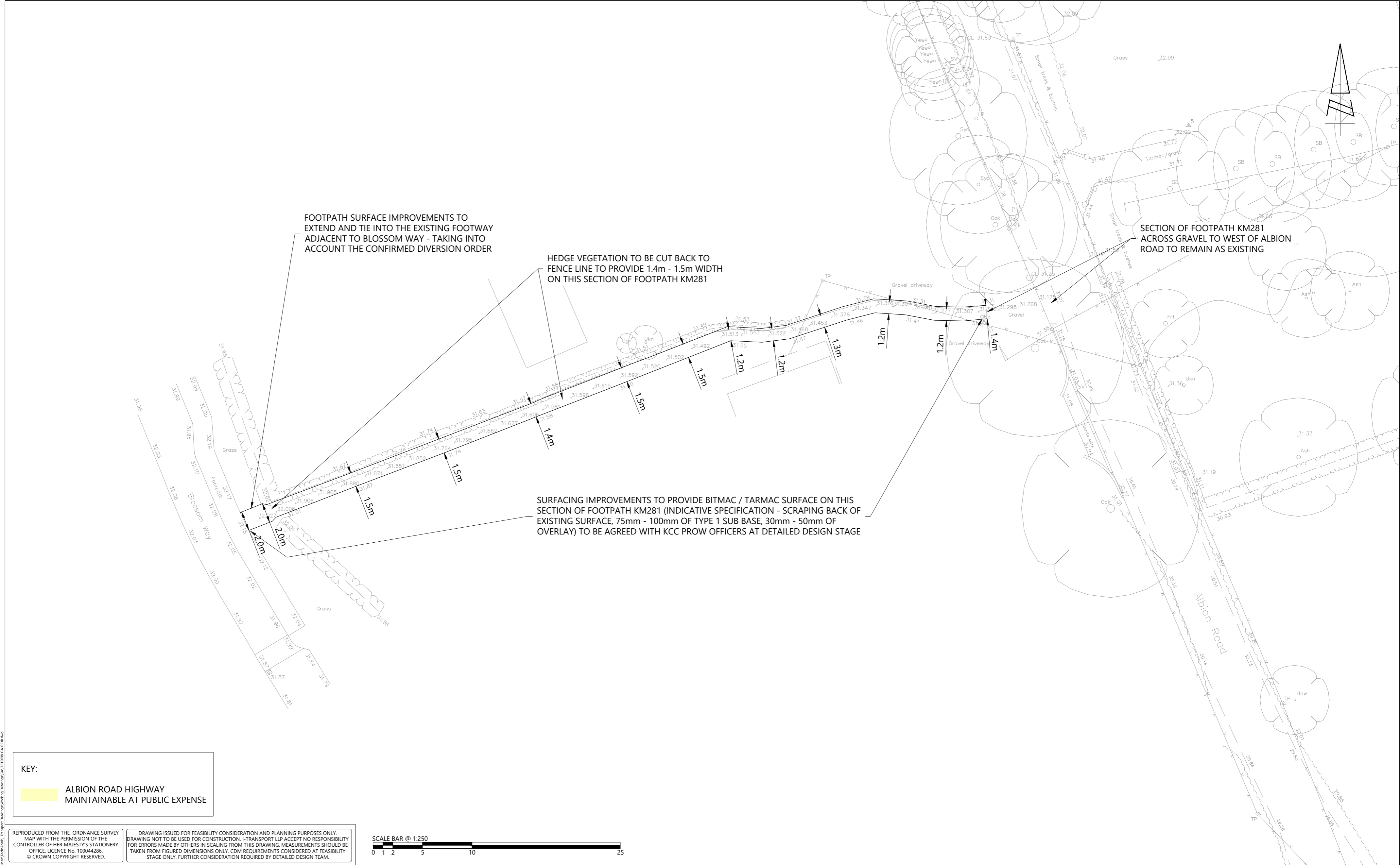

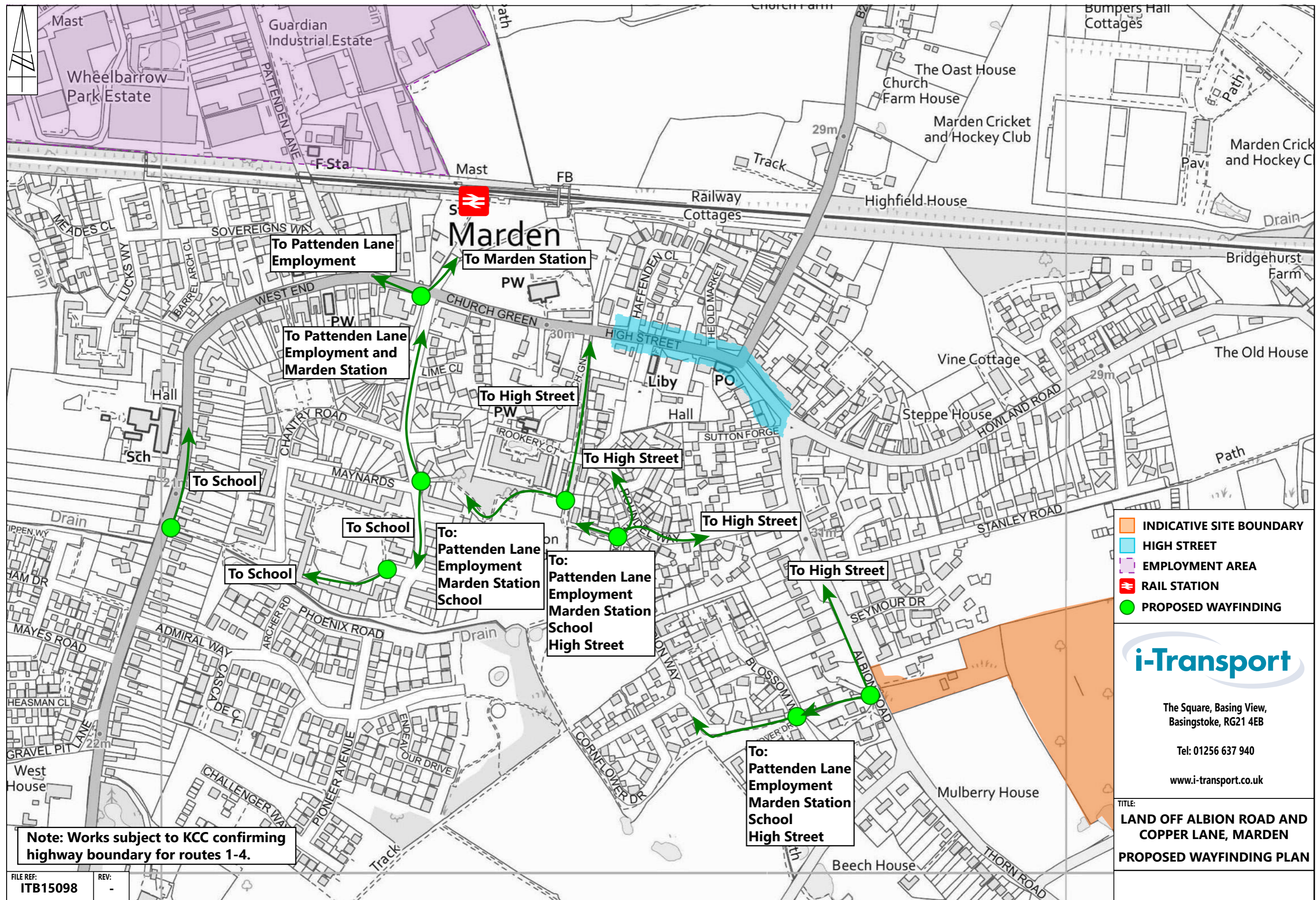


APPENDIX I. Agreed Improvements - Public Footpath KM281

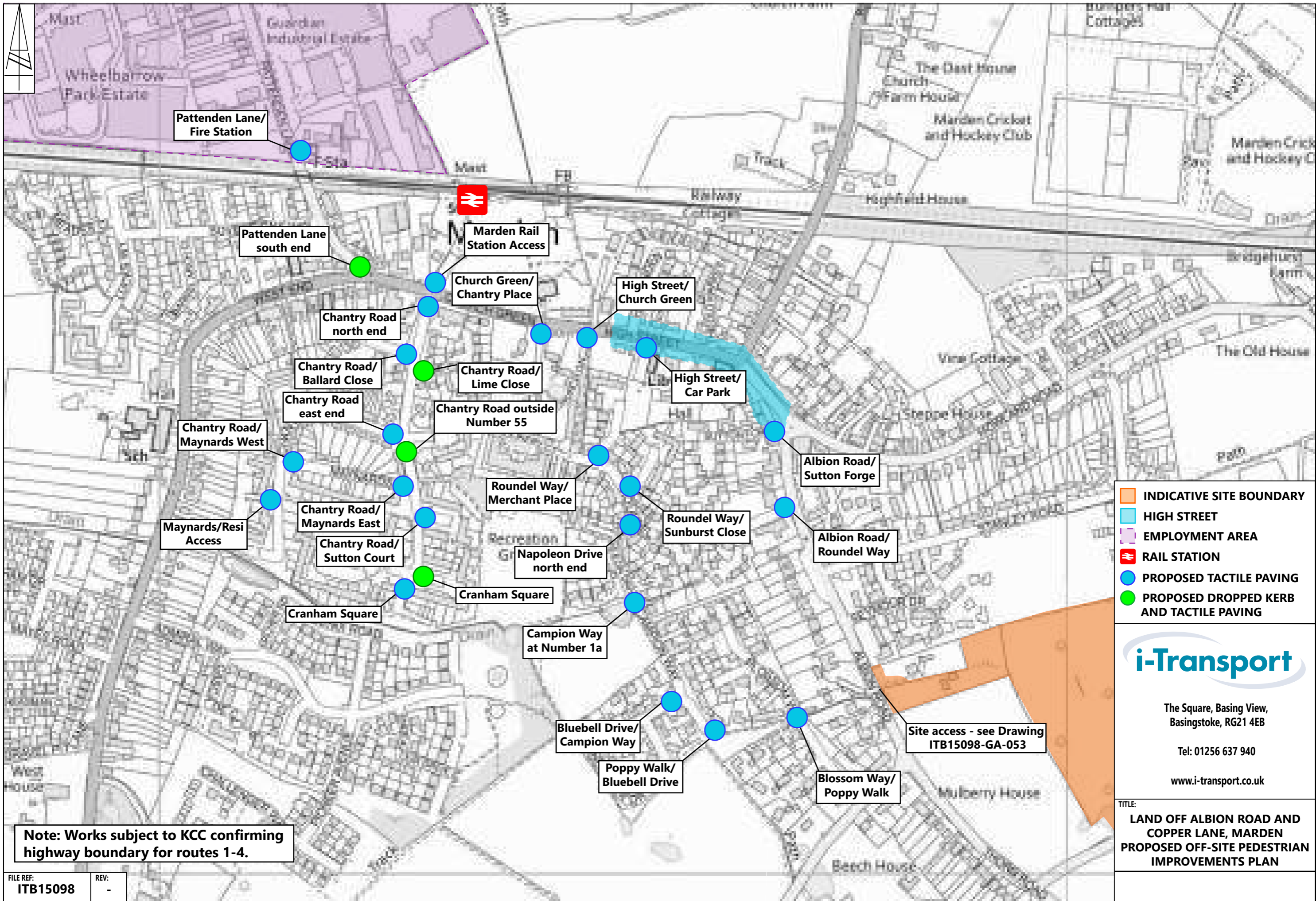


 The Square, Basing View, Basingstoke, Hampshire, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk				TITLE: PROPOSED PUBLIC RIGHT OF WAY IMPROVEMENT - PUBLIC FOOTPATH KM281				DRAWN: JD		CHECKED: IN		APPROVED: MG	
REV: A				DATE: 10.02.23				PROJECT No: ITB15098		SCALE @ A2: 1:250		DATE: 08.11.22	
STATUS: FOR INFORMATION				PROJECT: ALBION ROAD, MARDEN				CLIENT: RYDON HOMES LTD		DRAWING No: ITB15098-GA-051		REV: B	

APPENDIX J. Wayfinding / Signing – Village Wide



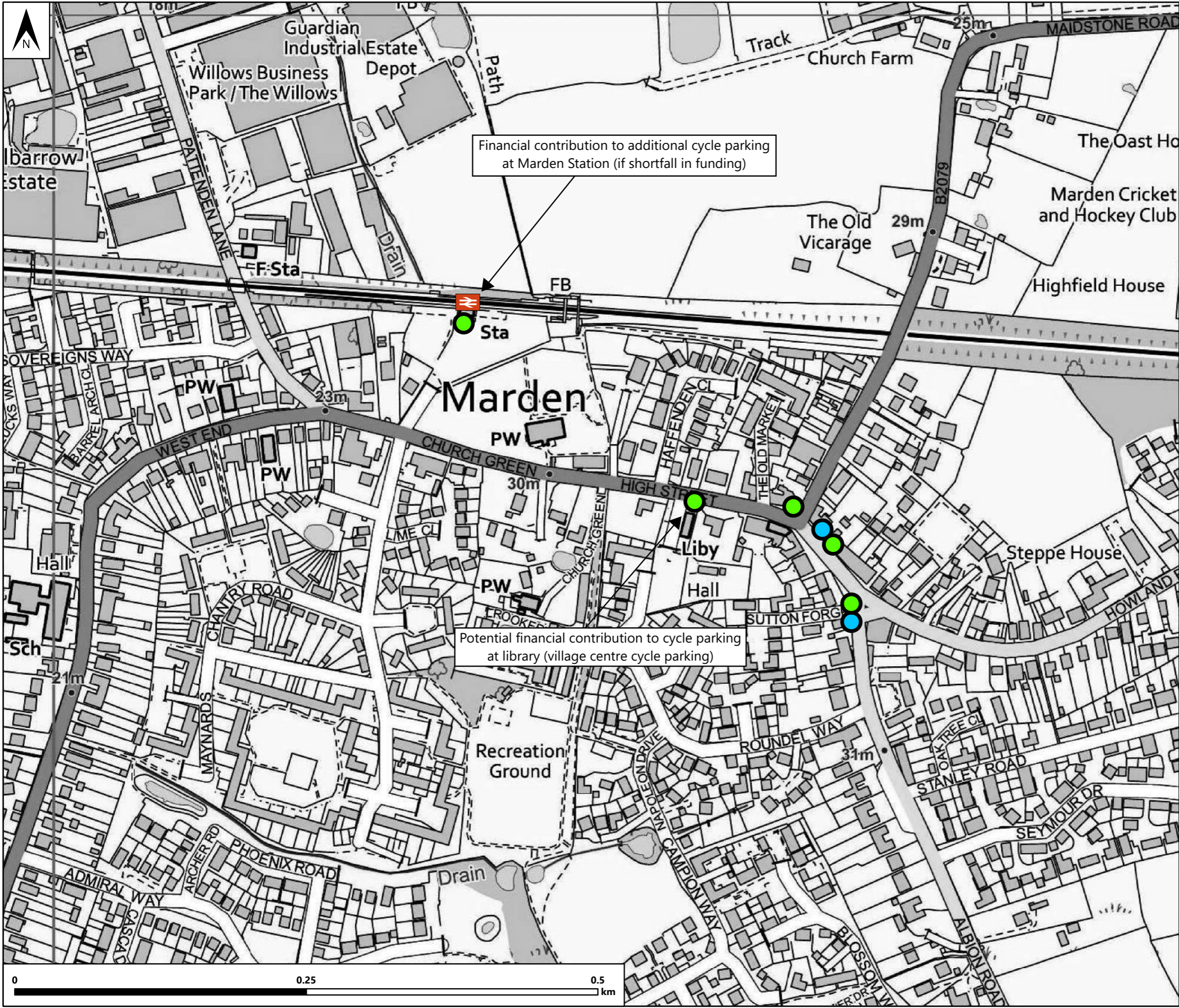
APPENDIX K. Pedestrian Improvements -Marden



FILE REF:
ITB15098

REV:
-

APPENDIX L. Potential Cycle Parking – Village Centre



- Key**
- Existing Cycle Parking
 - Indicative Locations for Additional Cycle Parking
 - Marden Railway Station

Additional Sources: KCC Open Data

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i-Transport

The Square, Basing View,
Basingstoke, Hampshire, RG21 4EB

Tel: 01256 898 366

www.i-transport.co.uk

Title:
**Indicative Locations for Additional Village
Centre Cycle Parking**

Project:
**Land East of Albion Road and North of
Copper Lane, Marden**

Project Number: ITB15098	Figure Number:	Revision: -
------------------------------------	----------------	----------------

APPENDIX M. TEMPRO Growth Calculations

Maidstone 018 2022–2028 AM Peak

1: Select NTM Dataset:

NTM Dataset Description	From	To
RTF 2018 Scenario 1 - Reference	2015	2050
NTM AF15 Dataset	2010	2040

2: Select Areas to make up the geographic region:

☒ Maidstone 018 (E02005085)

3. Select area type:

☐ Urban
☐ Rural
☒ All

4. Select road type:

☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5. Select which area it serves:

☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
E02005085	Maidstone 018	1.0442

Maidstone 018 2022–2028 PM Peak

1: Select NTM Dataset:

NTM Dataset Description	From	To
RTF 2018 Scenario 1 - Reference	2015	2050
NTM AF15 Dataset	2010	2040

2: Select Areas to make up the geographic region:

☒ Maidstone 018 (E02005085)

3. Select area type:

☐ Urban
☐ Rural
☒ All

4. Select road type:

☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5. Select which area it serves:

☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
E02005085	Maidstone 018	1.0473

APPENDIX N. Traffic Distribution Model

Broad Destination	% Car by Destination	Proportion by Car	All categories: Method of travel to work (2001 specification)	Work mainly at or from home	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi	Motorcycle, scooter or moped	Driving a car or van	Passenger in a car or van	Bicycle	On foot	Other method of travel to work
Maidstone	81%	22.5%	418	0	0	6	15	1	2	338	24	4	27	1
Marden	51%	10.8%	316	0	0	6	1	1	5	162	20	13	107	1
Tunbridge Wells	83%	6.5%	118	0	0	12	0	0	4	98	2	0	2	0
London	19%	5.3%	422	0	5	319	4	0	4	80	4	2	4	0
Paddock Wood	86%	4.9%	85	0	0	9	0	0	0	73	2	0	0	1
Sevenoaks	82%	4.1%	74	0	0	7	0	0	1	61	1	1	3	0
Medway	95%	3.9%	62	0	0	0	0	0	0	59	2	0	1	0
Goudhurst	92%	3.7%	60	0	0	1	0	1	0	55	2	1	0	0
Ditton / Leybourne	92%	3.2%	52	0	0	3	0	0	0	48	1	0	0	0
Other - South East	92%	3.1%	50	0	0	1	1	0	0	46	2	0	0	0
Kings Hill	94%	3.1%	49	0	0	0	1	0	0	46	2	0	0	0
Staplehurst	82%	3.0%	55	0	0	1	0	0	0	45	5	1	3	0
Tonbridge	80%	2.6%	49	0	0	10	0	0	0	39	0	0	0	0
Hadlow / East Peckham	92%	2.2%	36	0	0	2	0	0	0	33	1	0	0	0
Headcom / Sutton Valence	89%	2.1%	36	0	0	1	0	0	2	32	1	0	0	0
Other - North	91%	1.9%	32	0	0	1	0	0	0	29	2	0	0	0
Coxheath	90%	1.9%	31	0	0	0	0	0	0	28	0	0	3	0
Yalding	84%	1.8%	32	0	0	1	0	0	0	27	0	1	3	0
Cranbrook	92%	1.5%	24	0	0	0	0	0	1	22	1	0	0	0
Dartford	95%	1.3%	21	0	0	0	0	0	0	20	1	0	0	0
Sittingbourne	95%	1.3%	20	0	0	0	0	0	0	19	1	0	0	0
Other - East	95%	1.3%	20	0	0	0	0	0	0	19	0	0	1	0
Ashford	75%	1.2%	24	0	0	6	0	0	0	18	0	0	0	0
Hawkhurst	90%	1.2%	20	0	0	0	0	0	0	18	2	0	0	0
West Malling	90%	1.2%	20	0	0	0	0	1	0	18	0	0	1	0
Hollingbourne / Harrietsham	80%	1.1%	20	0	0	1	0	0	0	16	2	0	1	0
Other - North East	94%	1.1%	17	0	0	0	0	0	0	16	1	0	0	0
Other - West	94%	2.0%	32	0	0	1	0	0	0	30	1	0	0	0
Other - South West	80%	0.3%	5	0	0	0	0	0	0	4	0	0	0	0
Total	68%	100.0%	2200	0	5	389	22	4	19	1499	80	23	156	3

Broad Destination	% Car by Destination	Proportion by Car	Proportion Per Route	Route 1	Route 2	Route 3	Route 4	Route 5
Maidstone	81%	23%	50%	11.3%	Albion Road N	High Street W	B2079 Maidstone Road N	A229 Staplehurst Road N
Marden	51%	11%	50%	11.3%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Tunbridge Wells	83%	7%	100%	10.8%	Albion Road N	High Street W	High Street W	West End
London	19%	5%	40%	6.5%	Albion Road S	Plain Road	Sheephurst Lane	-
Paddock Wood	86%	5%	100%	2.1%	Albion Road N	High Street W	B2079 Maidstone Road N	A229 Staplehurst Road N
Sevenoaks	82%	4%	60%	3.2%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Medway	95%	4%	70%	3.4%	Albion Road S	Plain Road	Sheephurst Lane	Hunton Road N
Goudhurst	92%	4%	30%	1.5%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Ditton / Leybourne	92%	3%	70%	2.8%	Albion Road S	Plain Road	Sheephurst Lane	-
Other - South East	92%	3%	30%	1.2%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Kings Hill	94%	3%	40%	1.3%	Albion Road N	High Street W	B2079 Maidstone Road N	A229 Staplehurst Road N
Staplehurst	82%	3%	60%	1.9%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Tonbridge	80%	3%	100%	3.1%	Albion Road S	Plain Road	B2079 South	-
Hadlow / East Peckham	92%	2%	40%	1.2%	Albion Road N	High Street W	B2079 Maidstone Road N	A229 Staplehurst Road N
Headcom / Sutton Valence	89%	2%	60%	1.8%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Other - North	91%	2%	33%	1.0%	Albion Road S	Thorn Road	Thorn Road	Pagehurst Road
Coxheath	90%	2%	33%	1.0%	Albion Road S	Thorn Road	Copper Lane	Howland Road E
Yalding	84%	2%	33%	1.0%	Albion Road N	Howland Road E	Howland Road E	Howland Road E
Cranbrook	92%	1%	50%	1.3%	Albion Road S	Plain Road	Sheephurst Lane	Marden Road
Dartford	95%	1%	50%	1.3%	Albion Road N	High Street W	High Street W	-
Sittingbourne	95%	1%	50%	1.3%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Other - East	95%	1%	50%	1.3%	Albion Road N	High Street W	High Street W	Hunton Road N
Ashford	75%	1%	100%	2.2%	Albion Road N	High Street W	High Street W	Pattenden Lane N
Hawkhurst	90%	1%	100%	2.1%	Albion Road S	Thorn Road	Thorn Road	Pagehurst Road
West Malling	90%	1%	100%	1.9%	Albion Road N	High Street W	High Street W	Pagehurst Road
Hollingbourne / Harrietsham	80%	1%	100%	1.9%	Albion Road N	High Street W	High Street W	Pagehurst Road
Other - North East	94%	1%	100%	1.9%	Albion Road N	High Street W	High Street W	Pagehurst Road
Other - West	94%	2%	100%	1.9%	Albion Road N	High Street W	High Street W	Pagehurst Road
Other - South West	80%	0%	100%	1.9%	Albion Road N	High Street W	High Street W	Pagehurst Road
Total	68%	100%	100%	1.9%	Albion Road N	High Street W	High Street W	Pagehurst Road

Route 1 (Site Access)	Proportion of Cars	62%
Albion Road N	67.75%	42.14%
Albion Road S	32.25%	20.06%
Total	100%	62%

Route 2	Proportion of Cars	62%
High Street W	66.74%	41.52%
Howland Road E	1.40%	0.82%
Plain Road	24.42%	15.19%
Thorn Road	7.83%	4.87%
Total	100.00%	62.20%

Route 3	Proportion of Cars	62%
B2079 Maidstone Rd	25.14%	15.64%
High Street W	41.60%	25.88%
Howland Road E	1.00%	0.62%
Sheephurst Lane	16.82%	10.46%
B2079 South	7.61%	4.73%
Thorn Road	6.83%	4.25%
Copper Lane	1.00%	0.62%
Total	100.00%	62.20%

Route 4	Proportion of Cars	62%
A229 Staplehurst Rd	25.14%	15.64%
Pattenden Lane	30.79%	19.15%
West End	10.81%	6.72%
Pagehurst Road	5.36%	3.34%
Howland Road E	2.00%	1.24%
Wildern Park Road	1.47%	0.91%
Total	100.00%	62.20%

Route 5	Proportion of Cars	62%
Hunton Road N	30.79%	19.15%
Goudhurst Road	10.81%	6.72%
Pagehurst Road	4.76%	2.96%
Marden Road	2.00%	1.24%
Wildern Park Road	0.60%	0.37%
-	51.03%	31.74%
Total	100.00%	62.20%

Journey to Work Gravity Model

Route 1 (Site Access)	62%	38%	Total
Albion Road N	42.1%	35.9%	78.0%
Albion Road S	20.1%	1.9%	22.0%
Total	62.2%	37.8%	100.0%

Route 2	62.2%	37.8%	Total
High Street W	42%	35%	77%
Howland Road E	1%	1%	1%
Plain Road	15%	1%	16%
Thorn Road	5%	1%	6%
Total	62%	38%	100%

Route 3	62.2%	37.8%	Total
B2079 Maidstone Road N	15.6%	11.1%	26.8%
High Street W	25.9%	24.2%	50.1%
Howland Road E	0.6%	0.5%	1.1%
Sheephurst Lane	10.5%	0.5%	11.0%
B2079 South	4.7%	0.2%	4.9%
Thorn Road	4.2%	0.8%	5.0%
Copper Lane	0.6%	0.5%	1.1%
Total	62.2%	37.8%	100.0%

Route 4	62.2%	37.8%	Total
A229 Staplehurst Road N	15.6%	11.1%	26.8%
Pattenden Lane N	19.2%	11.1%	30.3%
West End	6.7%	13.1%	19.8%
Pagehurst Road	3.3%	0.6%	3.9%
Howland Road E	1.2%	1.0%	2.3%
Wilden Park Road	0.9%	0.2%	1.1%
-	15.2%	0.7%	15.9%
Total	62.2%	37.8%	100.0%

Route 5	62.2%	37.8%	Total
Hunton Road N	19.2%	11.1%	30.3%
Goudhurst Road	6.7%	13.1%	19.8%
Pagehurst Road	3.0%	0.6%	3.6%
Marden Road	1.2%	1.0%	2.3%
Wildern Park Road	0.4%	0.0%	0.4%
-	31.7%	12.0%	43.7%
Total	62.2%	37.8%	100.0%

APPENDIX O. Operational Assessment Results

Junctions 10						
PICADY 10 - Priority Intersection Module						
Version: 10.0.4.1693						
© Copyright TRL Software Limited, 2021						
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+44 (0)1344 379777 software@trl.co.uk trlsoftware.com						
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution						

Filename: Site Access.j10

Path: T:\Projects\15000 Series\15098ITB Land East of Albion Road, Marden\Tech\Junction Assessments\2023

Report generation date: 01/08/2023 11:42:27

»2028 + Development, AM

»2028 + Development, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2028 + Development						
Stream B-AC	0.1	7.64	0.09	0.0	7.37	0.04
Stream C-AB	0.0	5.13	0.01	0.0	5.14	0.02

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	01/08/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15			
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15			
D3	2028 Baseline	AM	ONE HOUR	07:45	09:15	15		Simple	D1*G1
D4	2028 Baseline	PM	ONE HOUR	16:45	18:15	15		Simple	D2*G2
D5	Development	AM	ONE HOUR	07:45	09:15	15			
D6	Development	PM	ONE HOUR	16:45	18:15	15			
D7	2028 + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D8	2028 + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2022-2028 AM		1.0442
G2	2022-2028 PM		1.0473

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2028 + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Albion Road S - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	Two-way	Two-way		1.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.39	A

Arms

Arms

Arm	Name	Description	Arm type
A	Albion Road N		Major
B	Site Access		Minor
C	Albion Road S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Albion Road S	5.23			200.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	3.00	101	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	543	0.102	0.258	0.163	0.369
B-C	665	0.105	0.266	-	-
C-B	690	0.276	0.276	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2028 + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Albion Road N		ONE HOUR	✓	111	100.000
B - Site Access		ONE HOUR	✓	43	100.000
C - Albion Road S		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Albion Road N	B - Site Access	C - Albion Road S
From	A - Albion Road N	0	14	97
	B - Site Access	34	0	9
	C - Albion Road S	87	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Albion Road N	B - Site Access	C - Albion Road S
From	A - Albion Road N	0	0	4
	B - Site Access	0	0	0
	C - Albion Road S	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	7.64	0.1	A	39	59
C-AB	0.01	5.13	0.0	A	4	6
C-A					79	119
A-B					13	19
A-C					89	134

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	533	0.061	32	0.0	0.1	7.182	A
C-AB	3	0.83	706	0.005	3	0.0	0.0	5.124	A
C-A	65	16			65				
A-B	11	3			11				
A-C	73	18			73				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	527	0.073	39	0.1	0.1	7.370	A
C-AB	4	1	709	0.006	4	0.0	0.0	5.103	A
C-A	77	19			77				
A-B	13	3			13				
A-C	87	22			87				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	519	0.091	47	0.1	0.1	7.639	A
C-AB	5	1	714	0.007	5	0.0	0.0	5.076	A
C-A	95	24			95				
A-B	15	4			15				
A-C	107	27			107				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	519	0.091	47	0.1	0.1	7.639	A
C-AB	5	1	714	0.007	5	0.0	0.0	5.081	A
C-A	95	24			95				
A-B	15	4			15				
A-C	107	27			107				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	527	0.073	39	0.1	0.1	7.373	A
C-AB	4	1	709	0.006	4	0.0	0.0	5.109	A
C-A	77	19			77				
A-B	13	3			13				
A-C	87	22			87				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	533	0.061	32	0.1	0.1	7.189	A
C-AB	3	0.83	706	0.005	3	0.0	0.0	5.129	A
C-A	65	16			65				
A-B	11	3			11				
A-C	73	18			73				

2028 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Albion Road S - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	Two-way	Two-way		0.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.72	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2028 + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Albion Road N		ONE HOUR	✓	142	100.000
B - Site Access		ONE HOUR	✓	19	100.000
C - Albion Road S		ONE HOUR	✓	114	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Albion Road N	B - Site Access	C - Albion Road S
From	A - Albion Road N	0	34	108
	B - Site Access	15	0	4
	C - Albion Road S	104	10	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Albion Road N	B - Site Access	C - Albion Road S
From	A - Albion Road N	0	0	1
	B - Site Access	0	0	0
	C - Albion Road S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	7.37	0.0	A	17	26
C-AB	0.02	5.14	0.0	A	11	16
C-A					94	141
A-B					31	47
A-C					99	148

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	4	527	0.027	14	0.0	0.0	7.017	A
C-AB	8	2	709	0.012	8	0.0	0.0	5.141	A
C-A	77	19			77				
A-B	26	6			26				
A-C	81	20			81				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	4	520	0.033	17	0.0	0.0	7.161	A
C-AB	10	3	713	0.015	10	0.0	0.0	5.124	A
C-A	92	23			92				
A-B	31	8			31				
A-C	97	24			97				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	21	5	510	0.041	21	0.0	0.0	7.367	A
C-AB	13	3	718	0.018	13	0.0	0.0	5.102	A
C-A	112	28			112				
A-B	37	9			37				
A-C	119	30			119				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	21	5	510	0.041	21	0.0	0.0	7.367	A
C-AB	13	3	718	0.018	13	0.0	0.0	5.107	A
C-A	112	28			112				
A-B	37	9			37				
A-C	119	30			119				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	4	520	0.033	17	0.0	0.0	7.162	A
C-AB	10	3	713	0.015	10	0.0	0.0	5.130	A
C-A	92	23			92				
A-B	31	8			31				
A-C	97	24			97				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	4	527	0.027	14	0.0	0.0	7.023	A
C-AB	8	2	709	0.012	8	0.0	0.0	5.143	A
C-A	77	19			77				
A-B	26	6			26				
A-C	81	20			81				

Junctions 10						
PICADY 10 - Priority Intersection Module						
Version: 10.0.4.1693						
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Filename: Albion Rd_Plain Rd.j10

Path: T:\Projects\15000 Series\15098ITB Land East of Albion Road, Marden\Tech\Junction Assessments\2023

Report generation date: 01/08/2023 11:23:43

«Development Flows, PM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2022 Observed						
1 - Albion Rd North / Plain Rd - Stream B-AC	0.1	6.32	0.05	0.1	6.56	0.06
1 - Albion Rd North / Plain Rd - Stream C-AB	0.1	6.18	0.08	0.1	5.86	0.05
2 - Thorn Rd South / Plain Rd - Stream B-AC	0.1	8.49	0.05	0.1	8.98	0.10
2 - Thorn Rd South / Plain Rd - Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00
3 - Thorn Rd South / Plain Rd - Stream B-AC	0.1	7.10	0.07	0.0	6.28	0.04
3 - Thorn Rd South / Plain Rd - Stream C-AB	0.0	6.35	0.04	0.1	6.51	0.08
2028 Baseline						
1 - Albion Rd North / Plain Rd - Stream B-AC	0.1	6.35	0.05	0.1	6.59	0.07
1 - Albion Rd North / Plain Rd - Stream C-AB	0.1	6.19	0.08	0.1	5.86	0.06
2 - Thorn Rd South / Plain Rd - Stream B-AC	0.1	8.54	0.06	0.1	9.06	0.10
2 - Thorn Rd South / Plain Rd - Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00
3 - Thorn Rd South / Plain Rd - Stream B-AC	0.1	7.13	0.08	0.0	6.30	0.04
3 - Thorn Rd South / Plain Rd - Stream C-AB	0.1	6.36	0.05	0.1	6.53	0.08
2028 + Development						
1 - Albion Rd North / Plain Rd - Stream B-AC	0.1	6.36	0.06	0.1	6.62	0.08
1 - Albion Rd North / Plain Rd - Stream C-AB	0.1	6.22	0.09	0.1	5.88	0.06
2 - Thorn Rd South / Plain Rd - Stream B-AC	0.1	8.55	0.06	0.1	9.08	0.10
2 - Thorn Rd South / Plain Rd - Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00
3 - Thorn Rd South / Plain Rd - Stream B-AC	0.1	7.15	0.08	0.0	6.31	0.04
3 - Thorn Rd South / Plain Rd - Stream C-AB	0.1	6.36	0.05	0.1	6.49	0.08

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	06/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	LCL18\Andrew
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2022-2028 AM		1.0442
G2	2022-2027 PM		1.0473

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	Development Flows	PM	ONE HOUR	16:15	17:45	15

Development Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	1 - Albion Rd North / Plain Rd - C - Albion Rd (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	2 - Thorn Rd South / Plain Rd - C - Albion Rd (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	3 - Thorn Rd South / Plain Rd - C - Plain Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Vehicle Mix	1 - Albion Rd North / Plain Rd	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Vehicle Mix	2 - Thorn Rd South / Plain Rd	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Vehicle Mix	3 - Thorn Rd South / Plain Rd	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Albion Rd North / Plain Rd	T-Junction	Two-way	Two-way	Two-way		5.70	A
2	Thorn Rd South / Plain Rd	T-Junction	Two-way	Two-way	Two-way		0.00	F
3	Thorn Rd South / Plain Rd	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.85	A

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - Albion Rd North / Plain Rd	A	Thorn Rd (S)		Major
	B	Plain Rd LT (W)		Minor
	C	Albion Rd (N)		Major
2 - Thorn Rd South / Plain Rd	A	Thorn Rd (S)		Major
	B	Plain Rd RT (W)		Minor
	C	Albion Rd (N)		Major
3 - Thorn Rd South / Plain Rd	A	Plain Rd (E)		Major
	B	Plain Rd Cut-Thro		Minor
	C	Plain Rd (W)		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1 - Albion Rd North / Plain Rd	C - Albion Rd (N)	5.30			108.4	✓	0.00
2 - Thorn Rd South / Plain Rd	C - Albion Rd (N)	5.30			108.0	✓	0.00
3 - Thorn Rd South / Plain Rd	C - Plain Rd (W)	4.50			16.0	✓	0.00

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

Minor Arm Geometry

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
1 - Albion Rd North / Plain Rd	B - Plain Rd LT (W)	One lane	3.02	33	22
2 - Thorn Rd South / Plain Rd	B - Plain Rd RT (W)	One lane	2.52	46	14
3 - Thorn Rd South / Plain Rd	B - Plain Rd Cut-Thro	One lane	2.50	26	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1 - Albion Rd North / Plain Rd	B-A	500	0.094	0.237	0.149	0.339
	B-C	639	0.101	0.255	-	-
	C-B	637	0.254	0.254	-	-

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2 - Thorn Rd South / Plain Rd	B-A	475	0.089	0.225	0.142	0.322
	B-C	602	0.095	0.240	-	-
	C-B	637	0.254	0.254	-	-

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
3 - Thorn Rd South / Plain Rd	B-A	470	0.091	0.230	0.145	0.329
	B-C	603	0.098	0.249	-	-
	C-B	583	0.241	0.241	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Albion Rd North / Plain Rd	A - Thorn Rd (S)		ONE HOUR	✓	3	100.000
	B - Plain Rd LT (W)		ONE HOUR	✓	7	100.000
	C - Albion Rd (N)		ONE HOUR	✓	4	100.000
2 - Thorn Rd South / Plain Rd	A - Thorn Rd (S)		ONE HOUR	✓	3	100.000
	B - Plain Rd RT (W)		ONE HOUR	✓	0	100.000
	C - Albion Rd (N)		ONE HOUR	✓	1	100.000
3 - Thorn Rd South / Plain Rd	A - Plain Rd (E)		ONE HOUR	✓	3	100.000
	B - Plain Rd Cut-Thro		ONE HOUR	✓	0	100.000
	C - Plain Rd (W)		ONE HOUR	✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

1 - Albion Rd North / Plain Rd

	To			
		A - Thorn Rd (S)	B - Plain Rd LT (W)	C - Albion Rd (N)
From	A - Thorn Rd (S)	0	0	3
	B - Plain Rd LT (W)	0	0	7
	C - Albion Rd (N)	1	3	0

Demand (Veh/hr)

2 - Thorn Rd South / Plain Rd

	To			
		A - Thorn Rd (S)	B - Plain Rd RT (W)	C - Albion Rd (N)
From	A - Thorn Rd (S)	0	0	3
	B - Plain Rd RT (W)	0	0	0
	C - Albion Rd (N)	1	0	0

Demand (Veh/hr)

3 - Thorn Rd South / Plain Rd

	To			
		A - Plain Rd (E)	B - Plain Rd Cut-Thro	C - Plain Rd (W)
From	A - Plain Rd (E)	0	0	3
	B - Plain Rd Cut-Thro	0	0	0
	C - Plain Rd (W)	7	0	0

Vehicle Mix

Heavy Vehicle Percentages

1 - Albion Rd North / Plain Rd

	To			
		A - Thorn Rd (S)	B - Plain Rd LT (W)	C - Albion Rd (N)
From	A - Thorn Rd (S)	0	0	0
	B - Plain Rd LT (W)	0	0	0
	C - Albion Rd (N)	0	0	0

Heavy Vehicle Percentages

2 - Thorn Rd South / Plain Rd

	To			
		A - Thorn Rd (S)	B - Plain Rd RT (W)	C - Albion Rd (N)
From	A - Thorn Rd (S)	0	0	0
	B - Plain Rd RT (W)	0	0	0
	C - Albion Rd (N)	0	0	0

Heavy Vehicle Percentages

3 - Thorn Rd South / Plain Rd

	To			
		A - Plain Rd (E)	B - Plain Rd Cut-Thro	C - Plain Rd (W)
From	A - Plain Rd (E)	0	0	0
	B - Plain Rd Cut-Thro	0	0	0
	C - Plain Rd (W)	0	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Albion Rd North / Plain Rd	B-AC	0.01	5.70	0.0	A	6	10
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					0	0
	A-B					0	0
	A-C					0	0
2 - Thorn Rd South / Plain Rd	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					0	0
	A-B					0	0
	A-C					0	0
3 - Thorn Rd South / Plain Rd	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					6	10
	A-B					0	0
	A-C					0	0

Main Results for each time segment

16:15 - 16:30

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Albion Rd North / Plain Rd	B-AC	5	1	639	0.008	5	0.0	0.0	5.677	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
2 - Thorn Rd South / Plain Rd	B-AC	0	0	531	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
3 - Thorn Rd South / Plain Rd	B-AC	0	0	527	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
	C-A	5	1			5				
	A-B	0	0			0				
	A-C	0	0			0				

16:30 - 16:45

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Albion Rd North / Plain Rd	B-AC	6	2	639	0.010	6	0.0	0.0	5.686	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
2 - Thorn Rd South / Plain Rd	B-AC	0	0	531	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
3 - Thorn Rd South / Plain Rd	B-AC	0	0	527	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
	C-A	6	2			6				
	A-B	0	0			0				
	A-C	0	0			0				

16:45 - 17:00

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Albion Rd North / Plain Rd	B-AC	8	2	639	0.012	8	0.0	0.0	5.699	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
2 - Thorn Rd South / Plain Rd	B-AC	0	0	531	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
3 - Thorn Rd South / Plain Rd	B-AC	0	0	527	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
	C-A	8	2			8				
	A-B	0	0			0				
	A-C	0	0			0				

17:00 - 17:15

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Albion Rd North / Plain Rd	B-AC	8	2	639	0.012	8	0.0	0.0	5.699	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
2 - Thorn Rd South / Plain Rd	B-AC	0	0	531	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
3 - Thorn Rd South / Plain Rd	B-AC	0	0	527	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
	C-A	8	2			8				
	A-B	0	0			0				
	A-C	0	0			0				

17:15 - 17:30

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Albion Rd North / Plain Rd	B-AC	6	2	639	0.010	6	0.0	0.0	5.686	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
2 - Thorn Rd South / Plain Rd	B-AC	0	0	531	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
3 - Thorn Rd South / Plain Rd	B-AC	0	0	527	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
	C-A	6	2			6				
	A-B	0	0			0				
	A-C	0	0			0				

17:30 - 17:45

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Albion Rd North / Plain Rd	B-AC	5	1	639	0.008	5	0.0	0.0	5.677	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
2 - Thorn Rd South / Plain Rd	B-AC	0	0	531	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	637	0.000	0	0.0	0.0	0.000	A
	C-A	0	0			0				
	A-B	0	0			0				
	A-C	0	0			0				
3 - Thorn Rd South / Plain Rd	B-AC	0	0	527	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
	C-A	5	1			5				
	A-B	0	0			0				
	A-C	0	0			0				

Junctions 10	
PICADY 10 - Priority Intersection Module	
Version: 10.0.4.1693	
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Filename: Howland Rd_Albion Rd_Sutton Forge.j10

Path: T:\Projects\15000 Series\15098ITB Land East of Albion Road, Marden\Tech\Junction Assessments\2023

Report generation date: 01/08/2023 11:33:04

«2028 + Development, PM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2022 Observed						
1 - High St / Howland Rd / Albion Rd - Stream B-AC	0.3	6.53	0.21	0.2	6.23	0.19
1 - High St / Howland Rd / Albion Rd - Stream C-AB	0.3	7.73	0.24	0.6	7.72	0.34
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream B-ACD	0.0	6.32	0.02	0.0	6.37	0.02
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream A-BCD	0.0	5.50	0.00	0.0	5.33	0.01
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream D-ABC	0.0	0.00	0.00	0.0	0.00	0.00
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream C-ABD	0.0	5.65	0.01	0.0	5.73	0.01
3 - Howland Rd / Albion Rd Link - Stream B-AC	0.0	7.75	0.01	0.0	7.73	0.01
3 - Howland Rd / Albion Rd Link - Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00
2028 Baseline						
1 - High St / Howland Rd / Albion Rd - Stream B-AC	0.3	6.63	0.22	0.3	6.31	0.20
1 - High St / Howland Rd / Albion Rd - Stream C-AB	0.4	7.84	0.25	0.7	7.89	0.35
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream B-ACD	0.0	6.34	0.03	0.0	6.39	0.02
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream A-BCD	0.0	5.48	0.00	0.0	5.31	0.01
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream D-ABC	0.0	0.00	0.00	0.0	0.00	0.00
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream C-ABD	0.0	5.63	0.01	0.0	5.71	0.01
3 - Howland Rd / Albion Rd Link - Stream B-AC	0.0	7.79	0.01	0.0	7.77	0.01
3 - Howland Rd / Albion Rd Link - Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00
2028 + Development						
1 - High St / Howland Rd / Albion Rd - Stream B-AC	0.4	7.07	0.27	0.3	6.48	0.23
1 - High St / Howland Rd / Albion Rd - Stream C-AB	0.4	8.10	0.27	0.9	8.87	0.43
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream B-ACD	0.0	6.37	0.03	0.0	6.49	0.02
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream A-BCD	0.0	5.47	0.00	0.0	5.20	0.01
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream D-ABC	0.0	0.00	0.00	0.0	0.00	0.00
2 - Albion Rd / Sutton Forge / Howland Rd Link - Stream C-ABD	0.0	5.50	0.01	0.0	5.69	0.01
3 - Howland Rd / Albion Rd Link - Stream B-AC	0.0	7.79	0.01	0.0	7.77	0.01
3 - Howland Rd / Albion Rd Link - Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	High St / Howland Rd / Albion Rd / Sutton Forge
Location	Marden, Kent
Site number	
Date	05/07/2022
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	al
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2022-2028 AM		1.0442
G2	2022-2028 PM		1.0473

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2028 + Development	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6

2028 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Vehicle Mix	3 - Howland Rd / Albion Rd Link	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	High St / Howland Rd / Albion Rd	T-Junction	Two-way	Two-way	Two-way			5.45	A
2	Albion Rd / Sutton Forge / Howland Rd Link	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		0.35	A
3	Howland Rd / Albion Rd Link	T-Junction	Two-way	Two-way	Two-way			0.18	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.81	A

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - High St / Howland Rd / Albion Rd	A	Howland Rd (S)		Major
	B	Albion Rd		Minor
	C	High St (N)		Major
2 - Albion Rd / Sutton Forge / Howland Rd Link	A	Albion Rd (N)		Major
	B	Howland Rd Link		Minor
	C	Albion Rd (S)		Major
	D	Sutton Forge		Minor
3 - Howland Rd / Albion Rd Link	A	Howland Rd (S)		Major
	B	Albion Rd Link		Minor
	C	Howland Rd (N)		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1 - High St / Howland Rd / Albion Rd	C - High St (N)	7.14			56.3	✓	0.00
2 - Albion Rd / Sutton Forge / Howland Rd Link	A - Albion Rd (N)	8.70			85.0	✓	0.00
	C - Albion Rd (S)	7.20			34.0	✓	0.00
3 - Howland Rd / Albion Rd Link	C - Howland Rd (N)	6.02			94.8	✓	0.00

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

Minor Arm Geometry

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
1 - High St / Howland Rd / Albion Rd	B - Albion Rd	One lane	5.00	73	10
2 - Albion Rd / Sutton Forge / Howland Rd Link	B - Howland Rd Link	One lane	2.71	18	12
	D - Sutton Forge	One lane	4.58	27	19
3 - Howland Rd / Albion Rd Link	B - Albion Rd Link	One lane	3.60	14	18

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1 - High St / Howland Rd / Albion Rd	B-A	607	0.105	0.266	0.167	0.380
	B-C	757	0.110	0.279	-	-
	C-B	607	0.223	0.223	-	-

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
2 - Albion Rd / Sutton Forge / Howland Rd Link	A-D	623	-	-	-	0.213	0.213	0.213	-	0.213	-	-
	B-AD	475	0.082	0.207	-	-	-	0.130	0.296	0.130	0.082	0.207
	B-C	613	0.089	0.225	-	-	-	-	-	-	0.089	0.225
	C-B	594	0.218	0.218	-	-	-	-	-	-	0.218	0.218
	D-A	736	-	-	-	0.252	0.100	0.252	-	0.100	-	-
	D-BC	574	0.147	0.147	0.333	0.233	0.092	0.233	-	0.092	-	-

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
3 - Howland Rd / Albion Rd Link	B-A	521	0.095	0.240	0.151	0.342
	B-C	674	0.103	0.261	-	-
	C-B	629	0.243	0.243	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - High St / Howland Rd / Albion Rd	A - Howland Rd (S)		ONE HOUR	✓	81	100.000
	B - Albion Rd		ONE HOUR	✓	148	100.000
	C - High St (N)		ONE HOUR	✓	372	100.000
2 - Albion Rd / Sutton Forge / Howland Rd Link	A - Albion Rd (N)		ONE HOUR	✓	201	100.000
	B - Howland Rd Link		ONE HOUR	✓	8	100.000
	C - Albion Rd (S)		ONE HOUR	✓	157	100.000
	D - Sutton Forge		ONE HOUR	✓	1	100.000
3 - Howland Rd / Albion Rd Link	A - Howland Rd (S)		ONE HOUR	✓	89	100.000
	B - Albion Rd Link		ONE HOUR	✓	6	100.000
	C - Howland Rd (N)		ONE HOUR	✓	172	100.000

Origin-Destination Data

Demand (Veh/hr)

1 - High St / Howland Rd / Albion Rd

	To			
		A - Howland Rd (S)	B - Albion Rd	C - High St (N)
From	A - Howland Rd (S)	0	0	81
	B - Albion Rd	0	0	148
	C - High St (N)	172	201	0

Demand (Veh/hr)

2 - Albion Rd / Sutton Forge / Howland Rd Link

	To				
		A - Albion Rd (N)	B - Howland Rd Link	C - Albion Rd (S)	D - Sutton Forge
From	A - Albion Rd (N)	0	0	196	4
	B - Howland Rd Link	0	0	8	0
	C - Albion Rd (S)	148	6	0	3
	D - Sutton Forge	1	0	0	0

Demand (Veh/hr)

3 - Howland Rd / Albion Rd Link

	To			
		A - Howland Rd (S)	B - Albion Rd Link	C - Howland Rd (N)
From	A - Howland Rd (S)	0	8	81
	B - Albion Rd Link	6	0	0
	C - Howland Rd (N)	172	0	0

Vehicle Mix

Heavy Vehicle Percentages

1 - High St / Howland Rd / Albion Rd

	To			
		A - Howland Rd (S)	B - Albion Rd	C - High St (N)
From	A - Howland Rd (S)	0	0	3
	B - Albion Rd	0	0	2
	C - High St (N)	1	1	0

Heavy Vehicle Percentages

2 - Albion Rd / Sutton Forge / Howland Rd Link

	To				
		A - Albion Rd (N)	B - Howland Rd Link	C - Albion Rd (S)	D - Sutton Forge
From	A - Albion Rd (N)	0	0	1	0
	B - Howland Rd Link	0	0	0	0
	C - Albion Rd (S)	2	0	0	0
	D - Sutton Forge	0	0	0	0

Heavy Vehicle Percentages

3 - Howland Rd / Albion Rd Link

	To			
		A - Howland Rd (S)	B - Albion Rd Link	C - Howland Rd (N)
From	A - Howland Rd (S)	0	0	0
	B - Albion Rd Link	0	0	0
	C - Howland Rd (N)	0	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - High St / Howland Rd / Albion Rd	B-AC	0.23	6.48	0.3	A	136	204
	C-AB	0.43	8.87	0.9	A	241	361
	C-A					101	151
	A-B					0	0
	A-C					74	111
2 - Albion Rd / Sutton Forge / Howland Rd Link	B-ACD	0.02	6.49	0.0	A	8	12
	A-BCD	0.01	5.20	0.0	A	5	8
	A-B					0	0
	A-C					179	268
	D-ABC	0.00	0.00	0.0	A	0	0
	C-ABD	0.01	5.69	0.0	A	7	11
	C-D					3	4
	C-A					134	201
3 - Howland Rd / Albion Rd Link	B-AC	0.01	7.77	0.0	A	6	9
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					158	236
	A-B					8	12
	A-C					74	111

Main Results for each time segment

16:15 - 16:30

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - High St / Howland Rd / Albion Rd	B-AC	111	28	726	0.153	111	0.0	0.2	5.844	A
	C-AB	187	47	674	0.277	185	0.0	0.4	7.338	A
	C-A	93	23			93				
	A-B	0	0			0				
	A-C	61	15			61				
2 - Albion Rd / Sutton Forge / Howland Rd Link	B-ACD	6	2	580	0.011	6	0.0	0.0	6.279	A
	A-BCD	4	1	697	0.006	4	0.0	0.0	5.196	A
	A-B	0	0			0				
	A-C	147	37			147				
	D-ABC	0	0	602	0.000	0	0.0	0.0	0.000	A
	C-ABD	6	1	639	0.009	6	0.0	0.0	5.685	A
	C-D	2	0.59			2				
	C-A	110	28			110				
3 - Howland Rd / Albion Rd Link	B-AC	5	1	486	0.010	5	0.0	0.0	7.477	A
	C-AB	0	0	613	0.000	0	0.0	0.0	0.000	A
	C-A	129	32			129				
	A-B	6	2			6				
	A-C	61	15			61				

16:30 - 16:45

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - High St / Howland Rd / Albion Rd	B-AC	133	33	723	0.184	133	0.2	0.2	6.101	A
	C-AB	233	58	689	0.338	232	0.4	0.6	7.883	A
	C-A	102	25			102				
	A-B	0	0			0				
	A-C	72	18			72				
2 - Albion Rd / Sutton Forge / Howland Rd Link	B-ACD	8	2	573	0.013	8	0.0	0.0	6.365	A
	A-BCD	5	1	712	0.007	5	0.0	0.0	5.094	A
	A-B	0	0			0				
	A-C	175	44			175				
	D-ABC	0	0	594	0.000	0	0.0	0.0	0.000	A
	C-ABD	7	2	648	0.011	7	0.0	0.0	5.614	A
	C-D	3	0.70			3				
	C-A	132	33			132				
3 - Howland Rd / Albion Rd Link	B-AC	6	1	479	0.012	6	0.0	0.0	7.598	A
	C-AB	0	0	609	0.000	0	0.0	0.0	0.000	A
	C-A	154	39			154				
	A-B	8	2			8				
	A-C	72	18			72				

16:45 - 17:00

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - High St / Howland Rd / Albion Rd	B-AC	163	41	718	0.227	163	0.2	0.3	6.477	A
	C-AB	302	75	709	0.426	301	0.6	0.9	8.816	A
	C-A	108	27			108				
	A-B	0	0			0				
	A-C	89	22			89				
2 - Albion Rd / Sutton Forge / Howland Rd Link	B-ACD	9	2	564	0.016	9	0.0	0.0	6.488	A
	A-BCD	7	2	732	0.009	7	0.0	0.0	4.959	A
	A-B	0	0			0				
	A-C	214	54			214				
	D-ABC	0	0	582	0.000	0	0.0	0.0	0.000	A
	C-ABD	9	2	661	0.014	9	0.0	0.0	5.519	A
	C-D	3	0.85			3				
	C-A	161	40			161				
3 - Howland Rd / Albion Rd Link	B-AC	7	2	470	0.015	7	0.0	0.0	7.772	A
	C-AB	0	0	605	0.000	0	0.0	0.0	0.000	A
	C-A	189	47			189				
	A-B	9	2			9				
	A-C	89	22			89				

17:00 - 17:15

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - High St / Howland Rd / Albion Rd	B-AC	163	41	718	0.227	163	0.3	0.3	6.483	A
	C-AB	302	76	709	0.426	302	0.9	0.9	8.865	A
	C-A	108	27			108				
	A-B	0	0			0				
	A-C	89	22			89				
2 - Albion Rd / Sutton Forge / Howland Rd Link	B-ACD	9	2	564	0.016	9	0.0	0.0	6.488	A
	A-BCD	7	2	732	0.009	7	0.0	0.0	4.962	A
	A-B	0	0			0				
	A-C	214	54			214				
	D-ABC	0	0	582	0.000	0	0.0	0.0	0.000	A
	C-ABD	9	2	661	0.014	9	0.0	0.0	5.523	A
	C-D	3	0.85			3				
	C-A	161	40			161				
3 - Howland Rd / Albion Rd Link	B-AC	7	2	470	0.015	7	0.0	0.0	7.772	A
	C-AB	0	0	605	0.000	0	0.0	0.0	0.000	A
	C-A	189	47			189				
	A-B	9	2			9				
	A-C	89	22			89				

17:15 - 17:30

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - High St / Howland Rd / Albion Rd	B-AC	133	33	723	0.184	133	0.3	0.2	6.109	A
	C-AB	233	58	689	0.338	234	0.9	0.6	7.944	A
	C-A	102	25			102				
	A-B	0	0			0				
	A-C	72	18			72				
2 - Albion Rd / Sutton Forge / Howland Rd Link	B-ACD	8	2	573	0.013	8	0.0	0.0	6.365	A
	A-BCD	5	1	712	0.007	5	0.0	0.0	5.096	A
	A-B	0	0			0				
	A-C	175	44			175				
	D-ABC	0	0	594	0.000	0	0.0	0.0	0.000	A
	C-ABD	7	2	648	0.011	7	0.0	0.0	5.618	A
	C-D	3	0.70			3				
	C-A	132	33			132				
3 - Howland Rd / Albion Rd Link	B-AC	6	1	479	0.012	6	0.0	0.0	7.598	A
	C-AB	0	0	609	0.000	0	0.0	0.0	0.000	A
	C-A	154	39			154				
	A-B	8	2			8				
	A-C	72	18			72				

17:30 - 17:45

Junction	Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - High St / Howland Rd / Albion Rd	B-AC	111	28	726	0.153	112	0.2	0.2	5.859	A
	C-AB	187	47	675	0.278	188	0.6	0.5	7.412	A
	C-A	93	23			93				
	A-B	0	0			0				
	A-C	61	15			61				
2 - Albion Rd / Sutton Forge / Howland Rd Link	B-ACD	6	2	580	0.011	6	0.0	0.0	6.279	A
	A-BCD	4	1	697	0.006	4	0.0	0.0	5.197	A
	A-B	0	0			0				
	A-C	147	37			147				
	D-ABC	0	0	602	0.000	0	0.0	0.0	0.000	A
	C-ABD	6	1	639	0.009	6	0.0	0.0	5.690	A
	C-D	2	0.59			2				
	C-A	110	28			110				
3 - Howland Rd / Albion Rd Link	B-AC	5	1	486	0.010	5	0.0	0.0	7.478	A
	C-AB	0	0	613	0.000	0	0.0	0.0	0.000	A
	C-A	129	32			129				
	A-B	6	2			6				
	A-C	61	15			61				

Junctions 10						
PICADY 10 - Priority Intersection Module						
Version: 10.0.4.1693						
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Filename: High Street-Maidstone Road.j10

Path: T:\Projects\15000 Series\15098ITB Land East of Albion Road, Marden\Tech\Junction Assessments\2023

Report generation date: 01/08/2023 11:28:11

- »2022 Observed, AM
- »2022 Observed, PM
- »2028 Baseline, AM
- »2028 Baseline, PM
- »2028 + Development, AM
- »2028 + Development, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2022 Observed						
Stream B-AC	0.6	13.15	0.36	0.5	12.05	0.33
Stream C-AB	0.1	5.15	0.08	0.2	5.69	0.10
2028 Baseline						
Stream B-AC	0.6	13.69	0.38	0.5	12.59	0.35
Stream C-AB	0.1	5.14	0.08	0.2	5.71	0.10
2028 + Development						
Stream B-AC	0.7	14.20	0.40	0.6	13.17	0.38
Stream C-AB	0.2	5.14	0.11	0.2	5.77	0.11

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	17/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2028 Baseline	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*G1
D4	2028 Baseline	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2
D5	Development Flows	AM	ONE HOUR	07:45	09:15	15			
D6	Development Flows	PM	ONE HOUR	16:45	18:15	15			
D7	2028 + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D8	2028 + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2022-2028 AM		1.0442
G2	2022-2028 PM		1.0473

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2022 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	High Street/Maidstone Road	T-Junction	Two-way	Two-way	Two-way		3.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.45	A

Arms

Arms

Arm	Name	Description	Arm type
A	High Street W		Major
B	Maidstone Road		Minor
C	High Street E		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - High Street E	7.30			182.8	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Maidstone Road	One lane	3.44	30	59

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	539	0.093	0.234	0.147	0.335
B-C	690	0.100	0.252	-	-
C-B	680	0.249	0.249	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - High Street W		ONE HOUR	✓	226	100.000
B - Maidstone Road		ONE HOUR	✓	142	100.000
C - High Street E		ONE HOUR	✓	278	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	68	158
	B - Maidstone Road	106	0	36
	C - High Street E	242	36	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	7	3
	B - Maidstone Road	10	0	11
	C - High Street E	2	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	13.15	0.6	B	130	195
C-AB	0.08	5.15	0.1	A	47	71
C-A					208	311
A-B					62	94
A-C					145	217

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	458	0.233	106	0.0	0.3	10.178	B
C-AB	36	9	736	0.049	36	0.0	0.1	5.142	A
C-A	173	43			173				
A-B	51	13			51				
A-C	119	30			119				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	128	32	446	0.286	127	0.3	0.4	11.266	B
C-AB	46	11	751	0.061	46	0.1	0.1	5.101	A
C-A	204	51			204				
A-B	61	15			61				
A-C	142	36			142				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	430	0.364	156	0.4	0.6	13.086	B
C-AB	61	15	774	0.078	60	0.1	0.1	5.051	A
C-A	245	61			245				
A-B	75	19			75				
A-C	174	43			174				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	430	0.364	156	0.6	0.6	13.149	B
C-AB	61	15	774	0.078	61	0.1	0.1	5.050	A
C-A	245	61			245				
A-B	75	19			75				
A-C	174	43			174				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	128	32	446	0.286	128	0.6	0.4	11.340	B
C-AB	46	11	752	0.061	46	0.1	0.1	5.102	A
C-A	204	51			204				
A-B	61	15			61				
A-C	142	36			142				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	458	0.233	107	0.4	0.3	10.272	B
C-AB	36	9	736	0.049	36	0.1	0.1	5.146	A
C-A	173	43			173				
A-B	51	13			51				
A-C	119	30			119				

2022 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	High Street/Maidstone Road	T-Junction	Two-way	Two-way	Two-way		2.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.64	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - High Street W		ONE HOUR	✓	390	100.000
B - Maidstone Road		ONE HOUR	✓	135	100.000
C - High Street E		ONE HOUR	✓	228	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	101	289
	B - Maidstone Road	82	0	53
	C - High Street E	185	43	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	3	0
	B - Maidstone Road	5	0	2
	C - High Street E	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	12.05	0.5	B	124	186
C-AB	0.10	5.69	0.2	A	53	79
C-A					156	235
A-B					93	139
A-C					265	398

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	25	486	0.209	101	0.0	0.3	9.321	A
C-AB	41	10	687	0.059	40	0.0	0.1	5.569	A
C-A	131	33			131				
A-B	76	19			76				
A-C	218	54			218				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	121	30	470	0.258	121	0.3	0.3	10.317	B
C-AB	51	13	692	0.074	51	0.1	0.1	5.615	A
C-A	154	38			154				
A-B	91	23			91				
A-C	260	65			260				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	447	0.332	148	0.3	0.5	12.004	B
C-AB	67	17	700	0.096	67	0.1	0.2	5.687	A
C-A	184	46			184				
A-B	111	28			111				
A-C	318	80			318				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	447	0.332	149	0.5	0.5	12.050	B
C-AB	67	17	700	0.096	67	0.2	0.2	5.690	A
C-A	184	46			184				
A-B	111	28			111				
A-C	318	80			318				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	121	30	470	0.258	122	0.5	0.4	10.372	B
C-AB	51	13	692	0.074	51	0.2	0.1	5.619	A
C-A	154	38			154				
A-B	91	23			91				
A-C	260	65			260				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	25	486	0.209	102	0.4	0.3	9.392	A
C-AB	41	10	687	0.059	41	0.1	0.1	5.576	A
C-A	131	33			131				
A-B	76	19			76				
A-C	218	54			218				

2028 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	High Street/Maidstone Road	T-Junction	Two-way	Two-way	Two-way		3.58	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.58	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Baseline	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*G1

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - High Street W		ONE HOUR	✓	236	100.000
B - Maidstone Road		ONE HOUR	✓	148	100.000
C - High Street E		ONE HOUR	✓	290	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	71	165
	B - Maidstone Road	111	0	38
	C - High Street E	253	38	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	7	3
	B - Maidstone Road	10	0	11
	C - High Street E	2	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	13.69	0.6	B	136	204
C-AB	0.08	5.14	0.1	A	50	76
C-A					216	324
A-B					65	98
A-C					151	227

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	112	28	456	0.245	110	0.0	0.3	10.391	B
C-AB	38	10	739	0.052	38	0.0	0.1	5.131	A
C-A	180	45			180				
A-B	53	13			53				
A-C	124	31			124				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	133	33	443	0.301	133	0.3	0.4	11.582	B
C-AB	48	12	756	0.064	48	0.1	0.1	5.092	A
C-A	213	53			213				
A-B	64	16			64				
A-C	148	37			148				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	426	0.383	163	0.4	0.6	13.616	B
C-AB	65	16	779	0.083	64	0.1	0.1	5.038	A
C-A	255	64			255				
A-B	78	20			78				
A-C	182	45			182				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	426	0.383	163	0.6	0.6	13.690	B
C-AB	65	16	779	0.083	65	0.1	0.1	5.041	A
C-A	255	64			255				
A-B	78	20			78				
A-C	182	45			182				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	133	33	443	0.301	134	0.6	0.4	11.673	B
C-AB	48	12	756	0.064	49	0.1	0.1	5.093	A
C-A	212	53			212				
A-B	64	16			64				
A-C	148	37			148				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	112	28	455	0.245	112	0.4	0.3	10.498	B
C-AB	38	10	739	0.052	38	0.1	0.1	5.137	A
C-A	180	45			180				
A-B	53	13			53				
A-C	124	31			124				

2028 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	High Street/Maidstone Road	T-Junction	Two-way	Two-way	Two-way		2.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Baseline	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - High Street W		ONE HOUR	✓	408	100.000
B - Maidstone Road		ONE HOUR	✓	141	100.000
C - High Street E		ONE HOUR	✓	239	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - High Street W	B - Maidstone Road	C - High Street E
	A - High Street W	0	106	303
	B - Maidstone Road	86	0	56
	C - High Street E	194	45	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - High Street W	B - Maidstone Road	C - High Street E
	A - High Street W	0	3	0
	B - Maidstone Road	5	0	2
	C - High Street E	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	12.59	0.5	B	130	195
C-AB	0.10	5.71	0.2	A	56	84
C-A					163	244
A-B					97	146
A-C					278	417

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	482	0.221	105	0.0	0.3	9.534	A
C-AB	43	11	688	0.063	43	0.0	0.1	5.576	A
C-A	137	34			137				
A-B	80	20			80				
A-C	228	57			228				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	465	0.273	127	0.3	0.4	10.631	B
C-AB	54	14	694	0.078	54	0.1	0.1	5.631	A
C-A	161	40			161				
A-B	95	24			95				
A-C	272	68			272				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	442	0.353	155	0.4	0.5	12.535	B
C-AB	71	18	702	0.102	71	0.1	0.2	5.706	A
C-A	192	48			192				
A-B	116	29			116				
A-C	333	83			333				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	442	0.353	156	0.5	0.5	12.590	B
C-AB	71	18	702	0.102	71	0.2	0.2	5.709	A
C-A	191	48			191				
A-B	116	29			116				
A-C	333	83			333				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	465	0.273	128	0.5	0.4	10.695	B
C-AB	54	14	694	0.078	54	0.2	0.1	5.636	A
C-A	160	40			160				
A-B	95	24			95				
A-C	272	68			272				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	482	0.221	107	0.4	0.3	9.612	A
C-AB	43	11	688	0.063	43	0.1	0.1	5.586	A
C-A	137	34			137				
A-B	80	20			80				
A-C	228	57			228				

2028 + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	High Street/Maidstone Road	T-Junction	Two-way	Two-way	Two-way		3.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.69	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2028 + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - High Street W		ONE HOUR	✓	245	100.000
B - Maidstone Road		ONE HOUR	✓	153	100.000
C - High Street E		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	71	174
	B - Maidstone Road	111	0	43
	C - High Street E	275	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	7	3
	B - Maidstone Road	10	0	10
	C - High Street E	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	14.20	0.7	B	141	211
C-AB	0.11	5.14	0.2	A	69	103
C-A					229	344
A-B					65	98
A-C					160	239

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	454	0.254	114	0.0	0.3	10.539	B
C-AB	51	13	753	0.068	51	0.0	0.1	5.130	A
C-A	193	48			193				
A-B	53	13			53				
A-C	131	33			131				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	138	34	441	0.313	137	0.3	0.4	11.843	B
C-AB	66	16	771	0.085	66	0.1	0.1	5.107	A
C-A	226	56			226				
A-B	64	16			64				
A-C	156	39			156				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	169	42	422	0.400	168	0.4	0.6	14.113	B
C-AB	88	22	797	0.111	88	0.1	0.2	5.082	A
C-A	269	67			269				
A-B	78	20			78				
A-C	192	48			192				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	169	42	422	0.400	169	0.6	0.7	14.202	B
C-AB	88	22	797	0.111	88	0.2	0.2	5.084	A
C-A	269	67			269				
A-B	78	20			78				
A-C	192	48			192				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	138	34	441	0.313	139	0.7	0.5	11.942	B
C-AB	66	16	771	0.085	66	0.2	0.1	5.109	A
C-A	226	56			226				
A-B	64	16			64				
A-C	156	39			156				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	454	0.254	116	0.5	0.3	10.656	B
C-AB	52	13	753	0.069	52	0.1	0.1	5.138	A
C-A	193	48			193				
A-B	53	13			53				
A-C	131	33			131				

2028 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	High Street/Maidstone Road	T-Junction	Two-way	Two-way	Two-way		2.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.94	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2028 + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - High Street W		ONE HOUR	✓	430	100.000
B - Maidstone Road		ONE HOUR	✓	153	100.000
C - High Street E		ONE HOUR	✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	106	325
	B - Maidstone Road	86	0	68
	C - High Street E	204	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - High Street W	B - Maidstone Road	C - High Street E
From	A - High Street W	0	3	0
	B - Maidstone Road	5	0	2
	C - High Street E	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	13.17	0.6	B	141	211
C-AB	0.11	5.77	0.2	A	64	95
C-A					169	254
A-B					97	146
A-C					298	447

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	485	0.238	114	0.0	0.3	9.678	A
C-AB	48	12	690	0.070	48	0.0	0.1	5.602	A
C-A	143	36			143				
A-B	80	20			80				
A-C	244	61			244				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	138	34	467	0.295	137	0.3	0.4	10.906	B
C-AB	61	15	696	0.088	61	0.1	0.1	5.668	A
C-A	167	42			167				
A-B	95	24			95				
A-C	292	73			292				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	169	42	442	0.382	168	0.4	0.6	13.094	B
C-AB	81	20	706	0.115	81	0.1	0.2	5.764	A
C-A	198	50			198				
A-B	116	29			116				
A-C	357	89			357				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	169	42	442	0.382	169	0.6	0.6	13.169	B
C-AB	81	20	706	0.115	81	0.2	0.2	5.768	A
C-A	198	50			198				
A-B	116	29			116				
A-C	357	89			357				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	138	34	467	0.295	139	0.6	0.4	10.988	B
C-AB	61	15	697	0.088	61	0.2	0.1	5.674	A
C-A	167	42			167				
A-B	95	24			95				
A-C	292	73			292				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	485	0.238	116	0.4	0.3	9.767	A
C-AB	49	12	691	0.070	49	0.1	0.1	5.613	A
C-A	143	36			143				
A-B	80	20			80				
A-C	244	61			244				

Junctions 10						
PICADY 10 - Priority Intersection Module						
Version: 10.0.4.1693						
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Filename: Pattenden Lane-Church Green.j10

Path: T:\Projects\15000 Series\15098ITB Land East of Albion Road, Marden\Tech\Junction Assessments\2023

Report generation date: 01/08/2023 11:38:21

- »2022 Observed, AM
- »2022 Observed, PM
- »2028 Baseline, AM
- »2028 Baseline, PM
- »2028 + Development, AM
- »2028 + Development, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2022 Observed						
Stream B-AC	0.6	11.74	0.38	1.4	15.51	0.58
Stream C-AB	0.8	8.41	0.40	0.5	7.56	0.29
2028 Baseline						
Stream B-AC	0.7	12.29	0.40	1.6	16.95	0.62
Stream C-AB	0.9	8.70	0.42	0.5	7.71	0.31
2028 + Development						
Stream B-AC	0.7	12.62	0.41	1.8	18.28	0.64
Stream C-AB	1.1	9.13	0.45	0.6	7.86	0.32

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	17/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2028 Baseline	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*G1
D4	2028 Baseline	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2
D5	Development Flows	AM	ONE HOUR	07:45	09:15	15			
D6	Development Flows	PM	ONE HOUR	16:45	18:15	15			
D7	2028 + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D8	2028 + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2022-2028 AM		1.0442
G2	2022-2028 PM		1.0473

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2022 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Pattenden Lane/Church Green/West End	T-Junction	Two-way	Two-way	Two-way		5.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.15	A

Arms

Arms

Arm	Name	Description	Arm type
A	West End		Major
B	Pattenden Lane		Minor
C	Church Green		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Church Green	7.05			126.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Pattenden Lane	One lane	3.78	84	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	553	0.096	0.243	0.153	0.347
B-C	684	0.100	0.253	-	-
C-B	647	0.239	0.239	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - West End		ONE HOUR	✓	238	100.000
B - Pattenden Lane		ONE HOUR	✓	169	100.000
C - Church Green		ONE HOUR	✓	375	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - West End	B - Pattenden Lane	C - Church Green
	A - West End	0	83	155
	B - Pattenden Lane	71	0	98
	C - Church Green	195	180	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West End	B - Pattenden Lane	C - Church Green
	A - West End	0	1	3
	B - Pattenden Lane	1	0	4
	C - Church Green	7	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	11.74	0.6	B	155	233
C-AB	0.40	8.41	0.8	A	225	337
C-A					119	179
A-B					76	114
A-C					142	213

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	531	0.240	126	0.0	0.3	8.859	A
C-AB	172	43	686	0.251	171	0.0	0.4	6.966	A
C-A	110	27			110				
A-B	62	16			62				
A-C	117	29			117				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	152	38	515	0.295	152	0.3	0.4	9.886	A
C-AB	217	54	698	0.310	216	0.4	0.6	7.470	A
C-A	121	30			121				
A-B	75	19			75				
A-C	139	35			139				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	47	493	0.377	185	0.4	0.6	11.676	B
C-AB	284	71	713	0.398	283	0.6	0.8	8.355	A
C-A	129	32			129				
A-B	91	23			91				
A-C	171	43			171				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	47	493	0.378	186	0.6	0.6	11.736	B
C-AB	285	71	714	0.399	285	0.8	0.8	8.415	A
C-A	128	32			128				
A-B	91	23			91				
A-C	171	43			171				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	152	38	515	0.295	153	0.6	0.4	9.955	A
C-AB	217	54	698	0.311	218	0.8	0.6	7.547	A
C-A	120	30			120				
A-B	75	19			75				
A-C	139	35			139				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	531	0.240	128	0.4	0.3	8.941	A
C-AB	173	43	687	0.252	173	0.6	0.4	7.038	A
C-A	109	27			109				
A-B	62	16			62				
A-C	117	29			117				

2022 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Pattenden Lane/Church Green/West End	T-Junction	Two-way	Two-way	Two-way		7.04	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.04	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - West End		ONE HOUR	✓	246	100.000
B - Pattenden Lane		ONE HOUR	✓	296	100.000
C - Church Green		ONE HOUR	✓	285	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	72	174
	B - Pattenden Lane	71	0	225
	C - Church Green	152	133	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	1	3
	B - Pattenden Lane	1	0	0
	C - Church Green	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	15.51	1.4	C	272	407
C-AB	0.29	7.56	0.5	A	156	234
C-A					106	158
A-B					66	99
A-C					160	239

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	223	56	587	0.380	220	0.0	0.6	9.766	A
C-AB	121	30	655	0.185	120	0.0	0.3	6.724	A
C-A	93	23			93				
A-B	54	14			54				
A-C	131	33			131				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	266	67	575	0.463	265	0.6	0.8	11.594	B
C-AB	151	38	662	0.228	151	0.3	0.4	7.038	A
C-A	105	26			105				
A-B	65	16			65				
A-C	156	39			156				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	81	558	0.584	324	0.8	1.4	15.256	C
C-AB	195	49	672	0.291	195	0.4	0.5	7.542	A
C-A	118	30			118				
A-B	79	20			79				
A-C	192	48			192				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	81	558	0.584	326	1.4	1.4	15.508	C
C-AB	195	49	672	0.291	195	0.5	0.5	7.557	A
C-A	118	30			118				
A-B	79	20			79				
A-C	192	48			192				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	266	67	575	0.463	268	1.4	0.9	11.824	B
C-AB	151	38	662	0.228	152	0.5	0.4	7.062	A
C-A	105	26			105				
A-B	65	16			65				
A-C	156	39			156				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	223	56	587	0.380	224	0.9	0.6	9.956	A
C-AB	122	30	655	0.186	122	0.4	0.3	6.760	A
C-A	93	23			93				
A-B	54	14			54				
A-C	131	33			131				

2028 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Pattenden Lane/Church Green/West End	T-Junction	Two-way	Two-way	Two-way		5.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.39	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Baseline	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*G1

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - West End		ONE HOUR	✓	249	100.000
B - Pattenden Lane		ONE HOUR	✓	176	100.000
C - Church Green		ONE HOUR	✓	392	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	87	162
	B - Pattenden Lane	74	0	102
	C - Church Green	204	188	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	1	3
	B - Pattenden Lane	1	0	4
	C - Church Green	7	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	12.29	0.7	B	162	243
C-AB	0.42	8.70	0.9	A	238	357
C-A					121	182
A-B					80	119
A-C					149	223

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	133	33	528	0.252	132	0.0	0.3	9.059	A
C-AB	182	45	689	0.264	180	0.0	0.4	7.061	A
C-A	113	28			113				
A-B	65	16			65				
A-C	122	30			122				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	159	40	511	0.311	158	0.3	0.4	10.192	B
C-AB	229	57	701	0.327	229	0.4	0.6	7.618	A
C-A	123	31			123				
A-B	78	19			78				
A-C	146	36			146				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	487	0.399	193	0.4	0.6	12.210	B
C-AB	302	75	717	0.421	301	0.6	0.9	8.632	A
C-A	129	32			129				
A-B	95	24			95				
A-C	178	45			178				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	487	0.399	194	0.6	0.7	12.288	B
C-AB	302	76	718	0.421	302	0.9	0.9	8.697	A
C-A	129	32			129				
A-B	95	24			95				
A-C	178	45			178				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	159	40	511	0.311	159	0.7	0.5	10.277	B
C-AB	230	57	701	0.328	231	0.9	0.6	7.708	A
C-A	122	31			122				
A-B	78	19			78				
A-C	146	36			146				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	133	33	527	0.252	133	0.5	0.3	9.152	A
C-AB	183	46	689	0.265	183	0.6	0.4	7.142	A
C-A	112	28			112				
A-B	65	16			65				
A-C	122	30			122				

2028 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Pattenden Lane/Church Green/West End	T-Junction	Two-way	Two-way	Two-way		7.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.59	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Baseline	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - West End		ONE HOUR	✓	258	100.000
B - Pattenden Lane		ONE HOUR	✓	310	100.000
C - Church Green		ONE HOUR	✓	298	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	75	182
	B - Pattenden Lane	74	0	236
	C - Church Green	159	139	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	1	3
	B - Pattenden Lane	1	0	0
	C - Church Green	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.62	16.95	1.6	C	284	427
C-AB	0.31	7.71	0.5	A	165	248
C-A					109	163
A-B					69	104
A-C					167	251

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	584	0.400	231	0.0	0.7	10.126	B
C-AB	128	32	657	0.195	127	0.0	0.3	6.788	A
C-A	96	24			96				
A-B	57	14			57				
A-C	137	34			137				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	70	571	0.488	278	0.7	0.9	12.216	B
C-AB	160	40	664	0.241	159	0.3	0.4	7.134	A
C-A	108	27			108				
A-B	68	17			68				
A-C	164	41			164				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	553	0.617	339	0.9	1.5	16.595	C
C-AB	208	52	675	0.308	207	0.4	0.5	7.695	A
C-A	121	30			121				
A-B	83	21			83				
A-C	201	50			201				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	553	0.617	341	1.5	1.6	16.950	C
C-AB	208	52	675	0.308	208	0.5	0.5	7.714	A
C-A	121	30			121				
A-B	83	21			83				
A-C	201	50			201				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	70	571	0.488	281	1.6	1.0	12.519	B
C-AB	160	40	665	0.241	161	0.5	0.4	7.161	A
C-A	108	27			108				
A-B	68	17			68				
A-C	164	41			164				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	584	0.400	235	1.0	0.7	10.350	B
C-AB	129	32	657	0.196	129	0.4	0.3	6.826	A
C-A	96	24			96				
A-B	57	14			57				
A-C	137	34			137				

2028 + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Pattenden Lane/Church Green/West End	T-Junction	Two-way	Two-way	Two-way		5.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.71	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2028 + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - West End		ONE HOUR	✓	252	100.000
B - Pattenden Lane		ONE HOUR	✓	181	100.000
C - Church Green		ONE HOUR	✓	414	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	87	165
	B - Pattenden Lane	74	0	107
	C - Church Green	213	201	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	1	3
	B - Pattenden Lane	1	0	4
	C - Church Green	7	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.41	12.62	0.7	B	167	250
C-AB	0.45	9.13	1.1	A	258	387
C-A					122	182
A-B					80	119
A-C					151	227

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	137	34	527	0.259	135	0.0	0.3	9.155	A
C-AB	197	49	694	0.284	195	0.0	0.5	7.199	A
C-A	115	29			115				
A-B	65	16			65				
A-C	124	31			124				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	510	0.320	163	0.3	0.5	10.357	B
C-AB	248	62	706	0.352	248	0.5	0.7	7.840	A
C-A	124	31			124				
A-B	78	19			78				
A-C	148	37			148				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	200	50	485	0.412	199	0.5	0.7	12.531	B
C-AB	328	82	724	0.453	327	0.7	1.0	9.042	A
C-A	127	32			127				
A-B	95	24			95				
A-C	182	45			182				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	200	50	485	0.412	200	0.7	0.7	12.617	B
C-AB	328	82	725	0.453	328	1.0	1.1	9.127	A
C-A	127	32			127				
A-B	95	24			95				
A-C	182	45			182				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	509	0.320	164	0.7	0.5	10.452	B
C-AB	249	62	707	0.352	250	1.1	0.7	7.946	A
C-A	123	31			123				
A-B	78	19			78				
A-C	148	37			148				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	137	34	527	0.259	137	0.5	0.4	9.254	A
C-AB	197	49	694	0.284	198	0.7	0.5	7.290	A
C-A	114	29			114				
A-B	65	16			65				
A-C	124	31			124				

2028 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2028 + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Pattenden Lane/Church Green/West End	T-Junction	Two-way	Two-way	Two-way		8.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.15	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2028 + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - West End		ONE HOUR	✓	267	100.000
B - Pattenden Lane		ONE HOUR	✓	323	100.000
C - Church Green		ONE HOUR	✓	308	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	75	191
	B - Pattenden Lane	74	0	249
	C - Church Green	163	145	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West End	B - Pattenden Lane	C - Church Green
From	A - West End	0	1	3
	B - Pattenden Lane	1	0	0
	C - Church Green	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.64	18.28	1.8	C	296	445
C-AB	0.32	7.86	0.6	A	174	260
C-A					109	164
A-B					69	104
A-C					175	263

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	584	0.417	240	0.0	0.7	10.410	B
C-AB	134	34	658	0.204	133	0.0	0.3	6.849	A
C-A	98	24			98				
A-B	57	14			57				
A-C	144	36			144				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	73	570	0.509	289	0.7	1.0	12.740	B
C-AB	168	42	666	0.252	167	0.3	0.4	7.225	A
C-A	110	27			110				
A-B	68	17			68				
A-C	172	43			172				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	356	89	552	0.644	353	1.0	1.7	17.812	C
C-AB	218	55	677	0.322	218	0.4	0.6	7.842	A
C-A	121	30			121				
A-B	83	21			83				
A-C	211	53			211				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	356	89	552	0.644	355	1.7	1.8	18.282	C
C-AB	218	55	677	0.323	218	0.6	0.6	7.864	A
C-A	121	30			121				
A-B	83	21			83				
A-C	211	53			211				

17:45 - 18:00

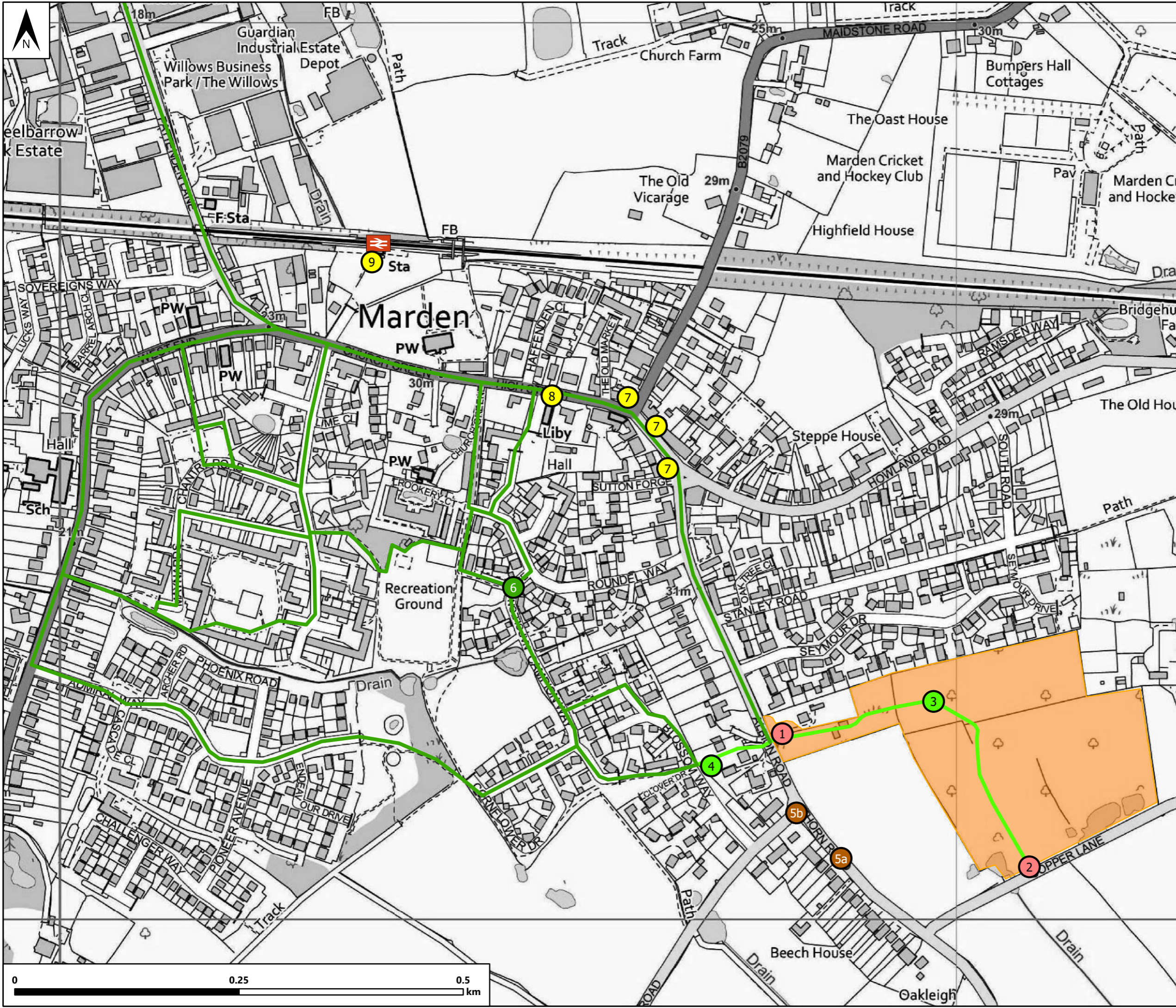
Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	73	570	0.509	293	1.8	1.1	13.122	B
C-AB	168	42	666	0.252	169	0.6	0.4	7.255	A
C-A	109	27			109				
A-B	68	17			68				
A-C	172	43			172				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	583	0.417	245	1.1	0.7	10.670	B
C-AB	135	34	658	0.205	135	0.4	0.3	6.892	A
C-A	97	24			97				
A-B	57	14			57				
A-C	144	36			144				

APPENDIX P. Transport / Highway Improvements

Summary Plan



- Key**
- Land East of Albion Road and North of Copper Lane: Indicative Site Boundary
 - Marden Railway Station
 - Albion Road - All Purpose Access
 - Copper Lane - Pedestrian / Cycle / Emergency Access
 - New Pedestrian / Cycle Route between Albion Road and Copper Lane (Through Site)
 - Proposed Improvements to Footpath KM281
 - Proposed Traffic Calming Along Albion Road / Thorn Road
 - Proposed Simplification of Albion Road / Plain Road / Thorn Road Junction (Opportunity for Environmental Enhancements and Improved Bus Waiting Area)
 - Active Travel Routes - Wayfinding Signing and Dropped Kerbs / Tactile Paving Where Missing
 - Indicative Location of Additional Cycle Parking in Village Centre
 - Financial Contribution to Cycle Parking at Library (Village Centre Cycle Parking)
 - Potential Financial Contribution to Cycle Parking at Marden Station

Additional Sources: KCC Open Data

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Title: Proposed Transport / Highway Improvements Summary Plan		
Project: Land East of Albion Road and North of Copper Lane, Marden		
Project Number: ITB15098	Figure Number:	Revision: -

