Transport Statement



Transport Statement

3rd July 2014 SJT/14346-01_TS

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Prepared For:

North Oak Homes

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1.0 INTRODUCTION

- 1.1 This Transport Statement (TS) has been prepared by David Tucker Associates (DTA) on behalf of North Oak Homes to consider the transport issues associated with the proposed development for 44 dwellings on land off the A40 in Lea, Herefordshire. The location of the proposed site is shown on **Figure 1**, and the indicative site masterplan is attached at **Appendix A**.
- 1.2 The methodology used for this report takes account of 'Guidance on Transport Assessment' (GTA) issued by the Department for Transport (DfT) and Department for Communities and Local Government (DCLG) in March 2007. The Guidance considers the following:
 - Reducing the need to travel, especially by car ensure, at the outset that thought is given to reducing the need to travel; consider the types of uses (or mix of uses) and the scale of development in order to promote multipurpose or linked trips.
 - **Sustainable accessibility** promote accessibility by all modes of travel, in particular public transport, cycling and walking; assess the likely travel behaviour or travel pattern to and from the proposed site; and develop appropriate measures to influence travel behaviour.
 - **Dealing with residual trips** provide accurate quantitative and qualitative analyses of the predicted impacts of residual trips from the proposed development and ensure that suitable measures are proposed to manage these impacts.
 - **Mitigation measures** ensure as much as possible that the proposed mitigation measures avoid unnecessary physical improvements to highways and promote innovative and sustainable transport solutions.
- 1.3 The Government's sustainability objectives were embodied in updated Planning Policy Guidance. The National Planning Policy Framework (March 2012) confirms that:

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"developments should be located and designed where practical to;

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- consider the needs of people with disabilities by all modes of transport.

1.4 It goes onto say;

All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.
- 1.5 This statement therefore considers the potential traffic impact of the proposals on the local network in terms of capacity, road safety and accessibility. The potential traffic impact on the local network will not be material and there are no highway grounds for refusing planning permission.

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2.0 EXISTING CONDITIONS

2.1 **Development Site**

- 2.1.1 The proposed development site lies to the south of the village of Lea. It is bound to the north by existing residential dwellings, to the east by the A40, to the south by a dismantled railway line, and to the west by agricultural land.
- 2.1.2 The town of Mitcheldean is located approximately 3km to the south of the site.

2.2 **Local Highway Network**

- 2.2.1 The proposed development site will be accessed from the A40. The A40 is currently around 6.3 m wide in the vicinity of the site. There is no footway provision along the site frontage; however there is a 1.0m wide footway which starts to the northern edge of the site on the opposite side of the road to the site.
- 2.2.2 The road is subject to a 30mph speed limit and this commences around 150m south of the proposed site access.
- 2.2.3 To the south east, to A40 provides connections to Gloucester and to the north west the A40 provides connections to Ross-on-Wye.

2.3 Existing traffic flows

2.3.1 In order to establish existing traffic flows on the network a classified ATC was undertaken by PCC TIC from the 19th March to the 25th March 2014. The results of the survey are attached at **Appendix B** and the two way flows on A40 are summarised below in **Table 1**.

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Table 1 – Existing Flows – A40

	W/B	E/B	Total
AM Peak (0800-0900)	132	84	216
PM Peak (1700-1800)	178	127	305
12 Hours (0700-1900)	1665	1446	3111

2.3.2 It can be seen from the above that existing flows on A40 are extremely modest. The survey also confirmed weekday vehicle speeds in the vicinity of the site as follows:

Westbound - 48.5mph 85th Percentile.

Eastbound - 38.6mph 85th Percentile.

Westbound - 40.4mph Average Speed.

Eastbound - 30.1mph Average Speed.

2.4 Road Safety

- 2.4.1 Personal Injury Accident (PIC) data for the last five years (01/05/2009 to 31/04/2014) has been provided by Herefordshire County Council. The PIC data is attached at **Appendix C**.
- 2.4.2 The data shows that within the last five year period there was one recorded collision which was slight in severity. The slight collision occurred on the A40 near the village hall where a pedestrian was hit by a vehicle.
- 2.4.3 The data also shows that there have been no accidents in the immediate vicinity of the site.
- 2.4.4 On this basis, there are no specific accident issues or blackspots which need to be addressed as a result of the proposed development.

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2.5 Non Car Access

Bus Services

2.5.1 Bus service 33 operated by Stagecoach routes pass the site on the A40. The nearest bus stop is situated approximately 380m to the north of the site. The bus service operates between Ross-on-Wye and Gloucester on an hourly service Monday to Saturday. There are no bus services on Sundays. The bus route is shown on **Figure 1**.

Access by Foot and Cycle

- 2.5.2 There is no footway provision directly along the site frontage; however footway provision is provided to the north west of the site on the adjacent side of the carriageway. The footway provision continues along the A40 providing access to the village store.
- 2.5.3 A new footway and informal pedestrian crossing facility will be provided as part of the development proposals.

2.6 Local Amenities

- 2.6.1 The village has a village store, village hall, primary school (Lea Church of England primary school), petrol filling garage (with post office), and a public house as shown on **Figure**1.
- 2.6.2 The site is located near Mitcheldean which has further amenities and facilities such as a pharmacy, library, primary and secondary school, employment (Vantage Point Business Village), convenience store, butchers and hair and beauty salon.

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3.0 DEVELOPMENT PROPOSALS

- 3.1 The proposals are for a total of 44 residential dwellings to include a mixture of 2 bed, 3 bed and 4 bed houses. A copy of the site masterplan is attached at **Appendix A**.
- The development is proposed to be served by a single point of access onto the A40. This is shown on the site masterplan as being a 5.5m wide road with a 10m junction radii and 2.0m footways on either side of the access road as shown on **Drawing 14346-03a.** Visibility splay of 2.4m x 85m to the left and 2.4m x 154m to the right are provided.
- 3.3 Based on the speed surveys, Manual for Streets 2 requires a minimum of 85m to the left and 127m to the right and therefore it is clear that the visibility is acceptable.
- 3.4 A new footway link with an informal pedestrian crossing will be provided on the A40 to link to the proposed development with existing footway provision on the adjacent side of the carriageway. The proposals are shown on **Drawing 14346-03a**.
- 3.5 Car parking has been provided in accordance with the Local Highway Authority standards. Herefordshire County Council's Highways Design Guide for New Developments (July 2006) sets out the maximum parking provision of 2 spaces per 2-3 bed dwellings and 3 spaces for 4+ bed dwellings.
- 3.6 Cycle parking will either be accommodated within garages where provided, or alternatively will be within the curtilage of individual dwellings, for example stored in garden sheds. Where properties do not have garages or sheds, a bicycle bracket will be installed on a convenient and safe point externally to the property.
- 3.7 The internal road layout has been subject to a detailed swept path analysis with a large refuse vehicle which demonstrates that the vehicle can safely manoeuvre in and out of the site in forward gear. The vehicle tracking plan is shown on **Drawing 14346-03-2**.

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4.0 TRAFFIC GENERATION AND IMPACT

4.1 **Proposed Traffic Generation**

- 4.1.1 In order to assess the likely traffic movements from the development the TRICS database was interrogated (TRICS 2014 v7.1.1 on line). This database contains surveys of the vehicle and multimodal trip generation of a wide variety of sites which are classified by land use and various other attributes.
- 4.1.2 The database was interrogated for multi model surveys of private residential house, with sites in London, Scotland and Ireland manually excluded. The resulting TRICS printouts are attached at **Appendix D** for both total person trips and vehicle trips. The trip rates are summarised in **Table 3** below.

Table 2 – TRICS assessment for private residential housing (trips/dwelling)

	Person Trip Rate			Vehicle Trip Rate		
	In	Out	Total	In	Out	Total
AM Peak (08:00 - 09:00)	0.236	0.728	0.964	0.149	0.378	0.527
PM Peak (17:00 – 18:00)	0.562	0.341	0.903	0.355	0.222	0.577
12 Hour (07:00 – 19:00)	4.017	4.243	8.260	2.439	2.571	5.010

4.1.3 A summary of the development generated person and vehicle trips relating to the 44 dwellings is given in **Table 4**.

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Table 3 – Person and Vehicle trips for 44 dwellings

	Person Trips			Vehicle Trips		
	In	Out	Total	In	Out	Total
AM Peak (08:00 - 09:00)	10	32	42	7	17	24
PM Peak (17:00 - 18:00)	25	15	40	16	10	26
12 Hour (07:00 - 19:00)	177	187	364	107	113	220

4.2 Traffic Distribution

4.2.1 Based on the 12hr existing surveyed vehicle flows, it can reasonably be assumed that around 50% of site generated traffic would route to the north west towards Ross-on-Wye and the remainder to the south east towards Gloucester. This therefore equates to approximately 12 additional two-way movements north and south of the site access in the AM peak and an additional 13 two-way movements in the PM peak.

4.3 Traffic Impact

- 4.3.1 It can be seen from the above that traffic generation from the site will be modest in absolute terms. The additional flows are in the order of 8-10% increase over the recorded ATC flows. However they will be well within the existing daily variation in flows.
- 4.3.2 In traffic capacity terms, this change in flows will be minimal and below the accuracy of any junction modelling software.

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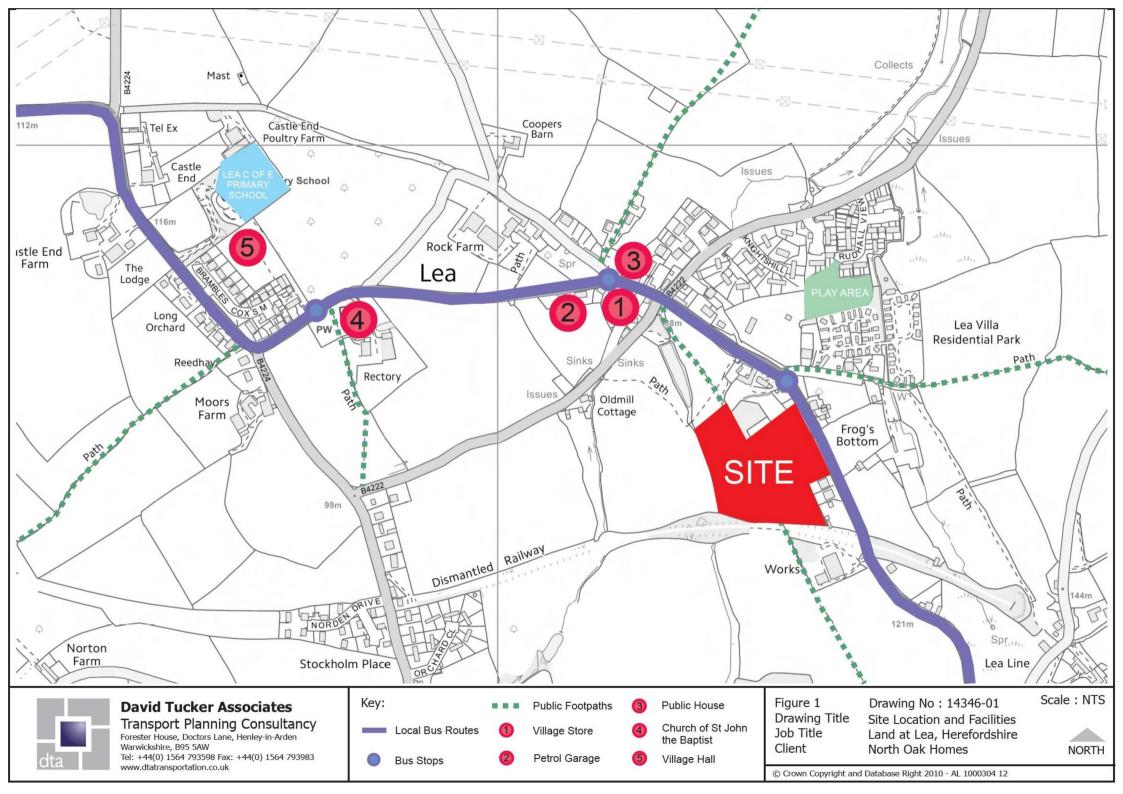


5.0 SUMMARY AND CONCLUSIONS

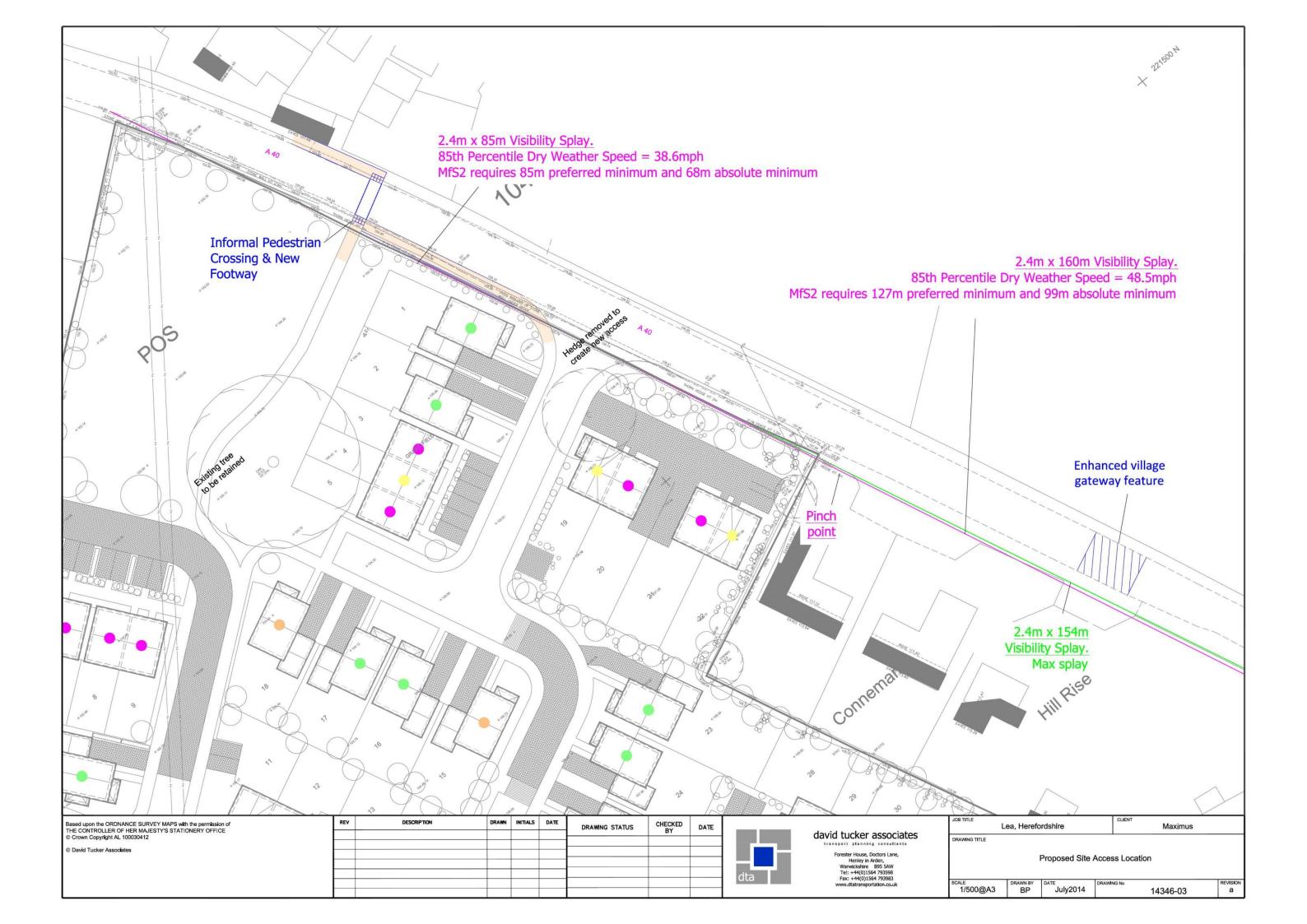
- 5.1 The proposals are for the development of 44 houses on land at Lea, Herefordshire.
- 5.2 The traffic generation forecasts confirm that the sites will generate modest levels of traffic on the wider network.
- 5.3 In the context of the adjacent highway network, the traffic generation of the proposed sites is negligible and would have no material impact on the network. The accident record of the site has indicated that there are no road safety issues that would warrant mitigation measures as a result of the current proposals.
- 5.4 The TS has demonstrated that the development is fully in accordance with both national and local policy and in particular confirms that the impact of the development is not severe. On this basis it is concluded that there are no grounds for refusal on highway grounds.

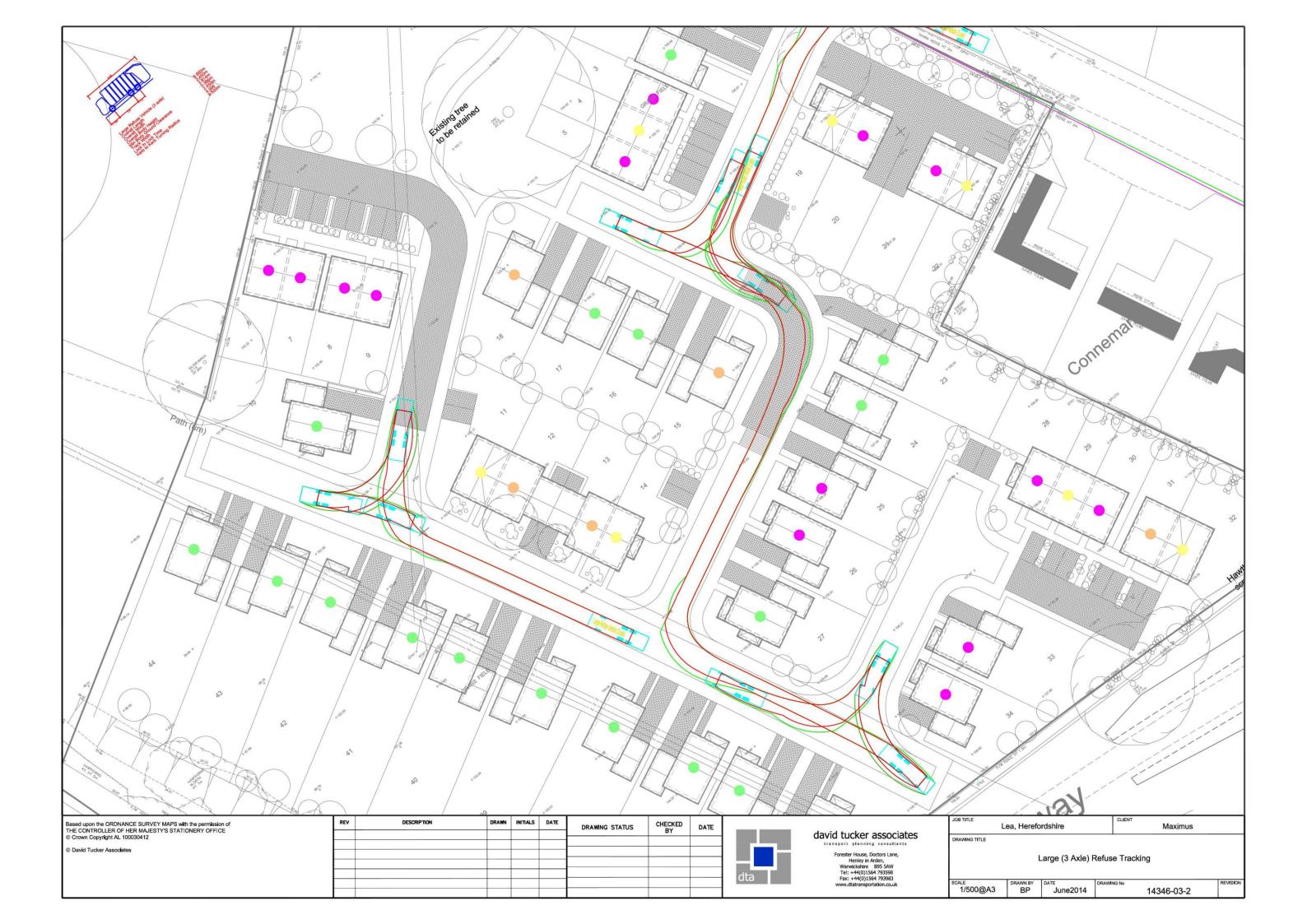
SJT/14346-01_TS 3rd July 2014

Figures



Drawings





Appendix A

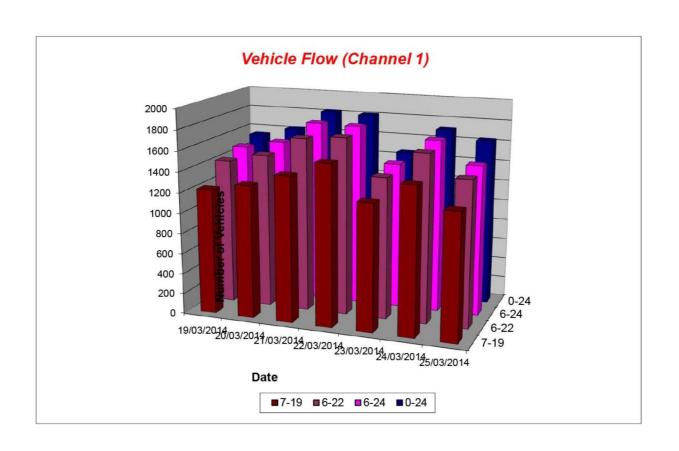


Appendix B

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Channel 1 - Westbound	Vehicle Flow	Week 1

	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014		
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	5 Day Ave	7 Day Ave
1	9	15	12	5	13	2	21	12	11
2	3	8	8	5	8	2	26	9	9
3	5	3	3	12	5	0	16	5	6
4	5	5	5	8	3	5	32	10	9
5	15	13	9	4	3	8	43	18	14
6	18	19	12	11	1	13	23	17	14
7	38	41	44	19	3	53	42	44	34
8	97	94	75	44	25	98	99	93	76
9	113	130	128	81	43	152	137	132	112
10	80	105	81	163	64	96	101	93	99
11	90	81	90	110	97	82	104	89	93
12	84	96	90	117	152	100	77	89	102
13	65	63	77	154	158	99	60	73	97
14	58	67	98	171	95	118	57	80	95
15	72	99	151	127	121	136	97	111	115
16	100	90	152	170	138	125	87	111	123
17	123	139	170	201	131	158	98	138	146
18	201	188	169	127	109	158	176	178	161
19	139	142	137	101	101	106	136	132	123
20	70	67	101	60	75	39	67	69	68
21	53	60	84	42	39	34	35	53	50
22	38	43	47	40	30	83	51	52	47
23	51	32	47	21	31	23	33	37	34
24	14	23	33	17	14	21	11	20	19
7-19	1222	1294	1418	1566	1234	1428	1229	1318	1342
6-22	1421	1505	1694	1727	1381	1637	1424	1536	1541
6-24	1486	1560	1774	1765	1426	1681	1468	1594	1594
0-24	1541	1623	1823	1810	1459	1711	1629	1665	1657



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Channel 1 - Westbound

Average Speed

Week 1

	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	39.7	39.8	40.3	38.0	43.0	33.0	41.8
2	33.0	34.6	36.1	43.0	37.4	33.0	43.2
3	35.0	41.3	33.0	40.7	30.5	-	40.2
4	52.0	22.8	42.0	29.8	33.0	45.0	41.8
5	39.7	41.5	32.2	38.0	43.0	38.0	42.4
6	42.7	42.5	49.2	38.9	25.5	40.7	41.2
7	45.8	38.9	41.5	42.5	33.0	40.3	41.8
8	39.3	42.5	44.7	39.7	42.2	41.3	41.4
9	40.1	40.3	43.0	43.6	42.8	40.7	41.0
10	38.8	41.1	41.7	39.7	41.3	40.8	39.0
11	36.8	38.4	41.6	40.5	40.1	39.7	36.7
12	38.4	39.5	39.4	40.2	38.7	38.4	37.9
13	39.0	40.3	38.3	39.3	40.0	38.3	38.7
14	40.5	41.0	40.6	40.3	41.4	38.9	42.1
15	42.1	39.7	39.8	39.3	39.5	37.4	39.8
16	40.3	40.9	40.6	39.4	39.0	39.8	41.0
17	42.1	41.5	39.5	38.7	40.5	41.3	41.6
18	40.1	40.1	39.5	40.1	40.4	41.0	39.8
19	40.0	39.4	39.8	40.2	40.7	41.1	38.1
20	44.3	40.6	39.9	44.2	39.2	41.6	42.6
21	42.2	46.0	40.4	44.5	43.4	42.3	41.9
22	46.3	40.0	41.7	42.9	42.7	39.6	39.3
23	42.2	45.3	43.6	43.2	44.1	42.3	41.6
24	42.3	42.9	47.1	40.9	47.3	38.7	42.1
10-12	37.6	39.0	40.5	40.3	39.3	39.0	37.2
14-16	41.1	40.2	40.2	39.3	39.2	38.6	40.4
0-24	40.6	40.6	40.7	40.2	40.3	40.1	40.2

7 Day Ave 40.4

Channel 1 - Westbound

85th Percentile

	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	43.7	43.6	49.0	48.7	53.9	33.7	48.3
2	33.5	43.3	48.4	43.9	43.7	33.9	48.2
3	38.6	48.3	33.3	48.8	38.5	-	48.5
4	58.3	38.8	53.2	43.0	33.4	48.5	48.3
5	48.3	53.8	38.2	43.5	43.1	43.1	48.3
6	58.8	48.6	53.6	43.9	10-	48.8	48.0
7	53.0	49.0	53.4	53.4	33.5	53.4	48.5
8	48.8	53.9	53.4	48.7	48.8	48.5	48.2
9	48.8	48.2	53.7	48.5	48.6	48.5	48.9
10	48.7	48.7	48.3	48.5	48.8	48.2	48.6
11	43.0	49.0	48.6	48.5	48.0	48.3	48.8
12	43.4	43.2	48.2	48.4	43.2	43.1	43.9
13	48.9	48.5	48.2	48.4	48.1	43.6	48.3
14	48.8	48.1	48.6	48.3	48.1	48.2	48.5
15	48.4	49.0	48.1	48.1	48.3	43.9	48.1
16	49.0	48.7	48.5	48.2	48.1	48.1	53.6
17	53.9	48.0	48.9	49.0	48.0	48.4	48.4
18	48.1	48.6	48.3	48.1	48.5	48.3	49.0
19	48.9	48.1	48.8	48.4	48.7	48.9	48.1
20	53.4	48.1	48.4	53.4	48.5	53.8	53.9
21	48.5	53.8	48.3	53.5	53.8	53.3	48.6
22	53.8	48.3	53.9	53.2	53.1	48.7	53.3
23	53.1	53.0	53.6	58.5	53.2	48.3	53.1
24	48.6	53.3	53.6	48.3	58.7	48.1	48.5
and the second second							
10-12	43.5	48.4	48.4	48.6	43.5	48.0	43.2
14-16	48.3	48.3	48.1	48.5	48.4	48.3	49.0
0-24	48.6	48.9	48.6	48.2	48.1	48.8	48.1

7 Day Ave 48.5

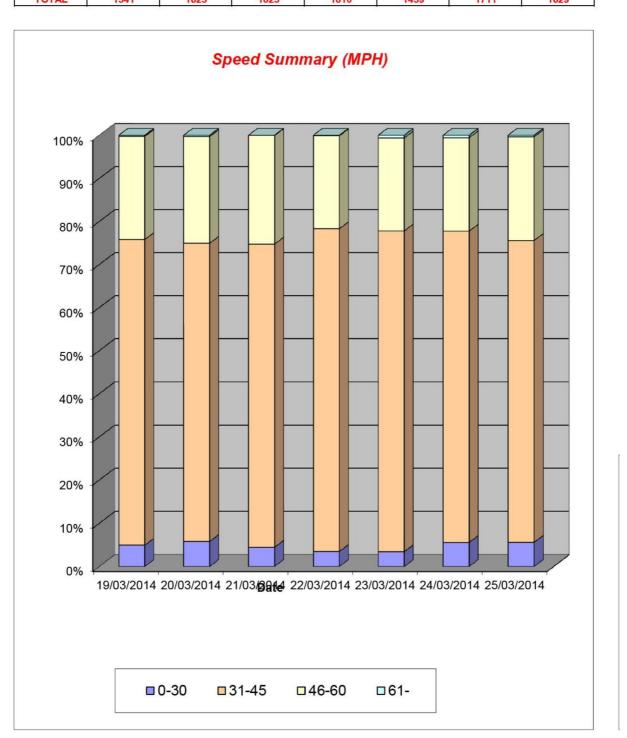
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Channel 1 - Westbound

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Week 1

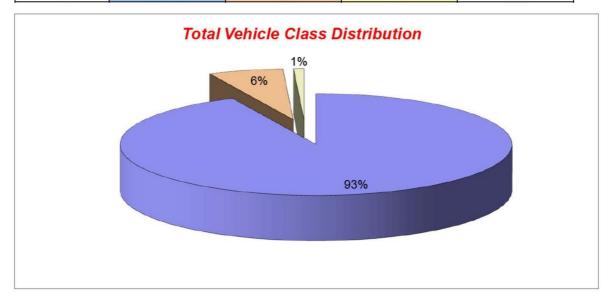
	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014
Speed (MPH)	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
0-30	76	94	81	63	50	95	91
31-45	1092	1122	1281	1354	1085	1235	1140
46-60	369	402	460	391	315	371	392
61-	4	5	1	2	9	10	6
TOTAL	1541	1623	1823	1810	1459	1711	1629



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Channel 1 - Westbound Vehicle Class Week 1

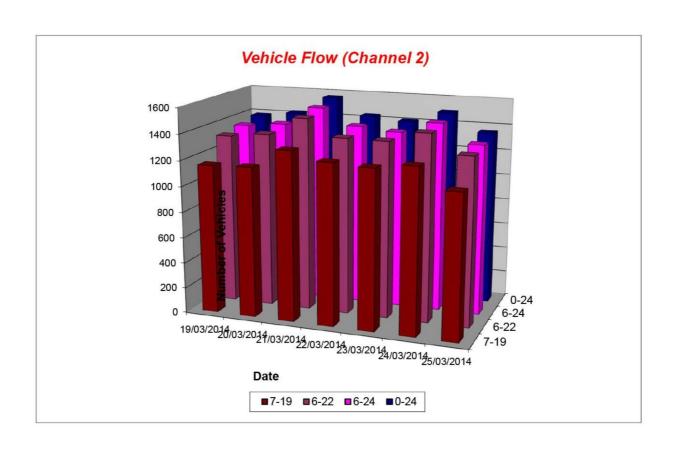
Classes	Car / LGV /	OGV1 / Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
19/03/2014				
7-19	1120	91	11	1222
6-22	1304	105	12	1421
6-24	1366	108	12	1486
0-24	1417	112	12	1541
20/03/2014				
7-19	1192	96	6	1294
6-22	1385	112	8	1505
6-24	1437	115	8	1560
0-24	1498	117	8	1623
21/03/2014				
7-19	1310	101	7	1418
6-22	1568	119	7	1694
6-24	1644	123	7	1774
0-24	1689	125	9	1823
22/03/2014				
7-19	1508	52	6	1566
6-22	1663	56	8	1727
6-24	1698	58	9	1765
0-24	1738	60	12	1810
23/03/2014				
7-19	1200	30	4	1234
6-22	1342	33	6	1381
6-24	1386	34	6	1426
0-24	1418	34	7	1459
24/03/2014				
7-19	1308	97	23	1428
6-22	1496	114	27	1637
6-24	1533	120	28	1681
0-24	1559	122	30	1711
25/03/2014				
7-19	1104	113	12	1229
6-22	1279	128	17	1424
6-24	1321	130	17	1468
0-24	1463	145	21	1629
37,000,000,000,0				
Average				
7-19	1249	83	10	1342
6-22	1434	95	12	1541
6-24	1484	98	12	1594
0-24	1540	102	14	1657



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Channel 2 - Eastbound	Vehicle Flow	Week 1

	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014		
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	5 Day Ave	7 Day Ave
1	3	5	7	7	13	2	2	4	6
2	2	3	1	2	4	0	3	2	2
3	1	3	4	1	5	0	4	2	3
4	3	2	3	6	0	2	2	2	3
5	5	3	5	3	2	5	4	4	4
6	18	20	14	10	6	20	20	18	15
7	73	84	66	19	8	77	80	76	58
8	93	83	104	41	18	98	102	96	77
9	80	88	81	69	29	83	89	84	74
10	114	103	115	103	78	122	108	112	106
11	82	98	133	127	114	129	78	104	109
12	80	98	112	125	133	113	88	98	107
13	107	106	92	131	157	108	103	103	115
14	91	91	115	151	117	119	85	100	110
15	90	85	120	124	127	99	73	93	103
16	102	98	99	92	133	96	96	98	102
17	118	112	114	121	121	115	100	112	114
18	127	135	137	86	116	115	119	127	119
19	74	69	93	81	91	74	73	77	79
20	55	47	58	45	53	41	53	51	50
21	26	36	34	30	43	32	37	33	34
22	14	26	27	26	30	28	20	23	24
23	22	17	18	20	7	10	15	16	16
24	6	10	13	14	5	10	4	9	9
7.40	4450	4400	4045	4054	4004	4074	4444	4005	4040
7-19	1158	1166	1315	1251	1234	1271	1114	1205	1216
6-22	1326	1359	1500	1371	1368	1449	1304	1388	1382
6-24	1354	1386	1531	1405	1380	1469	1323	1413	1407
0-24	1386	1422	1565	1434	1410	1498	1358	1446	1439



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Channel 2 - Eastbound

Average Speed

Week 1

	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	26.3	28.5	29.1	36.6	31.8	38.0	20.5
2	35.5	22.8	33.0	25.5	36.8	-	36.3
3	38.0	22.8	32.4	43.0	37.0	-	27.9
4	39.7	21.5	32.2	29.7	-	34.2	19.0
5	27.5	36.3	37.5	28.0	29.2	40.0	31.1
6	36.9	35.8	36.2	32.8	38.8	38.8	38.8
7	33.1	34.5	36.3	35.3	38.6	36.5	34.3
8	29.5	30.0	33.2	35.0	34.4	32.3	33.6
9	30.9	31.6	33.8	33.4	36.6	31.8	32.3
10	29.4	29.1	30.6	31.5	32.9	30.8	31.0
11	29.2	27.7	30.3	30.9	32.1	29.2	28.7
12	26.0	28.4	29.4	31.2	31.1	29.8	25.1
13	26.8	28.8	30.2	31.1	31.6	30.9	27.7
14	24.5	26.4	28.6	28.1	29.7	28.0	23.3
15	23.8	24.4	29.4	30.1	28.8	28.4	24.5
16	22.8	29.7	30.3	31.3	28.9	29.5	26.6
17	25.3	29.9	28.3	30.0	30.5	31.7	24.9
18	26.2	29.5	30.9	31.7	29.0	31.8	27.8
19	31.5	29.4	30.5	32.9	33.3	29.6	29.2
20	28.8	31.1	32.7	32.9	33.0	31.0	29.1
21	34.8	32.8	32.8	31.5	34.4	33.6	29.9
22	29.2	32.5	31.7	33.5	34.3	30.1	30.0
23	32.8	34.3	35.8	35.6	34.8	35.2	30.0
24	30.1	33.8	35.1	34.2	34.0	36.8	32.4
10-12	27.7	28.0	29.9	31.1	31.6	29.5	26.8
14-16	23.3	27.2	29.8	30.6	28.9	28.9	25.7
0-24	27.8	29.5	31.0	31.3	31.3	30.9	28.7

7 Day Ave 30.1

Channel 2 - Eastbound

85th Percentile

	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	38.0	33.4	38.0	43.1	38.5	43.1	25.7
2	38.3	38.3	-	26.1	43.2	-	38.3
3	-	38.3	38.5	-	48.2	-	43.0
4	43.9	38.2	38.6	43.1	-	43.3	33.7
5	43.5	38.5	43.2	33.2	33.3	43.6	33.8
6	48.4	43.2	38.5	38.1	48.8	43.8	43.3
7	43.8	43.6	43.7	43.4	43.1	43.5	43.7
8	38.8	38.4	43.8	44.0	43.5	38.2	38.4
9	38.7	38.9	38.4	38.5	43.8	38.9	38.8
10	33.7	38.5	38.9	38.5	38.8	38.4	38.7
11	39.0	33.2	38.7	39.0	38.3	38.3	38.4
12	33.3	38.7	38.1	38.2	39.0	38.8	33.1
13	33.5	38.7	38.6	38.4	38.8	38.2	38.4
14	33.4	38.6	38.7	33.4	38.7	33.4	33.3
15	33.7	33.8	38.0	38.3	38.9	38.2	38.7
16	33.2	38.2	38.4	38.5	38.9	38.9	38.3
17	38.4	38.8	38.4	38.1	38.4	38.6	33.8
18	38.5	38.2	38.3	38.5	38.1	38.4	38.2
19	38.8	39.0	39.0	39.0	39.0	38.4	38.6
20	38.5	38.1	38.8	38.6	38.8	38.9	39.0
21	43.4	43.1	43.7	38.9	43.7	38.6	43.2
22	38.5	38.8	38.4	38.7	38.4	38.9	38.9
23	38.2	43.4	38.7	43.4	43.0	38.5	38.1
24	38.6	38.5	38.3	43.7	48.2	38.3	39.0
10-12	38.5	38.1	38.4	38.1	38.2	38.9	38.6
14-16	33.7	38.1	38.4	38.8	38.5	38.3	38.6
0-24	38.9	38.2	38.9	38.7	38.4	38.3	38.9

7 Day Ave 38.6

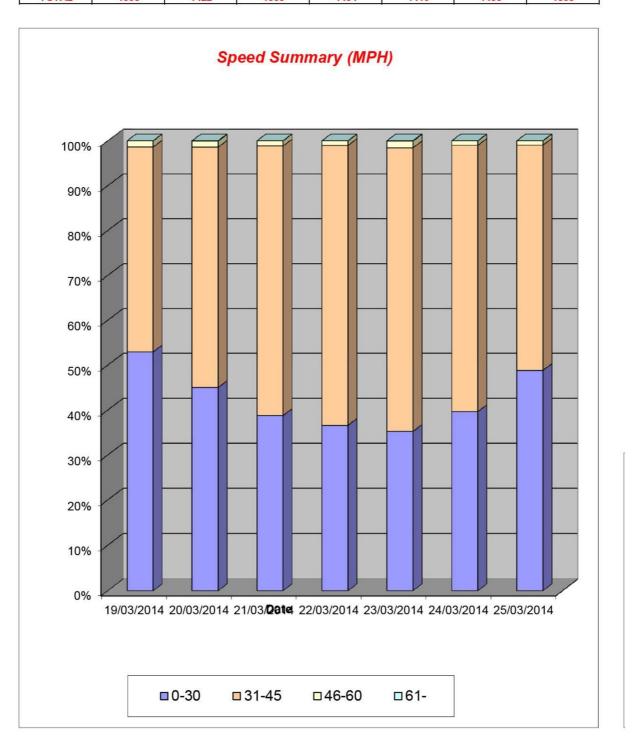
Produced by PCC Traffic Information Consultancy Ltd.

Channel 2 - Eastbound

e	n	_	_	N	S		m	m	2	n	,
0	u	C	c	u	-	u			а	ΙV	•

Week 1

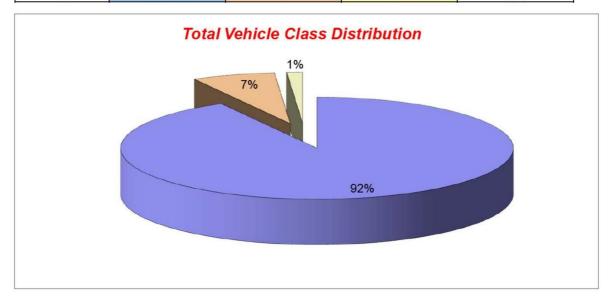
	19/03/2014	20/03/2014	21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014
Speed (MPH)	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
0-30	734	640	607	525	497	594	663
31-45	633	762	940	894	891	889	682
46-60	19	19	18	15	21	15	13
61-	0	1	0	0	1	0	0
TOTAL	1386	1422	1565	1434	1410	1498	1358



Produced by PCC Traffic Information Consultancy Ltd.

Channel 2 - Eastbound Vehicle Class Week 1

Classes	Car / LGV /	OGV1 / Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
19/03/2014				
7-19	1057	91	10	1158
6-22	1216	98	12	1326
6-24	1242	99	13	1354
0-24	1271	101	14	1386
20/03/2014				
7-19	1061	91	14	1166
6-22	1244	98	17	1359
6-24	1269	100	17	1386
0-24	1300	103	19	1422
21/03/2014				
7-19	1181	119	15	1315
6-22	1359	125	16	1500
6-24	1389	126	16	1531
0-24	1417	130	18	1565
22/03/2014				
7-19	1193	47	11	1251
6-22	1307	52	12	1371
6-24	1338	54	13	1405
0-24	1359	59	16	1434
23/03/2014				
7-19	1202	28	4	1234
6-22	1330	34	4	1368
6-24	1342	34	4	1380
0-24	1369	35	6	1410
24/03/2014				
7-19	1089	144	38	1271
6-22	1259	151	39	1449
6-24	1278	152	39	1469
0-24	1304	154	40	1498
25/03/2014				
7-19	1007	92	15	1114
6-22	1187	101	16	1304
6-24	1205	102	16	1323
0-24	1234	107	17	1358
Average				
7-19	1113	87	15	1216
6-22	1272	94	17	1382
6-24	1295	95	17	1407
0-24	1322	98	19	1439



Appendix C

Contributory Factors Report Summary - A40 Lea Village

Accidents Found Date Range: 01/08/2009 - 01/08/2009 Grid Coordinate Range: 366185, 221787 - 366185, 221787

Database: "g:\aip\keyaccident v6data\data"

Query Conditions: 01/05/2009 - 31/04/2014 Search Conditions:

Accident Severity

	2009	Total
Slight	1	1
Total	1	1

Casualty Severity

	2009	Total
Slight	1	1
Total	1	1

Casualty KSI

	2009	Total
Slight	1	1
Total	1	1

A40 Lea Village

Database: "g:\aip\keyaccident v6data\data"

Query Conditions: 01/05/2009 - 31/04/2014 Search Conditions:

A40 Lea Village

Database: "g:\aip\keyaccident v6data\data"

Query Conditions: 01/05/2009 - 31/04/2014 Search Conditions:

Accident Reference: 09E904183 Slight A40 LEA, ROSS ON WYE, J/W TURN LEADING TO CROWN INN, Accident 1 of 1

Saturday 01/08/2009 14:00 Grid Coords 366185/221787 Daylight Light/with lights

Surface Dry Weather Fine without high winds

Contributory Factors

Participant Confidence Did a police officer attend?

405 Failed to look properly (Driver/Rider - Error)

Vehicle 1 Very likely No - reported

406 Failed to judge other person's path/speed (Driver/Rider - Error) Vehicle 1 Very likely 'over the

Accident Description

CAS 1 WAS CROSSING A40 IN LEA LEAVING VILLAGE SHOP AND AS SHE CROSSED THE ROAD TOWARDS THE PUB WHERE HER CAR WAS PARKED, A SMALL RED CAR WAS AT THE JUNCTION INFRONT OF THE PUB TURNING RIGHT SIDE OF CAS 1 AND NEXT THING SHE WAS ON THE FLOOR. SHE CANNOT REMEMBER FALLING. THE WOMAN THEN PARKS HER CAR AND WALKED CAS 1 TO HER CAR AND ASKED IF SHE WAS OK. SHE TOLD THEM SHE WAS FINE AND GOT HER NAME AND CONTACT NUMBER. INJURY CAUSED TO CAS 1 FROM INCIDENT BUT ONLY REALISED VEHICLES OF IT WHEN SHE GOT HOME AS IN SHOCK.

1 Car Turning right No skid Not requested NW to W Female Age 45

Casualties

1 Pedestrian Slight Vehicle no.1 Female 45

Appendix D

1 days

1 days

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED **MULTI-MODAL VEHICLES**

CF

CP

CARDIFF

CAERPHILLY

Sele	cted re	gions and areas:	
03	V (4/2) (1/2 - 2/2) (4/2)	TH WEST	
	CW	CORNWALL	2 days
04	EAST	Γ ANGLIA	•
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	2 days
05	EAST	T MIDLANDS	
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
06	WES	T MIDLANDS	-
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YOR	KSHIRE & NORTH LINCOLNSHIRE	
	NY	NORTH YORKSHIRE	2 days
80	NOR	TH WEST	
	CH	CHESHIRE	2 days
	MS	MERSEYSIDE	2 days
09	NOR	TH	
	TV	TEES VALLEY	1 days
	TW	TYNE & WEAR	1 days
10	WAL	.ES	

TRICS 7.1.1 280614 B16.42 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium Monday 30/06/14 Page 2

DTA Transportation Ltd Doctors Lane Henley in Arden Licence No: 623801

Filtering Stage 2 selection:

Parameter: Number of dwellings Actual Range: 6 to 372 (units:) 6 to 491 (units:) Range Selected by User:

Public Transport Provision:

Selection by: Include all surveys

01/01/05 to 07/10/13 Date Range:

Selected survey days:

Monday 5 days 8 days Tuesday 3 days Wednesday Thursday 6 days 5 days Friday

Selected survey types:

Manual count 27 days **Directional ATC Count** 0 days

<u>Selected Locations:</u> Suburban Area (PPS6 Out of Centre) 25 Neighbourhood Centre (PPS6 Local Centre) 2

Selected Location Sub Categories:

23 Residential Zone No Sub Category

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			[DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00								Î	
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00			1						
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	71	0.065	27	71	0.249	27	71	0.314
08:00 - 09:00	27	71	0.149	27	71	0.378	27	71	0.527
09:00 - 10:00	27	71	0.165	27	71	0.201	27	71	0.366
10:00 - 11:00	27	71	0.158	27	71	0.178	27	71	0.336
11:00 - 12:00	27	71	0.171	27	71	0.183	27	71	0.354
12:00 - 13:00	27	71	0.192	27	71	0.178	27	71	0.370
13:00 - 14:00	27	71	0.181	27	71	0.171	27	71	0.352
14:00 - 15:00	27	71	0.185	27	71	0.209	27	71	0.394
15:00 - 16:00	27	71	0.258	27	71	0.203	27	71	0.461
16:00 - 17:00	27	71	0.305	27	71	0.184	27	71	0.489
17:00 - 18:00	27	71	0.355	27	71	0.222	27	71	0.577
18:00 - 19:00	27	71	0.255	27	71	0.215	27	71	0.470
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.439	25-		2.571			5.010

Parameter summary

Trip rate parameter range selected: 6 - 372 (units:) Survey date date range: 01/01/05 - 07/10/13

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Y Committee of the Comm	ARRIVALS			[DEPARTURES	5		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00	v5.									
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00								-		
07:00 - 08:00	27	71	0.008	27	71	0.014	27	71	0.022	
08:00 - 09:00	27	71	0.005	27	71	0.020	27	71	0.025	
09:00 - 10:00	27	71	0.002	27	71	0.004	27	71	0.006	
10:00 - 11:00	27	71	0.003	27	71	0.006	27	71	0.009	
11:00 - 12:00	27	71	0.006	27	71	0.003	27	71	0.009	
12:00 - 13:00	27	71	0.004	27	71	0.004	27	71	0.008	
13:00 - 14:00	27	71	0.004	27	71	0.003	27	71	0.007	
14:00 - 15:00	27	71	0.003	27	71	0.004	27	71	0.007	
15:00 - 16:00	27	71	0.015	27	71	0.006	27	71	0.021	
16:00 - 17:00	27	71	0.013	27	71	0.009	27	71	0.022	
17:00 - 18:00	27	71	0.014	27	71	0.008	27	71	0.022	
18:00 - 19:00	27	71	0.006	27	71	0.003	27	71	0.009	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:		· · · · · · · · · · · · · · · · · · ·	0.083	E4		0.084		· · · · · · · · · · · · · · · · · · ·	0.167	

Parameter summary

Trip rate parameter range selected: 6 - 372 (units:) Survey date date range: 01/01/05 - 07/10/13

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00	v5.			80					
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00								-	
07:00 - 08:00	27	71	0.074	27	71	0.288	27	71	0.362
08:00 - 09:00	27	71	0.192	27	71	0.526	27	71	0.718
09:00 - 10:00	27	71	0.192	27	71	0.253	27	71	0.445
10:00 - 11:00	27	71	0.192	27	71	0.229	27	71	0.421
11:00 - 12:00	27	71	0.210	27	71	0.221	27	71	0.431
12:00 - 13:00	27	71	0.236	27	71	0.227	27	71	0.463
13:00 - 14:00	27	71	0.224	27	71	0.223	27	71	0.447
14:00 - 15:00	27	71	0.224	27	71	0.265	27	71	0.489
15:00 - 16:00	27	71	0.385	27	71	0.269	27	71	0.654
16:00 - 17:00	27	71	0.402	27	71	0.262	27	71	0.664
17:00 - 18:00	27	71	0.461	27	71	0.294	27	71	0.755
18:00 - 19:00	27	71	0.330	27	71	0.307	27	71	0.637
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		· · · · · · · · · · · · · · · · · · ·	3.122	E4		3.364		· · · · · · · · · · · · · · · · · · ·	6.486

Parameter summary

Trip rate parameter range selected: 6 - 372 (units:) Survey date date range: 01/01/05 - 07/10/13

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	71	0.021	27	71	0.055	27	71	0.076
08:00 - 09:00	27	71	0.030	27	71	0.156	27	71	0.186
09:00 - 10:00	27	71	0.038	27	71	0.067	27	71	0.105
10:00 - 11:00	27	71	0.038	27	71	0.055	27	71	0.093
11:00 - 12:00	27	71	0.043	27	71	0.038	27	71	0.081
12:00 - 13:00	27	71	0.051	27	71	0.040	27	71	0.091
13:00 - 14:00	27	71	0.036	27	71	0.039	27	71	0.075
14:00 - 15:00	27	71	0.046	27	71	0.045	27	71	0.091
15:00 - 16:00	27	71	0.125	27	71	0.065	27	71	0.190
16:00 - 17:00	27	71	0.082	27	71	0.045	27	71	0.127
17:00 - 18:00	27	71	0.075	27	71	0.037	27	71	0.112
18:00 - 19:00	27	71	0.040	27	71	0.037	27	71	0.077
19:00 - 20:00	1	29	0.069	1	29	0.034	1	29	0.103
20:00 - 21:00	1	29	0.034	1	29	0.000	1	29	0.034
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.728			0.713			1.441

Parameter summary

Trip rate parameter range selected: 6 - 372 (units:) Survey date date range: 01/01/05 - 07/10/13

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00	<i>3</i> 5.								
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	71	0.002	27	71	0.006	27	71	0.008
08:00 - 09:00	27	71	0.009	27	71	0.026	27	71	0.035
09:00 - 10:00	27	71	0.005	27	71	0.007	27	71	0.012
10:00 - 11:00	27	71	0.006	27	71	0.006	27	71	0.012
11:00 - 12:00	27	71	0.006	27	71	0.006	27	71	0.012
12:00 - 13:00	27	71	0.005	27	71	0.005	27	71	0.010
13:00 - 14:00	27	71	0.006	27	71	0.003	27	71	0.009
14:00 - 15:00	27	71	0.003	27	71	0.004	27	71	0.007
15:00 - 16:00	27	71	0.016	27	71	0.011	27	71	0.027
16:00 - 17:00	27	71	0.008	27	71	0.002	27	71	0.010
17:00 - 18:00	27	71	0.013	27	71	0.002	27	71	0.015
18:00 - 19:00	27	71	0.007	27	71	0.003	27	71	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.086			0.081			0.167

Parameter summary

Trip rate parameter range selected: 6 - 372 (units:) Survey date date range: 01/01/05 - 07/10/13

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00	V-1								
01:00 - 02:00			1						
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	71	0.105	27	71	0.363	27	71	0.468
08:00 - 09:00	27	71	0.236	27	71	0.728	27	71	0.964
09:00 - 10:00	27	71	0.236	27	71	0.331	27	71	0.567
10:00 - 11:00	27	71	0.239	27	71	0.297	27	71	0.536
11:00 - 12:00	27	71	0.264	27	71	0.268	27	71	0.532
12:00 - 13:00	27	71	0.296	27	71	0.276	27	71	0.572
13:00 - 14:00	27	71	0.271	27	71	0.268	27	71	0.539
14:00 - 15:00	27	71	0.275	27	71	0.318	27	71	0.593
15:00 - 16:00	27	71	0.541	27	71	0.351	27	71	0.892
16:00 - 17:00	27	71	0.506	27	71	0.318	27	71	0.824
17:00 - 18:00	27	71	0.562	27	71	0.341	27	71	0.903
18:00 - 19:00	27	71	0.383	27	71	0.350	27	71	0.733
19:00 - 20:00	1	29	0.069	1	29	0.034	1	29	0.103
20:00 - 21:00	1	29	0.034	1	29	0.000	1	29	0.034
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 4.017 4.243 8.26								8.260	

Parameter summary

Trip rate parameter range selected: 6 - 372 (units:) Survey date date range: 01/01/05 - 07/10/13