

Thompson, Matt

From: Thompson, Matt
Sent: 13 June 2022 10:29
To: Thompson, Matt
Subject: RE: Land off Fryatts Way, Bexhill - Response from East Sussex County Highways

From: Clare Gibbons <Clare.Gibbons@rother.gov.uk>
Sent: 27 May 2022 10:30
To: Victoria Richardson ([REDACTED]); Sian Gulliver ([REDACTED]); Jeff Pyrah
Cc: Steve Barker ([REDACTED]); <Jeff.Pyrah@rother.gov.uk>
Subject: RE: Land off Fryatts Way, Bexhill - Response from East Sussex County Highways

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Dear Tori,

Thank you for your email below and attached 'landscape response note'. I have forwarded to East Sussex County Council's landscape architect for any further comments.

In terms of your request for a list of committed development to inform the Transport Assessment, I suggest that the 'Housing Land Supply Position Statement' is used as it sets out sites with planning permission and allocations. Please find following a link to the latest version: https://www.rother.gov.uk/wp-content/uploads/2021/12/Housing-Land-Supply_2021_Final_Web.pdf. I would be grateful if you could give me an indication of when you intend to submit the further information that National Highways have requested. In the meantime, I would be grateful if you could agree to an extension of time for the determination of the application, as the current one expires next Monday.

There are concerns about whether the application site constitutes a sustainable location. East Sussex County Council as highways authority has raised an objection on this basis. If you are considering measures to address this, you could put them forward for consideration and then further discussion could take place if appropriate.

I look forward to hearing from you.

Kind regards,

Ms Clare Gibbons BA, DipTRP, MRTPI,
Development Management Team Leader
Directorate of Place and Climate Change

[REDACTED]
rother.gov.uk



From: Victoria Richardson ([REDACTED])
Sent: 19 May 2022 09:11
To: Clare Gibbons <Clare.Gibbons@rother.gov.uk>

Cc: Steve Barker <>; Sian Gulliver <>; Jeff Pyrah <Jeff.Pyrah@rother.gov.uk>

Subject: RE: Land off Fryatts Way, Bexhill - Response from East Sussex County Highways

Morning Clare,

I hope you're well?

I'm emailing to provide you with a few updates from my end. Firstly, our consultant spoke to your landscape consultee in order to inform our reply to their comments submitted as part of our application. We submit our views in relation to this detailed as a landscape response note attached.

You may have seen that National Highways have provided an updated consultation response in relation to the above planning application. One of the outstanding matters is the committed developments in the vicinity of the site to be included in the traffic assessments. Although a scope of works (including committed developments) was previously agreed with the LHA, National Highways are requesting that we specifically approach yourselves to obtain a comprehensive list of windfall planning approvals that could influence traffic conditions on the A259 in the vicinity of the site. On that basis, we would be grateful if you could provide us with the requested list to inform the Traffic Assessment and therefore satisfy the National Highways requirements.

Can you please provide us with the contact details for your Strategic Economic Infrastructure team so we can talk to them in more detail about a contribution towards the DRT or the improved cycle/ footpath link to Little Common? We're keen to work with them and you to remove this objection.

Please can you also offer us some dates and times for a meeting to discuss our proposals? As mentioned previously, this could be arranged to include your Strategic Economic Infrastructure colleague.

I look forward to hearing from you.

Kind regards,
Tori

[Redacted signature box]

Victoria Richardson | Assistant Planner

[Redacted contact information]

[Redacted box]

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Appendix C – Committed Development Traffic Flows

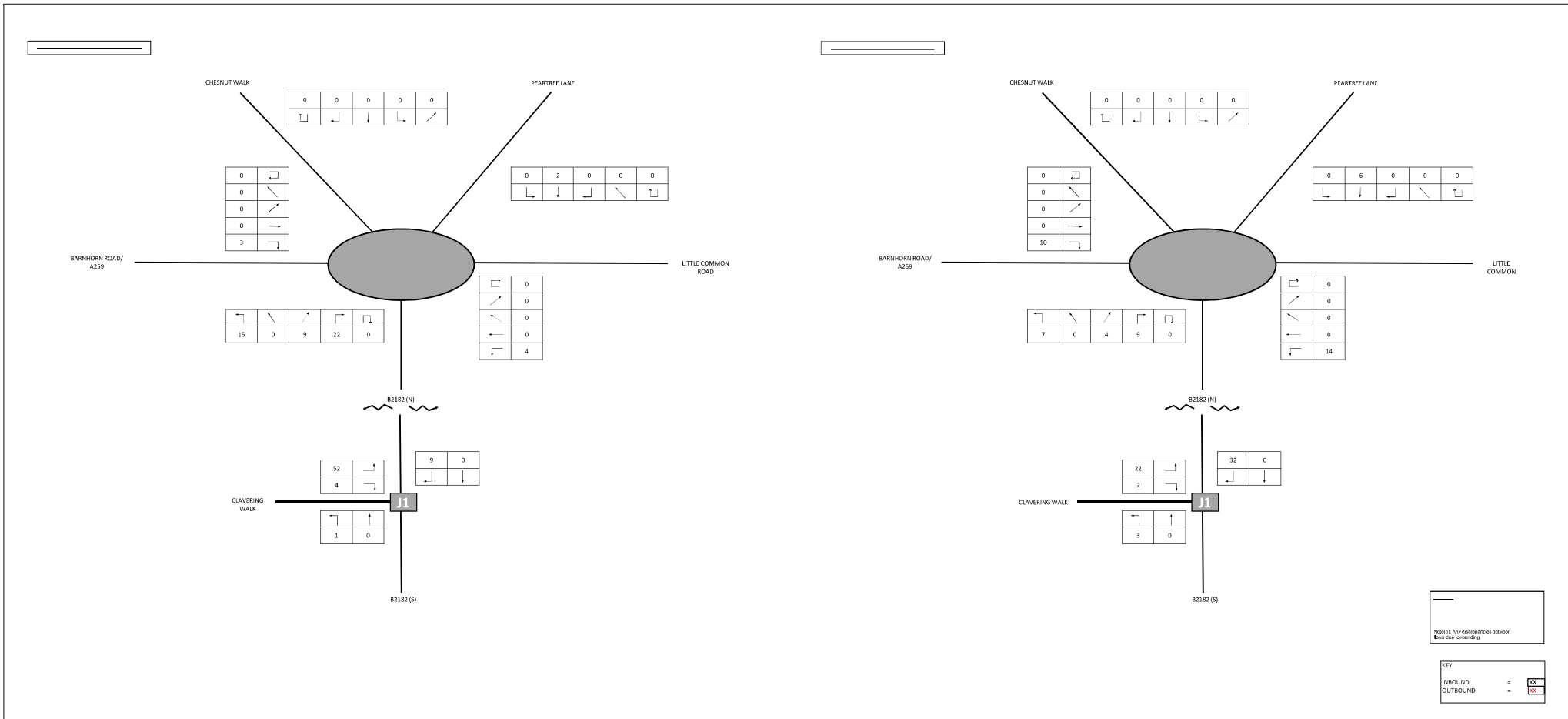


FIGURE 6
 PROPOSED DEVELOPMENT TRAFFIC FLOWS
 LAND AT CLAVERING WALK, COODEN
 JOB NUMBER: 180300
 DRAWN BY: AH

2.4 Cycle Parking Provision

2.4.1 ESCC's parking standards confirm a requirement for 2 cycle parking spaces to be provided for each house. As illustrated on the Proposed Site Plan, these cycle parking spaces would be provided within sheds at the rear of each property.

2.5 Trip Generation & Impact

2.5.1 The outline planning application RR/2016/3206/P included an assessment of the implications of a scheme of up to 31 residential dwellings on the site and included an assessment of the capacity of the proposed access arrangement. The current proposals seek to implement 29 residential dwellings. Table 1 of this report confirms the proposed housing mix.

2.5.2 Therefore, the previous assessments undertaken with respect to traffic impact and junction capacity would remain valid. However, for completeness a summary of the anticipated levels of development traffic, in comparison with the outline scheme, has been considered.

2.5.3 Table 2 below summarises the levels of traffic that would be generated by the site using the approved trip rates set out in the Statement of Common Ground (**Appendix C**).

Time Period	Outline Scheme (31 houses)		Proposed Scheme (29 houses)	
	Arrivals	Departures	Arrivals	Departures
AM Peak Hour (08:00-09:00)	4	12	4	11
PM Peak Hour (17:00-18:00)	10	6	10	5
Daily Traffic	70	73	66	68
		143		134

Table 2 Proposed Traffic Generation (29 Residential Dwellings)

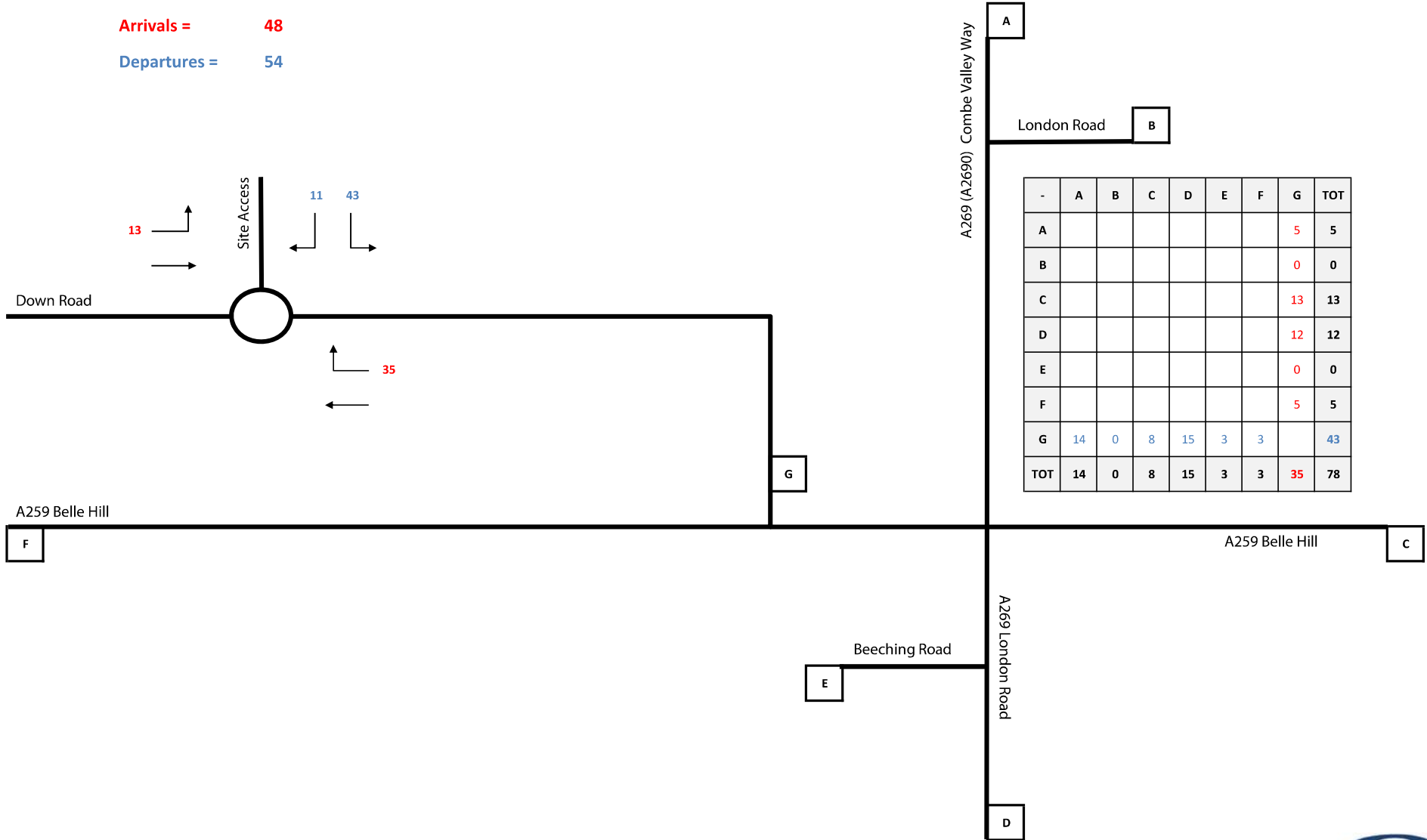
2.5.4 As demonstrated above, the proposed development would generate lower levels of traffic to the approved scheme, equivalent to 9 fewer vehicle movements per day.

Project: Bexhill Leisure Destination
Scenario: Traffic Flow Diagram 17 - Total New Development Trips
Peak AM (0800-0900)

Notes: Excludes existing uses

Arrivals = 48

Departures = 54



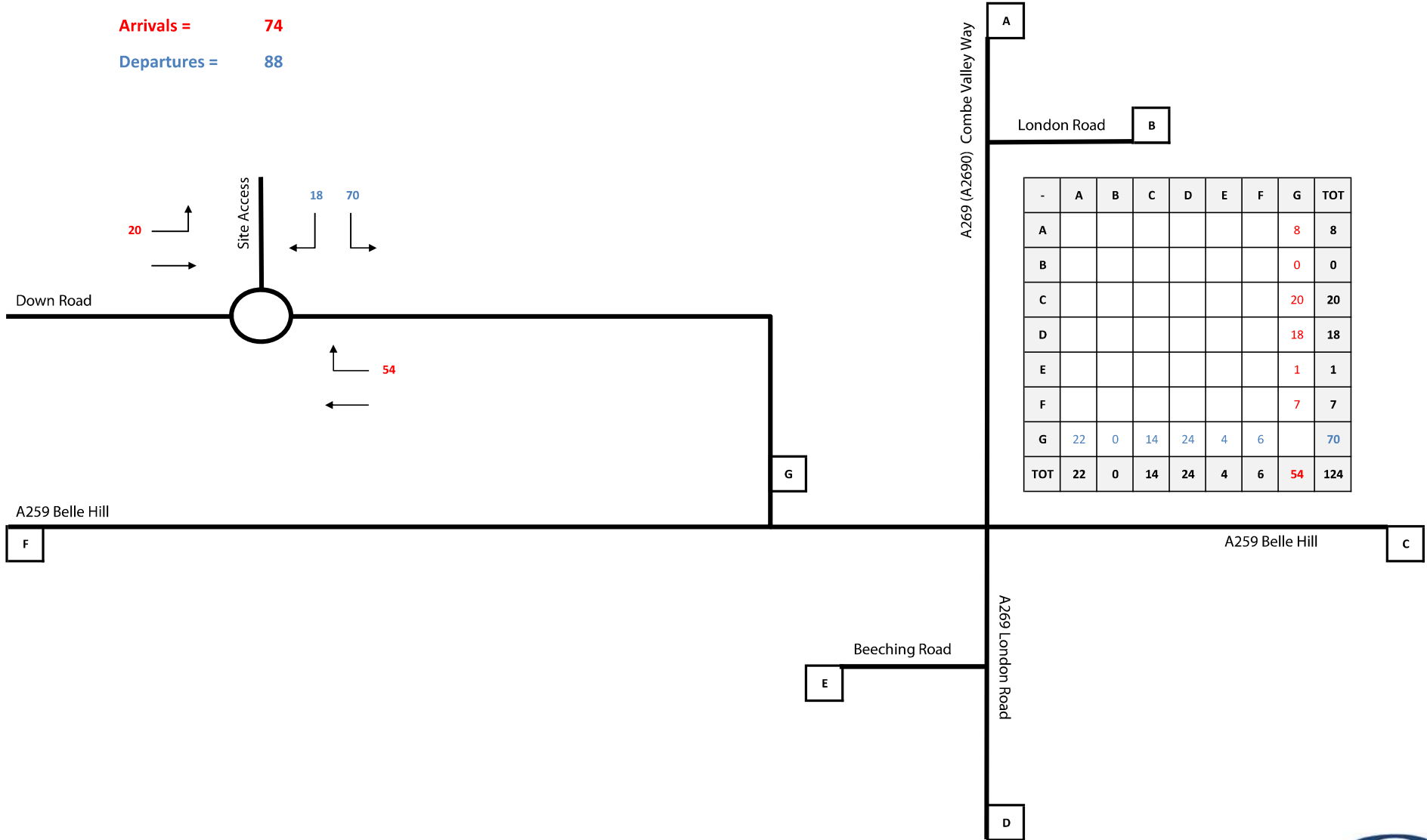
-	A	B	C	D	E	F	G	TOT
A							5	5
B							0	0
C							13	13
D							12	12
E							0	0
F							5	5
G	14	0	8	15	3	3		43
TOT	14	0	8	15	3	3	35	78



Project: Bexhill Leisure Destination
Scenario: Traffic Flow Diagram 18 - Total New Development Trips
Peak PM (1645-1745)
Notes: Excludes existing uses

Arrivals = 74

Departures = 88



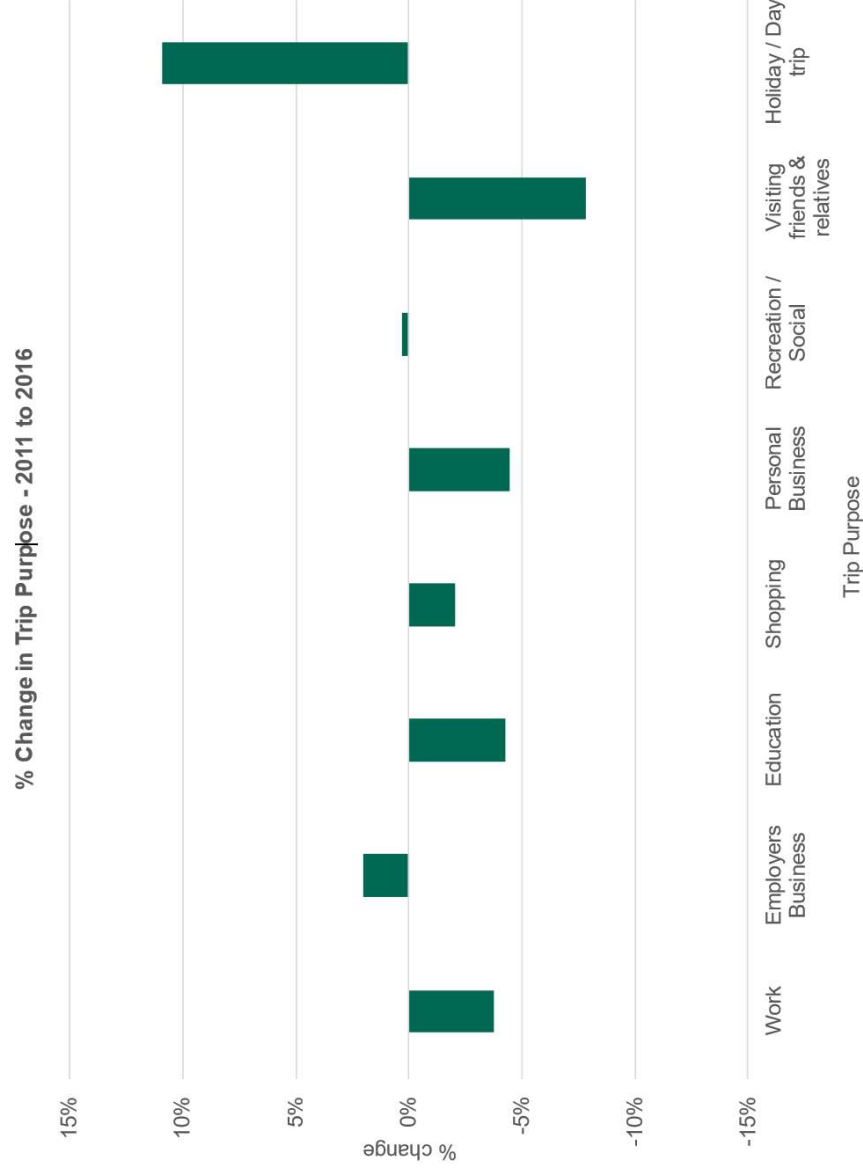


Appendix D – Key pages from TRICS Guidance Note: Changes in Travel Behaviour

TRICS Guidance Note on
Changes in Travel Behaviour
August 2019



- 2.20 Scenario 6 captures uncertainty around socio economic trends, for example in both trip rates and licence holding in young people. This scenario assumes that young people reduce their licence holding acquisition compared to current levels and have extrapolated this trend in young people's licence holding up until 2050.
- 2.21 Changes in trip purpose are also cited. This is shown in the figure below taken from RTF Figure 16: Trips by purpose percentage change between 2011 and 2016 (NTEM)



- 2.22 DfT does recognise that there is uncertainty in this scenario and has advocated that they will: *“continue to monitor the evidence on trip rates in the coming years and monitor the developments of the National Travel Survey aimed at improving the method of collection of data on walking trips, which are believed to be underrepresented.”*
- 2.23 Having considered the evidence in *All Change*, NTS16 and RTF18 TRICS has carried out its own trend analysis to see if these changes in travel behaviour are reflected in the substantial data sets that are held by TRICS for land use classes – residential, retail and office.

TRICS Trend Analysis May 2019

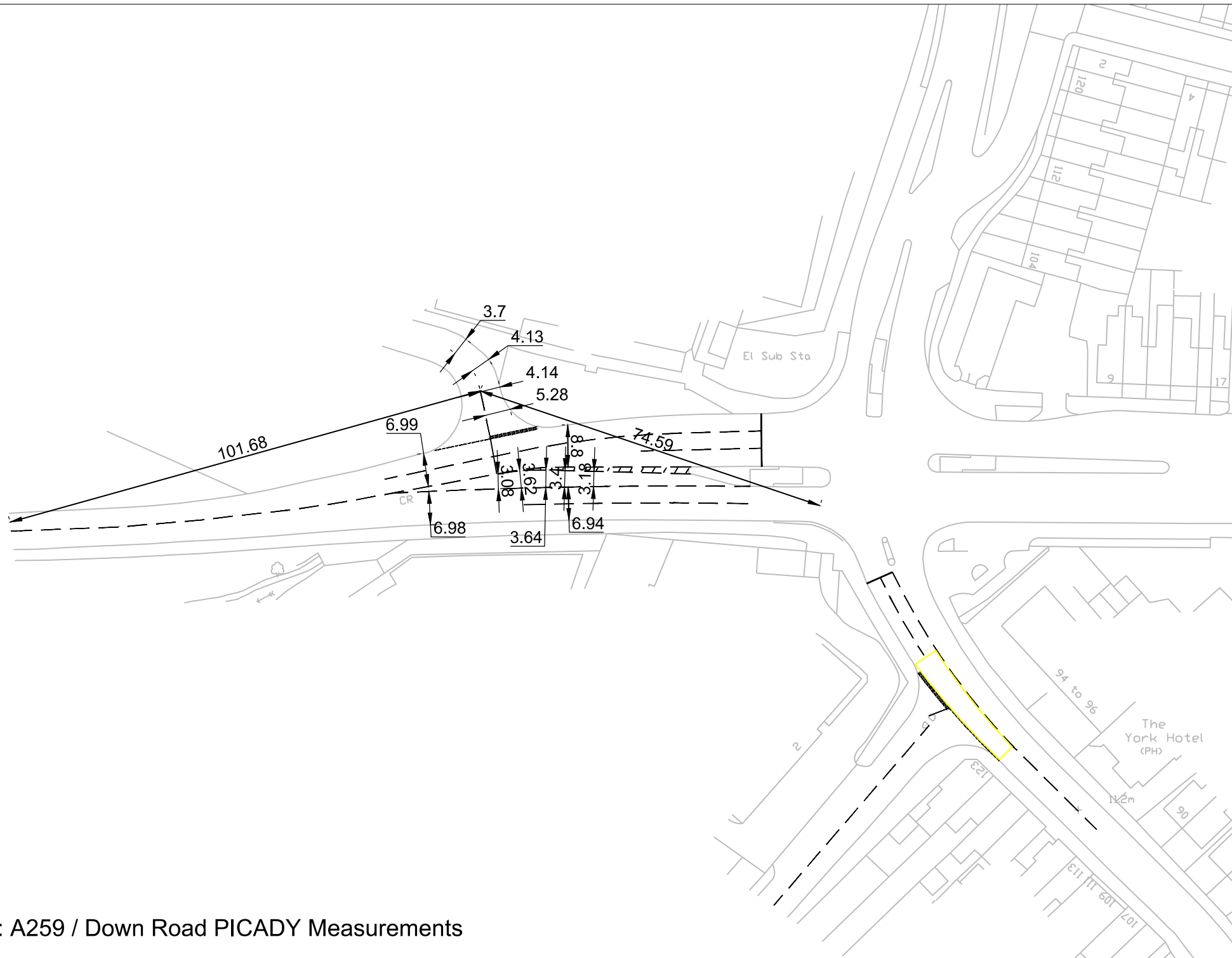
Introduction

What does the NTS tell us?

- 2.24 Before exploring what the TRICS data tells us, it is important to look at what the NTS says about trip rate change over time. The results of the 2017 NTS time series analysis are shown below. These show a reduction in commuting (12%), shopping (15%) and all trips (9%) since 2002.



Appendix E – Assessment Outputs: Junctions 8 and 10



Junction 8: A259 / Down Road PICADY Measurements

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: J8 Down Road - A259.j9
Path: J:\2019A\115791 Bexhill, Fryatt Way\Jun. Ass\June 2022 Assessments J5 to J7\J8 Down Road - A259
Report generation date: 14/06/2022 13:44:23

»2022, AM
»2022, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2022								
Stream B-C	0.4	8.67	0.30	A	0.3	8.05	0.24	A
Stream B-A	0.1	13.95	0.05	B	0.1	14.03	0.11	B
Stream C-AB	0.3	8.11	0.24	A	0.4	8.61	0.30	A

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	13/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TTPATRICK.TALLENTS1
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	00:00	01:30	15
D2	2022	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vets. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A259 West		Major
B	Down Road		Minor
C	A259 East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocking queue (PCU)
C	14.86		✓	3.38	150.0	7.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.28	4.14	4.13	3.70	✓	1.00	102	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	531	0.059	0.150	0.095	0.215
1	B-C	764	0.072	0.182	-	-
1	C-B	746	0.178	0.178	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	00:00	01:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	813	100.000
B		✓	177	100.000
C		✓	993	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A	B	C
From	A	0	29
	B	12	0
	C	863	130

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A	B	C
From	A	0	0
	B	0	0
	C	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.30	8.67	0.4	A
B-A	0.05	13.95	0.1	B
C-AB	0.24	8.11	0.3	A
C-A				
AB				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	124	651	0.191	123	0.2	6.816	A
B-A	9	356	0.025	9	0.0	10.363	B
C-AB	98	637	0.154	97	0.2	6.661	A
C-A	650			650			
AB	22			22			
A-C	590			590			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	628	0.236	148	0.3	7.492	A
B-A	11	321	0.034	11	0.0	11.603	B
C-AB	117	616	0.190	117	0.2	7.207	A
C-A	776			776			
AB	26			26			
A-C	705			705			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	182	597	0.304	181	0.4	8.651	A
B-A	13	271	0.049	13	0.1	13.937	B
C-AB	143	587	0.244	143	0.3	8.102	A
C-A	950			950			
AB	32			32			
A-C	863			863			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	182	597	0.304	182	0.4	8.672	A
B-A	13	271	0.049	13	0.1	13.949	B
C-AB	143	587	0.244	143	0.3	8.114	A
C-A	950			950			
AB	32			32			
A-C	863			863			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	628	0.236	149	0.3	7.517	A
B-A	11	321	0.034	11	0.0	11.616	B
C-AB	117	616	0.190	117	0.2	7.225	A
C-A	776			776			
AB	26			26			
A-C	705			705			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	124	651	0.191	125	0.2	6.849	A
B-A	9	356	0.025	9	0.0	10.378	B
C-AB	98	637	0.154	98	0.2	6.684	A
C-A	650			650			
A-B	22			22			
A-C	590			590			

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vets. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	ONE HOUR	00:00	01:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	747	100.000
B		✓	159	100.000
C		✓	990	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A	B	C
From	A	0	12
	B	29	0
	C	825	165

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A	B	C
From	A	0	0
	B	0	0
	C	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.24	8.05	0.3	A
B-A	0.11	14.03	0.1	B
C-AB	0.30	8.61	0.4	A
C-A				
AB				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	646	0.152	97	0.2	6.557	A
B-A	22	372	0.059	22	0.1	10.264	B
C-AB	124	646	0.192	123	0.2	6.876	A
C-A	621			621			
AB	9			9			
A-C	553			553			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	623	0.188	117	0.2	7.106	A
B-A	26	337	0.077	26	0.1	11.566	B
C-AB	148	626	0.237	148	0.3	7.519	A
C-A	742			742			
AB	11			11			
A-C	661			661			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	143	591	0.242	143	0.3	8.031	A
B-A	32	289	0.111	32	0.1	14.010	B
C-AB	182	600	0.303	181	0.4	8.590	A
C-A	908			908			
AB	13			13			
A-C	809			809			

00:45 - 01:00

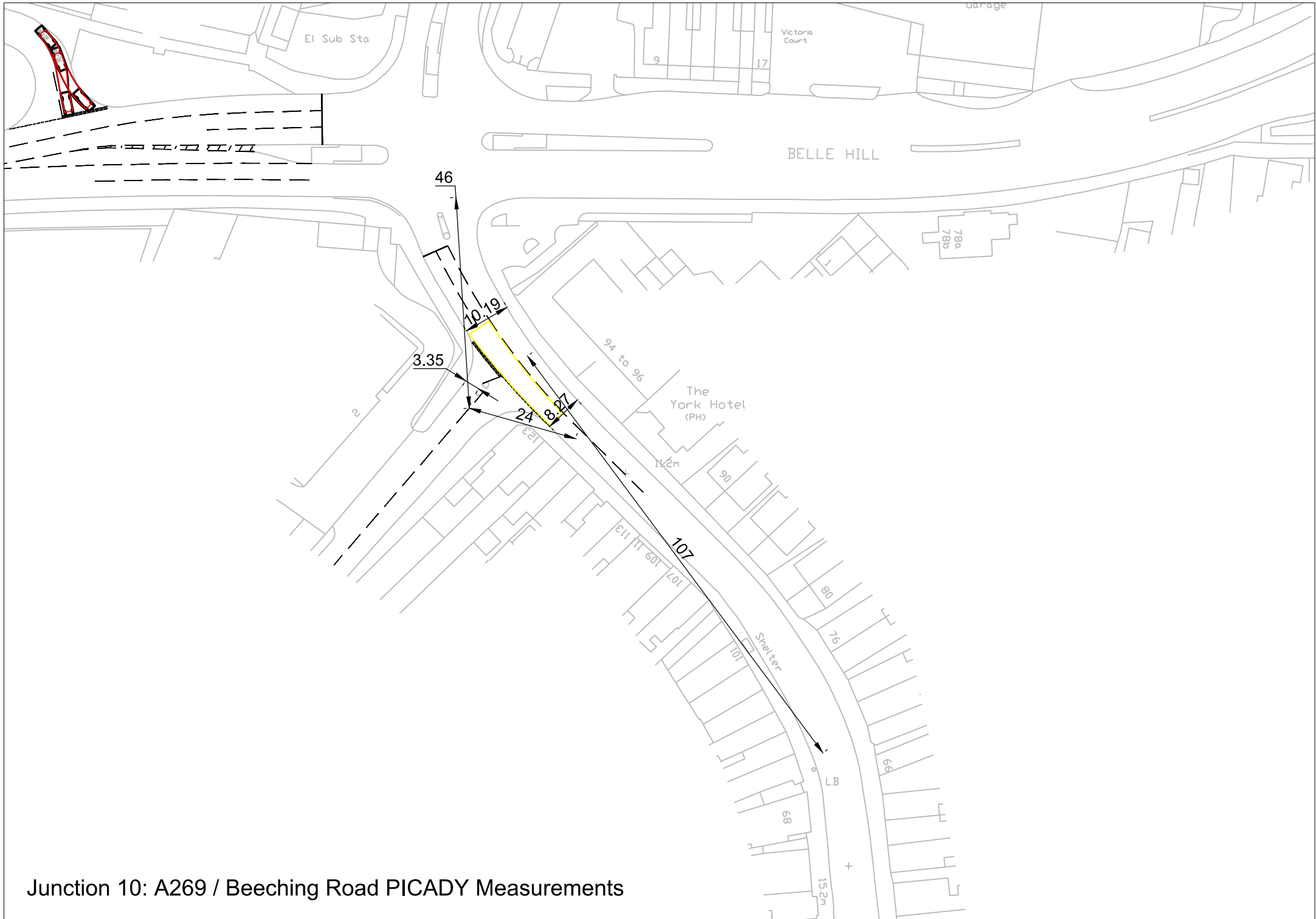
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	143	591	0.242	143	0.3	8.046	A
B-A	32	288	0.111	32	0.1	14.032	B
C-AB	182	600	0.303	182	0.4	8.610	A
C-A	908			908			
AB	13			13			
A-C	809			809			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	623	0.188	117	0.2	7.127	A
B-A	26	337	0.077	26	0.1	11.590	B
C-AB	148	626	0.237	149	0.3	7.543	A
C-A	742			742			
AB	11			11			
AC	661			661			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	645	0.152	98	0.2	6.583	A
B-A	22	372	0.059	22	0.1	10.290	B
C-AB	124	646	0.192	125	0.2	6.911	A
C-A	621			621			
AB	9			9			
AC	553			553			



Junction 10: A269 / Beeching Road PICADY Measurements

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: J10 Beeching Road - A269.j9
Path: J:\2019A\115791 Bexhill, Fryatt Way\Jun. Ass\June 2022 Assessments J5 to J7\J10 Beeching Road - A269
Report generation date: 13/06/2022 15:10:31

»2022, AM
 »2022, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2022							
Stream B-AC	0.3	8.31	0.23	A	0.4	8.70	0.27	A
Stream C-AB	2.3	12.45	0.63	B	0.9	7.17	0.38	A

*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	13/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TTPATRICK.TALLENTS1
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	00:00	01:30	15
D2	2022	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vets. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	London		Major
B	Beeching Road		Minor
C	A269		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.25			105.0	✓	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	One lane	3.34	45	29

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	524	0.082	0.207	0.130	0.296
1	B-C	664	0.087	0.221	-	-
1	C-B	635	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	00:00	01:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	345	100.000
B		✓	120	100.000
C		✓	567	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A	B	C
From	A	0	8
	B	4	0
	C	311	256

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A	B	C
From	A	0	0
	B	0	0
	C	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.23	8.31	0.3	A
C-AB	0.63	12.45	2.3	B
C-A				
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	596	0.152	90	0.2	7.101	A
C-AB	282	739	0.382	279	0.8	7.805	A
C-A	145			145			
AB	6			6			
AC	254			254			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	583	0.185	108	0.2	7.565	A
C-AB	365	761	0.480	364	1.2	9.071	A
C-A	144			144			
AB	7			7			
AC	303			303			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	132	566	0.234	132	0.3	8.293	A
C-AB	499	793	0.630	495	2.2	12.117	B
C-A	125			125			
AB	9			9			
AC	371			371			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	132	566	0.234	132	0.3	8.306	A
C-AB	501	794	0.631	501	2.3	12.454	B
C-A	123			123			
AB	9			9			
AC	371			371			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	583	0.185	108	0.2	7.585	A
C-AB	367	763	0.481	371	1.3	9.342	A
C-A	142			142			
AB	7			7			
AC	303			303			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	596	0.152	91	0.2	7.130	A
C-AB	284	740	0.384	286	0.8	7.981	A
C-A	143			143			
AB	6			6			
AC	254			254			

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vets. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	ONE HOUR	00:00	01:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	355	100.000
B		✓	140	100.000
C		✓	501	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A	B	C
From	A	0	9
	B	4	0
	C	350	151
			0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A	B	C
From	A	0	0
	B	0	0
	C	0	0
			0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	8.70	0.4	A
C-AB	0.38	7.17	0.9	A
C-A				
AB				
AC				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	597	0.176	105	0.2	7.296	A
C-AB	174	757	0.230	173	0.4	6.152	A
C-A	203			203			
AB	7			7			
AC	260			260			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	585	0.215	126	0.3	7.832	A
C-AB	228	783	0.291	227	0.6	6.480	A
C-A	223			223			
AB	8			8			
AC	311			311			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	568	0.271	154	0.4	8.684	A
C-AB	315	820	0.384	314	0.9	7.127	A
C-A	236			236			
AB	10			10			
AC	381			381			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	568	0.271	154	0.4	8.699	A
C-AB	316	821	0.385	316	0.9	7.168	A
C-A	236			236			
AB	10			10			
AC	381			381			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	585	0.215	126	0.3	7.853	A
C-AB	228	784	0.291	230	0.6	6.530	A
C-A	222			222			
AB	8			8			
AC	311			311			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	597	0.177	106	0.2	7.329	A
C-AB	175	758	0.231	176	0.4	6.206	A
C-A	202			202			
AB	7			7			
AC	260			260			



Appendix F – Assessment Output: Junction 5

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: J5 - TA Model inc 2022 Surveyed Flows - Q Validated.j9
Path: J:\2019\A115791 Bexhill, Fryatt Way\Jun. Ass\June 2022 Assessments J5 to J7\J5 Little Common Rdt
Report generation date: 13/06/2022 09:24:24

- »Validation - 2022 Surveyed Flows - 2022 Surveyed Flows, AM - Surveyed Peak
- »Validation - 2022 Surveyed Flows - 2022 Surveyed Flows, PM - Surveyed Peak
- »Assessment Drawing No. 180300-003F - 2025 Baseline Flows, AM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2025 Baseline Flows, PM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2025 Assessment Flows, AM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2025 Assessment Flows, PM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2031 Baseline Flows, AM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2031 Baseline Flows, PM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2031 Assessment Flows, AM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2031 Assessment Flows, PM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2025 Assessment Flows - Sensitivity, AM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2025 Assessment Flows - Sensitivity, PM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2031 Assessment Flows - Sensitivity, AM - Saturn Peak
- »Assessment Drawing No. 180300-003F - 2031 Assessment Flows - Sensitivity, PM - Saturn Peak

Summary of junction performance

	AM - Surveyed Peak			PM - Surveyed Peak			
	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Queue (PCU)	Delay (s)	Junction Delay (s)
Validation - 2022 Surveyed Flows - 2022 Surveyed Flows							
1 - Pear Tree Lane	9.9	126.24	0.98	50.73	2.3	39.17	0.71
2 - Little Common Road (A259)	12.7	55.53	0.96		7.3	33.46	0.90
3 - Cooden Sea Road	6.7	61.00	0.90		7.5	61.50	0.92
4 - Barnhorn Road (A259)	6.6	22.41	0.88		9.0	31.25	0.92
5 - Chestnut Walk	1.1	65.37	0.54		1.3	92.21	0.61

	AM - Saturn Peak			PM - Saturn Peak			
	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Queue (PCU)	Delay (s)	Junction Delay (s)
Assessment Drawing No. 180300-003F - 2025 Baseline Flows							
1 - Pear Tree Lane	5.3	70.41	0.91	27.94	1.4	32.35	0.61
2 - Little Common Road (A259)	3.6	18.41	0.79		2.6	13.26	0.73
3 - Cooden Sea Road	3.3	28.41	0.78		6.2	44.88	0.90
4 - Barnhorn Road (A259)	5.4	19.72	0.86		12.9	40.69	0.97
5 - Chestnut Walk	1.4	68.91	0.62		0.9	63.50	0.50
Assessment Drawing No. 180300-003F - 2025 Assessment Flows							
1 - Pear Tree Lane	5.5	73.24	0.92	29.73	1.5	34.36	0.63
2 - Little Common Road (A259)	4.1	20.67	0.82		2.7	13.79	0.74
3 - Cooden Sea Road	3.6	31.12	0.80		6.8	48.66	0.92
4 - Barnhorn Road (A259)	5.7	20.49	0.86		15.1	48.48	0.98
5 - Chestnut Walk	1.5	74.06	0.65		1.0	71.54	0.54
Assessment Drawing No. 180300-003F - 2031 Baseline Flows							
1 - Pear Tree Lane	10.6	137.55	1.04	43.48	1.9	40.86	0.68
2 - Little Common Road (A259)	4.8	23.52	0.85		3.3	16.07	0.78
3 - Cooden Sea Road	4.7	39.16	0.85		11.4	79.16	1.00
4 - Barnhorn Road (A259)	7.9	27.26	0.91		25.1	78.66	1.03
5 - Chestnut Walk	2.6	125.00	0.83		1.3	92.74	0.62
Assessment Drawing No. 180300-003F - 2031 Assessment Flows							
1 - Pear Tree Lane	11.2	145.80	1.05	46.70	2.0	42.85	0.70
2 - Little Common Road (A259)	5.6	26.91	0.87		3.5	16.73	0.79
3 - Cooden Sea Road	5.3	43.56	0.87		12.6	88.00	1.01
4 - Barnhorn Road (A259)	8.4	28.49	0.92		30.3	92.70	1.04
5 - Chestnut Walk	2.9	134.84	0.87		1.5	106.23	0.65
Assessment Drawing No. 180300-003F - 2025 Assessment Flows - Sensitivity							
1 - Pear Tree Lane	5.7	74.83	0.93	30.20	1.6	34.75	0.63
2 - Little Common Road (A259)	4.2	21.06	0.82		2.8	13.83	0.74
3 - Cooden Sea Road	3.7	31.61	0.80		6.8	48.91	0.92
4 - Barnhorn Road (A259)	5.7	20.67	0.87		15.8	50.65	0.99
5 - Chestnut Walk	1.5	75.03	0.65		1.0	73.23	0.55
Assessment Drawing No. 180300-003F - 2031 Assessment Flows - Sensitivity							
1 - Pear Tree Lane	11.5	148.74	1.05	47.56	2.0	43.30	0.70
2 - Little Common Road (A259)	5.8	27.49	0.88		3.5	16.70	0.79
3 - Cooden Sea Road	5.4	44.48	0.88		12.8	89.14	1.01
4 - Barnhorn Road (A259)	8.5	28.88	0.92		32.0	97.05	1.05
5 - Chestnut Walk	3.0	138.22	0.88		1.6	109.54	0.66

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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	12/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\patrick.talents
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	mph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queuing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Surveyed Flows	AM - Surveyed Peak	ONE HOUR	07:30	09:00	15	✓
D2	2022 Surveyed Flows	PM - Surveyed Peak	ONE HOUR	15:45	17:15	15	✓
D3	2025 Baseline Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓
D4	2025 Baseline Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓
D5	2025 Assessment Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓
D6	2025 Assessment Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓
D7	2031 Baseline Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓
D8	2031 Baseline Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓
D9	2031 Assessment Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓
D10	2031 Assessment Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓
D11	2025 Assessment Flows - Sensitivity	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓
D12	2025 Assessment Flows - Sensitivity	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓
D13	2031 Assessment Flows - Sensitivity	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓
D14	2031 Assessment Flows - Sensitivity	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓

Validation - 2022 Surveyed Flows - 2022 Surveyed Flows, AM - Surveyed Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Little Common Road (A259) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Cooden Sea Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.
Warning	Vehicle Mix		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.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Validation - 2022 Surveyed Flows	✓	✓		D1,D2	100,000	100,000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	50.73	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

The slope and intercept shown above include any corrections and adjustments.

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 Surveyed Flows	AM - Surveyed Peak	ONE HOUR	07:30	09:00	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 (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	265	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	789	100.000
3 - Cooden Sea Road		ONE HOUR	✓	386	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1010	100.000
5 - Chestnut Walk		ONE HOUR	✓	58	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOURL]	0.00
3 - Cooden Sea Road	[ONEHOURL]	0.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
From	1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk	
	0	19	144	102	0	
	8	0	39	732	10	
	73	75	0	221	17	
	49	751	204	0	6	
	6	1	23	28	0	

Vehicle Mix

Heavy Vehicle Percentages

		To				
From	1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk	
	0	0	0	0	0	
	0	0	0	0	0	
	0	0	0	0	0	
	0	0	0	0	0	
	0	0	0	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.98	126.24	9.9	F	243	365
2 - Little Common Road (A259)	0.96	55.53	12.7	F	724	1086
3 - Cooden Sea Road	0.90	61.00	6.7	F	354	531
4 - Barnhorn Road (A259)	0.88	22.41	6.6	C	927	1390
5 - Chestnut Walk	0.54	65.37	1.1	F	53	80

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	200	50	808		453	0.441	196	101	0.0	0.8	13.897	B
2 - Little Common Road (A259)	594	149	373	0.00	1008	0.589	588	632	0.0	1.4	8.476	A
3 - Cooden Sea Road	291	73	656	0.00	649	0.448	287	305	0.0	0.8	9.863	A
4 - Barnhorn Road (A259)	760	190	136		1299	0.585	755	807	0.0	1.4	6.547	A
5 - Chestnut Walk	44	11	867		288	0.152	43	25	0.0	0.2	14.651	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	238	60	968		387	0.615	235	121	0.8	1.5	23.226	C
2 - Little Common Road (A259)	709	177	446	0.00	964	0.736	704	757	1.4	2.6	13.624	B
3 - Cooden Sea Road	347	87	785	0.00	571	0.607	344	366	0.8	1.5	15.659	C
4 - Barnhorn Road (A259)	908	227	163		1285	0.707	904	966	1.4	2.3	9.358	A
5 - Chestnut Walk	52	13	1038		216	0.241	52	29	0.2	0.3	21.826	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	292	73	1172		304	0.959	270	146	1.5	6.9	78.720	F
2 - Little Common Road (A259)	869	217	526	0.00	916	0.949	840	916	2.6	9.8	37.876	E
3 - Cooden Sea Road	425	106	932	0.00	483	0.880	410	434	1.5	5.2	42.924	E
4 - Barnhorn Road (A259)	1112	278	194		1268	0.877	1097	1148	2.3	6.1	19.493	C
5 - Chestnut Walk	64	16	1256		124	0.514	61	35	0.3	0.9	55.197	F

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	292	73	1188		298	0.980	280	148	6.9	9.9	126.244	F
2 - Little Common Road (A259)	869	217	539	0.00	908	0.957	857	928	9.8	12.7	55.532	F
3 - Cooden Sea Road	425	106	953	0.00	470	0.904	419	444	5.2	6.7	60.999	F
4 - Barnhorn Road (A259)	1112	278	199		1266	0.878	1110	1173	6.1	6.6	22.408	C
5 - Chestnut Walk	64	16	1273		117	0.544	63	36	0.9	1.1	65.370	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	238	60	994		377	0.632	270	127	9.9	1.9	41.769	E
2 - Little Common Road (A259)	709	177	486	0.00	940	0.755	747	779	12.7	3.3	21.653	C
3 - Cooden Sea Road	347	87	841	0.00	538	0.645	366	392	6.7	1.9	22.984	C
4 - Barnhorn Road (A259)	908	227	174		1280	0.710	924	1033	6.6	2.5	10.553	B
5 - Chestnut Walk	52	13	1067		204	0.256	55	31	1.1	0.4	24.599	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	200	50	820		448	0.446	204	104	1.9	0.8	14.995	B
2 - Little Common Road (A259)	594	149	383	0.00	1002	0.593	601	641	3.3	1.5	9.144	A
3 - Cooden Sea Road	291	73	671	0.00	640	0.454	295	312	1.9	0.8	10.561	B
4 - Barnhorn Road (A259)	760	190	140		1298	0.586	765	826	2.5	1.4	6.810	A
5 - Chestnut Walk	44	11	879		283	0.155	44	25	0.4	0.2	15.152	C

Validation - 2022 Surveyed Flows - 2022 Surveyed Flows, PM - Surveyed Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Little Common Road (A259) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Cooden Sea Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.
Warning	Vehicle Mix		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.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Validation - 2022 Surveyed Flows	✓	✓	D1,D2	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	39.17	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

The slope and intercept shown above include any corrections and adjustments.

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 Surveyed Flows	PM - Surveyed Peak	ONE HOUR	15:45	17:15	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 (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	202	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	766	100.000
3 - Cooden Sea Road		ONE HOUR	✓	429	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1004	100.000
5 - Chestnut Walk		ONE HOUR	✓	52	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONE HOUR]	0.00
3 - Cooden Sea Road	[ONE HOUR]	0.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
From	1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk	
	0	26	102	71	3	
	25	0	60	658	23	
	107	86	0	197	39	
	78	696	222	0	8	
	2	5	25	20	0	

Vehicle Mix

Heavy Vehicle Percentages

		To				
From	1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk	
	0	0	0	0	0	
	0	0	0	0	0	
	0	0	0	0	0	
	0	0	0	0	0	
	0	0	0	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.71	39.17	2.3	E	185	278
2 - Little Common Road (A259)	0.90	33.46	7.3	D	703	1054
3 - Cooden Sea Road	0.92	61.50	7.5	F	394	590
4 - Barnhorn Road (A259)	0.92	31.25	9.0	D	921	1382
5 - Chestnut Walk	0.61	92.21	1.3	F	48	72

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	152	38	787		461	0.330	150	158	0.0	0.5	11.501	B
2 - Little Common Road (A259)	577	144	330	0.00	1033	0.558	572	607	0.0	1.2	7.722	A
3 - Cooden Sea Road	323	81	597	0.00	685	0.472	319	305	0.0	0.9	9.761	A
4 - Barnhorn Road (A259)	756	189	211		1260	0.600	750	705	0.0	1.5	6.985	A
5 - Chestnut Walk	39	10	906		271	0.144	38	54	0.0	0.2	15.424	C

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	182	45	942		398	0.456	180	189	0.5	0.8	16.441	C
2 - Little Common Road (A259)	689	172	396	0.00	994	0.693	685	727	1.2	2.2	11.508	B
3 - Cooden Sea Road	386	96	715	0.00	614	0.629	383	365	0.9	1.6	15.393	C
4 - Barnhorn Road (A259)	903	226	253		1237	0.729	898	845	1.5	2.6	10.469	B
5 - Chestnut Walk	47	12	1085		196	0.238	46	65	0.2	0.3	23.932	C

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	222	56	1135		319	0.696	217	227	0.8	2.0	33,781	D
2 - Little Common Road (A259)	843	211	476	0.00	946	0.892	826	876	2.2	6.4	26,923	D
3 - Cooden Sea Road	472	118	862	0.00	525	0.900	455	440	1.6	6.0	43,646	E
4 - Barnhorn Road (A259)	1105	276	301		1212	0.912	1084	1016	2.6	7.9	24,914	C
5 - Chestnut Walk	57	14	1307		103	0.556	54	78	0.3	1.1	70,172	F

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	222	56	1154		312	0.714	221	231	2.0	2.3	39,165	E
2 - Little Common Road (A259)	843	211	485	0.00	941	0.897	840	891	6.4	7.3	33,460	D
3 - Cooden Sea Road	472	118	877	0.00	516	0.915	466	448	6.0	7.5	61,499	F
4 - Barnhorn Road (A259)	1105	276	308		1208	0.915	1101	1035	7.9	9.0	31,249	D
5 - Chestnut Walk	57	14	1329		94	0.611	56	80	1.1	1.3	92,208	F

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	182	45	978		383	0.474	187	199	2.3	0.9	18,806	C
2 - Little Common Road (A259)	689	172	412	0.00	984	0.700	708	753	7.3	2.4	13,881	B
3 - Cooden Sea Road	386	96	741	0.00	598	0.645	408	379	7.5	1.9	20,924	C
4 - Barnhorn Road (A259)	903	226	268		1229	0.734	927	881	9.0	2.9	12,781	B
5 - Chestnut Walk	47	12	1126		179	0.261	51	69	1.3	0.4	28,819	D

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	152	38	800		456	0.334	154	161	0.9	0.5	11,983	B
2 - Little Common Road (A259)	577	144	337	0.00	1029	0.560	581	617	2.4	1.3	8,116	A
3 - Cooden Sea Road	323	81	607	0.00	678	0.476	327	311	1.9	0.9	10,349	B
4 - Barnhorn Road (A259)	756	189	216		1257	0.601	761	719	2.9	1.5	7,338	A
5 - Chestnut Walk	39	10	921		265	0.148	40	56	0.4	0.2	16,045	C

Assessment Drawing No. 180300-003F - 2025 Baseline Flows, AM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	27.94	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

The slope and intercept shown above include any corrections and adjustments.

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
D3	2025 Baseline Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓

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 (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	283	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	725	100.000
3 - Cooden Sea Road		ONE HOUR	✓	437	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1034	100.000
5 - Chestnut Walk		ONE HOUR	✓	78	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOURL]	17.00
3 - Cooden Sea Road	[ONEHOURL]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	15	152	116	0
	2 - Little Common Road (A259)	3	0	65	638	19
	3 - Cooden Sea Road	127	111	0	182	17
	4 - Barnhorn Road (A259)	51	750	201	0	32
	5 - Chestnut Walk	0	31	34	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From	1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk	
	1 - Pear Tree Lane	0	1	0	0	
	2 - Little Common Road (A259)	6	5	3	3	
	3 - Cooden Sea Road	9	0	10	7	
	4 - Barnhorn Road (A259)	2	7	0	3	
	5 - Chestnut Walk	0	3	4	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.91	70.41	5.3	F	231	347
2 - Little Common Road (A259)	0.79	18.41	3.6	C	592	888
3 - Cooden Sea Road	0.78	28.41	3.3	D	357	535
4 - Barnhorn Road (A259)	0.86	19.72	5.4	C	845	1267
5 - Chestnut Walk	0.82	68.91	1.4	F	64	96

Main Results for each time segment

07:45 - 07:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	762		472	0.406	187	121	0.0	0.7	12.585	B
2 - Little Common Road (A259)	490	82	343	11.50	1011	0.485	485	606	0.0	0.9	6.981	A
3 - Cooden Sea Road	295	49	526	6.09	722	0.409	291	301	0.0	0.7	8.889	A
4 - Barnhorn Road (A259)	699	117	185		1274	0.549	692	633	0.0	1.3	6.469	A
5 - Chestnut Walk	53	9	831		303	0.174	51	45	0.0	0.2	14.639	B

07:55 - 08:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	771		468	0.409	191	122	0.7	0.7	13.090	B
2 - Little Common Road (A259)	490	82	349	11.50	1013	0.484	490	613	0.9	1.0	7.100	A
3 - Cooden Sea Road	295	49	533	6.09	720	0.410	295	306	0.7	0.7	9.106	A
4 - Barnhorn Road (A259)	699	117	187		1272	0.550	699	642	1.3	1.3	6.649	A
5 - Chestnut Walk	53	9	840		299	0.176	53	46	0.2	0.2	15.016	C

08:05 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	240	40	957		392	0.612	235	152	0.7	1.5	22.481	C
2 - Little Common Road (A259)	614	102	431	14.40	968	0.634	610	762	1.0	1.7	10.219	B
3 - Cooden Sea Road	370	62	662	7.62	645	0.574	366	378	0.7	1.4	13.682	B
4 - Barnhorn Road (A259)	876	146	232		1248	0.702	869	796	1.3	2.4	9.888	A
5 - Chestnut Walk	66	11	1044		213	0.310	65	57	0.2	0.4	24.687	C

08:15 - 08:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	274	46	1091		337	0.814	264	173	1.5	3.2	43.859	E
2 - Little Common Road (A259)	703	117	487	16.48	940	0.748	696	868	1.7	2.8	14.844	B
3 - Cooden Sea Road	424	71	754	8.73	590	0.718	417	429	1.4	2.5	21.580	C
4 - Barnhorn Road (A259)	1003	167	265		1231	0.814	992	907	2.4	4.1	15.254	C
5 - Chestnut Walk	76	13	1191		152	0.499	73	65	0.4	0.9	45.477	E

08:25 - 08:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	287	48	1145		315	0.910	275	182	3.2	5.3	70.407	F
2 - Little Common Road (A259)	735	123	509	17.24	926	0.794	731	911	2.8	3.6	18.406	C
3 - Cooden Sea Road	443	74	791	9.13	568	0.780	438	449	2.5	3.3	28.408	D
4 - Barnhorn Road (A259)	1049	175	278		1224	0.857	1041	951	4.1	5.4	19.723	C
5 - Chestnut Walk	79	13	1250		127	0.624	76	68	0.9	1.4	68.913	F

08:35 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	274	46	1109		330	0.831	275	176	5.3	5.2	66.932	F
2 - Little Common Road (A259)	703	117	501	16.48	931	0.755	704	882	3.6	3.4	16.585	C
3 - Cooden Sea Road	424	71	766	8.73	583	0.727	425	439	3.3	3.1	24.956	C
4 - Barnhorn Road (A259)	1003	167	269		1228	0.816	1005	922	5.4	5.1	17.395	C
5 - Chestnut Walk	76	13	1208		145	0.523	76	66	1.4	1.2	55.403	F

08:45 - 08:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	240	40	985		380	0.630	260	157	5.2	1.9	33.502	D
2 - Little Common Road (A259)	614	102	461	14.40	955	0.643	623	784	3.4	1.9	11.459	B
3 - Cooden Sea Road	370	62	685	7.62	632	0.586	379	399	3.1	1.6	15.791	C
4 - Barnhorn Road (A259)	876	146	240		1244	0.704	890	824	5.1	2.7	11.174	B
5 - Chestnut Walk	66	11	1072		202	0.327	70	59	1.2	0.5	28.907	D

08:55 - 09:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	781		463	0.413	198	124	1.9	0.7	14.001	B
2 - Little Common Road (A259)	490	82	358	11.50	1013	0.484	496	621	1.9	1.0	7.259	A
3 - Cooden Sea Road	295	49	542	6.09	718	0.412	300	312	1.6	0.8	9.378	A
4 - Barnhorn Road (A259)	699	117	190		1271	0.550	707	652	2.7	1.3	6.857	A
5 - Chestnut Walk	53	9	851		295	0.179	55	47	0.5	0.2	15.524	C

09:05 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	771		468	0.409	191	122	0.7	0.7	13.133	B
2 - Little Common Road (A259)	490	82	349	11.50	1013	0.484	490	613	1.0	1.0	7.107	A
3 - Cooden Sea Road	295	49	534	6.09	720	0.410	296	306	0.8	0.8	9.116	A
4 - Barnhorn Road (A259)	699	117	187		1272	0.550	699	642	1.3	1.3	6.659	A
5 - Chestnut Walk	53	9	841		299	0.176	53	46	0.2	0.2	15.037	C

Assessment Drawing No. 180300-003F - 2025 Baseline Flows, PM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	33.88	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

The slope and intercept shown above include any corrections and adjustments.

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
D4	2025 Baseline Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓

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 (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	169	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	724	100.000
3 - Cooden Sea Road		ONE HOUR	✓	518	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1161	100.000
5 - Chestnut Walk		ONE HOUR	✓	54	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONE HOUR]	17.00
3 - Cooden Sea Road	[ONE HOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	14	114	41	0
	2 - Little Common Road (A259)	3	0	33	650	38
	3 - Cooden Sea Road	101	123	0	267	27
	4 - Barnhorn Road (A259)	12	889	177	0	83
	5 - Chestnut Walk	0	19	9	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From	1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk	
1 - Pear Tree Lane	0	2	1	7	0	
2 - Little Common Road (A259)	17	0	1	5	1	
3 - Cooden Sea Road	2	2	0	8	0	
4 - Barnhorn Road (A259)	4	5	7	0	8	
5 - Chestnut Walk	0	1	0	6	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.61	32.35	1.4	D	138	207
2 - Little Common Road (A259)	0.73	13.26	2.6	B	591	887
3 - Cooden Sea Road	0.90	44.88	6.2	E	423	635
4 - Barnhorn Road (A259)	0.97	40.69	12.9	E	948	1423
5 - Chestnut Walk	0.50	63.50	0.9	F	44	66

Main Results for each time segment

16:45 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	114	19	829		444	0.257	112	77	0.0	0.3	11.053	B
2 - Little Common Road (A259)	490	82	244	11.50	1069	0.458	484	697	0.0	0.9	6.392	A
3 - Cooden Sea Road	350	58	507	6.09	734	0.477	345	222	0.0	0.9	9.559	A
4 - Barnhorn Road (A259)	785	131	194		1268	0.619	775	657	0.0	1.7	7.557	A
5 - Chestnut Walk	37	6	871		286	0.128	36	99	0.0	0.1	14.774	B

16:55 - 17:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	114	19	840		439	0.260	114	78	0.3	0.4	11.340	B
2 - Little Common Road (A259)	490	82	248	11.50	1071	0.457	490	706	0.9	0.9	6.475	A
3 - Cooden Sea Road	350	58	513	6.09	734	0.477	350	225	0.9	0.9	9.837	A
4 - Barnhorn Road (A259)	785	131	197		1267	0.620	785	665	1.7	1.7	7.872	A
5 - Chestnut Walk	37	6	882		281	0.130	36	100	0.1	0.2	15.162	C

17:05 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	143	24	1040		358	0.400	141	97	0.4	0.7	16.877	C
2 - Little Common Road (A259)	613	102	307	14.40	1038	0.591	610	874	0.9	1.5	8.715	A
3 - Cooden Sea Road	439	73	638	7.62	660	0.665	433	279	0.9	1.9	16.202	C
4 - Barnhorn Road (A259)	983	164	244		1242	0.792	972	826	1.7	3.6	13.499	B
5 - Chestnut Walk	46	8	1092		193	0.237	45	124	0.2	0.3	24.856	C