

MOVEMENT SUMMARY

 Site: 101vv [Petrie Rd/ SH1 Intersection AM Peak Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

Site Category: (None)

Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: SH1 South															
2	T1	All MCs	539	18.9	539	18.9	0.310	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	All MCs	7	0.0	7	0.0	0.021	15.4	LOS C	0.1	0.5	0.81	0.88	0.81	40.4
Approach			546	18.7	546	18.7	0.310	0.3	NA	0.1	0.5	0.01	0.01	0.01	49.7
East: Petrie Rd															
4	L2	All MCs	98	1.0	98	1.0	0.365	24.5	LOS C	1.4	9.9	0.88	1.06	1.09	37.4
6	R2	All MCs	6	0.0	6	0.0	0.042	31.7	LOS D	0.1	0.9	0.91	1.00	0.91	34.6
Approach			104	1.0	104	1.0	0.365	25.0	LOS C	1.4	9.9	0.88	1.06	1.08	37.3
North: SH1 North															
7	L2	All MCs	2	0.0	2	0.0	0.642	4.9	LOS A	0.0	0.0	0.00	0.00	0.00	48.2
8	T1	All MCs	1196	6.9	1196	6.9	0.642	0.4	LOS A	0.0	0.0	0.00	0.00	0.00	49.4
Approach			1198	6.8	1198	6.8	0.642	0.5	NA	0.0	0.0	0.00	0.00	0.00	49.4
All Vehicles			1848	10.0	1848	10.0	0.642	1.8	NA	1.4	9.9	0.05	0.06	0.06	48.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Organisation: ABLEY TRANSPORTATION CONSULTANTS LIMITED | Licence: PLUS / 1PC | Processed: Thursday, 29 February 2024 2:37:01 p.m.

Project: J:\Oxford John Ltd (OJL)\OJL-J001 - Southeast Woodend Plan Change Transport Advice\2 Project and Delivery\5 Analysis and Design\2 Models\Petrie Road Models.sip9

MOVEMENT SUMMARY

 Site: 101vv [Petrie Rd/ SH1 Intersection AM Peak - 50% Inc (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: SH1 South															
2	T1	All MCs	539	18.9	539	18.9	0.310	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	All MCs	11	0.0	11	0.0	0.032	15.5	LOS C	0.1	0.8	0.82	0.91	0.82	40.3
Approach			550	18.5	550	18.5	0.310	0.4	NA	0.1	0.8	0.02	0.02	0.02	49.6
East: Petrie Rd															
4	L2	All MCs	148	1.4	148	1.4	0.556	28.7	LOS D	2.5	17.4	0.91	1.14	1.37	35.9
6	R2	All MCs	9	0.0	9	0.0	0.064	32.0	LOS D	0.2	1.3	0.91	1.00	0.91	34.5
Approach			157	1.3	157	1.3	0.556	28.9	LOS D	2.5	17.4	0.91	1.13	1.35	35.8
North: SH1 North															
7	L2	All MCs	3	0.0	3	0.0	0.642	4.9	LOS A	0.0	0.0	0.00	0.00	0.00	48.2
8	T1	All MCs	1196	6.9	1196	6.9	0.642	0.4	LOS A	0.0	0.0	0.00	0.00	0.00	49.4
Approach			1199	6.8	1199	6.8	0.642	0.5	NA	0.0	0.0	0.00	0.00	0.00	49.4
All Vehicles			1906	9.8	1906	9.8	0.642	2.8	NA	2.5	17.4	0.08	0.10	0.12	48.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Organisation: ABLEY TRANSPORTATION CONSULTANTS LIMITED | Licence: PLUS / 1PC | Processed: Thursday, 29 February 2024 3:21:44 p.m.

Project: J:\Oxford John Ltd (OJL)\OJL-J001 - Southeast Woodend Plan Change Transport Advice\2 Project and Delivery\5 Analysis and Design\2 Models\Petrie Road Models.sip9

MOVEMENT SUMMARY

Site: 101vv [Petrie Rd/ SH1 Intersection AM Peak - 50% Inc + Through Growth (Site Folder: Futures)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: SH1 South															
2	T1	All MCs	594	19.0	594	19.0	0.342	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	All MCs	11	0.0	11	0.0	0.045	20.1	LOS C	0.2	1.1	0.87	0.94	0.87	38.4
Approach			605	18.7	605	18.7	0.342	0.5	NA	0.2	1.1	0.02	0.02	0.02	49.5
East: Petrie Rd															
4	L2	All MCs	148	1.4	148	1.4	0.784	49.4	LOS E	3.9	27.7	0.97	1.27	1.90	29.9
6	R2	All MCs	9	0.0	9	0.0	0.096	44.7	LOS E	0.3	1.9	0.94	1.00	0.94	30.9
Approach			157	1.3	157	1.3	0.784	49.2	LOS E	3.9	27.7	0.97	1.25	1.84	29.9
North: SH1 North															
7	L2	All MCs	3	0.0	3	0.0	0.707	5.1	LOS A	0.0	0.0	0.00	0.00	0.00	48.0
8	T1	All MCs	1316	6.9	1316	6.9	0.707	0.6	LOS A	0.0	0.0	0.00	0.00	0.00	49.2
Approach			1319	6.9	1319	6.9	0.707	0.6	NA	0.0	0.0	0.00	0.00	0.00	49.2
All Vehicles			2081	9.9	2081	9.9	0.784	4.2	NA	3.9	27.7	0.08	0.10	0.14	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: J:\Oxford John Ltd (OJL)\OJL-J001 - Southeast Woodend Plan Change Transport Advice\2 Project and Delivery\5 Analysis and Design\2 Models\Petrie Road Models.sip9

MOVEMENT SUMMARY

 Site: 101vv [Petrie Rd/ SH1 Intersection PM Peak Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV]		Arrival Flows [Total HV]		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue [Veh. Dist]		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			veh/h	%	veh/h	%				v/c	sec				
South: SH1 South															
2	T1	All MCs	1079	6.3	1079	6.3	0.576	0.3	LOS A	0.0	0.0	0.00	0.00	0.00	49.5
3	R2	All MCs	105	6.7	105	6.7	0.201	11.6	LOS B	0.8	5.7	0.73	0.88	0.75	42.1
Approach			1184	6.3	1184	6.3	0.576	1.3	NA	0.8	5.7	0.07	0.08	0.07	48.8
East: Petrie Rd															
4	L2	All MCs	51	0.0	51	0.0	0.102	13.7	LOS B	0.4	2.5	0.69	1.00	0.69	41.9
6	R2	All MCs	1	0.0	1	0.0	0.013	50.6	LOS F	0.0	0.3	0.95	1.00	0.95	29.4
Approach			52	0.0	52	0.0	0.102	14.4	LOS B	0.4	2.5	0.70	1.00	0.70	41.6
North: SH1 North															
7	L2	All MCs	24	0.0	24	0.0	0.488	4.8	LOS A	0.0	0.0	0.00	0.01	0.00	48.4
8	T1	All MCs	862	11.6	862	11.6	0.488	0.2	LOS A	0.0	0.0	0.00	0.01	0.00	49.6
Approach			886	11.3	886	11.3	0.488	0.4	NA	0.0	0.0	0.00	0.01	0.00	49.5
All Vehicles			2122	8.2	2122	8.2	0.576	1.3	NA	0.8	5.7	0.05	0.07	0.05	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: J:\Oxford John Ltd (OJL)\OJL-J001 - Southeast Woodend Plan Change Transport Advice\2 Project and Delivery\5 Analysis and Design\2 Models\Petrie Road Models.sip9

MOVEMENT SUMMARY

 Site: 101vv [Petrie Rd/ SH1 Intersection PM Peak - 50% Inc (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

Site Category: (None)

Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: SH1 South															
2	T1	All MCs	1079	6.3	1079	6.3	0.576	0.3	LOS A	0.0	0.0	0.00	0.00	0.00	49.5
3	R2	All MCs	158	7.0	158	7.0	0.311	13.1	LOS B	1.4	10.1	0.77	0.95	0.93	41.4
Approach			1237	6.4	1237	6.4	0.576	2.0	NA	1.4	10.1	0.10	0.12	0.12	48.3
East: Petrie Rd															
4	L2	All MCs	77	0.0	77	0.0	0.154	13.8	LOS B	0.5	3.8	0.70	1.00	0.70	41.9
6	R2	All MCs	2	0.0	2	0.0	0.029	55.3	LOS F	0.1	0.6	0.96	1.00	0.96	28.3
Approach			79	0.0	79	0.0	0.154	14.9	LOS B	0.5	3.8	0.71	1.00	0.71	41.4
North: SH1 North															
7	L2	All MCs	36	0.0	36	0.0	0.495	4.8	LOS A	0.0	0.0	0.00	0.02	0.00	48.3
8	T1	All MCs	862	11.6	862	11.6	0.495	0.3	LOS A	0.0	0.0	0.00	0.02	0.00	49.5
Approach			898	11.1	898	11.1	0.495	0.4	NA	0.0	0.0	0.00	0.02	0.00	49.5
All Vehicles			2214	8.1	2214	8.1	0.576	1.8	NA	1.4	10.1	0.08	0.11	0.09	48.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: J:\Oxford John Ltd (OJL)\OJL-J001 - Southeast Woodend Plan Change Transport Advice\2 Project and Delivery\5 Analysis and Design\2 Models\Petrie Road Models.sip9

MOVEMENT SUMMARY

Site: 101vv [Petrie Rd/ SH1 Intersection PM Peak - 50% Inc + Through Growth (Site Folder: Futures)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

Site Category: (None)

Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: SH1 South															
2	T1	All MCs	1187	6.3	1187	6.3	0.634	0.4	LOS A	0.0	0.0	0.00	0.00	0.00	49.4
3	R2	All MCs	158	7.0	158	7.0	0.379	16.1	LOS C	1.7	12.3	0.83	1.00	1.08	40.0
Approach			1345	6.4	1345	6.4	0.634	2.3	NA	1.7	12.3	0.10	0.12	0.13	48.1
East: Petrie Rd															
4	L2	All MCs	77	0.0	77	0.0	0.184	15.6	LOS C	0.6	4.5	0.76	1.00	0.77	41.1
6	R2	All MCs	2	0.0	2	0.0	0.049	85.9	LOS F	0.1	0.9	0.97	1.00	0.97	22.9
Approach			79	0.0	79	0.0	0.184	17.4	LOS C	0.6	4.5	0.77	1.00	0.78	40.3
North: SH1 North															
7	L2	All MCs	36	0.0	36	0.0	0.542	4.8	LOS A	0.0	0.0	0.00	0.02	0.00	48.3
8	T1	All MCs	948	11.6	948	11.6	0.542	0.3	LOS A	0.0	0.0	0.00	0.02	0.00	49.5
Approach			984	11.2	984	11.2	0.542	0.5	NA	0.0	0.0	0.00	0.02	0.00	49.4
All Vehicles			2408	8.1	2408	8.1	0.634	2.0	NA	1.7	12.3	0.08	0.11	0.10	48.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: J:\Oxford John Ltd (OJL)\OJL-J001 - Southeast Woodend Plan Change Transport Advice\2 Project and Delivery\5 Analysis and Design\2 Models\Petrie Road Models.sip9