37.7	LOS D	1.2	8.8	0.95	0.72	35.8
Approach		76	2.6	0.202	29.5	LOS C	1.2	8.8	0.85	0.67	38.2
West: Summerhill Rd											
10	L2	54	5.6	0.076	21.0	LOS C	1.1	8.4	0.65	0.72	45.2
11	T1	20	0.0	0.048	23.8	LOS C	0.5	3.8	0.82	0.59	52.6
12	R2	20	0.0	0.126	40.7	LOS D	0.7	4.7	0.95	0.70	36.2
Approach		94	3.2	0.126	25.8	LOS C	1.1	8.4	0.75	0.69	44.2
All Vehicles		290	2.1	0.202	27.5	LOS C	1.2	8.8	0.80	0.67	41.2

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P3	North Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P4	West Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		80	29.3	LOS C			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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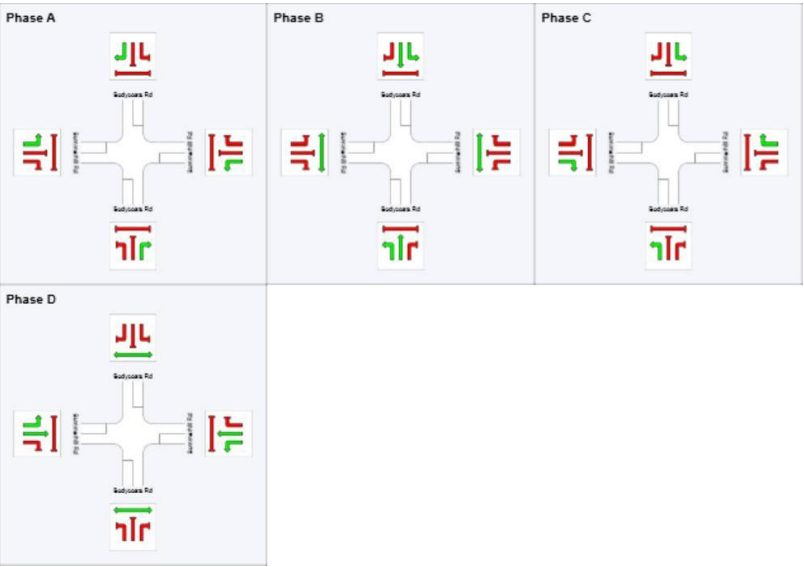
PHASING SUMMARY

Site: Intersection 13 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	13	37	49
Green Time (sec)	7	18	6	15
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	13	24	12	21
Phase Split	19 %	34 %	17 %	30 %



Processed: Tuesday, 22 July 2014 11:19:06 AM
SIDRA INTERSECTION 6.0.22.4722
Project: C:\Users\malonej\Desktop\MODELS\Intersection 13 2026.sip6
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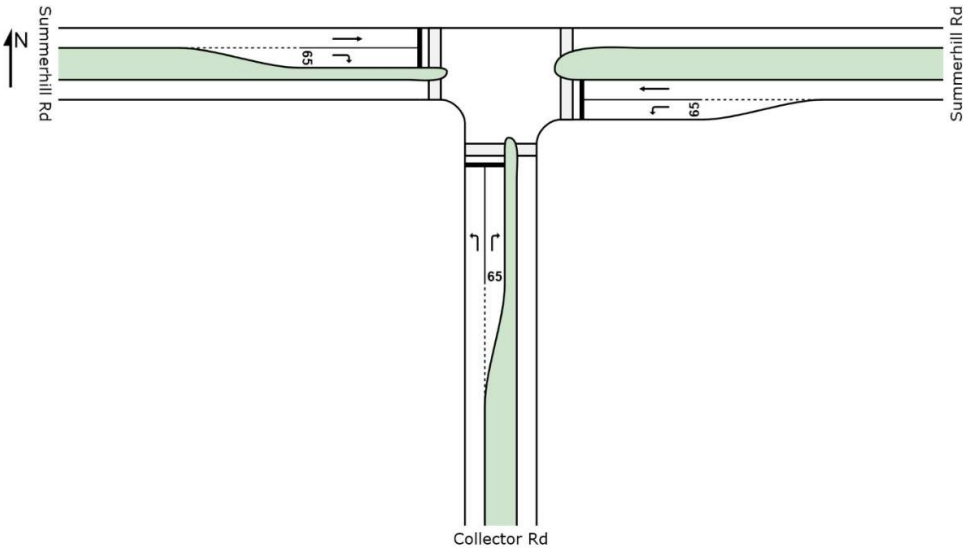
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 14 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 14 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	20	0.0	0.019	11.9	LOS B	0.3	2.1	0.46	0.62	48.9
3	R2	20	0.0	0.050	28.4	LOS C	0.6	3.9	0.82	0.68	39.9
Approach		40	0.0	0.050	20.2	LOS C	0.6	3.9	0.64	0.65	44.0
East: Summerhill Rd											
4	L2	20	0.0	0.019	13.8	LOS B	0.3	2.0	0.45	0.67	49.6
5	T1	41	4.9	0.080	20.6	LOS C	1.1	7.7	0.78	0.58	55.1
Approach		61	3.3	0.080	18.4	LOS B	1.1	7.7	0.67	0.61	53.1
West: Summerhill Rd											
11	T1	48	6.3	0.094	20.7	LOS C	1.2	9.1	0.78	0.59	55.0
12	R2	20	0.0	0.042	28.0	LOS C	0.5	3.6	0.78	0.70	41.4
Approach		68	4.4	0.094	22.9	LOS C	1.2	9.1	0.78	0.62	50.1
All Vehicles		169	3.0	0.094	20.6	LOS C	1.2	9.1	0.71	0.63	49.5

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	25.7	LOS C	0.0	0.0	0.86	0.86
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P4	West Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		60	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Tuesday, 22 July 2014 11:18:44 AM
SIDRA INTERSECTION 6.0.22.4722
Project: C:\Users\malone\Desktop\MODELS\Intersection 14 2026.sip6
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INTERSECTION 6

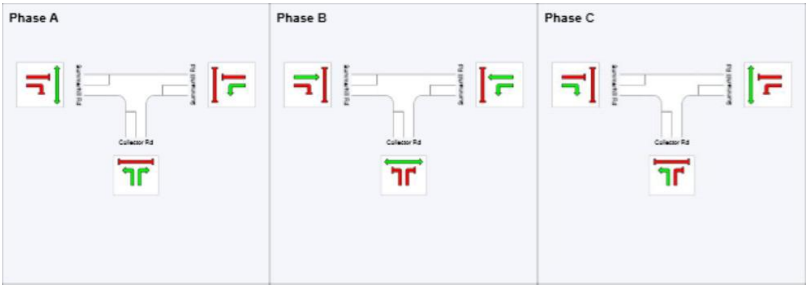
PHASING SUMMARY

Site: Intersection 14 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

Phase Timing Results			
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	46
Green Time (sec)	15	19	18
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	25	24
Phase Split	30 %	36 %	34 %



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Project: C:\Users\malone\Desktop\MODELS\Intersection 14 2026.sip6
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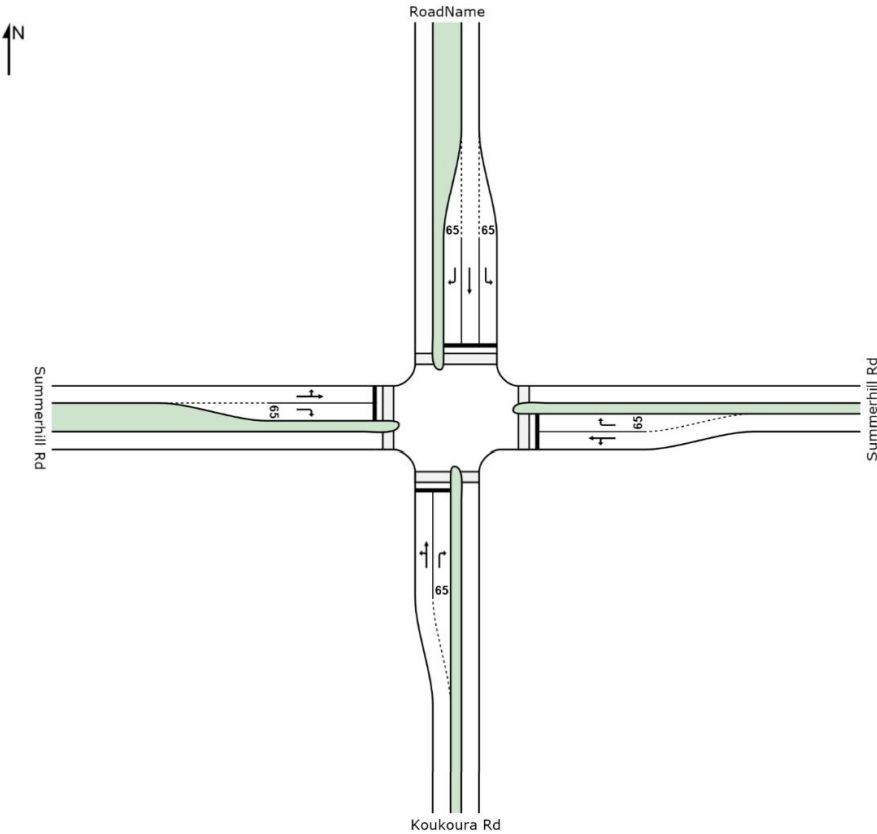
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 15 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 15 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Rd											
1	L2	27	7.4	0.115	28.9	LOS C	1.4	10.0	0.80	0.68	47.8
2	T1	25	0.0	0.115	21.8	LOS C	1.4	10.0	0.80	0.68	51.5
3	R2	47	6.4	0.265	40.4	LOS D	1.6	11.7	0.96	0.74	40.0
Approach		99	5.1	0.265	32.6	LOS C	1.6	11.7	0.88	0.71	44.5
East: Summerhill Rd											
4	L2	29	6.9	0.089	26.2	LOS C	1.2	8.8	0.75	0.67	49.2
5	T1	19	5.3	0.089	19.1	LOS B	1.2	8.8	0.75	0.67	53.0
6	R2	20	0.0	0.126	40.8	LOS D	0.7	4.7	0.95	0.70	40.8
Approach		68	4.4	0.126	28.5	LOS C	1.2	8.8	0.81	0.68	47.3
North: RoadName											
7	L2	20	0.0	0.126	40.8	LOS D	0.7	4.7	0.95	0.70	40.7
8	T1	20	0.0	0.048	23.8	LOS C	0.5	3.8	0.82	0.59	52.6
9	R2	20	0.0	0.108	39.3	LOS D	0.7	4.6	0.94	0.70	41.3
Approach		60	0.0	0.126	34.6	LOS C	0.7	4.7	0.90	0.66	44.3
West: Summerhill Rd											
10	L2	20	0.0	0.074	26.7	LOS C	1.0	7.0	0.76	0.65	50.6
11	T1	20	0.0	0.074	19.8	LOS B	1.0	7.0	0.76	0.65	53.0
12	R2	20	0.0	0.126	40.7	LOS D	0.7	4.7	0.95	0.70	40.7
Approach		60	0.0	0.126	29.0	LOS C	1.0	7.0	0.82	0.66	47.5
All Vehicles		287	2.8	0.265	31.3	LOS C	1.6	11.7	0.86	0.68	45.7

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	26.6	LOS C	0.0	0.0	0.87	0.87
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P3	North Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P4	West Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		110	28.8	LOS C			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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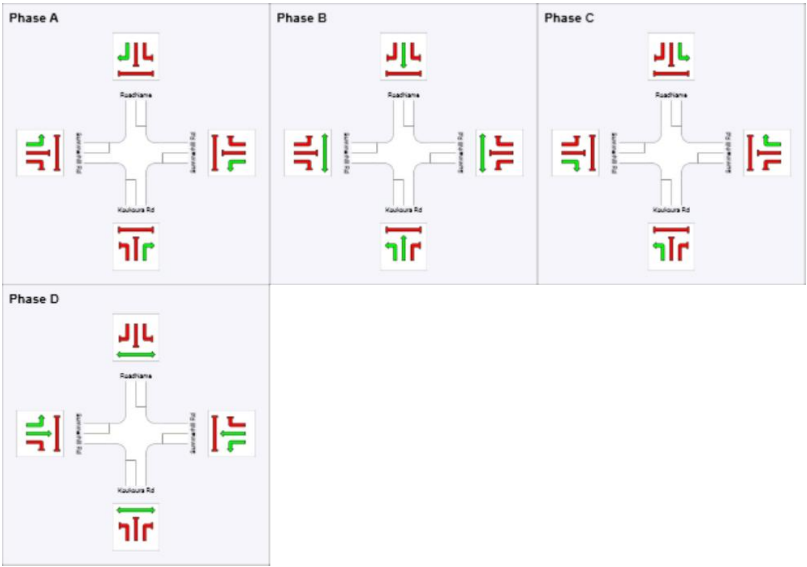
PHASING SUMMARY

Site: Intersection 15 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	13	34	46
Green Time (sec)	7	15	6	18
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	13	21	12	24
Phase Split	19 %	30 %	17 %	34 %



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SIDRA INTERSECTION 6.0.22.4722
Project: P:\60313908\4. Tech work area\4.5 Planning\SIDRA MODEL\Interim\MODELS\Intersection 15 2026.sip6
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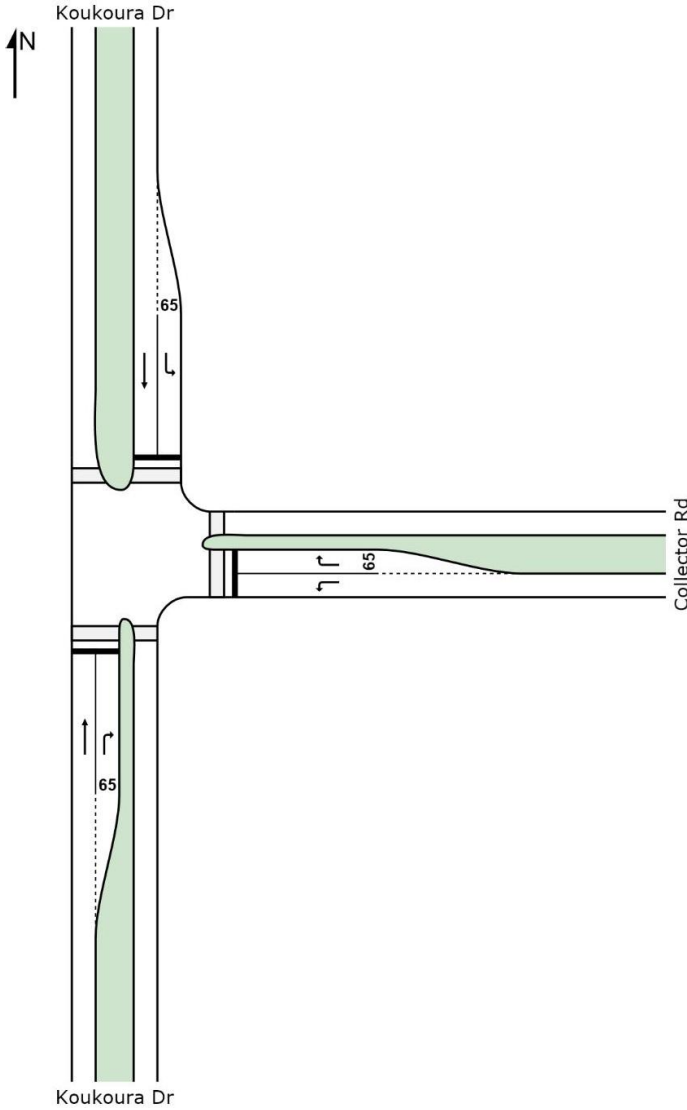
SIDRA
INTERSECTION 6

SITE LAYOUT

43

Site: Intersection 17 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

44

Site: Intersection 17 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Dr											
2	T1	63	6.3	0.157	24.6	LOS C	1.8	13.2	0.85	0.65	51.9
3	R2	74	5.4	0.132	25.6	LOS C	1.8	13.4	0.75	0.74	42.5
Approach		137	5.8	0.157	25.1	LOS C	1.8	13.4	0.79	0.70	46.4
East: Collector Rd											
4	L2	182	6.0	0.166	10.8	LOS B	2.7	19.5	0.46	0.67	48.5
6	R2	20	5.0	0.052	28.5	LOS C	0.6	4.0	0.82	0.68	39.3
Approach		202	5.9	0.166	12.6	LOS B	2.7	19.5	0.49	0.67	47.4
North: Koukoura Dr											
7	L2	20	0.0	0.021	15.8	LOS B	0.3	2.3	0.51	0.68	48.3
8	T1	31	6.5	0.077	24.1	LOS C	0.9	6.4	0.83	0.61	52.4
Approach		51	3.9	0.077	20.8	LOS C	0.9	6.4	0.70	0.64	50.7
All Vehicles		390	5.6	0.166	18.1	LOS B	2.7	19.5	0.63	0.68	47.4

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P3	North Full Crossing	20	25.7	LOS C	0.0	0.0	0.86	0.86
All Pedestrians		60	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

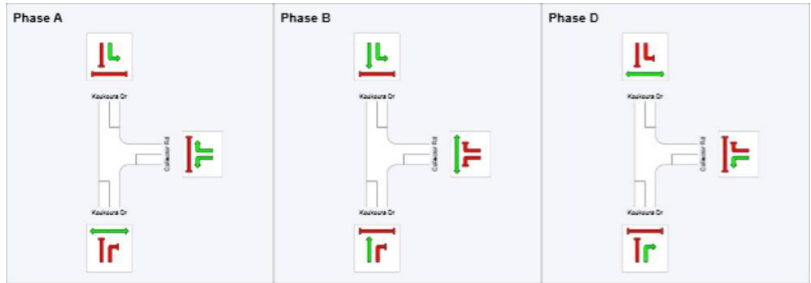
45

Site: Intersection 17 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, D
Output Sequence: A, B, D

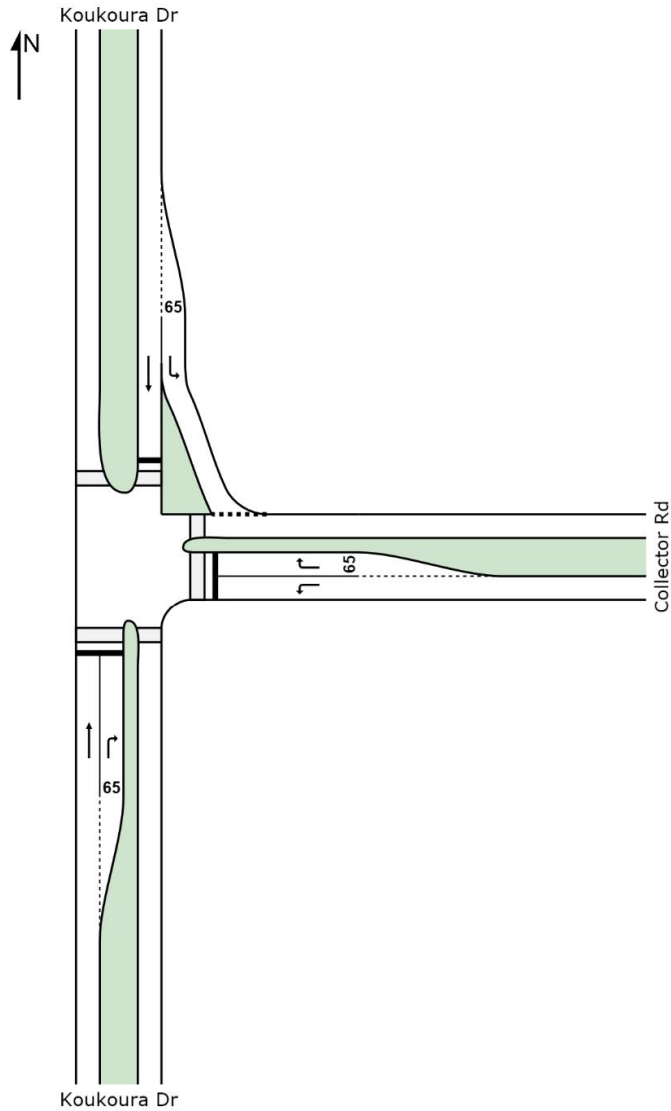
Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	42
Green Time (sec)	15	15	22
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	21	28
Phase Split	30 %	30 %	40 %



SITE LAYOUT

Site: Intersection 18 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

Site: Intersection 18 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Dr											
2	T1	129	6.2	0.219	19.3	LOS B	3.3	24.2	0.77	0.62	56.2
3	R2	59	6.8	0.155	31.6	LOS C	1.7	12.5	0.85	0.74	39.7
Approach		188	6.4	0.219	23.1	LOS C	3.3	24.2	0.80	0.66	49.7
East: Collector Rd											
4	L2	124	5.6	0.135	14.1	LOS B	2.2	16.2	0.55	0.68	46.5
6	R2	20	5.0	0.052	28.5	LOS C	0.6	4.0	0.82	0.68	39.3
Approach		144	5.6	0.135	16.1	LOS B	2.2	16.2	0.59	0.68	45.3
North: Koukoura Dr											
7	L2	20	0.0	0.015	8.0	LOS A	0.1	0.5	0.19	0.64	54.5
8	T1	210	6.2	0.356	20.3	LOS C	5.6	41.5	0.82	0.68	55.4
Approach		230	5.7	0.356	19.2	LOS B	5.6	41.5	0.76	0.67	55.3
All Vehicles		562	5.9	0.356	19.7	LOS B	5.6	41.5	0.73	0.67	50.6

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P2	East Full Crossing	20	23.2	LOS C	0.0	0.0	0.81	0.81
P3	North Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		60	27.3	LOS C			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

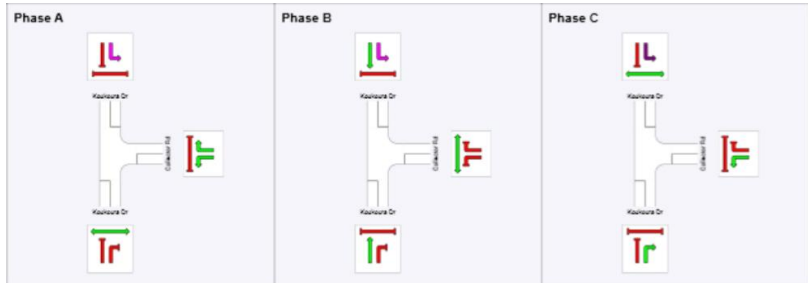
PHASING SUMMARY

Site: Intersection 18 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

Phase Timing Results			
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	49
Green Time (sec)	15	22	15
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	28	21
Phase Split	30 %	40 %	30 %

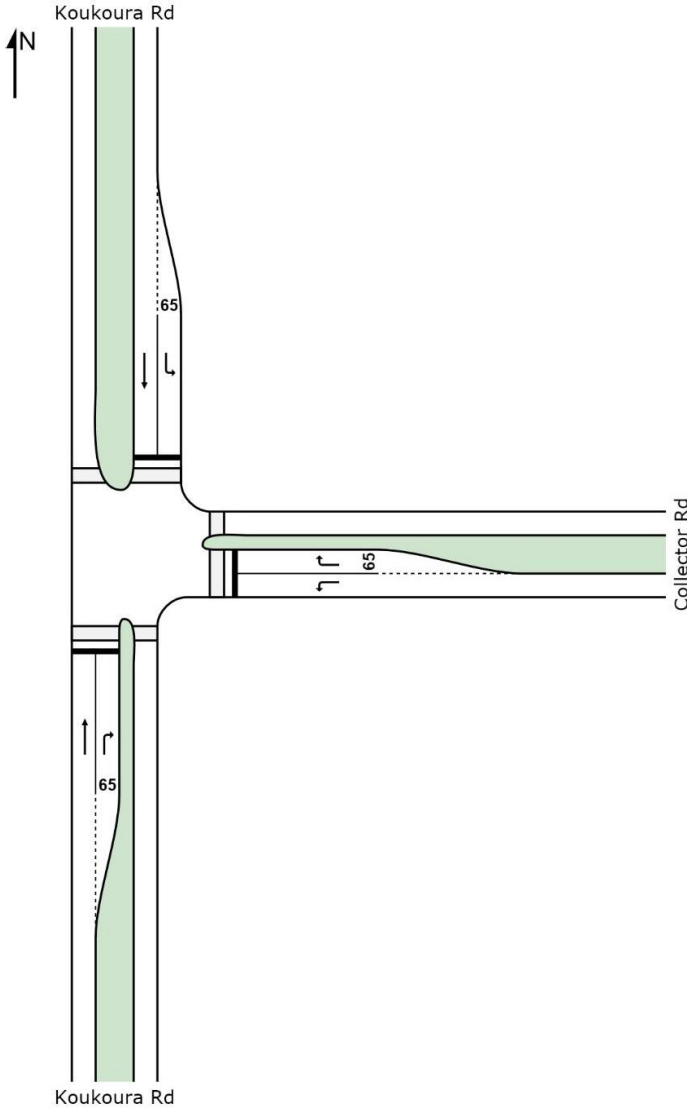


SITE LAYOUT

49

Site: Intersection 19 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

50

Site: Intersection 19 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Rd											
2	T1	182	6.0	0.357	22.6	LOS C	5.1	37.8	0.85	0.70	53.5
3	R2	82	6.1	0.179	29.2	LOS C	2.2	16.4	0.82	0.76	40.8
Approach		264	6.1	0.357	24.7	LOS C	5.1	37.8	0.84	0.72	48.8
East: Collector Rd											
4	L2	60	6.7	0.061	12.2	LOS B	0.9	6.9	0.48	0.65	47.5
6	R2	20	0.0	0.050	28.4	LOS C	0.6	3.9	0.82	0.68	39.9
Approach		80	5.0	0.061	16.2	LOS B	0.9	6.9	0.57	0.66	45.4
North: Koukoura Rd											
7	L2	20	0.0	0.019	13.8	LOS B	0.3	2.0	0.45	0.67	49.6
8	T1	333	6.0	0.654	25.2	LOS C	10.4	76.8	0.94	0.81	51.5
Approach		353	5.7	0.654	24.6	LOS C	10.4	76.8	0.91	0.80	51.4
All Vehicles		697	5.7	0.654	23.7	LOS C	10.4	76.8	0.85	0.75	49.6

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P2	East Full Crossing	20	25.7	LOS C	0.0	0.0	0.86	0.86
P3	North Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		60	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

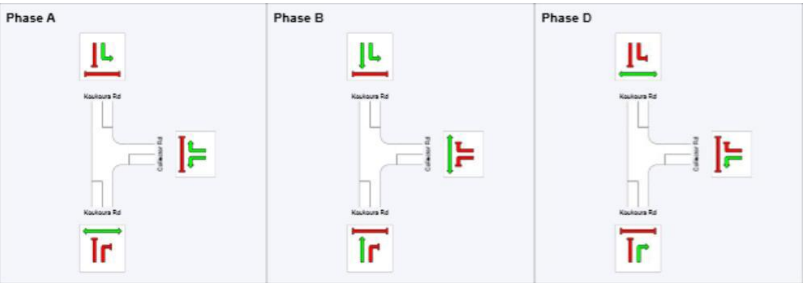
51

Site: Intersection 19 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, D
Output Sequence: A, B, D

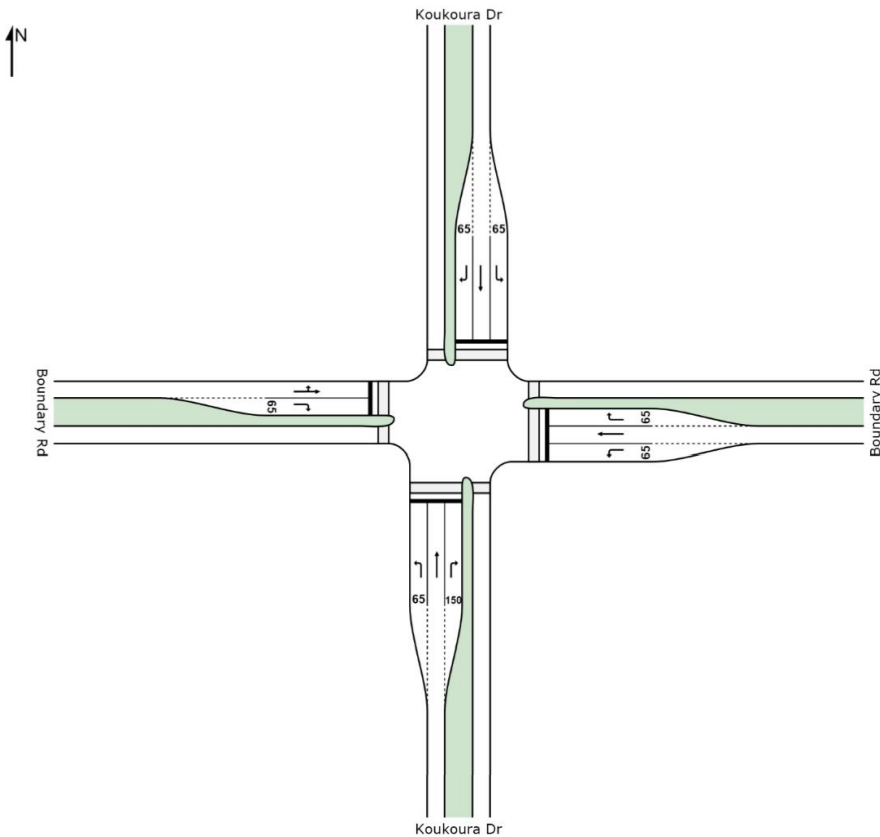
Phase Timing Results			
Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	46
Green Time (sec)	15	19	18
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	25	24
Phase Split	30 %	36 %	34 %



SITE LAYOUT

Site: Intersection 20 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 20 AM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Dr											
1	L2	54	5.6	0.185	50.5	LOS D	2.5	18.6	0.90	0.75	33.1
2	T1	210	6.2	0.685	48.6	LOS D	11.0	81.4	1.00	0.84	38.8
3	R2	247	6.1	0.848	63.8	LOS E	14.6	107.3	1.00	0.93	30.8
Approach		511	6.1	0.848	56.1	LOS E	14.6	107.3	0.99	0.87	33.9
East: Boundary Rd											
4	L2	265	6.0	0.819	58.5	LOS E	15.1	111.1	1.00	0.92	31.3
5	T1	60	6.7	0.177	42.6	LOS D	2.8	20.4	0.88	0.70	33.4
6	R2	20	0.0	0.059	45.7	LOS D	0.9	6.2	0.86	0.70	35.7
Approach		345	5.8	0.819	55.0	LOS E	15.1	111.1	0.97	0.87	31.9
North: Koukoura Dr											
7	L2	20	0.0	0.039	38.3	LOS D	0.8	5.5	0.76	0.70	39.3
8	T1	413	5.1	0.821	45.4	LOS D	22.5	164.4	0.99	0.94	40.2
9	R2	37	5.4	0.076	38.7	LOS D	1.5	10.7	0.77	0.73	36.9
Approach		470	4.9	0.821	44.5	LOS D	22.5	164.4	0.97	0.91	39.9
West: Boundary Rd											
10	L2	47	6.4	0.355	49.5	LOS D	5.2	38.2	0.93	0.77	32.8
11	T1	59	6.8	0.355	46.7	LOS D	5.2	38.2	0.93	0.77	32.1
12	R2	114	6.1	0.392	49.9	LOS D	5.6	41.2	0.94	0.78	31.9
Approach		220	6.4	0.392	49.0	LOS D	5.6	41.2	0.94	0.78	32.1
All Vehicles		1546	5.7	0.848	51.3	LOS D	22.5	164.4	0.97	0.87	34.7

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	47.3	LOS E	0.1	0.1	0.93	0.93
P2	East Full Crossing	20	38.5	LOS D	0.1	0.1	0.84	0.84
P3	North Full Crossing	20	49.2	LOS E	0.1	0.1	0.95	0.95
P4	West Full Crossing	20	46.4	LOS E	0.1	0.1	0.92	0.92
All Pedestrians		80	45.4	LOS E			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Friday, 15 August 2014 2:39:23 PM
SIDRA INTERSECTION 6.0.22.4722
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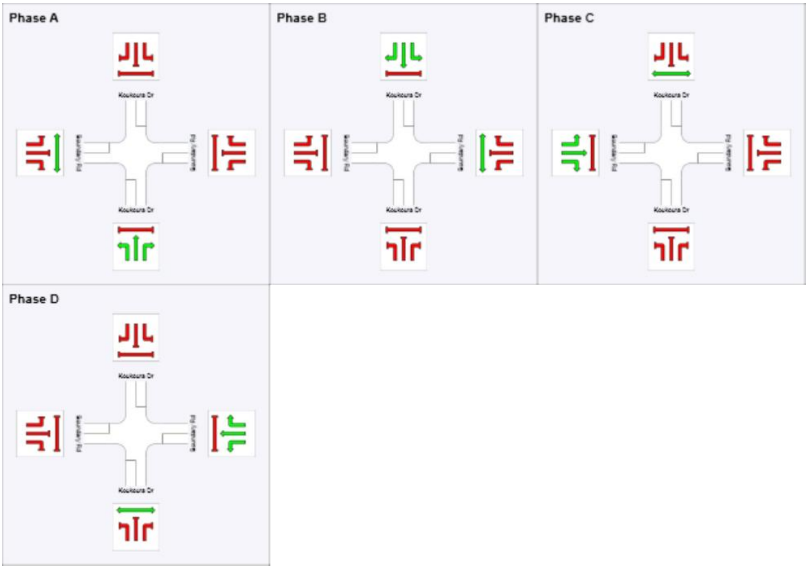
PHASING SUMMARY

Site: Intersection 20 AM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Split Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results	A	B	C	D
Phase				
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	24	60	84
Green Time (sec)	18	30	18	20
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	24	36	24	26
Phase Split	22 %	33 %	22 %	24 %



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Project: P:\60313908\4. Tech work area\4.5 Planning\SIDRA MODEL\Interim\MODELS\Intersection 20 2026.sip6
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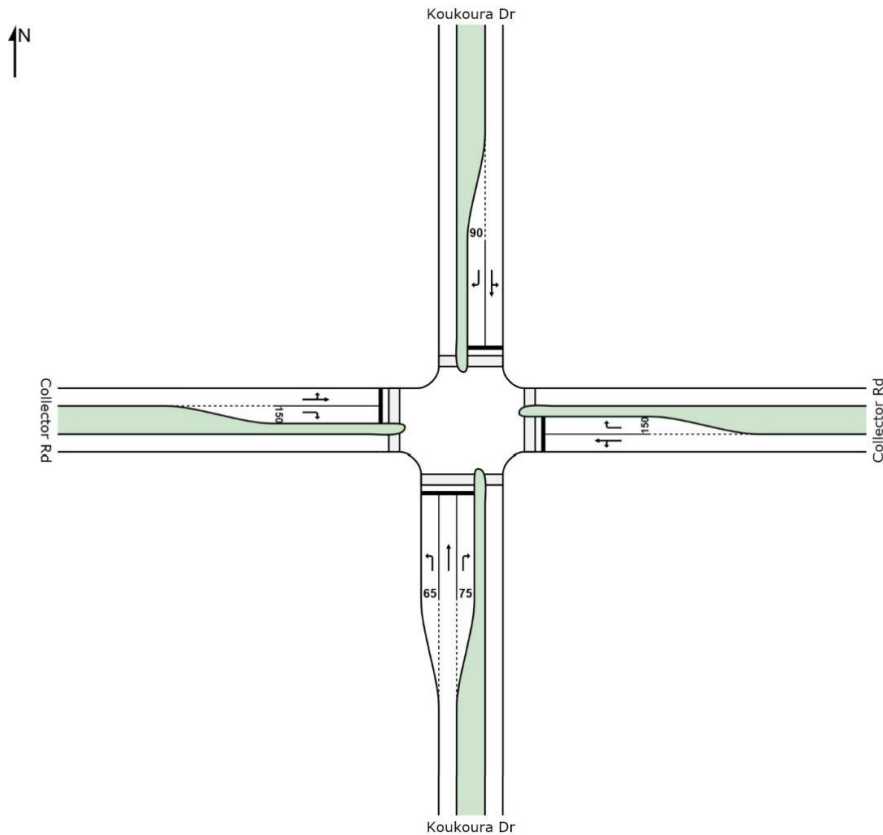
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SITE LAYOUT

Site: Intersection 21 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 21 AM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Dr											
1	L2	121	5.8	0.111	16.5	LOS B	2.7	19.6	0.44	0.71	47.8
2	T1	438	5.9	0.467	19.1	LOS B	15.2	111.5	0.70	0.62	56.4
3	R2	77	6.5	0.596	64.0	LOS E	4.3	31.7	1.00	0.78	29.4
Approach		636	6.0	0.596	24.0	LOS C	15.2	111.5	0.69	0.66	49.2
East: Collector Rd											
4	L2	61	6.6	0.594	52.5	LOS D	8.7	63.9	0.98	0.80	32.0
5	T1	108	5.6	0.594	47.9	LOS D	8.7	63.9	0.98	0.80	29.8
6	R2	20	0.0	0.085	32.5	LOS C	0.7	4.9	0.91	0.69	38.2
Approach		189	5.3	0.594	47.8	LOS D	8.7	63.9	0.97	0.79	31.2
North: Koukoura Dr											
7	L2	20	5.0	0.745	28.8	LOS C	26.0	191.4	0.82	0.74	44.5
8	T1	626	6.1	0.745	21.8	LOS C	26.0	191.4	0.82	0.74	54.0
9	R2	95	6.3	0.735	66.2	LOS E	5.5	40.3	1.00	0.84	28.9
Approach		741	6.1	0.745	27.7	LOS C	26.0	191.4	0.84	0.75	48.3
West: Collector Rd											
10	L2	65	6.2	0.347	50.4	LOS D	4.8	35.1	0.94	0.76	32.2
11	T1	32	6.3	0.347	45.8	LOS D	4.8	35.1	0.94	0.76	30.0
12	R2	122	5.7	0.537	35.1	LOS D	4.7	34.4	0.98	0.78	36.7
Approach		219	5.9	0.537	41.2	LOS D	4.8	35.1	0.96	0.77	34.2
All Vehicles		1785	5.9	0.745	30.2	LOS C	26.0	191.4	0.81	0.72	43.8

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	50.2	LOS E	0.1	0.1	0.96	0.96
P2	East Full Crossing	20	18.6	LOS B	0.0	0.0	0.58	0.58
P3	North Full Crossing	20	47.3	LOS E	0.1	0.1	0.93	0.93
P4	West Full Crossing	20	18.6	LOS B	0.0	0.0	0.58	0.58
All Pedestrians		80	33.7	LOS D			0.76	0.76

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Friday, 25 July 2014 11:51:21 AM
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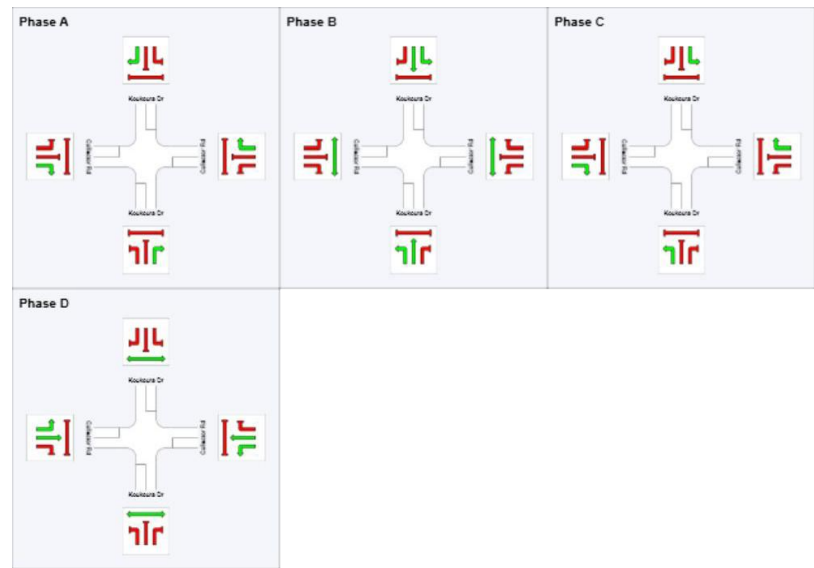
PHASING SUMMARY

Site: Intersection 21 AM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	14	75	87
Green Time (sec)	8	55	6	17
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	14	61	12	23
Phase Split	13 %	55 %	11 %	21 %



Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class Running	Other Movement Class Stopped
Mixed Running & Stopped Movement Classes	
Undetected Movement	Phase Transition Applied

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SIDRA INTERSECTION 6.0.22.4722
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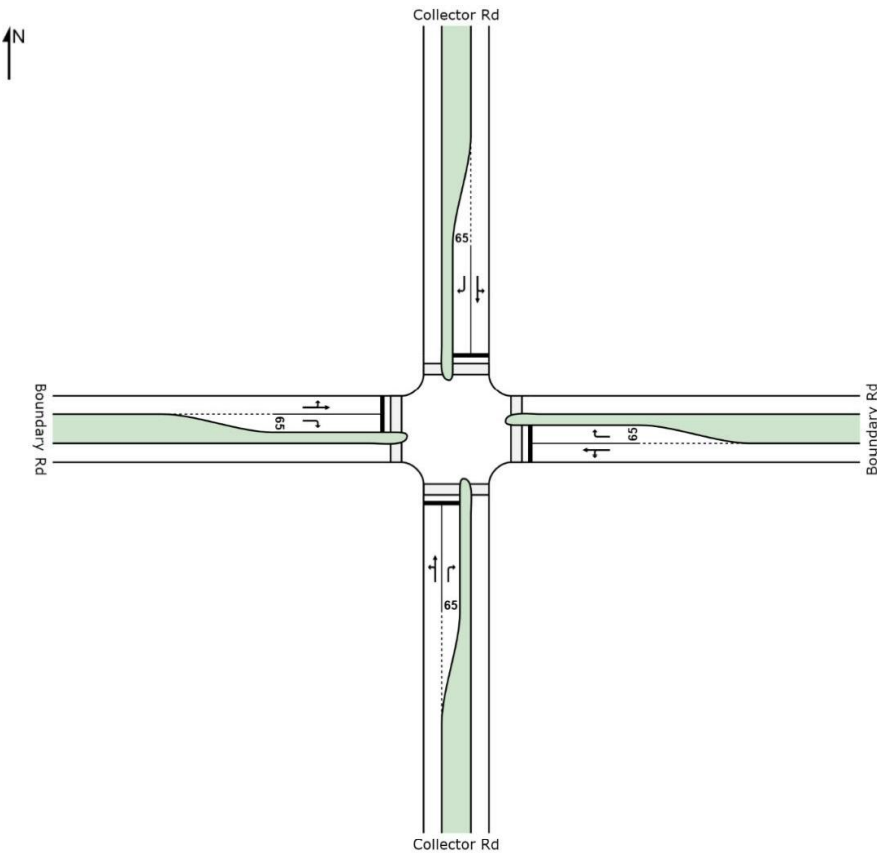
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SITE LAYOUT

Site: Intersection 22 AM 2026

New Site
Signals - Fixed Time



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MOVEMENT SUMMARY

Site: Intersection 22 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	20	5.0	0.163	27.3	LOS C	1.9	14.0	0.84	0.71	35.4
2	T1	48	6.3	0.163	25.3	LOS C	1.9	14.0	0.84	0.71	34.1
3	R2	20	5.0	0.130	37.5	LOS D	0.7	4.9	0.95	0.69	31.5
Approach		88	5.7	0.163	28.5	LOS C	1.9	14.0	0.86	0.71	33.7
East: Boundary Rd											
4	L2	20	5.0	0.593	31.7	LOS C	8.0	58.8	0.94	0.79	35.8
5	T1	236	5.9	0.593	26.1	LOS C	8.0	58.8	0.94	0.79	41.8
6	R2	155	5.8	0.676	40.0	LOS D	5.5	40.5	1.00	0.85	33.8
Approach		411	5.8	0.676	31.6	LOS C	8.0	58.8	0.96	0.81	38.1
North: Collector Rd											
7	L2	149	6.0	0.468	28.2	LOS C	6.6	48.8	0.88	0.78	38.0
8	T1	77	6.5	0.468	24.8	LOS C	6.6	48.8	0.88	0.78	33.5
9	R2	48	6.3	0.315	39.6	LOS D	1.7	12.3	0.98	0.74	33.5
Approach		274	6.2	0.468	29.2	LOS C	6.6	48.8	0.90	0.78	35.8
West: Boundary Rd											
10	L2	34	5.9	0.746	35.1	LOS D	11.2	82.0	0.98	0.91	37.3
11	T1	289	5.9	0.746	29.5	LOS C	11.2	82.0	0.98	0.91	40.1
12	R2	46	6.5	0.202	36.5	LOS D	1.5	10.9	0.93	0.73	32.5
Approach		369	6.0	0.746	30.9	LOS C	11.2	82.0	0.98	0.88	38.7
All Vehicles		1142	6.0	0.746	30.6	LOS C	11.2	82.0	0.94	0.82	37.3

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	28.4	LOS C	0.1	0.1	0.90	0.90
P2	East Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P3	North Full Crossing	50	28.4	LOS C	0.1	0.1	0.90	0.90
P4	West Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		200	28.9	LOS C			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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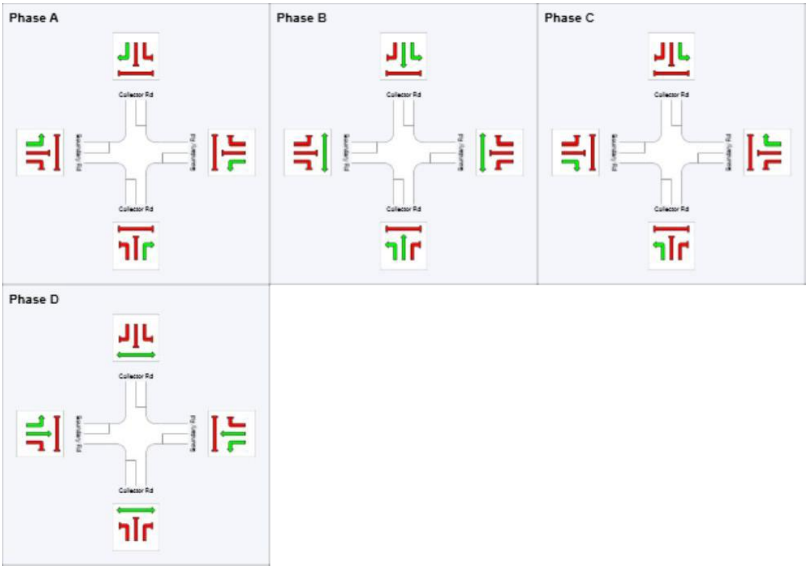
PHASING SUMMARY

Site: Intersection 22 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	12	33	48
Green Time (sec)	6	15	9	16
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	12	21	15	22
Phase Split	17 %	30 %	21 %	31 %



Processed: Friday, 25 July 2014 12:05:28 PM
SIDRA INTERSECTION 6.0.22.4722
Project: C:\Users\malonej\Desktop\MODELS\Intersection 22 2026.sip6
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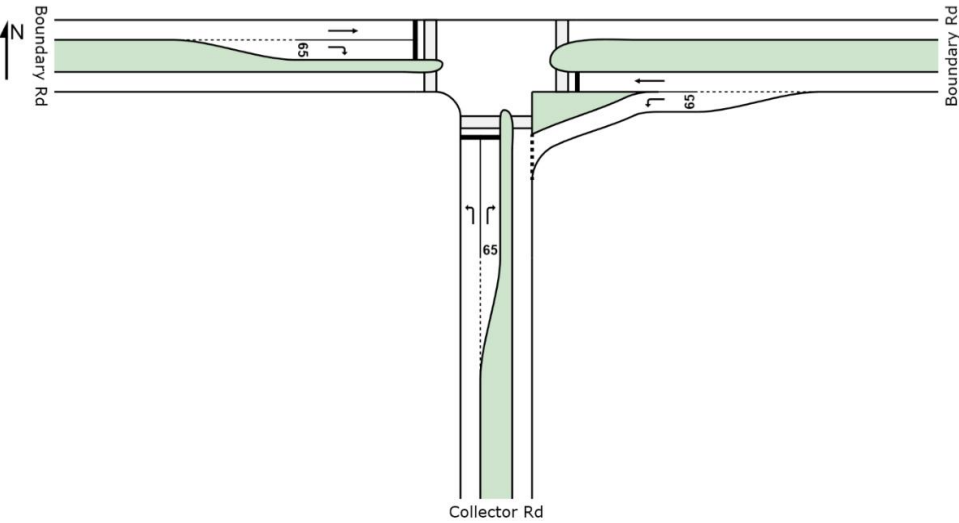
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SITE LAYOUT

Site: Intersection 23 AM 2026

New Site
Signals - Fixed Time



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MOVEMENT SUMMARY

Site: Intersection 23 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	39	5.1	0.039	12.1	LOS B	0.6	4.3	0.47	0.64	45.1
3	R2	37	5.4	0.097	28.9	LOS C	1.0	7.6	0.83	0.71	37.2
Approach		76	5.3	0.097	20.2	LOS C	1.0	7.6	0.65	0.67	40.9
East: Boundary Rd											
4	L2	150	6.0	0.147	13.1	LOS B	2.4	17.5	0.49	0.70	45.2
5	T1	371	5.9	0.728	27.2	LOS C	12.3	90.7	0.97	0.88	41.5
Approach		521	6.0	0.728	23.1	LOS C	12.3	90.7	0.83	0.83	42.5
West: Boundary Rd											
11	T1	413	6.1	0.811	30.9	LOS C	15.0	110.6	0.99	0.98	39.8
12	R2	46	6.5	0.101	27.3	LOS C	1.2	9.0	0.79	0.72	38.3
Approach		459	6.1	0.811	30.5	LOS C	15.0	110.6	0.97	0.95	39.6
All Vehicles		1056	6.0	0.811	26.1	LOS C	15.0	110.6	0.88	0.87	41.1

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
P2	East Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P4	West Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		150	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Tuesday, 22 July 2014 11:52:40 AM
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MOVEMENT SUMMARY

Site: Intersection 23 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	39	5.1	0.042	13.6	LOS B	0.7	4.8	0.52	0.65	44.2
3	R2	37	5.4	0.097	28.9	LOS C	1.0	7.6	0.83	0.71	37.2
Approach		76	5.3	0.097	21.0	LOS C	1.0	7.6	0.67	0.68	40.5
East: Boundary Rd											
4	L2	150	6.0	0.113	6.4	LOS A	0.6	4.2	0.22	0.61	49.8
5	T1	371	5.9	0.629	22.6	LOS C	11.1	81.4	0.91	0.78	43.8
Approach		521	6.0	0.629	17.9	LOS B	11.1	81.4	0.71	0.73	45.4
West: Boundary Rd											
11	T1	413	6.1	0.700	24.0	LOS C	13.0	95.6	0.94	0.83	43.0
12	R2	46	6.5	0.121	30.0	LOS C	1.3	9.6	0.84	0.73	37.2
Approach		459	6.1	0.700	24.6	LOS C	13.0	95.6	0.93	0.82	42.4
All Vehicles		1056	6.0	0.700	21.0	LOS C	13.0	95.6	0.80	0.77	43.6

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	23.3	LOS C	0.1	0.1	0.82	0.82
P2	East Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P4	West Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		150	27.3	LOS C			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Friday, 15 August 2014 3:12:22 PM
SIDRA INTERSECTION 6.0.22.4722
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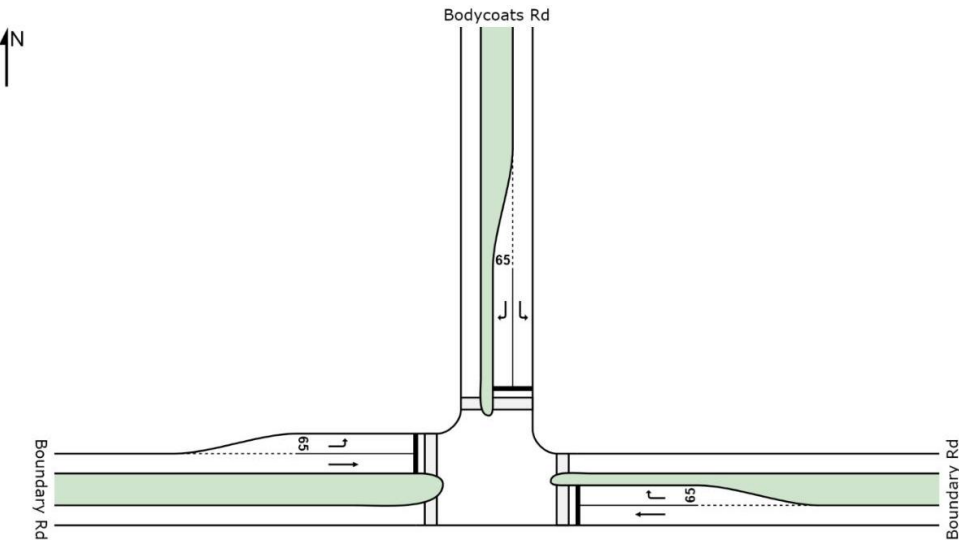
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INTERSECTION 6

SITE LAYOUT

64

Site: Intersection 24 AM 2026

New Site
Signals - Fixed Time



Created: Friday, 25 July 2014 1:16:02 PM
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MOVEMENT SUMMARY

65

Site: Intersection 24 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Boundary Rd											
5	T1	349	6.0	0.685	25.9	LOS C	11.2	82.4	0.95	0.84	42.1
6	R2	27	7.4	0.060	26.9	LOS C	0.7	5.2	0.78	0.70	38.4
Approach		376	6.1	0.685	26.0	LOS C	11.2	82.4	0.94	0.83	41.8
North: Bodycoats Rd											
7	L2	69	5.8	0.069	12.2	LOS B	1.1	7.9	0.48	0.65	45.0
9	R2	172	5.8	0.450	31.3	LOS C	5.3	38.9	0.92	0.79	36.3
Approach		241	5.8	0.450	25.8	LOS C	5.3	38.9	0.79	0.75	38.4
West: Boundary Rd											
10	L2	71	5.6	0.070	12.7	LOS B	1.1	7.9	0.47	0.67	45.4
11	T1	378	6.1	0.742	27.6	LOS C	12.7	93.8	0.97	0.89	41.2
Approach		449	6.0	0.742	25.3	LOS C	12.7	93.8	0.89	0.86	41.9
All Vehicles		1066	6.0	0.742	25.7	LOS C	12.7	93.8	0.89	0.82	41.0

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P3	North Full Crossing	20	25.7	LOS C	0.0	0.0	0.86	0.86
P4	West Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		60	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Monday, 26 May 2014 3:45:58 PM
SIDRA INTERSECTION 6.0.22.4722
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PHASING SUMMARY

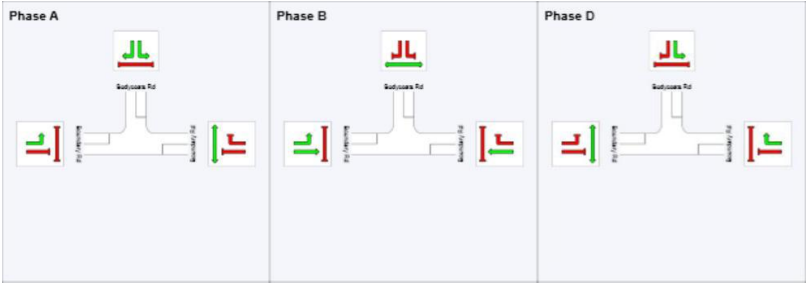
66

Site: Intersection 24 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, D
Output Sequence: A, B, D

Phase Timing Results			
Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	46
Green Time (sec)	15	19	18
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	25	24
Phase Split	30 %	36 %	34 %



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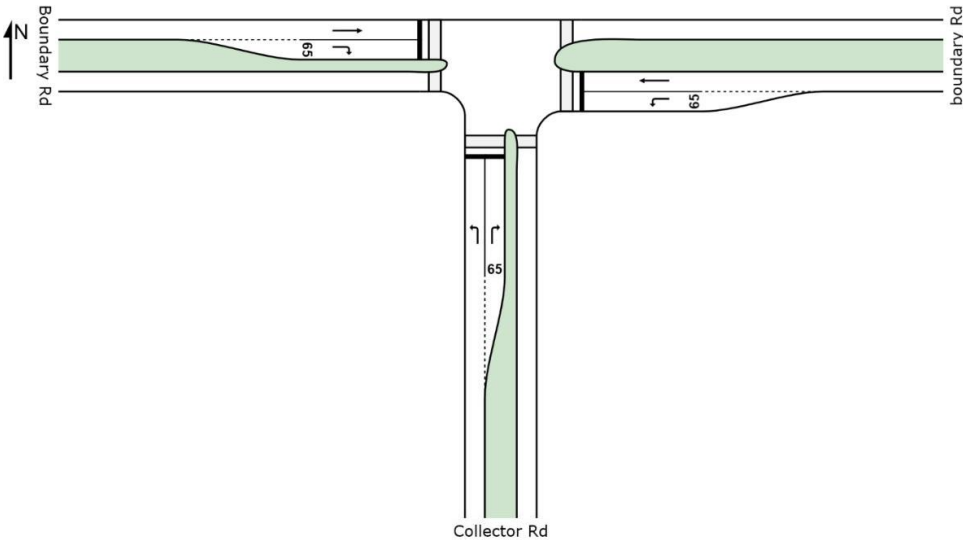
SIDRA
INTERSECTION 6

SITE LAYOUT

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Site: Intersection 25 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

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Site: Intersection 25 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	29	6.9	0.029	12.0	LOS B	0.4	3.3	0.47	0.63	45.0
3	R2	40	5.0	0.104	28.9	LOS C	1.1	8.2	0.84	0.71	37.2
Approach		69	5.8	0.104	21.8	LOS C	1.1	8.2	0.68	0.68	40.1
East: boundary Rd											
4	L2	39	5.1	0.038	12.6	LOS B	0.6	4.2	0.46	0.66	45.5
5	T1	347	6.1	0.681	25.9	LOS C	11.1	81.7	0.95	0.83	42.1
Approach		386	6.0	0.681	24.5	LOS C	11.1	81.7	0.90	0.82	42.4
West: Boundary Rd											
11	T1	315	6.0	0.618	24.7	LOS C	9.7	71.3	0.93	0.79	42.7
12	R2	132	6.1	0.288	28.6	LOS C	3.7	27.3	0.84	0.77	37.8
Approach		447	6.0	0.618	25.9	LOS C	9.7	71.3	0.90	0.78	41.1
All Vehicles		902	6.0	0.681	25.0	LOS C	11.1	81.7	0.89	0.79	41.6

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	25.7	LOS C	0.0	0.0	0.86	0.86
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P4	West Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		60	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Monday, 26 May 2014 3:53:14 PM
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PHASING SUMMARY

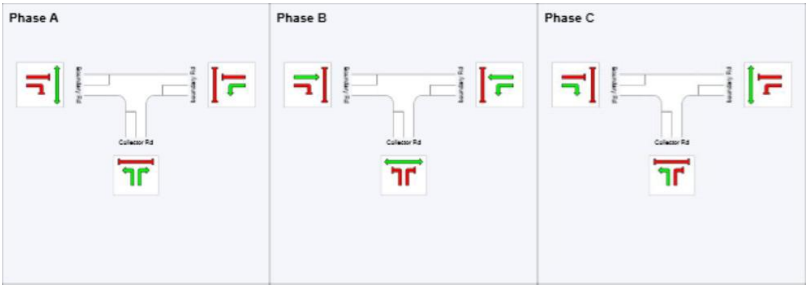
69

Site: Intersection 25 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

Phase Timing Results			
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	46
Green Time (sec)	15	19	18
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	25	24
Phase Split	30 %	36 %	34 %



Processed: Monday, 26 May 2014 3:53:14 PM
SIDRA INTERSECTION 6.0.22.4722
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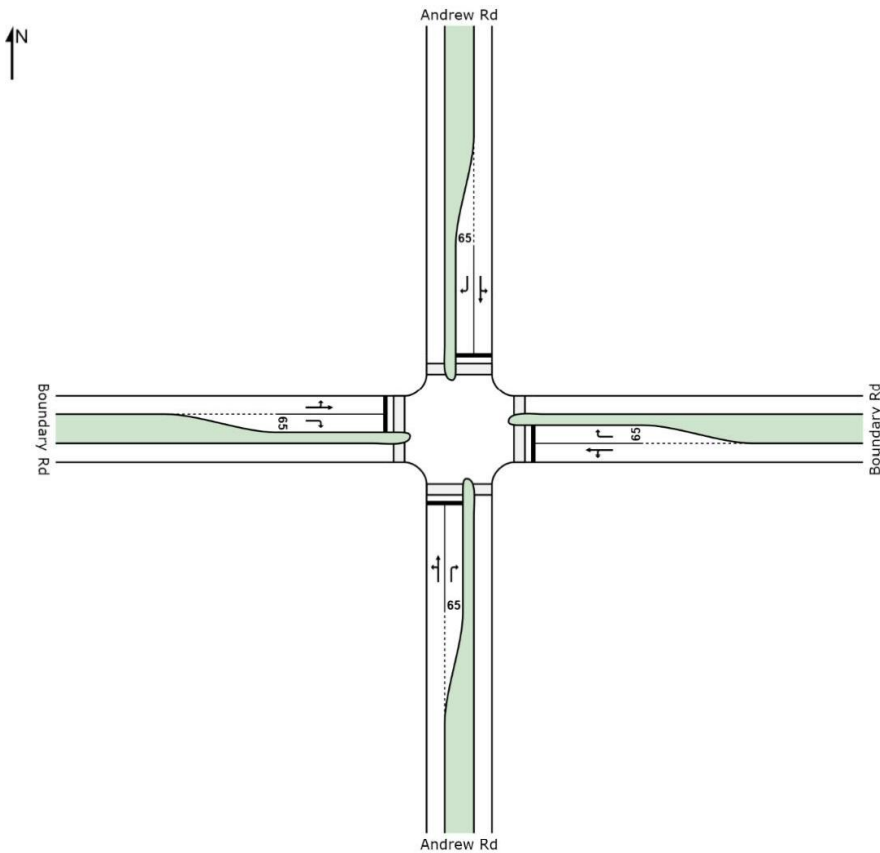
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SITE LAYOUT

Site: Intersection 26 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 26 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Andrew Rd											
1	L2	28	7.1	0.110	26.4	LOS C	1.3	9.8	0.80	0.67	39.1
2	T1	22	4.5	0.110	21.8	LOS C	1.3	9.8	0.80	0.67	37.5
3	R2	21	4.8	0.136	38.6	LOS D	0.7	5.2	0.95	0.70	33.8
Approach		71	5.6	0.136	28.6	LOS C	1.3	9.8	0.84	0.68	36.9
East: Boundary Rd											
4	L2	61	6.6	0.712	31.7	LOS C	12.0	88.1	0.95	0.86	38.6
5	T1	306	5.9	0.712	26.0	LOS C	12.0	88.1	0.95	0.86	41.6
6	R2	39	5.1	0.254	40.2	LOS D	1.3	9.8	0.97	0.73	33.7
Approach		406	5.9	0.712	28.2	LOS C	12.0	88.1	0.96	0.85	40.2
North: Andrew Rd											
7	L2	50	6.0	0.473	30.6	LOS C	6.0	44.1	0.91	0.76	37.9
8	T1	146	6.2	0.473	26.0	LOS C	6.0	44.1	0.91	0.76	36.4
9	R2	53	5.7	0.346	39.7	LOS D	1.8	13.5	0.98	0.74	33.5
Approach		249	6.0	0.473	29.8	LOS C	6.0	44.1	0.93	0.76	36.1
West: Boundary Rd											
10	L2	21	4.8	0.670	30.5	LOS C	10.8	79.4	0.94	0.82	39.3
11	T1	322	5.9	0.670	24.9	LOS C	10.8	79.4	0.94	0.82	42.4
12	R2	21	4.8	0.136	39.5	LOS D	0.7	5.2	0.95	0.70	33.9
Approach		364	5.8	0.670	26.1	LOS C	10.8	79.4	0.94	0.81	41.6
All Vehicles		1090	5.9	0.712	27.9	LOS C	12.0	88.1	0.94	0.81	39.4

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
P2	East Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P3	North Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
P4	West Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		200	27.5	LOS C			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Monday, 21 July 2014 4:49:11 PM
SIDRA INTERSECTION 6.0.22.4722
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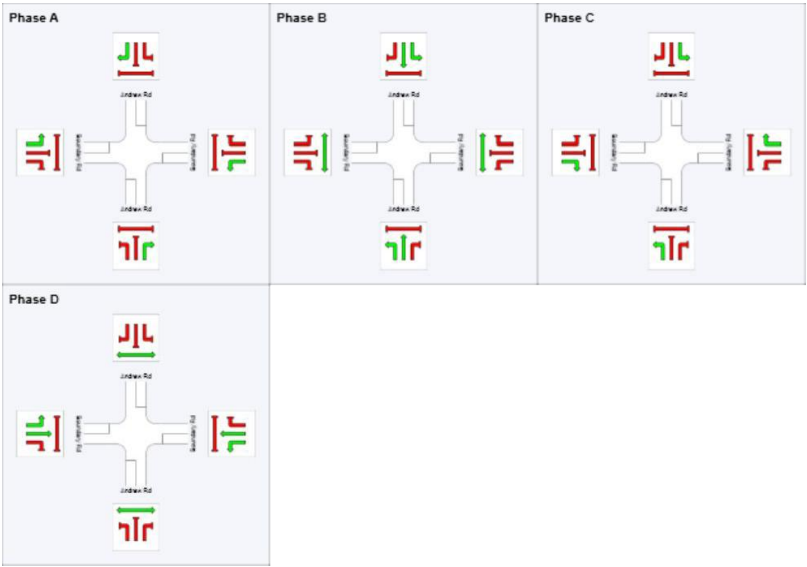
PHASING SUMMARY

Site: Intersection 26 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	12	33	45
Green Time (sec)	6	15	6	19
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	12	21	12	25
Phase Split	17 %	30 %	17 %	36 %



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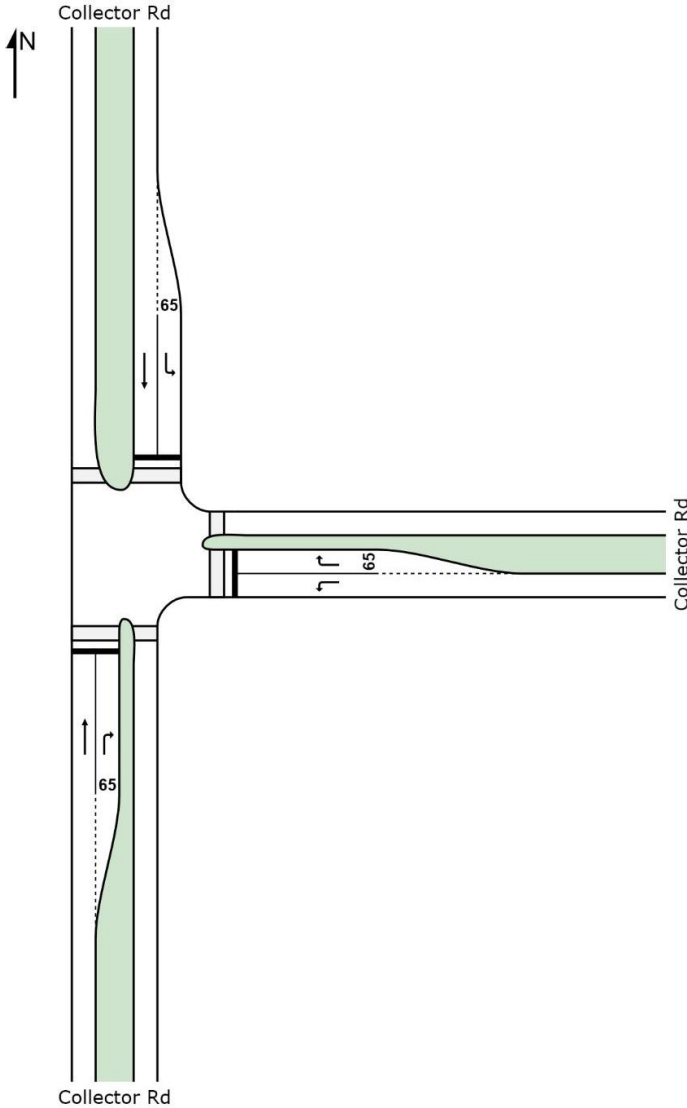
SIDRA
INTERSECTION 6

SITE LAYOUT

73

Site: Intersection 27 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

74

Site: Intersection 27 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
2	T1	51	0.0	0.096	21.9	LOS C	1.3	9.2	0.78	0.64	35.1
3	R2	42	0.0	0.088	26.1	LOS C	1.1	7.7	0.79	0.71	33.8
Approach		93	0.0	0.096	23.8	LOS C	1.3	9.2	0.79	0.67	34.5
East: Collector Rd											
4	L2	35	0.0	0.034	10.8	LOS B	0.5	3.7	0.47	0.60	38.9
6	R2	20	0.0	0.050	27.3	LOS C	0.6	3.9	0.82	0.67	30.8
Approach		55	0.0	0.050	16.8	LOS B	0.6	3.9	0.60	0.62	35.5
North: Collector Rd											
7	L2	20	0.0	0.019	10.3	LOS B	0.3	2.0	0.45	0.58	36.1
8	T1	65	0.0	0.123	22.2	LOS C	1.7	11.8	0.79	0.68	35.3
Approach		85	0.0	0.123	19.4	LOS B	1.7	11.8	0.71	0.65	35.5
All Vehicles		233	0.0	0.123	20.5	LOS C	1.7	11.8	0.71	0.65	35.1

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P2	East Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
P3	North Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		150	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

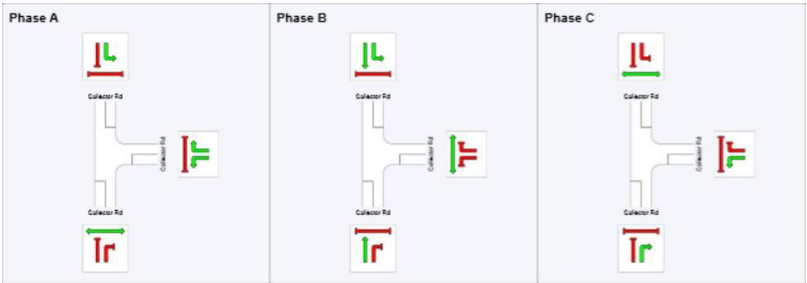
75

Site: Intersection 27 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

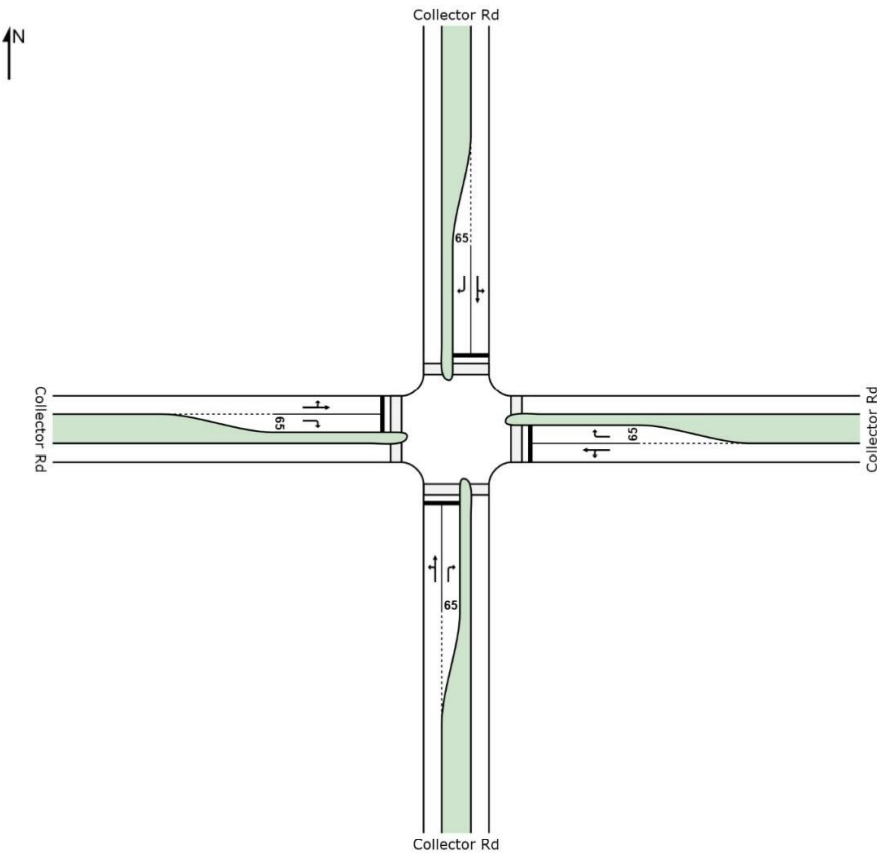
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	46
Green Time (sec)	15	19	18
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	25	24
Phase Split	30 %	36 %	34 %



SITE LAYOUT

Site: Intersection 28 AM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 28 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	45	0.0	0.173	24.3	LOS C	2.5	17.3	0.77	0.67	35.3
2	T1	52	0.0	0.173	19.7	LOS B	2.5	17.3	0.77	0.67	38.5
3	R2	30	0.0	0.188	38.8	LOS D	1.0	7.1	0.96	0.71	30.2
Approach		127	0.0	0.188	25.8	LOS C	2.5	17.3	0.82	0.68	35.1
East: Collector Rd											
4	L2	95	0.0	0.224	23.5	LOS C	3.2	22.2	0.79	0.71	34.5
5	T1	27	0.0	0.224	20.1	LOS C	3.2	22.2	0.79	0.71	32.0
6	R2	20	0.0	0.126	37.3	LOS D	0.7	4.7	0.95	0.69	30.3
Approach		142	0.0	0.224	24.8	LOS C	3.2	22.2	0.81	0.71	33.4
North: Collector Rd											
7	L2	20	0.0	0.289	25.9	LOS C	4.2	29.2	0.82	0.68	35.2
8	T1	134	0.0	0.289	21.3	LOS C	4.2	29.2	0.82	0.68	38.4
9	R2	20	0.0	0.126	38.4	LOS D	0.7	4.7	0.95	0.69	30.3
Approach		174	0.0	0.289	23.8	LOS C	4.2	29.2	0.84	0.68	36.9
West: Collector Rd											
10	L2	20	0.0	0.103	25.9	LOS C	1.2	8.7	0.81	0.65	34.1
11	T1	26	0.0	0.103	22.5	LOS C	1.2	8.7	0.81	0.65	31.7
12	R2	29	0.0	0.182	37.7	LOS D	1.0	6.9	0.96	0.71	30.2
Approach		75	0.0	0.182	29.3	LOS C	1.2	8.7	0.87	0.67	31.7
All Vehicles		518	0.0	0.289	25.4	LOS C	4.2	29.2	0.83	0.69	34.6

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P2	East Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
P3	North Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P4	West Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
All Pedestrians		200	27.5	LOS C			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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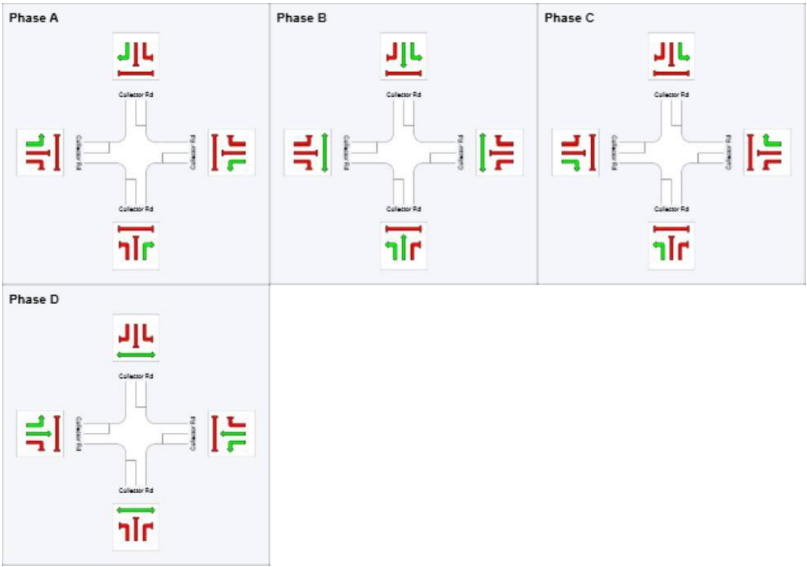
PHASING SUMMARY

Site: Intersection 28 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	12	37	49
Green Time (sec)	6	19	6	15
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	12	25	12	21
Phase Split	17 %	36 %	17 %	30 %



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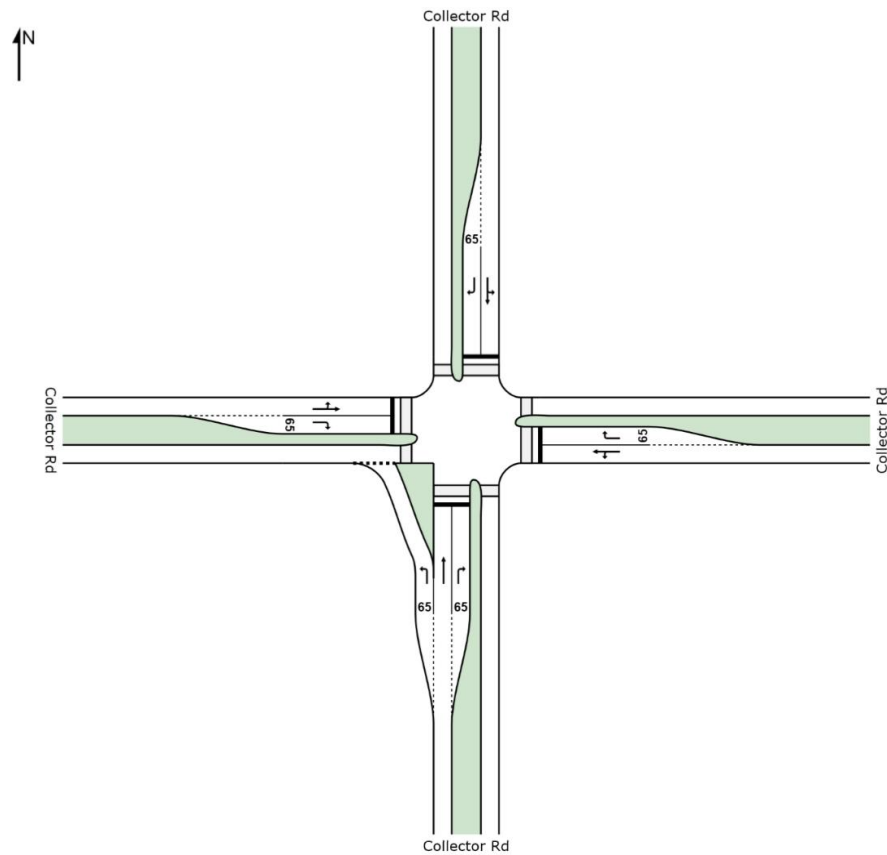
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SIDRA
INTERSECTION 6

SITE LAYOUT

 **Site: Intersection 29 AM 2026**

New Site
Signals - Fixed Time



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**SIDRA
INTERSECTION 6**

MOVEMENT SUMMARY

 **Site: Intersection 29 AM 2026**

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	20	0.0	0.014	3.9	LOS A	0.1	0.6	0.21	0.47	42.3
2	T1	32	0.0	0.060	21.7	LOS C	0.8	5.7	0.77	0.64	35.5
3	R2	20	0.0	0.126	37.3	LOS D	0.7	4.7	0.95	0.69	30.3
Approach		72	0.0	0.126	21.1	LOS C	0.8	5.7	0.67	0.61	35.4
East: Collector Rd											
4	L2	24	0.0	0.167	28.4	LOS C	2.0	14.3	0.84	0.68	34.1
5	T1	49	0.0	0.167	23.8	LOS C	2.0	14.3	0.84	0.68	37.2
6	R2	20	0.0	0.126	38.4	LOS D	0.7	4.7	0.95	0.69	32.4
Approach		93	0.0	0.167	28.1	LOS C	2.0	14.3	0.86	0.68	35.3
North: Collector Rd											
7	L2	63	0.0	0.189	23.6	LOS C	2.8	19.4	0.77	0.71	38.1
8	T1	47	0.0	0.189	20.3	LOS C	2.8	19.4	0.77	0.71	35.0
9	R2	20	0.0	0.126	38.4	LOS D	0.7	4.7	0.95	0.69	32.4
Approach		130	0.0	0.189	24.7	LOS C	2.8	19.4	0.79	0.70	36.0
West: Collector Rd											
10	L2	20	0.0	0.105	27.1	LOS C	1.3	8.9	0.81	0.65	37.2
11	T1	27	0.0	0.105	22.5	LOS C	1.3	8.9	0.81	0.65	37.5
12	R2	20	0.0	0.126	38.4	LOS D	0.7	4.7	0.95	0.69	30.5
Approach		67	0.0	0.126	28.6	LOS C	1.3	8.9	0.85	0.67	35.0
All Vehicles		362	0.0	0.189	25.6	LOS C	2.8	19.4	0.80	0.67	35.5

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P2	East Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
P3	North Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P4	West Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
All Pedestrians		200	27.5	LOS C			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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**SIDRA
INTERSECTION 6**

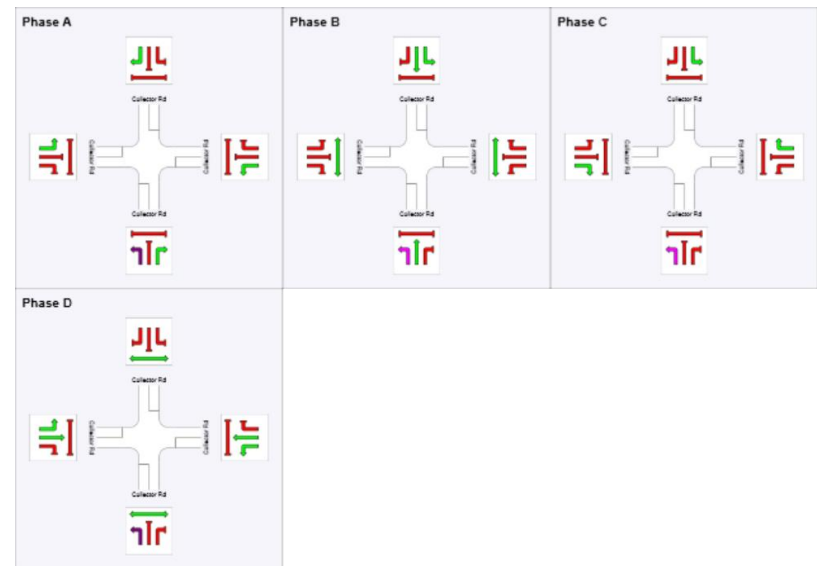
PHASING SUMMARY

 **Site: Intersection 29 AM 2026**

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	12	37	49
Green Time (sec)	6	19	6	15
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	12	25	12	21
Phase Split	17 %	36 %	17 %	30 %



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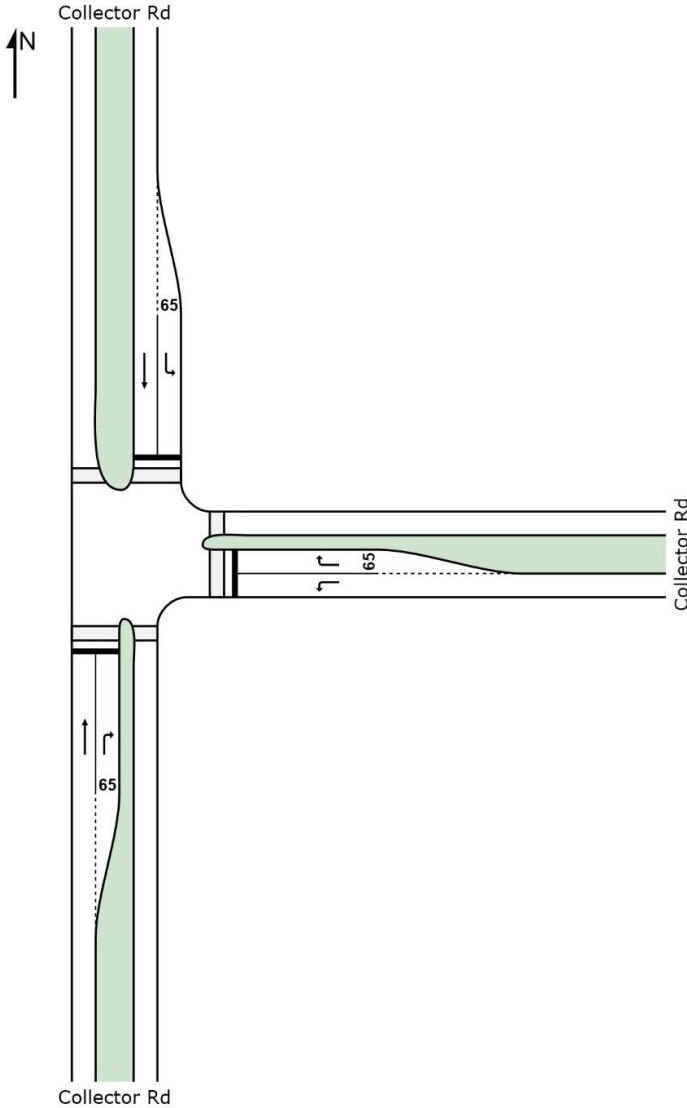
**SIDRA
INTERSECTION 6**

SITE LAYOUT

82

Site: Intersection 30 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

83

Site: Intersection 30 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
2	T1	20	0.0	0.048	25.0	LOS C	0.5	3.8	0.82	0.63	34.1
3	R2	62	0.0	0.106	23.0	LOS C	1.5	10.6	0.74	0.71	34.7
Approach		82	0.0	0.106	23.5	LOS C	1.5	10.6	0.76	0.69	34.6
East: Collector Rd											
4	L2	51	0.0	0.045	9.1	LOS A	0.7	4.8	0.42	0.59	39.7
6	R2	20	0.0	0.050	27.3	LOS C	0.6	3.9	0.82	0.67	30.8
Approach		71	0.0	0.050	14.2	LOS B	0.7	4.8	0.53	0.61	36.7
North: Collector Rd											
7	L2	20	0.0	0.021	12.2	LOS B	0.3	2.3	0.51	0.59	35.4
8	T1	20	0.0	0.048	25.0	LOS C	0.5	3.8	0.82	0.65	34.4
Approach		40	0.0	0.048	18.6	LOS B	0.5	3.8	0.67	0.62	34.9
All Vehicles		193	0.0	0.106	19.1	LOS B	1.5	10.6	0.66	0.65	35.4

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P2	East Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92
P3	North Full Crossing	50	25.8	LOS C	0.1	0.1	0.86	0.86
All Pedestrians		150	28.1	LOS C			0.90	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

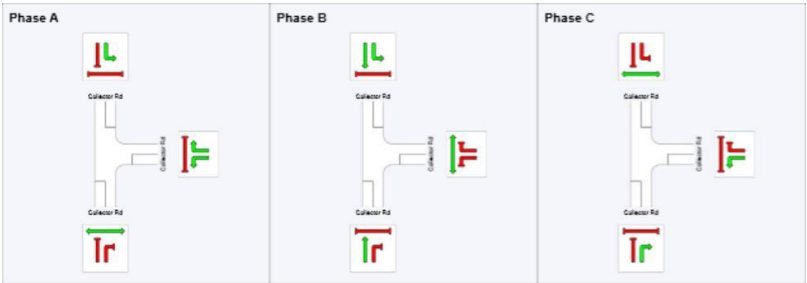
84

Site: Intersection 30 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

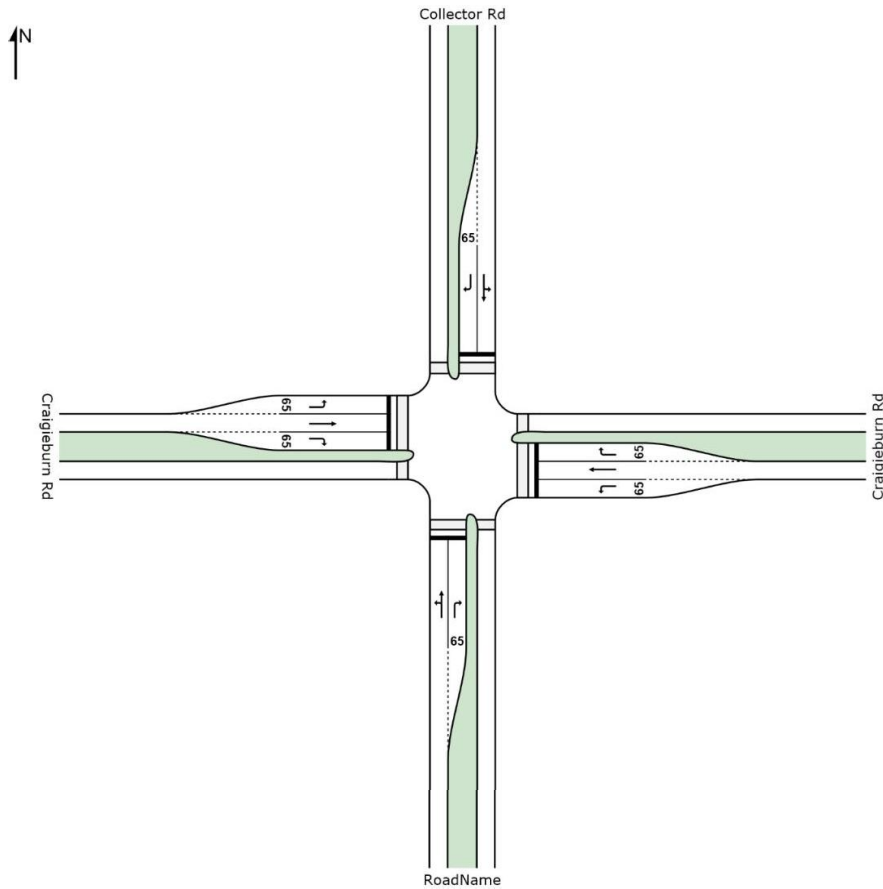
Phase Timing Results			
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	42
Green Time (sec)	15	15	22
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	21	28
Phase Split	30 %	30 %	40 %



SITE LAYOUT

Site: Intersection 31 AM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 31 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: RoadName											
1	L2	29	6.9	0.075	22.1	LOS C	1.0	7.4	0.72	0.65	42.7
2	T1	13	7.7	0.075	17.5	LOS B	1.0	7.4	0.72	0.65	39.0
3	R2	20	0.0	0.126	38.4	LOS D	0.7	4.7	0.95	0.69	36.1
Approach		62	4.8	0.126	26.4	LOS C	1.0	7.4	0.79	0.66	39.6
East: Craigieburn Rd											
4	L2	20	0.0	0.027	20.5	LOS C	0.4	2.9	0.63	0.69	48.5
5	T1	250	6.0	0.583	26.7	LOS C	7.9	57.8	0.94	0.78	50.4
6	R2	47	6.4	0.309	41.8	LOS D	1.6	12.0	0.97	0.74	35.8
Approach		317	5.7	0.583	28.6	LOS C	7.9	57.8	0.93	0.77	47.4
North: Collector Rd											
7	L2	223	5.8	0.526	25.6	LOS C	8.7	63.7	0.86	0.79	41.1
8	T1	83	6.0	0.526	21.0	LOS C	8.7	63.7	0.86	0.79	37.5
9	R2	33	6.1	0.216	39.1	LOS D	1.1	8.3	0.96	0.72	35.3
Approach		339	5.9	0.526	25.8	LOS C	8.7	63.7	0.87	0.78	39.6
West: Craigieburn Rd											
10	L2	50	6.0	0.070	21.0	LOS C	1.1	7.8	0.64	0.72	45.2
11	T1	326	6.1	0.761	30.6	LOS C	11.4	84.2	0.99	0.90	47.9
12	R2	53	5.7	0.346	42.0	LOS D	1.8	13.5	0.98	0.74	37.5
Approach		429	6.1	0.761	30.9	LOS C	11.4	84.2	0.95	0.86	46.0
All Vehicles		1147	5.8	0.761	28.5	LOS C	11.4	84.2	0.91	0.80	43.9

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	28.4	LOS C	0.0	0.0	0.90	0.90
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P3	North Full Crossing	20	28.4	LOS C	0.0	0.0	0.90	0.90
P4	West Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
All Pedestrians		80	28.8	LOS C			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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INTERSECTION 6

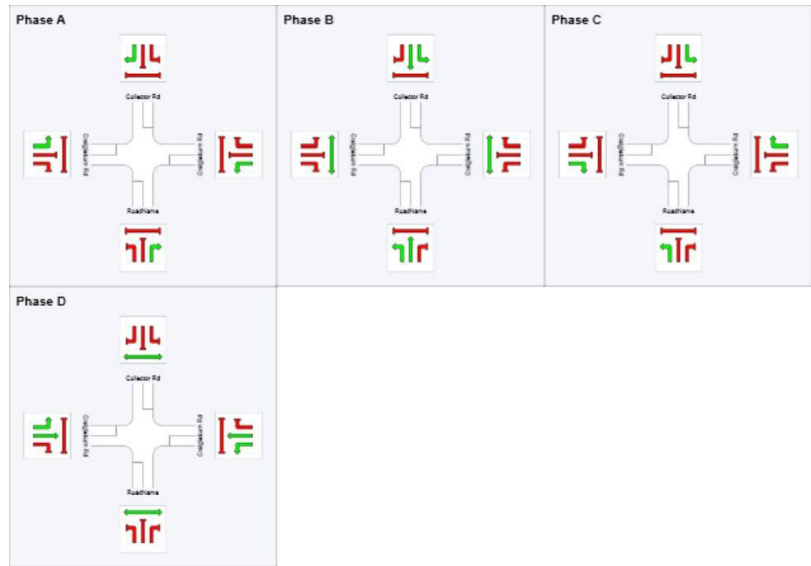
PHASING SUMMARY

Site: Intersection 31 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	12	36	48
Green Time (sec)	6	18	6	16
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	12	24	12	22
Phase Split	17 %	34 %	17 %	31 %



Processed: Friday, 25 July 2014 12:07:31 PM
SIDRA INTERSECTION 6.0.22.4722
Project: C:\Users\malonej\Desktop\MODELS\Intersection 31 2026.sip6
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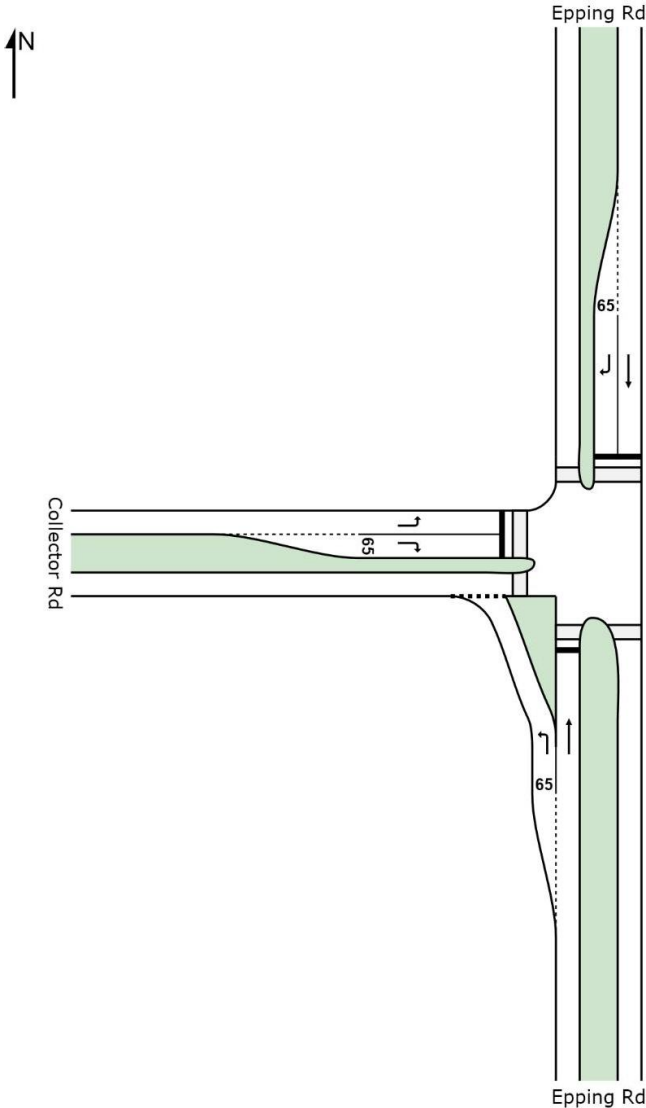
SIDRA
INTERSECTION 6

SITE LAYOUT

88

Site: Intersection 32 AM 2026

New Site
Signals - Fixed Time



MOVEMENT SUMMARY

89

Site: Intersection 32 AM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd											
1	L2	20	0.0	0.014	6.3	LOS A	0.1	0.5	0.19	0.58	50.0
2	T1	448	10.0	0.779	27.1	LOS C	15.4	116.9	0.97	0.93	41.5
Approach		468	9.6	0.779	26.2	LOS C	15.4	116.9	0.94	0.91	41.8
North: Epping Rd											
8	T1	457	10.1	0.794	27.9	LOS C	16.0	121.8	0.98	0.95	41.1
9	R2	36	11.1	0.098	29.9	LOS C	1.0	7.7	0.83	0.72	37.2
Approach		493	10.1	0.794	28.1	LOS C	16.0	121.8	0.97	0.93	40.8
West: Collector Rd											
10	L2	56	10.7	0.063	13.8	LOS B	1.0	7.3	0.53	0.66	44.0
12	R2	20	0.0	0.050	28.4	LOS C	0.6	3.9	0.82	0.68	37.5
Approach		76	7.9	0.063	17.6	LOS B	1.0	7.3	0.60	0.66	42.1
All Vehicles		1037	9.7	0.794	26.4	LOS C	16.0	121.8	0.93	0.90	41.4

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P3	North Full Crossing	20	29.3	LOS C	0.0	0.0	0.92	0.92
P4	West Full Crossing	20	23.2	LOS C	0.0	0.0	0.81	0.81
All Pedestrians		60	27.3	LOS C			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

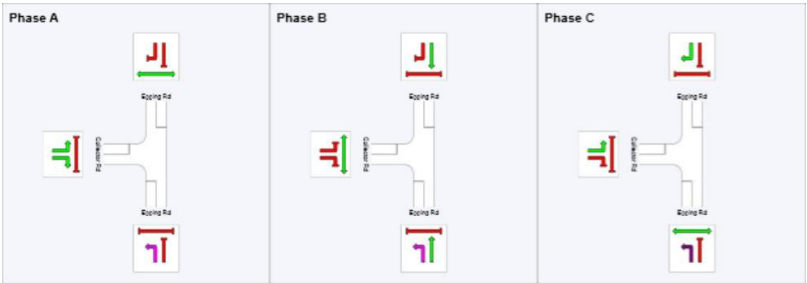
90

Site: Intersection 32 AM 2026

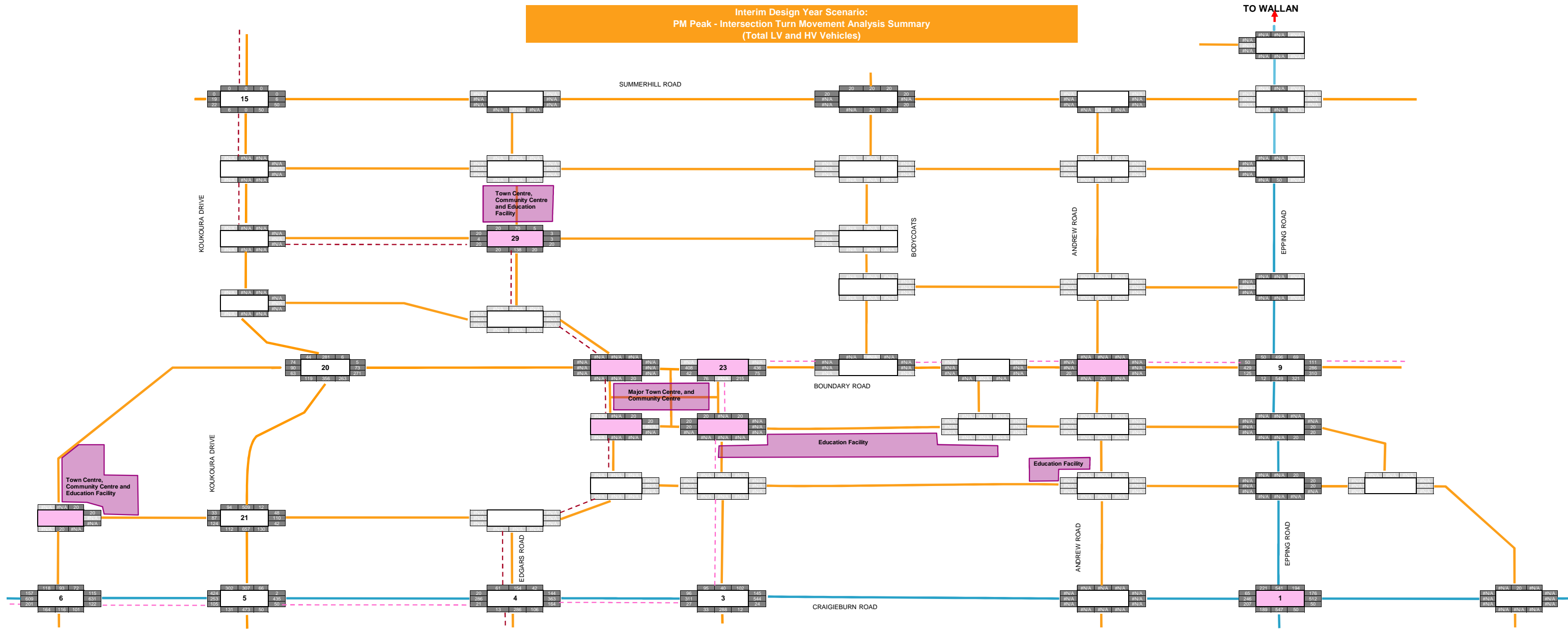
New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

Phase Timing Results			
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	21	49
Green Time (sec)	15	22	15
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	21	28	21
Phase Split	30 %	40 %	30 %



Interim Design Year Scenario:
PM Peak - Intersection Turn Movement Analysis Summary
(Total LV and HV Vehicles)



LEGEND

- Intersection with 50 pedestrians at each approach
- Intersection with 20 pedestrians at each approach
- Six traffic lane Arterial Road (three lanes in each direction)
- Four traffic lane Arterial Road (two lanes in each direction)
- Two traffic lane Arterial Road (one lane in each direction)
- Two traffic lane Collector Road (one lane in each direction)
- Bus priority route

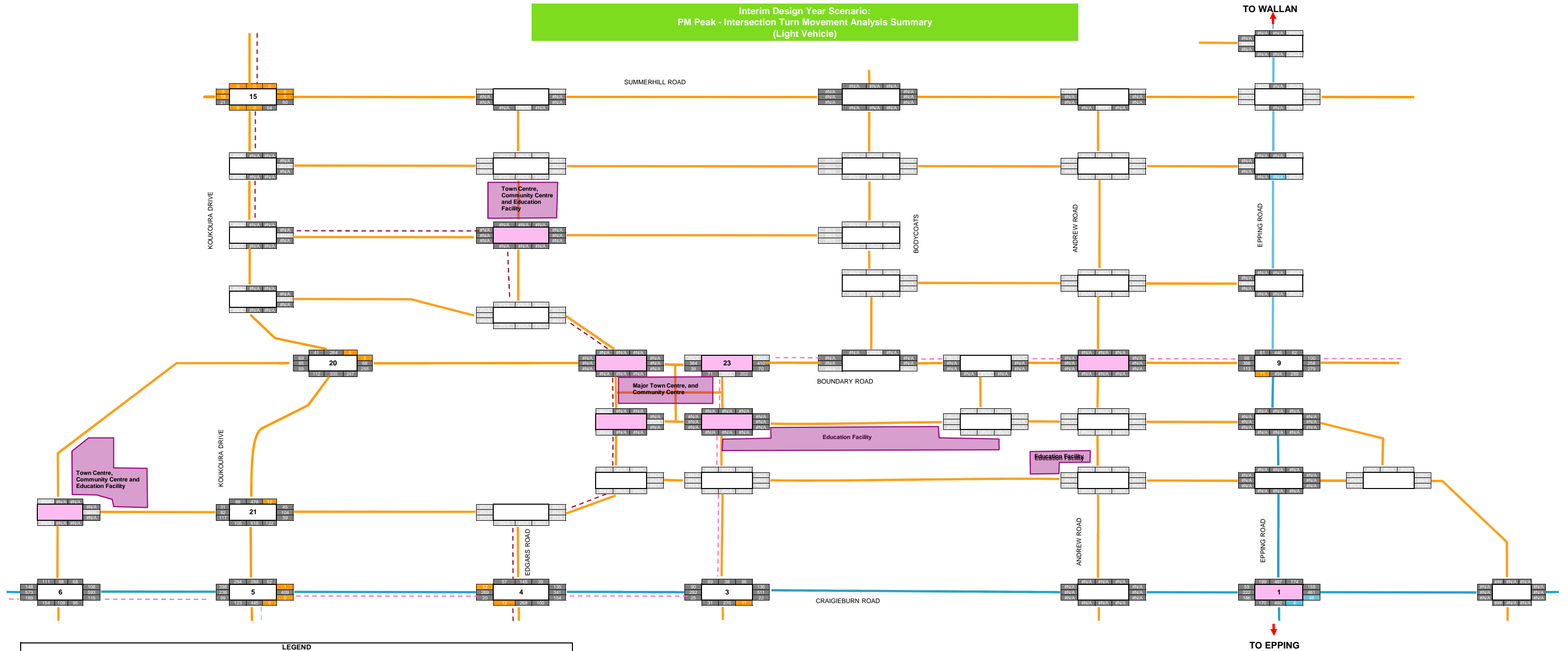
West Approach - Left Turn
West Approach - Through
West Approach - Right Turn

North Approach - Left Turn
North Approach - Through
North Approach - Right Turn
South Approach - Left Turn
South Approach - Through
South Approach - Right Turn

292	1040	96
398	500	82
308	500	0
192	0	0
143	308	0

East Approach - Right Turn
East Approach - Through
East Approach - Left Turn

Interim Design Year Scenario:
PM Peak - Intersection Turn Movement Analysis Summary
(Light Vehicle)

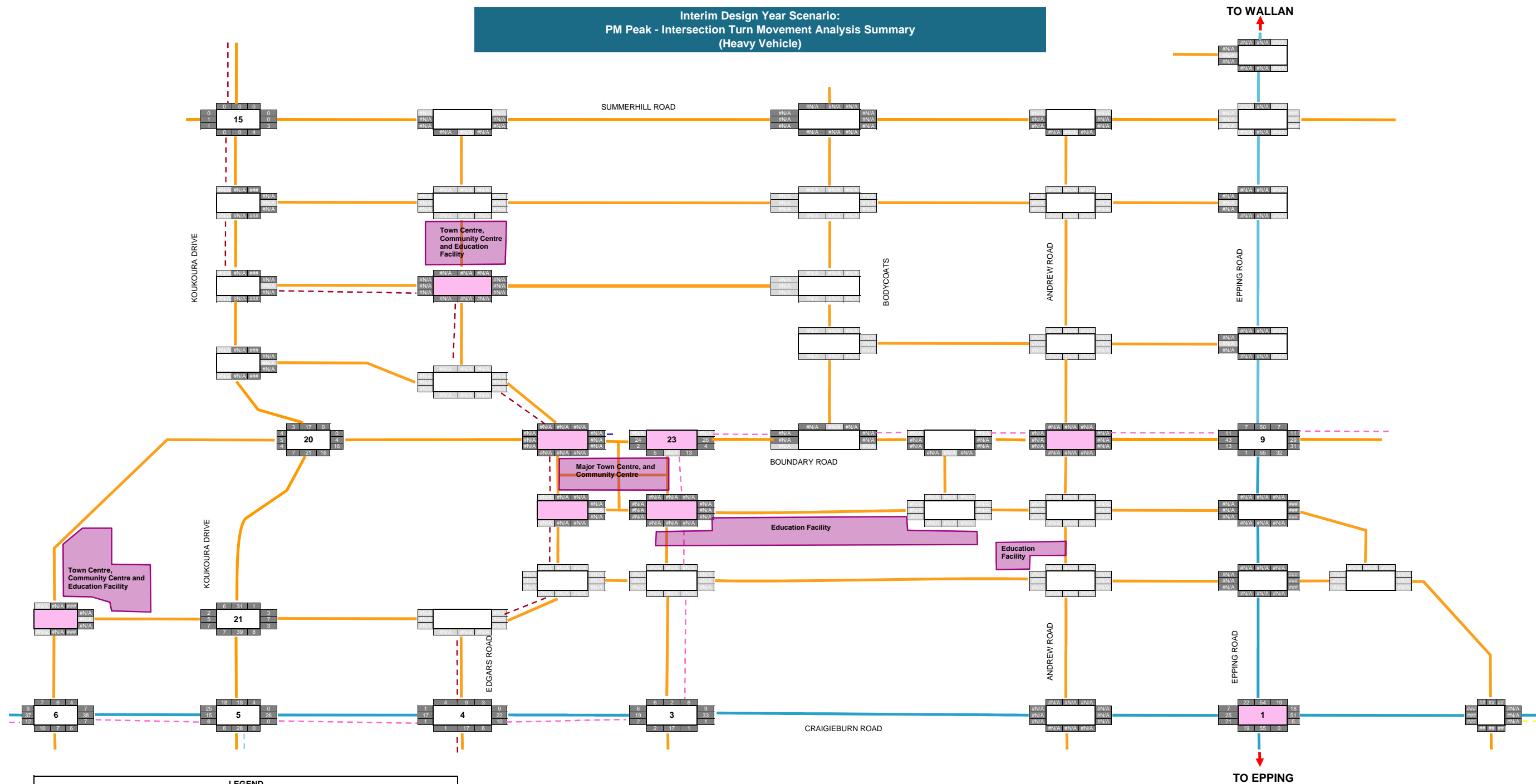


LEGEND

- A minimum total vehicle of 20 vehicles (LV + HV). If the total volumes less than 20 vehicles, an additional LV of up to 20 will be added to the turn movement to meet the minimum total vehicles.
eg. 3 input = 20 total volumes (LV & HV)
- A minimum total vehicle of 50 vehicles (LV + HV). If the total volumes less than 50 vehicles, an additional LV of up to 50 will be added to the turn movement to meet the minimum total vehicles.
eg. 3 input = 50 total volumes (LV & HV)
- Intersection with 50 pedestrians at each approach
- Intersection with 20 pedestrians at each approach
- Six traffic lane Arterial Road (three lanes in each direction)
- Four traffic lane Arterial Road (two lanes in each direction)
- Two traffic lane Arterial Road (one lane in each direction)
- Two traffic lane Collector Road (one lane in each direction)
- Bus priority route

North Approach - Left Turn	292	1040	96
North Approach - Through	398	82	500
North Approach - Right Turn	192	0	0
South Approach - Left Turn	143	308	0
South Approach - Through	398	82	500
South Approach - Right Turn	192	0	0

**Interim Design Year Scenario:
PM Peak - Intersection Turn Movement Analysis Summary
(Heavy Vehicle)**



LEGEND

- The diagram shows a four-way intersection with the following traffic volumes and pedestrian counts:

 - North Approach - Left Turn:** 19
 - North Approach - Through:** 66
 - North Approach - Right Turn:** 6
 - East Approach - Right Turn:** 5
 - East Approach - Through:** 32
 - East Approach - Left Turn:** 0
 - South Approach - Right Turn:** 9
 - South Approach - Through:** 20
 - South Approach - Left Turn:** 0
 - West Approach - Left Turn:** 25
 - West Approach - Through:** 12
 - West Approach - Right Turn:** 12

Intersection with 50 pedestrians at each approach

Intersection with 20 pedestrians at each approach

Six traffic lane Arterial Road (three lanes in each direction)

Four traffic lane Arterial Road (two lanes in each direction)

Two traffic lane Arterial Road (one lane in each direction)

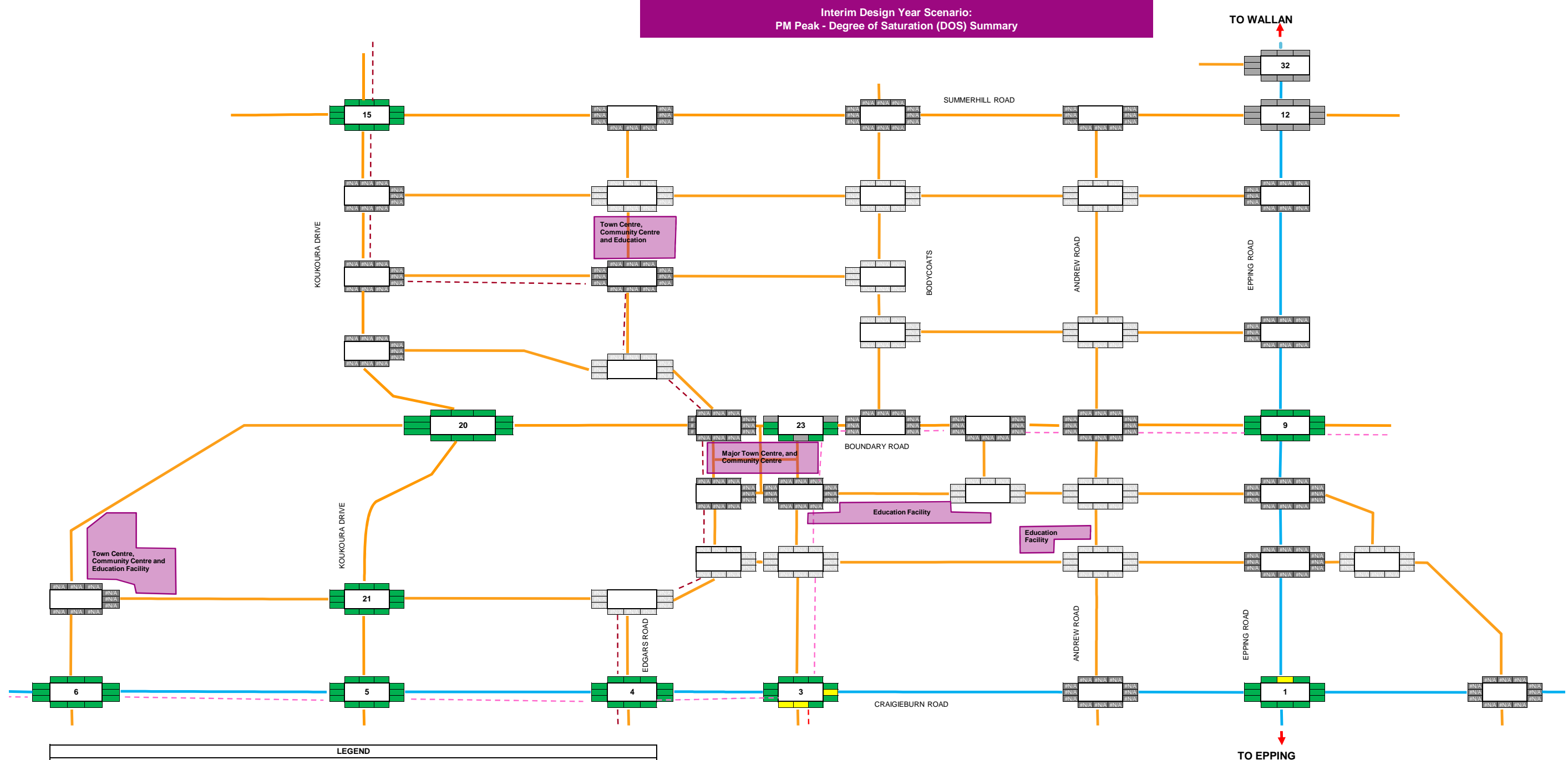
Two traffic lane Collector Road (one lane in each direction)

Bus priority route

Heavy Vehicle Assumptions:

 - 10% of LV are HV on Epping Road applied on all approaches
 - 6% of LV are HV on all other roads applied on all approaches

Interim Design Year Scenario:
PM Peak - Degree of Saturation (DOS) Summary



LEGEND

- Degree of Saturation greater than 1.00
- Degree of Saturation between 0.95 and 1.00
- Degree of Saturation between 0.85 and 0.95
- Degree of Saturation less than 0.85
- Intersection not analysed
- Six traffic lane Arterial Road (three lanes in each direction)
- Four traffic lane Arterial Road (two lanes in each direction)
- Two traffic lane Arterial Road (one lane in each direction)
- Two traffic lane Collector Road (one lane in each direction)
- Bus priority route

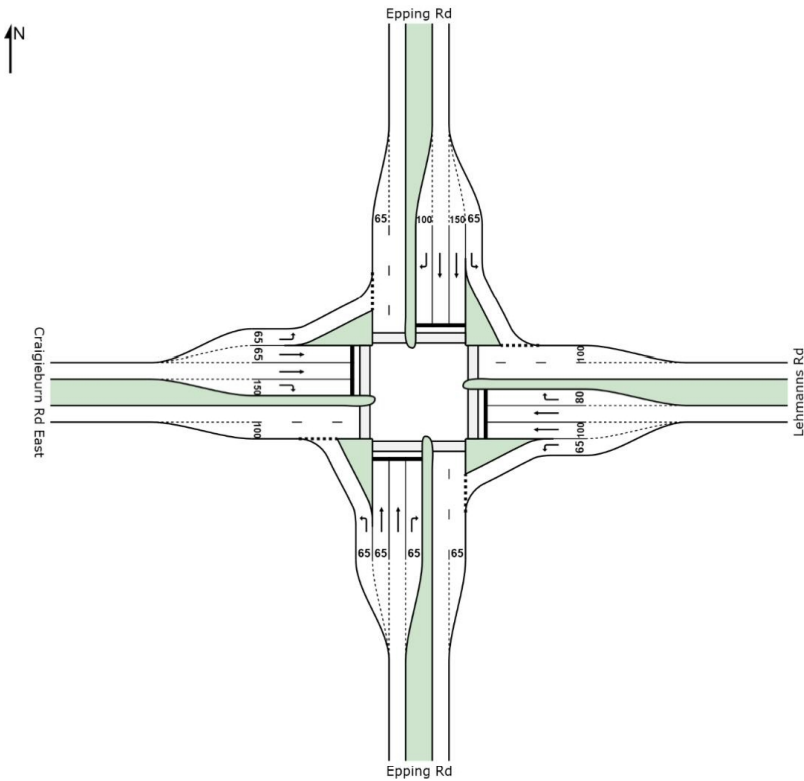
North Approach - Left Turn
North Approach - Through
North Approach - Right Turn
West Approach - Left Turn
West Approach - Through
West Approach - Right Turn
East Approach - Right Turn
East Approach - Through
East Approach - Left Turn
South Approach - Right Turn
South Approach - Through
South Approach - Left Turn

39

SITE LAYOUT

Site: Intersection 1 PM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 1 PM 2026

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd											
1	L2	189	10.1	0.185	17.4	LOS B	4.5	33.9	0.47	0.73	57.4
2	T1	547	10.1	0.830	49.7	LOS D	21.8	165.8	0.93	0.87	37.4
3	R2	50	0.0	0.170	55.8	LOS E	2.6	17.9	0.90	0.75	36.8
Approach		786	9.4	0.830	42.4	LOS D	21.8	165.8	0.82	0.83	40.8
East: Lehmanns Rd											
4	L2	53	9.4	0.055	16.1	LOS B	1.2	8.8	0.44	0.68	57.4
5	T1	512	10.0	0.812	50.1	LOS D	19.4	147.4	0.97	0.87	38.3
6	R2	177	10.2	0.681	61.7	LOS E	10.2	77.9	1.00	0.84	31.5
Approach		742	10.0	0.812	50.5	LOS D	19.4	147.4	0.94	0.85	37.3
North: Epping Rd											
7	L2	193	9.8	0.137	6.3	LOS A	1.0	7.4	0.15	0.59	56.1
8	T1	541	10.0	0.756	58.4	LOS E	21.1	160.0	0.94	1.06	40.0
9	R2	221	10.0	0.805	64.1	LOS E	13.6	103.4	1.00	0.91	29.8
Approach		955	9.9	0.805	49.2	LOS D	21.1	160.0	0.79	0.93	39.2
West: Craigieburn Rd East											
10	L2	66	10.6	0.067	15.0	LOS B	1.4	10.4	0.41	0.68	52.8
11	T1	47	53.2	0.094	40.5	LOS D	1.4	14.2	0.83	0.61	42.5
12	R2	207	10.1	0.797	66.1	LOS E	12.7	96.8	1.00	0.89	32.2
Approach		320	16.6	0.797	51.8	LOS D	12.7	96.8	0.85	0.81	36.4
All Vehicles		2803	10.6	0.830	47.9	LOS D	21.8	165.8	0.85	0.87	38.7

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	49.6	LOS E	0.2	0.2	0.91	0.91
P2	East Full Crossing	50	43.4	LOS E	0.1	0.1	0.85	0.85
P3	North Full Crossing	50	49.6	LOS E	0.2	0.2	0.91	0.91
P4	West Full Crossing	50	43.4	LOS E	0.1	0.1	0.85	0.85
All Pedestrians		200	46.5	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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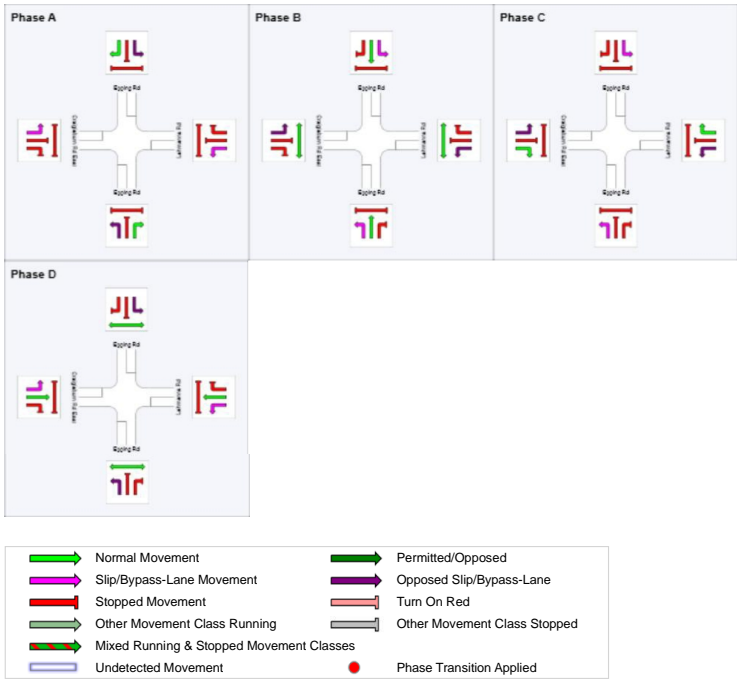
PHASING SUMMARY

Site: Intersection 1 PM 2026

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	25	64	88
Green Time (sec)	19	33	18	26
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	25	39	24	32
Phase Split	21 %	33 %	20 %	27 %



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SIDRA INTERSECTION 6.0.22.4722
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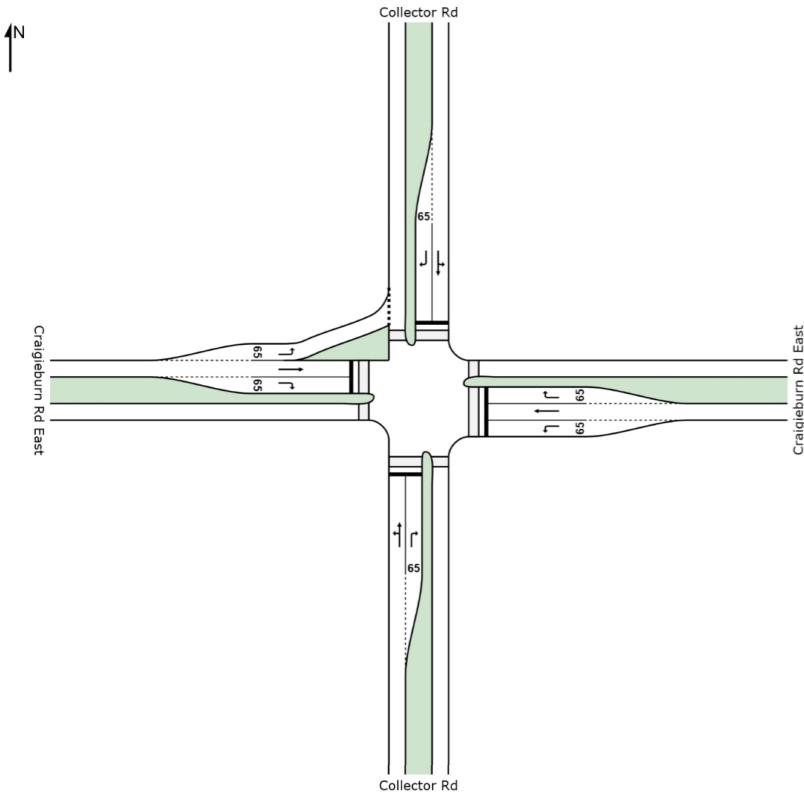
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 3 PM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 3 PM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	33	6.1	0.848	53.7	LOS D	17.1	126.0	1.00	1.03	32.0
2	T1	287	5.9	0.848	49.1	LOS D	17.1	126.0	1.00	1.03	29.8
3	R2	21	4.8	0.167	54.4	LOS D	1.0	7.4	0.97	0.70	30.8
Approach		341	5.9	0.848	49.9	LOS D	17.1	126.0	1.00	1.01	30.1
East: Craigieburn Rd East											
4	L2	23	4.3	0.025	19.3	LOS B	0.5	3.9	0.51	0.69	46.1
5	T1	544	6.1	0.849	36.1	LOS D	26.3	193.7	0.92	0.91	44.7
6	R2	145	6.2	0.815	61.4	LOS E	7.8	57.3	1.00	0.90	30.0
Approach		712	6.0	0.849	40.7	LOS D	26.3	193.7	0.92	0.90	40.6
North: Collector Rd											
7	L2	102	5.9	0.317	37.9	LOS D	5.7	41.9	0.86	0.75	36.2
8	T1	40	5.0	0.317	33.2	LOS C	5.7	41.9	0.86	0.75	33.4
9	R2	95	6.3	0.764	59.9	LOS E	5.1	37.4	1.00	0.90	29.4
Approach		237	5.9	0.764	45.9	LOS D	5.7	41.9	0.92	0.81	32.7
West: Craigieburn Rd East											
10	L2	96	6.3	0.084	12.6	LOS B	1.5	11.1	0.39	0.68	51.1
11	T1	311	6.1	0.425	24.0	LOS C	11.1	81.6	0.78	0.67	52.4
12	R2	27	7.4	0.153	53.0	LOS D	1.3	9.3	0.95	0.72	32.2
Approach		434	6.2	0.425	23.3	LOS C	11.1	81.6	0.70	0.67	50.2
All Vehicles		1724	6.0	0.849	38.8	LOS D	26.3	193.7	0.88	0.85	38.5

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	24.5	LOS C	0.0	0.0	0.70
P2	East Full Crossing	20	42.4	LOS E	0.1	0.1	0.92
P3	North Full Crossing	20	24.5	LOS C	0.0	0.0	0.70
P4	West Full Crossing	20	39.6	LOS D	0.1	0.1	0.89
All Pedestrians		80	32.8	LOS D			0.80

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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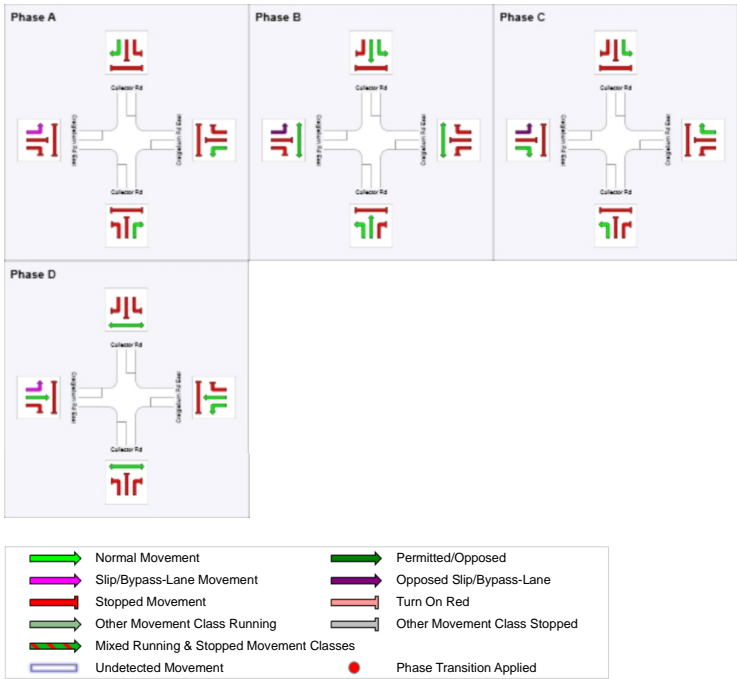
PHASING SUMMARY

Site: Intersection 3 PM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	13	39	55
Green Time (sec)	7	20	10	39
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	13	26	16	45
Phase Split	13 %	26 %	16 %	45 %



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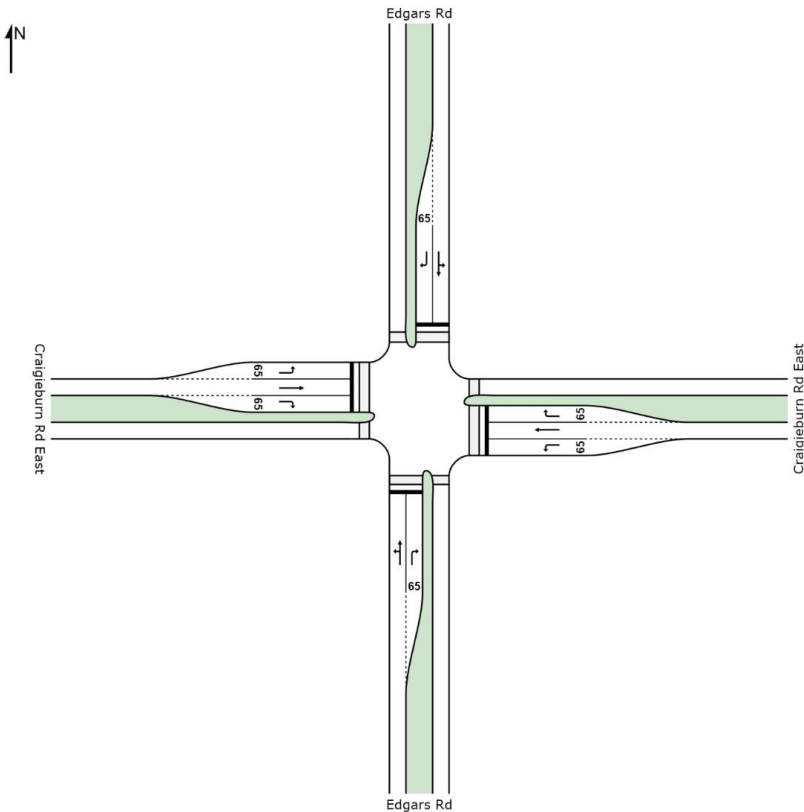
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SITE LAYOUT

Site: Intersection 4 PM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 4 PM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Edgars Rd											
1	L2	20	5.0	0.719	38.1	LOS D	11.7	85.7	0.98	0.88	39.7
2	T1	285	6.0	0.719	33.7	LOS C	11.7	85.7	0.98	0.88	36.3
3	R2	106	5.7	0.679	47.7	LOS D	4.4	32.4	1.00	0.84	34.5
Approach		411	5.8	0.719	37.5	LOS D	11.7	85.7	0.98	0.87	35.9
East: Craigieburn Rd East											
4	L2	164	6.1	0.211	22.1	LOS C	4.0	29.2	0.66	0.76	47.4
5	T1	363	6.1	0.704	29.5	LOS C	13.3	97.9	0.96	0.84	48.6
6	R2	144	6.3	0.720	47.8	LOS D	6.0	44.0	1.00	0.85	33.8
Approach		671	6.1	0.720	31.6	LOS C	13.3	97.9	0.89	0.82	44.1
North: Edgars Rd											
7	L2	42	7.1	0.457	33.4	LOS C	6.7	49.4	0.90	0.79	38.6
8	T1	154	5.8	0.457	30.5	LOS C	6.7	49.4	0.90	0.79	37.8
9	R2	61	6.6	0.393	44.4	LOS D	2.4	17.8	0.98	0.75	33.5
Approach		257	6.2	0.457	34.3	LOS C	6.7	49.4	0.92	0.78	36.8
West: Craigieburn Rd East											
10	L2	20	5.0	0.025	20.6	LOS C	0.4	3.2	0.59	0.69	45.4
11	T1	286	5.9	0.554	27.2	LOS C	9.7	71.6	0.91	0.77	50.1
12	R2	21	4.8	0.104	42.6	LOS D	0.8	5.6	0.93	0.70	37.3
Approach		327	5.8	0.554	27.8	LOS C	9.7	71.6	0.89	0.76	48.7
All Vehicles		1666	6.0	0.720	32.7	LOS C	13.3	97.9	0.92	0.81	41.3

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	28.1	LOS C	0.0	0.0	0.84
P2	East Full Crossing	20	34.3	LOS D	0.0	0.0	0.93
P3	North Full Crossing	20	28.1	LOS C	0.0	0.0	0.84
P4	West Full Crossing	20	34.3	LOS D	0.0	0.0	0.93
All Pedestrians		80	31.2	LOS D			0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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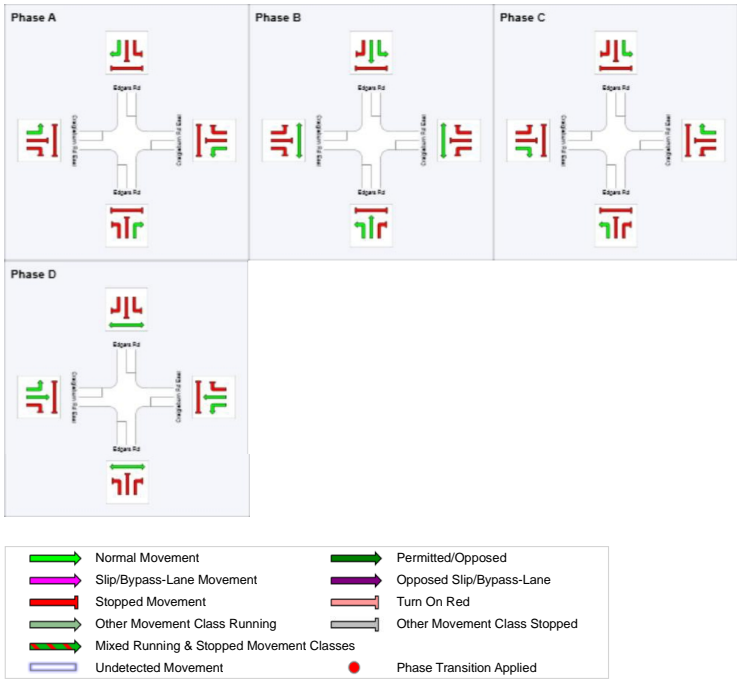
PHASING SUMMARY

Site: Intersection 4 PM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	13	37	52
Green Time (sec)	7	18	9	22
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	13	24	15	28
Phase Split	16 %	30 %	19 %	35 %



Processed: Friday, 25 July 2014 10:37:00 AM
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Project: C:\Users\malone\Desktop\MODELS\Intersection 4 2026.sip6
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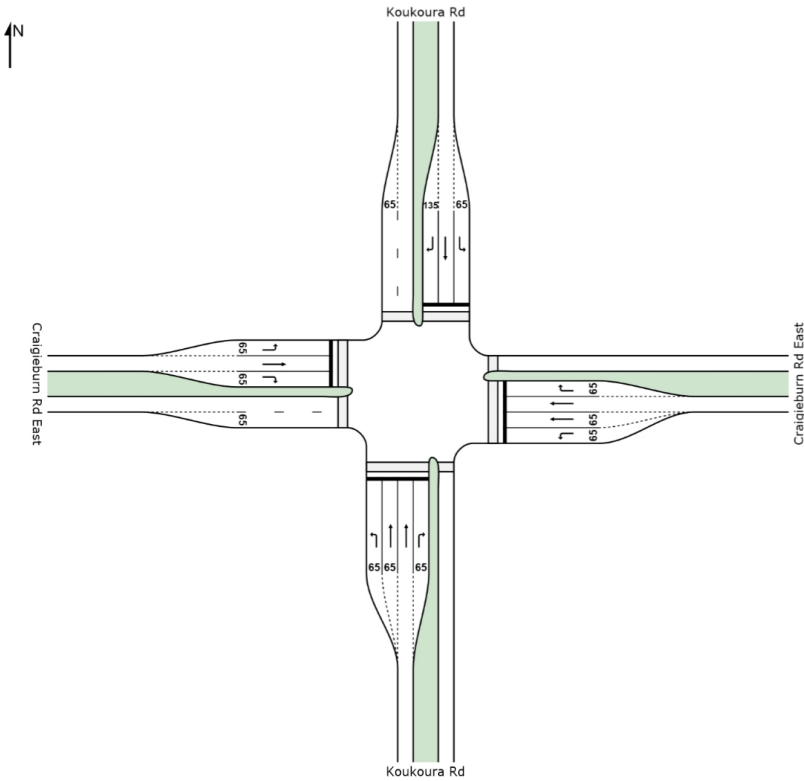
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 5 PM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 5 PM 2026

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Rd											
1	L2	131	6.1	0.192	31.8	LOS C	5.1	37.2	0.70	0.75	40.5
2	T1	473	5.9	0.744	43.9	LOS D	18.2	134.1	0.94	0.81	34.9
3	R2	20	0.0	0.046	43.6	LOS D	0.9	6.3	0.80	0.69	36.6
Approach		624	5.8	0.744	41.4	LOS D	18.2	134.1	0.88	0.80	36.0
East: Craigieburn Rd East											
4	L2	20	0.0	0.021	21.8	LOS C	0.6	3.9	0.51	0.68	47.7
5	T1	435	6.0	0.720	45.0	LOS D	16.9	124.2	0.94	0.80	40.4
6	R2	20	0.0	0.129	63.7	LOS E	1.1	7.8	0.96	0.71	32.5
Approach		475	5.5	0.720	44.8	LOS D	16.9	124.2	0.93	0.79	40.3
North: Koukoura Rd											
7	L2	66	6.1	0.097	32.2	LOS C	2.4	18.0	0.67	0.73	44.1
8	T1	307	5.9	0.659	45.9	LOS D	16.2	119.4	0.95	0.83	37.0
9	R2	302	6.0	0.727	54.5	LOS D	16.8	123.8	0.98	0.86	34.9
Approach		675	5.9	0.727	48.4	LOS D	16.8	123.8	0.94	0.83	36.6
West: Craigieburn Rd East											
10	L2	423	5.9	0.481	26.6	LOS C	15.5	114.0	0.68	0.80	47.4
11	T1	253	5.9	0.577	44.3	LOS D	13.2	97.4	0.94	0.79	40.7
12	R2	105	5.7	0.706	69.5	LOS E	6.4	47.2	1.00	0.83	29.6
Approach		781	5.9	0.706	38.1	LOS D	15.5	114.0	0.81	0.80	41.8
All Vehicles		2555	5.8	0.744	42.9	LOS D	18.2	134.1	0.88	0.81	38.6

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	47.7	LOS E	0.1	0.1	0.89
P2	East Full Crossing	20	46.0	LOS E	0.1	0.1	0.88
P3	North Full Crossing	20	47.7	LOS E	0.1	0.1	0.89
P4	West Full Crossing	20	46.0	LOS E	0.1	0.1	0.88
All Pedestrians		80	46.9	LOS E			0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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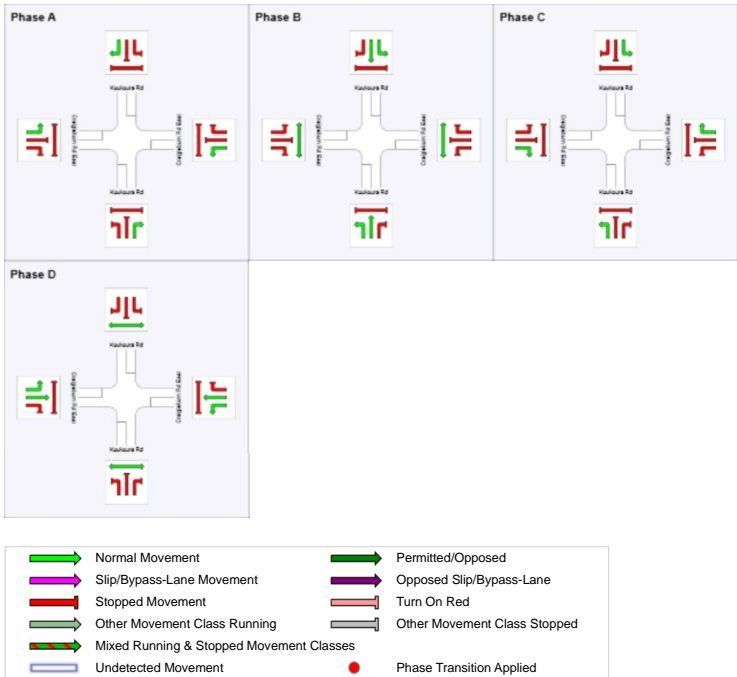
PHASING SUMMARY

Site: Intersection 5 PM 2026

New Site
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	34	70	86
Green Time (sec)	28	30	10	28
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	34	36	16	34
Phase Split	28 %	30 %	13 %	28 %



Processed: Thursday, 21 August 2014 1:13:48 PM
SIDRA INTERSECTION 6.0.22.4722
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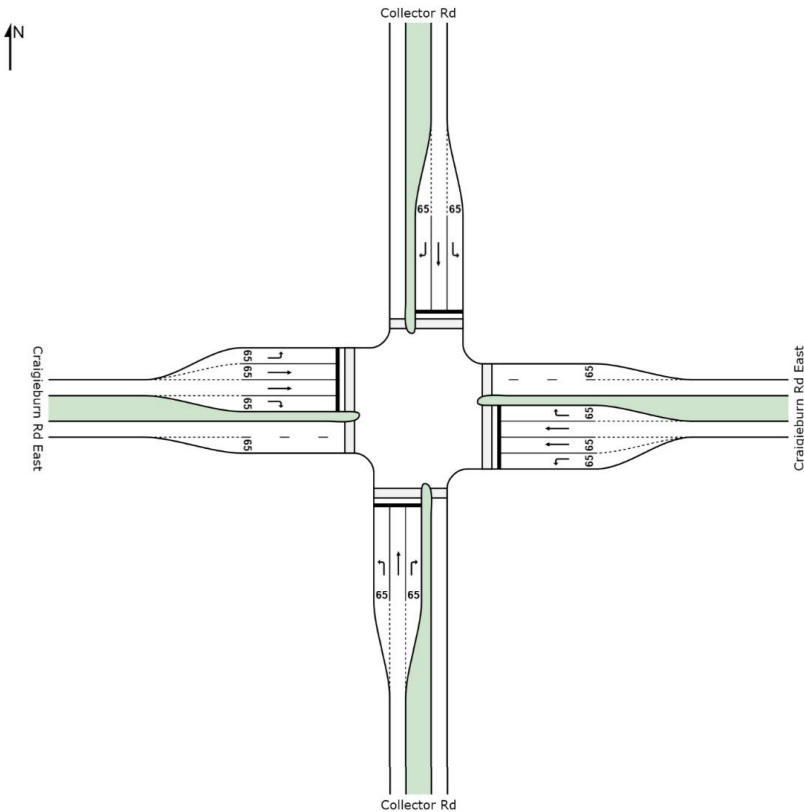
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SIDRA
INTERSECTION 6

SITE LAYOUT

Site: Intersection 6 PM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 6 PM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	164	6.1	0.214	23.7	LOS C	5.0	36.7	0.66	0.73	41.4
2	T1	116	6.0	0.269	34.4	LOS C	4.7	34.6	0.86	0.69	34.1
3	R2	101	5.9	0.709	57.6	LOS E	5.2	38.6	1.00	0.86	30.1
Approach		381	6.0	0.709	35.9	LOS D	5.2	38.6	0.81	0.75	35.5
East: Craigieburn Rd East											
4	L2	122	5.7	0.152	24.3	LOS C	3.5	25.5	0.62	0.75	43.4
5	T1	631	6.0	0.835	36.7	LOS D	21.9	161.1	0.92	0.86	44.4
6	R2	115	6.1	0.461	51.3	LOS D	5.3	39.4	0.96	0.79	33.0
Approach		868	6.0	0.835	36.9	LOS D	21.9	161.1	0.88	0.83	42.3
North: Collector Rd											
7	L2	72	5.6	0.094	22.6	LOS C	2.1	15.1	0.62	0.69	42.0
8	T1	94	6.4	0.218	33.9	LOS C	3.8	27.7	0.85	0.67	34.2
9	R2	118	5.9	0.828	61.3	LOS E	6.4	47.3	1.00	0.97	29.2
Approach		284	6.0	0.828	42.4	LOS D	6.4	47.3	0.86	0.80	33.4
West: Craigieburn Rd East											
10	L2	157	5.7	0.196	24.7	LOS C	4.6	33.6	0.64	0.76	43.2
11	T1	610	6.1	0.827	36.1	LOS D	20.6	151.4	0.91	0.84	44.7
12	R2	201	6.0	0.806	58.2	LOS E	10.5	77.6	1.00	0.90	31.1
Approach		968	6.0	0.827	38.8	LOS D	20.6	151.4	0.88	0.84	40.8
All Vehicles		2501	6.0	0.835	38.1	LOS D	21.9	161.1	0.87	0.82	39.4

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	32.8	LOS D	0.0	0.0	0.81
P2	East Full Crossing	20	44.2	LOS E	0.1	0.1	0.94
P3	North Full Crossing	20	32.8	LOS D	0.0	0.0	0.81
P4	West Full Crossing	20	44.2	LOS E	0.1	0.1	0.94
All Pedestrians		80	38.5	LOS D			0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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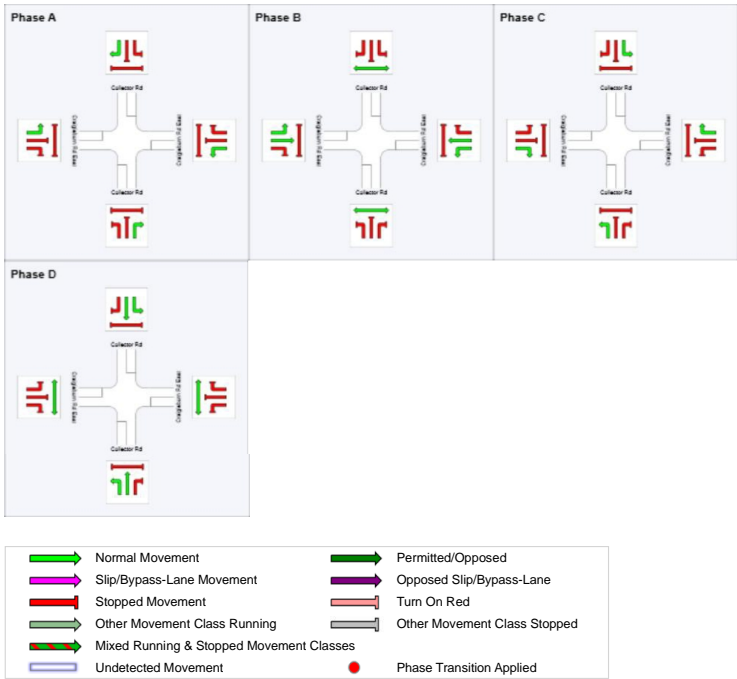
PHASING SUMMARY

Site: Intersection 6 PM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	14	51	71
Green Time (sec)	8	31	14	23
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	14	37	20	29
Phase Split	14 %	37 %	20 %	29 %



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Project: C:\Users\malone\Desktop\MODELS\Intersection 6 2026.sip6
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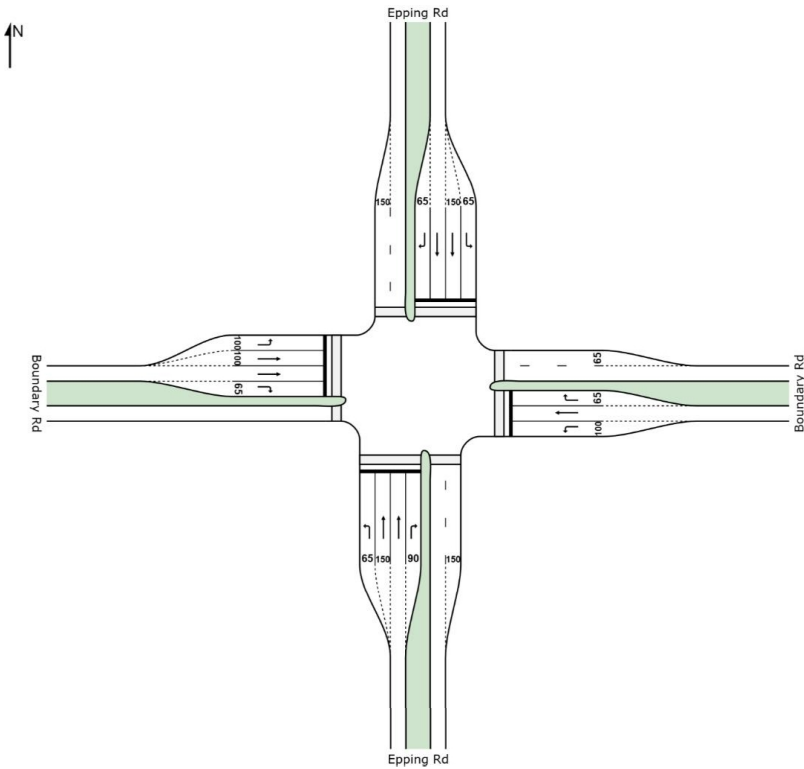
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SIDRA
INTERSECTION 6

SITE LAYOUT

Site: Intersection 9 PM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 9 PM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd											
1	L2	20	5.0	0.031	27.6	LOS C	0.6	4.5	0.67	0.68	40.4
2	T1	549	10.0	0.779	42.2	LOS D	14.9	113.2	0.99	0.88	35.5
3	R2	321	10.0	0.805	50.2	LOS D	16.3	123.8	1.00	0.92	33.4
Approach		890	9.9	0.805	44.8	LOS D	16.3	123.8	0.98	0.89	34.8
East: Boundary Rd											
4	L2	310	10.0	0.344	22.1	LOS C	8.8	66.6	0.62	0.78	47.3
5	T1	287	10.1	0.682	41.3	LOS D	13.1	100.0	0.97	0.84	38.9
6	R2	111	9.9	0.711	59.5	LOS E	5.7	43.6	1.00	0.84	32.1
Approach		708	10.0	0.711	35.7	LOS D	13.1	100.0	0.82	0.81	40.7
North: Epping Rd											
7	L2	69	10.1	0.111	28.5	LOS C	2.2	17.0	0.70	0.72	41.5
8	T1	496	10.1	0.704	40.3	LOS D	12.8	97.0	0.97	0.83	36.2
9	R2	68	10.3	0.171	39.3	LOS D	2.7	20.5	0.84	0.74	36.0
Approach		633	10.1	0.704	38.9	LOS D	12.8	97.0	0.93	0.81	36.7
West: Boundary Rd											
10	L2	109	10.1	0.121	18.7	LOS B	2.7	20.4	0.54	0.70	44.7
11	T1	429	10.0	0.717	43.4	LOS D	14.2	107.6	0.95	0.87	39.9
12	R2	126	10.3	0.809	60.9	LOS E	6.8	51.7	1.00	0.93	29.7
Approach		664	10.1	0.809	42.7	LOS D	14.2	107.6	0.89	0.86	38.1
All Vehicles		2895	10.0	0.809	40.8	LOS D	16.3	123.8	0.91	0.84	37.3

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	44.2	LOS E	0.1	0.1	0.94
P2	East Full Crossing	20	44.2	LOS E	0.1	0.1	0.94
P3	North Full Crossing	20	44.2	LOS E	0.1	0.1	0.94
P4	West Full Crossing	20	44.2	LOS E	0.1	0.1	0.94
All Pedestrians		80	44.2	LOS E			0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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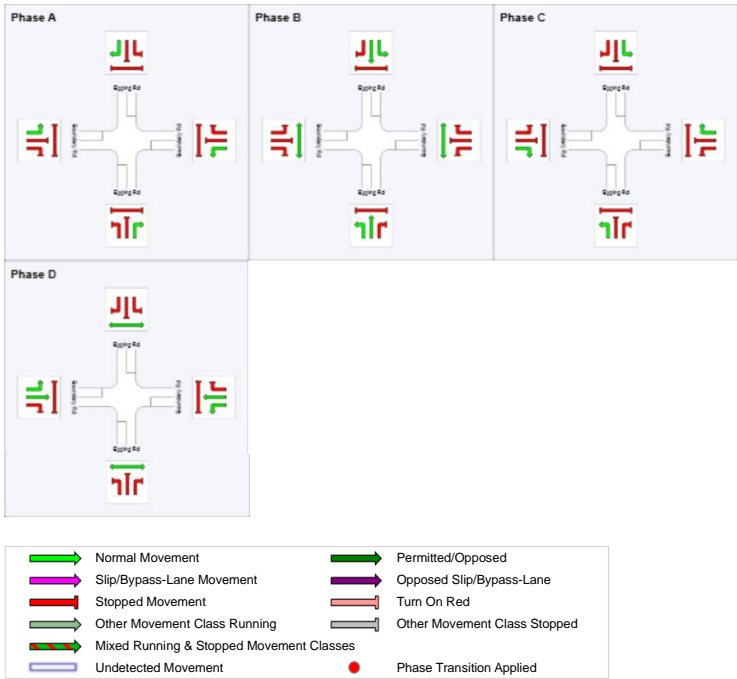
PHASING SUMMARY

Site: Intersection 9 PM 2026

New Site
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	29	56	71
Green Time (sec)	23	21	9	23
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	29	27	15	29
Phase Split	29 %	27 %	15 %	29 %



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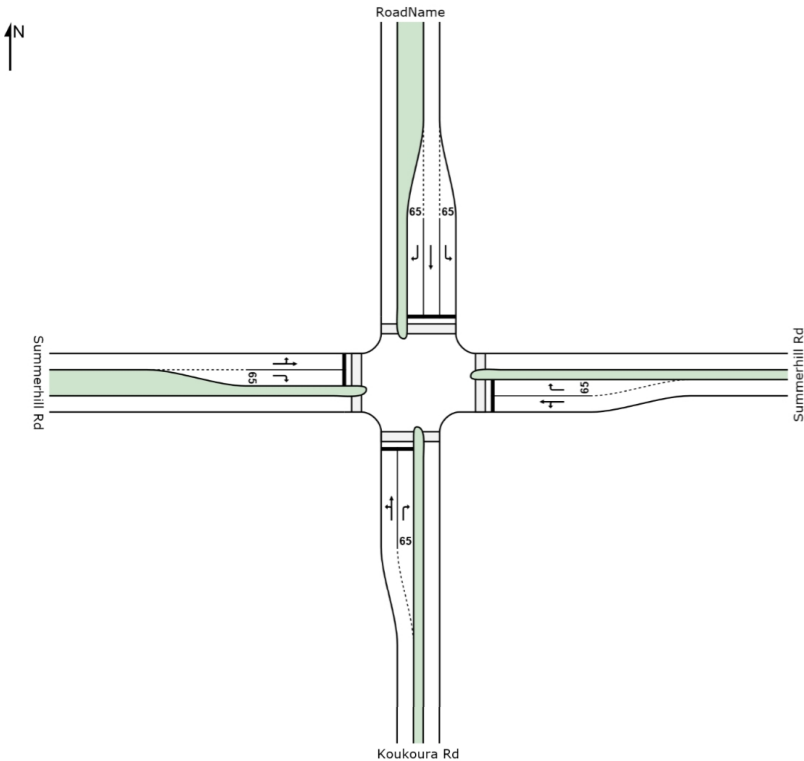
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SIDRA
INTERSECTION 6

SITE LAYOUT

Site: Intersection 15 PM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 15 PM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Rd											
1	L2	20	0.0	0.087	29.3	LOS C	1.1	7.5	0.80	0.66	48.9
2	T1	20	0.0	0.087	22.4	LOS C	1.1	7.5	0.80	0.66	51.1
3	R2	68	5.9	0.382	41.0	LOS D	2.3	17.1	0.97	0.76	39.8
Approach		108	3.7	0.382	35.4	LOS D	2.3	17.1	0.91	0.72	43.0
East: Summerhill Rd											
4	L2	53	5.7	0.124	24.9	LOS C	1.8	12.8	0.73	0.70	49.8
5	T1	20	0.0	0.124	17.9	LOS B	1.8	12.8	0.73	0.70	53.4
6	R2	20	0.0	0.126	40.8	LOS D	0.7	4.7	0.95	0.70	40.8
Approach		93	3.2	0.126	26.8	LOS C	1.8	12.8	0.78	0.70	48.2
North: RoadName											
7	L2	20	0.0	0.126	40.8	LOS D	0.7	4.7	0.95	0.70	40.7
8	T1	20	0.0	0.048	23.8	LOS C	0.5	3.8	0.82	0.59	52.6
9	R2	20	0.0	0.108	39.3	LOS D	0.7	4.6	0.94	0.70	41.3
Approach		60	0.0	0.126	34.6	LOS C	0.7	4.7	0.90	0.66	44.3
West: Summerhill Rd											
10	L2	20	0.0	0.075	26.7	LOS C	1.0	7.2	0.76	0.65	50.6
11	T1	20	5.0	0.075	19.8	LOS B	1.0	7.2	0.76	0.65	53.0
12	R2	22	4.5	0.143	40.9	LOS D	0.7	5.4	0.96	0.70	40.0
Approach		62	3.2	0.143	29.5	LOS C	1.0	7.2	0.83	0.67	46.9
All Vehicles		323	2.8	0.382	31.6	LOS C	2.3	17.1	0.86	0.69	45.4

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	26.6	LOS C	0.0	0.0	0.87
P2	East Full Crossing	20	29.3	LOS C	0.0	0.0	0.92
P3	North Full Crossing	50	29.3	LOS C	0.1	0.1	0.92
P4	West Full Crossing	20	29.3	LOS C	0.0	0.0	0.92
All Pedestrians		110	28.8	LOS C			0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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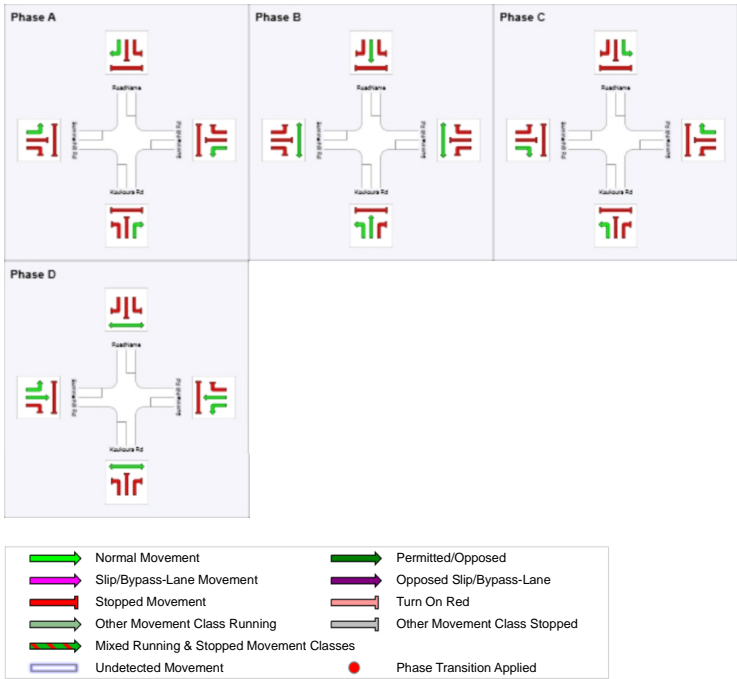
PHASING SUMMARY

Site: Intersection 15 PM 2026

New Site
Signals - Fixed Time Cycle Time = 70 seconds (Practical Cycle Time)

Phase times determined by the program
Sequence: Leading Right Turn
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	13	34	46
Green Time (sec)	7	15	6	18
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	13	21	12	24
Phase Split	19 %	30 %	17 %	34 %



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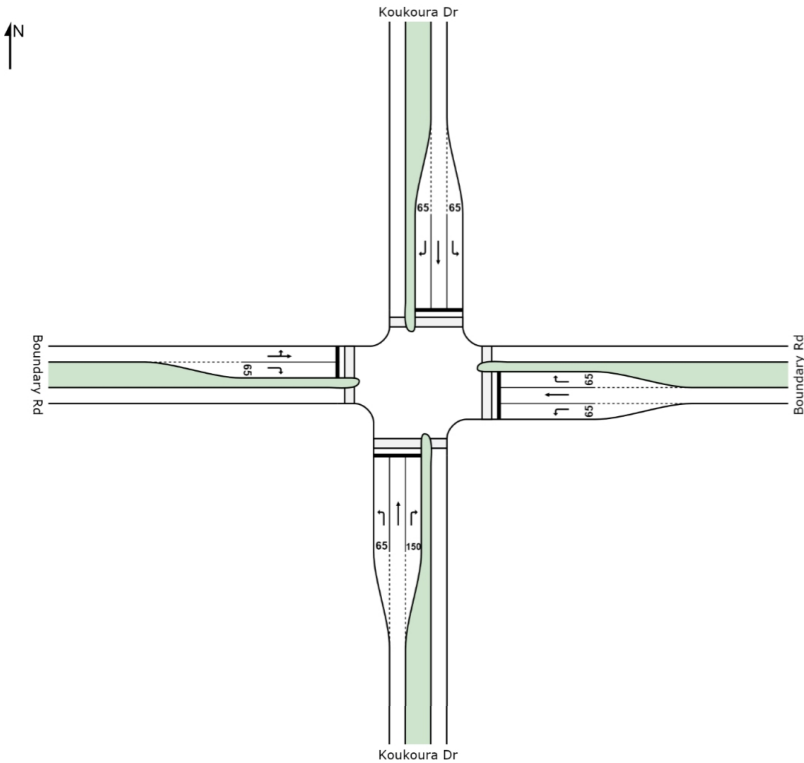
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 20 PM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 20 PM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Dr											
1	L2	119	5.9	0.272	43.4	LOS D	5.2	38.2	0.85	0.78	35.4
2	T1	356	5.9	0.809	46.6	LOS D	19.3	142.1	0.99	0.92	39.6
3	R2	263	6.1	0.602	47.2	LOS D	12.7	93.2	0.94	0.83	35.8
Approach		738	6.0	0.809	46.3	LOS D	19.3	142.1	0.95	0.87	37.5
East: Boundary Rd											
4	L2	271	5.9	0.797	56.4	LOS E	15.1	110.9	1.00	0.90	31.9
5	T1	72	5.6	0.200	41.9	LOS D	3.3	24.1	0.88	0.71	33.6
6	R2	5	0.0	0.014	44.1	LOS D	0.2	1.5	0.83	0.65	36.3
Approach		348	5.7	0.797	53.2	LOS D	15.1	110.9	0.97	0.86	32.3
North: Koukoura Dr											
7	L2	20	0.0	0.059	47.1	LOS D	0.9	6.2	0.86	0.71	35.8
8	T1	281	6.0	0.824	52.9	LOS D	16.0	117.8	1.00	0.94	37.1
9	R2	44	6.8	0.137	48.0	LOS D	2.0	14.8	0.87	0.74	33.7
Approach		345	5.8	0.824	52.0	LOS D	16.0	117.8	0.98	0.90	36.5
West: Boundary Rd											
10	L2	73	5.5	0.542	51.2	LOS D	8.2	60.3	0.97	0.80	32.3
11	T1	90	5.6	0.542	48.3	LOS D	8.2	60.3	0.97	0.80	31.6
12	R2	63	6.3	0.217	48.3	LOS D	3.0	22.0	0.91	0.75	32.4
Approach		226	5.8	0.542	49.2	LOS D	8.2	60.3	0.95	0.79	32.1
All Vehicles		1657	5.9	0.824	49.3	LOS D	19.3	142.1	0.96	0.86	35.3

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	46.4	LOS E	0.1	0.1	0.92	0.92
P2	East Full Crossing	20	47.3	LOS E	0.1	0.1	0.93	0.93
P3	North Full Crossing	20	49.2	LOS E	0.1	0.1	0.95	0.95
P4	West Full Crossing	20	38.5	LOS D	0.1	0.1	0.84	0.84
All Pedestrians		80	45.4	LOS E			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Processed: Friday, 15 August 2014 2:41:11 PM
SIDRA INTERSECTION 6.0.22.4722
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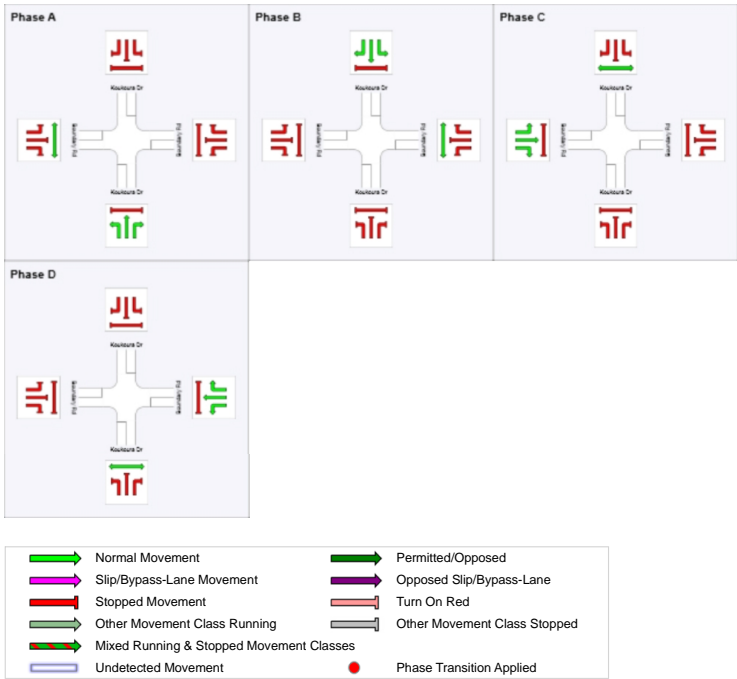
PHASING SUMMARY

Site: Intersection 20 PM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Split Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	33	59	83
Green Time (sec)	27	20	18	21
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	33	26	24	27
Phase Split	30 %	24 %	22 %	25 %



Processed: Friday, 15 August 2014 2:41:11 PM
SIDRA INTERSECTION 6.0.22.4722
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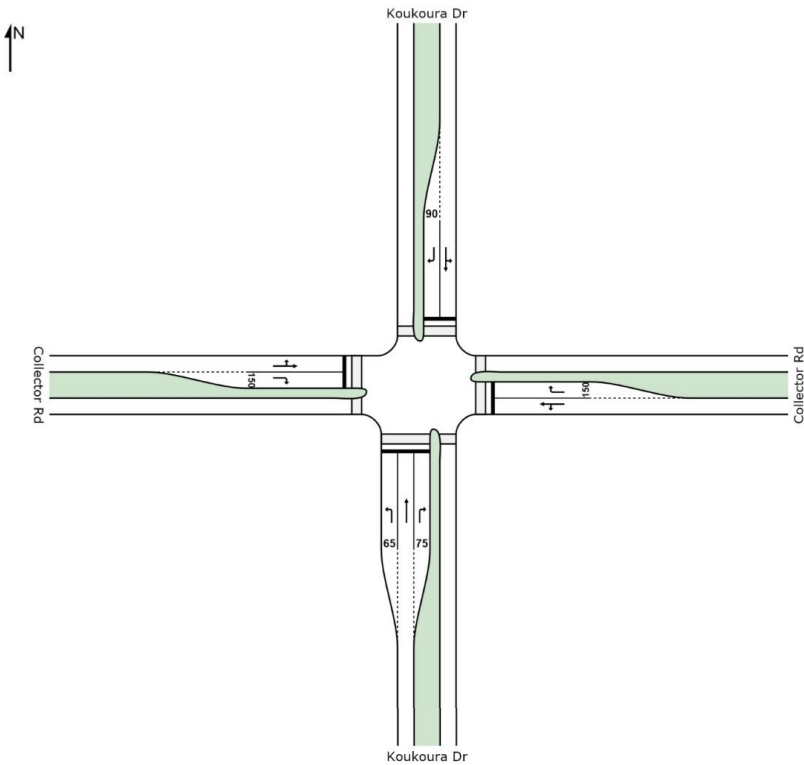
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SIDRA
INTERSECTION 6

SITE LAYOUT

Site: Intersection 21 PM 2026

New Site
Signals - Fixed Time



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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 21 PM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Koukoura Dr											
1	L2	112	6.3	0.108	17.9	LOS B	2.6	19.4	0.47	0.72	47.0
2	T1	657	5.9	0.830	29.7	LOS C	31.0	228.1	0.88	0.84	48.5
3	R2	130	6.2	0.804	66.5	LOS E	7.6	55.9	1.00	0.88	28.8
Approach		899	6.0	0.830	33.5	LOS C	31.0	228.1	0.84	0.83	43.9
East: Collector Rd											
4	L2	42	7.1	0.507	50.9	LOS D	7.7	56.7	0.96	0.78	32.5
5	T1	111	6.3	0.507	46.3	LOS D	7.7	56.7	0.96	0.78	30.3
6	R2	48	6.3	0.186	31.6	LOS C	1.7	12.3	0.91	0.73	37.9
Approach		201	6.5	0.507	43.7	LOS D	7.7	56.7	0.95	0.77	32.3
North: Koukoura Dr											
7	L2	20	5.0	0.597	29.2	LOS C	20.5	150.8	0.78	0.70	44.3
8	T1	509	6.1	0.597	22.1	LOS C	20.5	150.8	0.78	0.70	53.6
9	R2	94	6.4	0.582	61.5	LOS E	5.1	37.8	1.00	0.79	30.0
Approach		623	6.1	0.597	28.3	LOS C	20.5	150.8	0.82	0.72	47.6
West: Collector Rd											
10	L2	33	6.1	0.396	49.9	LOS D	5.9	43.3	0.94	0.76	32.9
11	T1	87	5.7	0.396	45.3	LOS D	5.9	43.3	0.94	0.76	30.6
12	R2	124	5.6	0.478	33.2	LOS C	4.6	33.4	0.96	0.78	37.5
Approach		244	5.7	0.478	39.7	LOS D	5.9	43.3	0.95	0.77	34.1
All Vehicles		1967	6.0	0.830	33.7	LOS C	31.0	228.1	0.86	0.78	41.9

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	20	49.2	LOS E	0.1	0.1	0.95	0.95
P2	East Full Crossing	20	20.4	LOS C	0.0	0.0	0.61	0.61
P3	North Full Crossing	20	46.4	LOS E	0.1	0.1	0.92	0.92
P4	West Full Crossing	20	20.4	LOS C	0.0	0.0	0.61	0.61
All Pedestrians		80	34.1	LOS D			0.77	0.77

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SIDRA
INTERSECTION 6

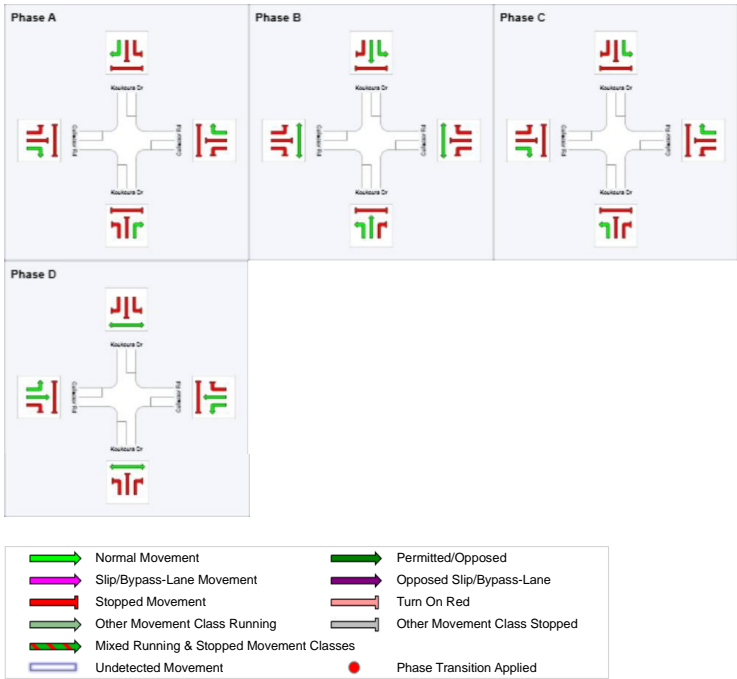
PHASING SUMMARY

Site: Intersection 21 PM 2026

New Site
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C, D
Output Sequence: A, B, C, D

Phase Timing Results				
Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	16	74	86
Green Time (sec)	10	52	6	18
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	16	58	12	24
Phase Split	15 %	53 %	11 %	22 %



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SIDRA INTERSECTION 6.0.22.4722
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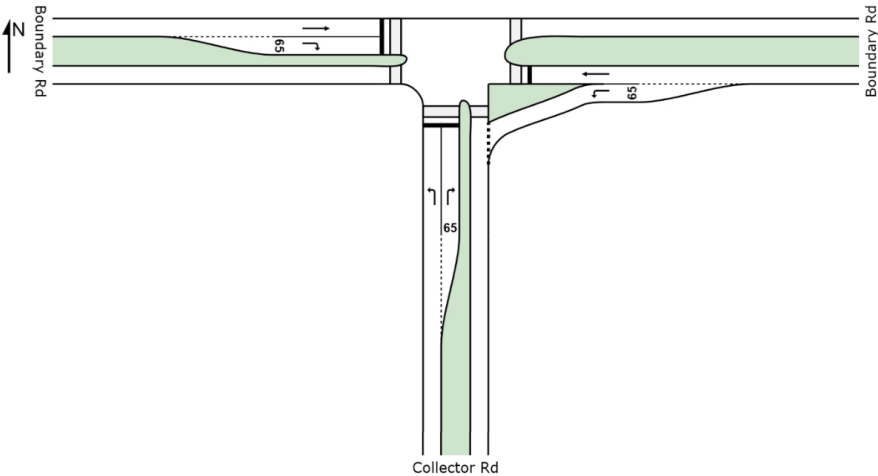
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INTERSECTION 6

SITE LAYOUT

Site: Intersection 23 PM 2026

New Site
Signals - Fixed Time



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INTERSECTION 6

MOVEMENT SUMMARY

Site: Intersection 23 PM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collector Rd											
1	L2	76	6.6	0.093	17.5	LOS B	1.7	12.2	0.59	0.68	42.2
3	R2	215	6.0	0.604	37.1	LOS D	7.9	58.2	0.96	0.82	34.3
Approach		291	6.2	0.604	32.0	LOS C	7.9	58.2	0.86	0.78	36.1
East: Boundary Rd											
4	L2	74	5.4	0.053	6.3	LOS A	0.3	1.9	0.18	0.59	50.0
5	T1	436	6.0	0.599	21.2	LOS C	13.7	100.8	0.85	0.74	44.5
Approach		510	5.9	0.599	19.1	LOS B	13.7	100.8	0.76	0.72	45.2
West: Boundary Rd											
11	T1	408	5.9	0.561	20.8	LOS C	12.6	92.4	0.84	0.73	44.7
12	R2	41	4.9	0.122	35.3	LOS D	1.4	9.9	0.86	0.73	35.3
Approach		449	5.8	0.561	22.1	LOS C	12.6	92.4	0.84	0.73	43.6
All Vehicles		1250	5.9	0.604	23.2	LOS C	13.7	100.8	0.81	0.74	42.2

Level of Service (LOS) Method: Delay (HCM 2000).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	21.1	LOS C	0.1	0.1	0.73	0.73
P2	East Full Crossing	50	34.3	LOS D	0.1	0.1	0.93	0.93
P4	West Full Crossing	50	33.4	LOS D	0.1	0.1	0.91	0.91
All Pedestrians		150	29.6	LOS C			0.86	0.86

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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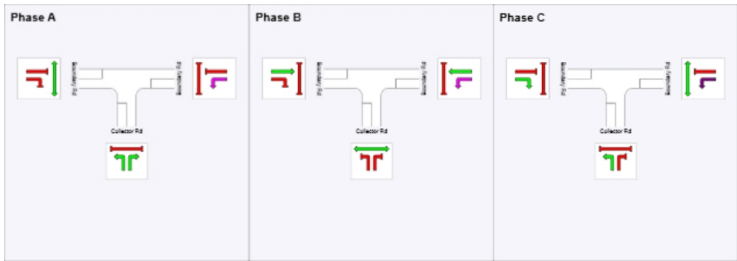
PHASING SUMMARY

Site: Intersection 23 PM 2026

New Site
Signals - Fixed Time Cycle Time = 80 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: Variable Phasing
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

Phase Timing Results			
Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	22	59
Green Time (sec)	16	31	15
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	22	37	21
Phase Split	28 %	46 %	26 %



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