MOVEMENT SUMMARY

Site: 3 [2021 PM (Site Folder: Option 3Ai)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	12	0	13	0.0	0.007	1.4	LOS A	0.0	0.1	0.10	0.23	0.10	43.5
6	R2	1	0	1	0.0	0.007	6.3	LOS A	0.0	0.1	0.10	0.23	0.10	43.4
Approach		13	0	14	0.0	0.007	1.8	NA	0.0	0.1	0.10	0.23	0.10	43.5
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.448	7.4	LOS A	2.6	18.1	0.46	0.98	0.56	40.1
9	R2	376	0	396	0.0	0.448	8.8	LOS A	2.6	18.1	0.46	0.98	0.56	36.6
Approach		377	0	397	0.0	0.448	8.8	LOS A	2.6	18.1	0.46	0.98	0.56	36.6
NorthWest: Ocean Parade (NW)														
10	L2	425	0	447	0.0	0.258	3.5	LOS A	0.0	0.0	0.00	0.42	0.00	38.7
11	T1	32	0	34	0.0	0.258	0.1	LOS A	0.0	0.0	0.00	0.42	0.00	38.6
Approach		457	0	481	0.0	0.258	3.3	NA	0.0	0.0	0.00	0.42	0.00	38.7
All Vehicles		847	0	892	0.0	0.448	5.7	NA	2.6	18.1	0.21	0.67	0.25	37.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 AM (Site Folder: Option 3Ai)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	44	0	46	0.0	0.024	1.2	LOS A	0.0	0.1	0.02	0.23	0.02	43.8
6	R2	1	0	1	0.0	0.024	5.2	LOS A	0.0	0.1	0.02	0.23	0.02	43.7
Approach		45	0	47	0.0	0.024	1.3	NA	0.0	0.1	0.02	0.23	0.02	43.8
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.352	6.8	LOS A	1.5	10.7	0.32	0.89	0.32	40.7
9	R2	332	0	349	0.0	0.352	7.3	LOS A	1.5	10.7	0.32	0.89	0.32	37.1
Approach		333	0	351	0.0	0.352	7.3	LOS A	1.5	10.7	0.32	0.89	0.32	37.1
NorthWest: Ocean Parade (NW)														
10	L2	192	0	202	0.0	0.116	3.4	LOS A	0.0	0.0	0.00	0.42	0.00	38.8
11	T1	14	0	15	0.0	0.116	0.0	LOS A	0.0	0.0	0.00	0.42	0.00	38.6
Approach		206	0	217	0.0	0.116	3.2	NA	0.0	0.0	0.00	0.42	0.00	38.8
All Vehicles		584	0	615	0.0	0.352	5.4	NA	1.5	10.7	0.18	0.68	0.18	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 PM (Site Folder: Option 3Ai)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	13	0	14	0.0	0.008	1.4	LOS A	0.0	0.1	0.09	0.23	0.09	43.6
6	R2	1	0	1	0.0	0.008	6.2	LOS A	0.0	0.1	0.09	0.23	0.09	43.4
Approach		14	0	15	0.0	0.008	1.7	NA	0.0	0.1	0.09	0.23	0.09	43.6
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.475	7.5	LOS A	2.9	20.5	0.47	0.98	0.58	40.1
9	R2	402	0	423	0.0	0.475	8.9	LOS A	2.9	20.5	0.47	0.98	0.58	36.6
Approach		403	0	424	0.0	0.475	8.9	LOS A	2.9	20.5	0.47	0.98	0.58	36.6
NorthWest: Ocean Parade (NW)														
10	L2	393	0	414	0.0	0.244	3.5	LOS A	0.0	0.0	0.00	0.41	0.00	38.8
11	T1	39	0	41	0.0	0.244	0.1	LOS A	0.0	0.0	0.00	0.41	0.00	38.6
Approach		432	0	455	0.0	0.244	3.2	NA	0.0	0.0	0.00	0.41	0.00	38.7
All Vehicles		849	0	894	0.0	0.475	5.9	NA	2.9	20.5	0.22	0.68	0.28	37.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 AM (Site Folder: Option 3Ai)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	43	0	45	0.0	0.023	1.2	LOS A	0.0	0.0	0.01	0.23	0.01	43.8
6	R2	1	0	1	0.0	0.023	4.9	LOS A	0.0	0.0	0.01	0.23	0.01	43.7
Approach		44	0	46	0.0	0.023	1.3	NA	0.0	0.0	0.01	0.23	0.01	43.8
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.301	6.8	LOS A	1.3	8.8	0.26	0.89	0.26	40.8
9	R2	296	0	312	0.0	0.301	7.0	LOS A	1.3	8.8	0.26	0.89	0.26	37.2
Approach		297	0	313	0.0	0.301	7.0	LOS A	1.3	8.8	0.26	0.89	0.26	37.2
NorthWest: Ocean Parade (NW)														
10	L2	105	0	111	0.0	0.068	3.4	LOS A	0.0	0.0	0.00	0.40	0.00	38.9
11	T1	16	0	17	0.0	0.068	0.0	LOS A	0.0	0.0	0.00	0.40	0.00	38.7
Approach		121	0	127	0.0	0.068	3.0	NA	0.0	0.0	0.00	0.40	0.00	38.9
All Vehicles		462	0	486	0.0	0.301	5.4	NA	1.3	8.8	0.17	0.70	0.17	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 PM (Site Folder: Option 3Ai)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	12	0	13	0.0	0.007	1.2	LOS A	0.0	0.0	0.05	0.24	0.05	43.6
6	R2	1	0	1	0.0	0.007	5.0	LOS A	0.0	0.0	0.05	0.24	0.05	43.5
Approach		13	0	14	0.0	0.007	1.5	NA	0.0	0.0	0.05	0.24	0.05	43.6
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.175	6.9	LOS A	0.6	4.5	0.23	0.90	0.23	40.8
9	R2	172	0	181	0.0	0.175	6.9	LOS A	0.6	4.5	0.23	0.90	0.23	37.2
Approach		173	0	182	0.0	0.175	6.9	LOS A	0.6	4.5	0.23	0.90	0.23	37.2
NorthWest: Ocean Parade (NW)														
10	L2	108	0	114	0.0	0.085	3.4	LOS A	0.0	0.0	0.00	0.33	0.00	39.1
11	T1	44	0	46	0.0	0.085	0.0	LOS A	0.0	0.0	0.00	0.33	0.00	38.9
Approach		152	0	160	0.0	0.085	2.4	NA	0.0	0.0	0.00	0.33	0.00	39.0
All Vehicles		338	0	356	0.0	0.175	4.7	NA	0.6	4.5	0.12	0.62	0.12	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 AM (Site Folder: Option 3Ai)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	42	0	44	0.0	0.023	1.2	LOS A	0.0	0.0	0.01	0.23	0.01	43.8
6	R2	1	0	1	0.0	0.023	4.8	LOS A	0.0	0.0	0.01	0.23	0.01	43.7
Approach		43	0	45	0.0	0.023	1.3	NA	0.0	0.0	0.01	0.23	0.01	43.8
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.334	6.8	LOS A	1.5	10.2	0.25	0.89	0.25	40.8
9	R2	333	0	351	0.0	0.334	6.9	LOS A	1.5	10.2	0.25	0.89	0.25	37.2
Approach		334	0	352	0.0	0.334	6.9	LOS A	1.5	10.2	0.25	0.89	0.25	37.2
NorthWest: Ocean Parade (NW)														
10	L2	71	0	75	0.0	0.052	3.4	LOS A	0.0	0.0	0.00	0.35	0.00	39.0
11	T1	21	0	22	0.0	0.052	0.0	LOS A	0.0	0.0	0.00	0.35	0.00	38.9
Approach		92	0	97	0.0	0.052	2.6	NA	0.0	0.0	0.00	0.35	0.00	39.0
All Vehicles		469	0	494	0.0	0.334	5.6	NA	1.5	10.2	0.18	0.72	0.18	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 PM (Site Folder: Option 3Ai)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	34	0	36	0.0	0.018	1.2	LOS A	0.0	0.1	0.02	0.23	0.02	43.8
6	R2	1	0	1	0.0	0.018	5.1	LOS A	0.0	0.1	0.02	0.23	0.02	43.6
Approach		35	0	37	0.0	0.018	1.3	NA	0.0	0.1	0.02	0.23	0.02	43.8
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.148	6.8	LOS A	0.5	3.7	0.25	0.90	0.25	40.8
9	R2	141	0	148	0.0	0.148	7.0	LOS A	0.5	3.7	0.25	0.90	0.25	37.1
Approach		142	0	149	0.0	0.148	7.0	LOS A	0.5	3.7	0.25	0.90	0.25	37.2
NorthWest: Ocean Parade (NW)														
10	L2	139	0	146	0.0	0.097	3.4	LOS A	0.0	0.0	0.00	0.37	0.00	39.0
11	T1	34	0	36	0.0	0.097	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	38.8
Approach		173	0	182	0.0	0.097	2.8	NA	0.0	0.0	0.00	0.37	0.00	38.9
All Vehicles		350	0	368	0.0	0.148	4.3	NA	0.5	3.7	0.10	0.57	0.10	38.6

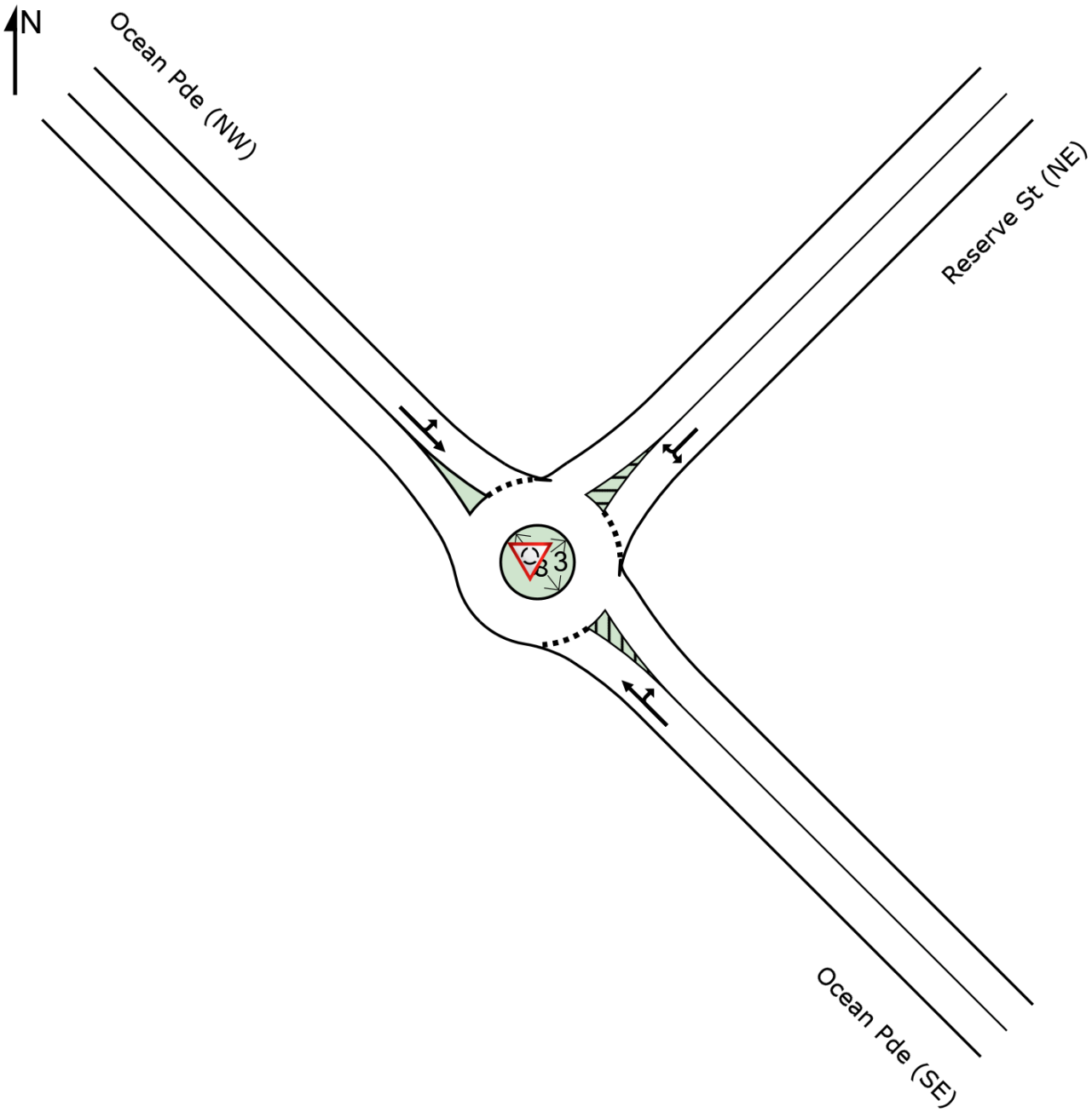
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 3 [2021 AM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

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



MOVEMENT SUMMARY

Site: 3 [2021 AM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	37	0	39	0.0	0.060	8.9	LOS A	0.3	2.2	0.68	0.70	0.68	40.5
3	R2	1	0	1	0.0	0.060	11.7	LOS B	0.3	2.2	0.68	0.70	0.68	40.4
Approach		38	0	40	0.0	0.060	9.0	LOS A	0.3	2.2	0.68	0.70	0.68	40.5
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.476	3.2	LOS A	3.6	25.3	0.10	0.57	0.10	40.9
6	R2	719	0	757	0.0	0.476	5.4	LOS A	3.6	25.3	0.10	0.57	0.10	37.9
Approach		720	0	758	0.0	0.476	5.4	LOS A	3.6	25.3	0.10	0.57	0.10	37.9
NorthWest: Ocean Pde (NW)														
7	L2	213	0	224	0.0	0.142	3.1	LOS A	0.9	6.4	0.02	0.44	0.02	38.5
8	T1	11	0	12	0.0	0.142	2.5	LOS A	0.9	6.4	0.02	0.44	0.02	42.6
Approach		224	0	236	0.0	0.142	3.1	LOS A	0.9	6.4	0.02	0.44	0.02	38.7
All Vehicles		982	0	1034	0.0	0.476	5.0	LOS A	3.6	25.3	0.10	0.54	0.10	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2021 PM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	13	0	14	0.0	0.017	5.9	LOS A	0.1	0.6	0.50	0.55	0.50	41.8
3	R2	1	0	1	0.0	0.017	8.7	LOS A	0.1	0.6	0.50	0.55	0.50	41.7
Approach		14	0	15	0.0	0.017	6.1	LOS A	0.1	0.6	0.50	0.55	0.50	41.8
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.288	3.3	LOS A	1.7	11.8	0.16	0.56	0.16	40.8
6	R2	385	0	405	0.0	0.288	5.5	LOS A	1.7	11.8	0.16	0.56	0.16	37.8
Approach		386	0	406	0.0	0.288	5.5	LOS A	1.7	11.8	0.16	0.56	0.16	37.8
NorthWest: Ocean Pde (NW)														
7	L2	490	0	516	0.0	0.331	3.1	LOS A	2.5	17.2	0.02	0.44	0.02	38.5
8	T1	34	0	36	0.0	0.331	2.5	LOS A	2.5	17.2	0.02	0.44	0.02	42.6
Approach		524	0	552	0.0	0.331	3.1	LOS A	2.5	17.2	0.02	0.44	0.02	38.8
All Vehicles		924	0	973	0.0	0.331	4.1	LOS A	2.5	17.2	0.09	0.49	0.09	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 AM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	37	0	39	0.0	0.066	9.9	LOS A	0.4	2.5	0.72	0.73	0.72	40.0
3	R2	1	0	1	0.0	0.066	12.7	LOS B	0.4	2.5	0.72	0.73	0.72	40.0
Approach		38	0	40	0.0	0.066	10.0	LOS A	0.4	2.5	0.72	0.73	0.72	40.0
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.537	3.2	LOS A	4.5	31.5	0.14	0.56	0.14	40.9
6	R2	799	0	841	0.0	0.537	5.5	LOS A	4.5	31.5	0.14	0.56	0.14	37.8
Approach		800	0	842	0.0	0.537	5.5	LOS A	4.5	31.5	0.14	0.56	0.14	37.8
NorthWest: Ocean Pde (NW)														
7	L2	247	0	260	0.0	0.167	3.1	LOS A	1.1	7.8	0.02	0.44	0.02	38.6
8	T1	16	0	17	0.0	0.167	2.5	LOS A	1.1	7.8	0.02	0.44	0.02	42.6
Approach		263	0	277	0.0	0.167	3.1	LOS A	1.1	7.8	0.02	0.44	0.02	38.8
All Vehicles		1101	0	1159	0.0	0.537	5.0	LOS A	4.5	31.5	0.13	0.54	0.13	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 PM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	16	0	17	0.0	0.021	6.0	LOS A	0.1	0.7	0.51	0.56	0.51	41.8
3	R2	1	0	1	0.0	0.021	8.9	LOS A	0.1	0.7	0.51	0.56	0.51	41.7
Approach		17	0	18	0.0	0.021	6.2	LOS A	0.1	0.7	0.51	0.56	0.51	41.7
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.305	3.3	LOS A	1.8	12.7	0.18	0.56	0.18	40.8
6	R2	402	0	423	0.0	0.305	5.6	LOS A	1.8	12.7	0.18	0.56	0.18	37.8
Approach		403	0	424	0.0	0.305	5.6	LOS A	1.8	12.7	0.18	0.56	0.18	37.8
NorthWest: Ocean Pde (NW)														
7	L2	379	0	399	0.0	0.265	3.1	LOS A	1.8	12.8	0.02	0.43	0.02	38.6
8	T1	40	0	42	0.0	0.265	2.5	LOS A	1.8	12.8	0.02	0.43	0.02	42.6
Approach		419	0	441	0.0	0.265	3.0	LOS A	1.8	12.8	0.02	0.43	0.02	38.9
All Vehicles		839	0	883	0.0	0.305	4.3	LOS A	1.8	12.8	0.11	0.50	0.11	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 AM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	43	0	45	0.0	0.049	5.4	LOS A	0.2	1.6	0.45	0.54	0.45	41.9
3	R2	1	0	1	0.0	0.049	8.3	LOS A	0.2	1.6	0.45	0.54	0.45	41.9
Approach		44	0	46	0.0	0.049	5.5	LOS A	0.2	1.6	0.45	0.54	0.45	41.9
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.215	3.2	LOS A	1.2	8.1	0.09	0.57	0.09	40.9
6	R2	302	0	318	0.0	0.215	5.4	LOS A	1.2	8.1	0.09	0.57	0.09	37.9
Approach		303	0	319	0.0	0.215	5.4	LOS A	1.2	8.1	0.09	0.57	0.09	37.9
NorthWest: Ocean Pde (NW)														
7	L2	112	0	118	0.0	0.082	3.1	LOS A	0.5	3.2	0.02	0.43	0.02	38.6
8	T1	16	0	17	0.0	0.082	2.5	LOS A	0.5	3.2	0.02	0.43	0.02	42.6
Approach		128	0	135	0.0	0.082	3.0	LOS A	0.5	3.2	0.02	0.43	0.02	39.0
All Vehicles		475	0	500	0.0	0.215	4.8	LOS A	1.2	8.1	0.11	0.53	0.11	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 PM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	12	0	13	0.0	0.013	4.6	LOS A	0.1	0.4	0.34	0.47	0.34	42.1
3	R2	1	0	1	0.0	0.013	7.5	LOS A	0.1	0.4	0.34	0.47	0.34	42.1
Approach		13	0	14	0.0	0.013	4.8	LOS A	0.1	0.4	0.34	0.47	0.34	42.1
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.139	3.3	LOS A	0.7	4.9	0.16	0.56	0.16	40.8
6	R2	171	0	180	0.0	0.139	5.6	LOS A	0.7	4.9	0.16	0.56	0.16	37.8
Approach		172	0	181	0.0	0.139	5.6	LOS A	0.7	4.9	0.16	0.56	0.16	37.8
NorthWest: Ocean Pde (NW)														
7	L2	128	0	135	0.0	0.109	3.1	LOS A	0.6	4.2	0.02	0.42	0.02	38.6
8	T1	43	0	45	0.0	0.109	2.5	LOS A	0.6	4.2	0.02	0.42	0.02	42.7
Approach		171	0	180	0.0	0.109	3.0	LOS A	0.6	4.2	0.02	0.42	0.02	39.6
All Vehicles		356	0	375	0.0	0.139	4.3	LOS A	0.7	4.9	0.10	0.49	0.10	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 AM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	42	0	44	0.0	0.049	5.7	LOS A	0.2	1.7	0.47	0.56	0.47	41.9
3	R2	1	0	1	0.0	0.049	8.5	LOS A	0.2	1.7	0.47	0.56	0.47	41.8
Approach		43	0	45	0.0	0.049	5.7	LOS A	0.2	1.7	0.47	0.56	0.47	41.9
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.242	3.2	LOS A	1.3	9.4	0.11	0.57	0.11	40.9
6	R2	335	0	353	0.0	0.242	5.4	LOS A	1.3	9.4	0.11	0.57	0.11	37.9
Approach		336	0	354	0.0	0.242	5.4	LOS A	1.3	9.4	0.11	0.57	0.11	37.9
NorthWest: Ocean Pde (NW)														
7	L2	74	0	78	0.0	0.061	3.1	LOS A	0.3	2.4	0.02	0.42	0.02	38.6
8	T1	21	0	22	0.0	0.061	2.5	LOS A	0.3	2.4	0.02	0.42	0.02	42.7
Approach		95	0	100	0.0	0.061	3.0	LOS A	0.3	2.4	0.02	0.42	0.02	39.4
All Vehicles		474	0	499	0.0	0.242	5.0	LOS A	1.3	9.4	0.13	0.54	0.13	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 PM (Site Folder: Option 3Aii)]

Reserve Street / Ocean Parade
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	35	0	37	0.0	0.035	4.5	LOS A	0.2	1.1	0.30	0.47	0.30	42.3
3	R2	1	0	1	0.0	0.035	7.3	LOS A	0.2	1.1	0.30	0.47	0.30	42.2
Approach		36	0	38	0.0	0.035	4.5	LOS A	0.2	1.1	0.30	0.47	0.30	42.3
NorthEast: Reserve St (NE)														
4	L2	1	0	1	0.0	0.111	3.3	LOS A	0.5	3.8	0.14	0.57	0.14	40.9
6	R2	138	0	145	0.0	0.111	5.5	LOS A	0.5	3.8	0.14	0.57	0.14	37.8
Approach		139	0	146	0.0	0.111	5.5	LOS A	0.5	3.8	0.14	0.57	0.14	37.9
NorthWest: Ocean Pde (NW)														
7	L2	143	0	151	0.0	0.113	3.1	LOS A	0.6	4.3	0.02	0.43	0.02	38.6
8	T1	34	0	36	0.0	0.113	2.5	LOS A	0.6	4.3	0.02	0.43	0.02	42.7
Approach		177	0	186	0.0	0.113	3.0	LOS A	0.6	4.3	0.02	0.43	0.02	39.3
All Vehicles		352	0	371	0.0	0.113	4.1	LOS A	0.6	4.3	0.09	0.49	0.09	39.0

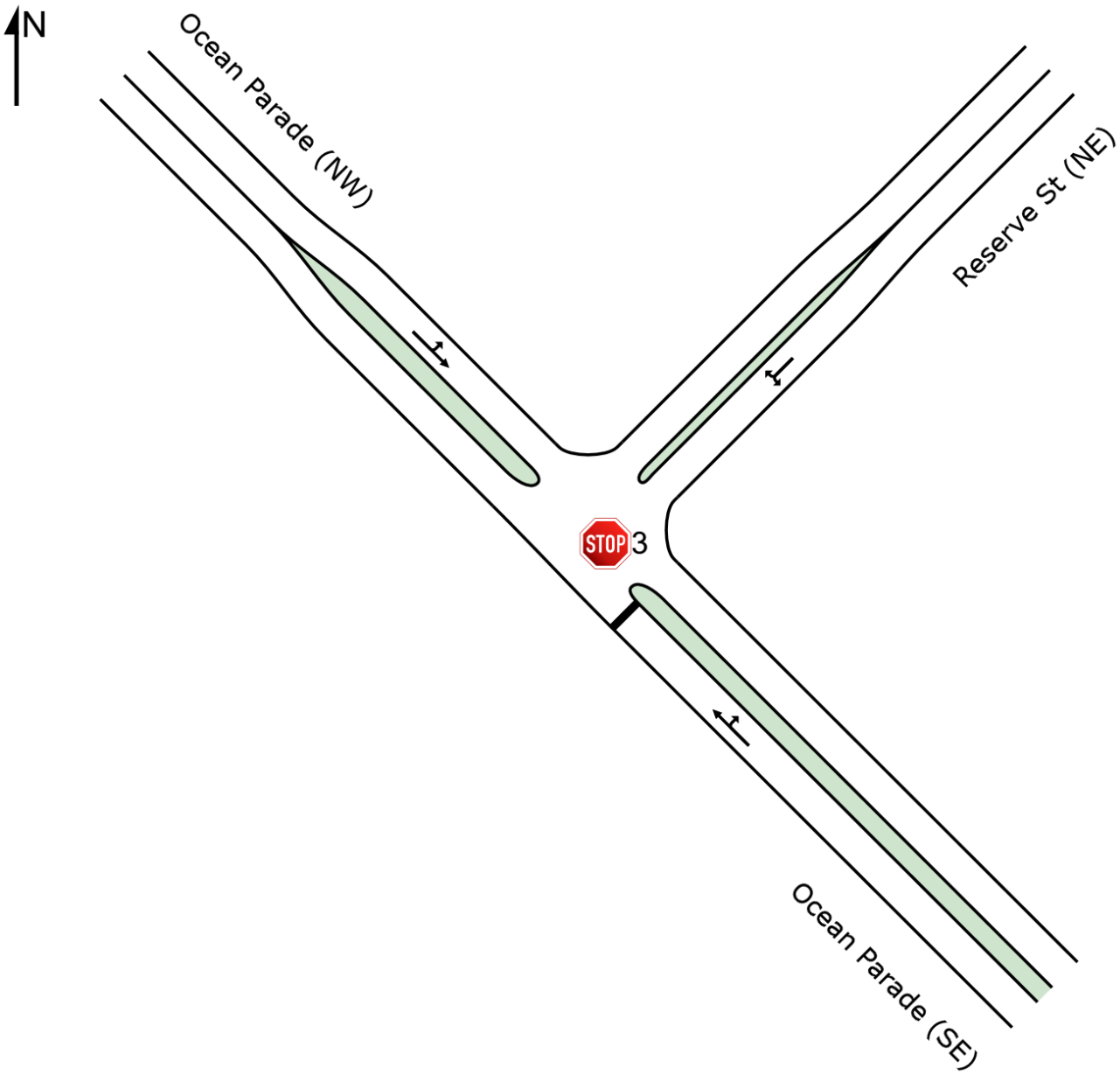
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 3 [2021 AM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

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



MOVEMENT SUMMARY

Site: 3 [2021 AM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	39	0	41	0.0	0.100	13.9	LOS B	0.3	2.3	0.67	1.03	0.67	38.6
6	R2	1	0	1	0.0	0.100	16.3	LOS C	0.3	2.3	0.67	1.03	0.67	38.5
Approach		40	0	42	0.0	0.100	14.0	LOS B	0.3	2.3	0.67	1.03	0.67	38.6
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.419	3.5	LOS A	2.9	20.5	0.07	0.47	0.07	42.1
9	R2	710	0	747	0.0	0.419	3.6	LOS A	2.9	20.5	0.07	0.47	0.07	38.2
Approach		711	0	748	0.0	0.419	3.6	NA	2.9	20.5	0.07	0.47	0.07	38.2
NorthWest: Ocean Parade (NW)														
10	L2	205	0	216	0.0	0.121	3.4	LOS A	0.0	0.0	0.00	0.44	0.00	38.7
11	T1	9	0	9	0.0	0.121	0.0	LOS A	0.0	0.0	0.00	0.44	0.00	38.6
Approach		214	0	225	0.0	0.121	3.3	NA	0.0	0.0	0.00	0.44	0.00	38.7
All Vehicles		965	0	1016	0.0	0.419	3.9	NA	2.9	20.5	0.08	0.49	0.08	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2021 PM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	12	0	13	0.0	0.020	9.5	LOS A	0.1	0.5	0.46	0.93	0.46	40.1
6	R2	1	0	1	0.0	0.020	14.8	LOS B	0.1	0.5	0.46	0.93	0.46	40.0
Approach		13	0	14	0.0	0.020	9.9	LOS A	0.1	0.5	0.46	0.93	0.46	40.1
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.236	3.6	LOS A	1.3	9.1	0.13	0.47	0.13	42.0
9	R2	390	0	411	0.0	0.236	3.7	LOS A	1.3	9.1	0.13	0.47	0.13	38.1
Approach		391	0	412	0.0	0.236	3.7	NA	1.3	9.1	0.13	0.47	0.13	38.1
NorthWest: Ocean Parade (NW)														
10	L2	486	0	512	0.0	0.293	3.5	LOS A	0.0	0.0	0.00	0.43	0.00	38.7
11	T1	33	0	35	0.0	0.293	0.1	LOS A	0.0	0.0	0.00	0.43	0.00	38.6
Approach		519	0	546	0.0	0.293	3.3	NA	0.0	0.0	0.00	0.43	0.00	38.7
All Vehicles		923	0	972	0.0	0.293	3.5	NA	1.3	9.1	0.06	0.45	0.06	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 AM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	37	0	39	0.0	0.109	15.3	LOS C	0.3	2.4	0.72	1.03	0.72	38.0
6	R2	1	0	1	0.0	0.109	18.1	LOS C	0.3	2.4	0.72	1.03	0.72	38.0
Approach		38	0	40	0.0	0.109	15.4	LOS C	0.3	2.4	0.72	1.03	0.72	38.0
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.460	3.5	LOS A	3.4	23.6	0.11	0.47	0.11	42.0
9	R2	773	0	814	0.0	0.460	3.6	LOS A	3.4	23.6	0.11	0.47	0.11	38.2
Approach		774	0	815	0.0	0.460	3.6	NA	3.4	23.6	0.11	0.47	0.11	38.2
NorthWest: Ocean Parade (NW)														
10	L2	206	0	217	0.0	0.126	3.4	LOS A	0.0	0.0	0.00	0.42	0.00	38.8
11	T1	17	0	18	0.0	0.126	0.0	LOS A	0.0	0.0	0.00	0.42	0.00	38.6
Approach		223	0	235	0.0	0.126	3.2	NA	0.0	0.0	0.00	0.42	0.00	38.8
All Vehicles		1035	0	1089	0.0	0.460	4.0	NA	3.4	23.6	0.11	0.48	0.11	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 PM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	16	0	17	0.0	0.025	9.6	LOS A	0.1	0.6	0.46	0.94	0.46	40.1
6	R2	1	0	1	0.0	0.025	13.3	LOS B	0.1	0.6	0.46	0.94	0.46	40.0
Approach		17	0	18	0.0	0.025	9.8	LOS A	0.1	0.6	0.46	0.94	0.46	40.1
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.242	3.6	LOS A	1.3	9.4	0.14	0.47	0.14	42.0
9	R2	399	0	420	0.0	0.242	3.7	LOS A	1.3	9.4	0.14	0.47	0.14	38.1
Approach		400	0	421	0.0	0.242	3.7	NA	1.3	9.4	0.14	0.47	0.14	38.1
NorthWest: Ocean Parade (NW)														
10	L2	384	0	404	0.0	0.238	3.5	LOS A	0.0	0.0	0.00	0.41	0.00	38.8
11	T1	38	0	40	0.0	0.238	0.1	LOS A	0.0	0.0	0.00	0.41	0.00	38.6
Approach		422	0	444	0.0	0.238	3.2	NA	0.0	0.0	0.00	0.41	0.00	38.7
All Vehicles		839	0	883	0.0	0.242	3.6	NA	1.3	9.4	0.08	0.45	0.08	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 AM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	44	0	46	0.0	0.058	9.0	LOS A	0.2	1.4	0.41	0.95	0.41	40.4
6	R2	1	0	1	0.0	0.058	9.5	LOS A	0.2	1.4	0.41	0.95	0.41	40.3
Approach		45	0	47	0.0	0.058	9.0	LOS A	0.2	1.4	0.41	0.95	0.41	40.4
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.188	3.5	LOS A	1.0	7.0	0.08	0.47	0.08	42.1
9	R2	316	0	333	0.0	0.188	3.6	LOS A	1.0	7.0	0.08	0.47	0.08	38.2
Approach		317	0	334	0.0	0.188	3.6	NA	1.0	7.0	0.08	0.47	0.08	38.2
NorthWest: Ocean Parade (NW)														
10	L2	111	0	117	0.0	0.072	3.4	LOS A	0.0	0.0	0.00	0.40	0.00	38.9
11	T1	16	0	17	0.0	0.072	0.0	LOS A	0.0	0.0	0.00	0.40	0.00	38.7
Approach		127	0	134	0.0	0.072	3.0	NA	0.0	0.0	0.00	0.40	0.00	38.8
All Vehicles		489	0	515	0.0	0.188	3.9	NA	1.0	7.0	0.09	0.50	0.09	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 PM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	12	0	13	0.0	0.014	8.0	LOS A	0.0	0.3	0.28	0.93	0.28	40.7
6	R2	1	0	1	0.0	0.014	8.6	LOS A	0.0	0.3	0.28	0.93	0.28	40.6
Approach		13	0	14	0.0	0.014	8.0	LOS A	0.0	0.3	0.28	0.93	0.28	40.7
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.106	3.6	LOS A	0.5	3.6	0.13	0.47	0.13	42.0
9	R2	173	0	182	0.0	0.106	3.7	LOS A	0.5	3.6	0.13	0.47	0.13	38.1
Approach		174	0	183	0.0	0.106	3.7	NA	0.5	3.6	0.13	0.47	0.13	38.1
NorthWest: Ocean Parade (NW)														
10	L2	123	0	129	0.0	0.093	3.4	LOS A	0.0	0.0	0.00	0.34	0.00	39.0
11	T1	43	0	45	0.0	0.093	0.0	LOS A	0.0	0.0	0.00	0.34	0.00	38.9
Approach		166	0	175	0.0	0.093	2.6	NA	0.0	0.0	0.00	0.34	0.00	39.0
All Vehicles		353	0	372	0.0	0.106	3.3	NA	0.5	3.6	0.08	0.43	0.08	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 AM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	42	0	44	0.0	0.056	9.1	LOS A	0.2	1.4	0.42	0.95	0.42	40.4
6	R2	1	0	1	0.0	0.056	9.4	LOS A	0.2	1.4	0.42	0.95	0.42	40.3
Approach		43	0	45	0.0	0.056	9.1	LOS A	0.2	1.4	0.42	0.95	0.42	40.4
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.199	3.5	LOS A	1.1	7.5	0.10	0.47	0.10	42.0
9	R2	333	0	351	0.0	0.199	3.6	LOS A	1.1	7.5	0.10	0.47	0.10	38.2
Approach		334	0	352	0.0	0.199	3.6	NA	1.1	7.5	0.10	0.47	0.10	38.2
NorthWest: Ocean Parade (NW)														
10	L2	70	0	74	0.0	0.051	3.4	LOS A	0.0	0.0	0.00	0.35	0.00	39.0
11	T1	21	0	22	0.0	0.051	0.0	LOS A	0.0	0.0	0.00	0.35	0.00	38.9
Approach		91	0	96	0.0	0.051	2.6	NA	0.0	0.0	0.00	0.35	0.00	39.0
All Vehicles		468	0	493	0.0	0.199	3.9	NA	1.1	7.5	0.11	0.49	0.11	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 PM (Site Folder: Option 3Aiii)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	33	0	35	0.0	0.035	7.8	LOS A	0.1	0.9	0.25	0.95	0.25	40.8
6	R2	1	0	1	0.0	0.035	8.6	LOS A	0.1	0.9	0.25	0.95	0.25	40.7
Approach		34	0	36	0.0	0.035	7.8	LOS A	0.1	0.9	0.25	0.95	0.25	40.8
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.083	3.5	LOS A	0.4	2.8	0.11	0.47	0.11	42.0
9	R2	137	0	144	0.0	0.083	3.6	LOS A	0.4	2.8	0.11	0.47	0.11	38.2
Approach		138	0	145	0.0	0.083	3.6	NA	0.4	2.8	0.11	0.47	0.11	38.2
NorthWest: Ocean Parade (NW)														
10	L2	146	0	154	0.0	0.101	3.4	LOS A	0.0	0.0	0.00	0.37	0.00	38.9
11	T1	34	0	36	0.0	0.101	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	38.8
Approach		180	0	189	0.0	0.101	2.8	NA	0.0	0.0	0.00	0.37	0.00	38.9
All Vehicles		352	0	371	0.0	0.101	3.6	NA	0.4	2.8	0.07	0.47	0.07	38.8

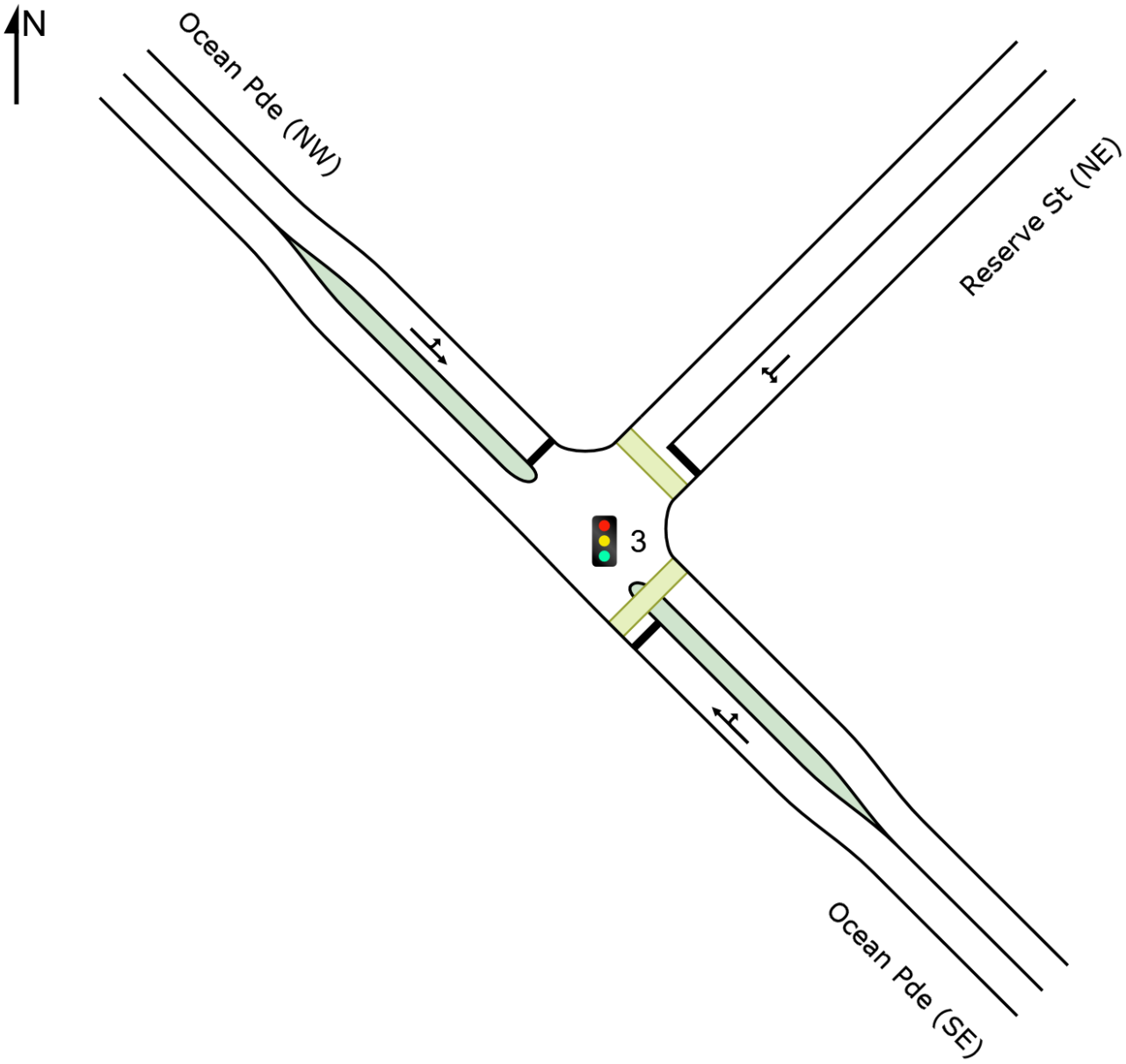
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 3 [2021 AM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: 3 [2021 AM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	40	0.0	42	0.0	0.149	18.2	LOS B	0.8	5.5	0.90	0.68	0.90	36.4
3	R2	1	0.0	1	0.0	0.149	21.6	LOS C	0.8	5.5	0.90	0.68	0.90	36.3
Approach		41	0.0	43	0.0	0.149	18.3	LOS B	0.8	5.5	0.90	0.68	0.90	36.4
NorthEast: Reserve St (NE)														
4	L2	1	0.0	1	0.0	0.681	10.9	LOS B	10.7	74.6	0.77	0.81	0.79	38.8
6	R2	684	0.0	720	0.0	*0.681	11.0	LOS B	10.7	74.6	0.77	0.81	0.79	35.6
Approach		685	0.0	721	0.0	0.681	11.0	LOS B	10.7	74.6	0.77	0.81	0.79	35.6
NorthWest: Ocean Pde (NW)														
7	L2	197	0.0	207	0.0	0.178	6.0	LOS A	1.6	11.1	0.39	0.59	0.39	37.7
8	T1	9	0.0	9	0.0	*0.178	2.6	LOS A	1.6	11.1	0.39	0.59	0.39	41.7
Approach		206	0.0	217	0.0	0.178	5.9	LOS A	1.6	11.1	0.39	0.59	0.39	37.9
All Vehicles		932	0.0	981	0.0	0.681	10.2	LOS B	10.7	74.6	0.69	0.76	0.71	36.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	14.5	LOS B	0.0	0.0	0.85	0.85	176.8	211.0	1.19
NorthEast: Reserve St (NE)												
P2	Full	20	21	14.5	LOS B	0.0	0.0	0.85	0.85	176.0	210.0	1.19
All Pedestrians		40	42	14.5	LOS B	0.0	0.0	0.85	0.85	176.4	210.5	1.19

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: 3 [2021 PM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	12	0.0	13	0.0	0.038	12.2	LOS B	0.2	1.2	0.83	0.61	0.83	38.6
3	R2	1	0.0	1	0.0	0.038	15.6	LOS B	0.2	1.2	0.83	0.61	0.83	38.5
Approach		13	0.0	14	0.0	0.038	12.5	LOS B	0.2	1.2	0.83	0.61	0.83	38.6
NorthEast: Reserve St (NE)														
4	L2	357	0.0	376	0.0	0.489	11.0	LOS B	4.3	30.4	0.79	0.77	0.79	38.8
6	R2	1	0.0	1	0.0	*0.489	11.1	LOS B	4.3	30.4	0.79	0.77	0.79	35.6
Approach		358	0.0	377	0.0	0.489	11.0	LOS B	4.3	30.4	0.79	0.77	0.79	38.8
NorthWest: Ocean Pde (NW)														
7	L2	476	0.0	501	0.0	0.426	6.0	LOS A	3.7	26.0	0.50	0.65	0.50	37.7
8	T1	25	0.0	26	0.0	*0.426	2.6	LOS A	3.7	26.0	0.50	0.65	0.50	41.7
Approach		501	0.0	527	0.0	0.426	5.8	LOS A	3.7	26.0	0.50	0.65	0.50	37.9
All Vehicles		872	0.0	918	0.0	0.489	8.1	LOS A	4.3	30.4	0.62	0.70	0.62	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.9	211.0	1.23
NorthEast: Reserve St (NE)												
P2	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.1	210.0	1.23
All Pedestrians		40	42	9.6	LOS A	0.0	0.0	0.80	0.80	171.5	210.5	1.23

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: 3 [2024 AM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	37	0.0	39	0.0	0.138	18.2	LOS B	0.7	5.1	0.90	0.68	0.90	36.4
3	R2	1	0.0	1	0.0	0.138	21.6	LOS C	0.7	5.1	0.90	0.68	0.90	36.3
Approach		38	0.0	40	0.0	0.138	18.3	LOS B	0.7	5.1	0.90	0.68	0.90	36.4
NorthEast: Reserve St (NE)														
4	L2	1	0.0	1	0.0	0.749	12.8	LOS B	13.4	94.0	0.82	0.87	0.91	38.1
6	R2	752	0.0	792	0.0	*0.749	12.9	LOS B	13.4	94.0	0.82	0.87	0.91	34.9
Approach		753	0.0	793	0.0	0.749	12.9	LOS B	13.4	94.0	0.82	0.87	0.91	34.9
NorthWest: Ocean Pde (NW)														
7	L2	218	0.0	229	0.0	0.203	6.5	LOS A	1.9	13.4	0.43	0.61	0.43	37.5
8	T1	11	0.0	12	0.0	*0.203	3.1	LOS A	1.9	13.4	0.43	0.61	0.43	41.5
Approach		229	0.0	241	0.0	0.203	6.3	LOS A	1.9	13.4	0.43	0.61	0.43	37.7
All Vehicles		1020	0.0	1074	0.0	0.749	11.7	LOS B	13.4	94.0	0.74	0.80	0.80	35.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	14.5	LOS B	0.0	0.0	0.85	0.85	176.8	211.0	1.19
NorthEast: Reserve St (NE)												
P2	Full	20	21	14.5	LOS B	0.0	0.0	0.85	0.85	176.0	210.0	1.19
All Pedestrians		40	42	14.5	LOS B	0.0	0.0	0.85	0.85	176.4	210.5	1.19

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: 3 [2024 PM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	16	0.0	17	0.0	0.048	12.3	LOS B	0.2	1.6	0.83	0.62	0.83	38.6
3	R2	1	0.0	1	0.0	0.048	15.6	LOS B	0.2	1.6	0.83	0.62	0.83	38.5
Approach		17	0.0	18	0.0	0.048	12.5	LOS B	0.2	1.6	0.83	0.62	0.83	38.6
NorthEast: Reserve St (NE)														
4	L2	395	0.0	416	0.0	0.541	11.2	LOS B	4.9	34.5	0.81	0.78	0.81	38.7
6	R2	1	0.0	1	0.0	* 0.541	11.3	LOS B	4.9	34.5	0.81	0.78	0.81	35.5
Approach		396	0.0	417	0.0	0.541	11.2	LOS B	4.9	34.5	0.81	0.78	0.81	38.7
NorthWest: Ocean Pde (NW)														
7	L2	369	0.0	388	0.0	0.348	5.8	LOS A	2.7	19.0	0.46	0.63	0.46	37.8
8	T1	24	0.0	25	0.0	* 0.348	2.4	LOS A	2.7	19.0	0.46	0.63	0.46	41.8
Approach		393	0.0	414	0.0	0.348	5.6	LOS A	2.7	19.0	0.46	0.63	0.46	38.0
All Vehicles		806	0.0	848	0.0	0.541	8.5	LOS A	4.9	34.5	0.64	0.70	0.64	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.9	211.0	1.23
NorthEast: Reserve St (NE)												
P2	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.1	210.0	1.23
All Pedestrians		40	42	9.6	LOS A	0.0	0.0	0.80	0.80	171.5	210.5	1.23

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: 3 [2026 AM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	43	0.0	45	0.0	0.119	12.5	LOS B	0.6	4.2	0.85	0.66	0.85	38.6
3	R2	1	0.0	1	0.0	0.119	15.9	LOS B	0.6	4.2	0.85	0.66	0.85	38.5
Approach		44	0.0	46	0.0	0.119	12.6	LOS B	0.6	4.2	0.85	0.66	0.85	38.6
NorthEast: Reserve St (NE)														
4	L2	1	0.0	1	0.0	0.403	10.7	LOS B	3.4	23.9	0.76	0.75	0.76	38.9
6	R2	294	0.0	309	0.0	*0.403	10.8	LOS B	3.4	23.9	0.76	0.75	0.76	35.7
Approach		295	0.0	311	0.0	0.403	10.8	LOS B	3.4	23.9	0.76	0.75	0.76	35.7
NorthWest: Ocean Pde (NW)														
7	L2	112	0.0	118	0.0	0.139	7.3	LOS A	1.0	7.2	0.53	0.61	0.53	37.3
8	T1	16	0.0	17	0.0	*0.139	3.9	LOS A	1.0	7.2	0.53	0.61	0.53	41.2
Approach		128	0.0	135	0.0	0.139	6.9	LOS A	1.0	7.2	0.53	0.61	0.53	37.8
All Vehicles		467	0.0	492	0.0	0.403	9.9	LOS A	3.4	23.9	0.70	0.71	0.70	36.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.9	211.0	1.23
NorthEast: Reserve St (NE)												
P2	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.1	210.0	1.23
All Pedestrians		40	42	9.6	LOS A	0.0	0.0	0.80	0.80	171.5	210.5	1.23

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: 3 [2026 PM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	10	0.0	11	0.0	0.027	11.2	LOS B	0.1	1.0	0.79	0.59	0.79	39.0
3	R2	1	0.0	1	0.0	0.027	14.6	LOS B	0.1	1.0	0.79	0.59	0.79	38.9
Approach		11	0.0	12	0.0	0.027	11.5	LOS B	0.1	1.0	0.79	0.59	0.79	39.0
NorthEast: Reserve St (NE)														
4	L2	158	0.0	166	0.0	0.237	10.8	LOS B	1.8	12.5	0.73	0.71	0.73	38.9
6	R2	1	0.0	1	0.0	*0.237	11.0	LOS B	1.8	12.5	0.73	0.71	0.73	35.7
Approach		159	0.0	167	0.0	0.237	10.8	LOS B	1.8	12.5	0.73	0.71	0.73	38.9
NorthWest: Ocean Pde (NW)														
7	L2	127	0.0	134	0.0	0.234	9.4	LOS A	1.7	12.1	0.66	0.66	0.66	36.7
8	T1	43	0.0	45	0.0	*0.234	6.0	LOS A	1.7	12.1	0.66	0.66	0.66	40.4
Approach		170	0.0	179	0.0	0.234	8.6	LOS A	1.7	12.1	0.66	0.66	0.66	37.6
All Vehicles		340	0.0	358	0.0	0.237	9.7	LOS A	1.8	12.5	0.70	0.68	0.70	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.9	211.0	1.23
NorthEast: Reserve St (NE)												
P2	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.1	210.0	1.23
All Pedestrians		40	42	9.6	LOS A	0.0	0.0	0.80	0.80	171.5	210.5	1.23

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: 3 [2041 AM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	42	0.0	44	0.0	0.117	12.5	LOS B	0.6	4.1	0.85	0.66	0.85	38.6
3	R2	1	0.0	1	0.0	0.117	15.9	LOS B	0.6	4.1	0.85	0.66	0.85	38.5
Approach		43	0.0	45	0.0	0.117	12.6	LOS B	0.6	4.1	0.85	0.66	0.85	38.6
NorthEast: Reserve St (NE)														
4	L2	1	0.0	1	0.0	0.453	10.9	LOS B	3.9	27.5	0.78	0.76	0.78	38.8
6	R2	330	0.0	347	0.0	* 0.453	11.0	LOS B	3.9	27.5	0.78	0.76	0.78	35.6
Approach		331	0.0	348	0.0	0.453	11.0	LOS B	3.9	27.5	0.78	0.76	0.78	35.6
NorthWest: Ocean Pde (NW)														
7	L2	73	0.0	77	0.0	0.131	9.1	LOS A	0.9	6.3	0.63	0.63	0.63	36.8
8	T1	21	0.0	22	0.0	* 0.131	5.7	LOS A	0.9	6.3	0.63	0.63	0.63	40.5
Approach		94	0.0	99	0.0	0.131	8.4	LOS A	0.9	6.3	0.63	0.63	0.63	37.5
All Vehicles		468	0.0	493	0.0	0.453	10.6	LOS B	3.9	27.5	0.75	0.73	0.75	36.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.9	211.0	1.23
NorthEast: Reserve St (NE)												
P2	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.1	210.0	1.23
All Pedestrians		40	42	9.6	LOS A	0.0	0.0	0.80	0.80	171.5	210.5	1.23

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: 3 [2041 PM (Site Folder: Option 3Aiv)]

Reserver Street / Ocean Parade
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Pde (SE)														
2	T1	34	0.0	36	0.0	0.072	10.5	LOS B	0.4	3.0	0.78	0.62	0.78	39.4
3	R2	1	0.0	1	0.0	0.072	13.9	LOS B	0.4	3.0	0.78	0.62	0.78	39.3
Approach		35	0.0	37	0.0	0.072	10.6	LOS B	0.4	3.0	0.78	0.62	0.78	39.4
NorthEast: Reserve St (NE)														
4	L2	128	0.0	135	0.0	0.212	11.5	LOS B	1.5	10.5	0.75	0.71	0.75	38.6
6	R2	1	0.0	1	0.0	*0.212	11.6	LOS B	1.5	10.5	0.75	0.71	0.75	35.4
Approach		129	0.0	136	0.0	0.212	11.5	LOS B	1.5	10.5	0.75	0.71	0.75	38.6
NorthWest: Ocean Pde (NW)														
7	L2	144	0.0	152	0.0	0.204	8.1	LOS A	1.6	11.1	0.59	0.63	0.59	37.1
8	T1	34	0.0	36	0.0	*0.204	4.7	LOS A	1.6	11.1	0.59	0.63	0.59	41.0
Approach		178	0.0	187	0.0	0.204	7.4	LOS A	1.6	11.1	0.59	0.63	0.59	37.8
All Vehicles		342	0.0	360	0.0	0.212	9.3	LOS A	1.6	11.1	0.67	0.66	0.67	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Pde (SE)												
P1	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.9	211.0	1.23
NorthEast: Reserve St (NE)												
P2	Full	20	21	9.6	LOS A	0.0	0.0	0.80	0.80	171.1	210.0	1.23
All Pedestrians		40	42	9.6	LOS A	0.0	0.0	0.80	0.80	171.5	210.5	1.23

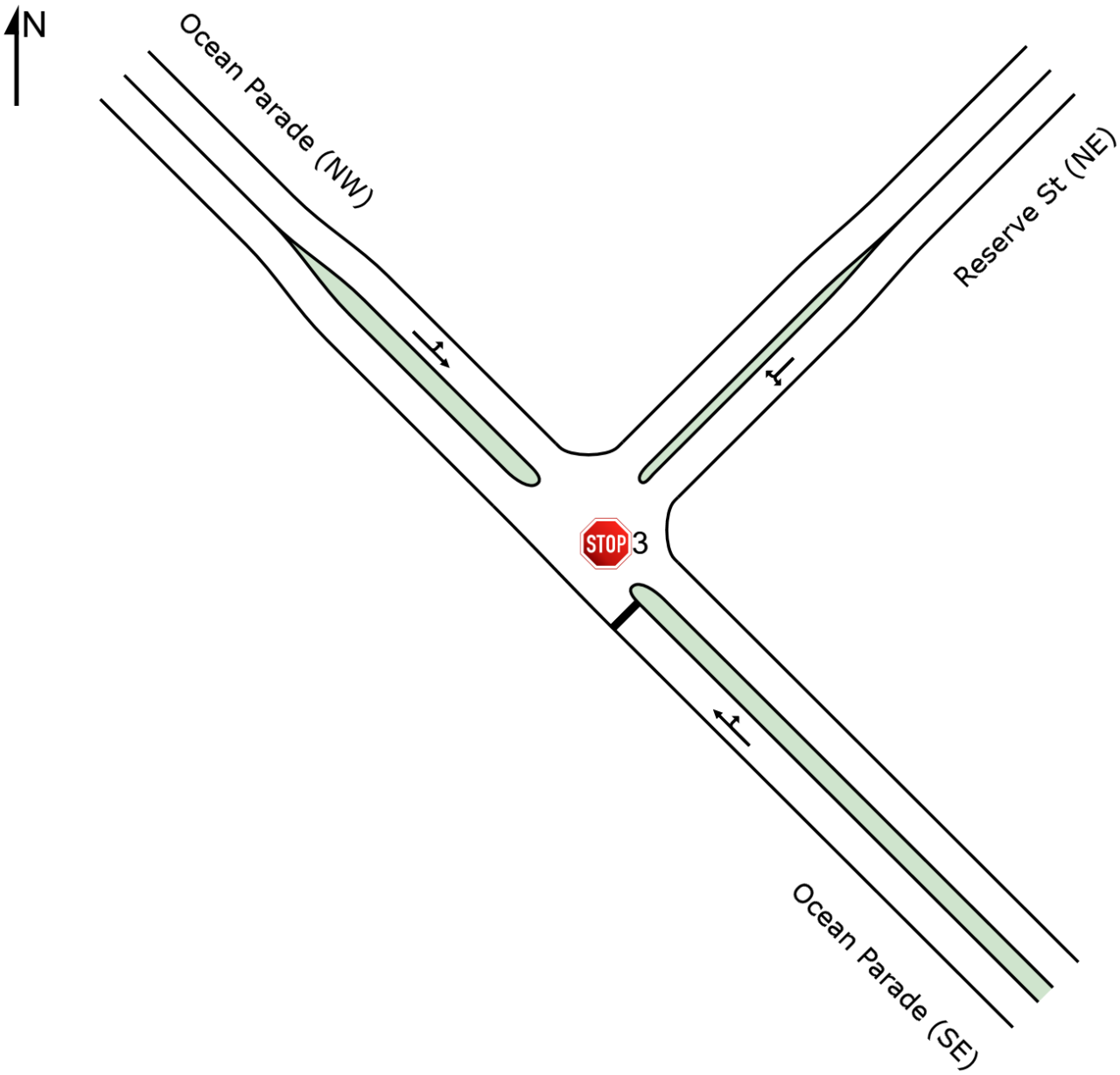
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

Site: 3 [2021 AM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

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



MOVEMENT SUMMARY

Site: 3 [2021 AM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	39	0	41	0.0	0.099	13.9	LOS B	0.3	2.3	0.67	1.03	0.67	38.6
6	R2	1	0	1	0.0	0.099	16.3	LOS C	0.3	2.3	0.67	1.03	0.67	38.5
Approach		40	0	42	0.0	0.099	13.9	LOS B	0.3	2.3	0.67	1.03	0.67	38.6
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.418	3.5	LOS A	2.9	20.3	0.08	0.47	0.08	42.1
9	R2	706	0	743	0.0	0.418	3.6	LOS A	2.9	20.3	0.08	0.47	0.08	38.2
Approach		707	0	744	0.0	0.418	3.6	NA	2.9	20.3	0.08	0.47	0.08	38.2
NorthWest: Ocean Parade (NW)														
10	L2	211	0	222	0.0	0.126	3.4	LOS A	0.0	0.0	0.00	0.43	0.00	38.7
11	T1	11	0	12	0.0	0.126	0.0	LOS A	0.0	0.0	0.00	0.43	0.00	38.6
Approach		222	0	234	0.0	0.126	3.3	NA	0.0	0.0	0.00	0.43	0.00	38.7
All Vehicles		969	0	1020	0.0	0.418	3.9	NA	2.9	20.3	0.09	0.49	0.09	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2021 PM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	12	0	13	0.0	0.019	9.2	LOS A	0.1	0.4	0.44	0.93	0.44	40.2
6	R2	1	0	1	0.0	0.019	14.1	LOS B	0.1	0.4	0.44	0.93	0.44	40.1
Approach		13	0	14	0.0	0.019	9.6	LOS A	0.1	0.4	0.44	0.93	0.44	40.2
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.216	3.5	LOS A	1.2	8.2	0.11	0.47	0.11	42.0
9	R2	359	0	378	0.0	0.216	3.6	LOS A	1.2	8.2	0.11	0.47	0.11	38.2
Approach		360	0	379	0.0	0.216	3.6	NA	1.2	8.2	0.11	0.47	0.11	38.2
NorthWest: Ocean Parade (NW)														
10	L2	483	0	508	0.0	0.288	3.5	LOS A	0.0	0.0	0.00	0.43	0.00	38.7
11	T1	27	0	28	0.0	0.288	0.1	LOS A	0.0	0.0	0.00	0.43	0.00	38.5
Approach		510	0	537	0.0	0.288	3.3	NA	0.0	0.0	0.00	0.43	0.00	38.7
All Vehicles		883	0	929	0.0	0.288	3.5	NA	1.2	8.2	0.05	0.45	0.05	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 AM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	37	0	39	0.0	0.119	16.3	LOS C	0.4	2.6	0.74	1.02	0.74	37.7
6	R2	1	0	1	0.0	0.119	19.0	LOS C	0.4	2.6	0.74	1.02	0.74	37.6
Approach		38	0	40	0.0	0.119	16.4	LOS C	0.4	2.6	0.74	1.02	0.74	37.7
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.480	3.5	LOS A	3.6	25.5	0.10	0.47	0.10	42.0
9	R2	810	0	853	0.0	0.480	3.6	LOS A	3.6	25.5	0.10	0.47	0.10	38.2
Approach		811	0	854	0.0	0.480	3.6	NA	3.6	25.5	0.10	0.47	0.10	38.2
NorthWest: Ocean Parade (NW)														
10	L2	198	0	208	0.0	0.119	3.4	LOS A	0.0	0.0	0.00	0.43	0.00	38.8
11	T1	13	0	14	0.0	0.119	0.0	LOS A	0.0	0.0	0.00	0.43	0.00	38.6
Approach		211	0	222	0.0	0.119	3.2	NA	0.0	0.0	0.00	0.43	0.00	38.8
All Vehicles		1060	0	1116	0.0	0.480	4.0	NA	3.6	25.5	0.10	0.48	0.10	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2024 PM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	16	0	17	0.0	0.025	9.4	LOS A	0.1	0.6	0.45	0.94	0.45	40.2
6	R2	1	0	1	0.0	0.025	13.1	LOS B	0.1	0.6	0.45	0.94	0.45	40.1
Approach		17	0	18	0.0	0.025	9.7	LOS A	0.1	0.6	0.45	0.94	0.45	40.2
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.231	3.6	LOS A	1.3	8.9	0.13	0.47	0.13	42.0
9	R2	383	0	403	0.0	0.231	3.7	LOS A	1.3	8.9	0.13	0.47	0.13	38.1
Approach		384	0	404	0.0	0.231	3.7	NA	1.3	8.9	0.13	0.47	0.13	38.1
NorthWest: Ocean Parade (NW)														
10	L2	393	0	414	0.0	0.240	3.5	LOS A	0.0	0.0	0.00	0.42	0.00	38.7
11	T1	32	0	34	0.0	0.240	0.1	LOS A	0.0	0.0	0.00	0.42	0.00	38.6
Approach		425	0	447	0.0	0.240	3.2	NA	0.0	0.0	0.00	0.42	0.00	38.7
All Vehicles		826	0	869	0.0	0.240	3.6	NA	1.3	8.9	0.07	0.45	0.07	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 AM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	44	0	46	0.0	0.056	8.9	LOS A	0.2	1.4	0.39	0.95	0.39	40.5
6	R2	1	0	1	0.0	0.056	9.4	LOS A	0.2	1.4	0.39	0.95	0.39	40.4
Approach		45	0	47	0.0	0.056	8.9	LOS A	0.2	1.4	0.39	0.95	0.39	40.5
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.178	3.5	LOS A	0.9	6.5	0.08	0.47	0.08	42.1
9	R2	299	0	315	0.0	0.178	3.6	LOS A	0.9	6.5	0.08	0.47	0.08	38.2
Approach		300	0	316	0.0	0.178	3.6	NA	0.9	6.5	0.08	0.47	0.08	38.2
NorthWest: Ocean Parade (NW)														
10	L2	110	0	116	0.0	0.070	3.4	LOS A	0.0	0.0	0.00	0.40	0.00	38.9
11	T1	15	0	16	0.0	0.070	0.0	LOS A	0.0	0.0	0.00	0.40	0.00	38.7
Approach		125	0	132	0.0	0.070	3.0	NA	0.0	0.0	0.00	0.40	0.00	38.8
All Vehicles		470	0	495	0.0	0.178	3.9	NA	0.9	6.5	0.09	0.50	0.09	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2026 PM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	10	0	11	0.0	0.012	8.0	LOS A	0.0	0.3	0.28	0.93	0.28	40.7
6	R2	1	0	1	0.0	0.012	8.6	LOS A	0.0	0.3	0.28	0.93	0.28	40.6
Approach		11	0	12	0.0	0.012	8.0	LOS A	0.0	0.3	0.28	0.93	0.28	40.7
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.103	3.6	LOS A	0.5	3.5	0.13	0.47	0.13	42.0
9	R2	168	0	177	0.0	0.103	3.7	LOS A	0.5	3.5	0.13	0.47	0.13	38.1
Approach		169	0	178	0.0	0.103	3.7	NA	0.5	3.5	0.13	0.47	0.13	38.1
NorthWest: Ocean Parade (NW)														
10	L2	121	0	127	0.0	0.091	3.4	LOS A	0.0	0.0	0.00	0.34	0.00	39.0
11	T1	42	0	44	0.0	0.091	0.0	LOS A	0.0	0.0	0.00	0.34	0.00	38.9
Approach		163	0	172	0.0	0.091	2.6	NA	0.0	0.0	0.00	0.34	0.00	39.0
All Vehicles		343	0	361	0.0	0.103	3.3	NA	0.5	3.5	0.07	0.42	0.07	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 AM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	42	0	44	0.0	0.056	9.1	LOS A	0.2	1.4	0.42	0.95	0.42	40.4
6	R2	1	0	1	0.0	0.056	9.5	LOS A	0.2	1.4	0.42	0.95	0.42	40.3
Approach		43	0	45	0.0	0.056	9.2	LOS A	0.2	1.4	0.42	0.95	0.42	40.4
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.200	3.5	LOS A	1.1	7.5	0.10	0.47	0.10	42.0
9	R2	335	0	353	0.0	0.200	3.6	LOS A	1.1	7.5	0.10	0.47	0.10	38.2
Approach		336	0	354	0.0	0.200	3.6	NA	1.1	7.5	0.10	0.47	0.10	38.2
NorthWest: Ocean Parade (NW)														
10	L2	76	0	80	0.0	0.054	3.4	LOS A	0.0	0.0	0.00	0.36	0.00	39.0
11	T1	21	0	22	0.0	0.054	0.0	LOS A	0.0	0.0	0.00	0.36	0.00	38.9
Approach		97	0	102	0.0	0.054	2.7	NA	0.0	0.0	0.00	0.36	0.00	39.0
All Vehicles		476	0	501	0.0	0.200	3.9	NA	1.1	7.5	0.11	0.49	0.11	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3 [2041 PM (Site Folder: Option 3Av)]

Reserve Street / Ocean Parade
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Ocean Parade (SE)														
5	T1	33	0	35	0.0	0.035	7.8	LOS A	0.1	0.9	0.25	0.95	0.25	40.8
6	R2	1	0	1	0.0	0.035	8.6	LOS A	0.1	0.9	0.25	0.95	0.25	40.7
Approach		34	0	36	0.0	0.035	7.9	LOS A	0.1	0.9	0.25	0.95	0.25	40.8
NorthEast: Reserve St (NE)														
7	L2	1	0	1	0.0	0.086	3.5	LOS A	0.4	2.9	0.11	0.47	0.11	42.0
9	R2	141	0	148	0.0	0.086	3.6	LOS A	0.4	2.9	0.11	0.47	0.11	38.2
Approach		142	0	149	0.0	0.086	3.6	NA	0.4	2.9	0.11	0.47	0.11	38.2
NorthWest: Ocean Parade (NW)														
10	L2	145	0	153	0.0	0.101	3.4	LOS A	0.0	0.0	0.00	0.37	0.00	38.9
11	T1	34	0	36	0.0	0.101	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	38.8
Approach		179	0	188	0.0	0.101	2.8	NA	0.0	0.0	0.00	0.37	0.00	38.9
All Vehicles		355	0	374	0.0	0.101	3.6	NA	0.4	2.9	0.07	0.47	0.07	38.8

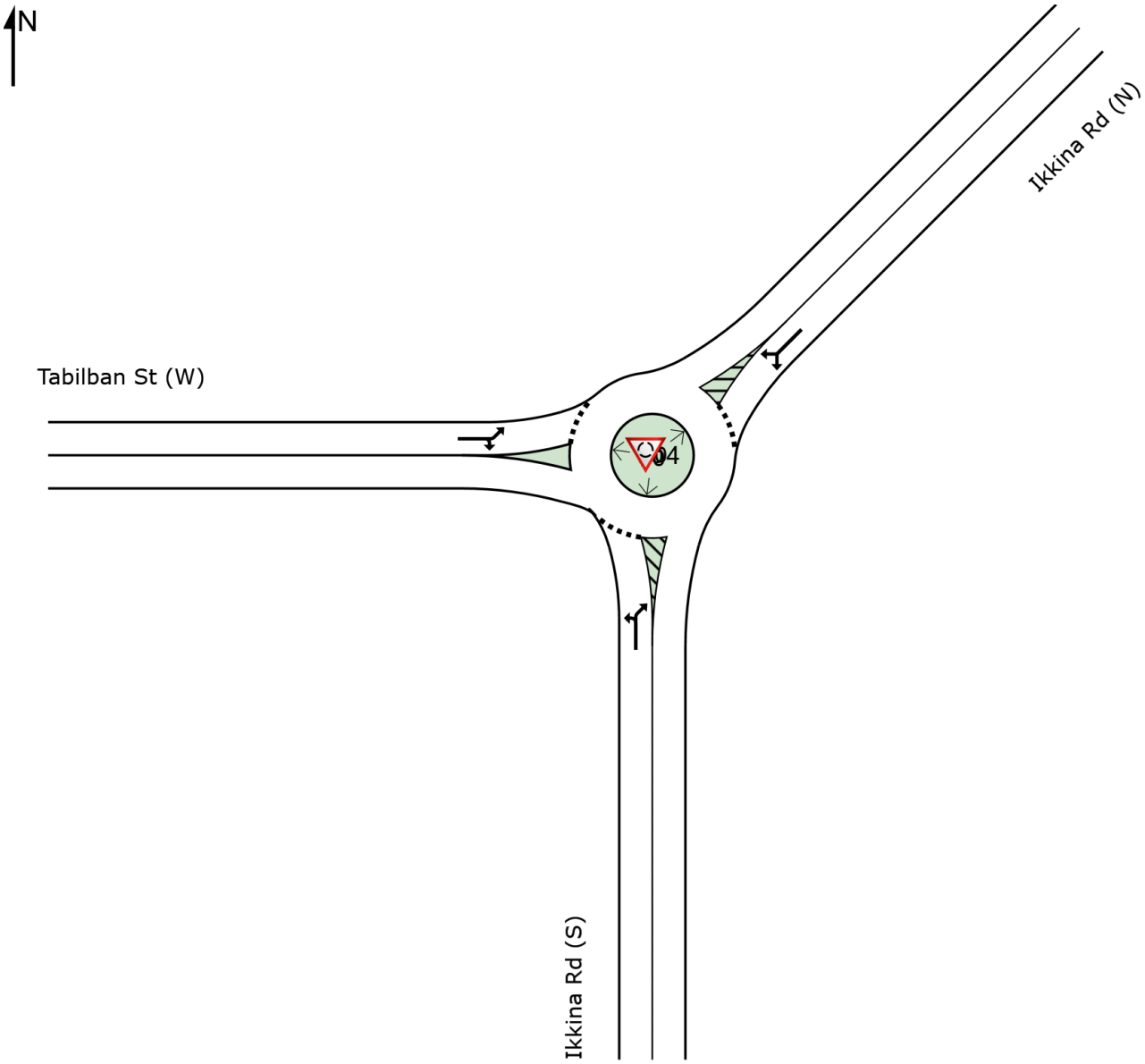
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 4 [2021 AM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

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



MOVEMENT SUMMARY

Site: 4 [2021 AM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.026	6.6	LOS A	0.1	1.0	0.56	0.67	0.56	45.7
3a	R1	19	2	20	10.5	0.026	9.4	LOS A	0.1	1.0	0.56	0.67	0.56	36.5
Approach		20	2	21	10.0	0.026	9.3	LOS A	0.1	1.0	0.56	0.67	0.56	37.2
NorthEast: Ikkina Rd (N)														
24a	L1	11	1	12	9.1	0.327	4.4	LOS A	2.1	14.6	0.05	0.63	0.05	40.2
26a	R1	507	0	534	0.0	0.327	7.2	LOS A	2.1	14.6	0.05	0.63	0.05	50.3
Approach		518	1	545	0.2	0.327	7.1	LOS A	2.1	14.6	0.05	0.63	0.05	50.1
West: Tabilban St (W)														
10a	L1	173	0	182	0.0	0.129	4.4	LOS A	0.8	5.3	0.12	0.47	0.12	53.0
12	R2	4	0	4	0.0	0.129	8.1	LOS A	0.8	5.3	0.12	0.47	0.12	49.2
Approach		177	0	186	0.0	0.129	4.5	LOS A	0.8	5.3	0.12	0.47	0.12	53.0
All Vehicles		715	3	753	0.4	0.327	6.5	LOS A	2.1	14.6	0.08	0.59	0.08	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:24:37 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2021 PM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	4	0	4	0.0	0.028	5.7	LOS A	0.1	0.9	0.48	0.64	0.48	47.1
3a	R1	21	0	22	0.0	0.028	8.4	LOS A	0.1	0.9	0.48	0.64	0.48	40.1
Approach		25	0	26	0.0	0.028	7.9	LOS A	0.1	0.9	0.48	0.64	0.48	41.7
NorthEast: Ikkina Rd (N)														
24a	L1	18	0	19	0.0	0.245	4.3	LOS A	1.4	10.0	0.02	0.64	0.02	40.7
26a	R1	376	0	396	0.0	0.245	7.2	LOS A	1.4	10.0	0.02	0.64	0.02	50.4
Approach		394	0	415	0.0	0.245	7.0	LOS A	1.4	10.0	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	413	0	435	0.0	0.287	4.4	LOS A	2.0	13.8	0.14	0.46	0.14	53.0
12	R2	1	0	1	0.0	0.287	8.1	LOS A	2.0	13.8	0.14	0.46	0.14	49.2
Approach		414	0	436	0.0	0.287	4.4	LOS A	2.0	13.8	0.14	0.46	0.14	53.0
All Vehicles		833	0	877	0.0	0.287	5.8	LOS A	2.0	13.8	0.09	0.55	0.09	51.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 AM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.018	5.2	LOS A	0.1	0.6	0.42	0.61	0.42	47.4
3a	R1	16	0	17	0.0	0.018	7.8	LOS A	0.1	0.6	0.42	0.61	0.42	40.5
Approach		17	0	18	0.0	0.018	7.7	LOS A	0.1	0.6	0.42	0.61	0.42	41.1
NorthEast: Ikkina Rd (N)														
24a	L1	12	4	13	33.3	0.187	4.7	LOS A	1.0	7.2	0.02	0.64	0.02	39.8
26a	R1	287	0	302	0.0	0.187	7.2	LOS A	1.0	7.2	0.02	0.64	0.02	50.4
Approach		299	4	315	1.3	0.187	7.1	LOS A	1.0	7.2	0.02	0.64	0.02	50.1
West: Tabilban St (W)														
10a	L1	196	0	206	0.0	0.139	4.4	LOS A	0.8	5.6	0.10	0.47	0.10	53.2
12	R2	1	0	1	0.0	0.139	8.1	LOS A	0.8	5.6	0.10	0.47	0.10	49.4
Approach		197	0	207	0.0	0.139	4.4	LOS A	0.8	5.6	0.10	0.47	0.10	53.2
All Vehicles		513	4	540	0.8	0.187	6.1	LOS A	1.0	7.2	0.06	0.57	0.06	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 PM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	2	0	2	0.0	0.023	5.8	LOS A	0.1	0.8	0.49	0.64	0.49	46.8
3a	R1	18	0	19	0.0	0.023	8.4	LOS A	0.1	0.8	0.49	0.64	0.49	39.7
Approach		20	0	21	0.0	0.023	8.2	LOS A	0.1	0.8	0.49	0.64	0.49	40.8
NorthEast: Ikkina Rd (N)														
24a	L1	21	2	22	9.5	0.260	4.4	LOS A	1.5	10.8	0.03	0.63	0.03	40.4
26a	R1	393	2	414	0.5	0.260	7.2	LOS A	1.5	10.8	0.03	0.63	0.03	50.4
Approach		414	4	436	1.0	0.260	7.0	LOS A	1.5	10.8	0.03	0.63	0.03	50.1
West: Tabilban St (W)														
10a	L1	390	0	411	0.0	0.269	4.4	LOS A	1.8	12.8	0.12	0.46	0.12	53.1
12	R2	2	0	2	0.0	0.269	8.1	LOS A	1.8	12.8	0.12	0.46	0.12	49.3
Approach		392	0	413	0.0	0.269	4.4	LOS A	1.8	12.8	0.12	0.46	0.12	53.1
All Vehicles		826	4	869	0.5	0.269	5.8	LOS A	1.8	12.8	0.08	0.55	0.08	51.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:24:40 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2026 AM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.024	5.2	LOS A	0.1	0.8	0.42	0.62	0.42	47.3
3a	R1	22	1	23	4.5	0.024	7.9	LOS A	0.1	0.8	0.42	0.62	0.42	39.5
Approach		23	1	24	4.3	0.024	7.8	LOS A	0.1	0.8	0.42	0.62	0.42	40.0
NorthEast: Ikkina Rd (N)														
24a	L1	5	0	5	0.0	0.180	4.3	LOS A	1.0	6.8	0.02	0.64	0.02	40.6
26a	R1	285	0	300	0.0	0.180	7.2	LOS A	1.0	6.8	0.02	0.64	0.02	50.3
Approach		290	0	305	0.0	0.180	7.1	LOS A	1.0	6.8	0.02	0.64	0.02	50.3
West: Tabilban St (W)														
10a	L1	98	0	103	0.0	0.075	4.4	LOS A	0.4	2.8	0.12	0.47	0.12	53.1
12	R2	1	0	1	0.0	0.075	8.1	LOS A	0.4	2.8	0.12	0.47	0.12	49.3
Approach		99	0	104	0.0	0.075	4.5	LOS A	0.4	2.8	0.12	0.47	0.12	53.0
All Vehicles		412	1	434	0.2	0.180	6.5	LOS A	1.0	6.8	0.06	0.60	0.06	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:24:40 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2026 PM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.026	4.5	LOS A	0.1	0.8	0.30	0.60	0.30	47.8
3a	R1	27	0	28	0.0	0.026	7.1	LOS A	0.1	0.8	0.30	0.60	0.30	41.1
Approach		28	0	29	0.0	0.026	7.0	LOS A	0.1	0.8	0.30	0.60	0.30	41.5
NorthEast: Ikkina Rd (N)														
24a	L1	10	5	11	50.0	0.099	4.8	LOS A	0.5	3.7	0.02	0.64	0.02	39.5
26a	R1	143	5	151	3.5	0.099	7.2	LOS A	0.5	3.7	0.02	0.64	0.02	50.2
Approach		153	10	161	6.5	0.099	7.0	LOS A	0.5	3.7	0.02	0.64	0.02	49.8
West: Tabilban St (W)														
10a	L1	148	0	156	0.0	0.112	4.4	LOS A	0.6	4.2	0.13	0.47	0.13	53.0
12	R2	1	0	1	0.0	0.112	8.1	LOS A	0.6	4.2	0.13	0.47	0.13	49.2
Approach		149	0	157	0.0	0.112	4.5	LOS A	0.6	4.2	0.13	0.47	0.13	53.0
All Vehicles		330	10	347	3.0	0.112	5.9	LOS A	0.6	4.2	0.09	0.56	0.09	50.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2041 AM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.029	5.4	LOS A	0.1	0.9	0.44	0.63	0.44	47.1
3a	R1	26	0	27	0.0	0.029	8.0	LOS A	0.1	0.9	0.44	0.63	0.44	40.1
Approach		27	0	28	0.0	0.029	7.9	LOS A	0.1	0.9	0.44	0.63	0.44	40.5
NorthEast: Ikkina Rd (N)														
24a	L1	16	5	17	31.3	0.211	4.6	LOS A	1.2	8.4	0.02	0.64	0.02	39.9
26a	R1	322	0	339	0.0	0.211	7.2	LOS A	1.2	8.4	0.02	0.64	0.02	50.4
Approach		338	5	356	1.5	0.211	7.0	LOS A	1.2	8.4	0.02	0.64	0.02	50.1
West: Tabilban St (W)														
10a	L1	68	0	72	0.0	0.054	4.4	LOS A	0.3	2.0	0.13	0.46	0.13	53.0
12	R2	1	0	1	0.0	0.054	8.1	LOS A	0.3	2.0	0.13	0.46	0.13	49.2
Approach		69	0	73	0.0	0.054	4.5	LOS A	0.3	2.0	0.13	0.46	0.13	53.0
All Vehicles		434	5	457	1.2	0.211	6.7	LOS A	1.2	8.4	0.06	0.61	0.06	50.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:24:41 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2041 PM (Site Folder: Option 3Ai)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.021	4.4	LOS A	0.1	0.7	0.28	0.58	0.28	47.9
3a	R1	20	3	21	15.0	0.021	7.0	LOS A	0.1	0.7	0.28	0.58	0.28	38.4
Approach		21	3	22	14.3	0.021	6.9	LOS A	0.1	0.7	0.28	0.58	0.28	39.1
NorthEast: Ikkina Rd (N)														
24a	L1	34	5	36	14.7	0.100	4.5	LOS A	0.5	3.6	0.02	0.62	0.02	40.9
26a	R1	124	0	131	0.0	0.100	7.2	LOS A	0.5	3.6	0.02	0.62	0.02	50.8
Approach		158	5	166	3.2	0.100	6.6	LOS A	0.5	3.6	0.02	0.62	0.02	49.6
West: Tabilban St (W)														
10a	L1	130	0	137	0.0	0.097	4.4	LOS A	0.5	3.6	0.11	0.47	0.11	53.1
12	R2	1	0	1	0.0	0.097	8.1	LOS A	0.5	3.6	0.11	0.47	0.11	49.3
Approach		131	0	138	0.0	0.097	4.4	LOS A	0.5	3.6	0.11	0.47	0.11	53.1
All Vehicles		310	8	326	2.6	0.100	5.7	LOS A	0.5	3.6	0.07	0.55	0.07	50.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:24:42 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2021 AM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.038	8.3	LOS A	0.2	1.5	0.66	0.73	0.66	44.0
3a	R1	24	2	25	8.3	0.038	11.2	LOS B	0.2	1.5	0.66	0.73	0.66	34.8
Approach		25	2	26	8.0	0.038	11.1	LOS B	0.2	1.5	0.66	0.73	0.66	35.3
NorthEast: Ikkina Rd (N)														
24a	L1	10	1	11	10.0	0.447	4.4	LOS A	3.4	23.6	0.04	0.63	0.04	40.2
26a	R1	706	0	743	0.0	0.447	7.2	LOS A	3.4	23.6	0.04	0.63	0.04	50.2
Approach		716	1	754	0.1	0.447	7.1	LOS A	3.4	23.6	0.04	0.63	0.04	50.2
West: Tabilban St (W)														
10a	L1	221	0	233	0.0	0.163	4.4	LOS A	1.0	7.2	0.14	0.46	0.14	52.9
12	R2	3	0	3	0.0	0.163	8.1	LOS A	1.0	7.2	0.14	0.46	0.14	49.1
Approach		224	0	236	0.0	0.163	4.5	LOS A	1.0	7.2	0.14	0.46	0.14	52.9
All Vehicles		965	3	1016	0.3	0.447	6.6	LOS A	3.4	23.6	0.08	0.59	0.08	50.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:29:16 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2021 PM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.028	5.8	LOS A	0.1	0.9	0.48	0.64	0.48	46.7
3a	R1	24	0	25	0.0	0.028	8.4	LOS A	0.1	0.9	0.48	0.64	0.48	39.6
Approach		25	0	26	0.0	0.028	8.3	LOS A	0.1	0.9	0.48	0.64	0.48	40.1
NorthEast: Ikkina Rd (N)														
24a	L1	17	0	18	0.0	0.249	4.3	LOS A	1.5	10.2	0.02	0.64	0.02	40.7
26a	R1	384	0	404	0.0	0.249	7.2	LOS A	1.5	10.2	0.02	0.64	0.02	50.4
Approach		401	0	422	0.0	0.249	7.0	LOS A	1.5	10.2	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	476	0	501	0.0	0.331	4.4	LOS A	2.4	16.8	0.16	0.46	0.16	52.9
12	R2	1	0	1	0.0	0.331	8.1	LOS A	2.4	16.8	0.16	0.46	0.16	49.1
Approach		477	0	502	0.0	0.331	4.5	LOS A	2.4	16.8	0.16	0.46	0.16	52.9
All Vehicles		903	0	951	0.0	0.331	5.7	LOS A	2.4	16.8	0.10	0.55	0.10	51.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 AM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	3	0	3	0.0	0.043	9.3	LOS A	0.2	1.7	0.69	0.75	0.69	43.3
3a	R1	23	2	24	8.7	0.043	12.3	LOS B	0.2	1.7	0.69	0.75	0.69	33.8
Approach		26	2	27	7.7	0.043	12.0	LOS B	0.2	1.7	0.69	0.75	0.69	35.4
NorthEast: Ikkina Rd (N)														
24a	L1	10	1	11	10.0	0.498	4.4	LOS A	4.1	28.5	0.02	0.64	0.02	40.3
26a	R1	793	0	835	0.0	0.498	7.2	LOS A	4.1	28.5	0.02	0.64	0.02	50.3
Approach		803	1	845	0.1	0.498	7.1	LOS A	4.1	28.5	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	250	0	263	0.0	0.181	4.4	LOS A	1.2	8.2	0.14	0.46	0.14	53.0
12	R2	1	0	1	0.0	0.181	8.1	LOS A	1.2	8.2	0.14	0.46	0.14	49.2
Approach		251	0	264	0.0	0.181	4.4	LOS A	1.2	8.2	0.14	0.46	0.14	53.0
All Vehicles		1080	3	1137	0.3	0.498	6.6	LOS A	4.1	28.5	0.07	0.60	0.07	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 PM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.025	5.9	LOS A	0.1	0.8	0.49	0.64	0.49	46.7
3a	R1	21	0	22	0.0	0.025	8.5	LOS A	0.1	0.8	0.49	0.64	0.49	39.5
Approach		22	0	23	0.0	0.025	8.4	LOS A	0.1	0.8	0.49	0.64	0.49	40.0
NorthEast: Ikkina Rd (N)														
24a	L1	20	0	21	0.0	0.261	4.3	LOS A	1.5	10.8	0.02	0.64	0.02	40.7
26a	R1	401	0	422	0.0	0.261	7.2	LOS A	1.5	10.8	0.02	0.64	0.02	50.4
Approach		421	0	443	0.0	0.261	7.0	LOS A	1.5	10.8	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	364	0	383	0.0	0.254	4.4	LOS A	1.7	11.9	0.13	0.46	0.13	53.0
12	R2	1	0	1	0.0	0.254	8.1	LOS A	1.7	11.9	0.13	0.46	0.13	49.2
Approach		365	0	384	0.0	0.254	4.4	LOS A	1.7	11.9	0.13	0.46	0.13	53.0
All Vehicles		808	0	851	0.0	0.261	5.9	LOS A	1.7	11.9	0.08	0.56	0.08	51.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:29:18 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2026 AM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	2	0	2	0.0	0.026	5.2	LOS A	0.1	0.9	0.43	0.62	0.43	47.3
3a	R1	22	2	23	9.1	0.026	8.0	LOS A	0.1	0.9	0.43	0.62	0.43	38.7
Approach		24	2	25	8.3	0.026	7.7	LOS A	0.1	0.9	0.43	0.62	0.43	39.7
NorthEast: Ikkina Rd (N)														
24a	L1	5	1	5	20.0	0.187	4.5	LOS A	1.0	7.2	0.03	0.63	0.03	40.0
26a	R1	290	0	305	0.0	0.187	7.2	LOS A	1.0	7.2	0.03	0.63	0.03	50.3
Approach		295	1	311	0.3	0.187	7.1	LOS A	1.0	7.2	0.03	0.63	0.03	50.2
West: Tabilban St (W)														
10a	L1	107	0	113	0.0	0.083	4.4	LOS A	0.5	3.2	0.12	0.47	0.12	53.0
12	R2	3	0	3	0.0	0.083	8.1	LOS A	0.5	3.2	0.12	0.47	0.12	49.2
Approach		110	0	116	0.0	0.083	4.5	LOS A	0.5	3.2	0.12	0.47	0.12	52.9
All Vehicles		429	3	452	0.7	0.187	6.5	LOS A	1.0	7.2	0.08	0.59	0.08	50.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2026 PM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.015	4.6	LOS A	0.1	0.5	0.31	0.59	0.31	47.8
3a	R1	15	0	16	0.0	0.015	7.2	LOS A	0.1	0.5	0.31	0.59	0.31	41.1
Approach		16	0	17	0.0	0.015	7.0	LOS A	0.1	0.5	0.31	0.59	0.31	41.8
NorthEast: Ikkina Rd (N)														
24a	L1	17	0	18	0.0	0.114	4.3	LOS A	0.6	4.0	0.02	0.64	0.02	40.9
26a	R1	166	0	175	0.0	0.114	7.2	LOS A	0.6	4.0	0.02	0.64	0.02	50.6
Approach		183	0	193	0.0	0.114	6.9	LOS A	0.6	4.0	0.02	0.64	0.02	50.1
West: Tabilban St (W)														
10a	L1	111	0	117	0.0	0.082	4.4	LOS A	0.4	3.0	0.09	0.47	0.09	53.2
12	R2	1	0	1	0.0	0.082	8.1	LOS A	0.4	3.0	0.09	0.47	0.09	49.4
Approach		112	0	118	0.0	0.082	4.4	LOS A	0.4	3.0	0.09	0.47	0.09	53.2
All Vehicles		311	0	327	0.0	0.114	6.0	LOS A	0.6	4.0	0.06	0.57	0.06	51.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2041 AM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.030	5.4	LOS A	0.1	1.0	0.45	0.63	0.45	47.0
3a	R1	26	2	27	7.7	0.030	8.1	LOS A	0.1	1.0	0.45	0.63	0.45	38.5
Approach		27	2	28	7.4	0.030	8.0	LOS A	0.1	1.0	0.45	0.63	0.45	39.0
NorthEast: Ikkina Rd (N)														
24a	L1	16	1	17	6.3	0.210	4.4	LOS A	1.2	8.2	0.02	0.64	0.02	40.5
26a	R1	321	0	338	0.0	0.210	7.2	LOS A	1.2	8.2	0.02	0.64	0.02	50.4
Approach		337	1	355	0.3	0.210	7.0	LOS A	1.2	8.2	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	71	0	75	0.0	0.057	4.4	LOS A	0.3	2.1	0.13	0.46	0.13	53.0
12	R2	1	0	1	0.0	0.057	8.1	LOS A	0.3	2.1	0.13	0.46	0.13	49.2
Approach		72	0	76	0.0	0.057	4.5	LOS A	0.3	2.1	0.13	0.46	0.13	53.0
All Vehicles		436	3	459	0.7	0.210	6.7	LOS A	1.2	8.2	0.06	0.61	0.06	50.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:29:20 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2041 PM (Site Folder: Option 3Aii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.030	4.4	LOS A	0.1	1.0	0.29	0.60	0.29	47.8
3a	R1	32	0	34	0.0	0.030	7.1	LOS A	0.1	1.0	0.29	0.60	0.29	41.1
Approach		33	0	35	0.0	0.030	7.0	LOS A	0.1	1.0	0.29	0.60	0.29	41.4
NorthEast: Ikkina Rd (N)														
24a	L1	21	0	22	0.0	0.101	4.3	LOS A	0.5	3.6	0.02	0.63	0.02	41.0
26a	R1	141	0	148	0.0	0.101	7.2	LOS A	0.5	3.6	0.02	0.63	0.02	50.6
Approach		162	0	171	0.0	0.101	6.8	LOS A	0.5	3.6	0.02	0.63	0.02	50.0
West: Tabilban St (W)														
10a	L1	109	0	115	0.0	0.086	4.5	LOS A	0.4	3.1	0.14	0.47	0.14	53.0
12	R2	1	0	1	0.0	0.086	8.1	LOS A	0.4	3.1	0.14	0.47	0.14	49.1
Approach		110	0	116	0.0	0.086	4.5	LOS A	0.4	3.1	0.14	0.47	0.14	52.9
All Vehicles		305	0	321	0.0	0.101	6.0	LOS A	0.5	3.6	0.09	0.57	0.09	50.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2021 AM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.038	8.4	LOS A	0.2	1.5	0.65	0.73	0.65	44.0
3a	R1	24	2	25	8.3	0.038	11.3	LOS B	0.2	1.5	0.65	0.73	0.65	34.8
Approach		25	2	26	8.0	0.038	11.1	LOS B	0.2	1.5	0.65	0.73	0.65	35.3
NorthEast: Ikkina Rd (N)														
24a	L1	12	1	13	8.3	0.447	4.4	LOS A	3.4	23.6	0.02	0.64	0.02	40.4
26a	R1	709	0	746	0.0	0.447	7.2	LOS A	3.4	23.6	0.02	0.64	0.02	50.3
Approach		721	1	759	0.1	0.447	7.1	LOS A	3.4	23.6	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	211	0	222	0.0	0.155	4.4	LOS A	1.0	6.8	0.14	0.46	0.14	53.0
12	R2	1	0	1	0.0	0.155	8.1	LOS A	1.0	6.8	0.14	0.46	0.14	49.2
Approach		212	0	223	0.0	0.155	4.5	LOS A	1.0	6.8	0.14	0.46	0.14	53.0
All Vehicles		958	3	1008	0.3	0.447	6.6	LOS A	3.4	23.6	0.07	0.60	0.07	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2021 PM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.026	5.8	LOS A	0.1	0.9	0.49	0.64	0.49	46.7
3a	R1	22	0	23	0.0	0.026	8.5	LOS A	0.1	0.9	0.49	0.64	0.49	39.6
Approach		23	0	24	0.0	0.026	8.3	LOS A	0.1	0.9	0.49	0.64	0.49	40.0
NorthEast: Ikkina Rd (N)														
24a	L1	17	0	18	0.0	0.254	4.3	LOS A	1.5	10.5	0.02	0.64	0.02	40.7
26a	R1	393	0	414	0.0	0.254	7.2	LOS A	1.5	10.5	0.02	0.64	0.02	50.4
Approach		410	0	432	0.0	0.254	7.0	LOS A	1.5	10.5	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	475	0	500	0.0	0.328	4.4	LOS A	2.4	16.7	0.15	0.46	0.15	53.0
12	R2	1	0	1	0.0	0.328	8.1	LOS A	2.4	16.7	0.15	0.46	0.15	49.1
Approach		476	0	501	0.0	0.328	4.4	LOS A	2.4	16.7	0.15	0.46	0.15	53.0
All Vehicles		909	0	957	0.0	0.328	5.7	LOS A	2.4	16.7	0.10	0.55	0.10	51.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 AM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	3	0	3	0.0	0.044	9.0	LOS A	0.2	1.7	0.68	0.74	0.68	43.8
3a	R1	26	0	27	0.0	0.044	11.7	LOS B	0.2	1.7	0.68	0.74	0.68	35.7
Approach		29	0	31	0.0	0.044	11.4	LOS B	0.2	1.7	0.68	0.74	0.68	36.9
NorthEast: Ikkina Rd (N)														
24a	L1	10	4	11	40.0	0.483	4.7	LOS A	3.8	27.1	0.02	0.64	0.02	39.6
26a	R1	767	0	807	0.0	0.483	7.2	LOS A	3.8	27.1	0.02	0.64	0.02	50.3
Approach		777	4	818	0.5	0.483	7.1	LOS A	3.8	27.1	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	207	0	218	0.0	0.153	4.4	LOS A	1.0	6.7	0.15	0.46	0.15	53.0
12	R2	1	0	1	0.0	0.153	8.1	LOS A	1.0	6.7	0.15	0.46	0.15	49.1
Approach		208	0	219	0.0	0.153	4.5	LOS A	1.0	6.7	0.15	0.46	0.15	52.9
All Vehicles		1014	4	1067	0.4	0.483	6.7	LOS A	3.8	27.1	0.07	0.61	0.07	50.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 PM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.025	5.9	LOS A	0.1	0.8	0.50	0.64	0.50	46.6
3a	R1	21	0	22	0.0	0.025	8.5	LOS A	0.1	0.8	0.50	0.64	0.50	39.5
Approach		22	0	23	0.0	0.025	8.4	LOS A	0.1	0.8	0.50	0.64	0.50	40.0
NorthEast: Ikkina Rd (N)														
24a	L1	21	2	22	9.5	0.278	4.5	LOS A	1.7	11.8	0.07	0.62	0.07	40.2
26a	R1	402	2	423	0.5	0.278	7.2	LOS A	1.7	11.8	0.07	0.62	0.07	50.2
Approach		423	4	445	0.9	0.278	7.1	LOS A	1.7	11.8	0.07	0.62	0.07	49.9
West: Tabilban St (W)														
10a	L1	373	0	393	0.0	0.266	4.4	LOS A	1.8	12.5	0.13	0.47	0.13	53.0
12	R2	9	0	9	0.0	0.266	8.1	LOS A	1.8	12.5	0.13	0.47	0.13	49.1
Approach		382	0	402	0.0	0.266	4.5	LOS A	1.8	12.5	0.13	0.47	0.13	52.9
All Vehicles		827	4	871	0.5	0.278	5.9	LOS A	1.8	12.5	0.11	0.55	0.11	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:34:39 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2026 AM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	2	0	2	0.0	0.025	5.3	LOS A	0.1	0.8	0.43	0.62	0.43	47.3
3a	R1	21	1	22	4.8	0.025	8.0	LOS A	0.1	0.8	0.43	0.62	0.43	39.4
Approach		23	1	24	4.3	0.025	7.8	LOS A	0.1	0.8	0.43	0.62	0.43	40.5
NorthEast: Ikkina Rd (N)														
24a	L1	5	0	5	0.0	0.192	4.3	LOS A	1.0	7.3	0.02	0.64	0.02	40.6
26a	R1	304	0	320	0.0	0.192	7.2	LOS A	1.0	7.3	0.02	0.64	0.02	50.3
Approach		309	0	325	0.0	0.192	7.1	LOS A	1.0	7.3	0.02	0.64	0.02	50.3
West: Tabilban St (W)														
10a	L1	105	0	111	0.0	0.080	4.4	LOS A	0.4	3.0	0.12	0.47	0.12	53.1
12	R2	1	0	1	0.0	0.080	8.1	LOS A	0.4	3.0	0.12	0.47	0.12	49.3
Approach		106	0	112	0.0	0.080	4.4	LOS A	0.4	3.0	0.12	0.47	0.12	53.1
All Vehicles		438	1	461	0.2	0.192	6.5	LOS A	1.0	7.3	0.06	0.60	0.06	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2026 PM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.015	4.6	LOS A	0.1	0.5	0.32	0.59	0.32	47.8
3a	R1	15	0	16	0.0	0.015	7.2	LOS A	0.1	0.5	0.32	0.59	0.32	41.1
Approach		16	0	17	0.0	0.015	7.0	LOS A	0.1	0.5	0.32	0.59	0.32	41.8
NorthEast: Ikkina Rd (N)														
24a	L1	17	1	18	5.9	0.117	4.4	LOS A	0.6	4.2	0.02	0.64	0.02	40.7
26a	R1	169	2	178	1.2	0.117	7.2	LOS A	0.6	4.2	0.02	0.64	0.02	50.5
Approach		186	3	196	1.6	0.117	6.9	LOS A	0.6	4.2	0.02	0.64	0.02	50.0
West: Tabilban St (W)														
10a	L1	106	0	112	0.0	0.078	4.4	LOS A	0.4	2.9	0.09	0.47	0.09	53.2
12	R2	1	0	1	0.0	0.078	8.1	LOS A	0.4	2.9	0.09	0.47	0.09	49.4
Approach		107	0	113	0.0	0.078	4.4	LOS A	0.4	2.9	0.09	0.47	0.09	53.2
All Vehicles		309	3	325	1.0	0.117	6.1	LOS A	0.6	4.2	0.06	0.58	0.06	50.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2041 AM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	3	0	3	0.0	0.031	5.4	LOS A	0.1	1.0	0.44	0.63	0.44	47.3
3a	R1	26	0	27	0.0	0.031	8.0	LOS A	0.1	1.0	0.44	0.63	0.44	40.3
Approach		29	0	31	0.0	0.031	7.8	LOS A	0.1	1.0	0.44	0.63	0.44	41.4
NorthEast: Ikkina Rd (N)														
24a	L1	16	5	17	31.3	0.217	4.6	LOS A	1.2	8.7	0.04	0.63	0.04	39.8
26a	R1	322	0	339	0.0	0.217	7.2	LOS A	1.2	8.7	0.04	0.63	0.04	50.3
Approach		338	5	356	1.5	0.217	7.1	LOS A	1.2	8.7	0.04	0.63	0.04	50.0
West: Tabilban St (W)														
10a	L1	68	0	72	0.0	0.056	4.4	LOS A	0.3	2.1	0.13	0.47	0.13	52.9
12	R2	4	0	4	0.0	0.056	8.1	LOS A	0.3	2.1	0.13	0.47	0.13	49.0
Approach		72	0	76	0.0	0.056	4.6	LOS A	0.3	2.1	0.13	0.47	0.13	52.7
All Vehicles		439	5	462	1.1	0.217	6.7	LOS A	1.2	8.7	0.08	0.60	0.08	50.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:34:41 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2041 PM (Site Folder: Option 3Aiii)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.033	4.4	LOS A	0.2	1.1	0.30	0.60	0.30	47.8
3a	R1	34	2	36	5.9	0.033	7.1	LOS A	0.2	1.1	0.30	0.60	0.30	39.9
Approach		35	2	37	5.7	0.033	7.0	LOS A	0.2	1.1	0.30	0.60	0.30	40.3
NorthEast: Ikkina Rd (N)														
24a	L1	21	0	22	0.0	0.101	4.3	LOS A	0.5	3.6	0.02	0.63	0.02	41.0
26a	R1	140	0	147	0.0	0.101	7.2	LOS A	0.5	3.6	0.02	0.63	0.02	50.7
Approach		161	0	169	0.0	0.101	6.8	LOS A	0.5	3.6	0.02	0.63	0.02	50.0
West: Tabilban St (W)														
10a	L1	110	0	116	0.0	0.087	4.5	LOS A	0.5	3.2	0.15	0.47	0.15	52.9
12	R2	1	0	1	0.0	0.087	8.2	LOS A	0.5	3.2	0.15	0.47	0.15	49.1
Approach		111	0	117	0.0	0.087	4.5	LOS A	0.5	3.2	0.15	0.47	0.15	52.9
All Vehicles		307	2	323	0.7	0.101	6.0	LOS A	0.5	3.6	0.10	0.57	0.10	50.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:34:42 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2021 AM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.036	8.0	LOS A	0.2	1.4	0.64	0.72	0.64	44.4
3a	R1	23	2	24	8.7	0.036	10.9	LOS B	0.2	1.4	0.64	0.72	0.64	35.1
Approach		24	2	25	8.3	0.036	10.8	LOS B	0.2	1.4	0.64	0.72	0.64	35.7
NorthEast: Ikkina Rd (N)														
24a	L1	11	1	12	9.1	0.425	4.4	LOS A	3.1	21.7	0.03	0.63	0.03	40.3
26a	R1	672	0	707	0.0	0.425	7.2	LOS A	3.1	21.7	0.03	0.63	0.03	50.3
Approach		683	1	719	0.1	0.425	7.1	LOS A	3.1	21.7	0.03	0.63	0.03	50.2
West: Tabilban St (W)														
10a	L1	206	0	217	0.0	0.152	4.4	LOS A	0.9	6.6	0.14	0.46	0.14	53.0
12	R2	2	0	2	0.0	0.152	8.1	LOS A	0.9	6.6	0.14	0.46	0.14	49.2
Approach		208	0	219	0.0	0.152	4.5	LOS A	0.9	6.6	0.14	0.46	0.14	53.0
All Vehicles		915	3	963	0.3	0.425	6.6	LOS A	3.1	21.7	0.07	0.60	0.07	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2021 PM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.024	5.6	LOS A	0.1	0.8	0.46	0.63	0.46	46.9
3a	R1	21	0	22	0.0	0.024	8.2	LOS A	0.1	0.8	0.46	0.63	0.46	39.9
Approach		22	0	23	0.0	0.024	8.1	LOS A	0.1	0.8	0.46	0.63	0.46	40.4
NorthEast: Ikkina Rd (N)														
24a	L1	25	0	26	0.0	0.238	4.3	LOS A	1.4	9.7	0.02	0.64	0.02	40.8
26a	R1	359	0	378	0.0	0.238	7.2	LOS A	1.4	9.7	0.02	0.64	0.02	50.5
Approach		384	0	404	0.0	0.238	7.0	LOS A	1.4	9.7	0.02	0.64	0.02	50.1
West: Tabilban St (W)														
10a	L1	469	0	494	0.0	0.323	4.4	LOS A	2.3	16.2	0.14	0.46	0.14	53.0
12	R2	1	0	1	0.0	0.323	8.1	LOS A	2.3	16.2	0.14	0.46	0.14	49.2
Approach		470	0	495	0.0	0.323	4.4	LOS A	2.3	16.2	0.14	0.46	0.14	53.0
All Vehicles		876	0	922	0.0	0.323	5.6	LOS A	2.3	16.2	0.10	0.54	0.10	51.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 AM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	2	0	2	0.0	0.037	8.7	LOS A	0.2	1.4	0.67	0.72	0.67	44.0
3a	R1	23	0	24	0.0	0.037	11.3	LOS B	0.2	1.4	0.67	0.72	0.67	36.0
Approach		25	0	26	0.0	0.037	11.1	LOS B	0.2	1.4	0.67	0.72	0.67	37.0
NorthEast: Ikkina Rd (N)														
24a	L1	14	4	15	28.6	0.468	4.6	LOS A	3.6	25.6	0.02	0.64	0.02	39.9
26a	R1	740	0	779	0.0	0.468	7.2	LOS A	3.6	25.6	0.02	0.64	0.02	50.3
Approach		754	4	794	0.5	0.468	7.1	LOS A	3.6	25.6	0.02	0.64	0.02	50.2
West: Tabilban St (W)														
10a	L1	222	0	234	0.0	0.162	4.4	LOS A	1.0	7.1	0.14	0.46	0.14	53.0
12	R2	1	0	1	0.0	0.162	8.1	LOS A	1.0	7.1	0.14	0.46	0.14	49.2
Approach		223	0	235	0.0	0.162	4.4	LOS A	1.0	7.1	0.14	0.46	0.14	53.0
All Vehicles		1002	4	1055	0.4	0.468	6.6	LOS A	3.6	25.6	0.06	0.60	0.06	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 PM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.025	5.9	LOS A	0.1	0.8	0.49	0.64	0.49	46.7
3a	R1	21	0	22	0.0	0.025	8.5	LOS A	0.1	0.8	0.49	0.64	0.49	39.5
Approach		22	0	23	0.0	0.025	8.4	LOS A	0.1	0.8	0.49	0.64	0.49	40.0
NorthEast: Ikkina Rd (N)														
24a	L1	36	2	38	5.6	0.278	4.4	LOS A	1.7	11.8	0.05	0.62	0.05	40.5
26a	R1	398	2	419	0.5	0.278	7.2	LOS A	1.7	11.8	0.05	0.62	0.05	50.4
Approach		434	4	457	0.9	0.278	7.0	LOS A	1.7	11.8	0.05	0.62	0.05	49.9
West: Tabilban St (W)														
10a	L1	355	0	374	0.0	0.251	4.4	LOS A	1.7	11.7	0.13	0.46	0.13	53.0
12	R2	5	0	5	0.0	0.251	8.1	LOS A	1.7	11.7	0.13	0.46	0.13	49.2
Approach		360	0	379	0.0	0.251	4.5	LOS A	1.7	11.7	0.13	0.46	0.13	52.9
All Vehicles		816	4	859	0.5	0.278	5.9	LOS A	1.7	11.8	0.10	0.55	0.10	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:39:02 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2026 AM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	2	0	2	0.0	0.025	5.2	LOS A	0.1	0.9	0.42	0.62	0.42	47.4
3a	R1	22	1	23	4.5	0.025	7.9	LOS A	0.1	0.9	0.42	0.62	0.42	39.6
Approach		24	1	25	4.2	0.025	7.6	LOS A	0.1	0.9	0.42	0.62	0.42	40.6
NorthEast: Ikkina Rd (N)														
24a	L1	5	0	5	0.0	0.179	4.3	LOS A	1.0	6.8	0.02	0.64	0.02	40.6
26a	R1	283	0	298	0.0	0.179	7.2	LOS A	1.0	6.8	0.02	0.64	0.02	50.4
Approach		288	0	303	0.0	0.179	7.1	LOS A	1.0	6.8	0.02	0.64	0.02	50.3
West: Tabilban St (W)														
10a	L1	106	0	112	0.0	0.081	4.4	LOS A	0.4	3.1	0.12	0.47	0.12	53.1
12	R2	1	0	1	0.0	0.081	8.1	LOS A	0.4	3.1	0.12	0.47	0.12	49.3
Approach		107	0	113	0.0	0.081	4.5	LOS A	0.4	3.1	0.12	0.47	0.12	53.0
All Vehicles		419	1	441	0.2	0.179	6.5	LOS A	1.0	6.8	0.07	0.60	0.07	50.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Processed: Thursday, 11 August 2022 1:39:02 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2026 PM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.017	4.5	LOS A	0.1	0.5	0.30	0.59	0.30	47.9
3a	R1	17	0	18	0.0	0.017	7.1	LOS A	0.1	0.5	0.30	0.59	0.30	41.1
Approach		18	0	19	0.0	0.017	7.0	LOS A	0.1	0.5	0.30	0.59	0.30	41.7
NorthEast: Ikkina Rd (N)														
24a	L1	18	1	19	5.6	0.108	4.4	LOS A	0.5	3.8	0.02	0.63	0.02	40.8
26a	R1	154	2	162	1.3	0.108	7.2	LOS A	0.5	3.8	0.02	0.63	0.02	50.5
Approach		172	3	181	1.7	0.108	6.9	LOS A	0.5	3.8	0.02	0.63	0.02	49.9
West: Tabilban St (W)														
10a	L1	111	0	117	0.0	0.083	4.4	LOS A	0.4	3.0	0.10	0.47	0.10	53.2
12	R2	1	0	1	0.0	0.083	8.1	LOS A	0.4	3.0	0.10	0.47	0.10	49.4
Approach		112	0	118	0.0	0.083	4.4	LOS A	0.4	3.0	0.10	0.47	0.10	53.2
All Vehicles		302	3	318	1.0	0.108	6.0	LOS A	0.5	3.8	0.06	0.57	0.06	50.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2041 AM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.029	5.4	LOS A	0.1	0.9	0.44	0.63	0.44	47.1
3a	R1	26	0	27	0.0	0.029	8.0	LOS A	0.1	0.9	0.44	0.63	0.44	40.2
Approach		27	0	28	0.0	0.029	7.9	LOS A	0.1	0.9	0.44	0.63	0.44	40.6
NorthEast: Ikkina Rd (N)														
24a	L1	16	5	17	31.3	0.208	4.6	LOS A	1.2	8.2	0.02	0.64	0.02	39.9
26a	R1	317	0	334	0.0	0.208	7.2	LOS A	1.2	8.2	0.02	0.64	0.02	50.4
Approach		333	5	351	1.5	0.208	7.0	LOS A	1.2	8.2	0.02	0.64	0.02	50.1
West: Tabilban St (W)														
10a	L1	71	0	75	0.0	0.056	4.4	LOS A	0.3	2.1	0.13	0.46	0.13	53.0
12	R2	1	0	1	0.0	0.056	8.1	LOS A	0.3	2.1	0.13	0.46	0.13	49.2
Approach		72	0	76	0.0	0.056	4.5	LOS A	0.3	2.1	0.13	0.46	0.13	53.0
All Vehicles		432	5	455	1.2	0.208	6.7	LOS A	1.2	8.2	0.06	0.61	0.06	50.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2041 PM (Site Folder: Option 3Aiv)]

Tabilban Street / Ikkina Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Ikkina Rd (S)														
1	L2	1	0	1	0.0	0.032	4.4	LOS A	0.1	1.1	0.29	0.60	0.29	47.8
3a	R1	33	2	35	6.1	0.032	7.1	LOS A	0.1	1.1	0.29	0.60	0.29	39.9
Approach		34	2	36	5.9	0.032	7.0	LOS A	0.1	1.1	0.29	0.60	0.29	40.3
NorthEast: Ikkina Rd (N)														
24a	L1	21	0	22	0.0	0.097	4.3	LOS A	0.5	3.4	0.02	0.63	0.02	41.1
26a	R1	134	0	141	0.0	0.097	7.2	LOS A	0.5	3.4	0.02	0.63	0.02	50.7
Approach		155	0	163	0.0	0.097	6.8	LOS A	0.5	3.4	0.02	0.63	0.02	49.9
West: Tabilban St (W)														
10a	L1	114	0	120	0.0	0.090	4.5	LOS A	0.5	3.3	0.15	0.47	0.15	52.9
12	R2	1	0	1	0.0	0.090	8.2	LOS A	0.5	3.3	0.15	0.47	0.15	49.1
Approach		115	0	121	0.0	0.090	4.5	LOS A	0.5	3.3	0.15	0.47	0.15	52.9
All Vehicles		304	2	320	0.7	0.097	5.9	LOS A	0.5	3.4	0.10	0.56	0.10	50.5

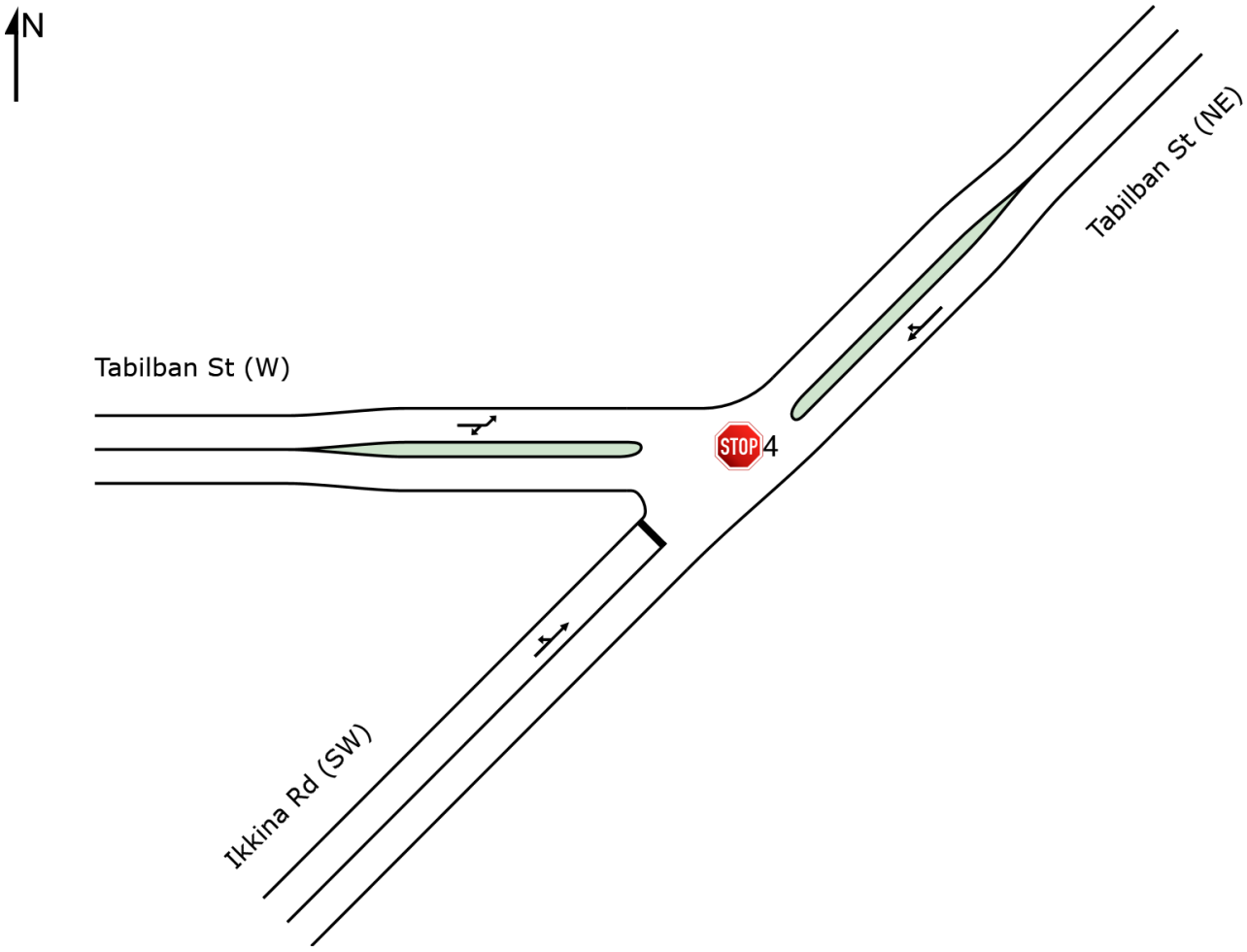
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 4 [2021 AM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

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



Organisation: BITZIOS CONSULTING | Licence: PLUS / Enterprise | Created: Monday, 15 August 2022 12:02:11 PM
Project: P:\P5288 Koala Park Traffic Management Study\Technical Work\Models\SIDRA\Options Testing\4 - P5288.001M Tabilban St - Ikkina Rd.sip9

MOVEMENT SUMMARY

Site: 4 [2021 AM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	10	1	11	10.0	0.393	0.1	LOS A	0.0	0.0	0.00	0.39	0.00	36.6
26a	R1	710	0	747	0.0	0.393	2.6	LOS A	0.0	0.0	0.00	0.39	0.00	38.5
Approach		720	1	758	0.1	0.393	2.5	NA	0.0	0.0	0.00	0.39	0.00	38.5
West: Tabilban St (W)														
10a	L1	219	0	231	0.0	0.121	3.5	LOS A	0.0	0.1	0.01	0.48	0.01	37.7
12b	R3	1	0	1	0.0	0.121	8.4	LOS A	0.0	0.1	0.01	0.48	0.01	28.9
Approach		220	0	232	0.0	0.121	3.5	NA	0.0	0.1	0.01	0.48	0.01	37.7
SouthWest: Ikkina Rd (SW)														
30b	L3	1	0	1	0.0	0.089	13.1	LOS B	0.3	2.2	0.75	1.03	0.75	31.9
2	T1	25	2	26	8.0	0.089	18.1	LOS C	0.3	2.2	0.75	1.03	0.75	26.0
Approach		26	2	27	7.7	0.089	17.9	LOS C	0.3	2.2	0.75	1.03	0.75	26.3
All Vehicles		966	3	1017	0.3	0.393	3.1	NA	0.3	2.2	0.02	0.43	0.02	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2021 PM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	23	0	24	0.0	0.208	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	36.8
26a	R1	359	0	378	0.0	0.208	2.5	LOS A	0.0	0.0	0.00	0.37	0.00	38.7
Approach		382	0	402	0.0	0.208	2.4	NA	0.0	0.0	0.00	0.37	0.00	38.6
West: Tabilban St (W)														
10a	L1	469	0	494	0.0	0.257	3.4	LOS A	0.0	0.2	0.01	0.48	0.01	37.8
12b	R3	2	0	2	0.0	0.257	6.1	LOS A	0.0	0.2	0.01	0.48	0.01	28.9
Approach		471	0	496	0.0	0.257	3.4	NA	0.0	0.2	0.01	0.48	0.01	37.7
SouthWest: Ikkina Rd (SW)														
30b	L3	3	0	3	0.0	0.058	9.9	LOS A	0.2	1.3	0.63	1.01	0.63	33.7
2	T1	21	0	22	0.0	0.058	14.3	LOS B	0.2	1.3	0.63	1.01	0.63	28.5
Approach		24	0	25	0.0	0.058	13.8	LOS B	0.2	1.3	0.63	1.01	0.63	29.4
All Vehicles		877	0	923	0.0	0.257	3.3	NA	0.2	1.3	0.02	0.45	0.02	38.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 AM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	13	4	14	30.8	0.449	0.1	LOS A	0.0	0.0	0.00	0.39	0.00	36.5
26a	R1	809	0	852	0.0	0.449	2.6	LOS A	0.0	0.0	0.00	0.39	0.00	38.5
Approach		822	4	865	0.5	0.449	2.5	NA	0.0	0.0	0.00	0.39	0.00	38.5
West: Tabilban St (W)														
10a	L1	202	0	213	0.0	0.113	3.5	LOS A	0.0	0.3	0.02	0.47	0.02	37.7
12b	R3	2	0	2	0.0	0.113	9.7	LOS A	0.0	0.3	0.02	0.47	0.02	28.9
Approach		204	0	215	0.0	0.113	3.6	NA	0.0	0.3	0.02	0.47	0.02	37.6
SouthWest: Ikkina Rd (SW)														
30b	L3	1	0	1	0.0	0.102	14.5	LOS B	0.3	2.3	0.79	1.02	0.79	31.3
2	T1	26	0	27	0.0	0.102	19.1	LOS C	0.3	2.3	0.79	1.02	0.79	25.2
Approach		27	0	28	0.0	0.102	19.0	LOS C	0.3	2.3	0.79	1.02	0.79	25.6
All Vehicles		1053	4	1108	0.4	0.449	3.2	NA	0.3	2.3	0.02	0.42	0.02	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2024 PM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	30	2	32	6.7	0.228	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	36.8
26a	R1	387	2	407	0.5	0.228	2.5	LOS A	0.0	0.0	0.00	0.37	0.00	38.7
Approach		417	4	439	1.0	0.228	2.3	NA	0.0	0.0	0.00	0.37	0.00	38.6
West: Tabilban St (W)														
10a	L1	383	0	403	0.0	0.214	3.5	LOS A	0.1	0.4	0.02	0.47	0.02	37.7
12b	R3	5	0	5	0.0	0.214	6.2	LOS A	0.1	0.4	0.02	0.47	0.02	28.9
Approach		388	0	408	0.0	0.214	3.5	NA	0.1	0.4	0.02	0.47	0.02	37.6
SouthWest: Ikkina Rd (SW)														
30b	L3	1	0	1	0.0	0.048	10.1	LOS B	0.2	1.1	0.62	1.01	0.62	34.0
2	T1	20	0	21	0.0	0.048	13.3	LOS B	0.2	1.1	0.62	1.01	0.62	28.9
Approach		21	0	22	0.0	0.048	13.2	LOS B	0.2	1.1	0.62	1.01	0.62	29.3
All Vehicles		826	4	869	0.5	0.228	3.2	NA	0.2	1.1	0.02	0.43	0.02	38.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2026 AM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	8	0	8	0.0	0.161	0.0	LOS A	0.0	0.0	0.00	0.38	0.00	36.7
26a	R1	287	0	302	0.0	0.161	2.5	LOS A	0.0	0.0	0.00	0.38	0.00	38.6
Approach		295	0	311	0.0	0.161	2.4	NA	0.0	0.0	0.00	0.38	0.00	38.6
West: Tabilban St (W)														
10a	L1	106	0	112	0.0	0.059	3.4	LOS A	0.0	0.1	0.01	0.48	0.01	37.8
12b	R3	1	0	1	0.0	0.059	5.2	LOS A	0.0	0.1	0.01	0.48	0.01	28.9
Approach		107	0	113	0.0	0.059	3.4	NA	0.0	0.1	0.01	0.48	0.01	37.7
SouthWest: Ikkina Rd (SW)														
30b	L3	1	0	1	0.0	0.032	9.5	LOS A	0.1	0.8	0.44	0.94	0.44	35.9
2	T1	22	1	23	4.5	0.032	9.6	LOS A	0.1	0.8	0.44	0.94	0.44	31.6
Approach		23	1	24	4.3	0.032	9.6	LOS A	0.1	0.8	0.44	0.94	0.44	31.9
All Vehicles		425	1	447	0.2	0.161	3.1	NA	0.1	0.8	0.03	0.44	0.03	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2026 PM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	22	1	23	4.5	0.101	0.0	LOS A	0.0	0.0	0.00	0.35	0.00	37.0
26a	R1	161	2	169	1.2	0.101	2.5	LOS A	0.0	0.0	0.00	0.35	0.00	38.8
Approach		183	3	193	1.6	0.101	2.2	NA	0.0	0.0	0.00	0.35	0.00	38.7
West: Tabilban St (W)														
10a	L1	104	0	109	0.0	0.057	3.4	LOS A	0.0	0.1	0.01	0.48	0.01	37.8
12b	R3	1	0	1	0.0	0.057	4.8	LOS A	0.0	0.1	0.01	0.48	0.01	28.9
Approach		105	0	111	0.0	0.057	3.4	NA	0.0	0.1	0.01	0.48	0.01	37.7
SouthWest: Ikkina Rd (SW)														
30b	L3	1	0	1	0.0	0.021	8.9	LOS A	0.1	0.5	0.35	0.92	0.35	36.4
2	T1	17	0	18	0.0	0.021	8.5	LOS A	0.1	0.5	0.35	0.92	0.35	32.3
Approach		18	0	19	0.0	0.021	8.6	LOS A	0.1	0.5	0.35	0.92	0.35	32.7
All Vehicles		306	3	322	1.0	0.101	3.0	NA	0.1	0.5	0.02	0.43	0.02	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2041 AM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	16	5	17	31.3	0.185	0.0	LOS A	0.0	0.0	0.00	0.38	0.00	36.7
26a	R1	320	0	337	0.0	0.185	2.5	LOS A	0.0	0.0	0.00	0.38	0.00	38.6
Approach		336	5	354	1.5	0.185	2.4	NA	0.0	0.0	0.00	0.38	0.00	38.6
West: Tabilban St (W)														
10a	L1	71	0	75	0.0	0.043	3.5	LOS A	0.0	0.3	0.07	0.46	0.07	37.6
12b	R3	5	0	5	0.0	0.043	5.4	LOS A	0.0	0.3	0.07	0.46	0.07	28.8
Approach		76	0	80	0.0	0.043	3.7	NA	0.0	0.3	0.07	0.46	0.07	37.0
SouthWest: Ikkina Rd (SW)														
30b	L3	2	0	2	0.0	0.038	9.7	LOS A	0.1	1.0	0.44	0.94	0.44	35.9
2	T1	26	0	27	0.0	0.038	9.5	LOS A	0.1	1.0	0.44	0.94	0.44	31.6
Approach		28	0	29	0.0	0.038	9.5	LOS A	0.1	1.0	0.44	0.94	0.44	32.1
All Vehicles		440	5	463	1.1	0.185	3.1	NA	0.1	1.0	0.04	0.43	0.04	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4 [2041 PM (Site Folder: Option 3Av)]

Tabilban Street / Ikkina Road
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
NorthEast: Tabilban St (NE)														
8	T1	21	0	22	0.0	0.091	0.0	LOS A	0.0	0.0	0.00	0.35	0.00	37.0
26a	R1	147	0	155	0.0	0.091	2.5	LOS A	0.0	0.0	0.00	0.35	0.00	38.8
Approach		168	0	177	0.0	0.091	2.2	NA	0.0	0.0	0.00	0.35	0.00	38.7
West: Tabilban St (W)														
10a	L1	112	0	118	0.0	0.063	3.4	LOS A	0.0	0.2	0.02	0.48	0.02	37.7
12b	R3	3	0	3	0.0	0.063	4.7	LOS A	0.0	0.2	0.02	0.48	0.02	28.9
Approach		115	0	121	0.0	0.063	3.5	NA	0.0	0.2	0.02	0.48	0.02	37.5
SouthWest: Ikkina Rd (SW)														
30b	L3	1	0	1	0.0	0.042	8.8	LOS A	0.2	1.1	0.36	0.95	0.36	36.3
2	T1	34	2	36	5.9	0.042	8.8	LOS A	0.2	1.1	0.36	0.95	0.36	32.2
Approach		35	2	37	5.7	0.042	8.8	LOS A	0.2	1.1	0.36	0.95	0.36	32.4
All Vehicles		318	2	335	0.6	0.091	3.4	NA	0.2	1.1	0.05	0.46	0.05	37.8

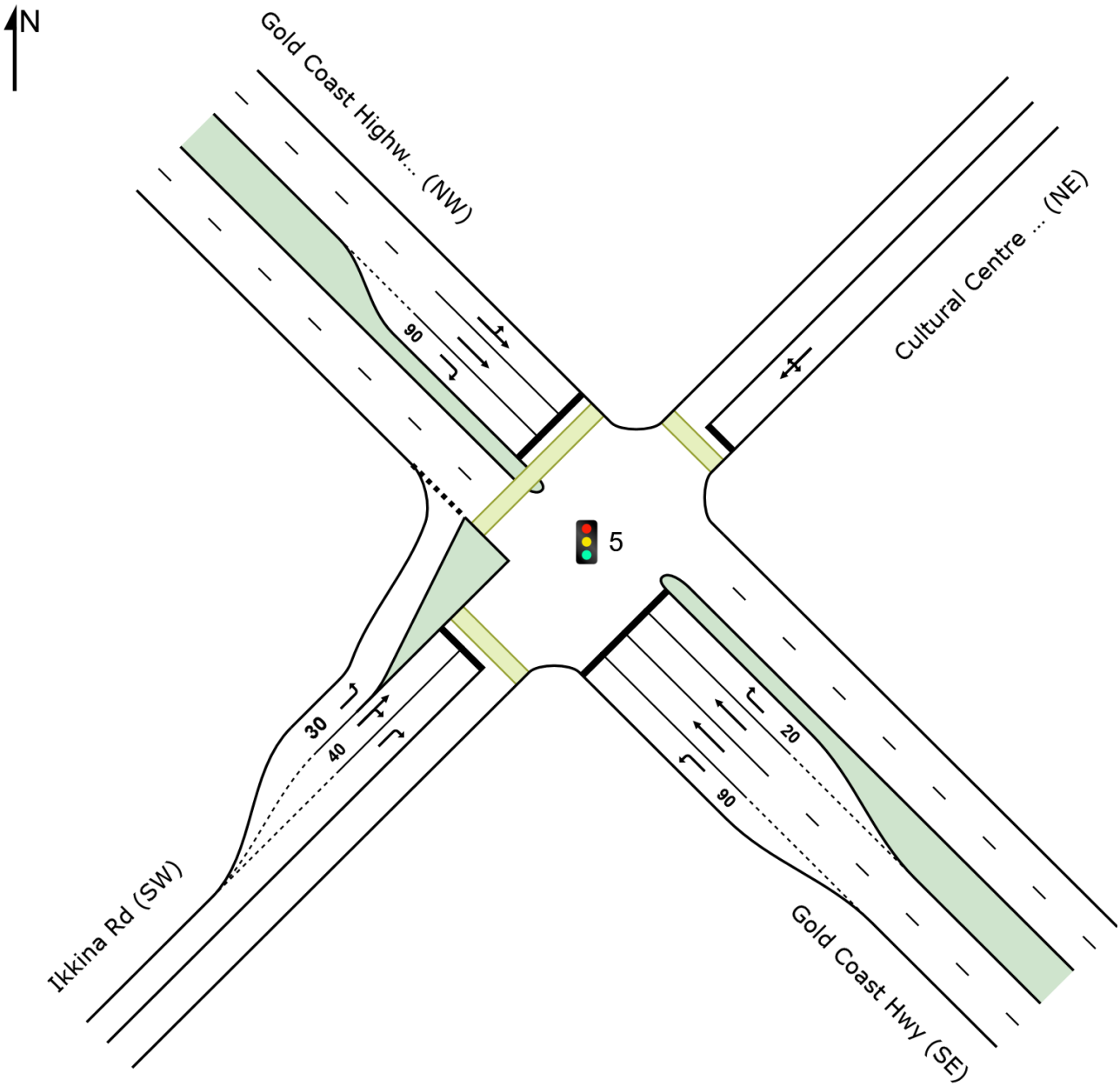
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 5 [2021 AM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2021 AM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	515	0	542	0.0	* 0.372	8.2	LOS A	7.3	51.0	0.33	0.68	0.33	48.2
5	T1	1525	49	1605	3.2	* 0.571	1.1	LOS A	3.5	24.9	0.07	0.07	0.07	58.9
6	R2	1	0	1	0.0	0.003	10.2	LOS B	0.0	0.1	0.33	0.59	0.33	45.4
Approach		2041	49	2148	2.4	0.571	2.9	LOS A	7.3	51.0	0.13	0.22	0.13	55.8
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.381	88.6	LOS F	0.8	5.7	1.00	0.66	1.00	18.2
8	T1	1	0	1	0.0	* 0.381	84.1	LOS F	0.8	5.7	1.00	0.66	1.00	17.7
9	R2	8	0	8	0.0	0.381	88.6	LOS F	0.8	5.7	1.00	0.66	1.00	18.3
Approach		10	0	11	0.0	0.381	88.2	LOS F	0.8	5.7	1.00	0.66	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	0.335	11.7	LOS B	10.7	77.6	0.36	0.33	0.36	49.3
11	T1	910	43	958	4.7	0.335	6.1	LOS A	10.7	77.6	0.36	0.32	0.36	54.5
12	R2	25	1	26	4.0	* 0.510	85.2	LOS F	2.0	14.1	1.00	0.72	1.04	24.1
Approach		938	44	987	4.7	0.510	8.2	LOS A	10.7	77.6	0.38	0.34	0.38	52.7
SouthWest: Ikkina Rd (SW)														
1	L2	48	2	51	4.2	0.064	5.1	LOS A	0.3	1.9	0.13	0.53	0.13	49.9
2	T1	1	0	1	0.0	0.501	66.3	LOS E	6.2	43.6	0.99	0.78	0.99	20.3
3	R2	176	0	185	0.0	0.501	70.8	LOS E	6.2	43.6	0.99	0.78	0.99	26.4
Approach		225	2	237	0.9	0.501	56.8	LOS E	6.2	43.6	0.81	0.73	0.81	29.3
All Vehicles		3214	95	3383	3.0	0.571	8.5	LOS A	10.7	77.6	0.26	0.29	0.26	51.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2021 PM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	386	0	406	0.0	0.408	25.9	LOS C	16.2	113.2	0.64	0.77	0.64	39.1
5	T1	872	27	918	3.1	0.411	17.2	LOS B	17.0	122.0	0.60	0.53	0.60	46.8
6	R2	1	0	1	0.0	* 0.007	15.1	LOS B	0.0	0.2	0.45	0.59	0.45	41.5
Approach		1259	27	1325	2.1	0.411	19.8	LOS B	17.0	122.0	0.61	0.60	0.61	44.1
NorthEast: Cultural Centre Access (NE)														
7	L2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
8	T1	1	0	1	0.0	* 0.379	90.1	LOS F	0.4	3.0	1.00	0.63	1.03	17.0
9	R2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
Approach		5	0	5	0.0	0.379	93.7	LOS F	0.4	3.0	1.00	0.63	1.03	17.4
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	* 0.593	12.0	LOS B	13.9	98.3	0.30	0.28	0.30	49.0
11	T1	1426	22	1501	1.5	0.593	6.5	LOS A	13.9	98.3	0.30	0.28	0.30	54.3
12	R2	33	0	35	0.0	0.238	73.0	LOS E	2.3	16.1	0.97	0.73	0.97	26.2
Approach		1462	22	1539	1.5	0.593	8.0	LOS A	13.9	98.3	0.31	0.29	0.31	53.0
SouthWest: Ikkina Rd (SW)														
1	L2	34	0	36	0.0	0.051	35.0	LOS C	1.6	11.4	0.68	0.64	0.68	35.6
2	T1	3	0	3	0.0	* 0.604	53.2	LOS D	13.8	96.7	0.95	0.82	0.95	22.8
3	R2	400	0	421	0.0	0.604	57.3	LOS E	13.8	96.7	0.94	0.81	0.94	29.2
Approach		437	0	460	0.0	0.604	55.6	LOS E	13.8	96.7	0.92	0.80	0.92	29.6
All Vehicles		3163	49	3329	1.5	0.604	19.4	LOS B	17.0	122.0	0.52	0.48	0.52	44.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 AM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	278	0	293	0.0	0.197	7.5	LOS A	3.1	21.9	0.25	0.65	0.25	48.6
5	T1	1865	50	1963	2.7	* 0.669	0.8	LOS A	3.8	27.2	0.06	0.06	0.06	59.2
6	R2	4	0	4	0.0	0.012	9.6	LOS A	0.1	0.4	0.31	0.60	0.31	45.9
Approach		2147	50	2260	2.3	0.669	1.7	LOS A	3.8	27.2	0.09	0.14	0.09	57.6
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.605	96.0	LOS F	0.7	4.9	1.00	0.69	1.26	17.4
8	T1	2	0	2	0.0	* 0.605	91.4	LOS F	0.7	4.9	1.00	0.69	1.26	16.8
9	R2	5	0	5	0.0	0.605	96.0	LOS F	0.7	4.9	1.00	0.69	1.26	17.4
Approach		8	0	8	0.0	0.605	94.8	LOS F	0.7	4.9	1.00	0.69	1.26	17.2
NorthWest: Gold Coast Highway (NW)														
10	L2	6	1	6	16.7	0.340	10.9	LOS B	10.3	75.0	0.33	0.31	0.33	48.7
11	T1	945	44	995	4.7	0.340	5.2	LOS A	10.3	75.0	0.33	0.30	0.33	55.3
12	R2	23	4	24	17.4	* 0.684	89.9	LOS F	1.9	15.1	1.00	0.77	1.25	23.3
Approach		974	49	1025	5.0	0.684	7.2	LOS A	10.3	75.0	0.35	0.31	0.36	53.5
SouthWest: Ikkina Rd (SW)														
1	L2	43	0	45	0.0	0.069	5.1	LOS A	0.2	1.7	0.13	0.53	0.13	50.0
2	T1	1	0	1	0.0	* 0.701	71.0	LOS E	7.8	54.9	1.00	0.84	1.09	19.5
3	R2	211	0	222	0.0	0.701	75.6	LOS E	7.8	54.9	1.00	0.84	1.09	25.5
Approach		255	0	268	0.0	0.701	63.6	LOS E	7.8	54.9	0.85	0.79	0.93	27.8
All Vehicles		3384	99	3562	2.9	0.701	8.2	LOS A	10.3	75.0	0.22	0.24	0.23	52.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 PM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	400	0	421	0.0	0.418	25.5	LOS C	16.7	116.7	0.64	0.77	0.64	39.2
5	T1	910	20	958	2.2	0.422	16.8	LOS B	17.6	125.8	0.59	0.53	0.59	47.1
6	R2	2	0	2	0.0	*0.014	14.8	LOS B	0.1	0.4	0.45	0.60	0.45	41.7
Approach		1312	20	1381	1.5	0.422	19.4	LOS B	17.6	125.8	0.61	0.60	0.61	44.4
NorthEast: Cultural Centre Access (NE)														
7	L2	3	0	3	0.0	0.532	95.6	LOS F	0.6	4.3	1.00	0.67	1.18	17.3
8	T1	1	0	1	0.0	*0.532	91.0	LOS F	0.6	4.3	1.00	0.67	1.18	16.8
9	R2	3	0	3	0.0	0.532	95.6	LOS F	0.6	4.3	1.00	0.67	1.18	17.4
Approach		7	0	7	0.0	0.532	94.9	LOS F	0.6	4.3	1.00	0.67	1.18	17.3
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	*0.606	11.5	LOS B	13.7	97.3	0.29	0.27	0.29	49.5
11	T1	1470	29	1547	2.0	0.606	6.0	LOS A	13.7	97.3	0.29	0.26	0.29	54.6
12	R2	41	5	43	12.2	0.321	74.1	LOS E	2.9	22.4	0.98	0.74	0.98	25.9
Approach		1512	34	1592	2.2	0.606	7.8	LOS A	13.7	97.3	0.31	0.28	0.31	53.0
SouthWest: Ikkina Rd (SW)														
1	L2	34	0	36	0.0	0.033	7.1	LOS A	0.4	3.1	0.24	0.56	0.24	48.7
2	T1	1	0	1	0.0	*0.606	54.8	LOS D	13.1	91.4	0.96	0.82	0.96	22.4
3	R2	381	0	401	0.0	0.606	59.0	LOS E	13.1	91.4	0.95	0.81	0.95	28.8
Approach		416	0	438	0.0	0.606	54.8	LOS D	13.1	91.4	0.89	0.79	0.89	29.8
All Vehicles		3247	54	3418	1.7	0.606	18.7	LOS B	17.6	125.8	0.50	0.48	0.50	44.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 AM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	279	0	294	0.0	* 0.203	8.0	LOS A	3.5	24.4	0.28	0.66	0.28	48.3
5	T1	1041	31	1096	3.0	* 0.409	2.8	LOS A	4.5	32.2	0.13	0.12	0.13	57.4
6	R2	1	0	1	0.0	0.002	10.7	LOS B	0.0	0.1	0.32	0.58	0.32	45.0
Approach		1321	31	1391	2.3	0.409	3.9	LOS A	4.5	32.2	0.16	0.23	0.16	55.2
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.341	88.4	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
8	T1	2	0	2	0.0	* 0.341	83.8	LOS F	0.7	5.1	1.00	0.65	1.00	17.8
9	R2	6	0	6	0.0	0.341	88.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
Approach		9	0	9	0.0	0.341	87.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	0.192	12.1	LOS B	5.6	41.4	0.35	0.30	0.35	48.9
11	T1	497	30	523	6.0	0.192	6.6	LOS A	5.6	41.4	0.35	0.30	0.35	54.1
12	R2	26	0	27	0.0	* 0.413	82.4	LOS F	2.0	13.8	1.00	0.71	1.00	24.5
Approach		524	30	552	5.7	0.413	10.4	LOS B	5.6	41.4	0.38	0.32	0.38	51.1
SouthWest: Ikkina Rd (SW)														
1	L2	50	1	53	2.0	0.052	5.1	LOS A	0.3	2.1	0.13	0.53	0.13	49.9
2	T1	3	0	3	0.0	0.225	59.8	LOS E	3.3	23.4	0.94	0.74	0.94	21.5
3	R2	99	0	104	0.0	0.225	64.3	LOS E	3.3	23.4	0.94	0.74	0.94	27.7
Approach		152	1	160	0.7	0.225	44.8	LOS D	3.3	23.4	0.67	0.67	0.67	32.3
All Vehicles		2006	62	2112	3.1	0.413	9.0	LOS A	5.6	41.4	0.26	0.29	0.26	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 PM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	181	0	191	0.0	0.154	14.7	LOS B	4.7	33.1	0.40	0.68	0.40	44.4
5	T1	711	22	748	3.1	* 0.274	7.8	LOS A	9.0	65.0	0.39	0.34	0.39	53.2
6	R2	1	0	1	0.0	* 0.003	9.1	LOS A	0.0	0.1	0.29	0.59	0.29	46.3
Approach		893	22	940	2.5	0.274	9.2	LOS A	9.0	65.0	0.39	0.41	0.39	51.1
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.281	96.2	LOS F	0.3	2.4	1.00	0.61	1.00	17.4
8	T1	1	0	1	0.0	* 0.281	91.6	LOS F	0.3	2.4	1.00	0.61	1.00	16.8
9	R2	1	1	1	100.0	0.281	97.0	LOS F	0.3	2.4	1.00	0.61	1.00	16.7
Approach		3	1	3	33.3	0.281	94.9	LOS F	0.3	2.4	1.00	0.61	1.00	17.0
NorthWest: Gold Coast Highway (NW)														
10	L2	2	0	2	0.0	0.290	6.0	LOS A	0.8	6.1	0.03	0.03	0.03	55.8
11	T1	824	28	867	3.4	0.290	0.5	LOS A	0.8	6.1	0.03	0.03	0.03	59.5
12	R2	37	3	39	8.1	0.282	73.6	LOS E	2.6	19.5	0.98	0.74	0.98	26.0
Approach		863	31	908	3.6	0.290	3.6	LOS A	2.6	19.5	0.07	0.06	0.07	56.4
SouthWest: Ikkina Rd (SW)														
1	L2	39	1	41	2.6	0.093	49.4	LOS D	2.3	16.2	0.82	0.67	0.82	31.2
2	T1	1	0	1	0.0	* 0.268	66.5	LOS E	2.8	19.7	0.97	0.74	0.97	20.3
3	R2	80	0	84	0.0	0.268	71.0	LOS E	2.8	19.7	0.97	0.74	0.97	26.3
Approach		120	1	126	0.8	0.268	64.0	LOS E	2.8	19.7	0.92	0.72	0.92	27.7
All Vehicles		1879	55	1978	2.9	0.290	10.3	LOS B	9.0	65.0	0.28	0.27	0.28	50.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

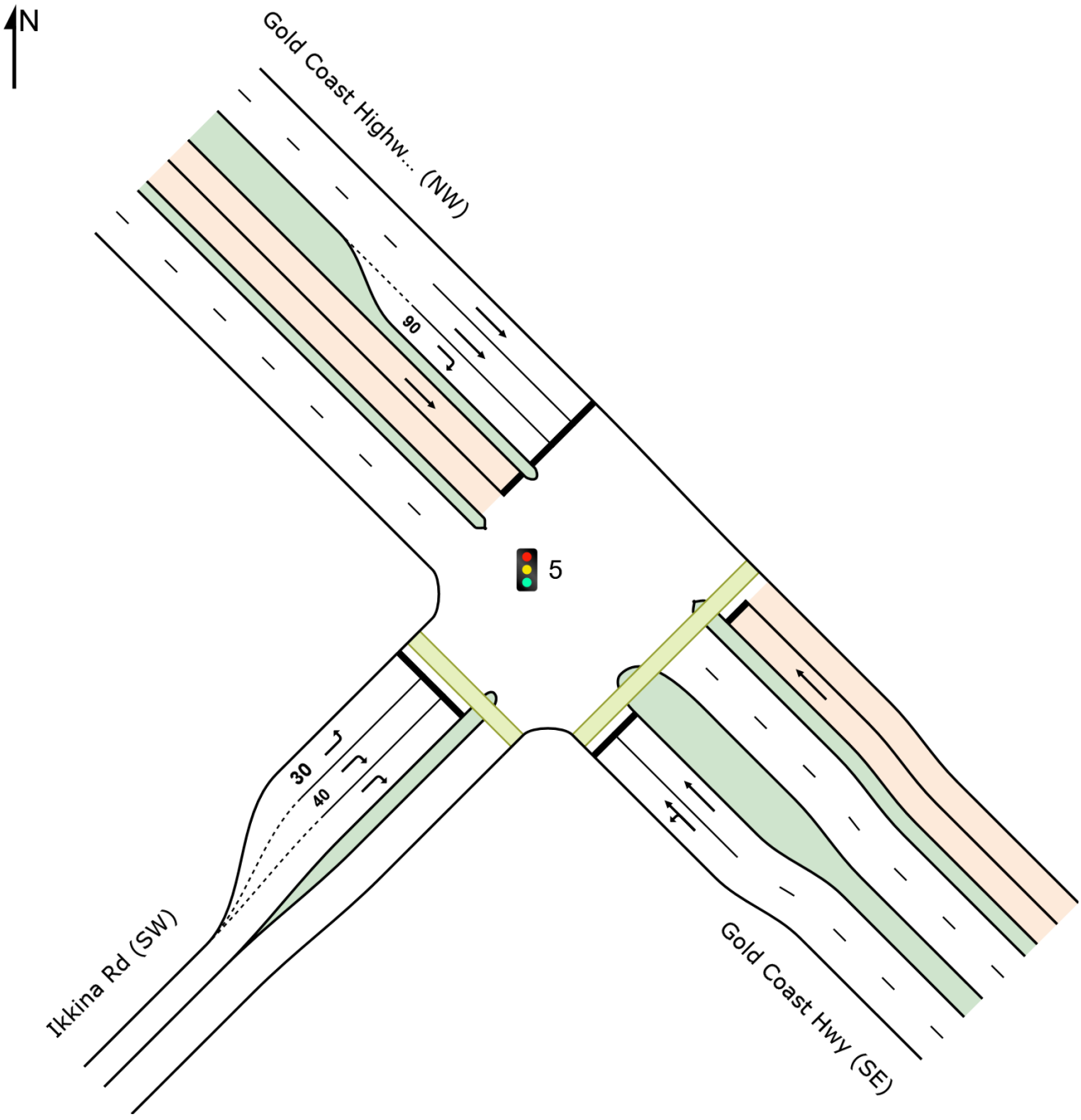
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

SITE LAYOUT

Site: 5 [2041 AM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2041 AM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	294	0	309	0.0	* 0.549	15.8	LOS B	17.9	126.5	0.43	0.55	0.43	45.4
5	T1	1008	30	1061	3.0	0.549	8.1	LOS A	17.9	126.5	0.33	0.36	0.33	52.5
Approach		1302	30	1371	2.3	0.549	9.8	LOS A	17.9	126.5	0.36	0.40	0.36	50.6
NorthWest: Gold Coast Highway (NW)														
11	T1	240	15	253	6.3	0.126	19.6	LOS B	4.2	29.8	0.55	0.45	0.55	45.8
12	R2	43	5	45	11.6	* 0.148	58.2	LOS E	2.6	20.2	0.88	0.73	0.88	29.3
Approach		283	20	298	7.1	0.148	25.5	LOS C	4.2	29.8	0.60	0.49	0.60	41.9
SouthWest: Ikkina Rd (SW)														
1	L2	28	0	29	0.0	0.058	45.3	LOS D	1.5	10.4	0.78	0.70	0.78	32.0
3	R2	73	0	77	0.0	* 0.483	80.1	LOS F	2.8	19.3	1.00	0.73	1.00	24.6
Approach		101	0	106	0.0	0.483	70.5	LOS E	2.8	19.3	0.94	0.72	0.94	26.3
All Vehicles		1686	50	1775	3.0	0.549	16.1	LOS B	17.9	126.5	0.43	0.44	0.43	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	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.

MOVEMENT SUMMARY

Site: 5 [2041 PM (Site Folder: Option 3Ai)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	152	0	160	0.0	0.276	18.4	LOS B	8.1	57.3	0.43	0.55	0.43	43.8
5	T1	439	21	462	4.8	0.302	11.6	LOS B	8.1	57.3	0.35	0.36	0.35	50.2
Approach		591	21	622	3.6	0.302	13.3	LOS B	8.1	57.3	0.37	0.41	0.37	48.1
NorthWest: Gold Coast Highway (NW)														
11	T1	569	17	599	3.0	* 0.302	22.0	LOS C	11.5	81.4	0.63	0.54	0.63	44.3
12	R2	36	1	38	2.8	* 0.117	57.6	LOS E	2.2	15.6	0.87	0.73	0.87	29.5
Approach		605	18	637	3.0	0.302	24.1	LOS C	11.5	81.4	0.64	0.55	0.64	42.9
SouthWest: Ikkina Rd (SW)														
1	L2	28	2	29	7.1	0.049	38.5	LOS D	1.3	10.0	0.71	0.68	0.71	34.0
3	R2	110	0	116	0.0	* 0.291	68.0	LOS E	3.7	26.1	0.96	0.75	0.96	26.8
Approach		138	2	145	1.4	0.291	62.0	LOS E	3.7	26.1	0.91	0.74	0.91	28.0
All Vehicles		1334	41	1404	3.1	0.302	23.2	LOS C	11.5	81.4	0.55	0.51	0.55	42.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	0.95

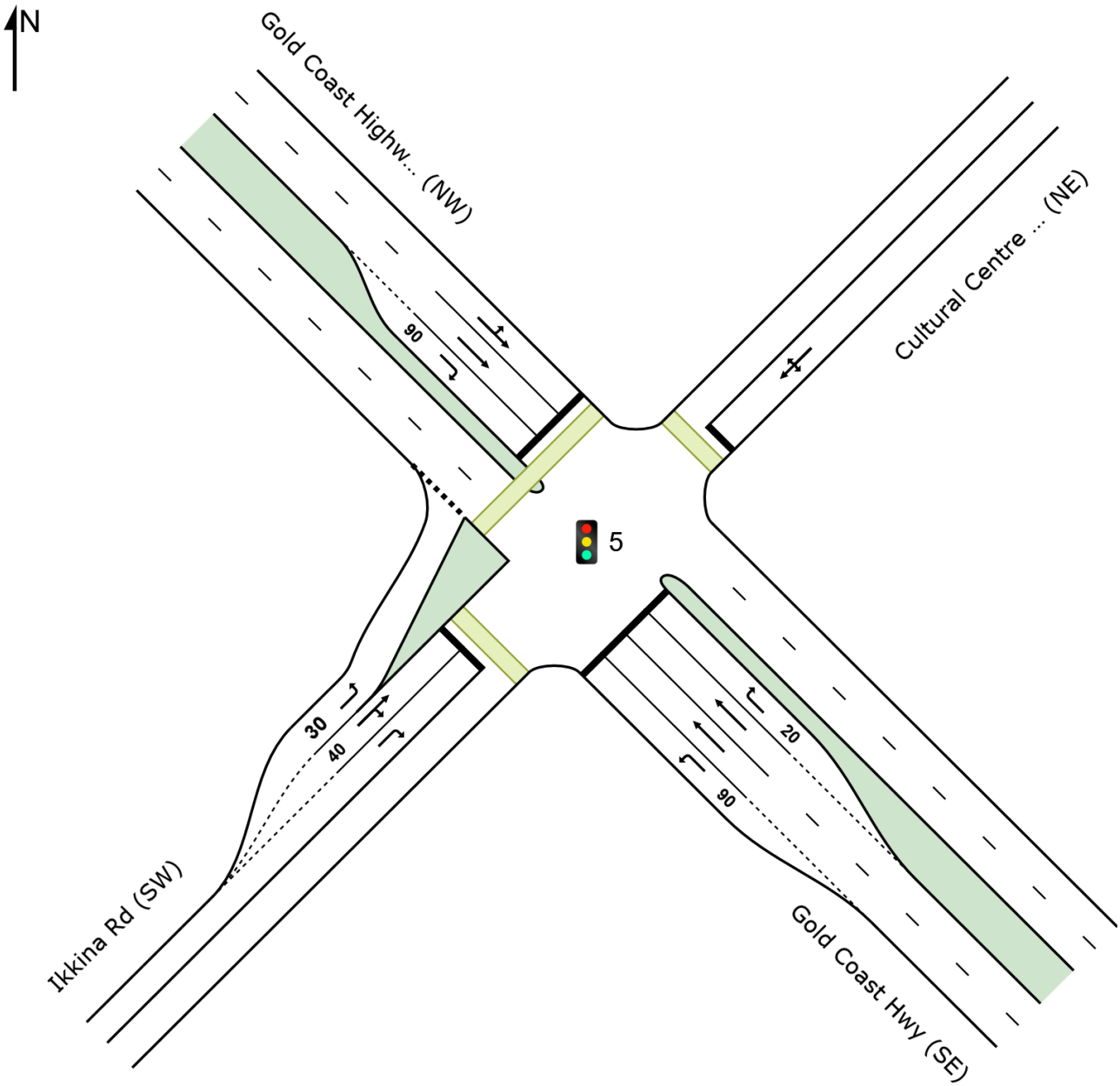
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

Site: 5 [2021 AM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2021 AM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	701	0	738	0.0	*0.520	9.5	LOS A	13.5	94.2	0.42	0.72	0.42	47.4
5	T1	1330	49	1400	3.7	*0.537	4.1	LOS A	8.7	62.6	0.20	0.18	0.20	56.2
6	R2	1	0	1	0.0	0.003	11.7	LOS B	0.0	0.1	0.37	0.59	0.37	44.1
Approach		2032	49	2139	2.4	0.537	6.0	LOS A	13.5	94.2	0.28	0.37	0.28	52.8
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
8	T1	1	0	1	0.0	*0.343	83.8	LOS F	0.7	5.1	1.00	0.66	1.00	17.7
9	R2	7	0	7	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
Approach		9	0	9	0.0	0.343	87.9	LOS F	0.7	5.1	1.00	0.66	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	0.334	13.4	LOS B	11.4	83.0	0.40	0.36	0.40	47.6
11	T1	863	43	908	5.0	0.334	7.9	LOS A	11.4	83.0	0.40	0.36	0.40	53.1
12	R2	39	1	41	2.6	*0.525	81.6	LOS F	3.0	21.1	1.00	0.74	1.02	24.6
Approach		905	44	953	4.9	0.525	11.1	LOS B	11.4	83.0	0.43	0.38	0.43	50.6
SouthWest: Ikkina Rd (SW)														
1	L2	50	2	53	4.0	0.059	5.6	LOS A	0.4	3.0	0.17	0.54	0.17	49.5
2	T1	1	0	1	0.0	0.496	62.4	LOS E	7.7	53.9	0.98	0.79	0.98	21.0
3	R2	224	0	236	0.0	0.496	67.0	LOS E	7.7	53.9	0.98	0.79	0.98	27.1
Approach		275	2	289	0.7	0.496	55.8	LOS E	7.7	53.9	0.83	0.75	0.83	29.5
All Vehicles		3221	95	3391	2.9	0.537	11.9	LOS B	13.5	94.2	0.37	0.40	0.37	48.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2021 PM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	396	0	417	0.0	0.449	29.4	LOS C	18.0	126.2	0.69	0.79	0.69	37.7
5	T1	872	28	918	3.2	0.439	20.2	LOS C	18.4	132.7	0.65	0.57	0.65	45.1
6	R2	1	0	1	0.0	*0.007	18.0	LOS B	0.0	0.2	0.52	0.59	0.52	39.6
Approach		1269	28	1336	2.2	0.449	23.1	LOS C	18.4	132.7	0.66	0.64	0.66	42.5
NorthEast: Cultural Centre Access (NE)														
7	L2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
8	T1	1	0	1	0.0	*0.379	90.1	LOS F	0.4	3.0	1.00	0.63	1.03	17.0
9	R2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
Approach		5	0	5	0.0	0.379	93.7	LOS F	0.4	3.0	1.00	0.63	1.03	17.4
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	*0.617	15.1	LOS B	18.2	128.8	0.40	0.37	0.40	46.1
11	T1	1402	22	1476	1.6	0.617	9.6	LOS A	18.2	128.8	0.40	0.37	0.40	51.9
12	R2	33	0	35	0.0	0.238	73.0	LOS E	2.3	16.1	0.97	0.73	0.97	26.2
Approach		1438	22	1514	1.5	0.617	11.0	LOS B	18.2	128.8	0.41	0.37	0.41	50.7
SouthWest: Ikkina Rd (SW)														
1	L2	41	0	43	0.0	0.056	31.7	LOS C	1.9	13.0	0.64	0.64	0.64	36.7
2	T1	3	0	3	0.0	*0.611	49.4	LOS D	15.8	110.4	0.93	0.82	0.93	23.6
3	R2	456	0	480	0.0	0.611	53.3	LOS D	15.8	110.4	0.92	0.81	0.92	30.1
Approach		500	0	526	0.0	0.611	51.5	LOS D	15.8	110.4	0.89	0.80	0.89	30.6
All Vehicles		3212	50	3381	1.6	0.617	22.2	LOS C	18.4	132.7	0.59	0.55	0.59	42.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 AM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	791	0	833	0.0	* 0.565	8.9	LOS A	14.5	101.2	0.41	0.72	0.41	47.8
5	T1	1369	50	1441	3.7	* 0.584	6.9	LOS A	13.8	99.8	0.31	0.28	0.31	53.9
6	R2	4	0	4	0.0	0.014	14.7	LOS B	0.1	0.7	0.45	0.61	0.45	41.8
Approach		2164	50	2278	2.3	0.584	7.6	LOS A	14.5	101.2	0.35	0.44	0.35	51.5
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.605	96.0	LOS F	0.7	4.9	1.00	0.69	1.26	17.4
8	T1	2	0	2	0.0	* 0.605	91.4	LOS F	0.7	4.9	1.00	0.69	1.26	16.8
9	R2	5	0	5	0.0	0.605	96.0	LOS F	0.7	4.9	1.00	0.69	1.26	17.4
Approach		8	0	8	0.0	0.605	94.8	LOS F	0.7	4.9	1.00	0.69	1.26	17.2
NorthWest: Gold Coast Highway (NW)														
10	L2	6	1	6	16.7	0.374	16.8	LOS B	14.1	103.0	0.48	0.44	0.48	43.6
11	T1	895	44	942	4.9	0.374	11.0	LOS B	14.1	103.1	0.48	0.43	0.48	50.8
12	R2	25	4	26	16.0	* 0.553	86.1	LOS F	2.0	15.7	1.00	0.74	1.08	23.9
Approach		926	49	975	5.3	0.553	13.1	LOS B	14.1	103.1	0.50	0.44	0.50	49.3
SouthWest: Ikkina Rd (SW)														
1	L2	49	0	52	0.0	0.056	6.4	LOS A	0.6	3.9	0.22	0.56	0.22	49.1
2	T1	1	0	1	0.0	0.390	53.3	LOS D	8.1	57.0	0.92	0.79	0.92	22.8
3	R2	261	0	275	0.0	0.390	57.9	LOS E	8.4	58.7	0.92	0.79	0.92	29.1
Approach		311	0	327	0.0	0.390	49.7	LOS D	8.4	58.7	0.81	0.75	0.81	31.0
All Vehicles		3409	99	3588	2.9	0.605	13.2	LOS B	14.5	103.1	0.43	0.47	0.43	47.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 PM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	413	0	435	0.0	0.420	24.4	LOS C	16.8	117.8	0.62	0.77	0.62	39.7
5	T1	898	20	945	2.2	0.406	15.6	LOS B	16.7	119.3	0.57	0.51	0.57	47.8
6	R2	2	0	2	0.0	*0.014	13.8	LOS B	0.0	0.3	0.42	0.60	0.42	42.5
Approach		1313	20	1382	1.5	0.420	18.4	LOS B	16.8	119.3	0.59	0.59	0.59	44.9
NorthEast: Cultural Centre Access (NE)														
7	L2	3	0	3	0.0	0.456	95.1	LOS F	0.5	3.7	1.00	0.65	1.10	17.4
8	T1	1	0	1	0.0	*0.456	90.6	LOS F	0.5	3.7	1.00	0.65	1.10	16.9
9	R2	2	0	2	0.0	0.456	95.1	LOS F	0.5	3.7	1.00	0.65	1.10	17.4
Approach		6	0	6	0.0	0.456	94.4	LOS F	0.5	3.7	1.00	0.65	1.10	17.3
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	*0.604	10.5	LOS B	12.0	85.6	0.25	0.23	0.25	50.6
11	T1	1497	29	1576	1.9	0.604	4.9	LOS A	12.0	85.6	0.25	0.23	0.25	55.5
12	R2	37	5	39	13.5	0.293	73.9	LOS E	2.6	20.4	0.98	0.74	0.98	26.0
Approach		1535	34	1616	2.2	0.604	6.6	LOS A	12.0	85.6	0.27	0.24	0.27	54.0
SouthWest: Ikkina Rd (SW)														
1	L2	32	0	34	0.0	0.031	6.9	LOS A	0.4	2.8	0.23	0.56	0.23	48.8
2	T1	3	0	3	0.0	*0.603	56.4	LOS E	12.3	86.0	0.96	0.81	0.96	22.1
3	R2	357	0	376	0.0	0.603	60.7	LOS E	12.3	86.0	0.96	0.81	0.96	28.4
Approach		392	0	413	0.0	0.603	56.3	LOS E	12.3	86.0	0.90	0.79	0.90	29.4
All Vehicles		3246	54	3417	1.7	0.604	17.5	LOS B	16.8	119.3	0.47	0.45	0.47	45.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 AM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	281	0	296	0.0	* 0.208	8.4	LOS A	3.8	26.9	0.30	0.66	0.30	48.1
5	T1	1039	31	1094	3.0	* 0.408	2.8	LOS A	4.5	32.1	0.13	0.12	0.13	57.4
6	R2	1	0	1	0.0	0.002	10.1	LOS B	0.0	0.1	0.31	0.58	0.31	45.4
Approach		1321	31	1391	2.3	0.408	4.0	LOS A	4.5	32.1	0.17	0.24	0.17	55.1
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.341	88.4	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
8	T1	2	0	2	0.0	* 0.341	83.8	LOS F	0.7	5.1	1.00	0.65	1.00	17.8
9	R2	6	0	6	0.0	0.341	88.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
Approach		9	0	9	0.0	0.341	87.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	0.191	12.1	LOS B	5.6	41.1	0.35	0.30	0.35	48.9
11	T1	494	30	520	6.1	0.191	6.6	LOS A	5.6	41.1	0.35	0.30	0.35	54.2
12	R2	29	0	31	0.0	* 0.384	80.6	LOS F	2.2	15.2	1.00	0.72	1.00	24.8
Approach		524	30	552	5.7	0.384	10.7	LOS B	5.6	41.1	0.38	0.32	0.38	50.8
SouthWest: Ikkina Rd (SW)														
1	L2	56	1	59	1.8	0.058	5.1	LOS A	0.3	2.4	0.13	0.53	0.13	49.9
2	T1	3	0	3	0.0	0.260	62.1	LOS E	3.5	24.6	0.95	0.75	0.95	21.1
3	R2	102	0	107	0.0	0.260	66.7	LOS E	3.5	24.6	0.95	0.75	0.95	27.2
Approach		161	1	169	0.6	0.260	45.2	LOS D	3.5	24.6	0.67	0.67	0.67	32.2
All Vehicles		2015	62	2121	3.1	0.408	9.4	LOS A	5.6	41.1	0.27	0.29	0.27	50.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 PM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	179	1	188	0.6	0.155	15.1	LOS B	4.8	33.6	0.41	0.69	0.41	44.2
5	T1	713	22	751	3.1	* 0.278	8.2	LOS A	9.3	66.8	0.40	0.35	0.40	52.9
6	R2	1	0	1	0.0	* 0.002	9.3	LOS A	0.0	0.1	0.30	0.59	0.30	46.2
Approach		893	23	940	2.6	0.278	9.6	LOS A	9.3	66.8	0.40	0.42	0.40	50.9
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.281	96.2	LOS F	0.3	2.4	1.00	0.61	1.00	17.4
8	T1	1	0	1	0.0	* 0.281	91.6	LOS F	0.3	2.4	1.00	0.61	1.00	16.8
9	R2	1	1	1	100.0	0.281	97.0	LOS F	0.3	2.4	1.00	0.61	1.00	16.7
Approach		3	1	3	33.3	0.281	94.9	LOS F	0.3	2.4	1.00	0.61	1.00	17.0
NorthWest: Gold Coast Highway (NW)														
10	L2	2	0	2	0.0	0.287	6.1	LOS A	0.8	5.9	0.03	0.03	0.03	55.7
11	T1	809	28	852	3.5	0.287	0.5	LOS A	0.8	5.9	0.03	0.03	0.03	59.5
12	R2	36	3	38	8.3	0.275	73.6	LOS E	2.5	19.0	0.98	0.74	0.98	26.0
Approach		847	31	892	3.7	0.287	3.6	LOS A	2.5	19.0	0.07	0.06	0.07	56.4
SouthWest: Ikkina Rd (SW)														
1	L2	45	1	47	2.2	0.104	48.8	LOS D	2.6	18.5	0.81	0.68	0.81	31.4
2	T1	1	0	1	0.0	* 0.287	65.5	LOS E	3.2	22.7	0.97	0.74	0.97	20.4
3	R2	93	0	98	0.0	0.287	70.1	LOS E	3.2	22.7	0.97	0.74	0.97	26.5
Approach		139	1	146	0.7	0.287	63.1	LOS E	3.2	22.7	0.92	0.72	0.92	27.9
All Vehicles		1882	56	1981	3.0	0.287	11.0	LOS B	9.3	66.8	0.29	0.28	0.29	49.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

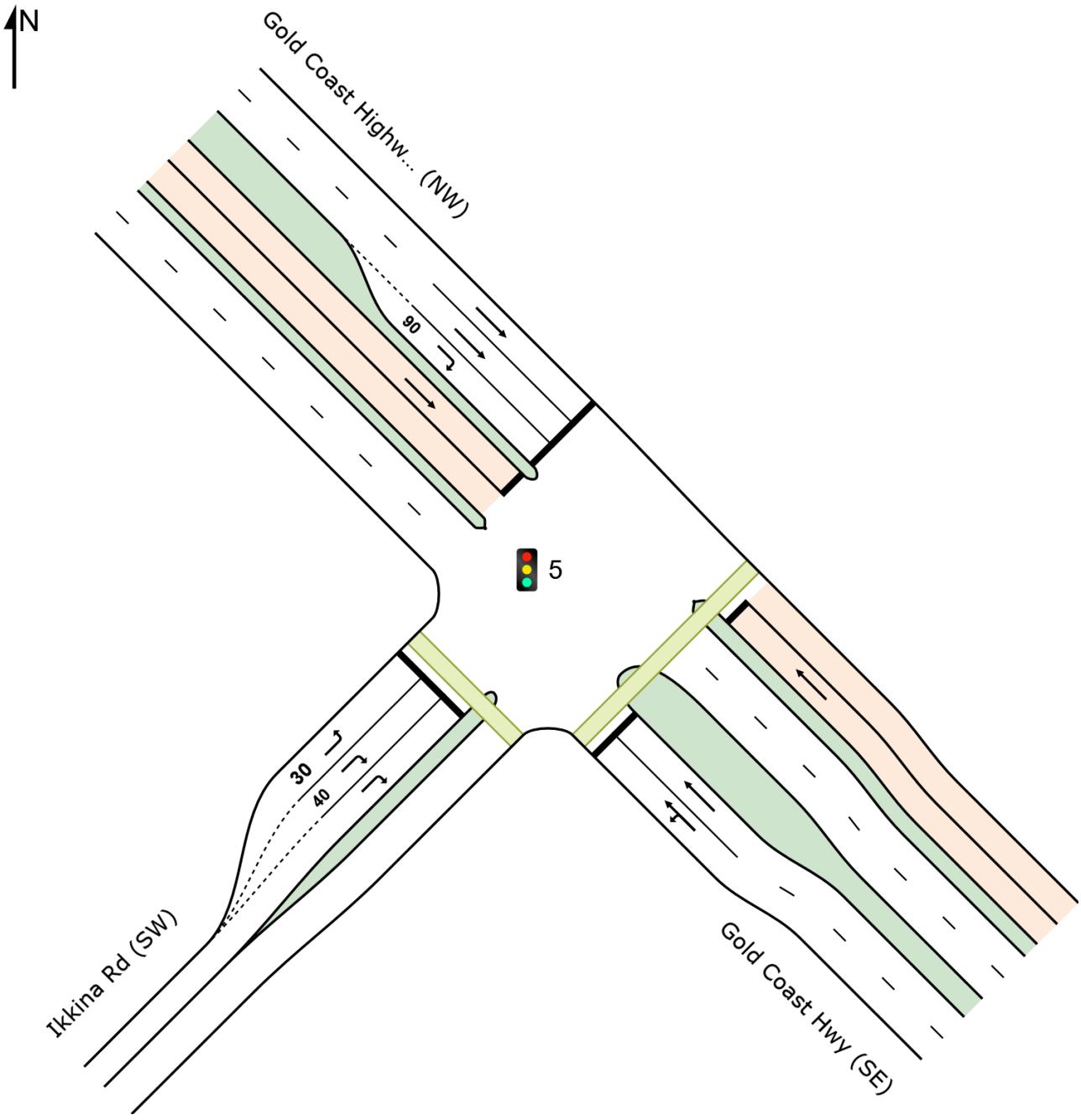
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

SITE LAYOUT

Site: 5 [2041 AM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2041 AM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	292	0	307	0.0	* 0.545	15.8	LOS B	17.7	125.1	0.43	0.55	0.43	45.4
5	T1	1001	30	1054	3.0	0.545	8.0	LOS A	17.7	125.1	0.33	0.36	0.33	52.5
Approach		1293	30	1361	2.3	0.545	9.8	LOS A	17.7	125.1	0.36	0.40	0.36	50.6
NorthWest: Gold Coast Highway (NW)														
11	T1	238	15	251	6.3	0.126	19.6	LOS B	4.1	29.5	0.55	0.45	0.55	45.8
12	R2	44	5	46	11.4	* 0.151	58.2	LOS E	2.7	20.6	0.88	0.74	0.88	29.3
Approach		282	20	297	7.1	0.151	25.6	LOS C	4.1	29.5	0.61	0.50	0.61	41.8
SouthWest: Ikkina Rd (SW)														
1	L2	31	0	33	0.0	0.064	45.4	LOS D	1.6	11.5	0.78	0.70	0.78	32.0
3	R2	73	0	77	0.0	* 0.483	80.1	LOS F	2.8	19.3	1.00	0.73	1.00	24.6
Approach		104	0	109	0.0	0.483	69.8	LOS E	2.8	19.3	0.93	0.72	0.93	26.4
All Vehicles		1679	50	1767	3.0	0.545	16.2	LOS B	17.7	125.1	0.43	0.44	0.43	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	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.

MOVEMENT SUMMARY

Site: 5 [2041 PM (Site Folder: Option 3Aii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	150	0	158	0.0	0.276	18.3	LOS B	8.1	57.1	0.43	0.55	0.43	43.9
5	T1	441	21	464	4.8	0.276	11.5	LOS B	8.1	57.1	0.35	0.36	0.35	50.2
Approach		591	21	622	3.6	0.276	13.3	LOS B	8.1	57.1	0.37	0.41	0.37	48.2
NorthWest: Gold Coast Highway (NW)														
11	T1	566	17	596	3.0	* 0.301	22.5	LOS C	11.6	82.1	0.63	0.55	0.63	44.0
12	R2	31	1	33	3.2	* 0.101	57.4	LOS E	1.9	13.4	0.87	0.72	0.87	29.5
Approach		597	18	628	3.0	0.301	24.3	LOS C	11.6	82.1	0.65	0.55	0.65	42.8
SouthWest: Ikkina Rd (SW)														
1	L2	26	2	27	7.7	0.046	38.4	LOS D	1.2	9.3	0.71	0.68	0.71	34.0
3	R2	112	0	118	0.0	* 0.296	68.1	LOS E	3.8	26.6	0.96	0.75	0.96	26.8
Approach		138	2	145	1.4	0.296	62.5	LOS E	3.8	26.6	0.91	0.74	0.91	27.9
All Vehicles		1326	41	1396	3.1	0.301	23.4	LOS C	11.6	82.1	0.55	0.51	0.55	42.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	0.95

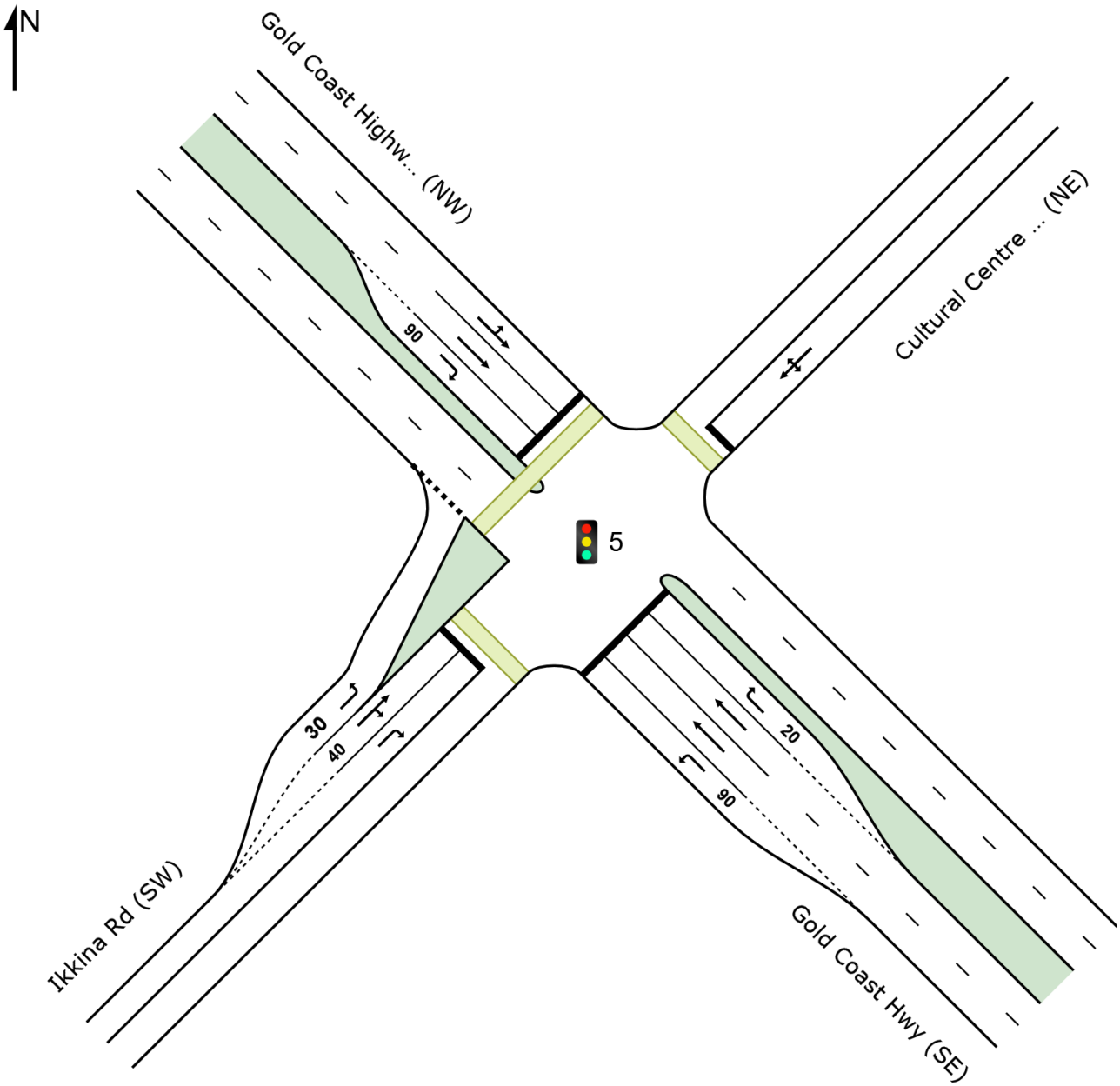
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

Site: 5 [2021 AM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2021 AM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	711	0	748	0.0	* 0.522	9.3	LOS A	13.2	92.2	0.41	0.71	0.41	47.5
5	T1	1329	49	1399	3.7	* 0.536	4.1	LOS A	8.7	62.5	0.20	0.18	0.20	56.2
6	R2	1	0	1	0.0	0.003	12.0	LOS B	0.0	0.1	0.38	0.59	0.38	43.9
Approach		2041	49	2148	2.4	0.536	5.9	LOS A	13.2	92.2	0.28	0.37	0.28	52.9
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
8	T1	1	0	1	0.0	* 0.343	83.8	LOS F	0.7	5.1	1.00	0.66	1.00	17.7
9	R2	7	0	7	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
Approach		9	0	9	0.0	0.343	87.9	LOS F	0.7	5.1	1.00	0.66	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	0.340	13.8	LOS B	11.8	86.0	0.42	0.37	0.42	47.2
11	T1	870	43	916	4.9	0.340	8.3	LOS A	11.8	86.0	0.42	0.37	0.42	52.8
12	R2	33	1	35	3.0	* 0.535	83.4	LOS F	2.5	18.2	1.00	0.74	1.04	24.4
Approach		906	44	954	4.9	0.535	11.0	LOS B	11.8	86.0	0.44	0.39	0.44	50.6
SouthWest: Ikkina Rd (SW)														
1	L2	46	2	48	4.3	0.055	5.6	LOS A	0.4	2.7	0.17	0.54	0.17	49.5
2	T1	1	0	1	0.0	0.457	61.1	LOS E	7.4	51.8	0.97	0.79	0.97	21.2
3	R2	218	0	229	0.0	0.457	65.7	LOS E	7.4	51.8	0.97	0.79	0.97	27.4
Approach		265	2	279	0.8	0.457	55.2	LOS E	7.4	51.8	0.83	0.75	0.83	29.7
All Vehicles		3221	95	3391	2.9	0.536	11.6	LOS B	13.2	92.2	0.37	0.41	0.37	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2021 PM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	400	0	421	0.0	0.453	29.5	LOS C	18.3	127.9	0.69	0.79	0.69	37.6
5	T1	858	27	903	3.1	0.431	20.1	LOS C	18.1	129.8	0.64	0.57	0.64	45.1
6	R2	1	0	1	0.0	* 0.007	18.0	LOS B	0.0	0.2	0.52	0.59	0.52	39.6
Approach		1259	27	1325	2.1	0.453	23.1	LOS C	18.3	129.8	0.66	0.64	0.66	42.4
NorthEast: Cultural Centre Access (NE)														
7	L2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
8	T1	1	0	1	0.0	* 0.379	90.1	LOS F	0.4	3.0	1.00	0.63	1.03	17.0
9	R2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
Approach		5	0	5	0.0	0.379	93.7	LOS F	0.4	3.0	1.00	0.63	1.03	17.4
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	* 0.617	15.1	LOS B	18.2	128.8	0.40	0.37	0.40	46.1
11	T1	1402	22	1476	1.6	0.617	9.6	LOS A	18.2	128.8	0.40	0.37	0.40	51.9
12	R2	35	0	37	0.0	0.252	73.1	LOS E	2.4	17.1	0.98	0.73	0.98	26.1
Approach		1440	22	1516	1.5	0.617	11.1	LOS B	18.2	128.8	0.41	0.37	0.41	50.6
SouthWest: Ikkina Rd (SW)														
1	L2	37	0	39	0.0	0.051	31.6	LOS C	1.7	11.7	0.64	0.63	0.64	36.8
2	T1	3	0	3	0.0	* 0.613	49.5	LOS D	16.0	111.8	0.93	0.82	0.93	23.6
3	R2	459	0	483	0.0	0.613	53.4	LOS D	16.0	111.8	0.92	0.81	0.92	30.1
Approach		499	0	525	0.0	0.613	51.7	LOS D	16.0	111.8	0.90	0.80	0.90	30.5
All Vehicles		3203	49	3372	1.5	0.617	22.3	LOS C	18.3	129.8	0.59	0.55	0.59	42.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 AM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	758	0	798	0.0	* 0.547	8.9	LOS A	13.4	93.6	0.41	0.71	0.41	47.8
5	T1	1392	50	1465	3.6	* 0.562	4.2	LOS A	9.5	68.7	0.21	0.19	0.21	56.1
6	R2	4	0	4	0.0	0.014	12.8	LOS B	0.1	0.6	0.40	0.61	0.40	43.3
Approach		2154	50	2267	2.3	0.562	5.9	LOS A	13.4	93.6	0.28	0.38	0.28	52.9
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.303	88.1	LOS F	0.6	4.5	1.00	0.65	1.00	18.4
8	T1	2	0	2	0.0	* 0.303	83.5	LOS F	0.6	4.5	1.00	0.65	1.00	17.8
9	R2	5	0	5	0.0	0.303	88.1	LOS F	0.6	4.5	1.00	0.65	1.00	18.4
Approach		8	0	8	0.0	0.303	87.0	LOS F	0.6	4.5	1.00	0.65	1.00	18.3
NorthWest: Gold Coast Highway (NW)														
10	L2	6	1	6	16.7	0.372	14.7	LOS B	13.4	97.9	0.44	0.40	0.44	45.3
11	T1	940	44	989	4.7	0.372	8.9	LOS A	13.5	98.0	0.44	0.40	0.44	52.3
12	R2	25	4	26	16.0	* 0.553	86.1	LOS F	2.0	15.7	1.00	0.74	1.08	23.9
Approach		971	49	1022	5.0	0.553	11.0	LOS B	13.5	98.0	0.45	0.40	0.45	50.7
SouthWest: Ikkina Rd (SW)														
1	L2	44	0	46	0.0	0.052	5.7	LOS A	0.4	2.7	0.17	0.55	0.17	49.6
2	T1	1	0	1	0.0	0.423	59.0	LOS E	7.4	51.9	0.95	0.79	0.95	21.6
3	R2	223	0	235	0.0	0.423	63.5	LOS E	7.4	51.9	0.95	0.79	0.95	27.8
Approach		268	0	282	0.0	0.423	54.0	LOS D	7.4	51.9	0.83	0.75	0.83	30.0
All Vehicles		3401	99	3580	2.9	0.562	11.3	LOS B	13.5	98.0	0.37	0.41	0.37	49.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 PM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	413	0	435	0.0	0.426	25.1	LOS C	17.1	119.7	0.63	0.77	0.63	39.4
5	T1	898	20	945	2.2	0.411	16.1	LOS B	17.0	121.5	0.58	0.52	0.58	47.5
6	R2	2	0	2	0.0	* 0.014	14.3	LOS B	0.0	0.3	0.43	0.60	0.43	42.1
Approach		1313	20	1382	1.5	0.426	18.9	LOS B	17.1	121.5	0.60	0.60	0.60	44.6
NorthEast: Cultural Centre Access (NE)														
7	L2	3	0	3	0.0	0.456	95.1	LOS F	0.5	3.7	1.00	0.65	1.10	17.4
8	T1	1	0	1	0.0	* 0.456	90.6	LOS F	0.5	3.7	1.00	0.65	1.10	16.9
9	R2	2	0	2	0.0	0.456	95.1	LOS F	0.5	3.7	1.00	0.65	1.10	17.4
Approach		6	0	6	0.0	0.456	94.4	LOS F	0.5	3.7	1.00	0.65	1.10	17.3
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	* 0.601	11.0	LOS B	12.7	90.5	0.27	0.25	0.27	50.1
11	T1	1475	29	1553	2.0	0.601	5.4	LOS A	12.7	90.5	0.27	0.25	0.27	55.1
12	R2	37	5	39	13.5	0.293	73.9	LOS E	2.6	20.4	0.98	0.74	0.98	26.0
Approach		1513	34	1593	2.2	0.601	7.1	LOS A	12.7	90.5	0.28	0.26	0.28	53.6
SouthWest: Ikkina Rd (SW)														
1	L2	31	0	33	0.0	0.030	6.9	LOS A	0.4	2.7	0.23	0.56	0.23	48.8
2	T1	1	0	1	0.0	* 0.596	55.5	LOS E	12.5	87.8	0.96	0.82	0.96	22.3
3	R2	367	0	386	0.0	0.596	59.8	LOS E	12.5	87.8	0.95	0.81	0.95	28.6
Approach		399	0	420	0.0	0.596	55.7	LOS E	12.5	87.8	0.90	0.79	0.90	29.6
All Vehicles		3231	54	3401	1.7	0.601	18.1	LOS B	17.1	121.5	0.49	0.46	0.49	45.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 AM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	285	0	300	0.0	*0.215	8.8	LOS A	4.3	29.8	0.32	0.67	0.32	47.8
5	T1	1035	31	1089	3.0	*0.411	3.2	LOS A	5.0	35.9	0.15	0.13	0.15	57.0
6	R2	1	0	1	0.0	0.002	9.9	LOS A	0.0	0.1	0.31	0.58	0.31	45.7
Approach		1321	31	1391	2.3	0.411	4.4	LOS A	5.0	35.9	0.19	0.25	0.19	54.8
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.341	88.4	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
8	T1	2	0	2	0.0	*0.341	83.8	LOS F	0.7	5.1	1.00	0.65	1.00	17.8
9	R2	6	0	6	0.0	0.341	88.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
Approach		9	0	9	0.0	0.341	87.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	0.189	11.8	LOS B	5.4	40.1	0.34	0.29	0.34	49.2
11	T1	495	30	521	6.1	0.189	6.2	LOS A	5.4	40.1	0.34	0.29	0.34	54.4
12	R2	39	0	41	0.0	*0.387	77.8	LOS E	2.8	19.9	1.00	0.74	1.00	25.3
Approach		535	30	563	5.6	0.387	11.5	LOS B	5.4	40.1	0.39	0.32	0.39	50.2
SouthWest: Ikkina Rd (SW)														
1	L2	54	1	57	1.9	0.056	5.1	LOS A	0.3	2.3	0.13	0.53	0.13	49.9
2	T1	3	0	3	0.0	0.275	63.3	LOS E	3.5	24.7	0.96	0.75	0.96	20.8
3	R2	101	0	106	0.0	0.275	67.8	LOS E	3.5	24.7	0.96	0.75	0.96	27.0
Approach		158	1	166	0.6	0.275	46.3	LOS D	3.5	24.7	0.68	0.67	0.68	31.9
All Vehicles		2023	62	2129	3.1	0.411	9.9	LOS A	5.4	40.1	0.28	0.30	0.28	50.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 PM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	183	1	193	0.5	0.158	15.2	LOS B	4.9	34.4	0.41	0.69	0.41	44.1
5	T1	709	22	746	3.1	* 0.276	8.2	LOS A	9.2	66.4	0.40	0.35	0.40	52.9
6	R2	1	0	1	0.0	* 0.002	9.3	LOS A	0.0	0.1	0.30	0.59	0.30	46.2
Approach		893	23	940	2.6	0.276	9.6	LOS A	9.2	66.4	0.40	0.42	0.40	50.8
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.281	96.2	LOS F	0.3	2.4	1.00	0.61	1.00	17.4
8	T1	1	0	1	0.0	* 0.281	91.6	LOS F	0.3	2.4	1.00	0.61	1.00	16.8
9	R2	1	1	1	100.0	0.281	97.0	LOS F	0.3	2.4	1.00	0.61	1.00	16.7
Approach		3	1	3	33.3	0.281	94.9	LOS F	0.3	2.4	1.00	0.61	1.00	17.0
NorthWest: Gold Coast Highway (NW)														
10	L2	2	0	2	0.0	0.287	6.1	LOS A	0.8	5.9	0.03	0.03	0.03	55.7
11	T1	809	28	852	3.5	0.287	0.5	LOS A	0.8	5.9	0.03	0.03	0.03	59.5
12	R2	36	3	38	8.3	0.275	73.6	LOS E	2.5	19.0	0.98	0.74	0.98	26.0
Approach		847	31	892	3.7	0.287	3.6	LOS A	2.5	19.0	0.07	0.06	0.07	56.4
SouthWest: Ikkina Rd (SW)														
1	L2	40	1	42	2.5	0.092	48.6	LOS D	2.3	16.5	0.81	0.67	0.81	31.4
2	T1	1	0	1	0.0	* 0.287	65.5	LOS E	3.2	22.7	0.97	0.74	0.97	20.4
3	R2	93	0	98	0.0	0.287	70.1	LOS E	3.2	22.7	0.97	0.74	0.97	26.5
Approach		134	1	141	0.7	0.287	63.6	LOS E	3.2	22.7	0.92	0.72	0.92	27.8
All Vehicles		1877	56	1976	3.0	0.287	10.9	LOS B	9.2	66.4	0.29	0.28	0.29	50.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

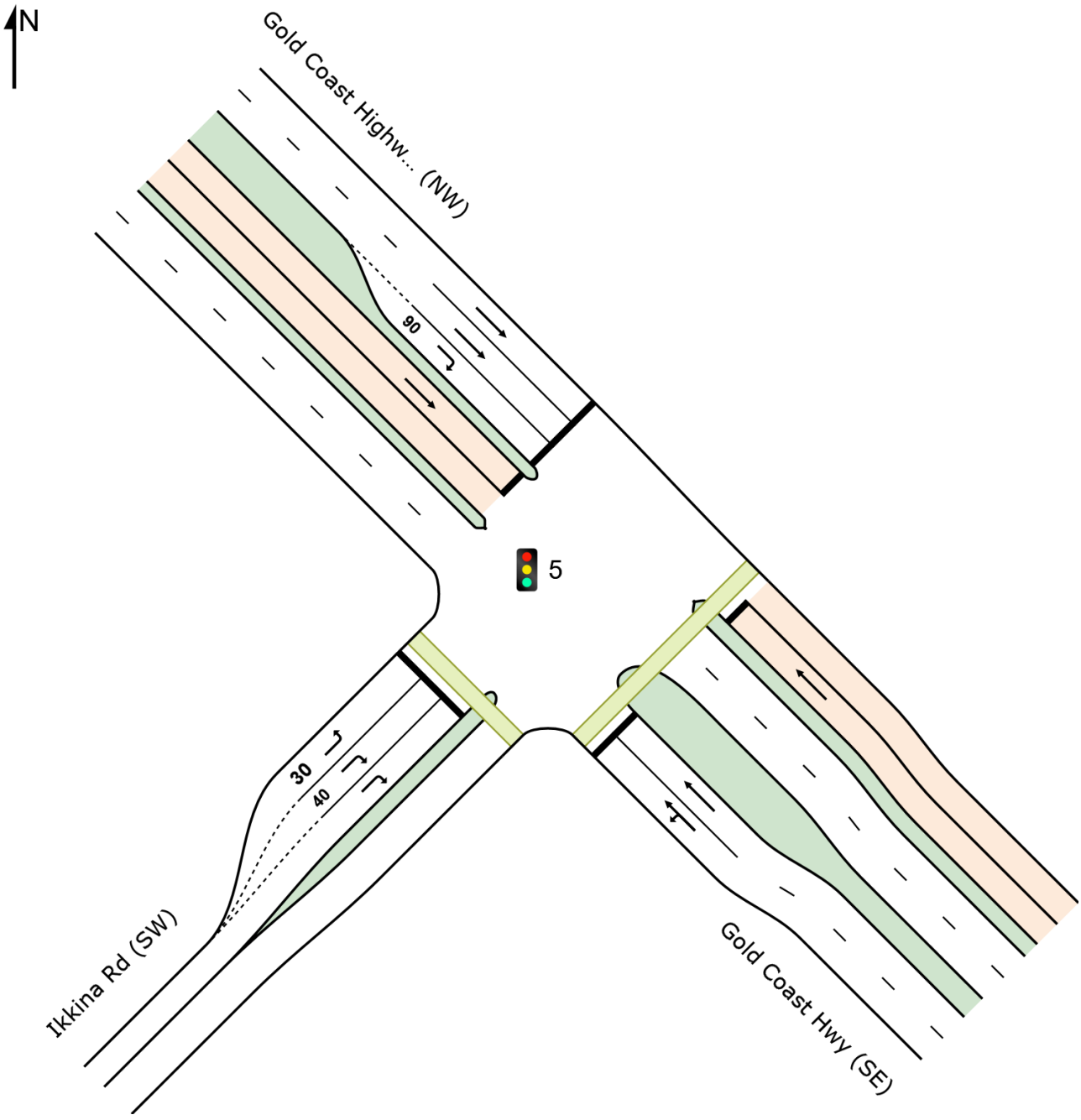
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

SITE LAYOUT

Site: 5 [2041 AM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2041 AM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	292	0	307	0.0	* 0.545	15.8	LOS B	17.7	125.1	0.43	0.55	0.43	45.4
5	T1	1001	30	1054	3.0	0.545	8.0	LOS A	17.7	125.1	0.33	0.36	0.33	52.5
Approach		1293	30	1361	2.3	0.545	9.8	LOS A	17.7	125.1	0.36	0.40	0.36	50.6
NorthWest: Gold Coast Highway (NW)														
11	T1	235	15	247	6.4	0.120	20.1	LOS C	4.1	29.6	0.56	0.46	0.56	45.5
12	R2	44	5	46	11.4	* 0.151	58.2	LOS E	2.7	20.6	0.88	0.74	0.88	29.3
Approach		279	20	294	7.2	0.151	26.1	LOS C	4.1	29.6	0.61	0.50	0.61	41.6
SouthWest: Ikkina Rd (SW)														
1	L2	28	0	29	0.0	0.058	45.3	LOS D	1.5	10.4	0.78	0.70	0.78	32.0
3	R2	73	0	77	0.0	* 0.483	80.1	LOS F	2.8	19.3	1.00	0.73	1.00	24.6
Approach		101	0	106	0.0	0.483	70.5	LOS E	2.8	19.3	0.94	0.72	0.94	26.3
All Vehicles		1673	50	1761	3.0	0.545	16.2	LOS B	17.7	125.1	0.43	0.44	0.43	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	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.

MOVEMENT SUMMARY

Site: 5 [2041 PM (Site Folder: Option 3Aiii)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	145	0	153	0.0	0.276	18.2	LOS B	8.0	56.6	0.43	0.54	0.43	44.0
5	T1	446	21	469	4.7	0.302	11.6	LOS B	8.0	56.6	0.35	0.36	0.35	50.2
Approach		591	21	622	3.6	0.302	13.2	LOS B	8.0	56.6	0.37	0.40	0.37	48.2
NorthWest: Gold Coast Highway (NW)														
11	T1	568	17	598	3.0	* 0.302	22.0	LOS C	11.4	81.2	0.63	0.54	0.63	44.3
12	R2	35	1	37	2.9	* 0.113	57.5	LOS E	2.1	15.1	0.87	0.72	0.87	29.5
Approach		603	18	635	3.0	0.302	24.0	LOS C	11.4	81.2	0.64	0.55	0.64	42.9
SouthWest: Ikkina Rd (SW)														
1	L2	29	2	31	6.9	0.051	38.5	LOS D	1.4	10.3	0.71	0.69	0.71	34.0
3	R2	112	0	118	0.0	* 0.296	68.1	LOS E	3.8	26.6	0.96	0.75	0.96	26.8
Approach		141	2	148	1.4	0.296	62.0	LOS E	3.8	26.6	0.91	0.74	0.91	28.0
All Vehicles		1335	41	1405	3.1	0.302	23.2	LOS C	11.4	81.2	0.55	0.50	0.55	42.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	0.95

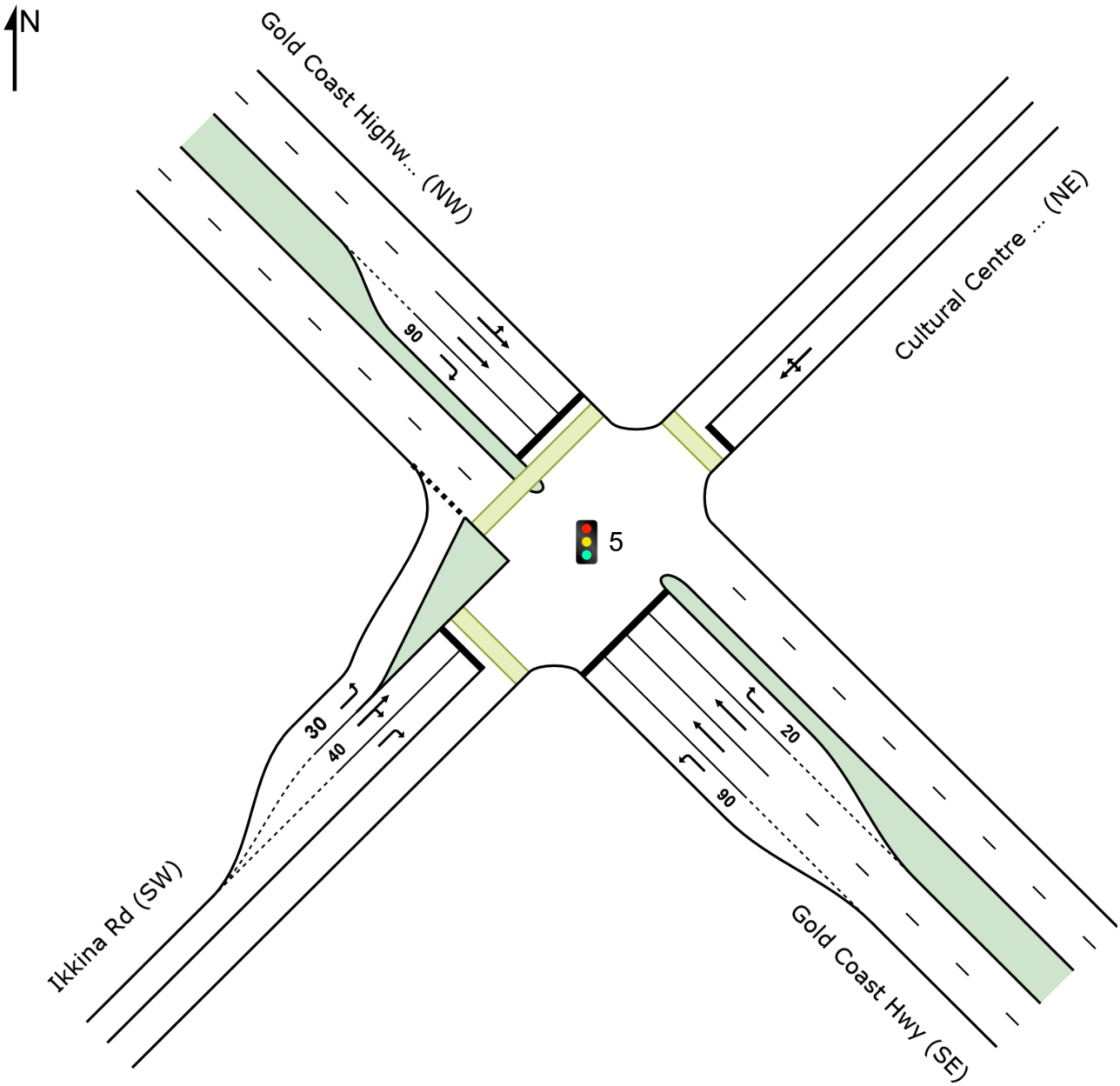
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

Site: 5 [2021 AM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2021 AM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	680	0	716	0.0	* 0.500	9.2	LOS A	12.2	85.6	0.40	0.71	0.40	47.6
5	T1	1353	49	1424	3.6	* 0.529	2.7	LOS A	6.3	45.3	0.14	0.13	0.14	57.5
6	R2	1	0	1	0.0	0.003	11.1	LOS B	0.0	0.1	0.36	0.59	0.36	44.6
Approach		2034	49	2141	2.4	0.529	4.9	LOS A	12.2	85.6	0.23	0.32	0.23	53.7
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
8	T1	1	0	1	0.0	* 0.343	83.8	LOS F	0.7	5.1	1.00	0.66	1.00	17.7
9	R2	7	0	7	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
Approach		9	0	9	0.0	0.343	87.9	LOS F	0.7	5.1	1.00	0.66	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	0.331	12.7	LOS B	11.0	80.0	0.39	0.35	0.39	48.3
11	T1	873	43	919	4.9	0.331	7.1	LOS A	11.0	80.0	0.39	0.35	0.39	53.7
12	R2	30	1	32	3.3	* 0.487	83.0	LOS F	2.3	16.5	1.00	0.72	1.00	24.4
Approach		906	44	954	4.9	0.487	9.7	LOS A	11.0	80.0	0.41	0.36	0.41	51.6
SouthWest: Ikkina Rd (SW)														
1	L2	47	2	49	4.3	0.057	5.4	LOS A	0.3	2.4	0.15	0.54	0.15	49.7
2	T1	1	0	1	0.0	0.528	64.6	LOS E	7.4	51.9	0.99	0.79	0.99	20.6
3	R2	212	0	223	0.0	0.528	69.1	LOS E	7.4	51.9	0.99	0.79	0.99	26.7
Approach		260	2	274	0.8	0.528	57.6	LOS E	7.4	51.9	0.84	0.74	0.84	29.1
All Vehicles		3209	95	3378	3.0	0.529	10.7	LOS B	12.2	85.6	0.33	0.37	0.33	49.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2021 PM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	358	0	377	0.0	0.406	28.7	LOS C	15.9	111.0	0.67	0.78	0.67	37.9
5	T1	890	27	937	3.0	0.447	20.4	LOS C	18.9	136.0	0.65	0.58	0.65	45.0
6	R2	1	0	1	0.0	*0.007	17.8	LOS B	0.0	0.2	0.52	0.59	0.52	39.7
Approach		1249	27	1315	2.2	0.447	22.8	LOS C	18.9	136.0	0.66	0.64	0.66	42.7
NorthEast: Cultural Centre Access (NE)														
7	L2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
8	T1	1	0	1	0.0	*0.379	90.1	LOS F	0.4	3.0	1.00	0.63	1.03	17.0
9	R2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
Approach		5	0	5	0.0	0.379	93.7	LOS F	0.4	3.0	1.00	0.63	1.03	17.4
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	*0.606	15.0	LOS B	17.5	124.3	0.39	0.36	0.39	46.2
11	T1	1377	22	1449	1.6	0.606	9.5	LOS A	17.5	124.3	0.39	0.36	0.39	51.9
12	R2	41	0	43	0.0	0.296	73.4	LOS E	2.9	20.2	0.98	0.74	0.98	26.1
Approach		1421	22	1496	1.5	0.606	11.3	LOS B	17.5	124.3	0.41	0.37	0.41	50.5
SouthWest: Ikkina Rd (SW)														
1	L2	36	0	38	0.0	0.050	31.6	LOS C	1.6	11.3	0.64	0.63	0.64	36.8
2	T1	3	0	3	0.0	*0.604	49.4	LOS D	15.7	110.0	0.93	0.82	0.93	23.6
3	R2	454	0	478	0.0	0.604	53.3	LOS D	15.7	110.0	0.92	0.81	0.92	30.2
Approach		493	0	519	0.0	0.604	51.7	LOS D	15.7	110.0	0.90	0.80	0.90	30.5
All Vehicles		3168	49	3335	1.5	0.606	22.2	LOS C	18.9	136.0	0.58	0.54	0.58	42.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 AM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	739	0	778	0.0	* 0.524	8.6	LOS A	12.8	89.4	0.37	0.70	0.37	48.0
5	T1	1410	50	1484	3.5	* 0.540	1.9	LOS A	4.9	35.1	0.11	0.10	0.11	58.2
6	R2	4	0	4	0.0	0.012	11.0	LOS B	0.1	0.5	0.35	0.61	0.35	44.7
Approach		2153	50	2266	2.3	0.540	4.2	LOS A	12.8	89.4	0.20	0.31	0.20	54.2
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.598	95.8	LOS F	0.7	4.9	1.00	0.69	1.25	17.6
8	T1	4	0	4	0.0	* 0.598	91.2	LOS F	0.7	4.9	1.00	0.69	1.25	17.0
9	R2	3	0	3	0.0	0.598	95.8	LOS F	0.7	4.9	1.00	0.69	1.25	17.6
Approach		8	0	8	0.0	0.598	93.5	LOS F	0.7	4.9	1.00	0.69	1.25	17.3
NorthWest: Gold Coast Highway (NW)														
10	L2	6	1	6	16.7	0.346	12.6	LOS B	11.5	83.6	0.38	0.35	0.38	47.1
11	T1	918	44	966	4.8	0.346	6.9	LOS A	11.5	83.6	0.38	0.35	0.38	53.9
12	R2	24	4	25	16.7	* 0.533	86.0	LOS F	1.9	15.1	1.00	0.73	1.07	23.9
Approach		948	49	998	5.2	0.533	8.9	LOS A	11.5	83.6	0.40	0.36	0.40	52.2
SouthWest: Ikkina Rd (SW)														
1	L2	49	0	52	0.0	0.059	5.1	LOS A	0.3	2.1	0.14	0.54	0.14	50.0
2	T1	1	0	1	0.0	0.528	62.6	LOS E	8.0	56.3	0.98	0.79	0.98	20.9
3	R2	236	0	248	0.0	0.528	67.2	LOS E	8.2	57.6	0.98	0.79	0.98	27.1
Approach		286	0	301	0.0	0.528	56.6	LOS E	8.2	57.6	0.84	0.75	0.84	29.4
All Vehicles		3395	99	3574	2.9	0.598	10.1	LOS B	12.8	89.4	0.31	0.36	0.31	49.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 PM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	412	0	434	0.0	0.419	24.4	LOS C	16.8	117.4	0.62	0.77	0.62	39.7
5	T1	901	20	948	2.2	0.408	15.6	LOS B	16.8	119.8	0.57	0.51	0.57	47.8
6	R2	2	0	2	0.0	*0.014	13.8	LOS B	0.0	0.3	0.42	0.60	0.42	42.5
Approach		1315	20	1384	1.5	0.419	18.4	LOS B	16.8	119.8	0.59	0.59	0.59	44.9
NorthEast: Cultural Centre Access (NE)														
7	L2	3	0	3	0.0	0.532	95.6	LOS F	0.6	4.3	1.00	0.67	1.18	17.3
8	T1	1	0	1	0.0	*0.532	91.0	LOS F	0.6	4.3	1.00	0.67	1.18	16.8
9	R2	3	0	3	0.0	0.532	95.6	LOS F	0.6	4.3	1.00	0.67	1.18	17.4
Approach		7	0	7	0.0	0.532	94.9	LOS F	0.6	4.3	1.00	0.67	1.18	17.3
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	*0.602	10.5	LOS B	12.0	85.1	0.25	0.23	0.25	50.6
11	T1	1493	29	1572	1.9	0.602	4.9	LOS A	12.0	85.1	0.25	0.23	0.25	55.5
12	R2	51	5	54	9.8	0.394	74.5	LOS E	3.6	27.6	0.99	0.75	0.99	25.8
Approach		1545	34	1626	2.2	0.602	7.2	LOS A	12.0	85.1	0.27	0.25	0.27	53.5
SouthWest: Ikkina Rd (SW)														
1	L2	30	0	32	0.0	0.029	6.9	LOS A	0.4	2.6	0.23	0.56	0.23	48.8
2	T1	2	0	2	0.0	*0.604	57.2	LOS E	11.9	83.6	0.97	0.81	0.97	22.0
3	R2	348	0	366	0.0	0.604	61.6	LOS E	11.9	83.6	0.96	0.81	0.96	28.2
Approach		380	0	400	0.0	0.604	57.3	LOS E	11.9	83.6	0.91	0.79	0.91	29.2
All Vehicles		3247	54	3418	1.7	0.604	17.8	LOS B	16.8	119.8	0.47	0.45	0.48	45.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 AM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	278	0	293	0.0	* 0.204	8.2	LOS A	3.6	25.4	0.29	0.66	0.29	48.2
5	T1	1042	31	1097	3.0	* 0.405	2.4	LOS A	3.9	28.2	0.12	0.11	0.12	57.8
6	R2	1	0	1	0.0	0.002	9.9	LOS A	0.0	0.1	0.31	0.58	0.31	45.7
Approach		1321	31	1391	2.3	0.405	3.6	LOS A	3.9	28.2	0.15	0.22	0.15	55.5
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.341	88.4	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
8	T1	2	0	2	0.0	* 0.341	83.8	LOS F	0.7	5.1	1.00	0.65	1.00	17.8
9	R2	6	0	6	0.0	0.341	88.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
Approach		9	0	9	0.0	0.341	87.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	0.189	11.8	LOS B	5.4	40.1	0.34	0.29	0.34	49.2
11	T1	495	30	521	6.1	0.189	6.2	LOS A	5.4	40.1	0.34	0.29	0.34	54.4
12	R2	27	0	28	0.0	* 0.357	80.5	LOS F	2.0	14.1	1.00	0.72	1.00	24.8
Approach		523	30	551	5.7	0.357	10.1	LOS B	5.4	40.1	0.37	0.31	0.37	51.3
SouthWest: Ikkina Rd (SW)														
1	L2	56	1	59	1.8	0.058	5.1	LOS A	0.3	2.1	0.13	0.53	0.13	50.0
2	T1	3	0	3	0.0	0.258	62.1	LOS E	3.5	24.4	0.95	0.75	0.95	21.1
3	R2	101	0	106	0.0	0.258	66.6	LOS E	3.5	24.4	0.95	0.75	0.95	27.2
Approach		160	1	168	0.6	0.258	45.0	LOS D	3.5	24.4	0.66	0.67	0.66	32.3
All Vehicles		2013	62	2119	3.1	0.405	8.9	LOS A	5.4	40.1	0.25	0.28	0.25	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 PM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	171	1	180	0.6	0.148	15.1	LOS B	4.5	31.9	0.40	0.68	0.40	44.2
5	T1	721	22	759	3.1	* 0.281	8.2	LOS A	9.4	67.7	0.40	0.35	0.40	52.9
6	R2	1	0	1	0.0	* 0.002	9.3	LOS A	0.0	0.1	0.30	0.59	0.30	46.2
Approach		893	23	940	2.6	0.281	9.5	LOS A	9.4	67.7	0.40	0.42	0.40	51.0
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.281	96.2	LOS F	0.3	2.4	1.00	0.61	1.00	17.4
8	T1	1	0	1	0.0	* 0.281	91.6	LOS F	0.3	2.4	1.00	0.61	1.00	16.8
9	R2	1	1	1	100.0	0.281	97.0	LOS F	0.3	2.4	1.00	0.61	1.00	16.7
Approach		3	1	3	33.3	0.281	94.9	LOS F	0.3	2.4	1.00	0.61	1.00	17.0
NorthWest: Gold Coast Highway (NW)														
10	L2	2	0	2	0.0	0.288	6.1	LOS A	0.8	6.0	0.03	0.03	0.03	55.7
11	T1	810	28	853	3.5	0.288	0.5	LOS A	0.8	6.0	0.03	0.03	0.03	59.5
12	R2	36	3	38	8.3	0.275	73.6	LOS E	2.5	19.0	0.98	0.74	0.98	26.0
Approach		848	31	893	3.7	0.288	3.6	LOS A	2.5	19.0	0.07	0.06	0.07	56.4
SouthWest: Ikkina Rd (SW)														
1	L2	45	1	47	2.2	0.104	48.8	LOS D	2.6	18.5	0.81	0.68	0.81	31.4
2	T1	1	0	1	0.0	* 0.290	65.6	LOS E	3.3	22.9	0.97	0.75	0.97	20.4
3	R2	94	0	99	0.0	0.290	70.1	LOS E	3.3	22.9	0.97	0.75	0.97	26.5
Approach		140	1	147	0.7	0.290	63.2	LOS E	3.3	22.9	0.92	0.72	0.92	27.9
All Vehicles		1884	56	1983	3.0	0.290	11.0	LOS B	9.4	67.7	0.29	0.28	0.29	49.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

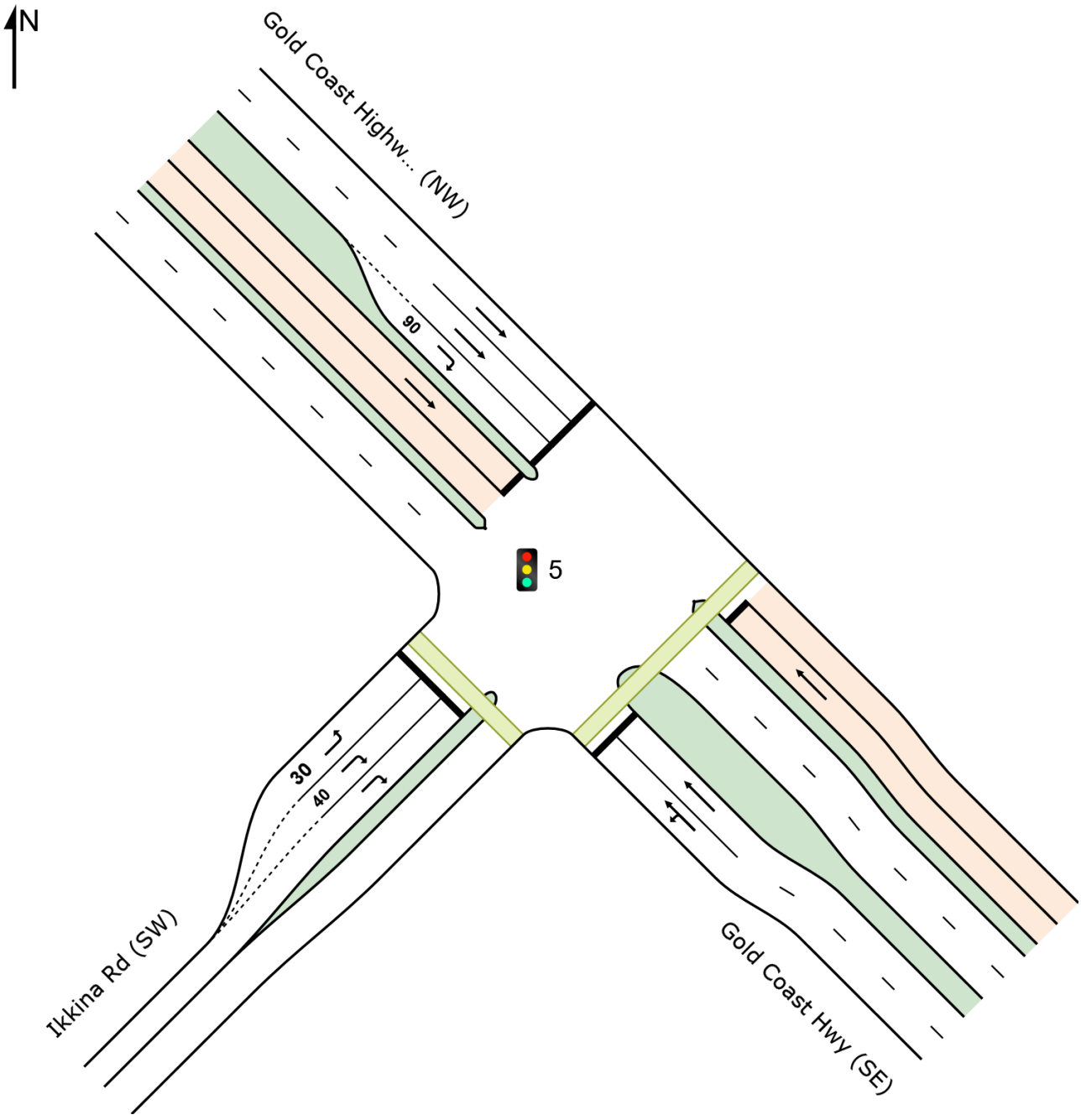
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

SITE LAYOUT

Site: 5 [2041 AM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2041 AM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	294	0	309	0.0	* 0.549	15.8	LOS B	17.9	126.5	0.43	0.55	0.43	45.4
5	T1	1008	30	1061	3.0	0.549	8.0	LOS A	17.9	126.5	0.33	0.36	0.33	52.5
Approach		1302	30	1371	2.3	0.549	9.8	LOS A	17.9	126.5	0.36	0.40	0.36	50.6
NorthWest: Gold Coast Highway (NW)														
11	T1	237	15	249	6.3	0.121	20.1	LOS C	4.2	29.9	0.56	0.46	0.56	45.5
12	R2	38	5	40	13.2	* 0.132	58.0	LOS E	2.3	18.0	0.88	0.73	0.88	29.4
Approach		275	20	289	7.3	0.132	25.3	LOS C	4.2	29.9	0.61	0.49	0.61	42.0
SouthWest: Ikkina Rd (SW)														
1	L2	31	0	33	0.0	0.064	45.4	LOS D	1.6	11.5	0.78	0.70	0.78	32.0
3	R2	73	0	77	0.0	* 0.483	80.1	LOS F	2.8	19.3	1.00	0.73	1.00	24.6
Approach		104	0	109	0.0	0.483	69.8	LOS E	2.8	19.3	0.93	0.72	0.93	26.4
All Vehicles		1681	50	1769	3.0	0.549	16.1	LOS B	17.9	126.5	0.43	0.44	0.43	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	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.

MOVEMENT SUMMARY

Site: 5 [2041 PM (Site Folder: Option 3Aiv)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	141	0	148	0.0	0.279	18.7	LOS B	8.1	57.7	0.43	0.54	0.43	43.8
5	T1	450	21	474	4.7	0.302	12.1	LOS B	8.1	57.7	0.36	0.37	0.36	49.9
Approach		591	21	622	3.6	0.302	13.7	LOS B	8.1	57.7	0.38	0.41	0.38	48.0
NorthWest: Gold Coast Highway (NW)														
11	T1	565	17	595	3.0	* 0.302	22.6	LOS C	11.5	81.9	0.63	0.55	0.63	44.0
12	R2	34	1	36	2.9	* 0.110	57.5	LOS E	2.0	14.7	0.87	0.72	0.87	29.5
Approach		599	18	631	3.0	0.302	24.5	LOS C	11.5	81.9	0.65	0.56	0.65	42.6
SouthWest: Ikkina Rd (SW)														
1	L2	29	2	31	6.9	0.050	37.7	LOS D	1.4	10.2	0.70	0.68	0.70	34.2
3	R2	116	0	122	0.0	* 0.288	66.9	LOS E	3.9	27.3	0.96	0.75	0.96	27.0
Approach		145	2	153	1.4	0.288	61.1	LOS E	3.9	27.3	0.91	0.74	0.91	28.2
All Vehicles		1335	41	1405	3.1	0.302	23.7	LOS C	11.5	81.9	0.56	0.51	0.56	42.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	0.95

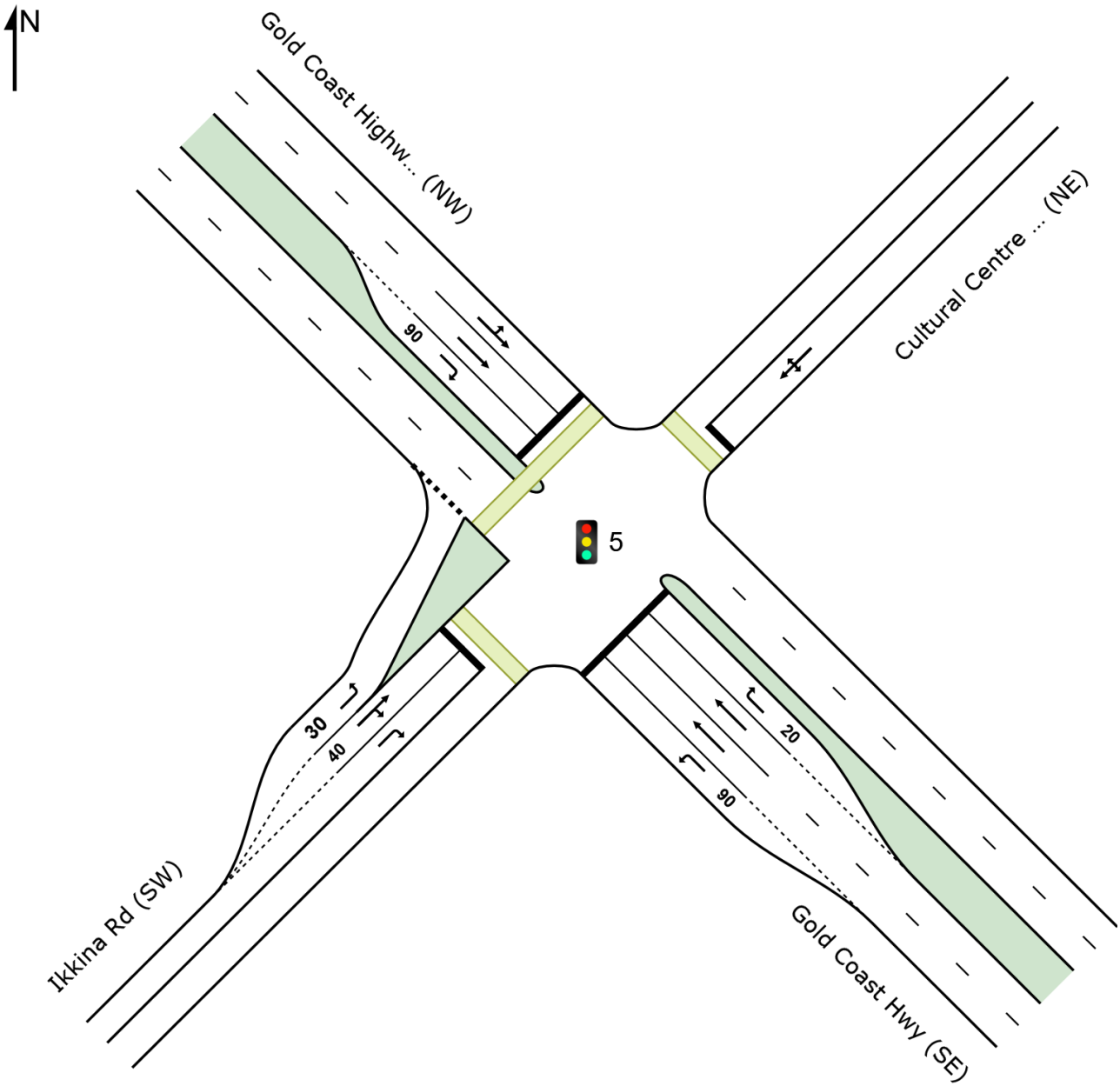
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

Site: 5 [2021 AM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2021 AM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	705	0	742	0.0	* 0.523	9.5	LOS A	13.6	95.0	0.42	0.72	0.42	47.4
5	T1	1334	49	1404	3.7	* 0.532	3.6	LOS A	7.8	56.6	0.18	0.17	0.18	56.7
6	R2	1	0	1	0.0	0.003	11.1	LOS B	0.0	0.1	0.36	0.59	0.36	44.6
Approach		2040	49	2147	2.4	0.532	5.6	LOS A	13.6	95.0	0.27	0.36	0.27	53.1
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
8	T1	1	0	1	0.0	* 0.343	83.8	LOS F	0.7	5.1	1.00	0.66	1.00	17.7
9	R2	7	0	7	0.0	0.343	88.4	LOS F	0.7	5.1	1.00	0.66	1.00	18.3
Approach		9	0	9	0.0	0.343	87.9	LOS F	0.7	5.1	1.00	0.66	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	3	0	3	0.0	0.334	13.4	LOS B	11.4	82.9	0.40	0.36	0.40	47.6
11	T1	862	43	907	5.0	0.334	7.9	LOS A	11.4	82.9	0.40	0.36	0.40	53.1
12	R2	33	1	35	3.0	* 0.446	81.1	LOS F	2.5	17.8	1.00	0.73	1.00	24.7
Approach		898	44	945	4.9	0.446	10.6	LOS B	11.4	82.9	0.43	0.38	0.43	51.0
SouthWest: Ikkina Rd (SW)														
1	L2	47	2	49	4.3	0.056	5.6	LOS A	0.4	2.8	0.17	0.54	0.17	49.5
2	T1	1	0	1	0.0	0.529	63.6	LOS E	7.8	54.5	0.99	0.79	0.99	20.7
3	R2	225	0	237	0.0	0.529	68.2	LOS E	7.8	54.8	0.99	0.79	0.99	26.9
Approach		273	2	287	0.7	0.529	57.4	LOS E	7.8	54.8	0.84	0.75	0.84	29.2
All Vehicles		3220	95	3389	3.0	0.532	11.6	LOS B	13.6	95.0	0.36	0.40	0.36	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2021 PM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	367	0	386	0.0	0.416	28.9	LOS C	16.4	114.5	0.68	0.78	0.68	37.9
5	T1	891	27	938	3.0	0.448	20.4	LOS C	19.0	136.2	0.65	0.58	0.65	45.0
6	R2	1	0	1	0.0	* 0.007	18.0	LOS B	0.0	0.2	0.52	0.59	0.52	39.6
Approach		1259	27	1325	2.1	0.448	22.9	LOS C	19.0	136.2	0.66	0.64	0.66	42.7
NorthEast: Cultural Centre Access (NE)														
7	L2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
8	T1	1	0	1	0.0	* 0.379	90.1	LOS F	0.4	3.0	1.00	0.63	1.03	17.0
9	R2	2	0	2	0.0	0.379	94.6	LOS F	0.4	3.0	1.00	0.63	1.03	17.5
Approach		5	0	5	0.0	0.379	93.7	LOS F	0.4	3.0	1.00	0.63	1.03	17.4
NorthWest: Gold Coast Highway (NW)														
10	L2	4	0	4	0.0	* 0.617	15.1	LOS B	18.1	128.7	0.40	0.37	0.40	46.1
11	T1	1400	22	1474	1.6	0.617	9.6	LOS A	18.1	128.7	0.40	0.37	0.40	51.9
12	R2	40	0	42	0.0	0.289	73.4	LOS E	2.8	19.7	0.98	0.74	0.98	26.1
Approach		1444	22	1520	1.5	0.617	11.3	LOS B	18.1	128.7	0.41	0.38	0.41	50.5
SouthWest: Ikkina Rd (SW)														
1	L2	35	0	37	0.0	0.048	31.5	LOS C	1.6	11.0	0.64	0.63	0.64	36.8
2	T1	5	0	5	0.0	* 0.605	49.4	LOS D	15.8	110.5	0.93	0.82	0.93	23.6
3	R2	453	0	477	0.0	0.605	53.3	LOS D	15.8	110.5	0.92	0.81	0.92	30.2
Approach		493	0	519	0.0	0.605	51.7	LOS D	15.8	110.5	0.90	0.80	0.90	30.5
All Vehicles		3201	49	3369	1.5	0.617	22.2	LOS C	19.0	136.2	0.59	0.54	0.59	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 AM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	795	0	837	0.0	* 0.590	9.9	LOS A	16.8	117.5	0.47	0.74	0.47	47.1
5	T1	1365	50	1437	3.7	* 0.596	8.1	LOS A	15.6	112.5	0.35	0.32	0.35	52.9
6	R2	4	0	4	0.0	0.014	14.4	LOS B	0.1	0.7	0.46	0.61	0.46	42.1
Approach		2164	50	2278	2.3	0.596	8.8	LOS A	16.8	117.5	0.39	0.47	0.39	50.6
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.303	88.1	LOS F	0.6	4.5	1.00	0.65	1.00	18.4
8	T1	2	0	2	0.0	* 0.303	83.5	LOS F	0.6	4.5	1.00	0.65	1.00	17.8
9	R2	5	0	5	0.0	0.303	88.1	LOS F	0.6	4.5	1.00	0.65	1.00	18.4
Approach		8	0	8	0.0	0.303	87.0	LOS F	0.6	4.5	1.00	0.65	1.00	18.3
NorthWest: Gold Coast Highway (NW)														
10	L2	6	1	6	16.7	0.396	17.4	LOS B	15.4	111.9	0.50	0.45	0.50	43.1
11	T1	939	44	988	4.7	0.396	11.7	LOS B	15.4	112.0	0.50	0.45	0.50	50.3
12	R2	37	4	39	10.8	* 0.527	82.0	LOS F	2.8	21.5	1.00	0.74	1.02	24.6
Approach		982	49	1034	5.0	0.527	14.4	LOS B	15.4	112.0	0.52	0.46	0.52	48.4
SouthWest: Ikkina Rd (SW)														
1	L2	45	0	47	0.0	0.051	6.8	LOS A	0.6	3.9	0.23	0.56	0.23	48.9
2	T1	1	0	1	0.0	0.347	54.6	LOS D	6.9	48.6	0.92	0.78	0.92	22.5
3	R2	218	0	229	0.0	0.347	59.1	LOS E	6.9	48.6	0.92	0.78	0.92	28.8
Approach		264	0	278	0.0	0.347	50.2	LOS D	6.9	48.6	0.80	0.74	0.80	30.9
All Vehicles		3418	99	3598	2.9	0.596	13.8	LOS B	16.8	117.5	0.46	0.49	0.46	47.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2024 PM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	394	0	415	0.0	0.411	25.4	LOS C	16.3	114.4	0.63	0.77	0.63	39.3
5	T1	917	20	965	2.2	0.425	16.8	LOS B	17.8	127.1	0.59	0.53	0.59	47.0
6	R2	2	0	2	0.0	*0.014	14.8	LOS B	0.1	0.4	0.45	0.60	0.45	41.7
Approach		1313	20	1382	1.5	0.425	19.4	LOS B	17.8	127.1	0.61	0.60	0.61	44.4
NorthEast: Cultural Centre Access (NE)														
7	L2	3	0	3	0.0	0.532	95.6	LOS F	0.6	4.3	1.00	0.67	1.18	17.3
8	T1	1	0	1	0.0	*0.532	91.0	LOS F	0.6	4.3	1.00	0.67	1.18	16.8
9	R2	3	0	3	0.0	0.532	95.6	LOS F	0.6	4.3	1.00	0.67	1.18	17.4
Approach		7	0	7	0.0	0.532	94.9	LOS F	0.6	4.3	1.00	0.67	1.18	17.3
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	*0.609	11.6	LOS B	13.8	98.5	0.29	0.27	0.29	49.5
11	T1	1478	29	1556	2.0	0.609	6.0	LOS A	13.8	98.5	0.29	0.27	0.29	54.6
12	R2	51	5	54	9.8	0.394	74.5	LOS E	3.6	27.6	0.99	0.75	0.99	25.8
Approach		1530	34	1611	2.2	0.609	8.3	LOS A	13.8	98.5	0.31	0.28	0.31	52.7
SouthWest: Ikkina Rd (SW)														
1	L2	36	0	38	0.0	0.035	7.1	LOS A	0.5	3.3	0.24	0.56	0.24	48.7
2	T1	3	0	3	0.0	*0.611	55.6	LOS E	12.7	89.2	0.96	0.82	0.96	22.3
3	R2	370	0	389	0.0	0.611	59.9	LOS E	12.7	89.2	0.96	0.81	0.96	28.6
Approach		409	0	431	0.0	0.611	55.2	LOS E	12.7	89.2	0.89	0.79	0.89	29.6
All Vehicles		3259	54	3431	1.7	0.611	18.8	LOS B	17.8	127.1	0.50	0.48	0.50	44.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 AM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	281	0	296	0.0	* 0.208	8.4	LOS A	3.8	26.9	0.30	0.66	0.30	48.1
5	T1	1039	31	1094	3.0	* 0.413	3.2	LOS A	5.0	36.1	0.15	0.13	0.15	57.0
6	R2	1	0	1	0.0	0.002	10.7	LOS B	0.0	0.1	0.32	0.58	0.32	45.0
Approach		1321	31	1391	2.3	0.413	4.3	LOS A	5.0	36.1	0.18	0.25	0.18	54.9
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.341	88.4	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
8	T1	2	0	2	0.0	* 0.341	83.8	LOS F	0.7	5.1	1.00	0.65	1.00	17.8
9	R2	6	0	6	0.0	0.341	88.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.4
Approach		9	0	9	0.0	0.341	87.3	LOS F	0.7	5.1	1.00	0.65	1.00	18.2
NorthWest: Gold Coast Highway (NW)														
10	L2	1	0	1	0.0	0.191	12.1	LOS B	5.6	41.2	0.35	0.30	0.35	48.9
11	T1	495	30	521	6.1	0.191	6.6	LOS A	5.6	41.2	0.35	0.30	0.35	54.2
12	R2	30	0	32	0.0	* 0.397	80.7	LOS F	2.2	15.7	1.00	0.72	1.00	24.8
Approach		526	30	554	5.7	0.397	10.8	LOS B	5.6	41.2	0.38	0.32	0.38	50.7
SouthWest: Ikkina Rd (SW)														
1	L2	55	1	58	1.8	0.057	5.1	LOS A	0.3	2.3	0.13	0.53	0.13	49.9
2	T1	3	0	3	0.0	0.242	60.9	LOS E	3.4	24.1	0.94	0.74	0.94	21.3
3	R2	101	0	106	0.0	0.242	65.5	LOS E	3.4	24.1	0.94	0.75	0.94	27.4
Approach		159	1	167	0.6	0.242	44.5	LOS D	3.4	24.1	0.66	0.67	0.66	32.4
All Vehicles		2015	62	2121	3.1	0.413	9.5	LOS A	5.6	41.2	0.28	0.30	0.28	50.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

MOVEMENT SUMMARY

Site: 5 [2026 PM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	179	1	188	0.6	0.155	15.1	LOS B	4.8	33.6	0.41	0.69	0.41	44.2
5	T1	713	22	751	3.1	*0.278	8.2	LOS A	9.3	66.8	0.40	0.35	0.40	52.9
6	R2	1	0	1	0.0	*0.002	9.3	LOS A	0.0	0.1	0.30	0.59	0.30	46.1
Approach		893	23	940	2.6	0.278	9.6	LOS A	9.3	66.8	0.40	0.42	0.40	50.9
NorthEast: Cultural Centre Access (NE)														
7	L2	1	0	1	0.0	0.281	96.2	LOS F	0.3	2.4	1.00	0.61	1.00	17.4
8	T1	1	0	1	0.0	*0.281	91.6	LOS F	0.3	2.4	1.00	0.61	1.00	16.8
9	R2	1	1	1	100.0	0.281	97.0	LOS F	0.3	2.4	1.00	0.61	1.00	16.7
Approach		3	1	3	33.3	0.281	94.9	LOS F	0.3	2.4	1.00	0.61	1.00	17.0
NorthWest: Gold Coast Highway (NW)														
10	L2	2	0	2	0.0	0.288	6.1	LOS A	0.8	6.0	0.03	0.03	0.03	55.7
11	T1	812	28	855	3.4	0.288	0.5	LOS A	0.8	6.0	0.03	0.03	0.03	59.5
12	R2	37	3	39	8.1	0.282	73.6	LOS E	2.6	19.5	0.98	0.74	0.98	26.0
Approach		851	31	896	3.6	0.288	3.7	LOS A	2.6	19.5	0.07	0.06	0.07	56.3
SouthWest: Ikkina Rd (SW)														
1	L2	41	1	43	2.4	0.095	48.6	LOS D	2.4	16.9	0.81	0.67	0.81	31.4
2	T1	1	0	1	0.0	*0.284	65.5	LOS E	3.2	22.4	0.97	0.74	0.97	20.4
3	R2	92	0	97	0.0	0.284	70.0	LOS E	3.2	22.4	0.97	0.74	0.97	26.5
Approach		134	1	141	0.7	0.284	63.5	LOS E	3.2	22.4	0.92	0.72	0.92	27.8
All Vehicles		1881	56	1980	3.0	0.288	10.9	LOS B	9.3	66.8	0.29	0.28	0.29	50.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

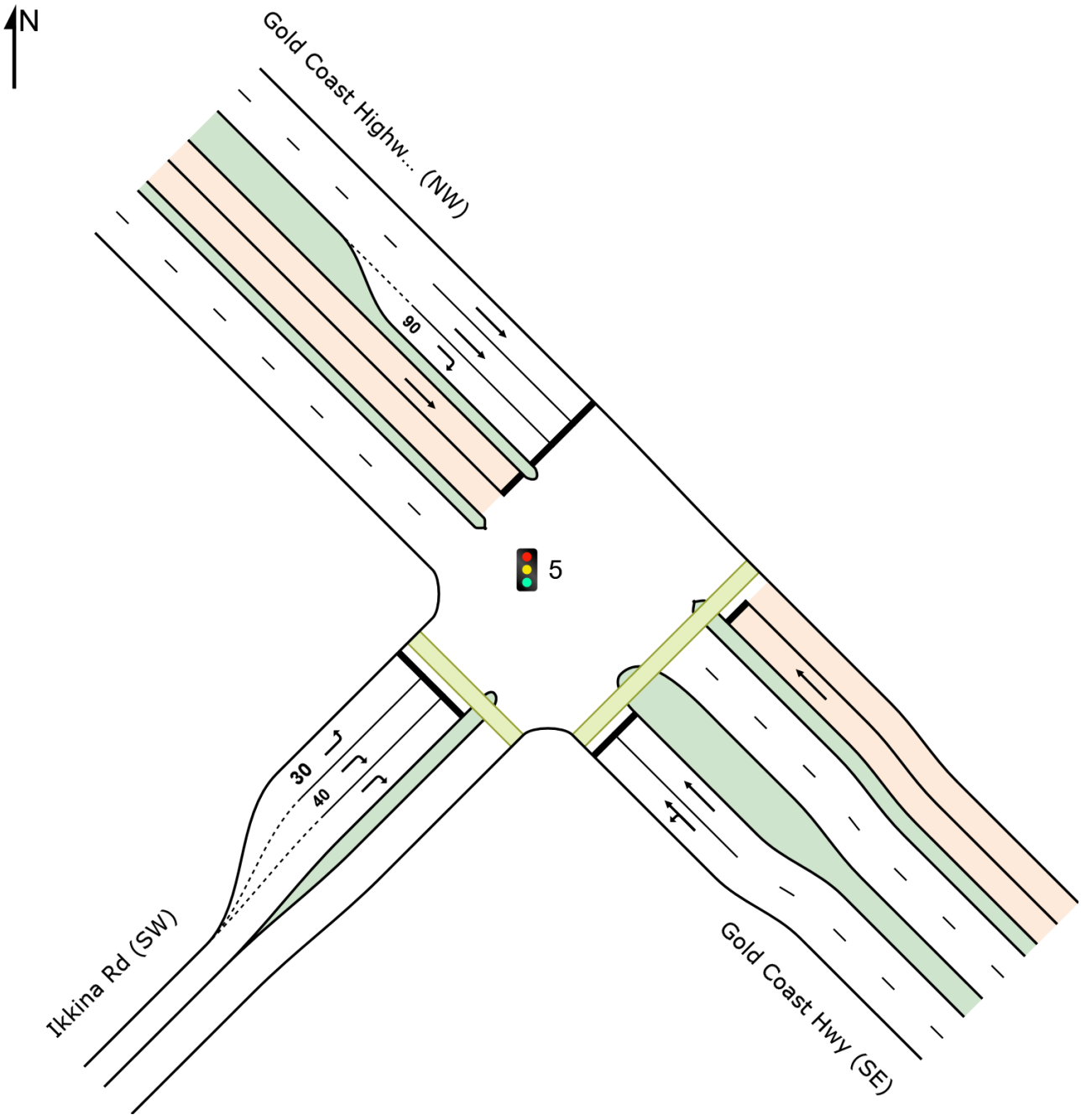
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthEast: Cultural Centre Access (NE)												
P3	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	225.7	210.0	0.93
NorthWest: Gold Coast Highway (NW)												
P4	Full	20	21	64.2	LOS F	0.1	0.1	0.96	0.96	234.4	221.3	0.94
SouthWest: Ikkina Rd (SW)												

SITE LAYOUT

Site: 5 [2041 AM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



MOVEMENT SUMMARY

Site: 5 [2041 AM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	292	0	307	0.0	* 0.545	15.8	LOS B	17.7	125.1	0.43	0.55	0.43	45.4
5	T1	1001	30	1054	3.0	0.545	8.0	LOS A	17.7	125.1	0.33	0.36	0.33	52.5
Approach		1293	30	1361	2.3	0.545	9.8	LOS A	17.7	125.1	0.36	0.40	0.36	50.6
NorthWest: Gold Coast Highway (NW)														
11	T1	234	15	246	6.4	0.120	20.1	LOS C	4.1	29.4	0.56	0.46	0.56	45.5
12	R2	44	5	46	11.4	* 0.151	58.2	LOS E	2.7	20.6	0.88	0.74	0.88	29.3
Approach		278	20	293	7.2	0.151	26.1	LOS C	4.1	29.4	0.61	0.50	0.61	41.6
SouthWest: Ikkina Rd (SW)														
1	L2	31	0	33	0.0	0.064	45.4	LOS D	1.6	11.5	0.78	0.70	0.78	32.0
3	R2	73	0	77	0.0	* 0.483	80.1	LOS F	2.8	19.3	1.00	0.73	1.00	24.6
Approach		104	0	109	0.0	0.483	69.8	LOS E	2.8	19.3	0.93	0.72	0.93	26.4
All Vehicles		1675	50	1763	3.0	0.545	16.2	LOS B	17.7	125.1	0.43	0.44	0.43	46.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	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.

MOVEMENT SUMMARY

Site: 5 [2041 PM (Site Folder: Option 3Av)]

Gold Coast Highway / Ikkina Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Gold Coast Hwy (SE)														
4	L2	152	0	160	0.0	0.276	18.4	LOS B	8.1	57.3	0.43	0.55	0.43	43.8
5	T1	439	21	462	4.8	0.302	11.6	LOS B	8.1	57.3	0.35	0.36	0.35	50.2
Approach		591	21	622	3.6	0.302	13.3	LOS B	8.1	57.3	0.37	0.41	0.37	48.1
NorthWest: Gold Coast Highway (NW)														
11	T1	568	17	598	3.0	* 0.302	22.0	LOS C	11.4	81.2	0.63	0.54	0.63	44.3
12	R2	33	1	35	3.0	* 0.107	57.4	LOS E	2.0	14.3	0.87	0.72	0.87	29.5
Approach		601	18	633	3.0	0.302	23.9	LOS C	11.4	81.2	0.64	0.55	0.64	43.0
SouthWest: Ikkina Rd (SW)														
1	L2	29	2	31	6.9	0.051	38.5	LOS D	1.4	10.3	0.71	0.69	0.71	34.0
3	R2	114	0	120	0.0	* 0.302	68.1	LOS E	3.9	27.1	0.96	0.75	0.96	26.8
Approach		143	2	151	1.4	0.302	62.1	LOS E	3.9	27.1	0.91	0.74	0.91	28.0
All Vehicles		1335	41	1405	3.1	0.302	23.3	LOS C	11.4	81.2	0.55	0.51	0.55	42.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

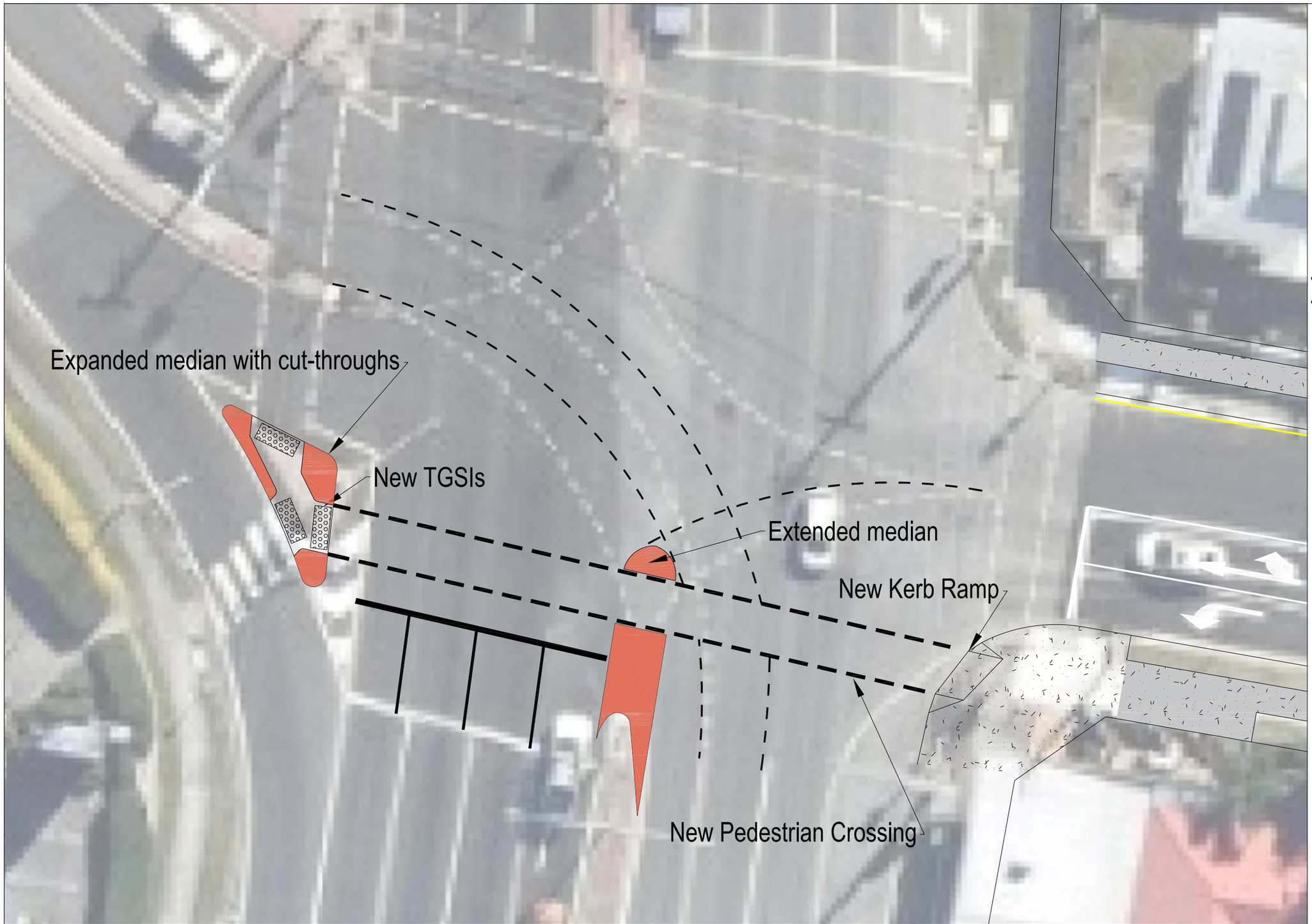
* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Gold Coast Hwy (SE)												
P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	241.8	230.8	0.95
SouthWest: Ikkina Rd (SW)												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	232.8	219.1	0.94
All Pedestrians		100	105	64.3	LOS F	0.2	0.2	0.96	0.96	237.3	225.0	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.

Appendix G: Preferred Option Concept Design Plans



NORTH

NOTES

- Design & implementation subject to DTMR approval
- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Raised Median
- Footpath
- TGSIs

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 1:200

Project: Koala Park Traffic Management Study

Title: Concept Sketch
West Burleigh Rd / Tabilban St
Southern Pedestrian Crossing

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	1	002

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

No Stopping

Footpath

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 24 28 1:600

Project: Koala Park Traffic Management Study

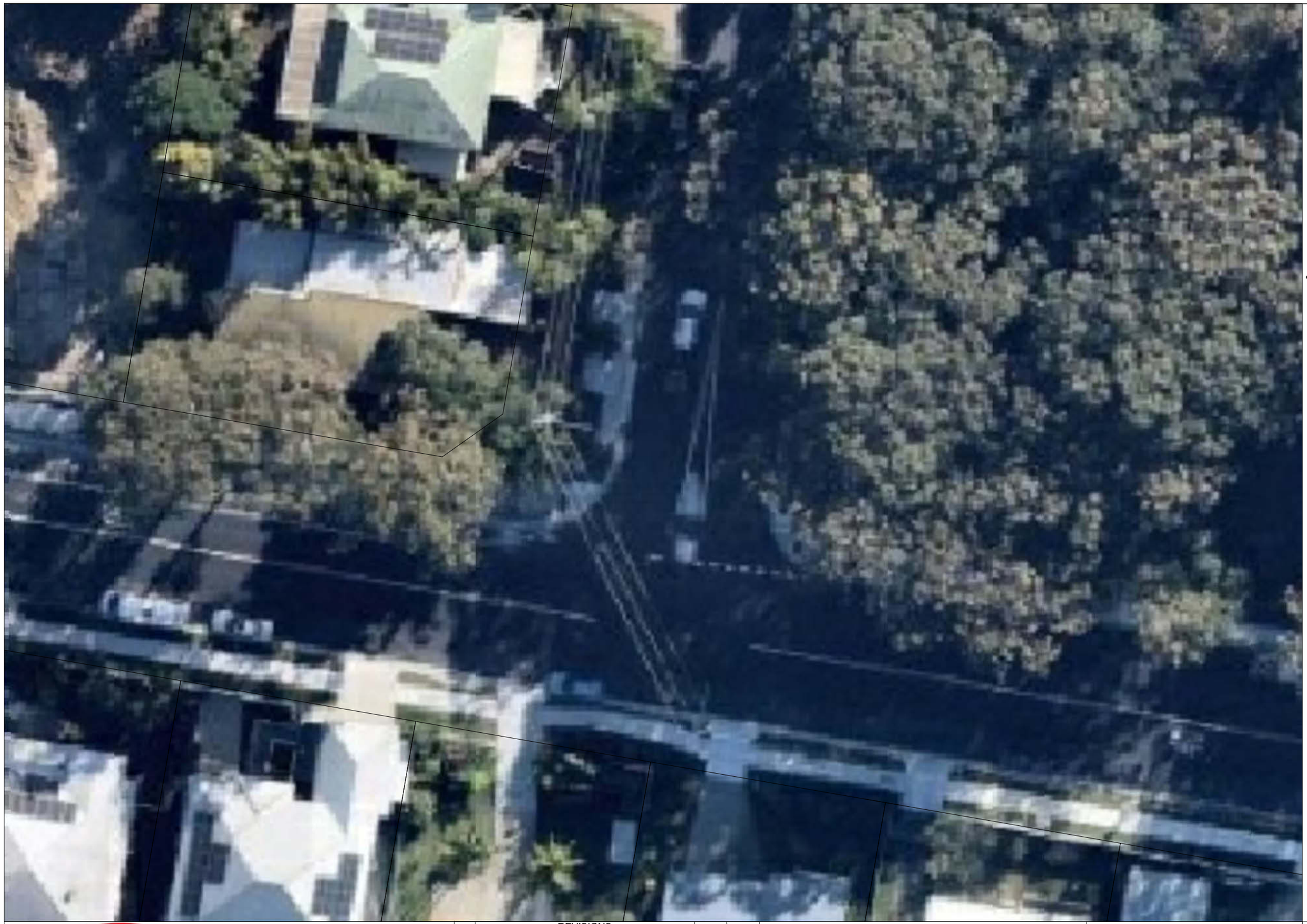
Title: Concept Sketch
Tabilban St
Modified Line Marking

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	2	002



NOTES

- Roadwork underway at time of aerial imagery and therefore not representative of road conditions following completion of Tabilban Street renewal project

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

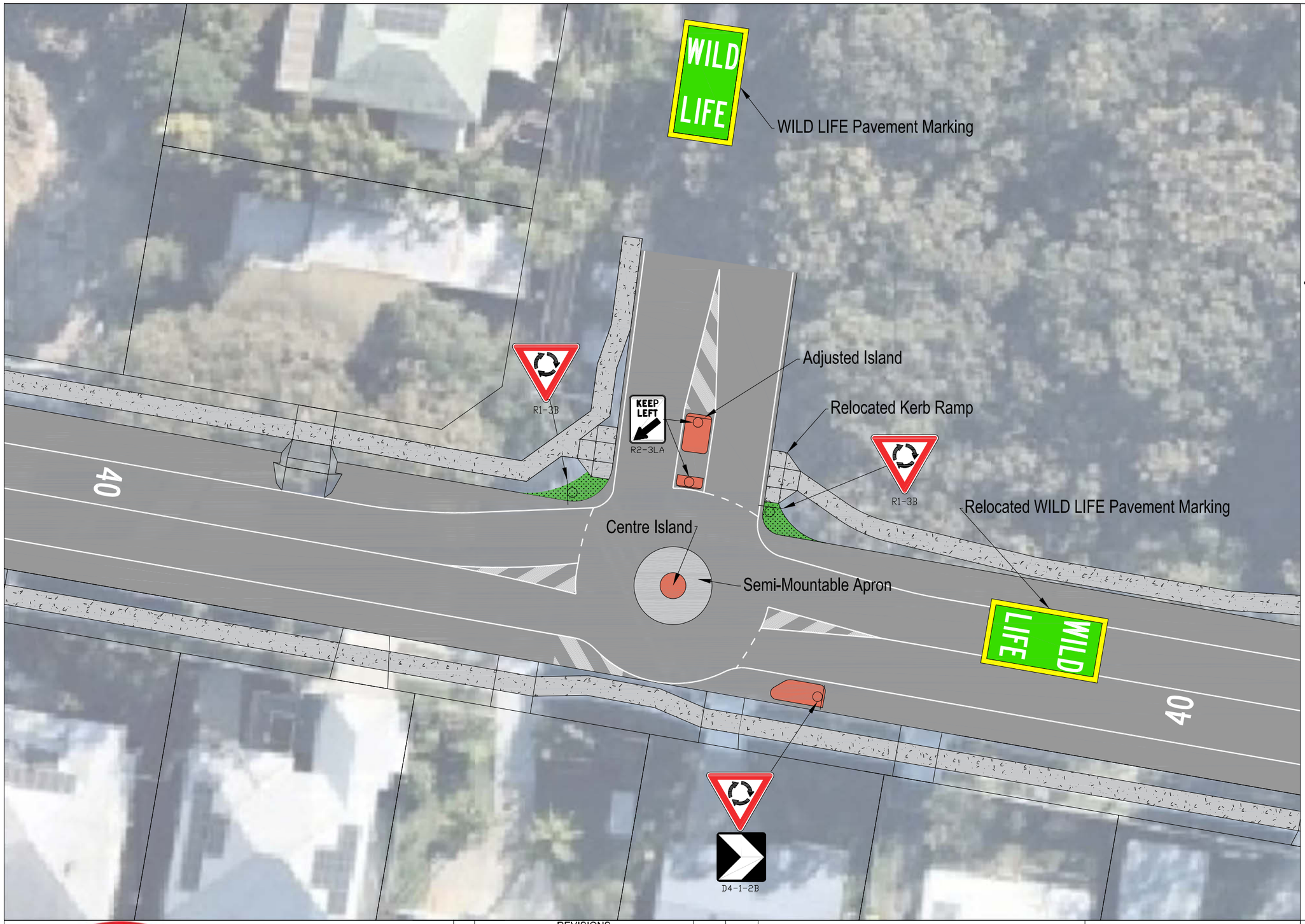
Title: Concept Sketch
Tabilban St / Wairoo St
Aerial Imagery

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	3	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Raised Median
- Semi-Mountable Apron (50mm)
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

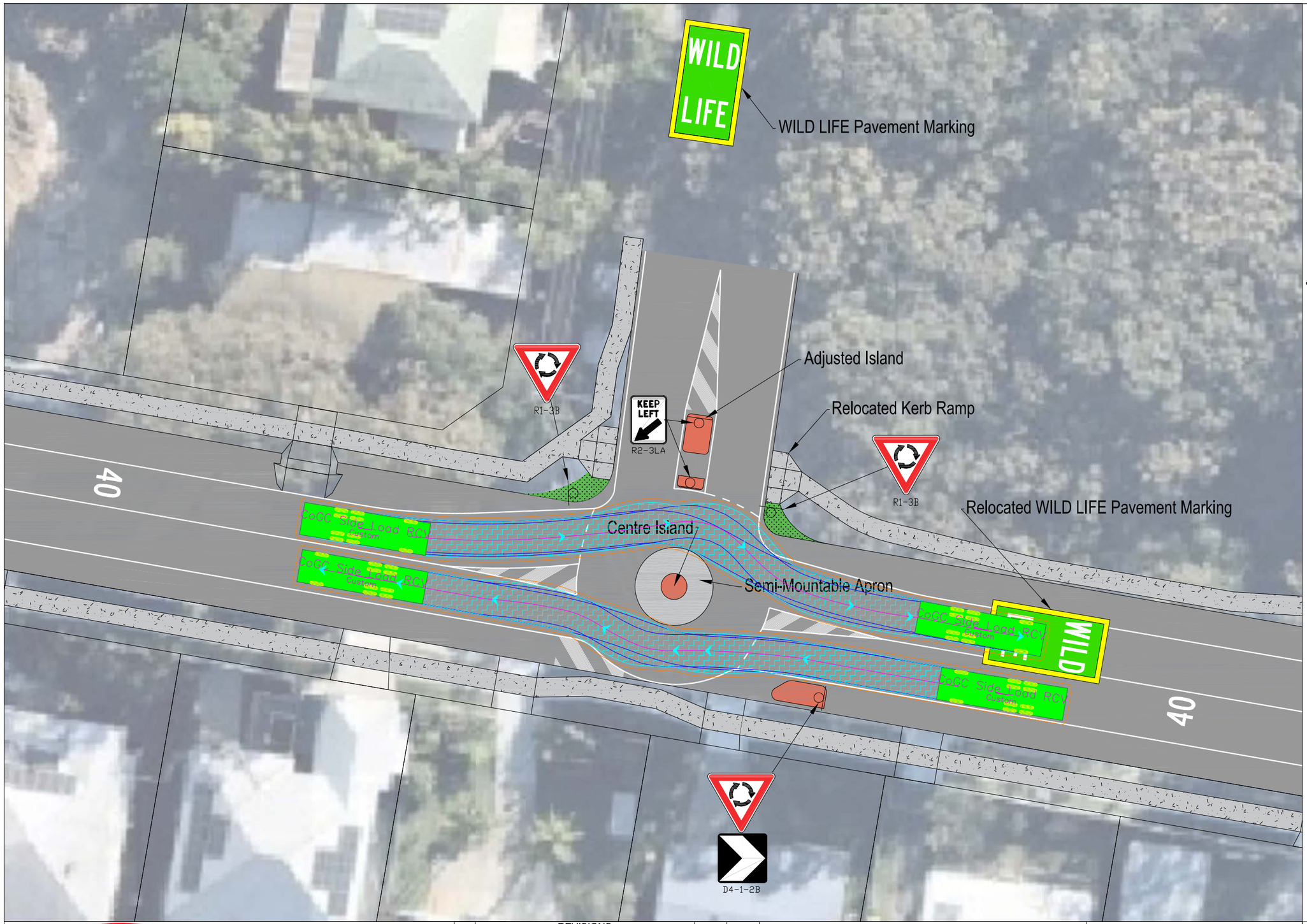
Title: Concept Sketch
Tabilban St / Wairoo St
Mini Roundabout

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

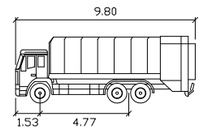
Project Number	Sheet Number	Issue
P5288	4	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

- Raised Median
- Semi-Mountable Apron (50mm)
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

Title: Concept Swept Paths
Tabilban St / Wairoo St
Mini Roundabout

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	5	001

WILD LIFE

WILD LIFE Pavement Marking

Adjusted Island

Relocated Kerb Ramp

R1-3B

R1-3B

KEEP LEFT

R2-3LA

CoGC Side Load RCV

CoGC Side Load RCV

CoGC Side Load RCV

CoGC Side Load RCV

Centre Island

Semi-Mountable Apron

Relocated WILD LIFE Pavement Marking

WILD LIFE

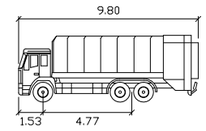
40

40

D4-1-2B

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

- Raised Median
- Semi-Mountable Apron (50mm)
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

Title: Concept Swept Paths
Tabilban St / Wairoo St
Mini Roundabout

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	6	001

WILD LIFE

WILD LIFE Pavement Marking

Adjusted Island

Relocated Kerb Ramp

Relocated WILD LIFE Pavement Marking

Centre Island

Semi-Mountable Apron

R1-3B

R1-3B

R2-3LA

LEFT

D4-1-2B

40

40

CoGC Side Load RCV

CoGC Side Load RCV

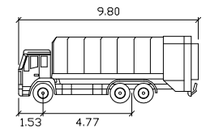
CoGC Side Load RCV

CoGC Side Load RCV

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

- Raised Median
- Semi-Mountable Apron (50mm)
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

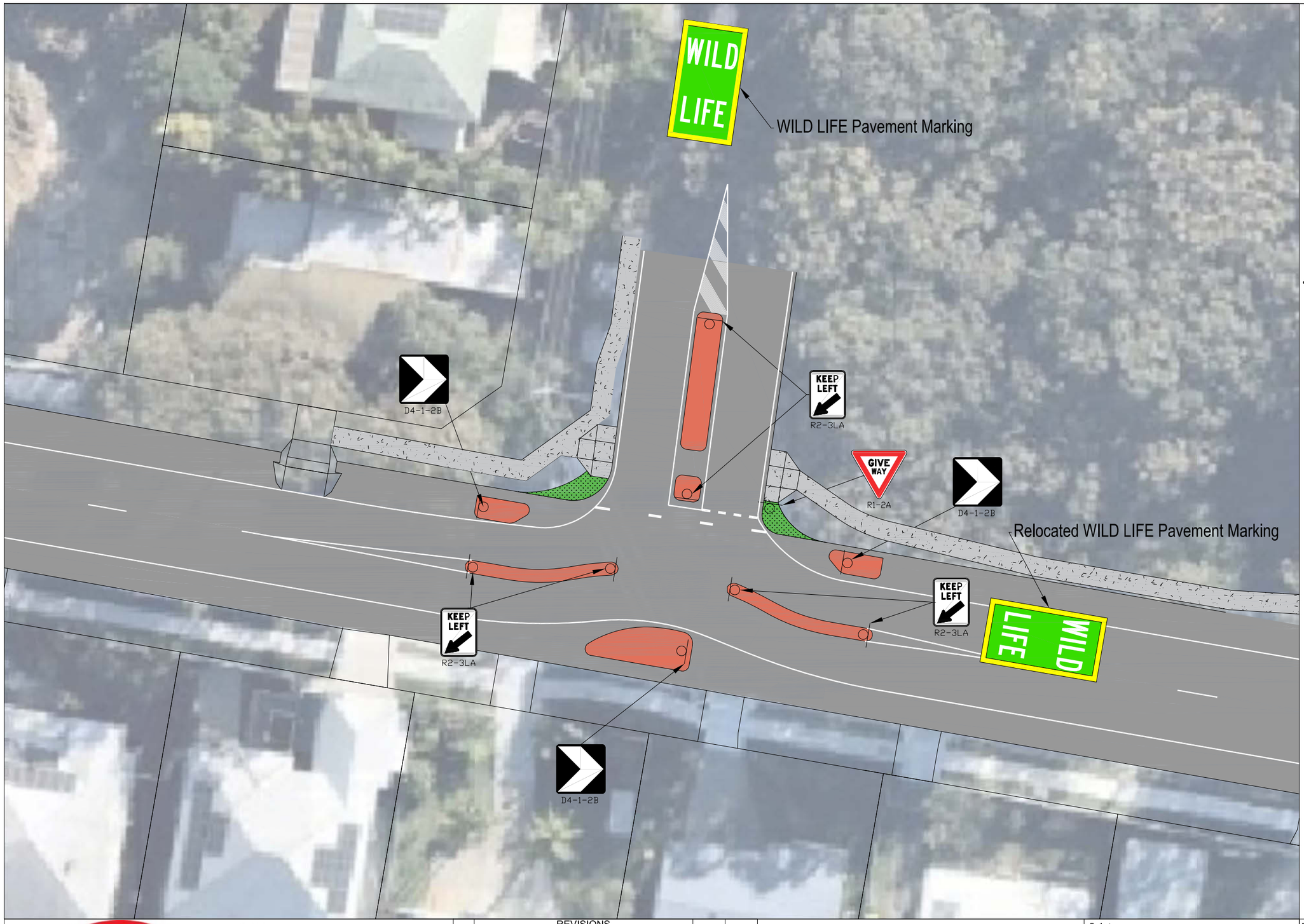
Title: Concept Swept Paths
Tabilban St / Wairoo St
Mini Roundabout

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	7	001



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Raised Median
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

Title: Concept Sketch
Tabilban St / Wairoo St
Chicane

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	8	002

WILD LIFE

WILD LIFE Pavement Marking

D4-1-2B

KEEP LEFT

R2-3LA

GIVE WAY

R1-2A

D4-1-2B

Relocated WILD LIFE Pavement Marking

CoGC Side Load RCV

CoGC Side Load RCV

KEEP LEFT

R2-3LA

CoGC Side Load RCV

WILD LIFE

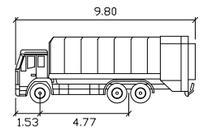
CoGC Side Load RCV

D4-1-2B

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

- Raised Median
- Semi-Mountable Apron (50mm)
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

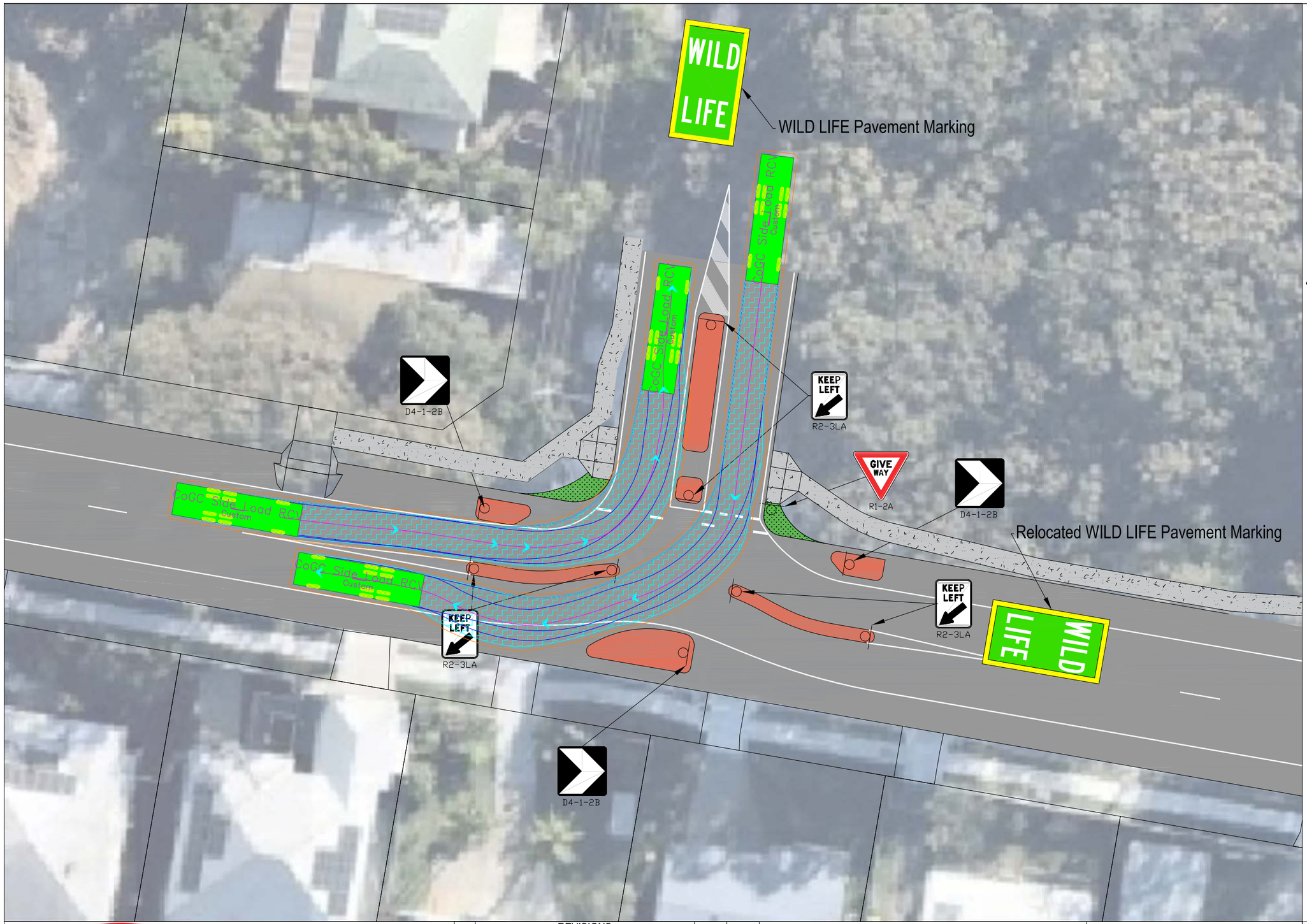
Title: Concept Swept Paths
Tabilban St / Wairoo St
Chicane

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

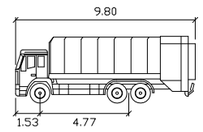
Project Number	Sheet Number	Issue
P5288	9	001



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

- Raised Median
- Semi-Mountable Apron (50mm)
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

Title: Concept Swept Paths
Tabilban St / Wairoo St
Chicane

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	10	001

WILD LIFE

WILD LIFE Pavement Marking

D4-1-2B

KEEP LEFT

R2-3LA

GIVE WAY

R1-2A

D4-1-2B

Relocated WILD LIFE Pavement Marking

KEEP LEFT

R2-3LA

D4-1-2B

CoGC Side Load RCV

CoGC Side Load RCV

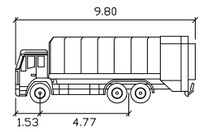
CoGC Side Load RCV

CoGC Side Load RCV

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

- Raised Median
- Semi-Mountable Apron (50mm)
- Kerb Build Out / Extension
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

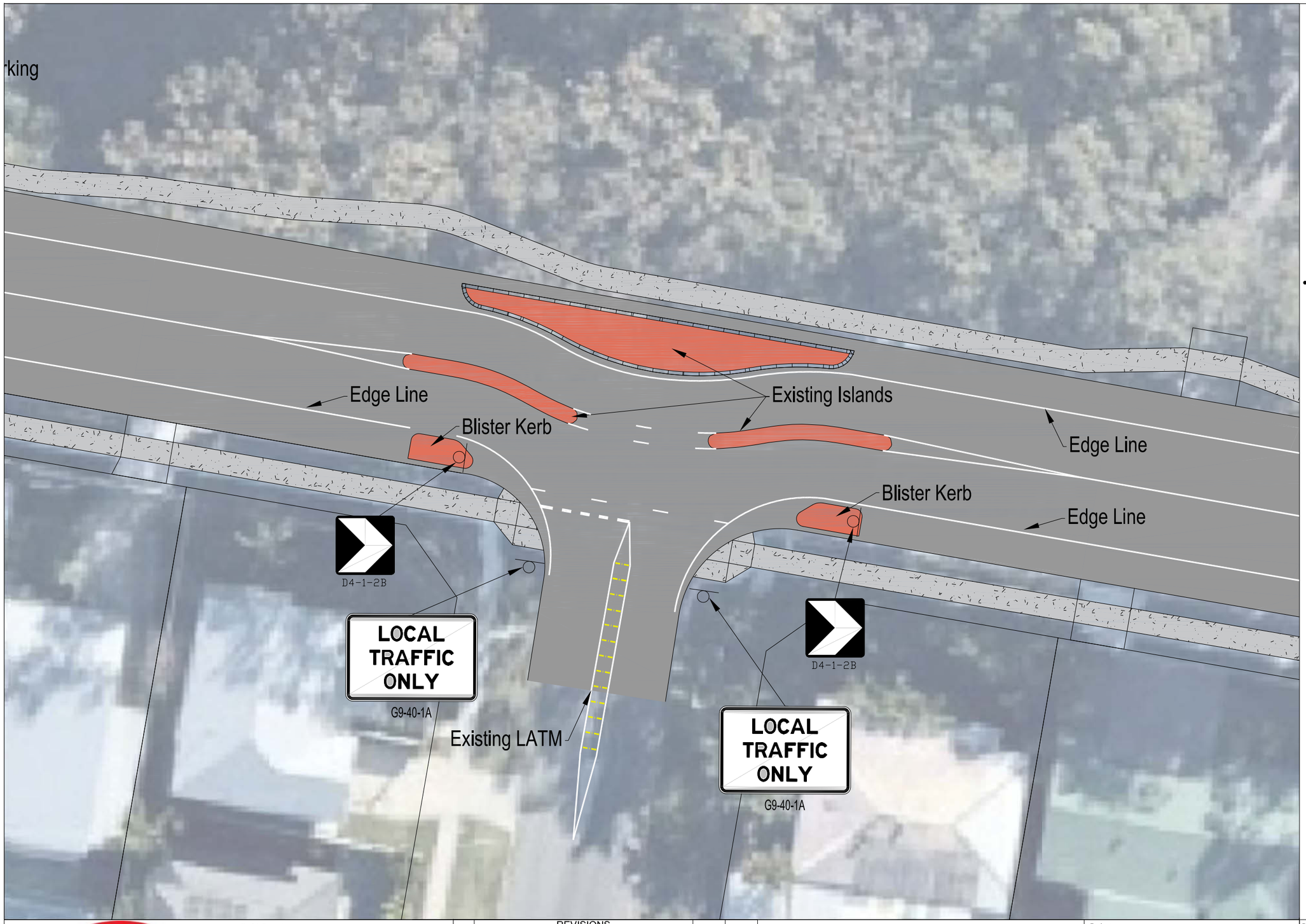
Title: Concept Swept Paths
Tabilban St / Wairoo St
Chicane

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	11	001



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Raised Median
- Footpath
- Pavement Bars
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 1:250

Project: Koala Park Traffic Management Study

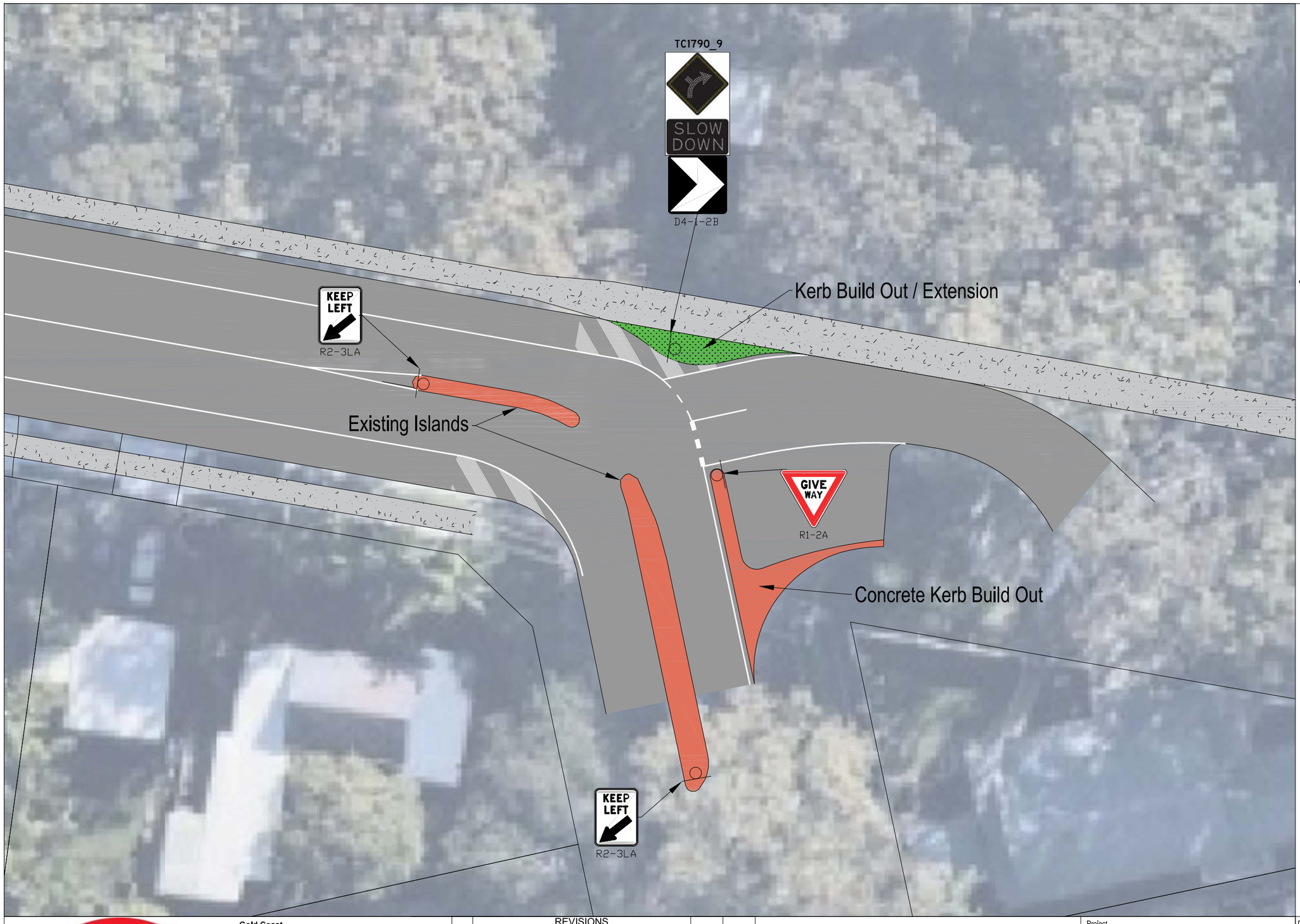
Title: Concept Sketch
Tabilban St / Koel St
Build Outs

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	12	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Kerb Build Out / Extension
- Raised Median / Island
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 1:250

Project: Koala Park Traffic Management Study

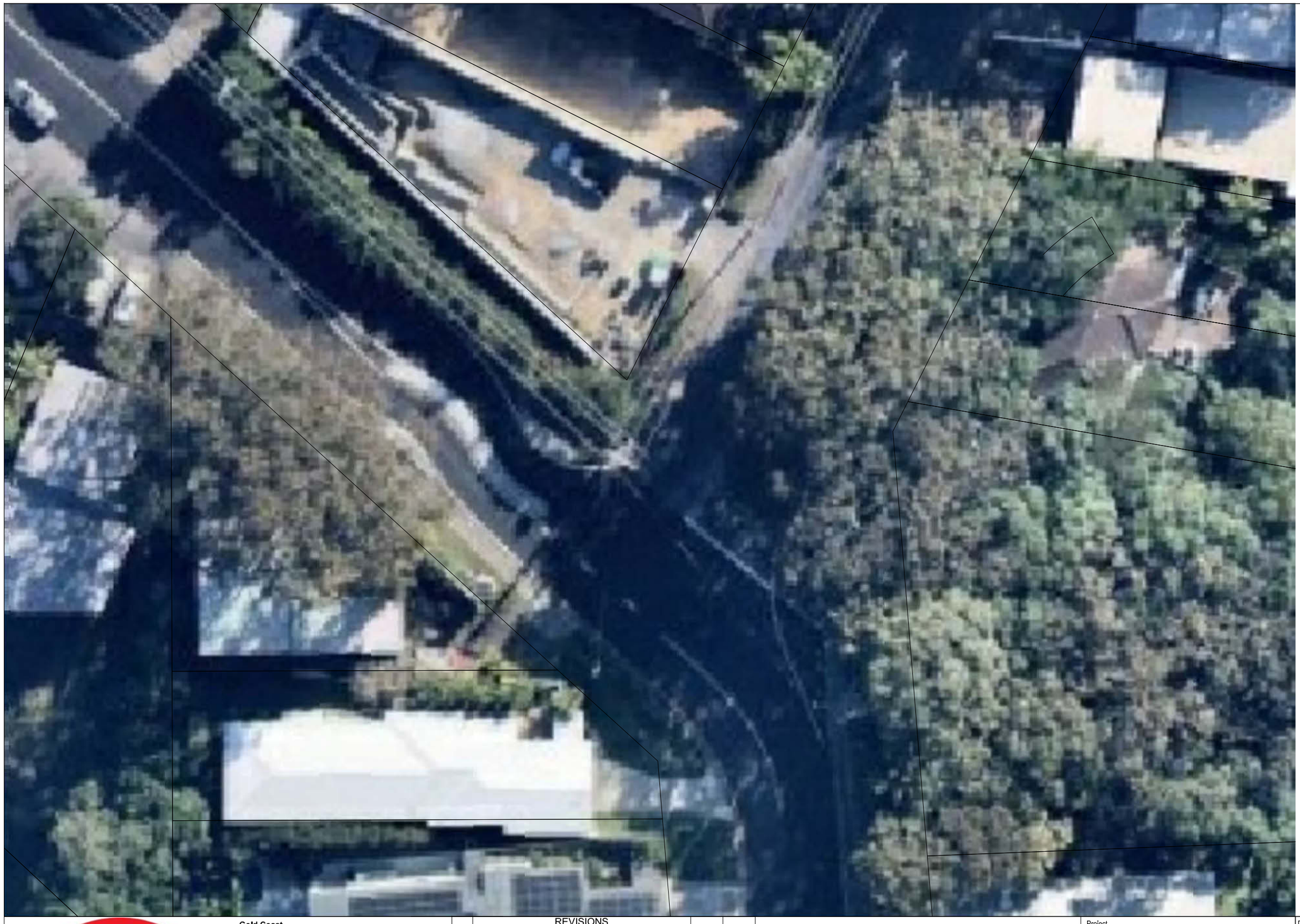
Title: Concept Sketch
Tabilban St / Ocean Parade

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	13	002



NOTES

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

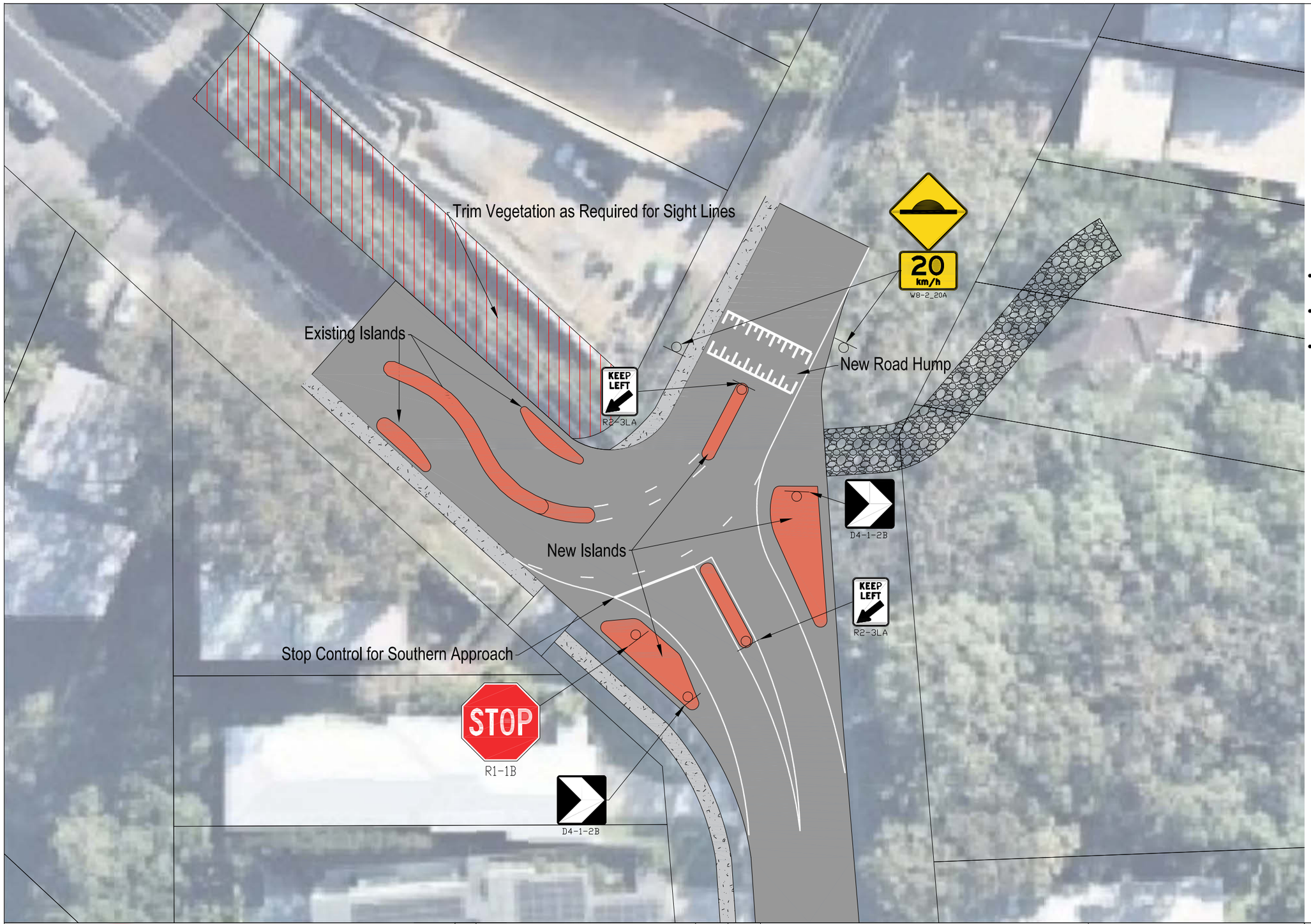
Title: Concept Sketch
Ocean Parade / Reserve Street
Aerial Image

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	14	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data
- Design requires reconstruction of 3 & 5 Reserve Street property access, shown indicatively only on plan
- Provision of proposed road hump subject to grade constraints, alternate speed reduction treatment may be required at detailed design.

LEGEND

- Mountable Roundabout
- Raised Island / Median
- Vegetation Clearing Area
- 3 & 5 Reserve St Driveway
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

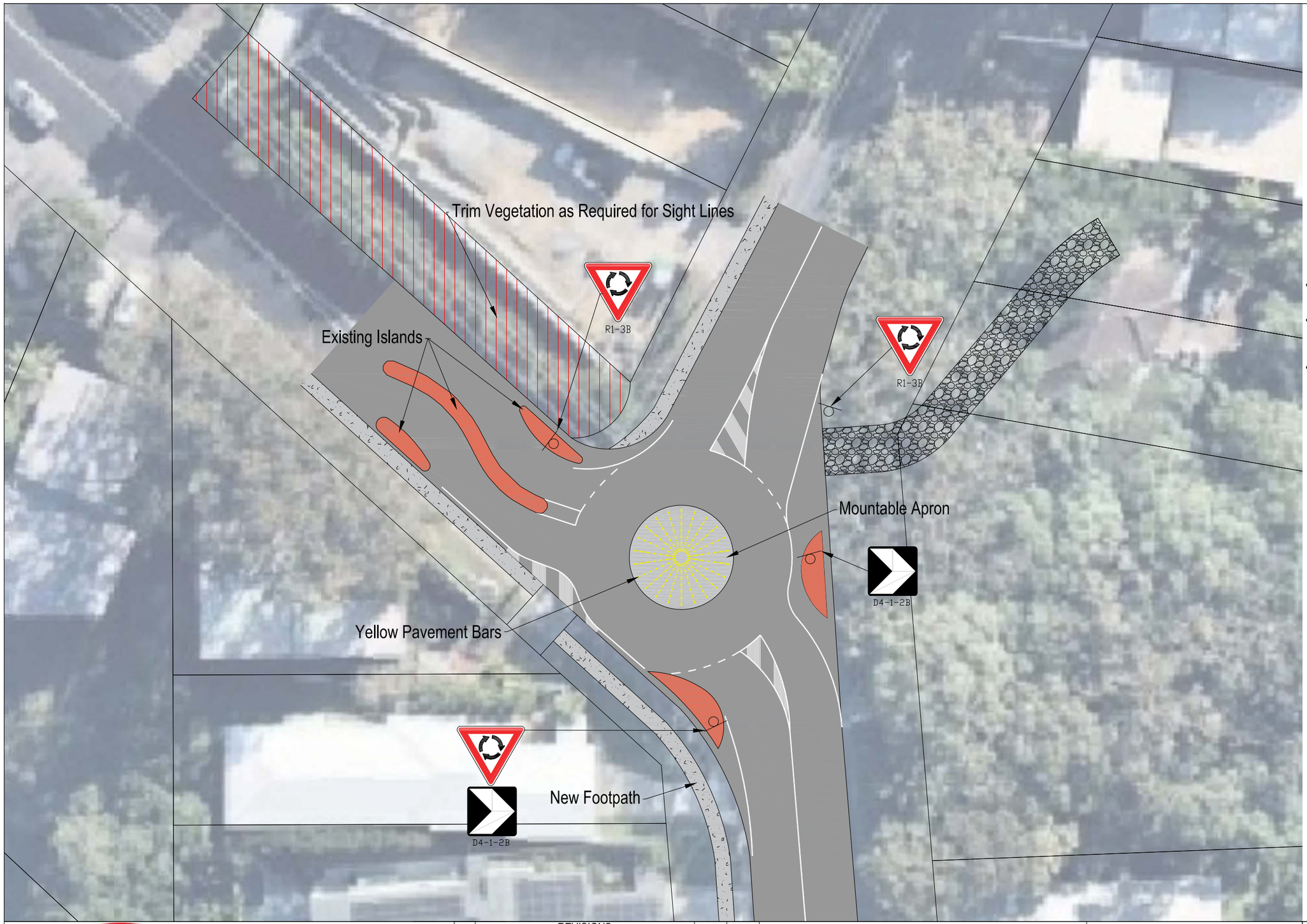
Title: Concept Sketch
Ocean Parade / Reserve Street
Option 1 - Reprioritisation & LATM

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	15	002



NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.
- Alternate treatments available to discourage general traffic encroachment on roundabout apron (i.e. raised island, RRPM's, bolt-on speed humps etc.)
- Design requires reconstruction of 3 & 5 Reserve Street property access, shown indicatively only on plan

LEGEND

- Mountable Roundabout
- Raised Island / Median
- Vegetation Clearing Area
- Footpath
- 3 & 5 Reserve St Driveway
- Pavement Bars
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

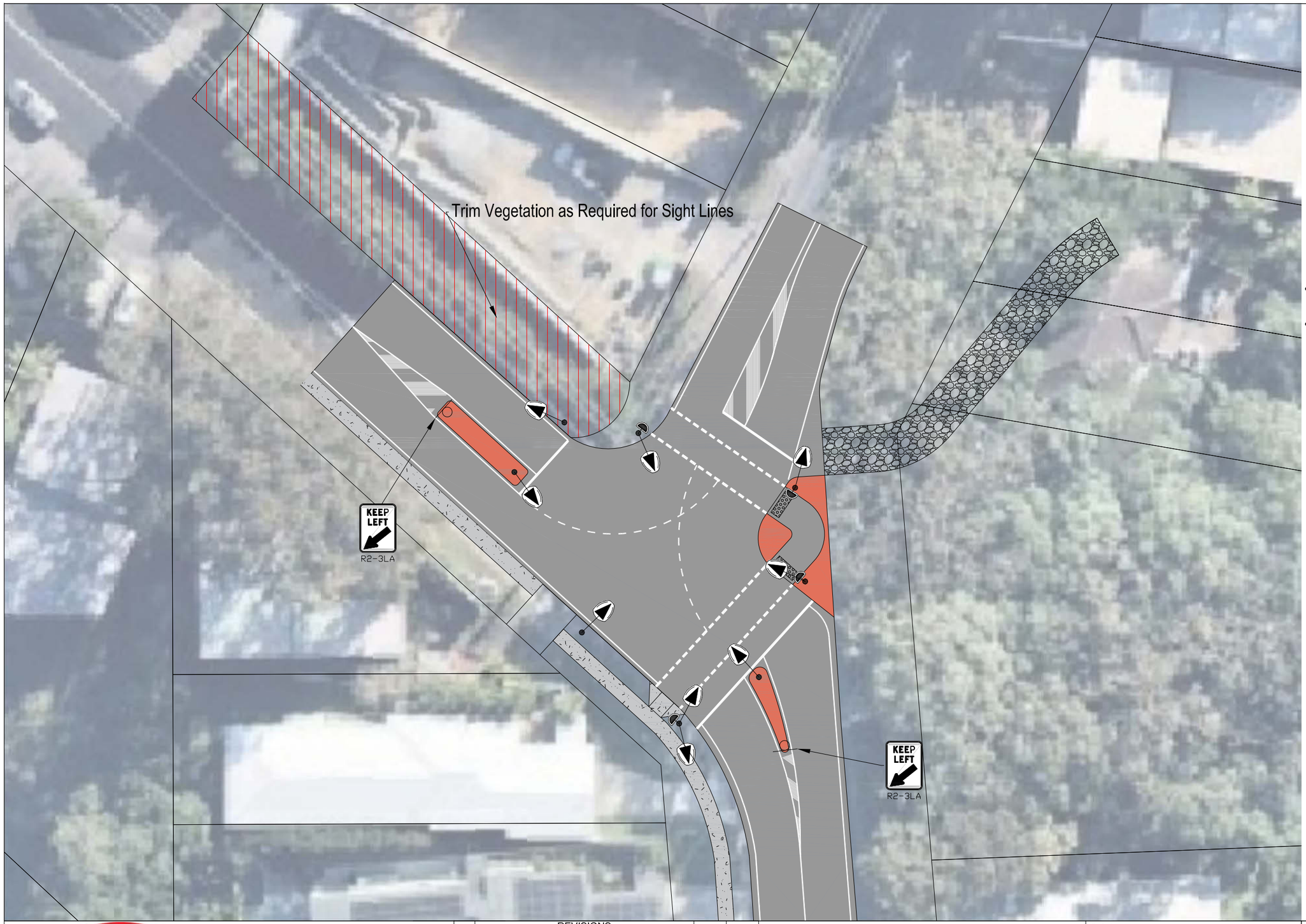
Title: Concept Sketch
Ocean Parade / Reserve Street
Option 2 - Mini Roundabout

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	16	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.
- Design requires reconstruction of 3 & 5 Reserve Street property access, shown indicatively only on plan

LEGEND

- Raised Island / Median
- Vegetation Clearing Area
- Footpath
- 3 & 5 Reserve St Driveway
- Proposed Signal Lantern
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	26.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 2 4 6 8 10 12 14 1:300

Project: Koala Park Traffic Management Study

Title: Concept Sketch
Ocean Parade / Reserve Street
Signals

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	17	002

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.
- Design & implementation of shared path subject to environmental and geometric constraints. Path location should minimise impact to significant vegetation as specified in the Natura Pacific Ecological Assessment

LEGEND

- Gravel Parking / Driveway
- RRPMs
- Footpath
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	13.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

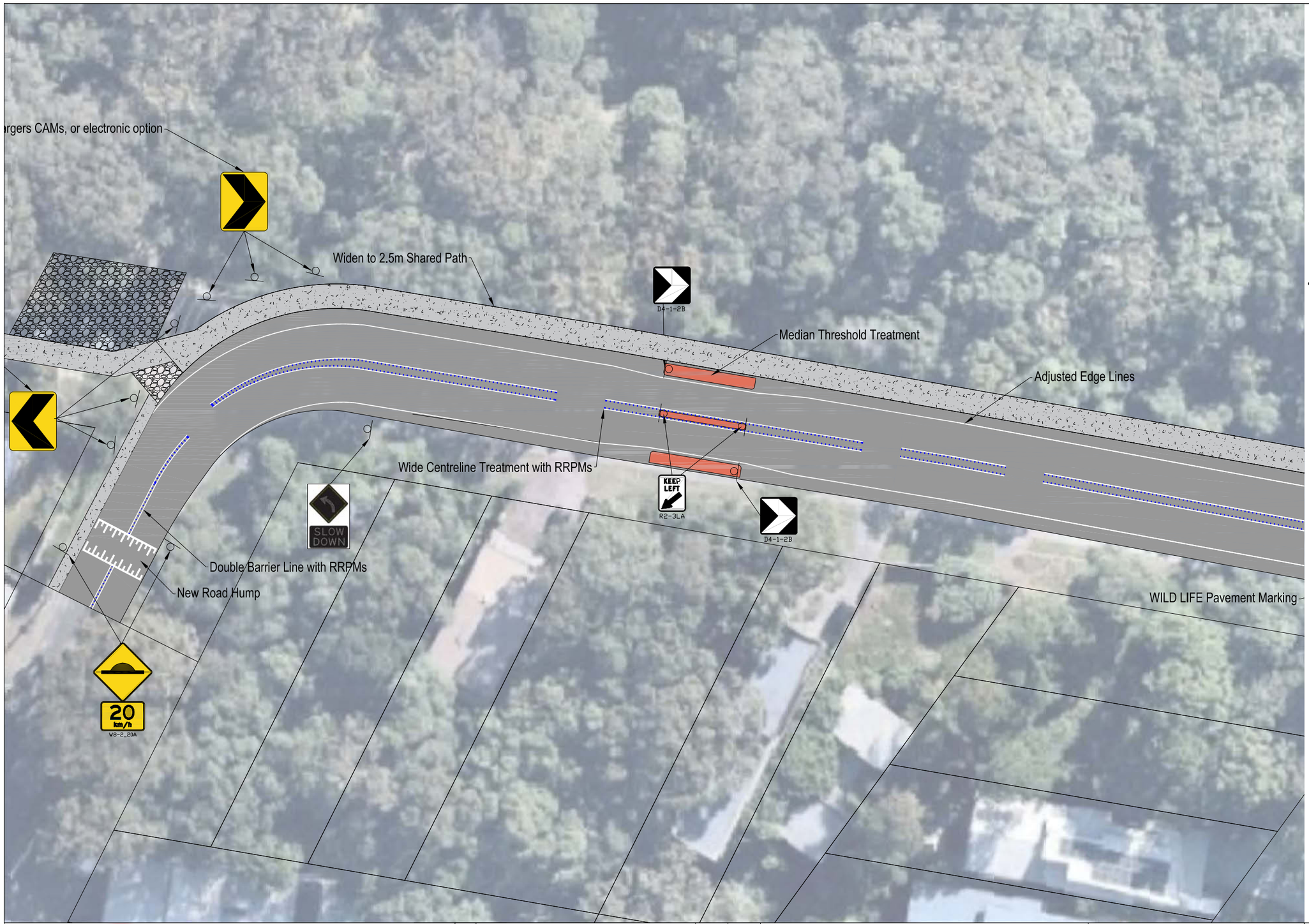
Title: Concept Sketch
Tabilban Link Path

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	18	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Raised Median
- RRPMs
- Footpath / Shared Path
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

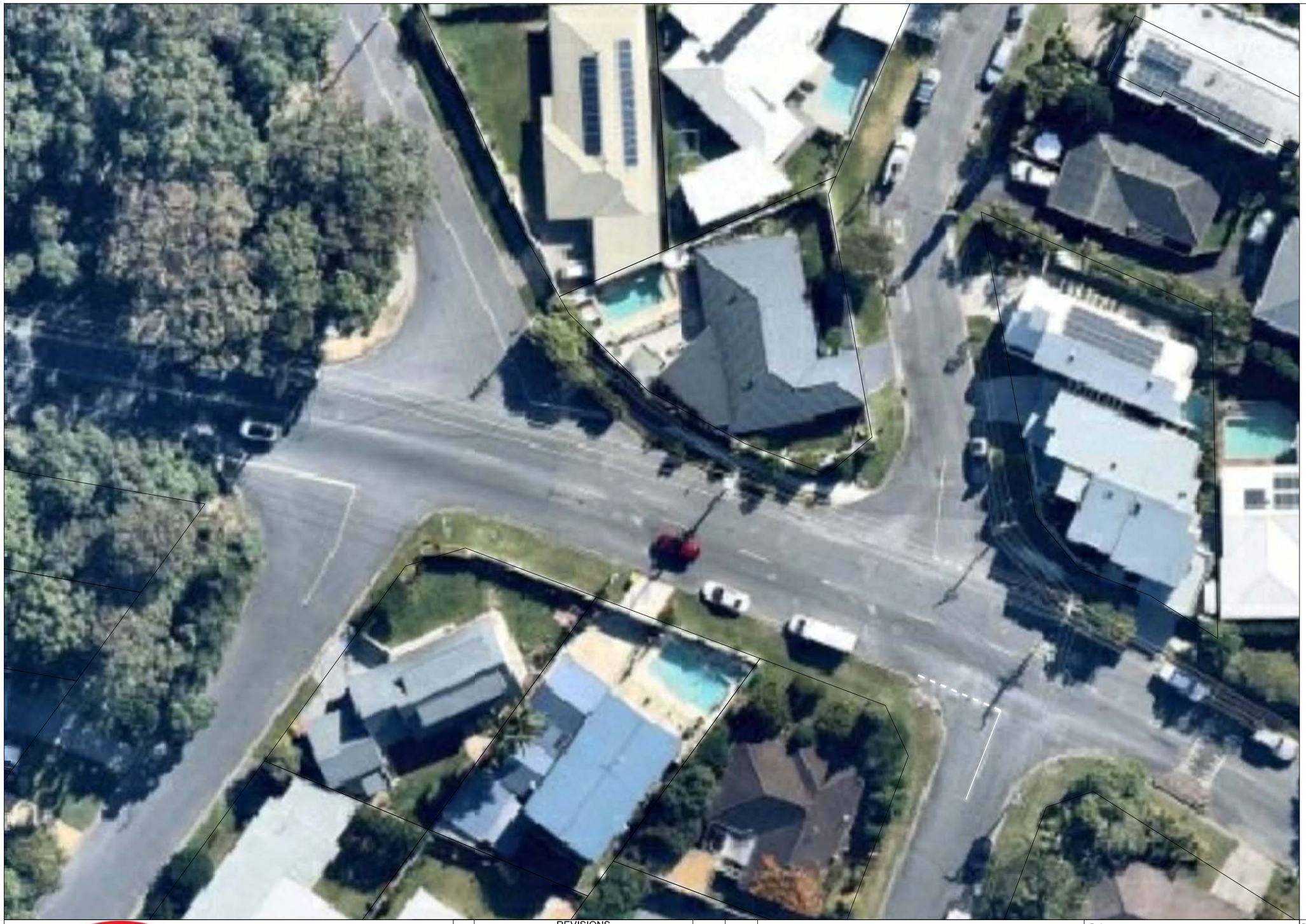
Title: Concept Sketch
Tabilban St Hill
Wide Centreline Treatment

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	19	002



NORTH

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

Title: Concept Sketch
Tabilban St / Pindary Ave
Aerial Imagery

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	20	002

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

Kerb Build Out / Extension

Footpath / Shared Path

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

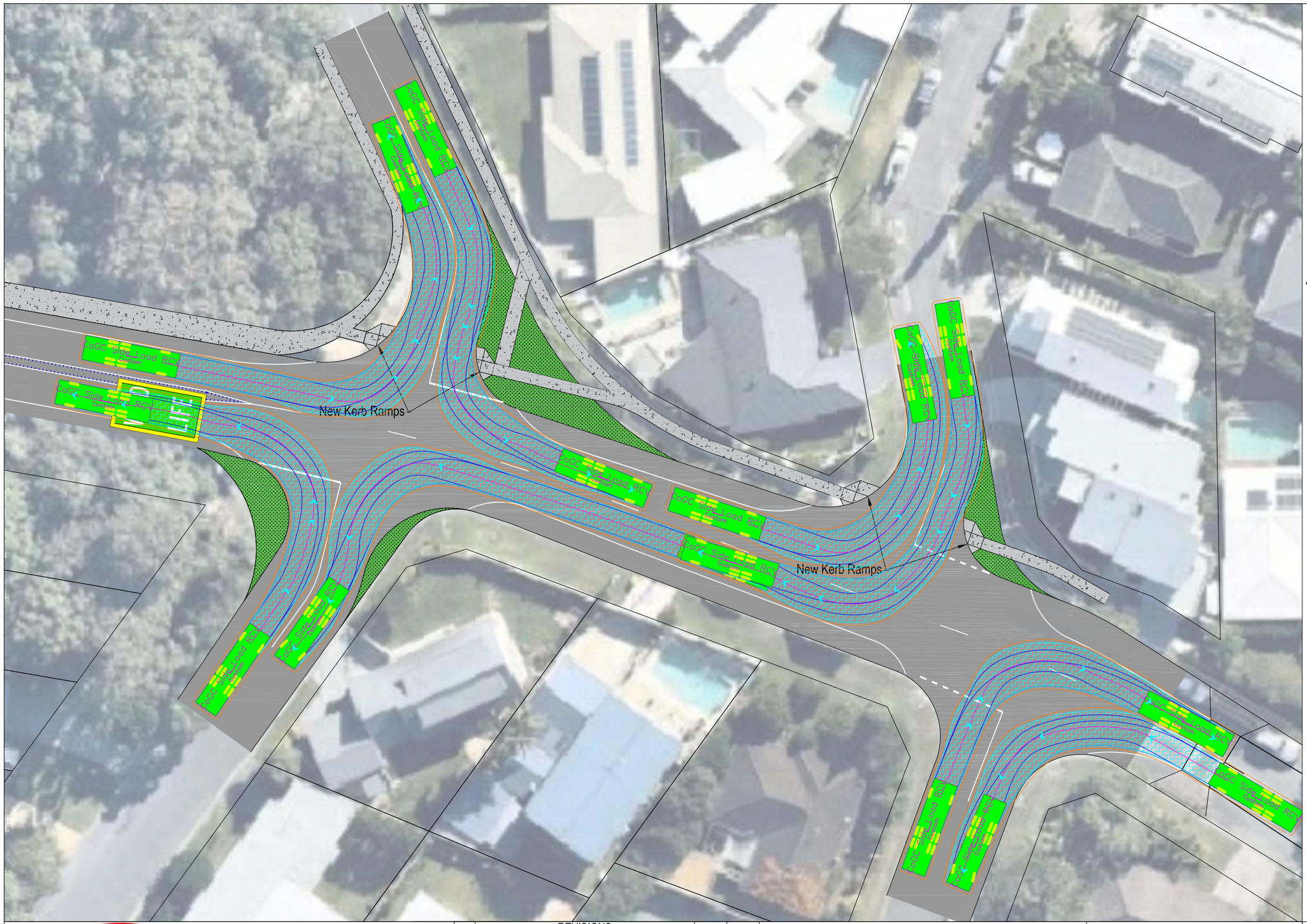
Title: Concept Sketch
Tabilban Street / Pindari Ave
Intersection Realignments

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

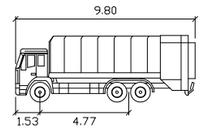
Project Number	Sheet Number	Issue
P5288	21	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

Kerb Build Out / Extension

Footpath / Shared Path

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

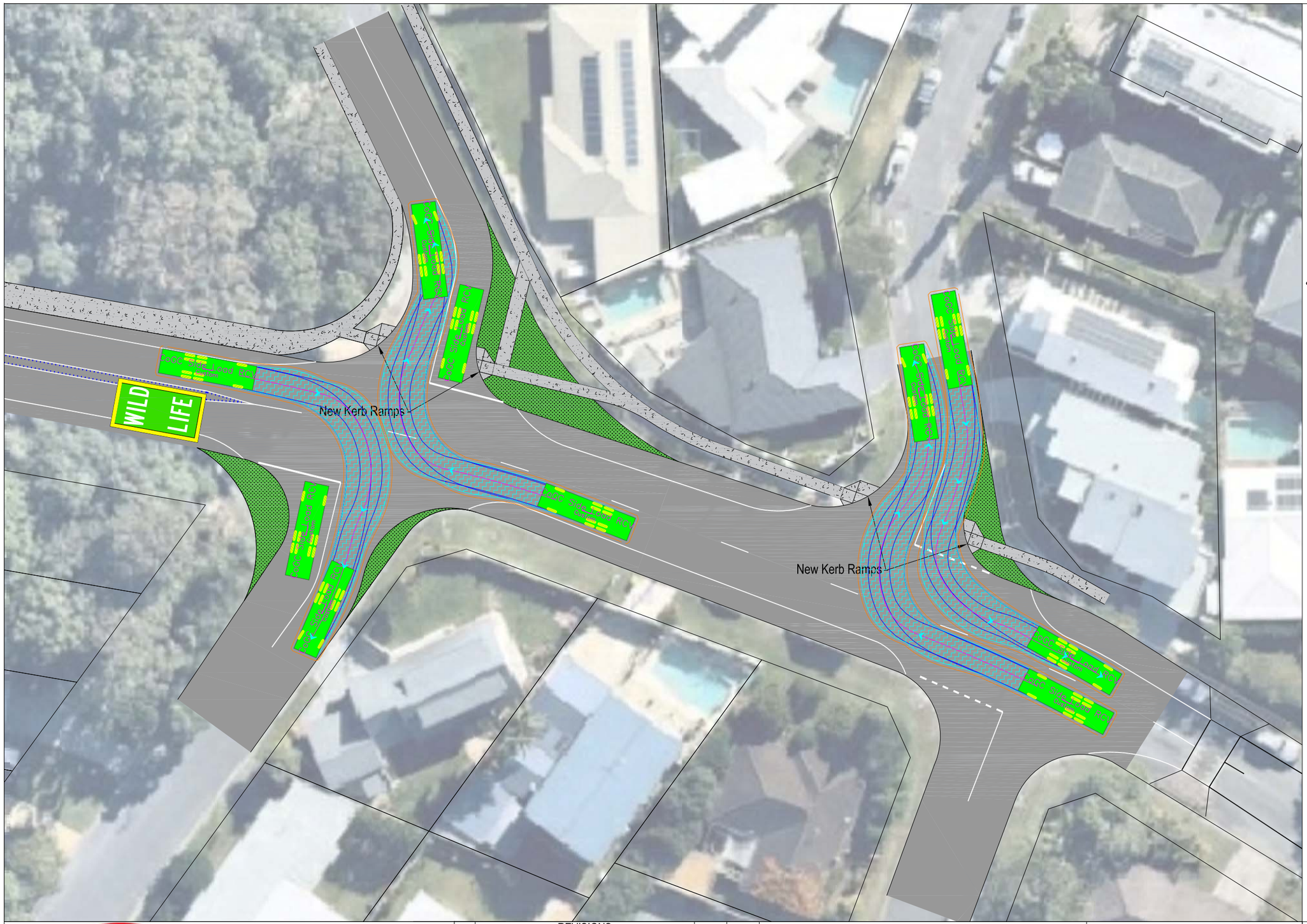
Title: Concept Swept Paths
Tabilban Street / Pindari Ave
Intersection Realignments

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

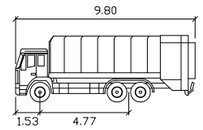
Project Number	Sheet Number	Issue
P5288	22	001



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.



CoGC Side Load RCV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 30.5

DESIGN VEHICLE

LEGEND

- Kerb Build Out / Extension
- Footpath / Shared Path

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Swept Paths	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

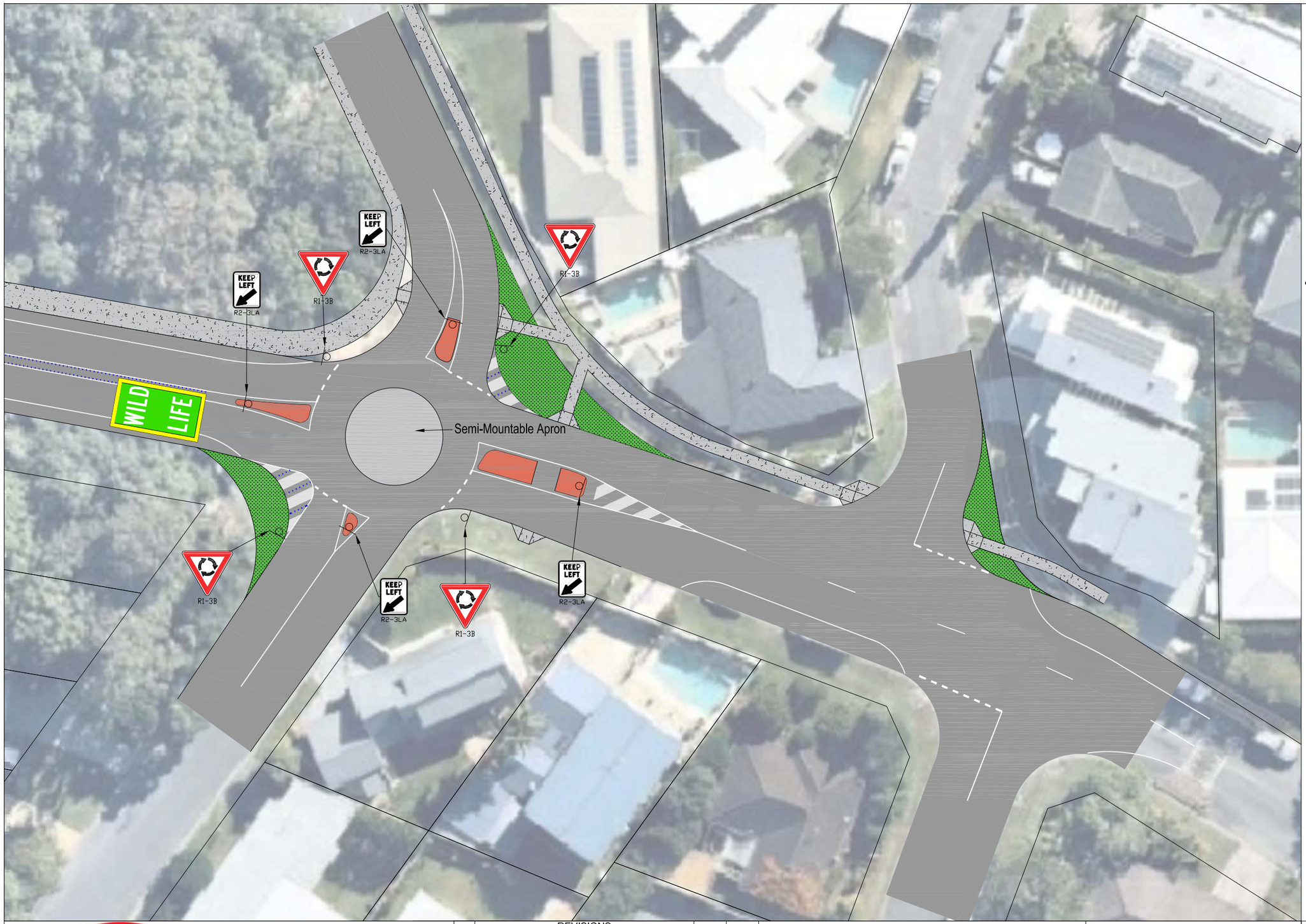
Title: Concept Swept Paths
Tabilban Street / Pindari Ave
Intersection Realignments

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	23	001



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Raised Median
- Kerb Build Out / Extension
- Semi-Mountable Apron (50mm)
- Footpath / Shared Path
- RRPMs
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

Title: Concept Sketch Tabilban St / Pindari Ave Roundabout

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	24	002

NORTH

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

Title: Concept Sketch
Tabilban Street / Ikkina Road
Aerial Image

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	25	002

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

- Raised Median
- Kerb Build Out / Extension
- Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES
Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES
The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

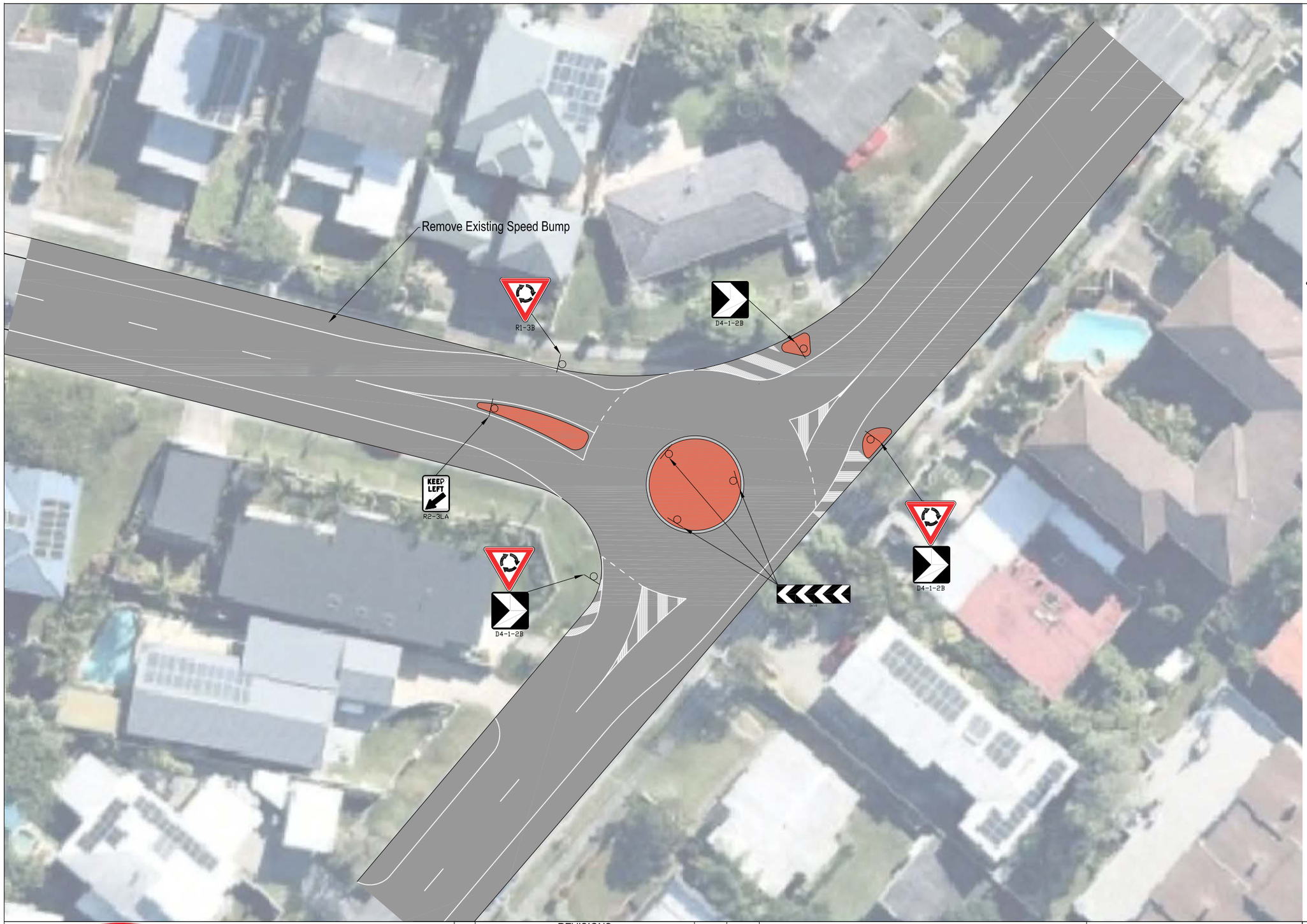
Title: Concept Sketch
Ikkina Road Intersections
Ikkina Rd / Tabilban St Realignment

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	26	002



NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data.

LEGEND

Raised Median

Proposed Signpost

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 4 8 12 16 20 1:400

Project: Koala Park Traffic Management Study

Title: Concept Sketch
Ikkina Road Intersections
Ikkina Rd / Tabilban St Roundabout

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	27	002

NORTH

NOTES

- Elements of concept sketch based on aerial imagery only and detailed design shall be subject to survey data
- Assessment to also be undertaken of a speed limit reduction to 40km/h on Bunyip Street.

WARNING!

BEWARE OF AERIAL SERVICES

Overhead powerlines and communication cables within work area. Contact service provider for advice prior to commencement of work.

WARNING!

BEWARE OF UNDERGROUND SERVICES

The location of underground services has been compiled from engineering survey and interpolated from Dial Before You Dig as provided by the Service Authorities. No responsibility is taken for the accuracy of the interpolated information supplied. Ensure all services are accurately located prior to commencement of work.

BITZIOS consulting

Gold Coast
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
P: (07) 5562-5377
W: www.bitziosconsulting.com.au
Brisbane
Level 2, 428 Upper Edward Street, Spring Hill 4000
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au
Sydney
Studio 203, 3 Gladstone Street, Newtown NSW 2042
P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	Concept Sketch	A.P	12.07.22
002	Concept Sketch Including Council Comments	A.P	05.08.22

Scale @ A3 0 10 20 30 40 50 1:1000

Project: Koala Park Traffic Management Study

Title: Concept Sketch
Ikkina Road Intersections
Bunyip Street Line Marking

Design	Drawn	Checked
A.P	A.P	L.D

CONCEPT ONLY

Date: 05.08.22

Project Number	Sheet Number	Issue
P5288	28	002

Appendix H: Independent Concept Budgetary Estimate Report

ROD COSSOR CONSULTING PTY LTD

Independent Concept Budgetary Estimate Report

Koala Park Transport Study
City of Gold Coast Council

Prepared by
Rod Cossor Consulting Pty Ltd

Version Number: 0
Date: 26 August 2022

Table of Contents

Contact

TYPE	DETAILS
NAME OF COMPANY/TRADING NAME	Rod Cossor Consulting Pty Ltd
ABN / ACN	81 681 746 571
REPRESENTATIVE	[redacted]
POSITION	Senior Civil Estimator
HEAD OFFICE	126 Waterford-Tamborine Road, Waterford Queensland 4133
MOBILE	[redacted]
EMAIL	[redacted]

DOCUMENT STATUS	NAME	DATE
PREPARED BY:	[redacted] – Senior Civil Estimator	12/08/2022
REVIEWED BY:	[redacted] – Senior Project Engineer/Estimator	12/08/2022
REVIEWED BY:	[redacted] – Senior Civil Estimator	26/08/2022

REVISION NO.	REVISION DATE	STATUS
0	13 August 2022	Draft issued to CoGC for review
1	26 August 2022	Final issued to CoGC

Executive Summary

Rod Cossor Consulting Pty Ltd (RCC) is pleased to provide an independent concept budgetary estimate report including probabilistic contingency (P50-P90) to inform the overall Koala Park Transport Study (the "Project") for the City of Gold Coast Council (CoGC).

We understand the independent concept budgetary estimate report will support the City of Gold Coast Council in addressing resident petition to close Reserve Street to through traffic and construct the missing link at Tabilban Street at Burleigh Heads; RCC have prepared the Project Cost Summary (refer Figure 1), which is derived from first principles estimating and industry best practice.

	Option A	Option B	Option C
Total Costs	$3,900,000.00	$12,300,000.00	$3,900,000.00
Total Sans Owners Costs	$3,300,000.00	$10,600,000.00	$3,300,000.00
P90 Contingency	$1,200,000.00	$4,000,000.00	$1,200,000.00
Owner's Costs	$600,000.00	$1,700,000.00	$600,000.00
Construction Value	$2,100,000.00	$6,600,000.00	$2,100,000.00

Figure 1: Project cost summary

1 Introduction

City of Gold Coast Council ("Council") is undertaking the Koala Park Transport Study (the "Project") and have engaged Rod Cossor Consulting Pty Ltd (RCC) to deliver an Independent Concept Budgetary Estimate including probabilistic contingency (P50-P90) to support the overall Koala Park Transport Study.

1.1 Project background

Koala Park is a residential area within Burleigh Heads, situated on the northern side of Tallebudgera Creek, west of the Gold Coast Highway and east of West Burleigh Road. Access to the residential area is provided via Ikkina Road to the east and Tabilban Street to the west, both of which form an east-west/west-east connection between the Gold Coast Highway and West Burleigh Road as shown in Figure 1.

Figure 2: Project site location

The Tabilban Street is a commonly used 'short cut' for traffic travelling between the Gold Coast Highway between Palm Beach and West Burleigh Road. Which has resulted in a petition requesting that Council close Reserve Street to through traffic and construct the missing link at Tabilban Street at Burleigh Heads.

To date, Council has engaged with Bitzios Consulting to complete a Traffic Management Study for the Koala Park area. As part of the study, three overarching options have been considered, these include:

- Option A – Providing minor network improvements to the existing through route;
- Option B – Providing the Tabilban Street Link (petition option); and
- Option C – Restricting traffic and allowing for local traffic only.

For each of the above options, concept plans/sub-options were considered many of which are consistent across all the options, as listed in the Table 1.

Table 1: Option A-C details

SUB-OPTIONS	OPTION A	OPTION B	OPTION C
Intersection of Tabilban Street and West-Burleigh Road	Provision of a pedestrian crossing on the southern leg of the intersection.	Provision of a left-hand slip lane existing Tabilban Street (would require property acquisition on corner)	Provision of a pedestrian crossing on the southern leg of the intersection
Tabilban Street between West-Burleigh Road and Wairoo Street	Line-marking of parking lanes and no stopping to lengthen left-turn pocket exiting Tabilban Street.	Line-marking of parking lanes and no stopping to lengthen left-turn pocket exiting Tabilban Street.	As per existing
Intersection of Tabilban Street and Wairoo Street	Provision of a mini roundabout	As per existing	Provision of a mini roundabout
Intersection of Tabilban Street and Koel Street	Intersection LATM including additional line marking and installation of kerb side islands on southern side of intersection	As per existing	Intersection LATM including additional line marking and installation of kerb side islands on southern side of intersection
Intersection of Tabilban Street and Ocean Parade	Intersection LATM including kerb extensions and formalisation of eastern leg	Reconfiguration of intersection/change of priority. Tabilban Street extension through unmade road reserve.	Intersection LATM including kerb extensions and formalisation of eastern leg
Tabilban Street Extension	Not applicable	▪ Tabilban Street extension through unmade road reserve. ▪ Cul-du-sac of intersection of Tabilban Street and Reserve Street intersection.	Not Applicable
Intersection of Reserve Street and Ocean Parade	▪ Option 1: Minor intersection reconfiguration to provide improved sight distances. ▪ Option 2: Provision of a mini roundabout ▪ Option 3: Signalisation	As per existing	As per existing
Reserve Street	Potential minor road widening to provide some additional road shoulder width	As per existing	As per existing
Tabilban Street between Reserve Street and Pindari Avenue	▪ Additional line marking, provision of LATM treatment. ▪ Upgrade of signs and lines on corners. Provision of upgraded shared path.	Provision of upgraded shared path.	▪ Additional line marking, provision of LATM treatment. ▪ Upgrade of signs and lines on corners. Provision of upgraded shared path.

Intersection of Tabilban Street / Pindari Avenue and Djerral Avenue	▪ Option 1: Minor intersection reconfiguration to improve active transport access and improve safety. ▪ Option 2: Provision of a roundabout	Option 1: Minor intersection reconfiguration to improve active transport access and improve safety.	Option 1: Minor intersection reconfiguration to improve active transport access and improve safety.
Intersection of Tabilban Street and Parnoo Avenue	Minor intersection reconfiguration to improve active transport access and improve safety	Minor intersection reconfiguration to improve active transport access and improve safety	Minor intersection reconfiguration to improve active transport access and improve safety
Intersection of Tabilban Street and Ikkina Road	▪ Option 1: Minor intersection reconfiguration to improve active transport access and improve safety. ▪ Option 2: Provision of a roundabout	Minor intersection reconfiguration to improve active transport access and improve safety.	▪ Option 1: Minor intersection reconfiguration to improve active transport access and improve safety. ▪ Option 2: Provision of a roundabout
Full length of through route	Signs and line marking upgrade including but not limited to signage, line marking, electronic signage	Signs and line marking upgrade including but not limited to signage, line marking, electronic signage	Signs and line marking upgrade including but not limited to signage, line marking, electronic signage

1.2 Project scope

The Project scope of works involves the following;

- Review all project information and attachments provided, including concept plans.
- Attend a start-up meeting with the Council Project Team and Bitzios Consulting team (allow 1 hour via MS Teams).
- Provide a draft Capital Cost Estimate report including a probabilistic contingency (P50-P90) analysis for each of options (and sub-options) listed.
- Provide a cost breakdown for each option apportioning costs to each of the sub-options listed.
- Allow Council to review and make comment.
- Update the draft cost estimate incorporating Council's feedback and formally submit the final Capital Cost Estimate report.

1.3 Purpose of this report

Council engaged Rod Cossor Consulting to provide an independent concept budgetary estimate report to inform the overall Koala Park Transport Study of Council.

The Project is currently in the concept phases which requires an independent concept budgetary estimate to determine the Project feasibility for Council. Rod Cossor Consulting scope for the independent concept budgetary estimate involves delivery of:

- Independent concept budgetary estimate report;
- Draft Capital Cost Estimate Report including a probabilistic contingency (P50-P90) analysis; and
- Final Capital Cost Estimate Report including a probabilistic contingency (P50-P90) analysis.

1.4 Source of information

Rod Cossor Consulting has based this report on the following information, generally:

- 22-T1-00459 Koala Park Consult 4;
- P5288 Koala Park – Option A Concept Base Sketches (Draft);
- P5288.001 Option A Design Sketch Package;
- P5288.001 Option B Design Sketch;
- P5288.001 Option C Design Sketch; and
- VP315658 ITQ Consultancy Services QS Koala Park (a79056659).

2 Estimate classification and methodology

2.1 Classification and approach

RCC have assumed the Project as a Type 2, estimate category type 2/3 with a class 4 estimate per the Queensland Department of Transport and Main Roads Project Cost Estimating Manual[1] classification of project types (refer Table 2).

Table 2: PCEM Estimate classification overview

CATEGORY	STAGE	KNOWLEDGE LEVEL	ESTIMATING METHOD		PLANNED RISK CONTINGENCY PARAMETERS		CONFIDENCE LEVEL	CONTINGENCY RANGE	NOTES	SERVICES
			Project Type 1 *Complex Infrastructure*	**Project Type 2 *Normal Infrastructure***	**Min**	**Max**				
1	Strategic Planning	<2%	Unit Rates	Global	-0.5	2	Very Low	40-70%	No formal scope	▪ Benchmarked unit rates from past projects. ▪ Constructability Advice ▪ Deterministic Risk ▪ Basis of Estimate Report
2	Project Proposal	1% to 15%	Unit Rates	Unit Rate	-0.3	1	Low	40-70%	A simple scope and strategy	▪ Benchmarked unit rates from past projects. ▪ Constructability Advice ▪ Deterministic Risk ▪ Basis of Estimate Report

[1] Project Cost Estimating Manual, Version 1.1 December 2021, Queensland Department of Transport and Main Roads

2/3	**Options Analysis**	**5% to 25%**	**60% Unit Rates 40% First Principles**	**Unit Rate**	**-0.3**	**1**	**Low to Medium**	**35-55%**	**A preliminary scope and preferred options**	**▪ First Principle Estimate in Expert Estimator on critical construction items and Benchmarked unit rates from past projects on minor construction items ▪ Constructability Advice ▪ Deterministic Risk ▪ Basis of Estimate Report**
3	Business Case (P90)	10% to 40%	First Principles at WBS 4 or 5	60% Unit Rates / 40% First Principles	-0.15	0.2	Medium	30-40%	An agreed scope and preferred option	▪ First Principle Estimate in Expert Estimator on critical construction items and Benchmarked unit rates from past projects on minor construction items ▪ Constructability Advice ▪ Monte Carlo Risk Model Simulation in @Risk ▪ Basis of Estimate Report
4/5	Preliminary / Detailed Design (P90)	30% to 80%	First Principles at WBS 4 or 5	20% Unit Rates / 80% First Principles Alternative First Principal at WBS 3	-0.1	0.15	Medium to High	10-30%	Developed design	▪ First Principle Estimate in Expert Estimator on critical construction items and Benchmarked unit rates from past projects on minor construction items ▪ Constructability Advice ▪ Monte Carlo Risk Model Simulation in @Risk ▪ Basis of Estimate Report

6	Procurement / Implementation	50% to 100%	First Principles at WBS 4 or 5, or alternatively Tender Schedule & Principal's Estimate	First Principles at WBS3 or Tender Schedule & Principal's Estimate	-0.05	0.1	Very High	5-15%	Contract details	▪ First Principle Estimate in Expert Estimator ▪ Detailed Construction Program in Microsoft Project or Primavera P6 ▪ Constructability Advice ▪ Monte Carlo Risk Model Simulation in @Risk ▪ Basis of Estimate Report

2.2 Estimate methodology

The estimated costs included within the scope of this estimate can be summarised to include:

- Contractors Direct Construction Costs;
- Contractors Indirect Construction Costs;
- Contractors Offsite Overheads and Margin;
- Risk and Opportunity; and
- Owner's Costs.

The first principles estimate is based on:

- Current plant and labour rates from real contractors drawn from recent similar projects delivered by RCC
- Overheads to suit private contractor construction in line with current market allowances; and
- Margin in line with current market rates.

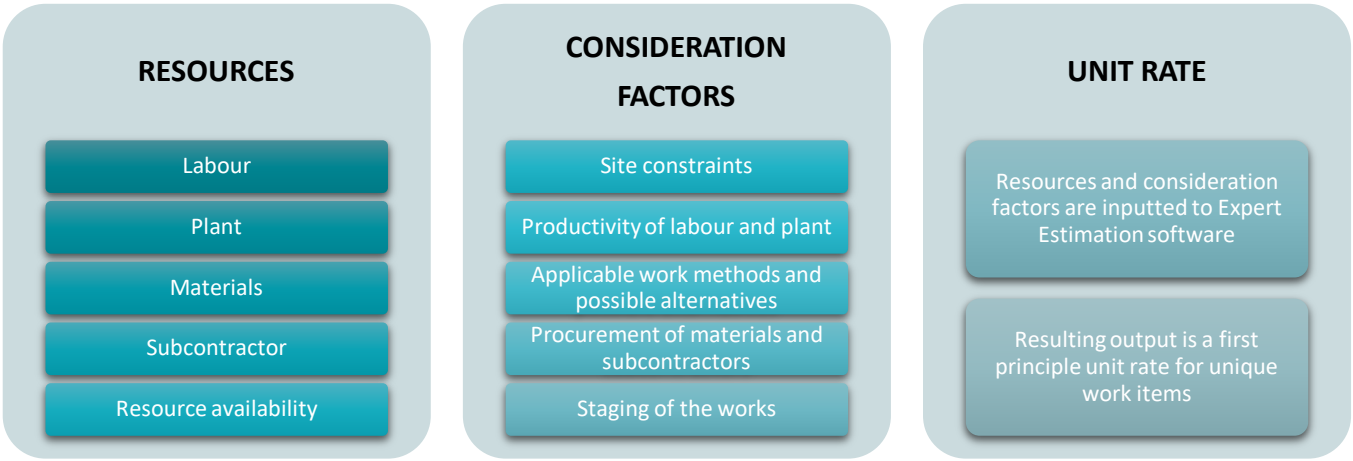


Figure 3: First principle rates generally follow and include the process detailed above however it must be preceded by an agreed construction methodology with CoGC.

2.3 Schedule of rates

Rod Cossor Consulting have utilised a Schedule of Rates (SoR) for the scope items, Figure 4 outlines the process followed, generally.

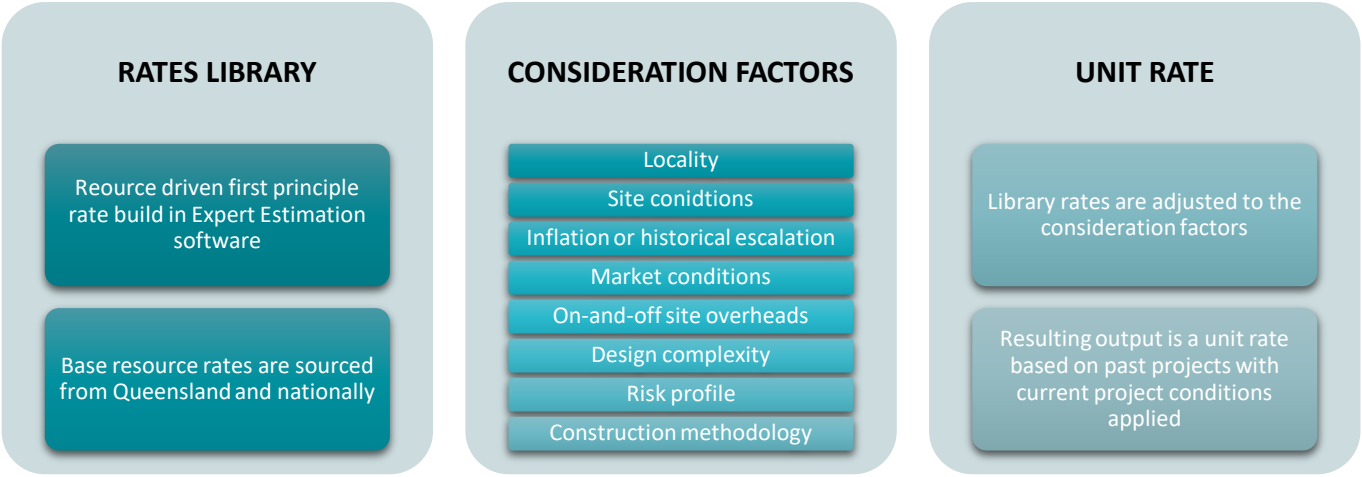


Figure 4: Schedule of rates (SoR) process

2.4 Independent cost estimate assumptions

Rod Cossor Consulting have made assumptions (refer Table 3) which underpin the basis of estimate.

Table 3: Independent cost estimate assumptions

PROJECT TYPE	Type 2
ESTIMATE CATEGORY	2/3
ESTIMATING METHOD	Unit Rate
DELIVERY MODEL	Construct only
CONTRACTOR SIZE	Tier 2/3
PROJECT GATEWAY	Gateway 1

2.5 Engineering and design basis

Rod Cossor Consulting have based the estimate on the documentation provided by CoGC.

2.6 Quantity basis

Rod Cossor Consulting developed a BOQ required to form the basis of developing the first principle estimate.

2.7 Contracting delivery strategy and procurement

Rod Cossor Consulting have assumed the Project will be procured through an open market tender targeted at local Tier 2 Civil Contractors on a Construct Only form of contract. If upon review, Council and management determine this is not valid, the estimate validity would require re-assessment.

2.8 General estimate assumptions

Provided in Table 4 are the key assumptions that Rod Cossor Consulting have made whilst preparing this report.

Table 4: General assumptions

#	ASSUMPTIONS
1	Estimate date is August 2022
2	No major service relocations are required
3	No Property Acquisitions are required
4	No modification to existing stormwater infrastructure required
5	All new islands assumed to be cast in place

2.9 Exclusions

Provided in Table 5 are the key exclusions that Rod Cossor Consulting have made in preparing this report.

Table 5: Exclusions

#	EXCLUSIONS
1	Estimate excludes escalation and GST
2	Legal Fees and Permits
3	Taxation relief or Grants
4	Working over or adjacent to gas mains

2.10 Limitations

Rod Cossor Consulting advises that the cost estimates are limited to the relevant documentation, as provided by Council. As such, no allowance has been made for escalation beyond the date of this report.

2.11 Specific assumptions

Table 6: Option specific assumptions

	OPTION A	OPTION B	OPTION C
Intersection of Tabilban Street and West-Burleigh Road	No allowance made to modify existing traffic signals or include additional pedestrian controls.	▪ A Provisional Sum of $150, 000 has been allowed to relocate the power pole at the corner of West Burleigh Road and Tabilban Street. ▪ A Provisional Sum of $75,000 has been allowed for the relocation of the traffic light and adjacent controller at the corner of West Burleigh Road and Tabilban Street. ▪ A Provisional Sum of $2,500,000 has been allowed for the acquisition of the property at 90 Tabilban Street to cater for the proposed turning lane.	No allowance made to modify existing traffic signals or include additional pedestrian controls.
Intersection of Reserve Street and Ocean Parade	▪ No allowance for any retaining structures to the adjoining property following clearing works. ▪ Topsoil and turf allowed to cleared zone. ▪ No allowance for retaining structures to driveway at 3&5 Reserve Street.		
Reserve Street	Works were identified as "Potential minor road widening to provide some additional road shoulder width" with no design sketches provided. It is assumed that this potential work is not required and no costs have been allowed.		
Tabilban Street between Reserve Street and Pindari Avenue	▪ No allowance has been made for property access modifications to 14 Reserve Street. ▪ Clearing and nominal earthworks allowed for new shared path connection. Proposed path would be assumed to follow the natural contours. No retaining structures have been allowed. ▪ The upgraded shared path from Reserve Street to Djerral Ave has been priced on the assumption of removing the existing path and replacing with a new full width shared path. No allowance has been made to relocate the existing power poles on this route.	▪ No allowance has been made for property access modifications to 14 Reserve Street. ▪ The upgraded shared path from Reserve Street to Djerral Ave has been priced on the assumption of removing the existing path and replacing with a new full width shared path. No allowance has been made to relocate the existing power poles on this route.	▪ No allowance has been made for property access modifications to 14 Reserve Street. ▪ The upgraded shared path from Reserve Street to Djerral Ave has been priced on the assumption of removing the existing path and replacing with a new full width shared path. No allowance has been made to relocate the existing power poles on this route.

Intersection of Tabilban Street and Parnoo Avenue	This work has been assumed to include the kerb build out at the corner of Tabilban Street and Tawarri Crescent.	This work has been assumed to include the kerb build out at the corner of Tabilban Street and Tawarri Crescent.	This work has been assumed to include the kerb build out at the corner of Tabilban Street and Tawarri Crescent.
Tabilban Street Extension		▪ Topsoil stripping assumed to be 100mm thick. ▪ The first 60m length at the highest point of the proposed road has been assumed to be in cut for a depth of 1.5m. ▪ 15% of this excavation volume is assumed to be in rock. ▪ The balance of the proposed road is assumed to require 1.5m of fill. ▪ A reinforced concrete retaining wall is assumed for the length of this fill to minimise batter encroachment into the adjacent park. – Wall footing assumed at 3m wide and 250mm thick – Wall height assumed at a.5m high and 250mm thick – Reinforcing rate assumed at 180kg/m3 ▪ Drainage has been assumed along one side of the road for the full length of the kerbing at the following sizes: – 375mm = 30% – 450mm = 30% – 525mm = 20% – 600mm = 10% – 675mm = 10% – Gully pits have been allowed at approximately 30m centres.	

3 Independent Cost Estimate

Rod Cossor Consulting Pty Ltd (Rod Cossor Consulting) works directly with Tier 1 – 3 Contractors and Subcontractors delivering competitive cost estimates and engineering advice. As such, Rod Cossor Consulting (RCC) have a deep understanding of the current and actual market place, through comprehensive and ongoing market analyses.

With our experience in mind, RCC have drawn upon this knowledge and have conducted further market research to inform this independent cost estimate. This approach ensures that our estimates reflect the actual market, providing greater certainty to the City of Gold Coast Council (Council) in their investment.

For the Project, RCC has assumed that a Tier 2 as the most suitable Contractor for delivery, and as such, have prepared the estimate on this basis.

3.1 Direct job cost estimate

Rod Cossor Consulting have undertaken a first principle rate build for the key cost drivers using Expert Estimation software. Each rate built is driven by rough quantities derived from limited information, should this change, the rates will be adjusted accordingly.

The direct job costs required to complete the works are built from the direct cost of all labour, materials, plant, and subcontractors. These are further detailed in Figure 5.

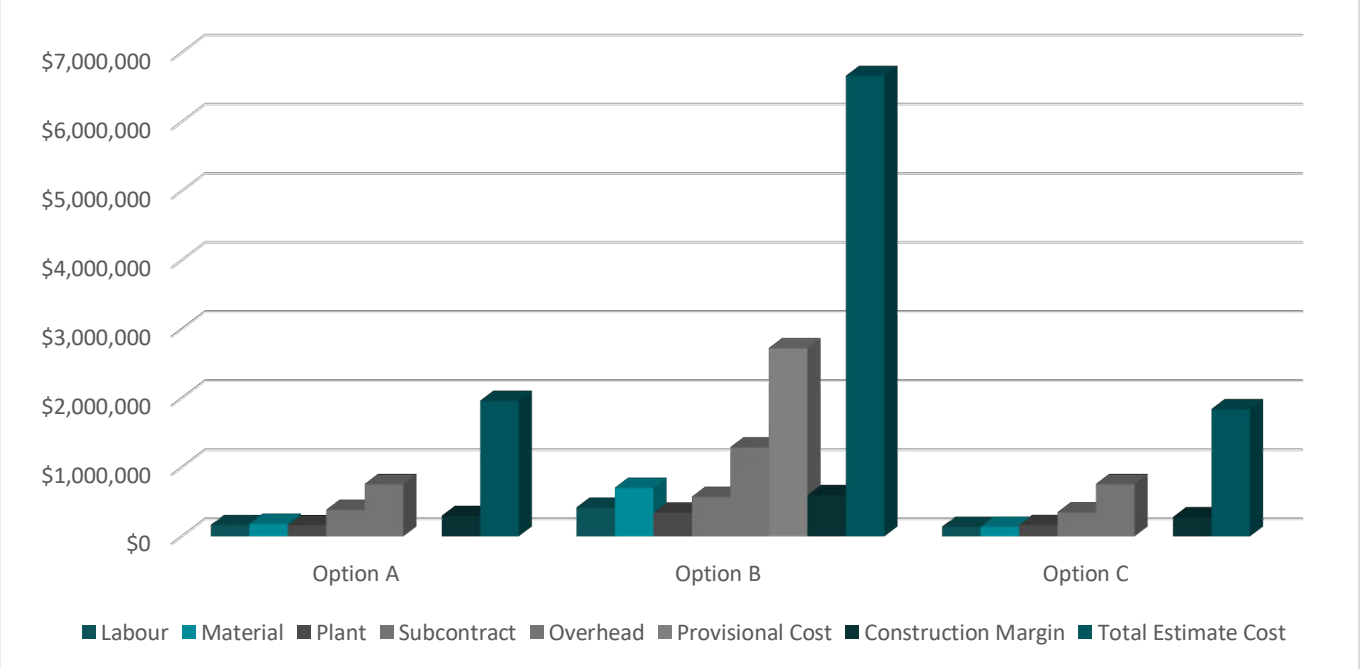


Figure 5: Direct job costs summary

3.2 Indirect job cost estimate

Rod Cossor Consulting have assumed a minimum Construction duration of 40 weeks for Option 2 and 3, 44 weeks for Option 5 and 42 weeks for Option 6, these assumptions have been applied to form the basis and develop the first principle indirect job cost build up in Expert Estimation. The indirect job costs that RCC has allowed are detailed in Table 7.

Table 7: Contractor's on site indirect job costs

COST CATEGORY	COMPONENT	SUBCOMPONENTS
ON SITE INDIRECT JOB COST OVERHEADS (RECURRING)	Project management	Project manager, project engineer
	Works management	Supervisors, administration officer, systems officers, surveyor, laboratory technician
	Site facilities	Office rentals (accommodation, photocopier, computer hardware and software, etc)

		Service utility charges (telephone, power, water and sewerage)
		Cleaning charges (office cleaning, septic pumping, refuse disposal, etc)
	Plant and equipment	Site staff vehicles, job trucks, pumps and generators, floating plant and loose tools
	Consumables	Stationery, miscellaneous materials
	Insurance and permits	Queensland Government and local government permit fees, insurances required by the contractor, bank guarantees and financial charges
ON SITE OVERHEADS INDIRECT JOBS COSTS (FIXED)	Travel	Travel costs not included in wages and salaries

3.3 Overheads and margin

Rod Cossor Consulting has a sound understanding of the market including current overheads and margin to be expected from a Tier 2 Contractor. As such, RCC has assumed Tie 2 Contractor would undertake the works under the estimated percentages:

- Margin – 6.00 percent; and
- Offsite overheads – 12.00 percent.

3.4 Cost estimate

The independent cost estimate has been developed based on current market conditions with production, labour, plant and subcontract / supplier rates, please refer to Appendix A Estimate Schedule (Expert Estimation).

4 Owner's Cost Estimate

4.1 Owner's cost estimate overview

Rod Cossor Consulting have developed the Owner's Cost based on a percentage of the Construction Costs, along with the provided Council costs. The method employed utilises a percentage approach rather than first principles, as the staff levels required for the Project were not known at the time of preparing this report.

The Owner's costs have been developed and summarised as the following (refer Table 10):

1. Portfolio & Project Planning;
2. Options Analysis;
3. Business Case;
4. Procurement and Readiness for Market;
5. Procurement and Readiness for Market or Construction;
6. Construction; and
7. Any Phase.

The Owner's costs generally include for:

- Project management costs (for the life of the project);
- Contract administration costs (for the life of the project);
- Strategic assessment costs (for the life of the project);
- Options analysis costs (incurred during the execution of this phase);
- Business case costs (incurred during the execution of this phase);
- Legal costs;
- Procurement costs;
- Property and land costs;
- Property and land costs;
- Environmental and Heritage costs;
- Approval costs;
- Contract administration;
- Principal supplied materials;
- As-constructed drawings; and
- Commissioning and hand over costs

Table 8: Owner's Cost Summary

	OPTION A	OPTION B	OPTION C
Intersection of Tabilban Street and West-Burleigh Road	$191,870	$5,697,984	$207,670
Tabilban Street between West-Burleigh Road and Wairoo Street	$10,850	$9,266	$0
Intersection of Tabilban Street and Wairoo Street	$346,120	$0	$246,924
Intersection of Tabilban Street and Koel Street	$67,165	$0	$72,685
Intersection of Tabilban Street and Ocean Parade	$134,951	$560,166	$146,068
Tabilban Street Extension	$0	$5,238,113	$0
Intersection of Reserve Street and Ocean Parade	$980,930	$0	$0
Reserve Street	$0	$0	$0
Tabilban Street between Reserve Street and Pindari Avenue	$475,411	$221,716	$491,515
Intersection of Tabilban Street / Pindari Avenue and Djerral Avenue	$1,147,411	$145,922	$184,963
Intersection of Tabilban Street and Parnoo Avenue	$120,333	$102,753	$130,245
Intersection of Tabilban Street and Ikkina Road	$236,896	$202,283	$2,079,631
Full length of through route	$15,191	$4,919	$16,446
Preferred options total	$3,727,127	$12,183,122	$3,576,146

Provisional Optional Costs			
Intersection of Tabilban Street and Wairoo Street - Provision of mini roundabout in lieu of LATM	$217,241		
Intersection of Reserve Street and Ocean Parade - Minor intersection reconfiguration in lieu of Mini roundabout	-$330,927	$0	$0
Intersection of Reserve Street and Ocean Parade - Signalisation in lieu of Mini roundabout	$281,679	$0	$0
New path through Tabilban Street Extension in Park	$684,518	$684,518	$684,518
Intersection of Tabilban Street / Pindari Avenue and Djerral Avenue - Minor intersection reconfiguration in lieu of roundabout	$449,845	$0	$0
Intersection of Tabilban Street and Ikkina Road - Provision of roundabout in lieu of minor intersection reconfiguration	$778,656	$0	$0
Intersection of Tabilban Street and Ikkina Road - Provision minor intersection reconfiguration in lieu of roundabout	$0	$0	-$793,523
COST RANGE OF EACH OPTION			
Minimum value	**$3,396,200**	**$12,183,122**	**$2,782,623**
Preferred option	**$3,727,127**	**$12,183,122**	**$3,576,146**
Highest value	**$4,505,784**	**$12,867,640**	**$4,260,664**

Rod Cossor Consulting note that 25 – 29 percent of the construction value is at the upper end of the expectant range. This is driven by a number of factors, significantly:

- - Low construction value for a detailed scope of works
- - Disproportionally higher supervision and design requirements due to detailed scope of work

Note: The values for Figure 6 will be provided post CoGC review of revision 0 of this Report.

5 Risk and contingency

5.1 Risk methodology

Rod Cossor Consulting have undertaken a preliminary risk analysis[2] to determine the costs, risks and benefits associated with the identified Project Options. As such, RCC have applied a deterministic method with the contingency values summarised in including the percentages for the P50 and P90 outcomes of the @Risk simulations.

Rod Cossor Consulting notes that the ranges are not remarkable and are within the expected range of a concept budgetary estimate.

Table 9: Contingency values

	CONSTRUCTION + OWNERS COSTS	P50		P90		CONSTRUCTION + OWNERS COSTS + P90
	$	$	%	$	%	$
OPTION A	$2,700,000.00	$800,000.00	29.63%	$1,200,000.00	44.44%	$3,900,000.00
OPTION B	$8,300,000.00	$2,700,000.00	32.53%	$4,000,000.00	48.19%	$12,300,000.00
OPTION C	$2,700,000.00	$800,000.00	29.63%	$1,200,000.00	44.44%	$3,900,000.00
Expected PCEM risk range: **P50 – 20-40 percent,** **P90 - 35-55 percent**						

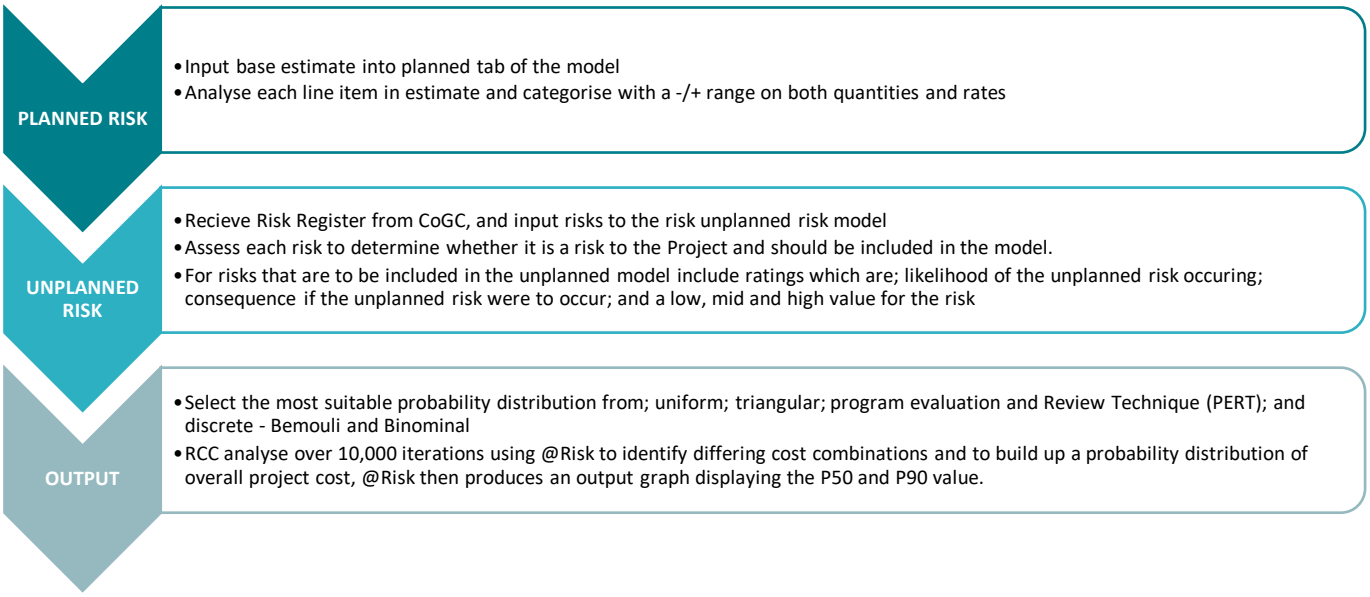


Figure 6: probabilistic risk assessment methodology

5.2 Probabalistic risk assessment, monte carlo and @risk

Probabilistic risk assessment involves using the Monte Carlo analysis to estimate the possibility of a cost variation at a line-by-line level and determines the probability distribution of the expected out-turn cost for investment projects.

Conducting a Monte Carlo simulation on the estimate provides the estimate with a statistical sampling which determines the likelihood of countless feasible outcomes of given a model. The likelihood of Monte Carlo simulation outcomes is scored

[2] Queensland Government, Project Assessment Framework, Preliminary Evaluation July 2015

within a given range and is determined by the probability density of the inputs and reflect the likelihood of an outcome within a range to occur in reality.

Rod Cossor Consulting implements @Risk software which runs a large number of iterations for differing cost combinations within an estimate enabling the build-up of probability distribution for an overall project cost; as such RCC undertook a probabilistic risk assessment using @Risk software to inform the risk profile of the provided independent concept budgetary estimate.

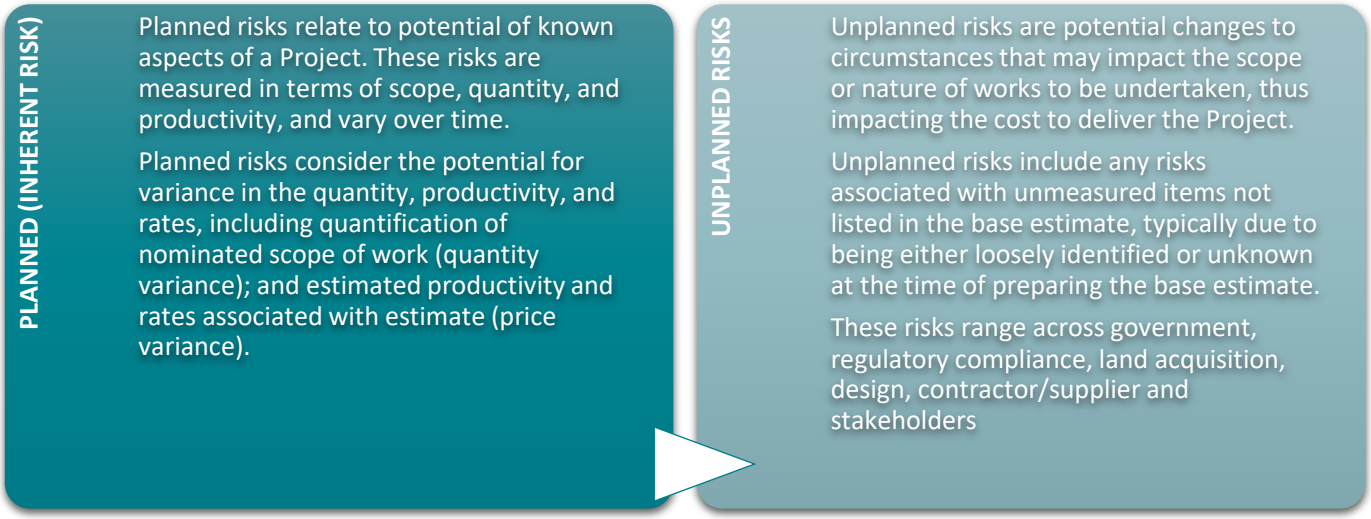


Figure 7: @risk output

Please refer to **Appendix B** Risk Reports

6 Cashflow and escalation

No escalation is allowed for due to the Project as it is assumed to be completed within the next financial year. The only volatile material that would be required is petroleum products required for asphalt and fuel for plant and equipment, with any fuel increases having minimal impact on the overall Project.

7 Review and verification

7.1 Peer review

Rod Cossor Consulting has developed this independent cost estimate through market research and sounding, and has been peer reviewed by [redacted] to ensure the following:

- Quantities are accurate;
- Cost estimates are based on current market conditions;
- Construction methodology and program that under pins the estimate is of sound logic and achievable, considering site conditions and constraints; and
- Risk and contingency consider the project specific characteristics and incorporates lessons learned from past projects to meet future market conditions and expectations.

Please refer to **Appendix B Peer Review Report**

7.2 Estimating team

The estimating team, led by [redacted] (Principal Civil Estimator) of Rod Cossor Consulting Pty Ltd prepared the estimates for the Project. Rod worked collaboratively with his team comprised of [redacted] (Senior Project Engineer/Estimator) and [redacted] (Senior Writer) who led the development of the Project risk assessment and associated outcomes.

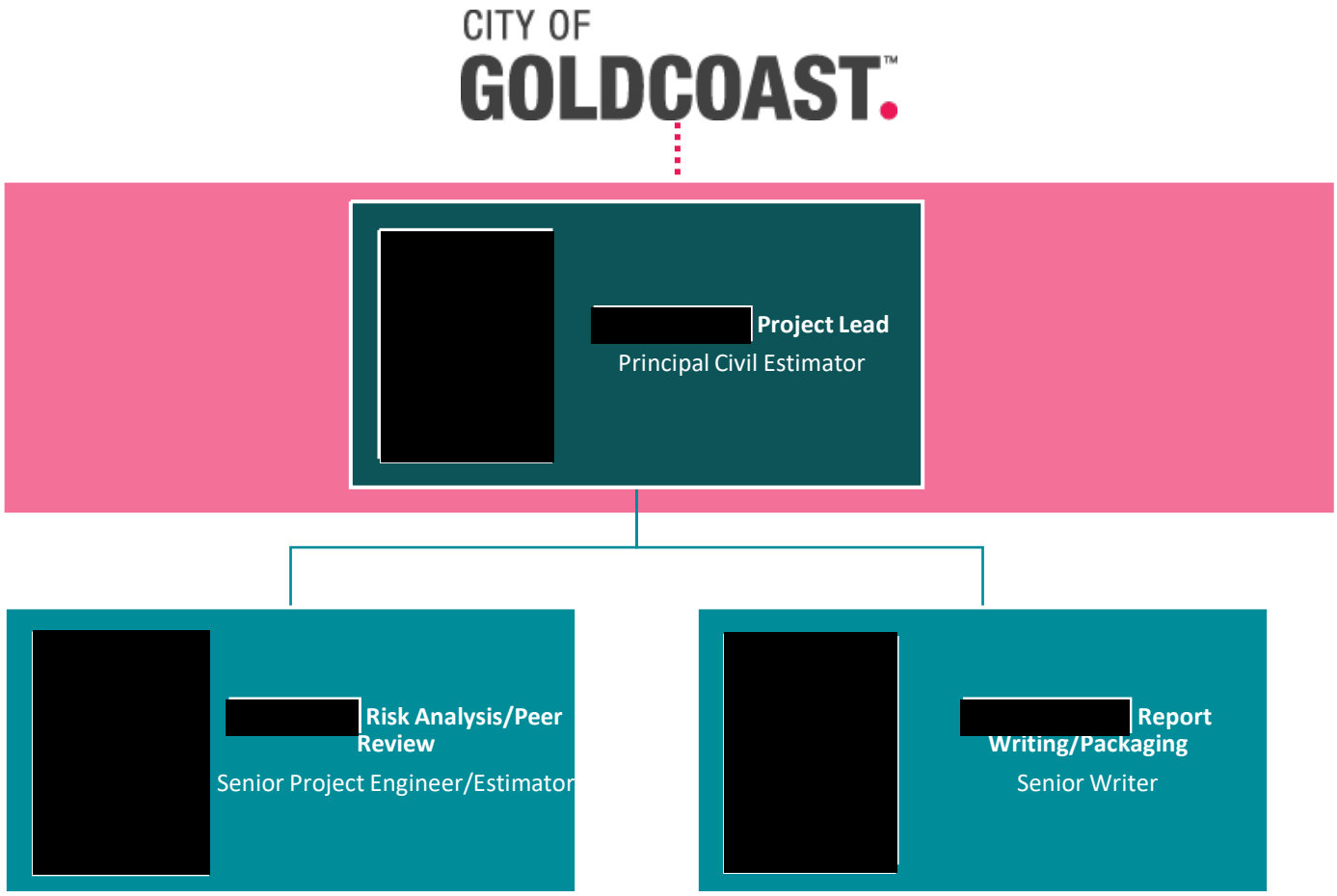
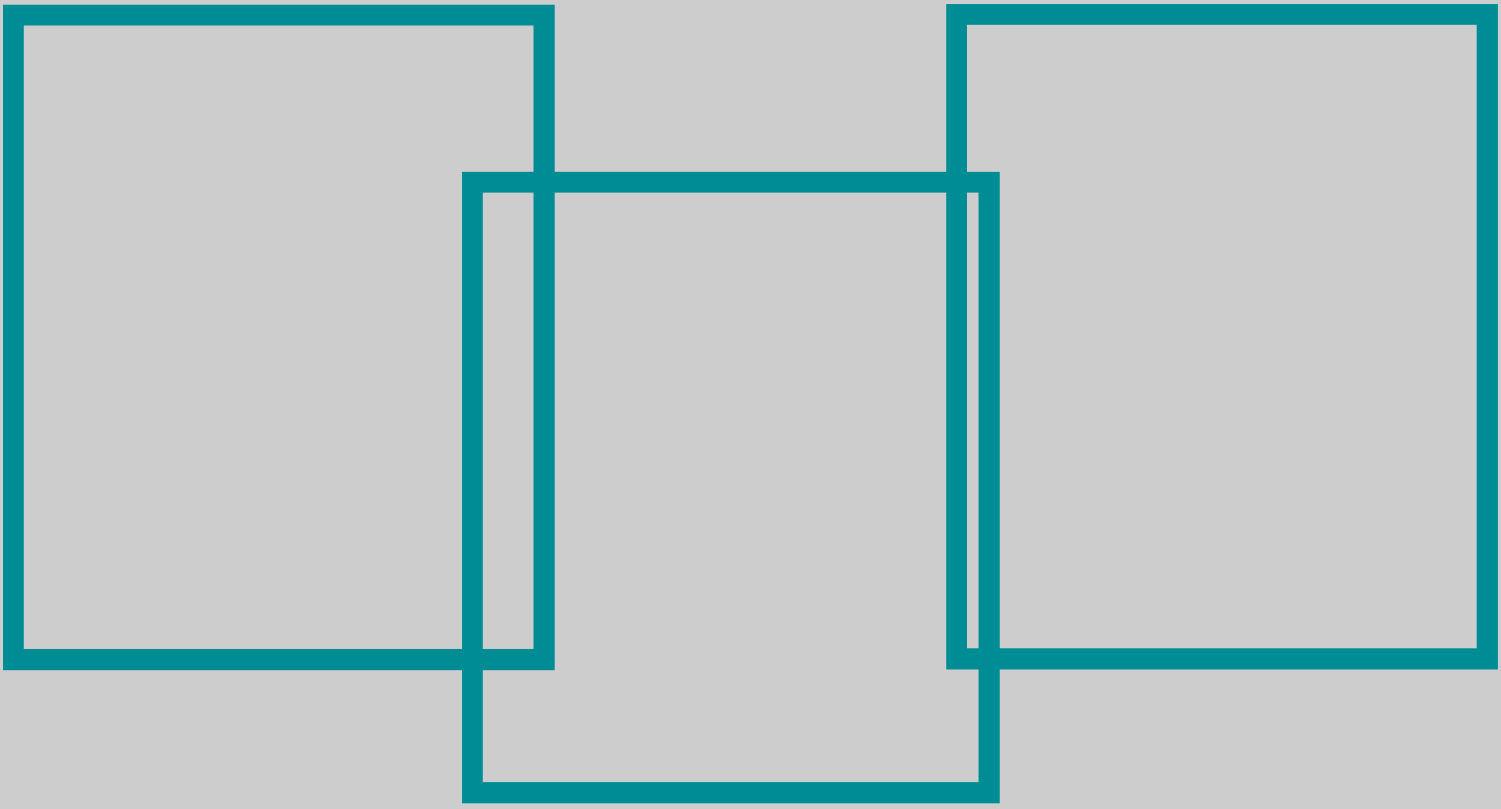


Figure 8: Independent Concept budgetary estimate consultant team

APPENDIX A
EXPERT ESTIMATION SCHEDULES



Item #	Description	Unit	Quantity	Unit Rate	Amount
1	**Intersection of West Burleigh Road and Tabilban Street**				
	Extended median with cut throughs				
	Traffic island	m2	25.00	1,099.87	27,497.00
	Concrete kerb crossings, [Type TGSI]	each	3.00	4,113.00	12,339.00
	Median nose and extension	m2	19.00	1,492.70	28,361.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	6,829.00	6,829.00
	Linemarking	item	1.00	1,347.00	1,347.00
	Traffic controllers	day	7.00	3,535.40	24,748.00
					101,121.00
2	**Tabilban Street between West-Burleigh Road and Wairoo Street**				
	Linemarking	item	1.00	3,066.00	3,066.00
	Traffic controllers	day	1.00	2,652.00	2,652.00
					5,718.00
3	**Intersection of Tabilban Street and Wairoo Street**				
	Removal of concrete footpath	m2	38.00	102.65	3,901.00
	Removal of existing island	m2	5.00	408.60	2,043.00
	Removal of kerb crossing	each	2.00	902.00	1,804.00
	Footpath	m2	48.00	386.05	18,530.00
	Concrete kerb crossings, [Type TGSI]	each	3.00	4,113.00	12,339.00
	Kerb Build outs and nose				
	Removal or demolition of concrete kerb	m	15.00	178.90	2,684.00
	Median nose and buildouts	m2	12.00	2,178.50	26,142.00
	New Islands	m2	87.00	916.84	79,765.00
	Linemarking	item	1.00	10,306.00	10,306.00
	Sign R1-2A	no	1.00	565.00	565.00
	Sign R2-3LA	no	6.00	546.90	3,281.00
	Sign D4-1-1A	no	1.00	640.00	640.00
	Sign D4-1-2B	no	2.00	597.00	1,194.00
	Topsoil and turf	m2	40.00	135.05	5,402.00
	Traffic controllers	day	10.00	1,381.90	13,819.00
					182,415.00
4	**Intersection of Tabilban Street and Koel Street**				
	Blister kerb	m2	13.00	1,934.60	25,150.00
	Linemarking	item	1.00	1,994.00	1,994.00
	Sign D4-1-2B	no	2.00	597.00	1,194.00
	Sign G9-40-1A	no	2.00	610.00	1,220.00
	Traffic controllers	day	4.00	1,460.00	5,840.00
					35,398.00
5	**Intersection of Tabilban Street and Ocean Parade**				
	Removal or demolition of concrete kerb	m	27.00	99.38	2,683.00
	Kerb build outs	m2	36.00	1,258.95	45,322.00
	Linemarking	item	1.00	2,260.00	2,260.00
	Sign D4-1-2B	no	1.00	597.00	597.00
	Sign R1-2A	no	1.00	565.00	565.00
	Sign R2-3LA	no	2.00	547.00	1,094.00

	Sign tc1790	no	1.00	9,558.00	9,558.00
	Traffic controllers	day	4.00	2,261.00	9,044.00
					71,123.00
6	**Tabilban Street Extension**				
	Not applicable				
					0.00
7	**Intersection of Reserve Street and Ocean Parade**				
Option 1	**Minor intersection reconfiguration to provide improved sight distances.**				
					0.00
Option 2	**Provision of a mini-roundabout**				
	Clearing & grubbing	day	1.00	17,038.00	17,038.00
	New Islands	m2	20.00	1,425.60	28,512.00
	Mountable Island	m2	51.00	577.71	29,463.00
	Linemarking	item	1.00	3,385.00	3,385.00
	Sign D4-1-2B	no	2.00	597.00	1,194.00
	Sign R1-1B	no	3.00	566.00	1,698.00
	Footpath	m2	48.00	386.05	18,530.00
	Topsoil and turf	m2	260.00	82.34	21,408.00
	Additional items to allow for pavement reinstatement to limit of works				
	Removal or demolition of concrete kerb	m	154.00	83.20	12,813.00
	Profile Asphalt with Bobcat	m2	910.00	23.28	21,185.00
	Road excavation	m3	273.00	137.37	37,502.00
	Subbase	m3	137.00	324.22	44,418.00
	Subsoil drains, Type B	m	133.00	98.03	13,038.00
	Kerb	m	133.00	213.80	28,435.00
	Base	m3	390.00	314.99	122,846.00
	Preparation of the existing surface	m2	860.00	3.26	2,804.00
	Prime @ 1 l/m2	litre	860.00	6.08	5,229.00
	Heavy duty dense graded asphalt in surfacing course, AC [nominal size] H mix	tonne	103.20	520.99	53,766.00
	Traffic controllers	day	20.00	2,685.70	53,714.00
					516,978.00
Option 3	**Signalisation**				
					0.00
8	**Reserve Street**				
	Not applicable				
					0.00
9	**Tabilban Street between Reserve Street and Pindari Avenue**				
9a	**New Reserve Path Section**				
9b	**Works between Reserve St and Pindari Ave**				
	Removal of concrete footpath - narrow section	m2	84.00	78.78	6,618.00
	New Footpath - 2.5m wide shared path	m2	350.00	336.39	117,737.00
	New Road Hump	no	1.00	10,963.00	10,963.00
	New Islands	m2	31.00	1,222.18	37,888.00
	Linemarking	item	1.00	28,050.00	28,050.00
	Sign D4-6B	no	6.00	592.40	3,554.00
	Sign R1-3B	no	1.00	614.00	614.00

	Sign R2-3LA	no	3.00	547.00	1,641.00
	Sign D4-1-2B	no	2.00	597.00	1,194.00
	Sign tc1790	no	1.00	9,558.00	9,558.00
	Sign W5-10	no	2.00	576.00	1,152.00
	Sign W8-2-20A	no	2.00	614.00	1,228.00
	Traffic controllers	day	14.00	2,168.40	30,358.00
					250,555.00
10	**Intersection of Tabilban Street / Pindari Avenue and Djerral Avenue**				
Option 1	**Minor intersection reconfiguration to improve active transport access and improve safety.**				
					0.00
Option 2	**Provision of a roundabout**				
	Removal or demolition of concrete kerb	m	52.00	93.85	4,880.00
	Kerb buildouts	m	60.00	281.53	16,892.00
	Topsoil and turf buildouts	m2	132.00	153.57	20,271.00
	Footpath	m2	10.00	586.40	5,864.00
	Concrete kerb crossings, [Type TGSI]	each	3.00	4,113.00	12,339.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	6,829.00	6,829.00
	New Islands	m2	31.00	1,102.07	34,164.00
	Mountable Island	m2	79.00	505.67	39,948.00
	Linemarking	item	1.00	3,450.00	3,450.00
	Sign R1-3B	no	4.00	614.00	2,456.00
	Sign R2-3LA	no	3.00	547.00	1,641.00
	Additional items to allow for pavement reinstatement to limit of works				
	Removal or demolition of concrete kerb	m	215.00	83.53	17,959.00
	Profile Asphalt with Bobcat	m2	1,350.00	23.30	31,455.00
	Road excavation	m3	405.00	138.43	56,064.00
	Subbase	m3	203.00	310.73	63,078.00
	Subsoil drains, Type B	m	215.00	96.16	20,674.00
	Kerb	m	215.00	189.46	40,734.00
	Base	m3	203.00	316.03	64,154.00
	Preparation of the existing surface	m2	1,320.00	3.26	4,303.00
	Prime @ 1 l/m2	litre	1,320.00	6.08	8,026.00
	Heavy duty dense graded asphalt in surfacing course, AC [nominal size] H mix	tonne	158.40	520.99	82,525.00
	Traffic controllers	day	25.00	2,680.48	67,012.00
					604,718.00
11	**Intersection of Tabilban Street and Parnoo Avenue**				
	This has been assumed to be the intersection with Tawarri Crescent				
	Removal or demolition of concrete kerb	m	23.00	116.70	2,684.00
	Kerb buildouts	m	25.00	287.05	7,176.00
	Topsoil and turf buildouts	m2	41.00	247.96	10,166.00
	Removal of concrete footpath	m2	40.00	99.51	3,980.00
	Footpath	m2	45.00	397.95	17,908.00
	Concrete kerb crossings, [Type TGSI]	each	1.00	4,657.00	4,657.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	6,829.00	6,829.00

	Linemarking	item	1.00	1,520.00	1,520.00
	Traffic controllers	day	3.00	2,833.00	8,499.00
					63,419.00
12	**Intersection of Tabilban Street and Ikkina Road**				
Option 1	**Minor intersection reconfiguration to improve active transport access and improve safety.**				
	Removal or demolition of concrete kerb	m	15.00	178.90	2,684.00
	Kerb buildouts	m	22.00	293.30	6,453.00
	Topsoil and turf buildouts	m2	34.00	284.12	9,660.00
	New Islands	m2	108.00	755.68	81,613.00
	Linemarking	item	1.00	1,954.00	1,954.00
	Sign R1-2A	no	1.00	565.00	565.00
	Sign R2-3LA	no	4.00	547.00	2,188.00
	Sign D4-1-2B	no	1.00	596.00	596.00
	Traffic controllers	day	7.00	2,734.00	19,138.00
					124,851.00
Option 2	**Provision of a roundabout**				
	Additional items to allow for pavement reinstatement to limit of works				
					0.00
13	**Full length of through route**				
	Sign R1-1B	no	3.00	1,012.00	3,036.00
	Linemarking	item	1.00	3,119.00	3,119.00
	Traffic controllers	day	1.00	1,851.00	1,851.00
					8,006.00
	Total for Project				**1,964,302.00**

Item #	Description	Unit	Quantity	Unit Rate	Amount
1	**Intersection of West Burleigh Road and Tabilban Street**				
	Provision of a left-hand slip lane existing Tabilban Street (would require property acquisition on corner)				
	Energex - relocation of power pole (Provisional)	item	1.00		150,000.00
	Relocation of traffic light and controller (Provisional)	item	1.00		75,000.00
	Property Acquisition (Provisional)	item	1.00		2,500,000.00
	Demolish property	each	1.00	92,357.00	92,357.00
	Topsoil and turf property	m2	800.00	68.22	54,576.00
	Service locations	Item	1.00	9,074.00	9,074.00
	Removal or demolition of concrete kerb	m	60.00	137.53	8,252.00
	Removal of concrete footpath	m2	116.00	92.33	10,710.00
	Excavation	m3	41.00	209.46	8,588.00
	Existing Subgrade testing (Provisional Quantity, if ordered	set	2.00	1,687.00	3,374.00
	Subgrade in cuttings	m2	150.00	32.19	4,829.00
	Subbase	m3	25.00	630.88	15,772.00
	Subsoil drains, Type B	m	60.00	121.64	7,298.00
	Kerb	m	60.00	277.09	16,625.00
	Concrete kerb crossings, [Type TGSI]	each	1.00	4,127.00	4,127.00
	Base	m3	25.00	630.88	15,772.00
	Asphalt	m2	150.00	175.99	26,399.00
	Footpath	m2	60.00	338.91	20,335.00
	Topsoil and turf	m2	150.00	76.08	11,412.00
	Linemarking	item	1.00	1,222.00	1,222.00
	Traffic controllers	item	1.00	81,414.00	81,414.00
					3,117,136.00
2	**Tabilban Street between West-Burleigh Road and Wairoo Street**				
	Linemarking	item	1.00	2,718.00	2,718.00
	Traffic controllers	day	1.00	2,351.00	2,351.00
					5,069.00
3	**Intersection of Tabilban Street and Wairoo Street**				
	As per existing				
					0.00
4	**Intersection of Tabilban Street and Koel Street**				
	As per existing				
					0.00
5	**Intersection of Tabilban Street and Ocean Parade**				
	Removal or demolition of concrete kerb	m	81.00	77.44	6,273.00
	Removal of existing island	m2	46.00	70.85	3,259.00
	Asphalt patching where islands removed	m2	46.00	385.69	17,742.00
	Excavation	m3	240.00	108.41	26,018.00
	Existing Subgrade testing (Provisional Quantity, if ordered	set	2.00	1,687.00	3,374.00
	Subgrade in cuttings	m2	800.00	13.86	11,088.00
	Subbase	m3	120.00	320.14	38,417.00
	Subsoil drains, Type B	m	81.00	119.15	9,651.00
	Kerb	m	81.00	276.89	22,428.00
	Concrete kerb crossings, [Type TGSI]	each	2.00	3,600.00	7,200.00
	Base	m3	120.00	342.36	41,083.00
	Preparation of the existing surface	m2	800.00	2.89	2,312.00
	Prime @ 1 l/m2	litre	800.00	5.39	4,312.00
	Heavy duty dense graded asphalt in surfacing course, AC [nominal size] H mix	tonne	96.00	461.78	44,331.00
	Footpath	m2	29.00	376.18	10,909.00
	Topsoil and turf	m2	60.00	91.32	5,479.00
	Kerb build outs	m2	5.00	3,931.90	19,660.00
	Linemarking	item	1.00	813.00	813.00
	Sign R1-1B	no	1.00	502.00	502.00
	Sign R2-3LA	no	1.00	485.00	485.00

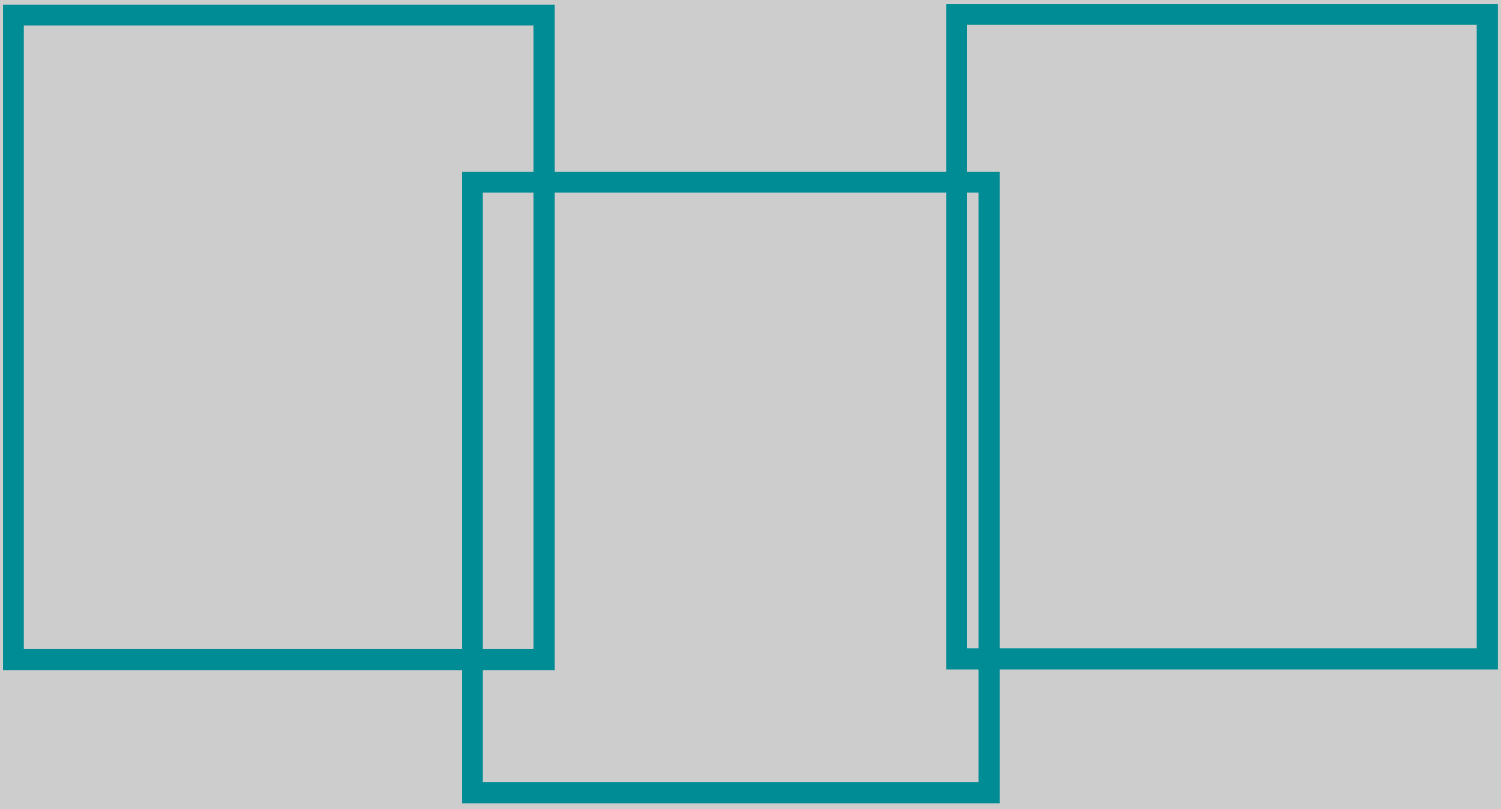
	Traffic controllers	day	13.00	2,392.90	31,108.00
					306,444.00
6	**Tabilban Street Extension**				
	Clearing & grubbing	m2	3,900.00	28.06	109,434.00
	Stripping of topsoil	m3	390.00	113.67	44,331.00
	Ground surface treatment under embankment	m2	3,900.00	8.16	31,824.00
	Road excavation	m3	1,800.00	87.54	157,572.00
	Rock Ripping	m3	270.00	92.25	24,908.00
	Road embankment using general fill material from all sources	m3	4,050.00	162.73	659,057.00
	Subgrade in cuttings, subgrade treatment Type A, compact existing	m2	2,600.00	6.71	17,446.00
	Subbase	m3	390.00	180.33	70,329.00
	Subsoil drains, Type B	m	390.00	84.03	32,772.00
	Kerb	m	390.00	169.09	65,945.00
	Base	m3	390.00	221.73	86,475.00
	Preparation of the existing surface	m2	2,400.00	2.89	6,936.00
	Prime @ 1 l/m2	litre	2,400.00	5.39	12,936.00
	Heavy duty dense graded asphalt in surfacing course, AC [nominal size] H mix	tonne	288.00	461.78	132,993.00
	New Footpath	m2	585.00	262.35	153,475.00
	Supply and installation of reinforced concrete pipe components, Class X, 375mm diameter	m	58.50	516.59	30,221.00
	Supply and installation of reinforced concrete pipe components, Class X, 450mm diameter	m	58.50	576.47	33,723.00
	Supply and installation of reinforced concrete pipe components, Class X, 525mm diameter	m	39.00	691.15	26,955.00
	Supply and installation of reinforced concrete pipe components, Class X, 600mm diameter	m	19.50	826.70	16,121.00
	Supply and installation of reinforced concrete pipe components, Class X, 675mm diameter	m	19.50	843.10	16,440.00
	Construct new side inlet gully on grade, cast in-situ (2400mm lintel) (2+ sites)	No	6.00	5,661.00	33,966.00
	Precast concrete end structures	each	1.00	4,718.00	4,718.00
	Dump Rock Protection, Rock Outlet Protection	m2	6.00	371.20	2,227.00
	Retaining Walls				
	Concrete retaining wall, concrete in footing	m3	80.00	4,173.35	333,868.00
	Concrete retaining wall, concrete in wall	m3	60.00	4,362.65	261,759.00
	Concrete retaining wall, steel reinforcing bar @ 180kg/m3	tonne	25.20	7,972.27	200,901.00
	Topsoil and turf	m2	1,170.00	67.22	78,647.00
	Linemarking	item	1.00	11,188.00	11,188.00
	Culdesac				
	Ground surface treatment under embankment	m2	470.00	9.44	4,437.00
	Road excavation	m3	235.00	88.60	20,821.00
	Subgrade in cuttings, subgrade treatment Type A, compact existing	m2	470.00	8.50	3,995.00
	Subbase	m3	70.00	215.08	15,056.00
	Subsoil drains, Type B	m	79.00	89.85	7,098.00
	Kerb	m	79.00	236.21	18,661.00
	Base	m3	70.00	252.68	17,688.00
	Preparation of the existing surface	m2	422.00	2.89	1,220.00
	Prime @ 1 l/m2	litre	422.00	5.39	2,275.00
	Heavy duty dense graded asphalt in surfacing course, AC [nominal size] H mix	tonne	50.64	461.78	23,385.00
	Topsoil and turf	m2	237.00	72.74	17,239.00
	New Footpath	m2	53.00	362.81	19,229.00
	Traffic controllers	day	80.00	716.10	57,288.00
					2,865,559.00
7	**Intersection of Reserve Street and Ocean Parade**				
	As per existing				
					0.00

8	**Reserve Street**				
	As per existing				
					0.00
9	**Tabilban Street between Reserve Street and Pindari Avenue**				
	Removal of concrete footpath - narrow section	m2	84.00	69.83	5,866.00
	New Footpath - 2.5m wide shared path	m2	350.00	298.16	104,356.00
	Traffic controllers	day	9.00	1,230.00	11,070.00
					121,292.00
10	**Intersection of Tabilban Street / Pindari Avenue and Djerral Avenue**				
Option 1	**Minor intersection reconfiguration to improve active transport access and improve safety.**				
	Removal or demolition of concrete kerb	m	73.00	75.82	5,535.00
	Kerb buildouts	m	84.00	250.30	21,025.00
	Topsoil and turf buildouts	m2	179.00	128.99	23,089.00
	Footpath	m2	22.00	398.20	8,760.00
	Concrete kerb crossings, [Type TGSI]	each	1.00	4,127.00	4,127.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	6,053.00	6,053.00
	Linemarking	item	1.00	1,347.00	1,347.00
	Traffic controllers	day	4.00	2,473.00	9,892.00
					79,828.00
11	**Intersection of Tabilban Street and Parnoo Avenue**				
	This has been assumed to be the intersection with Tawarri Crescent				
	Removal or demolition of concrete kerb	m	23.00	103.40	2,378.00
	Kerb buildouts	m	25.00	254.43	6,361.00
	Topsoil and turf buildouts	m2	41.00	219.78	9,011.00
	Removal of concrete footpath	m2	40.00	88.20	3,528.00
	Footpath	m2	45.00	352.73	15,873.00
	Concrete kerb crossings, [Type TGSI]	each	1.00	4,128.00	4,128.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	6,053.00	6,053.00
	Linemarking	item	1.00	1,347.00	1,347.00
	Traffic controllers	day	3.00	2,511.00	7,533.00
					56,212.00
12	**Intersection of Tabilban Street and Ikkina Road**				
	Minor intersection reconfiguration to improve active transport access and improve safety.				
	Removal or demolition of concrete kerb	m	15.00	158.50	2,378.00
	Kerb buildouts	m	22.00	259.90	5,718.00
	Topsoil and turf buildouts	m2	34.00	251.83	8,562.00
	New Islands	m2	108.00	669.80	72,338.00
	Linemarking	item	1.00	1,732.00	1,732.00
	Sign R1-2A	no	1.00	501.00	501.00
	Sign R2-3LA	no	4.00	485.00	1,940.00
	Sign D4-1-2B	no	1.00	528.00	528.00
	Traffic controllers	day	7.00	2,423.40	16,964.00
					110,661.00
13	**Full length of through route**				
	Sign R1-1B	no	3.00	897.00	2,691.00
					2,691.00
	Total for Project				**6,664,892.00**

Item #	Description	Unit	Quantity	Unit Rate	Amount
1	**Intersection of West Burleigh Road and Tabilban Street**				
	Extended median with cut throughs				
	Traffic island	m2	25.00	1,164.15	29,104.00
	Concrete kerb crossings, [Type TGSI]	each	3.00	4,353.00	13,059.00
	Median nose and extension	m2	19.00	1,579.90	30,018.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	7,229.00	7,229.00
	Linemarking	item	1.00	1,426.00	1,426.00
	Traffic controllers	day	7.00	3,742.10	26,195.00
					107,031.00
2	**Tabilban Street between West-Burleigh Road and Wairoo Street**				
	As per existing				
					0.00
3	**Intersection of Tabilban Street and Wairoo Street**				
	Removal of concrete footpath	m2	38.00	108.65	4,129.00
	Removal of existing island	m2	5.00	432.40	2,162.00
	Removal of kerb crossing	each	2.00	955.00	1,910.00
	Footpath	m2	48.00	408.62	19,614.00
	Concrete kerb crossings, [Type TGSI]	each	2.00	4,299.00	8,598.00
	Kerb Build outs and nose				
	Removal or demolition of concrete kerb	m	15.00	189.30	2,840.00
	Median nose and buildouts	m2	17.00	1,919.10	32,625.00
	Mountable Island	m2	28.00	802.72	22,476.00
	Linemarking	item	1.00	11,640.00	11,640.00
	Sign R1-3B	no	3.00	650.00	1,950.00
	Sign R2-3LA	no	2.00	579.00	1,158.00
	Sign D4-1-2B	no	1.00	631.00	631.00
	Topsoil and turf	m2	40.00	142.94	5,718.00
	Traffic controllers	day	8.00	1,476.40	11,811.00
					127,262.00
4	**Intersection of Tabilban Street and Koel Street**				
	Blister kerb	m2	13.00	2,047.60	26,619.00
	Linemarking	item	1.00	2,110.00	2,110.00
	Sign D4-1-2B	no	2.00	631.00	1,262.00
	Sign G9-40-1A	no	2.00	645.00	1,290.00
	Traffic controllers	day	4.00	1,545.00	6,180.00
					37,461.00
5	**Intersection of Tabilban Street and Ocean Parade**				
	Removal or demolition of concrete kerb	m	27.00	105.18	2,840.00
	Kerb build outs	m2	36.00	1,332.53	47,971.00
	Linemarking	item	1.00	2,392.00	2,392.00
	Sign D4-1-2B	no	1.00	631.00	631.00
	Sign R1-2A	no	1.00	598.00	598.00
	Sign R2-3LA	no	2.00	579.00	1,158.00
	Sign tc1790	no	1.00	10,116.00	10,116.00
	Traffic controllers	day	4.00	2,394.00	9,576.00
					75,282.00
6	**Tabilban Street Extension**				
	Not applicable				
					0.00
7	**Intersection of Reserve Street and Ocean Parade**				
	As per existing				
					0.00
8	**Reserve Street**				
	As per existing				
					0.00
9	**Tabilban Street between Reserve Street and Pindari Avenue**				
9a	**New Reserve Path Section**				
					0.00
9b	**Works between Reserve St and Pindari Ave**				
	Removal of concrete footpath - narrow section	m2	84.00	83.38	7,004.00
	New Footpath - 2.5m wide shared path	m2	350.00	356.05	124,618.00
	New Road Hump	no	1.00	11,603.00	11,603.00
	New Islands	m2	31.00	1,293.61	40,102.00
	Linemarking	item	1.00	29,689.00	29,689.00
	Sign D4-6B	no	6.00	627.10	3,763.00
	Sign R1-3B	no	1.00	650.00	650.00
	Sign R2-3LA	no	3.00	579.00	1,737.00
	Sign D4-1-2B	no	2.00	631.00	1,262.00
	Sign tc1790	no	1.00	10,117.00	10,117.00
	Sign W5-10	no	2.00	610.00	1,220.00
	Sign W8-2-20A	no	2.00	650.00	1,300.00

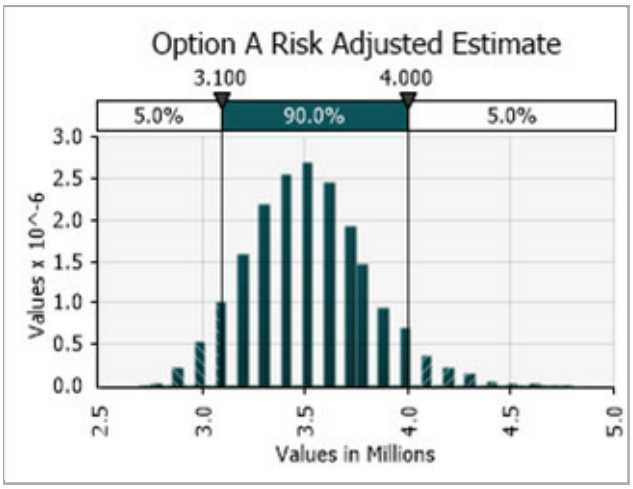
	Traffic controllers	day	14.00	1,446.90	20,257.00
					253,322.00
10	**Intersection of Tabilban Street / Pindari Avenue and Djerral Avenue**				
Option 1	**Minor intersection reconfiguration to improve active transport access and improve**				
	Removal or demolition of concrete kerb	m	73.00	90.54	6,609.00
	Kerb buildouts	m	84.00	298.89	25,107.00
	Topsoil and turf buildouts	m2	179.00	154.03	27,571.00
	Footpath	m2	22.00	475.60	10,463.00
	Concrete kerb crossings, [Type TGSI]	each	1.00	4,929.00	4,929.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	7,229.00	7,229.00
	Linemarking	item	1.00	1,608.00	1,608.00
	Traffic controllers	day	4.00	2,953.00	11,812.00
					95,328.00
11	**Intersection of Tabilban Street and Parnoo Avenue**				
	This has been assumed to be the intersection with Tawarri Crescent				
	Removal or demolition of concrete kerb	m	23.00	123.50	2,841.00
	Kerb buildouts	m	25.00	303.82	7,596.00
	Topsoil and turf buildouts	m2	41.00	262.45	10,760.00
	Removal of concrete footpath	m2	40.00	105.33	4,213.00
	Footpath	m2	45.00	421.21	18,954.00
	Concrete kerb crossings, [Type TGSI]	each	1.00	4,929.00	4,929.00
	Cut in Concrete kerb crossings, [Type TGSI]	each	1.00	7,229.00	7,229.00
	Linemarking	item	1.00	1,608.00	1,608.00
	Traffic controllers	day	3.00	2,999.00	8,997.00
					67,127.00
12	**Intersection of Tabilban Street and Ikkina Road**				
Option 1	**Minor intersection reconfiguration to improve active transport access and improve**				
					0.00
Option 2	**Provision of a roundabout**				
	Removal of existing speed hump	m2	55.00	217.31	11,952.00
	Asphalt patching where islands removed	m2	55.00	449.67	24,732.00
	New Islands	m2	30.00	1,171.36	35,141.00
	Mountable Island	m2	79.00	593.89	46,917.00
	Linemarking	item	1.00	5,732.00	5,732.00
	Sign R1-3B	no	3.00	650.00	1,950.00
	Sign R2-3LA	no	1.00	579.00	579.00
	Sign D4-1-2B	no	3.00	631.00	1,893.00
	Sign R1-1B	no	3.00	599.00	1,797.00
	Additional items to allow for pavement reinstatement to limit of works				
	Removal or demolition of concrete kerb	m	2,427.00	83.20	201,926.00
	Road excavation, all materials (PROFILER OPERATION)	m3	182.03	298.71	54,373.00
	Road excavation	m3	728.00	125.28	91,204.00
	Subbase	m3	364.00	280.71	102,178.00
	Subsoil drains, Type B	m	313.00	100.78	31,544.00
	Kerb	m	313.00	187.45	58,672.00
	Base	m3	364.00	293.11	106,692.00
	Preparation of the existing surface	m2	2,348.00	3.45	8,101.00
	Prime @ 1 l/m2	litre	2,348.00	6.43	15,098.00
	Heavy duty dense graded asphalt in surfacing course, AC [nominal size] H mix	tonne	281.76	551.43	155,371.00
	Traffic controllers	day	41.00	2,828.52	115,969.00
					1,071,821.00
13	**Full length of through route**				
	Sign R1-1B	no	3.00	1,072.00	3,216.00
	Linemarking	item	1.00	3,302.00	3,302.00
	Traffic controllers	day	1.00	1,958.00	1,958.00
					8,476.00
	Total for Project				**1,843,110.00**

APPENDIX B
RISK REPORTS

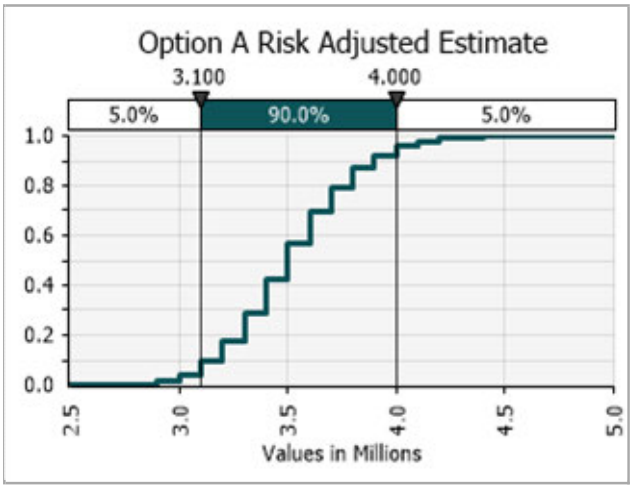


Option A Risk Estimate

Report: Compact Output Report
Performed By: Rod Cossor Consulting
Date: Wednesday, 24 August 2022



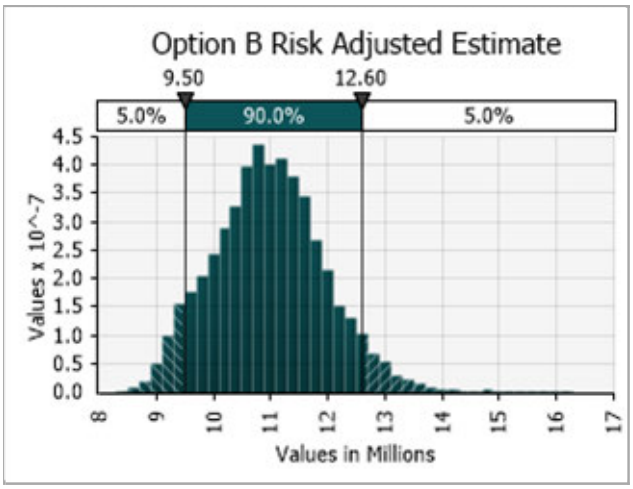
Summary Statistics	
Statistic	Value
Minimum	2,700,000.00
Maximum	4,800,000.00
Mean	3,519,790.00
Std. Deviation	290,285.69
Variance	8.427E+010
Skewness	0.3689
Kurtosis	3.1432
Median	3,500,000.00
Mode	3,500,000.00
Left X	3,100,000.00
Left P	5%
Right X	4,000,000.00
Right P	95%



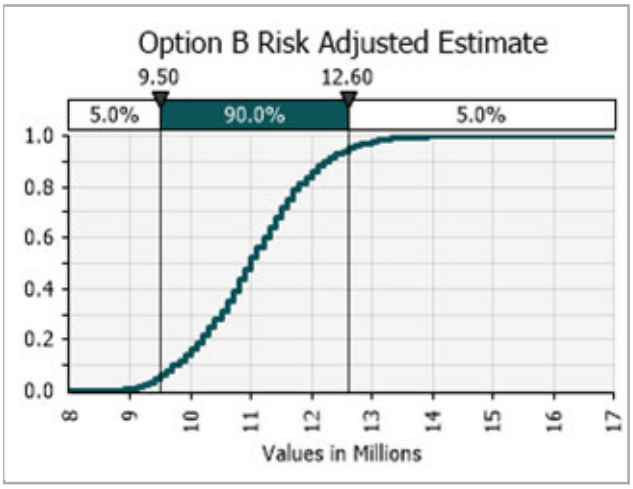
Percentiles	
Percentile	Value
1%	2,900,000.00
2.5%	3,000,000.00
5%	3,100,000.00
10%	3,200,000.00
20%	3,300,000.00
25%	3,300,000.00
50%	3,500,000.00
75%	3,700,000.00
80%	3,800,000.00
90%	3,900,000.00
95%	4,000,000.00
97.5%	4,100,000.00
99%	4,300,000.00

Option B Risk Adjusted Estimate

Report: Compact Output Report
Performed By: Rod Cossor Consulting
Date: Friday, 19 August 2022



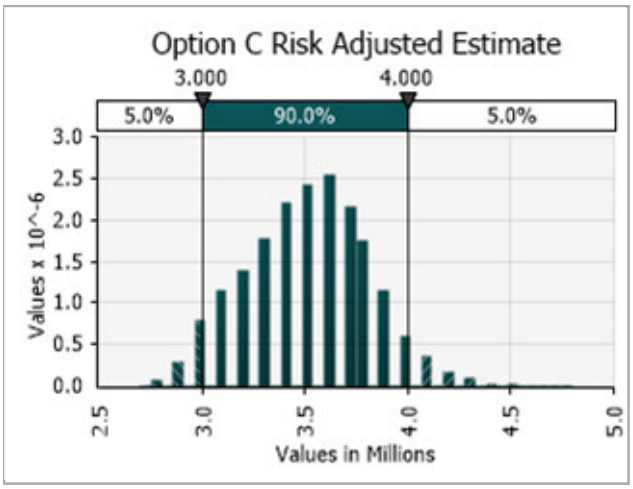
Summary Statistics	
Statistic	Value
Minimum	8,300,000.00
Maximum	16,300,000.00
Mean	11,020,740.00
Std. Deviation	962,266.31
Variance	9.260E+011
Skewness	0.2846
Kurtosis	3.2394
Median	11,000,000.00
Mode	10,800,000.00
Left X	9,500,000.00
Left P	5%
Right X	12,600,000.00
Right P	95%



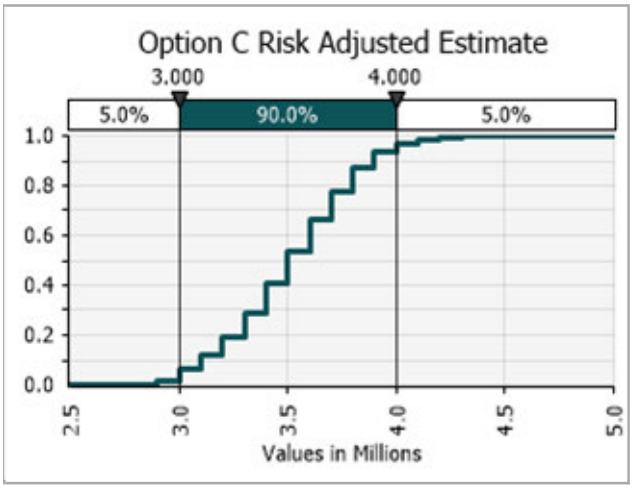
Percentiles	
Percentile	Value
1%	9,100,000.00
2.5%	9,300,000.00
5%	9,500,000.00
10%	9,700,000.00
20%	10,200,000.00
25%	10,400,000.00
50%	11,000,000.00
75%	11,600,000.00
80%	11,800,000.00
90%	12,300,000.00
95%	12,600,000.00
97.5%	13,000,000.00
99%	13,400,000.00

Option C Risk Adjusted Estimate

Report: Compact Output Report
Performed By: Rod Cossor Consulting
Date: Thursday, 25 August 2022

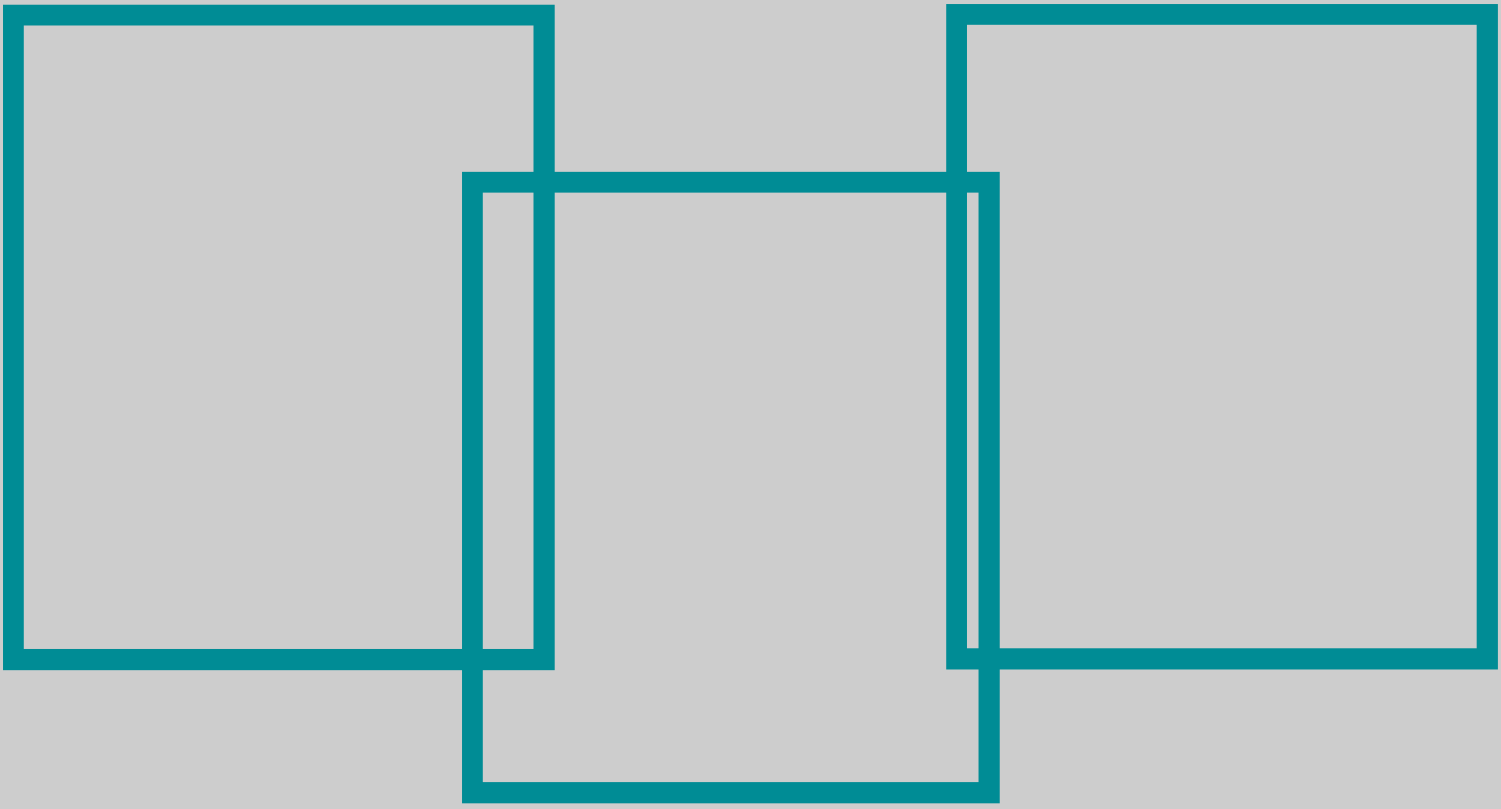


Summary Statistics	
Statistic	Value
Minimum	2,700,000.00
Maximum	4,800,000.00
Mean	3,519,190.00
Std. Deviation	296,832.54
Variance	8.811E+010
Skewness	0.0977
Kurtosis	2.8053
Median	3,500,000.00
Mode	3,600,000.00
Left X	3,000,000.00
Left P	5%
Right X	4,000,000.00
Right P	95%



Percentiles	
Percentile	Value
1%	2,900,000.00
2.5%	3,000,000.00
5%	3,000,000.00
10%	3,100,000.00
20%	3,300,000.00
25%	3,300,000.00
50%	3,500,000.00
75%	3,700,000.00
80%	3,800,000.00
90%	3,900,000.00
95%	4,000,000.00
97.5%	4,100,000.00
99%	4,200,000.00

APPENDIX C
PEER REVIEW REPORT



Peer Review Report

PROJECT TITLE	**Capital Cost Estimate Report For Koala Park Concept Study**
PROJECT REFERENCE/S	N/A
CLIENT NAME	City Of Gold Coast

ITEM	DESCRIPTION	YES	NO	N/A	COMMENTS
1	**ESTIMATE**				
1.1	What is the class of estimate, is it appropriate for the detail and does it conform with the Cost Estimation guideline requirements?	☒	☐	☐	
1.2	Has the Expert file been checked against the provided BoQ (Description / Quantities)?	☒	☐	☐	
1.3	Have subcontract prices been benchmarked and deemed acceptable?	☒	☐	☐	
1.4	Have material transport / haulage distances been considered?	☐	☐	☒	
1.5	Have productivities used in the estimate been checked?	☒	☐	☐	
1.6	Have the direct cost estimates been reviewed and closed out?	☒	☐	☐	
2	**INDIRECT COSTS**				
2.1	What margin and overhead has been included, does it reflect market forces?	☒	☐	☐	18% and 19 – 32%
2.2	Is the project management team allocated sufficient for the project?	☒	☐	☐	
2.3	Have adequate insurances been included?	☒	☐	☐	
2.4	Are the project site offices appropriate for the project?	☒	☐	☐	
3	**RISK REVIEW**				
3.1	How complex is the project and has this been factored into the estimate?	☒	☐	☐	Medium Complexity. Civil works. Adequately covered.
3.2	Have any influential materials that may negatively affect the project been identified?	☒	☐	☐	Yes, Current Asphalt rates included
3.3	What is the predicted weather for the construction period and is there adequate inclement weather allowance?	☒	☐	☐	2 Weeks
3.4	What are the anticipated ground conditions and how will this affect productivity?	☒	☐	☐	Rock at highest elevation. Rock allowance included.
3.5	Are fire ants, acid sulphate soil, contaminated soil present on site?	☐	☐	☒	Unknown
3.6	Are there sufficient environmental controls included?	☒	☐	☐	
3.7	Are there site access issues?	☒	☐	☐	Traffic controls covered.
3.8	PUP conflicts / relocations?	☐	☒	☐	
3.9	Is the risk allocation adequate?	☒	☐	☐	
3.10	Any other risks that have influenced the estimate?	☐	☐	☒	
4	**RESOURCING AND PLANT**				
4.1	Any perceived issues acquiring labour and resources?	☐	☒	☐	

VERSION	APPROVED BY	REVIEWER/S	LAST REVIEWED
1	Principal Civil Estimator	Senior Project Engineer/Estimator	January 2022

4.2	What labour and resource rates are being used?	☒	☐	☐	Current market rates
4.3	Have all labour and resource rates being used?	☒	☐	☐	Current market rates
4.4	Have all labour and resource rates been confirmed for the project?	☒	☐	☐	Current market rates
4.5	is FIFO / DIDO required?	☐	☐	☒	
4.6	Accommodation location / type / rate?	☐	☐	☒	
4.7	Roster (Days per week / Hrs per day)?	☒	☐	☐	Standard 5 day weeks
4.8	Has LAFA been allocated?	☐	☐	☒	
5	**CONSTRUCTABILITY AND PROGRAM**				
5.1	Has a site visit been undertaken to understand site constraints?	☒	☐	☐	
5.2	Has a construction methodology been developed and reviewed by an RPEQ?	☐	☒	☐	
5.3	Has staging diagrams being developed?	☐	☒	☐	
5.4	Has a program been developed that reflects the construction methodology and staging diagrams?	☐	☒	☐	
6	**ASSUMPTIONS AND CLARIFICATIONS**				
6.1	Have all the conditions and exclusions applicable to the estimate been identified and included?	☒	☐	☐	
7	**PROCUREMENT**				
7.1	Have subcontractor quotes been obtained for influential materials and specialist works?	☐	☒	☐	
7.2	Does the quoted maintenance period conform with contract documents?	☐	☐	☒	
8	**DELIVERABLES**				
8.1	Have all RFI's been satisfactorily resolved with the Client?	☒	☐	☐	
8.2	Is a program required, has it been checked against the estimate?	☐	☒	☐	
8.3	Does the cashflow reflect the program?	☐	☐	☒	
8.4	Have the correct escalation figures been used?	☐	☐	☒	
8.5	Has a Monte Carlo simulation been produced?	☒	☐	☐	
9	**PRINCIPAL COSTS**				
9.1	Have principals' costs been provided?	☐	☒	☐	
9.2	If benchmarked ranges used, have all stages been incorporated?	☒	☐	☐	
9.3	Have all principal supplied materials and obligations been included?	☐	☐	☒	
9.4	Any other principals cost?	☐	☒	☐	
10	**OTHER**				
10.1	Have quotes been received for the management of utility services?	☐	☐	☒	

PREPARED BY	[redacted] – Principal Civil Estimator	**DATE**	11/08/2022
REVIEWED BY	[redacted] – Senior Project Engineer/Estimator	**DATE**	11/08/2022

ROD COSSOR CONSULTING PTY LTD

ABN 81 681 746 571

rcossorconsult@optusnet.com
M 0400 022 695 **F** 07 3200 3831

126 Waterford-Tamborine Road
Waterford, Queensland 4133