



25 September 2018
Ref 17160

Roads and Maritime Services
PO Box 973
PARRAMATTA NSW 2150

Attn: Mr Greg Flynn

Dear Greg,

PLANNING PROPOSAL
88-96 NEW ILLAWARRA ROAD & 307-311A BEXLEY ROAD, BEXLEY NORTH
ADDENDUM TRAFFIC REPORT

I refer to your letter dated 2 July 2018 [your reference SYD18/00752 (A22692424)] requesting additional information in respect of the traffic matters associated with the abovementioned planning proposal.

1. The maximum development potential of the subject site under the *R4 – High Density Residential* zoning envisaged by the planning proposal is approximately 100 dwellings in 3 new 5 to 6-storey residential apartment buildings.
2. Your advice that the *average* traffic generation rates nominated in Roads and Maritime's *Technical Direction TDT 2013/04A Updated Traffic Surveys* included survey sites at St Leonards and Chatswood "with greater public transport mode share than might be expected at the site" is noted. However, the *average* rates also include other sites such as Liberty Grove and Rockdale with lower public transport mode shares than might be expected at the site. The use of the *average* rates derived from all survey sites was therefore considered to be the most appropriate.

In particular, it is noted that whilst the Chatswood and St Leonards site are located 160m and 350m respectively from the railway station, the Liberty Grove and Rockdale sites were located 1km and 900m respectively from the railway station.

The subject site at Bexley North is located just 250m from Bexley North Railway Station, and it is therefore envisaged that this site would achieve public transport mode shares similar to Chatswood and St Leonards rather than Liberty Grove or Rockdale.

Notwithstanding the above, for the purposes of this addendum traffic assessment, the "*Rockdale*" rates have been adopted as suggested in your letter.

The projected traffic generation potential of the planning proposal based on the *average* and the *Rockdale* rates is set out in the table below. I note that the difference in the traffic generation potential of the site is minimal in any event.

Planning Proposal Traffic Generation Potential
Comparison of *Average* & *Rockdale* Traffic Generation Rates

	"Average" Rates		"Rockdale" Rates	
	AM	PM	AM	PM
Planning Proposal (100 Apartments):	19 vph	15 vph	32 vph	18 vph

3. The proposed removal of the existing service station on the site will result in a very substantial reduction in the traffic generation potential of the site, as noted in your letter.
4. The projected traffic generation potential has been assigned to the surrounding road network in accordance with the trends identified by the "Journey To Work" data for the subject locality. The traffic assignments using the *average* and the *Rockdale* traffic generation rates are illustrated in the diagrams below. Those traffic assignments are largely consistent with the traffic assignment provided in the original traffic report.

Consistent with the methodology adopted in the original traffic report, it has been assumed that the site is currently *vacant*, and that no discounting has been applied to reflect the proposed closure of the existing service station on the site as shown on the attached plan

The results of the updated SIDRA analysis are summarised in the tables below and the Updated Movement Summaries are attached, revealing that *all* of the intersection will continue to operate at current *Levels of Service* and not road improvements or intersection upgrades are required as a consequence of the planning proposal.

5. It is agreed that the planning proposal should include improvements to pedestrian facilities to improve links to Bexley North Railway Station. An improved pedestrian crossing facility on New Illawarra Road is suggested, most likely to the north of the Fortescue Street intersection to provide the shortest, most direct walking route to the station for future residents.
6. A site specific DCP could be prepared as part of the planning proposal to set out the access arrangements for the site to guide future development. The DCP could require all vehicular access to the site to be provided via the New Illawarra Road frontage of the site only.

The two sites which are the subject of this planning proposal will each be accessed via a single driveway, to be located near the southern boundary of each site.

As the two sites are in separate ownership and may be developed at different times, the provision of a single, consolidated access driveway serving both sites is not feasible. Each site will generate minimal traffic activity in any event, given the close proximity of Bexley North Railway Station.

By way of comparison, the attached plan shows the 12 existing driveways currently serving the site, as well as the 10 driveways which would be required if the site was redeveloped in accordance with the current zoning controls.

It is clear that the planning proposal represents the best outcome in terms of driveway numbers and location, with zero driveways proposed in Bexley Road and only two driveways proposed in New Illawarra Road.

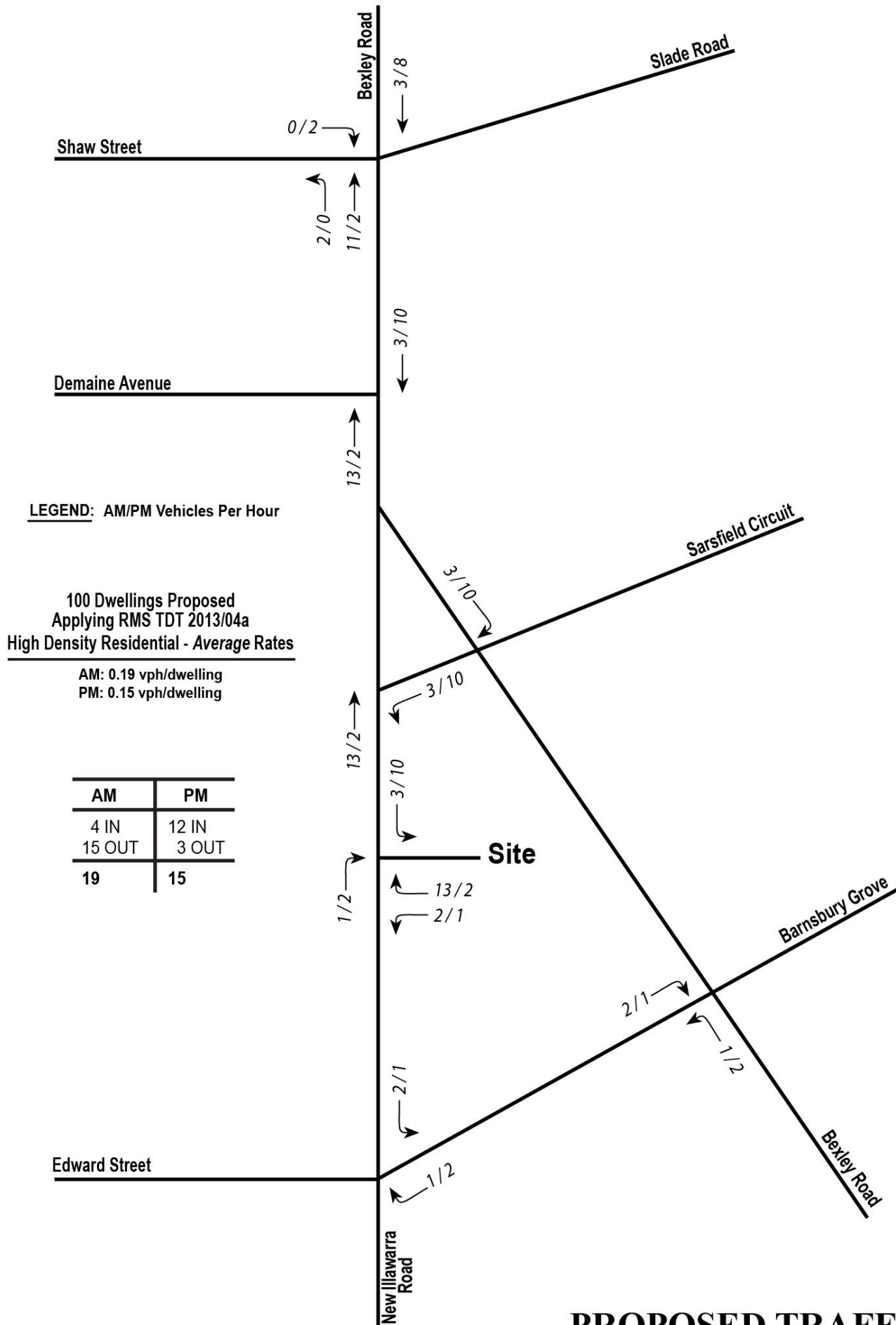
7. The amount of car parking to be provided on the site is not yet known, however it is likely to be consistent with requirements of SEPP 65 which nominates the parking rates specified in the RMS *Guidelines* for high density residential flat buildings.

Please do not hesitate to contact me on telephone 9904 3224 should you have any enquiries.

Yours sincerely



Robert Varga
Director
Varga Traffic Planning Pty Ltd



PROPOSED TRAFFIC DISTRIBUTION ASSIGNMENT TDT 2013/04a "Average" Rates

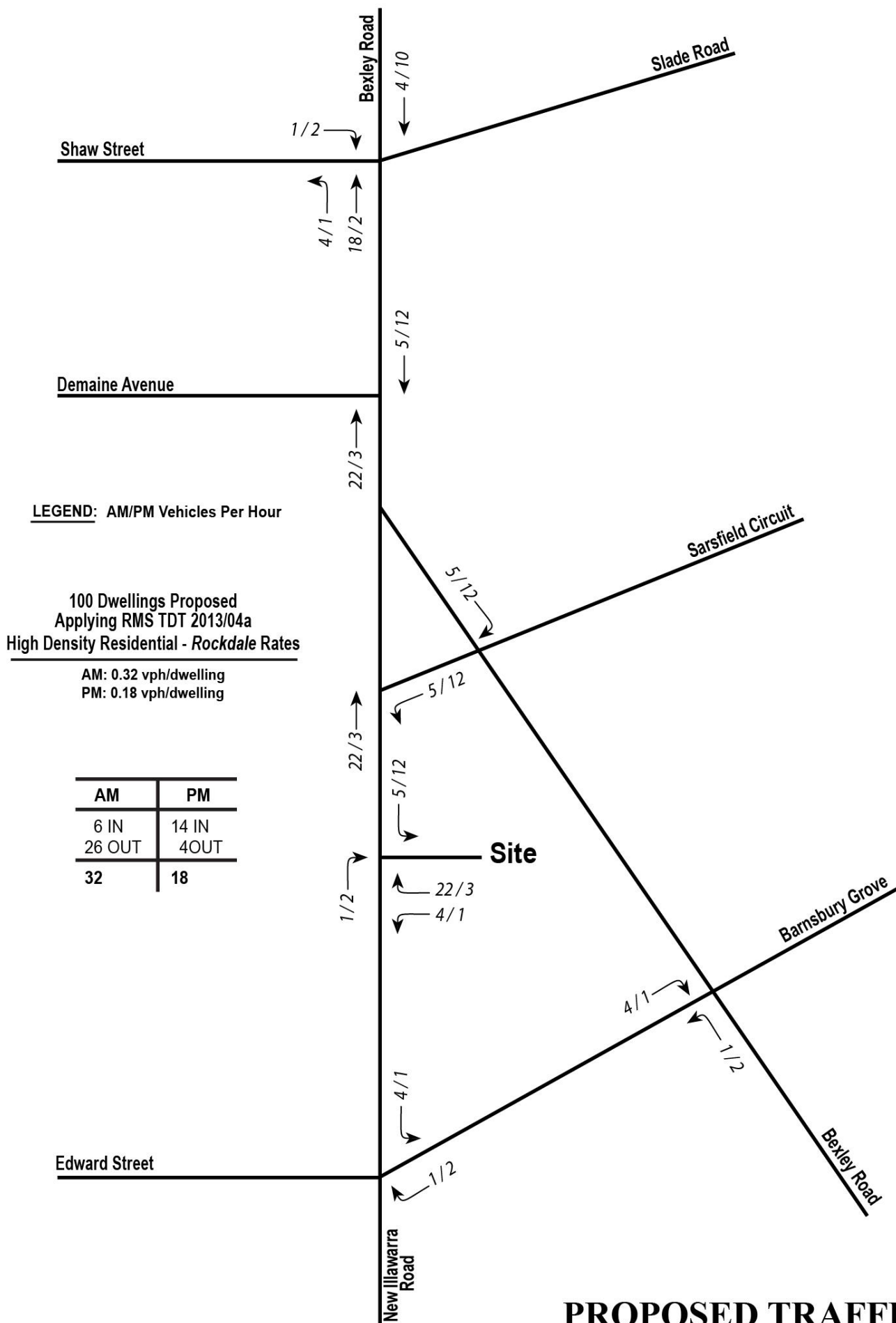


TABLE 3.1 – RESULTS OF SIDRA ANALYSIS OF BEXLEY ROAD, SHAW STREET & SLADE ROAD						
Key Indicators	Existing Traffic Demand		Projected Additional Traffic Demand			
			“Average” Rates		“Rockdale” Rates	
	AM	PM	AM	PM	AM	PM
Level of Service	E	D	E	D	E	D
Degree of Saturation	0.936	0.880	0.929	0.880	0.934	0.880
Average Vehicle Delay (secs/veh)	67.9	52.0	67.1	52.7	67.8	52.8

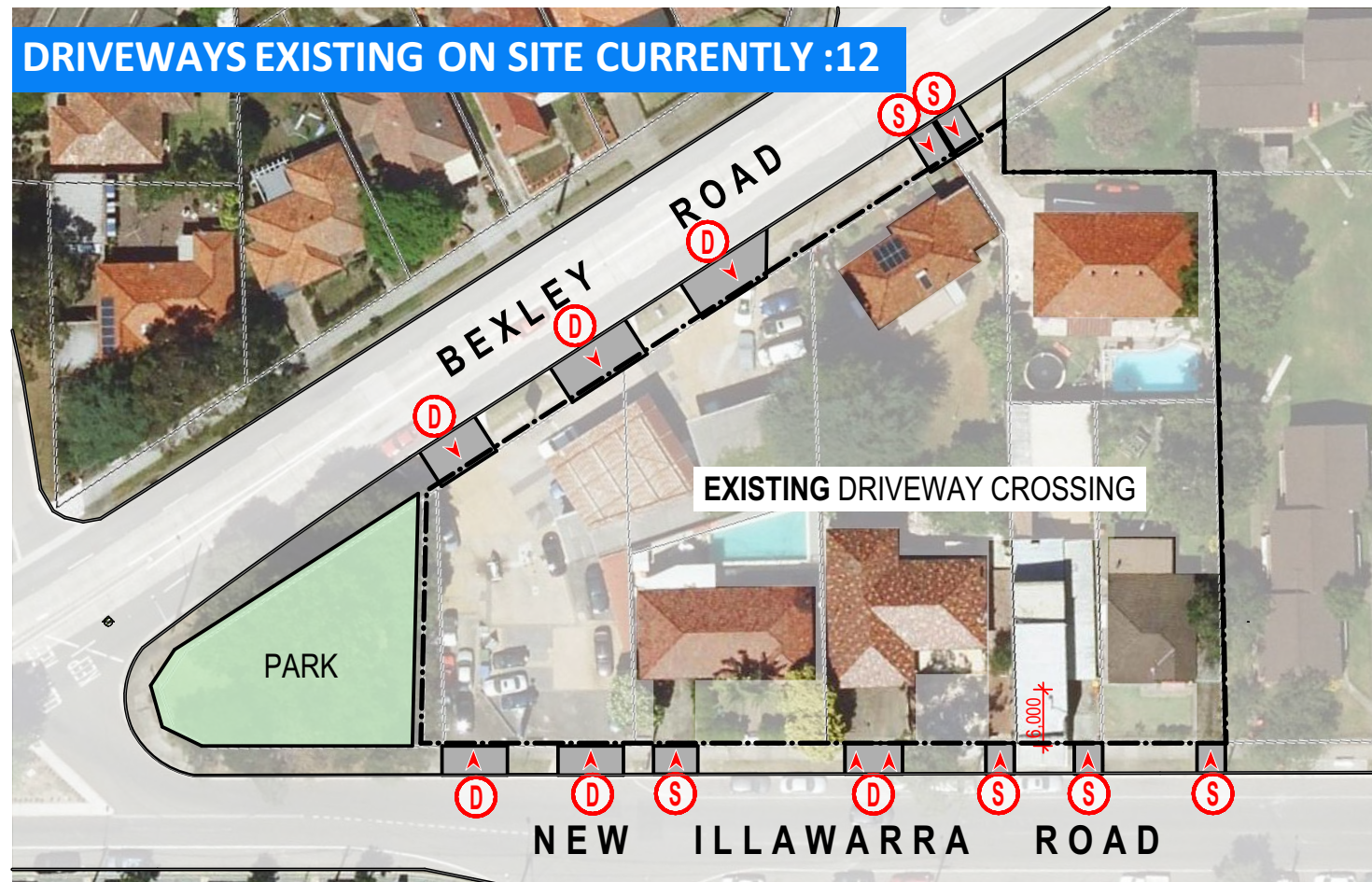
TABLE 3.2 – RESULTS OF SIDRA ANALYSIS OF BEXLEY ROAD & DERMAINE AVENUE						
Key Indicators	Existing Traffic Demand		Projected Additional Traffic Demand			
			“Average” Rates		“Rockdale” Rates	
	AM	PM	AM	PM	AM	PM
Level of Service	A	A	A	A	A	A
Degree of Saturation	0.394	0.382	0.394	0.386	0.394	0.387
Average Vehicle Delay (secs/veh)	0.8	0.2	0.8	0.2	0.8	0.2

TABLE 3.3 – RESULTS OF SIDRA ANALYSIS OF BEXLEY ROAD, NEW ILLAWARRA ROAD & SARSFIELD CIRCUIT						
Key Indicators	Existing Traffic Demand		Projected Additional Traffic Demand			
			“Average” Rates		“Rockdale” Rates	
	AM	PM	AM	PM	AM	PM
Level of Service	A	A	A	A	A	A
Degree of Saturation	0.718	0.871	0.724	0.891	0.728	0.895
Average Vehicle Delay (secs/veh)	3.4	5.5	3.4	6.1	3.5	6.2

TABLE 3.4 – RESULTS OF SIDRA ANALYSIS OF BEXLEY ROAD & BARNSBURY GROVE						
Key Indicators	Existing Traffic Demand		Projected Additional Traffic Demand			
			“Average” Rates		“Rockdale” Rates	
	AM	PM	AM	PM	AM	PM
Level of Service	B	A	B	A	B	B
Degree of Saturation	0.739	0.855	0.739	0.855	0.754	0.855
Average Vehicle Delay (secs/veh)	16.3	15.0	16.3	15.0	16.4	15.0

TABLE 3.5 – RESULTS OF SIDRA ANALYSIS OF BEXLEY ROAD & SHAW STREET & SLADE ROAD						
Key Indicators	Existing Traffic Demand		Projected Additional Traffic Demand			
			“Average” Rates		“Rockdale” Rates	
	AM	PM	AM	PM	AM	PM
Level of Service	A	A	A	A	A	A
Degree of Saturation	0.436	0.478	0.436	0.481	0.436	0.481
Average Vehicle Delay (secs/veh)	7.2	7.5	7.2	7.5	7.2	7.5

DRIVEWAYS EXISTING ON SITE CURRENTLY :12



KEY

- S > SINGLE 3m WIDE
- D > DOUBLE >5.5m WIDE

DRIVEWAY CROSSING ANALYSIS

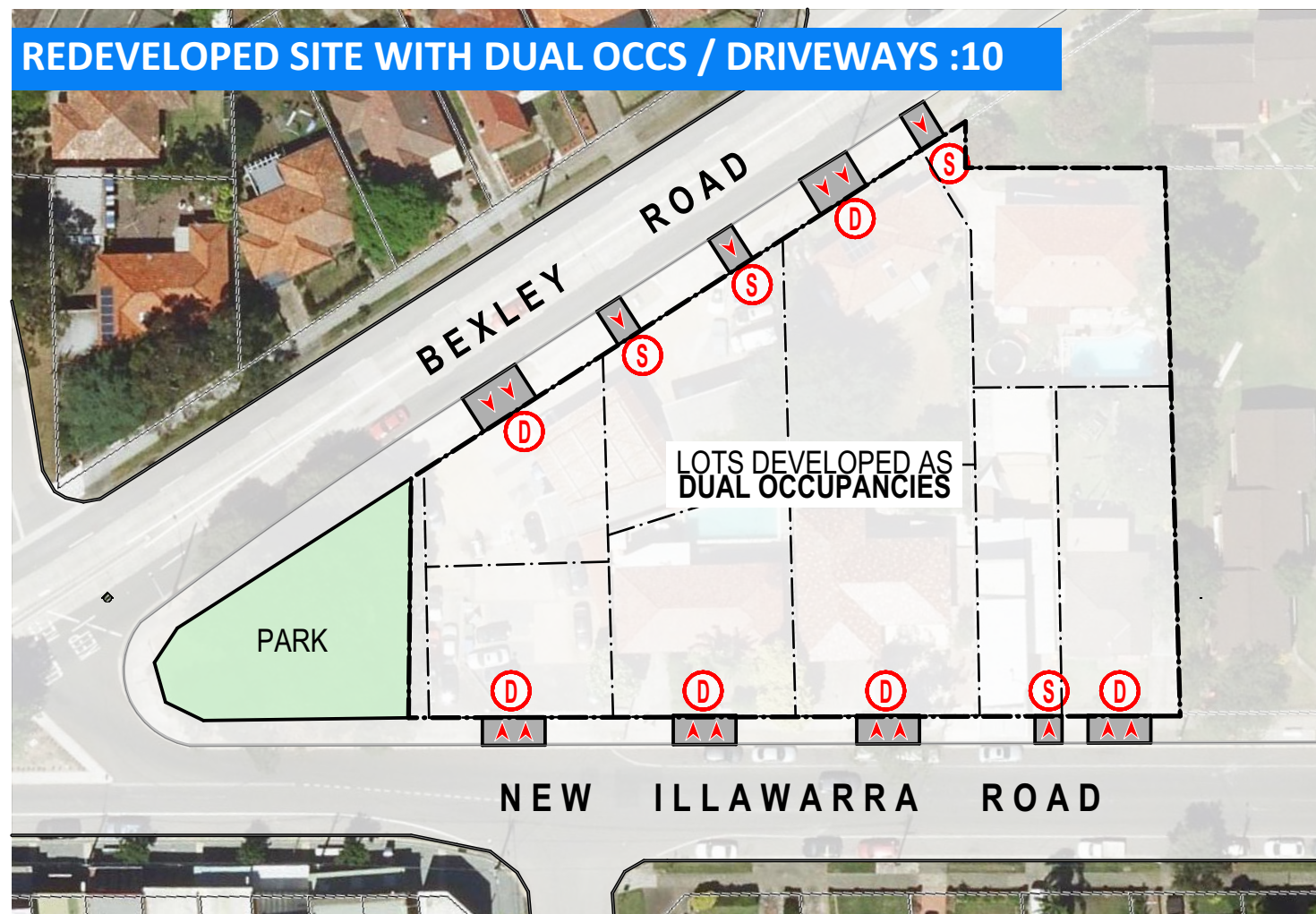
The diagrams show the number of existing driveway crossings in use within the site. What the likely outcomes are if all the sites are re-developed to their highest potential with the existing DCP/LEP controls and finally the outcome under the planning proposal.

EXISTING: There are 12 driveway crossings and several driveways wider than 5.5 accessing the petrol station.

RE-DEVELOPED TO EXISTING DCP/LEP: If the site is develop under the existing site controls there would be 10 driveways under a best case senario. These like the existing are on Bexley Rd & New Illawarra Rd.

PLANNING PROPOSAL: Under our proposal for the site as residential flats there would only be 2 driveways proposed, both of which would be on New Illawarra Rd.

REDEVELOPED SITE WITH DUAL OCCS / DRIVEWAYS :10



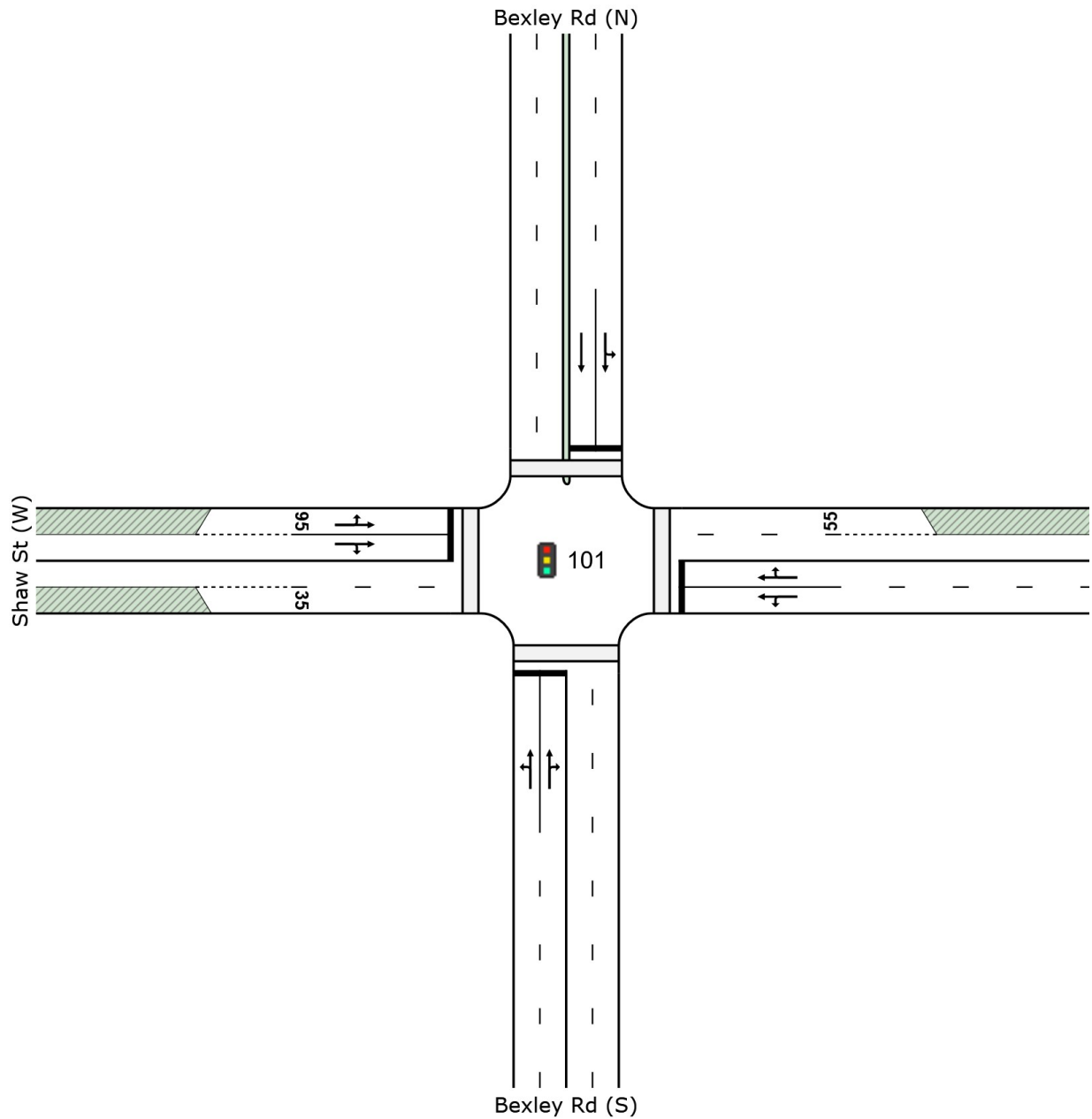
DRIVEWAYS PROPOSED IN PLANNING PROPOSAL: 2



SITE LAYOUT

 **Site: 101 [BEX_SHA_SLAX AM]**

Bexley Rd, Shaw St & Slade Rd, Bexley Nth
Signals - Fixed Time Isolated



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Organisation: VARGA TRAFFIC PLANNING | Created: Tuesday, 18 September 2018 5:12:24 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewllawaraRdBexleyNorth\SIDRA\180918\Existing Network.sip7

MOVEMENT SUMMARY

 Site: 101 [BEX_SHA_SLAX AM]

 Network: N101 [Existing Network AM]

Bexley Rd, Shaw St & Slade Rd, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	30	0.0	30	0.0	0.936	56.0	LOS D	73.6	522.2	1.00	1.03	28.0
2	T1	1270	1.7	1270	1.7	0.936	58.6	LOS E	73.6	522.2	1.00	1.09	19.8
3	R2	175	0.0	175	0.0	0.936	87.8	LOS F	37.7	266.2	1.00	1.27	21.3
Approach		1475	1.4	1475	1.4	0.936	62.0	LOS E	73.6	522.2	1.00	1.11	20.3
East: Slade Rd (E)													
4	L2	109	0.0	109	0.0	0.192	57.3	LOS E	9.9	69.0	0.89	0.78	20.0
5	T1	121	0.0	121	0.0	0.720	58.2	LOS E	18.4	128.5	0.95	0.82	27.2
6	R2	193	0.0	193	0.0	0.720	66.7	LOS E	18.4	128.5	1.00	0.85	21.2
Approach		423	0.0	423	0.0	0.720	61.8	LOS E	18.4	128.5	0.96	0.83	22.9
North: Bexley Rd (N)													
7	L2	106	0.0	106	0.0	0.917	81.2	LOS F	41.6	295.1	1.00	1.07	19.4
8	T1	909	1.9	909	1.9	0.917	73.6	LOS F	41.9	297.7	1.00	1.06	7.1
Approach		1015	1.7	1015	1.7	0.917	74.4	LOS F	41.9	297.7	1.00	1.06	8.9
West: Shaw St (W)													
10	L2	104	0.0	104	0.0	0.382	67.6	LOS E	7.0	48.7	0.95	0.78	20.8
11	T1	216	0.0	216	0.0	0.920	85.5	LOS F	22.0	154.2	1.00	1.08	23.0
12	R2	45	0.0	45	0.0	0.920	90.0	LOS F	22.0	154.2	1.00	1.08	15.1
Approach		365	0.0	365	0.0	0.920	80.9	LOS F	22.0	154.2	0.99	1.00	21.6
All Vehicles		3278	1.2	3278	1.2	0.936	67.9	LOS E	73.6	522.2	0.99	1.05	17.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %
 Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	57.3	LOS E	0.2	0.2	0.88	0.88
P2	East Full Crossing	53	45.7	LOS E	0.2	0.2	0.78	0.78
P3	North Full Crossing	53	64.5	LOS F	0.2	0.2	0.93	0.93
P4	West Full Crossing	53	20.8	LOS C	0.1	0.1	0.53	0.53
All Pedestrians		211	47.1	LOS E			0.78	0.78

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

MOVEMENT SUMMARY

 Site: 101 [BEX_SHA_SLAX PM]

 Network: N101 [Existing Network PM]

Bexley Rd, Shaw St & Slade Rd, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	25	0.0	25	0.0	0.863	38.3	LOS C	53.2	375.4	0.94	0.89	33.5
2	T1	1114	1.1	1114	1.1	0.863	40.2	LOS C	53.2	375.4	0.95	0.95	25.0
3	R2	139	0.0	139	0.0	0.863	70.4	LOS E	26.1	184.1	1.00	1.17	24.3
Approach		1278	0.9	1278	0.9	0.863	43.4	LOS D	53.2	375.4	0.96	0.97	25.1
East: Slade Rd (E)													
4	L2	139	0.0	139	0.0	0.251	30.0	LOS C	5.7	39.8	0.65	0.72	27.7
5	T1	194	0.0	194	0.0	0.880	65.3	LOS E	29.9	209.2	1.00	0.98	26.0
6	R2	211	0.0	211	0.0	0.880	69.9	LOS E	29.9	209.2	1.00	0.98	20.7
Approach		544	0.0	544	0.0	0.880	58.1	LOS E	29.9	209.2	0.91	0.92	24.1
North: Bexley Rd (N)													
7	L2	152	0.0	152	0.0	0.859	59.2	LOS E	37.9	267.2	1.00	0.99	23.5
8	T1	966	1.2	966	1.2	0.859	53.2	LOS D	38.4	271.5	1.00	0.98	9.4
Approach		1118	1.1	1118	1.1	0.859	54.1	LOS D	38.4	271.5	1.00	0.98	12.2
West: Shaw St (W)													
10	L2	49	0.0	49	0.0	0.301	69.1	LOS E	3.7	25.6	0.97	0.75	20.6
11	T1	135	0.0	135	0.0	0.866	76.1	LOS F	12.5	87.5	1.00	0.98	24.3
12	R2	39	0.0	39	0.0	0.866	81.3	LOS F	12.5	87.5	1.00	0.99	16.2
Approach		223	0.0	223	0.0	0.866	75.4	LOS F	12.5	87.5	0.99	0.93	22.4
All Vehicles		3163	0.8	3163	0.8	0.880	52.0	LOS D	53.2	375.4	0.97	0.96	20.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
 Number of Iterations: 8 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	48.2	LOS E	0.2	0.2	0.83	0.83
P2	East Full Crossing	53	38.0	LOS D	0.2	0.2	0.74	0.74
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	20.7	LOS C	0.1	0.1	0.54	0.54
All Pedestrians		211	42.8	LOS E			0.77	0.77

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

MOVEMENT SUMMARY

 Site: 101 [BEX_SHA_SLAP AM]

 Network: N101 [Proposed Network AM]

Bexley Rd, Shaw St & Slade Rd, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	33	0.0	33	0.0	0.929	52.7	LOS D	73.6	522.2	0.99	1.01	28.9
2	T1	1281	1.6	1281	1.6	0.929	55.5	LOS D	73.6	522.2	0.99	1.07	20.5
3	R2	175	0.0	175	0.0	0.929	84.7	LOS F	37.5	264.9	1.00	1.26	21.8
Approach		1489	1.4	1489	1.4	0.929	58.9	LOS E	73.6	522.2	0.99	1.09	21.0
East: Slade Rd (E)													
4	L2	109	0.0	109	0.0	0.197	59.4	LOS E	10.3	72.1	0.91	0.79	19.6
5	T1	121	0.0	121	0.0	0.736	59.7	LOS E	18.4	128.5	0.96	0.83	26.9
6	R2	193	0.0	193	0.0	0.736	68.1	LOS E	18.4	128.5	1.00	0.86	20.9
Approach		423	0.0	423	0.0	0.736	63.4	LOS E	18.4	128.5	0.97	0.84	22.6
North: Bexley Rd (N)													
7	L2	106	0.0	106	0.0	0.920	82.1	LOS F	42.0	297.7	1.00	1.07	19.3
8	T1	912	1.9	912	1.9	0.920	74.4	LOS F	42.2	300.2	1.00	1.06	7.1
Approach		1018	1.7	1018	1.7	0.920	75.2	LOS F	42.2	300.2	1.00	1.07	8.8
West: Shaw St (W)													
10	L2	104	0.0	104	0.0	0.382	67.6	LOS E	7.0	48.7	0.95	0.78	20.8
11	T1	216	0.0	216	0.0	0.928	87.2	LOS F	22.4	157.1	1.00	1.10	22.7
12	R2	47	0.0	47	0.0	0.928	91.7	LOS F	22.4	157.1	1.00	1.10	14.9
Approach		367	0.0	367	0.0	0.928	82.2	LOS F	22.4	157.1	0.99	1.01	21.4
All Vehicles		3297	1.2	3297	1.2	0.929	67.1	LOS E	73.6	522.2	0.99	1.04	17.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %
 Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	53	58.2	LOS E	0.2	0.2	0.88	0.88	
P2	East Full Crossing	53	45.7	LOS E	0.2	0.2	0.78	0.78	
P3	North Full Crossing	53	64.5	LOS F	0.2	0.2	0.93	0.93	
P4	West Full Crossing	53	20.3	LOS C	0.1	0.1	0.52	0.52	
All Pedestrians		211	47.2	LOS E			0.78	0.78	

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

MOVEMENT SUMMARY

 Site: 101 [BEX_SHA_SLAP PM]

 Network: N101 [Proposed Network PM]

Bexley Rd, Shaw St & Slade Rd, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec				veh	m	
South: Bexley Rd (S)													
1	L2	25	0.0	25	0.0	0.868	39.2	LOS C	54.3	383.4	0.94	0.90	33.2
2	T1	1116	1.1	1116	1.1	0.868	41.0	LOS C	54.3	383.4	0.95	0.96	24.7
3	R2	139	0.0	139	0.0	0.868	71.7	LOS F	26.1	183.9	1.00	1.18	24.1
Approach		1280	0.9	1280	0.9	0.868	44.3	LOS D	54.3	383.4	0.96	0.98	24.8
East: Slade Rd (E)													
4	L2	139	0.0	139	0.0	0.251	30.0	LOS C	5.7	39.8	0.65	0.72	27.7
5	T1	194	0.0	194	0.0	0.880	65.3	LOS E	29.9	209.2	1.00	0.98	26.0
6	R2	211	0.0	211	0.0	0.880	69.9	LOS E	29.9	209.2	1.00	0.98	20.7
Approach		544	0.0	544	0.0	0.880	58.1	LOS E	29.9	209.2	0.91	0.92	24.1
North: Bexley Rd (N)													
7	L2	152	0.0	152	0.0	0.865	60.1	LOS E	38.6	272.1	1.00	0.99	23.3
8	T1	974	1.2	974	1.2	0.865	54.1	LOS D	39.1	276.3	1.00	0.98	9.3
Approach		1126	1.1	1126	1.1	0.865	54.9	LOS D	39.1	276.3	1.00	0.98	12.0
West: Shaw St (W)													
10	L2	49	0.0	49	0.0	0.303	69.2	LOS E	3.7	25.8	0.97	0.75	20.6
11	T1	135	0.0	135	0.0	0.874	76.8	LOS F	12.7	88.8	1.00	0.99	24.2
12	R2	41	0.0	41	0.0	0.874	82.1	LOS F	12.7	88.8	1.00	1.00	16.1
Approach		225	0.0	225	0.0	0.874	76.1	LOS F	12.7	88.8	0.99	0.94	22.3
All Vehicles		3175	0.8	3175	0.8	0.880	52.7	LOS D	54.3	383.4	0.97	0.97	20.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
 Number of Iterations: 8 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	53	48.2	LOS E	0.2	0.2	0.83	0.83	
P2	East Full Crossing	53	38.0	LOS D	0.2	0.2	0.74	0.74	
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96	
P4	West Full Crossing	53	20.7	LOS C	0.1	0.1	0.54	0.54	
All Pedestrians		211	42.8	LOS E			0.77	0.77	

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

MOVEMENT SUMMARY

 Site: 101 [BEX_SHA_SLAP AM]

 Network: N101 [Proposed Network AM]

Bexley Rd, Shaw St & Slade Rd, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	34	0.0	34	0.0	0.934	54.3	LOS D	73.6	522.2	1.00	1.02	28.4
2	T1	1288	1.6	1288	1.6	0.934	57.1	LOS E	73.6	522.2	1.00	1.09	20.1
3	R2	175	0.0	175	0.0	0.934	86.1	LOS F	38.1	269.2	1.00	1.27	21.6
Approach		1497	1.4	1497	1.4	0.934	60.5	LOS E	73.6	522.2	1.00	1.11	20.6
East: Slade Rd (E)													
4	L2	109	0.0	109	0.0	0.197	59.4	LOS E	10.3	72.1	0.91	0.79	19.6
5	T1	121	0.0	121	0.0	0.736	59.7	LOS E	18.4	128.5	0.96	0.83	26.9
6	R2	193	0.0	193	0.0	0.736	68.1	LOS E	18.4	128.5	1.00	0.86	20.9
Approach		423	0.0	423	0.0	0.736	63.4	LOS E	18.4	128.5	0.97	0.84	22.6
North: Bexley Rd (N)													
7	L2	106	0.0	106	0.0	0.921	82.4	LOS F	42.1	298.6	1.00	1.08	19.2
8	T1	913	1.9	913	1.9	0.921	74.7	LOS F	42.3	301.0	1.00	1.07	7.0
Approach		1019	1.7	1019	1.7	0.921	75.5	LOS F	42.3	301.0	1.00	1.07	8.8
West: Shaw St (W)													
10	L2	104	0.0	104	0.0	0.382	67.6	LOS E	7.0	48.7	0.95	0.78	20.8
11	T1	216	0.0	216	0.0	0.924	86.3	LOS F	22.2	155.6	1.00	1.09	22.8
12	R2	46	0.0	46	0.0	0.924	90.8	LOS F	22.2	155.6	1.00	1.09	15.0
Approach		366	0.0	366	0.0	0.924	81.5	LOS F	22.2	155.6	0.99	1.00	21.5
All Vehicles		3305	1.1	3305	1.1	0.934	67.8	LOS E	73.6	522.2	0.99	1.05	17.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %
 Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian	Distance		per ped	
					ped	m			
P1	South Full Crossing	53	58.2	LOS E	0.2	0.2	0.88	0.88	
P2	East Full Crossing	53	45.7	LOS E	0.2	0.2	0.78	0.78	
P3	North Full Crossing	53	64.5	LOS F	0.2	0.2	0.93	0.93	
P4	West Full Crossing	53	20.3	LOS C	0.1	0.1	0.52	0.52	
All Pedestrians		211	47.2	LOS E			0.78	0.78	

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

MOVEMENT SUMMARY

 Site: 101 [BEX_SHA_SLAP PM]

 Network: N101 [Proposed Network PM]

Bexley Rd, Shaw St & Slade Rd, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec				veh	m	
South: Bexley Rd (S)													
1	L2	26	0.0	26	0.0	0.869	39.3	LOS C	54.5	384.7	0.94	0.90	33.1
2	T1	1116	1.1	1116	1.1	0.869	41.2	LOS C	54.5	384.7	0.95	0.96	24.7
3	R2	139	0.0	139	0.0	0.869	71.9	LOS F	26.2	184.3	1.00	1.18	24.0
Approach		1281	0.9	1281	0.9	0.869	44.5	LOS D	54.5	384.7	0.96	0.98	24.8
East: Slade Rd (E)													
4	L2	139	0.0	139	0.0	0.251	30.0	LOS C	5.7	39.8	0.65	0.72	27.7
5	T1	194	0.0	194	0.0	0.880	65.3	LOS E	29.9	209.2	1.00	0.98	26.0
6	R2	211	0.0	211	0.0	0.880	69.9	LOS E	29.9	209.2	1.00	0.98	20.7
Approach		544	0.0	544	0.0	0.880	58.1	LOS E	29.9	209.2	0.91	0.92	24.1
North: Bexley Rd (N)													
7	L2	152	0.0	152	0.0	0.867	60.4	LOS E	38.7	273.3	1.00	1.00	23.3
8	T1	976	1.2	976	1.2	0.867	54.3	LOS D	39.2	277.6	1.00	0.98	9.2
Approach		1128	1.1	1128	1.1	0.867	55.2	LOS D	39.2	277.6	1.00	0.99	12.0
West: Shaw St (W)													
10	L2	49	0.0	49	0.0	0.303	69.2	LOS E	3.7	25.8	0.97	0.75	20.6
11	T1	135	0.0	135	0.0	0.874	76.8	LOS F	12.7	88.8	1.00	0.99	24.2
12	R2	41	0.0	41	0.0	0.874	82.1	LOS F	12.7	88.8	1.00	1.00	16.1
Approach		225	0.0	225	0.0	0.874	76.1	LOS F	12.7	88.8	0.99	0.94	22.3
All Vehicles		3178	0.8	3178	0.8	0.880	52.8	LOS D	54.5	384.7	0.97	0.97	20.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
 Number of Iterations: 9 (maximum specified: 10)

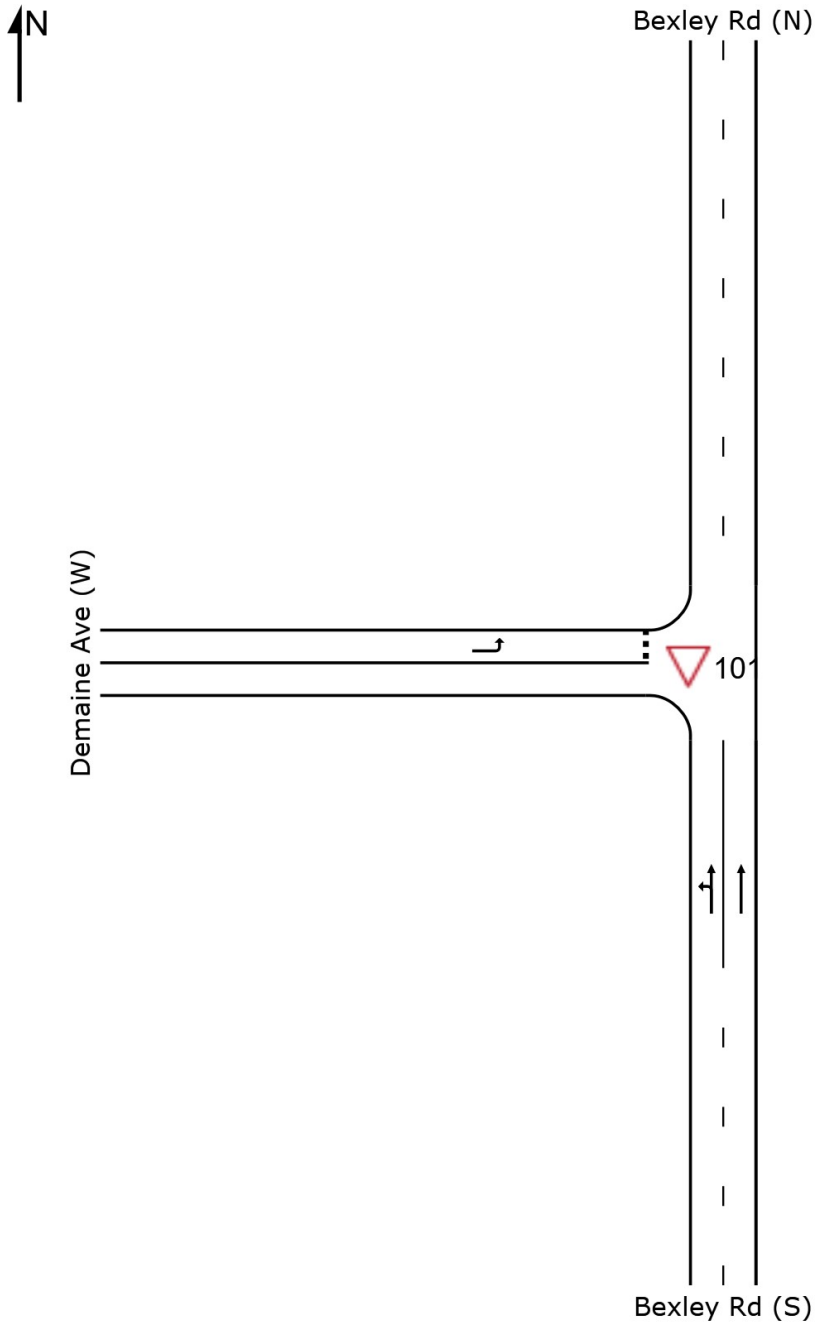
Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	53	48.2	LOS E	0.2	0.2	0.83	0.83
P2	East Full Crossing	53	38.0	LOS D	0.2	0.2	0.74	0.74
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	20.7	LOS C	0.1	0.1	0.54	0.54
All Pedestrians		211	42.8	LOS E			0.77	0.77

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

SITE LAYOUT

▽ Site: 101 [BEX_DEMX AM]

Bexley Rd & Demaine Ave, Bexley Nth
Giveway / Yield (Two-Way)



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Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96New\llawaraRdBexleyNorth\SIDRA\180918\Existing Network.sip7

MOVEMENT SUMMARY

Site: 101 [BEX_DEMX AM]

Network: N101 [Existing Network AM]

Bexley Rd & Demaine Ave, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	2	0.0	2	0.0	0.394	5.6	LOS A	2.8	19.7	0.00	0.00	58.3
2	T1	1520	1.6	1520	1.6	0.394	0.1	LOS A	2.8	19.7	0.00	0.00	59.9
Approach		1522	1.6	1522	1.6	0.394	0.1	NA	2.8	19.7	0.00	0.00	59.9
West: Demaine Ave (W)													
10	L2	132	0.0	132	0.0	0.375	9.9	LOS A	0.8	5.8	0.62	0.87	39.5
Approach		132	0.0	132	0.0	0.375	9.9	LOS A	0.8	5.8	0.62	0.87	39.5
All Vehicles		1654	1.5	1654	1.5	0.394	0.8	NA	2.8	19.7	0.05	0.07	57.5

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [BEX_DEMX PM]

Network: N101 [Existing Network PM]

Bexley Rd & Demaine Ave, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	8	0.0	8	0.0	0.382	5.6	LOS A	0.0	0.0	0.00	0.01	58.2
2	T1	1325	1.6	1325	1.6	0.382	0.1	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1333	1.6	1333	1.6	0.382	0.1	NA	0.0	0.0	0.00	0.00	59.8
West: Demaine Ave (W)													
10	L2	12	0.0	12	0.0	0.017	6.9	LOS A	0.0	0.3	0.51	0.63	42.2
Approach		12	0.0	12	0.0	0.017	6.9	LOS A	0.0	0.3	0.51	0.63	42.2
All Vehicles		1345	1.6	1345	1.6	0.382	0.2	NA	0.0	0.3	0.00	0.01	59.6

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %

Number of Iterations: 8 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [BEX_DEMP AM]

Network: N101 [Proposed Network AM]

Bexley Rd & Demaine Ave, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	2	0.0	2	0.0	0.394	5.6	LOS A	1.1	8.1	0.00	0.00	58.3
2	T1	1520	1.6	1520	1.6	0.394	0.1	LOS A	1.1	8.1	0.00	0.00	59.9
Approach		1522	1.6	1522	1.6	0.394	0.1	NA	1.1	8.1	0.00	0.00	59.9
West: Demaine Ave (W)													
10	L2	132	0.0	132	0.0	0.375	9.9	LOS A	0.8	5.8	0.62	0.87	39.5
Approach		132	0.0	132	0.0	0.375	9.9	LOS A	0.8	5.8	0.62	0.87	39.5
All Vehicles		1654	1.5	1654	1.5	0.394	0.8	NA	1.1	8.1	0.05	0.07	57.5

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [BEX_DEMP PM]

Network: N101 [Proposed Network PM]

Bexley Rd & Demaine Ave, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	8	0.0	8	0.0	0.386	5.6	LOS A	0.0	0.0	0.00	0.01	58.2
2	T1	1325	1.6	1325	1.6	0.386	0.1	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1333	1.6	1333	1.6	0.386	0.1	NA	0.0	0.0	0.00	0.00	59.8
West: Demaine Ave (W)													
10	L2	12	0.0	12	0.0	0.017	6.9	LOS A	0.0	0.3	0.50	0.63	42.2
Approach		12	0.0	12	0.0	0.017	6.9	LOS A	0.0	0.3	0.50	0.63	42.2
All Vehicles		1345	1.6	1345	1.6	0.386	0.2	NA	0.0	0.3	0.00	0.01	59.6

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %

Number of Iterations: 8 (maximum specified: 10)

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Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96New\llawaraRdBexleyNorth\SIDRA\180918\Proposed Network

(HighDensityResidential).sip7

MOVEMENT SUMMARY

Site: 101 [BEX_DEMP AM]

Network: N101 [Proposed Network AM]

Bexley Rd & Demaine Ave, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	2	0.0	2	0.0	0.394	5.6	LOS A	2.6	18.2	0.00	0.00	58.3
2	T1	1520	1.6	1520	1.6	0.394	0.1	LOS A	2.6	18.2	0.00	0.00	59.9
Approach		1522	1.6	1522	1.6	0.394	0.1	NA	2.6	18.2	0.00	0.00	59.9
West: Demaine Ave (W)													
10	L2	132	0.0	132	0.0	0.375	9.9	LOS A	0.8	5.8	0.62	0.87	39.5
Approach		132	0.0	132	0.0	0.375	9.9	LOS A	0.8	5.8	0.62	0.87	39.5
All Vehicles		1654	1.5	1654	1.5	0.394	0.8	NA	2.6	18.2	0.05	0.07	57.5

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:58:21 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96New\llawaraRdBexleyNorth\SIDRA\180918\Proposed Network (RockdaleComparison).sip7

MOVEMENT SUMMARY

Site: 101 [BEX_DEMP PM]

Network: N101 [Proposed Network PM]

Bexley Rd & Demaine Ave, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	8	0.0	8	0.0	0.387	5.6	LOS A	0.0	0.0	0.00	0.01	58.2
2	T1	1325	1.6	1325	1.6	0.387	0.1	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1333	1.6	1333	1.6	0.387	0.1	NA	0.0	0.0	0.00	0.00	59.8
West: Demaine Ave (W)													
10	L2	12	0.0	12	0.0	0.017	6.9	LOS A	0.0	0.3	0.50	0.63	42.2
Approach		12	0.0	12	0.0	0.017	6.9	LOS A	0.0	0.3	0.50	0.63	42.2
All Vehicles		1345	1.6	1345	1.6	0.387	0.2	NA	0.0	0.3	0.00	0.01	59.6

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %

Number of Iterations: 9 (maximum specified: 10)

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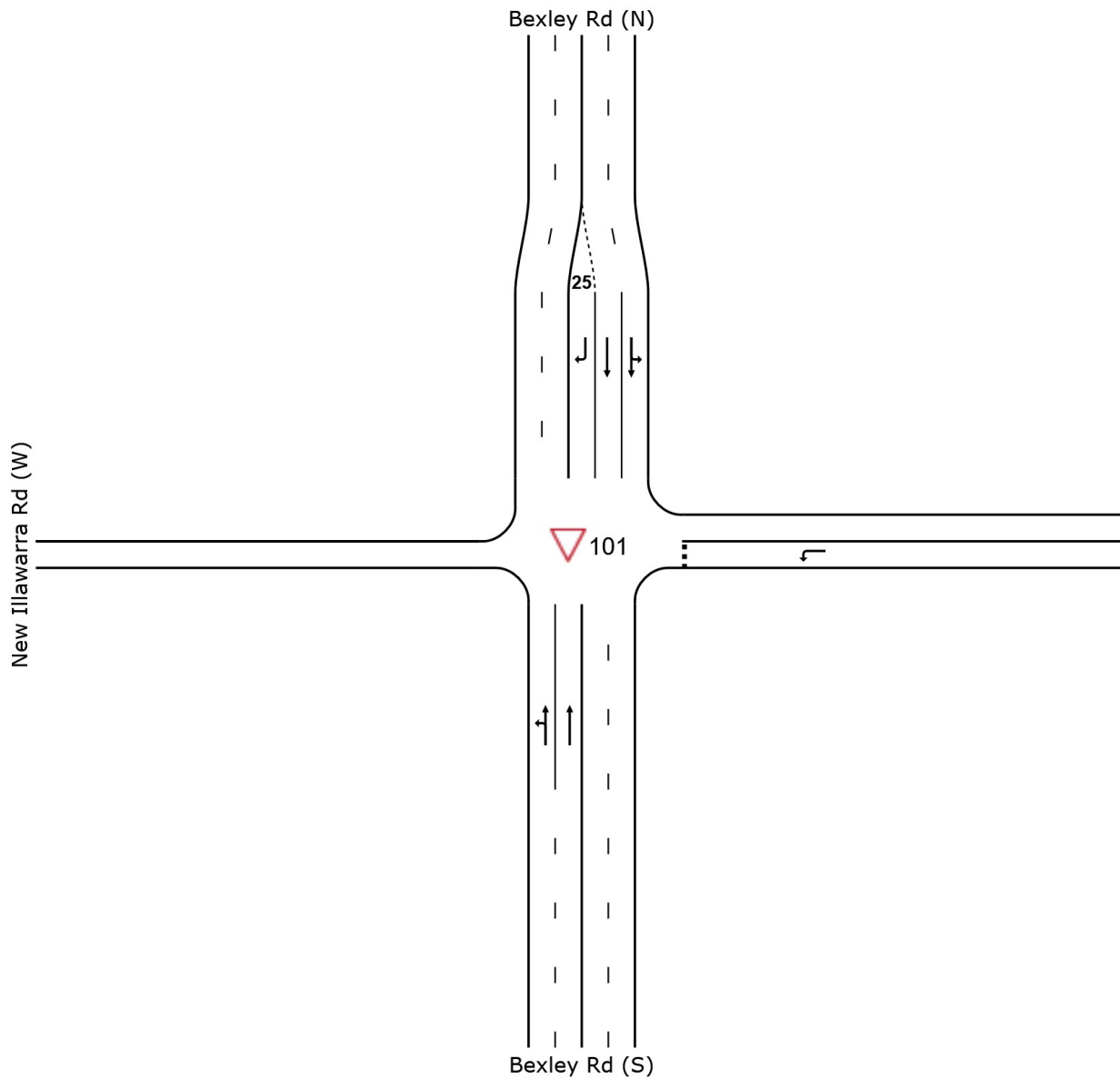
Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:59:27 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96New\llawaraRdBexleyNorth\SIDRA\180918\Proposed Network (RockdaleComparison).sip7

SITE LAYOUT

▽ Site: 101 [BEX_NEW_SARX AM]

Bexley Rd, New Illawarra Rd & Sarsfield Cct, Bexley Nth
Giveaway / Yield (Two-Way)



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Organisation: VARGA TRAFFIC PLANNING | Created: Tuesday, 18 September 2018 5:12:59 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Existing Network.sip7

MOVEMENT SUMMARY

Site: 101 [BEX_NEW_SARX AM]

Network: N101 [Existing Network AM]

Bexley Rd, New Illawarra Rd & Sarsfield Cct, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	2	0.0	2	0.0	0.285	5.6	LOS A	76.4	540.4	0.00	0.00	57.6
2	T1	1102	1.3	1102	1.3	0.285	0.0	LOS A	76.4	540.4	0.00	0.00	59.9
Approach		1104	1.3	1104	1.3	0.285	0.0	NA	76.4	540.4	0.00	0.00	59.9
East: Sarsfield Cct (E)													
4	L2	19	0.0	19	0.0	0.024	7.2	LOS A	0.1	0.7	0.49	0.62	41.9
Approach		19	0.0	19	0.0	0.024	7.2	LOS A	0.1	0.7	0.49	0.62	41.9
North: Bexley Rd (N)													
7	L2	3	0.0	3	0.0	0.283	5.5	LOS A	0.0	0.0	0.00	0.00	57.2
8	T1	769	2.1	769	2.1	0.283	0.8	LOS A	1.4	10.2	0.20	0.00	52.8
9	R2	338	0.0	338	0.0	0.718	19.9	LOS B	4.5	31.2	0.88	1.18	34.5
Approach		1110	1.4	1110	1.4	0.718	6.6	NA	4.5	31.2	0.40	0.36	38.4
All Vehicles		2233	1.3	2233	1.3	0.718	3.4	NA	76.4	540.4	0.20	0.18	45.6

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

MOVEMENT SUMMARY

Site: 101 [BEX_NEW_SARX PM]

Network: N101 [Existing Network PM]

Bexley Rd, New Illawarra Rd & Sarsfield Cct, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Bexley Rd (S)													
1	L2	1	0.0	1	0.0	0.271	5.5	LOS A	0.0	0.0	0.00	0.00	57.6
2	T1	1048	1.4	1048	1.4	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		1049	1.4	1049	1.4	0.271	0.0	NA	0.0	0.0	0.00	0.00	59.9
East: Sarsfield Cct (E)													
4	L2	35	0.0	35	0.0	0.043	7.2	LOS A	0.2	1.2	0.49	0.63	41.9
Approach		35	0.0	35	0.0	0.043	7.2	LOS A	0.2	1.2	0.49	0.63	41.9
North: Bexley Rd (N)													
7	L2	3	0.0	3	0.0	0.275	5.5	LOS A	0.0	0.0	0.00	0.00	57.2
8	T1	750	2.0	750	2.0	0.275	0.9	LOS A	1.4	9.9	0.19	0.00	52.4
9	R2	440	0.0	440	0.0	0.871	26.3	LOS B	8.6	60.4	0.93	1.48	31.3
Approach		1193	1.3	1193	1.3	0.871	10.3	NA	8.6	60.4	0.47	0.55	34.7
All Vehicles		2277	1.3	2277	1.3	0.871	5.5	NA	8.6	60.4	0.25	0.30	41.4

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %

Number of Iterations: 8 (maximum specified: 10)

MOVEMENT SUMMARY

Site: 101 [BEX_NEW_SARP AM]

Network: N101 [Proposed Network AM]

Bexley Rd, New Illawarra Rd & Sarsfield Cct, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	2	0.0	2	0.0	0.285	5.6	LOS A	74.8	528.9	0.00	0.00	57.6
2	T1	1102	1.3	1102	1.3	0.285	0.0	LOS A	74.8	528.9	0.00	0.00	59.9
Approach		1104	1.3	1104	1.3	0.285	0.0	NA	74.8	528.9	0.00	0.00	59.9
East: Sarsfield Cct (E)													
4	L2	19	0.0	19	0.0	0.024	7.2	LOS A	0.1	0.7	0.49	0.62	41.9
Approach		19	0.0	19	0.0	0.024	7.2	LOS A	0.1	0.7	0.49	0.62	41.9
North: Bexley Rd (N)													
7	L2	3	0.0	3	0.0	0.283	5.5	LOS A	0.0	0.0	0.00	0.00	57.2
8	T1	769	2.1	769	2.1	0.283	0.8	LOS A	1.4	10.2	0.20	0.00	52.8
9	R2	341	0.0	341	0.0	0.724	20.1	LOS B	4.5	31.8	0.88	1.18	34.4
Approach		1113	1.4	1113	1.4	0.724	6.7	NA	4.5	31.8	0.41	0.36	38.3
All Vehicles		2236	1.3	2236	1.3	0.724	3.4	NA	74.8	528.9	0.21	0.19	45.5

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Proposed Network (HighDensityResidential).sip7

MOVEMENT SUMMARY

Site: 101 [BEX_NEW_SARP PM]

Network: N101 [Proposed Network PM]

Bexley Rd, New Illawarra Rd & Sarsfield Cct, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	1	0.0	1	0.0	0.271	5.5	LOS A	0.0	0.0	0.00	0.00	57.6
2	T1	1048	1.4	1048	1.4	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		1049	1.4	1049	1.4	0.271	0.0	NA	0.0	0.0	0.00	0.00	59.9
East: Sarsfield Cct (E)													
4	L2	35	0.0	35	0.0	0.043	7.2	LOS A	0.2	1.2	0.49	0.63	41.9
Approach		35	0.0	35	0.0	0.043	7.2	LOS A	0.2	1.2	0.49	0.63	41.9
North: Bexley Rd (N)													
7	L2	3	0.0	3	0.0	0.276	5.5	LOS A	0.0	0.0	0.00	0.00	57.2
8	T1	750	2.0	750	2.0	0.276	1.2	LOS A	1.4	10.0	0.19	0.00	50.4
9	R2	450	0.0	450	0.0	0.891	28.3	LOS B	9.6	67.2	0.94	1.56	30.5
Approach		1203	1.2	1203	1.2	0.891	11.4	NA	9.6	67.2	0.47	0.58	33.6
All Vehicles		2287	1.3	2287	1.3	0.891	6.1	NA	9.6	67.2	0.26	0.32	40.4

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %

Number of Iterations: 8 (maximum specified: 10)

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Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Proposed Network (HighDensityResidential).sip7

MOVEMENT SUMMARY

Site: 101 [BEX_NEW_SARP AM]

Network: N101 [Proposed Network AM]

Bexley Rd, New Illawarra Rd & Sarsfield Cct, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	2	0.0	2	0.0	0.285	5.6	LOS A	76.2	539.0	0.00	0.00	57.6
2	T1	1102	1.3	1102	1.3	0.285	0.0	LOS A	76.2	539.0	0.00	0.00	59.9
Approach		1104	1.3	1104	1.3	0.285	0.0	NA	76.2	539.0	0.00	0.00	59.9
East: Sarsfield Cct (E)													
4	L2	19	0.0	19	0.0	0.024	7.2	LOS A	0.1	0.7	0.49	0.62	41.9
Approach		19	0.0	19	0.0	0.024	7.2	LOS A	0.1	0.7	0.49	0.62	41.9
North: Bexley Rd (N)													
7	L2	3	0.0	3	0.0	0.283	5.5	LOS A	0.0	0.0	0.00	0.00	57.2
8	T1	769	2.1	769	2.1	0.283	0.8	LOS A	1.4	10.2	0.20	0.00	52.8
9	R2	343	0.0	343	0.0	0.728	20.2	LOS B	4.6	32.3	0.88	1.19	34.3
Approach		1115	1.4	1115	1.4	0.728	6.8	NA	4.6	32.3	0.41	0.37	38.2
All Vehicles		2238	1.3	2238	1.3	0.728	3.5	NA	76.2	539.0	0.21	0.19	45.4

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Proposed Network (RockdaleComparison).sip7

MOVEMENT SUMMARY

Site: 101 [BEX_NEW_SARP PM]

Network: N101 [Proposed Network PM]

Bexley Rd, New Illawarra Rd & Sarsfield Cct, Bexley Nth
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Bexley Rd (S)													
1	L2	1	0.0	1	0.0	0.271	5.5	LOS A	0.0	0.0	0.00	0.00	57.6
2	T1	1048	1.4	1048	1.4	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		1049	1.4	1049	1.4	0.271	0.0	NA	0.0	0.0	0.00	0.00	59.9
East: Sarsfield Cct (E)													
4	L2	35	0.0	35	0.0	0.043	7.2	LOS A	0.2	1.2	0.49	0.63	41.9
Approach		35	0.0	35	0.0	0.043	7.2	LOS A	0.2	1.2	0.49	0.63	41.9
North: Bexley Rd (N)													
7	L2	3	0.0	3	0.0	0.276	5.5	LOS A	0.0	0.0	0.00	0.00	57.2
8	T1	750	2.0	750	2.0	0.276	1.3	LOS A	1.4	10.0	0.19	0.00	49.8
9	R2	452	0.0	452	0.0	0.895	28.7	LOS C	9.8	68.8	0.95	1.57	30.3
Approach		1205	1.2	1205	1.2	0.895	11.6	NA	9.8	68.8	0.48	0.59	33.3
All Vehicles		2289	1.3	2289	1.3	0.895	6.2	NA	9.8	68.8	0.26	0.32	40.1

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

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %

Number of Iterations: 9 (maximum specified: 10)

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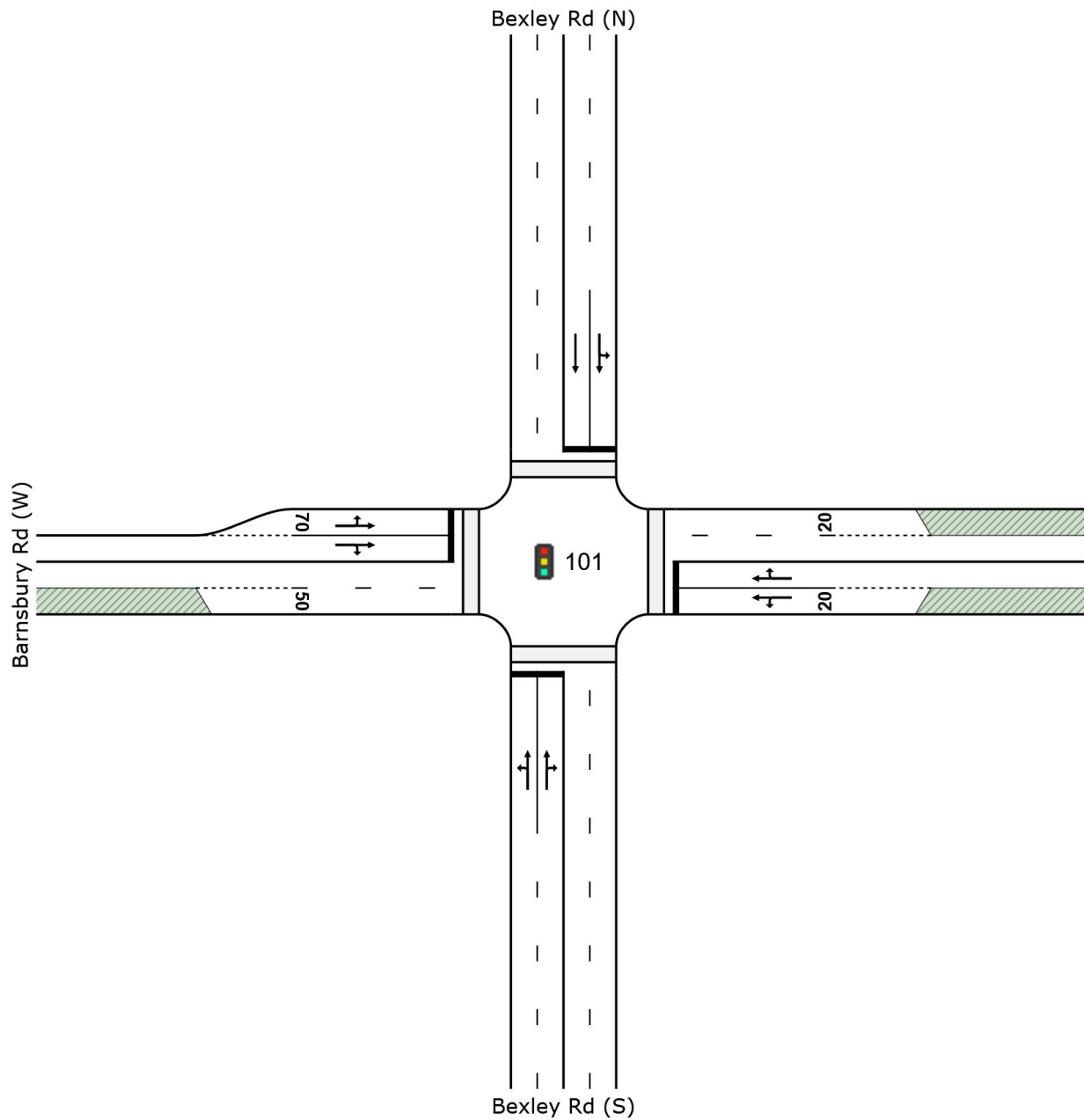
Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:59:27 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Proposed Network (RockdaleComparison).sip7

SITE LAYOUT

 **Site: 101 [BEX_BARX AM]**

Bexley Rd & Barnsbury Gr, Bexley Nth
Signals - Fixed Time Isolated



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Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Existing Network.sip7

MOVEMENT SUMMARY

 Site: 101 [BEX_BARX AM]

 Network: N101 [Existing Network AM]

Bexley Rd & Barnsbury Gr, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	29	0.0	29	0.0	0.640	15.0	LOS B	11.5	81.2	0.77	0.69	45.7
2	T1	950	1.3	950	1.3	0.640	10.3	LOS A	11.5	81.2	0.80	0.71	44.2
3	R2	108	0.0	108	0.0	0.640	17.5	LOS B	8.8	62.5	0.86	0.73	45.0
Approach		1087	1.1	1087	1.1	0.640	11.2	LOS A	11.5	81.2	0.81	0.71	44.4
East: Barnsbury Rd (E)													
4	L2	8	0.0	8	0.0	0.113	21.0	LOS B	1.0	7.3	0.81	0.63	42.5
5	T1	121	0.0	121	0.0	0.348	18.5	LOS B	2.5	17.7	0.87	0.69	32.7
6	R2	37	0.0	37	0.0	0.348	24.2	LOS B	2.5	17.7	0.90	0.73	31.9
Approach		166	0.0	166	0.0	0.348	19.9	LOS B	2.5	17.7	0.87	0.70	33.2
North: Bexley Rd (N)													
7	L2	29	0.0	29	0.0	0.703	24.8	LOS B	9.1	63.9	0.95	0.86	39.0
8	T1	732	1.1	732	1.1	0.703	19.3	LOS B	9.1	64.2	0.95	0.86	42.9
Approach		761	1.1	761	1.1	0.703	19.5	LOS B	9.1	64.2	0.95	0.86	42.8
West: Barnsbury Rd (W)													
10	L2	111	0.0	111	0.0	0.249	21.8	LOS B	2.3	16.0	0.85	0.75	31.5
11	T1	220	0.0	220	0.0	0.739	22.2	LOS B	7.4	51.9	0.98	0.93	37.9
12	R2	69	0.0	69	0.0	0.739	26.8	LOS B	7.4	51.9	0.98	0.93	39.7
Approach		400	0.0	400	0.0	0.739	22.9	LOS B	7.4	51.9	0.94	0.88	37.0
All Vehicles		2414	0.8	2414	0.8	0.739	16.3	LOS B	11.5	81.2	0.88	0.78	41.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %
 Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		Pedestrian	m		per ped
P1	South Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
P2	East Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
P3	North Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88
P4	West Full Crossing	53	11.6	LOS B	0.1	0.1	0.68	0.68
All Pedestrians		211	17.4	LOS B			0.83	0.83

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: 101 [BEX_BARX PM]

 Network: N101 [Existing Network PM]

Bexley Rd & Barnsbury Gr, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 40 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Bexley Rd (S)													
1	L2	66	0.0	66	0.0	0.596	12.2	LOS A	8.4	59.7	0.72	0.65	48.6
2	T1	1020	1.4	1020	1.4	0.596	7.3	LOS A	8.4	59.7	0.74	0.65	47.7
3	R2	58	0.0	58	0.0	0.596	13.6	LOS A	7.5	52.9	0.77	0.65	47.8
Approach		1144	1.2	1144	1.2	0.596	7.9	LOS A	8.4	59.7	0.74	0.65	47.8
East: Barnsbury Rd (E)													
4	L2	8	0.0	8	0.0	0.172	21.7	LOS B	0.9	6.4	0.91	0.68	42.2
5	T1	174	0.0	174	0.0	0.528	18.2	LOS B	2.9	20.1	0.95	0.75	33.3
6	R2	13	0.0	13	0.0	0.528	23.1	LOS B	2.9	20.1	0.97	0.78	33.1
Approach		195	0.0	195	0.0	0.528	18.7	LOS B	2.9	20.1	0.95	0.75	33.8
North: Bexley Rd (N)													
7	L2	37	0.0	37	0.0	0.855	28.0	LOS B	9.9	69.7	1.00	1.07	37.4
8	T1	790	1.0	790	1.0	0.855	22.5	LOS B	9.9	70.0	1.00	1.07	41.0
Approach		827	1.0	827	1.0	0.855	22.7	LOS B	9.9	70.0	1.00	1.07	40.8
West: Barnsbury Rd (W)													
10	L2	35	0.0	35	0.0	0.126	21.5	LOS B	0.6	4.4	0.90	0.71	31.6
11	T1	102	0.0	102	0.0	0.565	19.0	LOS B	2.8	19.6	0.97	0.80	39.2
12	R2	36	0.0	36	0.0	0.565	23.6	LOS B	2.8	19.6	0.97	0.80	41.1
Approach		173	0.0	173	0.0	0.565	20.5	LOS B	2.8	19.6	0.96	0.78	38.5
All Vehicles		2339	0.9	2339	0.9	0.855	15.0	LOS B	9.9	70.0	0.87	0.82	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
 Number of Iterations: 8 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85
P2	East Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85
P3	North Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85
P4	West Full Crossing	53	9.8	LOS A	0.0	0.0	0.70	0.70
All Pedestrians		211	13.3	LOS B			0.81	0.81

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: 101 [BEX_BARP AM]

 Network: N101 [Proposed Network AM]

Bexley Rd & Barnsbury Gr, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec				veh	m	
South: Bexley Rd (S)													
1	L2	29	0.0	29	0.0	0.640	15.0	LOS B	11.5	81.2	0.77	0.69	45.7
2	T1	950	1.3	950	1.3	0.640	10.3	LOS A	11.5	81.2	0.80	0.71	44.2
3	R2	108	0.0	108	0.0	0.640	17.5	LOS B	8.8	62.5	0.86	0.73	45.0
Approach		1087	1.1	1087	1.1	0.640	11.2	LOS A	11.5	81.2	0.81	0.71	44.4
East: Barnsbury Rd (E)													
4	L2	8	0.0	8	0.0	0.113	21.0	LOS B	1.0	7.3	0.81	0.63	42.5
5	T1	121	0.0	121	0.0	0.348	18.5	LOS B	2.5	17.7	0.87	0.69	32.7
6	R2	37	0.0	37	0.0	0.348	24.2	LOS B	2.5	17.7	0.90	0.73	31.9
Approach		166	0.0	166	0.0	0.348	19.9	LOS B	2.5	17.7	0.87	0.70	33.2
North: Bexley Rd (N)													
7	L2	29	0.0	29	0.0	0.703	24.8	LOS B	9.1	63.9	0.95	0.86	39.0
8	T1	732	1.1	732	1.1	0.703	19.3	LOS B	9.1	64.2	0.95	0.86	42.9
Approach		761	1.1	761	1.1	0.703	19.5	LOS B	9.1	64.2	0.95	0.86	42.8
West: Barnsbury Rd (W)													
10	L2	111	0.0	111	0.0	0.249	21.8	LOS B	2.3	16.0	0.85	0.75	31.5
11	T1	220	0.0	220	0.0	0.739	22.2	LOS B	7.4	51.9	0.98	0.93	37.9
12	R2	69	0.0	69	0.0	0.739	26.8	LOS B	7.4	51.9	0.98	0.93	39.7
Approach		400	0.0	400	0.0	0.739	22.9	LOS B	7.4	51.9	0.94	0.88	37.0
All Vehicles		2414	0.8	2414	0.8	0.739	16.3	LOS B	11.5	81.2	0.88	0.78	41.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %
 Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88	
P2	East Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88	
P3	North Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88	
P4	West Full Crossing	53	11.6	LOS B	0.1	0.1	0.68	0.68	
All Pedestrians		211	17.4	LOS B			0.83	0.83	

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: 101 [BEX_BARP PM]

 Network: N101 [Proposed Network PM]

Bexley Rd & Barnsbury Gr, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 40 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h			
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	68	0.0	68	0.0	0.597	12.2	LOS A	8.5	59.9	0.72	0.65	48.6
2	T1	1020	1.4	1020	1.4	0.597	7.3	LOS A	8.5	59.9	0.74	0.65	47.7
3	R2	58	0.0	58	0.0	0.597	13.6	LOS A	7.5	53.0	0.77	0.65	47.8
Approach		1146	1.2	1146	1.2	0.597	7.9	LOS A	8.5	59.9	0.74	0.65	47.8
East: Barnsbury Rd (E)													
4	L2	8	0.0	8	0.0	0.172	21.7	LOS B	0.9	6.4	0.91	0.68	42.2
5	T1	174	0.0	174	0.0	0.528	18.2	LOS B	2.9	20.1	0.95	0.75	33.3
6	R2	13	0.0	13	0.0	0.528	23.1	LOS B	2.9	20.1	0.97	0.78	33.1
Approach		195	0.0	195	0.0	0.528	18.7	LOS B	2.9	20.1	0.95	0.75	33.8
North: Bexley Rd (N)													
7	L2	37	0.0	37	0.0	0.855	28.0	LOS B	9.9	69.7	1.00	1.07	37.4
8	T1	790	1.0	790	1.0	0.855	22.5	LOS B	9.9	70.0	1.00	1.07	41.0
Approach		827	1.0	827	1.0	0.855	22.7	LOS B	9.9	70.0	1.00	1.07	40.8
West: Barnsbury Rd (W)													
10	L2	35	0.0	35	0.0	0.126	21.5	LOS B	0.6	4.4	0.90	0.71	31.6
11	T1	102	0.0	102	0.0	0.570	19.1	LOS B	2.8	19.8	0.97	0.81	39.1
12	R2	37	0.0	37	0.0	0.570	23.6	LOS B	2.8	19.8	0.97	0.81	41.0
Approach		174	0.0	174	0.0	0.570	20.5	LOS B	2.8	19.8	0.96	0.79	38.5
All Vehicles		2342	0.9	2342	0.9	0.855	15.0	LOS B	9.9	70.0	0.87	0.82	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
 Number of Iterations: 8 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85	
P2	East Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85	
P3	North Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85	
P4	West Full Crossing	53	9.8	LOS A	0.0	0.0	0.70	0.70	
All Pedestrians		211	13.3	LOS B			0.81	0.81	

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: 101 [BEX_BARP AM]

 Network: N101 [Proposed Network AM]

Bexley Rd & Barnsbury Gr, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec						
South: Bexley Rd (S)													
1	L2	30	0.0	30	0.0	0.640	15.0	LOS B	11.5	81.3	0.77	0.69	45.7
2	T1	950	1.3	950	1.3	0.640	10.4	LOS A	11.5	81.3	0.80	0.71	44.2
3	R2	108	0.0	108	0.0	0.640	17.5	LOS B	8.9	62.6	0.86	0.73	45.0
Approach		1088	1.1	1088	1.1	0.640	11.2	LOS A	11.5	81.3	0.81	0.71	44.4
East: Barnsbury Rd (E)													
4	L2	8	0.0	8	0.0	0.114	21.0	LOS B	1.0	7.3	0.81	0.63	42.5
5	T1	121	0.0	121	0.0	0.348	18.5	LOS B	2.5	17.7	0.87	0.69	32.7
6	R2	37	0.0	37	0.0	0.348	24.2	LOS B	2.5	17.7	0.90	0.73	31.9
Approach		166	0.0	166	0.0	0.348	19.9	LOS B	2.5	17.7	0.87	0.70	33.2
North: Bexley Rd (N)													
7	L2	29	0.0	29	0.0	0.703	24.8	LOS B	9.1	63.9	0.95	0.86	39.0
8	T1	732	1.1	732	1.1	0.703	19.3	LOS B	9.1	64.2	0.95	0.86	42.9
Approach		761	1.1	761	1.1	0.703	19.5	LOS B	9.1	64.2	0.95	0.86	42.8
West: Barnsbury Rd (W)													
10	L2	111	0.0	111	0.0	0.249	21.8	LOS B	2.3	16.0	0.85	0.75	31.5
11	T1	220	0.0	220	0.0	0.754	22.7	LOS B	7.6	53.4	0.98	0.95	37.7
12	R2	73	0.0	73	0.0	0.754	27.3	LOS B	7.6	53.4	0.98	0.95	39.4
Approach		404	0.0	404	0.0	0.754	23.3	LOS B	7.6	53.4	0.95	0.89	36.9
All Vehicles		2419	0.8	2419	0.8	0.754	16.4	LOS B	11.5	81.3	0.88	0.79	41.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %
 Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88	
P2	East Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88	
P3	North Full Crossing	53	19.4	LOS B	0.1	0.1	0.88	0.88	
P4	West Full Crossing	53	11.6	LOS B	0.1	0.1	0.68	0.68	
All Pedestrians		211	17.4	LOS B			0.83	0.83	

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: 101 [BEX_BARP PM]

 Network: N101 [Proposed Network PM]

Bexley Rd & Barnsbury Gr, Bexley Nth
Signals - Fixed Time Isolated Cycle Time = 40 seconds (Practical Cycle Time)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Bexley Rd (S)													
1	L2	68	0.0	68	0.0	0.597	12.2	LOS A	8.5	59.9	0.72	0.65	48.6
2	T1	1020	1.4	1020	1.4	0.597	7.3	LOS A	8.5	59.9	0.74	0.65	47.7
3	R2	58	0.0	58	0.0	0.597	13.6	LOS A	7.5	53.0	0.77	0.65	47.8
Approach		1146	1.2	1146	1.2	0.597	7.9	LOS A	8.5	59.9	0.74	0.65	47.8
East: Barnsbury Rd (E)													
4	L2	8	0.0	8	0.0	0.172	21.7	LOS B	0.9	6.4	0.91	0.68	42.2
5	T1	174	0.0	174	0.0	0.528	18.2	LOS B	2.9	20.1	0.95	0.75	33.3
6	R2	13	0.0	13	0.0	0.528	23.1	LOS B	2.9	20.1	0.97	0.78	33.1
Approach		195	0.0	195	0.0	0.528	18.7	LOS B	2.9	20.1	0.95	0.75	33.8
North: Bexley Rd (N)													
7	L2	37	0.0	37	0.0	0.855	28.0	LOS B	9.9	69.7	1.00	1.07	37.4
8	T1	790	1.0	790	1.0	0.855	22.5	LOS B	9.9	70.0	1.00	1.07	41.0
Approach		827	1.0	827	1.0	0.855	22.7	LOS B	9.9	70.0	1.00	1.07	40.8
West: Barnsbury Rd (W)													
10	L2	35	0.0	35	0.0	0.126	21.5	LOS B	0.6	4.4	0.90	0.71	31.6
11	T1	102	0.0	102	0.0	0.570	19.1	LOS B	2.8	19.8	0.97	0.81	39.1
12	R2	37	0.0	37	0.0	0.570	23.6	LOS B	2.8	19.8	0.97	0.81	41.0
Approach		174	0.0	174	0.0	0.570	20.5	LOS B	2.8	19.8	0.96	0.79	38.5
All Vehicles		2342	0.9	2342	0.9	0.855	15.0	LOS B	9.9	70.0	0.87	0.82	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Intersection and Approach LOS values are based on average delay for all vehicle movements.
 SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
 Number of Iterations: 9 (maximum specified: 10)

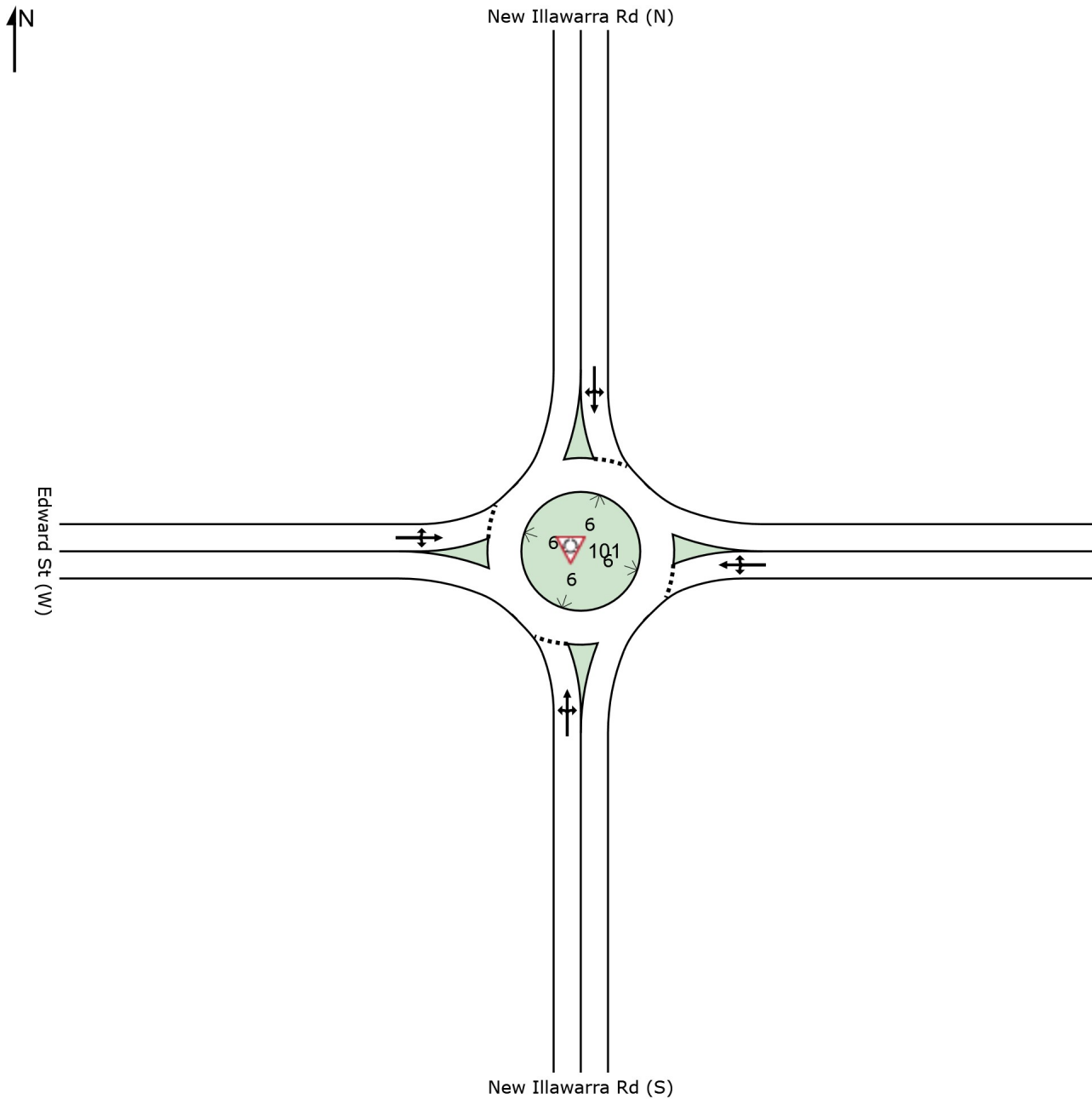
Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85	
P2	East Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85	
P3	North Full Crossing	53	14.5	LOS B	0.1	0.1	0.85	0.85	
P4	West Full Crossing	53	9.8	LOS A	0.0	0.0	0.70	0.70	
All Pedestrians		211	13.3	LOS B			0.81	0.81	

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: 101 [NEW_EDW_BARX AM]**

New Illawarra Rd, Edward St & Barnsbury Gr, Bexley Nth
Roundabout



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Organisation: VARGA TRAFFIC PLANNING | Created: Tuesday, 18 September 2018 5:13:15 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawaraRdBexleyNorth\SIDRA\180918\Existing Network.sip7

MOVEMENT SUMMARY

 Site: 101 [NEW_EDW_BARX AM]

 Network: N101 [Existing Network AM]

New Illawarra Rd, Edward St & Barnsbury Gr, Bexley Nth Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: New Illawarra Rd (S)													
1	L2	30	0.0	30	0.0	0.436	6.0	LOS A	3.4	24.1	0.38	0.58	48.3
2	T1	278	2.9	278	2.9	0.436	5.7	LOS A	3.4	24.1	0.38	0.58	52.4
3	R2	236	0.0	236	0.0	0.436	8.3	LOS A	3.4	24.1	0.38	0.58	48.4
Approach		544	1.5	544	1.5	0.436	6.8	LOS A	3.4	24.1	0.38	0.58	50.9
East: Barnsbury Gr (E)													
4	L2	85	0.0	85	0.0	0.174	6.3	LOS A	0.9	6.0	0.44	0.61	48.3
5	T1	62	0.0	62	0.0	0.174	5.7	LOS A	0.9	6.0	0.44	0.61	45.8
6	R2	13	0.0	13	0.0	0.174	8.4	LOS A	0.9	6.0	0.44	0.61	48.6
Approach		160	0.0	160	0.0	0.174	6.2	LOS A	0.9	6.0	0.44	0.61	47.3
North: New Illawarra Rd (N)													
7	L2	27	0.0	27	0.0	0.372	8.2	LOS A	2.3	16.5	0.63	0.73	47.5
8	T1	268	2.2	268	2.2	0.372	7.9	LOS A	2.3	16.5	0.63	0.73	51.9
9	R2	29	0.0	29	0.0	0.372	10.4	LOS A	2.3	16.5	0.63	0.73	48.2
Approach		324	1.9	324	1.9	0.372	8.1	LOS A	2.3	16.5	0.63	0.73	51.3
West: Edward St (W)													
10	L2	7	0.0	7	0.0	0.210	7.9	LOS A	1.2	8.5	0.66	0.72	47.5
11	T1	148	0.0	148	0.0	0.210	7.4	LOS A	1.2	8.5	0.66	0.72	41.6
12	R2	7	0.0	7	0.0	0.210	10.1	LOS A	1.2	8.5	0.66	0.72	47.8
Approach		162	0.0	162	0.0	0.210	7.5	LOS A	1.2	8.5	0.66	0.72	42.4
All Vehicles		1190	1.2	1190	1.2	0.436	7.2	LOS A	3.4	24.1	0.49	0.64	49.5

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

Vehicle movement LOS values are based on average delay per movement.

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

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:18:49 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17\work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\170316\Existing Network.sip7

MOVEMENT SUMMARY

 Site: 101 [NEW_EDW_BARX PM]

 Network: N101 [Existing Network PM]

New Illawarra Rd, Edward St & Barnsbury Gr, Bexley Nth Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: New Illawarra Rd (S)													
1	L2	23	0.0	23	0.0	0.357	7.6	LOS A	2.4	17.3	0.62	0.71	47.7
2	T1	189	4.2	189	4.2	0.357	7.4	LOS A	2.4	17.3	0.62	0.71	51.6
3	R2	110	0.0	110	0.0	0.357	9.9	LOS A	2.4	17.3	0.62	0.71	47.2
Approach		322	2.5	322	2.5	0.357	8.2	LOS A	2.4	17.3	0.62	0.71	50.2
East: Barnsbury Gr (E)													
4	L2	108	0.0	108	0.0	0.478	7.9	LOS A	3.1	21.8	0.63	0.76	47.0
5	T1	189	0.0	189	0.0	0.478	7.4	LOS A	3.1	21.8	0.63	0.76	44.7
6	R2	110	0.0	110	0.0	0.478	10.1	LOS A	3.1	21.8	0.63	0.76	47.3
Approach		407	0.0	407	0.0	0.478	8.3	LOS A	3.1	21.8	0.63	0.76	46.0
North: New Illawarra Rd (N)													
7	L2	11	0.0	11	0.0	0.369	6.4	LOS A	2.5	17.7	0.45	0.58	49.0
8	T1	379	1.6	379	1.6	0.369	6.0	LOS A	2.5	17.7	0.45	0.58	52.7
9	R2	22	0.0	22	0.0	0.369	8.7	LOS A	2.5	17.7	0.45	0.58	48.9
Approach		412	1.5	412	1.5	0.369	6.2	LOS A	2.5	17.7	0.45	0.58	52.5
West: Edward St (W)													
10	L2	7	0.0	7	0.0	0.071	6.7	LOS A	0.4	2.6	0.55	0.61	48.1
11	T1	48	0.0	48	0.0	0.071	6.2	LOS A	0.4	2.6	0.55	0.61	42.5
12	R2	5	0.0	5	0.0	0.071	8.9	LOS A	0.4	2.6	0.55	0.61	48.4
Approach		60	0.0	60	0.0	0.071	6.5	LOS A	0.4	2.6	0.55	0.61	44.2
All Vehicles		1201	1.2	1201	1.2	0.478	7.5	LOS A	3.1	21.8	0.56	0.67	49.1

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

Vehicle movement LOS values are based on average delay per movement.

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

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %

Number of Iterations: 8 (maximum specified: 10)

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Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:19:48 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17\work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\170316\Existing Network.sip7

MOVEMENT SUMMARY

 Site: 101 [NEW_EDW_BARP AM]

 Network: N101 [Proposed Network AM]

New Illawarra Rd, Edward St & Barnsbury Gr, Bexley Nth Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: New Illawarra Rd (S)													
1	L2	30	0.0	30	0.0	0.436	6.0	LOS A	3.4	24.2	0.38	0.58	48.3
2	T1	278	2.9	278	2.9	0.436	5.7	LOS A	3.4	24.2	0.38	0.58	52.3
3	R2	236	0.0	236	0.0	0.436	8.3	LOS A	3.4	24.2	0.38	0.58	48.4
Approach		544	1.5	544	1.5	0.436	6.8	LOS A	3.4	24.2	0.38	0.58	50.9
East: Barnsbury Gr (E)													
4	L2	85	0.0	85	0.0	0.175	6.3	LOS A	0.9	6.1	0.44	0.61	48.3
5	T1	62	0.0	62	0.0	0.175	5.7	LOS A	0.9	6.1	0.44	0.61	45.8
6	R2	14	0.0	14	0.0	0.175	8.4	LOS A	0.9	6.1	0.44	0.61	48.6
Approach		161	0.0	161	0.0	0.175	6.2	LOS A	0.9	6.1	0.44	0.61	47.3
North: New Illawarra Rd (N)													
7	L2	29	0.0	29	0.0	0.374	8.2	LOS A	2.3	16.6	0.63	0.73	47.5
8	T1	268	2.2	268	2.2	0.374	7.9	LOS A	2.3	16.6	0.63	0.73	51.8
9	R2	29	0.0	29	0.0	0.374	10.4	LOS A	2.3	16.6	0.63	0.73	48.2
Approach		326	1.8	326	1.8	0.374	8.1	LOS A	2.3	16.6	0.63	0.73	51.3
West: Edward St (W)													
10	L2	7	0.0	7	0.0	0.211	7.9	LOS A	1.2	8.5	0.66	0.72	47.5
11	T1	148	0.0	148	0.0	0.211	7.4	LOS A	1.2	8.5	0.66	0.72	41.5
12	R2	7	0.0	7	0.0	0.211	10.1	LOS A	1.2	8.5	0.66	0.72	47.8
Approach		162	0.0	162	0.0	0.211	7.5	LOS A	1.2	8.5	0.66	0.72	42.4
All Vehicles		1193	1.2	1193	1.2	0.436	7.2	LOS A	3.4	24.2	0.50	0.64	49.5

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

Vehicle movement LOS values are based on average delay per movement.

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

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:44:21 PM

Project: Z:\DATA\Data\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Proposed Network (HighDensityResidential).sip7

MOVEMENT SUMMARY

 Site: 101 [NEW_EDW_BARP PM]

 Network: N101 [Proposed Network PM]

New Illawarra Rd, Edward St & Barnsbury Gr, Bexley Nth Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: New Illawarra Rd (S)													
1	L2	23	0.0	23	0.0	0.358	7.6	LOS A	2.4	17.4	0.62	0.71	47.6
2	T1	189	4.2	189	4.2	0.358	7.4	LOS A	2.4	17.4	0.62	0.71	51.6
3	R2	110	0.0	110	0.0	0.358	9.9	LOS A	2.4	17.4	0.62	0.71	47.2
Approach		322	2.5	322	2.5	0.358	8.3	LOS A	2.4	17.4	0.62	0.71	50.2
East: Barnsbury Gr (E)													
4	L2	108	0.0	108	0.0	0.481	8.0	LOS A	3.1	22.0	0.63	0.76	47.0
5	T1	189	0.0	189	0.0	0.481	7.4	LOS A	3.1	22.0	0.63	0.76	44.7
6	R2	112	0.0	112	0.0	0.481	10.1	LOS A	3.1	22.0	0.63	0.76	47.3
Approach		409	0.0	409	0.0	0.481	8.3	LOS A	3.1	22.0	0.63	0.76	46.0
North: New Illawarra Rd (N)													
7	L2	12	0.0	12	0.0	0.370	6.4	LOS A	2.5	17.8	0.45	0.58	49.0
8	T1	379	1.6	379	1.6	0.370	6.0	LOS A	2.5	17.8	0.45	0.58	52.7
9	R2	22	0.0	22	0.0	0.370	8.7	LOS A	2.5	17.8	0.45	0.58	48.9
Approach		413	1.5	413	1.5	0.370	6.2	LOS A	2.5	17.8	0.45	0.58	52.5
West: Edward St (W)													
10	L2	7	0.0	7	0.0	0.071	6.7	LOS A	0.4	2.6	0.55	0.61	48.1
11	T1	48	0.0	48	0.0	0.071	6.2	LOS A	0.4	2.6	0.55	0.61	42.5
12	R2	5	0.0	5	0.0	0.071	8.9	LOS A	0.4	2.6	0.55	0.61	48.4
Approach		60	0.0	60	0.0	0.071	6.5	LOS A	0.4	2.6	0.55	0.61	44.2
All Vehicles		1204	1.2	1204	1.2	0.481	7.5	LOS A	3.1	22.0	0.56	0.68	49.1

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

Vehicle movement LOS values are based on average delay per movement.

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

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %

Number of Iterations: 8 (maximum specified: 10)

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Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:45:22 PM

Project: Z:\DATA\Data\Jobs01\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Proposed Network (HighDensityResidential).sip7

MOVEMENT SUMMARY

 Site: 101 [NEW_EDW_BARP AM]

 Network: N101 [Proposed Network AM]

New Illawarra Rd, Edward St & Barnsbury Gr, Bexley Nth Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: New Illawarra Rd (S)													
1	L2	30	0.0	30	0.0	0.436	6.0	LOS A	3.4	24.2	0.38	0.58	48.3
2	T1	278	2.9	278	2.9	0.436	5.7	LOS A	3.4	24.2	0.38	0.58	52.3
3	R2	236	0.0	236	0.0	0.436	8.3	LOS A	3.4	24.2	0.38	0.58	48.4
Approach		544	1.5	544	1.5	0.436	6.8	LOS A	3.4	24.2	0.38	0.58	50.9
East: Barnsbury Gr (E)													
4	L2	85	0.0	85	0.0	0.175	6.3	LOS A	0.9	6.1	0.44	0.61	48.3
5	T1	62	0.0	62	0.0	0.175	5.7	LOS A	0.9	6.1	0.44	0.61	45.8
6	R2	14	0.0	14	0.0	0.175	8.4	LOS A	0.9	6.1	0.44	0.61	48.6
Approach		161	0.0	161	0.0	0.175	6.2	LOS A	0.9	6.1	0.44	0.61	47.3
North: New Illawarra Rd (N)													
7	L2	31	0.0	31	0.0	0.377	8.2	LOS A	2.4	16.7	0.64	0.73	47.5
8	T1	268	2.2	268	2.2	0.377	7.9	LOS A	2.4	16.7	0.64	0.73	51.8
9	R2	29	0.0	29	0.0	0.377	10.5	LOS A	2.4	16.7	0.64	0.73	48.2
Approach		328	1.8	328	1.8	0.377	8.1	LOS A	2.4	16.7	0.64	0.73	51.2
West: Edward St (W)													
10	L2	7	0.0	7	0.0	0.211	7.9	LOS A	1.2	8.5	0.66	0.72	47.5
11	T1	148	0.0	148	0.0	0.211	7.4	LOS A	1.2	8.5	0.66	0.72	41.5
12	R2	7	0.0	7	0.0	0.211	10.1	LOS A	1.2	8.5	0.66	0.72	47.8
Approach		162	0.0	162	0.0	0.211	7.5	LOS A	1.2	8.5	0.66	0.72	42.4
All Vehicles		1195	1.2	1195	1.2	0.436	7.2	LOS A	3.4	24.2	0.50	0.64	49.5

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

Vehicle movement LOS values are based on average delay per movement.

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

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 4.1 %

Number of Iterations: 10 (maximum specified: 10)

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Organisation: VARGA TRAFFIC PLANNING | Processed: Tuesday, 18 September 2018 4:58:21 PM

Project: Z:\DATA\Data\Jobs\17work\17160_88-96NewIllawarraRdBexleyNorth\SIDRA\180918\Proposed Network (RockdaleComparison).sip7

MOVEMENT SUMMARY

 Site: 101 [NEW_EDW_BARP PM]

 Network: N101 [Proposed Network PM]

New Illawarra Rd, Edward St & Barnsbury Gr, Bexley Nth Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: New Illawarra Rd (S)													
1	L2	23	0.0	23	0.0	0.358	7.6	LOS A	2.4	17.4	0.62	0.71	47.6
2	T1	189	4.2	189	4.2	0.358	7.4	LOS A	2.4	17.4	0.62	0.71	51.6
3	R2	110	0.0	110	0.0	0.358	9.9	LOS A	2.4	17.4	0.62	0.71	47.2
Approach		322	2.5	322	2.5	0.358	8.3	LOS A	2.4	17.4	0.62	0.71	50.2
East: Barnsbury Gr (E)													
4	L2	108	0.0	108	0.0	0.481	8.0	LOS A	3.1	22.0	0.63	0.76	47.0
5	T1	189	0.0	189	0.0	0.481	7.4	LOS A	3.1	22.0	0.63	0.76	44.7
6	R2	112	0.0	112	0.0	0.481	10.1	LOS A	3.1	22.0	0.63	0.76	47.3
Approach		409	0.0	409	0.0	0.481	8.3	LOS A	3.1	22.0	0.63	0.76	46.0
North: New Illawarra Rd (N)													
7	L2	12	0.0	12	0.0	0.370	6.4	LOS A	2.5	17.8	0.45	0.58	49.0
8	T1	379	1.6	379	1.6	0.370	6.0	LOS A	2.5	17.8	0.45	0.58	52.7
9	R2	22	0.0	22	0.0	0.370	8.7	LOS A	2.5	17.8	0.45	0.58	48.9
Approach		413	1.5	413	1.5	0.370	6.2	LOS A	2.5	17.8	0.45	0.58	52.5
West: Edward St (W)													
10	L2	7	0.0	7	0.0	0.071	6.7	LOS A	0.4	2.6	0.55	0.61	48.1
11	T1	48	0.0	48	0.0	0.071	6.2	LOS A	0.4	2.6	0.55	0.61	42.5
12	R2	5	0.0	5	0.0	0.071	8.9	LOS A	0.4	2.6	0.55	0.61	48.4
Approach		60	0.0	60	0.0	0.071	6.5	LOS A	0.4	2.6	0.55	0.61	44.2
All Vehicles		1204	1.2	1204	1.2	0.481	7.5	LOS A	3.1	22.0	0.56	0.68	49.1

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

Vehicle movement LOS values are based on average delay per movement.

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

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %

Number of Iterations: 9 (maximum specified: 10)

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