MOVEMENT SUMMARY

Site: 102 [Site 2 - Hughes St and Dutton Ln West Proposed Peak] Network: N101 [PROPOSED PEAK NETWORK]

Site 2 - Hughes St and Dutton Ln West Proposed Peak
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Dutton Ln														
1	L2	439	0.2	439	0.2	0.330	4.8	LOS A	0.6	4.5	0.36	0.59	0.36	26.2
Approach		439	0.2	439	0.2	0.330	4.8	LOS A	0.6	4.5	0.36	0.59	0.36	26.2
East: Hughes St														
5	T1	204	0.5	204	0.5	0.108	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		204	0.5	204	0.5	0.108	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
West: Hughes St														
11	T1	803	1.0	803	1.0	0.218	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		803	1.0	803	1.0	0.218	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		1446	0.7	1446	0.7	0.330	1.5	NA	0.6	4.5	0.11	0.18	0.11	42.4

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Site 3 - Hughes St and Dutton Ln East Proposed Peak]

Network: N101 [PROPOSED PEAK NETWORK]

Site 3 - Hughes St and Dutton Ln East Proposed Peak
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	284	1.9	284	1.9	0.155	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	32.6
5	T1	166	0.0	166	0.0	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		451	1.2	451	1.2	0.155	2.2	NA	0.0	0.0	0.00	0.29	0.00	34.9
West: Hughes St														
11	T1	417	1.5	417	1.5	0.619	2.2	LOS A	3.3	23.2	0.30	0.32	0.47	24.7
12	R2	521	0.8	521	0.8	0.619	9.2	LOS A	3.3	23.2	0.71	0.74	1.11	16.0
Approach		938	1.1	938	1.1	0.619	6.1	NA	3.3	23.2	0.53	0.55	0.82	19.0
All Vehicles		1388	1.1	1388	1.1	0.619	4.8	NA	3.3	23.2	0.36	0.47	0.56	25.6

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 104 [Site 4 - Hughes St and Park Rd Proposed Peak] Network: N101 [PROPOSED PEAK NETWORK]

Site 4 - Hughes St and Park Rd Sat Proposed Peak
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	48	0.0	48	0.0	0.196	15.1	LOS B	1.0	7.3	0.78	0.66	0.78	25.5
5	T1	276	1.5	276	1.5	0.744	15.9	LOS B	3.3	23.7	0.89	0.87	1.10	17.9
6	R2	59	0.0	59	0.0	0.744	20.6	LOS B	3.3	23.7	0.92	0.93	1.19	24.6
Approach		383	1.1	383	1.1	0.744	16.5	LOS B	3.3	23.7	0.88	0.85	1.07	20.3
North: Park Rd														
7	L2	102	0.0	102	0.0	0.137	11.8	LOS A	0.8	5.6	0.67	0.68	0.67	28.4
8	T1	80	0.0	80	0.0	0.367	9.4	LOS A	2.4	16.9	0.74	0.71	0.74	27.1
9	R2	195	1.1	195	1.1	0.367	12.8	LOS A	2.4	16.9	0.74	0.71	0.74	22.9
Approach		377	0.6	377	0.6	0.367	11.8	LOS A	2.4	16.9	0.72	0.70	0.72	25.7
West: Hughes St														
10	L2	147	0.7	147	0.7	0.266	15.4	LOS B	1.4	9.9	0.80	0.73	0.80	26.4
11	T1	231	2.7	231	2.7	0.812	20.3	LOS B	4.8	34.0	0.99	1.08	1.38	22.3
12	R2	111	0.0	111	0.0	0.812	23.9	LOS B	4.8	34.0	0.99	1.08	1.38	20.9
Approach		488	1.5	488	1.5	0.812	19.6	LOS B	4.8	34.0	0.93	0.98	1.21	23.2
All Vehicles		1248	1.1	1248	1.1	0.812	16.3	LOS B	4.8	34.0	0.85	0.85	1.02	23.1

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.

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
P1	South Full Crossing	335	14.7	LOS B	0.3	0.3	0.86	0.86
P2	East Full Crossing	393	14.7	LOS B	0.4	0.4	0.86	0.86
P3	North Full Crossing	47	14.5	LOS B	0.0	0.0	0.85	0.85
P4	West Full Crossing	158	14.5	LOS B	0.2	0.2	0.86	0.86
All Pedestrians		933	14.6	LOS B			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.

MOVEMENT SUMMARY

Site: 105 [Site 5 - Dutton Ln Left Turn Only Proposed Peak] Network: N101 [PROPOSED PEAK NETWORK]

Site 5 - Dutton Ln Left Turn Only Proposed Peak
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
North: Dutton Ln														
7	L2	102	7.2	102	7.2	0.140	3.9	LOS A	0.0	0.0	0.00	0.22	0.00	38.2
8	T1	640	0.3	640	0.3	0.140	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	52.3
9	R2	63	0.0	63	0.0	0.140	4.0	LOS A	0.0	0.0	0.00	0.15	0.00	54.2
Approach		805	1.2	805	1.2	0.140	0.8	NA	0.0	0.0	0.00	0.12	0.00	50.0
All Vehicles		805	1.2	805	1.2	0.140	0.8	NA	0.0	0.0	0.00	0.12	0.00	50.0

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 106 [Site 6 - Hill St and Car Park West Exit Proposed Peak]

Network: N101 [PROPOSED PEAK NETWORK]

Site 6 - Hill St and Car Park West Exit Proposed Peak
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

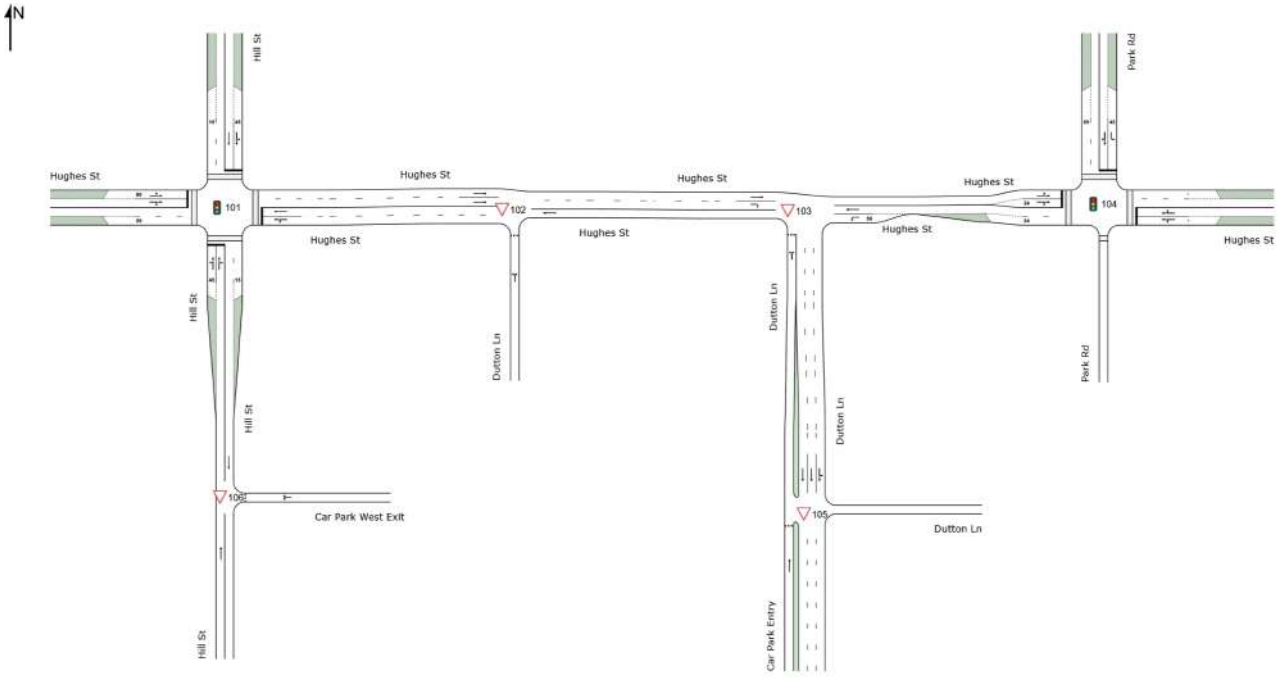
Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
2	T1	448	0.0	448	0.0	0.301	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		448	0.0	448	0.0	0.301	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
East: Car Park West Exit														
4	L2	121	1.7	121	1.7	0.521	7.7	LOS A	1.1	7.8	0.58	0.89	0.90	23.5
6	R2	188	3.4	188	3.4	0.521	11.7	LOS A	1.1	7.8	0.58	0.89	0.90	16.2
Approach		309	2.7	309	2.7	0.521	10.1	LOS A	1.1	7.8	0.58	0.89	0.90	19.8
North: Hill St														
8	T1	411	0.5	411	0.5	0.211	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		411	0.5	411	0.5	0.211	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		1168	0.9	1168	0.9	0.521	2.7	NA	1.1	7.8	0.15	0.23	0.24	41.8

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

NETWORK LAYOUT

Network: N101 [TUESDAY EXISTING AM PEAK]

TUESDAY EXISTING AM PEAK
Network Category: Existing AM Peak



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Site1 - Hughes St and Hill St Existing AM Peak
104	NA	Site 4 - Hughes St and Park Rd Existing AM Peak
103	NA	Site 3 - Hughes St and Dutton Ln East Existing AM Peak
102	NA	Site 2 - Hughes St and Dutton Ln West Existing AM Peak
105	NA	Site 5 - Dutton Ln Left Turn Only Existing AM Peak
106	NA	Site 6 - Hill St and Car Park West Exit Existing AM Peak

Organisation: PARKING AND TRAFFIC CONSULTANTS | Created: Monday, 8 October 2018 10:11:39 AM
Project: Z:\PCI - PROJECT WORK FILES\NSW\FAIRFIELD CITY COUNCIL - MDCP HUGHES STREET CABRAMATTA\3. DA\3. Modelling & Surveys\SIDRA MODELING\TUE EXISTING MORNING PEAK.sip8

MOVEMENT SUMMARY

Site: 101 [Site1 - Hughes St and Hill St Existing AM Peak]

Network: N101 [TUESDAY EXISTING AM PEAK]

Tuesday 19/09/18
Site1 - Hughes St and Hill St Existing AM Peak
Site Category: Existing AM Peak
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
1	L2	27	3.8	27	3.8	0.077	21.4	LOS B	0.5	3.7	0.78	0.65	0.78	29.0
2	T1	149	3.5	149	3.5	0.378	8.5	LOS A	2.5	18.3	0.72	0.66	0.72	27.6
3	R2	134	7.9	134	7.9	0.378	11.3	LOS A	2.5	18.3	0.71	0.66	0.71	18.6
Approach		311	5.4	311	5.4	0.378	10.8	LOS A	2.5	18.3	0.72	0.66	0.72	25.6
East: Hughes St														
4	L2	68	4.6	68	4.6	0.074	11.2	LOS A	0.6	4.5	0.53	0.62	0.53	13.8
5	T1	142	3.7	142	3.7	0.342	22.1	LOS B	2.2	16.1	0.89	0.71	0.89	27.9
Approach		211	4.0	211	4.0	0.342	18.6	LOS B	2.2	16.1	0.77	0.68	0.77	26.5
North: Hill St														
7	L2	101	0.0	101	0.0	0.204	22.2	LOS B	1.4	10.1	0.81	0.73	0.81	16.6
8	T1	216	1.5	216	1.5	0.419	20.2	LOS B	3.3	23.4	0.87	0.72	0.87	17.6
Approach		317	1.0	317	1.0	0.419	20.8	LOS B	3.3	23.4	0.85	0.72	0.85	17.3
West: Hughes St														
10	L2	33	0.0	33	0.0	0.496	26.6	LOS B	3.4	24.0	0.93	0.76	0.93	28.9
11	T1	320	3.3	320	3.3	0.496	23.2	LOS B	3.4	24.0	0.93	0.76	0.93	26.5
12	R2	31	0.0	31	0.0	0.496	26.7	LOS B	3.0	21.2	0.92	0.76	0.92	26.4
Approach		383	2.7	383	2.7	0.496	23.8	LOS B	3.4	24.0	0.93	0.76	0.93	26.7
All Vehicles		1221	3.2	1221	3.2	0.496	18.8	LOS B	3.4	24.0	0.83	0.71	0.83	24.7

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.

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
P1	South Full Crossing	122	24.4	LOS C	0.2	0.2	0.90	0.90
P2	East Full Crossing	177	24.5	LOS C	0.3	0.3	0.91	0.91
P3	North Full Crossing	34	24.3	LOS C	0.1	0.1	0.90	0.90
P4	West Full Crossing	61	24.4	LOS C	0.1	0.1	0.90	0.90
All Pedestrians		394	24.4	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.

MOVEMENT SUMMARY

Site: 102 [Site 2 - Hughes St and Dutton Ln West Existing AM Peak]

Network: N101 [TUESDAY EXISTING AM PEAK]

Tuesday 19/09/18
Site 2 - Hughes St and Dutton Ln West Existing AM Peak
Site Category: Existing AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Dutton Ln														
1	L2	66	6.3	66	6.3	0.060	4.4	LOS A	0.1	0.7	0.26	0.54	0.26	27.0
3	R2	6	16.7	6	16.7	0.060	9.2	LOS A	0.1	0.7	0.26	0.54	0.26	27.0
Approach		73	7.2	73	7.2	0.060	4.8	LOS A	0.1	0.7	0.26	0.54	0.26	27.0
East: Hughes St														
5	T1	144	2.9	144	2.9	0.075	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		144	2.9	144	2.9	0.075	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
West: Hughes St														
11	T1	555	4.2	555	4.2	0.146	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		555	4.2	555	4.2	0.146	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		772	4.2	772	4.2	0.146	0.5	NA	0.1	0.7	0.02	0.05	0.02	53.3

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Site 3 - Hughes St and Dutton Ln East Existing AM Peak]

Network: N101 [TUESDAY EXISTING AM PEAK]

Tuesday 19/09/18
Site 3 - Huges St and Dutton Ln East Existing AM Peak
Site Category: Existing AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Dutton Ln														
1	L2	1	0.0	1	0.0	0.015	3.9	LOS A	0.0	0.1	0.50	0.61	0.50	15.5
3	R2	5	0.0	5	0.0	0.015	10.8	LOS A	0.0	0.1	0.50	0.61	0.50	15.5
Approach		6	0.0	6	0.0	0.015	9.7	LOS A	0.0	0.1	0.50	0.61	0.50	15.5
East: Hughes St														
4	L2	94	1.1	94	1.1	0.051	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	32.6
5	T1	146	2.9	146	2.9	0.076	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		240	2.2	240	2.2	0.076	1.3	NA	0.0	0.0	0.00	0.18	0.00	36.7
West: Hughes St														
11	T1	293	4.3	293	4.3	0.154	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
12	R2	304	4.2	304	4.2	0.263	4.7	LOS A	0.5	3.9	0.38	0.55	0.38	21.0
Approach		597	4.2	597	4.2	0.263	2.4	NA	0.5	3.9	0.19	0.28	0.19	27.8
All Vehicles		843	3.6	843	3.6	0.263	2.1	NA	0.5	3.9	0.14	0.25	0.14	31.6

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 104 [Site 4 - Hughes St and Park Rd Existing AM Peak]

Network: N101 [TUESDAY EXISTING AM PEAK]

Tuesday 19/09/18
Site 4 - Hughes St and Park Rd Existing AM Peak
Site Category: Existing AM Peak
Signals - Fixed Time Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	46	0.0	46	0.0	0.104	14.7	LOS B	0.5	3.7	0.75	0.66	0.75	24.9
5	T1	135	3.1	135	3.1	0.397	12.4	LOS A	1.7	12.3	0.82	0.69	0.82	20.0
6	R2	51	2.1	51	2.1	0.397	15.9	LOS B	1.7	12.3	0.83	0.69	0.83	27.2
Approach		232	2.3	232	2.3	0.397	13.6	LOS A	1.7	12.3	0.81	0.69	0.81	23.2
North: Park Rd														
7	L2	51	2.1	51	2.1	0.069	11.5	LOS A	0.4	2.7	0.64	0.65	0.64	28.6
8	T1	89	0.0	89	0.0	0.268	9.0	LOS A	1.7	11.8	0.71	0.66	0.71	27.8
9	R2	113	1.9	113	1.9	0.268	12.4	LOS A	1.7	11.8	0.71	0.66	0.71	23.7
Approach		253	1.3	253	1.3	0.268	11.0	LOS A	1.7	11.8	0.70	0.66	0.70	26.5
West: Hughes St														
10	L2	44	4.8	44	4.8	0.104	14.7	LOS B	0.5	3.7	0.75	0.66	0.75	27.3
11	T1	135	5.5	135	5.5	0.522	13.2	LOS A	2.5	17.9	0.87	0.75	0.87	25.7
12	R2	111	2.9	111	2.9	0.522	16.9	LOS B	2.5	17.9	0.88	0.76	0.88	24.3
Approach		289	4.4	289	4.4	0.522	14.8	LOS B	2.5	17.9	0.85	0.74	0.85	25.5
All Vehicles		774	2.7	774	2.7	0.522	13.2	LOS A	2.5	17.9	0.79	0.70	0.79	25.2

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.

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
P1	South Full Crossing	335	14.7	LOS B	0.3	0.3	0.86	0.86
P2	East Full Crossing	393	14.7	LOS B	0.4	0.4	0.86	0.86
P3	North Full Crossing	47	14.5	LOS B	0.0	0.0	0.85	0.85
P4	West Full Crossing	158	14.5	LOS B	0.2	0.2	0.86	0.86
All Pedestrians		933	14.6	LOS B			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.

MOVEMENT SUMMARY

Site: 105 [Site 5 - Dutton Ln Left Turn Only Existing AM Peak]

Network: N101 [TUESDAY EXISTING AM PEAK]

Tuesday 19/09/18
Site 5 - Dutton Ln Left Turn Only Existing AM Peak

Site Category: Existing AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Car Park Entry														
2	T1	6	0.0	6	0.0	0.003	4.1	LOS A	0.0	0.0	0.00	0.53	0.00	52.9
Approach		6	0.0	6	0.0	0.003	4.1	LOS A	0.0	0.0	0.00	0.53	0.00	52.9
North: Dutton Ln														
7	L2	111	12.4	111	12.4	0.065	3.9	LOS A	0.0	0.0	0.00	0.55	0.00	34.4
8	T1	235	0.0	235	0.0	0.060	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		345	4.0	345	4.0	0.065	1.3	NA	0.0	0.0	0.00	0.17	0.00	43.9
All Vehicles		352	3.9	352	3.9	0.065	1.3	NA	0.0	0.0	0.00	0.18	0.00	44.5

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 106 [Site 6 - Hill St and Car Park West Exit Existing AM Peak]

Network: N101 [TUESDAY EXISTING AM PEAK]

Tuesday 19/09/18
Site 6 - Hill St and Car Park West Exit Existing AM Peak
Site Category: Existing AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

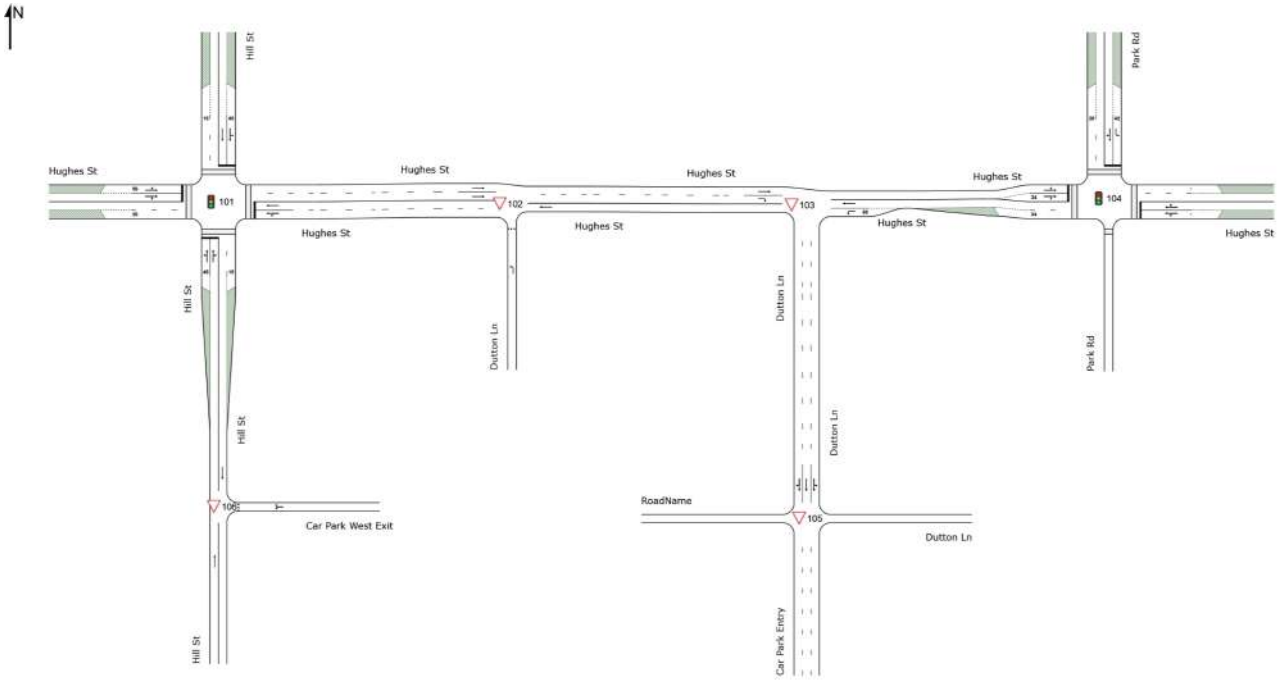
Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Aver. Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
2	T1	294	3.6	294	3.6	0.154	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		294	3.6	294	3.6	0.154	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
East: Car Park West Exit														
4	L2	17	37.5	17	37.5	0.038	5.3	LOS A	0.1	0.5	0.41	0.63	0.41	27.6
6	R2	15	14.3	15	14.3	0.038	6.9	LOS A	0.1	0.5	0.41	0.63	0.41	22.9
Approach		32	26.7	32	26.7	0.038	6.1	LOS A	0.1	0.5	0.41	0.63	0.41	26.1
North: Hill St														
8	T1	315	2.0	315	2.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		315	2.0	315	2.0	0.164	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		640	3.9	640	3.9	0.164	0.3	NA	0.1	0.5	0.02	0.03	0.02	56.9

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

NETWORK LAYOUT

Network: N101 [TUESDAY PROPOSED AM PEAK]

TUESDAY EXISTING AM PEAK
Network Category: Proposed AM Peak



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Site1 - Hughes St and Hill St Proposed AM Peak
104	NA	Site 4 - Hughes St and Park Rd Proposed AM Peak
▽103	NA	Site 3 - Hughes St and Dutton Ln East Proposed AM Peak
▽102	NA	Site 2 - Hughes St and Dutton Ln West Proposed AM Peak
▽105	NA	Site 5 - Dutton Ln Left Turn Only Proposed AM Peak
▽106	NA	Site 6 - Hill St and Car Park West Exit Proposed AM Peak

Organisation: PARKING AND TRAFFIC CONSULTANTS | Created: Monday, 8 October 2018 10:12:05 AM
Project: Z:\PCI - PROJECT WORK FILES\NSW\FAIRFIELD CITY COUNCIL - MDCP HUGHES STREET CABRAMATTA\3. DA\3. Modelling & Surveys\SIDRA MODELING\TUE EXISTING MORNING PEAK.sip8

MOVEMENT SUMMARY

Site: 101 [Site1 - Hughes St and Hill St Proposed AM Peak]

Network: N101 [TUESDAY PROPOSED AM PEAK]

Tuesday 19/09/18
Site1 - Hughes St and Hill St Proposed AM Peak
Site Category: Proposed AM Peak
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
1	L2	27	3.8	27	3.8	0.107	22.4	LOS B	0.7	5.0	0.80	0.66	0.80	28.8
2	T1	149	3.5	149	3.5	0.528	10.2	LOS A	3.6	25.8	0.79	0.72	0.79	25.9
3	R2	239	4.4	239	4.4	0.528	12.1	LOS A	3.6	25.8	0.79	0.74	0.79	17.2
Approach		416	4.1	416	4.1	0.528	12.1	LOS A	3.6	25.8	0.79	0.73	0.79	23.0
East: Hughes St														
4	L2	103	3.1	103	3.1	0.110	10.9	LOS A	0.9	6.7	0.52	0.63	0.52	14.1
5	T1	214	2.5	214	2.5	0.511	23.1	LOS B	3.5	25.0	0.93	0.76	0.93	27.5
Approach		317	2.7	317	2.7	0.511	19.1	LOS B	3.5	25.0	0.79	0.72	0.79	26.2
North: Hill St														
7	L2	154	0.0	154	0.0	0.331	23.9	LOS B	2.3	16.3	0.86	0.76	0.86	15.9
8	T1	216	1.5	216	1.5	0.447	21.1	LOS B	3.4	24.0	0.89	0.73	0.89	17.2
Approach		369	0.9	369	0.9	0.447	22.3	LOS B	3.4	24.0	0.88	0.74	0.88	16.6
West: Hughes St														
10	L2	33	0.0	33	0.0	0.612	27.4	LOS B	4.3	30.7	0.95	0.81	0.97	28.6
11	T1	404	2.6	404	2.6	0.612	24.5	LOS B	4.3	30.7	0.96	0.81	0.98	26.0
12	R2	31	0.0	31	0.0	0.612	28.5	LOS C	3.7	26.6	0.96	0.82	1.00	25.8
Approach		467	2.3	467	2.3	0.612	25.0	LOS B	4.3	30.7	0.96	0.81	0.98	26.2
All Vehicles		1569	2.5	1569	2.5	0.612	19.7	LOS B	4.3	30.7	0.86	0.75	0.87	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.

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
P1	South Full Crossing	122	24.4	LOS C	0.2	0.2	0.90	0.90
P2	East Full Crossing	177	24.5	LOS C	0.3	0.3	0.91	0.91
P3	North Full Crossing	34	24.3	LOS C	0.1	0.1	0.90	0.90
P4	West Full Crossing	61	24.4	LOS C	0.1	0.1	0.90	0.90
All Pedestrians		394	24.4	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.

MOVEMENT SUMMARY

Site: 102 [Site 2 - Hughes St and Dutton Ln West Proposed AM Peak]

Network: N101 [TUESDAY PROPOSED AM PEAK]

Tuesday 19/09/18
Site 2 - Hughes St and Dutton Ln West Proposed AM Peak
Site Category: Proposed AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Dutton Ln														
1	L2	172	2.5	172	2.5	0.120	4.4	LOS A	0.2	1.5	0.25	0.54	0.25	27.3
Approach		172	2.5	172	2.5	0.120	4.4	LOS A	0.2	1.5	0.25	0.54	0.25	27.3
East: Hughes St														
5	T1	144	2.9	144	2.9	0.075	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		144	2.9	144	2.9	0.075	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
West: Hughes St														
11	T1	660	3.5	660	3.5	0.173	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		660	3.5	660	3.5	0.173	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		976	3.2	976	3.2	0.173	0.8	NA	0.2	1.5	0.04	0.10	0.04	48.9

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Site 3 - Hughes St and Dutton Ln East Proposed AM Peak]

Network: N101 [TUESDAY PROPOSED AM PEAK]

Tuesday 19/09/18
Site 3 - Huges St and Dutton Ln East Proposed AM Peak
Site Category: Proposed AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	167	0.6	167	0.6	0.091	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	32.6
5	T1	146	2.9	146	2.9	0.076	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		314	1.7	314	1.7	0.091	1.8	NA	0.0	0.0	0.00	0.24	0.00	35.6
West: Hughes St														
11	T1	398	3.2	398	3.2	0.208	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
12	R2	388	3.3	388	3.3	0.354	5.4	LOS A	0.8	5.6	0.46	0.62	0.46	19.9
Approach		786	3.2	786	3.2	0.354	2.7	NA	0.8	5.6	0.23	0.31	0.23	26.9
All Vehicles		1100	2.8	1100	2.8	0.354	2.4	NA	0.8	5.6	0.16	0.29	0.16	30.8

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 104 [Site 4 - Hughes St and Park Rd Proposed AM Peak]

Network: N101 [TUESDAY PROPOSED AM PEAK]

Tuesday 19/09/18
Site 4 - Hughes St and Park Rd Proposed AM Peak
Site Category: Proposed AM Peak
Signals - Fixed Time Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	46	0.0	46	0.0	0.147	14.9	LOS B	0.8	5.3	0.77	0.65	0.77	25.4
5	T1	208	2.0	208	2.0	0.558	13.5	LOS A	2.4	16.8	0.86	0.73	0.87	19.4
6	R2	51	2.1	51	2.1	0.558	17.3	LOS B	2.4	16.8	0.88	0.74	0.90	26.4
Approach		305	1.7	305	1.7	0.558	14.3	LOS A	2.4	16.8	0.85	0.72	0.86	22.0
North: Park Rd														
7	L2	51	2.1	51	2.1	0.069	11.5	LOS A	0.4	2.7	0.64	0.65	0.64	28.6
8	T1	89	0.0	89	0.0	0.268	9.0	LOS A	1.7	11.8	0.71	0.66	0.71	27.8
9	R2	113	1.9	113	1.9	0.268	12.4	LOS A	1.7	11.8	0.71	0.66	0.71	23.7
Approach		253	1.3	253	1.3	0.268	11.0	LOS A	1.7	11.8	0.70	0.66	0.70	26.5
West: Hughes St														
10	L2	60	3.5	60	3.5	0.155	14.9	LOS B	0.8	5.6	0.77	0.67	0.77	27.3
11	T1	184	4.0	184	4.0	0.774	17.8	LOS B	4.1	29.7	0.95	0.97	1.22	23.1
12	R2	151	2.1	151	2.1	0.774	22.4	LOS B	4.1	29.7	0.98	1.02	1.29	21.3
Approach		395	3.2	395	3.2	0.774	19.1	LOS B	4.1	29.7	0.93	0.94	1.17	23.1
All Vehicles		953	2.2	953	2.2	0.774	15.4	LOS B	4.1	29.7	0.84	0.80	0.95	23.6

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.

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
P1	South Full Crossing	335	14.7	LOS B	0.3	0.3	0.86	0.86
P2	East Full Crossing	393	14.7	LOS B	0.4	0.4	0.86	0.86
P3	North Full Crossing	47	14.5	LOS B	0.0	0.0	0.85	0.85
P4	West Full Crossing	158	14.5	LOS B	0.2	0.2	0.86	0.86
All Pedestrians		933	14.6	LOS B			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.

MOVEMENT SUMMARY

Site: 105 [Site 5 - Dutton Ln Left Turn Only Proposed AM Peak]

Network: N101 [TUESDAY PROPOSED AM PEAK]

Tuesday 19/09/18
Site 5 - Dutton Ln Left Turn Only Proposed AM Peak

Site Category: Proposed AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
North: Dutton Ln														
7	L2	47	28.9	47	28.9	0.098	3.9	LOS A	0.0	0.0	0.00	0.15	0.00	38.0
8	T1	445	0.0	445	0.0	0.098	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	52.8
9	R2	63	0.0	63	0.0	0.098	4.0	LOS A	0.0	0.0	0.00	0.22	0.00	53.6
Approach		556	2.5	556	2.5	0.098	0.8	NA	0.0	0.0	0.00	0.12	0.00	51.3
All Vehicles		556	2.5	556	2.5	0.098	0.8	NA	0.0	0.0	0.00	0.12	0.00	51.3

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 106 [Site 6 - Hill St and Car Park West Exit Proposed AM Peak]

Network: N101 [TUESDAY PROPOSED AM PEAK]

Tuesday 19/09/18
Site 6 - Hill St and Car Park West Exit Proposed AM Peak
Site Category: Proposed AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

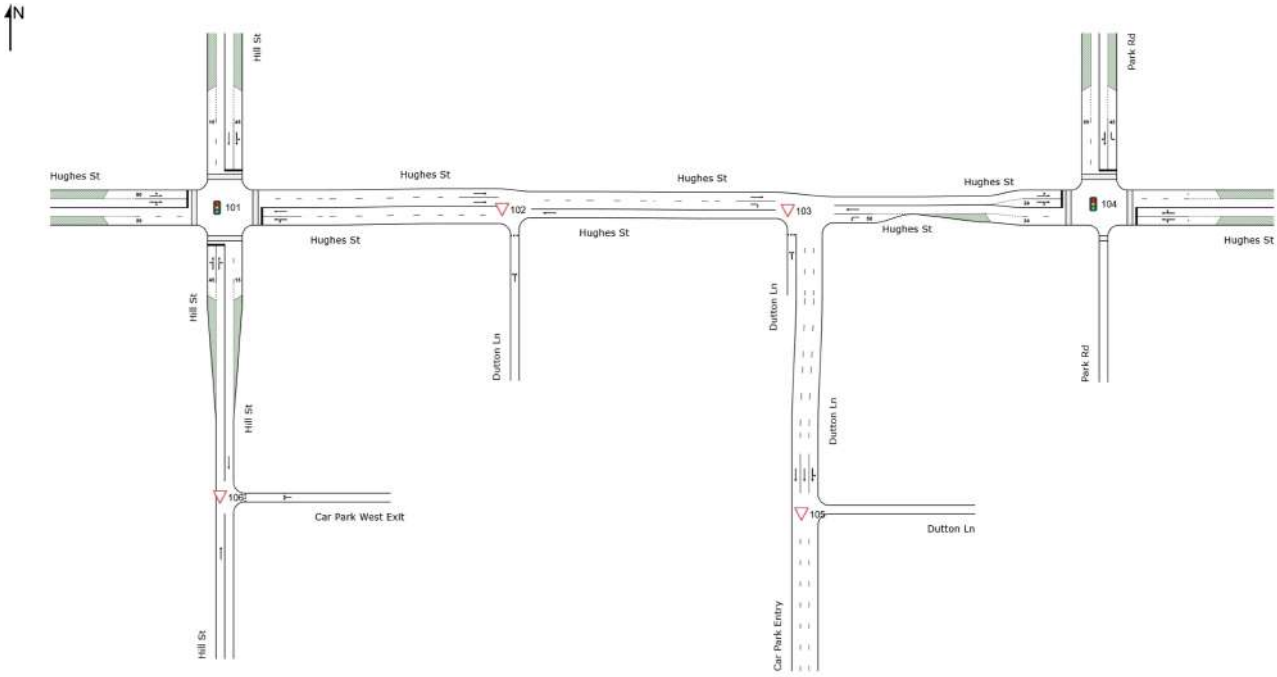
Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
2	T1	294	3.6	294	3.6	0.154	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		294	3.6	294	3.6	0.154	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
East: Car Park West Exit														
4	L2	80	7.9	80	7.9	0.235	5.5	LOS A	0.4	2.8	0.48	0.73	0.48	28.0
6	R2	120	1.8	120	1.8	0.235	7.3	LOS A	0.4	2.8	0.48	0.73	0.48	21.7
Approach		200	4.2	200	4.2	0.235	6.6	LOS A	0.4	2.8	0.48	0.73	0.48	25.0
North: Hill St														
8	T1	349	1.8	349	1.8	0.181	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		349	1.8	349	1.8	0.181	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		843	3.0	843	3.0	0.235	1.6	NA	0.4	2.8	0.11	0.17	0.11	47.6

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

NETWORK LAYOUT

Network: N101 [TUESDAY EXISTING PM PEAK]

TUESDAY EXISTING PM PEAK
Network Category: Existing PM Peak



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Site1 - Hughes St and Hill St Existing PM Peak
104	NA	Site 4 - Hughes St and Park Rd Existing PM Peak
103	NA	Site 3 - Hughes St and Dutton Ln East Existing PM Peak
102	NA	Site 2 - Hughes St and Dutton Ln West Existing PM Peak
105	NA	Site 5 - Dutton Ln Left Turn Only
106	NA	Site 6 - Hill St and Car Park West Exit Existing PM Peak

Organisation: PARKING AND TRAFFIC CONSULTANTS | Created: Monday, 8 October 2018 10:21:37 AM
Project: Z:\PCI - PROJECT WORK FILES\NSW\FAIRFIELD CITY COUNCIL - MDCP HUGHES STREET CABRAMATTA\3. DA\3. Modelling & Surveys\SIDRA MODELING\TUE EXISTING AFTERNOON PEAK.sip8

MOVEMENT SUMMARY

Site: 101 [Site1 - Hughes St and Hill St Existing PM Peak]

Network: N101 [TUESDAY EXISTING PM PEAK]

Tuesday 19/09/18
Site1 - Hughes St and Hill St Existing PM Peak

Site Category: Existing PM Peak
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
1	L2	61	0.0	61	0.0	0.131	22.6	LOS B	0.9	6.1	0.81	0.70	0.81	28.2
2	T1	203	1.0	203	1.0	0.482	8.5	LOS A	3.8	27.5	0.72	0.67	0.72	27.6
3	R2	167	6.9	167	6.9	0.482	11.9	LOS A	3.8	27.5	0.72	0.67	0.72	17.9
Approach		432	3.2	432	3.2	0.482	11.8	LOS A	3.8	27.5	0.74	0.67	0.74	25.7
East: Hughes St														
4	L2	140	0.0	140	0.0	0.165	12.2	LOS A	1.4	10.0	0.57	0.65	0.57	13.2
5	T1	353	0.9	353	0.9	0.766	26.3	LOS B	6.5	45.7	0.98	0.96	1.15	26.4
Approach		493	0.6	493	0.6	0.766	22.3	LOS B	6.5	45.7	0.87	0.87	0.99	25.2
North: Hill St														
7	L2	62	1.7	62	1.7	0.135	22.7	LOS B	0.9	6.3	0.81	0.71	0.81	16.4
8	T1	154	1.4	154	1.4	0.318	20.3	LOS B	2.3	16.4	0.86	0.69	0.86	17.5
Approach		216	1.5	216	1.5	0.318	21.0	LOS B	2.3	16.4	0.84	0.70	0.84	17.2
West: Hughes St														
10	L2	47	0.0	47	0.0	0.405	25.1	LOS B	2.8	20.1	0.89	0.74	0.89	29.3
11	T1	189	1.7	189	1.7	0.405	23.5	LOS B	2.8	20.1	0.91	0.74	0.91	26.2
12	R2	34	0.0	34	0.0	0.405	30.9	LOS C	1.6	11.2	0.96	0.75	0.96	24.7
Approach		271	1.2	271	1.2	0.405	24.7	LOS B	2.8	20.1	0.91	0.74	0.91	26.6
All Vehicles		1411	1.6	1411	1.6	0.766	19.4	LOS B	6.5	45.7	0.83	0.76	0.87	24.8

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.

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
P1	South Full Crossing	122	24.4	LOS C	0.2	0.2	0.90	0.90
P2	East Full Crossing	177	24.5	LOS C	0.3	0.3	0.91	0.91
P3	North Full Crossing	34	24.3	LOS C	0.1	0.1	0.90	0.90
P4	West Full Crossing	61	24.4	LOS C	0.1	0.1	0.90	0.90
All Pedestrians		394	24.4	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.

MOVEMENT SUMMARY

Site: 102 [Site 2 - Hughes St and Dutton Ln West Existing PM Peak]

Network: N101 [TUESDAY EXISTING PM PEAK]

Site 2 - Hughes St and Dutton Ln West Existing PM Peak
Site Category: Existing PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Dutton Ln														
1	L2	235	1.3	235	1.3	0.213	4.8	LOS A	0.4	2.7	0.37	0.60	0.37	25.9
3	R2	20	5.3	20	5.3	0.213	9.5	LOS A	0.4	2.7	0.37	0.60	0.37	25.9
Approach		255	1.7	255	1.7	0.213	5.2	LOS A	0.4	2.7	0.37	0.60	0.37	25.9
East: Hughes St														
5	T1	231	0.9	231	0.9	0.119	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		231	0.9	231	0.9	0.119	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
West: Hughes St														
11	T1	461	3.0	461	3.0	0.120	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		461	3.0	461	3.0	0.120	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		946	2.1	946	2.1	0.213	1.4	NA	0.4	2.7	0.10	0.16	0.10	43.5

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Site 3 - Hughes St and Dutton Ln East Existing PM Peak]

Network: N101 [TUESDAY EXISTING PM PEAK]

Tuesday 19/09/18
Site 3 - Huges St and Dutton Ln East Existing PM Peak
Site Category: Existing PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Dutton Ln														
1	L2	18	0.0	18	0.0	0.143	4.2	LOS A	0.2	1.5	0.50	0.67	0.50	16.0
3	R2	53	0.0	53	0.0	0.143	10.8	LOS A	0.2	1.5	0.50	0.67	0.50	16.0
Approach		71	0.0	71	0.0	0.143	9.1	LOS A	0.2	1.5	0.50	0.67	0.50	16.0
East: Hughes St														
4	L2	122	0.9	122	0.9	0.066	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	32.6
5	T1	194	0.5	194	0.5	0.100	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		316	0.7	316	0.7	0.100	1.3	NA	0.0	0.0	0.00	0.18	0.00	36.8
West: Hughes St														
11	T1	267	2.8	267	2.8	0.140	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
12	R2	241	2.2	241	2.2	0.220	5.0	LOS A	0.4	3.1	0.41	0.58	0.41	20.8
Approach		508	2.5	508	2.5	0.220	2.3	NA	0.4	3.1	0.20	0.27	0.20	28.2
All Vehicles		895	1.6	895	1.6	0.220	2.5	NA	0.4	3.1	0.15	0.27	0.15	31.2

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 104 [Site 4 - Hughes St and Park Rd Existing PM Peak]

Network: N101 [TUESDAY EXISTING PM PEAK]

Tuesday 19/09/18
Site 4 - Hughes St and Park Rd Existing PM Peak
Site Category: Existing PM Peak
Signals - Fixed Time Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	84	0.0	84	0.0	0.157	14.9	LOS B	0.8	5.6	0.77	0.70	0.77	24.4
5	T1	176	1.8	176	1.8	0.595	13.6	LOS A	2.5	17.9	0.87	0.77	0.92	19.3
6	R2	63	0.0	63	0.0	0.595	17.0	LOS B	2.5	17.9	0.87	0.77	0.93	26.5
Approach		323	1.0	323	1.0	0.595	14.6	LOS B	2.5	17.9	0.84	0.75	0.88	22.6
North: Park Rd														
7	L2	53	0.0	53	0.0	0.071	11.5	LOS A	0.4	2.8	0.64	0.65	0.64	28.6
8	T1	93	0.0	93	0.0	0.290	9.1	LOS A	1.8	12.9	0.72	0.67	0.72	27.7
9	R2	127	0.0	127	0.0	0.290	12.5	LOS A	1.8	12.9	0.72	0.67	0.72	23.6
Approach		273	0.0	273	0.0	0.290	11.1	LOS A	1.8	12.9	0.70	0.66	0.70	26.3
West: Hughes St														
10	L2	94	0.0	94	0.0	0.168	15.0	LOS B	0.9	6.0	0.77	0.71	0.77	26.7
11	T1	154	8.9	154	8.9	0.541	14.2	LOS A	2.6	19.0	0.90	0.76	0.90	25.4
12	R2	83	1.3	83	1.3	0.541	17.7	LOS B	2.6	19.0	0.90	0.76	0.90	24.1
Approach		331	4.5	331	4.5	0.541	15.3	LOS B	2.6	19.0	0.86	0.75	0.86	25.5
All Vehicles		926	1.9	926	1.9	0.595	13.8	LOS A	2.6	19.0	0.81	0.72	0.82	24.8

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.

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
P1	South Full Crossing	335	14.7	LOS B	0.3	0.3	0.86	0.86
P2	East Full Crossing	393	14.7	LOS B	0.4	0.4	0.86	0.86
P3	North Full Crossing	47	14.5	LOS B	0.0	0.0	0.85	0.85
P4	West Full Crossing	158	14.5	LOS B	0.2	0.2	0.86	0.86
All Pedestrians		933	14.6	LOS B			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.

MOVEMENT SUMMARY

Site: 105 [Site 5 - Dutton Ln Left Turn Only]

Network: N101 [TUESDAY EXISTING PM PEAK]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
North: Dutton Ln														
7	L2	167	3.1	167	3.1	0.092	3.9	LOS A	0.0	0.0	0.00	0.55	0.00	35.0
8	T1	196	0.5	196	0.5	0.050	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		363	1.7	363	1.7	0.092	1.8	NA	0.0	0.0	0.00	0.25	0.00	41.2
All Vehicles		363	1.7	363	1.7	0.092	1.8	NA	0.0	0.0	0.00	0.25	0.00	41.2

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 106 [Site 6 - Hill St and Car Park West Exit Existing PM Peak]

Network: N101 [TUESDAY EXISTING PM PEAK]

Tuesday 19/09/18
Site 6 - Hill St and Car Park West Exit Existing PM Peak

Site Category: Existing PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	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	Aver. Back of Queue Vehicles veh	Aver. Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
2	T1	294	3.6	294	3.6	0.154	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		294	3.6	294	3.6	0.154	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
East: Car Park West Exit														
4	L2	17	37.5	17	37.5	0.038	5.3	LOS A	0.1	0.5	0.41	0.63	0.41	27.6
6	R2	15	14.3	15	14.3	0.038	6.9	LOS A	0.1	0.5	0.41	0.63	0.41	22.8
Approach		32	26.7	32	26.7	0.038	6.1	LOS A	0.1	0.5	0.41	0.63	0.41	26.1
North: Hill St														
8	T1	315	2.0	315	2.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		315	2.0	315	2.0	0.164	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		640	3.9	640	3.9	0.164	0.3	NA	0.1	0.5	0.02	0.03	0.02	56.9

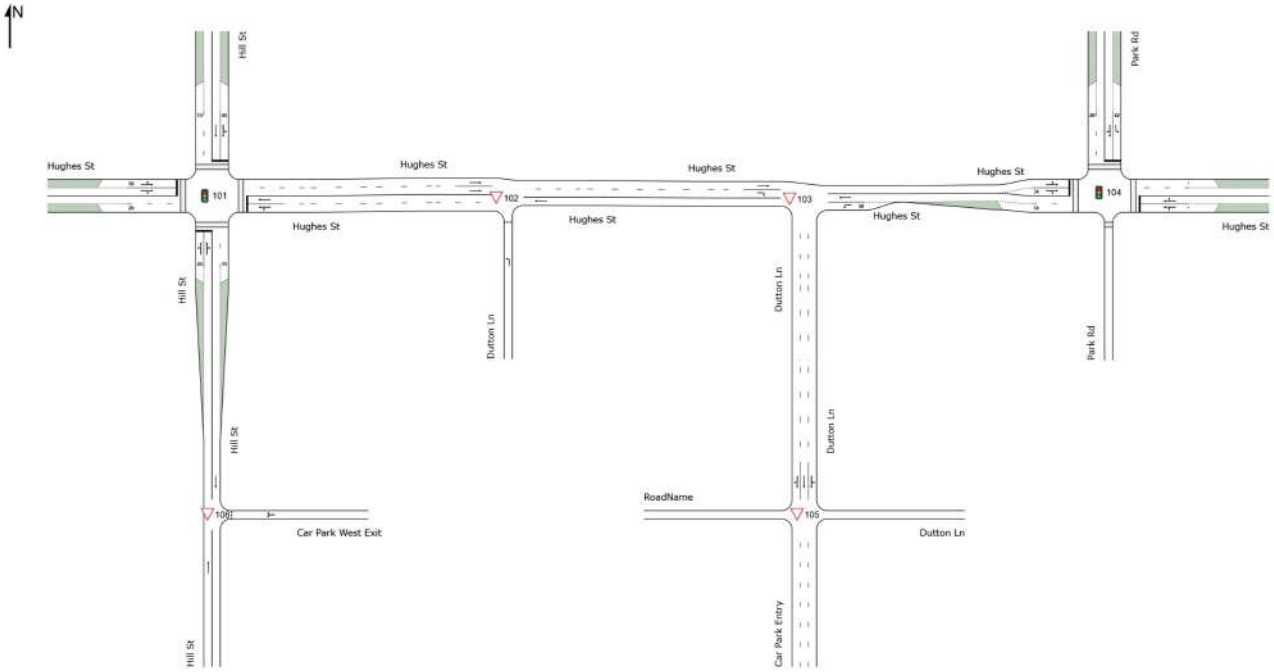
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road 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.

NETWORK LAYOUT

Network: N101 [TUESDAY PROPOSED PM PEAK]

TUESDAY PROPOSED PM PEAK

Network Category: Proposed PM Peak



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Site1 - Hughes St and Hill St Proposed PM Peak
104	NA	Site 4 - Hughes St and Park Rd Proposed PM Peak
▽103	NA	Site 3 - Hughes St and Dutton Ln East Proposed PM Peak
▽102	NA	Site 2 - Hughes St and Dutton Ln West Proposed PM Peak
▽105	NA	Site 5 - Dutton Ln Left Turn Only Existing PM Peak
▽106	NA	Site 6 - Hill St and Car Park West Exit Proposed PM Peak

MOVEMENT SUMMARY

Site: 101 [Site1 - Hughes St and Hill St Proposed PM Peak]

Network: N101 [TUESDAY PROPOSED PM PEAK]

Site1 - Hughes St and Hill St
Site Category: Proposed PM Peak
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
1	L2	61	0.0	61	0.0	0.144	27.1	LOS B	1.0	7.3	0.83	0.71	0.83	26.6
2	T1	203	1.0	203	1.0	0.602	9.8	LOS A	5.8	41.4	0.78	0.74	0.78	26.3
3	R2	273	4.2	273	4.2	0.602	13.3	LOS A	5.8	41.4	0.78	0.74	0.78	16.4
Approach		537	2.5	537	2.5	0.602	13.5	LOS A	5.8	41.4	0.79	0.74	0.79	23.3
East: Hughes St														
4	L2	169	0.0	169	0.0	0.193	12.6	LOS A	1.9	13.4	0.55	0.65	0.55	12.8
5	T1	428	0.7	428	0.7	0.895	39.3	LOS C	7.1	50.0	0.99	1.18	1.40	22.6
Approach		598	0.5	598	0.5	0.895	31.7	LOS C	7.1	50.0	0.87	1.03	1.16	21.8
North: Hill St														
7	L2	115	0.9	115	0.9	0.272	28.0	LOS B	2.0	14.3	0.86	0.75	0.86	14.4
8	T1	154	1.4	154	1.4	0.348	25.0	LOS B	2.8	19.6	0.88	0.71	0.88	15.5
Approach		268	1.2	268	1.2	0.348	26.3	LOS B	2.8	19.6	0.87	0.73	0.87	15.1
West: Hughes St														
10	L2	47	0.0	47	0.0	0.560	29.2	LOS C	4.9	34.8	0.93	0.78	0.93	28.0
11	T1	274	1.2	274	1.2	0.560	27.8	LOS B	4.9	34.8	0.94	0.78	0.95	24.8
12	R2	34	0.0	34	0.0	0.560	38.6	LOS C	2.0	14.4	1.00	0.80	1.04	22.4
Approach		355	0.9	355	0.9	0.560	29.0	LOS C	4.9	34.8	0.95	0.78	0.96	25.0
All Vehicles		1758	1.3	1758	1.3	0.895	24.8	LOS B	7.1	50.0	0.86	0.84	0.96	22.2

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.

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
P1	South Full Crossing	122	29.4	LOS C	0.2	0.2	0.92	0.92
P2	East Full Crossing	177	29.5	LOS C	0.3	0.3	0.92	0.92
P3	North Full Crossing	34	29.3	LOS C	0.1	0.1	0.92	0.92
P4	West Full Crossing	61	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		394	29.4	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.

MOVEMENT SUMMARY

Site: 102 [Site 2 - Hughes St and Dutton Ln West Proposed PM Peak]

Network: N101 [TUESDAY PROPOSED PM PEAK]

Site 2 - Hughes St and Dutton Ln West Proposed PM Peak
Site Category: Proposed PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Dutton Ln														
1	L2	340	0.9	340	0.9	0.256	4.9	LOS A	0.5	3.4	0.36	0.59	0.36	26.2
Approach		340	0.9	340	0.9	0.256	4.9	LOS A	0.5	3.4	0.36	0.59	0.36	26.2
East: Hughes St														
5	T1	231	0.9	231	0.9	0.119	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		231	0.9	231	0.9	0.119	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
West: Hughes St														
11	T1	566	2.4	566	2.4	0.147	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		566	2.4	566	2.4	0.147	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		1137	1.7	1137	1.7	0.256	1.5	NA	0.5	3.4	0.11	0.18	0.11	42.5

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Site 3 - Hughes St and Dutton Ln East Proposed PM Peak]

Network: N101 [TUESDAY PROPOSED PM PEAK]

Site 3 - Huges St and Dutton Ln East Proposed PM Peak
Site Category: Proposed PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	196	0.5	196	0.5	0.106	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	32.6
5	T1	194	0.5	194	0.5	0.100	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		389	0.5	389	0.5	0.106	1.7	NA	0.0	0.0	0.00	0.23	0.00	35.8
West: Hughes St														
11	T1	373	2.0	373	2.0	0.194	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
12	R2	378	1.4	378	1.4	0.365	6.0	LOS A	0.8	5.9	0.51	0.68	0.53	19.0
Approach		751	1.7	751	1.7	0.365	3.0	NA	0.8	5.9	0.26	0.34	0.27	25.9
All Vehicles		1140	1.3	1140	1.3	0.365	2.6	NA	0.8	5.9	0.17	0.30	0.18	30.9

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 104 [Site 4 - Hughes St and Park Rd Proposed PM Peak]

Network: N101 [TUESDAY PROPOSED PM PEAK]

Site 4 - Hughes St and Park Rd Proposed PM Peak
Site Category: Proposed PM Peak
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Hughes St														
4	L2	84	0.0	84	0.0	0.147	12.5	LOS A	1.1	7.6	0.63	0.62	0.63	26.7
5	T1	249	1.3	249	1.3	0.558	12.3	LOS A	3.2	22.6	0.77	0.68	0.77	20.2
6	R2	63	0.0	63	0.0	0.558	16.3	LOS B	3.2	22.6	0.79	0.69	0.79	27.1
Approach		397	0.8	397	0.8	0.558	13.0	LOS A	3.2	22.6	0.74	0.67	0.74	23.2
North: Park Rd														
7	L2	53	0.0	53	0.0	0.089	16.5	LOS B	0.6	3.9	0.73	0.68	0.73	25.4
8	T1	93	0.0	93	0.0	0.363	14.5	LOS B	2.6	18.3	0.81	0.72	0.81	24.0
9	R2	127	0.0	127	0.0	0.363	17.9	LOS B	2.6	18.3	0.81	0.72	0.81	19.6
Approach		273	0.0	273	0.0	0.363	16.5	LOS B	2.6	18.3	0.80	0.71	0.80	22.5
West: Hughes St														
10	L2	123	0.0	123	0.0	0.151	12.6	LOS A	1.1	7.8	0.63	0.67	0.63	28.2
11	T1	202	6.8	202	6.8	0.556	14.4	LOS A	3.9	28.3	0.85	0.75	0.85	25.3
12	R2	109	1.0	109	1.0	0.556	17.9	LOS B	3.9	28.3	0.85	0.75	0.85	24.0
Approach		435	3.4	435	3.4	0.556	14.7	LOS B	3.9	28.3	0.79	0.73	0.79	25.8
All Vehicles		1104	1.6	1104	1.6	0.558	14.6	LOS B	3.9	28.3	0.77	0.70	0.77	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.

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
P1	South Full Crossing	335	19.6	LOS B	0.4	0.4	0.89	0.89
P2	East Full Crossing	393	19.7	LOS B	0.5	0.5	0.89	0.89
P3	North Full Crossing	47	19.4	LOS B	0.1	0.1	0.88	0.88
P4	West Full Crossing	158	19.5	LOS B	0.2	0.2	0.89	0.89
All Pedestrians		933	19.6	LOS B			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.

MOVEMENT SUMMARY

Site: 105 [Site 5 - Dutton Ln Left Turn Only Existing PM Peak]

Network: N101 [TUESDAY PROPOSED PM PEAK]

Tuesday 19/09/18
Site 5 - Dutton Ln Left Turn Only Existing PM Peak
Site Category: Existing PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
North: Dutton Ln														
7	L2	104	5.1	104	5.1	0.100	3.9	LOS A	0.0	0.0	0.00	0.32	0.00	36.7
8	T1	406	0.3	406	0.3	0.100	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	50.5
9	R2	63	0.0	63	0.0	0.100	4.0	LOS A	0.0	0.0	0.00	0.21	0.00	53.7
Approach		574	1.1	574	1.1	0.100	1.2	NA	0.0	0.0	0.00	0.17	0.00	48.2
All Vehicles		574	1.1	574	1.1	0.100	1.2	NA	0.0	0.0	0.00	0.17	0.00	48.2

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 106 [Site 6 - Hill St and Car Park West Exit Proposed PM Peak]

Network: N101 [TUESDAY PROPOSED PM PEAK]

Site 6 - Hill St and Car Park West Exit Proposed PM Peak
Site Category: Proposed PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hill St														
2	T1	294	3.6	294	3.6	0.154	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		294	3.6	294	3.6	0.154	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
East: Car Park West Exit														
4	L2	80	7.9	80	7.9	0.235	5.4	LOS A	0.4	2.8	0.48	0.73	0.48	28.0
6	R2	120	1.8	120	1.8	0.235	7.3	LOS A	0.4	2.8	0.48	0.73	0.48	21.7
Approach		200	4.2	200	4.2	0.235	6.6	LOS A	0.4	2.8	0.48	0.73	0.48	25.1
North: Hill St														
8	T1	344	1.8	344	1.8	0.179	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		344	1.8	344	1.8	0.179	0.0	NA	0.0	0.0	0.00	0.00	0.00	60.0
All Vehicles		838	3.0	838	3.0	0.235	1.6	NA	0.4	2.8	0.11	0.17	0.11	47.6

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

Attachment 2 Car Park Assessment

Hughes Street

Continuous Footpath Treatment

Continuous Footpath Treatment

Car Park Approach Totem

Hughes Street Car Park

Dutton Lane

Driveway Layback

Dutton Lane

Raised Threshold

Dutton Lane Car Park

Column locations to be confirmed

Dutton Plaza Car Park

Dutton Lane

Glass shopfront to Hughes Street with graphic film

Raised pedestrian crossing

Sub Station

Low clearance

Hatching indicates extent of excavation to achieve finished surface of RL 19.91

Shared pedestrian walkway

Proposed exits

Removable Bollards

Relocate door to ex-fire stair. Internal walls removed to suit new path of travel

Section of Lane West reversed

Existing Loading Bay to be relocated to Hughes Street car park ground floor

Ceiling mounted jet fans to hatched zone for vehicle exhaust

Reverse ramp within Dutton Lane Car Park to down ramp

Relocated exit

New 2890.6 compliant accessible spaces replacing existing non compliant spaces

Proposed Hughes Street Car Park Ground Floor Bitumen on grade 68 Spaces Total 219 spaces

Fire Stair 1

Fire Stair 2

Main Switch Room

Coms

SCS

WC

Open Lobby

Dutton Lane Car Park Ground Floor Bitumen on grade

Ramp over

Steel

Timeshared parking spaces, SRV + car space

Driveway crossover

Pedestrian crossing

New Lift

New structures to be constructed partially under ramp

Managers office

Stone

Mechanical fan proposed to ventilate shaded portion of car park

Shared pedestrian walkway

Pedestrian crossing

Small Car Spaces

Ex-Sub Station

Dutton Lane

Dutton Lane Loop

COMMENTS

A3

1 - Minor adjustments to the kerbs at the top and bottom of ramps may be required. Detail layout of existing car park required to confirm.

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REV	DATE	COMMENT	DRAWN	REVIEWED
3	30/01/19	Access & Parking Assessment	SW	AM
2	18/12/18	Access & Parking Assessment	SW	AM
1	22/11/18	Access & Parking Assessment	SW	AM

PROJECT:
Cabramatta
Multi Deck Car Park

DRAWING TITLE:
Parking & Access Assessment
GROUND FLOOR
CAR ACCESS

CLIENT: Collins & Turner

DRG. #: PTC-001

PROJECT #: 2472

SCALE: 1:500

REV: 3

Hughes Street

Continuous Footpath Treatment

Continuous Footpath Treatment

Car Park Approach Totem

Hughes Street Car Park

Dutton Lane

Driveway Layback

Dutton Lane

Raised Threshold

Dutton Lane Car Park

Dutton Plaza Car Park

Dutton Lane

Relocated Loading Zone

Dutton Lane

Dutton Lane Loop

COMMENTS

A3

1 - Minor adjustments to the kerbs at the top and bottom of ramps may be required. Detail layout of existing car park required to confirm.

REV	DATE	COMMENT	DRAWN	REVIEWED
3	30/01/19	Access & Parking Assessment	SW	AM
2	18/12/18	Access & Parking Assessment	SW	AM
1	22/11/18	Access & Parking Assessment	SW	AM

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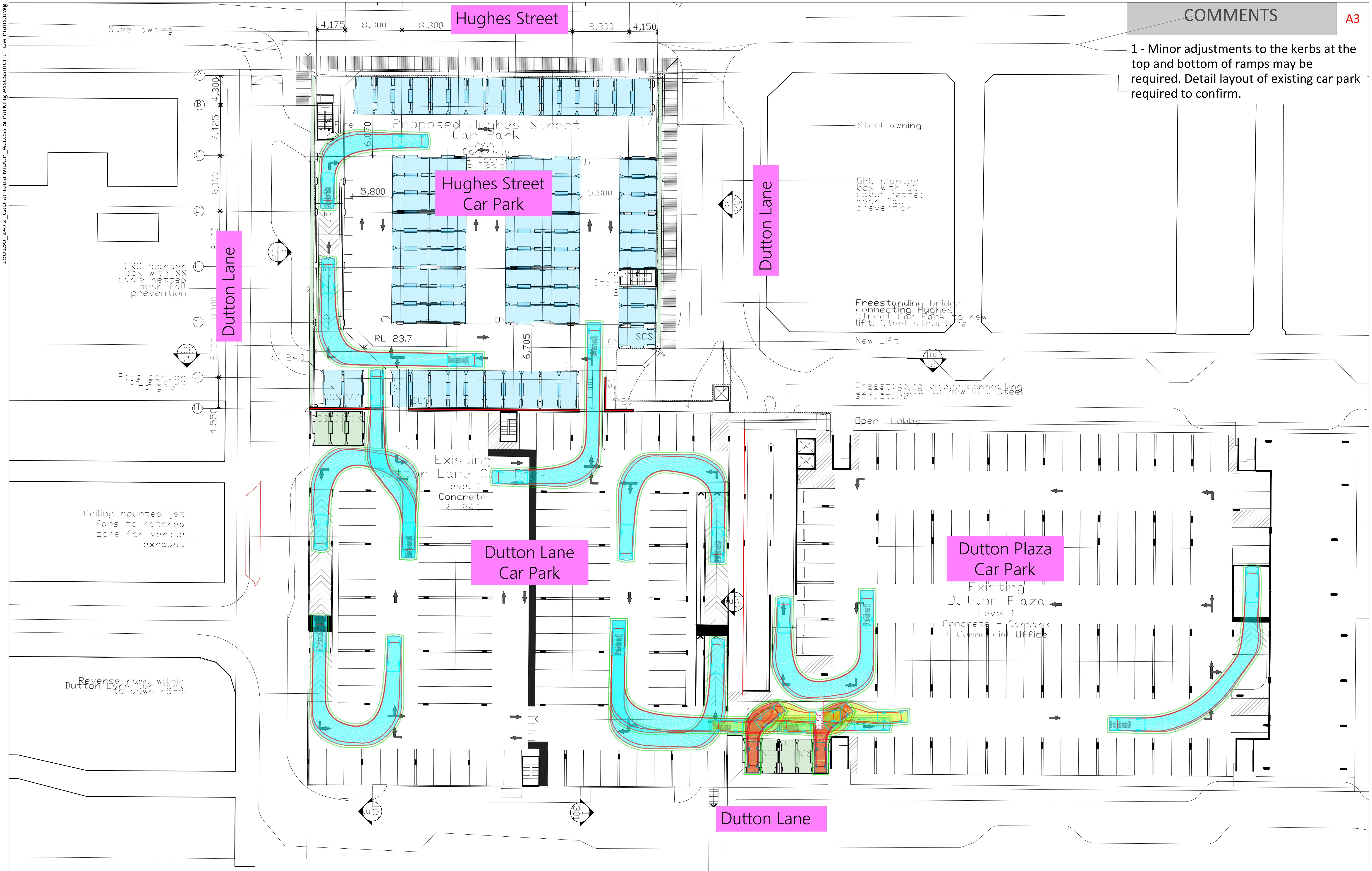
PROJECT:
Cabramatta Multi Deck Car Park

DRAWING TITLE:
Parking & Access Assessment
GROUND FLOOR
SRV & MRV ACCESS

CLIENT: Collins & Turner
DRG. #: PTC-002
PROJECT #: T2-2472
SCALE: 1:500

REV: 3


Hughes Street
Hughes Street Car Park
Proposed Hughes Street Car Park
Level 1
Concrete
Dutton Lane
Dutton Lane Car Park
Existing Dutton Lane Car Park
Level 1
Concrete
RL 24.0
Dutton Plaza Car Park
Existing Dutton Plaza
Level 1
Concrete - Carpark + Commercial Office
Steel awning
GRC planter box with SS cable netted mesh fall prevention
Freestanding bridge connecting Hughes Street Car Park to new lift. Steel structure
New Lift
Freestanding bridge connecting Dutton Plaza to new lift. Steel structure
Open Lobby
Fire Stair
Ramp portion of slab up to grid 1
Ceiling mounted jet fans to hatched zone for vehicle exhaust
Reverse ramp within Dutton Lane Car Park to down ramp
RL 23.7
RL 24.0
4,175
8,300
8,300
8,300
4,150
5,800
5,800
6,705
SCS

COMMENTS

A3

1 - Minor adjustments to the kerbs at the top and bottom of ramps may be required. Detail layout of existing car park required to confirm.

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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
3	30/01/19	Access & Parking Assessment	SW	AM					
2	18/12/18	Access & Parking Assessment	SW	AM					
1	22/11/18	Access & Parking Assessment	SW	AM					

PROJECT: Cabramatta Multi Deck Car Park

DRAWING TITLE: Parking & Access Assessment FIRST FLOOR

CLIENT: Collins & Turner

DRG. #: PTC-003

PROJECT #: T2-2472

SCALE: 1:500

REV: 3

Hughes Street

Proposed Hughes Street Car Park
Level 2
Concrete - open air
78 Spaces
RL 27.5

Hughes Street Car Park

Fire Stair

5,800

5,800

6,375

7,006

Dutton Lane

Steel structure over supporting photovoltaic panels

Freestanding bridge connecting Hughes Street Car Park to new [illegible] structure

Ramp reversed (from Hughes Street)

Freestanding bridge connecting Dutton Plaza to new lift. Steel structure

Dutton Lane Car Park
Level 2
Concrete
RL 26.61

Ramp reversed (from Dutton Lane)

Mechan[illegible] proposed shaded carpark

Dutton Lane Car Park

Dutton Plaza
Level 2
Concrete - Open Air

Dutton Plaza Car Park

Reverse ramp within Dutton Lane Car Park to ~~down ramp~~

Pedestrian crossing

Dutton Lane

COMMENTS

A3

1 - Minor adjustments to the kerbs at the top and bottom of ramps may be required. Detail layout of existing car park required to confirm.

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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
3	30/01/19	Access & Parking Assessment	SW	AM					
2	18/12/18	Access & Parking Assessment	SW	AM					
1	22/11/18	Access & Parking Assessment	SW	AM					

PROJECT:
Cabramatta
Multi Deck Car Park

DRAWING TITLE:
Parking & Access Assessment
SECOND FLOOR

CLIENT: Collins & Turner
DRG. #: PTC-004
PROJECT #: T2-2472
SCALE: 1:500

REV: 3

Hughes Street

Proposed Hughes Street
Car Park Below

Hughes Street
Car Park

Dutton Lane

RL 29.7

RL 29.7

Structure
RL 29.7

PV panel
RL 30.3

ovoltaic panels,
nt to be
irmed

RL 33.38

Dutton Lane Car Park
Level 3
Concrete - Open Air

Dutton Lane
Car Park

Dutton Plaza
Car Park Below

Dutton Plaza
Car Park

Dutton Lane

Dutton Lane

Dutton Lane

COMMENTS

A3

1 - Minor adjustments to the kerbs at the top and bottom of ramps may be required. Detail layout of existing car park required to confirm.

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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
3	30/01/19	Access & Parking Assessment	SW	AM					
1	22/11/18	Access & Parking Assessment	SW	AM					

PROJECT:
Cabramatta
Multi Deck Car Park

DRAWING TITLE:
Parking & Access Assessment
ROOF

CLIENT:	Collins & Turner
DRG. #:	PTC-005
PROJECT #:	T2-2472
SCALE:	1:500

REV: 3