

A Planning Application by
CO-OPERATIVE GROUP

In respect of
**Imperial Palace, Belmont Grove,
HAVANT**

Technical Note

August 2020



Document Management

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1 Introduction

- 1.1 Transport Planning Associates have been appointed by Co-Op to provide transport and highways advice in relation to the proposed conversion of the Imperial Palace Restaurant on Belmont Grove. The development proposes to convert the existing restaurant into a Co-Op retail store, with a retail sales area of 235m² and total gross floor area of 360m².
- 1.2 This Technical Note (TN) has been prepared in response to comments made by Highways Officers at Hampshire County Council (HCC), dated 3 July 2020. The consultation response requested the following:
- Junction modelling for the Bedhampton Road / Belmont Grove Junction
 - Upgrades to pedestrian and cycle infrastructure in the vicinity of the site
 - Updated tracking drawings
- 1.3 This TN provides the requested information, as well as an update regarding recently announced changes to land use classes which will come into force in September 2020 and have a material impact upon the highway impacts of this planning application.

New Land Use Class Order

- 1.4 On 22 July 2020 the Town and Country Planning (Use Classes) Order 1987 was amended. The amendments include revoking Parts A and D and introducing three new use classes (Class E, F1 and F2). The changes come into force in England on 1 September 2020.
- 1.5 New Class E covers various commercial operations, including the former A1 (retail) and A3 (restaurants). This means that as of 1st September 2020 the application site can be utilised as a retail unit without any requirement for planning permission, as it will fall into the new land use class E.
- 1.6 From a highways perspective, this means that without any planning permission being required, the site could operate as a retail unit, with a GFA of 479m² (the full existing floor space, as set out on the planning application forms). This compares with the planning application proposals, which would result in a retail unit with a GFA of 360m².
- 1.7 The impact of the current planning application is therefore that there will be a reduction in the quantum of vehicle, cycle and pedestrian trips which the site has the potential to generate. Notwithstanding this, as the traffic surveys have been commissioned, capacity analysis has been undertaken and is presented with this note. As a good will gesture, some pedestrian and cycle improvements are also offered.

2 Junction capacity analysis

- 2.1 Traffic surveys were undertaken at the Bedhampton Road / Belmont Grove junction on Friday 17th July, between 07:00 and 19:00, in order to gain existing traffic flow data. Given the impacts of Covid-19 on traffic flows, survey data from November 2019 has been sourced, for the B2177 at a point approximately 1km west of the application site. This data was in the form of an ATC and the ATC was repeated in July 2017, in order to provide an evidence base from which growth factors can be calculated, to increase the existing flows recorded at the Belmont Grove / Bedhampton Road junction to what would be expected in 'normal' pre-Covid-19 conditions. Copies of the traffic survey data are provided at **Appendix A**.
- 2.2 Analysis of the two ATC surveys shows that morning peak traffic flows are currently 45% below November 2019 levels and evening peak flows are down by 29%. These factors have therefore been applied to the July 2020 junction survey results, in order to provide the most accurate capacity analysis possible. Development traffic flows have been added to the factored survey flows, utilising existing turning proportions. Traffic flow diagrams are provided at **Appendix B**.
- 2.3 The Junctions 9 programme has been utilised to assess operation of the Belmont Grove / Bedhampton Road junction and results are provided in tables 2.1 and 2.2 for the existing junction operation, based upon the factored flows which approximate 2020 traffic flows without the impact of Covid-19.

Table 2.1 Capacity analysis results – 2020 without development – AM peak

Arm	Max RFC	Max Delay (s)	Max Queue (veh)
Bedhampton Rd (W)	0.04	9.1	0.0
Belmont Grove	0.19	20.8	0.2
Bedhampton Rd (E)	0.03	7.8	0.0

Table 2.2 Capacity analysis results – 2020 without development – PM peak

Arm	Max RFC	Max Delay (s)	Max Queue (veh)
Bedhampton Rd (W)	0.06	10.9	0.1
Belmont Grove	0.3	37.9	0.4
Bedhampton Rd (E)	0.08	9.3	0.1

- 2.4 The data illustrates that the junction should operate well within capacity under 'normal' circumstances, with the Belmont Grove arm being subject to the most delay, but with some 70% 'spare' capacity.

2.5 Tables 2.3 and 2.4 provide a summary of the 'with development' capacity analysis results.

Table 2.3 Capacity analysis results – 2020 with development – AM peak

Arm	Max RFC	Max Delay (s)	Max Queue (veh)
Bedhampton Rd (W)	0.07	9.8	0.1
Belmont Grove	0.29	24.2	0.4
Bedhampton Rd (E)	0.05	8.0	0.0

Table 2.4 Capacity analysis results – 2020 with development – PM peak

Arm	Max RFC	Max Delay (s)	Max Queue (veh)
Bedhampton Rd (W)	0.12	14.5	0.1
Belmont Grove	0.52	58.1	1
Bedhampton Rd (E)	0.12	9.8	0.1

2.6 The data illustrates that with the development in place the junction will continue to operate well within capacity, with a reserve capacity of almost 50% on the Belmont Grove arm. Full Junctions 9 results are provided at **Appendix C**.

3 Pedestrian & cycle infrastructure

- 3.1 Consideration has been given to the highway authority's request for pedestrian and cycle infrastructure improvements and notwithstanding the fact that the proposals will now result in a smaller retail unit than could be operated from the site under the new land use class E, the applicant is willing to provide improvements as a good will gesture and to benefit their customers.
- 3.2 The works proposed include the following:
- Openings in site boundary to provide direct pedestrian and cycle access to the site from footways to its north and south, such that pedestrians and cyclists do not need to use the vehicle access to the site
 - New dropped kerbs and tactile paving on Belmont Grove to the east of the site
 - Extended dropped kerbs and new tactile paving at a second crossing point on Belmont Grove to the east of the site
 - New dropped kerbs and tactile paving on Belmont Grove to the north of the site
- 3.3 A plan illustrating the proposed works is provided at **Appendix D**. The precise locations and dimensions for the works will be subject to detailed design, through a process pursuant to the relevant Highways Act, with the works expected to be secured via planning condition.

4 Swept path analysis

- 4.1 Swept path analysis has been undertaken at the request of the highway authority to illustrate that a good vehicle can exit the site toward Bedhampton Road and wait at the stop line without obstructing traffic seeking to turn into Belmont Grove. That analysis has been updated, again at the request of the highway officer, to include the correct alignment of public parking on Belmont Grove. A copy of the swept path analysis is included at **Appendix E**.
- 4.2 The analysis illustrates that there is more than adequate space for a service vehicle to leave the site, without having any detrimental impact upon traffic turning into Belmont Grove from Bedhampton Road.

5 Conclusion

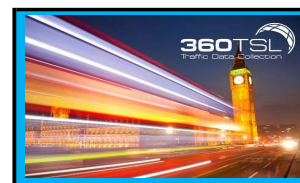
- 5.1 Transport Planning Associates have been appointed by Co-Op to provide transport and highways advice in relation to the proposed conversion of the Imperial Palace Restaurant on Belmont Grove. The development proposes to convert the existing restaurant into a Co-Op retail store, with a retail sales area of 235m² and total gross floor area of 360m².
- 5.2 This Technical Note has been prepared in response to comments made by Highways Officers at Hampshire County Council requesting junction capacity modelling, upgrades to pedestrian and cycle infrastructure in the vicinity of the site and updated tracking drawings
- 5.3 The analysis requested by the highway authority has been provided, however it is somewhat superseded by recent announcements relating to changes to the Land Use Class order, which mean that from September this year the site will fall under a new land use class, E, which includes both the existing A3 and A1 use classed. This has the effect of allowing the entire existing building to be traded as a retail store, without any planning permission being required. Given that the planning application proposals are to create a retail unit which has a total GFA lower than the total existing GFA of the building on site, the proposals will now result in a reduction to the amount of traffic which the site is capable of generating.
- 5.4 Highway impacts of the proposals will therefore be positive, with a reduction to the potential traffic volumes into / out of and around the site.
- 5.5 Notwithstanding the above, the applicant has agreed to provide improvements to pedestrian and cycle infrastructure, as a good will gesture and to benefit their customers.

APPENDIX A

Havant - Friday 17th July 2020

Junction: Belmont Grove/B2177 Bedhampton Rd

Approach: Belmont Grove

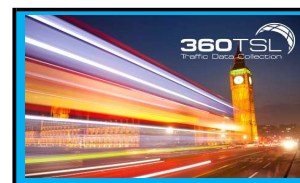


TIME	Left Turn				Right Turn			
	Light	HGV	Bus/Coach	TOTAL	Light	HGV	Bus/Coach	TOTAL
0700 - 0715	1	0	0	1	4	0	0	4
0715 - 0730	1	0	0	1	8	0	0	8
0730 - 0745	1	0	0	1	5	0	0	5
0745 - 0800	3	0	0	3	7	0	0	7
Hourly Total	6	0	0	6	24	0	0	24
0800 - 0815	3	0	0	3	4	0	0	4
0815 - 0830	1	0	0	1	10	0	0	10
0830 - 0845	4	0	0	4	6	0	0	6
0845 - 0900	3	0	0	3	6	0	0	6
Hourly Total	11	0	0	11	26	0	0	26
0900 - 0915	4	0	0	4	7	0	0	7
0915 - 0930	1	0	0	1	6	0	0	6
0930 - 0945	4	0	0	4	3	0	0	3
0945 - 1000	2	0	0	2	2	0	0	2
Hourly Total	11	0	0	11	18	0	0	18
1000 - 1015	2	0	0	2	4	0	0	4
1015 - 1030	5	0	0	5	7	0	0	7
1030 - 1045	3	0	0	3	3	0	0	3
1045 - 1100	3	0	0	3	5	0	0	5
Hourly Total	13	0	0	13	19	0	0	19
1100 - 1115	3	0	0	3	6	0	0	6
1115 - 1130	4	0	0	4	4	0	0	4
1130 - 1145	5	0	0	5	5	0	0	5
1145 - 1200	4	0	0	4	3	0	0	3
Hourly Total	16	0	0	16	18	0	0	18
1200 - 1215	5	0	0	5	6	0	0	6
1215 - 1230	2	0	0	2	4	0	0	4
1230 - 1245	3	0	0	3	7	0	0	7
1245 - 1300	2	0	0	2	4	0	0	4
Hourly Total	12	0	0	12	21	0	0	21
1300 - 1315	3	0	0	3	3	0	0	3
1315 - 1330	5	0	0	5	7	0	0	7
1330 - 1345	3	0	0	3	8	0	0	8
1345 - 1400	4	0	0	4	4	0	0	4
Hourly Total	15	0	0	15	22	0	0	22
1400 - 1415	1	0	0	1	6	0	0	6
1415 - 1430	5	0	0	5	2	0	0	2
1430 - 1445	6	0	0	6	9	0	0	9
1445 - 1500	4	0	0	4	5	0	0	5
Hourly Total	16	0	0	16	22	0	0	22
1500 - 1515	3	0	0	3	8	0	0	8
1515 - 1530	5	0	0	5	4	0	0	4
1530 - 1545	4	0	0	4	7	0	0	7
1545 - 1600	7	0	0	7	4	0	0	4
Hourly Total	19	0	0	19	23	0	0	23
1600 - 1615	4	0	0	4	9	0	0	9
1615 - 1630	5	0	0	5	6	0	0	6
1630 - 1645	3	0	0	3	9	0	0	9
1645 - 1700	3	0	0	3	5	0	0	5
Hourly Total	15	0	0	15	29	0	0	29
1700 - 1715	2	0	0	2	8	0	0	8
1715 - 1730	3	0	0	3	7	0	0	7
1730 - 1745	3	0	0	3	4	0	0	4
1745 - 1800	5	0	0	5	3	0	0	3
Hourly Total	13	0	0	13	22	0	0	22
1800 - 1815	2	0	0	2	4	0	0	4
1815 - 1830	2	0	0	2	6	0	0	6
1830 - 1845	4	0	0	4	3	0	0	3
1845 - 1900	2	0	0	2	3	0	0	3
Hourly Total	10	0	0	10	16	0	0	16
TOTAL	Left Turn				Right Turn			
	Light	HGV	Bus/Coach	TOTAL	Light	HGV	Bus/Coach	TOTAL
TOTAL	157	0	0	157	260	0	0	260

Havant - Friday 17th July 2020

Junction: Belmont Grove/B2177 Bedhampton Rd

Approach: Bedhampton Road EB

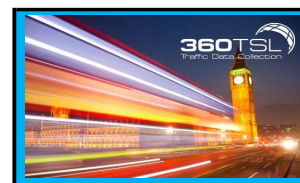


TIME	Left Turn				Eastbound			
	Light	HGV	Bus/Coach	TOTAL	Light	HGV	Bus/Coach	TOTAL
0700 - 0715	3	0	0	3	82	1	1	84
0715 - 0730	4	0	0	4	85	1	1	87
0730 - 0745	1	0	0	1	91	1	2	94
0745 - 0800	7	0	0	7	102	1	2	105
Hourly Total	15	0	0	15	360	4	6	370
0800 - 0815	4	0	0	4	114	0	3	117
0815 - 0830	3	0	0	3	110	0	1	111
0830 - 0845	9	0	0	9	127	3	2	132
0845 - 0900	6	0	0	6	114	1	2	117
Hourly Total	22	0	0	22	465	4	8	477
0900 - 0915	8	0	0	8	119	1	3	123
0915 - 0930	3	0	0	3	116	3	1	120
0930 - 0945	7	0	0	7	115	1	3	119
0945 - 1000	7	0	0	7	123	2	1	126
Hourly Total	25	0	0	25	473	7	8	488
1000 - 1015	6	0	0	6	113	1	2	116
1015 - 1030	3	0	0	3	127	3	2	132
1030 - 1045	4	0	0	4	115	1	2	118
1045 - 1100	7	0	0	7	116	2	2	120
Hourly Total	20	0	0	20	471	7	8	486
1100 - 1115	6	0	0	6	115	2	2	119
1115 - 1130	8	0	0	8	117	2	3	122
1130 - 1145	6	0	0	6	109	0	2	111
1145 - 1200	7	0	0	7	124	2	1	127
Hourly Total	27	0	0	27	465	6	8	479
1200 - 1215	7	0	0	7	113	1	1	115
1215 - 1230	3	0	0	3	103	2	3	108
1230 - 1245	6	0	0	6	107	2	1	110
1245 - 1300	6	0	0	6	118	1	2	121
Hourly Total	22	0	0	22	441	6	7	454
1300 - 1315	4	0	0	4	105	2	2	109
1315 - 1330	6	0	0	6	128	0	2	130
1330 - 1345	8	0	0	8	114	2	1	117
1345 - 1400	5	0	0	5	113	1	2	116
Hourly Total	23	0	0	23	460	5	7	472
1400 - 1415	7	0	0	7	128	0	2	130
1415 - 1430	4	0	0	4	134	1	2	137
1430 - 1445	4	0	0	4	151	0	3	154
1445 - 1500	7	0	0	7	146	2	2	150
Hourly Total	22	0	0	22	559	3	9	571
1500 - 1515	7	0	0	7	167	1	3	171
1515 - 1530	8	0	0	8	171	0	1	172
1530 - 1545	6	0	0	6	184	1	3	188
1545 - 1600	7	0	0	7	179	1	1	181
Hourly Total	28	0	0	28	701	3	8	712
1600 - 1615	8	0	0	8	189	1	3	193
1615 - 1630	5	0	0	5	180	0	2	182
1630 - 1645	10	0	0	10	167	1	4	172
1645 - 1700	8	0	0	8	166	0	1	167
Hourly Total	31	0	0	31	702	2	10	714
1700 - 1715	9	0	0	9	177	1	2	180
1715 - 1730	6	0	0	6	164	0	1	165
1730 - 1745	6	0	0	6	171	1	3	175
1745 - 1800	7	0	0	7	177	0	3	180
Hourly Total	28	0	0	28	689	2	9	700
1800 - 1815	8	0	0	8	169	0	3	172
1815 - 1830	5	0	0	5	182	1	1	184
1830 - 1845	4	0	0	4	164	0	2	166
1845 - 1900	5	0	0	5	155	0	2	157
Hourly Total	22	0	0	22	670	1	8	679
TOTAL	Left Turn				Eastbound			
	Light	HGV	Bus/Coach	TOTAL	Light	HGV	Bus/Coach	TOTAL
TOTAL	285	0	0	285	6456	50	96	6602

Havant - Friday 17th July 2020

Junction: Belmont Grove/B2177 Bedhampton Rd

Approach: Bedhampton Road WB



TIME	Right Turn				Westbound			
	Light	HGV	Bus/Coach	TOTAL	Light	HGV	Bus/Coach	TOTAL
0700 - 0715	2	0	0	2	114	1	1	116
0715 - 0730	1	0	0	1	117	1	3	121
0730 - 0745	5	0	0	5	133	1	1	135
0745 - 0800	1	0	0	1	114	0	3	117
Hourly Total	9	0	0	9	478	3	8	489
0800 - 0815	4	0	0	4	112	2	2	116
0815 - 0830	1	0	0	1	135	1	2	138
0830 - 0845	1	0	0	1	125	1	1	127
0845 - 0900	3	0	0	3	138	1	4	143
Hourly Total	9	0	0	9	510	5	9	524
0900 - 0915	5	0	0	5	134	1	1	136
0915 - 0930	2	0	0	2	127	1	2	130
0930 - 0945	1	0	0	1	130	2	2	134
0945 - 1000	1	0	0	1	121	1	3	125
Hourly Total	9	0	0	9	512	5	8	525
1000 - 1015	3	0	0	3	117	1	2	120
1015 - 1030	4	0	0	4	124	0	2	126
1030 - 1045	2	0	0	2	109	1	3	113
1045 - 1100	3	0	0	3	115	1	2	118
Hourly Total	12	0	0	12	465	3	9	477
1100 - 1115	3	0	0	3	127	1	1	129
1115 - 1130	2	0	0	2	116	1	2	119
1130 - 1145	6	0	0	6	130	0	2	132
1145 - 1200	4	0	0	4	124	2	4	130
Hourly Total	15	0	0	15	497	4	9	510
1200 - 1215	1	0	0	1	117	1	2	120
1215 - 1230	2	0	0	2	110	2	1	113
1230 - 1245	2	0	0	2	113	1	3	117
1245 - 1300	4	0	0	4	119	2	2	123
Hourly Total	9	0	0	9	459	6	8	473
1300 - 1315	4	0	0	4	130	1	2	133
1315 - 1330	6	0	0	6	144	0	2	146
1330 - 1345	4	0	0	4	135	2	1	138
1345 - 1400	3	0	0	3	142	0	2	144
Hourly Total	17	0	0	17	551	3	7	561
1400 - 1415	2	0	0	2	155	0	2	157
1415 - 1430	4	0	0	4	141	1	1	143
1430 - 1445	2	0	0	2	163	1	2	166
1445 - 1500	3	0	0	3	157	0	2	159
Hourly Total	11	0	0	11	616	2	7	625
1500 - 1515	9	0	0	9	174	0	2	176
1515 - 1530	5	0	0	5	183	2	1	186
1530 - 1545	6	0	0	6	192	0	3	195
1545 - 1600	5	0	0	5	172	1	1	174
Hourly Total	25	0	0	25	721	3	7	731
1600 - 1615	6	0	0	6	158	1	2	161
1615 - 1630	3	0	0	3	166	2	3	171
1630 - 1645	4	0	0	4	174	2	1	177
1645 - 1700	3	0	0	3	169	0	3	172
Hourly Total	16	0	0	16	667	5	9	681
1700 - 1715	3	0	0	3	155	1	3	159
1715 - 1730	5	0	0	5	162	1	1	164
1730 - 1745	5	0	0	5	151	2	3	156
1745 - 1800	3	0	0	3	163	0	2	165
Hourly Total	16	0	0	16	631	4	9	644
1800 - 1815	4	0	0	4	170	0	2	172
1815 - 1830	3	0	0	3	158	2	2	162
1830 - 1845	2	0	0	2	162	1	1	164
1845 - 1900	2	0	0	2	152	0	2	154
Hourly Total	11	0	0	11	642	3	7	652
TOTAL	Right Turn				Westbound			
	Light	HGV	Bus/Coach	TOTAL	Light	HGV	Bus/Coach	TOTAL
TOTAL	159	0	0	159	6749	46	97	6892

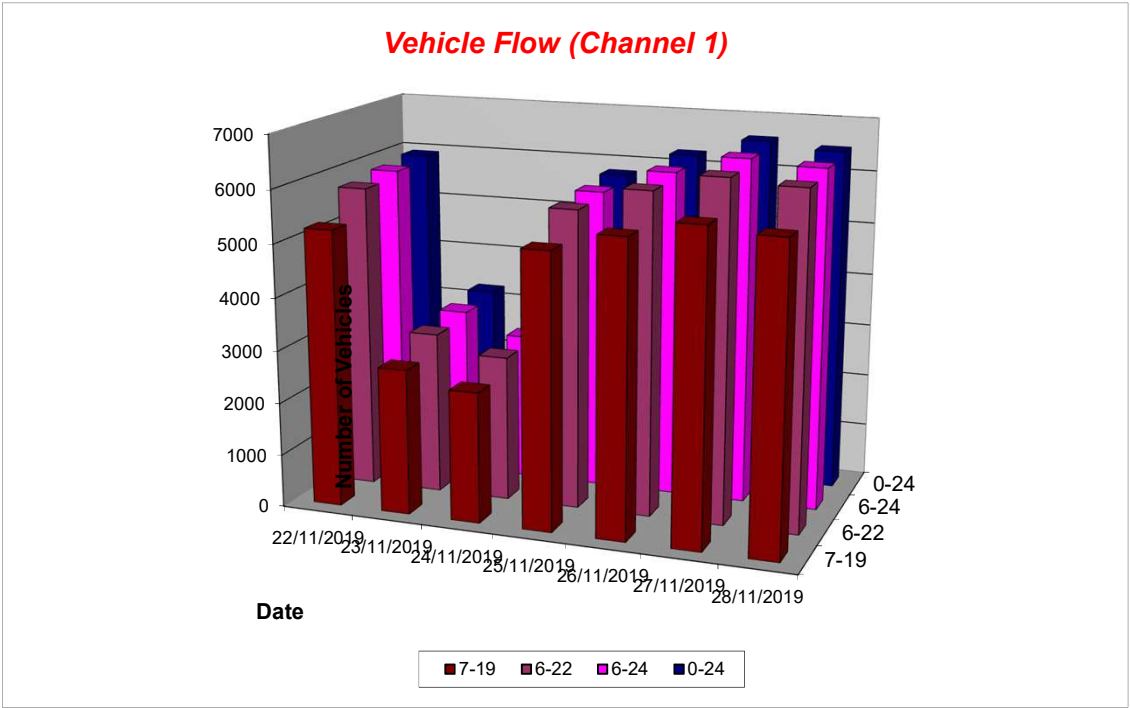
B2177 Havant ATC

Channel 1 - Eastbound

Vehicle Flow

Week 1

	22/11/2019	23/11/2019	24/11/2019	25/11/2019	26/11/2019	27/11/2019	28/11/2019		
Hr Ending	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	5 Day Ave	7 Day Ave
1	11	24	27	11	16	21	7	13	17
2	9	22	25	7	6	8	8	8	12
3	5	4	7	5	3	6	2	4	5
4	5	5	9	3	6	10	9	7	7
5	12	7	8	10	9	10	15	11	10
6	37	18	9	39	48	42	34	40	32
7	133	37	22	143	138	147	148	142	110
8	607	102	78	650	660	802	635	671	505
9	719	151	90	759	828	934	780	804	609
10	379	193	148	386	411	447	445	414	344
11	315	272	194	291	321	300	331	312	289
12	328	270	243	289	300	306	321	309	294
13	327	305	329	279	307	330	336	316	316
14	353	292	338	323	303	354	336	334	328
15	400	298	279	366	374	364	382	377	352
16	513	236	265	384	437	418	482	447	391
17	581	259	231	629	628	608	646	618	512
18	446	230	166	558	610	652	656	584	474
19	276	148	113	269	355	322	380	320	266
20	179	118	119	141	181	202	200	181	163
21	116	85	88	87	126	113	143	117	108
22	82	74	49	87	98	101	89	91	83
23	62	54	26	51	73	77	65	66	58
24	36	47	11	20	18	28	40	28	29
7-19	5244	2756	2474	5183	5534	5837	5730	5506	4680
6-22	5754	3070	2752	5641	6077	6400	6310	6036	5143
6-24	5852	3171	2789	5712	6168	6505	6415	6130	5230
0-24	5931	3251	2874	5787	6256	6602	6490	6213	5313



B2177 Havant ATC

Channel 1 - Eastbound

Average Speed

Week 1

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	45.7	44.9	39.9	41.2	43.6	44.9	44.4
2	40.8	42.4	40.1	42.3	36.3	45.2	44.6
3	45.0	45.5	44.8	41.0	48.8	44.7	45.5
4	36.0	51.5	39.7	39.7	38.4	47.2	46.1
5	42.4	38.0	39.6	43.2	40.5	43.2	41.5
6	41.2	44.2	39.7	42.2	42.3	42.0	42.4
7	39.6	42.2	40.5	40.0	39.6	39.1	40.2
8	35.6	40.7	39.6	34.3	33.5	31.9	34.1
9	35.7	38.3	40.2	35.5	34.2	26.8	32.1
10	37.4	37.6	38.7	35.9	35.8	34.9	34.8
11	36.1	38.3	39.5	36.9	35.5	35.8	36.4
12	36.5	37.9	38.5	34.9	35.4	35.9	35.5
13	37.9	38.3	38.1	36.0	36.2	37.4	37.5
14	36.7	38.4	38.3	36.5	36.7	36.6	36.9
15	37.0	38.3	38.7	35.9	33.8	36.1	36.3
16	36.4	38.3	38.9	36.4	35.4	37.3	36.6
17	36.4	37.1	38.2	35.9	36.0	35.6	35.7
18	37.6	39.2	38.8	35.9	35.9	35.7	35.7
19	38.5	40.2	38.8	38.5	37.8	38.2	37.4
20	39.9	40.0	39.3	40.0	39.1	38.8	38.6
21	40.2	40.4	39.4	39.2	40.6	40.0	39.4
22	41.4	39.8	43.1	40.6	39.6	40.3	40.8
23	42.2	39.3	39.6	41.7	40.3	39.6	41.2
24	41.3	38.6	40.3	41.9	37.3	40.3	40.9

10-12	36.3	38.1	38.9	35.9	35.5	35.8	36.0
14-16	36.7	38.3	38.8	36.1	34.7	36.8	36.4
0-24	37.1	38.7	38.9	36.3	35.9	34.8	35.9

Average	36.8
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Channel 1 - Eastbound

85th Percentile

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	66.2	58.6	44.0	48.7	53.9	53.7	58.2
2	43.5	48.3	48.4	43.9	48.7	48.9	53.5
3	53.6	58.3	58.3	43.8	66.0	53.5	53.3
4	53.3	66.3	58.2	43.0	53.4	58.1	58.3
5	53.3	38.8	48.2	48.5	53.1	48.8	48.0
6	48.8	53.6	43.6	48.9	48.8	53.4	48.5
7	43.0	49.0	48.4	48.4	48.5	43.5	43.2
8	43.8	53.9	48.4	38.7	38.8	38.5	38.9
9	38.8	43.2	48.7	38.5	38.6	38.2	38.6
10	43.7	43.7	43.3	38.5	43.8	38.3	43.8
11	43.0	44.0	43.6	43.5	38.0	43.1	38.9
12	43.4	43.2	43.2	38.4	38.2	43.6	38.3
13	43.9	43.5	43.2	43.4	43.1	43.2	43.5
14	43.8	43.1	43.6	38.3	43.1	43.9	43.1
15	43.4	44.0	43.1	38.1	38.3	43.1	43.6
16	44.0	43.7	43.5	43.2	38.1	43.4	43.4
17	38.9	43.0	43.9	39.0	38.0	38.3	39.0
18	43.1	43.6	43.3	43.1	38.5	38.9	38.1
19	43.9	43.1	43.8	43.4	43.7	43.8	43.9
20	48.4	48.1	43.4	48.4	43.5	43.3	43.6
21	48.5	48.8	43.3	43.5	48.8	48.7	43.3
22	48.8	48.3	53.9	48.2	43.1	48.3	48.1
23	48.1	43.0	43.6	53.5	48.2	48.1	48.5
24	48.6	43.3	43.6	48.3	43.7	48.0	48.2

10-12	43.5	43.4	43.4	43.6	38.5	43.3	39.0
14-16	43.3	43.3	43.1	38.5	38.4	43.8	43.1
0-24	43.6	43.9	43.6	43.2	43.1	43.3	43.0

85th %ile	43.4
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B2177 Havant ATC

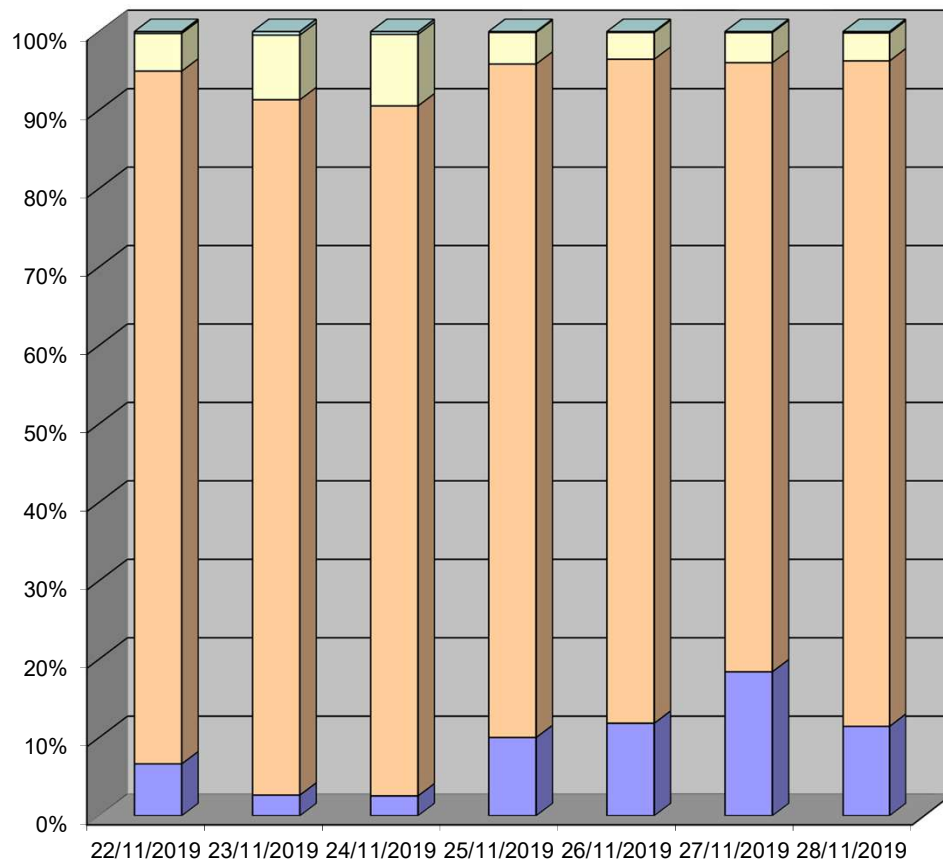
Channel 1 - Eastbound

Speed Summary

Week 1

Speed (MPH)	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
0-30	394	86	73	579	740	1214	742
31-45	5239	2883	2529	4969	5296	5127	5506
46-60	285	268	262	233	213	253	231
61-	13	14	10	6	7	8	11
TOTAL	5931	3251	2874	5787	6256	6602	6490

Speed Summary (MPH)



Date

0-30 31-45 46-60 61-

B2177 Havant ATC

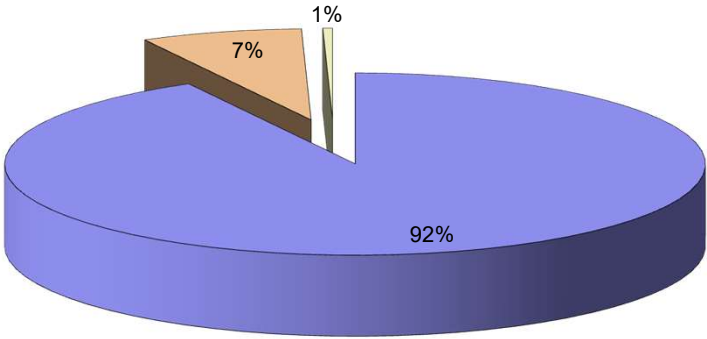
Channel 1 - Eastbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
22/11/2019				
7-19	4782	441	21	5244
6-22	5265	467	22	5754
6-24	5359	471	22	5852
0-24	5427	482	22	5931
23/11/2019				
7-19	2618	133	5	2756
6-22	2921	144	5	3070
6-24	3019	147	5	3171
0-24	3091	155	5	3251
24/11/2019				
7-19	2357	113	4	2474
6-22	2623	124	5	2752
6-24	2658	126	5	2789
0-24	2738	131	5	2874
25/11/2019				
7-19	4751	408	24	5183
6-22	5186	430	25	5641
6-24	5252	435	25	5712
0-24	5318	444	25	5787
26/11/2019				
7-19	5054	444	36	5534
6-22	5570	471	36	6077
6-24	5659	473	36	6168
0-24	5737	483	36	6256
27/11/2019				
7-19	5325	469	43	5837
6-22	5854	503	43	6400
6-24	5951	511	43	6505
0-24	6033	526	43	6602
28/11/2019				
7-19	5202	500	28	5730
6-22	5752	529	29	6310
6-24	5852	534	29	6415
0-24	5915	546	29	6490
Average				
7-19	4298	358	23	4680
6-22	4739	381	24	5143
6-24	4821	385	24	5230
0-24	4894	395	24	5313

Total Vehicle Class Distribution



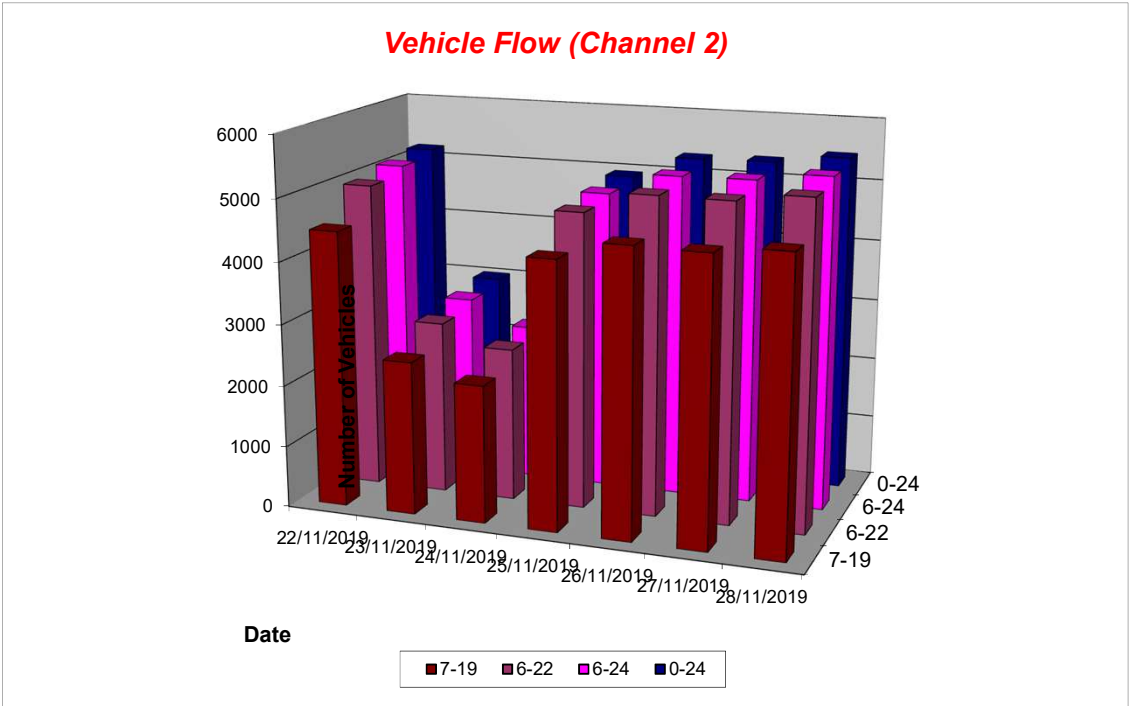
B2177 Havant ATC

Channel 2 - Westbound

Vehicle Flow

Week 1

	22/11/2019	23/11/2019	24/11/2019	25/11/2019	26/11/2019	27/11/2019	28/11/2019		
Hr Ending	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	5 Day Ave	7 Day Ave
1	13	30	37	11	12	16	16	14	19
2	7	9	22	7	8	7	11	8	10
3	7	10	12	3	4	6	3	5	6
4	8	5	14	2	6	4	2	4	6
5	8	5	4	9	11	9	9	9	8
6	43	25	7	40	40	43	49	43	35
7	143	41	20	133	166	136	156	147	114
8	329	79	33	323	347	353	362	343	261
9	438	134	80	497	474	481	539	486	378
10	307	217	150	330	370	334	321	332	290
11	280	224	217	276	274	271	264	273	258
12	284	256	230	293	247	291	321	287	275
13	371	285	288	243	327	306	303	310	303
14	348	251	265	297	280	284	328	307	293
15	398	268	244	311	368	357	369	361	331
16	452	259	246	416	445	442	471	445	390
17	552	196	213	531	563	582	618	569	465
18	467	190	150	516	600	564	565	542	436
19	248	129	116	281	318	328	243	284	238
20	140	108	103	158	163	179	166	161	145
21	122	96	78	119	104	112	137	119	110
22	100	79	58	70	92	113	105	96	88
23	79	64	42	54	59	76	63	66	62
24	44	53	16	24	28	34	42	34	34
7-19	4474	2488	2232	4314	4613	4593	4704	4540	3917
6-22	4979	2812	2491	4794	5138	5133	5268	5062	4374
6-24	5102	2929	2549	4872	5225	5243	5373	5163	4470
0-24	5188	3013	2645	4944	5306	5328	5463	5246	4555



B2177 Havant ATC

Channel 2 - Westbound

Average Speed

Week 1

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	41.3	40.7	40.8	43.0	40.3	44.4	42.1
2	43.0	44.4	39.8	42.3	39.9	39.4	49.1
3	45.1	44.5	40.5	39.7	38.0	42.2	46.3
4	44.2	46.0	43.4	38.0	46.3	44.2	43.0
5	45.5	49.5	44.2	45.2	45.5	46.6	47.7
6	43.6	40.6	43.0	43.2	45.4	43.1	42.6
7	39.6	39.8	40.6	39.1	39.2	39.6	39.2
8	38.7	40.7	39.5	36.6	36.9	36.0	37.5
9	36.9	39.4	39.4	34.8	35.9	35.5	36.4
10	35.5	38.6	39.7	37.1	36.4	35.5	36.6
11	37.1	37.8	40.5	37.2	35.9	37.1	37.6
12	37.9	38.3	39.4	35.5	37.5	37.3	34.4
13	37.1	38.1	38.7	38.4	37.1	37.6	36.7
14	36.6	38.9	38.7	36.0	36.3	37.1	37.2
15	36.3	39.4	39.0	36.5	35.3	37.0	36.6
16	35.4	38.5	38.9	35.7	35.6	35.6	35.9
17	34.5	38.1	38.7	35.7	34.9	35.4	35.1
18	36.5	38.8	38.0	36.9	35.5	36.4	36.0
19	38.0	40.5	39.7	38.5	38.0	37.9	38.4
20	39.8	40.3	40.3	39.6	39.1	39.1	39.4
21	38.8	40.6	41.3	38.4	39.9	40.6	40.6
22	41.3	39.0	43.3	39.8	40.4	41.2	40.1
23	39.4	40.9	40.6	41.7	41.3	42.6	41.0
24	39.4	41.0	45.0	43.6	41.5	45.2	43.5

10-12	37.5	38.1	39.9	36.4	36.6	37.2	35.9
14-16	35.8	39.0	39.0	36.1	35.5	36.2	36.2
0-24	37.0	39.1	39.5	36.9	36.7	37.0	37.0

Average	37.6
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Channel 2 - Westbound

85th Percentile

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	48.3	48.3	48.7	48.6	48.2	53.6	53.8
2	53.5	53.3	43.5	48.3	43.2	53.8	65.8
3	66.4	53.2	48.6	43.1	38.3	53.5	58.7
4	48.5	58.5	48.2	43.2	53.8	53.2	48.4
5	53.4	65.7	53.5	65.6	58.1	53.9	58.8
6	53.8	48.6	43.7	53.4	58.5	53.4	53.7
7	48.8	48.4	48.8	44.0	43.8	48.3	48.4
8	43.7	48.9	48.4	43.5	43.8	43.8	43.1
9	43.7	43.5	43.9	38.5	43.3	43.2	43.4
10	44.0	43.2	48.7	44.0	44.0	43.4	43.3
11	43.3	43.7	48.1	43.2	43.8	43.2	43.7
12	43.5	43.7	43.6	38.4	43.7	43.9	43.3
13	43.4	43.6	43.7	43.4	43.9	43.6	43.8
14	43.7	43.8	43.0	43.3	43.9	43.4	43.2
15	43.2	43.2	43.4	43.5	43.4	43.4	43.6
16	43.4	43.8	43.4	43.1	43.1	43.9	44.0
17	38.5	43.2	43.3	38.5	39.0	38.6	38.2
18	38.8	44.0	44.0	44.0	38.8	38.9	43.9
19	43.5	48.1	43.8	43.6	43.7	43.5	43.1
20	43.4	48.1	48.7	43.9	43.4	43.3	44.0
21	43.5	48.8	48.4	43.7	48.0	48.9	48.6
22	48.2	48.4	53.7	48.4	43.2	48.3	48.6
23	43.6	48.5	43.3	48.7	48.2	48.3	48.9
24	43.5	43.1	53.4	48.1	48.5	53.2	48.6

10-12	43.7	43.1	43.4	38.8	43.4	43.3	43.2
14-16	38.9	43.2	43.9	43.7	43.1	43.0	43.9
0-24	43.4	43.0	43.1	43.5	43.3	43.7	43.1

85th %ile	43.3
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B2177 Havant ATC

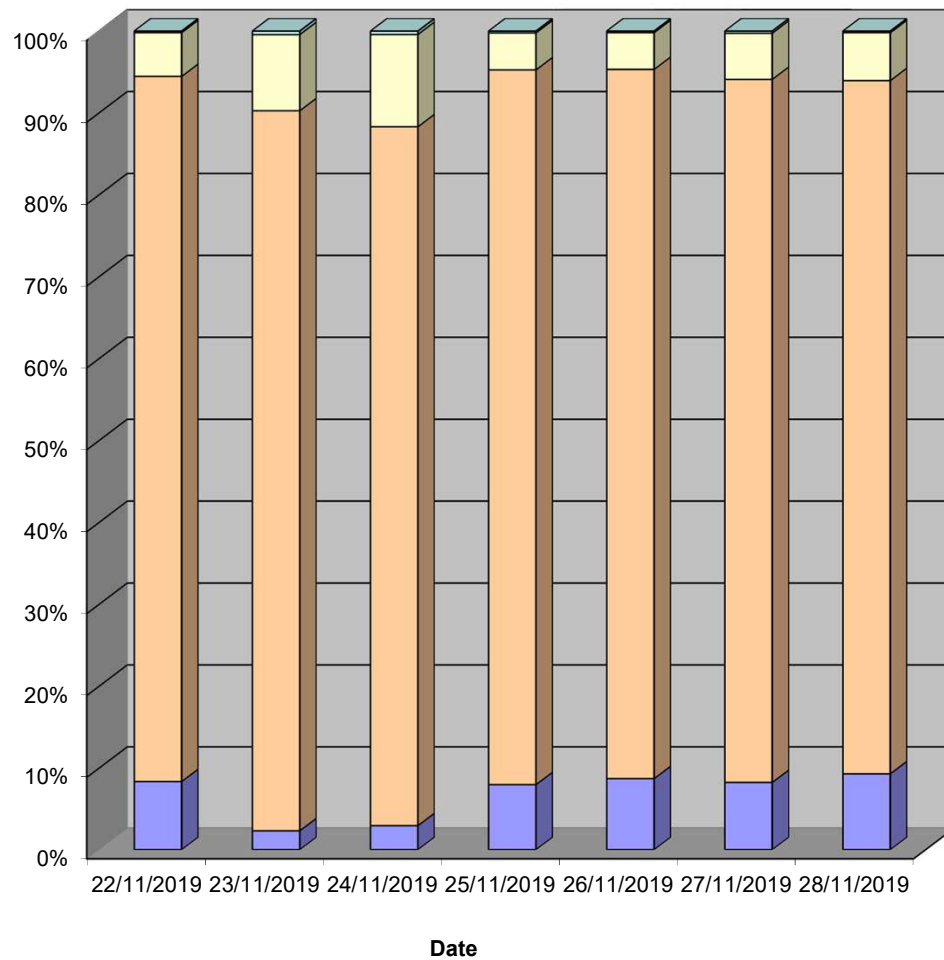
Channel 2 - Westbound

Speed Summary

Week 1

Speed (MPH)	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
0-30	434	70	78	395	463	440	509
31-45	4467	2650	2258	4315	4595	4574	4624
46-60	277	280	298	223	238	300	319
61-	10	13	11	11	10	14	11
TOTAL	5188	3013	2645	4944	5306	5328	5463

Speed Summary (MPH)



0-30 31-45 46-60 61-

B2177 Havant ATC

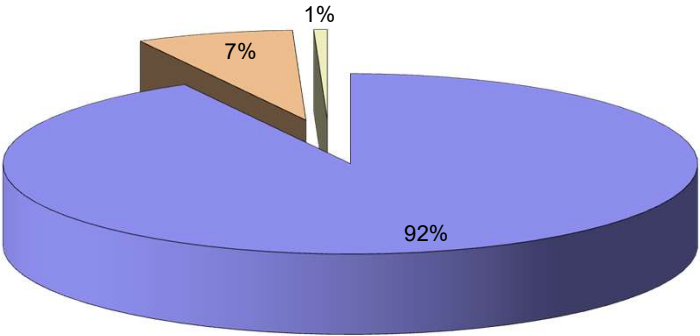
Channel 2 - Westbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
22/11/2019				
7-19	4051	389	34	4474
6-22	4531	412	36	4979
6-24	4651	415	36	5102
0-24	4727	425	36	5188
23/11/2019				
7-19	2353	130	5	2488
6-22	2666	141	5	2812
6-24	2775	149	5	2929
0-24	2848	160	5	3013
24/11/2019				
7-19	2132	97	3	2232
6-22	2384	104	3	2491
6-24	2440	106	3	2549
0-24	2531	111	3	2645
25/11/2019				
7-19	3939	338	37	4314
6-22	4388	369	37	4794
6-24	4462	373	37	4872
0-24	4526	381	37	4944
26/11/2019				
7-19	4224	346	43	4613
6-22	4725	370	43	5138
6-24	4810	372	43	5225
0-24	4873	389	44	5306
27/11/2019				
7-19	4182	374	37	4593
6-22	4699	396	38	5133
6-24	4803	402	38	5243
0-24	4878	412	38	5328
28/11/2019				
7-19	4266	403	35	4704
6-22	4796	436	36	5268
6-24	4899	438	36	5373
0-24	4976	451	36	5463
Average				
7-19	3592	297	28	3917
6-22	4027	318	28	4374
6-24	4120	322	28	4470
0-24	4194	333	28	4555

Total Vehicle Class Distribution



B2177 Havant ATC

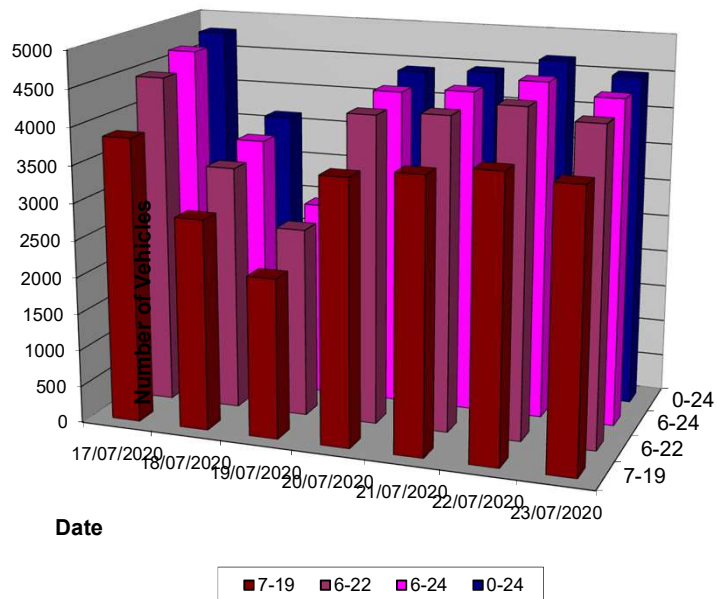
Channel 1 - Eastbound

Vehicle Flow

Week 1

Hr Ending	17/07/2020 Friday	18/07/2020 Saturday	19/07/2020 Sunday	20/07/2020 Monday	21/07/2020 Tuesday	22/07/2020 Wednesday	23/07/2020 Thursday	5 Day Ave	7 Day Ave
1	40	47	66	23	23	25	28	28	36
2	18	36	31	17	9	19	15	16	21
3	8	25	30	7	12	7	12	9	14
4	10	14	24	5	4	7	10	7	11
5	6	10	15	16	5	7	7	8	9
6	35	16	16	42	43	50	41	42	35
7	130	62	26	102	109	105	103	110	91
8	220	80	43	241	242	254	214	234	185
9	246	134	83	256	276	273	306	271	225
10	276	162	107	248	252	262	216	251	218
11	285	235	168	250	270	284	256	269	250
12	302	282	216	254	267	277	288	278	269
13	349	297	248	284	288	290	296	301	293
14	355	299	263	275	286	283	309	302	296
15	384	336	260	370	321	356	317	350	335
16	369	290	224	330	365	383	368	363	333
17	414	263	209	450	421	476	422	437	379
18	385	256	195	380	451	419	404	408	356
19	266	221	150	230	240	243	317	259	238
20	191	148	140	193	171	195	163	183	172
21	171	145	133	195	175	174	158	175	164
22	128	109	99	111	96	133	122	118	114
23	110	93	66	84	77	86	89	89	86
24	92	79	31	44	53	57	48	59	58
7-19	3851	2855	2166	3568	3679	3800	3713	3722	3376
6-22	4471	3319	2564	4169	4230	4407	4259	4307	3917
6-24	4673	3491	2661	4297	4360	4550	4396	4455	4061
0-24	4790	3639	2843	4407	4456	4665	4509	4565	4187

Vehicle Flow (Channel 1)



B2177 Havant ATC

Channel 1 - Eastbound

Average Speed

Week 1

Hr Ending	17/07/2020 Friday	18/07/2020 Saturday	19/07/2020 Sunday	20/07/2020 Monday	21/07/2020 Tuesday	22/07/2020 Wednesday	23/07/2020 Thursday
1	43.7	44.1	41.6	42.2	46.6	42.0	45.9
2	44.5	41.5	44.1	43.1	43.9	44.9	41.6
3	47.8	49.1	46.4	42.1	45.7	40.2	47.8
4	48.1	42.3	46.1	51.9	50.3	48.2	46.1
5	41.7	37.3	42.9	44.6	43.3	41.9	43.1
6	39.9	41.9	44.8	41.4	40.3	40.7	42.4
7	39.3	40.5	40.0	38.8	37.5	39.9	39.5
8	38.8	41.4	37.8	38.7	38.0	39.9	39.2
9	39.2	40.1	40.5	38.3	38.1	38.3	37.2
10	37.5	38.6	38.9	37.1	36.8	37.6	36.8
11	37.1	39.3	39.6	36.7	36.4	36.4	37.2
12	37.3	39.5	39.6	36.3	36.2	37.7	35.8
13	38.8	39.1	40.1	37.8	36.5	38.1	38.6
14	37.6	39.0	38.9	37.5	36.5	37.4	37.4
15	38.2	39.6	38.7	36.9	36.8	36.1	37.5
16	38.8	39.5	39.6	38.4	37.1	36.9	37.5
17	38.2	40.7	40.5	38.1	37.7	38.1	38.0
18	39.0	41.0	39.4	38.7	37.6	39.0	39.5
19	41.5	41.6	41.6	41.5	38.2	41.2	41.0
20	42.1	42.7	40.7	39.5	41.1	40.8	40.4
21	41.0	40.6	41.5	40.1	40.2	41.3	41.8
22	40.1	40.3	41.7	41.1	40.4	40.8	40.7
23	41.2	40.8	40.9	41.7	41.7	43.3	40.7
24	41.3	41.9	42.1	41.6	40.7	43.8	43.2

10-12	37.2	39.4	39.6	36.5	36.3	37.0	36.4
14-16	38.5	39.6	39.1	37.6	36.9	36.5	37.5
0-24	39.0	40.2	40.2	38.5	37.8	38.6	38.6

Average	38.9
---------	------

Channel 1 - Eastbound

85th Percentile

Hr Ending	17/07/2020 Friday	18/07/2020 Saturday	19/07/2020 Sunday	20/07/2020 Monday	21/07/2020 Tuesday	22/07/2020 Wednesday	23/07/2020 Thursday
1	52.8	51.7	46.9	44.7	57.8	52.9	57.1
2	50.3	46.3	53.6	52.1	54.6	52.3	49.1
3	59.7	61.1	53.5	52.1	53.5	43.8	55.4
4	60.6	48.5	55.2	58.5	57.4	54.7	60.1
5	47.7	43.0	49.7	52.2	51.3	45.0	48.4
6	46.9	48.1	51.2	46.3	49.0	47.9	50.9
7	45.7	48.3	45.7	45.1	44.9	47.6	46.2
8	45.6	46.9	45.6	45.6	43.9	45.3	44.5
9	44.4	44.5	46.9	43.5	42.5	43.7	42.3
10	42.8	43.4	43.0	42.8	42.7	41.7	42.7
11	41.6	44.3	44.5	42.5	41.0	41.4	42.3
12	41.7	44.5	44.0	41.8	42.4	42.8	40.9
13	43.6	43.6	44.8	42.8	42.2	42.6	43.8
14	41.6	44.5	42.9	43.0	41.9	42.6	42.4
15	42.8	44.6	42.2	41.9	41.8	41.8	42.7
16	43.6	43.8	44.4	43.6	42.2	42.1	41.7
17	43.2	45.5	44.7	42.8	43.3	43.2	42.7
18	45.3	45.8	44.6	43.7	43.5	43.8	44.5
19	46.8	45.9	45.7	46.8	43.5	46.6	47.1
20	47.6	48.7	45.9	45.1	47.1	45.8	45.5
21	45.8	45.3	46.6	46.1	45.7	48.4	48.4
22	43.8	46.0	47.4	46.3	45.5	46.3	47.1
23	47.2	44.5	45.7	48.1	46.0	51.6	45.5
24	46.8	47.4	48.6	49.0	46.8	51.3	49.5

10-12	41.7	44.4	44.3	42.4	42.0	42.1	41.9
14-16	43.2	43.9	43.4	42.8	42.1	42.0	42.3
0-24	44.2	45.4	45.3	43.7	43.4	44.0	43.8

85th %ile	44.1
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B2177 Havant ATC

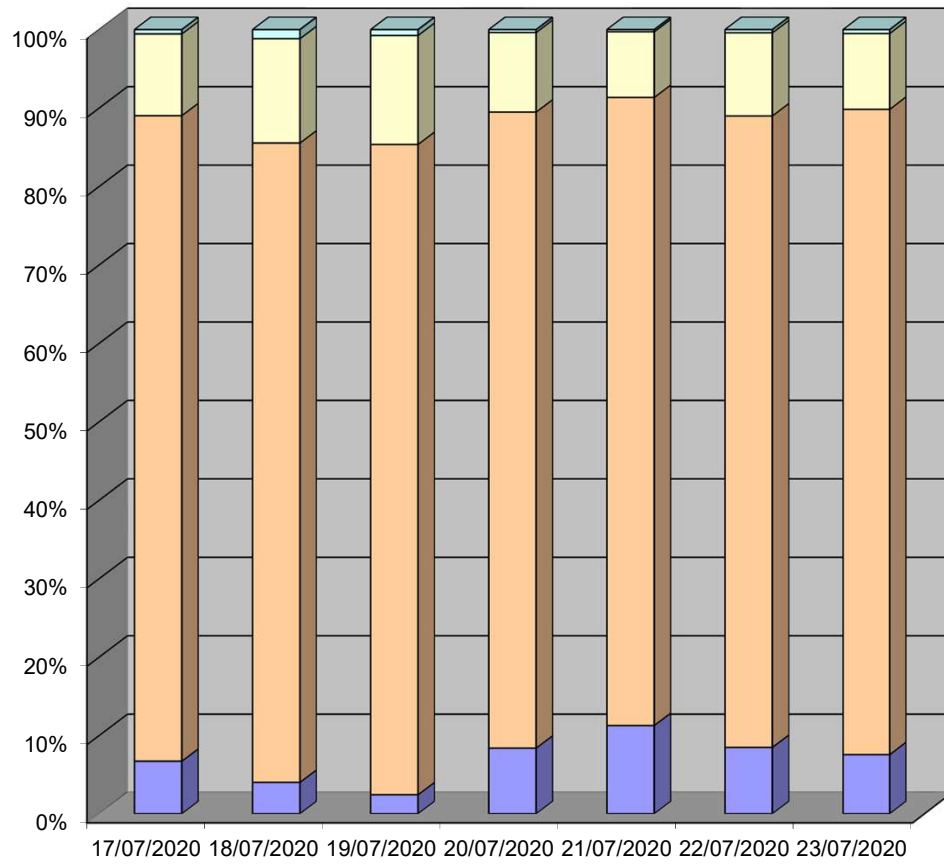
Channel 1 - Eastbound

Speed Summary

Week 1

Speed (MPH)	17/07/2020 Friday	18/07/2020 Saturday	19/07/2020 Sunday	20/07/2020 Monday	21/07/2020 Tuesday	22/07/2020 Wednesday	23/07/2020 Thursday
0-30	322	146	69	370	503	396	341
31-45	3943	2967	2358	3574	3568	3756	3710
46-60	499	484	395	447	373	494	436
61-	26	42	21	16	12	19	22
TOTAL	4790	3639	2843	4407	4456	4665	4509

Speed Summary (MPH)



Date

0-30 31-45 46-60 61-

B2177 Havant ATC

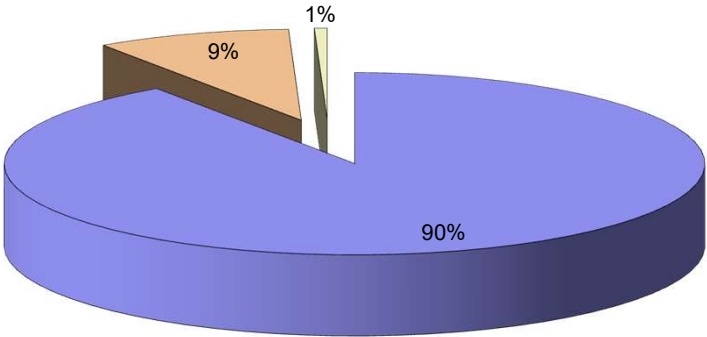
Channel 1 - Eastbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
17/07/2020				
7-19	3402	423	26	3851
6-22	3985	457	29	4471
6-24	4176	467	30	4673
0-24	4281	479	30	4790
18/07/2020				
7-19	2667	173	15	2855
6-22	3100	202	17	3319
6-24	3267	206	18	3491
0-24	3401	220	18	3639
19/07/2020				
7-19	2035	125	6	2166
6-22	2417	140	7	2564
6-24	2510	144	7	2661
0-24	2686	150	7	2843
20/07/2020				
7-19	3172	368	28	3568
6-22	3744	395	30	4169
6-24	3867	400	30	4297
0-24	3964	413	30	4407
21/07/2020				
7-19	3251	410	18	3679
6-22	3765	446	19	4230
6-24	3886	455	19	4360
0-24	3971	466	19	4456
22/07/2020				
7-19	3382	399	19	3800
6-22	3956	429	22	4407
6-24	4090	438	22	4550
0-24	4190	453	22	4665
23/07/2020				
7-19	3272	398	43	3713
6-22	3778	435	46	4259
6-24	3909	441	46	4396
0-24	4011	452	46	4509
Average				
7-19	3026	328	22	3376
6-22	3535	358	24	3917
6-24	3672	364	25	4061
0-24	3786	376	25	4187

Total Vehicle Class Distribution



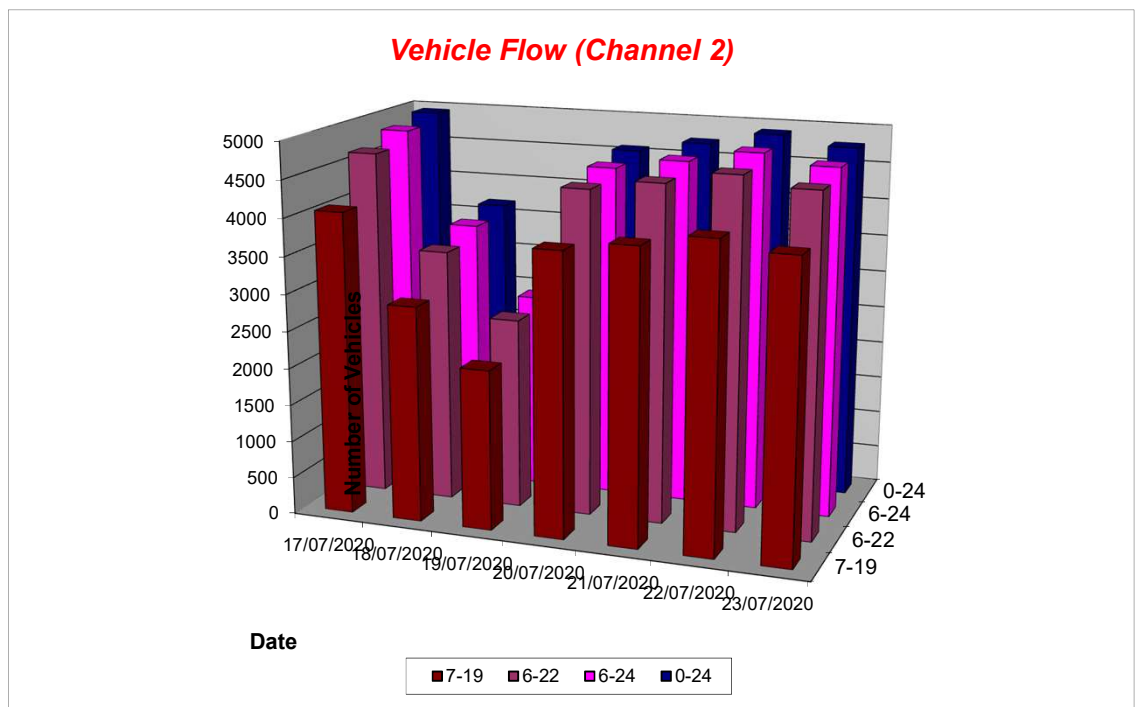
B2177 Havant ATC

Channel 2 - Westbound

Vehicle Flow

Week 1

Hr Ending	17/07/2020 Friday	18/07/2020 Saturday	19/07/2020 Sunday	20/07/2020 Monday	21/07/2020 Tuesday	22/07/2020 Wednesday	23/07/2020 Thursday	5 Day Ave	7 Day Ave
1	22	37	39	17	14	20	20	19	24
2	12	18	31	7	11	4	10	9	13
3	14	11	19	5	5	4	8	7	9
4	5	14	15	1	1	7	5	4	7
5	9	5	8	11	7	9	9	9	8
6	49	20	16	36	45	46	43	44	36
7	130	81	50	144	150	148	148	144	122
8	343	107	86	366	370	361	353	359	284
9	371	126	80	356	388	364	374	371	294
10	287	170	110	268	251	298	266	274	236
11	269	211	165	274	283	300	293	284	256
12	321	326	201	274	306	289	324	303	292
13	321	362	220	296	291	362	309	316	309
14	337	310	268	314	322	337	291	320	311
15	372	325	249	309	348	338	352	344	328
16	416	286	235	356	338	323	340	355	328
17	424	262	221	405	394	435	428	417	367
18	381	205	188	353	398	410	372	383	330
19	229	214	132	222	238	273	259	244	224
20	201	200	143	195	186	188	167	187	183
21	147	124	128	149	134	136	178	149	142
22	124	105	94	105	127	130	109	119	113
23	103	94	39	84	84	81	81	87	81
24	58	69	35	26	35	36	39	39	43
7-19	4071	2904	2155	3793	3927	4090	3961	3968	3557
6-22	4673	3414	2570	4386	4524	4692	4563	4568	4117
6-24	4834	3577	2644	4496	4643	4809	4683	4693	4241
0-24	4945	3682	2772	4573	4726	4899	4778	4784	4339



B2177 Havant ATC

Channel 2 - Westbound

Average Speed

Week 1

	17/07/2020	18/07/2020	19/07/2020	20/07/2020	21/07/2020	22/07/2020	23/07/2020
Hr Ending	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
1	43.8	43.2	43.0	44.9	41.1	44.9	41.3
2	42.6	42.6	42.1	44.9	46.6	46.9	42.7
3	42.8	39.1	42.9	47.4	41.5	39.2	37.1
4	39.7	43.9	44.1	43.4	62.2	41.3	41.9
5	41.3	43.2	51.2	45.0	42.8	40.5	41.1
6	42.5	45.9	46.8	43.5	43.3	42.6	43.6
7	41.6	43.0	40.3	41.3	41.0	40.4	41.3
8	37.4	40.3	42.0	38.6	38.6	38.4	38.5
9	38.3	39.8	42.1	38.5	38.3	39.6	38.0
10	36.7	38.3	40.2	37.1	38.3	37.4	36.7
11	37.1	39.0	40.5	35.9	36.9	36.6	36.5
12	35.2	37.6	39.7	37.3	35.8	37.3	35.0
13	38.1	38.4	39.8	38.9	37.4	38.4	36.6
14	37.7	39.9	40.5	37.3	37.8	37.1	38.1
15	37.0	39.6	39.7	38.5	37.2	37.4	38.0
16	38.3	40.4	39.5	37.7	38.4	38.8	38.4
17	39.9	40.9	40.1	38.9	38.9	38.7	39.3
18	40.7	41.4	40.4	39.4	39.1	39.1	39.5
19	41.5	41.7	41.4	41.8	39.1	41.6	40.7
20	42.3	41.2	41.5	40.7	40.3	41.4	39.9
21	41.5	41.2	40.8	41.7	40.6	41.2	42.9
22	41.6	40.2	40.6	40.7	40.9	40.6	42.0
23	40.3	40.9	42.3	39.7	41.8	40.7	41.5
24	42.2	40.3	42.9	43.4	43.3	43.2	41.1

10-12	36.1	38.2	40.0	36.6	36.3	36.9	35.7
14-16	37.7	40.0	39.6	38.1	37.8	38.1	38.2
0-24	38.8	40.0	40.6	38.8	38.5	38.8	38.6

Average	39.1
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Channel 2 - Westbound

85th Percentile

	17/07/2020	18/07/2020	19/07/2020	20/07/2020	21/07/2020	22/07/2020	23/07/2020
Hr Ending	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
1	50.2	49.9	50.5	53.4	45.7	52.6	44.0
2	50.3	44.3	48.4	49.4	55.0	53.7	46.4
3	52.1	49.8	48.0	51.7	44.3	42.7	46.3
4	42.1	53.0	56.6	-	-	53.1	47.8
5	46.4	52.4	65.5	51.8	51.2	44.9	46.4
6	52.9	53.0	55.2	49.7	53.8	52.4	53.8
7	49.1	48.3	50.0	47.3	48.4	46.2	47.3
8	43.3	51.0	47.1	44.4	43.3	44.6	44.3
9	43.8	45.4	49.6	43.6	43.1	44.7	43.3
10	42.7	44.4	46.3	44.5	43.1	43.3	42.4
11	43.1	45.0	44.6	42.6	42.8	42.0	42.3
12	41.0	43.3	45.3	43.1	40.7	42.7	40.4
13	42.7	43.8	45.1	44.0	42.7	43.6	42.6
14	42.7	44.6	45.2	43.1	43.8	43.0	43.8
15	42.9	43.9	44.4	43.5	43.0	42.7	42.8
16	43.6	45.3	44.1	43.0	43.7	44.2	43.3
17	44.9	45.5	44.5	44.7	44.2	43.8	44.7
18	45.7	45.6	45.6	44.4	44.8	44.4	44.9
19	46.8	47.3	45.7	48.0	46.4	46.7	45.7
20	46.2	46.2	47.1	45.9	46.6	45.9	44.7
21	45.8	46.6	46.5	47.0	47.1	45.6	50.3
22	46.4	44.9	45.6	45.1	45.8	46.0	46.7
23	45.3	46.4	48.2	44.8	47.7	45.9	46.7
24	45.5	47.1	52.3	47.8	48.8	48.5	45.9

10-12	42.2	44.1	45.0	42.8	41.7	42.5	40.9
14-16	43.3	44.8	44.4	43.2	43.4	43.8	43.1
0-24	44.6	45.5	45.7	44.7	44.3	44.6	44.3

85th %ile	44.7
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B2177 Havant ATC

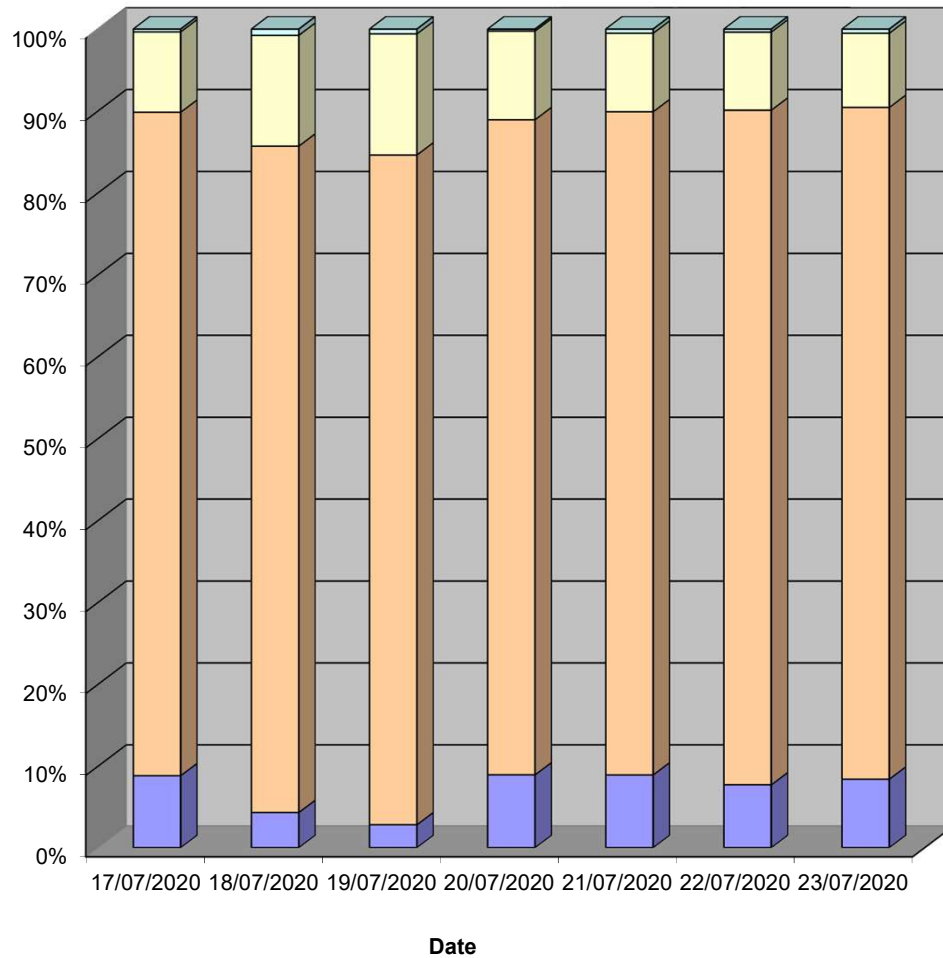
Channel 2 - Westbound

Speed Summary

Week 1

Speed (MPH)	17/07/2020 Friday	18/07/2020 Saturday	19/07/2020 Sunday	20/07/2020 Monday	21/07/2020 Tuesday	22/07/2020 Wednesday	23/07/2020 Thursday
0-30	437	159	78	409	422	378	402
31-45	4006	2997	2268	3658	3827	4036	3919
46-60	485	498	410	495	453	467	433
61-	17	28	16	11	24	18	24
TOTAL	4945	3682	2772	4573	4726	4899	4778

Speed Summary (MPH)



■ 0-30
 ■ 31-45
 ■ 46-60
 ■ 61-

B2177 Havant ATC

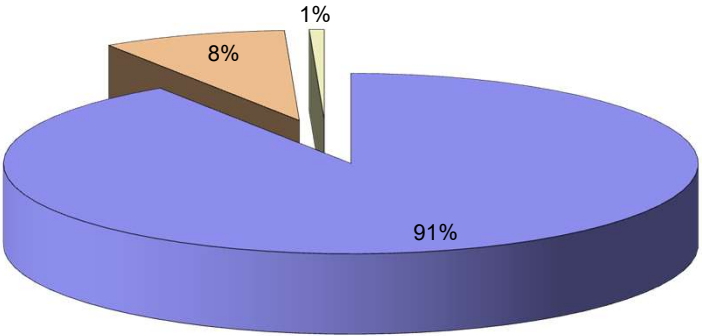
Channel 2 - Westbound

Vehicle Class

Week 1

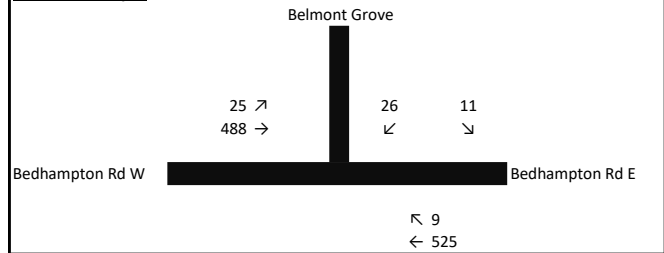
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
17/07/2020				
7-19	3619	424	28	4071
6-22	4185	460	28	4673
6-24	4334	470	30	4834
0-24	4434	480	31	4945
18/07/2020				
7-19	2744	149	11	2904
6-22	3221	181	12	3414
6-24	3380	183	14	3577
0-24	3475	193	14	3682
19/07/2020				
7-19	2046	104	5	2155
6-22	2442	122	6	2570
6-24	2514	124	6	2644
0-24	2634	131	7	2772
20/07/2020				
7-19	3371	386	36	3793
6-22	3917	432	37	4386
6-24	4022	436	38	4496
0-24	4089	445	39	4573
21/07/2020				
7-19	3535	362	30	3927
6-22	4088	405	31	4524
6-24	4196	416	31	4643
0-24	4273	422	31	4726
22/07/2020				
7-19	3662	395	33	4090
6-22	4220	438	34	4692
6-24	4331	444	34	4809
0-24	4408	457	34	4899
23/07/2020				
7-19	3504	416	41	3961
6-22	4052	459	52	4563
6-24	4163	468	52	4683
0-24	4250	475	53	4778
Average				
7-19	3212	319	26	3557
6-22	3732	357	29	4117
6-24	3849	363	29	4241
0-24	3938	372	30	4339

Total Vehicle Class Distribution

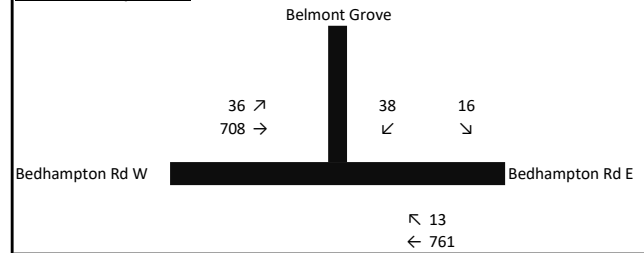


APPENDIX B

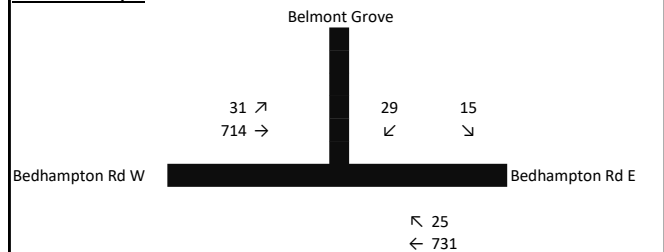
AM 2020 surveyed



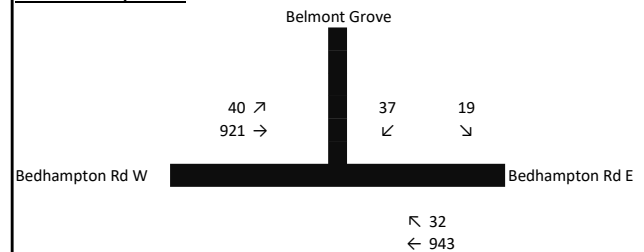
AM 2020 surveyed +45%



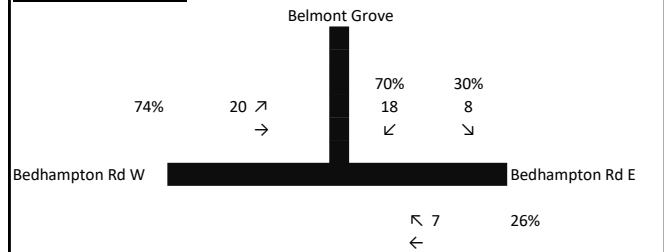
PM 2020 surveyed



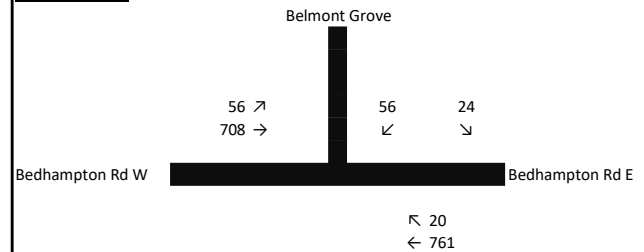
PM 2020 surveyed +29%



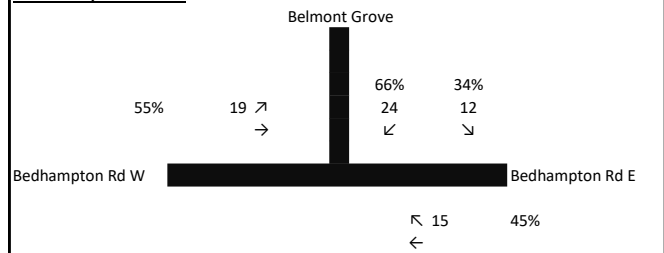
AM Development traffic



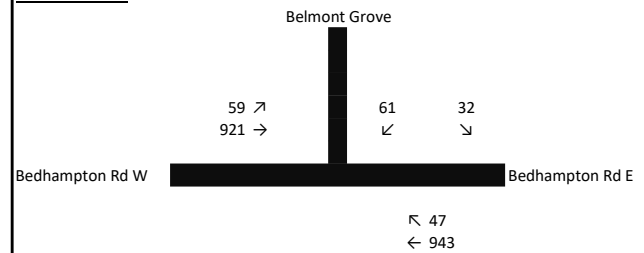
AM Total traffic



PM Development traffic



PM Total traffic



APPENDIX C

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Belmont & Bedhampton.j9

Path: P:\18\11\26 - Imperial Palace Restaurant, Havant\04 Calculations and Analysis\Highway Impact Analysis\Picady

Report generation date: 07/08/2020 13:56:57

»2020, AM
»2020, PM
»2020 With dev [D3], AM
»2020 With dev [D4], PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2020											
Stream B-C	D1	0.0	9.11	0.04	A	23 % [Stream B-A]	D2	0.1	10.91	0.06	B	-2 % [Stream B-A]
Stream B-A		0.2	20.80	0.19	C			0.4	37.89	0.30	E	
Stream C-AB		0.0	7.76	0.03	A			0.1	9.28	0.08	A	
	2020 With dev [D3]											
Stream B-C	D3	0.1	9.82	0.07	A	14 % [Stream B-A]						
Stream B-A		0.4	24.15	0.29	C							
Stream C-AB		0.0	7.98	0.05	A							
	2020 With dev [D4]											
Stream B-C							D4	0.1	14.48	0.12	B	-10 % [Stream B-A]
Stream B-A								1.0	58.05	0.52	F	
Stream C-AB								0.1	9.76	0.12	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	03/08/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TPA\Nathan.Hanks
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15
D2	2020	PM	ONE HOUR	17:00	18:30	15
D3	2020 With dev [D3]	AM	ONE HOUR	08:00	09:30	15
D4	2020 With dev [D4]	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2020, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bedhampton / Belmont	T-Junction	Two-way		0.66	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Bedhampton Rd W	BR(W)	Major
B	Belmont Grove		Minor
C	Bedampton Rd (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	10.20		✓	2.85	195.0	✓	3.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	6.10	3.10	2.80	2.80	✓	1.00	35	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	532	0.079	0.200	0.126	0.286
B-C	667	0.084	0.211	-	-
C-B	735	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	744	100.000
B		✓	54	100.000
C		✓	774	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	36	708
	B	38	0	16
	C	761	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.04	9.11	0.0	A
B-A	0.19	20.80	0.2	C
C-AB	0.03	7.76	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	479	0.025	12	0.0	7.702	A
B-A	29	300	0.095	28	0.1	13.225	B
C-AB	10	538	0.018	10	0.0	6.812	A
C-A	573			573			
A-B	27			27			
A-C	533			533			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	453	0.032	14	0.0	8.215	A
B-A	34	264	0.129	34	0.1	15.620	C
C-AB	12	513	0.023	12	0.0	7.182	A
C-A	684			684			
A-B	32			32			
A-C	636			636			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	18	413	0.043	18	0.0	9.098	A
B-A	42	215	0.195	41	0.2	20.717	C
C-AB	14	478	0.030	14	0.0	7.765	A
C-A	838			838			
A-B	40			40			
A-C	780			780			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	18	413	0.043	18	0.0	9.109	A
B-A	42	215	0.195	42	0.2	20.795	C
C-AB	14	478	0.030	14	0.0	7.765	A
C-A	838			838			
A-B	40			40			
A-C	780			780			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	452	0.032	14	0.0	8.229	A
B-A	34	264	0.129	35	0.2	15.686	C
C-AB	12	513	0.023	12	0.0	7.185	A
C-A	684			684			
A-B	32			32			
A-C	636			636			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	479	0.025	12	0.0	7.717	A
B-A	29	300	0.095	29	0.1	13.282	B
C-AB	10	538	0.018	10	0.0	6.815	A
C-A	573			573			
A-B	27			27			
A-C	533			533			

2020, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bedhampton / Belmont	T-Junction	Two-way		0.96	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	961	100.000
B		✓	56	100.000
C		✓	975	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	40	921
	B	37	0	19
	C	943	32	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.06	10.91	0.1	B
B-A	0.30	37.89	0.4	E
C-AB	0.08	9.28	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	449	0.032	14	0.0	8.273	A
B-A	28	245	0.114	27	0.1	16.500	C
C-AB	24	500	0.048	24	0.1	7.552	A
C-A	710			710			
A-B	30			30			
A-C	693			693			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	413	0.041	17	0.0	9.088	A
B-A	33	199	0.167	33	0.2	21.634	C
C-AB	29	468	0.062	29	0.1	8.197	A
C-A	848			848			
A-B	36			36			
A-C	828			828			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	21	353	0.059	21	0.1	10.851	B
B-A	41	136	0.301	40	0.4	37.305	E
C-AB	35	423	0.083	35	0.1	9.273	A
C-A	1038			1038			
A-B	44			44			
A-C	1014			1014			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	21	351	0.060	21	0.1	10.908	B
B-A	41	136	0.300	41	0.4	37.894	E
C-AB	35	423	0.083	35	0.1	9.276	A
C-A	1038			1038			
A-B	44			44			
A-C	1014			1014			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	412	0.042	17	0.0	9.132	A
B-A	33	199	0.167	34	0.2	21.911	C
C-AB	29	468	0.062	29	0.1	8.202	A
C-A	848			848			
A-B	36			36			
A-C	828			828			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	448	0.032	14	0.0	8.297	A
B-A	28	245	0.114	28	0.1	16.619	C
C-AB	24	500	0.048	24	0.1	7.563	A
C-A	710			710			
A-B	30			30			
A-C	693			693			

2020 With dev [D3], AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bedhampton / Belmont	T-Junction	Two-way		1.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2020 With dev [D3]	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	764	100.000
B		✓	80	100.000
C		✓	781	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	56	708
	B	56	0	24
	C	761	20	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.07	9.82	0.1	A
B-A	0.29	24.15	0.4	C
C-AB	0.05	7.98	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	18	472	0.038	18	0.0	7.928	A
B-A	42	297	0.142	42	0.2	14.050	B
C-AB	15	535	0.028	15	0.0	6.924	A
C-A	573			573			
A-B	42			42			
A-C	533			533			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	22	442	0.049	22	0.1	8.567	A
B-A	50	261	0.193	50	0.2	17.054	C
C-AB	18	509	0.035	18	0.0	7.334	A
C-A	684			684			
A-B	50			50			
A-C	636			636			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	26	394	0.067	26	0.1	9.796	A
B-A	62	211	0.293	61	0.4	23.951	C
C-AB	22	473	0.047	22	0.0	7.982	A
C-A	838			838			
A-B	62			62			
A-C	780			780			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	26	393	0.067	26	0.1	9.823	A
B-A	62	211	0.293	62	0.4	24.146	C
C-AB	22	473	0.047	22	0.0	7.984	A
C-A	838			838			
A-B	62			62			
A-C	780			780			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	22	441	0.049	22	0.1	8.592	A
B-A	50	261	0.193	51	0.2	17.201	C
C-AB	18	509	0.035	18	0.0	7.338	A
C-A	684			684			
A-B	50			50			
A-C	636			636			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	18	471	0.038	18	0.0	7.951	A
B-A	42	297	0.142	42	0.2	14.153	B
C-AB	15	535	0.028	15	0.0	6.927	A
C-A	573			573			
A-B	42			42			
A-C	533			533			

2020 With dev [D4], PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bedhampton / Belmont	T-Junction	Two-way		2.16	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2020 With dev [D4]	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	980	100.000
B		✓	93	100.000
C		✓	990	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	59	921
	B	61	0	32
	C	943	47	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.12	14.48	0.1	B
B-A	0.52	58.05	1.0	F
C-AB	0.12	9.76	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	437	0.055	24	0.1	8.704	A
B-A	46	240	0.191	45	0.2	18.338	C
C-AB	35	497	0.071	35	0.1	7.784	A
C-A	710			710			
A-B	44			44			
A-C	693			693			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	392	0.073	29	0.1	9.907	A
B-A	55	194	0.283	54	0.4	25.730	D
C-AB	42	465	0.091	42	0.1	8.520	A
C-A	848			848			
A-B	53			53			
A-C	828			828			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	291	0.121	35	0.1	14.050	B
B-A	67	128	0.523	65	1.0	54.688	F
C-AB	52	421	0.124	52	0.1	9.757	A
C-A	1038			1038			
A-B	65			65			
A-C	1014			1014			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	284	0.124	35	0.1	14.475	B
B-A	67	128	0.523	67	1.0	58.047	F
C-AB	52	421	0.124	52	0.1	9.765	A
C-A	1038			1038			
A-B	65			65			
A-C	1014			1014			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	387	0.074	29	0.1	10.050	B
B-A	55	194	0.283	57	0.4	26.842	D
C-AB	42	465	0.091	43	0.1	8.532	A
C-A	848			848			
A-B	53			53			
A-C	828			828			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	435	0.055	24	0.1	8.755	A
B-A	46	240	0.191	47	0.2	18.634	C
C-AB	35	497	0.071	36	0.1	7.798	A
C-A	710			710			
A-B	44			44			
A-C	693			693			

APPENDIX D

A3
ORIGINAL
PLOT SIZE

New dropped kerbs
and tactile paving

Direct pedestrian & cycle
access into site from
public footway

New tactile paving and
extended dropped kerbs
to replace existing sub-standard
pedestrian facilities

New dropped kerbs
and tactile paving

New dropped kerbs
and tactile paving

Existing dropped kerbs
tactile paving and
pedestrian refuge island

Direct pedestrian & cycle
access into site from
public footway



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NOTES:

Rev	Date	Details	Drawn by	Checked by	Approved by
-	-	-	-	-	-

Bristol
Cambridge
London
Manchester
Oxford
Welwyn Garden City



90 High Holborn
London
WC1V 6LJ

020 7119 1155
www.tpa.uk.com

CLIENT:
The Co-Operative Group

PROJECT:
**Imperial Palace
Belmont Grove
Bedhampton**

TITLE:
**Pedestrian & cycle
access improvements**

STATUS:
FOR INFORMATION

SCALE: 1:250	DATE: 15.07.20	DRAWN: NH	CHECKED:	APPROVED: NH
JOB NO: 1811-26	DRAWING NO: SK02	REVISION:		

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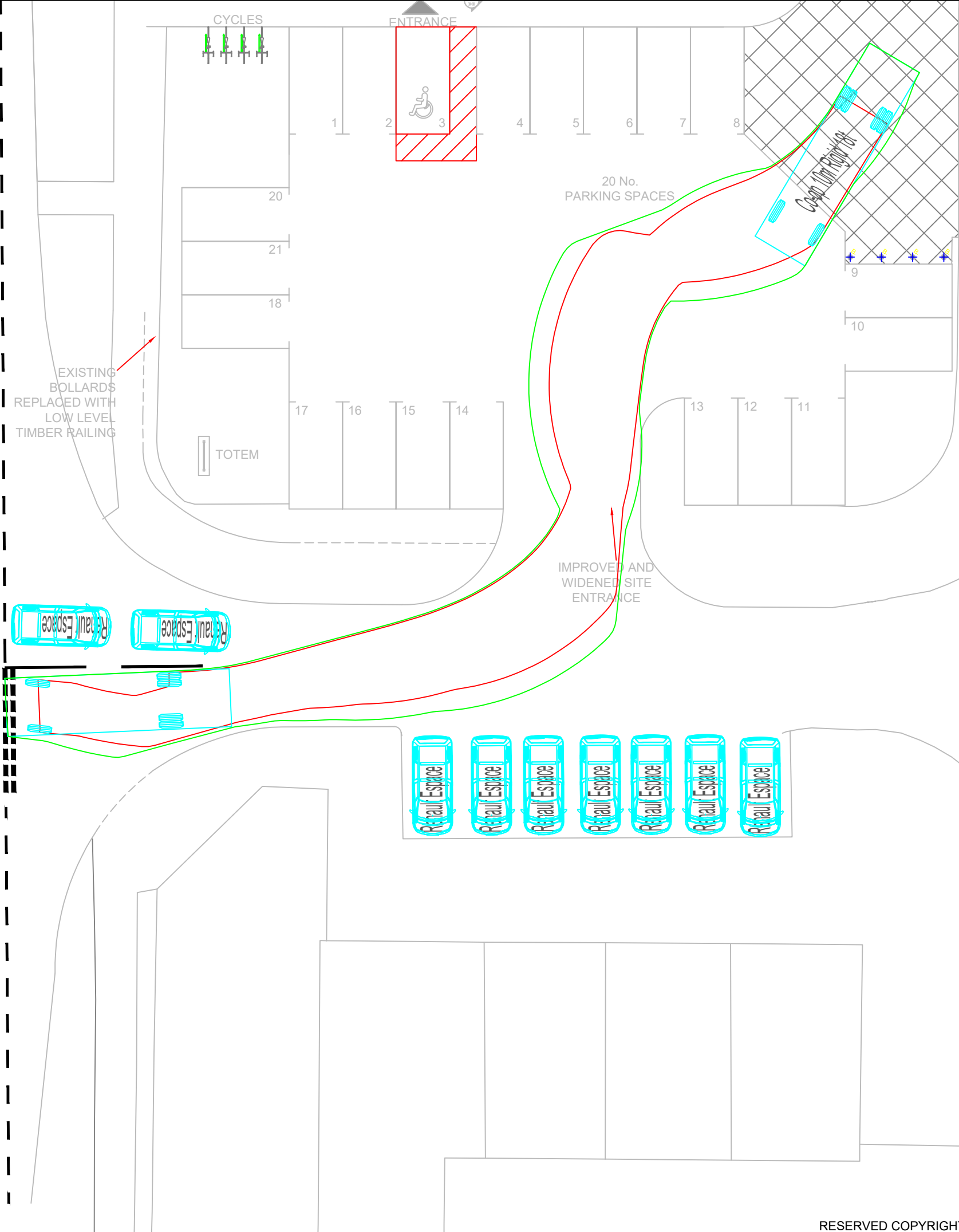
APPENDIX E

A3
ORIGINAL
PLOT SIZE



INDICATIVE

N ROAD



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NOTES:

A	10.8.20	Belmont Grove public parking amended	NH	-	NH
Rev	Date	Details	Drawn by	Checked by	Approved by

Bristol
Cambridge
London
Manchester
Oxford
Welwyn Garden City



90 High Holborn
London
WC1V 6LJ

020 7119 1155
www.tpa.uk.com

CLIENT:
The Co-Operative Group

PROJECT:
**Imperial Palace
Belmont Grove
Bedhampton**

TITLE:
**Swept Path Analysis
of a 10m goods
vehicle**

STATUS:
FOR INFORMATION

SCALE: 1:250	DATE: 15.7.20	DRAWN: NH	CHECKED:	APPROVED: NH
JOB NO: 1811-26	DRAWING NO: SP06	REVISION: A		

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