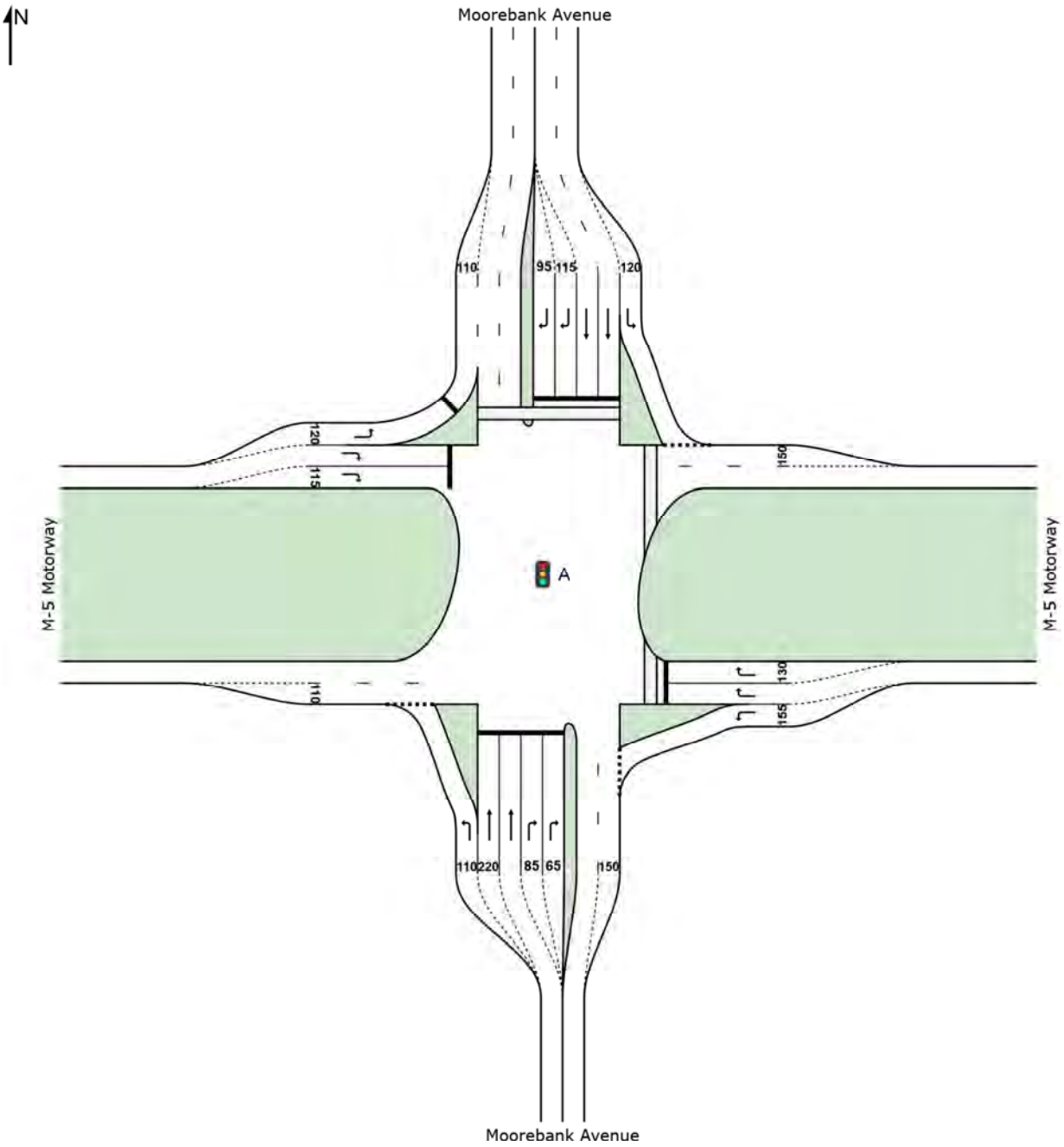
APPENDIX B – DETAILED SIDRA MOVEMENT SUMMARIES – SCENARIO 2

Stage 1

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	419	12.8	419	12.8	0.377	14.2	LOS A	9.7	85.0	0.41	0.73	50.8
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	261	17.3	261	17.3	0.410	57.4	LOS E	8.9	83.5	0.88	0.79	26.5
Approach		1082	10.4	1082	10.4	0.410	30.2	LOS C	9.7	85.0	0.63	0.69	37.2
East: M-5 Motorway													
4	L2	329	15.3	329	15.3	0.272	6.2	LOS A	1.7	15.5	0.13	0.59	47.6
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		573	10.7	573	10.7	0.949	47.8	LOS D	10.7	81.6	0.50	0.78	23.7
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.2	LOS A	0.5	4.4	0.17	0.58	52.9
8	T1	218	6.8	218	6.8	0.156	27.7	LOS B	5.2	41.5	0.65	0.53	24.6
9	R2	506	20.2	506	20.2	0.967	87.5	LOS F	28.7	282.0	0.98	0.98	22.1
Approach		773	16.3	773	16.3	0.967	65.6	LOS E	28.7	282.0	0.83	0.82	23.3
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	512	8.0	512	8.0	0.778	67.0	LOS E	19.8	160.8	0.99	0.86	19.2
Approach		1867	7.7	1867	7.7	0.887	23.5	LOS B	21.5	173.2	0.62	0.72	38.5
All Vehicles		4295	10.3	4295	10.3	0.967	36.0	LOS C	28.7	282.0	0.64	0.74	32.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 16 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

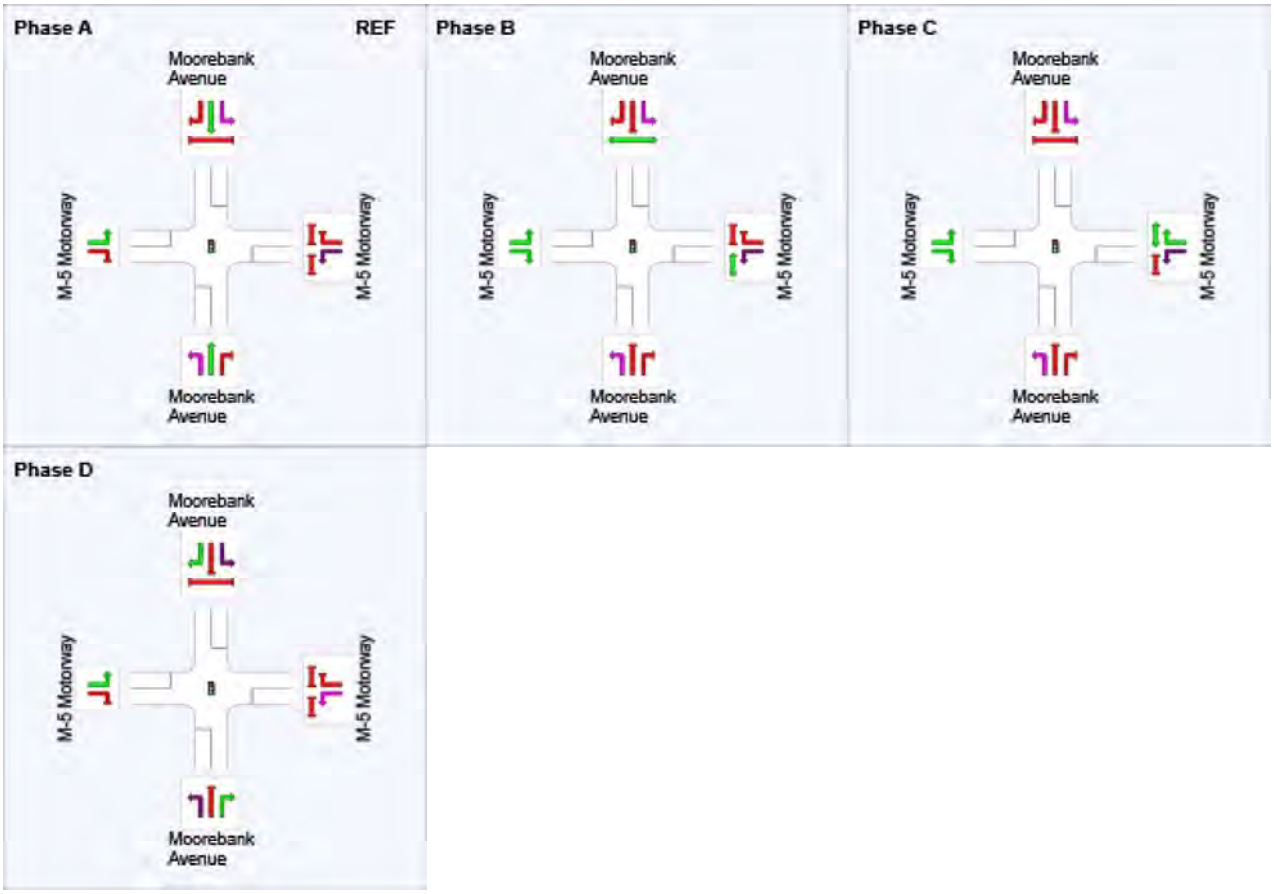
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

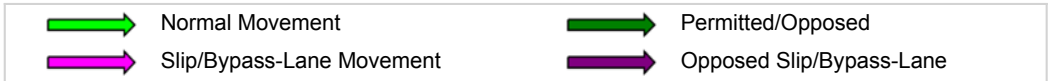
Phase Timing Results

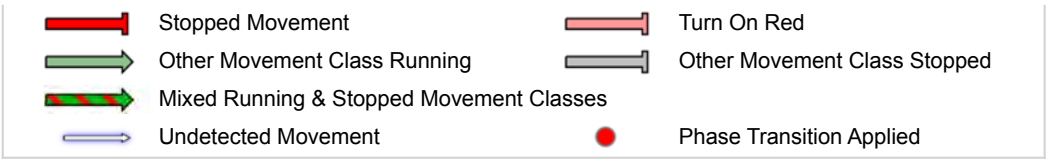
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase





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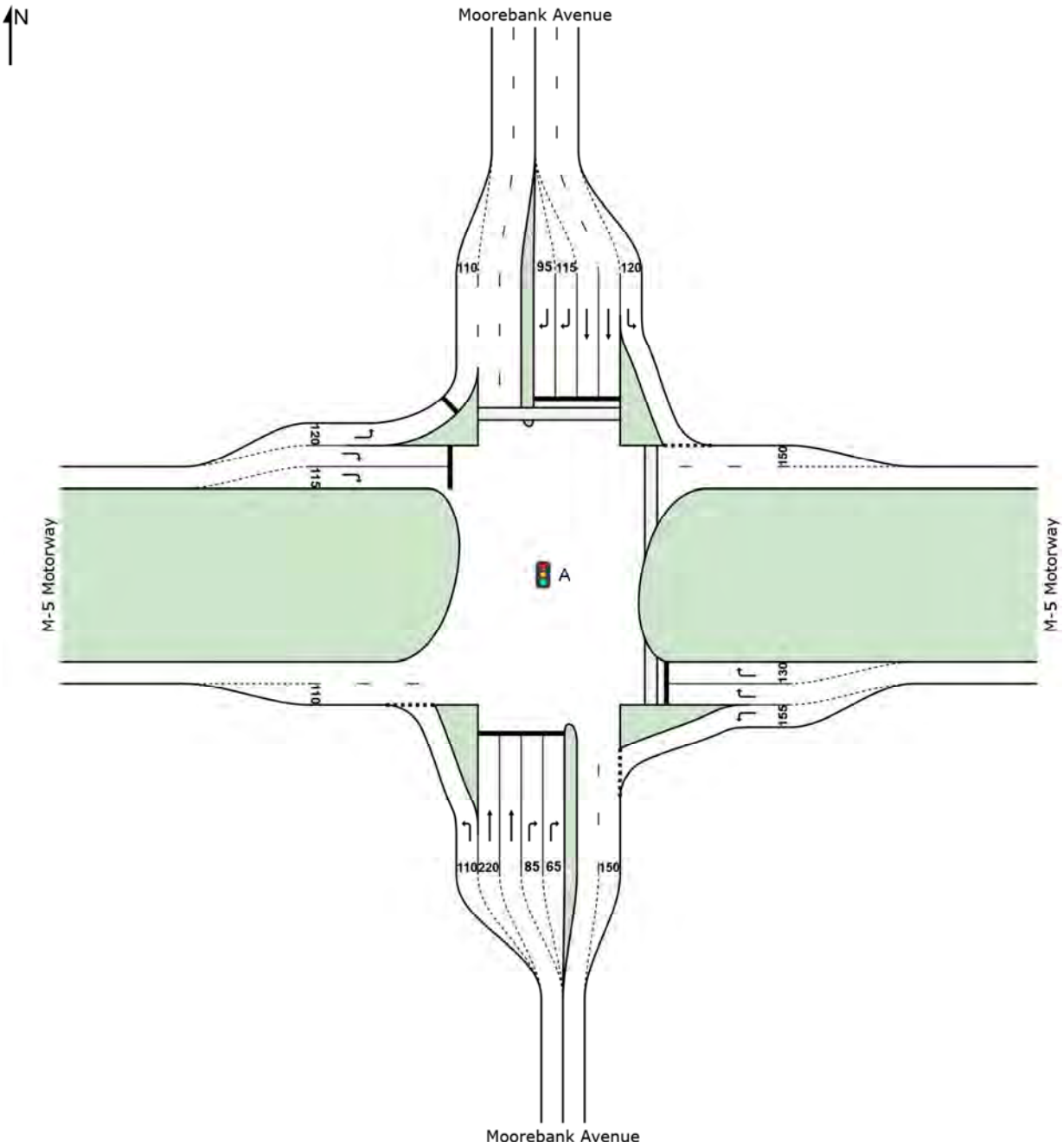
SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	457	6.7	457	6.7	0.636	38.9	LOS C	22.2	175.8	0.85	1.00	36.8
2	T1	236	3.1	236	3.1	0.471	65.8	LOS E	8.1	60.3	0.97	0.78	22.6
3	R2	320	8.2	320	8.2	0.187	22.1	LOS B	6.1	49.4	0.51	0.70	42.0
Approach		1013	6.3	1013	6.3	0.636	39.8	LOS C	22.2	175.8	0.77	0.86	33.8
East: M-5 Motorway													
4	L2	272	9.7	272	9.7	0.227	7.1	LOS A	2.8	23.1	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		359	8.8	359	8.8	0.642	27.0	LOS B	3.4	26.9	0.39	0.65	30.5
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.061	6.4	LOS A	0.5	3.8	0.14	0.58	56.3
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	429	7.6	429	7.6	0.769	70.5	LOS F	16.8	135.6	0.99	0.86	18.6
Approach		1024	7.4	1024	7.4	0.769	33.1	LOS C	16.8	135.6	0.49	0.69	33.2
All Vehicles		4171	5.8	4171	5.8	0.884	38.4	LOS C	46.1	352.4	0.68	0.80	32.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

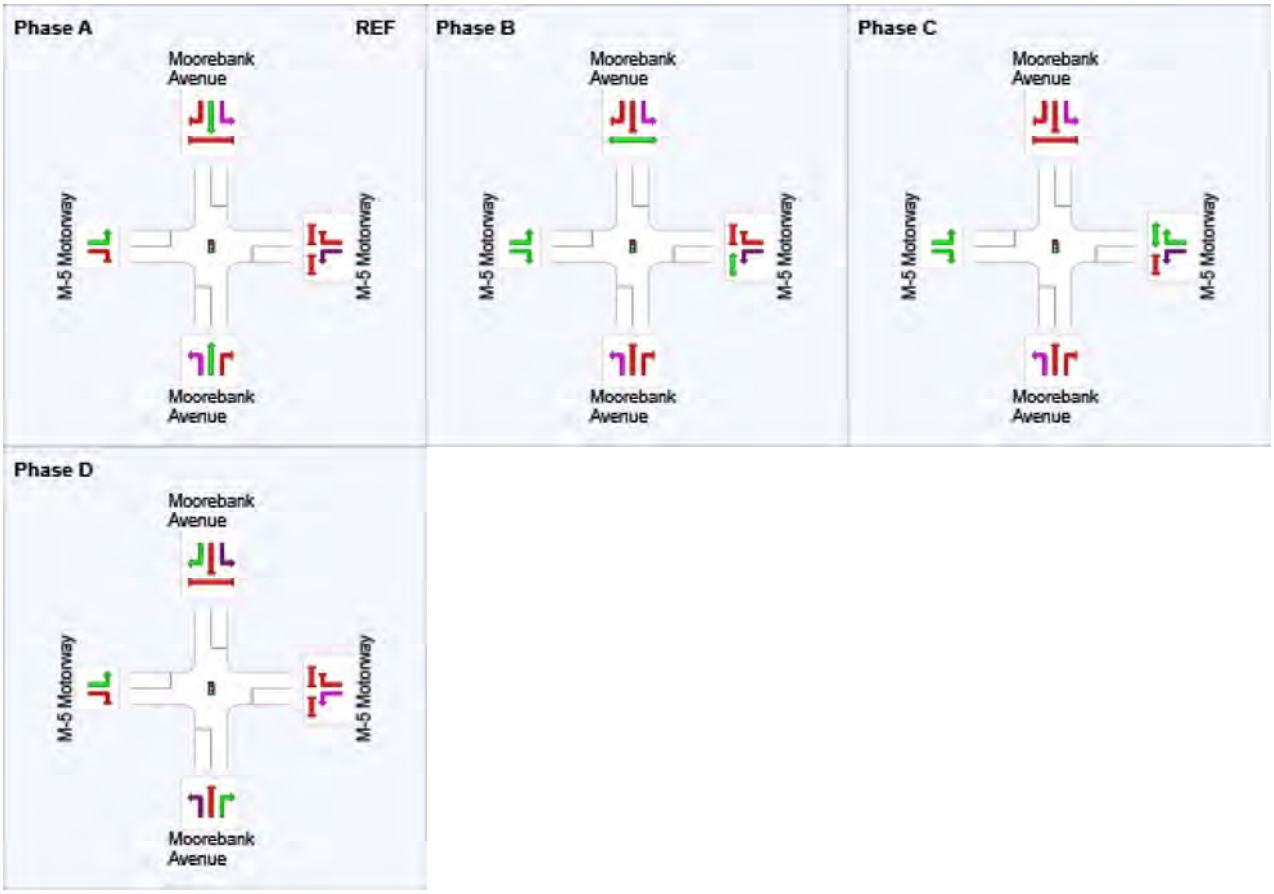
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

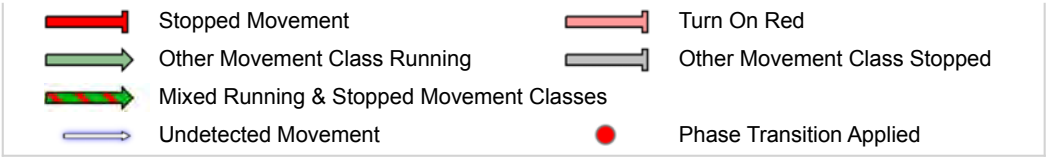
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase

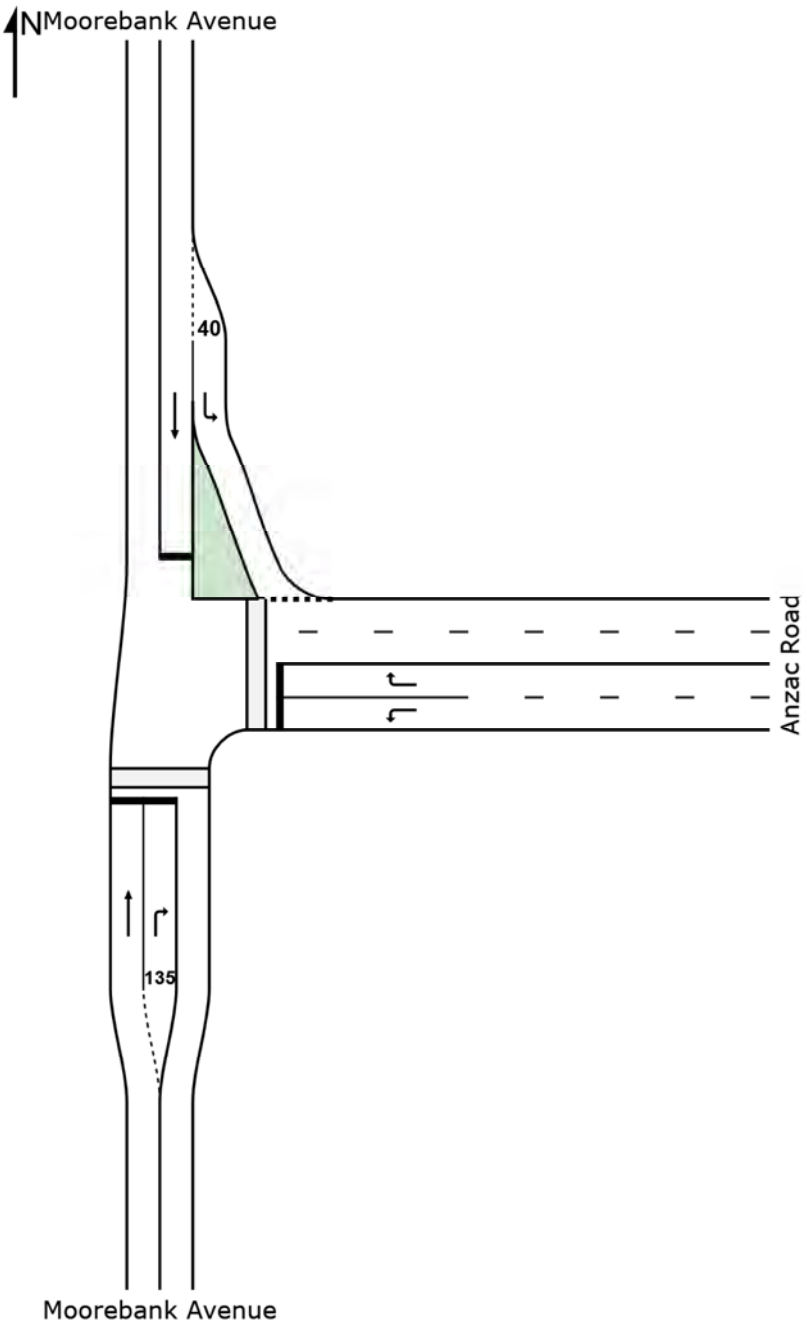
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	738	9.3	738	9.3	0.598	10.9	LOS A	21.7	180.5	0.60	0.55	28.9
3	R2	381	3.3	381	3.3	0.953	76.0	LOS F	26.7	199.4	1.00	1.12	14.6
Approach		1119	7.2	1119	7.2	0.953	33.1	LOS C	26.7	199.4	0.74	0.75	20.3
East: Anzac Road													
4	L2	208	3.0	208	3.0	0.520	47.0	LOS D	10.0	74.3	0.93	0.81	10.7
6	R2	363	11.9	363	11.9	0.924	70.1	LOS E	24.0	207.6	1.00	1.02	7.7
Approach		572	8.7	572	8.7	0.924	61.6	LOS E	24.0	207.6	0.98	0.95	8.6
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.320	9.4	LOS A	6.7	54.5	0.40	0.63	32.3
8	T1	517	14.7	517	14.7	0.946	61.6	LOS E	19.8	179.5	0.92	1.13	6.3
Approach		920	11.7	920	11.7	0.946	38.7	LOS C	19.8	179.5	0.69	0.91	12.9
All Vehicles		2611	9.1	2611	9.1	0.953	41.3	LOS C	26.7	207.6	0.77	0.85	15.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 16 (maximum specified: 20)

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	11	39.3	LOS D	0.0	0.0	0.85	0.85
P2	East Full Crossing	11	27.7	LOS C	0.0	0.0	0.71	0.71
All Pedestrians		21	33.5	LOS D			0.78	0.78

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: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

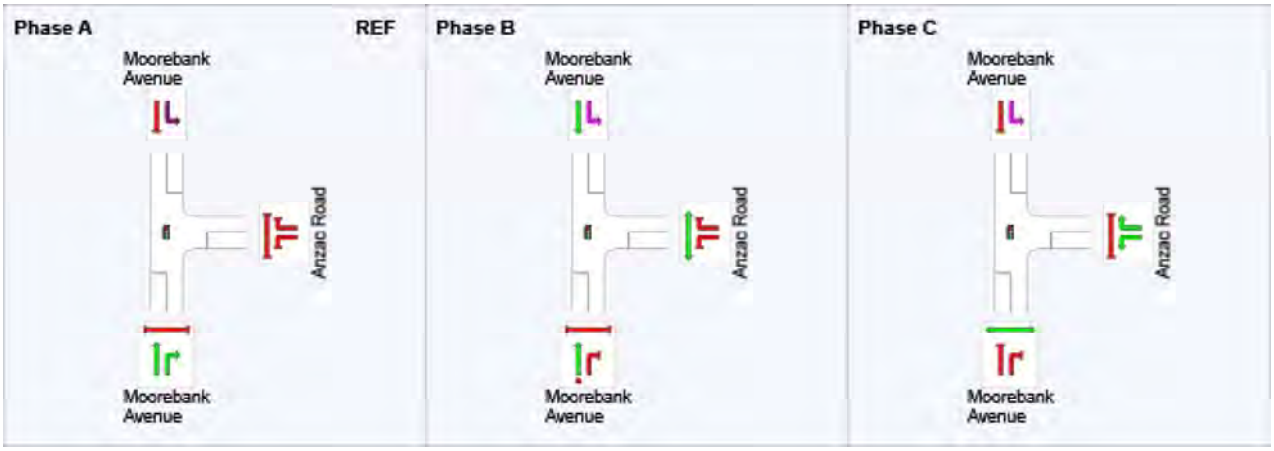
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 3 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	30	79
Green Time (sec)	24	43	25
Phase Time (sec)	30	49	31
Phase Split	27%	45%	28%

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

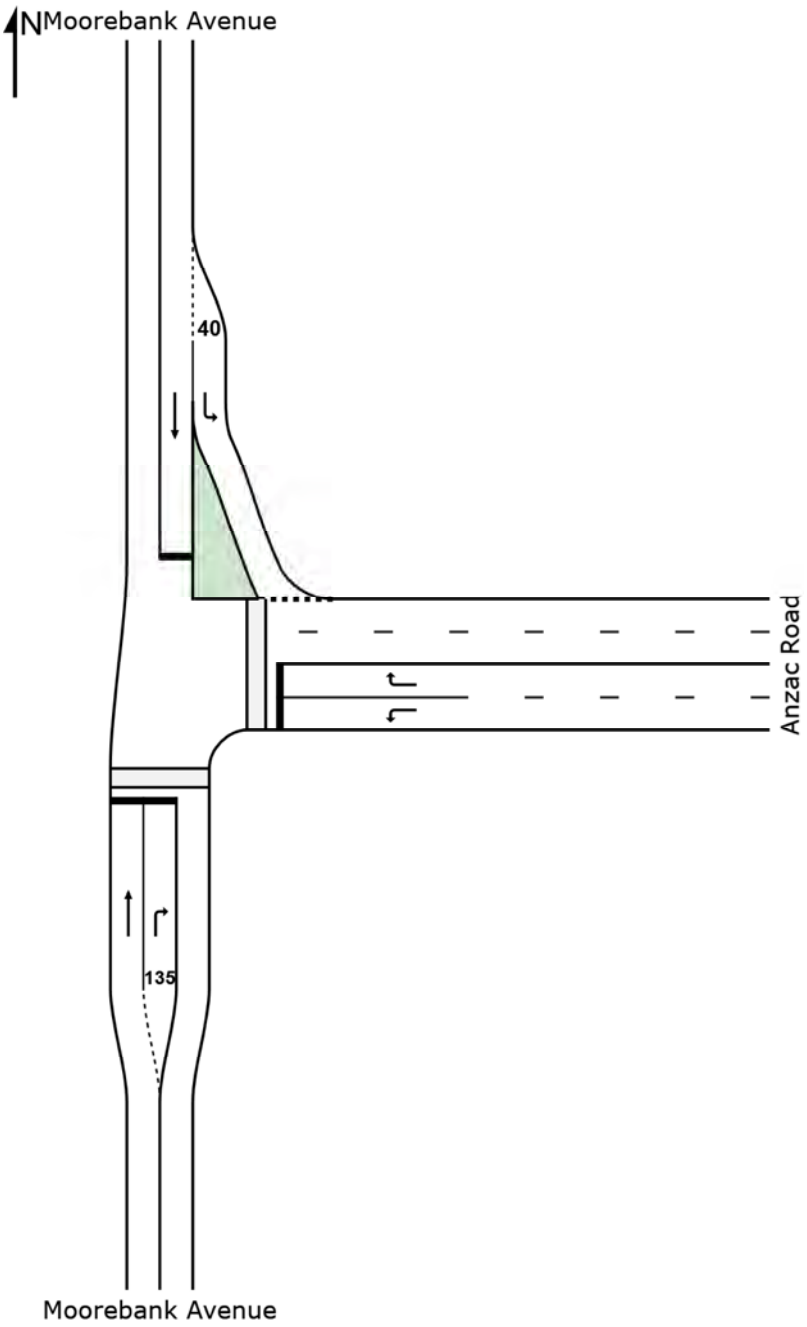


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 95 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	614	9.1	614	9.1	0.475	7.0	LOS A	12.8	105.7	0.49	0.44	32.1
3	R2	188	0.6	188	0.6	0.871	57.8	LOS E	10.0	70.7	1.00	1.03	17.4
Approach		802	7.1	802	7.1	0.871	18.9	LOS B	12.8	105.7	0.61	0.58	25.4
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.895	60.0	LOS E	15.3	110.3	1.00	1.00	8.7
6	R2	287	4.0	287	4.0	0.880	57.7	LOS E	15.4	116.2	1.00	0.98	9.1
Approach		567	2.8	567	2.8	0.895	58.8	LOS E	15.4	116.2	1.00	0.99	8.9
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.286	5.1	LOS A	4.0	29.5	0.28	0.51	37.6
8	T1	697	7.6	697	7.6	0.893	33.6	LOS C	22.3	179.5	0.83	0.92	10.2
Approach		1116	5.8	1116	5.8	0.893	22.9	LOS B	22.3	179.5	0.62	0.77	17.6
All Vehicles		2485	5.5	2485	5.5	0.895	29.8	LOS C	22.3	179.5	0.71	0.76	17.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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	11	38.9	LOS D	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	17.1	LOS B	0.0	0.0	0.60	0.60
All Pedestrians		21	28.0	LOS C			0.75	0.75

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: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

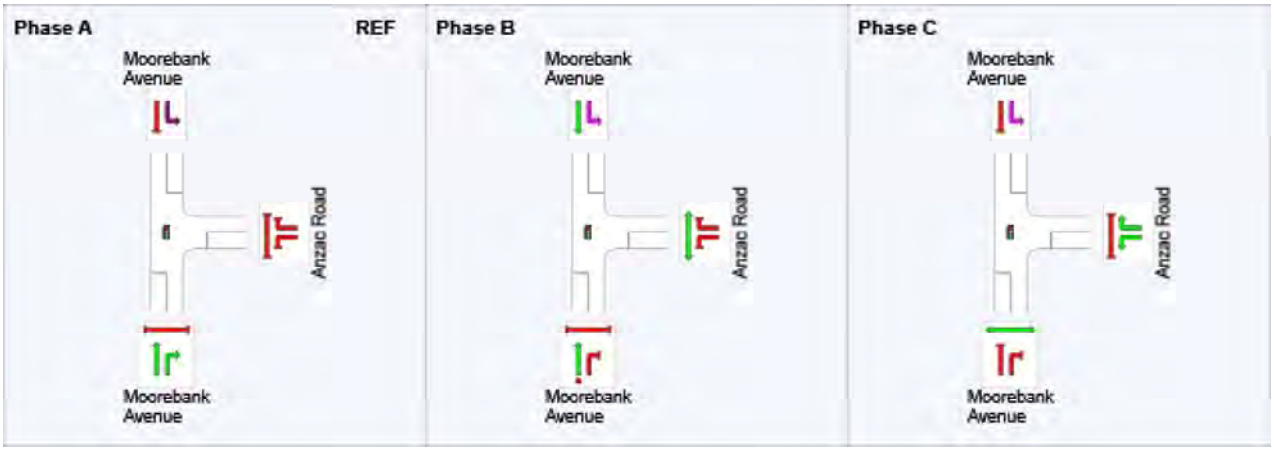
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 95 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 3 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	17	72
Green Time (sec)	11	49	17
Phase Time (sec)	17	55	23
Phase Split	18%	58%	24%

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



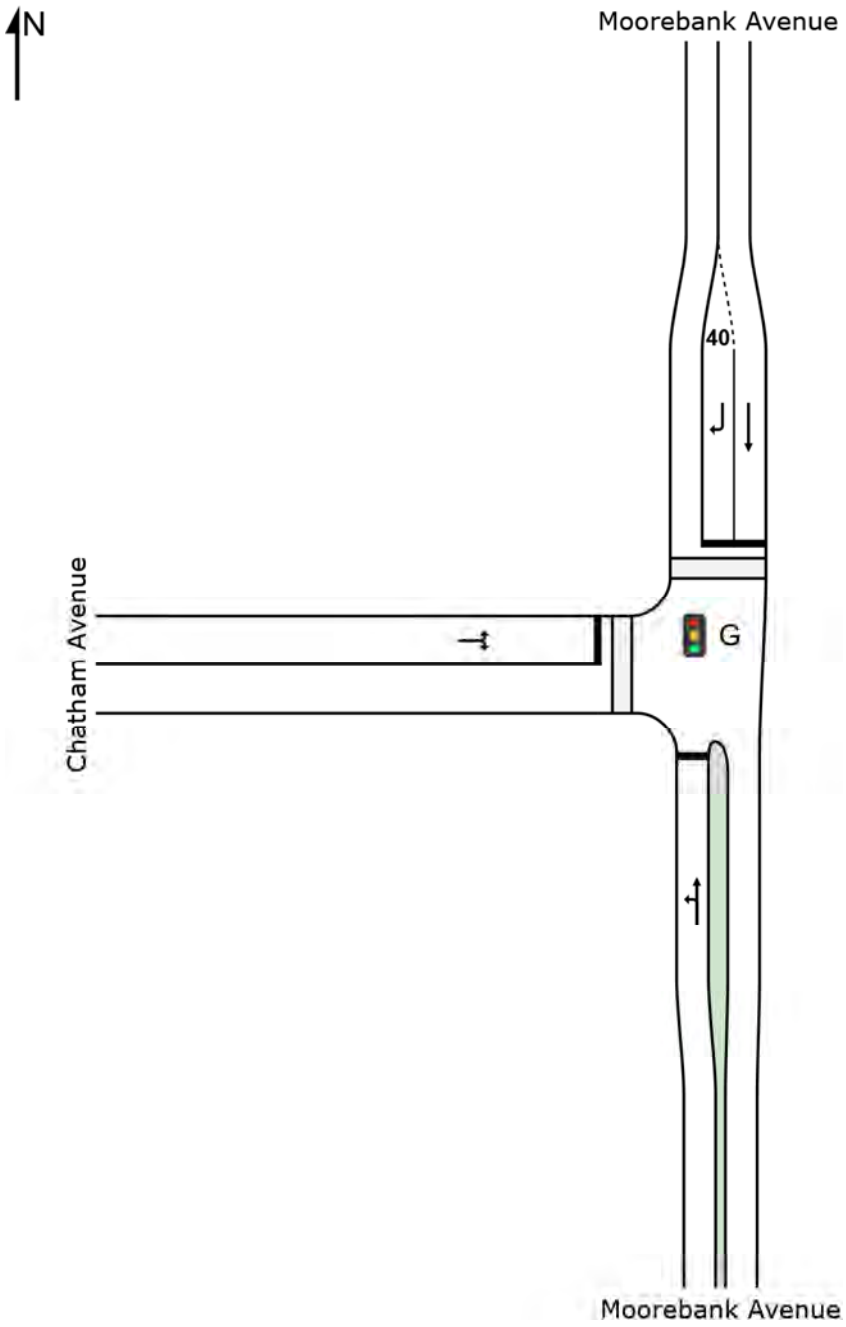
REF: Reference Phase
VAR: Variable Phase

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

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.896	30.2	LOS C	48.0	361.3	0.91	0.99	35.2
2	T1	1103	3.7	1103	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
Approach		1104	3.7	1104	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	40	100.0	40	100.0	0.523	50.3	LOS D	1.8	38.1	1.00	0.78	23.7
Approach		497	16.5	497	16.5	0.523	6.5	LOS A	5.3	43.6	0.36	0.31	43.3
West: Chatham Avenue													
10	L2	40	100.0	40	100.0	0.488	50.8	LOS D	1.8	37.9	1.00	0.76	11.8
12	R2	1	0.0	1	0.0	0.488	50.4	LOS D	1.8	37.9	1.00	0.76	26.3
Approach		41	97.4	41	97.4	0.488	50.8	LOS D	1.8	37.9	1.00	0.76	12.3
All Vehicles		1642	9.9	1642	9.9	0.896	21.4	LOS B	48.0	361.3	0.75	0.78	36.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 16 (maximum specified: 20)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

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: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

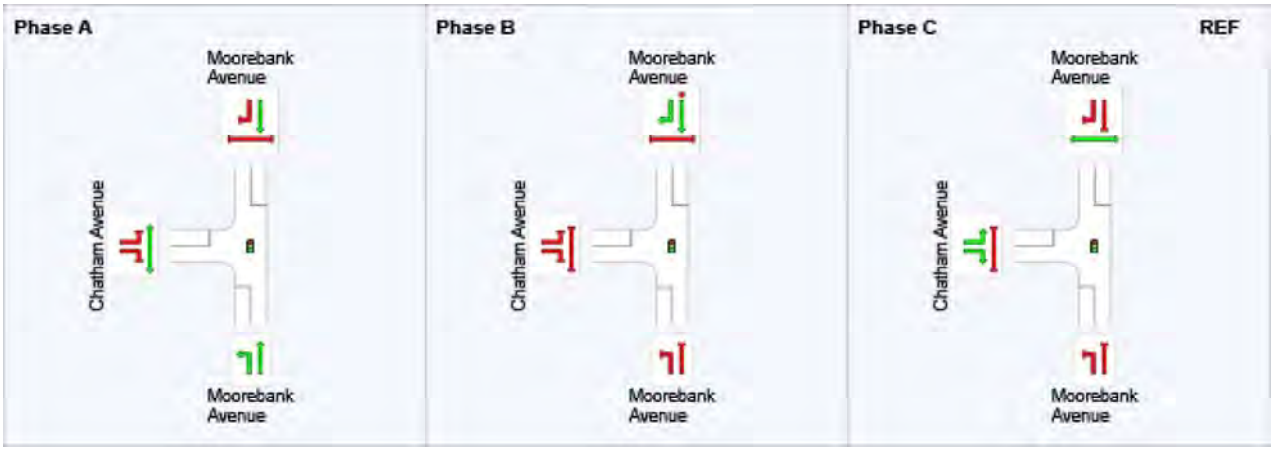
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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

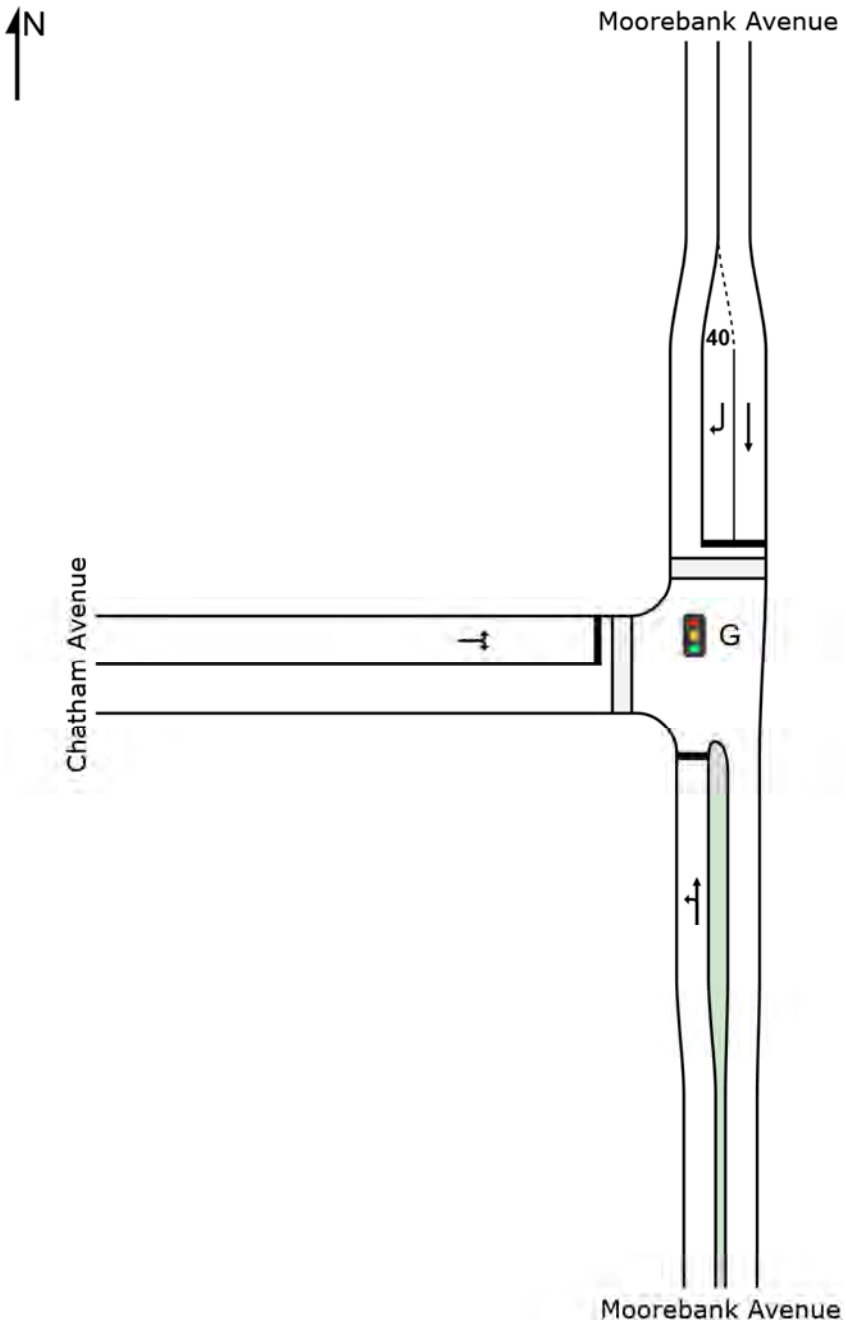


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	955	1.2	955	1.2	0.859	15.8	LOS B	22.7	163.1	0.85	0.98	39.7
9	R2	40	100.0	40	100.0	0.277	25.1	LOS B	0.9	18.7	0.93	0.73	30.0
Approach		995	5.2	995	5.2	0.859	16.2	LOS B	22.7	163.1	0.86	0.97	39.3
West: Chatham Avenue													
10	L2	105	38.0	105	38.0	0.500	26.4	LOS B	2.4	29.4	0.97	0.78	18.7
12	R2	1	0.0	1	0.0	0.500	26.1	LOS B	2.4	29.4	0.97	0.78	35.0
Approach		106	37.6	106	37.6	0.500	26.4	LOS B	2.4	29.4	0.97	0.78	18.9
All Vehicles		1603	6.4	1603	6.4	0.859	18.3	LOS B	22.7	163.1	0.90	0.95	37.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			0.84	0.84

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: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

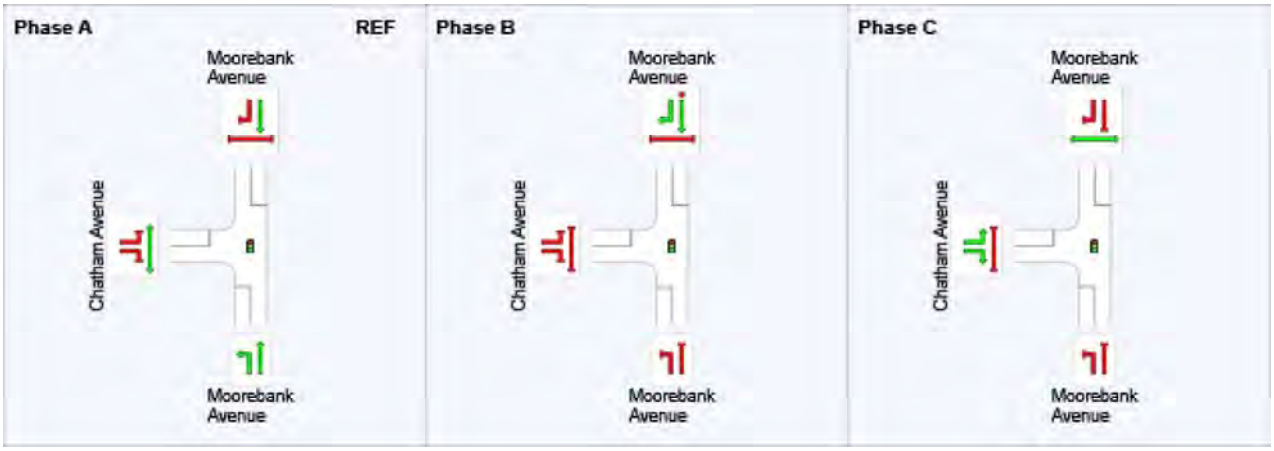
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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



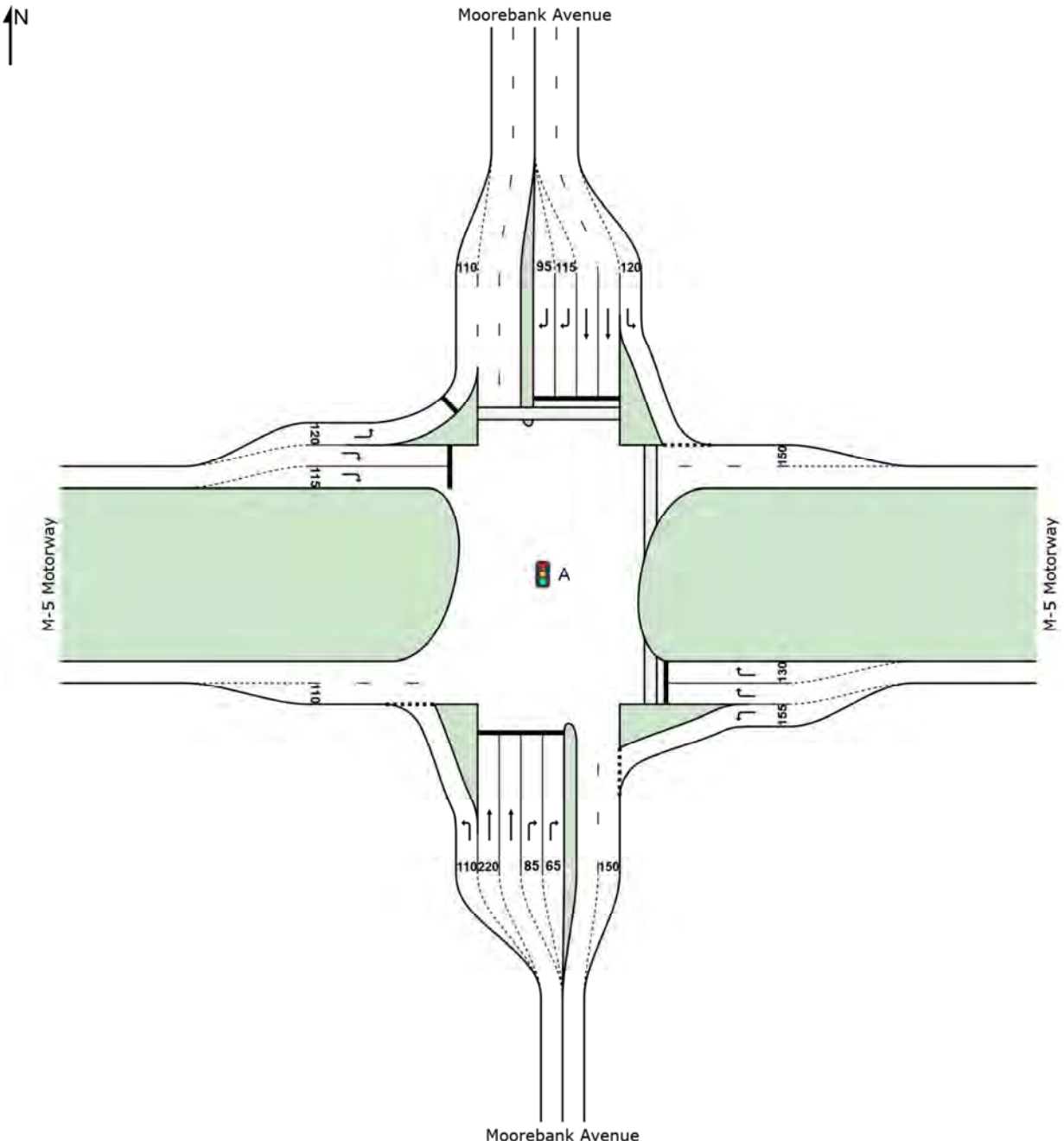
REF: Reference Phase
VAR: Variable Phase

Stage 2(i)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.4	LOS A	9.9	89.8	0.42	0.73	50.3
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	339	17.7	339	17.7	0.285	6.4	LOS A	2.0	18.9	0.14	0.59	47.5
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		582	12.1	582	12.1	0.949	47.1	LOS D	10.7	81.6	0.50	0.78	23.9
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	218	6.8	218	6.8	0.156	27.7	LOS B	5.2	41.5	0.65	0.53	24.6
9	R2	506	20.2	506	20.2	0.967	87.5	LOS F	28.7	282.0	0.98	0.98	22.1
Approach		773	16.3	773	16.3	0.967	65.6	LOS E	28.7	282.0	0.83	0.82	23.3
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	521	9.7	521	9.7	0.812	68.9	LOS E	20.8	173.8	0.99	0.88	18.9
Approach		1877	8.2	1877	8.2	0.887	24.3	LOS B	21.5	173.8	0.62	0.72	38.0
All Vehicles		4333	11.1	4333	11.1	0.967	36.3	LOS C	28.7	282.0	0.64	0.74	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 13 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

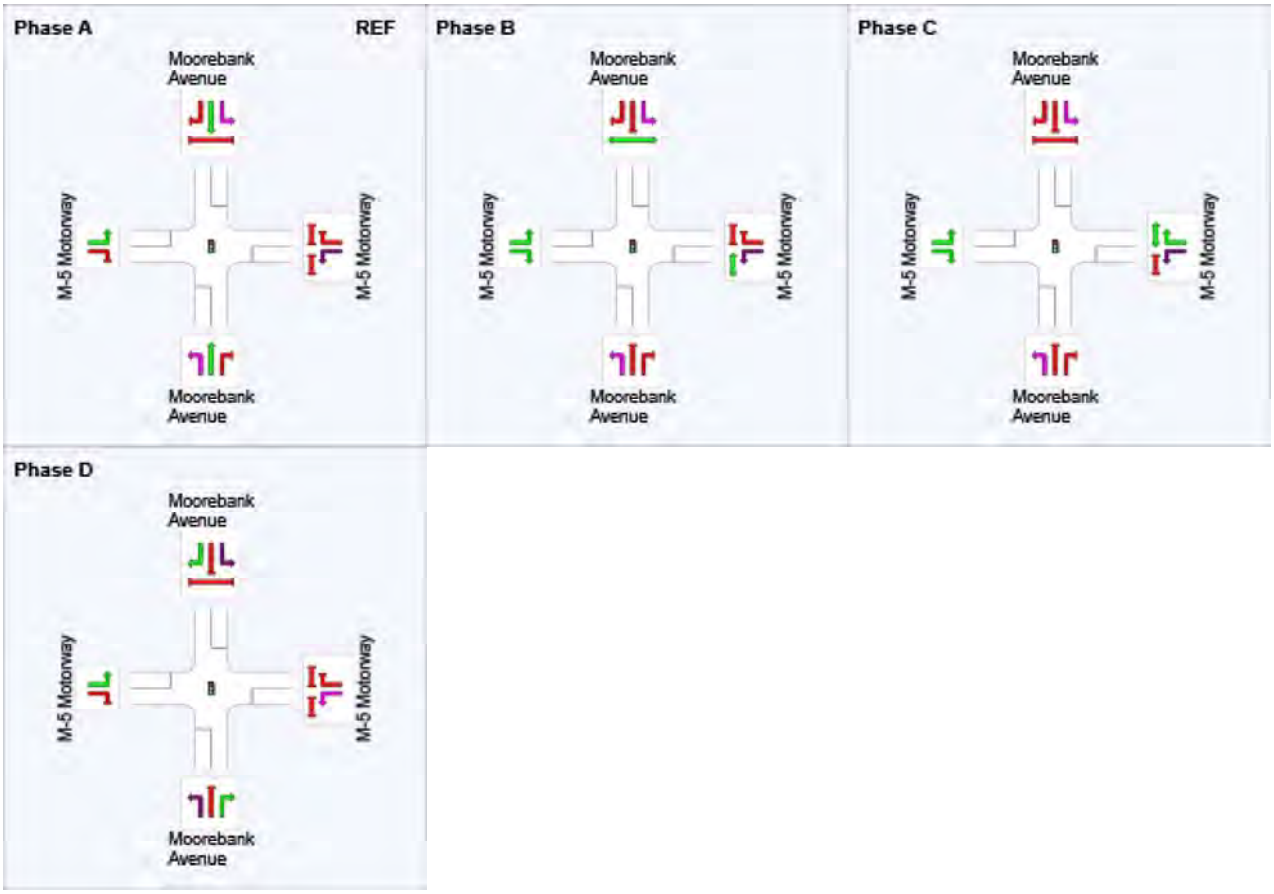
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

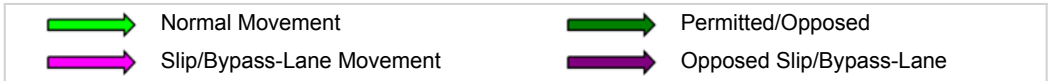
Phase Timing Results

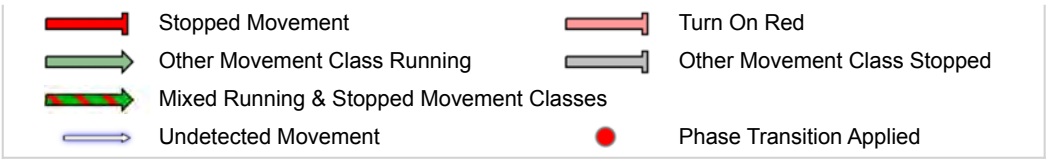
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

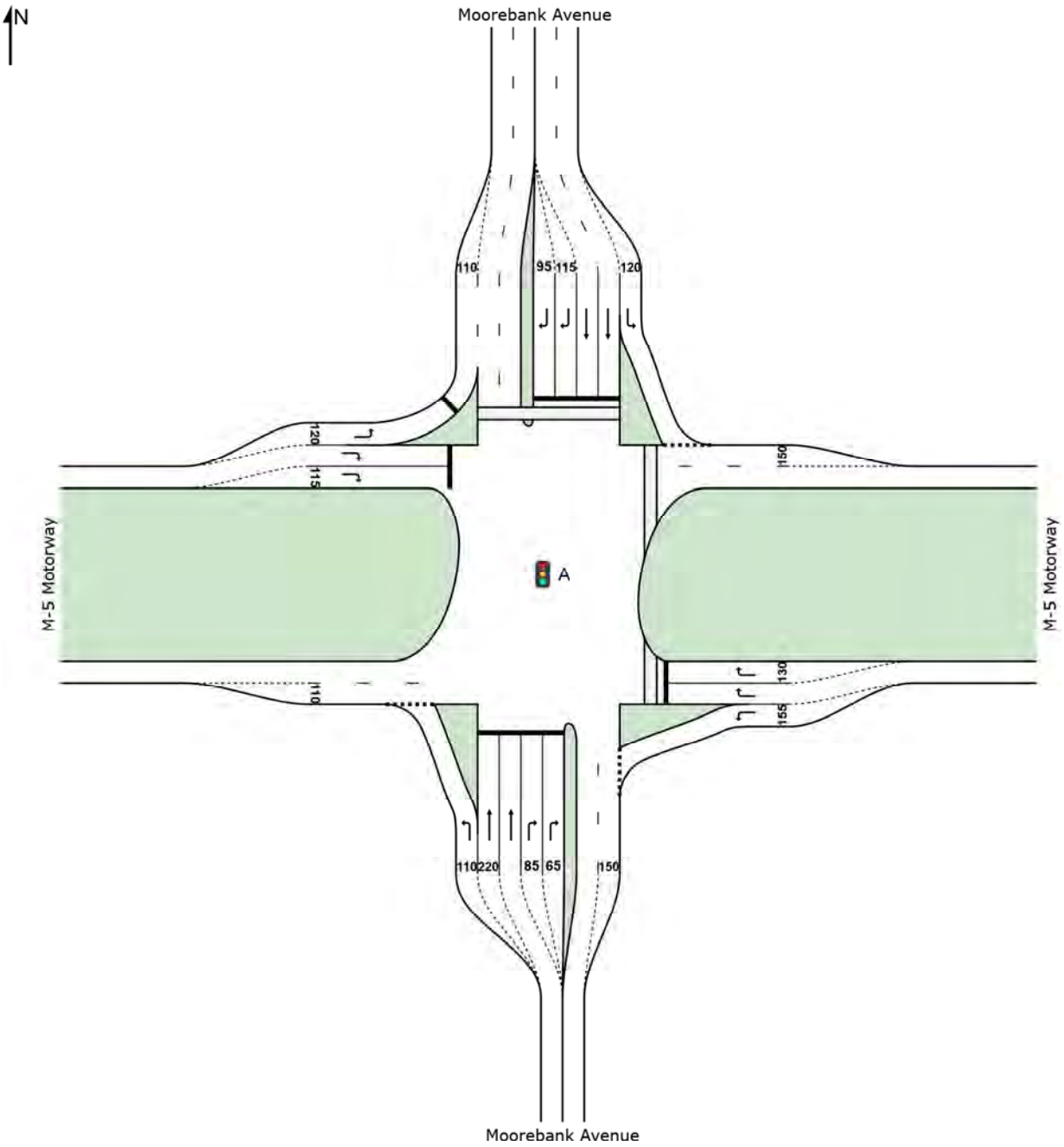




SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	541	7.4	541	7.4	0.761	42.8	LOS D	26.3	211.1	0.92	1.05	35.1
2	T1	286	2.6	286	2.6	0.567	66.8	LOS E	10.0	73.6	0.99	0.80	22.4
3	R2	404	8.9	404	8.9	0.239	22.6	LOS B	7.9	65.3	0.53	0.72	41.6
Approach		1232	6.8	1232	6.8	0.761	41.7	LOS C	26.3	211.1	0.81	0.88	33.0
East: M-5 Motorway													
4	L2	281	12.7	281	12.7	0.239	7.1	LOS A	2.9	25.6	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		368	11.1	368	11.1	0.642	26.5	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.065	6.8	LOS A	0.6	4.8	0.16	0.59	55.9
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	439	9.6	439	9.6	0.810	72.7	LOS F	17.7	148.0	1.00	0.88	18.2
Approach		1034	8.2	1034	8.2	0.810	34.4	LOS C	17.7	148.0	0.50	0.70	32.7
All Vehicles		4408	6.4	4408	6.4	0.884	39.2	LOS C	46.1	352.4	0.69	0.81	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.1 %
Number of Iterations: 9 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

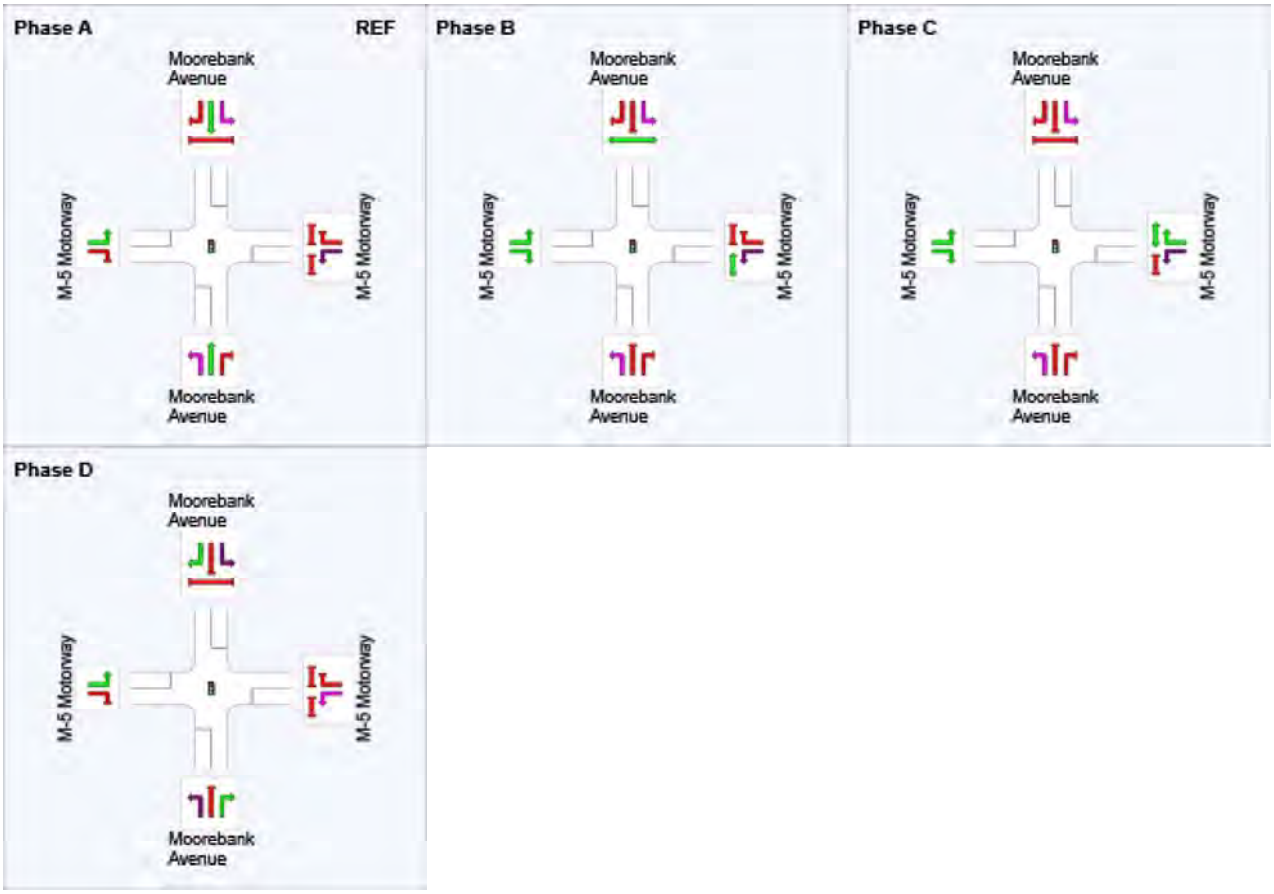
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

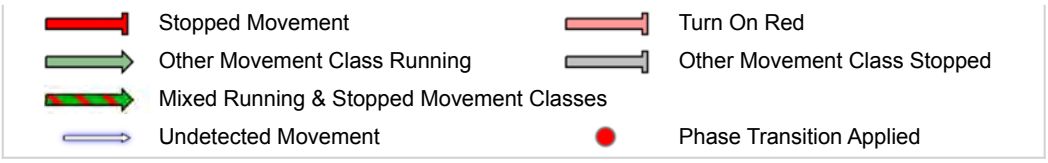
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase

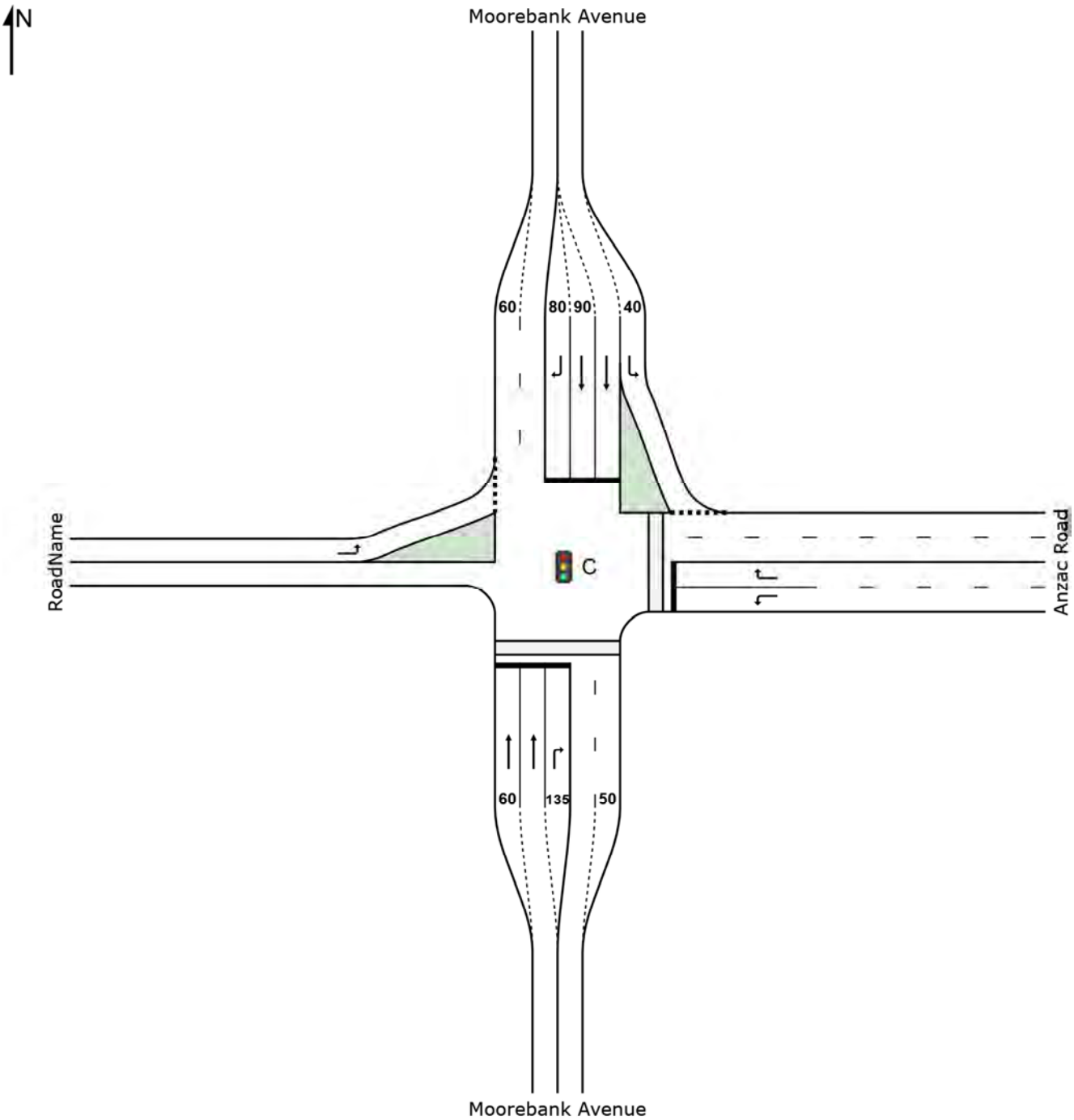
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	727	8.0	727	8.0	0.897	41.6	LOS C	28.9	234.6	0.88	0.90	16.3
3	R2	381	3.3	381	3.3	0.572	33.7	LOS C	16.4	122.6	0.86	0.81	23.2
Approach		1108	6.4	1108	6.4	0.897	38.8	LOS C	28.9	234.6	0.87	0.87	18.7
East: Anzac Road													
4	L2	208	3.0	208	3.0	0.499	46.0	LOS D	9.9	73.3	0.92	0.81	10.9
6	R2	363	11.9	363	11.9	0.888	62.4	LOS E	22.3	193.6	1.00	0.99	8.8
Approach		572	8.7	572	8.7	0.888	56.4	LOS D	22.3	193.6	0.97	0.93	9.4
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.340	7.8	LOS A	7.3	59.4	0.42	0.60	33.8
8	T1	506	12.9	506	12.9	0.906	53.7	LOS D	20.4	179.5	0.97	1.01	7.0
9	R2	29	100.0	29	100.0	0.114	42.1	LOS C	1.3	16.5	0.82	0.72	26.8
Approach		939	13.5	939	13.5	0.906	33.6	LOS C	20.4	179.5	0.73	0.82	15.0
West: RoadName													
10	L2	29	100.0	29	100.0	0.067	15.3	LOS B	0.5	6.0	0.57	0.65	40.8
Approach		29	100.0	29	100.0	0.067	15.3	LOS B	0.5	6.0	0.57	0.65	40.8
All Vehicles		2648	10.4	2648	10.4	0.906	40.5	LOS C	28.9	234.6	0.84	0.86	15.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 13 (maximum specified: 20)

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	11	43.7	LOS E	0.0	0.1	0.89	0.89
P2	East Full Crossing	11	41.0	LOS E	0.0	0.1	0.86	0.86
All Pedestrians		21	42.4	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

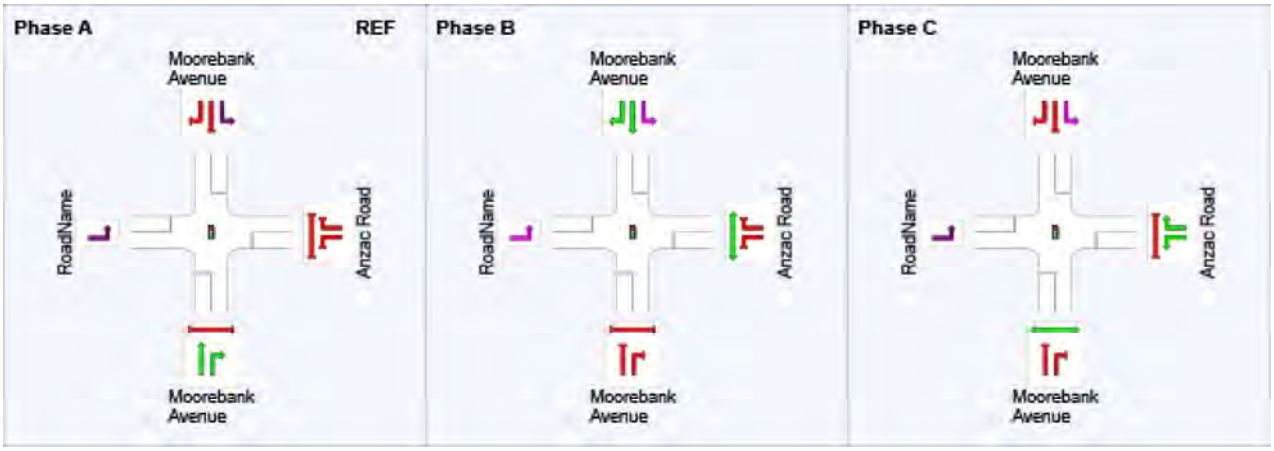
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	46	78
Green Time (sec)	40	26	26
Phase Time (sec)	46	32	32
Phase Split	42%	29%	29%

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



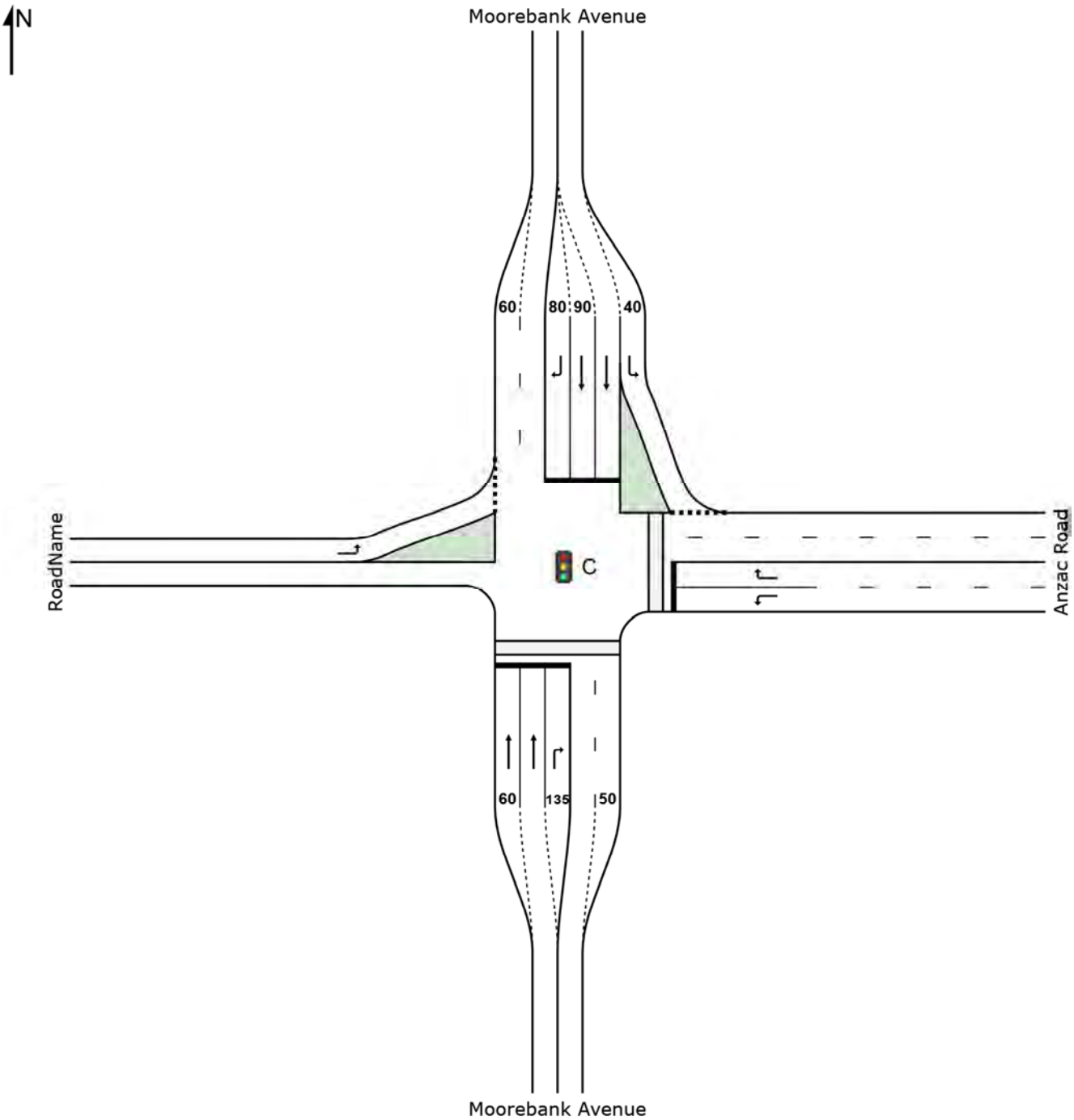
REF: Reference Phase
VAR: Variable Phase

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

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	803	5.6	803	5.6	0.862	22.5	LOS B	18.2	141.4	0.92	0.98	22.4
3	R2	211	0.5	211	0.5	0.885	38.3	LOS C	7.0	49.3	1.00	1.16	21.8
Approach		1014	4.6	1014	4.6	0.885	25.8	LOS B	18.2	141.4	0.94	1.02	22.2
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.829	35.1	LOS C	8.6	62.2	1.00	0.98	13.6
6	R2	287	4.0	287	4.0	0.866	37.8	LOS C	9.3	70.5	1.00	1.06	13.2
Approach		567	2.8	567	2.8	0.866	36.5	LOS C	9.3	70.5	1.00	1.02	13.4
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.349	5.6	LOS A	3.4	25.1	0.46	0.61	36.8
8	T1	686	6.1	686	6.1	0.749	17.6	LOS B	13.3	104.9	0.89	0.82	15.8
9	R2	29	100.0	29	100.0	0.211	31.5	LOS C	0.8	10.2	0.93	0.73	30.6
Approach		1135	7.4	1135	7.4	0.749	13.5	LOS A	13.3	104.9	0.73	0.74	24.1
West: RoadName													
10	L2	29	100.0	29	100.0	0.066	12.9	LOS A	0.3	4.2	0.67	0.66	43.0
Approach		29	100.0	29	100.0	0.066	12.9	LOS A	0.3	4.2	0.67	0.66	43.0
All Vehicles		2745	6.4	2745	6.4	0.885	22.8	LOS B	18.2	141.4	0.86	0.90	21.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.1 %
Number of Iterations: 9 (maximum specified: 20)

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	11	21.8	LOS C	0.0	0.0	0.89	0.89
P2	East Full Crossing	11	19.2	LOS B	0.0	0.0	0.84	0.84
All Pedestrians		21	20.5	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

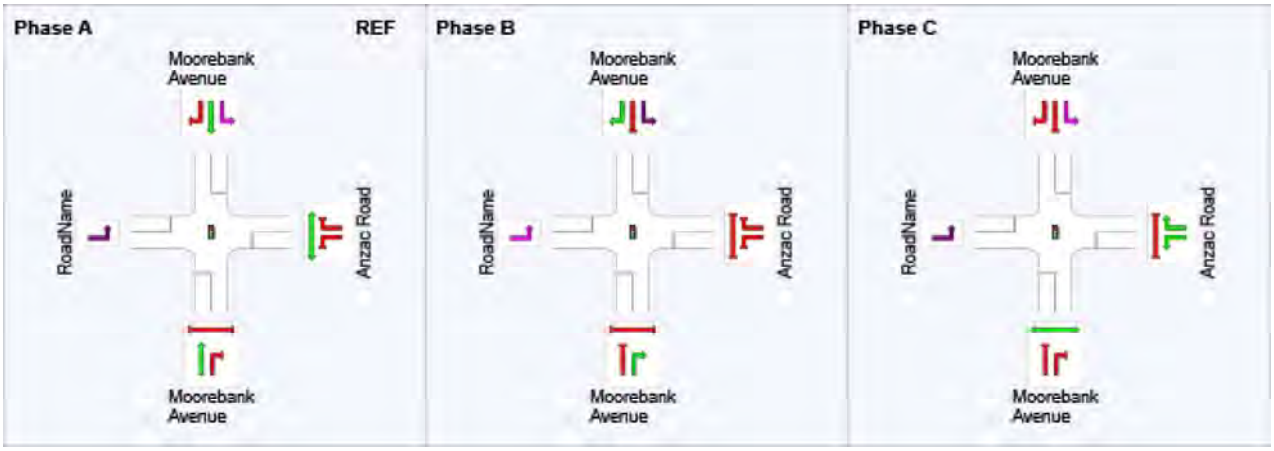
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	26	39
Green Time (sec)	20	7	10
Phase Time (sec)	26	13	16
Phase Split	47%	24%	29%

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



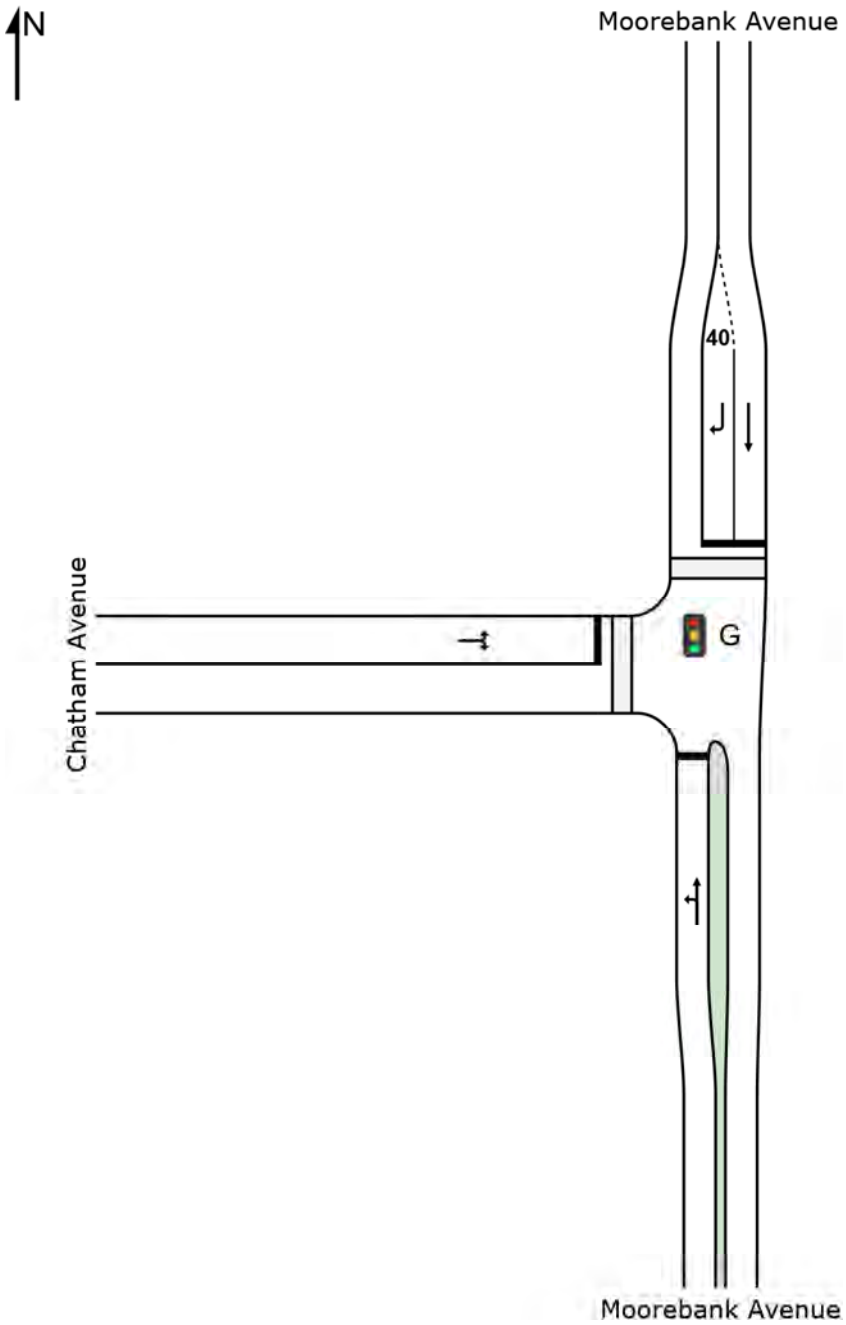
REF: Reference Phase
VAR: Variable Phase

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

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.896	30.2	LOS C	48.0	361.3	0.91	0.99	35.2
2	T1	1103	3.7	1103	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
Approach		1104	3.7	1104	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	29	100.0	29	100.0	0.385	49.3	LOS D	1.3	27.5	0.99	0.73	23.9
Approach		486	14.7	486	14.7	0.385	5.5	LOS A	5.3	43.6	0.34	0.30	43.9
West: Chatham Avenue													
10	L2	29	100.0	29	100.0	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	11.9
12	R2	1	0.0	1	0.0	0.361	49.6	LOS D	1.3	27.5	0.99	0.73	26.5
Approach		31	96.6	31	96.6	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	12.7
All Vehicles		1621	8.8	1621	8.8	0.896	21.0	LOS B	48.0	361.3	0.74	0.78	36.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 13 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

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: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

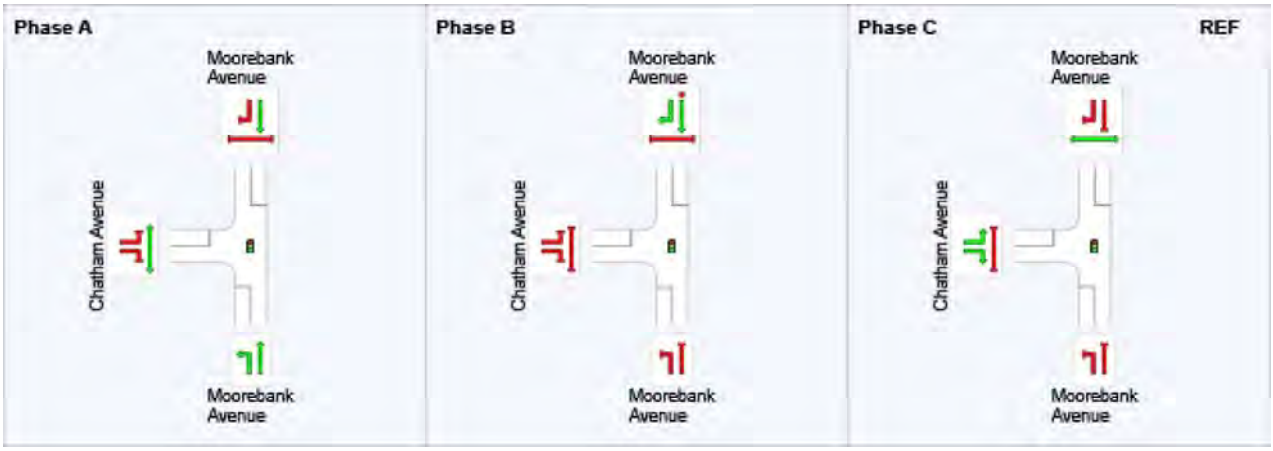
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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

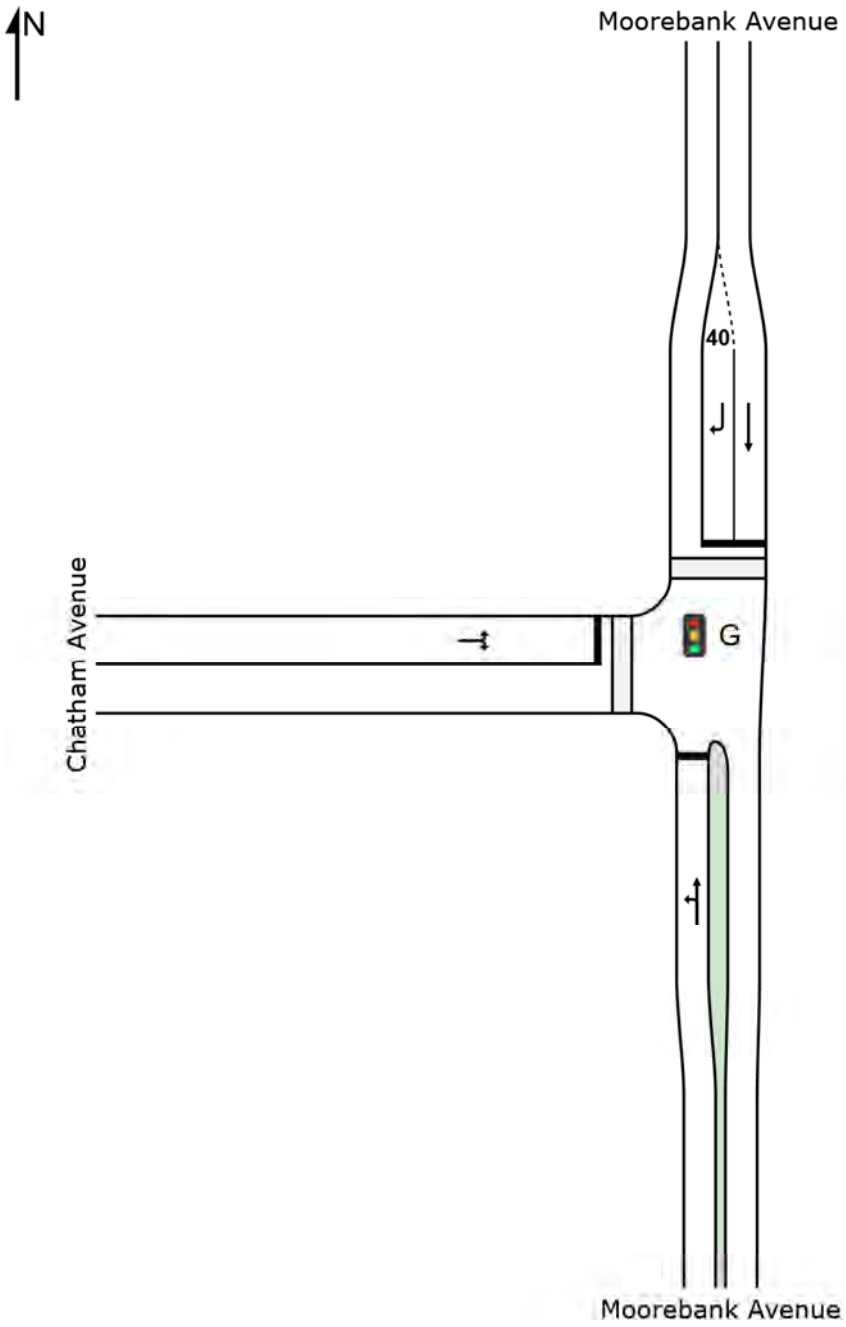


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.817	27.6	LOS B	13.5	98.5	0.98	1.00	36.5
2	T1	501	2.3	501	2.3	0.817	24.4	LOS B	13.5	98.5	0.98	1.00	33.5
Approach		502	2.3	502	2.3	0.817	24.4	LOS B	13.5	98.5	0.98	1.00	33.5
North: Moorebank Avenue													
8	T1	955	1.2	955	1.2	0.911	25.9	LOS B	30.9	221.5	0.94	1.18	36.0
9	R2	29	100.0	29	100.0	0.227	27.8	LOS B	0.7	15.3	0.94	0.72	29.2
Approach		984	4.2	984	4.2	0.911	26.0	LOS B	30.9	221.5	0.94	1.16	35.8
West: Chatham Avenue													
10	L2	318	9.3	318	9.3	0.841	31.9	LOS C	9.1	75.6	1.00	1.03	16.4
12	R2	1	0.0	1	0.0	0.841	31.9	LOS C	9.1	75.6	1.00	1.03	32.5
Approach		319	9.2	319	9.2	0.841	31.9	LOS C	9.1	75.6	1.00	1.03	16.5
All Vehicles		1805	4.5	1805	4.5	0.911	26.6	LOS B	30.9	221.5	0.96	1.09	33.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.1 %
Number of Iterations: 9 (maximum specified: 20)

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
P3	North Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
P4	West Full Crossing	11	16.8	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	18.1	LOS B			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

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

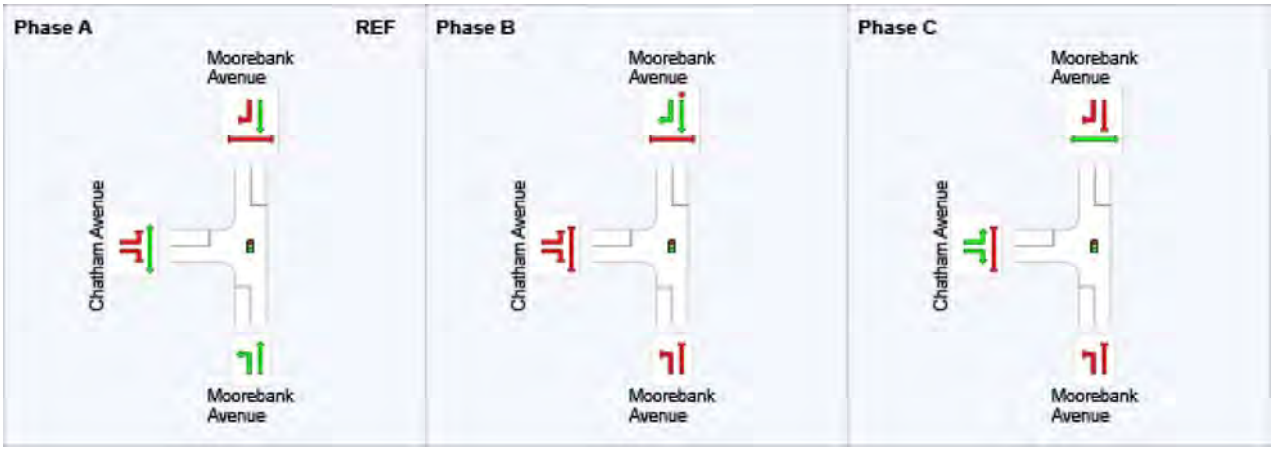
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	34
Green Time (sec)	16	6	10
Phase Time (sec)	22	12	16
Phase Split	44%	24%	32%

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



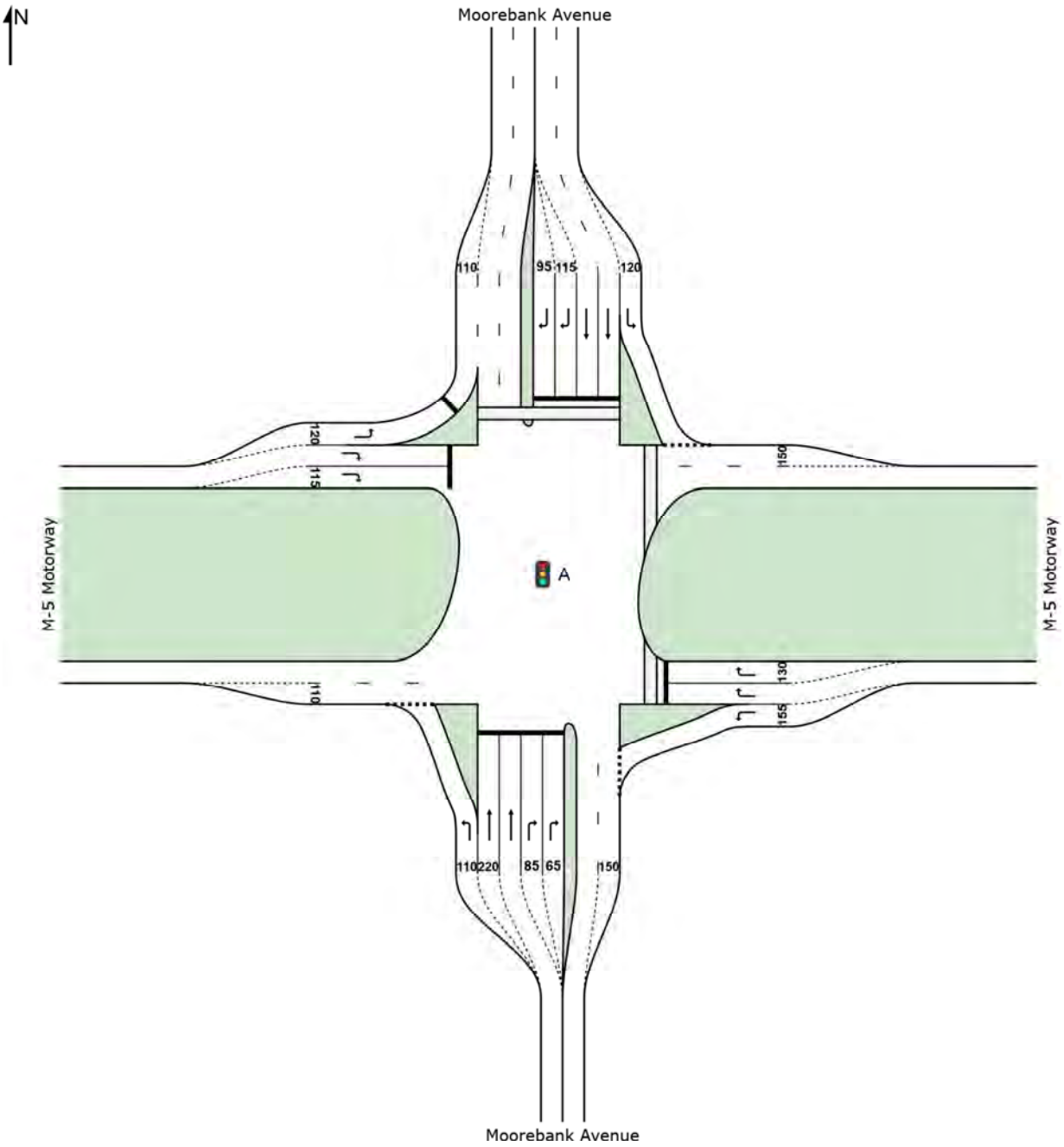
REF: Reference Phase
VAR: Variable Phase

Stage 2(ii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.4	LOS A	9.9	89.8	0.42	0.73	50.3
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	339	17.7	339	17.7	0.285	6.4	LOS A	2.0	18.9	0.14	0.59	47.5
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		582	12.1	582	12.1	0.949	47.1	LOS D	10.7	81.6	0.50	0.78	23.9
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	218	6.8	218	6.8	0.156	27.7	LOS B	5.2	41.5	0.65	0.53	24.6
9	R2	506	20.2	506	20.2	0.967	87.5	LOS F	28.7	282.0	0.98	0.98	22.1
Approach		773	16.3	773	16.3	0.967	65.6	LOS E	28.7	282.0	0.83	0.82	23.3
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	521	9.7	521	9.7	0.812	68.9	LOS E	20.8	173.8	0.99	0.88	18.9
Approach		1877	8.2	1877	8.2	0.887	24.3	LOS B	21.5	173.8	0.62	0.72	38.0
All Vehicles		4333	11.1	4333	11.1	0.967	36.3	LOS C	28.7	282.0	0.64	0.74	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 20 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

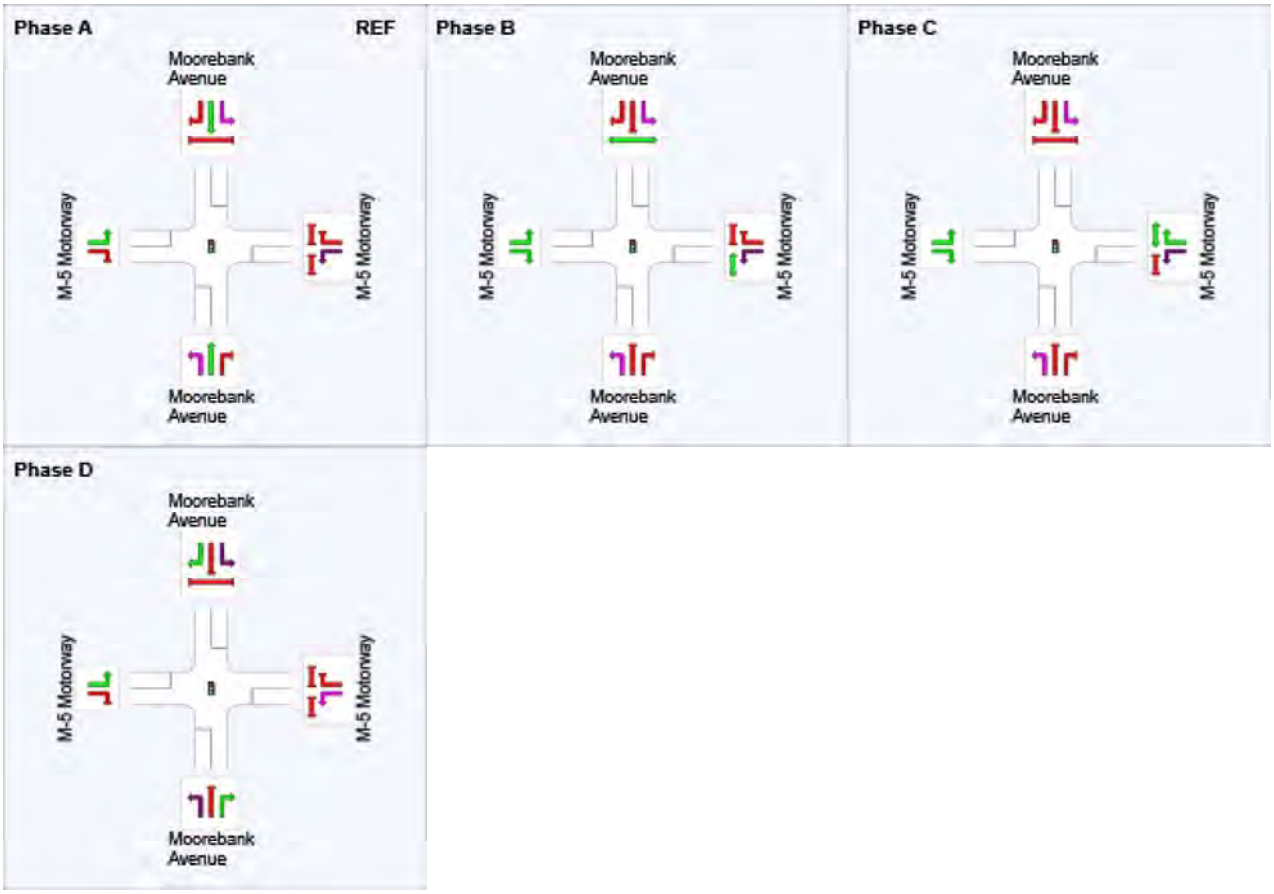
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

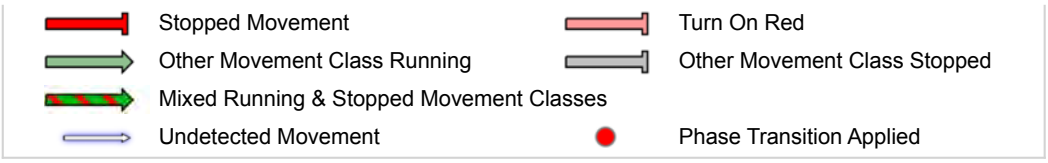
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



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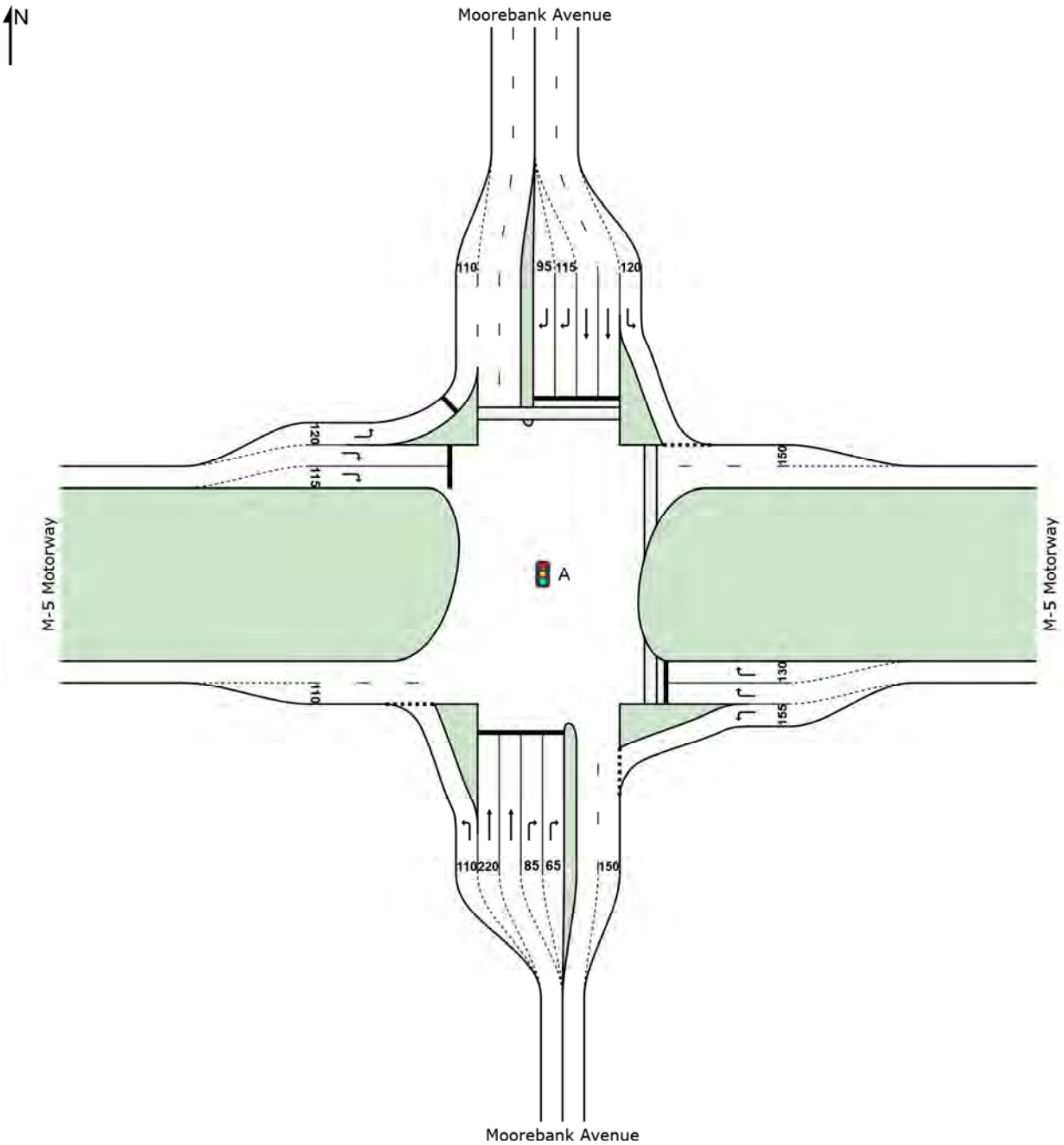
SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	541	7.4	541	7.4	0.761	42.8	LOS D	26.3	211.1	0.92	1.05	35.1
2	T1	286	2.6	286	2.6	0.567	66.8	LOS E	10.0	73.6	0.99	0.80	22.4
3	R2	404	8.9	404	8.9	0.239	22.6	LOS B	7.9	65.3	0.53	0.72	41.6
Approach		1232	6.8	1232	6.8	0.761	41.7	LOS C	26.3	211.1	0.81	0.88	33.0
East: M-5 Motorway													
4	L2	281	12.7	281	12.7	0.239	7.1	LOS A	2.9	25.6	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		368	11.1	368	11.1	0.642	26.5	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.065	6.8	LOS A	0.6	4.8	0.16	0.59	55.9
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	439	9.6	439	9.6	0.810	72.7	LOS F	17.7	148.0	1.00	0.88	18.2
Approach		1034	8.2	1034	8.2	0.810	34.4	LOS C	17.7	148.0	0.50	0.70	32.7
All Vehicles		4408	6.4	4408	6.4	0.884	39.2	LOS C	46.1	352.4	0.69	0.81	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.1 %
Number of Iterations: 9 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

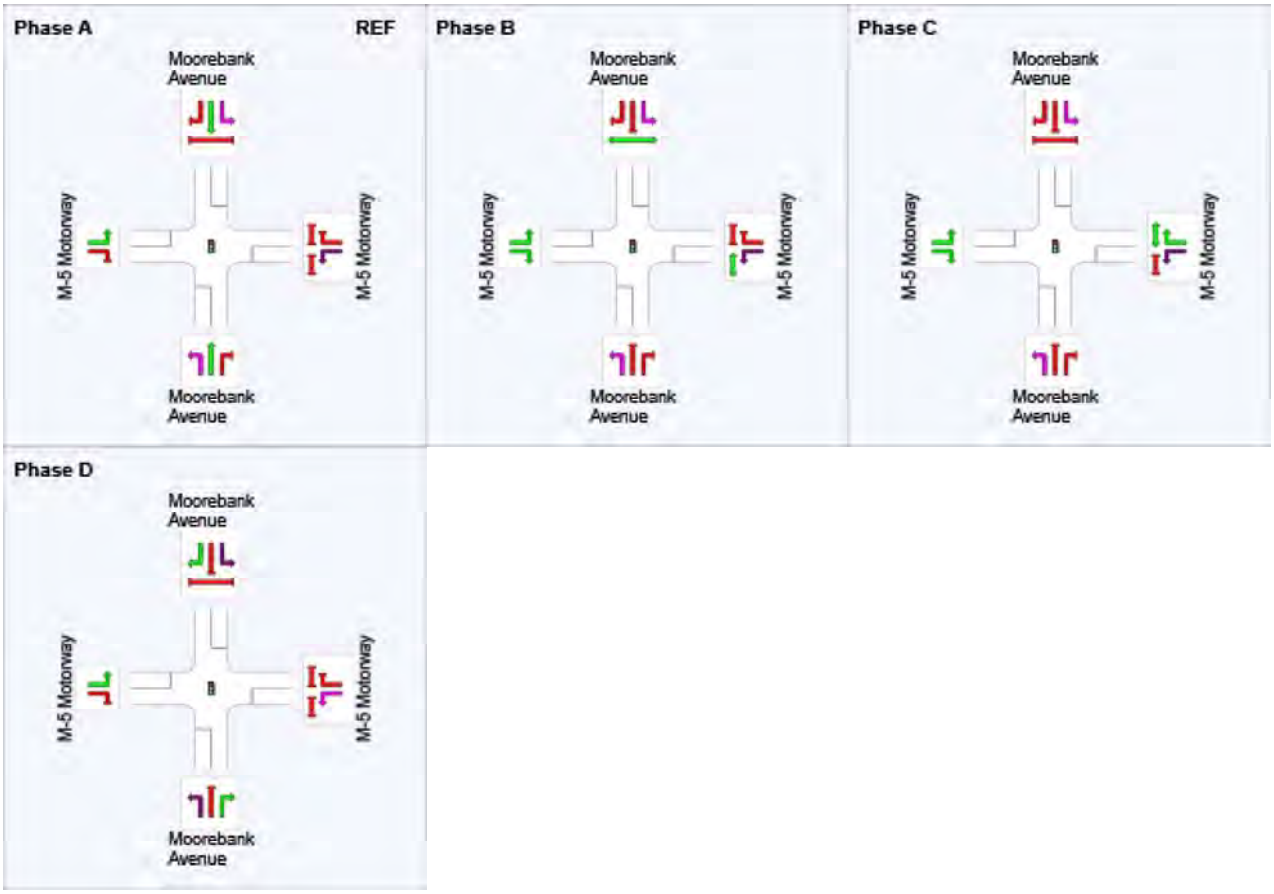
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

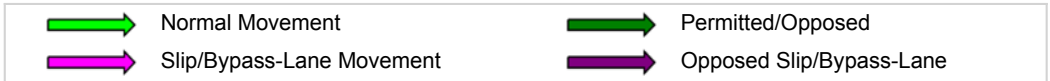
Phase Timing Results

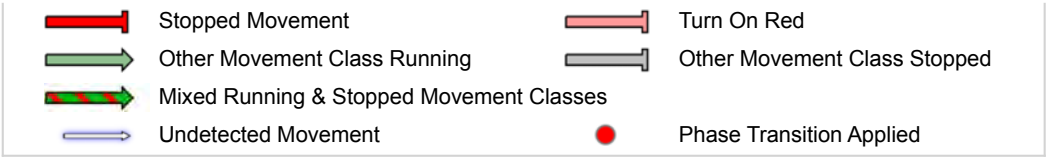
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase

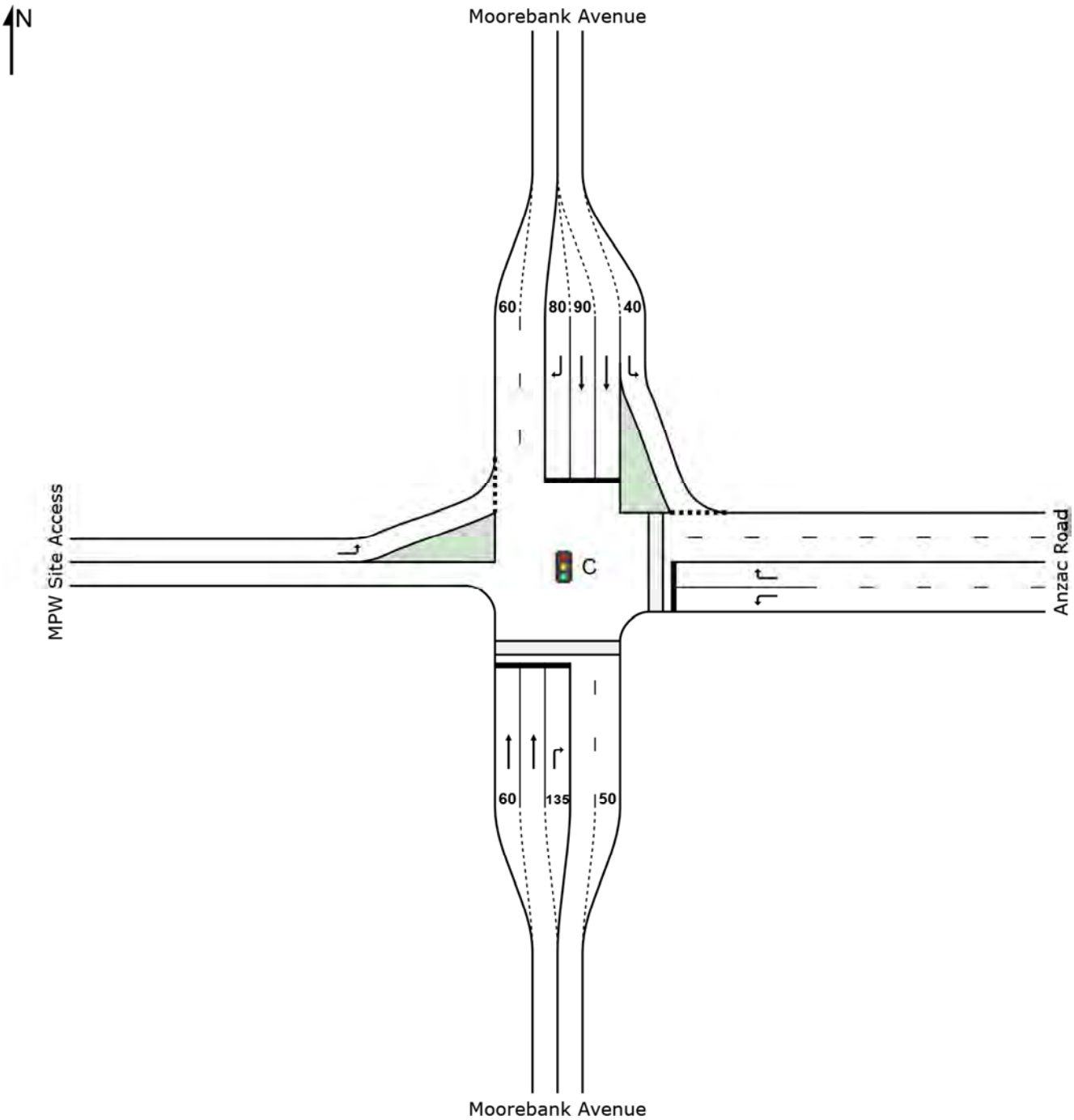




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	713	6.1	713	6.1	0.878	35.0	LOS C	23.9	187.4	0.90	0.92	18.0
3	R2	381	3.3	381	3.3	0.603	29.9	LOS C	14.0	104.3	0.88	0.82	24.4
Approach		1094	5.1	1094	5.1	0.878	33.2	LOS C	23.9	187.4	0.90	0.89	20.3
East: Anzac Road													
4	L2	208	3.0	208	3.0	0.486	38.3	LOS C	8.1	60.0	0.91	0.81	12.7
6	R2	363	11.9	363	11.9	0.900	56.2	LOS D	19.2	166.7	1.00	1.03	9.6
Approach		572	8.7	572	8.7	0.900	49.7	LOS D	19.2	166.7	0.97	0.95	10.5
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.346	7.5	LOS A	6.3	51.1	0.45	0.61	34.1
8	T1	492	10.3	492	10.3	0.901	45.9	LOS D	19.5	164.4	0.97	1.04	8.0
9	R2	44	100.0	44	100.0	0.182	37.6	LOS C	1.6	21.2	0.85	0.74	28.3
Approach		939	13.5	939	13.5	0.901	29.0	LOS C	19.5	164.4	0.74	0.84	16.9
West: MPW Site Access													
10	L2	44	100.0	44	100.0	0.099	14.7	LOS B	0.6	8.1	0.61	0.67	41.3
Approach		44	100.0	44	100.0	0.099	14.7	LOS B	0.6	8.1	0.61	0.67	41.3
All Vehicles		2648	10.4	2648	10.4	0.901	35.0	LOS C	23.9	187.4	0.85	0.88	17.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 20 (maximum specified: 20)

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	11	38.3	LOS D	0.0	0.0	0.92	0.92
P2	East Full Crossing	11	36.5	LOS D	0.0	0.0	0.90	0.90
All Pedestrians		21	37.4	LOS D			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

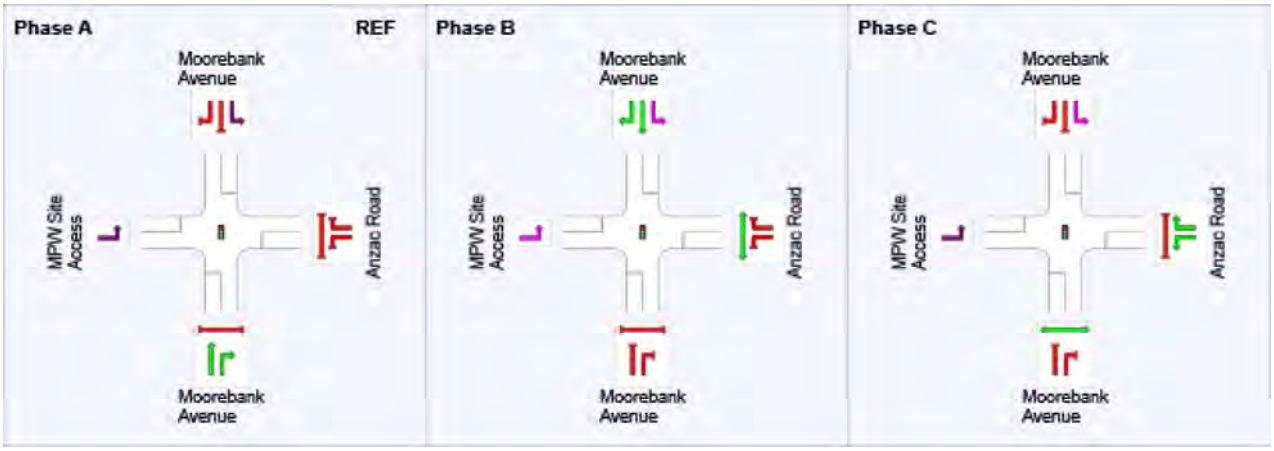
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	37	63
Green Time (sec)	31	20	21
Phase Time (sec)	37	26	27
Phase Split	41%	29%	30%

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

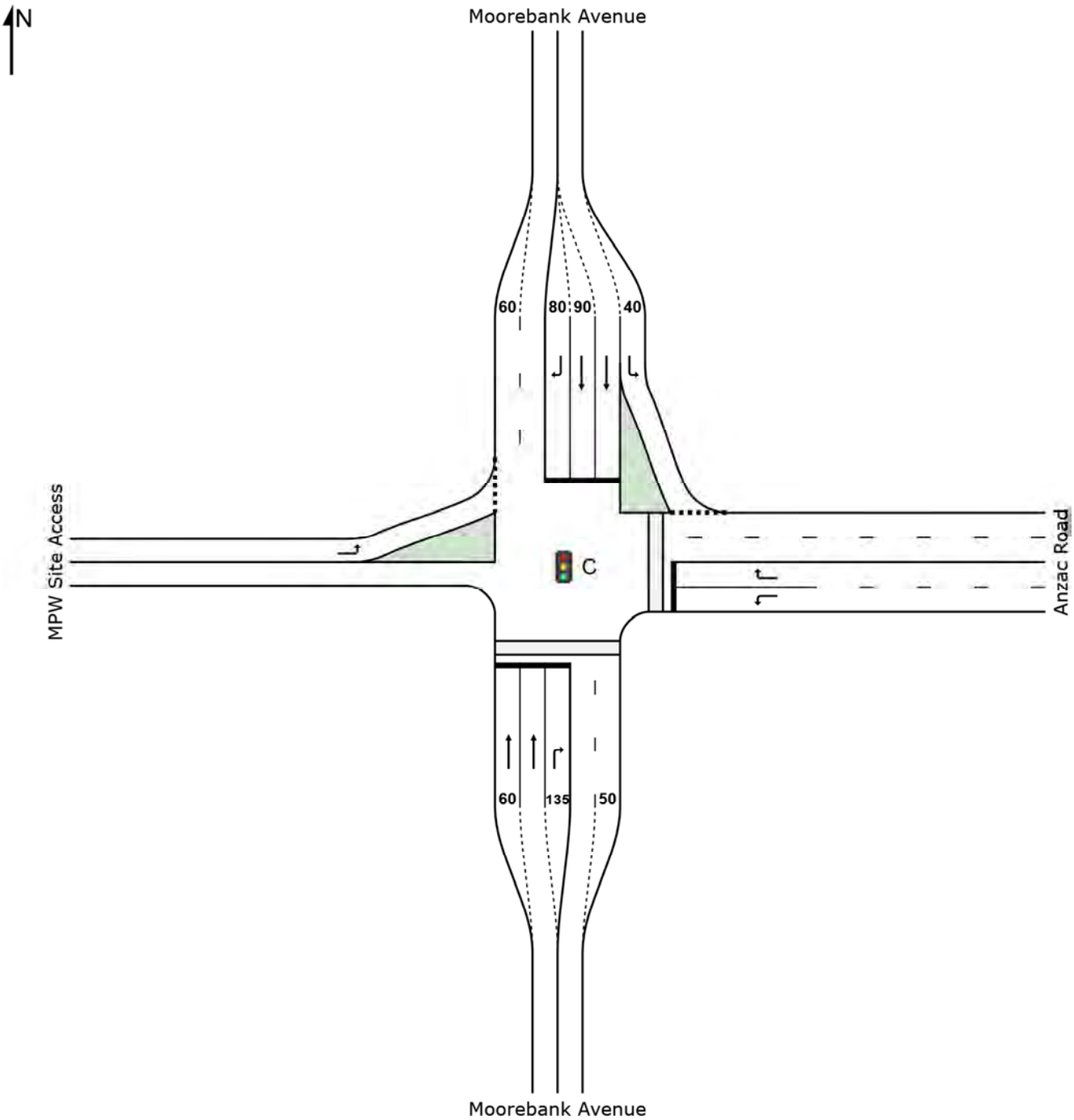


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	789	4.0	789	4.0	0.936	30.8	LOS C	20.8	157.3	0.95	1.21	19.2
3	R2	211	0.5	211	0.5	0.804	31.0	LOS C	5.9	41.5	1.00	1.02	24.1
Approach		1000	3.3	1000	3.3	0.936	30.8	LOS C	20.8	157.3	0.96	1.17	20.4
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.838	33.4	LOS C	8.0	57.7	1.00	1.00	14.1
6	R2	287	4.0	287	4.0	0.875	36.1	LOS C	8.7	65.8	1.00	1.09	13.7
Approach		567	2.8	567	2.8	0.875	34.8	LOS C	8.7	65.8	1.00	1.05	13.9
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.361	5.5	LOS A	3.1	23.2	0.48	0.62	36.9
8	T1	673	4.2	673	4.2	0.824	20.4	LOS B	13.7	104.3	0.94	0.96	14.4
9	R2	44	100.0	44	100.0	0.288	29.0	LOS C	1.1	14.0	0.93	0.74	31.7
Approach		1136	7.5	1136	7.5	0.824	15.2	LOS B	13.7	104.3	0.77	0.82	23.2
West: MPW Site Access													
10	L2	44	100.0	44	100.0	0.095	12.9	LOS A	0.5	6.1	0.71	0.68	43.0
Approach		44	100.0	44	100.0	0.095	12.9	LOS A	0.5	6.1	0.71	0.68	43.0
All Vehicles		2747	6.5	2747	6.5	0.936	24.9	LOS B	20.8	157.3	0.88	0.99	20.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.1 %
Number of Iterations: 9 (maximum specified: 20)

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	11	19.4	LOS B	0.0	0.0	0.88	0.88
P2	East Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
All Pedestrians		21	19.4	LOS B			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: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

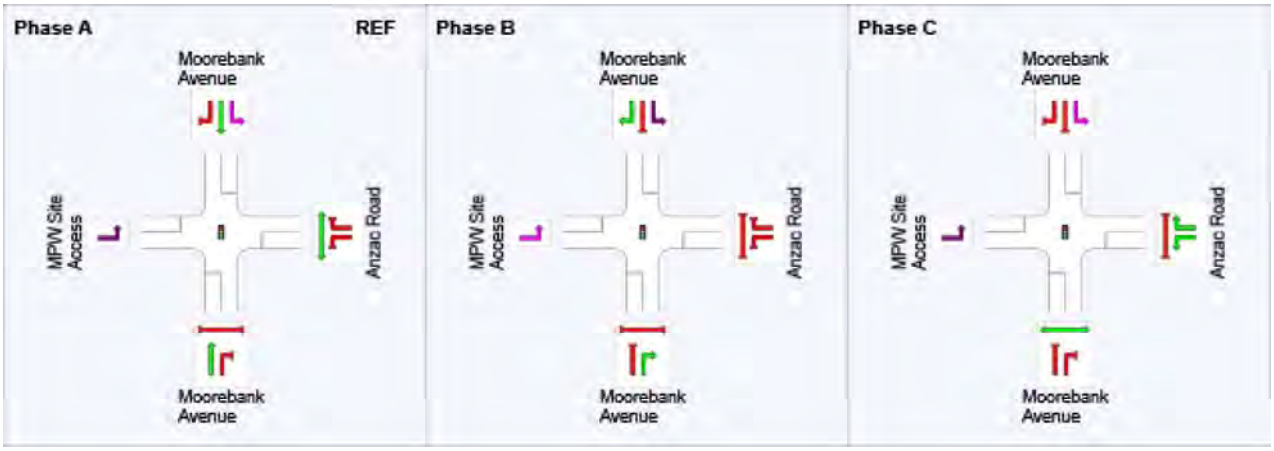
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	35
Green Time (sec)	16	7	9
Phase Time (sec)	22	13	15
Phase Split	44%	26%	30%

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



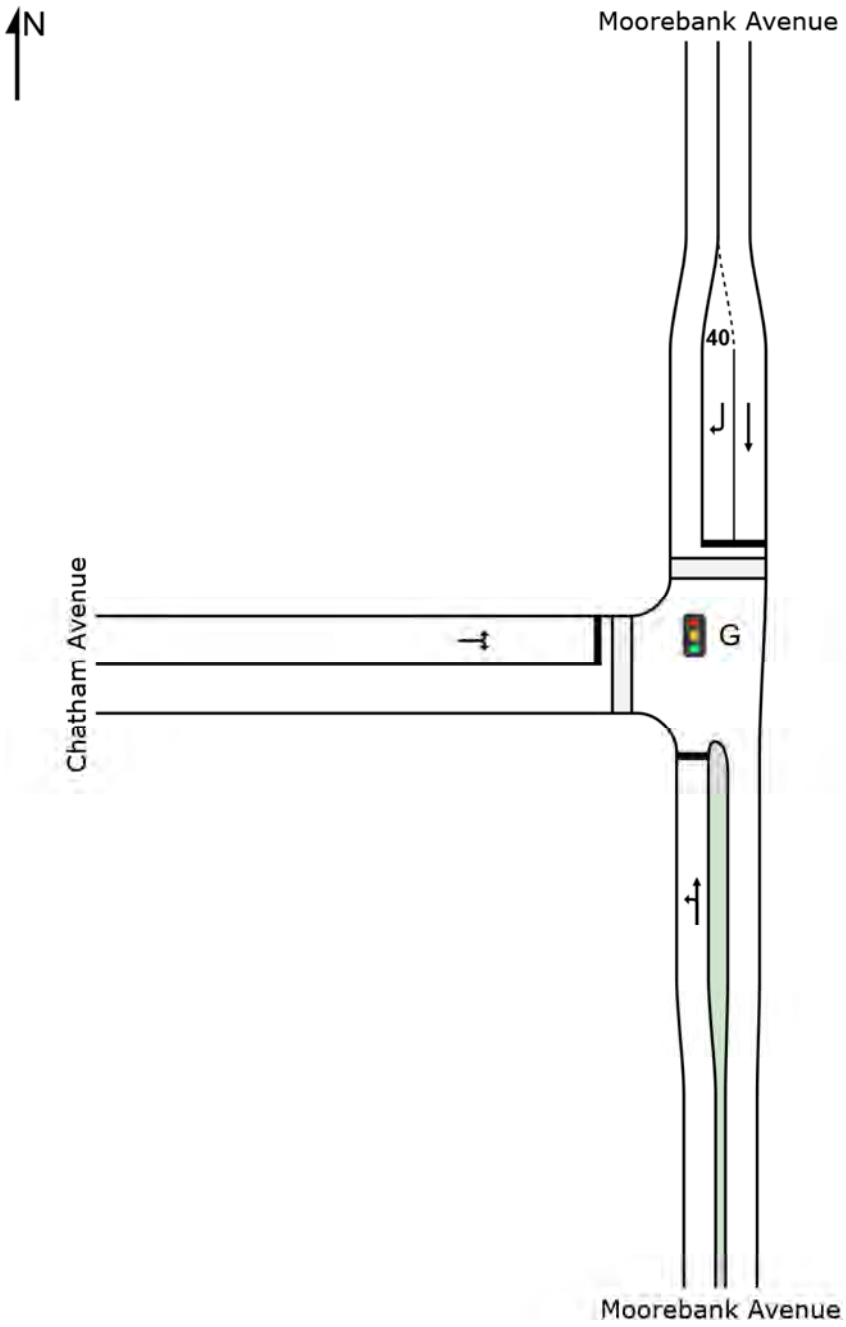
REF: Reference Phase
VAR: Variable Phase

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

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.896	30.2	LOS C	48.0	361.3	0.91	0.99	35.2
2	T1	1103	3.7	1103	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
Approach		1104	3.7	1104	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	15	100.0	15	100.0	0.193	48.2	LOS D	0.6	13.4	0.97	0.70	24.1
Approach		472	12.1	472	12.1	0.315	4.1	LOS A	5.3	43.6	0.32	0.28	44.8
West: Chatham Avenue													
10	L2	15	100.0	15	100.0	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	12.1
12	R2	1	0.0	1	0.0	0.184	48.5	LOS D	0.7	13.6	0.97	0.70	26.8
Approach		16	93.3	16	93.3	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	13.5
All Vehicles		1592	7.1	1592	7.1	0.896	20.5	LOS B	48.0	361.3	0.74	0.78	36.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 20 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

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: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

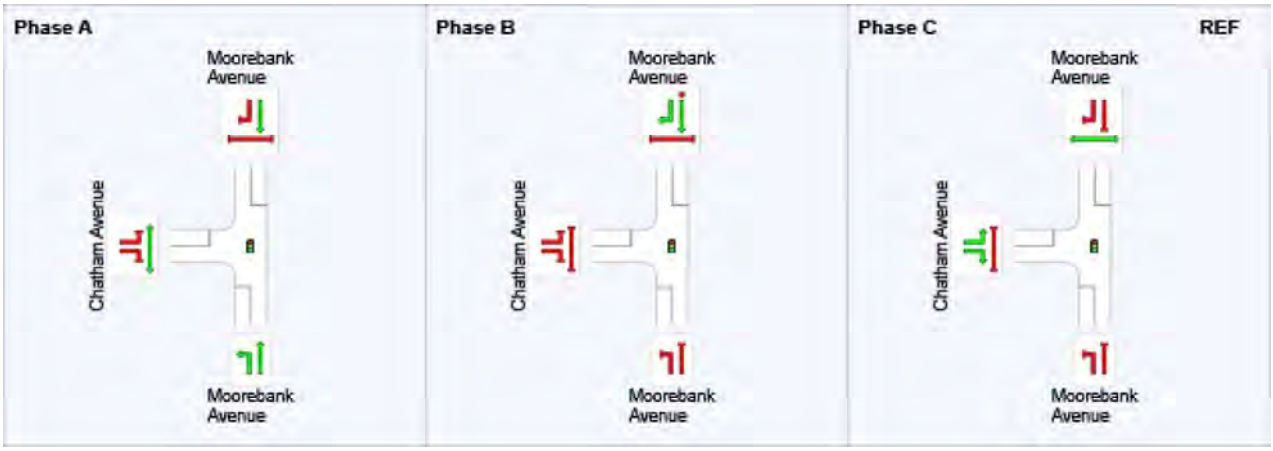
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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

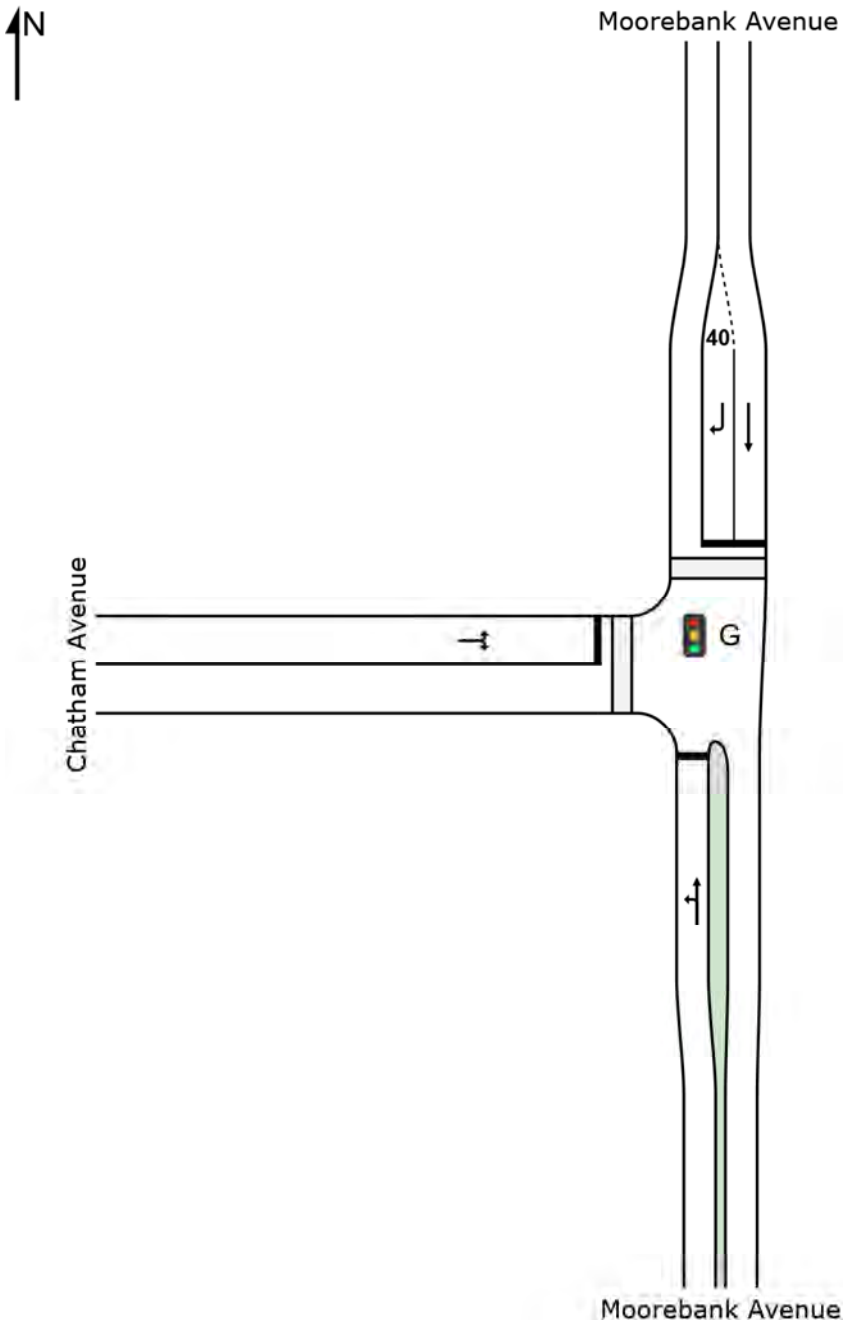


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.769	24.6	LOS B	12.4	90.9	0.95	0.93	38.2
2	T1	501	2.3	501	2.3	0.769	21.4	LOS B	12.4	90.9	0.95	0.93	35.4
Approach		502	2.3	502	2.3	0.769	21.4	LOS B	12.4	90.9	0.95	0.93	35.4
North: Moorebank Avenue													
8	T1	955	1.2	955	1.2	0.866	18.0	LOS B	25.9	185.4	0.90	1.01	38.8
9	R2	15	100.0	15	100.0	0.113	27.2	LOS B	0.4	7.5	0.92	0.68	29.4
Approach		969	2.7	969	2.7	0.866	18.2	LOS B	25.9	185.4	0.90	1.00	38.7
West: Chatham Avenue													
10	L2	303	4.9	303	4.9	0.865	33.9	LOS C	9.0	69.0	1.00	1.07	15.7
12	R2	1	0.0	1	0.0	0.865	33.9	LOS C	9.0	69.0	1.00	1.07	31.7
Approach		304	4.8	304	4.8	0.865	33.9	LOS C	9.0	69.0	1.00	1.07	15.8
All Vehicles		1776	3.0	1776	3.0	0.866	21.8	LOS B	25.9	185.4	0.93	0.99	35.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.1 %
Number of Iterations: 9 (maximum specified: 20)

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
P3	North Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
P4	West Full Crossing	11	16.0	LOS B	0.0	0.0	0.80	0.80
All Pedestrians		21	17.7	LOS B			0.84	0.84

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: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

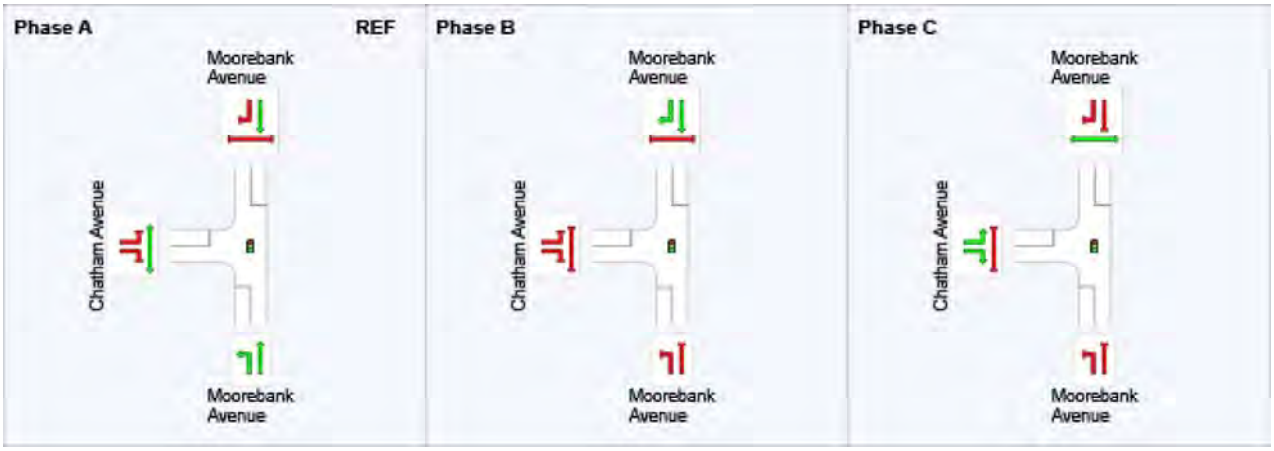
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	23	35
Green Time (sec)	17	6	9
Phase Time (sec)	23	12	15
Phase Split	46%	24%	30%

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



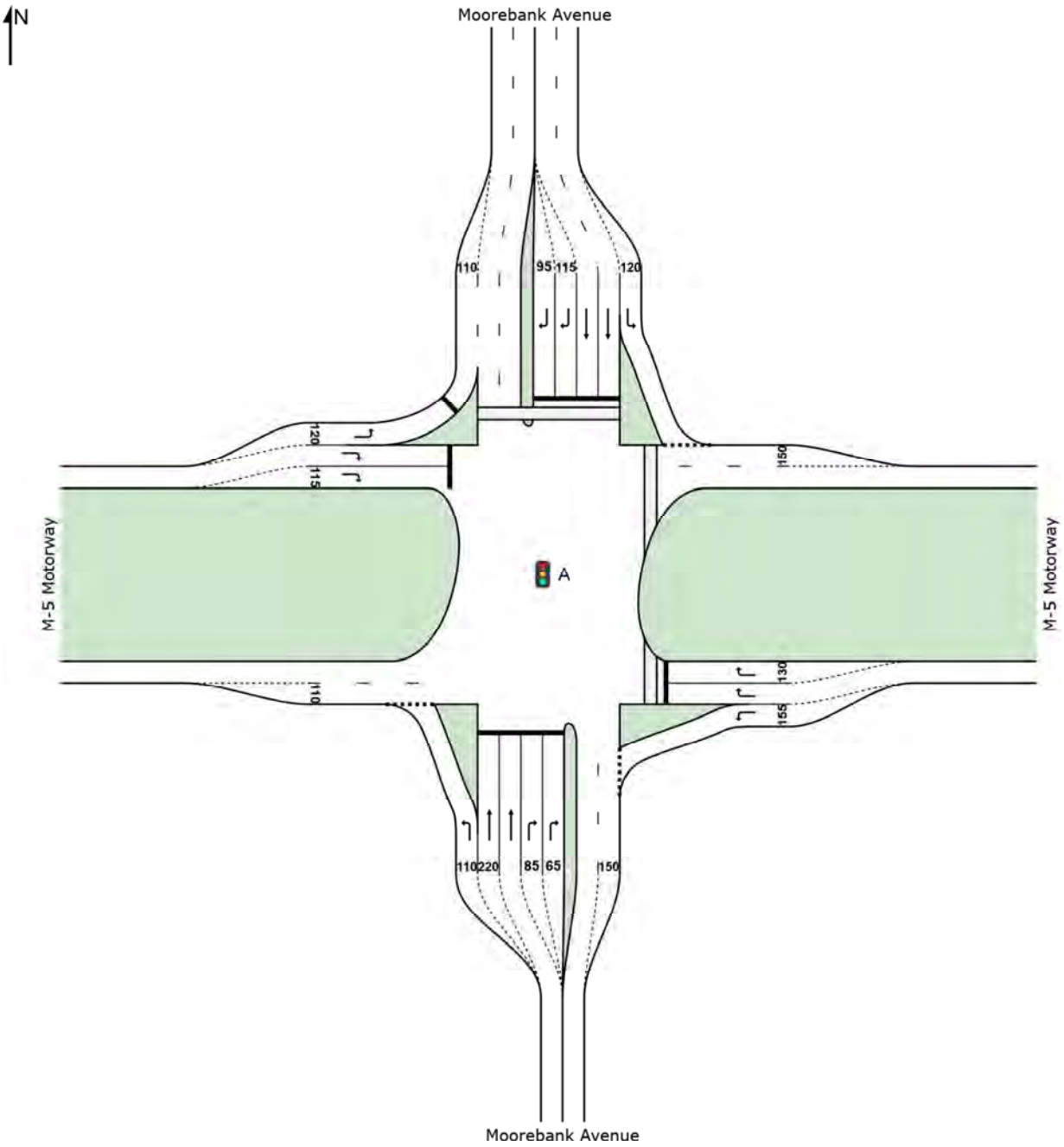
REF: Reference Phase
VAR: Variable Phase

Stage 2(iii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.4	LOS A	9.9	89.8	0.42	0.73	50.3
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	339	17.7	339	17.7	0.285	6.4	LOS A	2.0	18.9	0.14	0.59	47.5
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		582	12.1	582	12.1	0.949	47.1	LOS D	10.7	81.6	0.50	0.78	23.9
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	218	6.8	218	6.8	0.156	27.7	LOS B	5.2	41.5	0.65	0.53	24.6
9	R2	506	20.2	506	20.2	0.967	87.5	LOS F	28.7	282.0	0.98	0.98	22.1
Approach		773	16.3	773	16.3	0.967	65.6	LOS E	28.7	282.0	0.83	0.82	23.3
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	521	9.7	521	9.7	0.812	68.9	LOS E	20.8	173.8	0.99	0.88	18.9
Approach		1877	8.2	1877	8.2	0.887	24.3	LOS B	21.5	173.8	0.62	0.72	38.0
All Vehicles		4333	11.1	4333	11.1	0.967	36.3	LOS C	28.7	282.0	0.64	0.74	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

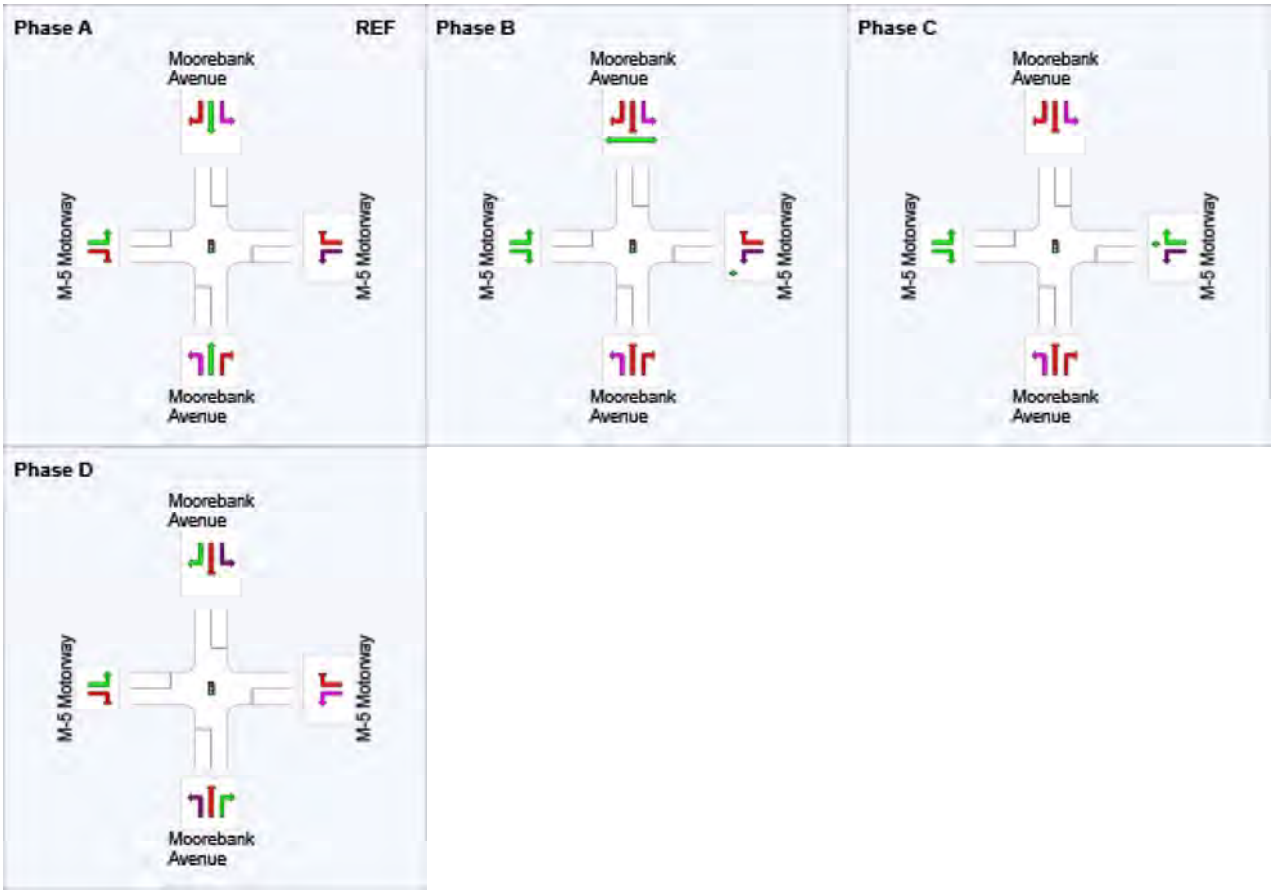
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

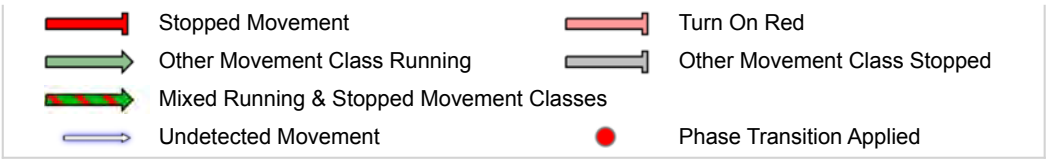
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



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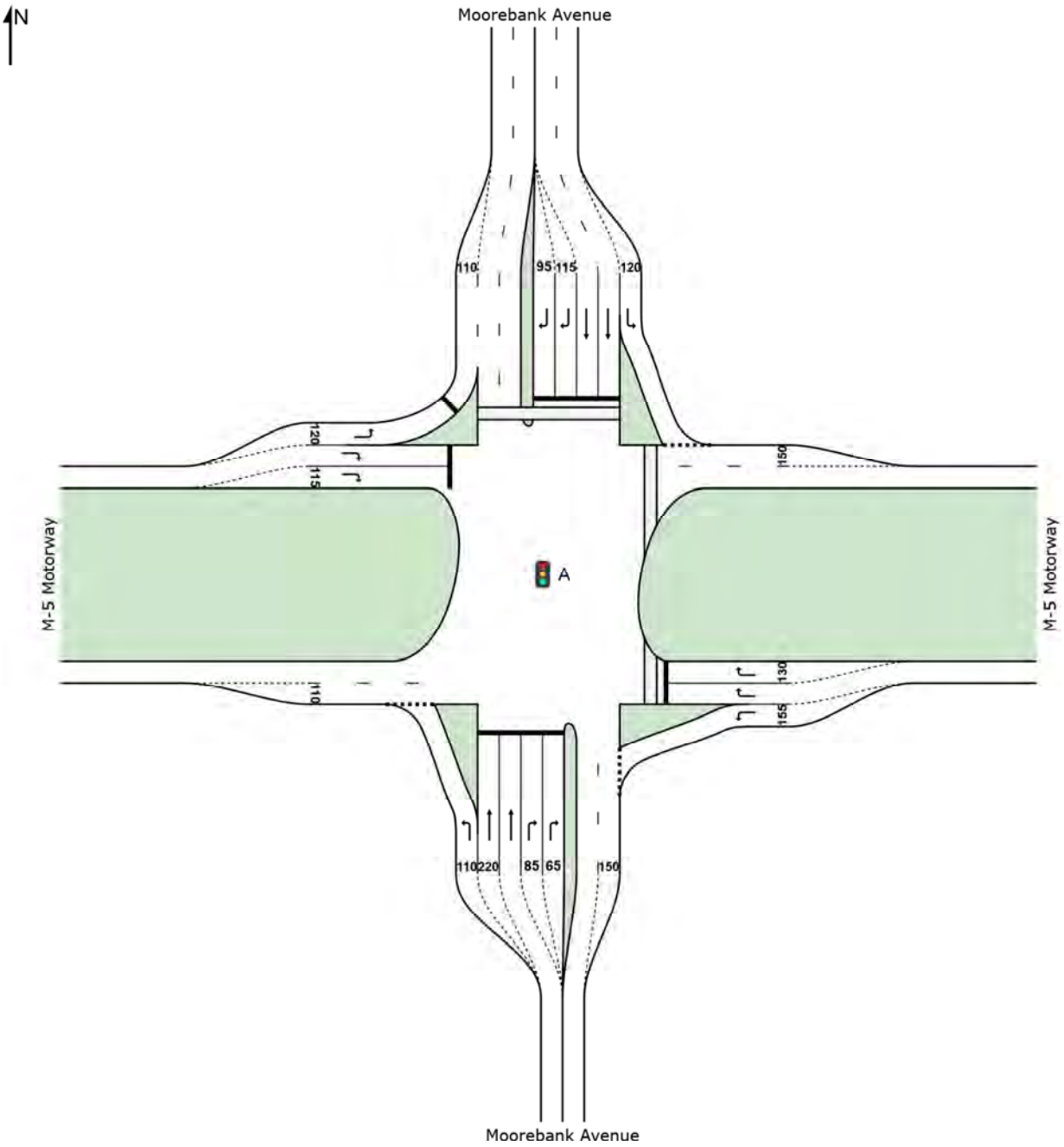
SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	541	7.4	541	7.4	0.761	42.8	LOS D	26.3	211.1	0.92	1.05	35.1
2	T1	286	2.6	286	2.6	0.567	66.8	LOS E	10.0	73.6	0.99	0.80	22.4
3	R2	404	8.9	404	8.9	0.239	22.6	LOS B	7.9	65.3	0.53	0.72	41.6
Approach		1232	6.8	1232	6.8	0.761	41.7	LOS C	26.3	211.1	0.81	0.88	33.0
East: M-5 Motorway													
4	L2	281	12.7	281	12.7	0.239	7.1	LOS A	2.9	25.6	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		368	11.1	368	11.1	0.642	26.5	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.065	6.8	LOS A	0.6	4.8	0.16	0.59	55.9
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	439	9.6	439	9.6	0.810	72.7	LOS F	17.7	148.0	1.00	0.88	18.2
Approach		1034	8.2	1034	8.2	0.810	34.4	LOS C	17.7	148.0	0.50	0.70	32.7
All Vehicles		4408	6.4	4408	6.4	0.884	39.2	LOS C	46.1	352.4	0.69	0.81	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.0 %
Number of Iterations: 9 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

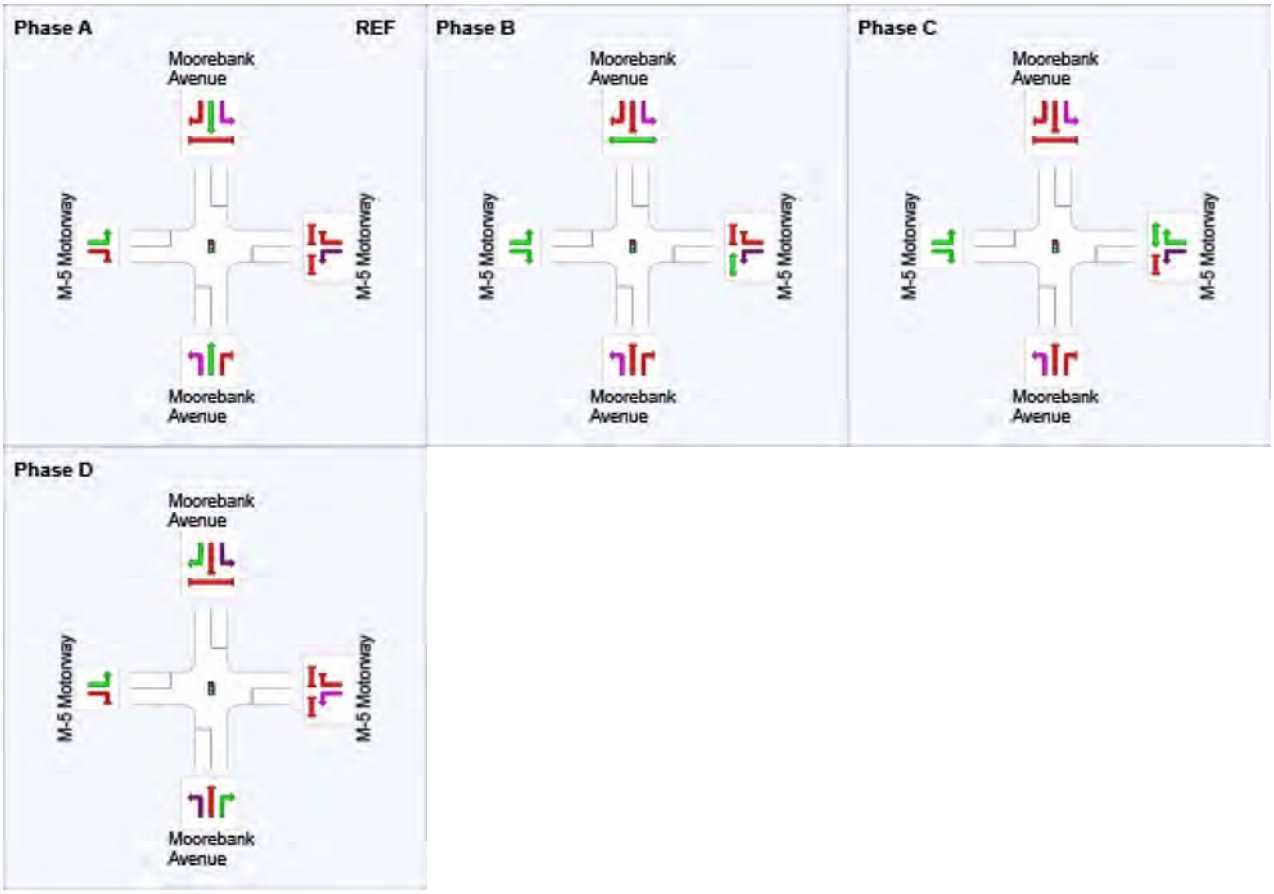
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

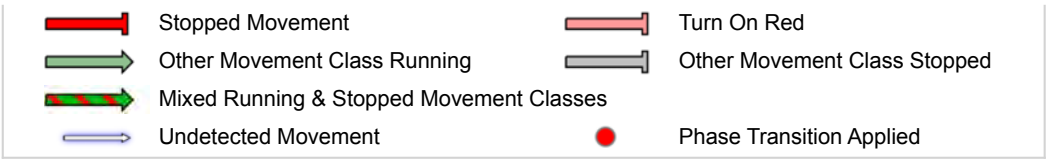
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase

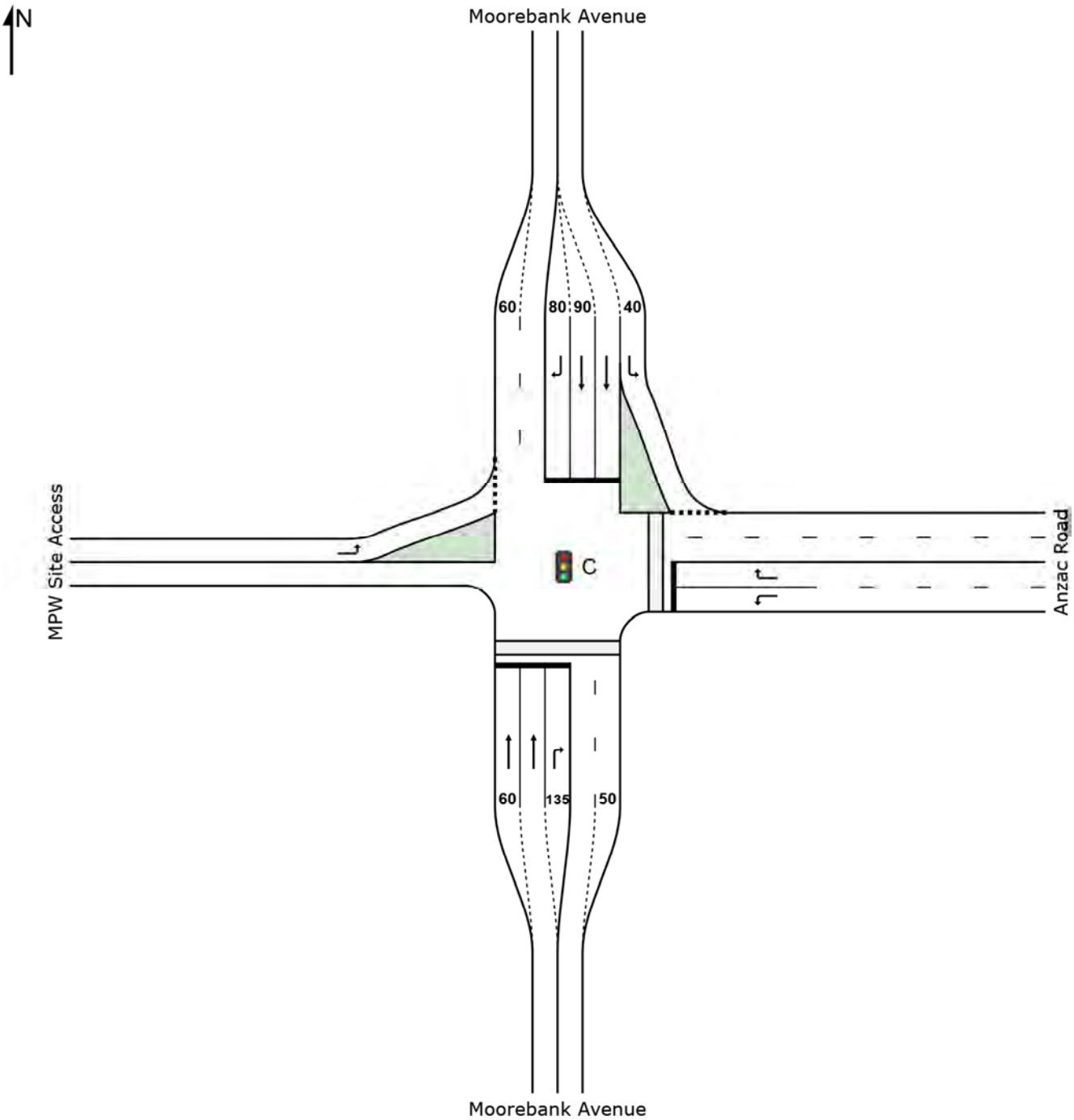
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 75 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	698	4.1	698	4.1	0.915	37.0	LOS C	22.8	172.8	0.95	1.06	17.4
3	R2	381	3.3	381	3.3	0.678	28.8	LOS C	12.6	94.0	0.93	0.84	24.8
Approach		1079	3.8	1079	3.8	0.915	34.1	LOS C	22.8	172.8	0.94	0.98	20.1
East: Anzac Road													
4	L2	208	3.0	208	3.0	0.473	32.6	LOS C	6.7	49.9	0.91	0.80	14.4
6	R2	363	11.9	363	11.9	0.875	45.9	LOS D	15.7	136.0	1.00	1.02	11.3
Approach		572	8.7	572	8.7	0.875	41.1	LOS C	15.7	136.0	0.97	0.94	12.2
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.351	7.4	LOS A	5.6	44.9	0.48	0.61	34.2
8	T1	477	7.5	477	7.5	0.895	39.3	LOS C	15.9	128.3	0.97	1.07	9.0
9	R2	59	100.0	59	100.0	0.252	33.7	LOS C	1.9	24.6	0.87	0.75	29.7
Approach		939	13.5	939	13.5	0.895	25.2	LOS B	15.9	128.3	0.75	0.85	18.8
West: MPW Site Access													
10	L2	59	100.0	59	100.0	0.128	14.3	LOS A	0.8	9.8	0.65	0.68	41.7
Approach		59	100.0	59	100.0	0.128	14.3	LOS A	0.8	9.8	0.65	0.68	41.7
All Vehicles		2648	10.4	2648	10.4	0.915	32.0	LOS C	22.8	172.8	0.87	0.92	18.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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	11	31.8	LOS D	0.0	0.0	0.92	0.92
P2	East Full Crossing	11	31.8	LOS D	0.0	0.0	0.92	0.92
All Pedestrians		21	31.8	LOS D			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

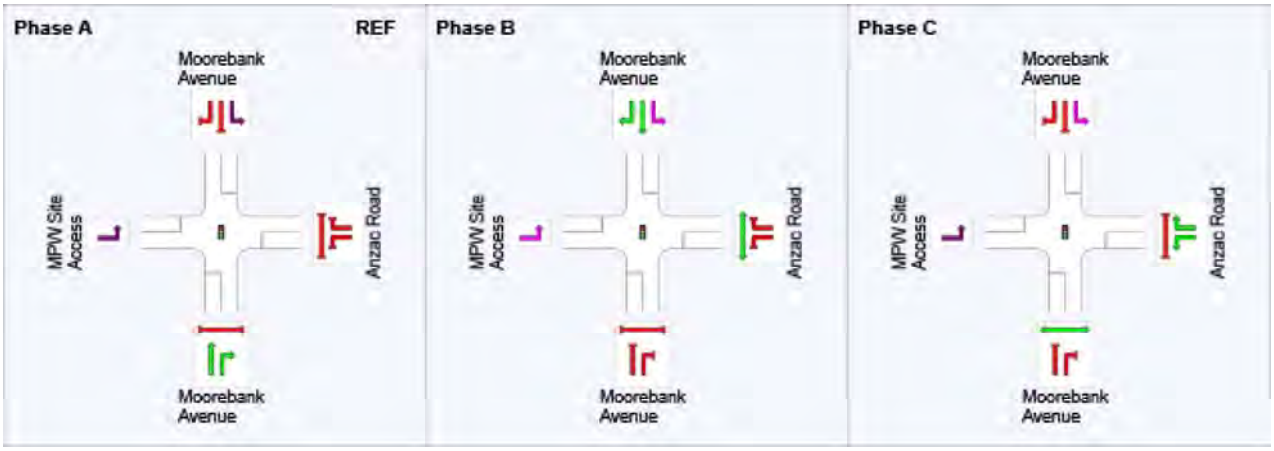
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 75 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	29	51
Green Time (sec)	23	16	18
Phase Time (sec)	29	22	24
Phase Split	39%	29%	32%

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



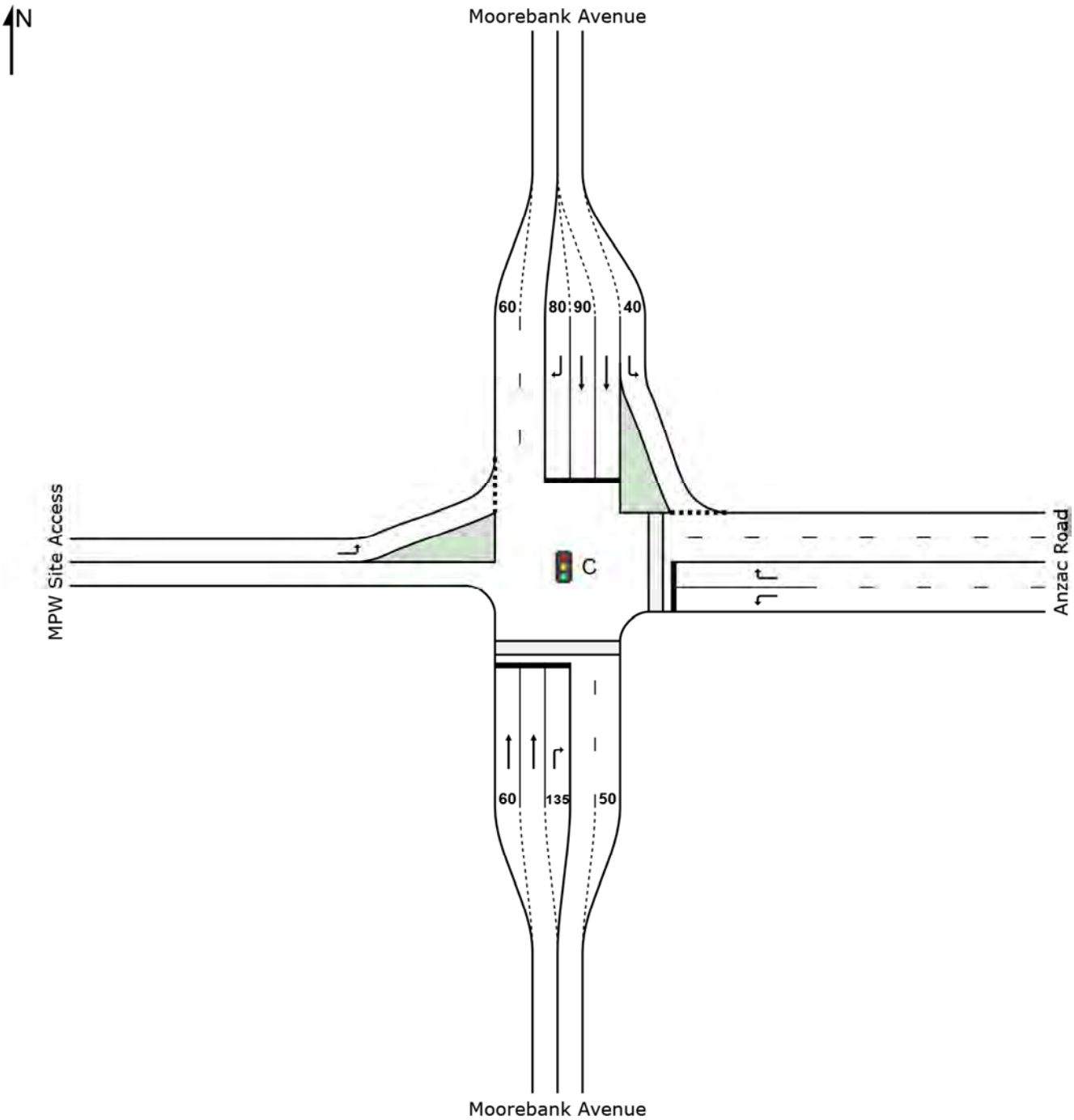
REF: Reference Phase
VAR: Variable Phase

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

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
2	T1	775	2.2	775	2.2	0.908	26.6	LOS B	18.5	135.4	0.95	1.12	20.7
3	R2	211	0.5	211	0.5	0.804	31.0	LOS C	5.9	41.5	1.00	1.02	24.1
Approach		985	1.8	985	1.8	0.908	27.5	LOS B	18.5	135.4	0.96	1.10	21.6
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.838	33.4	LOS C	8.0	57.7	1.00	1.00	14.1
6	R2	287	4.0	287	4.0	0.875	36.1	LOS C	8.7	65.8	1.00	1.09	13.7
Approach		567	2.8	567	2.8	0.875	34.8	LOS C	8.7	65.8	1.00	1.05	13.9
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.361	5.5	LOS A	3.1	23.2	0.48	0.62	36.9
8	T1	658	2.1	658	2.1	0.795	19.2	LOS B	12.8	93.4	0.93	0.91	15.0
9	R2	59	100.0	59	100.0	0.384	29.4	LOS C	1.5	19.0	0.95	0.76	31.5
Approach		1136	7.5	1136	7.5	0.795	14.7	LOS B	12.8	93.4	0.76	0.79	24.1
West: MPW Site Access													
10	L2	59	100.0	59	100.0	0.125	12.6	LOS A	0.6	7.9	0.69	0.69	43.4
Approach		59	100.0	59	100.0	0.125	12.6	LOS A	0.6	7.9	0.69	0.69	43.4
All Vehicles		2747	6.5	2747	6.5	0.908	23.4	LOS B	18.5	135.4	0.88	0.95	21.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.0 %
Number of Iterations: 9 (maximum specified: 20)

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	11	19.4	LOS B	0.0	0.0	0.88	0.88
P2	East Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
All Pedestrians		21	19.4	LOS B			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: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

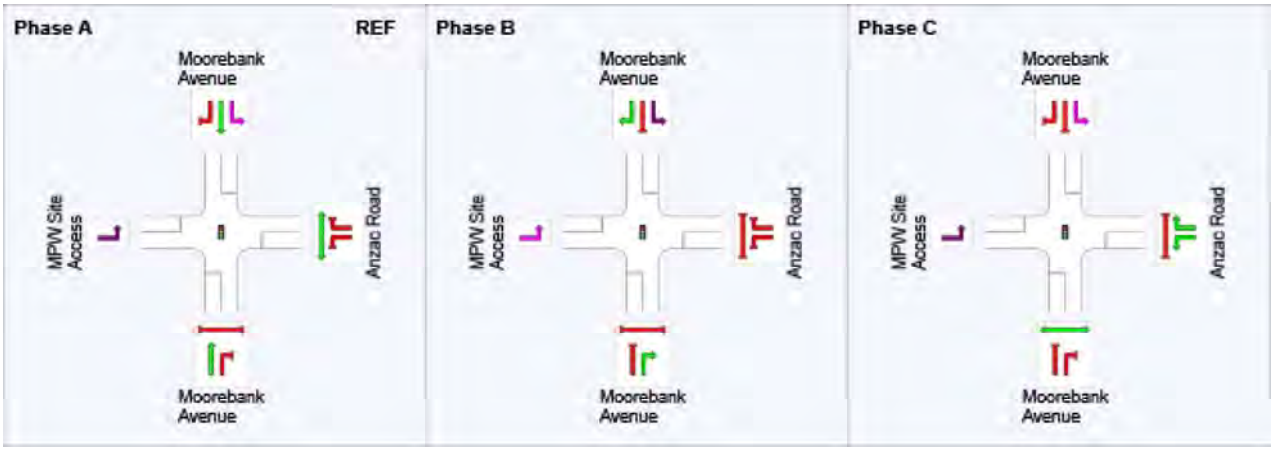
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	35
Green Time (sec)	16	7	9
Phase Time (sec)	22	13	15
Phase Split	44%	26%	30%

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



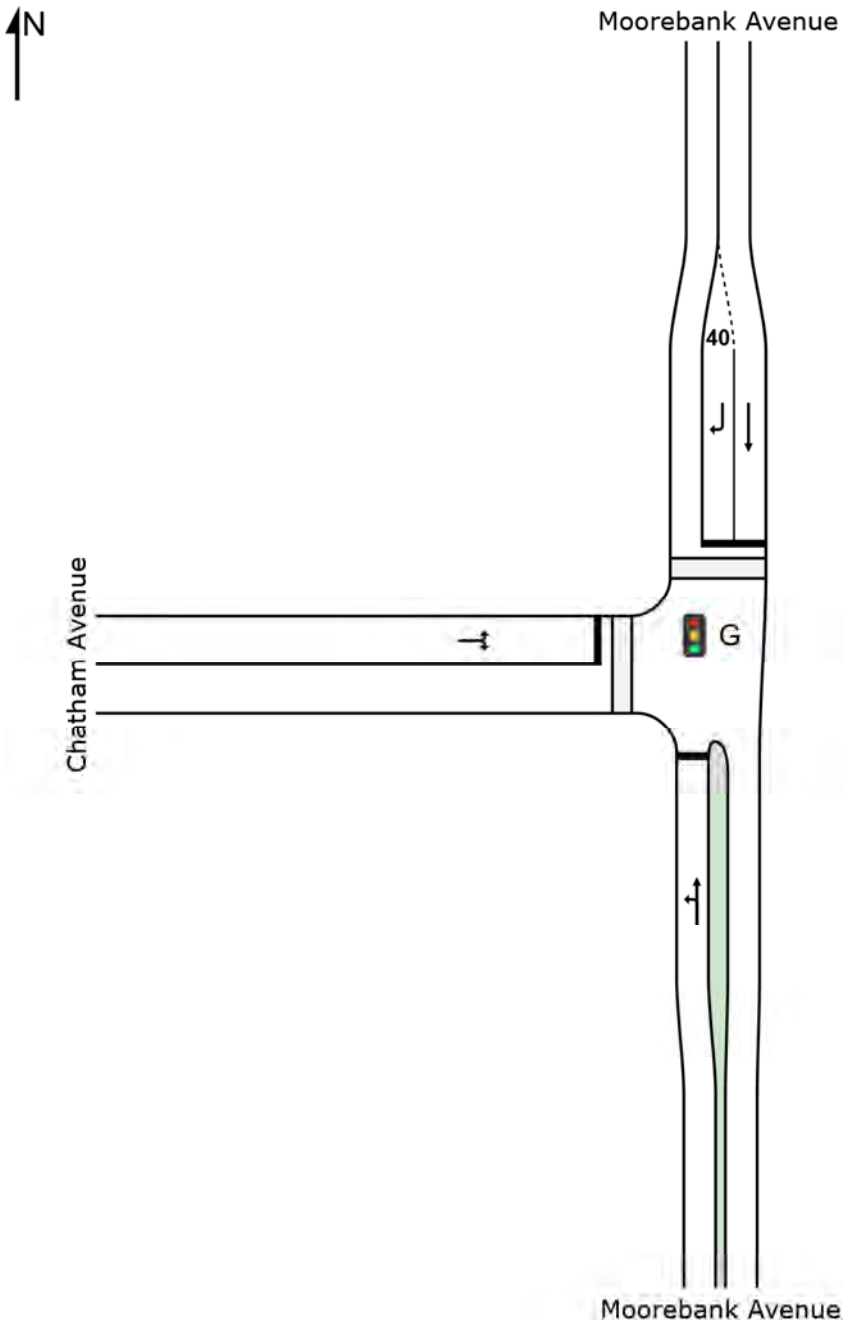
REF: Reference Phase
VAR: Variable Phase

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

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.896	30.2	LOS C	48.0	361.3	0.91	0.99	35.2
2	T1	1103	3.7	1103	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
Approach		1104	3.7	1104	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	1	0.0	1	0.0	0.008	44.2	LOS D	0.0	0.3	0.95	0.58	25.2
Approach		458	9.2	458	9.2	0.315	2.8	LOS A	5.3	43.6	0.30	0.27	45.6
West: Chatham Avenue													
10	L2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	12.7
12	R2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	27.7
Approach		2	0.0	2	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	21.8
All Vehicles		1564	5.3	1564	5.3	0.896	20.0	LOS B	48.0	361.3	0.74	0.78	37.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

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: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

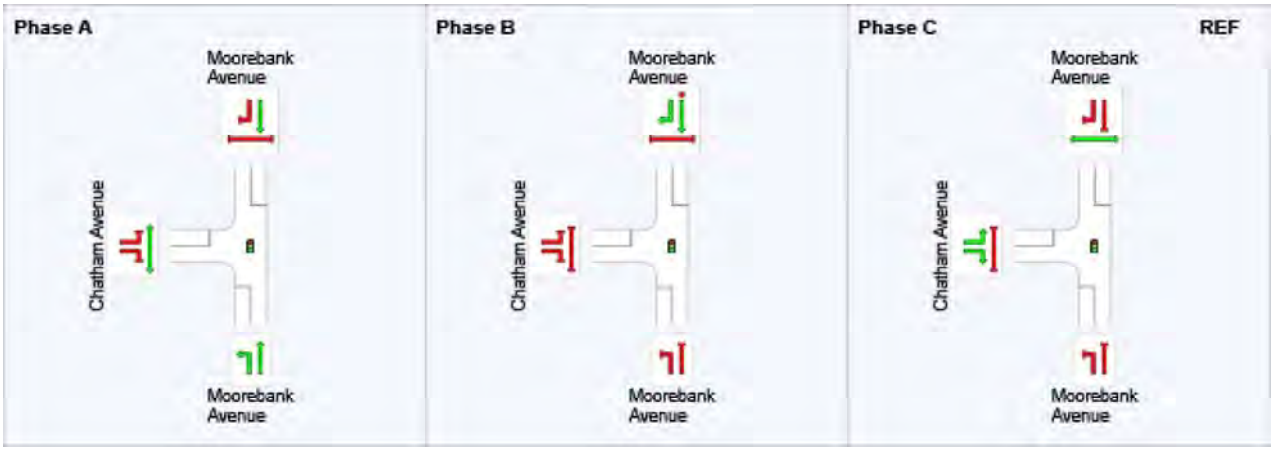
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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

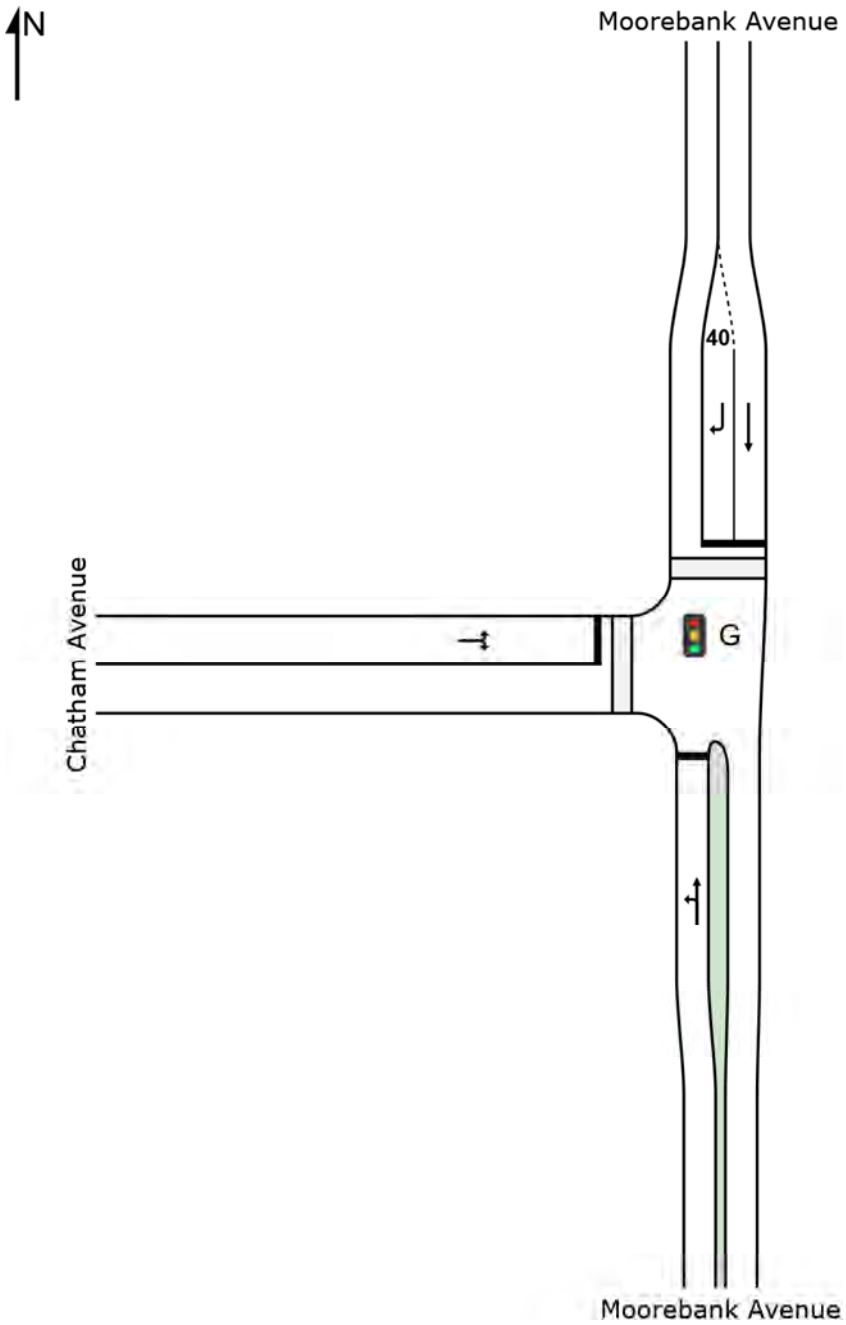


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.905	34.6	LOS C	15.0	109.5	1.00	1.18	33.2
2	T1	501	2.3	501	2.3	0.905	31.4	LOS C	15.0	109.5	1.00	1.18	29.7
Approach		502	2.3	502	2.3	0.905	31.4	LOS C	15.0	109.5	1.00	1.18	29.7
North: Moorebank Avenue													
8	T1	955	1.2	955	1.2	0.889	20.8	LOS B	26.5	190.3	0.95	1.14	37.8
9	R2	1	0.0	1	0.0	0.004	22.2	LOS B	0.0	0.1	0.88	0.57	31.3
Approach		956	1.2	956	1.2	0.889	20.8	LOS B	26.5	190.3	0.95	1.14	37.7
West: Chatham Avenue													
10	L2	288	0.0	288	0.0	0.806	28.3	LOS B	7.2	50.5	1.00	0.99	17.7
12	R2	1	0.0	1	0.0	0.806	28.3	LOS B	7.2	50.5	1.00	0.99	34.0
Approach		289	0.0	289	0.0	0.806	28.3	LOS B	7.2	50.5	1.00	0.99	17.8
All Vehicles		1747	1.3	1747	1.3	0.905	25.1	LOS B	26.5	190.3	0.97	1.13	34.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.0 %
Number of Iterations: 9 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
All Pedestrians		21	16.9	LOS B			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.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

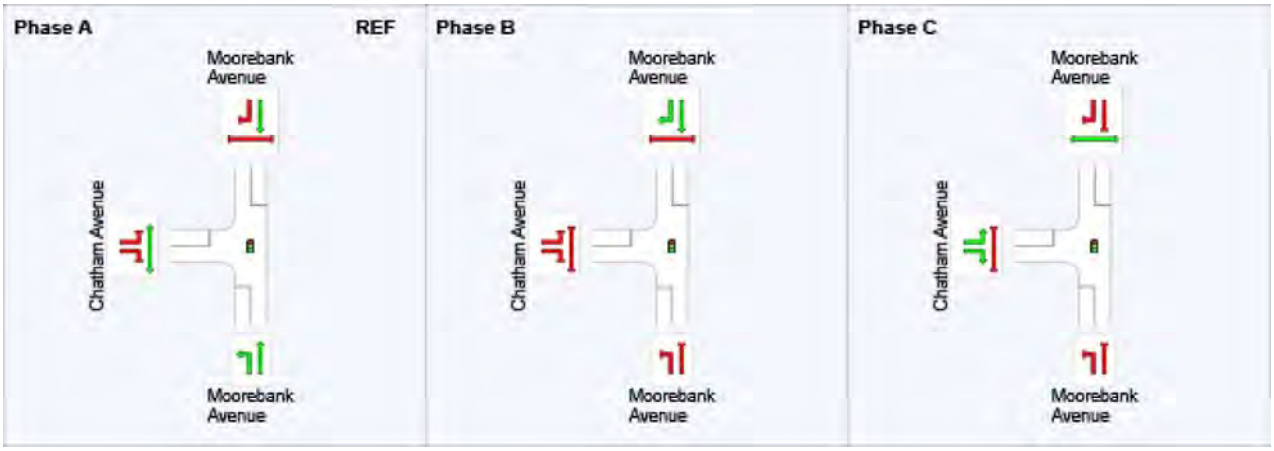
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	19	31
Green Time (sec)	13	6	8
Phase Time (sec)	19	12	14
Phase Split	42%	27%	31%

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



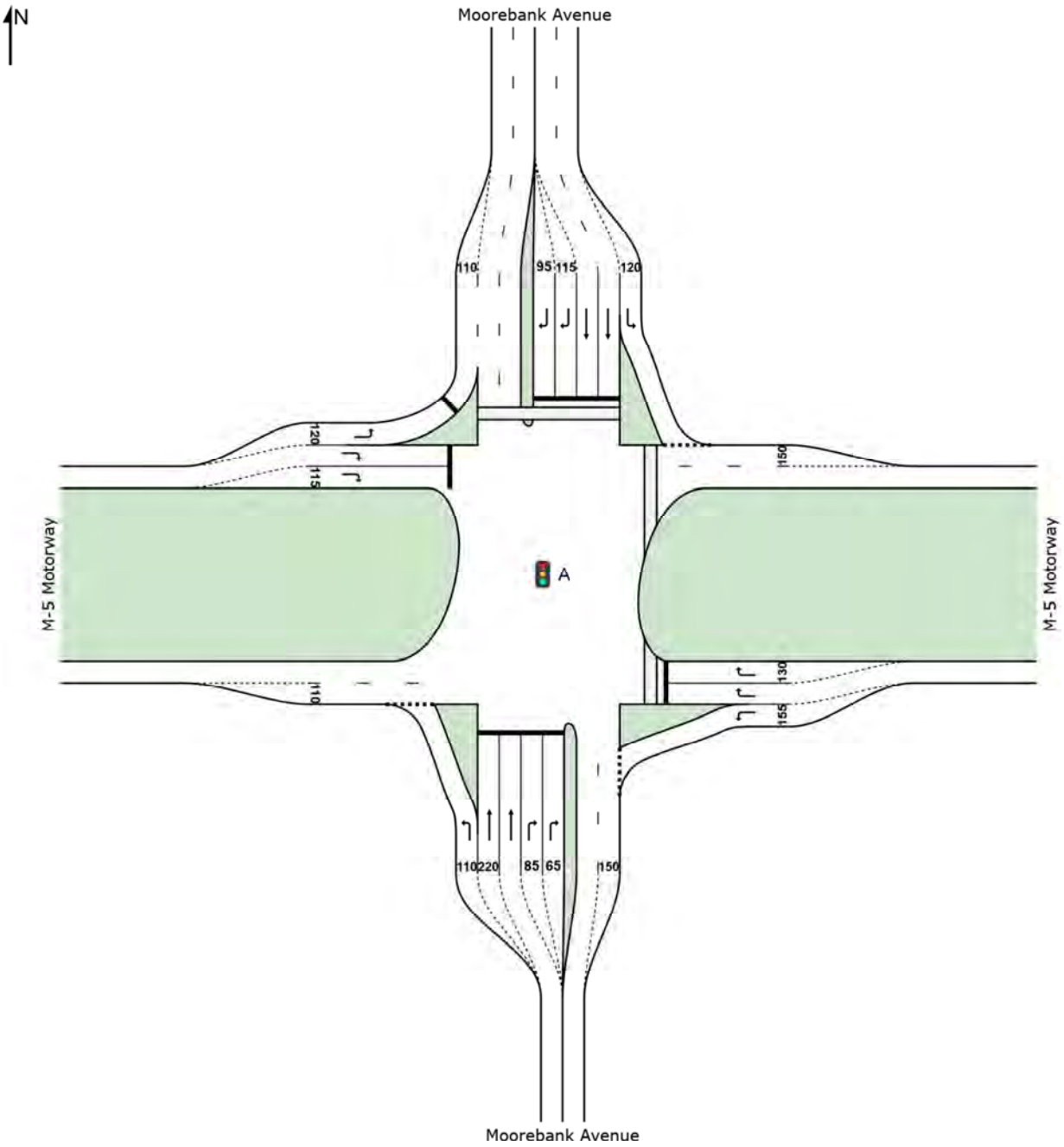
REF: Reference Phase
VAR: Variable Phase

Stage 3(i)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.4	LOS A	9.9	89.8	0.42	0.73	50.3
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	339	17.7	339	17.7	0.285	6.4	LOS A	2.0	18.9	0.14	0.59	47.5
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		582	12.1	582	12.1	0.949	47.1	LOS D	10.7	81.6	0.50	0.78	23.9
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	218	6.8	218	6.8	0.156	27.7	LOS B	5.2	41.5	0.65	0.53	24.6
9	R2	506	20.2	506	20.2	0.967	87.5	LOS F	28.7	282.0	0.98	0.98	22.1
Approach		773	16.3	773	16.3	0.967	65.6	LOS E	28.7	282.0	0.83	0.82	23.3
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	521	9.7	521	9.7	0.812	68.9	LOS E	20.8	173.8	0.99	0.88	18.9
Approach		1877	8.2	1877	8.2	0.887	24.3	LOS B	21.5	173.8	0.62	0.72	38.0
All Vehicles		4333	11.1	4333	11.1	0.967	36.3	LOS C	28.7	282.0	0.64	0.74	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 13 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

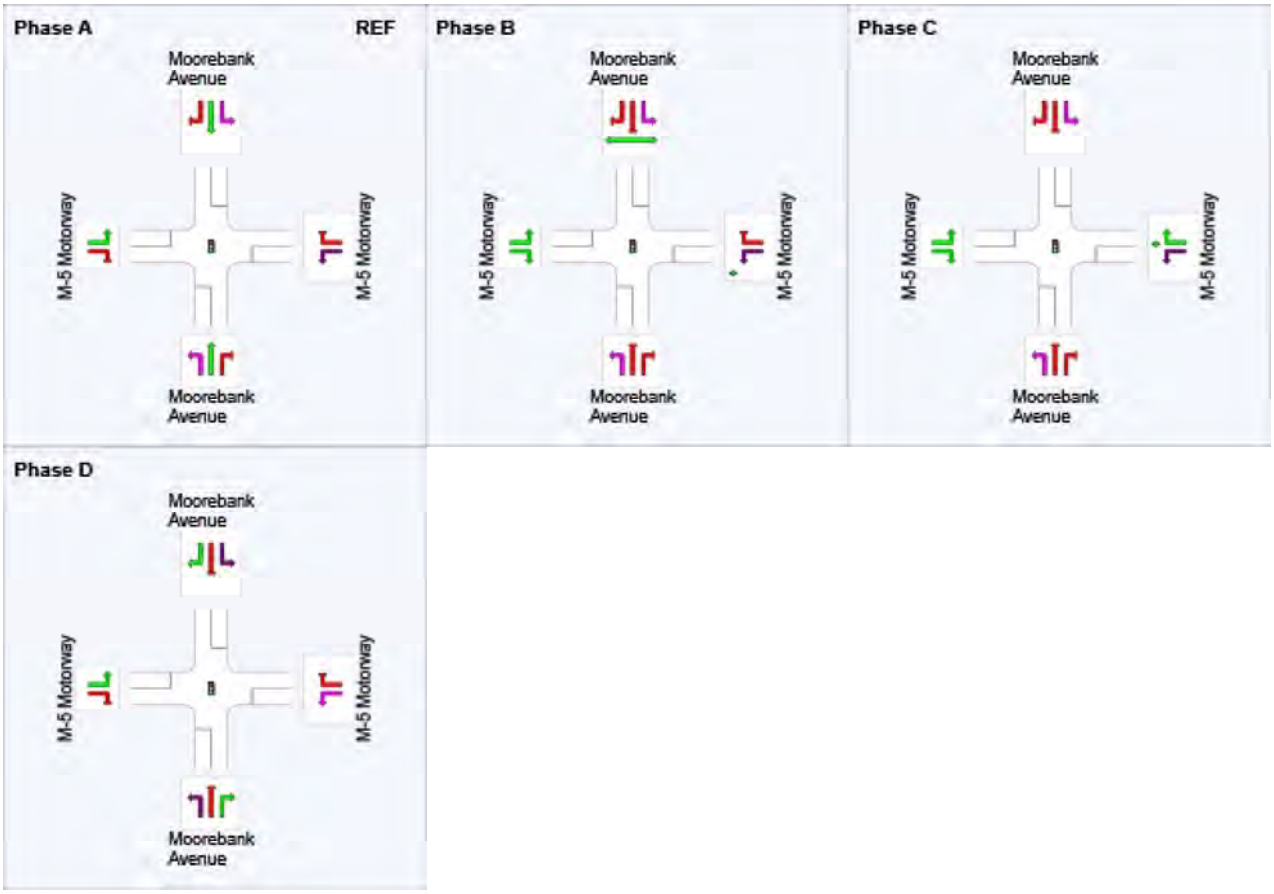
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

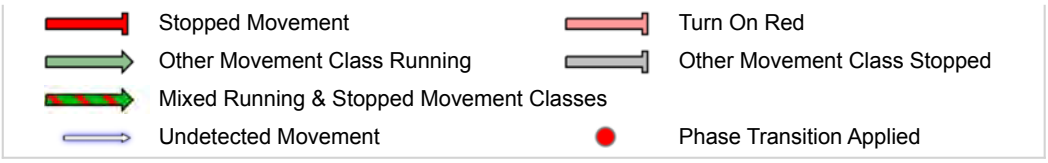
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

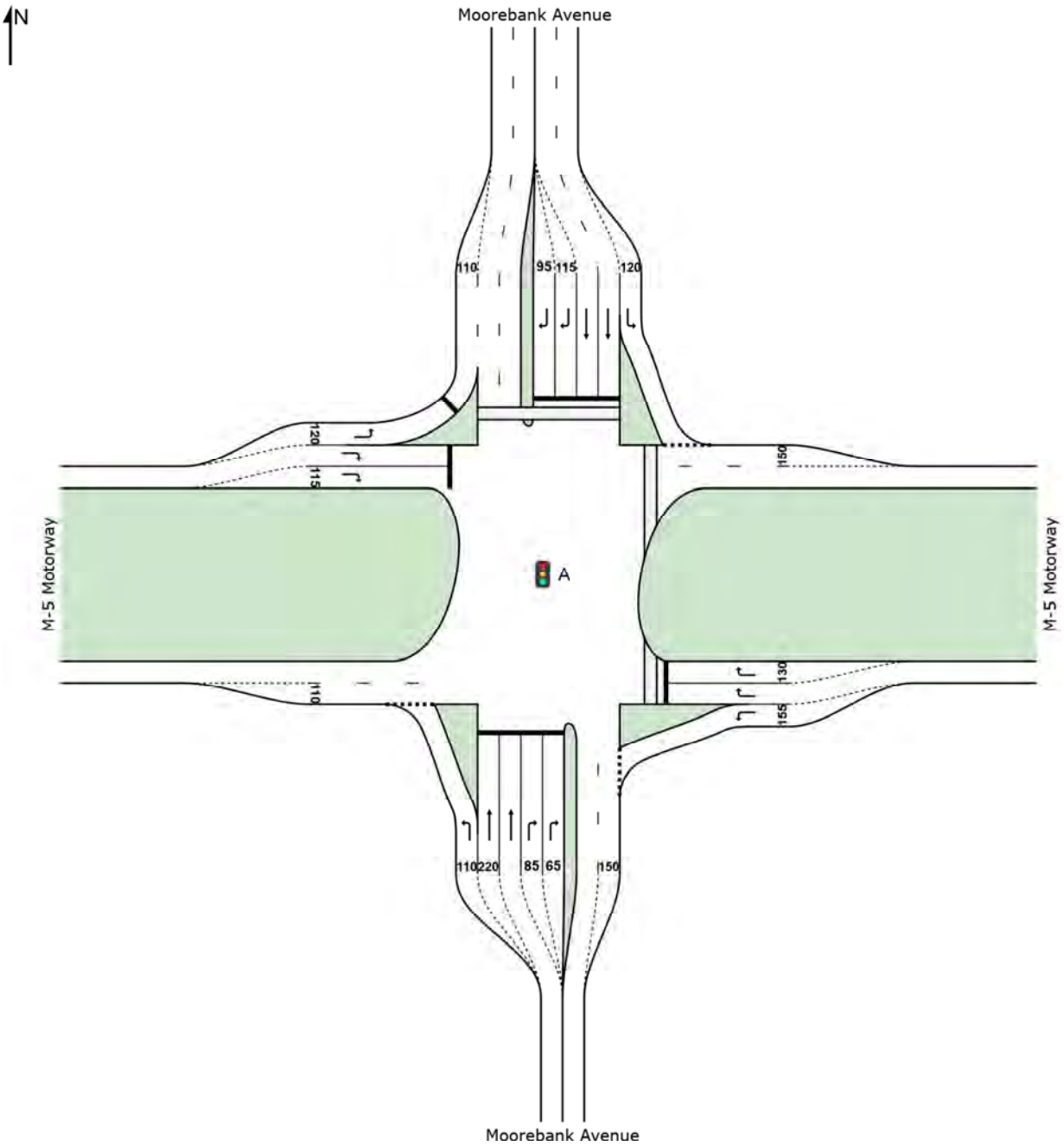
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	541	7.4	541	7.4	0.761	42.8	LOS D	26.3	211.1	0.92	1.05	35.1
2	T1	286	2.6	286	2.6	0.567	66.8	LOS E	10.0	73.6	0.99	0.80	22.4
3	R2	404	8.9	404	8.9	0.239	22.6	LOS B	7.9	65.3	0.53	0.72	41.6
Approach		1232	6.8	1232	6.8	0.761	41.7	LOS C	26.3	211.1	0.81	0.88	33.0
East: M-5 Motorway													
4	L2	281	12.7	281	12.7	0.239	7.1	LOS A	2.9	25.6	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		368	11.1	368	11.1	0.642	26.5	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.065	6.8	LOS A	0.6	4.8	0.16	0.59	55.9
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	439	9.6	439	9.6	0.810	72.7	LOS F	17.7	148.0	1.00	0.88	18.2
Approach		1034	8.2	1034	8.2	0.810	34.4	LOS C	17.7	148.0	0.50	0.70	32.7
All Vehicles		4408	6.4	4408	6.4	0.884	39.2	LOS C	46.1	352.4	0.69	0.81	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.5 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

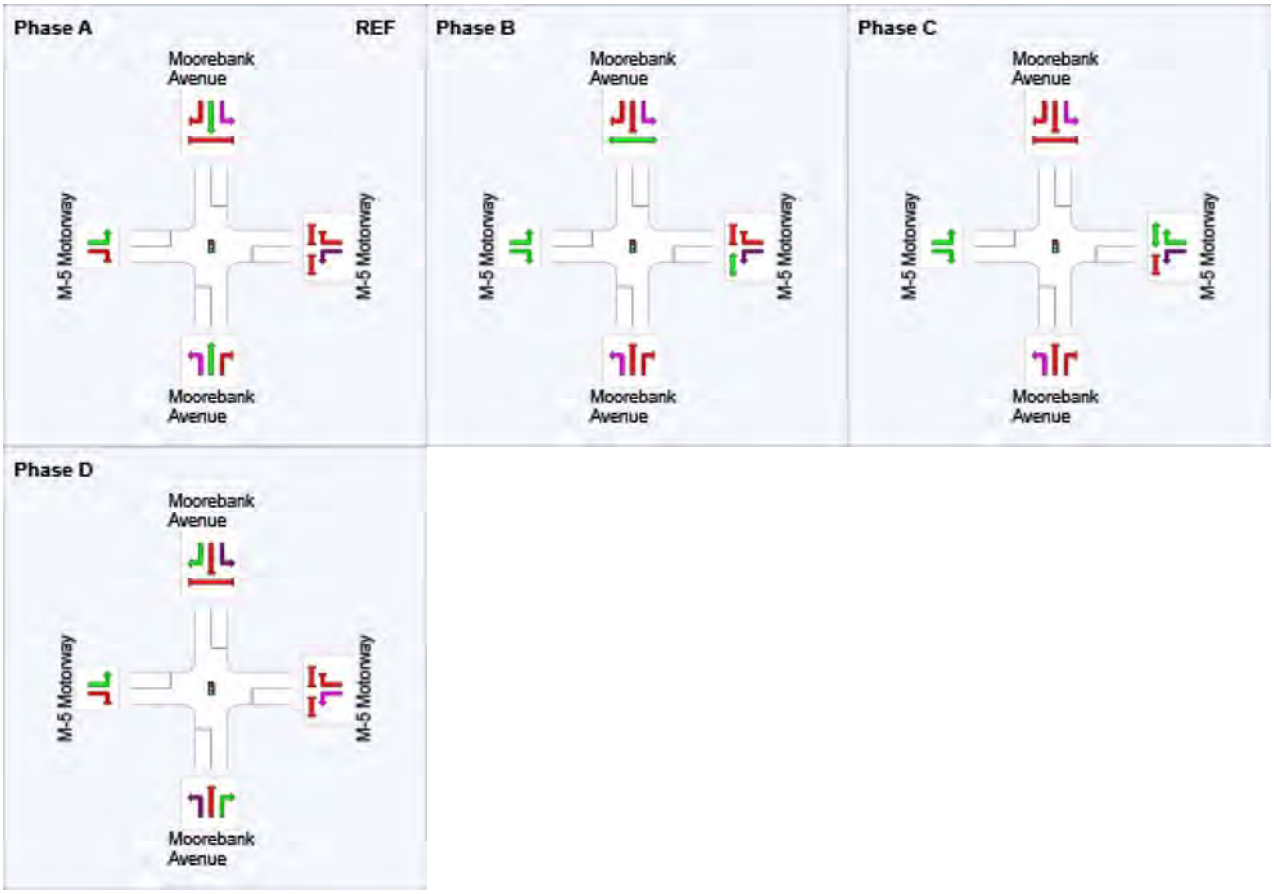
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

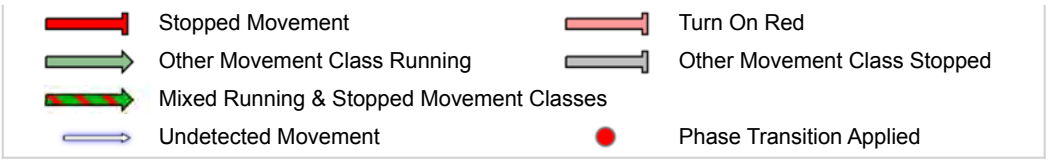
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase

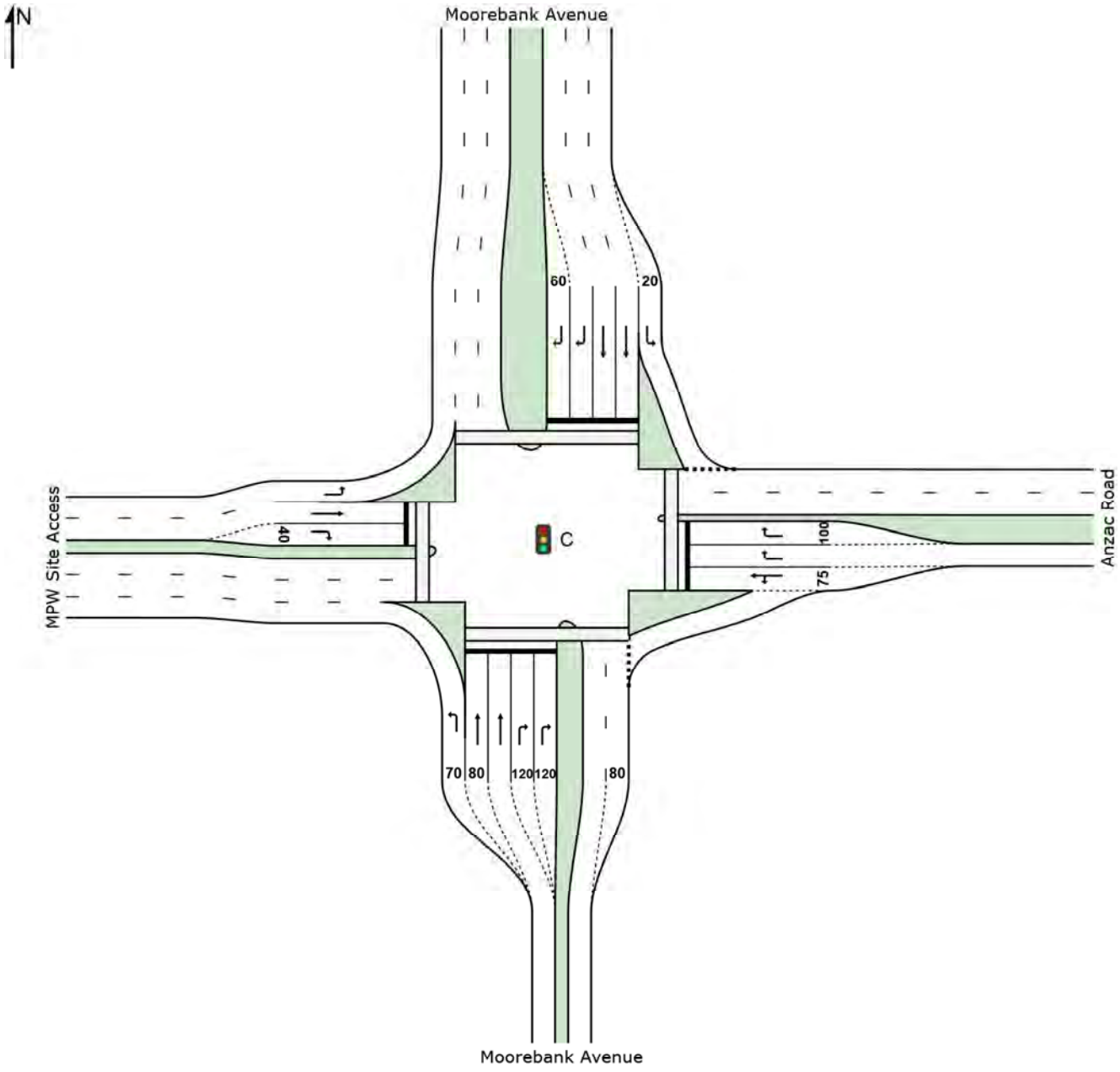
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



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Project: \\HC-AUS-NS-FS-01\jobs\AA008765\D-Calculations\Traffic\01 MPW Stage 2 Response\03 Anzac Rd Sensitivity Testing\SIDRA Model \Scenario 2\Scenario 2_Stage 3_50%.sip7

MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	37	0.0	37	0.0	0.020	5.6	LOS A	0.0	0.0	0.00	0.53	53.9
2	T1	727	8.0	727	8.0	0.832	29.9	LOS C	12.0	97.3	1.00	1.09	19.7
3	R2	381	3.3	381	3.3	0.780	35.1	LOS C	6.2	46.1	1.00	0.98	22.9
Approach		1145	6.2	1145	6.2	0.832	30.9	LOS C	12.0	97.3	0.97	1.03	21.9
East: Anzac Road													
4	L2	208	3.0	208	3.0	0.209	8.7	LOS A	1.9	14.3	0.45	0.67	32.9
5	T1	1	0.0	1	0.0	0.209	3.1	LOS A	1.9	14.3	0.45	0.67	49.3
6	R2	363	11.9	363	11.9	0.787	38.0	LOS C	5.9	51.5	1.00	0.95	13.4
Approach		573	8.6	573	8.6	0.787	27.3	LOS B	5.9	51.5	0.80	0.85	17.1
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.320	5.3	LOS A	3.1	25.0	0.41	0.59	36.7
8	T1	506	12.9	506	12.9	0.801	26.2	LOS B	10.8	95.2	0.96	0.93	12.6
9	R2	172	17.2	172	17.2	0.385	33.1	LOS C	2.5	19.8	0.95	0.76	31.2
Approach		1081	11.7	1081	11.7	0.801	19.5	LOS B	10.8	95.2	0.76	0.78	24.3
West: MPW Site Access													
10	L2	29	100.0	29	100.0	0.027	6.1	LOS A	0.0	0.0	0.00	0.50	51.0
11	T1	1	0.0	1	0.0	0.005	26.9	LOS B	0.0	0.2	0.92	0.54	36.3
12	R2	3	33.3	3	33.3	0.021	33.6	LOS C	0.1	0.8	0.92	0.62	29.2
Approach		34	90.6	34	90.6	0.027	9.3	LOS A	0.1	0.8	0.12	0.51	47.0
All Vehicles		2833	9.8	2833	9.8	0.832	25.6	LOS B	12.0	97.3	0.84	0.89	22.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 13 (maximum specified: 20)

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	11	24.3	LOS C	0.0	0.0	0.90	0.90
P2	East Full Crossing	11	24.3	LOS C	0.0	0.0	0.90	0.90
P3	North Full Crossing	11	24.3	LOS C	0.0	0.0	0.90	0.90
P4	West Full Crossing	53	24.4	LOS C	0.1	0.1	0.90	0.90

All Pedestrians	84	24.3	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

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

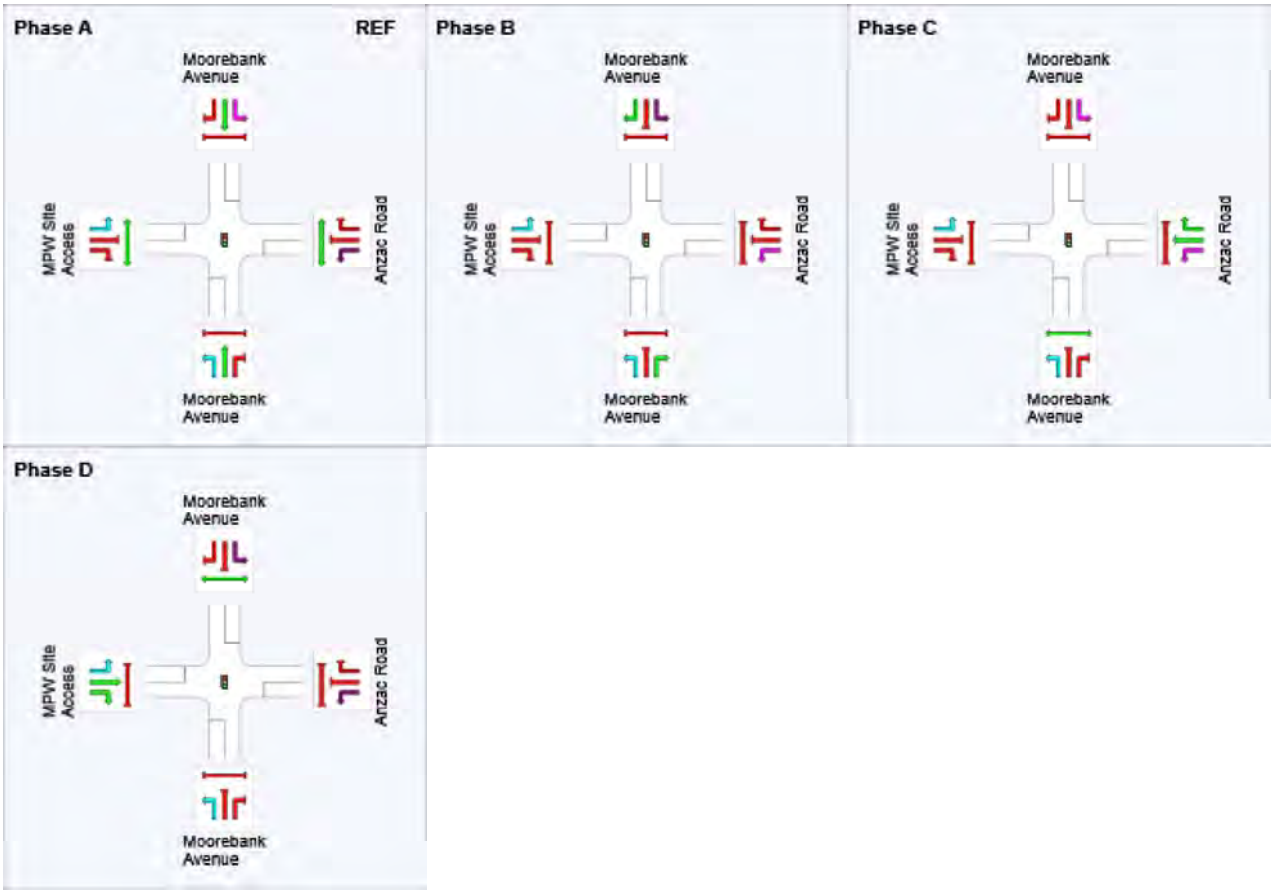
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

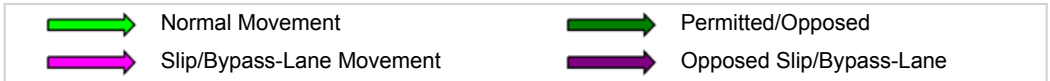
Phase Timing Results

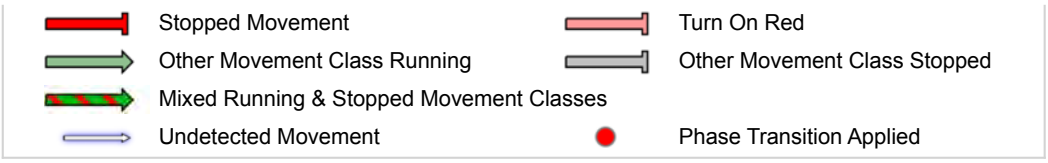
Phase	A	B	C	D
Phase Change Time (sec)	0	20	34	48
Green Time (sec)	14	8	8	6
Phase Time (sec)	20	14	14	12
Phase Split	33%	23%	23%	20%

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



REF: Reference Phase
VAR: Variable Phase

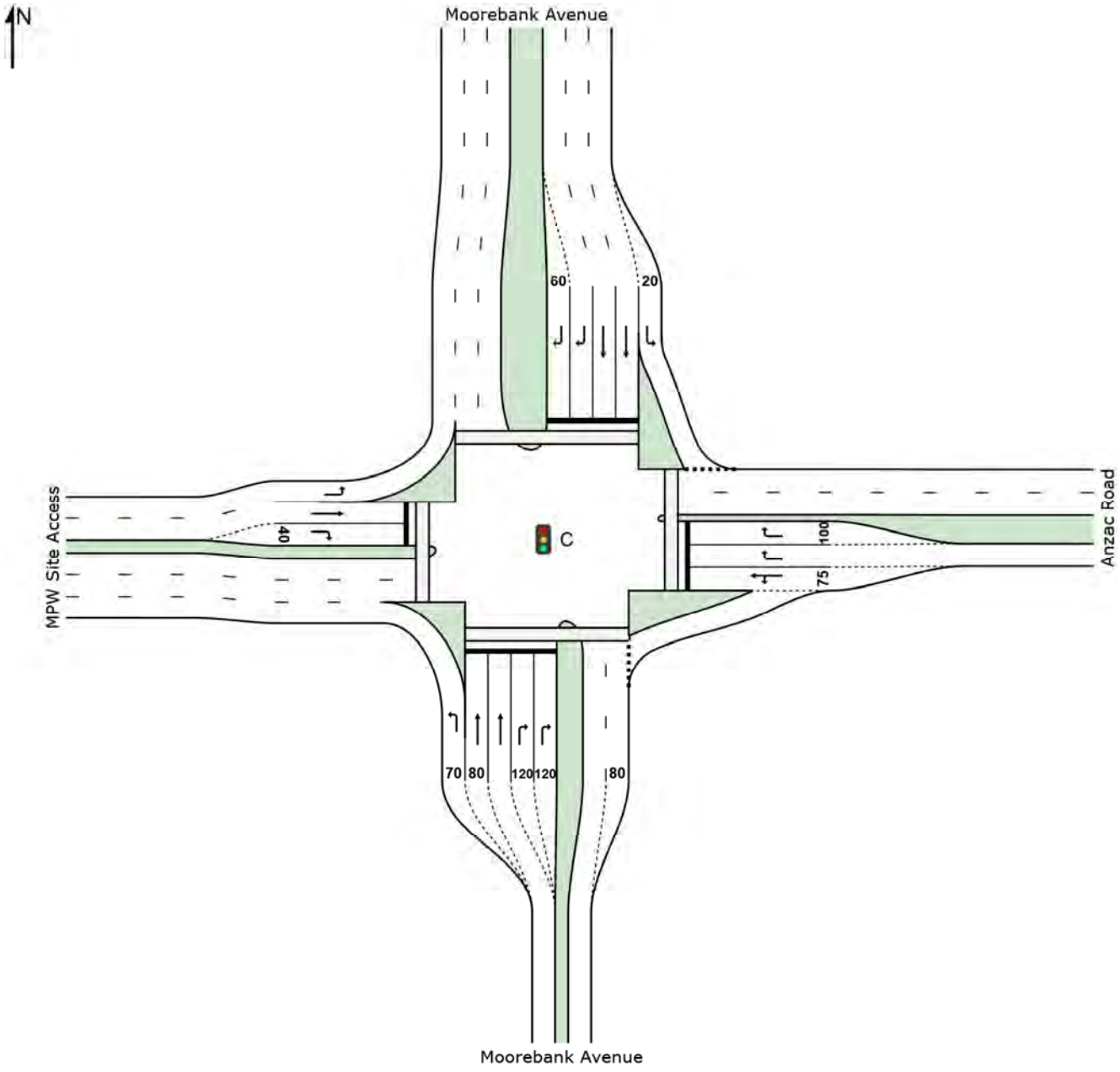




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	6	83.3	6	83.3	0.005	6.5	LOS A	0.0	0.0	0.00	0.49	50.5
2	T1	667	6.0	667	6.0	0.560	21.9	LOS B	9.7	75.9	0.88	0.75	22.8
3	R2	196	0.5	196	0.5	0.611	39.8	LOS C	3.5	25.0	1.00	0.82	21.6
Approach		869	5.3	869	5.3	0.611	25.9	LOS B	9.7	75.9	0.90	0.77	22.6
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.301	11.0	LOS A	4.0	28.9	0.52	0.71	29.4
5	T1	1	0.0	1	0.0	0.301	5.4	LOS A	4.0	28.9	0.52	0.71	47.1
6	R2	287	4.0	287	4.0	0.460	35.0	LOS C	4.6	34.9	0.94	0.79	14.2
Approach		568	2.8	568	2.8	0.460	23.1	LOS B	4.6	34.9	0.74	0.75	19.1
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.294	4.5	LOS A	2.7	19.8	0.32	0.55	38.3
8	T1	664	6.3	664	6.3	0.749	23.9	LOS B	14.7	116.0	0.91	0.83	13.4
9	R2	41	71.8	41	71.8	0.193	41.3	LOS C	0.7	8.1	0.96	0.71	27.2
Approach		1124	7.5	1124	7.5	0.749	17.3	LOS B	14.7	116.0	0.69	0.72	21.9
West: MPW Site Access													
10	L2	159	18.5	159	18.5	0.097	5.8	LOS A	0.0	0.0	0.00	0.52	51.0
11	T1	15	0.0	15	0.0	0.088	33.5	LOS C	0.5	3.4	0.95	0.65	33.1
12	R2	22	0.0	22	0.0	0.139	39.5	LOS C	0.7	5.2	0.96	0.70	26.7
Approach		196	15.1	196	15.1	0.139	11.7	LOS A	0.7	5.2	0.18	0.55	44.3
All Vehicles		2758	6.4	2758	6.4	0.749	20.8	LOS B	14.7	116.0	0.73	0.73	23.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.5 %
Number of Iterations: 5 (maximum specified: 20)

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	11	29.3	LOS C	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	28.4	LOS C	0.0	0.0	0.90	0.90
P3	North Full Crossing	11	29.3	LOS C	0.0	0.0	0.91	0.91
P4	West Full Crossing	53	28.4	LOS C	0.1	0.1	0.90	0.90
All Pedestrians		84	28.6	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

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

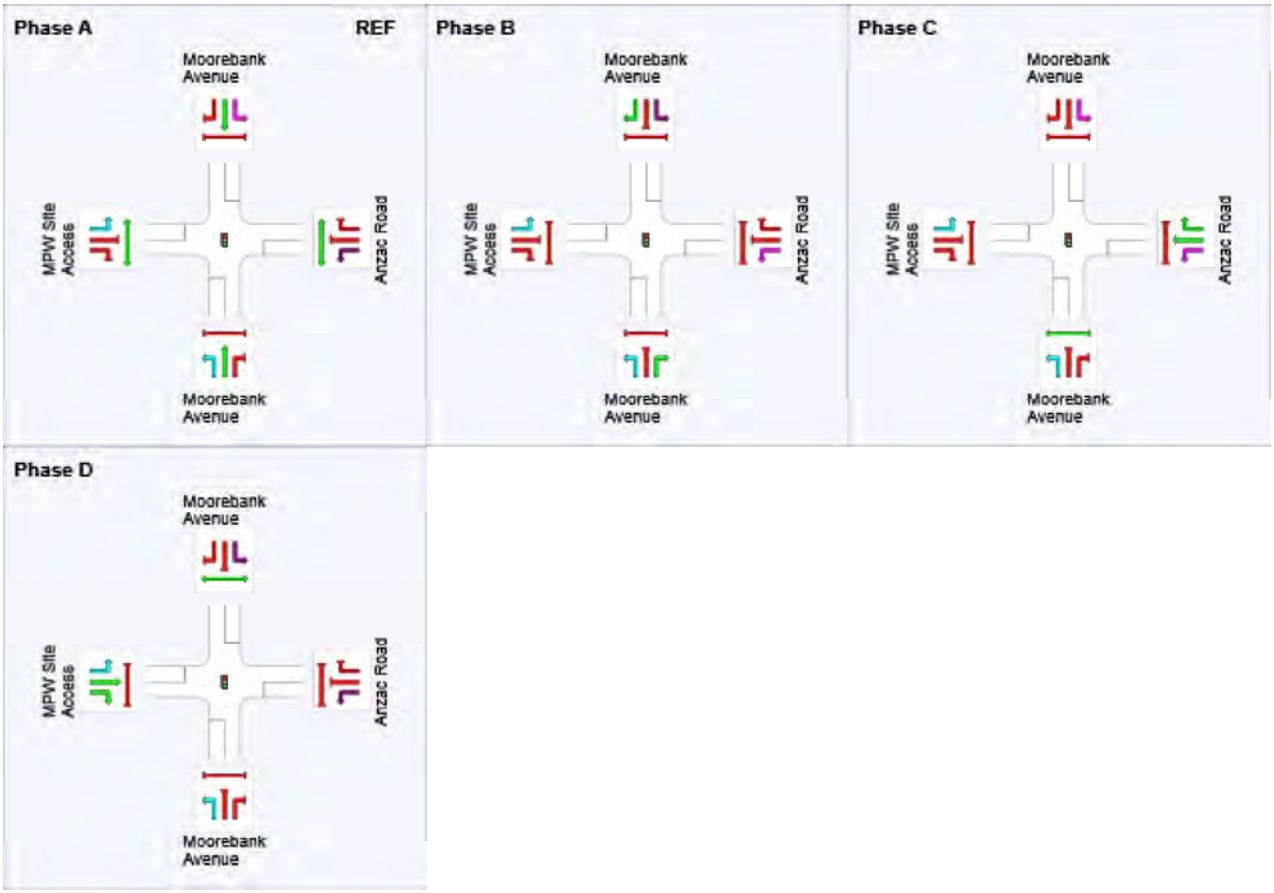
Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

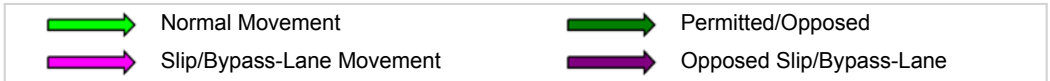
Phase Timing Results

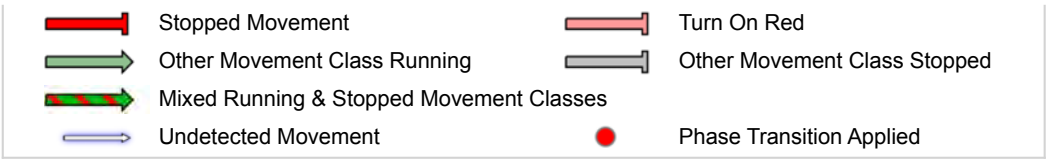
Phase	A	B	C	D
Phase Change Time (sec)	0	28	40	58
Green Time (sec)	22	6	12	6
Phase Time (sec)	28	12	18	12
Phase Split	40%	17%	26%	17%

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



REF: Reference Phase
VAR: Variable Phase

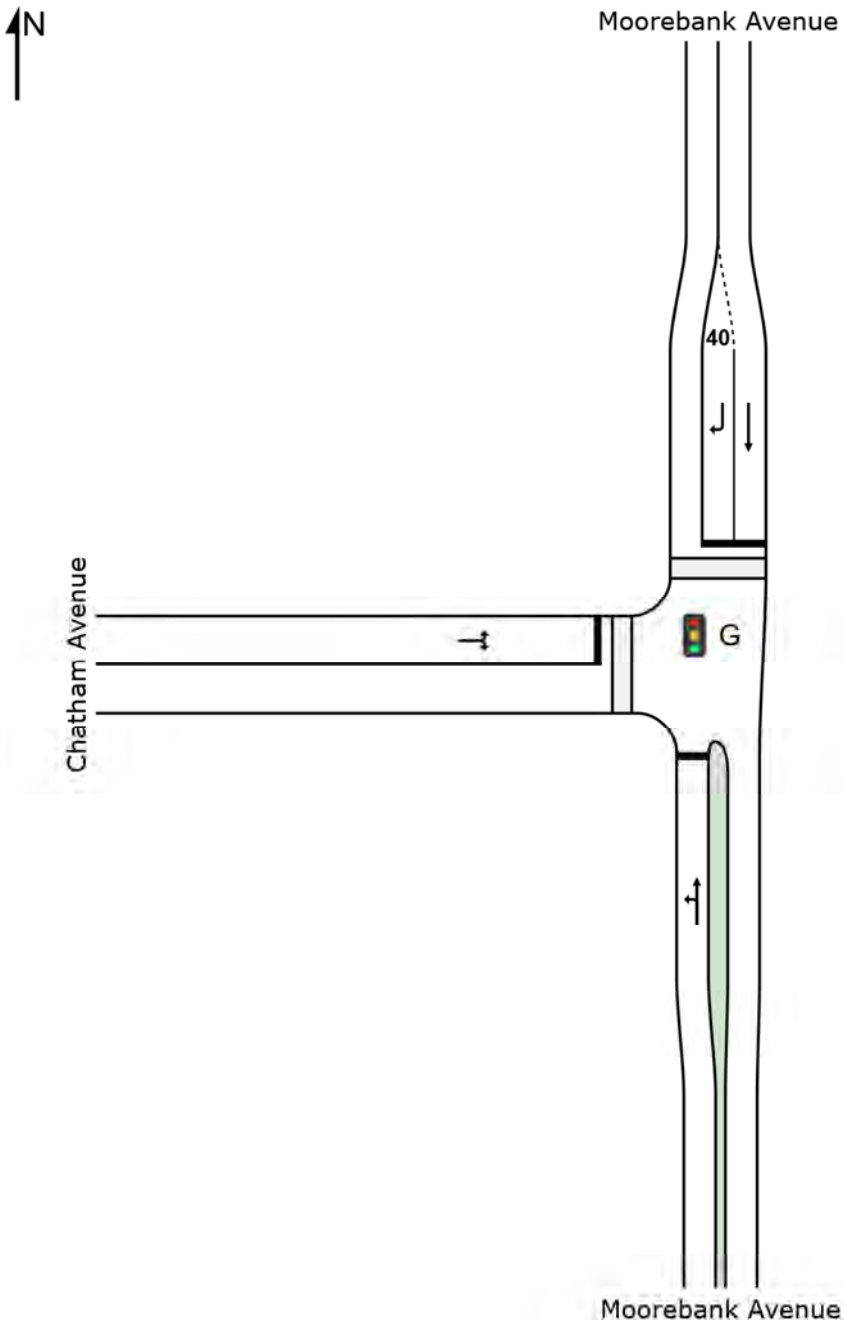




SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.896	30.2	LOS C	48.0	361.3	0.91	0.99	35.2
2	T1	1103	3.7	1103	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
Approach		1104	3.7	1104	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	29	100.0	29	100.0	0.385	49.3	LOS D	1.3	27.5	0.99	0.73	23.9
Approach		486	14.7	486	14.7	0.385	5.5	LOS A	5.3	43.6	0.34	0.30	43.9
West: Chatham Avenue													
10	L2	29	100.0	29	100.0	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	11.9
12	R2	1	0.0	1	0.0	0.361	49.6	LOS D	1.3	27.5	0.99	0.73	26.5
Approach		31	96.6	31	96.6	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	12.7
All Vehicles		1621	8.8	1621	8.8	0.896	21.0	LOS B	48.0	361.3	0.74	0.78	36.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 13 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

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: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

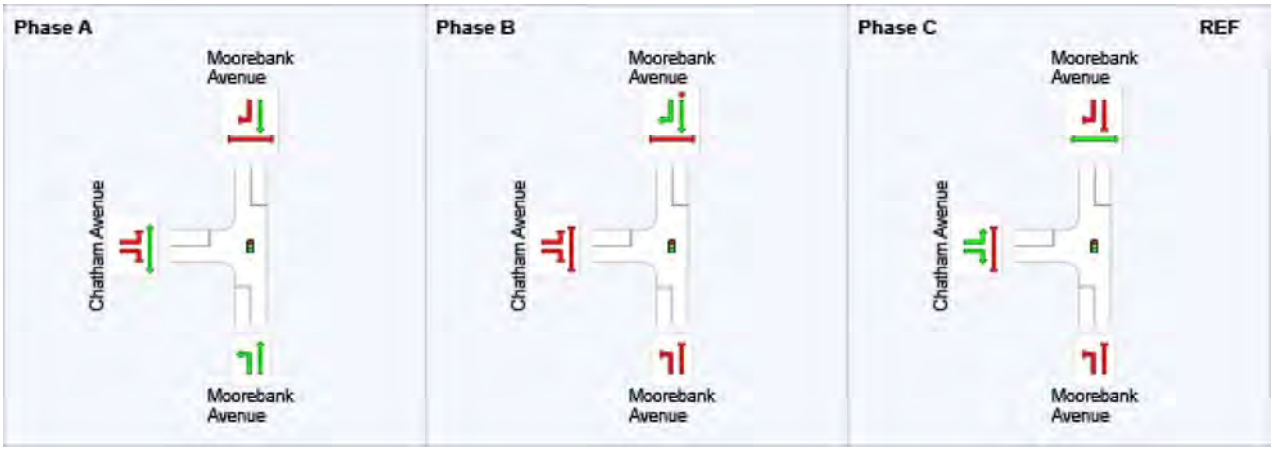
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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

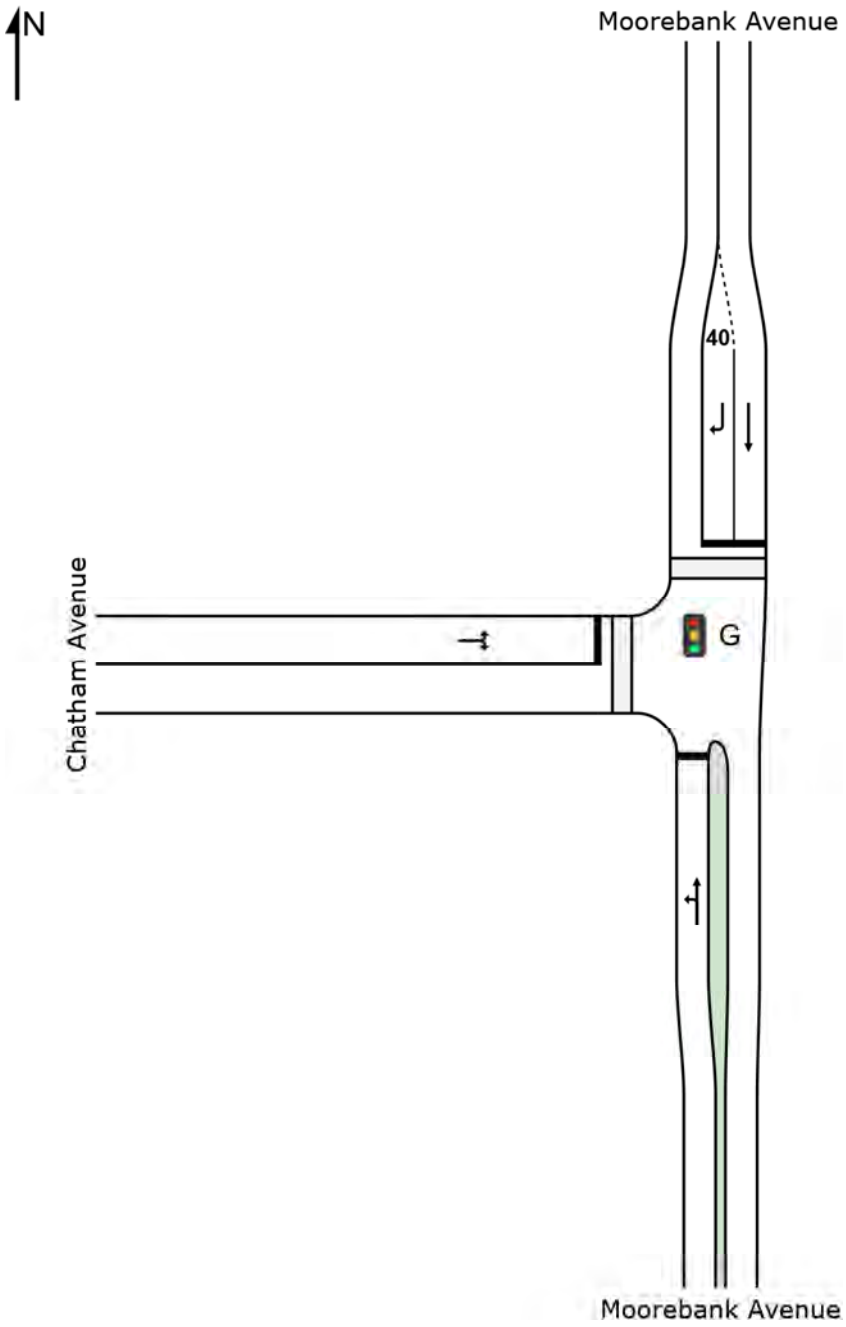


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	955	1.2	955	1.2	0.850	14.9	LOS B	22.1	158.5	0.85	0.96	40.1
9	R2	29	100.0	29	100.0	0.204	24.8	LOS B	0.6	13.6	0.92	0.71	30.1
Approach		984	4.2	984	4.2	0.850	15.2	LOS B	22.1	158.5	0.85	0.95	39.8
West: Chatham Avenue													
10	L2	174	17.0	174	17.0	0.726	28.3	LOS B	4.2	39.7	1.00	0.93	17.8
12	R2	1	0.0	1	0.0	0.726	28.2	LOS B	4.2	39.7	1.00	0.93	34.0
Approach		175	16.9	175	16.9	0.726	28.3	LOS B	4.2	39.7	1.00	0.93	17.9
All Vehicles		1661	4.9	1661	4.9	0.850	18.2	LOS B	22.1	158.5	0.90	0.95	37.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.5 %
Number of Iterations: 5 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			0.84	0.84

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: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

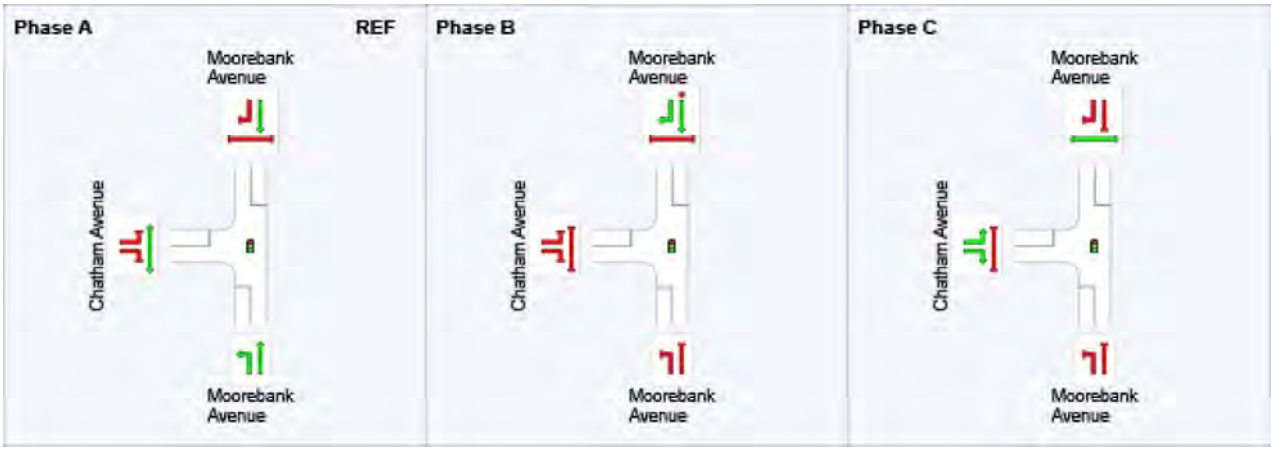
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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



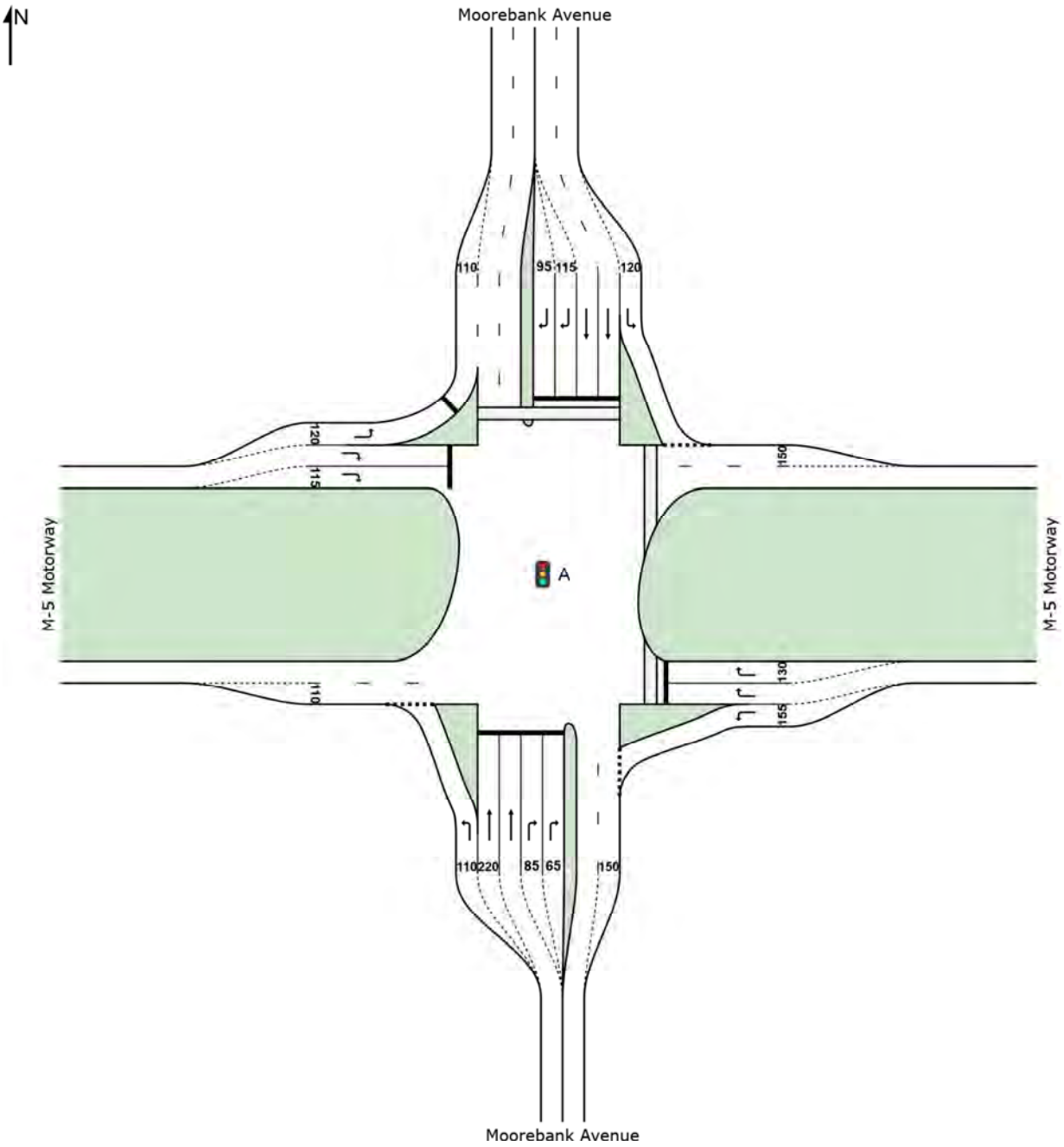
REF: Reference Phase
VAR: Variable Phase

Stage 3(ii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.4	LOS A	9.9	89.8	0.42	0.73	50.3
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	339	17.7	339	17.7	0.285	6.4	LOS A	2.0	18.9	0.14	0.59	47.5
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		582	12.1	582	12.1	0.949	47.1	LOS D	10.7	81.6	0.50	0.78	23.9
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	218	6.8	218	6.8	0.156	27.7	LOS B	5.2	41.5	0.65	0.53	24.6
9	R2	506	20.2	506	20.2	0.967	87.5	LOS F	28.7	282.0	0.98	0.98	22.1
Approach		773	16.3	773	16.3	0.967	65.6	LOS E	28.7	282.0	0.83	0.82	23.3
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	521	9.7	521	9.7	0.812	68.9	LOS E	20.8	173.8	0.99	0.88	18.9
Approach		1877	8.2	1877	8.2	0.887	24.3	LOS B	21.5	173.8	0.62	0.72	38.0
All Vehicles		4333	11.1	4333	11.1	0.967	36.3	LOS C	28.7	282.0	0.64	0.74	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 14 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

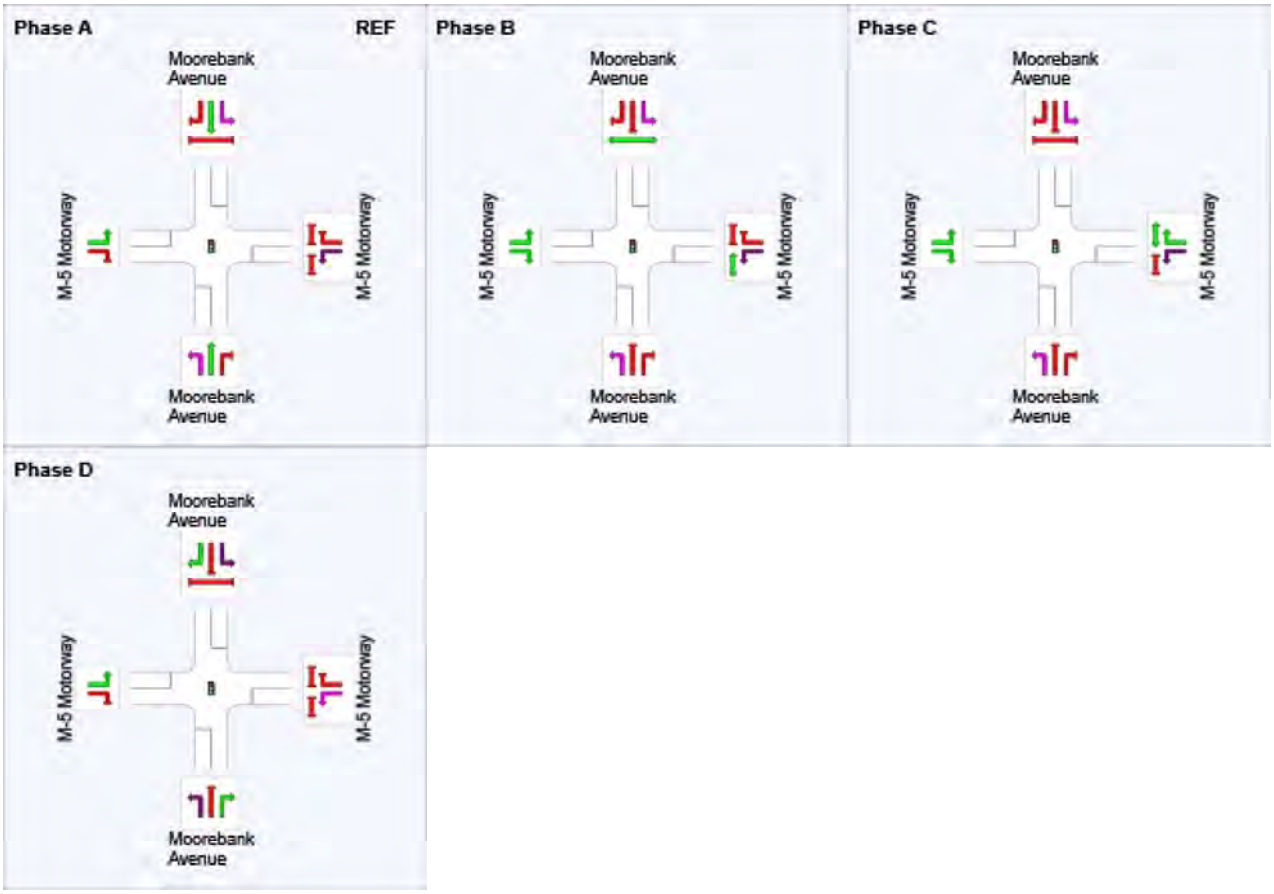
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

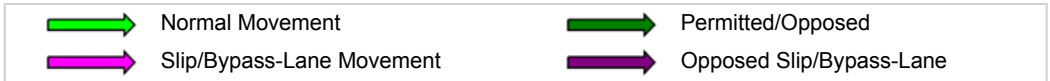
Phase Timing Results

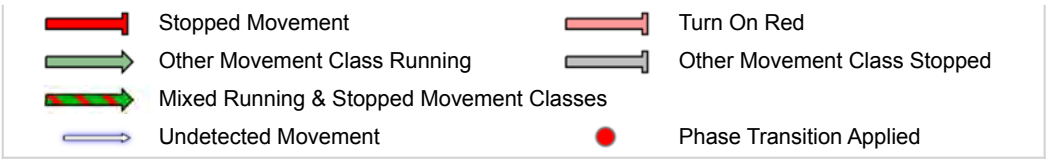
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

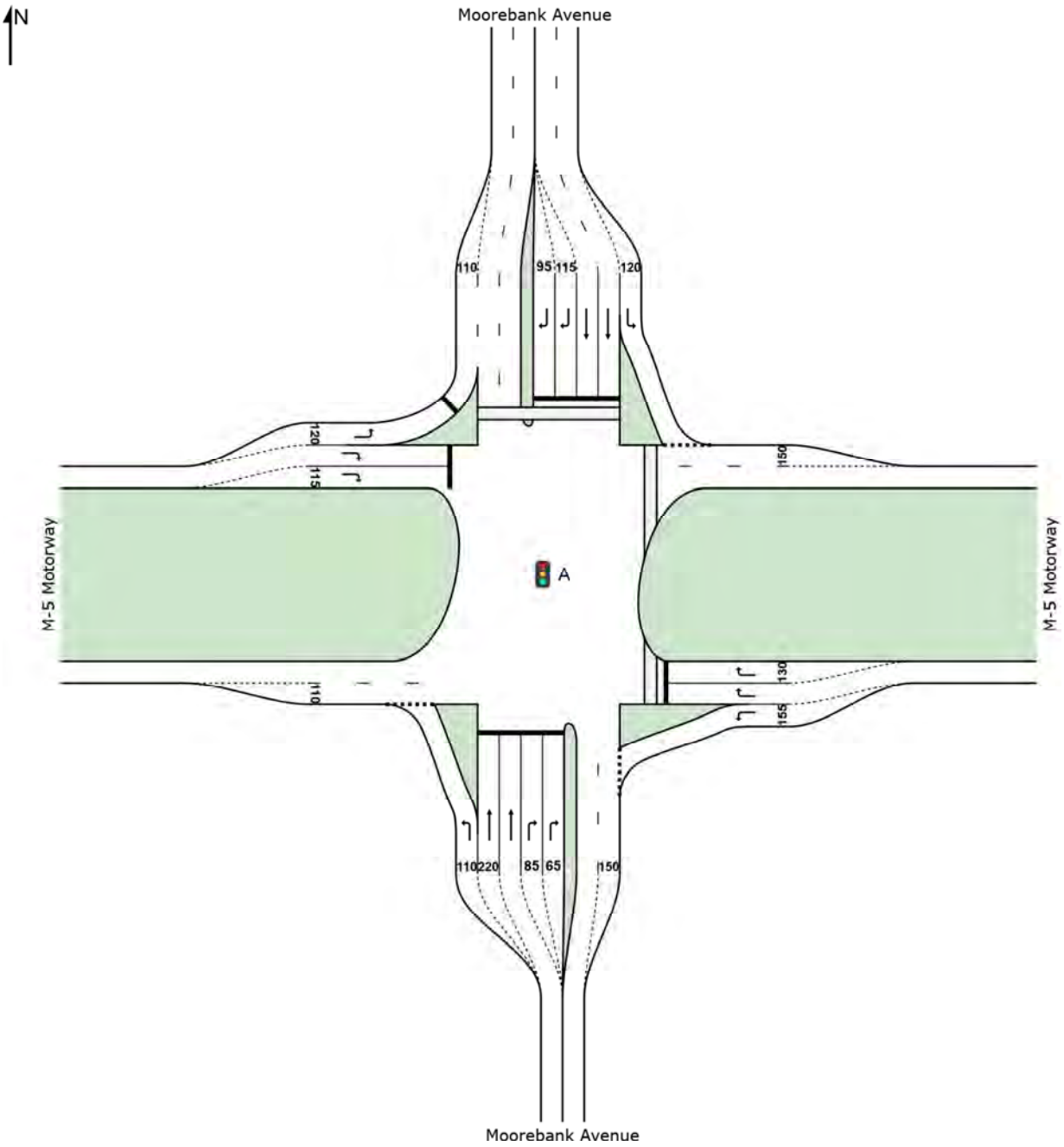




SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	541	7.4	541	7.4	0.761	42.8	LOS D	26.3	211.1	0.92	1.05	35.1
2	T1	286	2.6	286	2.6	0.567	66.8	LOS E	10.0	73.6	0.99	0.80	22.4
3	R2	404	8.9	404	8.9	0.239	22.6	LOS B	7.9	65.3	0.53	0.72	41.6
Approach		1232	6.8	1232	6.8	0.761	41.7	LOS C	26.3	211.1	0.81	0.88	33.0
East: M-5 Motorway													
4	L2	281	12.7	281	12.7	0.239	7.1	LOS A	2.9	25.6	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		368	11.1	368	11.1	0.642	26.5	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.065	6.8	LOS A	0.6	4.8	0.16	0.59	55.9
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	439	9.6	439	9.6	0.810	72.7	LOS F	17.7	148.0	1.00	0.88	18.2
Approach		1034	8.2	1034	8.2	0.810	34.4	LOS C	17.7	148.0	0.50	0.70	32.7
All Vehicles		4408	6.4	4408	6.4	0.884	39.2	LOS C	46.1	352.4	0.69	0.81	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.3 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

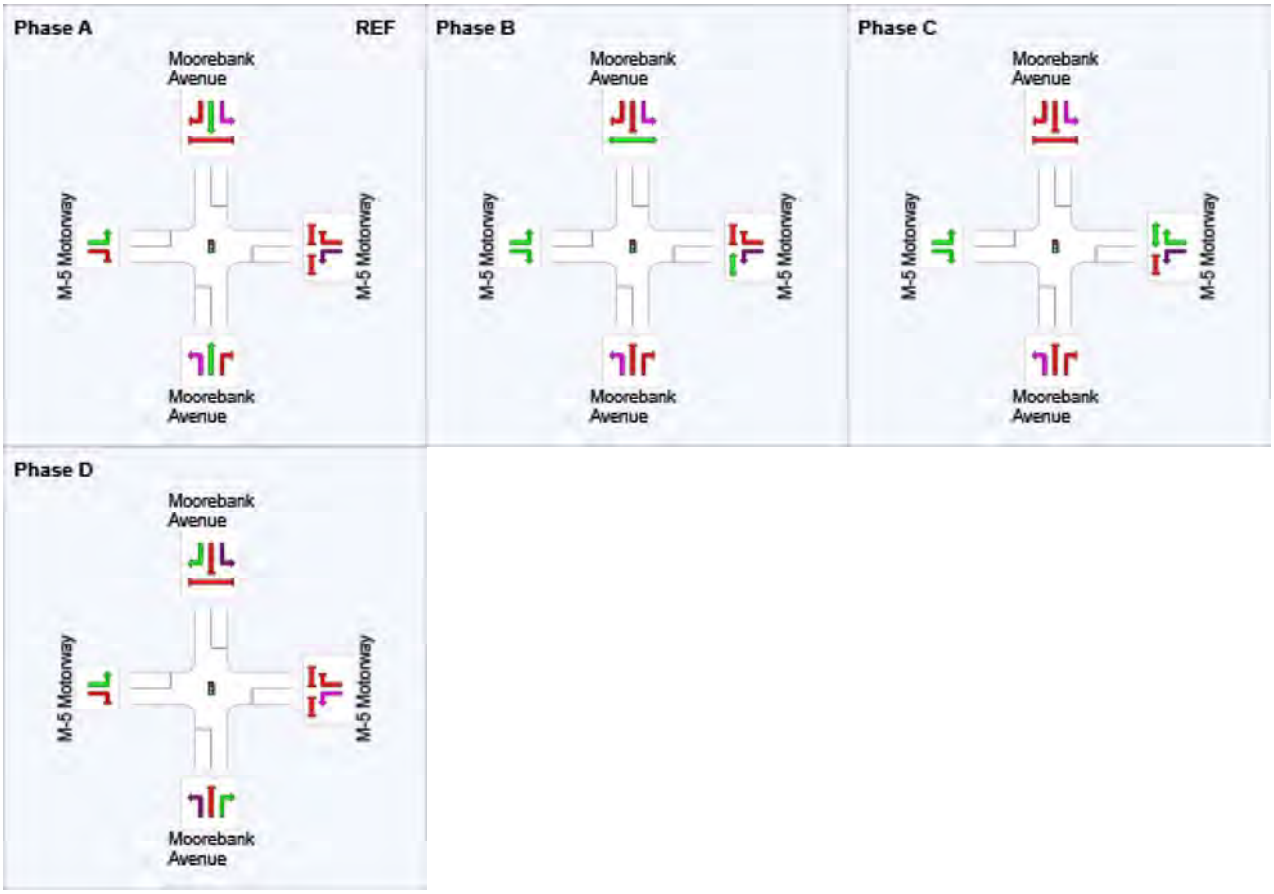
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

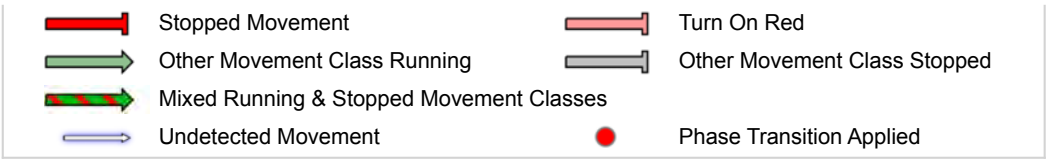
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase

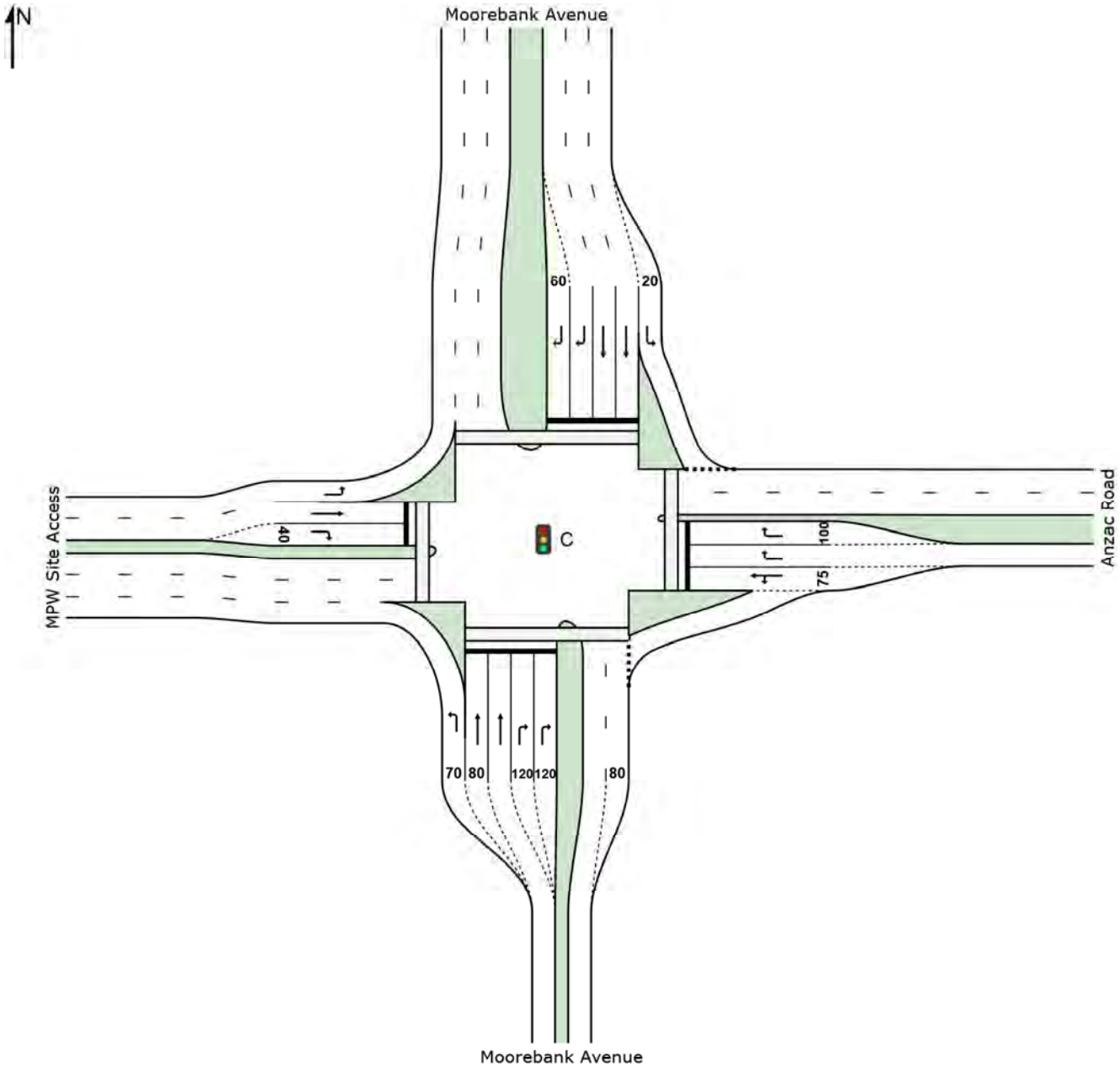
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	37	0.0	37	0.0	0.020	5.6	LOS A	0.0	0.0	0.00	0.53	53.9
2	T1	713	6.1	713	6.1	0.806	28.4	LOS B	11.4	89.1	1.00	1.04	20.2
3	R2	381	3.3	381	3.3	0.780	35.1	LOS C	6.2	46.1	1.00	0.98	22.9
Approach		1131	4.9	1131	4.9	0.806	29.9	LOS C	11.4	89.1	0.97	1.00	22.2
East: Anzac Road													
4	L2	208	3.0	208	3.0	0.206	8.4	LOS A	1.8	13.4	0.43	0.67	33.5
5	T1	1	0.0	1	0.0	0.206	2.8	LOS A	1.8	13.4	0.43	0.67	49.6
6	R2	363	11.9	363	11.9	0.787	38.0	LOS C	5.9	51.5	1.00	0.95	13.4
Approach		573	8.6	573	8.6	0.787	27.2	LOS B	5.9	51.5	0.79	0.85	17.1
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.320	5.3	LOS A	3.1	25.0	0.41	0.59	36.7
8	T1	492	10.3	492	10.3	0.765	25.1	LOS B	10.1	85.3	0.96	0.89	12.9
9	R2	186	23.7	186	23.7	0.435	33.5	LOS C	2.7	22.8	0.96	0.77	30.9
Approach		1081	11.7	1081	11.7	0.765	19.2	LOS B	10.1	85.3	0.75	0.76	24.9
West: MPW Site Access													
10	L2	44	100.0	44	100.0	0.041	6.1	LOS A	0.0	0.0	0.00	0.50	51.0
11	T1	1	0.0	1	0.0	0.005	26.9	LOS B	0.0	0.2	0.92	0.54	36.3
12	R2	3	33.3	3	33.3	0.021	33.6	LOS C	0.1	0.8	0.92	0.62	29.2
Approach		48	93.5	48	93.5	0.041	8.4	LOS A	0.1	0.8	0.08	0.51	48.2
All Vehicles		2833	9.8	2833	9.8	0.806	24.9	LOS B	11.4	89.1	0.83	0.87	22.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 14 (maximum specified: 20)

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	11	24.3	LOS C	0.0	0.0	0.90	0.90
P2	East Full Crossing	11	24.3	LOS C	0.0	0.0	0.90	0.90
P3	North Full Crossing	11	24.3	LOS C	0.0	0.0	0.90	0.90
P4	West Full Crossing	53	24.4	LOS C	0.1	0.1	0.90	0.90

All Pedestrians	84	24.3	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

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

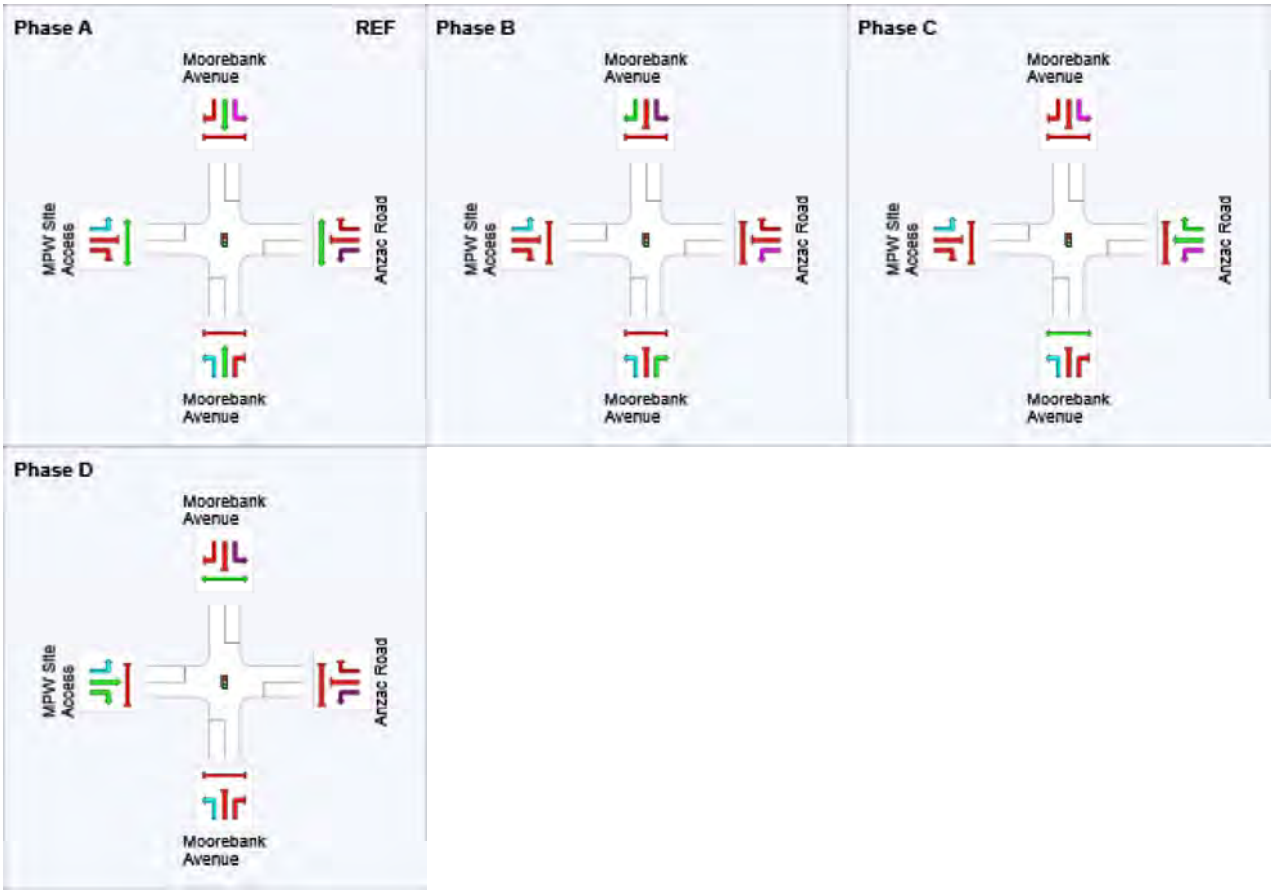
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

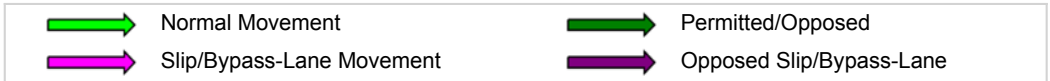
Phase Timing Results

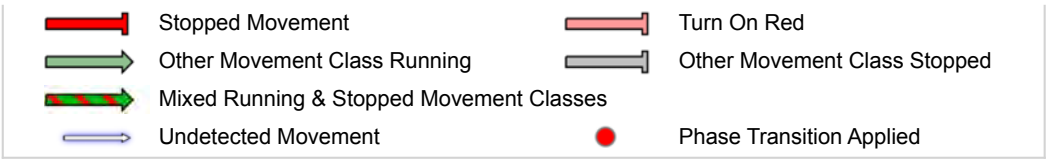
Phase	A	B	C	D
Phase Change Time (sec)	0	20	34	48
Green Time (sec)	14	8	8	6
Phase Time (sec)	20	14	14	12
Phase Split	33%	23%	23%	20%

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



REF: Reference Phase
VAR: Variable Phase

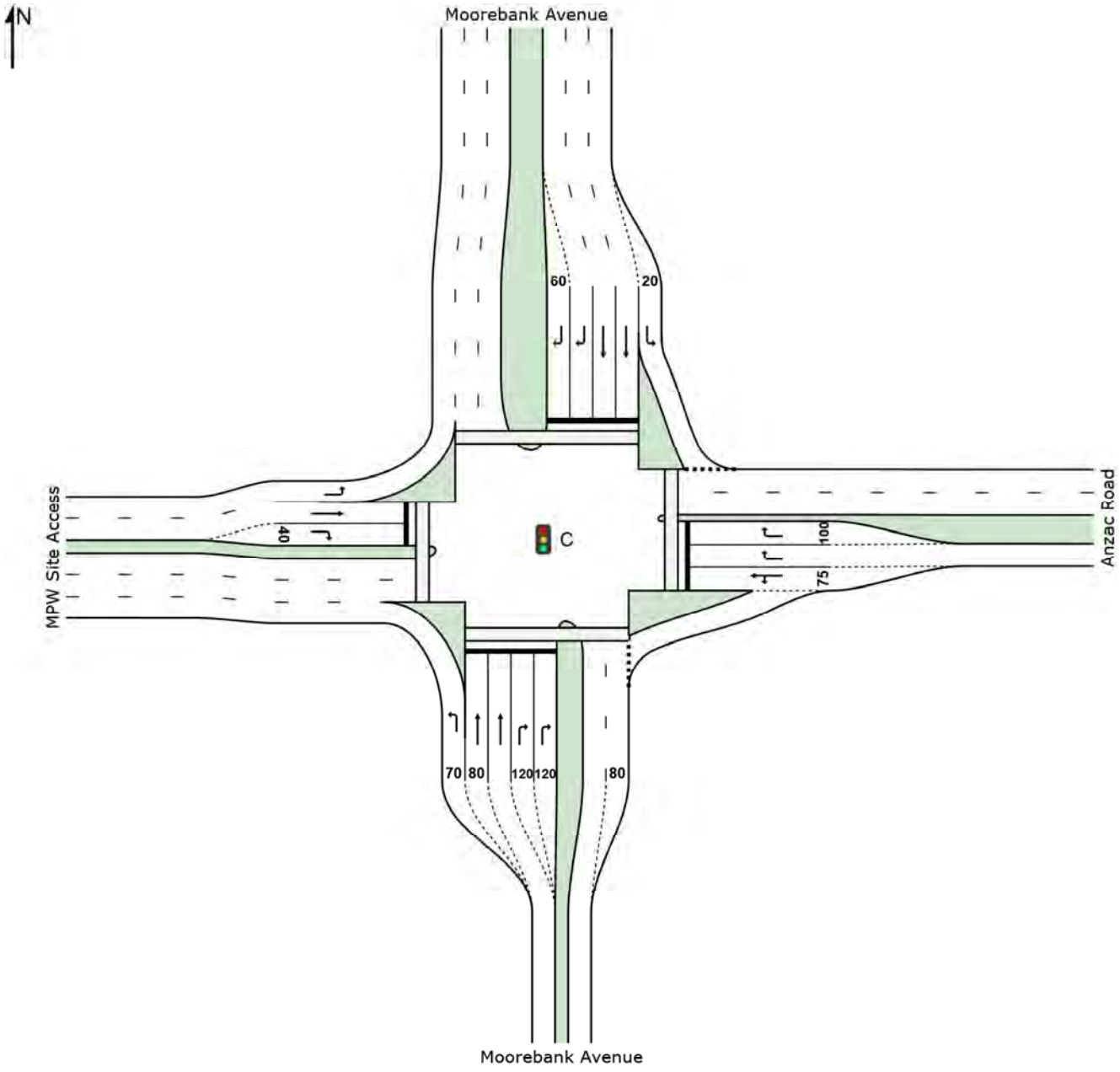




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated



Organisation: ARCADIS AUSTRALIA PACIFIC PTY LIMITED | Created: Wednesday, 31 May 2017 5:01:53 PM
Project: \\HC-AUS-NS-FS-01\jobs\AA008765\D-Calculations\Traffic\01 MPW Stage 2 Response\03 Anzac Rd Sensitivity Testing\SIDRA Model \Scenario 2\Scenario 2_Stage 3_75%.sip7

MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	6	83.3	6	83.3	0.005	6.5	LOS A	0.0	0.0	0.00	0.49	50.5
2	T1	589	4.5	589	4.5	0.513	22.3	LOS B	8.5	64.9	0.88	0.74	22.6
3	R2	188	0.6	188	0.6	0.588	39.6	LOS C	3.4	24.0	1.00	0.81	21.6
Approach		784	4.2	784	4.2	0.588	26.3	LOS B	8.5	64.9	0.90	0.76	22.5
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.293	10.6	LOS A	3.8	27.6	0.51	0.70	30.0
5	T1	1	0.0	1	0.0	0.293	5.0	LOS A	3.8	27.6	0.51	0.70	47.5
6	R2	287	4.0	287	4.0	0.424	33.9	LOS C	4.5	34.2	0.93	0.78	14.6
Approach		568	2.8	568	2.8	0.424	22.4	LOS B	4.5	34.2	0.72	0.74	19.6
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.295	4.5	LOS A	2.7	19.8	0.32	0.55	38.3
8	T1	651	4.4	651	4.4	0.759	24.9	LOS B	14.7	111.6	0.92	0.84	13.0
9	R2	56	79.2	56	79.2	0.271	41.9	LOS C	1.0	11.6	0.97	0.72	26.9
Approach		1125	7.6	1125	7.6	0.759	18.1	LOS B	14.7	111.6	0.70	0.73	21.8
West: MPW Site Access													
10	L2	239	18.5	239	18.5	0.146	5.8	LOS A	0.0	0.0	0.00	0.52	51.0
11	T1	22	0.0	22	0.0	0.132	33.8	LOS C	0.7	5.2	0.95	0.67	33.0
12	R2	22	0.0	22	0.0	0.139	39.5	LOS C	0.7	5.2	0.96	0.70	26.7
Approach		283	15.6	283	15.6	0.146	10.6	LOS A	0.7	5.2	0.15	0.54	45.4
All Vehicles		2761	6.4	2761	6.4	0.759	20.6	LOS B	14.7	111.6	0.70	0.72	24.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.3 %
Number of Iterations: 5 (maximum specified: 20)

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	11	29.3	LOS C	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	29.3	LOS C	0.0	0.0	0.91	0.91
P3	North Full Crossing	11	29.3	LOS C	0.0	0.0	0.91	0.91
P4	West Full Crossing	53	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		84	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

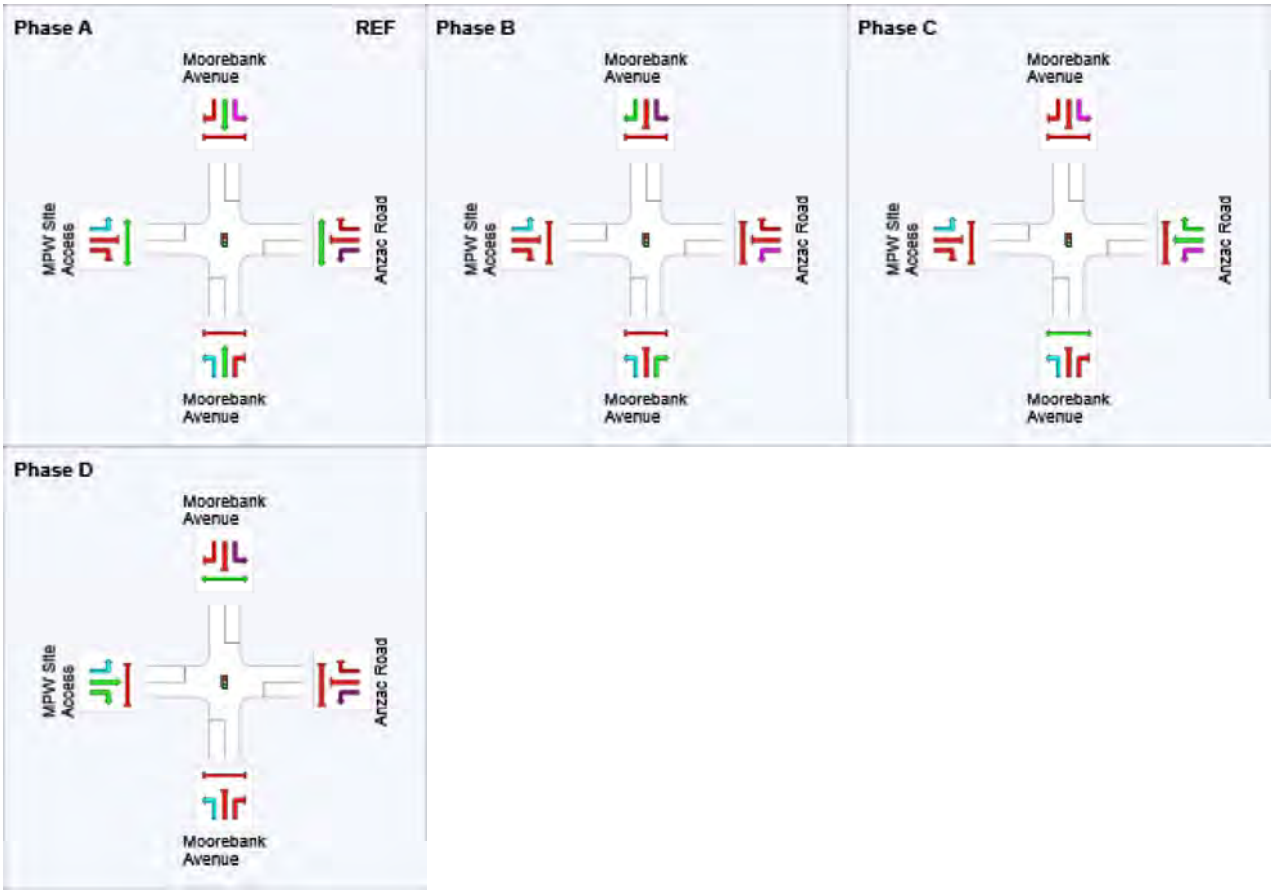
Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

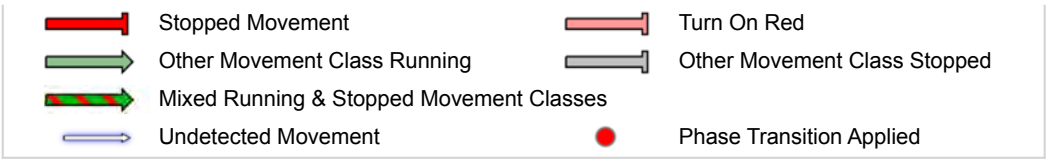
Phase	A	B	C	D
Phase Change Time (sec)	0	27	39	58
Green Time (sec)	21	6	13	6
Phase Time (sec)	27	12	19	12
Phase Split	39%	17%	27%	17%

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



REF: Reference Phase
VAR: Variable Phase

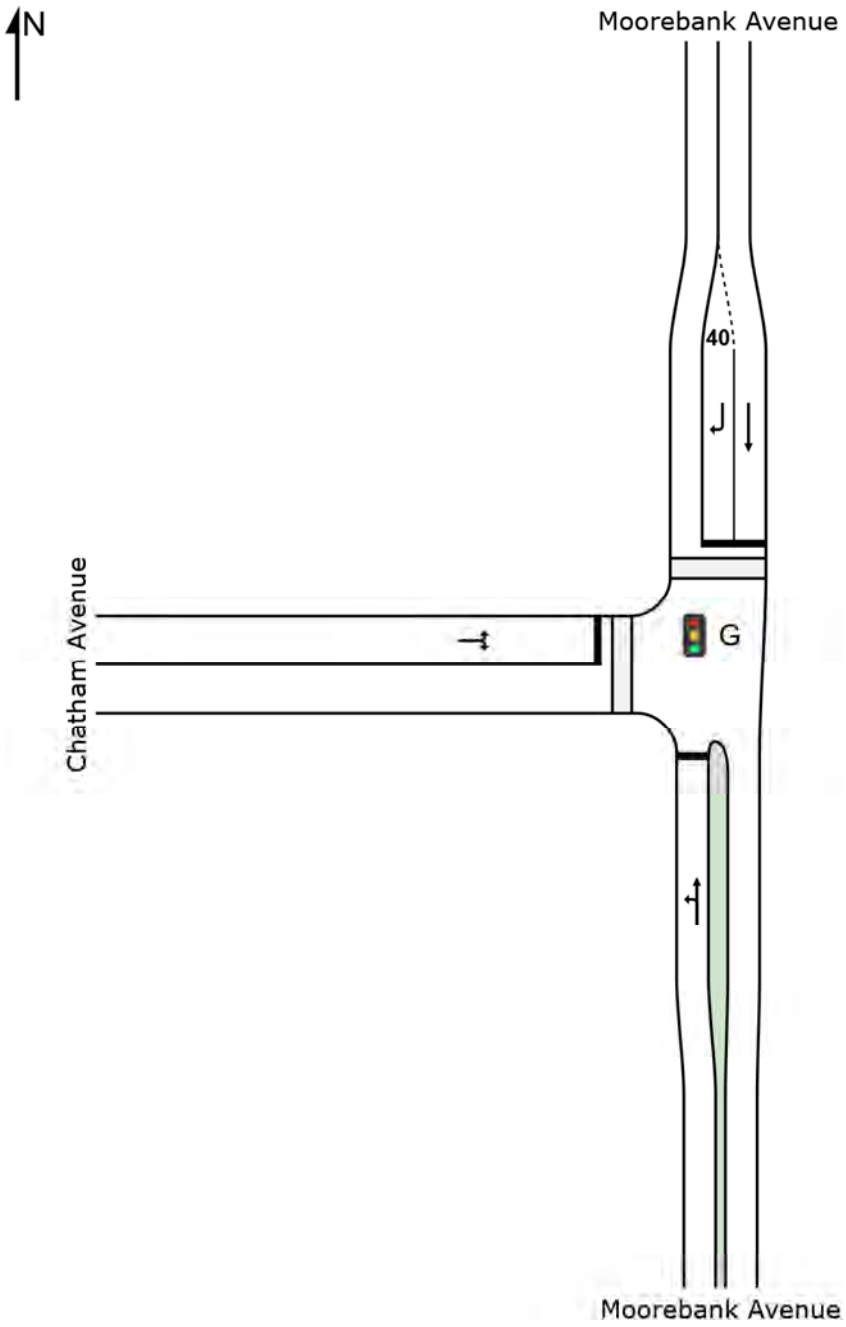
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.896	30.2	LOS C	48.0	361.3	0.91	0.99	35.2
2	T1	1103	3.7	1103	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
Approach		1104	3.7	1104	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	15	100.0	15	100.0	0.193	48.2	LOS D	0.6	13.4	0.97	0.70	24.1
Approach		472	12.1	472	12.1	0.315	4.1	LOS A	5.3	43.6	0.32	0.28	44.8
West: Chatham Avenue													
10	L2	15	100.0	15	100.0	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	12.1
12	R2	1	0.0	1	0.0	0.184	48.5	LOS D	0.7	13.6	0.97	0.70	26.8
Approach		16	93.3	16	93.3	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	13.5
All Vehicles		1592	7.1	1592	7.1	0.896	20.5	LOS B	48.0	361.3	0.74	0.78	36.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 14 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

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: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

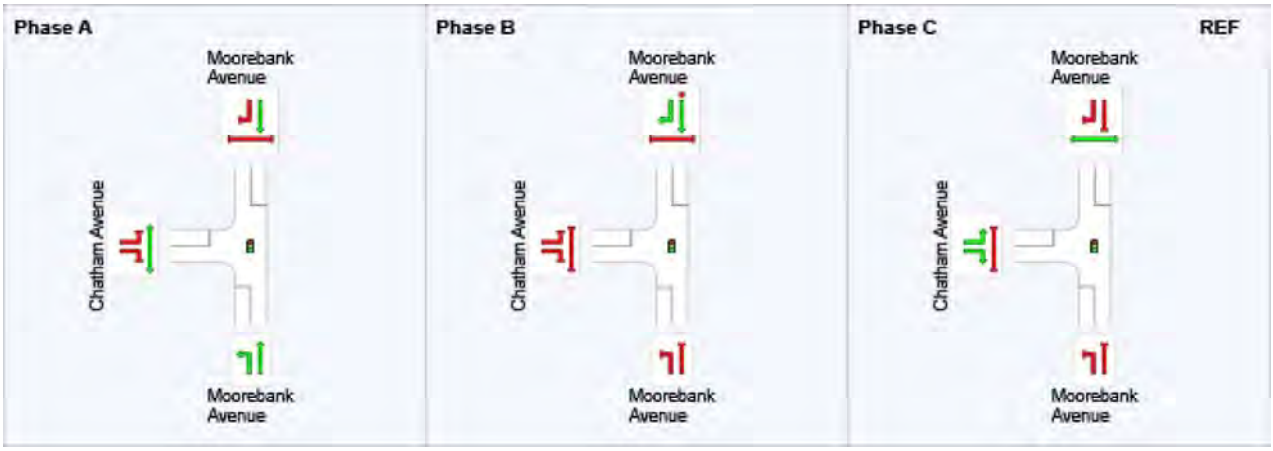
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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

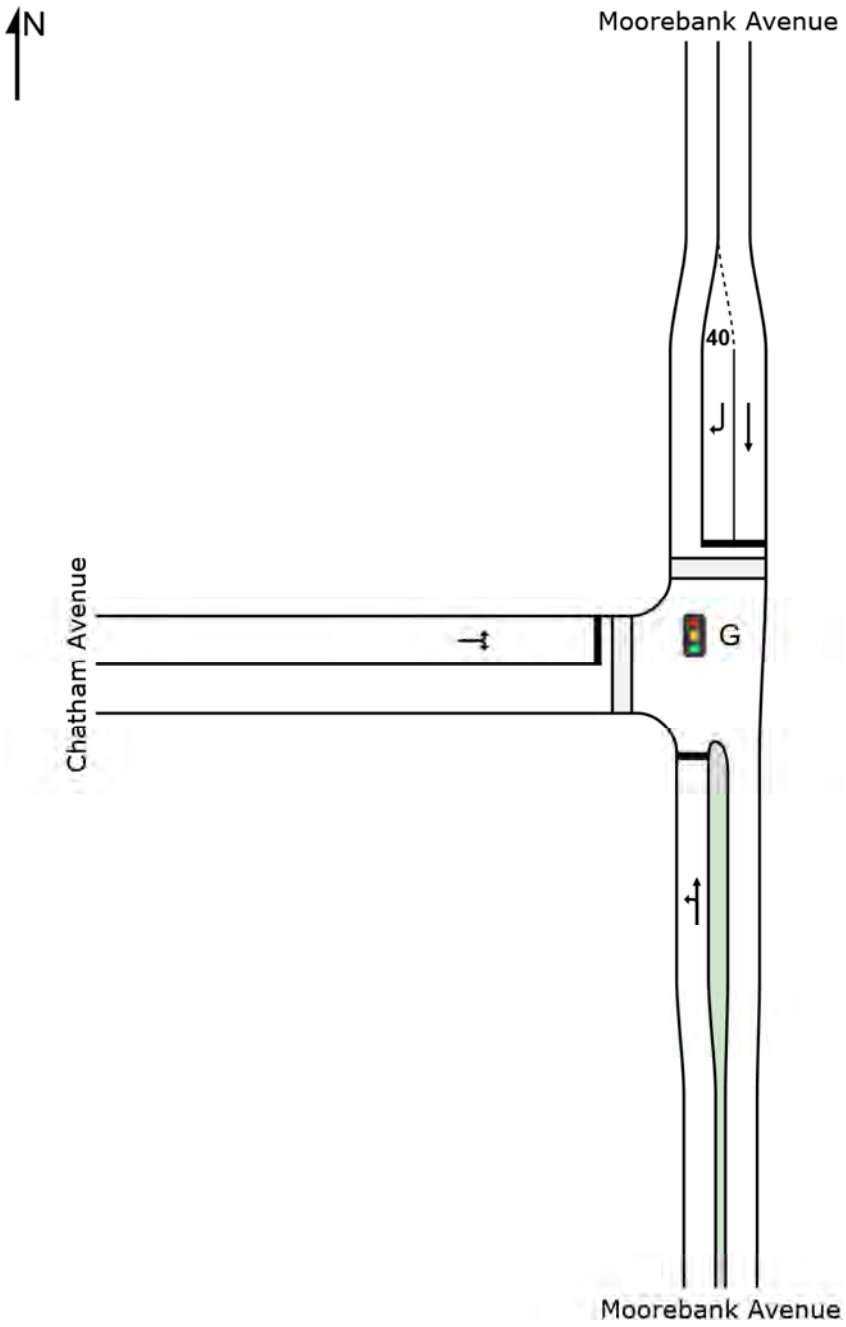


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	955	1.2	955	1.2	0.836	13.6	LOS A	21.3	152.8	0.85	0.93	40.6
9	R2	15	100.0	15	100.0	0.102	24.2	LOS B	0.3	6.6	0.91	0.68	30.3
Approach		969	2.7	969	2.7	0.836	13.8	LOS A	21.3	152.8	0.85	0.93	40.4
West: Chatham Avenue													
10	L2	86	17.1	86	17.1	0.363	25.5	LOS B	1.9	17.8	0.95	0.75	19.0
12	R2	1	0.0	1	0.0	0.363	25.4	LOS B	1.9	17.8	0.95	0.75	35.4
Approach		87	16.9	87	16.9	0.363	25.5	LOS B	1.9	17.8	0.95	0.75	19.3
All Vehicles		1559	3.4	1559	3.4	0.836	16.7	LOS B	21.3	152.8	0.89	0.93	38.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.3 %
Number of Iterations: 5 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			0.84	0.84

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: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

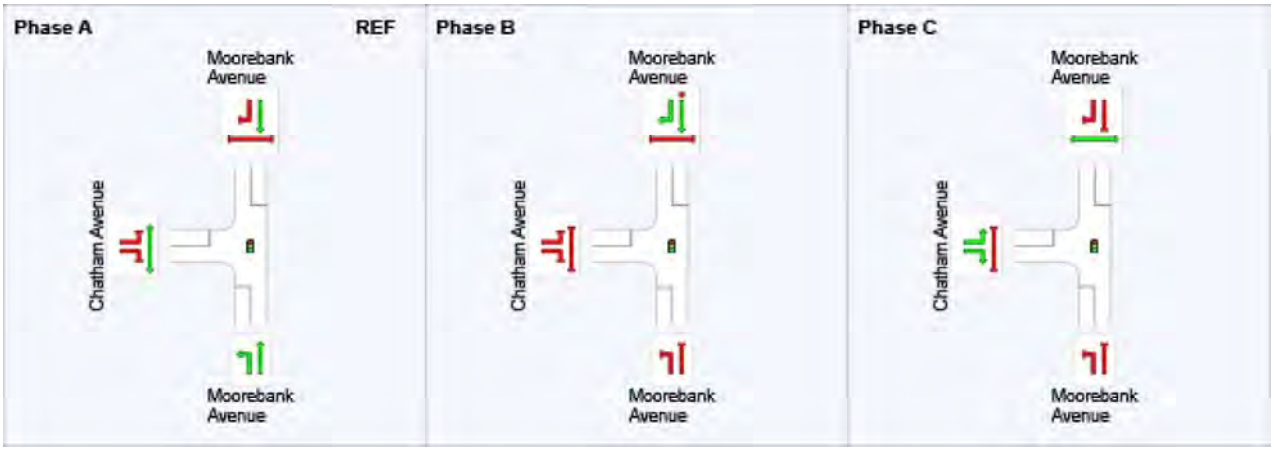
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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



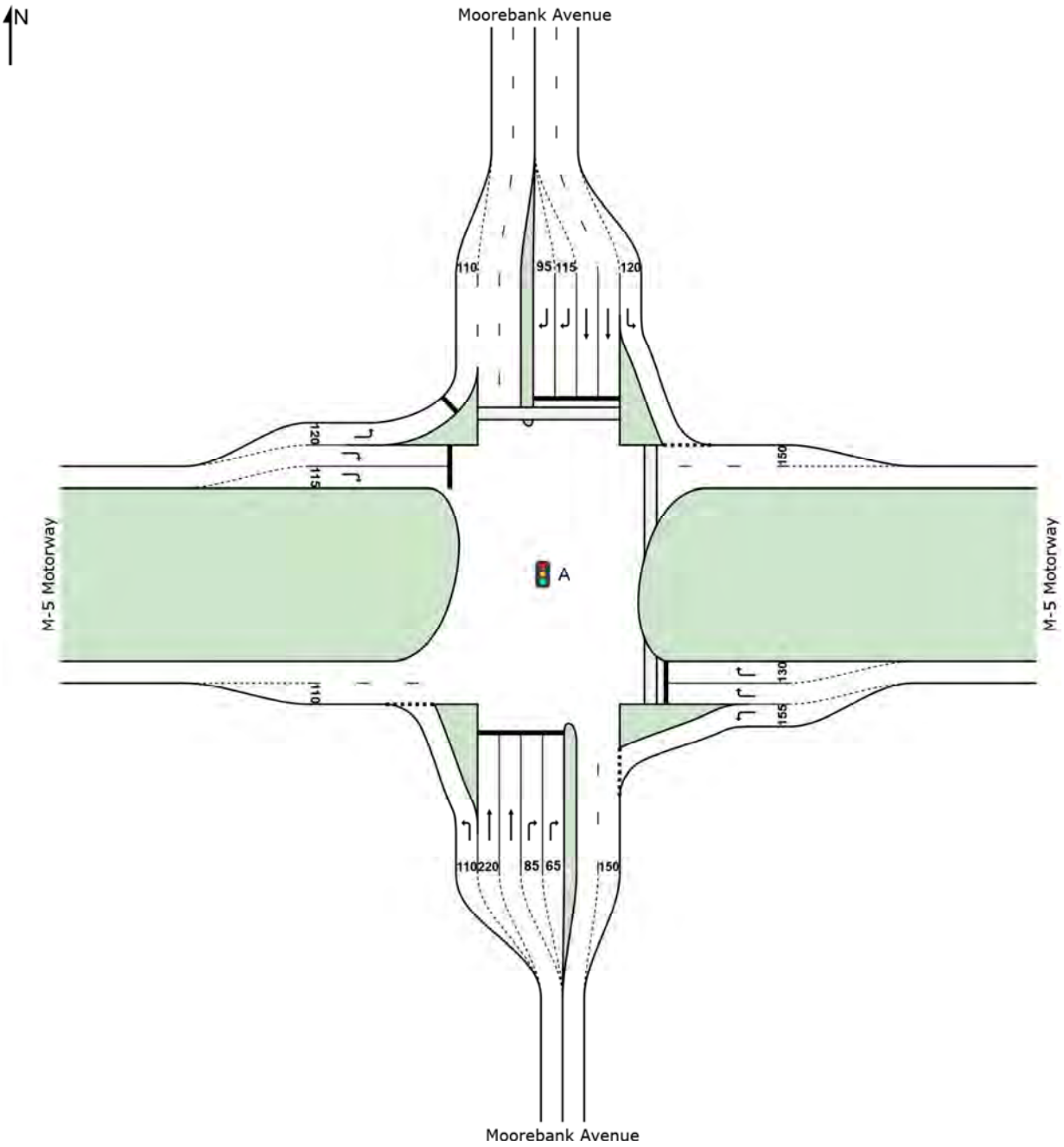
REF: Reference Phase
VAR: Variable Phase

Stage 3(iii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.4	LOS A	9.9	89.8	0.42	0.73	50.3
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	339	17.7	339	17.7	0.285	6.4	LOS A	2.0	18.9	0.14	0.59	47.5
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		582	12.1	582	12.1	0.949	47.1	LOS D	10.7	81.6	0.50	0.78	23.9
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	218	6.8	218	6.8	0.156	27.7	LOS B	5.2	41.5	0.65	0.53	24.6
9	R2	506	20.2	506	20.2	0.967	87.5	LOS F	28.7	282.0	0.98	0.98	22.1
Approach		773	16.3	773	16.3	0.967	65.6	LOS E	28.7	282.0	0.83	0.82	23.3
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	521	9.7	521	9.7	0.812	68.9	LOS E	20.8	173.8	0.99	0.88	18.9
Approach		1877	8.2	1877	8.2	0.887	24.3	LOS B	21.5	173.8	0.62	0.72	38.0
All Vehicles		4333	11.1	4333	11.1	0.967	36.3	LOS C	28.7	282.0	0.64	0.74	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 2_AM]

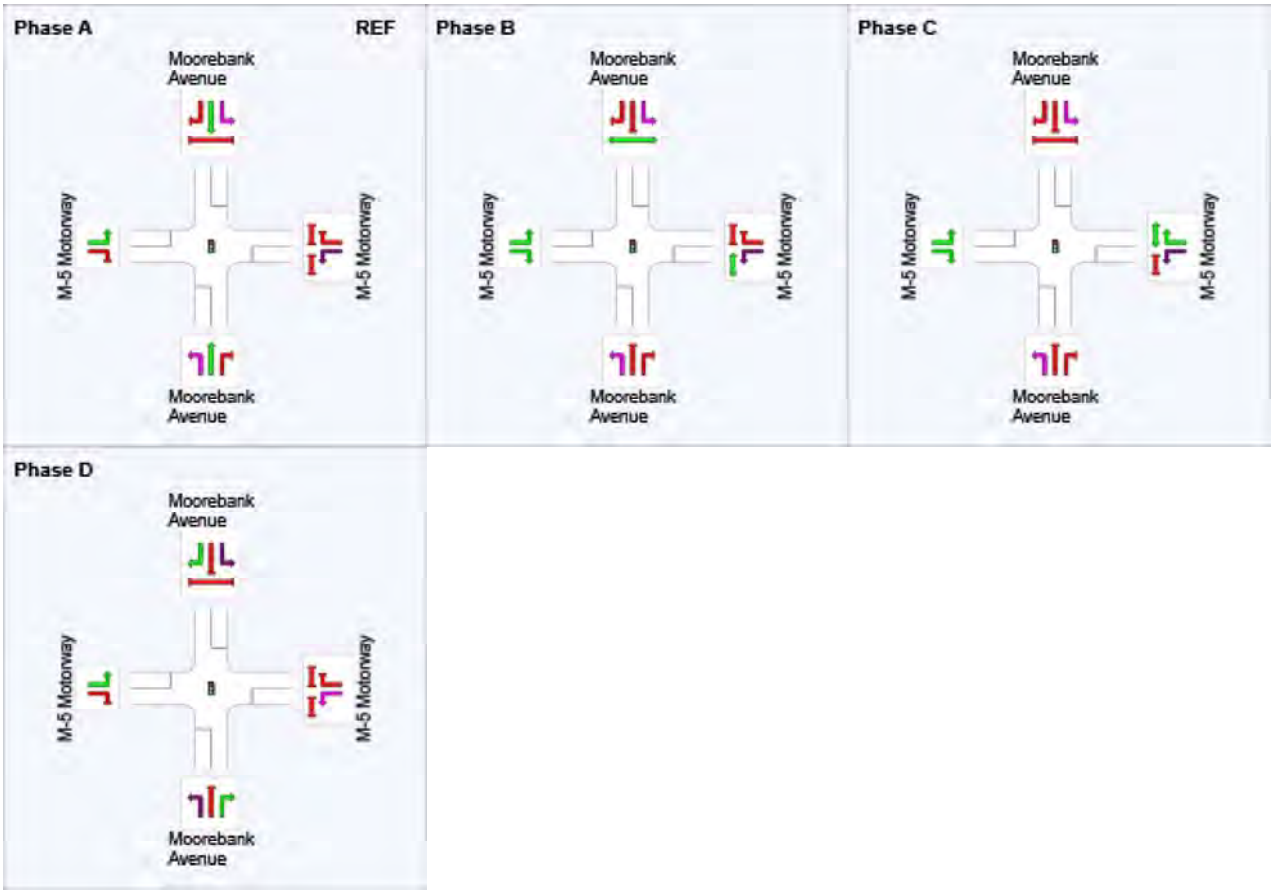
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

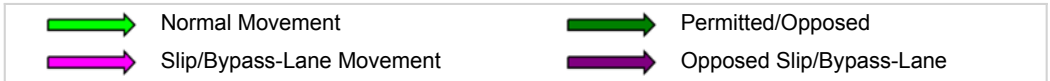
Phase Timing Results

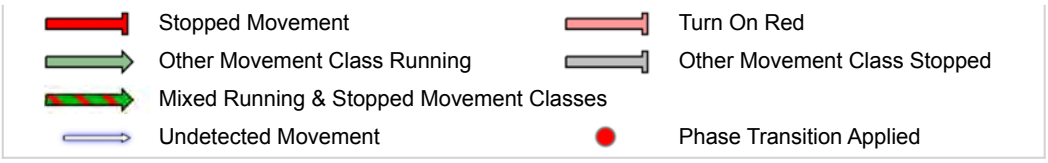
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase





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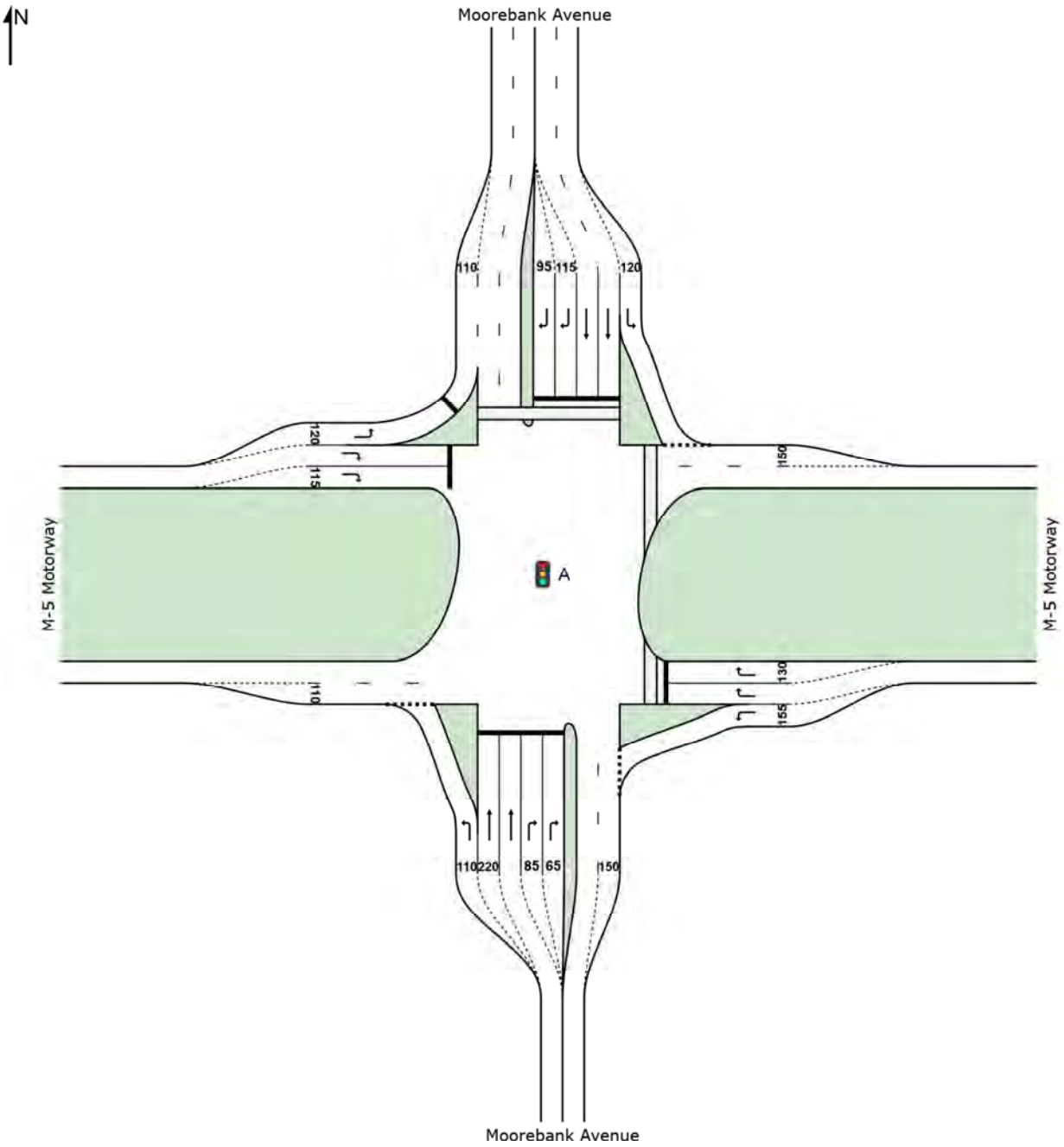
Project: \\HC-AUS-NS-FS-01\jobs\AA008765\D-Calculations\Traffic\01 MPW Stage 2 Response\03 Anzac Rd Sensitivity Testing\SIDRA Model \Scenario 2\Scenario 2_Stage 3_100%.sip7

SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	541	7.4	541	7.4	0.761	42.8	LOS D	26.3	211.1	0.92	1.05	35.1
2	T1	286	2.6	286	2.6	0.567	66.8	LOS E	10.0	73.6	0.99	0.80	22.4
3	R2	404	8.9	404	8.9	0.239	22.6	LOS B	7.9	65.3	0.53	0.72	41.6
Approach		1232	6.8	1232	6.8	0.761	41.7	LOS C	26.3	211.1	0.81	0.88	33.0
East: M-5 Motorway													
4	L2	281	12.7	281	12.7	0.239	7.1	LOS A	2.9	25.6	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		368	11.1	368	11.1	0.642	26.5	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.065	6.8	LOS A	0.6	4.8	0.16	0.59	55.9
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	439	9.6	439	9.6	0.810	72.7	LOS F	17.7	148.0	1.00	0.88	18.2
Approach		1034	8.2	1034	8.2	0.810	34.4	LOS C	17.7	148.0	0.50	0.70	32.7
All Vehicles		4408	6.4	4408	6.4	0.884	39.2	LOS C	46.1	352.4	0.69	0.81	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 7 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

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: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 2_PM]

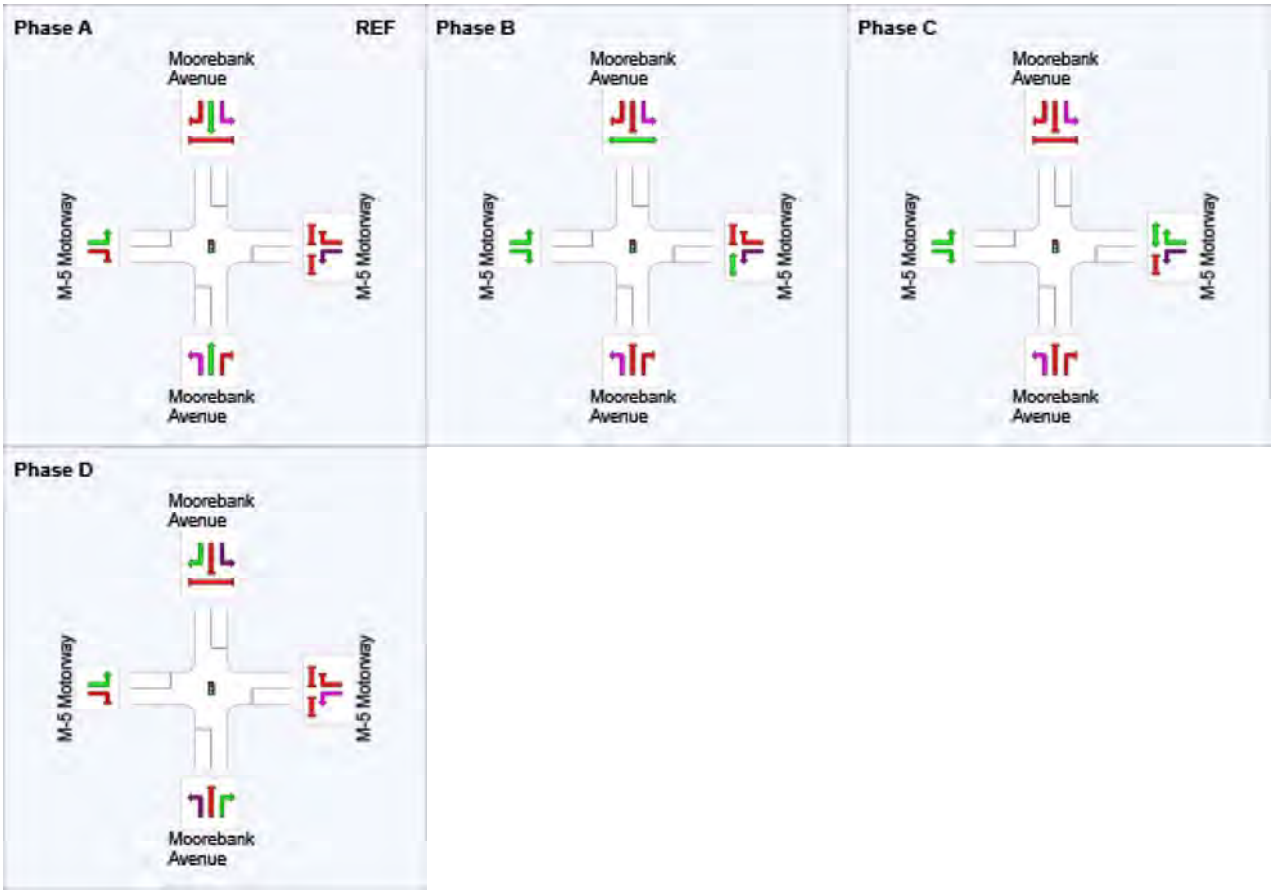
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

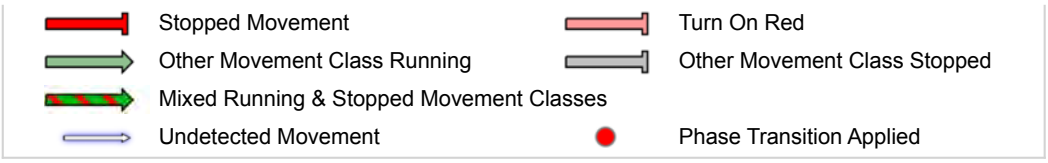
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase

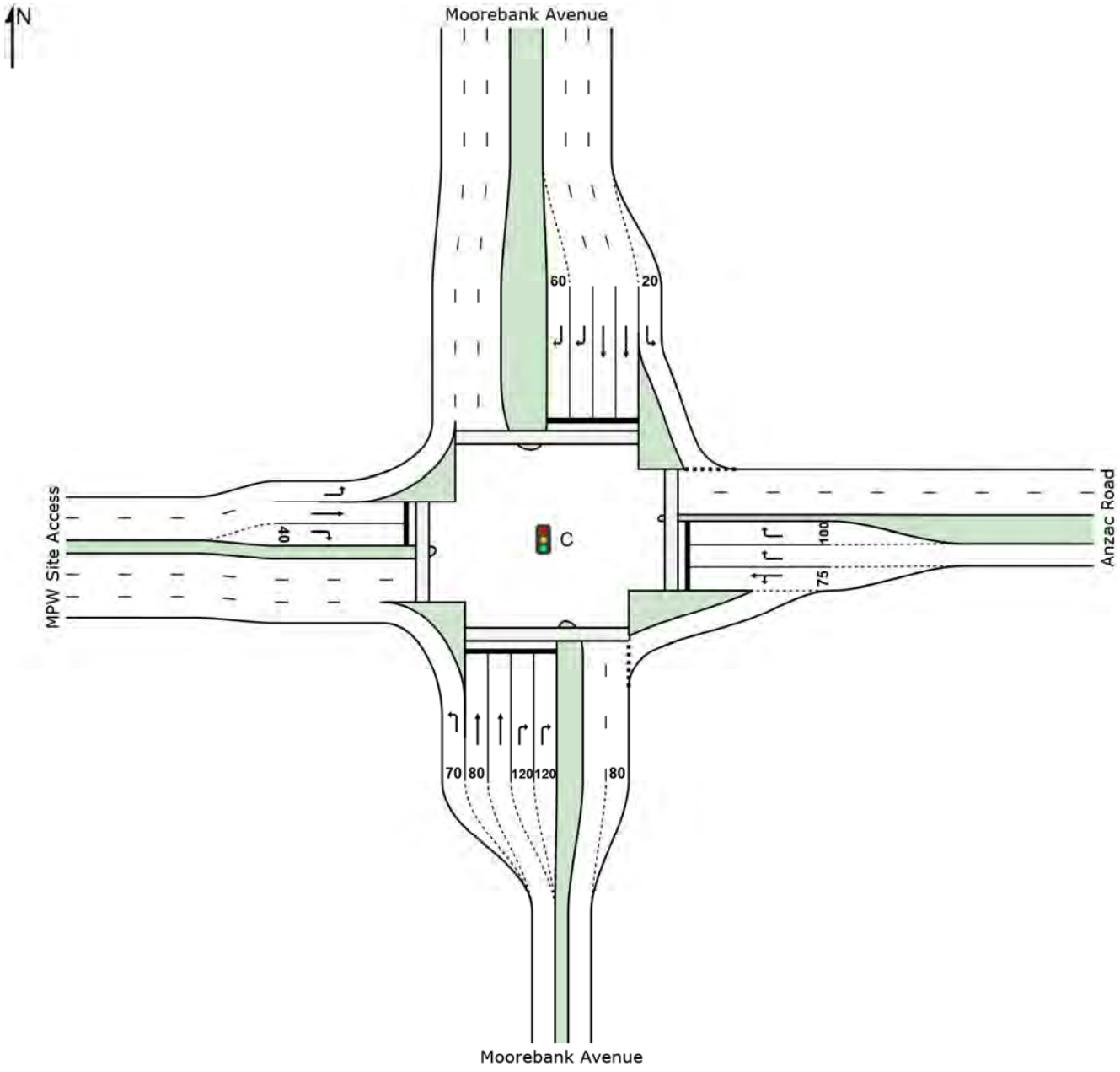
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	37	0.0	37	0.0	0.020	5.6	LOS A	0.0	0.0	0.00	0.53	53.9
2	T1	698	4.1	698	4.1	0.909	36.0	LOS C	12.2	92.6	1.00	1.28	17.9
3	R2	381	3.3	381	3.3	0.817	34.3	LOS C	5.9	43.9	1.00	1.04	23.1
Approach		1116	3.7	1116	3.7	0.909	34.4	LOS C	12.2	92.6	0.97	1.17	20.8
East: Anzac Road													
4	L2	208	3.0	208	3.0	0.205	8.5	LOS A	1.8	13.4	0.44	0.67	33.2
5	T1	1	0.0	1	0.0	0.205	2.9	LOS A	1.8	13.4	0.44	0.67	49.5
6	R2	363	11.9	363	11.9	0.825	37.3	LOS C	5.7	49.1	1.00	1.00	13.6
Approach		573	8.6	573	8.6	0.825	26.8	LOS B	5.7	49.1	0.80	0.88	17.3
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.327	5.2	LOS A	2.8	23.0	0.43	0.59	36.8
8	T1	477	7.5	477	7.5	0.851	27.4	LOS B	10.1	81.3	0.97	1.00	12.2
9	R2	201	29.3	201	29.3	0.509	32.1	LOS C	2.8	24.1	0.98	0.78	31.4
Approach		1081	11.7	1081	11.7	0.851	20.0	LOS B	10.1	81.3	0.77	0.81	24.7
West: MPW Site Access													
10	L2	59	100.0	59	100.0	0.054	6.1	LOS A	0.0	0.0	0.00	0.50	51.0
11	T1	1	0.0	1	0.0	0.005	24.1	LOS B	0.0	0.2	0.91	0.53	37.8
12	R2	3	33.3	3	33.3	0.019	30.8	LOS C	0.1	0.7	0.91	0.62	30.6
Approach		63	95.0	63	95.0	0.054	7.7	LOS A	0.1	0.7	0.06	0.51	49.0
All Vehicles		2833	9.8	2833	9.8	0.909	26.8	LOS B	12.2	92.6	0.84	0.96	22.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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	11	21.8	LOS C	0.0	0.0	0.89	0.89
P2	East Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P3	North Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P4	West Full Crossing	53	21.9	LOS C	0.1	0.1	0.89	0.89

All Pedestrians	84	21.9	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 2_AM]

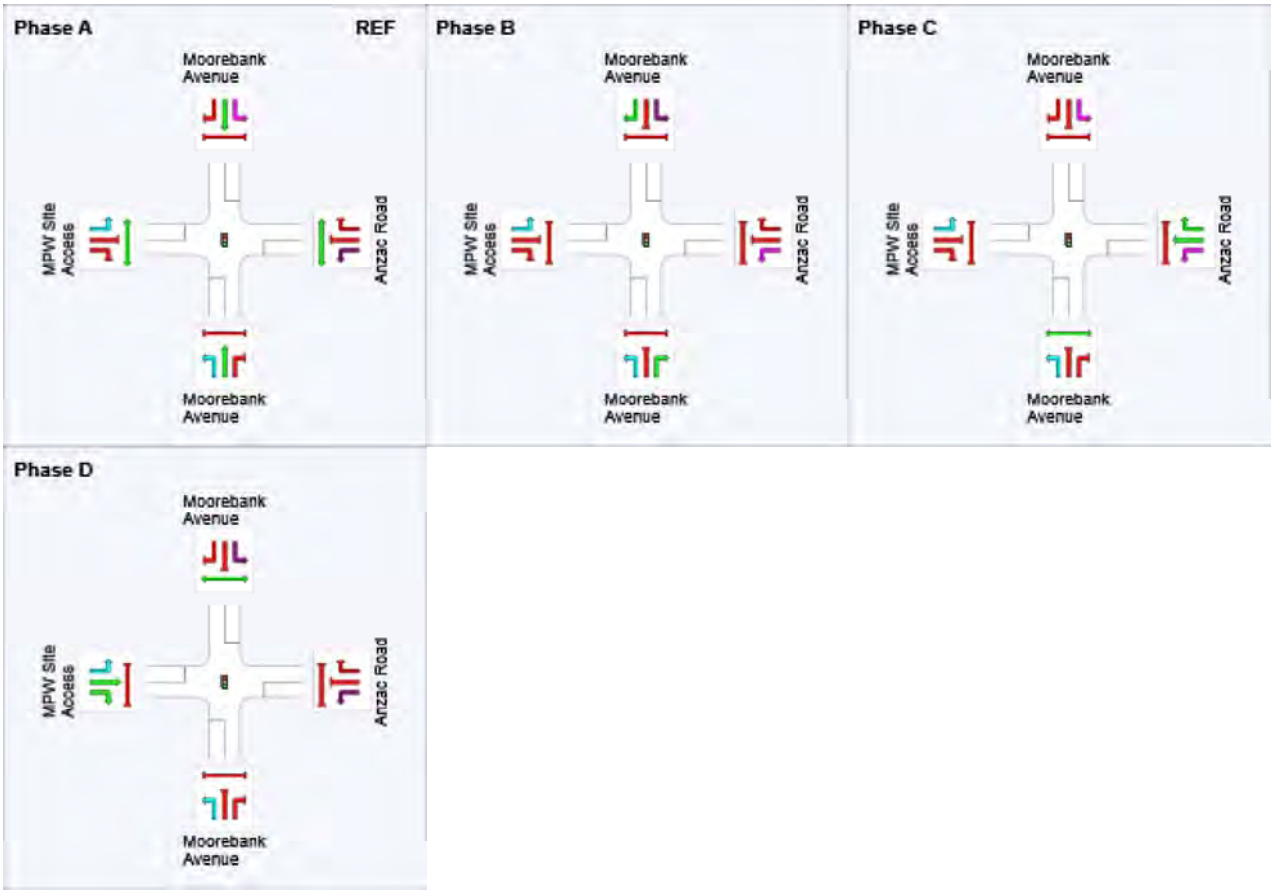
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

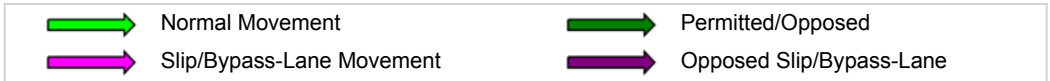
Phase Timing Results

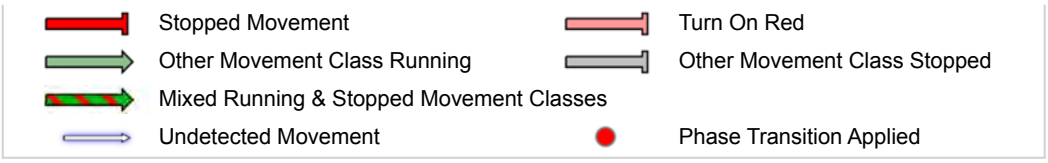
Phase	A	B	C	D
Phase Change Time (sec)	0	17	30	43
Green Time (sec)	11	7	7	6
Phase Time (sec)	17	13	13	12
Phase Split	31%	24%	24%	22%

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



REF: Reference Phase
VAR: Variable Phase





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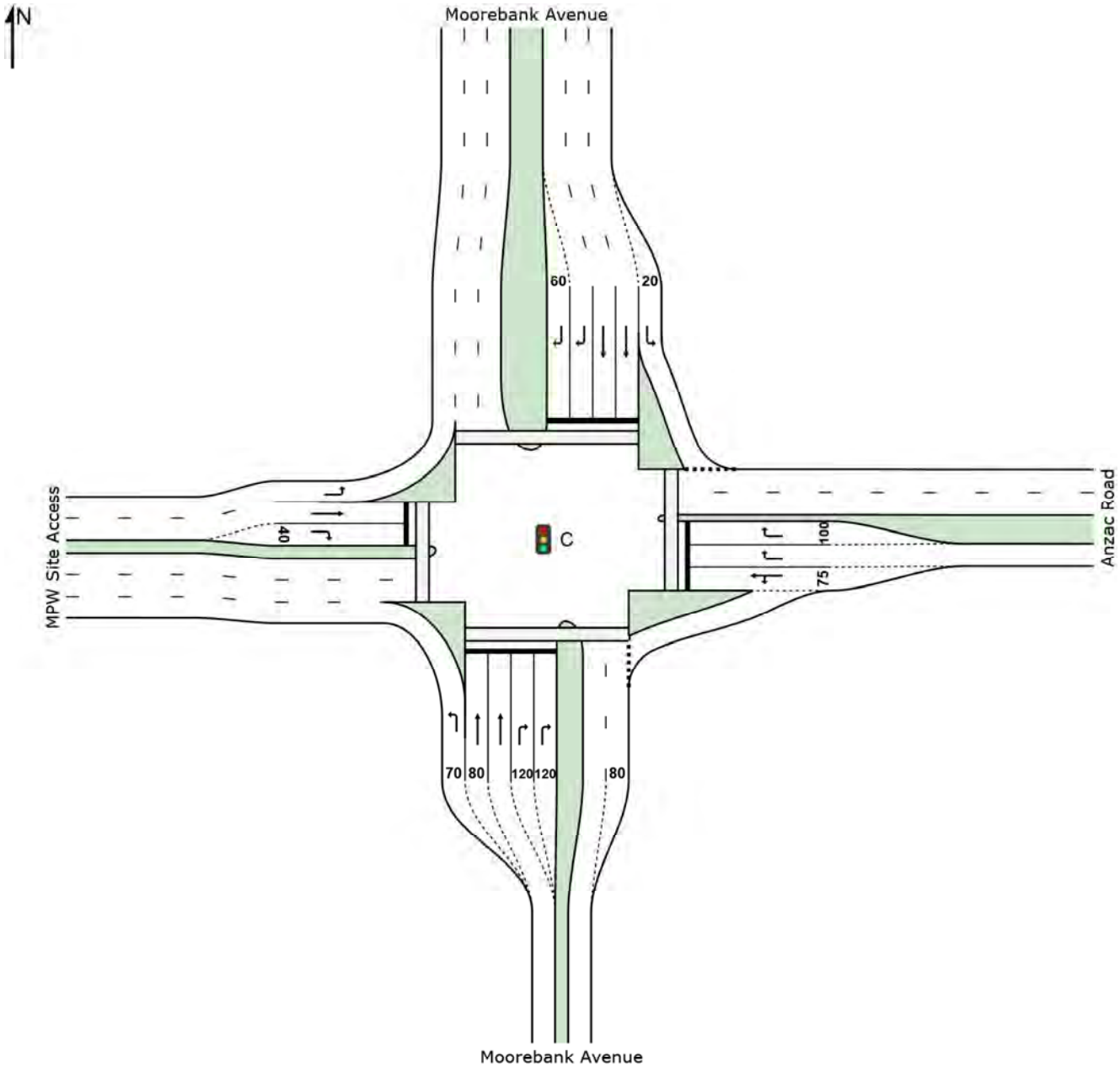
SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 65 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	6	83.3	6	83.3	0.005	6.5	LOS A	0.0	0.0	0.00	0.49	50.5
2	T1	509	2.3	509	2.3	0.502	22.6	LOS B	7.1	51.7	0.90	0.75	22.5
3	R2	182	0.6	182	0.6	0.528	36.2	LOS C	3.0	21.2	1.00	0.78	22.6
Approach		698	2.6	698	2.6	0.528	26.0	LOS B	7.1	51.7	0.92	0.75	22.8
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.280	9.6	LOS A	3.3	23.7	0.48	0.69	31.4
5	T1	1	0.0	1	0.0	0.280	4.0	LOS A	3.3	23.7	0.48	0.69	48.4
6	R2	287	4.0	287	4.0	0.427	32.1	LOS C	4.2	31.9	0.93	0.78	15.2
Approach		568	2.8	568	2.8	0.427	21.0	LOS B	4.2	31.9	0.71	0.74	20.4
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.300	4.5	LOS A	2.4	17.9	0.32	0.55	38.4
8	T1	636	2.2	636	2.2	0.915	35.2	LOS C	19.2	140.2	0.96	1.11	10.2
9	R2	71	83.6	71	83.6	0.325	39.3	LOS C	1.2	14.0	0.97	0.73	27.7
Approach		1125	7.6	1125	7.6	0.915	24.0	LOS B	19.2	140.2	0.72	0.88	19.1
West: MPW Site Access													
10	L2	318	18.5	318	18.5	0.194	5.8	LOS A	0.0	0.0	0.00	0.52	51.0
11	T1	28	0.0	28	0.0	0.158	31.1	LOS C	0.9	6.2	0.95	0.68	34.2
12	R2	22	0.0	22	0.0	0.129	36.7	LOS C	0.7	4.8	0.95	0.70	27.8
Approach		368	16.0	368	16.0	0.194	9.6	LOS A	0.9	6.2	0.13	0.54	46.5
All Vehicles		2760	6.4	2760	6.4	0.915	22.0	LOS B	19.2	140.2	0.69	0.77	24.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 7 (maximum specified: 20)

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	11	26.8	LOS C	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	26.8	LOS C	0.0	0.0	0.91	0.91
P3	North Full Crossing	11	26.8	LOS C	0.0	0.0	0.91	0.91
P4	West Full Crossing	53	26.8	LOS C	0.1	0.1	0.91	0.91
All Pedestrians		84	26.8	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 2_PM]

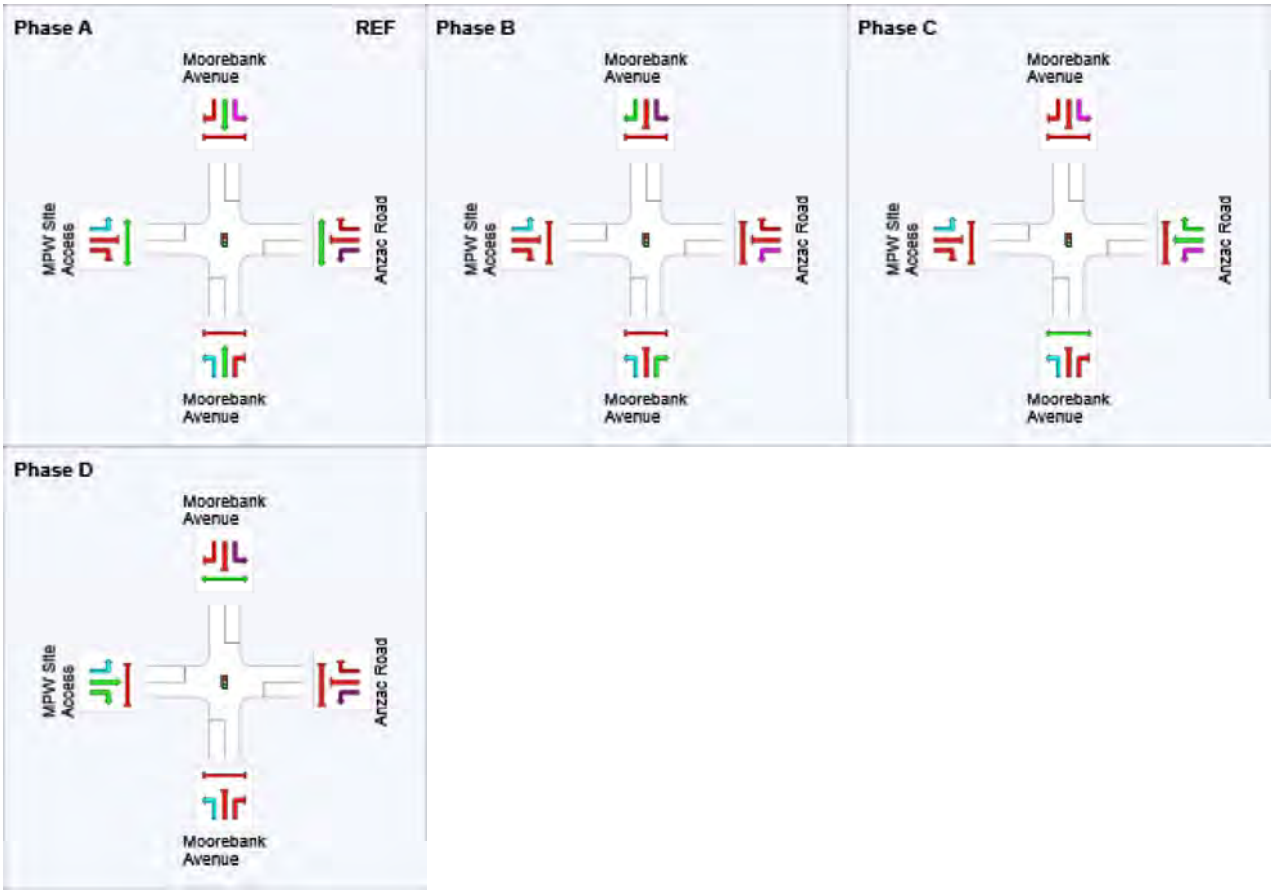
Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 65 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

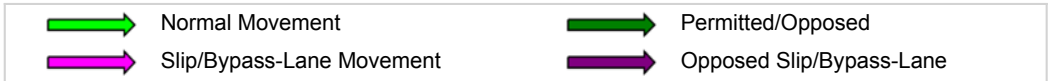
Phase Timing Results

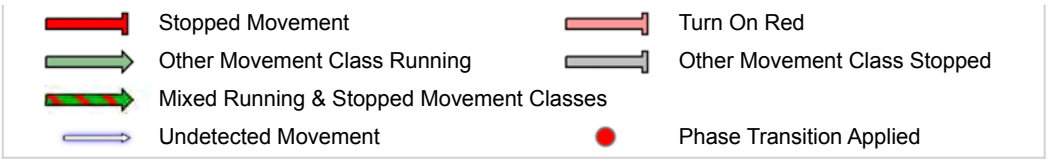
Phase	A	B	C	D
Phase Change Time (sec)	0	23	35	53
Green Time (sec)	17	6	12	6
Phase Time (sec)	23	12	18	12
Phase Split	35%	18%	28%	18%

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



REF: Reference Phase
VAR: Variable Phase

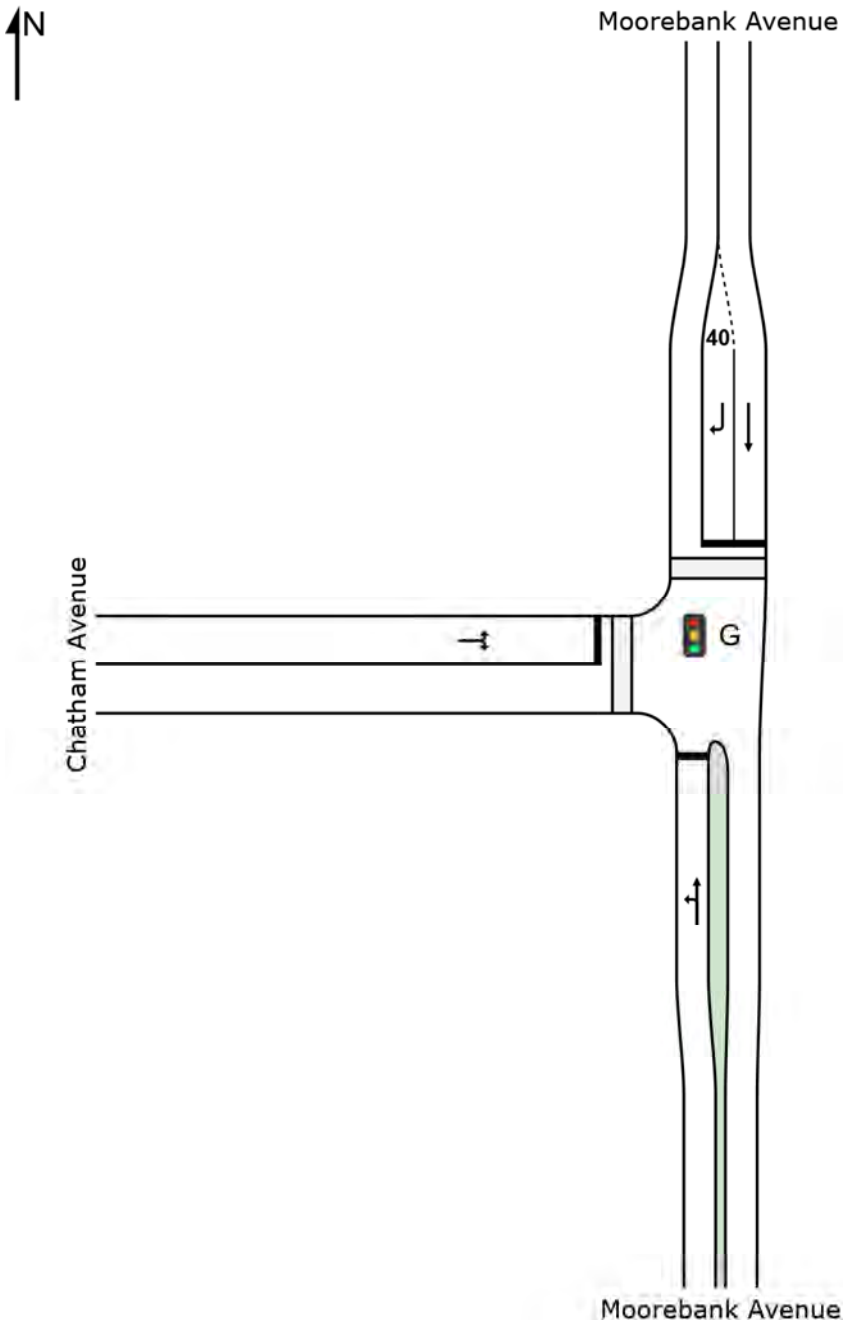




SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.896	30.2	LOS C	48.0	361.3	0.91	0.99	35.2
2	T1	1103	3.7	1103	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
Approach		1104	3.7	1104	3.7	0.896	27.0	LOS B	48.0	361.3	0.91	0.99	32.0
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	1	0.0	1	0.0	0.008	44.2	LOS D	0.0	0.3	0.95	0.58	25.2
Approach		458	9.2	458	9.2	0.315	2.8	LOS A	5.3	43.6	0.30	0.27	45.6
West: Chatham Avenue													
10	L2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	12.7
12	R2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	27.7
Approach		2	0.0	2	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	21.8
All Vehicles		1564	5.3	1564	5.3	0.896	20.0	LOS B	48.0	361.3	0.74	0.78	37.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 9 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

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: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 2_AM]

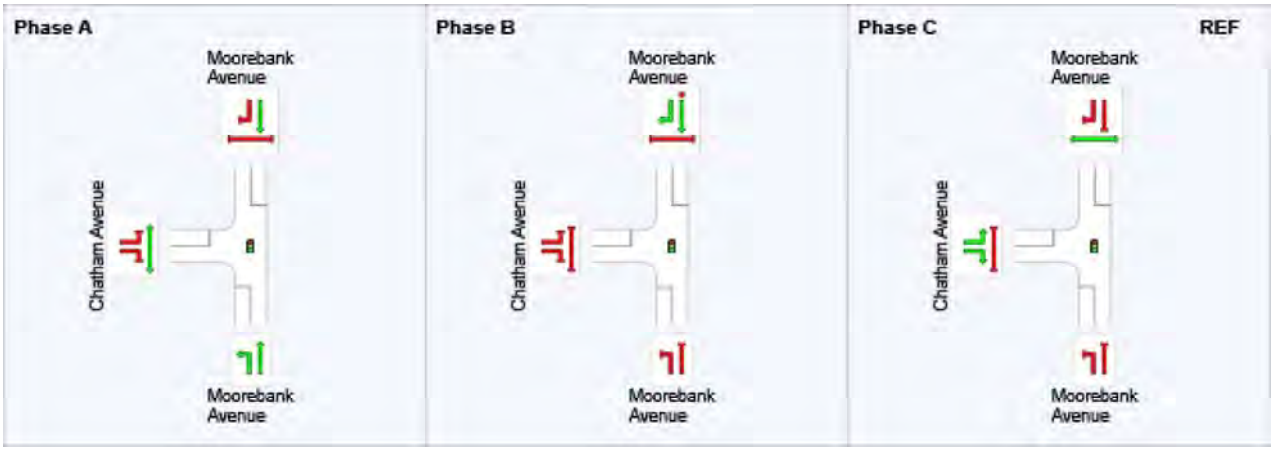
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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

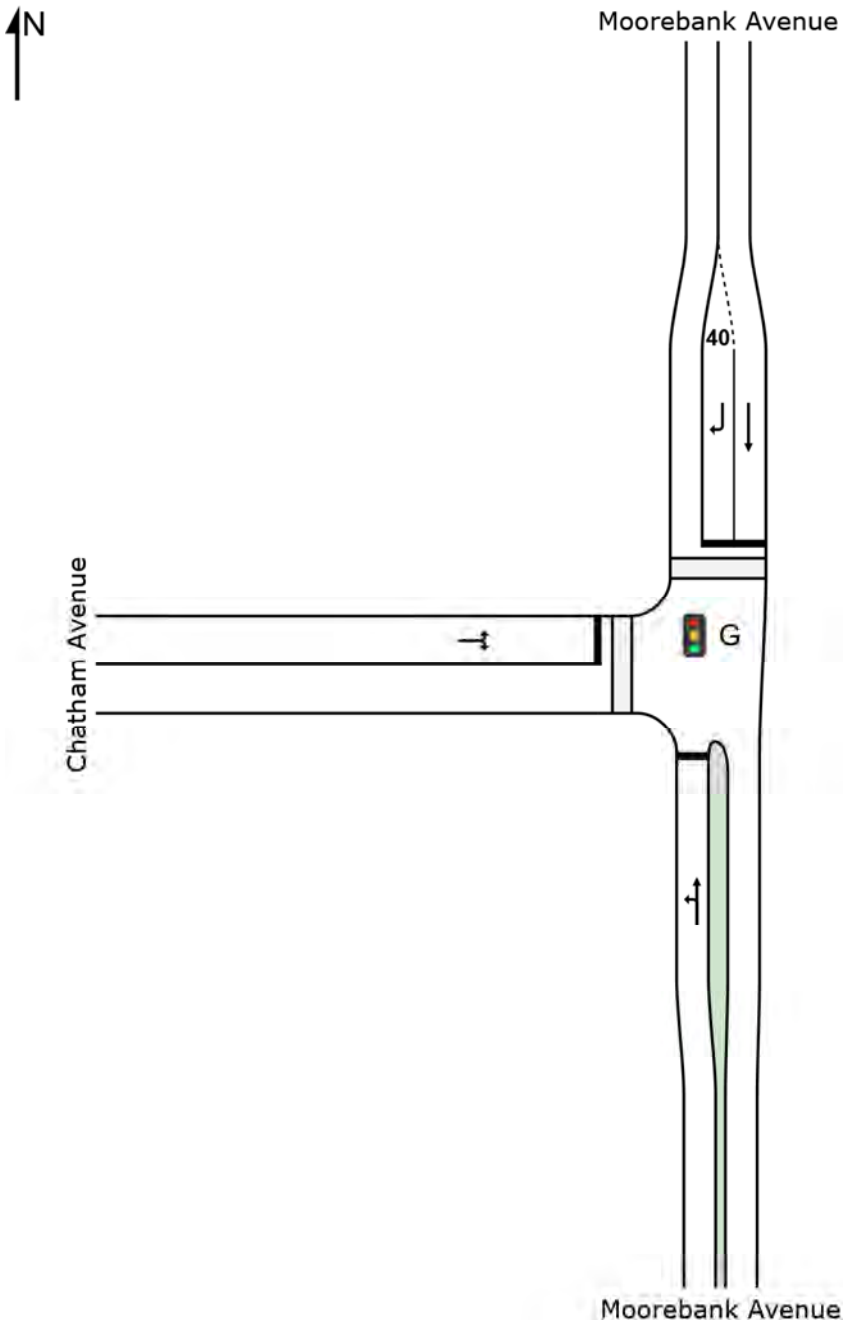


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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	Average Speed km/h
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	955	1.2	955	1.2	0.823	12.6	LOS A	20.6	147.8	0.85	0.91	41.0
9	R2	1	0.0	1	0.0	0.004	22.2	LOS B	0.0	0.1	0.88	0.57	31.3
Approach		956	1.2	956	1.2	0.823	12.6	LOS A	20.6	147.8	0.85	0.91	41.0
West: Chatham Avenue													
10	L2	1	0.0	1	0.0	0.008	23.3	LOS B	0.0	0.3	0.88	0.60	19.9
12	R2	1	0.0	1	0.0	0.008	23.3	LOS B	0.0	0.3	0.88	0.60	36.3
Approach		2	0.0	2	0.0	0.008	23.3	LOS B	0.0	0.3	0.88	0.60	30.5
All Vehicles		1460	1.6	1460	1.6	0.823	15.4	LOS B	20.6	147.8	0.89	0.92	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 7 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			0.84	0.84

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: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 2_PM]

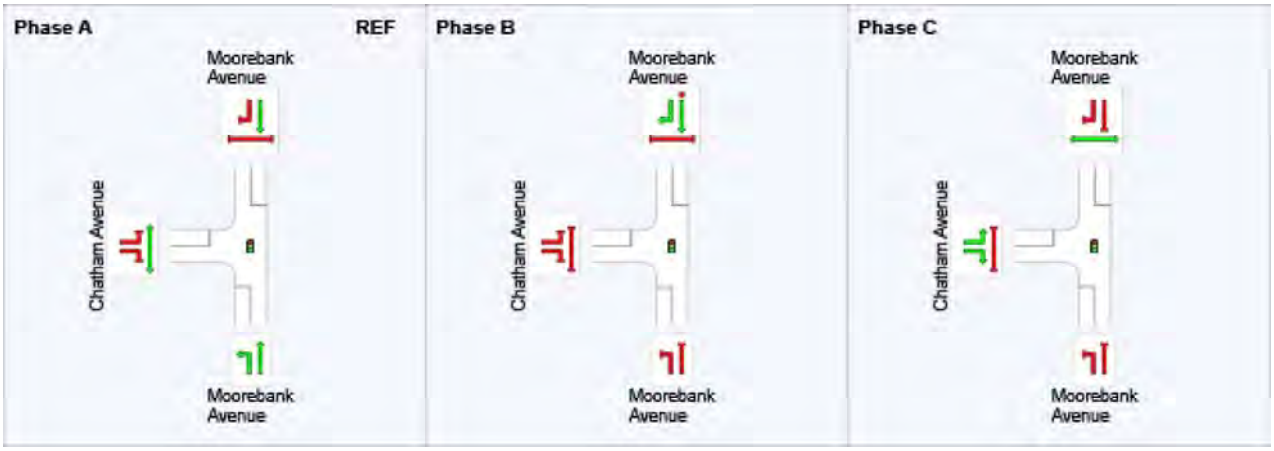
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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



REF: Reference Phase
VAR: Variable Phase