

MOVEMENT SUMMARY

Site: 1 [Existing intersection current traffic holiday periods plus 30% (Site Folder: General)]

Cove Rd/Mangawhai Heads Rd intersection

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h		DEMAND FLOWS [Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh		Prop. Que	Effective Stop Rate
			HV] veh/h		HV] %				Dist] m			
South: Cove Rd south												
11	T1	57	2	57	3.5	0.030	0.0	LOS A	0.0	0.0	0.00	0.00
12	R2	95	3	95	3.2	0.071	6.7	LOS A	0.3	2.2	0.15	0.59
Approach		152	5	152	3.3	0.071	4.2	NA	0.3	2.2	0.09	0.37
East: Mangawhai Heads Rd												
1	L2	58	3	58	5.2	0.206	9.0	LOS A	0.9	6.7	0.26	0.91
3	R2	95	3	95	3.2	0.206	10.9	LOS B	0.9	6.7	0.26	0.91
Approach		153	6	153	3.9	0.206	10.2	LOS B	0.9	6.7	0.26	0.91
North: Cove Rd to Waipu												
4	L2	111	3	111	2.7	0.114	7.7	LOS A	0.5	3.9	0.21	0.45
5	T1	57	2	57	3.5	0.114	1.4	LOS A	0.5	3.9	0.21	0.45
Approach		168	5	168	3.0	0.114	5.6	NA	0.5	3.9	0.21	0.45
All Vehicles		473	16	473	3.4	0.206	6.6	NA	0.9	6.7	0.19	0.57

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

MOVEMENT SUMMARY

Site: 1 [Roundabout with subdivision at 47and55CullenSt 2032 PeakHr Holiday weekend with PPC83 (Site Folder: General)]

Existing roundabout with existing traffic

Site Category: (None)

Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn w/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m		
South: Molesworth Drive												
1	L2	485	17	511	3.5	0.643	4.6	LOS A	7.1	50.8	0.56	0.55
2	T1	77	3	81	3.9	0.643	4.6	LOS A	7.1	50.8	0.56	0.55
3	R2	256	6	269	2.3	0.643	8.0	LOS A	7.1	50.8	0.56	0.55
Approach		818	26	861	3.2	0.643	5.7	LOS A	7.1	50.8	0.56	0.55
East: Mangawhai Heads Rd E												
4	L2	235	5	247	2.1	0.398	7.2	LOS A	2.9	20.9	0.79	0.79
5	T1	74	2	78	2.7	0.398	7.2	LOS A	2.9	20.9	0.79	0.79
6	R2	17	0	18	0.0	0.398	10.5	LOS B	2.9	20.9	0.79	0.79
Approach		326	7	343	2.1	0.398	7.4	LOS A	2.9	20.9	0.79	0.79
North: Cullen St												
7	L2	23	1	24	4.3	0.143	8.9	LOS A	1.0	7.1	0.82	0.78
8	T1	51	2	54	3.9	0.143	8.9	LOS A	1.0	7.1	0.82	0.78
9	R2	17	1	18	5.9	0.143	12.4	LOS B	1.0	7.1	0.82	0.78
Approach		91	4	96	4.4	0.143	9.6	LOS A	1.0	7.1	0.82	0.78
West: Mangawhai Heads Rd W												
10	L2	17	0	18	0.0	0.598	7.4	LOS A	5.6	40.9	0.77	0.82
11	T1	69	2	73	2.9	0.598	7.5	LOS A	5.6	40.9	0.77	0.82
12	R2	470	22	495	4.7	0.598	11.0	LOS B	5.6	40.9	0.77	0.82
Approach		556	24	585	4.3	0.598	10.4	LOS B	5.6	40.9	0.77	0.82
All Vehicles		1791	61	1885	3.4	0.643	7.7	LOS A	7.1	50.8	0.66	0.69

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

Roundabout LOS Method: Same as Signalised Intersections.

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

MOVEMENT SUMMARY

Site: 1 [Existing intersection current traffic holiday periods plus 30% plus PPC83 traffic (Site Folder: General)]

Cove Rd/Mangawhai Heads Rd intersection

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h HV] veh/h		DEMAND FLOWS [Total veh/h HV] %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh Dist] m	Prop. Que	Effective Stop Rate	
South: Cove Rd south												
11	T1	67	2	67	3.0	0.035	0.0	LOS A	0.0	0.0	0.00	0.00
12	R2	129	4	129	3.1	0.097	6.8	LOS A	0.4	3.1	0.17	0.59
Approach		196	6	196	3.1	0.097	4.4	NA	0.4	3.1	0.11	0.39
East: Mangawhai Heads Rd												
1	L2	58	3	58	5.2	0.280	9.1	LOS A	1.2	9.5	0.34	0.92
3	R2	129	4	129	3.1	0.280	12.0	LOS B	1.2	9.5	0.34	0.92
Approach		187	7	187	3.7	0.280	11.1	LOS B	1.2	9.5	0.34	0.92
North: Cove Rd to Waipu												
4	L2	145	4	145	2.8	0.149	7.9	LOS A	0.7	5.3	0.25	0.46
5	T1	67	2	67	3.0	0.149	1.5	LOS A	0.7	5.3	0.25	0.46
Approach		212	6	212	2.8	0.149	5.9	NA	0.7	5.3	0.25	0.46
All Vehicles		595	19	595	3.2	0.280	7.1	NA	1.2	9.5	0.23	0.58

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

MOVEMENT SUMMARY

Site: 1 [Roundabout with subdivision at 47and55CullenSt PeakHr Holiday weekend with PPC83 (Site Folder: General)]

Existing roundabout with existing traffic

Site Category: (None)

Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %	w/c	sec		[Veh. veh	Dist] m		
South: Molesworth Drive												
1	L2	387	14	407	3.6	0.493	4.2	LOS A	4.3	30.7	0.39	0.52
2	T1	59	2	62	3.4	0.493	4.2	LOS A	4.3	30.7	0.39	0.52
3	R2	197	5	207	2.5	0.493	7.6	LOS A	4.3	30.7	0.39	0.52
Approach		643	21	677	3.3	0.493	5.3	LOS A	4.3	30.7	0.39	0.52
East: Mangawhai Heads Rd E												
4	L2	181	4	191	2.2	0.272	6.1	LOS A	1.8	12.6	0.64	0.68
5	T1	60	2	63	3.3	0.272	6.1	LOS A	1.8	12.6	0.64	0.68
6	R2	13	0	14	0.0	0.272	9.4	LOS A	1.8	12.6	0.64	0.68
Approach		254	6	267	2.4	0.272	6.3	LOS A	1.8	12.6	0.64	0.68
North: Cullen St												
7	L2	18	1	19	5.6	0.090	7.2	LOS A	0.5	4.0	0.69	0.69
8	T1	40	2	42	5.0	0.090	7.1	LOS A	0.5	4.0	0.69	0.69
9	R2	13	1	14	7.7	0.090	10.6	LOS B	0.5	4.0	0.69	0.69
Approach		71	4	75	5.6	0.090	7.8	LOS A	0.5	4.0	0.69	0.69
West: Mangawhai Heads Rd W												
10	L2	13	0	14	0.0	0.437	5.5	LOS A	3.1	22.3	0.59	0.70
11	T1	56	2	59	3.6	0.437	5.6	LOS A	3.1	22.3	0.59	0.70
12	R2	375	17	395	4.5	0.437	9.0	LOS A	3.1	22.3	0.59	0.70
Approach		444	19	467	4.3	0.437	8.5	LOS A	3.1	22.3	0.59	0.70
All Vehicles		1412	50	1486	3.5	0.493	6.6	LOS A	4.3	30.7	0.52	0.61

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

Roundabout LOS Method: Same as Signalised Intersections.

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

MOVEMENT SUMMARY

Site: 1 [Roundabout with subdivision at 47and55CullenSt 2032 PeakHr Holiday weekend (Site Folder: General)]

Existing roundabout with existing traffic

Site Category: (None)

Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %	w/c	sec		[Veh. veh	Dist] m		
South: Molesworth Drive												
1	L2	425	15	447	3.5	0.588	4.5	LOS A	5.9	42.3	0.48	0.54
2	T1	77	3	81	3.9	0.588	4.5	LOS A	5.9	42.3	0.48	0.54
3	R2	256	6	269	2.3	0.588	7.8	LOS A	5.9	42.3	0.48	0.54
Approach		758	24	798	3.2	0.588	5.6	LOS A	5.9	42.3	0.48	0.54
East: Mangawhai Heads Rd E												
4	L2	235	5	247	2.1	0.358	6.6	LOS A	2.5	18.0	0.73	0.74
5	T1	64	2	87	3.1	0.358	6.7	LOS A	2.5	18.0	0.73	0.74
6	R2	17	0	18	0.0	0.358	9.9	LOS A	2.5	18.0	0.73	0.74
Approach		316	7	333	2.2	0.358	6.8	LOS A	2.5	18.0	0.73	0.74
North: Cullen St												
7	L2	23	1	24	4.3	0.129	8.1	LOS A	0.8	6.1	0.77	0.75
8	T1	51	2	54	3.9	0.129	8.1	LOS A	0.8	6.1	0.77	0.75
9	R2	17	1	18	5.9	0.129	11.6	LOS B	0.8	6.1	0.77	0.75
Approach		91	4	96	4.4	0.129	8.8	LOS A	0.8	6.1	0.77	0.75
West: Mangawhai Heads Rd W												
10	L2	17	0	18	0.0	0.523	6.6	LOS A	4.1	30.1	0.72	0.78
11	T1	59	2	62	3.4	0.523	6.7	LOS A	4.1	30.1	0.72	0.78
12	R2	410	20	432	4.9	0.523	10.1	LOS B	4.1	30.1	0.72	0.78
Approach		486	22	512	4.5	0.523	9.6	LOS A	4.1	30.1	0.72	0.78
All Vehicles		1651	57	1738	3.5	0.588	7.2	LOS A	5.9	42.3	0.61	0.66

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

Roundabout LOS Method: Same as Signalised Intersections.

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

MOVEMENT SUMMARY

Site: [Cove Road Bridge with PPC83 capacity (Site Folder: General)]

New Site

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE	Prop. Que	
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m	
South: Landing Road South											
2	T1	600	4.0	600	4.0	0.838	25.3	LOS D	27.3	197.5	1.00
Approach		600	4.0	600	4.0	0.838	25.3	LOS D	27.3	197.5	1.00
North: Landing Road North											
8	T1	400	4.0	400	4.0	0.387	4.6	LOS A	0.3	2.0	0.06
Approach		400	4.0	400	4.0	0.387	4.6	LOS A	0.3	2.0	0.06
All Vehicles		1000	4.0	1000	4.0	0.838	17.0	NA	27.3	197.5	0.63

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

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

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

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