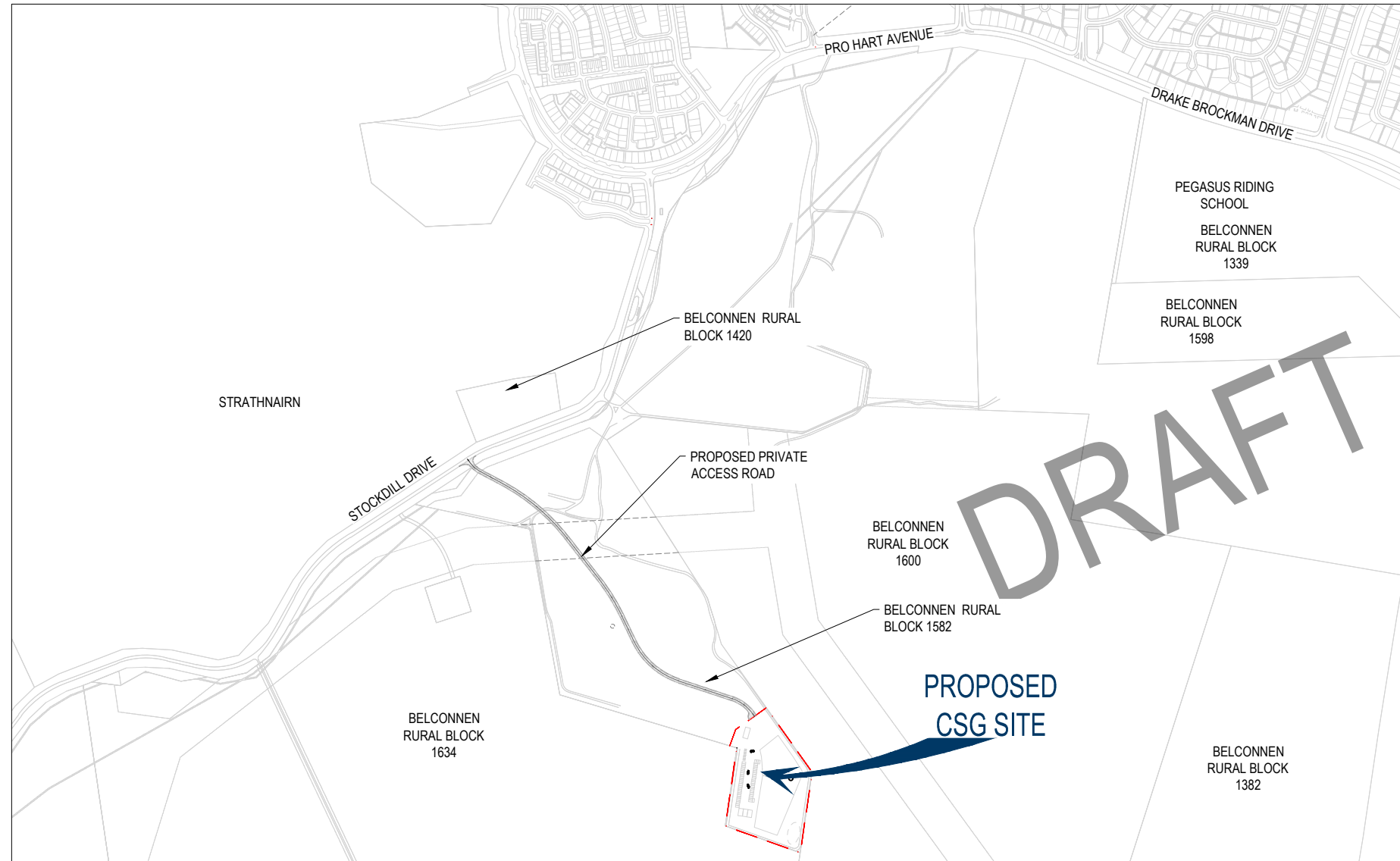


CANBERRA SAND AND GRAVEL–TRAFFIC IMPACT ASSESSMENT

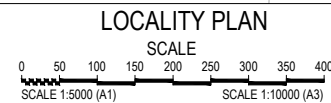
Appendix A CSG Drawing Set

CANBERRA SAND AND GRAVEL BLOCK 1582 BELCONNEN DEVELOPMENT APPLICATION

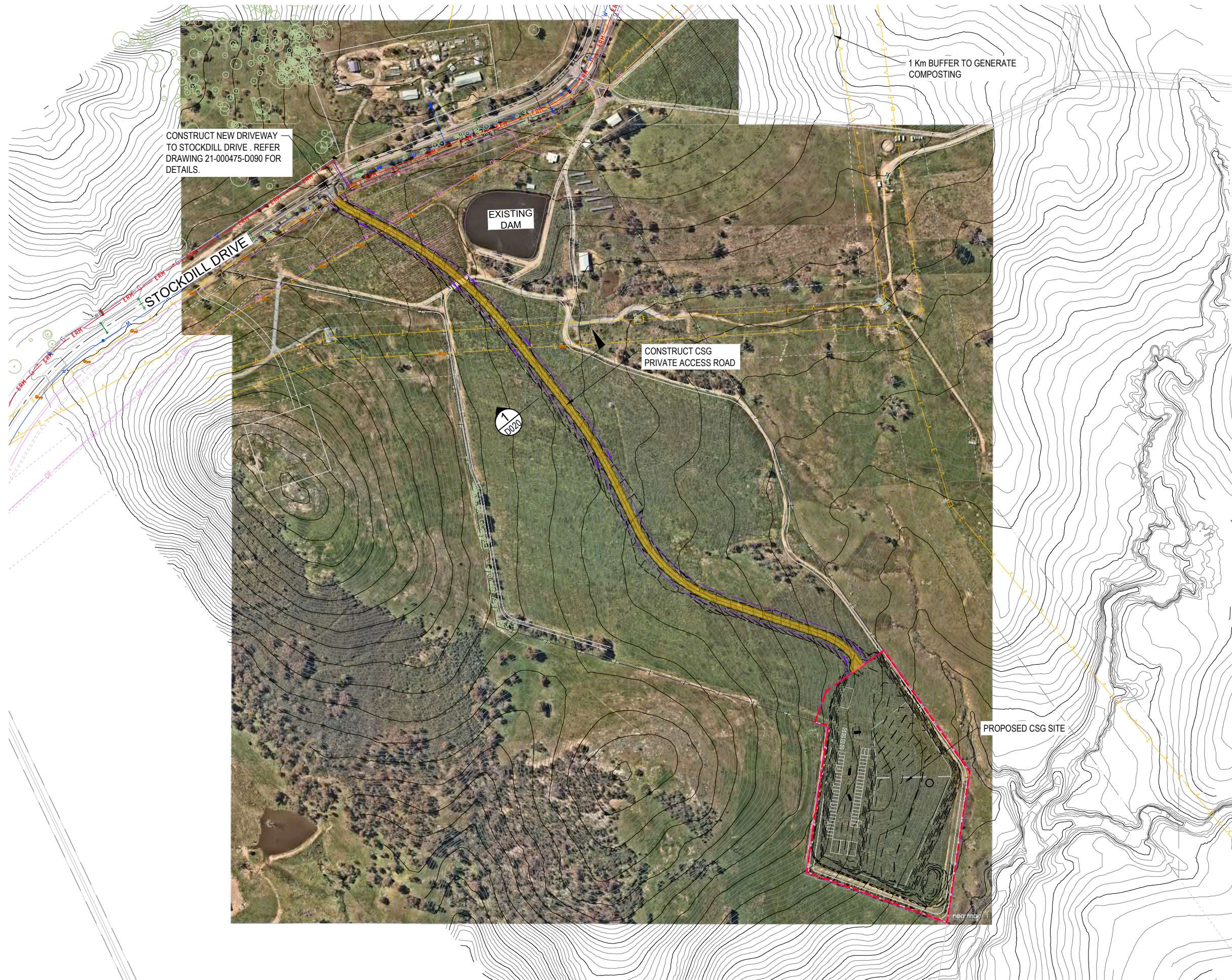


DRAWING SCHEDULE		
Sheet Number	Sheet Description	Sheet No Of No
D000	COVER SHEET	.
D002	GENERAL NOTES	.
D005	GENERAL ARRANGEMENT	.
D010	DETAIL PLAN	SHEET 1 OF 3
D011	DETAIL PLAN	SHEET 2 OF 3
D012	DETAIL PLAN	SHEET 3 OF 3
D020	TYPICAL CROSS SECTIONS	.
D030	CROSS SECTIONS - ROAD 01	SHEET 1 OF 6
D031	CROSS SECTIONS - ROAD 01	SHEET 2 OF 6
D032	CROSS SECTIONS - ROAD 01	SHEET 3 OF 6
D033	CROSS SECTIONS - ROAD 01	SHEET 4 OF 6
D034	CROSS SECTIONS - ROAD 01	SHEET 5 OF 6
D035	CROSS SECTIONS - ROAD 01	SHEET 6 OF 6
D050	LONGITUDINAL SECTION	SHEET 1 OF 3
D051	LONGITUDINAL SECTION	SHEET 2 OF 3
D052	LONGITUDINAL SECTION	SHEET 3 OF 3
D060	STORMWATER AND WSUD MASTER PLAN	.
D090	DETAIL PLAN ACCESS ROAD	SHEET 1 OF 2
D091	SIGHT DISTANCE PLAN	.
D095	VEHICLE TURNING PLAN	SHEET 1 OF 2
D096	VEHICLE TURNING PLAN	SHEET 2 OF 2
D100	CONCEPT SEDIMENT AND EROSION CONTROL PLAN	.
D120	GRADING PLAN	SHEET 1 OF 5
D121	CSG SITE GRADING PLAN	SHEET 2 OF 5
D122	CSG SITE GRADING PLAN	SHEET 3 OF 5
D123	CSG SITE GRADING SECTION	SHEET 4 OF 5
D124	CSG SITE GRADING SECTION	SHEET 5 OF 5
D127	WASTE MANAGEMENT PLAN	.

APRIL 2022



CANBERRA SAND AND GRAVEL, BLOCK
1582 BELCONNEN



CONSTRUCT NEW DRIVEWAY TO STOCKDILL DRIVE . REFER DRAWING 21-000475-D090 FOR DETAILS.

EXISTING DAM

1 Km BUFFER TO GENERATE COMPOSTING

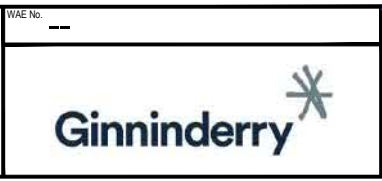
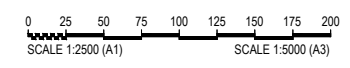
CONSTRUCT CSG PRIVATE ACCESS ROAD

D020

PROPOSED CSG SITE

Plot Date: 7-Apr-22, 9:57 AM File: H:\21\21-000475\6_Model\Civil\3D\21-000475-D005.dwg User:Byju Mathew

FIRST ISSUE	DESIGN	DRAWN	CHECK	APPROVED	DATE	AMENDMENT DETAILS
DRAFT						

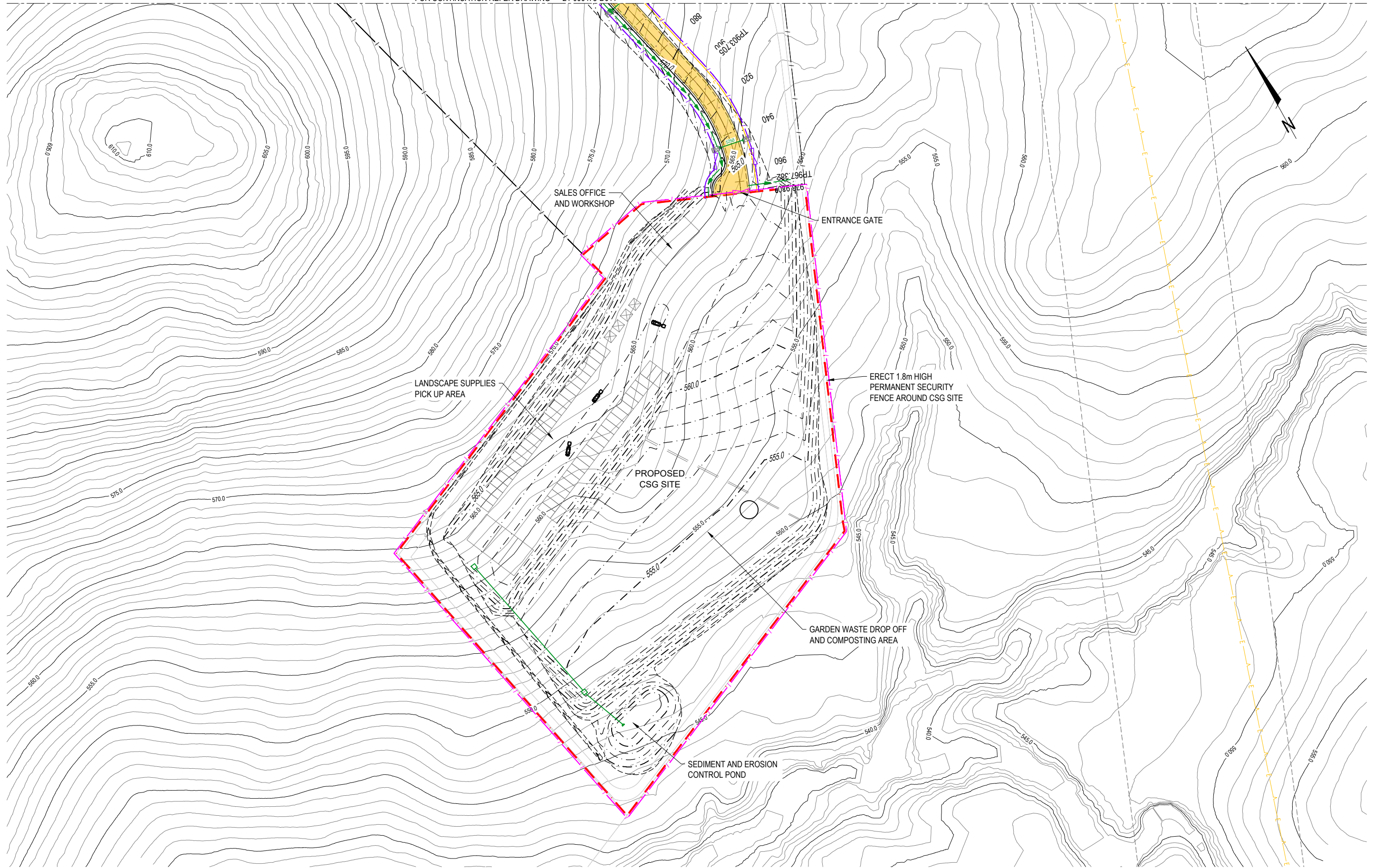


CANBERRA SAND AND GRAVEL, BLOCK 1582 BELCONNEN

DISCLAIMER
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY, DO NOT SCALE.

SITE PLAN

21-000475 D005 ---

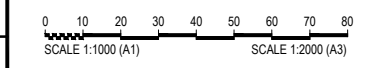


Plot Date: 7-Apr-22, 9:57 AM File: H:\21-000475-000475-D010.dwg User:Byju Mathew

FIRST ISSUE	DESIGN	DRAWN	CHECK	APPROVED	DATE

AMENDMENT DETAILS

DRAFT



WAE No: ---

calibre
calbregroup.com

CANBERRA SAND AND GRAVEL, BLOCK 1582 BELCONNEN

DISCLAIMER
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY, DO NOT SCALE.

DETAIL PLAN
SHEET 3 OF 3
21-000475 D012 ---

CANBERRA SAND AND GRAVEL-TRAFFIC IMPACT ASSESSMENT

Appendix B SIDRA Analysis

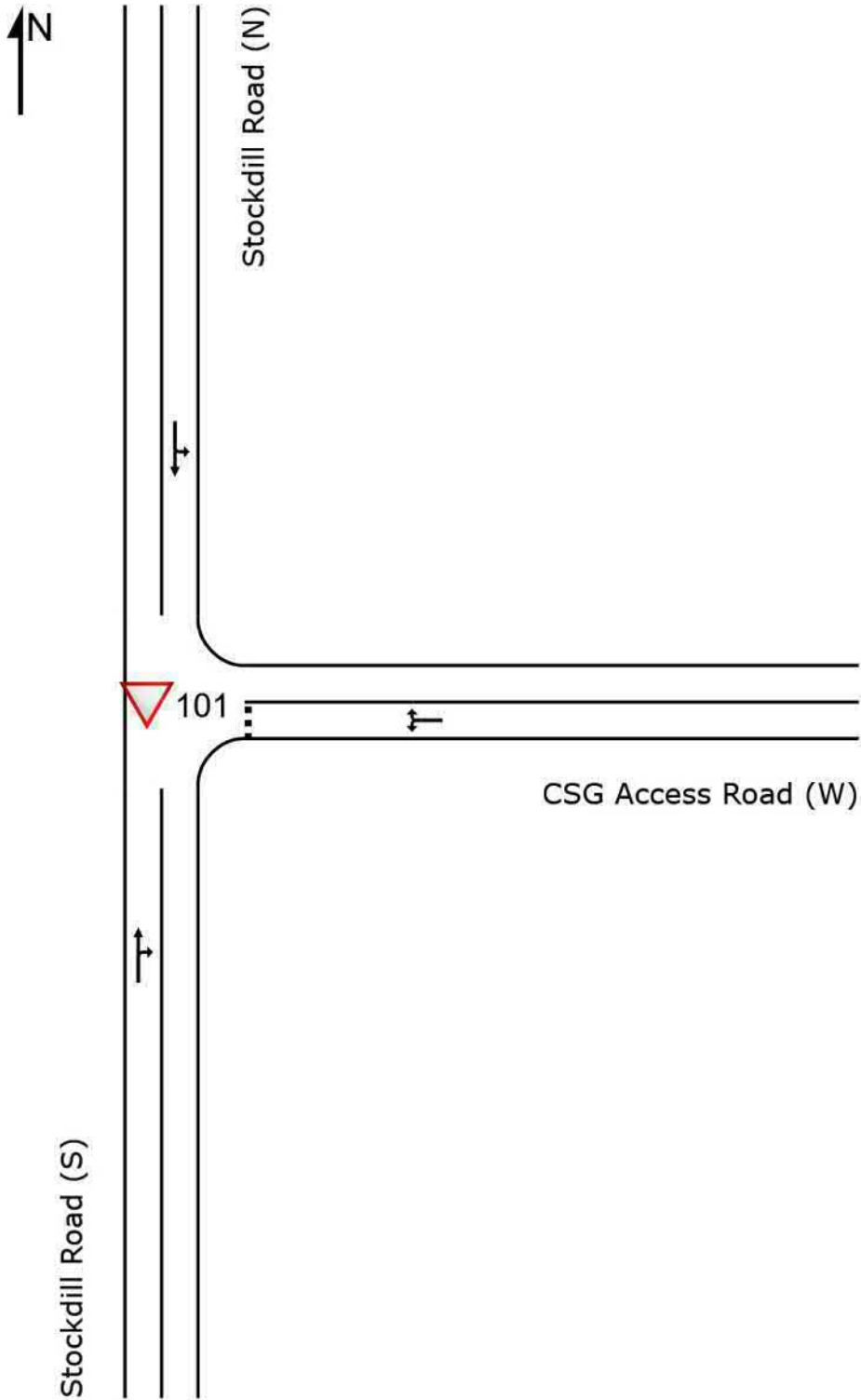
RIVERVIEW PROJECTS

Site: 101 [Base Interim AM CSG Site Access Road (Site Folder: Base Stockdill/Prohart 2031)]

CSG Access Road
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	39	5.0	41	5.0	0.025	0.0	LOS A	0.0	0.2	0.03	0.07	0.03	59.3
3	R2	5	5.0	5	5.0	0.025	5.6	LOS A	0.0	0.2	0.03	0.07	0.03	56.8
Approach		44	5.0	46	5.0	0.025	0.7	NA	0.0	0.2	0.03	0.07	0.03	59.0
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.008	5.7	LOS A	0.0	0.2	0.12	0.55	0.12	53.1
6	R2	5	5.0	5	5.0	0.008	5.8	LOS A	0.0	0.2	0.12	0.55	0.12	52.5
Approach		10	5.0	11	5.0	0.008	5.8	LOS A	0.0	0.2	0.12	0.55	0.12	52.8
North: Stockdill Road (N)														
7	L2	5	5.0	5	5.0	0.025	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	57.5
8	T1	39	5.0	41	5.0	0.025	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	59.4
Approach		44	5.0	46	5.0	0.025	0.6	NA	0.0	0.0	0.00	0.07	0.00	59.2
All Vehicles		98	5.0	103	5.0	0.025	1.2	NA	0.0	0.2	0.03	0.12	0.03	58.4

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %]						[Veh	Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	%	%		
South: Stockdill Road (S)													
Lane 1	46	5.0	1853	0.025	100	0.7	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	46	5.0		0.025		0.7	NA	0.0	0.2				
East: CSG Access Road (W)													
Lane 1	11	5.0	1324	0.008	100	5.8	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	11	5.0		0.008		5.8	LOS A	0.0	0.2				
North: Stockdill Road (N)													
Lane 1	46	5.0	1877	0.025	100	0.6	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	46	5.0		0.025		0.6	NA	0.0	0.0				
Intersection	103	5.0		0.025		1.2	NA	0.0	0.2				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

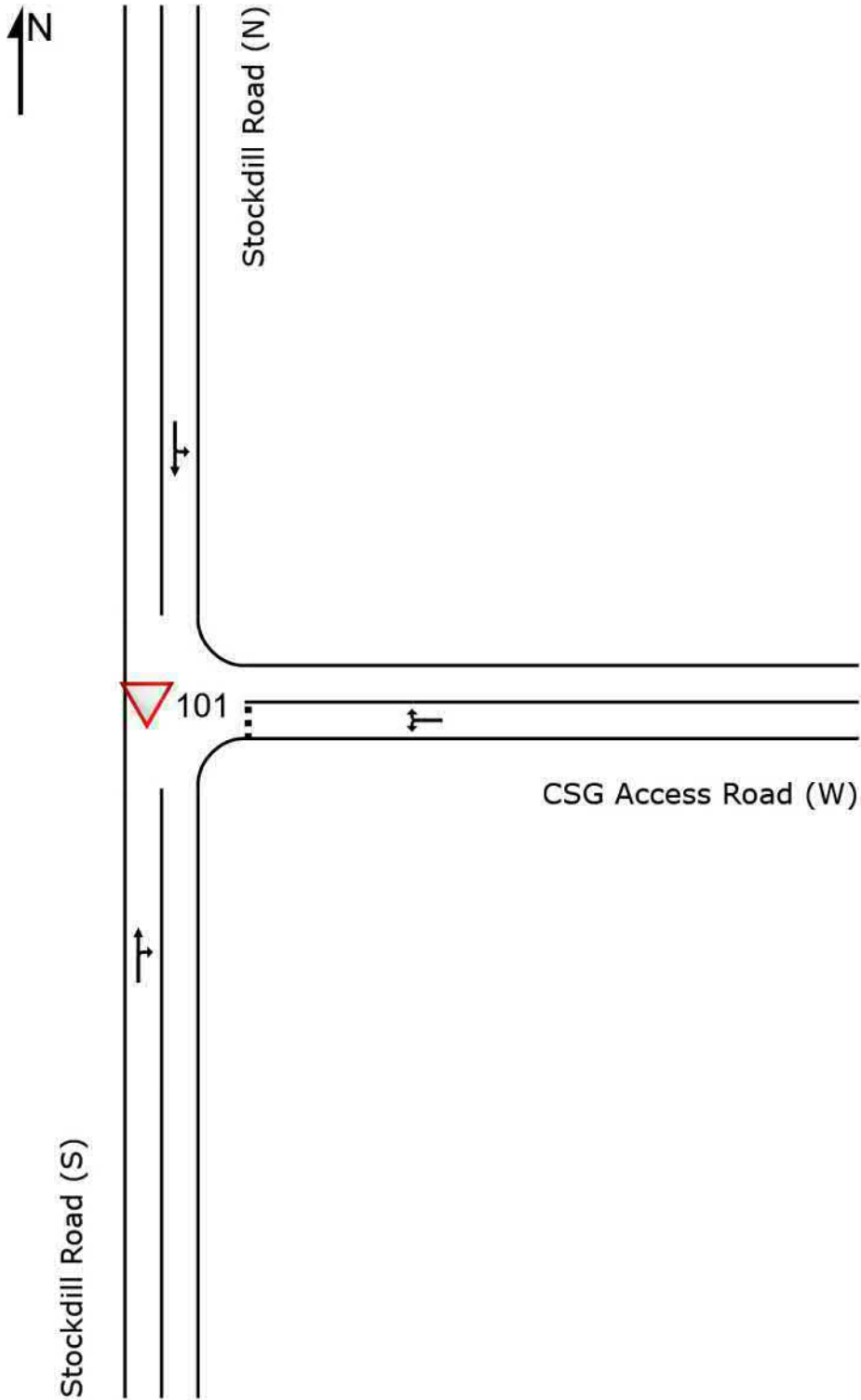
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▽ Site: 101 [Base Interim PM CSG Site Access Road (Site Folder: Base Stockdill/Prohart 2031)]

CSG Access Road
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	10	5.0	11	5.0	0.009	0.1	LOS A	0.0	0.2	0.09	0.19	0.09	57.9
3	R2	5	5.0	5	5.0	0.009	5.6	LOS A	0.0	0.2	0.09	0.19	0.09	55.6
Approach		15	5.0	16	5.0	0.009	1.9	NA	0.0	0.2	0.09	0.19	0.09	57.1
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.008	5.7	LOS A	0.0	0.2	0.12	0.55	0.12	53.1
6	R2	5	5.0	5	5.0	0.008	5.7	LOS A	0.0	0.2	0.12	0.55	0.12	52.6
Approach		10	5.0	11	5.0	0.008	5.7	LOS A	0.0	0.2	0.12	0.55	0.12	52.8
North: Stockdill Road (N)														
7	L2	5	5.0	5	5.0	0.025	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	57.5
8	T1	39	5.0	41	5.0	0.025	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	59.4
Approach		44	5.0	46	5.0	0.025	0.6	NA	0.0	0.0	0.00	0.07	0.00	59.2
All Vehicles		69	5.0	73	5.0	0.025	1.7	NA	0.0	0.2	0.04	0.17	0.04	57.7

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %]						[Veh	Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	%	%		
South: Stockdill Road (S)													
Lane 1	16	5.0	1795	0.009	100	1.9	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	16	5.0		0.009		1.9	NA	0.0	0.2				
East: CSG Access Road (W)													
Lane 1	11	5.0	1344	0.008	100	5.7	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	11	5.0		0.008		5.7	LOS A	0.0	0.2				
North: Stockdill Road (N)													
Lane 1	46	5.0	1877	0.025	100	0.6	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	46	5.0		0.025		0.6	NA	0.0	0.0				
Intersection	73	5.0		0.025		1.7	NA	0.0	0.2				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

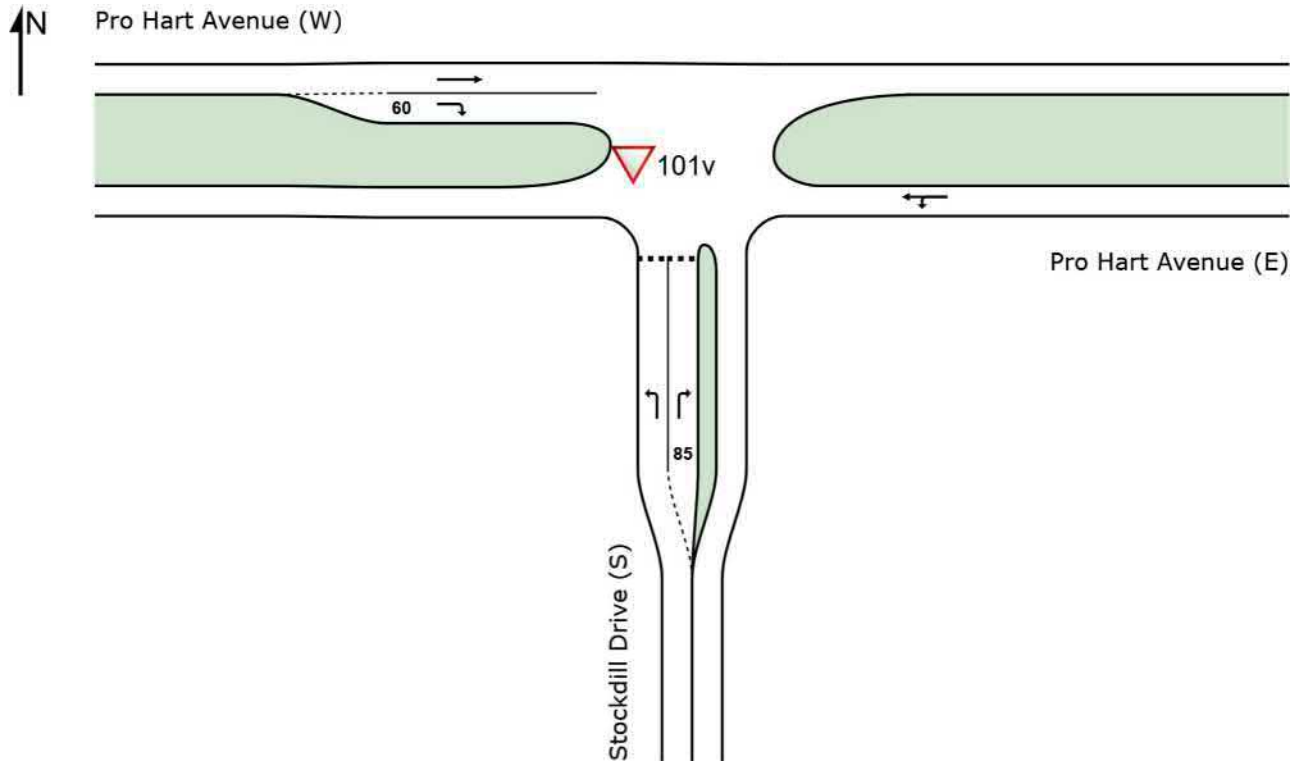
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▽ Site: 101v [Base Interim AM Pro Hart Avenue / Stockdill Drive (Site Folder: Base Stockdill/ Prohart 2031)]

Pro Hart Avenue / Stockdill Drive Intesection
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	4	5.0	4	5.0	0.003	6.1	LOS A	0.0	0.1	0.25	0.53	0.25	50.0
3	R2	35	5.0	37	5.0	0.158	20.6	LOS B	0.5	3.8	0.83	0.93	0.83	38.9
Approach		39	5.0	41	5.0	0.158	19.1	LOS B	0.5	3.8	0.77	0.89	0.77	39.8
East: Pro Hart Avenue (E)														
4	L2	9	5.0	9	5.0	0.091	5.6	LOS A	0.0	0.0	0.00	0.03	0.00	57.0
5	T1	154	5.0	162	5.0	0.091	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	59.3
Approach		163	5.0	172	5.0	0.091	0.3	NA	0.0	0.0	0.00	0.03	0.00	59.1
West: Pro Hart Avenue (W)														
11	T1	799	5.0	841	5.0	0.445	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	1	5.0	1	5.0	0.001	6.1	LOS A	0.0	0.0	0.28	0.51	0.28	50.1
Approach		800	5.0	842	5.0	0.445	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.6
All Vehicles		1002	5.0	1055	5.0	0.445	0.9	NA	0.5	3.8	0.03	0.04	0.03	57.8

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h	HV %						[Veh	Dist] m				
South: Stockdill Drive (S)													
Lane 1	4	5.0	1379	0.003	100	6.1	LOS A	0.0	0.1	Full	500	0.0	0.0
Lane 2	37	5.0	233	0.158	100	20.6	LOS B	0.5	3.8	Short	85	0.0	NA
Approach	41	5.0		0.158		19.1	LOS B	0.5	3.8				
East: Pro Hart Avenue (E)													
Lane 1	172	5.0	1883	0.091	100	0.3	LOS A	0.0	0.0	Full	215	0.0	0.0
Approach	172	5.0		0.091		0.3	NA	0.0	0.0				
West: Pro Hart Avenue (W)													
Lane 1	841	5.0	1889	0.445	100	0.1	LOS A	0.0	0.0	Full	230	0.0	0.0
Lane 2	1	5.0	1496	0.001	100	6.1	LOS A	0.0	0.0	Short	60	0.0	NA
Approach	842	5.0		0.445		0.1	NA	0.0	0.0				
Intersection	1055	5.0		0.445		0.9	NA	0.5	3.8				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

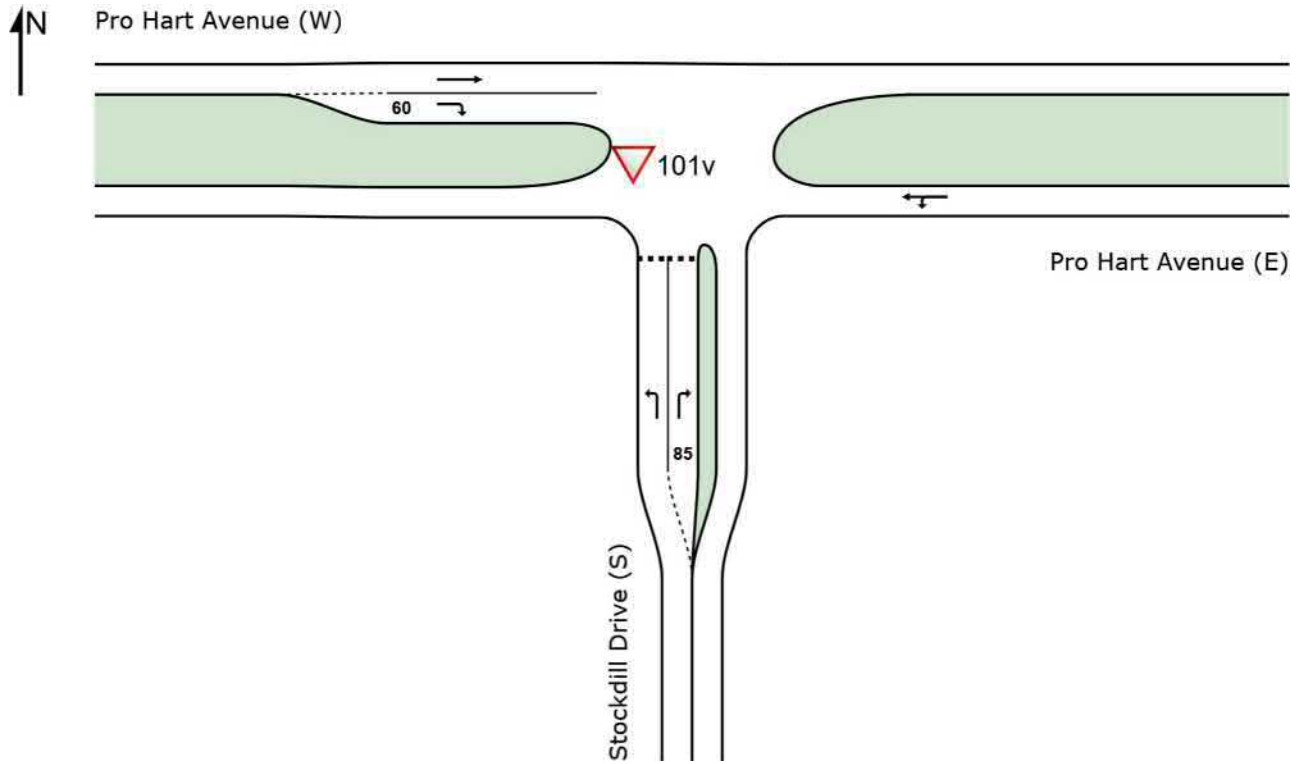
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▽ Site: 101v [Base Interim PM Pro Hart Avenue / Stockdill Drive (Site Folder: Base Stockdill/ Prohart 2031)]

Pro Hart Avenue / Stockdill Drive Intesection
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	5	5.0	5	5.0	0.010	10.6	LOS A	0.0	0.2	0.66	0.75	0.66	46.5
3	R2	9	5.0	9	5.0	0.042	20.4	LOS B	0.1	1.0	0.82	0.93	0.82	39.0
Approach		14	5.0	15	5.0	0.042	16.9	LOS B	0.1	1.0	0.76	0.86	0.76	41.5
East: Pro Hart Avenue (E)														
4	L2	35	5.0	37	5.0	0.466	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	56.8
5	T1	799	5.0	841	5.0	0.466	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.1
Approach		834	5.0	878	5.0	0.466	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.0
West: Pro Hart Avenue (W)														
11	T1	154	5.0	162	5.0	0.086	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	5	5.0	5	5.0	0.010	11.1	LOS A	0.0	0.3	0.69	0.75	0.69	46.2
Approach		159	5.0	167	5.0	0.086	0.4	NA	0.0	0.3	0.02	0.02	0.02	59.1
All Vehicles		1007	5.0	1060	5.0	0.466	0.6	NA	0.1	1.0	0.01	0.04	0.01	58.5

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %]						[Veh	Dist]				
	veh/h	%	veh/h	v/c	%	sec			m		%	%	
South: Stockdill Drive (S)													
Lane 1	5	5.0	553	0.010	100	10.6	LOS A	0.0	0.2	Full	500	0.0	0.0
Lane 2	9	5.0	224	0.042	100	20.4	LOS B	0.1	1.0	Short	85	0.0	NA
Approach	15	5.0		0.042		16.9	LOS B	0.1	1.0				
East: Pro Hart Avenue (E)													
Lane 1	878	5.0	1884	0.466	100	0.3	LOS A	0.0	0.0	Full	215	0.0	0.0
Approach	878	5.0		0.466		0.3	NA	0.0	0.0				
West: Pro Hart Avenue (W)													
Lane 1	162	5.0	1889	0.086	100	0.0	LOS A	0.0	0.0	Full	230	0.0	0.0
Lane 2	5	5.0	551	0.010	100	11.1	LOS A	0.0	0.3	Short	60	0.0	NA
Approach	167	5.0		0.086		0.4	NA	0.0	0.3				
Intersection	1060	5.0		0.466		0.6	NA	0.1	1.0				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

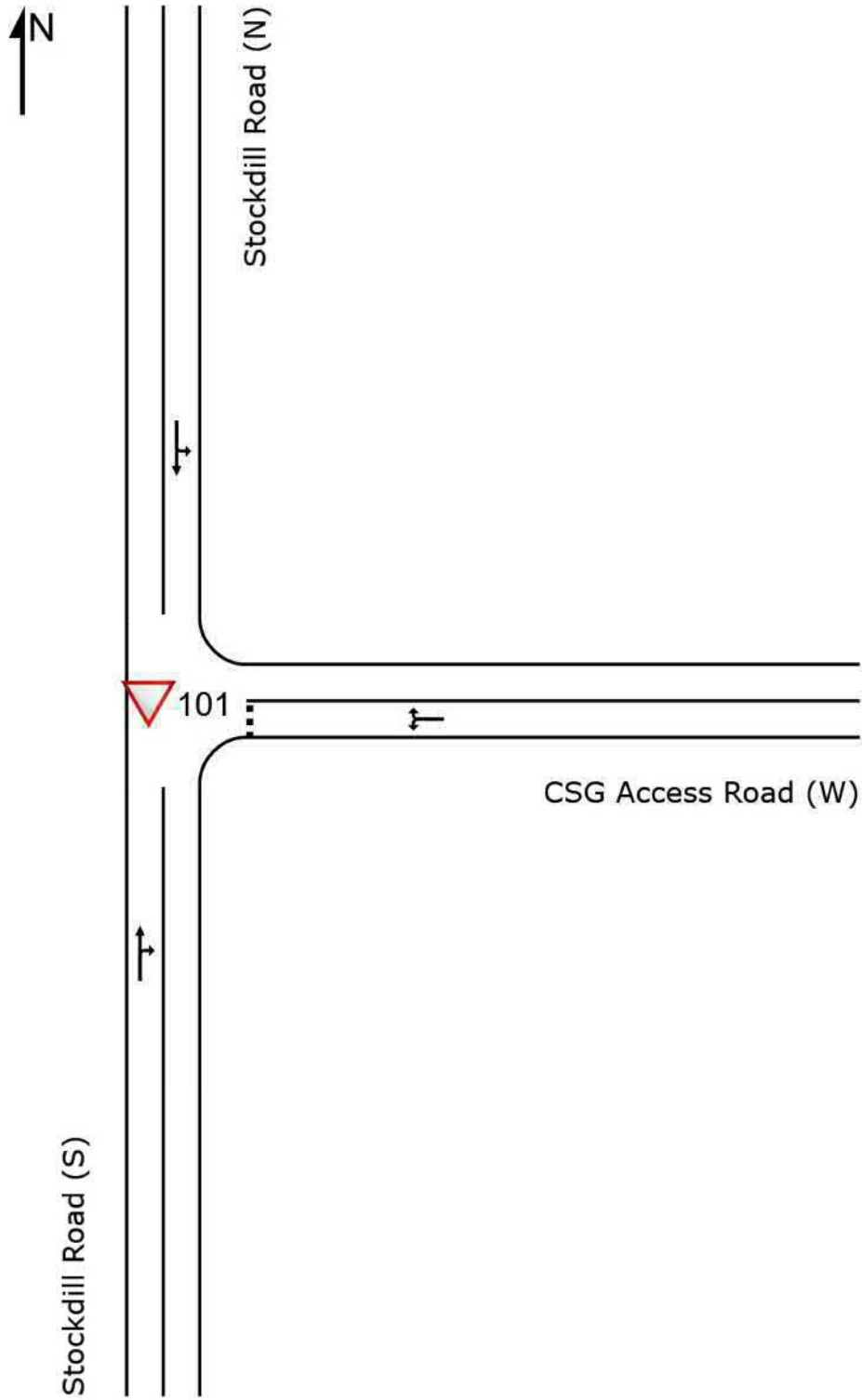
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▼ Site: 101 [CSG Calculated Interim AM CSG Site Access Road (Site Folder: CSG Stockdill/Prohart 2031)]

CSG Access Road Intersection
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	73	5.0	77	5.0	0.044	0.0	LOS A	0.0	0.3	0.04	0.04	0.04	59.5
3	R2	5	5.0	5	5.0	0.044	6.0	LOS A	0.0	0.3	0.04	0.04	0.04	57.0
Approach		78	5.0	82	5.0	0.044	0.4	NA	0.0	0.3	0.04	0.04	0.04	59.3
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.008	5.6	LOS A	0.0	0.2	0.04	0.58	0.04	53.2
6	R2	5	5.0	5	5.0	0.008	6.1	LOS A	0.0	0.2	0.04	0.58	0.04	52.7
Approach		10	5.0	11	5.0	0.008	5.9	LOS A	0.0	0.2	0.04	0.58	0.04	52.9
North: Stockdill Road (N)														
7	L2	138	5.0	145	5.0	0.087	5.6	LOS A	0.0	0.0	0.00	0.54	0.00	53.7
8	T1	10	5.0	11	5.0	0.087	0.0	LOS A	0.0	0.0	0.00	0.54	0.00	55.3
Approach		148	5.0	156	5.0	0.087	5.2	NA	0.0	0.0	0.00	0.54	0.00	53.8
All Vehicles		236	5.0	248	5.0	0.087	3.7	NA	0.0	0.3	0.02	0.38	0.02	55.4

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	%	%		
South: Stockdill Road (S)													
Lane 1	82	5.0	1854	0.044	100	0.4	LOS A	0.0	0.3	Full	500	0.0	0.0
Approach	82	5.0		0.044		0.4	NA	0.0	0.3				
East: CSG Access Road (W)													
Lane 1	11	5.0	1286	0.008	100	5.9	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	11	5.0		0.008		5.9	LOS A	0.0	0.2				
North: Stockdill Road (N)													
Lane 1	156	5.0	1799	0.087	100	5.2	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	156	5.0		0.087		5.2	NA	0.0	0.0				
Intersection	248	5.0		0.087		3.7	NA	0.0	0.3				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

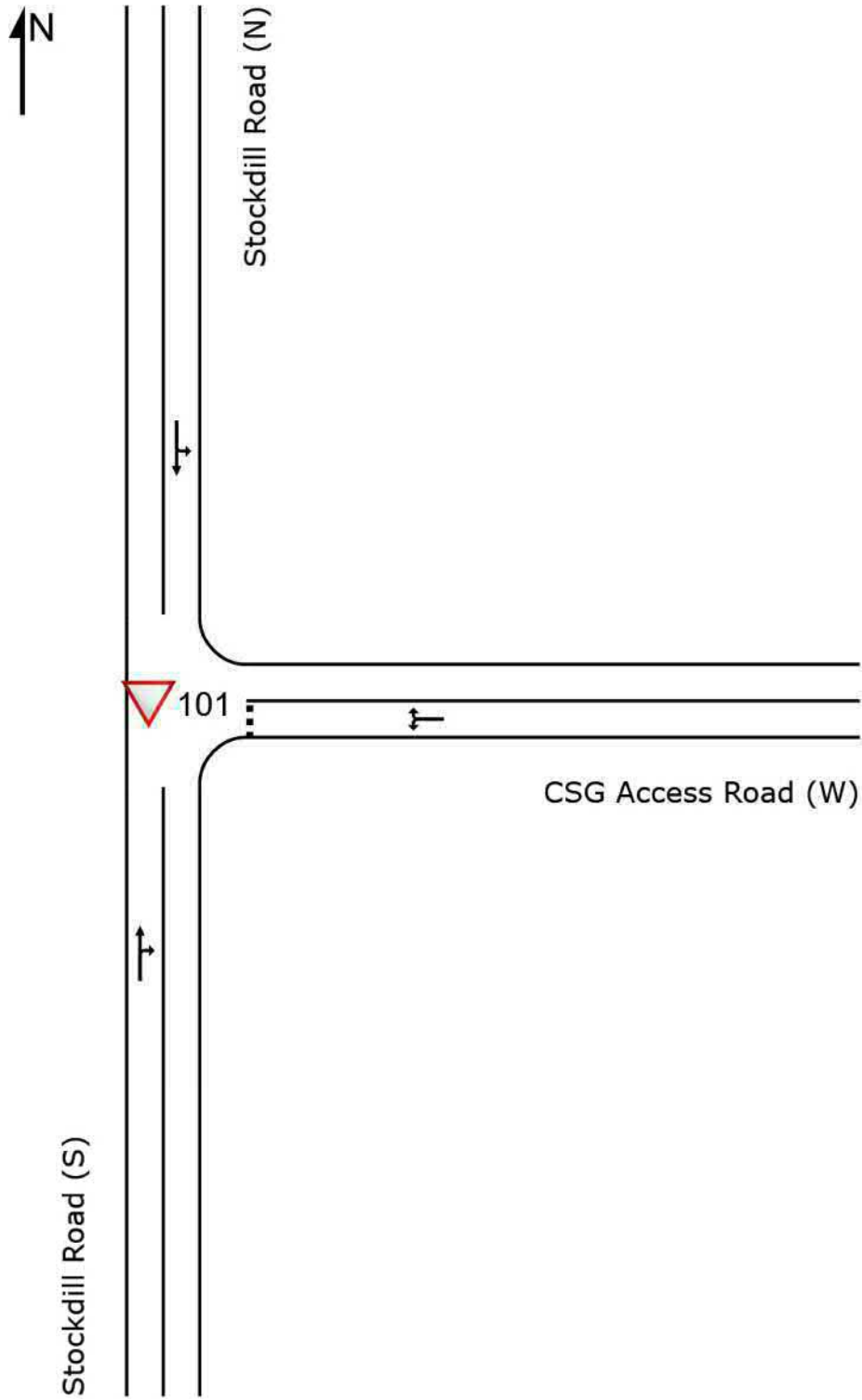
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▽ Site: 101 [CSG Calculated Interim PM CSG Site Access Road (Site Folder: CSG Stockdill/ Prohart 2031)]

CSG Access Road
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	10	5.0	11	5.0	0.009	0.1	LOS A	0.0	0.2	0.09	0.19	0.09	57.9
3	R2	5	5.0	5	5.0	0.009	5.6	LOS A	0.0	0.2	0.09	0.19	0.09	55.5
Approach		15	5.0	16	5.0	0.009	1.9	NA	0.0	0.2	0.09	0.19	0.09	57.1
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.028	5.7	LOS A	0.1	0.7	0.13	0.56	0.13	53.1
6	R2	28	5.0	29	5.0	0.028	5.7	LOS A	0.1	0.7	0.13	0.56	0.13	52.5
Approach		33	5.0	35	5.0	0.028	5.7	LOS A	0.1	0.7	0.13	0.56	0.13	52.6
North: Stockdill Road (N)														
7	L2	7	5.0	7	5.0	0.026	5.6	LOS A	0.0	0.0	0.00	0.09	0.00	57.3
8	T1	40	5.0	42	5.0	0.026	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	59.2
Approach		47	5.0	49	5.0	0.026	0.8	NA	0.0	0.0	0.00	0.09	0.00	58.9
All Vehicles		95	5.0	100	5.0	0.028	2.7	NA	0.1	0.7	0.06	0.27	0.06	56.3

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	%	%		
South: Stockdill Road (S)													
Lane 1	16	5.0	1793	0.009	100	1.9	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	16	5.0		0.009		1.9	NA	0.0	0.2				
East: CSG Access Road (W)													
Lane 1	35	5.0	1232	0.028	100	5.7	LOS A	0.1	0.7	Full	500	0.0	0.0
Approach	35	5.0		0.028		5.7	LOS A	0.1	0.7				
North: Stockdill Road (N)													
Lane 1	49	5.0	1874	0.026	100	0.8	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	49	5.0		0.026		0.8	NA	0.0	0.0				
Intersection	100	5.0		0.028		2.7	NA	0.1	0.7				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

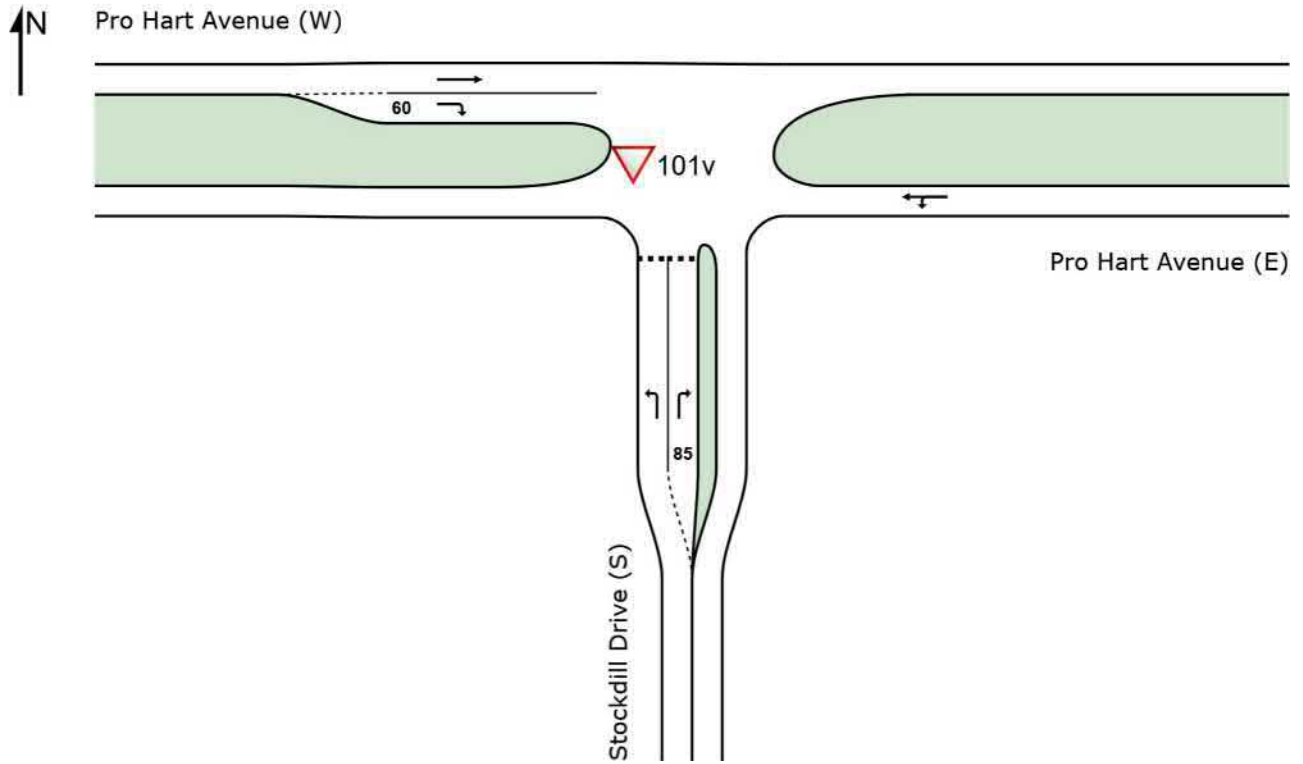
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▽ Site: 101v [CSG Calculated Interim AM Pro Hart Avenue / Stockdill Drive (Site Folder: CSG Stockdill/Prohart 2031)]

Pro Hart Avenue / Stockdill Drive Intesection
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	6	5.0	6	5.0	0.005	6.1	LOS A	0.0	0.1	0.25	0.53	0.25	50.0
3	R2	68	5.0	72	5.0	0.353	27.2	LOS B	1.3	9.5	0.88	1.00	1.08	35.4
Approach		74	5.0	78	5.0	0.353	25.5	LOS B	1.3	9.5	0.83	0.96	1.01	36.3
East: Pro Hart Avenue (E)														
4	L2	148	5.0	156	5.0	0.173	5.6	LOS A	0.0	0.0	0.00	0.29	0.00	54.1
5	T1	154	5.0	162	5.0	0.173	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	54.6
Approach		302	5.0	318	5.0	0.173	2.8	NA	0.0	0.0	0.00	0.29	0.00	54.3
West: Pro Hart Avenue (W)														
11	T1	799	5.0	841	5.0	0.445	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	5	5.0	5	5.0	0.004	6.6	LOS A	0.0	0.1	0.39	0.55	0.39	49.6
Approach		804	5.0	846	5.0	0.445	0.1	NA	0.0	0.1	0.00	0.00	0.00	59.5
All Vehicles		1180	5.0	1242	5.0	0.445	2.4	NA	1.3	9.5	0.05	0.14	0.06	54.8

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h	HV %						[Veh	Dist] m				
South: Stockdill Drive (S)													
Lane 1	6	5.0	1379	0.005	100	6.1	LOS A	0.0	0.1	Full	500	0.0	0.0
Lane 2	72	5.0	203	0.353	100	27.2	LOS B	1.3	9.5	Short	85	0.0	NA
Approach	78	5.0		0.353		25.5	LOS B	1.3	9.5				
East: Pro Hart Avenue (E)													
Lane 1	318	5.0	1841	0.173	100	2.8	LOS A	0.0	0.0	Full	215	0.0	0.0
Approach	318	5.0		0.173		2.8	NA	0.0	0.0				
West: Pro Hart Avenue (W)													
Lane 1	841	5.0	1889	0.445	100	0.1	LOS A	0.0	0.0	Full	230	0.0	0.0
Lane 2	5	5.0	1280	0.004	100	6.6	LOS A	0.0	0.1	Short	60	0.0	NA
Approach	846	5.0		0.445		0.1	NA	0.0	0.1				
Intersection	1242	5.0		0.445		2.4	NA	1.3	9.5				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

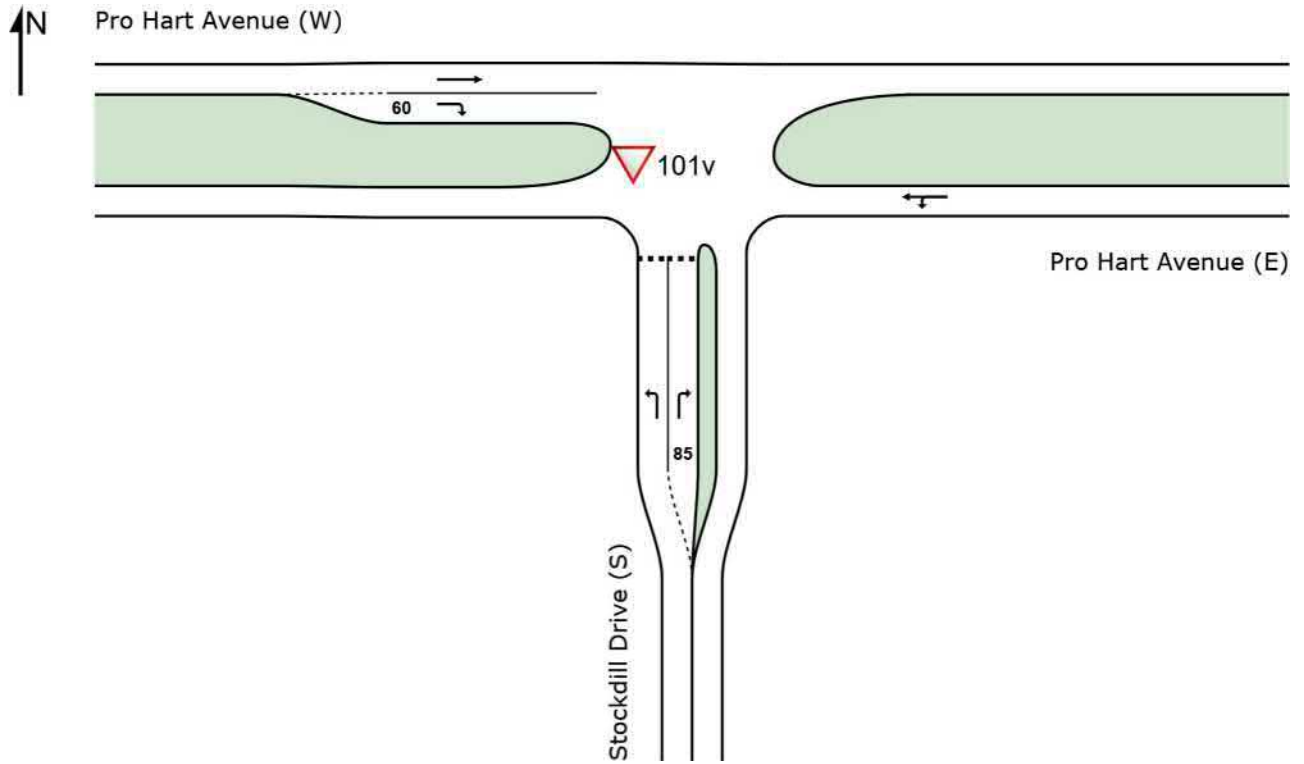
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▽ Site: 101v [CSG Calculated Interim PM Pro Hart Avenue / Stockdill Drive (Site Folder: CSG Stockdill/Prohart 2031)]

Pro Hart Avenue / Stockdill Drive Intesection
Site Category: Interim Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	2	5.0	2	5.0	0.004	10.5	LOS A	0.0	0.1	0.65	0.70	0.65	46.6
3	R2	35	5.0	37	5.0	0.166	21.5	LOS B	0.5	4.0	0.84	0.94	0.84	38.4
Approach		37	5.0	39	5.0	0.166	20.9	LOS B	0.5	4.0	0.83	0.92	0.83	38.8
East: Pro Hart Avenue (E)														
4	L2	42	5.0	44	5.0	0.470	5.7	LOS A	0.0	0.0	0.00	0.03	0.00	56.8
5	T1	799	5.0	841	5.0	0.470	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	59.0
Approach		841	5.0	885	5.0	0.470	0.4	NA	0.0	0.0	0.00	0.03	0.00	58.9
West: Pro Hart Avenue (W)														
11	T1	154	5.0	162	5.0	0.086	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	4	5.0	4	5.0	0.008	11.1	LOS A	0.0	0.2	0.69	0.74	0.69	46.2
Approach		158	5.0	166	5.0	0.086	0.3	NA	0.0	0.2	0.02	0.02	0.02	59.2
All Vehicles		1036	5.0	1091	5.0	0.470	1.1	NA	0.5	4.0	0.03	0.06	0.03	57.3

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h	HV %						[Veh	Dist] m				
South: Stockdill Drive (S)													
Lane 1	2	5.0	553	0.004	100	10.5	LOS A	0.0	0.1	Full	500	0.0	0.0
Lane 2	37	5.0	222	0.166	100	21.5	LOS B	0.5	4.0	Short	85	0.0	NA
Approach	39	5.0		0.166		20.9	LOS B	0.5	4.0				
East: Pro Hart Avenue (E)													
Lane 1	885	5.0	1884	0.470	100	0.4	LOS A	0.0	0.0	Full	215	0.0	0.0
Approach	885	5.0		0.470		0.4	NA	0.0	0.0				
West: Pro Hart Avenue (W)													
Lane 1	162	5.0	1889	0.086	100	0.0	LOS A	0.0	0.0	Full	230	0.0	0.0
Lane 2	4	5.0	543	0.008	100	11.1	LOS A	0.0	0.2	Short	60	0.0	NA
Approach	166	5.0		0.086		0.3	NA	0.0	0.2				
Intersection	1091	5.0		0.470		1.1	NA	0.5	4.0				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

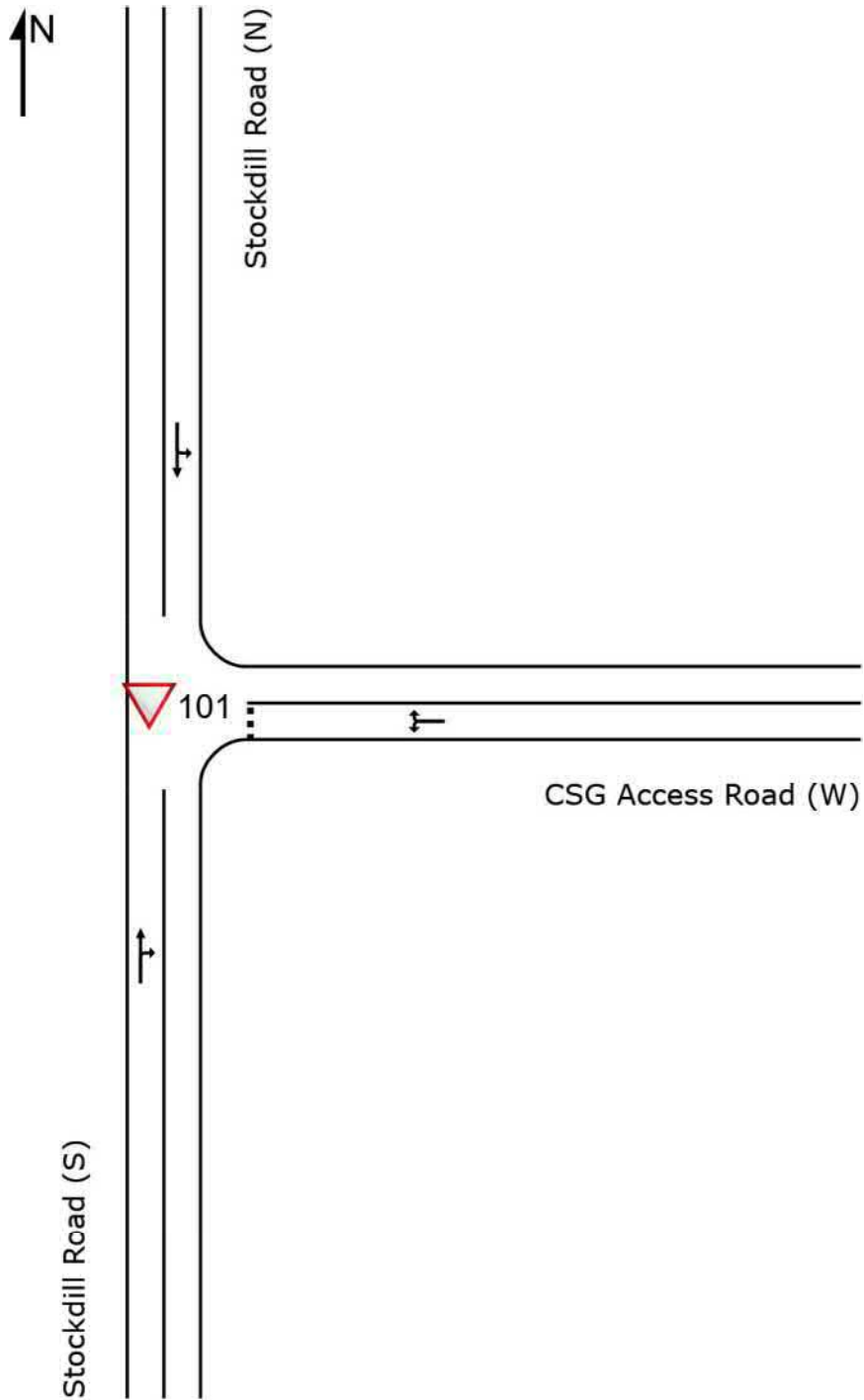
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▼ Site: 101 [Base Ultimate AM CSG Site Access (Site Folder: Base Stockdill/Prohart 2041 Signalised)]

CSG Access Road
Site Category: Ultimate Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	141	5.0	148	5.0	0.082	0.0	LOS A	0.0	0.3	0.01	0.02	0.01	59.8
3	R2	5	5.0	5	5.0	0.082	5.7	LOS A	0.0	0.3	0.01	0.02	0.01	57.2
Approach		146	5.0	154	5.0	0.082	0.2	NA	0.0	0.3	0.01	0.02	0.01	59.7
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.008	5.7	LOS A	0.0	0.2	0.13	0.56	0.13	53.0
6	R2	5	5.0	5	5.0	0.008	6.2	LOS A	0.0	0.2	0.13	0.56	0.13	52.5
Approach		10	5.0	11	5.0	0.008	6.0	LOS A	0.0	0.2	0.13	0.56	0.13	52.8
North: Stockdill Road (N)														
7	L2	5	5.0	5	5.0	0.027	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	57.6
8	T1	44	5.0	46	5.0	0.027	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	59.4
Approach		49	5.0	52	5.0	0.027	0.6	NA	0.0	0.0	0.00	0.06	0.00	59.2
All Vehicles		205	5.0	216	5.0	0.082	0.6	NA	0.0	0.3	0.01	0.06	0.01	59.2

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	m	%	%	
South: Stockdill Road (S)													
Lane 1	154	5.0	1877	0.082	100	0.2	LOS A	0.0	0.3	Full	500	0.0	0.0
Approach	154	5.0		0.082		0.2	NA	0.0	0.3				
East: CSG Access Road (W)													
Lane 1	11	5.0	1242	0.008	100	6.0	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	11	5.0		0.008		6.0	LOS A	0.0	0.2				
North: Stockdill Road (N)													
Lane 1	52	5.0	1878	0.027	100	0.6	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	52	5.0		0.027		0.6	NA	0.0	0.0				
Intersection	216	5.0		0.082		0.6	NA	0.0	0.3				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

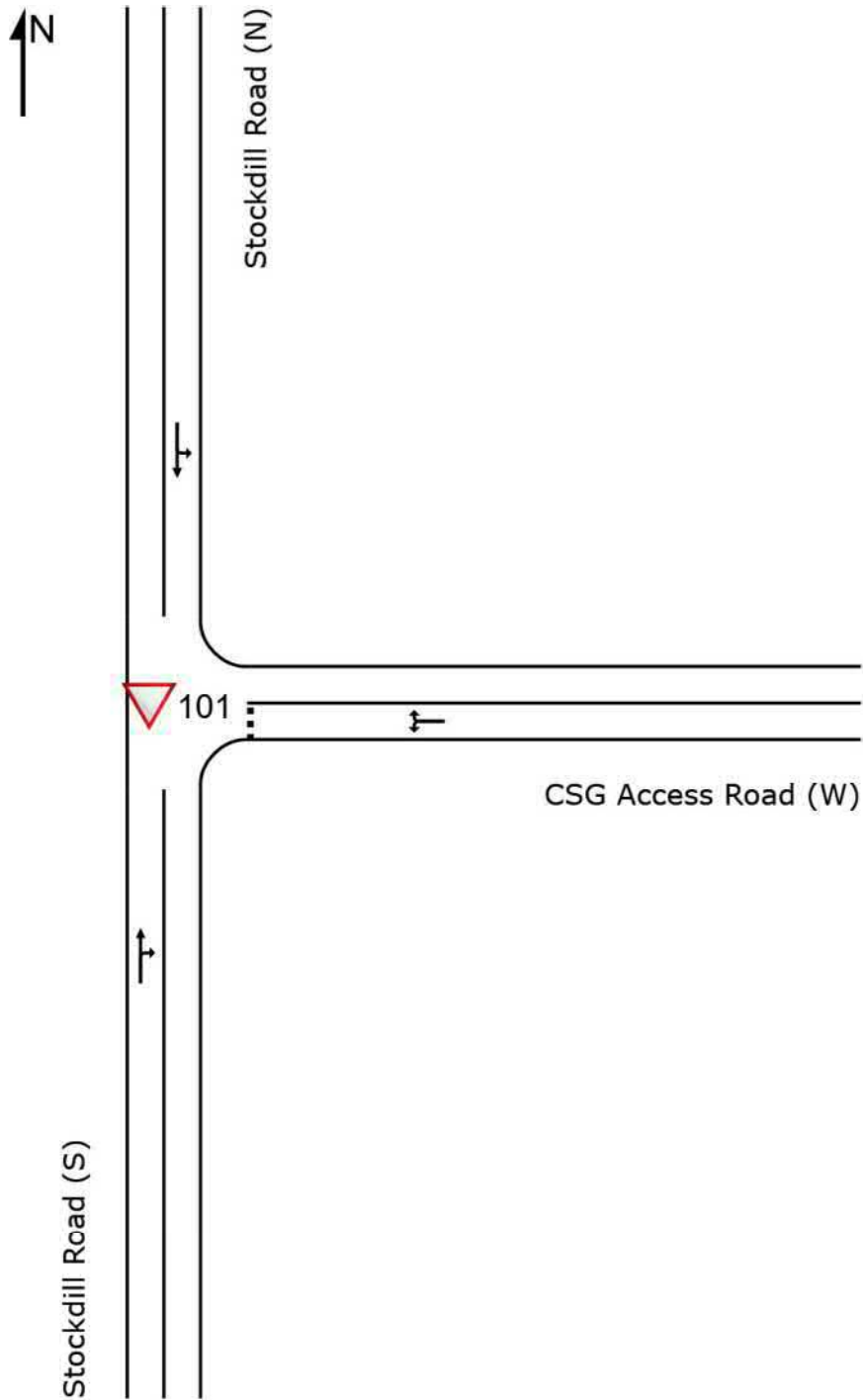
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▼ Site: 101 [Base Ultimate PM CSG Site Access (Site Folder: Base Stockdill/Prohart 2041 Signalised)]

CSG Access Road
Site Category: Ultimate Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	132	5.0	139	5.0	0.077	0.0	LOS A	0.0	0.3	0.02	0.02	0.02	59.7
3	R2	5	5.0	5	5.0	0.077	6.0	LOS A	0.0	0.3	0.02	0.02	0.02	57.2
Approach		137	5.0	144	5.0	0.077	0.2	NA	0.0	0.3	0.02	0.02	0.02	59.6
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.009	6.0	LOS A	0.0	0.2	0.26	0.56	0.26	52.7
6	R2	5	5.0	5	5.0	0.009	6.6	LOS A	0.0	0.2	0.26	0.56	0.26	52.1
Approach		10	5.0	11	5.0	0.009	6.3	LOS A	0.0	0.2	0.26	0.56	0.26	52.4
North: Stockdill Road (N)														
7	L2	5	5.0	5	5.0	0.078	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.9
8	T1	135	5.0	142	5.0	0.078	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach		140	5.0	147	5.0	0.078	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.7
All Vehicles		287	5.0	302	5.0	0.078	0.4	NA	0.0	0.3	0.02	0.04	0.02	59.4

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	m	%	%	
South: Stockdill Road (S)													
Lane 1	144	5.0	1869	0.077	100	0.2	LOS A	0.0	0.3	Full	500	0.0	0.0
Approach	144	5.0		0.077		0.2	NA	0.0	0.3				
East: CSG Access Road (W)													
Lane 1	11	5.0	1142	0.009	100	6.3	LOS A	0.0	0.2	Full	500	0.0	0.0
Approach	11	5.0		0.009		6.3	LOS A	0.0	0.2				
North: Stockdill Road (N)													
Lane 1	147	5.0	1885	0.078	100	0.2	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	147	5.0		0.078		0.2	NA	0.0	0.0				
Intersection	302	5.0		0.078		0.4	NA	0.0	0.3				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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: 101 [Base Ultimate AM ProHartAve/StockdillDrive (Site Folder: Base Stockdill/Prohart 2041 Signalised)]

Upgraded Pro Hart Avenue / Stockdill Drive Intesection

Site Category: Ultimate Development

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Leading Right Turn

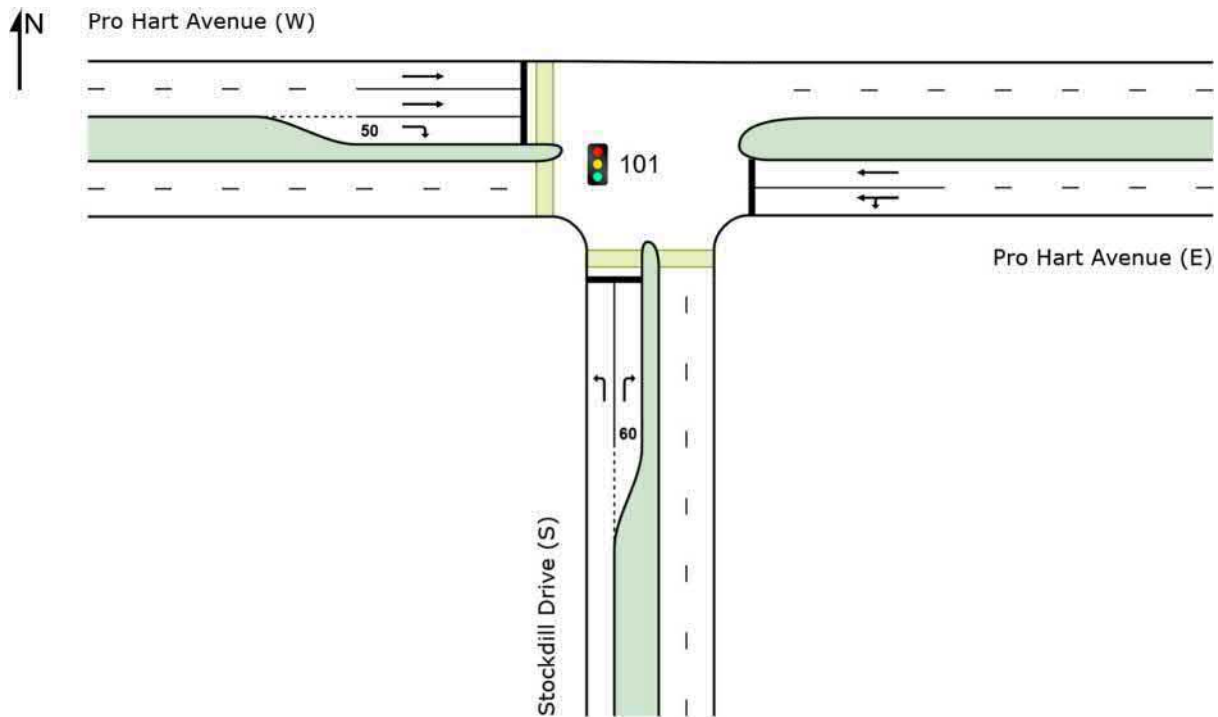
Reference Phase: Phase B

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	11	0.0	12	0.0	0.052	27.7	LOS B	0.3	1.8	0.91	0.67	0.91	40.5
3	R2	130	0.0	137	0.0	*0.614	30.5	LOS C	3.5	24.6	0.99	0.83	1.10	39.2
Approach		141	0.0	148	0.0	0.614	30.3	LOS C	3.5	24.6	0.99	0.81	1.09	39.3
East: Pro Hart Avenue (E)														
4	L2	35	0.0	37	0.0	0.471	17.8	LOS B	6.8	47.3	0.79	0.68	0.79	48.5
5	T1	661	0.0	696	0.0	0.471	12.2	LOS A	6.8	47.5	0.79	0.68	0.79	49.8
Approach		696	0.0	733	0.0	0.471	12.5	LOS A	6.8	47.5	0.79	0.68	0.79	49.7
West: Pro Hart Avenue (W)														
11	T1	1545	0.0	1626	0.0	*0.652	6.0	LOS A	12.4	86.7	0.67	0.60	0.67	54.6
12	R2	9	0.0	9	0.0	0.043	27.6	LOS B	0.2	1.5	0.91	0.66	0.91	40.5
Approach		1554	0.0	1636	0.0	0.652	6.2	LOS A	12.4	86.7	0.67	0.60	0.67	54.5
All Vehicles		2391	0.0	2517	0.0	0.652	9.4	LOS A	12.4	86.7	0.72	0.64	0.73	51.9

Site Level of Service (LOS) Method: Delay (RTA NSW). 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)

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Stockdill Drive (S)													
Lane 1	12	0.0	223	0.052	100	27.7	LOS B	0.3	1.8	Full	500	0.0	0.0
Lane 2	137	0.0	223	0.614	100	30.5	LOS C	3.5	24.6	Short	60	0.0	NA
Approach	148	0.0		0.614		30.3	LOS C	3.5	24.6				
East: Pro Hart Avenue (E)													
Lane 1	365	0.0	776	0.471	100	12.8	LOS A	6.8	47.3	Full	500	0.0	0.0
Lane 2	367	0.0	780	0.471	100	12.2	LOS A	6.8	47.5	Full	500	0.0	0.0
Approach	733	0.0		0.471		12.5	LOS A	6.8	47.5				
West: Pro Hart Avenue (W)													
Lane 1	813	0.0	1248	0.652	100	6.0	LOS A	12.4	86.7	Full	500	0.0	0.0
Lane 2	813	0.0	1248	0.652	100	6.0	LOS A	12.4	86.7	Full	500	0.0	0.0
Lane 3	9	0.0	223	0.043	100	27.6	LOS B	0.2	1.5	Short	50	0.0	NA
Approach	1636	0.0		0.652		6.2	LOS A	12.4	86.7				
Intersection	2517	0.0		0.652		9.4	LOS A	12.4	86.7				

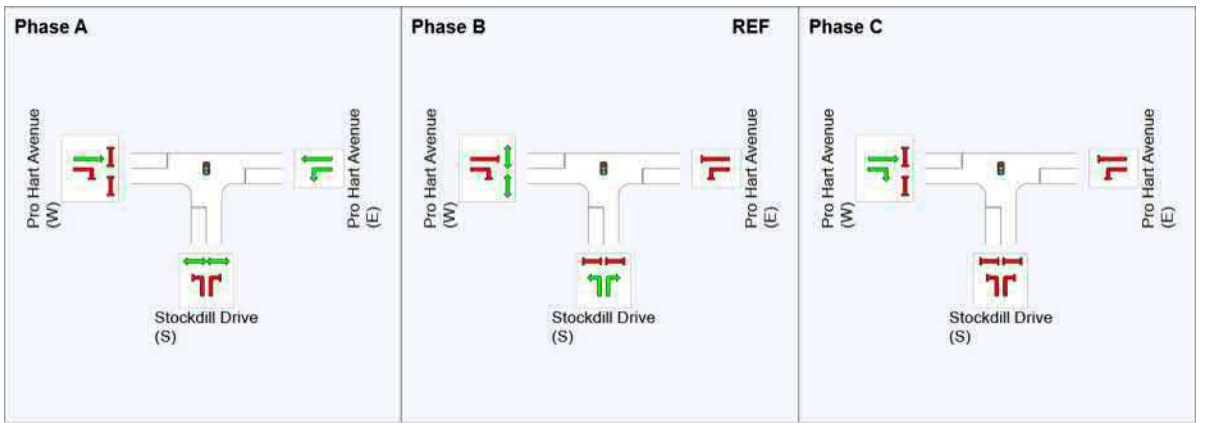
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric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

Phase Timing Summary













Phase	A	B	C
Phase Change Time (sec)	24	0	12
Green Time (sec)	20	6	6
Phase Time (sec)	26	12	12
Phase Split	52%	24%	24%

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

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

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

Site: 101 [Base Ultimate PM ProHartAve/StockdillDrive (Site Folder: Base Stockdill/Prohart 2041 Signalised)]

Upgraded Pro Hart Avenue / Stockdill Drive Intesection

Site Category: Ultimate Development

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 85 seconds (Site Optimum Cycle Time - Minimum Delay)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Leading Right Turn

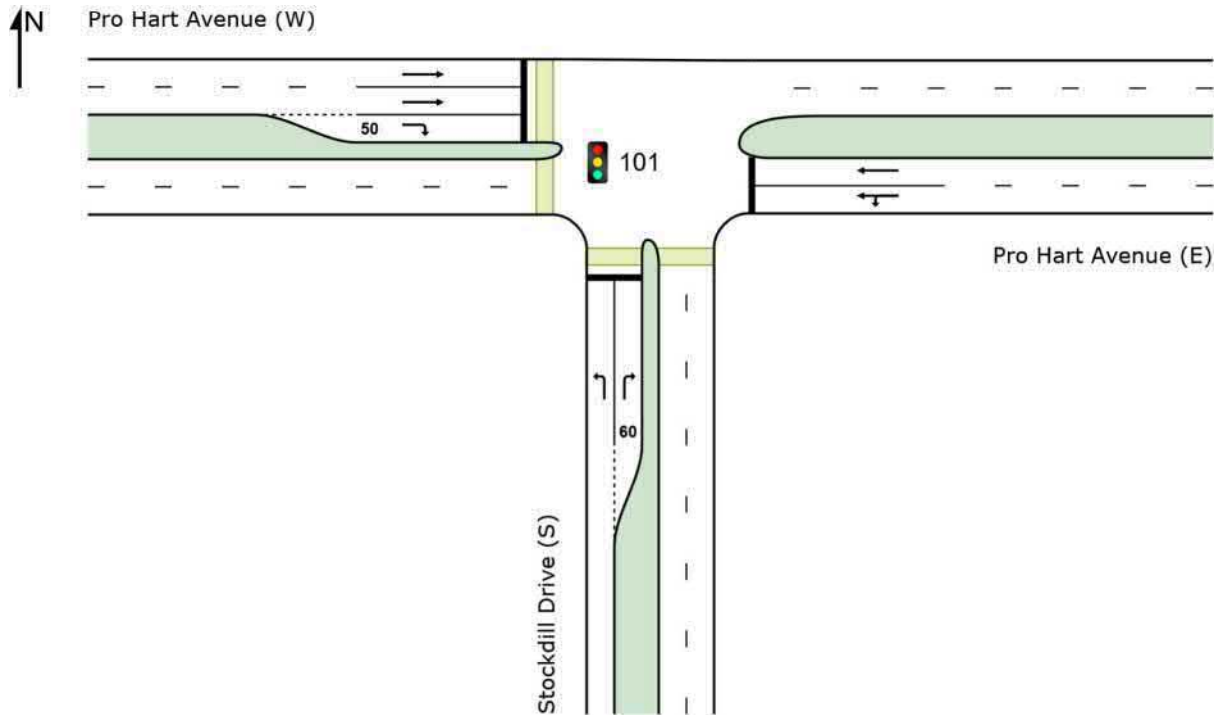
Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	11	0.0	12	0.0	0.066	44.8	LOS D	0.5	3.2	0.94	0.68	0.94	34.0
3	R2	121	0.0	127	0.0	* 0.729	50.3	LOS D	5.7	39.6	1.00	0.87	1.19	32.4
Approach		132	0.0	139	0.0	0.729	49.8	LOS D	5.7	39.6	0.99	0.85	1.17	32.5
East: Pro Hart Avenue (E)														
4	L2	107	0.0	113	0.0	0.752	17.7	LOS B	26.5	185.8	0.77	0.72	0.77	48.5
5	T1	1625	0.0	1711	0.0	* 0.752	12.1	LOS A	26.7	186.9	0.77	0.71	0.77	49.8
Approach		1732	0.0	1823	0.0	0.752	12.5	LOS A	26.7	186.9	0.77	0.72	0.77	49.7
West: Pro Hart Avenue (W)														
11	T1	559	0.0	588	0.0	0.197	2.9	LOS A	3.3	23.2	0.30	0.26	0.30	57.3
12	R2	28	0.0	29	0.0	* 0.225	48.4	LOS D	1.2	8.6	0.98	0.71	0.98	32.9
Approach		587	0.0	618	0.0	0.225	5.1	LOS A	3.3	23.2	0.33	0.28	0.33	55.3
All Vehicles		2451	0.0	2580	0.0	0.752	12.7	LOS A	26.7	186.9	0.68	0.62	0.68	49.5

Site Level of Service (LOS) Method: Delay (RTA NSW). 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)

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Stockdill Drive (S)													
Lane 1	12	0.0	175	0.066	100	44.8	LOS D	0.5	3.2	Full	500	0.0	0.0
Lane 2	127	0.0	175	0.729	100	50.3	LOS D	5.7	39.6	Short	60	0.0	NA
Approach	139	0.0		0.729		49.8	LOS D	5.7	39.6				
East: Pro Hart Avenue (E)													
Lane 1	909	0.0	1208	0.752	100	12.8	LOS A	26.5	185.8	Full	500	0.0	0.0
Lane 2	914	0.0	1216	0.752	100	12.1	LOS A	26.7	186.9	Full	500	0.0	0.0
Approach	1823	0.0		0.752		12.5	LOS A	26.7	186.9				
West: Pro Hart Avenue (W)													
Lane 1	294	0.0	1491	0.197	100	2.9	LOS A	3.3	23.2	Full	500	0.0	0.0
Lane 2	294	0.0	1491	0.197	100	2.9	LOS A	3.3	23.2	Full	500	0.0	0.0
Lane 3	29	0.0	131	0.225	100	48.4	LOS D	1.2	8.6	Short	50	0.0	NA
Approach	618	0.0		0.225		5.1	LOS A	3.3	23.2				
Intersection	2580	0.0		0.752		12.7	LOS A	26.7	186.9				

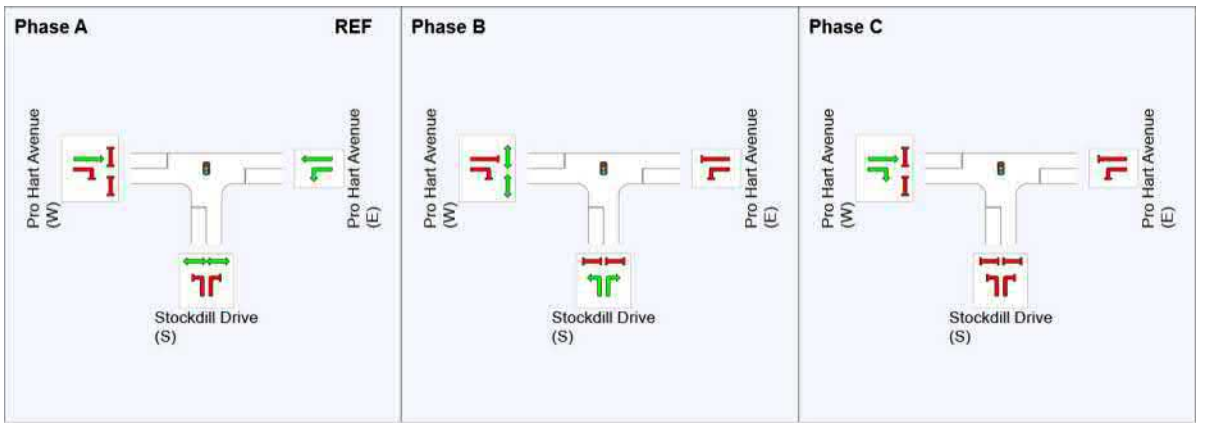
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric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

Phase Timing Summary













Phase	A	B	C
Phase Change Time (sec)	0	59	73
Green Time (sec)	53	8	6
Phase Time (sec)	59	14	12
Phase Split	69%	16%	14%

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

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

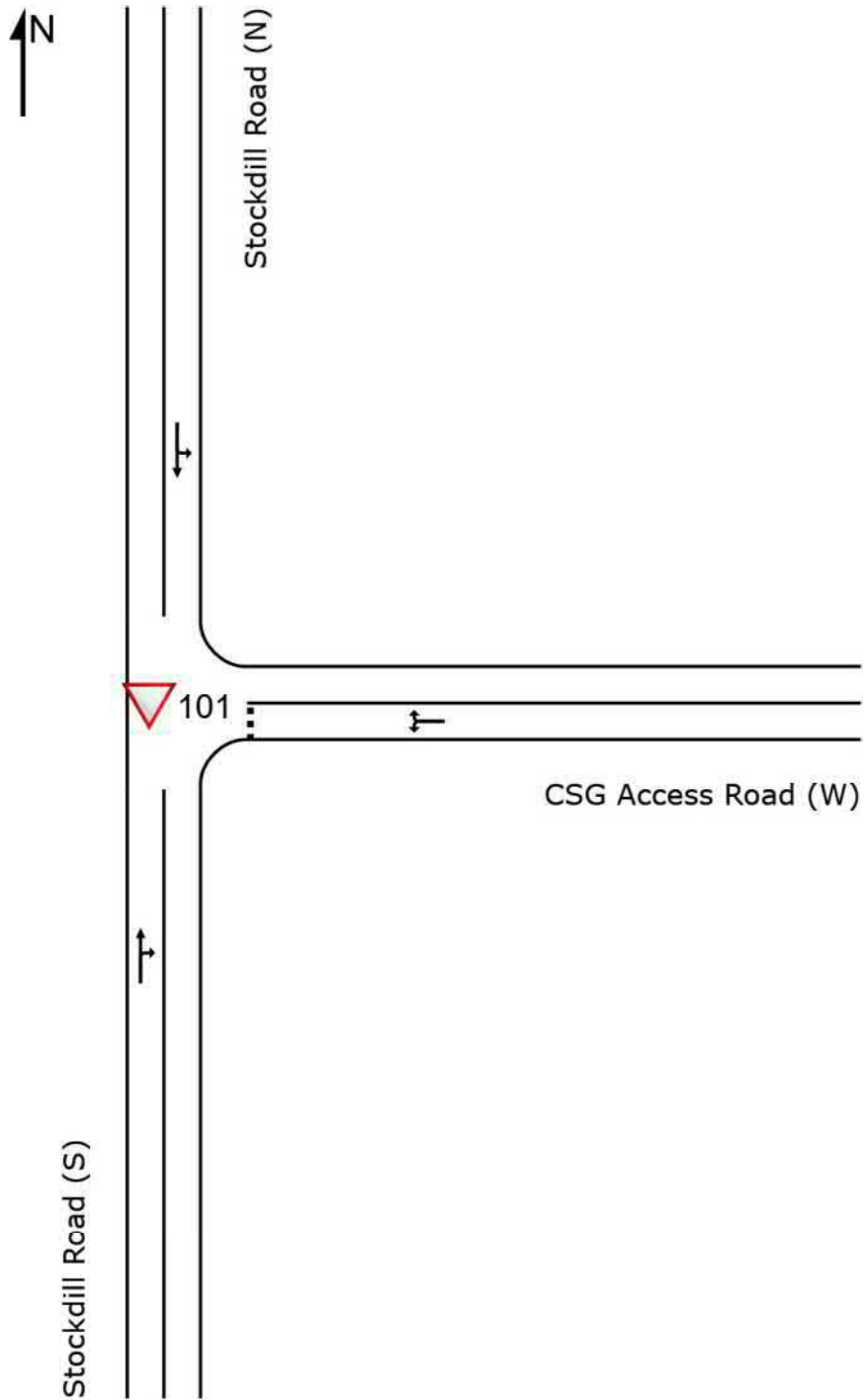
	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

▼ Site: 101 [CSG Calculated Ultimate AM Site Access Road (Site Folder: CSG Stockdill/Prohart 2041 Signalised)]

CSG Access Road
Site Category: Ultimate Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	130	5.0	137	5.0	0.076	0.0	LOS A	0.0	0.3	0.03	0.02	0.03	59.7
3	R2	5	5.0	5	5.0	0.076	6.2	LOS A	0.0	0.3	0.03	0.02	0.03	57.2
Approach		135	5.0	142	5.0	0.076	0.3	NA	0.0	0.3	0.03	0.02	0.03	59.6
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.041	5.7	LOS A	0.1	1.0	0.22	0.60	0.22	52.7
6	R2	35	5.0	37	5.0	0.041	6.5	LOS A	0.1	1.0	0.22	0.60	0.22	52.2
Approach		40	5.0	42	5.0	0.041	6.4	LOS A	0.1	1.0	0.22	0.60	0.22	52.3
North: Stockdill Road (N)														
7	L2	140	5.0	147	5.0	0.107	5.6	LOS A	0.0	0.0	0.00	0.44	0.00	54.4
8	T1	45	5.0	47	5.0	0.107	0.0	LOS A	0.0	0.0	0.00	0.44	0.00	56.1
Approach		185	5.0	195	5.0	0.107	4.3	NA	0.0	0.0	0.00	0.44	0.00	54.8
All Vehicles		360	5.0	379	5.0	0.107	3.0	NA	0.1	1.0	0.04	0.30	0.04	56.2

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	m	%	%	
South: Stockdill Road (S)													
Lane 1	142	5.0	1865	0.076	100	0.3	LOS A	0.0	0.3	Full	500	0.0	0.0
Approach	142	5.0		0.076		0.3	NA	0.0	0.3				
East: CSG Access Road (W)													
Lane 1	42	5.0	1032	0.041	100	6.4	LOS A	0.1	1.0	Full	500	0.0	0.0
Approach	42	5.0		0.041		6.4	LOS A	0.1	1.0				
North: Stockdill Road (N)													
Lane 1	195	5.0	1816	0.107	100	4.3	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	195	5.0		0.107		4.3	NA	0.0	0.0				
Intersection	379	5.0		0.107		3.0	NA	0.1	1.0				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

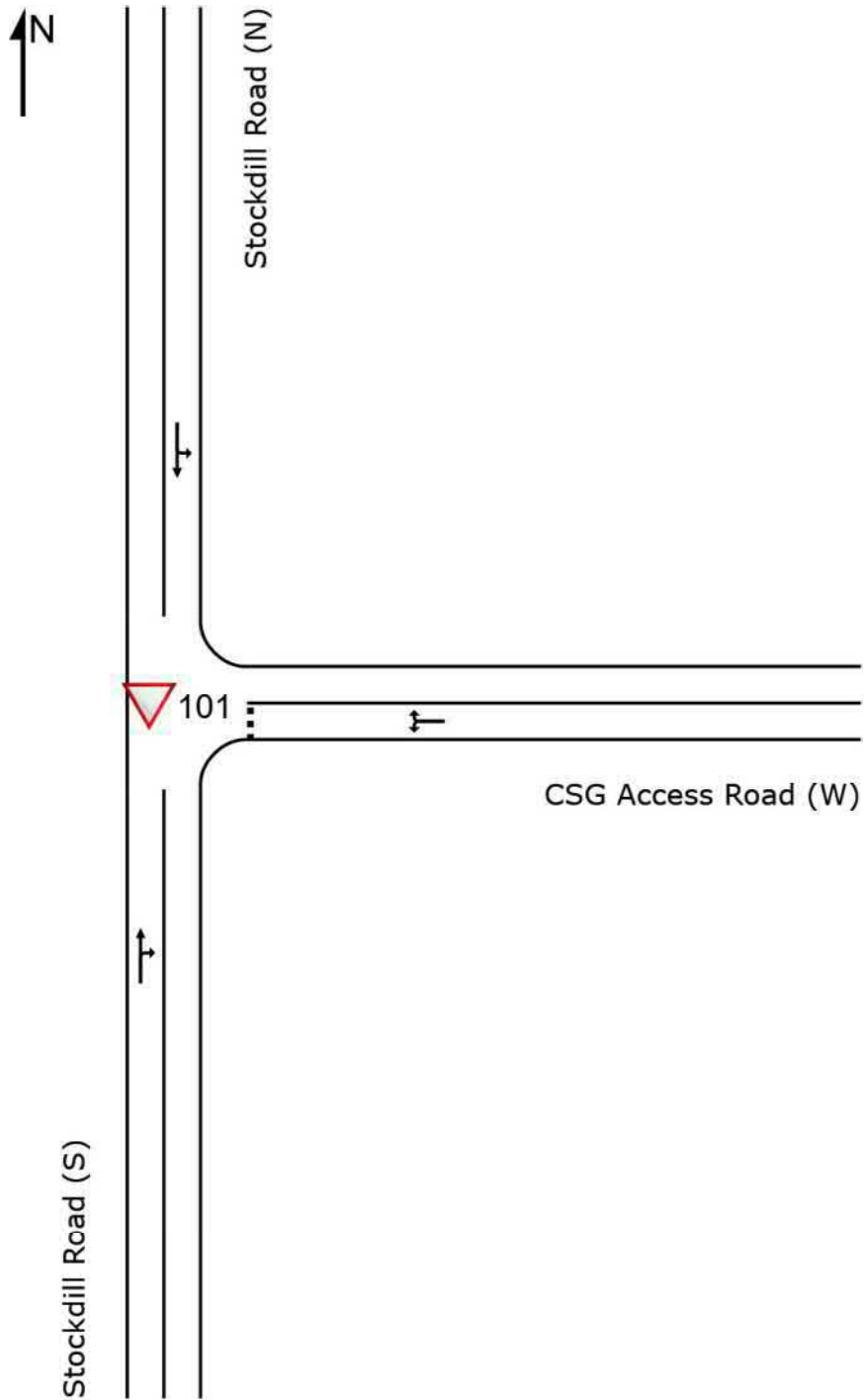
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▼ Site: 101 [CSG Calculated Ultimate PM Site Access Road (Site Folder: CSG Stockdill/Prohart 2041 Signalised)]

CSG Access Road
Site Category: Ultimate Development
Give-Way (Two-Way)

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Stockdill Road (S)														
2	T1	132	5.0	139	5.0	0.077	0.0	LOS A	0.0	0.3	0.02	0.02	0.02	59.7
3	R2	5	5.0	5	5.0	0.077	6.0	LOS A	0.0	0.3	0.02	0.02	0.02	57.2
Approach		137	5.0	144	5.0	0.077	0.2	NA	0.0	0.3	0.02	0.02	0.02	59.6
East: CSG Access Road (W)														
4	L2	5	5.0	5	5.0	0.034	6.0	LOS A	0.1	0.8	0.30	0.60	0.30	52.6
6	R2	28	5.0	29	5.0	0.034	6.6	LOS A	0.1	0.8	0.30	0.60	0.30	52.1
Approach		33	5.0	35	5.0	0.034	6.6	LOS A	0.1	0.8	0.30	0.60	0.30	52.1
North: Stockdill Road (N)														
7	L2	7	5.0	7	5.0	0.079	5.6	LOS A	0.0	0.0	0.00	0.03	0.00	57.8
8	T1	135	5.0	142	5.0	0.079	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	59.7
Approach		142	5.0	149	5.0	0.079	0.3	NA	0.0	0.0	0.00	0.03	0.00	59.6
All Vehicles		312	5.0	328	5.0	0.079	0.9	NA	0.1	0.8	0.04	0.09	0.04	58.7

Site Level of Service (LOS) Method: Delay (RTA NSW). 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.

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	m	%	%	
South: Stockdill Road (S)													
Lane 1	144	5.0	1869	0.077	100	0.2	LOS A	0.0	0.3	Full	500	0.0	0.0
Approach	144	5.0		0.077		0.2	NA	0.0	0.3				
East: CSG Access Road (W)													
Lane 1	35	5.0	1009	0.034	100	6.6	LOS A	0.1	0.8	Full	500	0.0	0.0
Approach	35	5.0		0.034		6.6	LOS A	0.1	0.8				
North: Stockdill Road (N)													
Lane 1	149	5.0	1884	0.079	100	0.3	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	149	5.0		0.079		0.3	NA	0.0	0.0				
Intersection	328	5.0		0.079		0.9	NA	0.1	0.8				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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: 101 [CSG Calculated Ultimate AM ProHartAve/StockdillDrive (Site Folder: CSG Stockdill/Prohart 2041 Signalised)]

Upgraded Pro Hart Avenue / Stockdill Drive Intesection

Site Category: Ultimate Development

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: CSG Ultiimate Signals

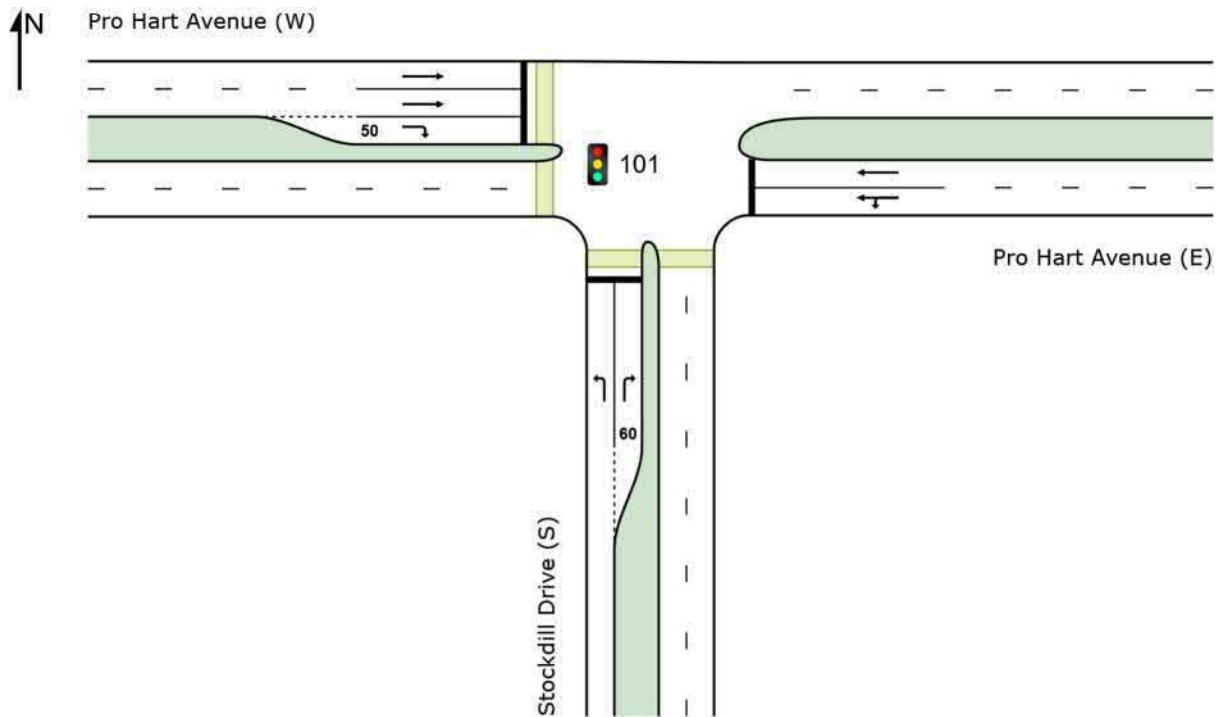
Reference Phase: Phase B

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	13	0.0	14	0.0	0.049	29.9	LOS C	0.4	2.5	0.88	0.68	0.88	39.5
3	R2	163	0.0	172	0.0	*0.616	33.3	LOS C	5.1	35.5	0.98	0.83	1.05	38.1
Approach		176	0.0	185	0.0	0.616	33.1	LOS C	5.1	35.5	0.98	0.81	1.03	38.2
East: Pro Hart Avenue (E)														
4	L2	174	0.0	183	0.0	0.506	18.4	LOS B	9.2	64.3	0.76	0.72	0.76	47.0
5	T1	661	0.0	696	0.0	0.506	12.8	LOS A	9.4	65.6	0.76	0.68	0.76	49.0
Approach		835	0.0	879	0.0	0.506	14.0	LOS A	9.4	65.6	0.76	0.69	0.76	48.6
West: Pro Hart Avenue (W)														
11	T1	1545	0.0	1626	0.0	*0.644	6.8	LOS A	14.4	101.1	0.65	0.59	0.65	54.0
12	R2	9	0.0	9	0.0	0.051	33.2	LOS C	0.3	1.9	0.93	0.66	0.93	38.1
Approach		1554	0.0	1636	0.0	0.644	7.0	LOS A	14.4	101.1	0.65	0.59	0.65	53.8
All Vehicles		2565	0.0	2700	0.0	0.644	11.0	LOS A	14.4	101.1	0.71	0.64	0.71	50.6

Site Level of Service (LOS) Method: Delay (RTA NSW). 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)

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]						[Veh	Dist]				
	veh/h	%	veh/h	v/c	%	sec			m	m	%	%	
South: Stockdill Drive (S)													
Lane 1	14	0.0	279	0.049	100	29.9	LOS C	0.4	2.5	Full	500	0.0	0.0
Lane 2	172	0.0	279	0.616	100	33.3	LOS C	5.1	35.5	Short	60	0.0	NA
Approach	185	0.0		0.616		33.1	LOS C	5.1	35.5				
East: Pro Hart Avenue (E)													
Lane 1	435	0.0	859	0.506	100	15.2	LOS B	9.2	64.3	Full	500	0.0	0.0
Lane 2	444	0.0	878	0.506	100	12.8	LOS A	9.4	65.6	Full	500	0.0	0.0
Approach	879	0.0		0.506		14.0	LOS A	9.4	65.6				
West: Pro Hart Avenue (W)													
Lane 1	816	0.0	1268	0.644	100	6.8	LOS A	14.4	101.1	Full	500	0.0	0.0
Lane 2	810	0.0	1257 ¹	0.644	100	6.8	LOS A	14.2	99.7	Full	500	0.0	0.0
Lane 3	9	0.0	186	0.051	100	33.2	LOS C	0.3	1.9	Short	50	0.0	NA
Approach	1636	0.0		0.644		7.0	LOS A	14.4	101.1				
Intersection	2700	0.0		0.644		11.0	LOS A	14.4	101.1				

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

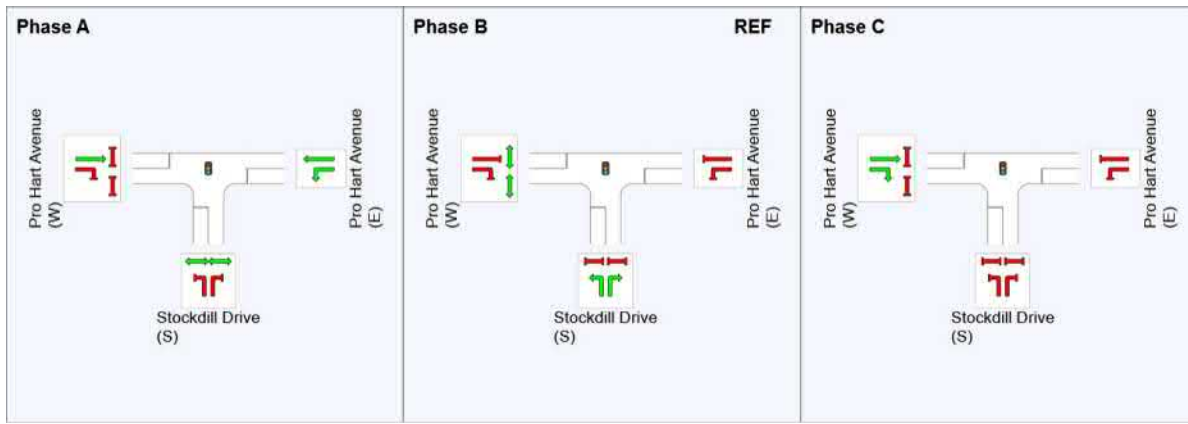
- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	27	0	15
Green Time (sec)	27	9	6
Phase Time (sec)	33	15	12
Phase Split	55%	25%	20%

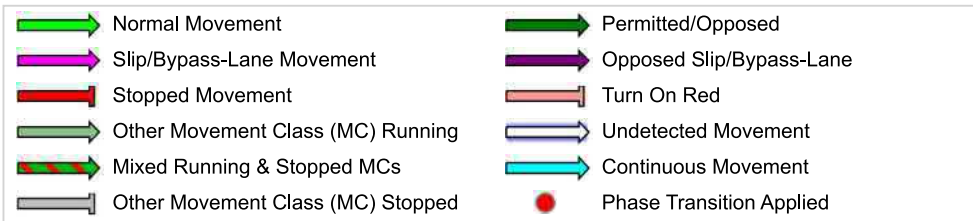
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



Site: 101 [CSG Calculated Ultimate PM ProHartAve/StockdillDrive (Site Folder: CSG Stockdill/ Prohart 2041 Signalised)]

Upgraded Pro Hart Avenue / Stockdill Drive Intesection

Site Category: Ultimate Development

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Leading Right Turn

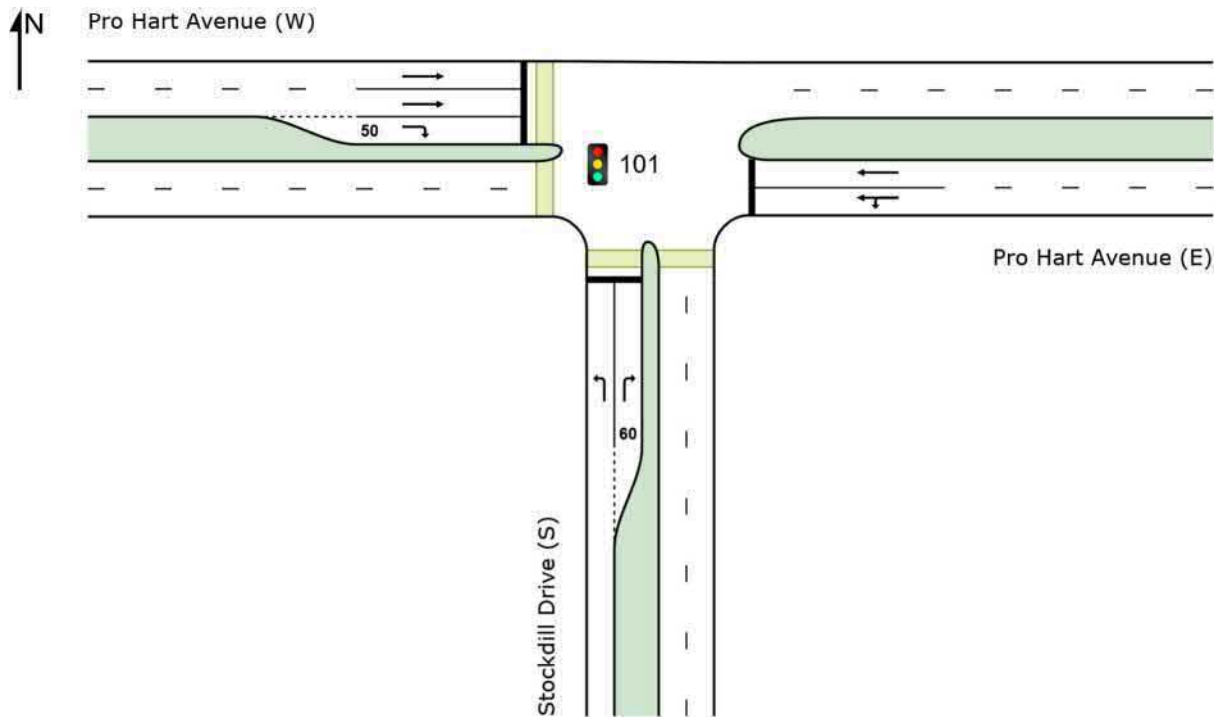
Reference Phase: Phase B

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Site Layout

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



Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Stockdill Drive (S)														
1	L2	12	0.0	13	0.0	0.061	45.2	LOS D	0.5	3.6	0.92	0.68	0.92	33.9
3	R2	147	0.0	155	0.0	*0.750	51.8	LOS D	7.2	50.5	1.00	0.88	1.19	32.0
Approach		159	0.0	167	0.0	0.750	51.3	LOS D	7.2	50.5	0.99	0.86	1.17	32.1
East: Pro Hart Avenue (E)														
4	L2	114	0.0	120	0.0	0.757	18.5	LOS B	28.4	198.6	0.77	0.73	0.77	47.9
5	T1	1625	0.0	1711	0.0	*0.757	13.0	LOS A	28.6	199.9	0.77	0.72	0.77	49.3
Approach		1739	0.0	1831	0.0	0.757	13.3	LOS A	28.6	199.9	0.77	0.72	0.77	49.2
West: Pro Hart Avenue (W)														
11	T1	559	0.0	588	0.0	0.200	3.3	LOS A	3.6	25.5	0.31	0.27	0.31	56.9
12	R2	28	0.0	29	0.0	*0.238	51.4	LOS D	1.3	9.2	0.98	0.72	0.98	32.1
Approach		587	0.0	618	0.0	0.238	5.6	LOS A	3.6	25.5	0.34	0.29	0.34	54.9
All Vehicles		2485	0.0	2616	0.0	0.757	13.9	LOS A	28.6	199.9	0.69	0.63	0.70	48.7

Site Level of Service (LOS) Method: Delay (RTA NSW). 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)

Lane Use and Performance													
	DEMAND FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Stockdill Drive (S)													
Lane 1	13	0.0	206	0.061	100	45.2	LOS D	0.5	3.6	Full	500	0.0	0.0
Lane 2	155	0.0	206	0.750	100	51.8	LOS D	7.2	50.5	Short	60	0.0	NA
Approach	167	0.0		0.750		51.3	LOS D	7.2	50.5				
East: Pro Hart Avenue (E)													
Lane 1	912	0.0	1205	0.757	100	13.7	LOS A	28.4	198.6	Full	500	0.0	0.0
Lane 2	918	0.0	1213	0.757	100	13.0	LOS A	28.6	199.9	Full	500	0.0	0.0
Approach	1831	0.0		0.757		13.3	LOS A	28.6	199.9				
West: Pro Hart Avenue (W)													
Lane 1	294	0.0	1473	0.200	100	3.3	LOS A	3.6	25.5	Full	500	0.0	0.0
Lane 2	294	0.0	1473	0.200	100	3.3	LOS A	3.6	25.5	Full	500	0.0	0.0
Lane 3	29	0.0	124	0.238	100	51.4	LOS D	1.3	9.2	Short	50	0.0	NA
Approach	618	0.0		0.238		5.6	LOS A	3.6	25.5				
Intersection	2616	0.0		0.757		13.9	LOS A	28.6	199.9				

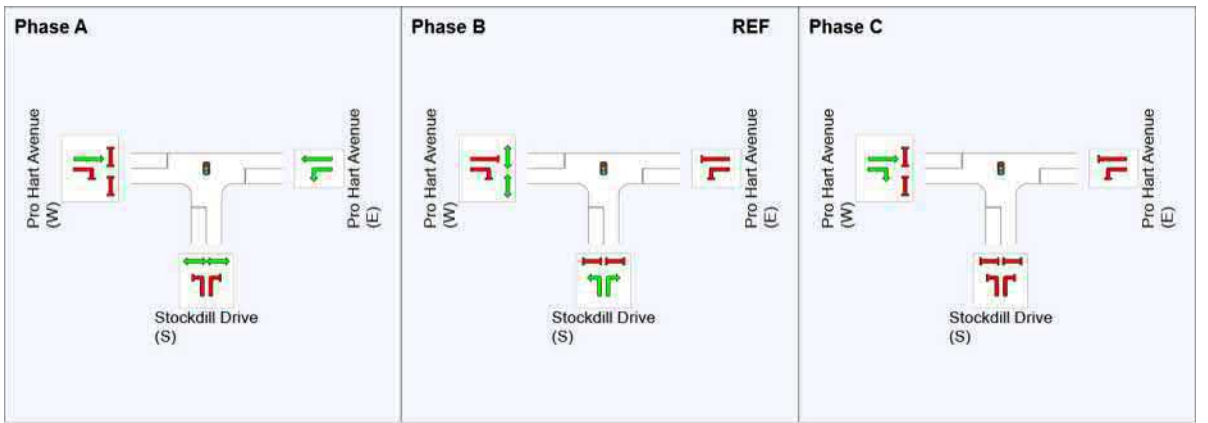
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric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

Phase Timing Summary













Phase	A	B	C
Phase Change Time (sec)	28	0	16
Green Time (sec)	56	10	6
Phase Time (sec)	62	16	12
Phase Split	69%	18%	13%

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

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

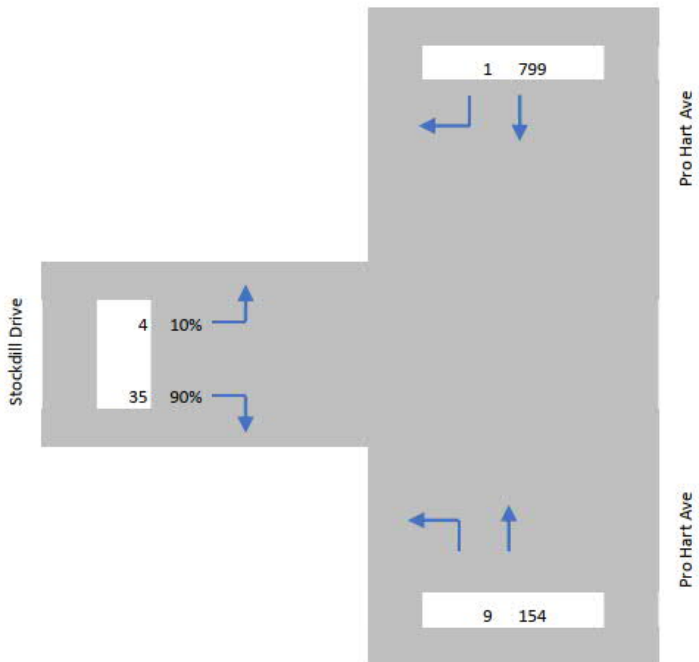
	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

CANBERRA SAND AND GRAVEL-TRAFFIC IMPACT ASSESSMENT

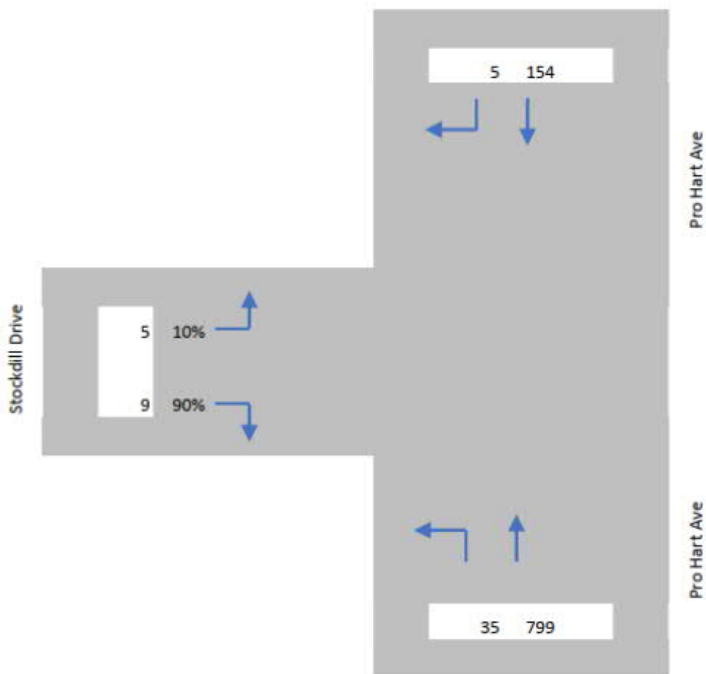
Appendix C Traffic Generation Values

RIVERVIEW PROJECTS

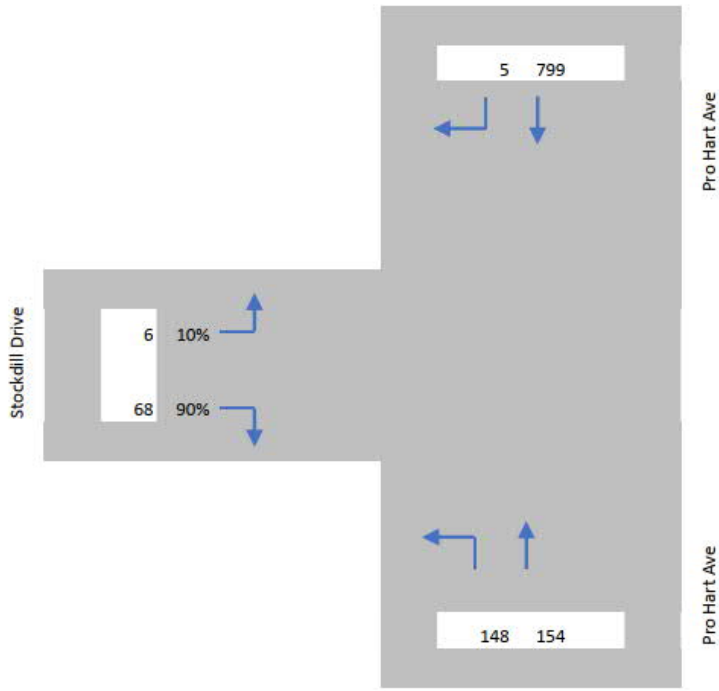
Base AM Interim Volumes



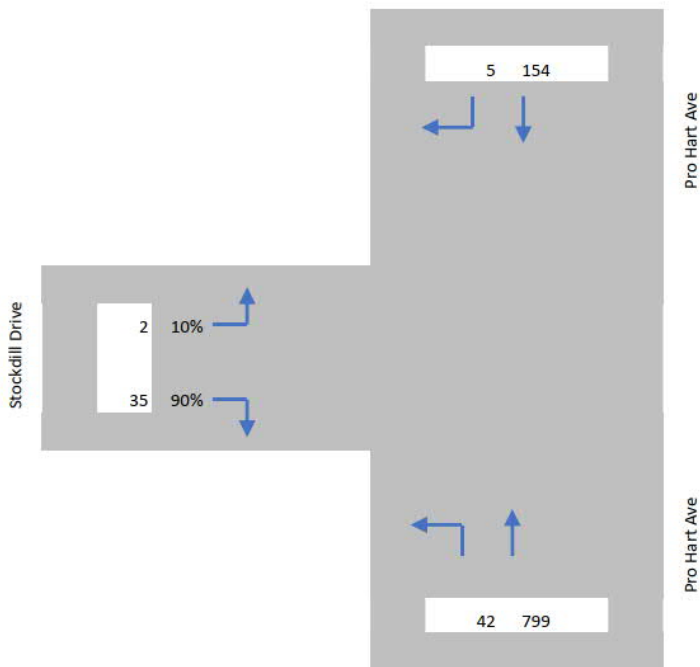
Base PM Interim Values



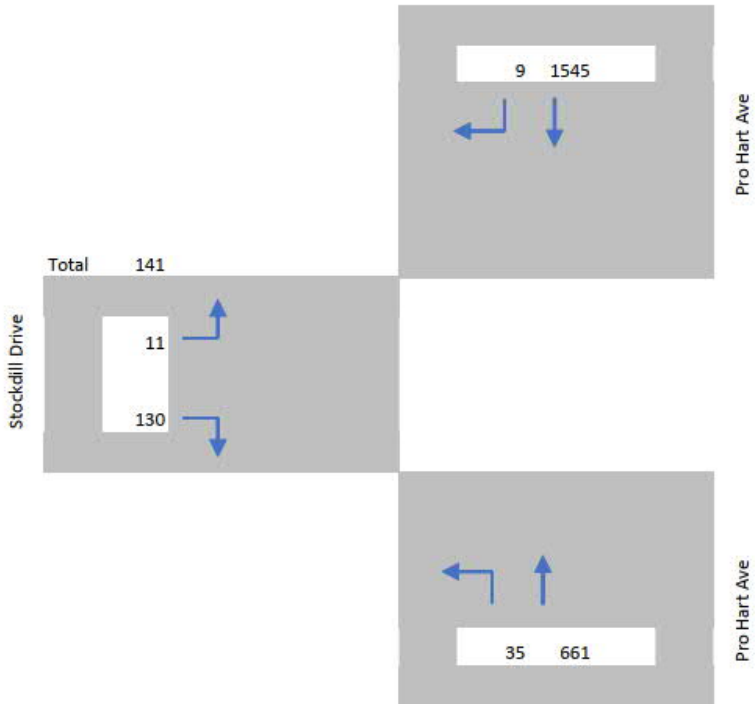
Base + Calculated Base AM Values



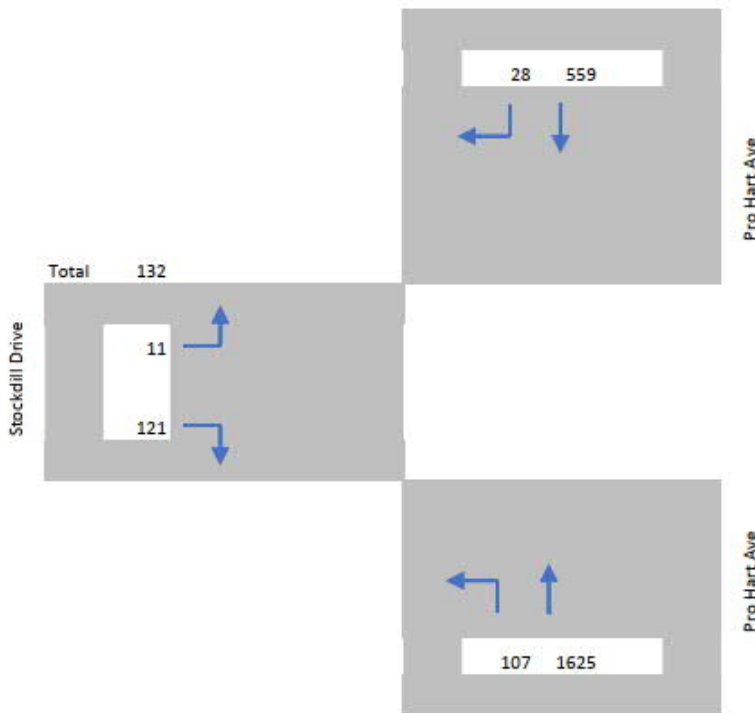
Base + Calculated Base PM Values



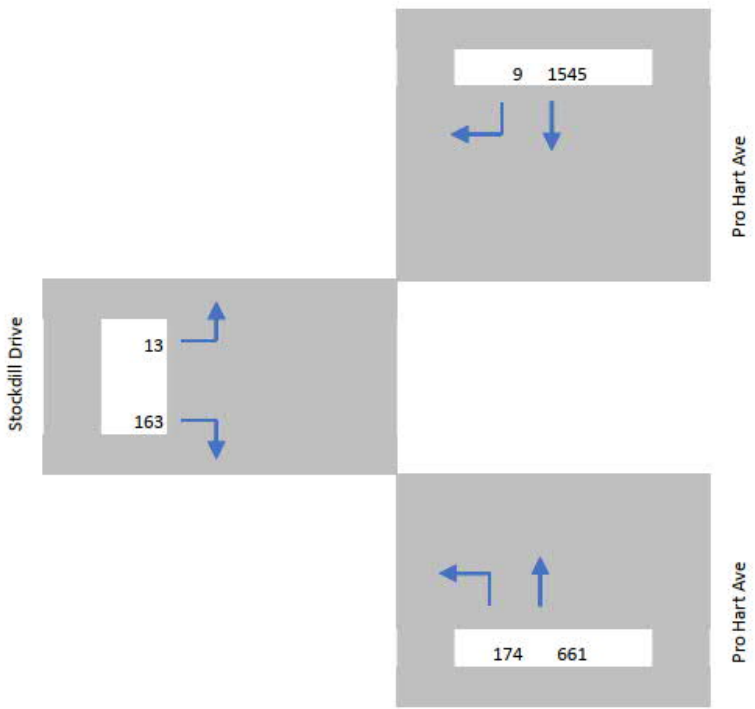
Base AM Ultimate Values



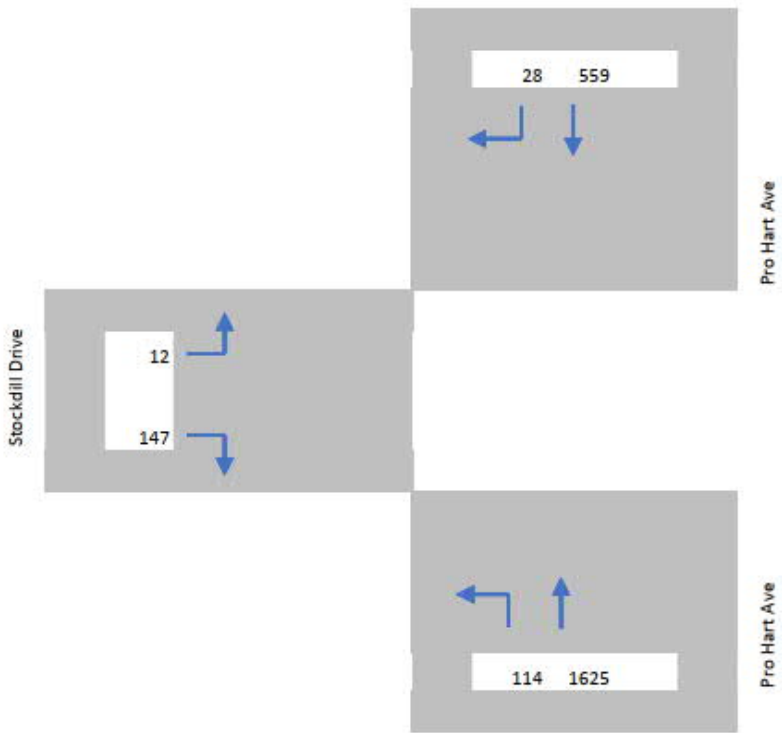
Base PM Ultimate Values



Base + Calculated AM Ultimate Values



Base + Calculated PM Ultimate Values



CANBERRA SAND AND GRAVEL-TRAFFIC IMPACT ASSESSMENT

Appendix D CSG Traffic Numbers Advice

RIVERVIEW PROJECTS

Brendan Hogan

Subject: FW: CSG Traffic report

From: Wayne Gregory <wayne@cansand.com.au>
Sent: Tuesday, 2 November 2021 10:05 AM
To: Peter Lewis <Peter.Lewis@calibregroup.com>; Imran Khan <imran@ginninderry.com>
Cc: James Gregory <james@cansand.com.au>
Subject: RE: CSG peak daily vehicle access

Peter

Looking at October 21 which was a fairly busy month, the number of vehicles coming into the green waste drop off averaged around 300 per day, with the busiest day at 500 vehicles. On average trucks would be 5% of the daily number of vehicles. We classify a truck as any vehicle other than a car with a trailer.

We do not keep records of vehicle numbers through our landscape centre, however on a busy day we could average 200 transactions which could equate to 200 vehicles, however there would be a percentage of the vehicles that go to the green waste that would also pickup material from the landscape centre. At a guess maybe 20%.

Deliveries by our trucks which are medium rigids, on a busy day would be around 20 truck movements one way.

Truck movements for material coming into the landscape centre would average 3 -4 per day. The largest vehicle would be a bogie drive truck and 4 axle dog trailer.

Hope this helps, let me know if you need any further information.

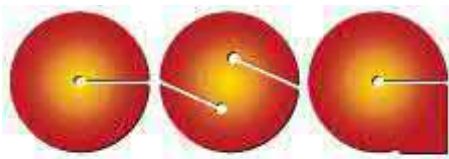
Wayne Gregory

Canberra Sand & Gravel

Ph: 02 6280 4133

Fax: 02 6280 5752

Email: wayne@cansand.com.au



CANBERRA SAND & GRAVEL

From: Peter Lewis <Peter.Lewis@calibregroup.com>
Sent: Monday, 1 November 2021 10:12 PM
To: Imran Khan <imran@ginninderry.com>; Wayne Gregory <wayne@cansand.com.au>
Subject: CSG peak daily vehicle access

Hi Wayne,

We are commencing discussions with TCCS about the proposed site off Stockdill Drive and was wondering if you are able to give us an indication of how many vehicles you get per day to the current CSG Parkwood site at your busiest periods. Presumably this would be on a weekend.

Thanks



Peter Lewis

Urban Development Leader - ACT

P +61 2 6211 7100 **D** +61 2 6211 7133 **M** +61 407 035 447

E Peter.Lewis@calibregroup.com

Level 6,121 Marcus Clarke Street, Canberra City ACT 2601

[View the legal disclaimer.](#)

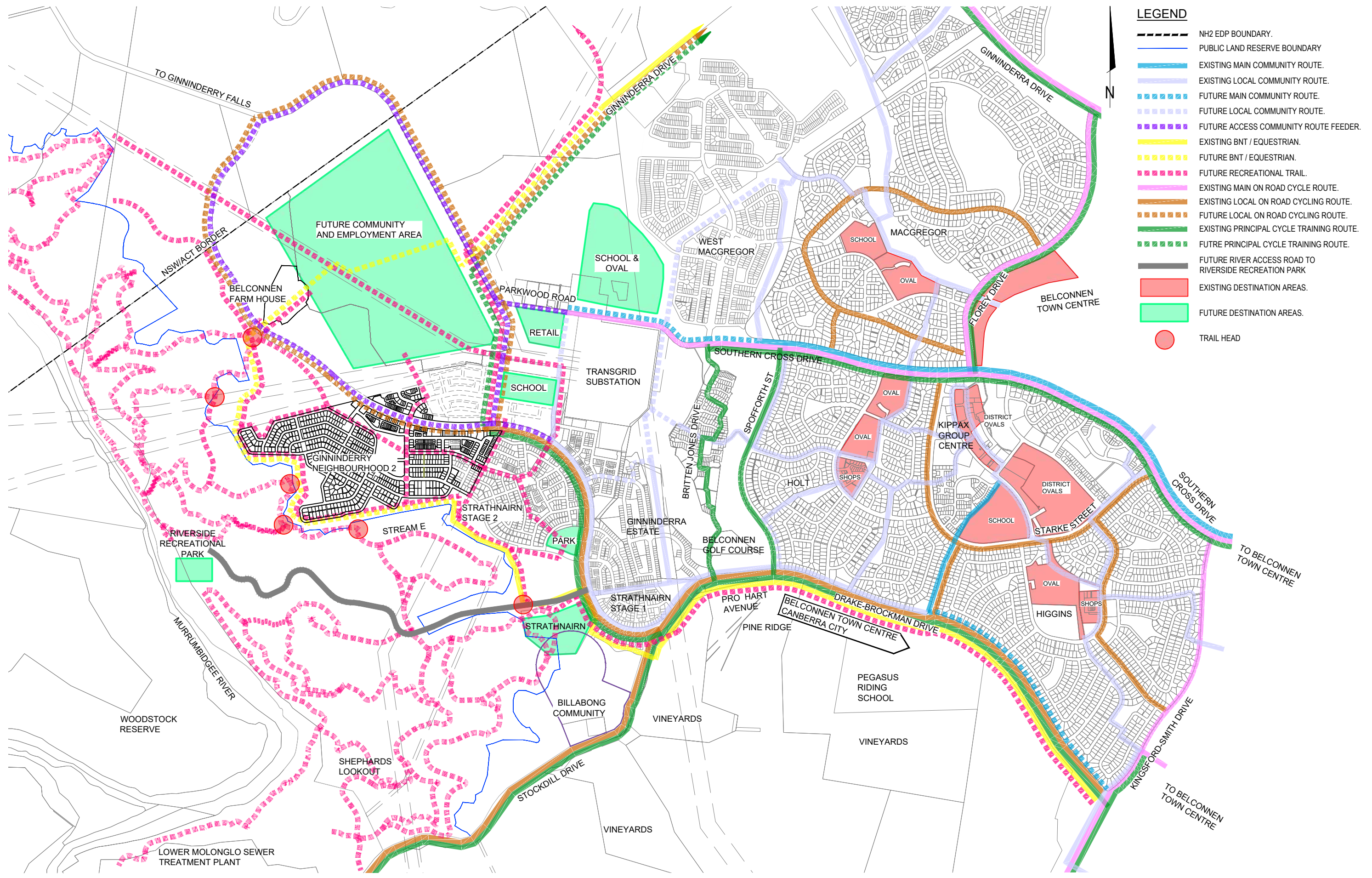


Enabling Communities to Thrive 

CANBERRA SAND AND GRAVEL-TRAFFIC IMPACT ASSESSMENT

Appendix E Macnamara EDP1 Active Travel

RIVERVIEW PROJECTS



FIRST ISSUE	DESIGN	DRAWN	CHECK	APPROVED	DATE
	PL	JK	AK	CU	31/07/2020

AMENDMENT DETAILS	STATUS
	ESTATE DEVELOPMENT PLAN
	Authorised for Issue:
	BY:
	SIGN: DATE:

SCALE
0 100 200 300 400 500 600 700 800
SCALE 1:10000 (A1) SCALE 1:20000 (A3)

WAE No. _____

CLIENT/CONSULTANTS

Ginninderra redbox designgroup

Tait Network

PROJECT

MACNAMARA EDP 1

calibre

calibregroup.com

DRAWING TITLE

ACTIVE TRAVEL NETWORK EXISTING AND FUTURE PLAN

SHEET 1 OF 4

PROJECT No. 19-000561

DRAWING No. E1.21.01

REVISION B

REVISION	DATE	DESCRIPTION				
A	JK	JK	CU	CU	19/12/2020	LAYOUT CHANGES & UPDATES FOR EDP COMMENTS
B	PL	JK	CU	CU	30/03/2021	ISSUE FOR DA