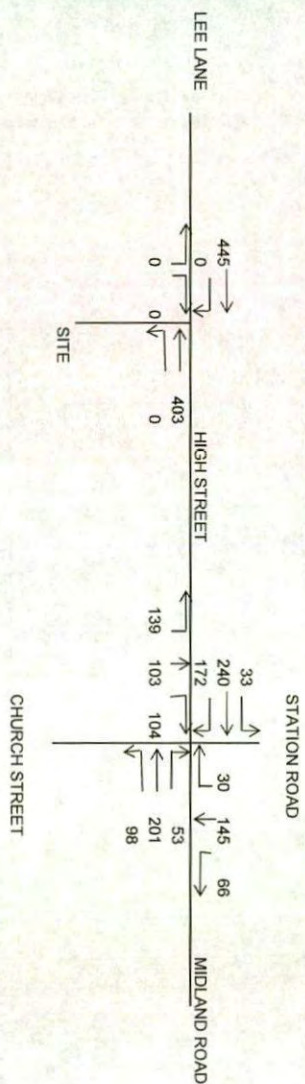




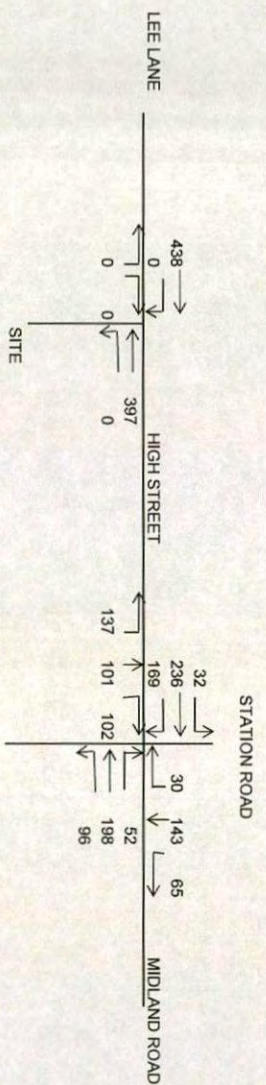
Transport
Potential



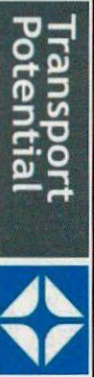
Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2014 Base (Counts + NRTF adjusted by TEMPRO)
PM PEAK

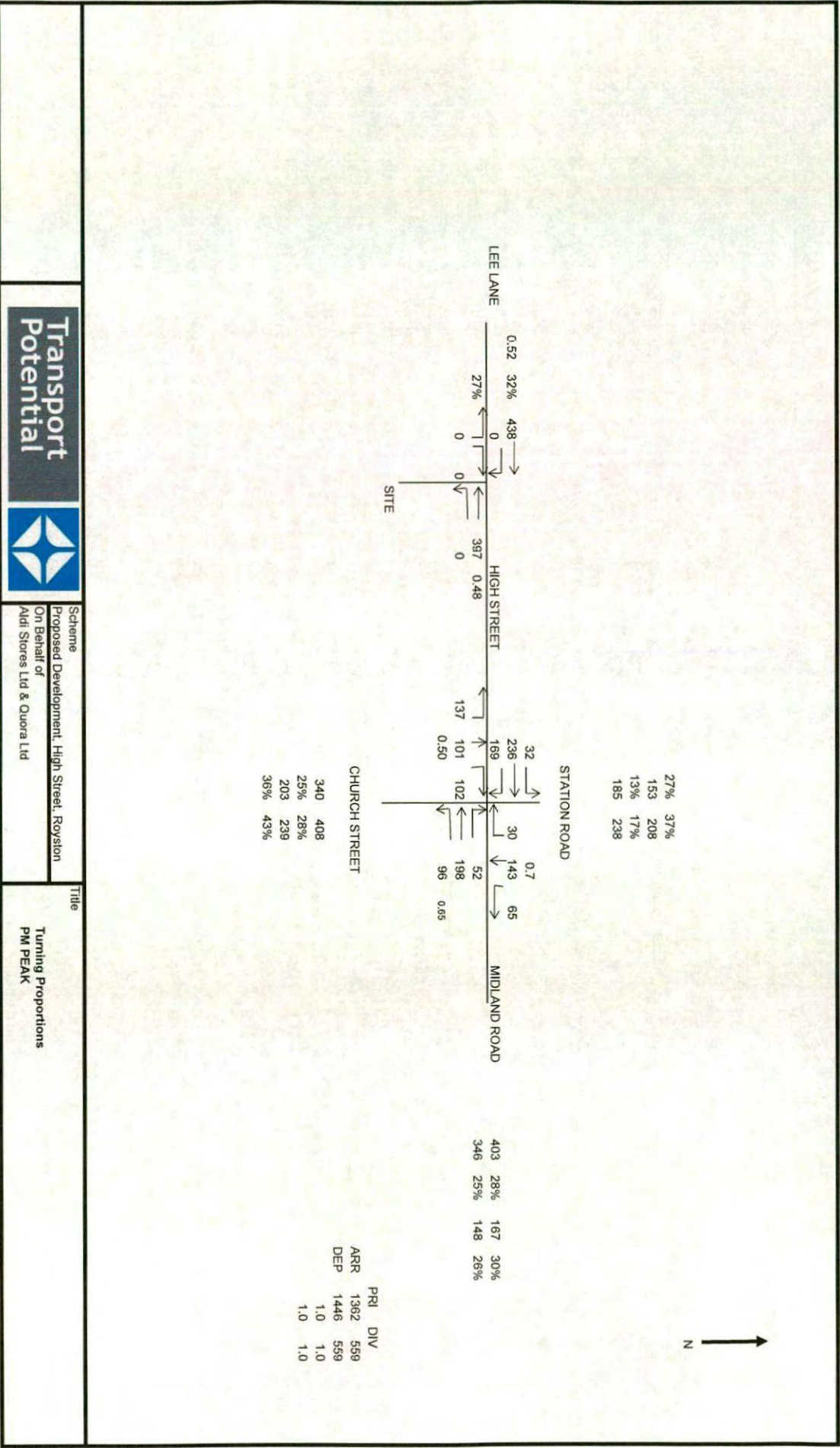


	A	B	C	D
A	0	0	397	52
B	0	0	0	101
C	438	0	0	32
D				0



Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

2013 BASE
PM PEAK



Scheme
Proposed Development: High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title
Turning Proportions
PM PEAK

NRTF Table 3

	2	3	4	5	6	7	8	9
	Rural Roads				Urban Roads			
	Trunk & Principal		Other		Trunk & Principal		Other	
	dual				dual			
Motorways				Total	Motorways			Total
1996	100	100	100	100	100	100	100	100
1997	103.0	101.9	101.4	101.9	101.9	101.2	101.9	101.6
1998	106.1	103.9	102.7	103.9	103.9	102.4	103.9	103.1
1999	109.3	105.9	104.1	105.9	105.9	103.6	105.9	104.7
2000	112.6	107.9	105.6	107.9	107.9	104.8	107.9	106.4
2001	116	110	107	110	110	106	110	108
2002	119.2	111.8	108.4	111.9	111.8	107.0	112.0	109.6
2003	122.4	113.6	109.8	113.7	113.6	107.9	114.1	111.2
2004	125.8	115.4	111.3	115.7	115.4	108.9	116.2	112.8
2005	129.2	117.2	112.8	117.6	117.2	109.9	118.3	114.5
2006	132.8	119.1	114.3	119.6	119.1	110.9	120.5	116.2
2007	136.4	121.0	115.8	121.6	121.0	111.9	122.7	117.9
2008	140.2	123.0	117.3	123.6	123.0	112.9	125.0	119.6
2009	144.0	125.0	118.8	125.7	125.0	113.9	127.3	121.4
2010	147.9	127.0	120.4	127.8	127.0	115.0	129.6	123.2
2011	152	129	122	130	129	116	132	125
2012	155.3	130.6	123.3	131.9	130.2	116.9	134.0	126.5
2013	158.6	132.2	124.7	133.8	131.5	117.7	136.0	128.0
2014	162.0	133.9	126.0	135.7	132.8	118.6	138.0	129.6
2015	165.5	135.5	127.4	137.7	134.1	119.5	140.0	131.2
2016	169.0	137.2	128.8	139.6	135.3	120.4	142.1	132.8
2017	172.7	138.9	130.2	141.7	136.6	121.3	144.2	134.4
2018	176.4	140.7	131.6	143.7	138.0	122.2	146.4	136.0
2019	180.2	142.4	133.1	145.8	139.3	123.1	148.5	137.6
2020	184.0	144.2	134.5	147.9	140.6	124.1	150.8	139.3
2021	188	146	136	150	142	125	153	141
2022	190.7	147.3	137.0	151.4	142.8	125.6	154.6	142.1
2023	193.5	148.5	137.9	152.9	144.6	126.2	156.3	143.1
2024	196.3	149.8	138.9	154.4	144.4	126.8	157.9	144.2
2025	199.1	151.1	139.9	155.8	145.1	127.4	159.6	145.3
2026	202.0	152.4	140.9	157.3	145.9	128.0	161.3	146.4
2027	204.9	153.7	141.9	158.8	146.7	128.6	163.0	147.5
2028	207.9	155.0	142.9	160.3	147.6	129.2	164.7	148.6
2029	210.9	156.3	143.9	161.9	148.4	129.8	166.5	149.7
2030	213.9	157.6	145.0	163.4	149.2	130.4	168.2	150.9
2031	217	159	146	165	150	131	170	152

Factors for different time periods

NRTF Table 3 Rates:

Enter the figures in red

Type of Road :

8

Factor in

2013 = 136.0

Factor in

2019 = 148.5

Factor from

2013 to 2019 = 1.093

TEMPO Factors

AM peak Local Factor from

2013 to 2019 = #DIV/0!

'Av. Day GB Factor from

2013 to 2019 = 1.054

PM peak Local Factor from

2013 to 2019 = 1.060 1.0543 1.0656

'Av. Day GB Factor from

2013 to 2019 = 1.054

Saturday Local Factor from

2013 to 2019 = 1.059 1.053 1.0658

'Av. Day GB Factor from

2013 to 2019 = 1.054

Overall Traffic Growth

AM Factor from

2013 to 2019 = #DIV/0!

PM Factor from

2013 to 2019 = 1.098

Saturday Factor from

2013 to 2019 = 1.098

NRTF Table 3

	2	3	4	5	6	7	8	9
	Rural Roads				Urban Roads			
	Trunk & Principal dual		Other	Total	Trunk & Principal dual		Other	Total
Motorways								
1996	100	100	100	100	100	100	100	100
1997	103.0	101.9	101.4	101.9	101.9	101.2	101.9	101.6
1998	106.1	103.9	102.7	103.9	103.9	102.4	103.9	103.1
1999	109.3	105.9	104.1	105.9	105.9	103.6	105.9	104.7
2000	112.6	107.9	105.6	107.9	107.9	104.8	107.9	106.4
2001	116	110	107	110	110	106	110	108
2002	119.2	111.8	108.4	111.9	111.8	107.0	112.0	109.6
2003	122.4	113.6	109.8	113.7	113.6	107.9	114.1	111.2
2004	125.8	115.4	111.3	115.7	115.4	108.9	116.2	112.8
2005	129.2	117.2	112.8	117.6	117.2	109.9	118.3	114.5
2006	132.8	119.1	114.3	119.6	119.1	110.9	120.5	116.2
2007	136.4	121.0	115.8	121.6	121.0	111.9	122.7	117.9
2008	140.2	123.0	117.3	123.6	123.0	112.9	125.0	119.6
2009	144.0	125.0	118.8	125.7	125.0	113.9	127.3	121.4
2010	147.9	127.0	120.4	127.8	127.0	115.0	129.6	123.2
2011	152	129	122	130	129	116	132	125
2012	155.3	130.6	123.3	131.9	130.2	116.9	134.0	126.5
2013	158.6	132.2	124.7	133.8	131.5	117.7	136.0	128.0
2014	162.0	133.9	126.0	135.7	132.8	118.6	138.0	129.6
2015	165.5	135.5	127.4	137.7	134.1	119.5	140.0	131.2
2016	169.0	137.2	128.8	139.6	135.3	120.4	142.1	132.8
2017	172.7	138.9	130.2	141.7	136.6	121.3	144.2	134.4
2018	176.4	140.7	131.6	143.7	138.0	122.2	146.4	136.0
2019	180.2	142.4	133.1	145.8	139.3	123.1	148.5	137.6
2020	184.0	144.2	134.5	147.9	140.6	124.1	150.8	139.3
2021	188	146	136	150	142	125	153	141
2022	190.7	147.3	137.0	151.4	142.8	125.6	154.6	142.1
2023	193.5	148.5	137.9	152.9	143.6	126.2	156.3	143.1
2024	196.3	149.8	138.9	154.4	144.4	126.8	157.9	144.2
2025	199.1	151.1	139.9	155.8	145.1	127.4	159.6	145.3
2026	202.0	152.4	140.9	157.3	145.9	128.0	161.3	146.4
2027	204.9	153.7	141.9	158.8	146.7	128.6	163.0	147.5
2028	207.9	155.0	142.9	160.3	147.6	129.2	164.7	148.6
2029	210.9	156.3	143.9	161.9	148.4	129.8	166.5	149.7
2030	213.9	157.6	145.0	163.4	149.2	130.4	168.2	150.9
2031	217	159	146	165	150	131	170	152

Factors for different time periods

NRTF Table 3 Rates:

Enter the figures in red

Type of Road :

8

Factor in

2013 = 136.0

Factor in

2014 = 138.0

Factor from

2013 to 2014 = 1.015

TEMPRO Factors

AM peak Local Factor from

2013 to 2014 = #DIV/0!

'Av. Day' GB Factor from

2013 to 2014 = 1.011

PM peak Local Factor from

2013 to 2014 = 1.012 1.011 1.0129

'Av. Day' GB Factor from

2013 to 2014 = 1.011

Saturday Local Factor from

2013 to 2014 = 1.012 1.0108 1.013

'Av. Day' GB Factor from

2013 to 2014 = 1.011

Overall Traffic Growth

AM Factor from

2013 to 2014 = #DIV/0!

PM Factor from

2013 to 2014 = 1.016

Saturday Factor from

2013 to 2014 = 1.016

APPENDIX C

Traffic Flow Diagrams

Queue Lengths, Royston, Barnsley

DATE: FRIDAY 22nd NOVEMBER 2013

LOCATION: STATION ROAD / MIDLAND ROAD / CHURCH STREET / HIGH STREET

ARM:	STATION ROAD			MIDLAND ROAD			CHURCH STREET			HIGH STREET					
Queue Length at end of red phase	LANE 1			LANE 1			LANE 1			LANE 1			LANE 2		
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)
15:00	7	0	39	4	0	22	7	0	39	4	0	22	2	0	11
15:05	9	0	50	7	0	39	9	0	50	4	0	22	1	0	6
15:10	7	0	39	5	0	28	11	0	61	6	0	33	2	0	11
15:15	7	0	39	9	0	50	12	0	66	5	0	28	3	0	17
15:20	9	0	50	7	0	39	9	0	50	5	0	28	2	0	11
15:25	8	0	44	5	0	28	7	0	39	4	0	22	4	0	22
15:30	10	0	55	6	0	33	10	0	55	8	0	44	8	0	44
15:35	12	0	66	10	0	55	12	0	66	10	0	55	7	0	39
15:40	7	0	39	9	0	50	7	0	39	10	0	55	2	0	11
15:45	12	0	66	7	0	39	12	0	66	6	0	33	3	0	17
15:50	12	0	66	14	1	92	15	0	83	7	0	39	4	0	22
15:55	9	0	50	14	0	77	9	0	50	7	0	39	2	0	11
16:00	12	0	66	9	1	65	19	0	105	7	0	39	1	0	6
16:05	15	0	83	7	0	39	24	0	132	3	0	17	1	0	6
16:10	19	0	105	7	0	39	23	0	127	8	0	44	4	0	22
16:15	14	0	77	12	0	66	24	0	132	3	0	17	1	0	6
16:20	11	0	61	13	1	87	12	0	66	9	0	50	4	0	22
16:25	4	0	22	7	0	39	4	0	22	10	0	55	3	0	17
16:30	5	0	28	14	0	77	5	0	28	8	0	44	5	0	28
16:35	5	1	43	5	0	28	9	0	50	8	1	59	4	0	22
16:40	9	1	65	8	0	44	9	0	50	2	0	11	3	0	17
16:45	8	0	44	3	0	17	8	0	44	2	0	11	4	0	22
16:50	7	0	39	11	0	61	7	0	39	6	0	33	3	0	17
16:55	12	0	66	6	0	33	12	0	66	4	0	22	3	0	17
17:00	11	0	61	6	0	33	7	0	39	2	0	11	4	0	22
17:05	7	1	54	12	1	81	6	0	33	6	0	33	5	0	28
17:10	6	0	33	10	1	70	5	0	28	10	0	55	6	0	33
17:15	5	0	28	4	1	37	12	0	66	8	0	44	7	0	39
17:20	15	0	83	5	1	43	15	0	83	11	0	61	5	0	28
17:25	14	0	77	11	0	61	11	0	61	6	0	33	4	0	22
17:30	11	0	61	3	0	17	5	0	28	4	0	22	2	0	11
17:35	11	0	61	11	0	61	7	0	39	9	0	50	2	0	11
17:40	5	0	28	4	1	37	4	0	22	4	0	22	3	0	17
17:45	7	0	39	8	0	44	2	0	11	4	0	22	2	0	11
17:50	4	0	22	5	0	28	11	0	61	7	0	39	1	0	6
17:55	12	0	66	10	0	55	16	0	88	5	0	28	4	0	22
18:00	11	0	61	9	0	50	8	0	44	8	0	44	3	0	17
18:05	8	0	44	6	0	33	12	0	66	7	0	39	4	0	22
18:10	8	0	44	10	0	55	5	0	28	4	0	22	2	0	11
18:15	9	0	50	7	0	39	7	0	39	1	0	6	1	0	6
18:20	8	0	44	4	0	22	8	0	44	5	0	28	2	0	11
18:25	7	0	39	4	0	22	9	0	50	5	0	28	3	0	17

Queue Lengths, Royston, Barnsley

DATE: FRIDAY 22nd NOVEMBER 2013

LOCATION: STATION ROAD / MIDLAND ROAD / CHURCH STREET / HIGH STREET

ARM:	STATION ROAD			MIDLAND ROAD			CHURCH STREET			HIGH STREET					
Queue Length at end of red phase	LANE 1			LANE 1			LANE 1			LANE 1			LANE 2		
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)	LIGHTS	HEAVIES	QUEUE LENGTH (M)

DATE: SATURDAY 23rd NOVEMBER 2013

11:00	8	0	44	11	0	61	8	0	44	16	0	88	0	0	0
11:05	12	0	66	12	0	66	12	0	66	14	0	77	0	0	0
11:10	11	0	61	8	2	74	11	0	61	15	0	83	0	0	0
11:15	7	1	54	13	0	72	7	1	54	12	0	66	0	0	0
11:20	12	0	66	13	0	72	12	0	66	9	2	80	0	0	0
11:25	11	1	76	16	0	88	11	1	76	16	0	88	0	0	0
11:30	8	1	59	13	0	72	8	0	44	13	0	72	0	0	0
11:35	9	0	50	14	0	77	9	0	50	11	0	61	0	0	0
11:40	9	0	50	12	0	66	9	0	50	15	0	83	0	0	0
11:45	13	0	72	10	0	55	13	0	72	14	0	77	0	0	0
11:50	7	0	39	11	0	61	7	0	39	12	0	66	0	0	0
11:55	10	0	55	16	0	88	10	1	70	9	0	50	0	0	0
12:00	12	0	66	17	0	94	12	0	66	14	1	92	0	0	0
12:05	10	0	55	15	0	83	10	0	55	13	0	72	0	0	0
12:10	9	2	80	15	0	83	9	0	50	15	1	98	0	0	0
12:15	9	1	65	11	0	61	9	0	50	15	0	83	0	0	0
12:20	10	0	55	8	1	59	10	0	55	9	0	50	0	0	0
12:25	13	0	72	11	0	61	13	0	72	8	1	59	0	0	0
12:30	14	0	77	10	0	55	14	0	77	12	0	66	0	0	0
12:35	12	0	66	11	0	61	12	0	66	10	0	55	0	0	0
12:40	12	0	66	12	0	66	12	0	66	14	0	77	0	0	0
12:45	6	0	33	15	0	83	16	0	88	11	1	76	0	0	0
12:50	14	0	77	17	0	94	6	0	33	15	0	83	0	0	0
12:55	15	0	83	11	0	61	14	0	77	12	0	66	0	0	0
13:00	17	0	94	12	0	66	15	0	83	11	0	61	0	0	0
13:05	11	0	61	19	0	105	19	0	105	13	0	72	0	0	0
13:10	8	0	44	14	0	77	8	0	44	19	0	105	0	0	0
13:15	13	0	72	11	0	61	13	0	72	9	0	50	0	0	0
13:20	14	0	77	12	0	66	14	0	77	7	0	39	0	0	0
13:25	111	0	611	19	0	105	11	1	76	12	0	66	0	0	0
13:30	11	0	61	14	0	77	12	1	81	12	0	66	0	0	0
13:35	8	0	44	11	0	61	8	0	44	9	0	50	0	0	0
13:40	9	0	50	12	0	66	9	0	50	7	0	39	0	0	0
13:45	12	0	66	7	0	39	12	0	66	12	0	66	0	0	0
13:50	8	0	44	5	0	28	8	0	44	11	0	61	0	0	0
13:55	12	0	66	9	0	50	12	0	66	13	0	72	0	0	0
14:00	13	0	72	7	0	39	13	0	72	9	0	50	0	0	0
14:05	11	0	61	11	0	61	9	0	50	7	0	39	0	0	0
14:10	9	0	50	12	0	66	7	0	39	5	0	28	0	0	0
14:15	7	0	39	14	0	77	8	0	44	9	0	50	0	0	0
14:20	8	0	44	11	0	61	11	0	61	11	0	61	0	0	0
14:25	7	0	39	9	0	50	9	0	50	12	0	66	0	0	0

Classified Turning Counts, Royston, Barnsley

DATE: FRIDAY 22nd NOVEMBER 2013

LOCATION: HIGH STREET (Former Industrial Building)



TIME / CLASS	EASTBOUND							WESTBOUND							TOTAL MOVEMENT FROM ARM
	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	
PERIOD TOTAL	9	986	96	3	0	12	1106	10	975	81	3	1	17	1087	2193

Classified Turning Counts, Royston, Barnsley

DATE: FRIDAY 22nd NOVEMBER 2013

LOCATION: HIGH STREET (Former Industrial Building)

TIME / CLASS	EASTBOUND							WESTBOUND							TOTAL MOVEMENT FROM ARM
	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	
9.00 - 9.15	0	84	10	1	0	2	97	1	115	7	0	0	2	125	222
9.15 - 9.30	1	105	11	0	0	1	118	0	81	17	1	0	2	101	219
9.30 - 9.45	0	121	14	2	0	2	139	1	97	10	0	0	2	110	249
9.45 - 10.00	1	76	8	1	0	0	86	0	114	9	0	0	1	124	210
HOURLY TOTAL	2	386	43	4	0	5	440	2	407	43	1	0	7	460	900
10.00 - 10.15	1	87	12	0	0	1	101	0	92	12	0	1	0	105	206
10.15 - 10.30	0	101	9	1	0	2	113	1	94	8	2	0	2	107	220
10.30 - 10.45	3	82	8	0	0	2	95	2	78	11	0	0	1	92	187
10.45 - 11.00	0	81	7	0	0	1	89	1	102	9	0	0	0	112	201
HOURLY TOTAL	4	351	36	1	0	6	398	4	366	40	2	1	3	416	814
11.00 - 11.15	0	98	7	0	0	0	105	1	82	5	1	0	1	90	195
11.15 - 11.30	2	109	3	0	0	1	115	0	67	9	1	0	2	79	194
11.30 - 11.45	0	110	5	0	0	1	116	1	91	3	0	0	2	97	213
11.45 - 12.00	1	90	7	0	0	0	98	0	67	10	0	0	1	78	176
HOURLY TOTAL	3	407	22	0	0	2	434	2	307	27	2	0	6	344	778
12.00 - 12.15	2	82	5	0	0	0	89	0	84	3	1	0	0	88	177
12.15 - 12.30	0	66	7	0	0	1	74	0	73	4	0	0	2	79	153
1/2 HOUR TOTAL	2	148	12	0	0	1	163	0	157	7	1	0	2	167	330
PERIOD TOTAL	11	1292	113	5	0	14	1435	8	1237	117	6	1	18	1387	2822

DATE: SATURDAY 23rd NOVEMBER 2013

11.00 - 11.15	0	70	10	1	0	0	81	0	70	2	0	0	2	74	155
11.15 - 11.30	1	72	7	1	0	2	83	1	75	1	1	0	1	79	162
11.30 - 11.45	0	59	9	0	0	1	69	0	84	6	0	0	2	92	161
11.45 - 12.00	0	64	6	0	0	1	71	0	66	8	0	0	0	74	145
HOURLY TOTAL	1	265	32	2	0	4	304	1	295	17	1	0	5	319	623
12.00 - 12.15	0	80	6	0	0	1	87	1	67	5	1	0	0	74	161
12.15 - 12.30	0	63	3	1	0	0	67	0	65	9	0	0	1	75	142
12.30 - 12.45	1	87	8	0	0	0	96	1	81	6	0	0	2	90	186
12.45 - 13.00	1	73	6	0	0	2	82	2	82	6	0	0	1	91	173
HOURLY TOTAL	2	303	23	1	0	3	332	4	295	26	1	0	4	330	662
13.00 - 13.15	2	77	6	0	0	2	87	0	64	7	1	0	2	73	160
13.15 - 13.30	0	76	10	0	0	0	86	1	68	6	1	0	1	77	163
13.30 - 13.45	0	62	5	0	0	0	67	2	73	3	0	1	0	79	146
13.45 - 14.00	1	64	6	0	0	1	72	2	64	6	0	0	1	73	145
HOURLY TOTAL	3	279	27	0	0	3	312	5	269	22	1	1	4	302	614
14.00 - 14.15	2	60	6	0	0	2	70	0	60	7	0	0	2	69	139
14.15 - 14.30	1	79	8	0	0	0	88	0	56	9	0	0	2	67	155
1/2 HOUR TOTAL	3	139	14	0	0	2	158	0	116	16	0	0	4	136	294

Classified Turning Counts, Royston, Barnsley

DATE: FRIDAY 22nd NOVEMBER 2013

LOCATION: STATION ROAD / MIDLAND ROAD / CHURCH STREET / HIGH STREET

ARM: HIGH STREET



TIME / CLASS	LEFT TO STATION ROAD						STRAIGHT TO MIDLAND ROAD						RIGHT TO CHURCH STREET						TOTAL MOVEMENT FROM ARM			
	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	MOTOR CYCLE	CAR TAXI	LGV	OGV1		OGV2	BUS COACH	TOTAL
15:00 - 15:15	0	7	1	0	0	0	8	0	41	5	1	0	1	48	0	37	3	0	0	1	34	90
15:15 - 15:30	0	12	0	0	0	0	12	1	48	4	0	0	1	54	0	37	1	0	0	0	38	104
15:30 - 15:45	0	7	1	0	0	0	8	0	46	8	2	0	2	58	0	41	3	0	0	0	44	110
15:45 - 16:00	0	8	1	0	0	0	9	0	45	8	1	0	0	54	0	34	3	0	0	0	37	100
HOURLY TOTAL	0	34	3	0	0	0	37	1	180	25	4	0	4	214	0	142	10	0	0	1	153	404
16:00 - 16:15	1	6	1	0	0	0	8	0	39	5	0	0	1	45	0	36	3	0	0	0	39	92
16:15 - 16:30	0	6	0	0	0	0	6	0	60	5	1	0	1	67	0	26	2	1	0	1	30	103
16:30 - 16:45	0	3	1	0	0	0	4	1	59	3	0	0	1	64	1	24	2	0	0	1	28	96
16:45 - 17:00	0	8	0	0	0	0	8	0	42	2	1	0	1	46	0	25	6	0	0	0	31	85
HOURLY TOTAL	1	23	2	0	0	0	26	1	200	15	2	0	4	222	1	111	13	1	0	2	128	376
17:00 - 17:15	0	5	0	0	0	0	5	0	46	5	0	0	0	51	0	43	5	0	0	0	48	104
17:15 - 17:30	0	10	0	0	0	0	10	1	69	2	0	0	1	73	1	35	1	0	0	0	37	120
17:30 - 17:45	0	9	0	0	0	0	9	0	55	1	0	0	1	57	0	42	4	0	0	0	46	112
17:45 - 18:00	0	4	1	0	0	0	5	0	39	4	0	0	0	43	1	48	0	0	0	0	49	97
HOURLY TOTAL	0	28	1	0	0	0	29	1	209	12	0	0	2	224	2	168	10	0	0	0	180	453
18:00 - 18:15	0	3	0	0	0	0	3	1	45	6	0	0	0	52	0	37	0	0	0	0	37	92
18:15 - 18:30	0	7	0	0	0	0	7	0	31	4	0	0	1	36	1	34	4	0	0	0	39	82
HOURLY TOTAL	0	10	0	0	0	0	10	1	76	10	0	0	1	88	1	71	4	0	0	0	76	174
PERIOD TOTAL	1	95	6	0	0	0	102	4	665	62	6	0	11	748	4	482	37	1	0	3	537	1387

DATE: SATURDAY 23rd NOVEMBER 2013

PERIOD TOTAL	1	54	2	1	0	0	58	3	468	39	0	0	11	521	1	209	18	0	0	1	230	809
11:00 - 11:15	0	7	0	0	0	0	7	1	39	5	0	0	0	45	0	17	0	0	0	0	17	69
11:15 - 11:30	0	5	0	0	0	0	5	1	32	4	0	0	1	38	0	11	1	0	0	1	13	56
11:30 - 11:45	0	3	1	1	0	0	5	0	40	4	0	0	1	45	0	11	2	0	0	0	13	63
11:45 - 12:00	0	5	0	0	0	0	5	0	33	4	0	0	1	38	0	19	1	0	0	0	20	63
HOURLY TOTAL	0	20	1	1	0	0	22	2	144	17	0	0	3	166	0	58	4	0	0	1	63	251
12:00 - 12:15	0	7	1	0	0	0	8	0	34	1	0	0	1	36	0	13	1	0	0	0	14	58
12:15 - 12:30	0	3	0	0	0	0	3	0	33	1	0	0	0	34	0	9	1	0	0	0	10	47
12:30 - 12:45	0	5	0	0	0	0	5	0	37	4	0	0	0	41	0	13	1	0	0	0	14	60
12:45 - 13:00	0	8	0	0	0	0	8	0	34	4	0	0	2	40	0	16	2	0	0	0	18	66
HOURLY TOTAL	0	23	1	0	0	0	24	0	138	10	0	0	3	151	0	51	5	0	0	0	56	231
13:00 - 13:15	0	5	0	0	0	0	5	0	30	2	0	0	2	34	0	19	0	0	0	0	19	58
13:15 - 13:30	0	1	0	0	0	0	1	0	29	2	0	0	0	31	0	16	3	0	0	0	19	51
13:30 - 13:45	0	1	0	0	0	0	1	0	34	0	0	0	0	34	0	16	5	0	0	0	21	56
13:45 - 14:00	0	0	0	0	0	0	0	1	32	3	0	0	1	37	0	17	0	0	0	0	17	54
HOURLY TOTAL	0	7	0	0	0	0	7	1	125	7	0	0	3	136	0	68	8	0	0	0	76	219
14:00 - 14:15	1	2	0	0	0	0	3	0	25	4	0	0	1	30	1	11	1	0	0	0	13	46
14:15 - 14:30	0	2	0	0	0	0	2	0	36	1	0	0	1	38	0	21	1	0	0	0	22	62
HOURLY TOTAL	1	4	0	0	0	0	5	0	61	5	0	0	2	68	1	32	2	0	0	0	35	108

TRANSPORT
DATA COLLECTION

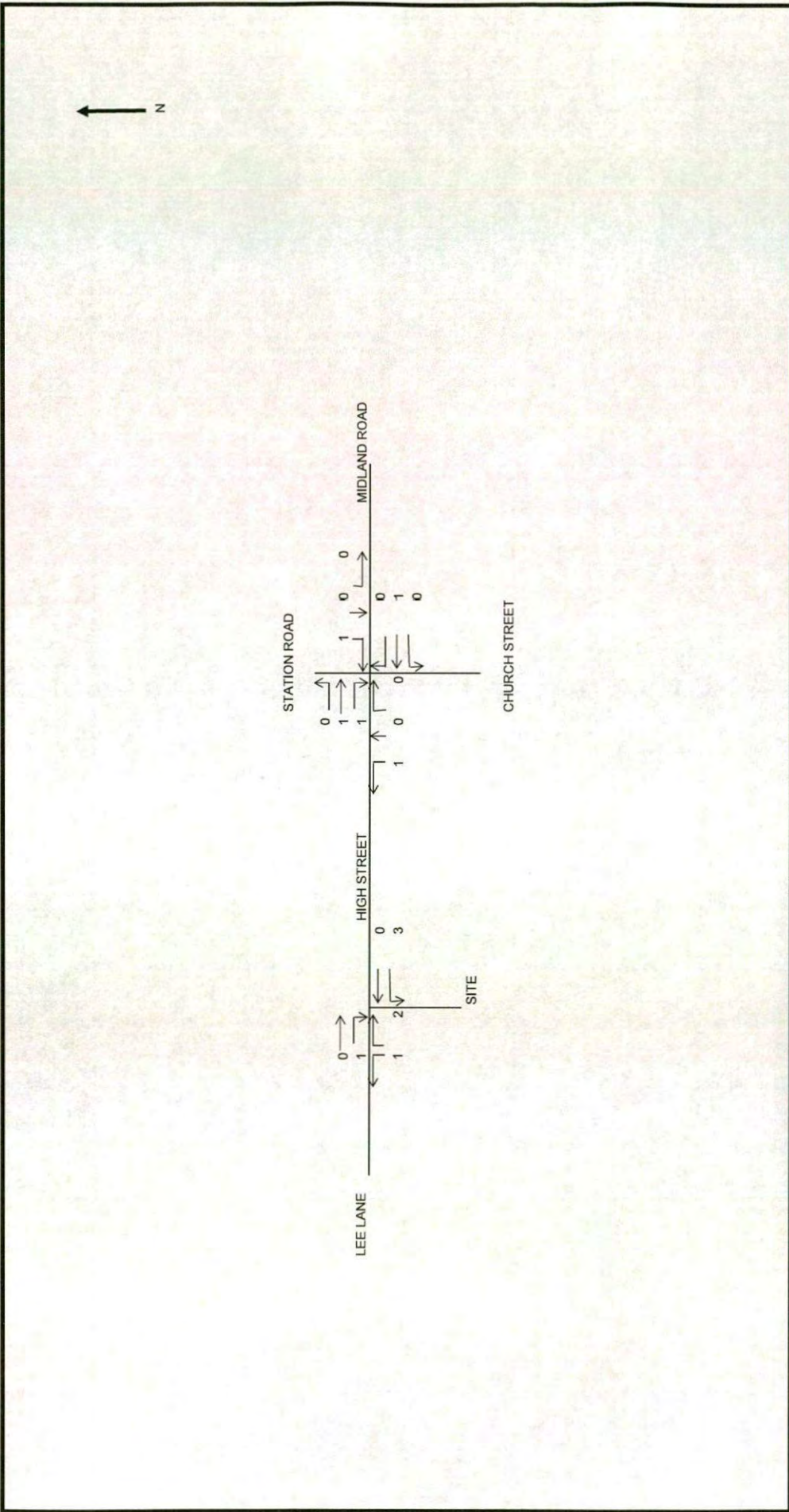
LOCATION: STATION ROAD / MIDLAND ROAD / CHURCH STREET / HIGH STREET



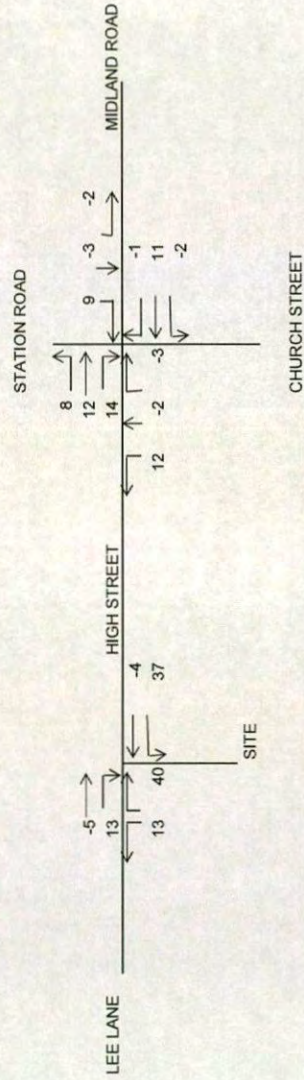
TRANSPORT
DATA COLLECTION

DATE: SATURDAY 23rd NOVEMBER 2013

11:00 - 11:15	0	25	0	0	0	26	0	18	1	1	0	0	0	0	20	0	6	1	0	0	0	0	7	53
11:15 - 11:30	0	21	2	1	0	1	25	0	17	1	0	0	0	0	18	1	11	1	0	0	0	1	14	57
11:30 - 11:45	0	21	1	0	0	0	22	2	14	2	1	0	0	0	19	0	16	2	0	0	0	0	18	58
11:45 - 12:00	0	11	1	0	0	0	12	0	11	0	0	0	0	0	11	0	11	1	0	0	0	0	12	51
HOURLY TOTAL	0	78	5	1	0	1	85	2	60	4	2	0	0	0	68	1	44	5	0	0	0	1	51	204
12:00 - 12:15	0	20	1	1	0	0	22	1	10	2	1	0	0	0	14	0	18	2	0	0	0	1	21	57
12:15 - 12:30	0	23	4	0	0	1	28	1	20	2	0	0	0	0	21	0	11	2	0	0	0	0	12	61
12:30 - 12:45	0	30	3	0	0	0	33	0	17	2	0	0	0	0	19	0	10	2	0	0	0	0	12	64
12:45 - 13:00	0	18	1	0	0	19	0	17	1	0	0	0	0	0	13	0	6	0	1	0	1	0	7	45
HOURLY TOTAL	0	94	9	1	0	1	102	2	64	5	2	0	0	0	79	0	45	5	0	0	1	1	52	227
13:00 - 13:15	0	19	1	0	0	20	0	26	0	1	0	0	0	0	27	1	12	1	0	0	0	0	14	61
13:15 - 13:30	0	21	4	0	0	1	26	0	10	0	0	0	0	0	11	0	15	1	0	0	0	1	17	54
13:30 - 13:45	0	21	0	0	0	0	21	0	16	2	0	0	0	0	18	0	14	0	0	0	0	0	14	53
13:45 - 14:00	0	17	1	0	0	0	18	0	12	1	0	0	0	0	13	2	9	2	0	0	0	1	12	43
HOURLY TOTAL	1	77	6	0	0	1	85	0	64	3	2	0	0	0	69	2	50	4	0	0	0	1	57	213
14:00 - 14:15	0	16	5	0	0	0	21	0	15	2	0	0	0	0	0	17	1	11	1	0	0	0	13	51
14:15 - 14:30	0	18	2	0	0	1	21	1	18	2	0	0	0	0	21	0	10	0	0	0	0	1	11	53
14:30 - 14:45	0	34	7	0	0	1	42	1	33	4	0	0	0	0	38	1	21	1	0	0	0	1	24	104
12 HOUR TOTAL	1	280	27	2	0	4	314	5	221	16	6	0	0	0	248	4	160	15	0	1	4	164	746	

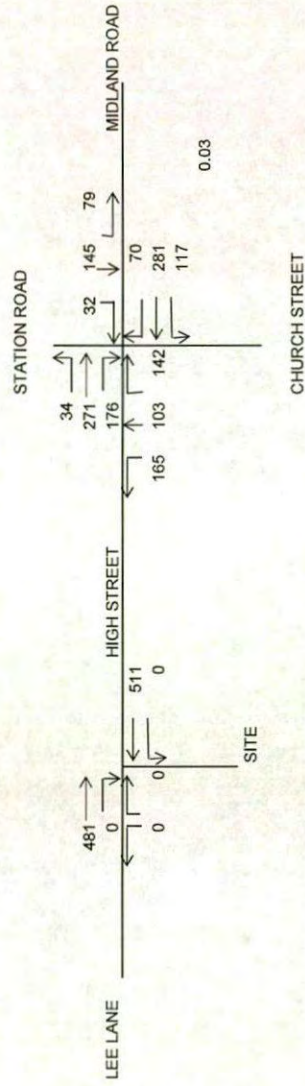


		Scheme		Title
		Proposed Development, High Street, Royston		
		On Behalf of		Residential Trips (New)
		Aldi Stores Ltd & Quora Ltd		PM PEAK



Title		Total Development Trips PM PEAK	
Scheme	Proposed Development, High Street, Royston		On Behalf of Aldi Stores Ltd & Quora Ltd
	Transport Potential		





	A	B	C
A	0	0	511
B	0	0	0
C	481	0	0

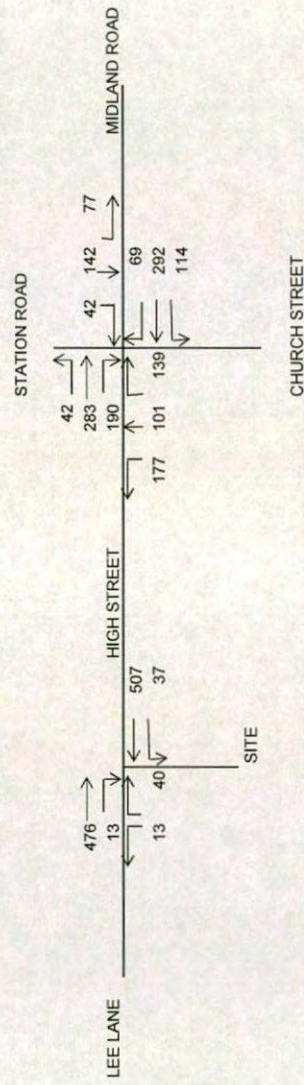
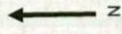
	A	B	C	D
A	0	117	281	70
B	142	0	165	103
C	271	176	0	34
D	79	145	32	0



Transport
Potential

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title
2014 + Committed Development
PM PEAK



A	B	C
A	0	37
B	40	0
C	476	13

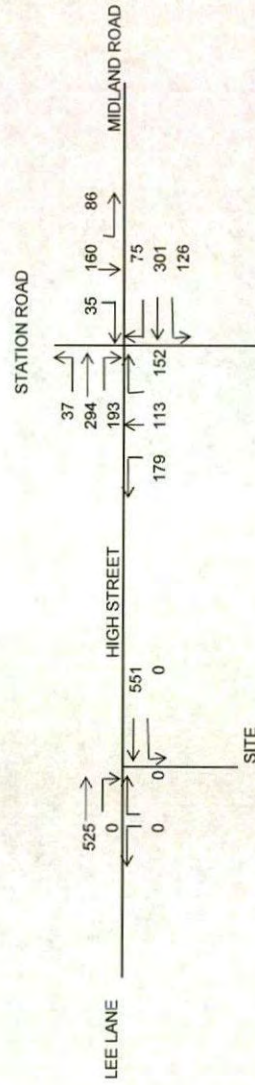
A	B	C	D
A	0	114	292
B	139	0	177
C	283	190	0
D	77	142	42



Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2014 Base + Committed Development + Proposed Development
PM PEAK



	A	B	C
A	0	0	551
B	0	0	0
C	525	0	0

	A	B	C	D
A	0	126	301	75
B	152	0	179	113
C	294	193	0	37
D	86	160	35	0



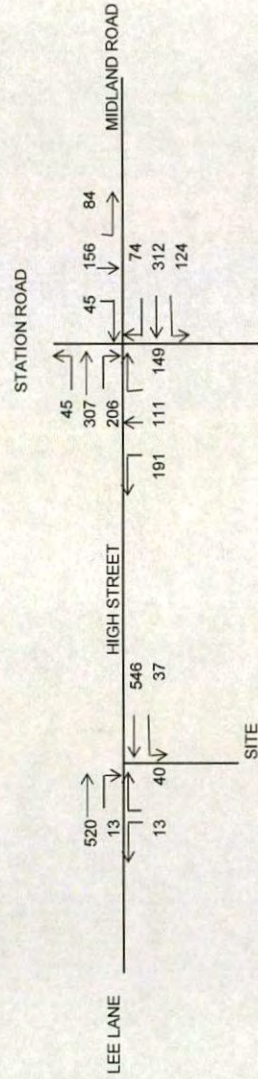
Transport
Potential

Scheme

Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2019 Base + Committed Development
PM PEAK



	A	B	C
A	0	37	546
B	40	0	13
C	520	13	0

	A	B	C	D
A	0	124	312	74
B	149	0	191	111
C	307	206	0	45
D	84	156	45	0



Transport
Potential

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

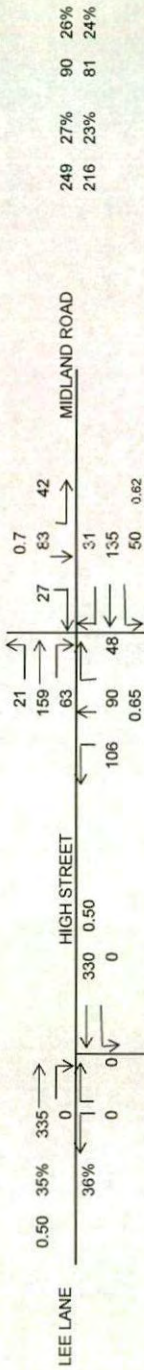
Title

2019 Base + Committed Development + Proposed Development
PM PEAK



35% 36%
121 125
15% 16%
142 152

STATION ROAD



SITE

CHURCH STREET

244 196
26% 21%
138 133
40% 39%

PRI DIV
ARR 947 344
DEP 927 344
1.0 1.0
1.0 1.0



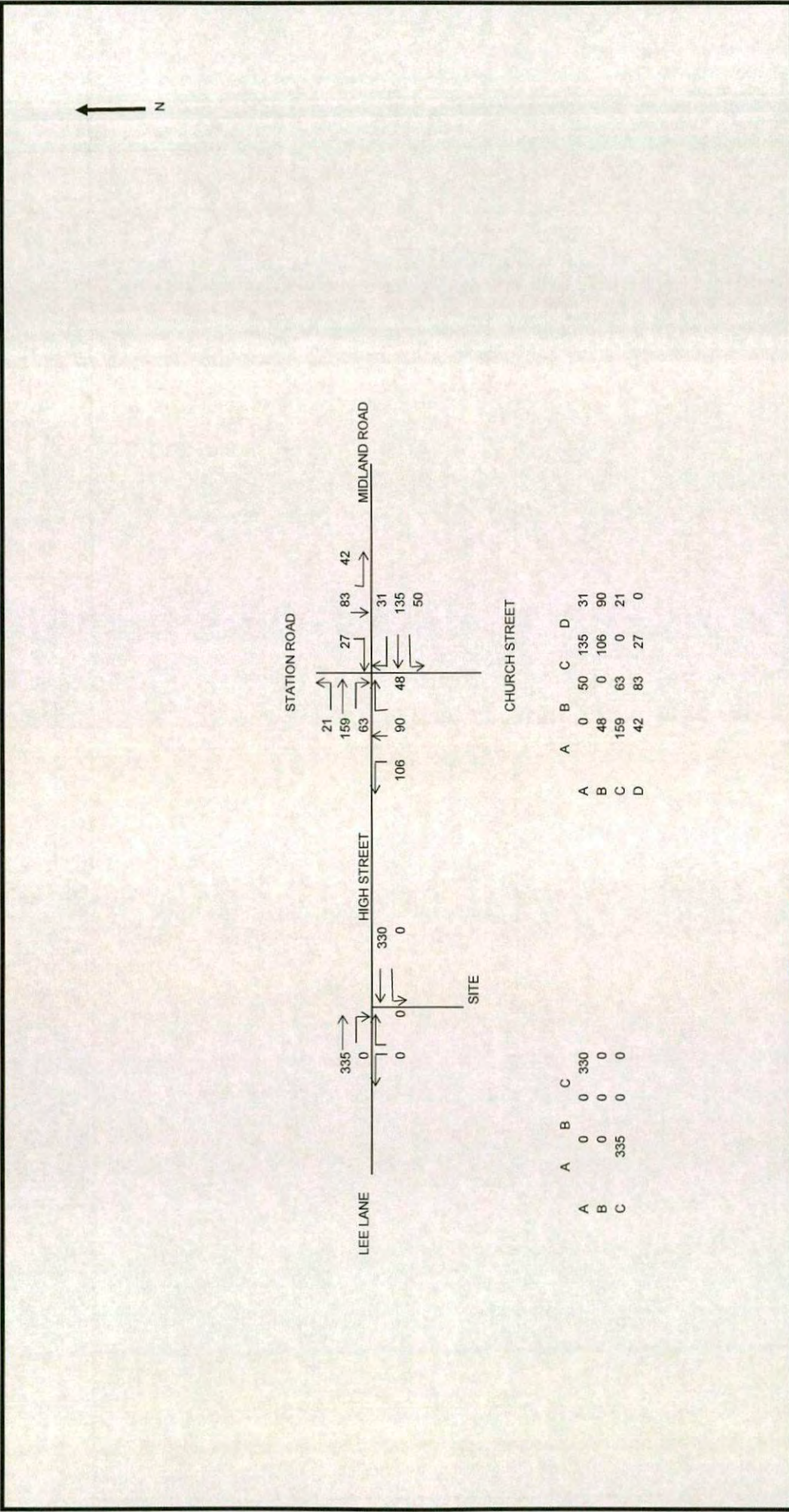
Transport
Potential

Scheme

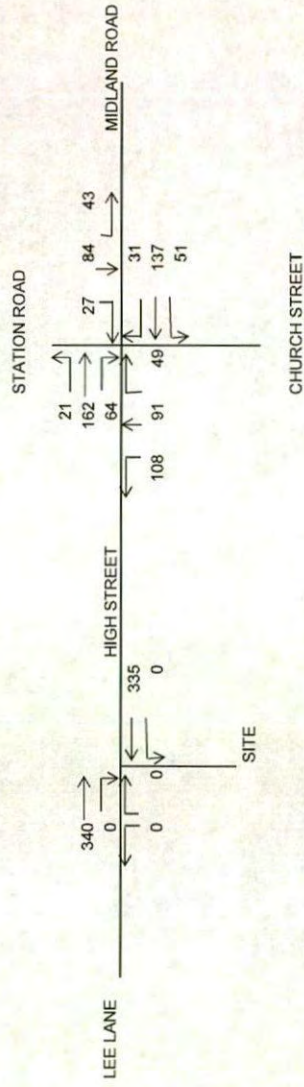
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

Turning Proportions
Saturday Peak



			Title	
			Scheme Proposed Development, High Street, Royston On Behalf of Aldi Stores Ltd & Quora Ltd	2013 BASE Saturday Peak



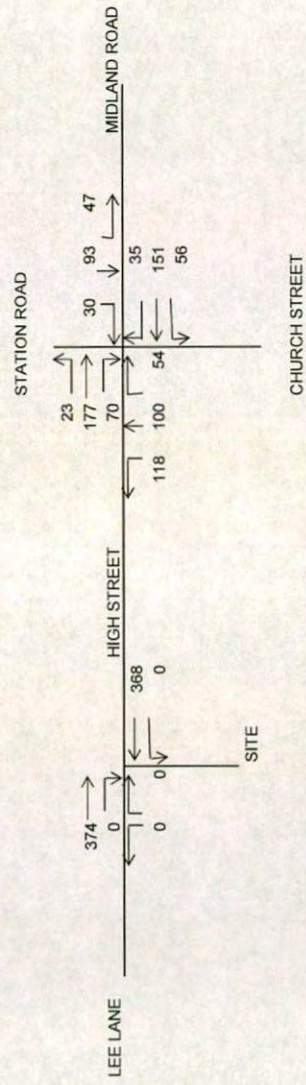
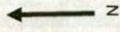
Title

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd



**Transport
Potential**

2014 BASE
Saturday Peak

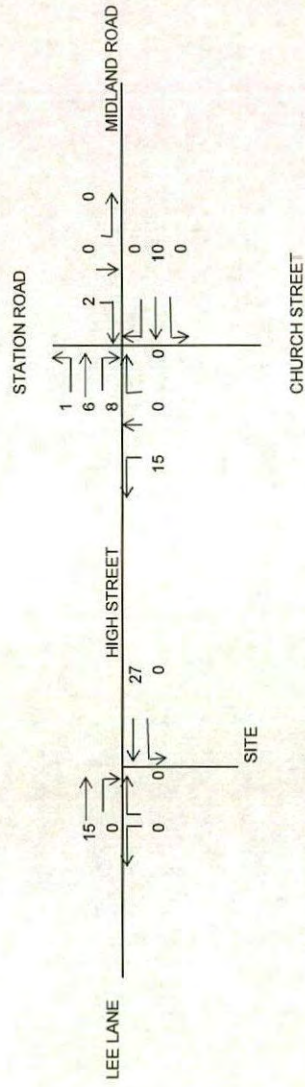


Transport
Potential

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2019 BASE
Saturday Peak



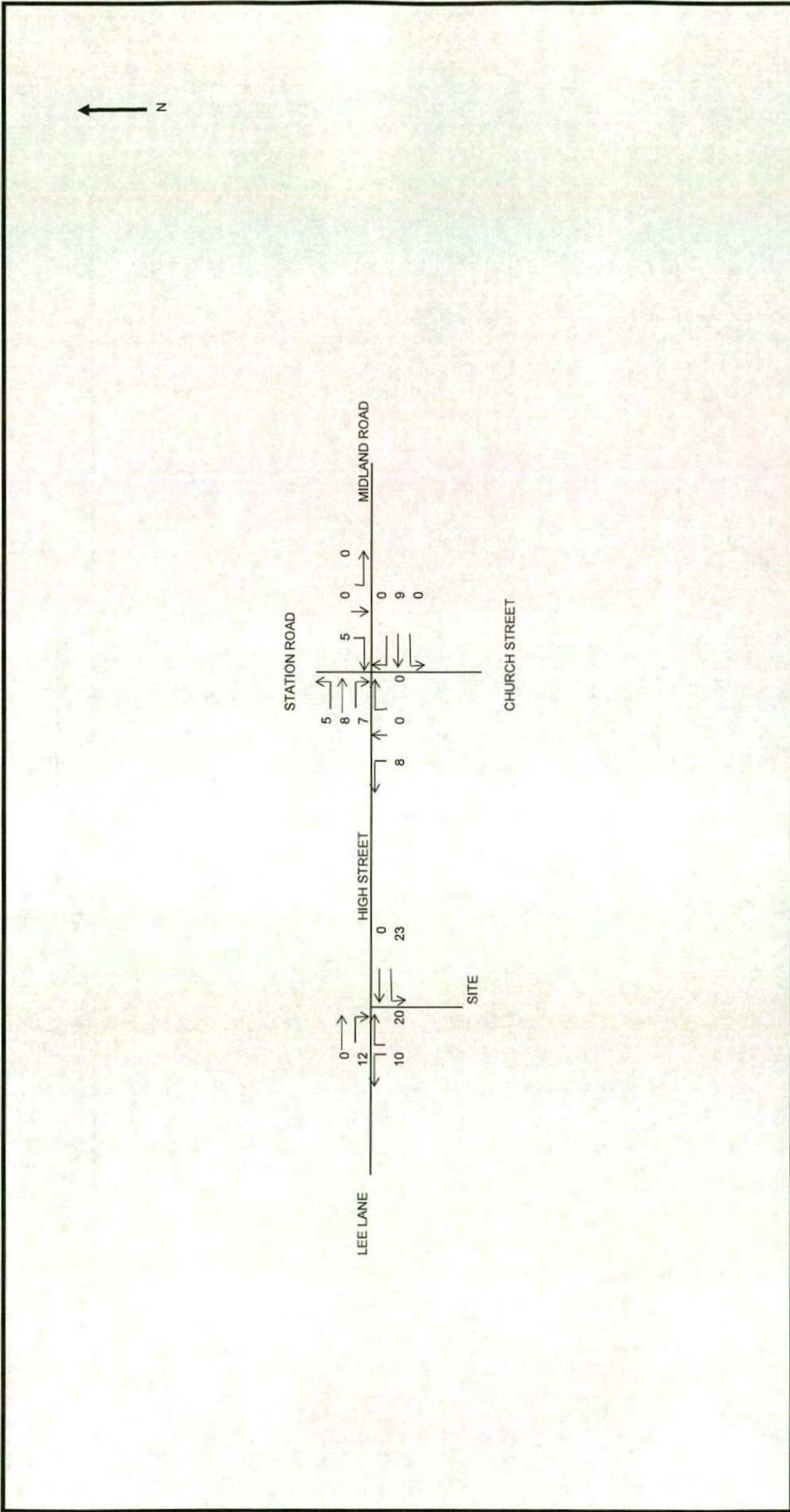
Title

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

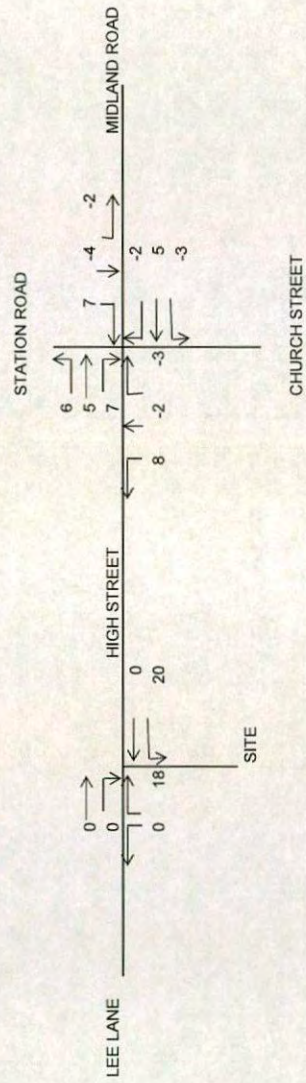


Transport
Potential

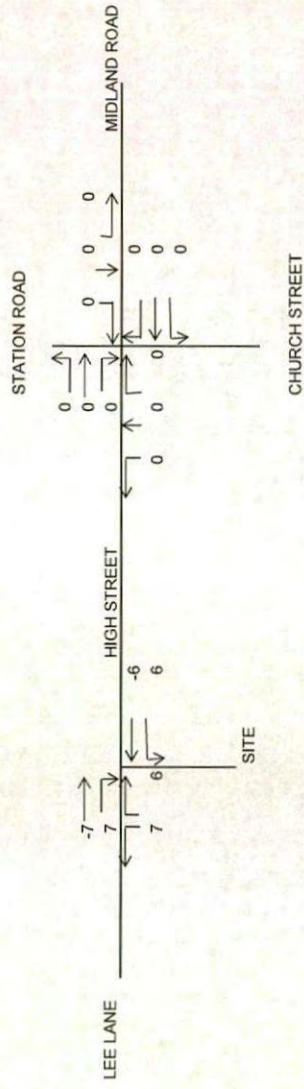
200 Dwellings Lee Lane Committed Development
Saturday Peak



			Scheme Proposed Development, High Street, Royston On Behalf of Aldi Stores Ltd & Quora Ltd	Title Primary Transfer Trips (New Trips) Saturday Peak
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	 	Scheme		Title
		Proposed Development, High Street, Royston		
		On Behalf of		
		Aldi Stores Ltd & Quora Ltd		Diverted Trips Saturday Peak



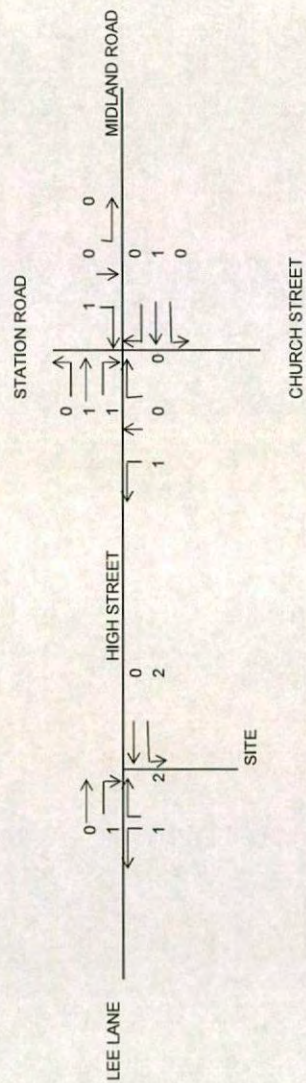
Title

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd



Transport
Potential

Pass - By Trips
Saturday Peak

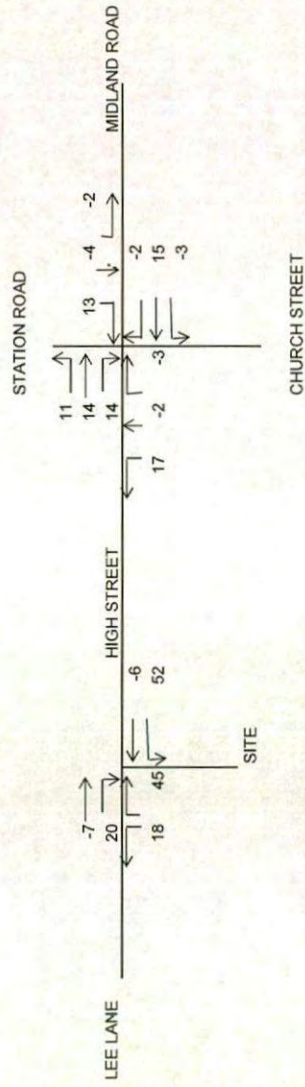
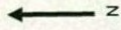


Transport
Potential

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

Residential Development (New Trips)
Saturday Peak



Title

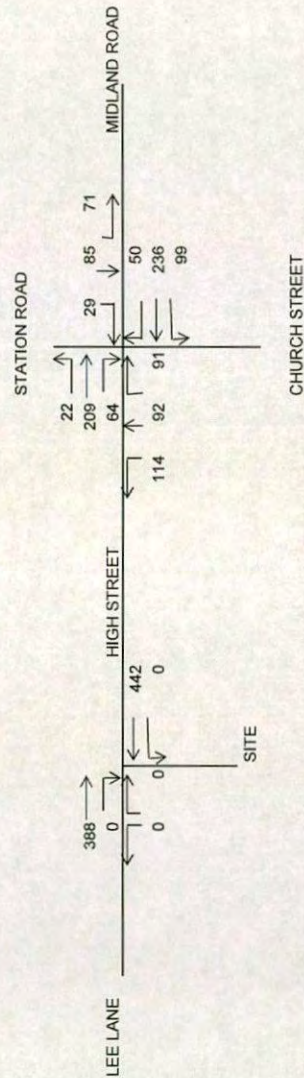
Total Development
Saturday Peak

Scheme

Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd



Transport
Potential



	A	B	C
A	0	0	442
B	0	0	0
C	388	0	0

	A	B	C	D
A	0	99	236	50
B	91	0	114	92
C	209	64	0	22
D	71	85	29	0



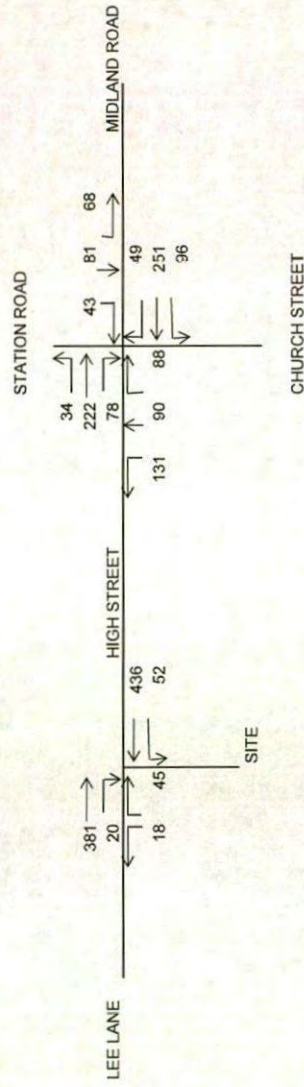
Transport
Potential

Scheme

Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2013 BASE + Committed Development
Saturday Peak



	A	B	C
A	0	52	436
B	45	0	18
C	381	20	0

	A	B	C	D
A	0	96	251	49
B	88	0	131	90
C	222	78	0	34
D	68	81	43	0

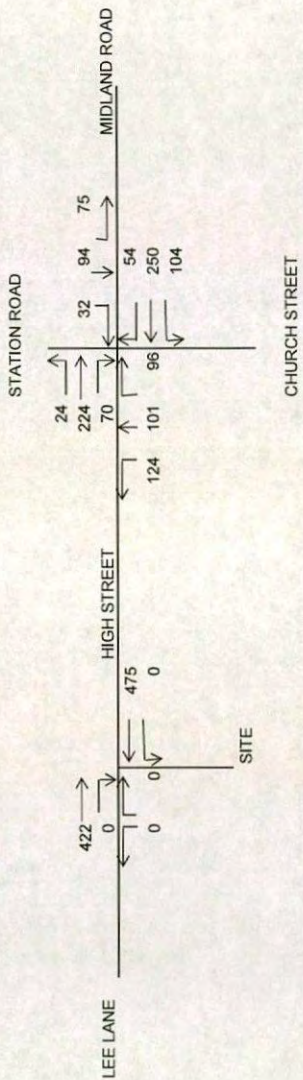


Transport
Potential

Scheme
Proposed Development, High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2014 BASE + Committed Development + Proposed Development
Saturday Peak



A	B	C
0	0	475
0	0	0
422	0	0

A	B	C	D
0	104	250	54
96	0	124	101
224	70	0	24
75	94	32	0

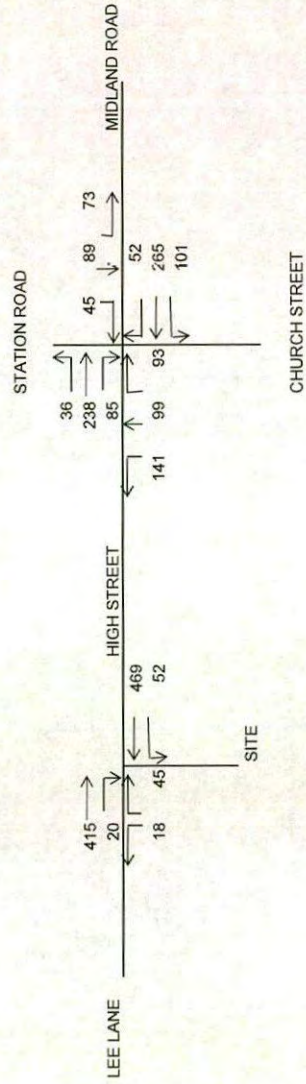


Transport
Potential

Scheme
Proposed Development: High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2019 BASE + Committed Development
Saturday Peak



	A	B	C
A	0	52	469
B	45	0	18
C	415	20	0

	A	B	C	D
A	0	101	265	52
B	93	0	141	99
C	238	85	0	36
D	73	89	45	0



Transport
Potential

Scheme
Proposed Development: High Street, Royston
On Behalf of
Aldi Stores Ltd & Quora Ltd

Title

2019 BASE + Committed Development + Proposed Development
Saturday Peak

APPENDIX D
Accident Data

[illegible]

APPENDIX F
LINSIG Output

TRL LIMITED

(C) COPYRIGHT 2010

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"C:\Users\C Smith\Documents\T Drive Sep 12\Works\PICADY\ROYSTON.vpi"
(drive-on-the-left) at 10:47:11 on Sunday, 9 March 2014

RUN INFORMATION

RUN TITLE : PROPOSED ALDI AND QUORA DEVELOPMENT
LOCATION : ROYSTON, BARNSLEY
DATE : 09/03/14
CLIENT : ALDI STORES AND QUORA
ENUMERATOR : C Smith [CSMITH-HP]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)

I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS HIGH STREET
ARM B IS SITE ACCESS
ARM C IS LEE LANE

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 160.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 20.0 M.
- VISIBILITY TO RIGHT	(VB-A) 75.0 M.
- LANE 1 WIDTH	(WB-C) 3.50 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

SLOPES AND INTERCEPT

(NB: Streams may be combined, in which case capacity will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
704.75	0.27	0.11

Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
546.86	0.25	0.10	0.16	0.36

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
666.62	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE (%)
A	100
B	100
C	100

Demand set: 2014 PM BASE + COM + DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.80	10.20	6.80
ARM B	15.00	45.00	75.00	0.66	0.99	0.66
ARM C	15.00	45.00	75.00	6.11	9.17	6.11

Demand set: 2014 PM BASE + COM + DEV

TIME	TURNING PROPORTIONS			TURNING COUNTS			(PERCENTAGE OF H.V.S)		
	FROM/TO	ARM	A	ARM	B	ARM	C		
08.00 - 09.30	ARM A	I	0.000	I	0.068	I	0.932	I	I
			0.0		37.0		507.0		
			(0.0)		(0.0)		(0.0)		
			I		I		I		
	ARM B	I	0.755	I	0.000	I	0.245	I	I
			40.0		0.0		13.0		
			(0.0)		(0.0)		(0.0)		
			I		I		I		
	ARM C	I	0.973	I	0.027	I	0.000	I	I
			476.0		13.0		0.0		
			(0.0)		(0.0)		(0.0)		
			I		I		I		

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 PM BASE + COM + DEV

AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.67	7.07	0.094		0.00	0.10	1.5		0.16
C-AB	0.28	13.33	0.021		0.00	0.03	0.4		0.08
C-A	5.86								
A-B	0.46								
A-C	6.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.79	6.56	0.121		0.10	0.14	2.0		0.17
C-AB	0.37	13.78	0.027		0.03	0.03	0.5		0.07
C-A	6.96								
A-B	0.55								
A-C	7.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.97	5.85	0.166		0.14	0.20	2.8		0.20
C-AB	0.52	14.40	0.036		0.03	0.05	0.7		0.07
C-A	8.45								
A-B	0.68								
A-C	9.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.97	5.85	0.166		0.20	0.20	3.0		0.20
C-AB	0.52	14.40	0.036		0.05	0.05	0.7		0.07
C-A	8.45								
A-B	0.68								
A-C	9.30								

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-AC	0.79	6.56	0.121		0.20	0.14	2.2		0.17	I
I	C-AB	0.37	13.78	0.027		0.05	0.03	0.5		0.07	I
I	C-A	6.96									I
I	A-B	0.55									I
I	A-C	7.60									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.15-09.30										I
I	B-AC	0.67	7.07	0.094		0.14	0.10	1.6		0.16	I
I	C-AB	0.28	13.33	0.021		0.03	0.03	0.4		0.08	I
I	C-A	5.86									I
I	A-B	0.46									I
I	A-C	6.36									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.1
08.30	0.1
08.45	0.2
09.00	0.2
09.15	0.1
09.30	0.1

QUEUE FOR STREAM C-AB	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

		NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
I	I	I FLOW STARTS	I TOP OF PEAK	I FLOW STOPS	I BEFORE	I AT TOP	I AFTER
I	I	I TO RISE	I IS REACHED	I FALLING	I PEAK	I OF PEAK	I PEAK
I	I	I	I	I	I	I	I
I ARM	A I	15.00	I 45.00	I 75.00	I 7.29	I 10.93	I 7.29
I ARM	B I	15.00	I 45.00	I 75.00	I 0.66	I 0.99	I 0.66
I ARM	C I	15.00	I 45.00	I 75.00	I 6.66	I 9.99	I 6.66

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.79	6.31	0.126		0.21	0.15	2.3		0.18
C-AB	0.39	14.07	0.028		0.05	0.04	0.5		0.07
C-A	7.59								
A-B	0.55								
A-C	8.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-AC	0.67	6.86	0.097		0.15	0.11	1.7		0.16
C-AB	0.29	13.57	0.022		0.04	0.03	0.4		0.08
C-A	6.39								
A-B	0.46								
A-C	6.85								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.1
08.30	0.1
08.45	0.2
09.00	0.2
09.15	0.1
09.30	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.1
09.00	0.1
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND		I	* QUEUEING *		I	* INCLUSIVE QUEUEING *		I
I	I	I	I		I	* DELAY *		I	* DELAY *		I
I	I	I	I		I	I		I	I		I
I	I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	(MIN)	(MIN/VEH)	I
I	B-AC	I	73.0	I 48.6	I	13.7	I 0.19	I	13.7	I 0.19	I
I	C-AB	I	37.2	I 24.8	I	3.4	I 0.09	I	3.4	I 0.09	I
I	C-A	I	696.4	I 464.3	I			I			I
I	A-B	I	50.9	I 34.0	I			I			I
I	A-C	I	751.5	I 501.0	I			I			I
I	ALL	I	1609.0	I 1072.7	I	17.2	I 0.01	I	17.2	I 0.01	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For Opposing	Slope For Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-B	I
I	704.75	0.27	0.11	I

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	I
I	546.86	0.25	0.10	0.16	0.36	I

I	Intercept For	Slope For Opposing	Slope For Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-B	I
I	666.62	0.26	0.26	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2014 SAT BASE + COM + DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START WHEN				RATE OF FLOW (VEH/MIN)			
ARM		FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER		
		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK		
ARM A		15.00	45.00	75.00	6.10	9.15	6.10		
ARM B		15.00	45.00	75.00	0.79	1.18	0.79		
ARM C		15.00	45.00	75.00	5.01	7.52	5.01		

Demand set: 2014 SAT BASE + COM + DEV

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S.)							
	FROM/TO	ARM	A	ARM	B	ARM	C	
08.00 - 09.30	I	I	I	I	I	I	I	I
	I	ARM A	I	0.000	I	0.107	I	0.893
	I	I	I	0.0	I	52.0	I	436.0
	I	I	I	(0.0)	I	(0.0)	I	(0.0)
	I	I	I	I	I	I	I	I
	I	ARM B	I	0.714	I	0.000	I	0.286
	I	I	I	45.0	I	0.0	I	18.0
	I	I	I	(0.0)	I	(0.0)	I	(0.0)
	I	I	I	I	I	I	I	I
	I	ARM C	I	0.950	I	0.050	I	0.000
I	I	I	I	381.0	I	20.0	I	0.0
	I	I	I	(0.0)	I	(0.0)	I	(0.0)
	I	I	I	I	I	I	I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 SAT BASE + COM + DEV
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.79	7.53	0.105		0.00	0.12	1.7		0.15
C-AB	0.39	12.72	0.031		0.00	0.04	0.6		0.08
C-A	4.64								
A-B	0.65								
A-C	5.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.94	7.10	0.133		0.12	0.15	2.2		0.16
C-AB	0.51	13.06	0.039		0.04	0.05	0.8		0.08
C-A	5.50								
A-B	0.76								
A-C	6.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.16	6.49	0.178		0.15	0.21	3.1		0.19
C-AB	0.70	13.53	0.052		0.05	0.08	1.2		0.08
C-A	6.66								
A-B	0.95								
A-C	8.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.16	6.49	0.178		0.21	0.22	3.2		0.19
C-AB	0.70	13.53	0.052		0.08	0.08	1.2		0.08
C-A	6.66								
A-B	0.95								
A-C	8.00								

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-AC	0.94	7.10	0.133		0.22	0.16	2.4		0.16	I
I	C-AB	0.51	13.06	0.039		0.08	0.05	0.8		0.08	I
I	C-A	5.50									I
I	A-B	0.78									I
I	A-C	6.53									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.15-09.30										I
I	B-AC	0.79	7.53	0.105		0.16	0.12	1.8		0.15	I
I	C-AB	0.39	12.72	0.031		0.05	0.04	0.6		0.08	I
I	C-A	4.64									I
I	A-B	0.65									I
I	A-C	5.47									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC	
TIME SEGMENT	NO. OF VEHICLES
ENDING	IN QUEUE
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.2
09.15	0.2
09.30	0.1

QUEUE FOR STREAM C-AB	
TIME SEGMENT	NO. OF VEHICLES
ENDING	IN QUEUE
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I
	I		I	* DELAY *	I	* DELAY *	I
	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	I	86.7	I	57.6	I	14.4	I
C-AB	I	47.8	I	31.9	I	5.2	I
C-A	I	504.1	I	336.1	I		I
A-B	I	71.6	I	47.7	I		I
A-C	I	600.1	I	400.1	I		I
ALL	I	1310.4	I	873.6	I	19.7	I
	I		I		I	0.01	I

DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	STREAM A-B
704.75	0.27	0.11		

Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	STREAM C-B
546.86	0.25	0.10	0.16	0.36		

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	STREAM A-B
666.62	0.26	0.26		

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	I	FLOW SCALE(%)	I
A	I	100	I
B	I	100	I
C	I	100	I

Demand set: 2019 SAT BASE + COM + DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
FLOW STARTS	I	TOP OF PEAK	I	BEFORE	I
TO RISE	I	IS REACHED	I	AT TOP	I
	I	FALLING	I	OF PEAK	I
	I		I	PEAK	I
ARM A	I	15.00	I	45.00	I
ARM B	I	15.00	I	45.00	I
ARM C	I	15.00	I	45.00	I
	I		I	75.00	I
	I		I	6.51	I
	I		I	9.77	I
	I		I	6.51	I
	I		I	0.79	I
	I		I	1.18	I
	I		I	0.79	I
	I		I	5.44	I
	I		I	9.16	I
	I		I	5.44	I

Demand set: 2019 SAT BASE + COM + DEV

		TURNING PROPORTIONS							
		TURNING COUNTS							
		(PERCENTAGE OF H.V.S)							

	TIME	FROM/TO	ARM	A	ARM	B	ARM	C	
I	08.00 - 09.30	I		I		I		I	
I		I	ARM A	I	0.000	I	0.100	I	0.900
I		I		I	0.0	I	52.0	I	469.0
I		I		I	(0.0)	I	(0.0)	I	(0.0)
I		I		I		I		I	
I		I	ARM B	I	0.714	I	0.000	I	0.286
I		I		I	45.0	I	0.0	I	18.0
I		I		I	(0.0)	I	(0.0)	I	(0.0)
I		I		I		I		I	
I		I	ARM C	I	0.954	I	0.046	I	0.000
I		I		I	415.0	I	20.0	I	0.0
I		I		I	(0.0)	I	(0.0)	I	(0.0)
I		I		I		I		I	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2019 SAT BASE + COM + DEV
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.79	7.37	0.107		0.00	0.12	1.7		0.15
C-AB	0.40	12.90	0.031		0.00	0.04	0.6		0.08
C-A	5.05								
A-B	0.65								
A-C	5.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.94	6.90	0.137		0.12	0.16	2.3		0.17
C-AB	0.53	13.28	0.040		0.04	0.06	0.8		0.08
C-A	5.99								
A-B	0.78								
A-C	7.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.16	6.24	0.185		0.16	0.22	3.2		0.20
C-AB	0.79	14.00	0.056		0.06	0.09	1.3		0.08
C-A	7.20								
A-B	0.95								
A-C	8.61								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.16	6.24	0.185		0.22	0.23	3.4		0.20
C-AB	0.79	14.00	0.056		0.09	0.09	1.3		0.08
C-A	7.20								
A-B	0.95								
A-C	8.61								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.94	6.90	0.137		0.23	0.16	2.5		0.17
C-AB	0.53	13.28	0.040		0.09	0.06	0.9		0.08
C-A	5.99								
A-B	0.78								
A-C	7.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-AC	0.79	7.37	0.107		0.16	0.12	1.9		0.15
C-AB	0.40	12.91	0.031		0.06	0.04	0.6		0.08
C-A	5.05								
A-B	0.65								
A-C	5.88								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.2
09.15	0.2
09.30	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	INCLUSIVE QUEUEING (VEH/H)	* QUEUEING * (MIN)	* DELAY * (MIN/VEH)	INCLUSIVE QUEUEING (MIN)	* DELAY * (MIN/VEH)
B-AC	86.7	57.8	15.0	0.17	15.0	0.17
C-AB	51.6	34.4	5.6	0.11	5.6	0.11
C-A	547.1	364.8				
A-B	71.6	47.7				
A-C	645.5	430.4				
ALL	1402.6	935.1	20.6	0.01	20.6	0.01

DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

===== end of file =====

APPENDIX E
PICADY Output

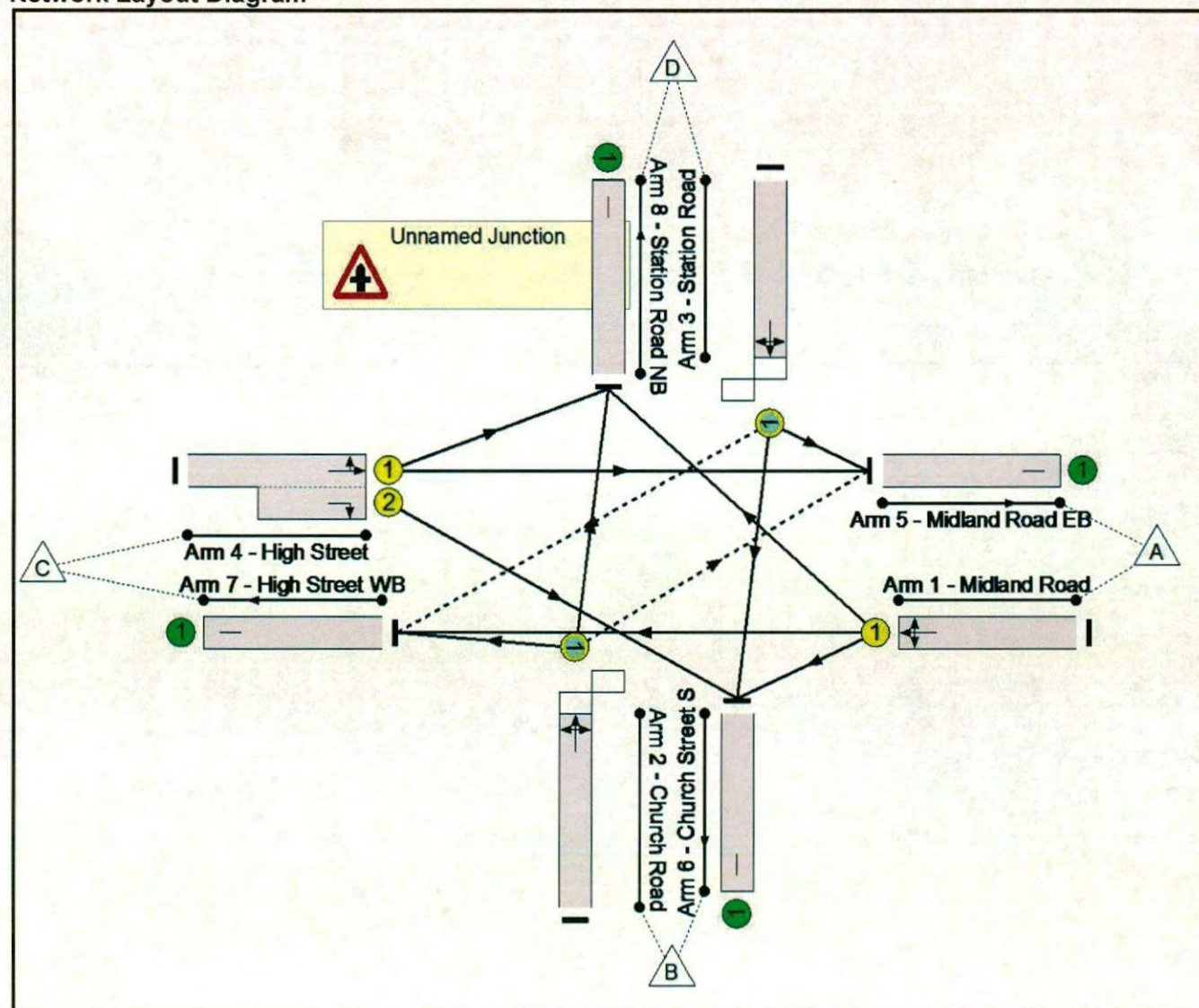
Full Input Data And Results

Full Input Data And Results

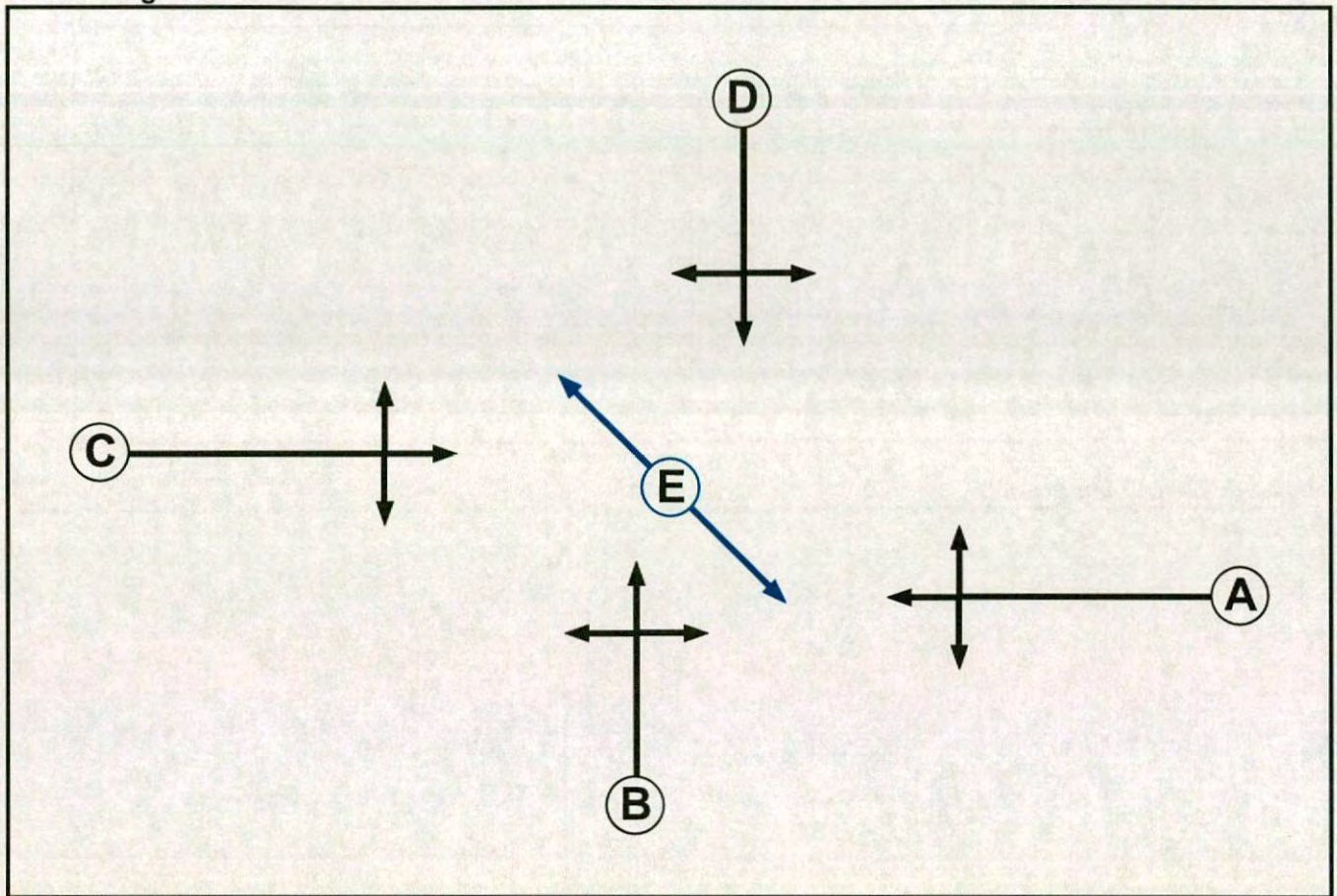
User and Project Details

Project:	
Title:	
Location:	
File name:	Royston.lsg3x
Author:	
Company:	
Address:	
Notes:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		8	8

Full Input Data And Results

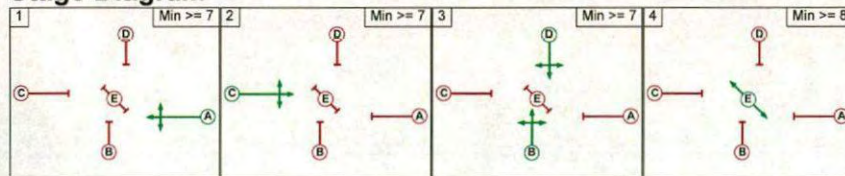
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		7	7	7	8
	B	7		7	-	8
	C	6	7		7	8
	D	7	-	7		8
	E	10	10	10	10	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	C
3	B D
4	E

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		7	7	8
	2	6		7	8
	3	7	7		8
	4	10	10	10	

Full Input Data And Results
Give-Way Lane Input Data

Junction: Unnamed Junction										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Church Road)	5/1 (Right)	1439	3/1	1.09	3/1	2.00	1.00	0.50	2	2.00
3/1 (Station Road)	7/1 (Right)	1439	2/1	1.09	2/1	2.00	1.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Midland Road)	U	A	2	3	60.0	User	1794	-	-	-	-	-
2/1 (Church Road)	O	B	2	3	60.0	User	1664	-	-	-	-	-
3/1 (Station Road)	O	D	2	3	60.0	User	1709	-	-	-	-	-
4/1 (High Street)	U	C	2	3	60.0	User	1880	-	-	-	-	-
4/2 (High Street)	U	C	2	3	5.0	User	1926	-	-	-	-	-
5/1 (Midland Road EB)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Church Street S)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (High Street WB)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Station Road NB)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2013 PM BASE'	16:45	17:45	01:00	
2: '2014 PM BASE + COM'	16:45	17:45	01:00	
3: '2014 PM BASE + COM + DEV'	16:45	17:45	01:00	
4: '2019 PM BASE + COM'	16:45	17:45	01:00	
5: '2014 PM BASE + COM + DEV'	16:45	17:45	01:00	
6: '2013 SAT BASE'	12:15	13:15	01:00	
7: '2014 SAT BASE + COM'	12:15	13:15	01:00	
8: '2014 SAT BASE + COM + DEV'	12:15	13:15	01:00	
9: '2019 SAT BASE + COM'	12:15	13:15	01:00	
10: '2019 SAT BASE + COM + DEV'	12:15	13:15	01:00	

Full Input Data And Results

Scenario 1: '2013 PM BASE' (FG1: '2013 PM BASE', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	96	198	52	346
	B	102	0	137	101	340
	C	236	169	0	32	437
	D	65	143	30	0	238
	Tot.	403	408	365	185	1361

Traffic Lane Flows

Lane	Scenario 1: 2013 PM BASE
Junction: Unnamed Junction	
1/1	346
2/1	340
3/1	238
4/1 (with short)	437(In) 268(Out)
4/2 (short)	169
5/1	403
6/1	408
7/1	365
8/1	185

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Scenario 2: '2014 PM BASE + COM' (FG2: '2014 PM BASE + COM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
Origin		A	B	C	D	Tot.
	A	0	117	281	70	468
	B	142	0	165	103	410
	C	271	176	0	34	481
	D	79	145	32	0	256
	Tot.	492	438	478	207	1615

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2014 PM BASE + COM
Junction: Unnamed Junction	
1/1	468
2/1	410
3/1	256
4/1 (with short)	481(In) 305(Out)
4/2 (short)	176
5/1	492
6/1	438
7/1	478
8/1	207

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Full Input Data And Results

Scenario 3: '2014 PM BASE + COM + DEV' (FG3: '2014 PM BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	114	292	69	475
	B	139	0	177	101	417
	C	283	190	0	42	515
	D	77	142	42	0	261
	Tot.	499	446	511	212	1668

Traffic Lane Flows

Lane	Scenario 3: 2014 PM BASE + COM + DEV
Junction: Unnamed Junction	
1/1	475
2/1	417
3/1	261
4/1 (with short)	515(In) 325(Out)
4/2 (short)	190
5/1	499
6/1	446
7/1	511
8/1	212

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Scenario 4: '2019 PM BASE + COM' (FG4: '2019 PM BASE + COM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	126	301	75	502
	B	152	0	179	113	444
	C	294	193	0	37	524
	D	86	160	35	0	281
	Tot.	532	479	515	225	1751

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2019 PM BASE + COM
Junction: Unnamed Junction	
1/1	502
2/1	444
3/1	281
4/1 (with short)	524(In) 331(Out)
4/2 (short)	193
5/1	532
6/1	479
7/1	515
8/1	225

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Full Input Data And Results

Scenario 5: '2019 PM BASE + COM + DEV' (FG5: '2014 PM BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	124	312	74	510
	B	149	0	191	111	451
	C	307	206	0	45	558
	D	84	156	45	0	285
	Tot.	540	486	548	230	1804

Traffic Lane Flows

Lane	Scenario 5: 2019 PM BASE + COM + DEV
Junction: Unnamed Junction	
1/1	510
2/1	451
3/1	285
4/1 (with short)	558(In) 352(Out)
4/2 (short)	206
5/1	540
6/1	486
7/1	548
8/1	230

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Scenario 6: '2013 SAT BASE' (FG6: '2013 SAT BASE', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin	A	B	C	D	Tot.	
	A	0	50	135	31	216
	B	48	0	106	90	244
	C	159	63	0	21	243
	D	42	83	27	0	152
	Tot.	249	196	268	142	855

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2013 SAT BASE
Junction: Unnamed Junction	
1/1	216
2/1	244
3/1	152
4/1 (with short)	243(In) 180(Out)
4/2 (short)	63
5/1	249
6/1	196
7/1	268
8/1	142

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf