
1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the off-site improvements associated with a residential development on land north of Water Lane in Angmering.
- 1.1.2 This report focuses on the proposed three arm roundabout at the A280/Water Lane junction to replace the existing uncontrolled priority junction on the outskirts of Angmering.
- 1.1.3 The RSA was carried out at the request of i-Transport.
- 1.1.4 GM Traffic Consultants Ltd carried out the Audit on 31st January 2018. The Auditors were:

Mark Barrett Highways England Cert. of Comp.
Ian Medd MCIHT FSoRSA
- 1.1.5 The Audit Team is independent of the project design team and has undertaken RSA, on alternative designs relating to the development. They have had no involvement with the design of the project.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.7 Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.
- 1.1.8 The Audit consisted of a desk top study and site visit, which was carried out on Wednesday 31st January 2018 between 10:30 and 11:30. Traffic flows were light, weather cloudy and the road surface was damp.
- 1.1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.1.10 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the LHA on final completion.

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

Drawing No.	Rev	Title
TW/MC/ITB9105-024 TN	A	Road Safety Audit Brief
Figure T1	-	Site Location Plan
ITB9105-GA-100	-	A280/Water Lane Proposed Roundabout Improvements
ITB9105-GA-111	B	A280/Water Lane Proposed Roundabout Improvements Design Check Review Sheet 1 of 4
ITB9105-GA-112	-	A280/Water Lane Proposed Roundabout Improvements Design Check Review Sheet 2 of 4
ITB9105-GA-113	A	A280/Water Lane Proposed Roundabout Improvements Design Check Review Sheet 3 of 4
ITB9105-GA-114	-	A280/Water Lane Proposed Roundabout Improvements Design Check Review Sheet 4 of 4

- 2.2 The Audit Team have been notified of a Departure from Standard.
- 2.3 Forward visibility on Water Lane is below DMRB standard which requires 215m for de-restricted approach. Actual speeds on Water Lane in the location where vehicles leave the 30mph are significantly lower than national speed limit, with eastbound wet weather speeds measured at 38.6mph and westbound wet weather speeds measured at 36.0mph. A stopping sight distance of 120m is achievable, which is in line with the guidance set out in Design Manual for Roads and Bridges for a design speed of 70kph.
- 2.4 The Audit Team raises no concerns with the DfS.

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT

3.1 PROBLEM

LOCATION: A280 southbound approach

SUMMARY: Misleading direction arrows

Drivers are advised by the lane arrows that they may proceed south on to the A280 in both lanes although there is only one lane on the southbound exit. This may result in late lane changes or braking on the circulatory carriageway increasing the risk of collisions.

RECOMMENDATION

Revise lane markings to reflect layout.

3.2 PROBLEM

LOCATION: A280 southbound approach

SUMMARY: Drivers may fail to assimilate new road layout

Drivers approaching the roundabout from the north may misinterpret the new road layout and attempt to follow the previous alignment which may lead to them striking the kerb and losing control.

RECOMMENDATION

Provide measures to highlight the new road alignment.

3.3 PROBLEM

LOCATION: Water Lane approach to roundabout

SUMMARY: Risk of head-on collisions

Drivers waiting to turn right from Water Lane on to the A280 may, particularly during peak periods, encroach into the right turn lane to pass queuing traffic in the nearside lane. This will increase the risk of collisions with vehicles turning right into the development.

RECOMMENDATION

Extend the splitter island to deter this manoeuvre.

4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in accordance with HD 19/15.

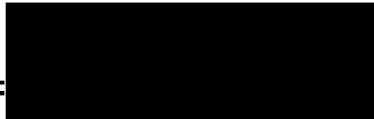
AUDIT TEAM LEADER

Mark Barrett

GM Traffic Consultants Ltd



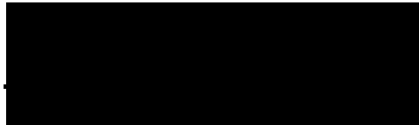
Signed:



AUDIT TEAM MEMBER

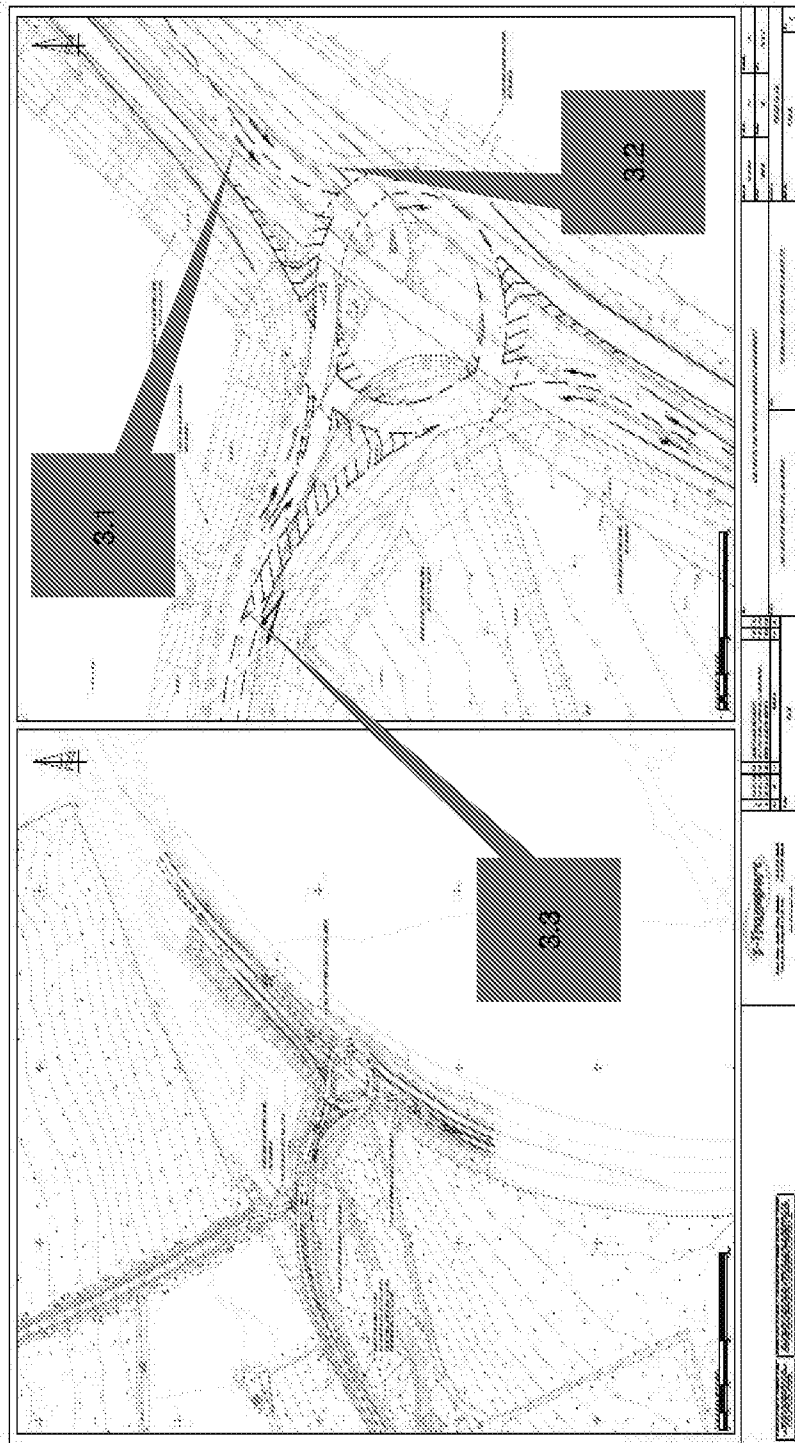
Ian Medd MCIHT FSoRSA

Signed:



Date: 31 January 2018

APPENDIX A: LOCATION PLAN



APPENDIX B: DESIGNERS RESPONSE

Auditors: Mark Barrett (Team Leader) and Ian Medd (Team Member).

Scheme: Land North of Water Lane, Angmering - Proposed Improvement to A280/Water Lane Junction

Date Audit Completed: 31 January 2018

This response is to an Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1	YES	YES	
3.2	YES	YES	
3.3	YES	YES	

APPENDIX C: HIGHWAY AUTHORITY RESPONSE

Principal Engineer's Statement:

**Addendum Road Safety Audit for Land North of Water Lane, Angmering
Proposed Improvement to A280/Water Lane Junction**

I certify that I have considered the items that have arisen in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.

..... Date.....

Principal Engineer

Chief Engineer's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer

Road Safety Audit – Stage 1
Land North of Water Lane, Angmering
Proposed Improvement to A280/Water Lane Junction

Land South of Water Lane, Angmering – Proposed A280/Water Lane Roundabout– RSA 1 Designer's Response			
Item	Problem	Recommendation	Designers Response
A1.1	<i>(Location: A280 Southbound approach)</i> Summary: Misleading direction arrows Drivers are advised by the lane arrows that they may proceed south on to the A280 in both lanes although there is only one lane on the southbound exit. This may result in late lane changes or braking on the circulatory carriageway increasing the risk of collisions. There is no hazard paving at the start/termination of the shared facility. This may increase the risk of pedestrian/cycle collisions as pedestrians, in particular those with visual impairments, may be unaware they are entering a shared footway. <i>Location: A280 Southbound approach)</i>	Revise lane markings to reflect layout	Lane markings have been revised to reflect layout
A1.2	Summary: Drivers may fail to assimilate new road layout Drivers approaching the roundabout from the north may misinterpret the new road layout and attempt to follow the previous alignment which may lead to them striking the kerb and losing control. <i>Location: Water Lane approach to roundabout)</i> Summary: Risk of head-on collisions Drivers waiting to turn right from Water Lane on to the A280 may, particularly during peak periods, encroach into the right turn lane to pass queuing traffic in the nearside lane. This will increase the risk of collisions with vehicles turning right into the development.	Provide measures to highlight the new road alignment	Bollards to be provided to highlight the new road alignment
A1.3		Extend the splitter island to deter this manoeuvre	Splitter island has been extended to deter vehicles waiting to turn right from Water Lane being able to encroach into the right turn lane.

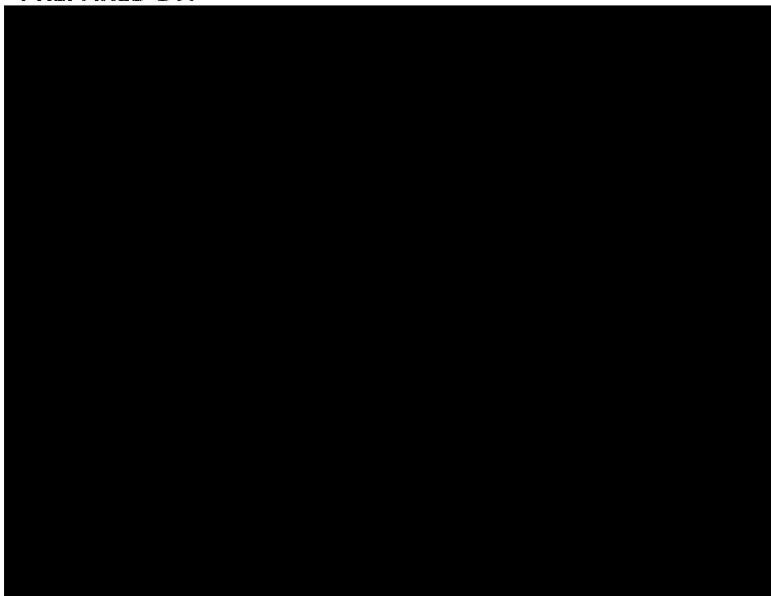
ROAD SAFETY AUDIT RESPONSE REPORT

A280 / A27 / TITNORE LANE ROUNDABOUT PROPOSED IMPROVEMENTS ROAD WIDENING OPTION

STAGE 1

15 September 2017

PREPARED BY:



AUTHORISATION SHEET

Project: A280 / A27 / Titnore Lane Roundabout Proposed Improvements – Road Widening Option

Report Title: Stage 1 Road Safety Audit Response Report

PREPARED BY:

Name: Tim Wall

Position: Design Team Leader

Signed: 

Organisation: i-Transport for Wates Developments

Date: 15 September 2017

APPROVED BY:

Name: David Bowie

Position: Project Sponsor

Signed: 

Organisation: Highways England

Date: 29 September 2017

Route Number: A27

Road Name: A280 Water Lane

Scheme: A280 / A27 / Titnore Lane Roundabout Proposed Improvements – Road Widening Option

Road Safety Audit: Stage 1

1 INTRODUCTION

- 1.1 This Road Safety Audit Response Report relates to the Stage 1 Road Safety Audit Report for the A280 / A27 / Titnore Lane Roundabout Proposed Improvements – Road Widening Option. The Stage 1 Road Safety Audit was produced by GM Traffic Consultants Ltd (reference Proposed Improvement Scheme A280/A27/Titnore Lane Roundabout) and is dated 9 September 2017.
- 1.2 The Stage 1 Road Safety Audit Brief comprised of a set of the preliminary design drawings, a summary of the general details of the scheme including traffic flows, 5-year crash data, traffic data, and Audit Reports, assembled by the Design Team for the scheme and sent by the Overseeing Organisation Project Sponsor (David Bowie) to the Road Safety Audit Team for examination. The Road Safety Audit Report was prepared and issued by the Road Safety Audit Team Leader, Mark Barrett of GM Traffic Consultants Ltd.
- 1.3 The proposed scheme comprises widening of the A280 South West Arm to provide a two-lane entry and extended flared approach. This is to address the impacts of the additional traffic generated by the land parcels proposed north and south of Water Lane.
- 1.4 The Design Team have carefully considered the problems and recommendations in the Stage 1 Road Safety Audit Report. This Road Safety Audit Response Report includes all of the problems and recommendations raised by the Road Safety Audit Team, as well as the Design Team's response to these issues.

2 KEY PERSONNEL

2.1 Overseeing Organisation

Project Sponsor – David Bowie (Highways England)

2.2 Road Safety Audit Team

Road Safety Audit Team Leader – Mark Barrett (GM Traffic Consultants Ltd)

Road Safety Audit Team Member – Ian Medd (GM Traffic Consultants Ltd)

2.3 Design Organisation

Design Team Leader – Tim Wall (i-Transport LLP)

Design Team Member – Matthew Craddy (i-Transport LLP)

Design Team Member – Stephen Hunt (i-Transport LLP)

Design Team Member – Amelia Boron (i-Transport)

3 ITEMS RAISED AT THE STAGE 1 ROAD SAFETY AUDIT

3.1 GENERAL

3.1.1 No Problems Raised

3.2 LOCAL ALIGNMENT

3.2.1 No Problems Raised

3.3 JUNCTIONS

3.3.1 PROBLEM

Location: A280 Water Lane approach to roundabout.

Summary: Risk of overtaking vehicles striking articulated HGVs.

The proposed widening scheme will allow cars and other smaller vehicles to access lane two on the approach to the roundabout alongside articulated HGVs in lane one. The swept path analysis shows HGV's will require to enter lane 2 when positioning themselves on the approach to the roundabout in order to access the first or second exits from the roundabout. This will increase the risk of side swipe type collisions or vehicles in lane 2 having to brake heavily risking tail end shunts when the HGV swings into lane two to manoeuvre for access.

Recommendation:

The widening should be reduced the on the approach such that other traffic is not provided with an opportunity to gain access to lane two prior to articulated HGVs taking up position on approach to the roundabout. Alternatively, the entry should be realigned to allow cars to pass safely.

Design Team Response:

Agreed – To reduce the risk of side swipe type collisions the approach has been realigned to allow cars to pass an HGV's safely. This has been provided on Drawing ITB9105-GA-024 Rev B. Swept path analysis has been undertaken to demonstrate that a car can pass an HGV safely as illustrated in Drawing ITB9105-GA-035 Rev A.

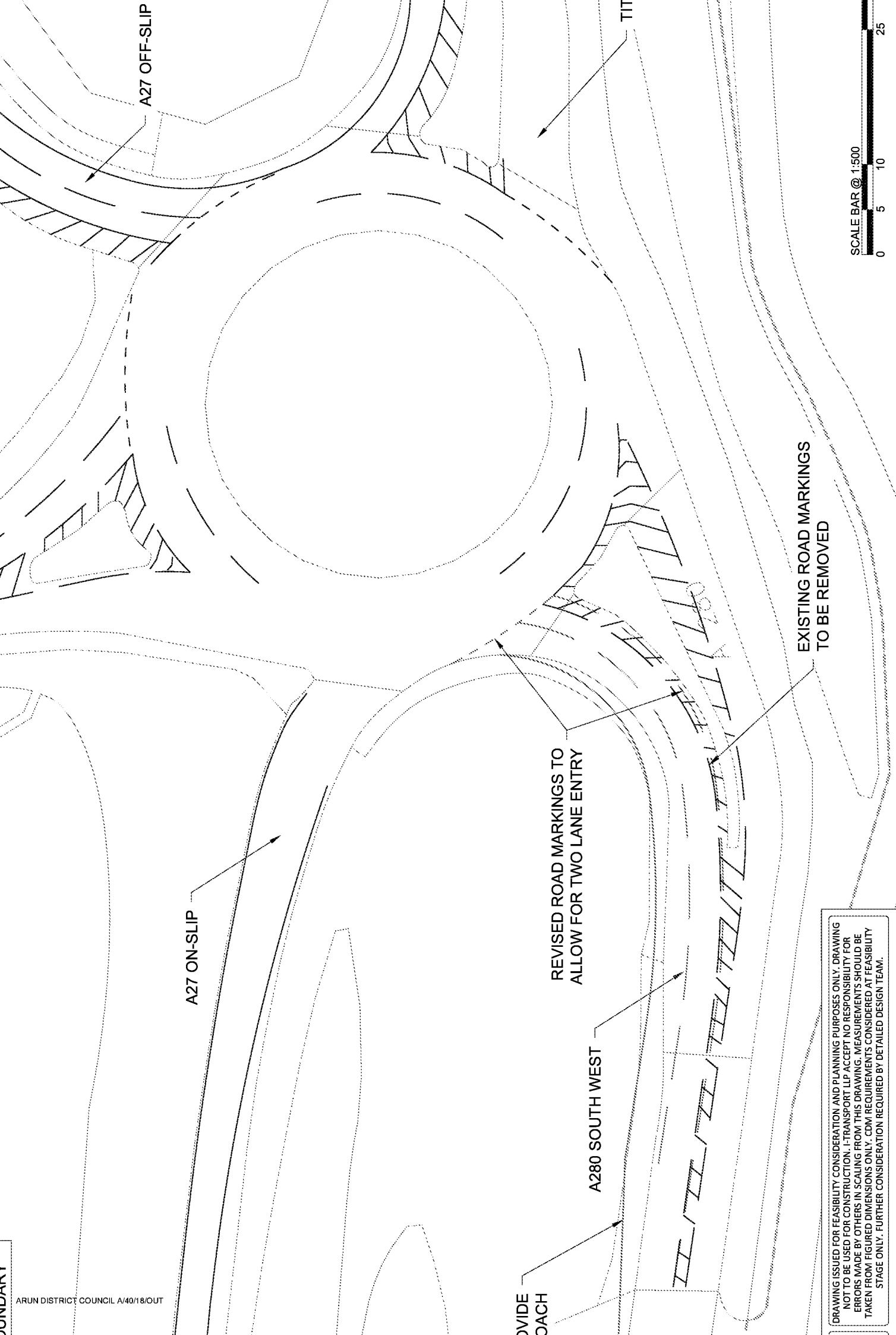
3.4 ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

3.4.1 No Problems Raised

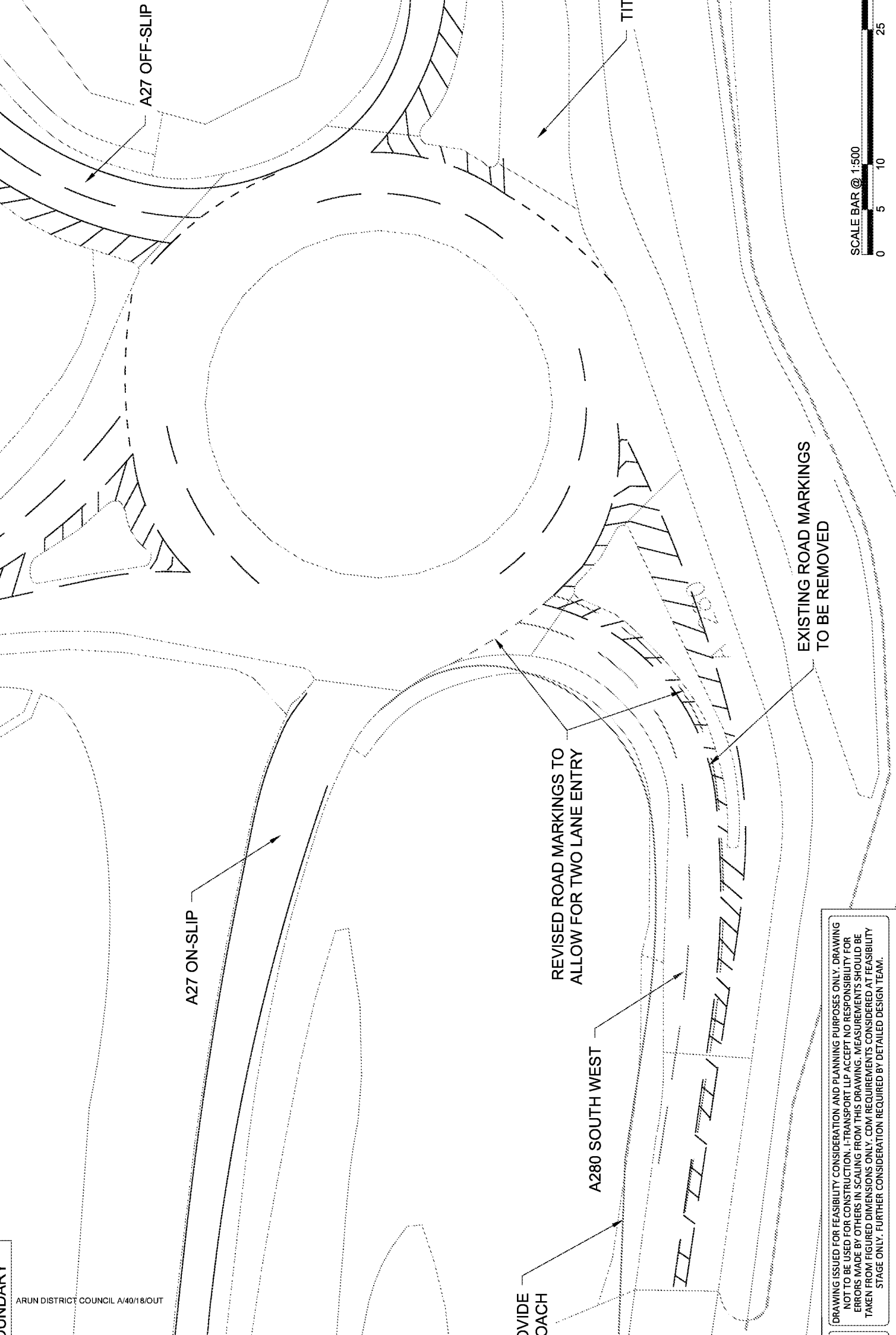
3.5 NON-MOTORISED USER PROVISION

3.5.1 No Problems Raised

APPENDIX A PROBLEM LOCATIONS PLAN FROM STAGE 1 ROAD SAFETY AUDIT



**APPENDIX B UPDATED DESIGN DRAWINGS TO REFLECT DESIGNERS
RESPONSE**

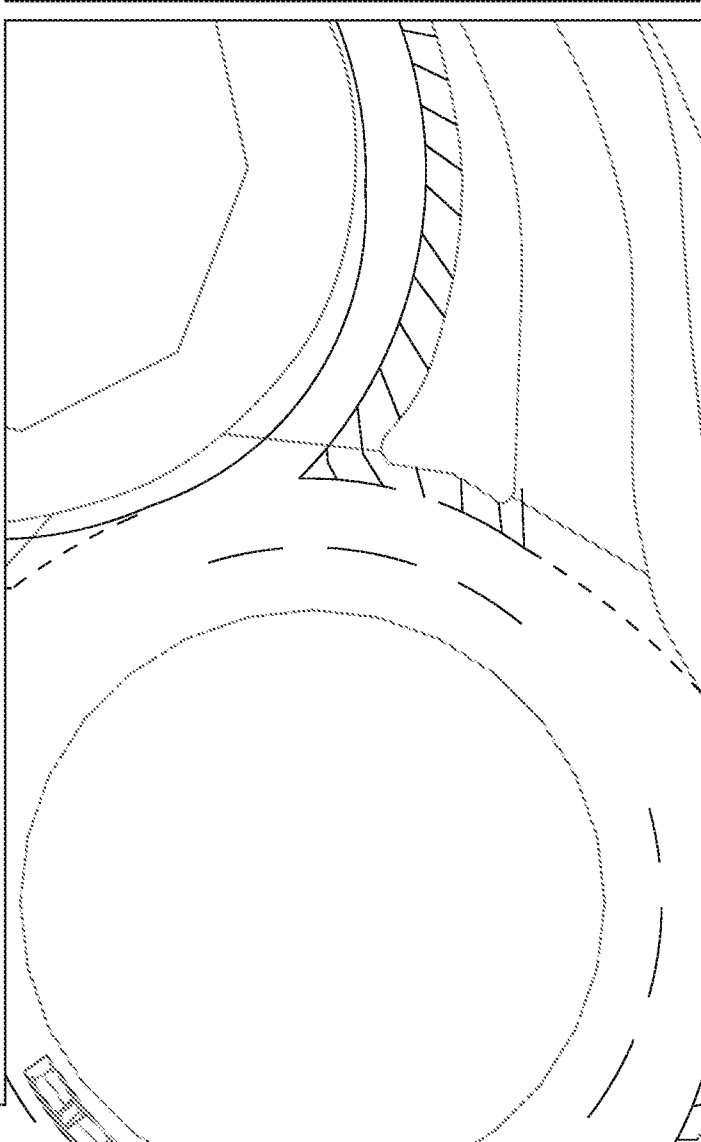
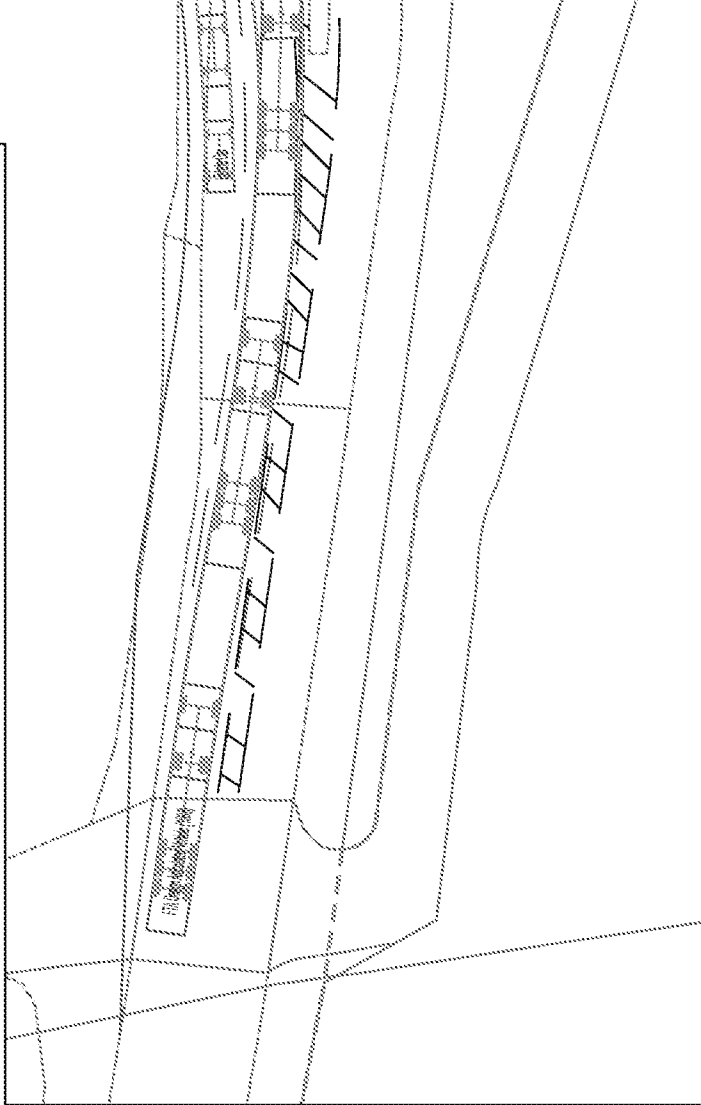
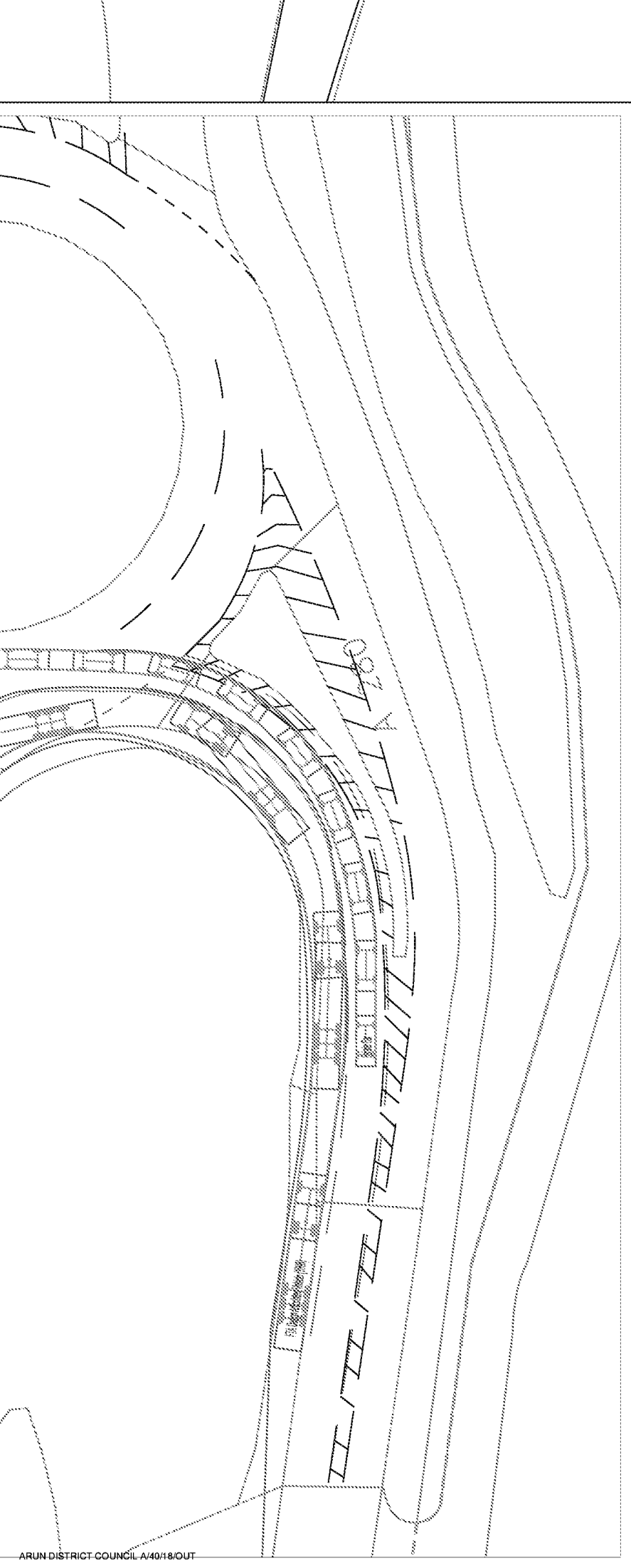


DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPTS NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.

ARUN DISTRICT COUNCIL A/40/18/OUT		B		12	09	17	MC	UPDATED AS PER STAGE 1		TW	TW	TITLE:		CHECKED:	1500	PROPOSED IMPROVEMENT SCHEME TO A280 / A27 / TITMORE LANE ROUNDABOUT	
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APPENDIX C

SWEPT PATH ANALYSIS TO REFLECT LATEST DESIGN

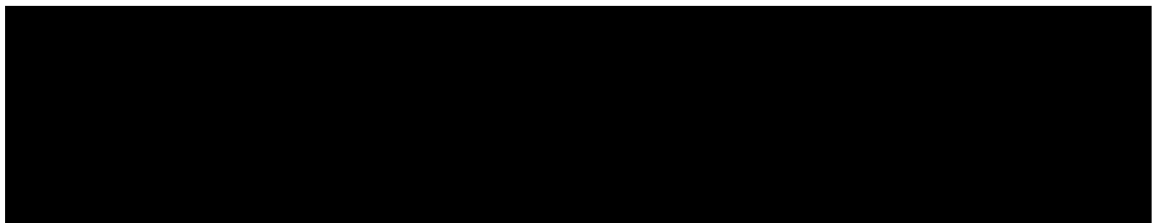


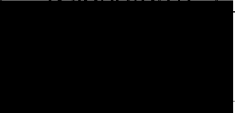
**LAND SOUTH OF WATER LANE
ANGMERING**

**A280/A27/TITNORE LANE ROUNDABOUT
PROPOSED IMPROVEMENTS
ROAD WIDENING OPTION**

STAGE 1 ROAD SAFETY AUDIT

SEPTEMBER 2017



Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
FINAL	Mark Barrett	Ian Medd		9 September 2017
Designer's Response				
Authority's Response				
Audit Response				

Client:
i-Transport

Engineer:
GM
Traffic Consultants Ltd

Date: 9 September 2017

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APPENDIX A Location Plan

1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the off-site improvements associated with a residential development on land north and south of Water Lane in Angmering.
- 1.1.2 This report focuses on proposals to widen the A280 south west arm to provide a two lane entry, extended flare approach and reinstatement of the footway following the widening.
- 1.1.3 The RSA was carried out at the request of i-Transport on behalf of Highways England (overseeing organisation).
- 1.1.4 GM Traffic Consultants Ltd carried out the Audit between 20th March and 9th September 2017. The Auditors approved by David Bowie (Highways England Project Sponsor) were:

Mark Barrett Highways England Cert. of Comp.
Ian Medd MCIHT FSoRSA
- 1.1.5 The Audit Team is independent of the project design team and has undertaken a RSA 1 on an alternative design. They have had no involvement with the design of the project.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.7 Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.
- 1.1.8 The Audit consisted of a desk top study and site visit, which was carried out by the Audit Team together on Thursday 23rd March 2017 between 10:30 and 11:00. Traffic flows were light, weather cloudy with sunny intervals and the road surface was dry.
- 1.1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.1.10 The response to the RSA should be formally recorded by the Designer and reported to the Audit Project Sponsor for consideration and approval. When completed a copy of the Response Report should be returned to the Design Team Designer and the RSA Team so that a record of the Audit process is contained in

the *As Built* design pack to be provided and retained by the overseeing organisation on final completion.

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation which formed the complete Audit Brief as approved by David Bowie (Highways England Project Sponsor).

Drawing No.	Rev	Title
MC/SJH/ITB 9105-13 TN	-	Road Safety Audit Brief
ITB 9105/GA/024	A	Proposed Improvement Scheme to A280/A27/Titnore Lane Roundabout
ITB 9105/GA/035	-	Swept Path Analysis Max Legal Articulated Vehicle
ITB 9105/GA/036	-	Swept Path Analysis Large Rigid Vehicle & Estate Car

- 2.2 The information supplied in the Audit Brief was considered by the Audit Team to be acceptable for the purposes of undertaking the Audit requested.
- 2.3 The personal injury collision (PIC) record for the roundabout has been provided. This reveals there have been in the five year period ending 31 March 2016. There were six reported PIC's during this period of which two occurred on the A280 approach to the roundabout resulting in slight injuries.
- 2.4 The Audit Team have not been notified of any Departure from Standards (DfS).

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT

3.1 GENERAL

3.2.1 No issues have been raised.

3.2 LOCAL ALIGNMENT

3.2.1 No issues have been raised.

3.3 JUNCTIONS

3.3.1 PROBLEM

LOCATION: A280 Water Lane approach to roundabout

SUMMARY: Risk of overtaking vehicles striking articulated HGVs

The proposed widening scheme will allow cars and other smaller vehicles to access lane two on the approach to the roundabout alongside articulated HGVs in lane one. The swept path analysis shows HGV's will require to enter lane 2 when positioning themselves on the approach to the roundabout in order to access the first or second exits from the roundabout. This will increase the risk of side swipe type collisions or vehicles in lane 2 having to brake heavily risking tail end shunts when the HGV swings into lane two to manoeuvre for access.

RECOMMENDATION

The widening should be reduced on the approach such that other traffic is not provided with an opportunity to gain access to lane two prior to articulated HGVs taking up position on approach to the roundabout. Alternatively the entry should be realigned to allow cars to pass safely.

3.4 ROAD SIGNS, CARRIAGEWAY MARKINGS & LIGHTING

3.4.1 No issues have been raised.

3.5 NON-MOTORISED USER PROVISION

3.5.1 No issues have been raised.

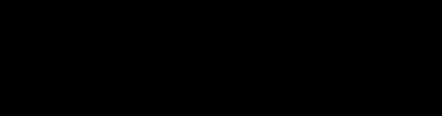
4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in accordance with HD 19/15.

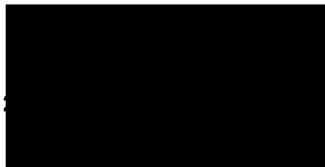
AUDIT TEAM LEADER

Mark Barrett

GM Traffic Consultants Ltd



Signed:



AUDIT TEAM MEMBER

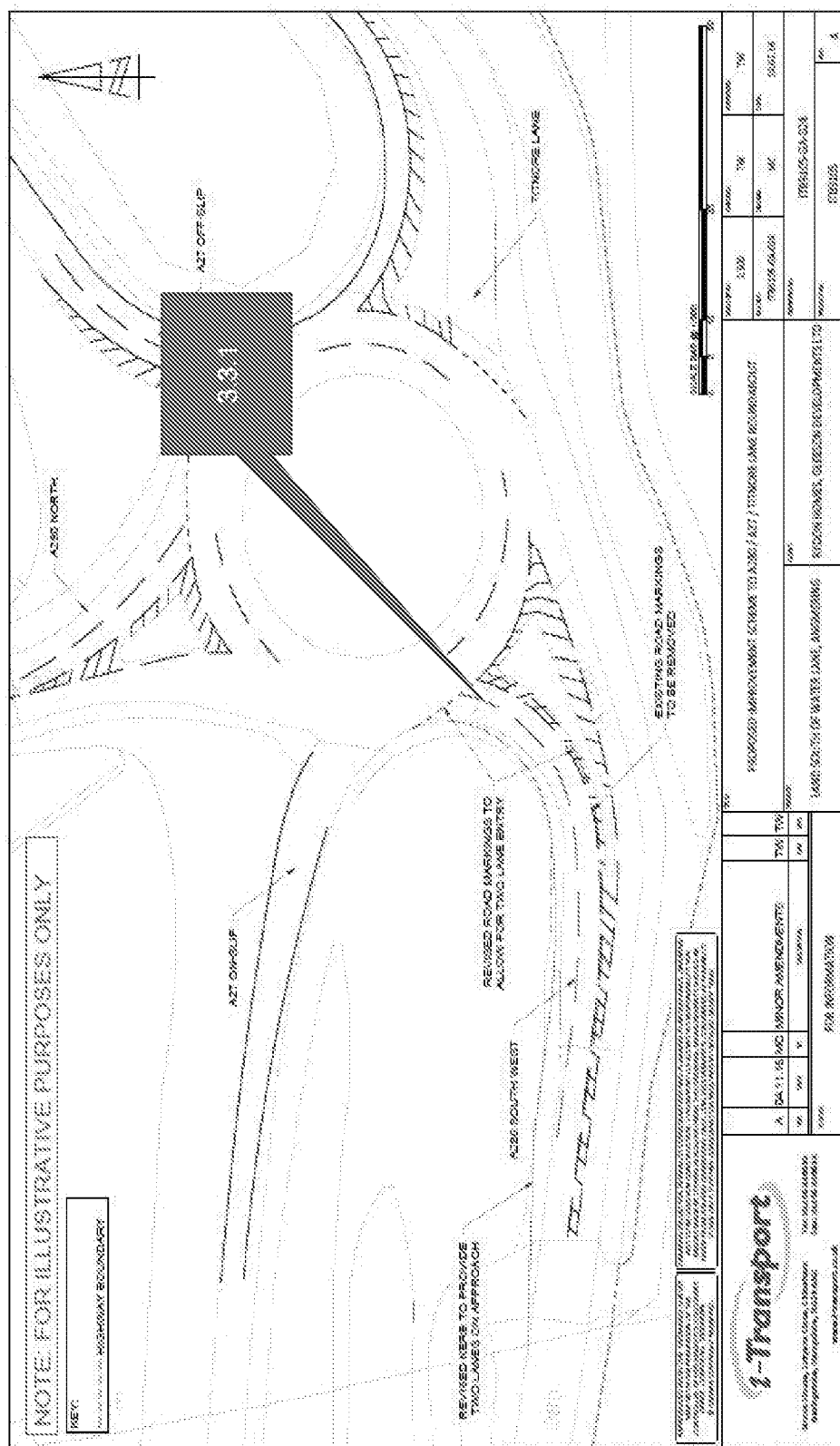
Ian Medd MCIHT FSoRSA

Signed:



Date: 9 September 2017

APPENDIX A: LOCATION PLAN



Road Safety Audit -- Stage 1
Land South of Water Lane, Arngmering
Proposed Improvement Scheme
A280/A27/Tinore Lane Roundabout



TRAFFIC CONSULTANTS LTD

8 February 2018

Mr. M Craddy
i-Transport

Ref: MB/2018/Angmering

Dear Mr. Craddy

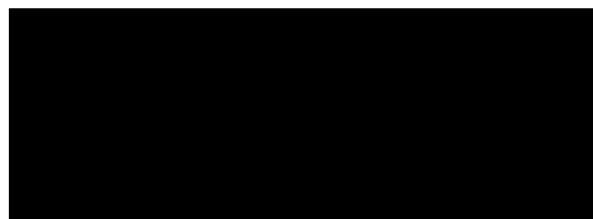
LAND NORTH OF WATER LANE, ANGMERING

Thank you for your Designers Response and revised drawings relating to the following three Road Safety Audits (RSA'S):

- Proposed Vehicular Access to the Site – Dated 31 January 2018;
- Proposed Vehicular Access on Dappers Lane and Bus Gate to North of Dappers Lane – Dated 31 January 2018; and
- A280/Water Lane Proposed Improvements – Dated 31 January 2018

I can confirm that the issues raised in our original RSA's have been addressed and we have no issues with the latest design.

Yours sincerely



Mark Barrett

GM Traffic Consultants Ltd.

APPENDIX H TRICS OUTPUT – EMPLOYMENT

Calculation Reference: AUDIT-236601-160706-0758

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : A - OFFICE

VEHICLESSelected regions and areas:

02 SOUTH EAST	
ES EAST SUSSEX	1 days
SC SURREY	2 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
WY WEST YORKSHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 186 to 9368 (units: sqm)
 Range Selected by User: 186 to 135750 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 26/11/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday 3 days
 Thursday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 4 days
 Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre) 4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 4

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:Use Class:

B1	4 days
----	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	2 days
No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	ES-02-A-11	HOUSING COMPANY	EAST SUSSEX
	THE SIDINGS		
	ORE VALLEY		
	HASTINGS		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	186 sqm	
	Survey date: <i>TUESDAY</i>	17/11/15	Survey Type: <i>MANUAL</i>
2	SC-02-A-15	ACCOUNTANTS	SURREY
	BOXGROVE ROAD		
	GUILDFORD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	1896 sqm	
	Survey date: <i>TUESDAY</i>	05/10/10	Survey Type: <i>MANUAL</i>
3	SC-02-A-17	PHARMACEUTICALS	SURREY
	ST GEORGE'S AVENUE		
	THE HEATH		
	WEYBRIDGE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	10293 sqm	
	Survey date: <i>TUESDAY</i>	18/10/11	Survey Type: <i>MANUAL</i>
4	WY-02-A-03	OFFICE	WEST YORKSHIRE
	VICTORIA ROAD		
	HEADINGLEY		
	LEEDS		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	2696 sqm	
	Survey date: <i>THURSDAY</i>	17/06/10	Survey Type: <i>MANUAL</i>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	3487	0.129	4	3487	0.007	4	3487	0.136
07:30 - 08:00	4	3487	0.566	4	3487	0.043	4	3487	0.609
08:00 - 08:30	4	3487	0.667	4	3487	0.100	4	3487	0.767
08:30 - 09:00	4	3487	0.581	4	3487	0.108	4	3487	0.689
09:00 - 09:30	4	3487	0.531	4	3487	0.079	4	3487	0.610
09:30 - 10:00	4	3487	0.308	4	3487	0.093	4	3487	0.401
10:00 - 10:30	4	3487	0.194	4	3487	0.086	4	3487	0.280
10:30 - 11:00	4	3487	0.072	4	3487	0.122	4	3487	0.194
11:00 - 11:30	4	3487	0.086	4	3487	0.093	4	3487	0.179
11:30 - 12:00	4	3487	0.086	4	3487	0.108	4	3487	0.194
12:00 - 12:30	4	3487	0.079	4	3487	0.208	4	3487	0.287
12:30 - 13:00	4	3487	0.172	4	3487	0.186	4	3487	0.358
13:00 - 13:30	4	3487	0.186	4	3487	0.136	4	3487	0.322
13:30 - 14:00	4	3487	0.186	4	3487	0.151	4	3487	0.337
14:00 - 14:30	4	3487	0.108	4	3487	0.108	4	3487	0.216
14:30 - 15:00	4	3487	0.086	4	3487	0.158	4	3487	0.244
15:00 - 15:30	4	3487	0.050	4	3487	0.072	4	3487	0.122
15:30 - 16:00	4	3487	0.029	4	3487	0.194	4	3487	0.223
16:00 - 16:30	4	3487	0.093	4	3487	0.359	4	3487	0.452
16:30 - 17:00	4	3487	0.079	4	3487	0.445	4	3487	0.524
17:00 - 17:30	4	3487	0.050	4	3487	0.724	4	3487	0.774
17:30 - 18:00	4	3487	0.022	4	3487	0.402	4	3487	0.424
18:00 - 18:30	4	3487	0.029	4	3487	0.344	4	3487	0.373
18:30 - 19:00	4	3487	0.014	4	3487	0.122	4	3487	0.136
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			4.403			4.448			8.851

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	186 - 9368 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

APPENDIX I CENSUS ANALYSIS AND DISTRIBUTION MODEL

[illegible]

Station	Location	Depth (m)	Temperature (°C)	Salinity (PSU)	Density (kg/m³)	Speed (m/s)	Direction (°)	Time (h:m:s)	Notes
1	Water Lane 1	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 1
2	Water Lane 2	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 2
3	Water Lane 3	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 3
4	Water Lane 4	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 4
5	Water Lane 5	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 5
6	Water Lane 6	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 6
7	Water Lane 7	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 7
8	Water Lane 8	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 8
9	Water Lane 9	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 9
10	Water Lane 10	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 10
11	Water Lane 11	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 11
12	Water Lane 12	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 12
13	Water Lane 13	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 13
14	Water Lane 14	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 14
15	Water Lane 15	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 15
16	Water Lane 16	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 16
17	Water Lane 17	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 17
18	Water Lane 18	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 18
19	Water Lane 19	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 19
20	Water Lane 20	20.0	14.0	35.0	1020.0	0.0	0	10:00:00	Water Lane 20

Employment Distribution Model

Origin		100%	Primary	%	Secondary	%	Tertiary	%	Quaternary	%
Main	001 Arundel	0.90%	Water Lane E	0.90%	A259 N	0.90%	A27 W	0.90%	-	-
	002 Angmering H	8.18%	Water Lane W	4.13%	Arundel Road	3.07%				
			Water Lane E	4.13%	Deppers Lane	3.07%				
	003 Eastbargate, Baniham and Walberton	1.51%	Water Lane E	1.51%	A280 N	1.51%	A27 W	1.51%	-	-
	004 Angmering S	14.00%	Water Lane E	7.00%	A259 N	7.00%	A280 N (Bridge)	3.50%	A27 E	3.50%
			Water Lane W	7.00%	Weavers Hill/High St/Roundstone Ln	3.50%	Roundstone Ln S of A259	3.50%		
	005 Yapton	1.67%	Water Lane W	1.67%	Station Road S	1.67%	A259 W	1.67%	A259 W	1.67%
	007 Plustington	8.23%	Water Lane W	8.23%	Station Road S	8.23%	A259 W	4.12%	Mif Lane S	4.12%
	008 Foning	2.08%	Water Lane W	2.08%	Weavers Hill/High St/Roundstone Ln	2.08%	A259 E	2.08%	A27 E	2.08%
	Liphroampton 009+011+004	14.23%	Water Lane W	14.23%	Station Road S	14.23%	A259 W	14.23%	A259 W	14.23%
Search Area	010 East Preston	5.54%	Water Lane W	5.54%	Weavers Hill/High St/Roundstone Ln	5.54%	Roundstone Ln S of A259	5.54%	-	-
	Regnor Regle 012-015	4.81%	Water Lane W	4.81%	Station Road S	4.81%	A259 W	4.81%	A259 W	4.81%
	Adur	3.68%	Water Lane E	3.68%	A280 N	3.68%	A280 N (Bridge)	3.68%	A27 E	3.68%
	Brighton and Hove	3.88%	Water Lane E	3.88%	A280 N	3.88%	A280 N (Bridge)	3.88%	A27 E	3.88%
	Chichester	1.70%	Water Lane E	1.70%	A280 N	1.70%	A27 W	1.70%	-	-
	Crawley	0.16%	Water Lane E	0.16%	A280 N	0.16%	A280 N (Bridge)	0.16%	A280 Long Furong N	0.16%
	Havant	0.32%	Water Lane E	0.32%	A280 N	0.32%	A27 W	0.32%	-	-
	Horsham	2.78%	Water Lane E	2.78%	A280 N	2.78%	A280 N (Bridge)	2.78%	A280 Long Furong N	2.78%
	Leaves	0.32%	Water Lane E	0.32%	A259 N	0.32%	A280 N (Bridge)	0.32%	A27 E	0.32%
	Mif Lane	0.50%	Water Lane E	0.50%	A259 N	0.50%	A280 N (Bridge)	0.50%	A27 E	0.50%
Worthing		25.59%	Water Lane E	25.59%	A280 N	25.59%	A280 N (Bridge)	8.53%	A27 E	8.53%
Total		100.00%		100.00%		100.00%		93.80%		93.80%

0.5

Primary	%	Secondary	%	Tertiary	%	Quaternary	%
Water Lane E	52.39%	A280 N	52.39%	A280 N (Bridge)	25.34%	A27 E	22.41%
						A280 Long Furong N	5.01%
				A27 W	7.92%	-	-
				Titonore Lane S	17.06%	Titonore Lane S	17.06%
Water Lane W	47.61%	Station Road S	32.96%	A259 W	24.74%	Mif Lane S	4.12%
				B2140 S	7.62%	A259 W	0.00%
				A259 E	2.08%	A259 W	20.63%
		Weavers Hill/High St/Roundstone Ln	11.12%	Roundstone Ln S of A259	9.04%	-	-
						-	-
						-	-
		Arundel Road		2.07%			
Dappa's Lane		2.07%					
Total	100.00%		100.00%		93.9%		93.9%

APPENDIX J JUNCTIONS 9 OUTPUTS

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.0.2.5947 © Copyright TRL Limited, 2017	
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Filename: A27 North Roundabout + mitigation.j9

Path: T:\Projects\9000 Series Project Numbers\9105ITB Land at Angmering, Arun Distr, W Susx\Tech\Assessments\Northern Site\Updated Jan 2018

Report generation date: 19/01/2018 16:22:40

»2017 Baseline, AM Peak
 »2017 Baseline, PM Peak
 »2021 Growth, AM Peak
 »2021 Growth, PM Peak
 »2021+Committed, AM Peak
 »2021+Committed, PM Peak
 »2021+Committed+Development, AM Peak
 »2021+Committed+Development, PM Peak
 »2031+Committed+Development, AM Peak
 »2031+Committed+Development, PM Peak
 »2021+Committed+Development + Sensitivity, AM Peak
 »2021+Committed+Development + Sensitivity, PM Peak
 »2031+Committed+Development + Sensitivity, AM Peak
 »2031+Committed+Development + Sensitivity, PM Peak

Summary of junction performance

	AM Peak				PM Peak			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline								
1 - A280 Long Furlong	1.0	4.31	0.49	A	1.2	3.75	0.54	A
3 - A280 South	1.1	3.99	0.53	A	0.6	3.07	0.37	A
4 - A27 Off-Slip	2.0	9.65	0.67	A	0.4	4.20	0.30	A
5 - Arundel Road	0.1	6.82	0.12	A	0.1	4.51	0.07	A
2021 Growth								
1 - A280 Long Furlong	1.1	4.61	0.52	A	1.3	3.98	0.57	A
3 - A280 South	1.2	4.16	0.55	A	0.6	3.13	0.39	A
4 - A27 Off-Slip	2.4	11.10	0.72	B	0.4	4.32	0.31	A
5 - Arundel Road	0.2	7.32	0.14	A	0.1	4.62	0.07	A
2021+Committed								
1 - A280 Long Furlong	1.1	4.78	0.53	A	1.5	4.35	0.60	A
3 - A280 South	1.4	4.52	0.58	A	0.7	3.23	0.41	A
4 - A27 Off-Slip	2.7	12.38	0.74	B	0.5	4.54	0.33	A
5 - Arundel Road	0.2	7.87	0.15	A	0.1	4.81	0.07	A
2021+Committed+Development								
1 - A280 Long Furlong	1.2	5.07	0.55	A	1.6	4.63	0.62	A
3 - A280 South	1.6	4.90	0.62	A	0.8	3.35	0.43	A
4 - A27 Off-Slip	3.2	14.29	0.77	B	0.5	4.76	0.35	A
5 - Arundel Road	0.2	8.50	0.16	A	0.1	5.01	0.07	A
2031+Committed+Development								
1 - A280 Long Furlong	1.6	6.24	0.62	A	2.2	5.69	0.69	A
3 - A280 South	2.0	5.66	0.67	A	0.9	3.59	0.47	A
4 - A27 Off-Slip	5.9	23.01	0.88	C	0.7	5.30	0.40	A
5 - Arundel Road	0.2	10.34	0.18	B	0.1	5.48	0.08	A
2021+Committed+Development + Sensitivity								
1 - A280 Long Furlong	1.2	5.21	0.56	A	1.7	4.81	0.63	A
3 - A280 South	1.7	5.18	0.64	A	0.8	3.42	0.44	A
4 - A27 Off-Slip	3.5	15.51	0.79	C	0.6	4.87	0.36	A
5 - Arundel Road	0.2	8.91	0.17	A	0.1	5.11	0.07	A
2031+Committed+Development + Sensitivity								
1 - A280 Long Furlong	1.7	6.46	0.63	A	2.3	5.97	0.70	A
3 - A280 South	2.2	5.99	0.69	A	0.9	3.66	0.48	A
4 - A27 Off-Slip	6.8	25.83	0.90	D	0.7	5.44	0.41	A
5 - Arundel Road	0.2	10.89	0.20	B	0.1	5.60	0.09	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	A27 Roundabout North
Location	Angmering
Site number	ITB9105
Date	19/05/2016
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\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	perTimeSegment	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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15
D7	2021+Committed	AM Peak	DIRECT	08:00	09:00	60	15
D8	2021+Committed	PM Peak	DIRECT	17:00	18:00	60	15
D9	2021+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15
D10	2021+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15
D15	2031+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15
D16	2031+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15
D17	2021+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D18	2021+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15
D19	2031+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D20	2031+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017 Baseline, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	5.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A280 Long Furlong	
2	A27 On Slip	
3	A280 South	
4	A27 Off-Slip	
5	Arundel Road	

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 - A280 Long Furlong	3.65	8.40	62.0	45.0	60.0	20.0	
2 - A27 On Slip							✓
3 - A280 South	3.65	8.10	14.0	37.0	60.0	12.0	
4 - A27 Off-Slip	3.65	6.60	30.0	15.0	60.0	44.0	
5 - Arundel Road	3.65	6.30	6.5	25.0	60.0	45.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1 - A280 Long Furlong	0.695	600.439
2 - A27 On Slip		
3 - A280 South	0.618	481.273
4 - A27 Off-Slip	0.535	417.497
5 - Arundel Road	0.493	348.221

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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
08:00 - 08:15	From	1 - A280 Long Furlong	0.00	4.00	162.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	184.00	48.00	0.00	5.00
		4 - A27 Off-Slip	46.00	6.00	132.00	0.00
		5 - Arundel Road	4.00	0.00	2.00	0.00

Demand (Veh/TS)

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
08:15 - 08:30	From	1 - A280 Long Furlong	0.00	3.00	153.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	160.00	42.00	0.00	6.00
		4 - A27 Off-Slip	46.00	6.00	76.00	0.00
		5 - Arundel Road	1.00	4.00	6.00	0.00

Demand (Veh/TS)

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
08:30 - 08:45	From	1 - A280 Long Furlong	0.00	5.00	196.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	123.00	123.00	0.00	4.00
		4 - A27 Off-Slip	42.00	7.00	96.00	0.00
		5 - Arundel Road	4.00	1.00	6.00	0.00

Demand (Veh/TS)

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
08:45 - 09:00	From	1 - A280 Long Furlong	0.00	6.00	139.00	2.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	174.00	58.00	0.00	5.00
		4 - A27 Off-Slip	41.00	9.00	83.00	0.00
		5 - Arundel Road	9.00	1.00	10.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.49	4.31	1.0	A
2 - A27 On Slip				
3 - A280 South	0.53	3.99	1.1	A
4 - A27 Off-Slip	0.67	9.65	2.0	A
5 - Arundel Road	0.12	6.82	0.1	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	166.00	186.29	438.49	0.379	165.39	0.6	3.289	A
2 - A27 On Slip		293.97						
3 - A280 South	237.00	0.00	473.88	0.500	236.01	1.0	3.768	A
4 - A27 Off-Slip	184.00	236.01	273.43	0.673	182.01	2.0	9.652	A
5 - Arundel Road	6.00	413.04	137.80	0.044	5.95	0.0	6.825	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	156.00	134.96	473.28	0.330	156.11	0.5	2.837	A
2 - A27 On Slip		236.03						
3 - A280 South	208.00	0.00	473.75	0.439	208.20	0.8	3.393	A
4 - A27 Off-Slip	128.00	208.20	285.50	0.448	129.17	0.8	5.798	A
5 - Arundel Road	11.00	331.37	179.25	0.061	10.98	0.1	5.348	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	201.00	232.31	408.75	0.492	200.53	1.0	4.313	A
2 - A27 On Slip		297.25						
3 - A280 South	250.00	0.00	474.63	0.527	249.69	1.1	3.995	A
4 - A27 Off-Slip	145.00	249.69	265.68	0.546	144.64	1.2	7.413	A
5 - Arundel Road	11.00	390.32	149.86	0.073	10.99	0.1	6.480	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	147.00	161.42	453.62	0.324	147.48	0.5	2.943	A
2 - A27 On Slip		234.61						
3 - A280 South	237.00	1.99	472.16	0.502	237.09	1.0	3.832	A
4 - A27 Off-Slip	133.00	239.08	269.81	0.493	133.20	1.0	6.599	A
5 - Arundel Road	20.00	365.29	162.33	0.123	19.94	0.1	6.317	A

2017 Baseline, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	3.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	9.00	241.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	141.00	32.00	0.00	0.00	0.00
	4 - A27 Off-Slip	36.00	4.00	50.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	8.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	11.00	210.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	102.00	44.00	0.00	0.00	5.00
	4 - A27 Off-Slip	40.00	1.00	47.00	0.00	0.00
	5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	275.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	97.00	39.00	0.00	0.00	9.00
	4 - A27 Off-Slip	43.00	7.00	35.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	10.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	236.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	100.00	41.00	0.00	0.00	11.00
	4 - A27 Off-Slip	31.00	1.00	50.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.54	3.75	1.2	A
2 - A27 On Slip				
3 - A280 South	0.37	3.07	0.6	A
4 - A27 Off-Slip	0.30	4.20	0.4	A
5 - Arundel Road	0.07	4.51	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	250.00	96.58	521.47	0.479	249.09	0.9	3.293	A
2 - A27 On Slip		297.85						
3 - A280 South	173.00	0.00	465.24	0.372	172.41	0.6	3.066	A
4 - A27 Off-Slip	90.00	172.41	303.48	0.297	89.58	0.4	4.200	A
5 - Arundel Road	14.00	261.99	213.49	0.066	13.93	0.1	4.509	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	222.00	100.02	519.46	0.427	222.16	0.8	3.030	A
2 - A27 On Slip		264.20						
3 - A280 South	151.00	1.00	466.68	0.324	151.11	0.5	2.852	A
4 - A27 Off-Slip	88.00	152.10	314.01	0.280	88.03	0.4	3.984	A
5 - Arundel Road	12.00	234.15	227.89	0.053	12.01	0.1	4.169	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	285.00	93.03	524.06	0.544	284.57	1.2	3.751	A
2 - A27 On Slip		321.60						
3 - A280 South	145.00	2.00	466.31	0.311	145.03	0.5	2.803	A
4 - A27 Off-Slip	85.00	147.02	315.07	0.270	85.02	0.4	3.913	A
5 - Arundel Road	13.00	221.06	234.33	0.055	13.00	0.1	4.066	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	243.00	103.95	516.47	0.471	243.29	0.9	3.297	A
2 - A27 On Slip		299.20						
3 - A280 South	152.00	2.00	466.50	0.326	151.97	0.5	2.861	A
4 - A27 Off-Slip	83.00	153.97	314.46	0.264	83.01	0.4	3.888	A
5 - Arundel Road	12.00	222.99	233.78	0.051	12.00	0.1	4.059	A

2021 Growth, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	6.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	4.00	168.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	192.00	50.00	0.00	0.00	5.00
	4 - A27 Off-Slip	48.00	6.00	138.00	0.00	0.00
	5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	159.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	166.00	43.00	0.00	0.00	6.00
	4 - A27 Off-Slip	48.00	6.00	79.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	204.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	128.00	128.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	100.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	145.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	181.00	60.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	87.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.52	4.61	1.1	A
2 - A27 On Slip				
3 - A280 South	0.55	4.16	1.2	A
4 - A27 Off-Slip	0.72	11.10	2.4	B
5 - Arundel Road	0.14	7.32	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	172.00	193.96	433.41	0.397	171.35	0.7	3.425	A
2 - A27 On Slip		305.62						
3 - A280 South	247.00	0.00	474.21	0.521	245.92	1.1	3.925	A
4 - A27 Off-Slip	192.00	245.92	268.45	0.715	189.60	2.4	11.103	B
5 - Arundel Road	6.00	430.54	128.97	0.047	5.95	0.0	7.316	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	162.00	139.23	470.48	0.344	162.13	0.5	2.919	A
2 - A27 On Slip		245.29						
3 - A280 South	215.00	0.00	474.08	0.454	215.24	0.8	3.479	A
4 - A27 Off-Slip	133.00	215.24	282.00	0.472	134.50	0.9	6.161	A
5 - Arundel Road	11.00	343.74	173.00	0.064	10.98	0.1	5.554	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	209.00	241.22	403.06	0.519	208.46	1.1	4.612	A
2 - A27 On Slip		309.12						
3 - A280 South	260.00	0.00	475.42	0.547	259.64	1.2	4.164	A
4 - A27 Off-Slip	150.00	259.64	260.89	0.575	149.58	1.3	8.054	A
5 - Arundel Road	11.00	405.21	142.55	0.077	10.98	0.1	6.840	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	153.00	169.45	448.41	0.341	153.54	0.5	3.057	A
2 - A27 On Slip		245.69						
3 - A280 South	246.00	1.99	472.56	0.521	246.10	1.1	3.976	A
4 - A27 Off-Slip	139.00	248.09	265.34	0.524	139.21	1.1	7.147	A
5 - Arundel Road	22.00	380.31	154.78	0.142	21.92	0.2	6.769	A

2021 Growth, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	3.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	252.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	147.00	33.00	0.00	0.00	0.00
	4 - A27 Off-Slip	37.00	4.00	52.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	8.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	12.00	219.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	106.00	46.00	0.00	0.00	5.00
	4 - A27 Off-Slip	41.00	1.00	49.00	0.00	0.00
	5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	287.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	101.00	40.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	36.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	246.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	104.00	42.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	52.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.57	3.98	1.3	A
2 - A27 On Slip				
3 - A280 South	0.39	3.13	0.6	A
4 - A27 Off-Slip	0.31	4.32	0.4	A
5 - Arundel Road	0.07	4.62	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	262.00	99.56	519.48	0.504	260.99	1.0	3.469	A
2 - A27 On Slip		310.74						
3 - A280 South	180.00	0.00	466.57	0.386	179.38	0.6	3.127	A
4 - A27 Off-Slip	93.00	179.38	300.32	0.310	92.55	0.4	4.323	A
5 - Arundel Road	14.00	271.93	208.67	0.067	13.93	0.1	4.620	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	232.00	104.02	516.79	0.449	232.19	0.8	3.163	A
2 - A27 On Slip		275.23						
3 - A280 South	157.00	1.00	468.02	0.335	157.12	0.5	2.897	A
4 - A27 Off-Slip	91.00	158.11	311.33	0.292	91.03	0.4	4.087	A
5 - Arundel Road	12.00	243.16	223.53	0.054	12.01	0.1	4.256	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	297.00	96.04	522.07	0.569	296.51	1.3	3.981	A
2 - A27 On Slip		335.55						
3 - A280 South	151.00	1.99	467.62	0.323	151.03	0.5	2.844	A
4 - A27 Off-Slip	88.00	153.02	312.37	0.282	88.02	0.4	4.011	A
5 - Arundel Road	14.00	229.07	230.44	0.061	13.99	0.1	4.157	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	253.00	107.95	513.77	0.492	253.33	1.0	3.461	A
2 - A27 On Slip		312.24						
3 - A280 South	158.00	2.00	467.79	0.338	157.97	0.5	2.904	A
4 - A27 Off-Slip	86.00	159.97	311.71	0.276	86.01	0.4	3.989	A
5 - Arundel Road	13.00	230.99	229.91	0.057	13.00	0.1	4.150	A

2021+Committed, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	6.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2021+Committed	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	4.00	172.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	206.00	55.00	0.00	0.00	5.00
	4 - A27 Off-Slip	48.00	6.00	138.00	0.00	0.00
	5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	162.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	180.00	49.00	0.00	0.00	6.00
	4 - A27 Off-Slip	48.00	6.00	79.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	208.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	142.00	133.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	100.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	148.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	195.00	66.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	87.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	0
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.53	4.78	1.1	A
2 - A27 On Slip				
3 - A280 South	0.58	4.52	1.4	A
4 - A27 Off-Slip	0.74	12.38	2.7	B
5 - Arundel Road	0.15	7.87	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	176.00	198.70	430.70	0.409	175.31	0.7	3.516	A
2 - A27 On Slip		309.37						
3 - A280 South	266.00	0.00	476.89	0.558	264.75	1.2	4.218	A
4 - A27 Off-Slip	192.00	264.75	259.55	0.740	189.31	2.7	12.380	B
5 - Arundel Road	6.00	449.08	120.33	0.050	5.95	0.1	7.865	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	165.00	145.41	466.85	0.353	165.14	0.5	2.986	A
2 - A27 On Slip		248.47						
3 - A280 South	235.00	0.00	476.92	0.493	235.27	1.0	3.727	A
4 - A27 Off-Slip	133.00	235.27	272.52	0.488	134.73	1.0	6.610	A
5 - Arundel Road	11.00	364.00	163.42	0.067	10.98	0.1	5.904	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	213.00	246.14	400.22	0.532	212.42	1.1	4.778	A
2 - A27 On Slip		313.05						
3 - A280 South	279.00	0.00	477.25	0.585	278.59	1.4	4.521	A
4 - A27 Off-Slip	150.00	278.59	251.77	0.596	149.53	1.4	8.760	A
5 - Arundel Road	11.00	424.11	133.55	0.082	10.98	0.1	7.342	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	156.00	175.49	444.90	0.351	156.58	0.5	3.127	A
2 - A27 On Slip		248.74						
3 - A280 South	266.00	1.99	475.12	0.560	266.11	1.3	4.309	A
4 - A27 Off-Slip	139.00	268.10	255.88	0.543	139.23	1.2	7.732	A
5 - Arundel Road	22.00	400.34	145.36	0.151	21.91	0.2	7.286	A

2021+Committed, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	4.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2021+Committed	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	265.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	151.00	39.00	0.00	0.00	0.00
	4 - A27 Off-Slip	37.00	4.00	58.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	8.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	12.00	232.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	110.00	52.00	0.00	0.00	5.00
	4 - A27 Off-Slip	41.00	1.00	55.00	0.00	0.00
	5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	300.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	105.00	47.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	42.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	260.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	108.00	49.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	58.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.60	4.35	1.5	A
2 - A27 On Slip				
3 - A280 South	0.41	3.23	0.7	A
4 - A27 Off-Slip	0.33	4.54	0.5	A
5 - Arundel Road	0.07	4.81	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	275.00	111.49	513.72	0.535	273.86	1.1	3.733	A
2 - A27 On Slip		329.57						
3 - A280 South	190.00	0.00	467.39	0.407	189.32	0.7	3.228	A
4 - A27 Off-Slip	99.00	189.32	296.40	0.334	98.50	0.5	4.537	A
5 - Arundel Road	14.00	287.82	200.87	0.070	13.93	0.1	4.811	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	245.00	116.03	510.91	0.480	245.21	0.9	3.389	A
2 - A27 On Slip		294.26						
3 - A280 South	167.00	1.00	468.73	0.356	167.12	0.6	2.984	A
4 - A27 Off-Slip	97.00	168.12	307.42	0.316	97.03	0.5	4.278	A
5 - Arundel Road	12.00	259.18	215.64	0.056	12.02	0.1	4.421	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	310.00	109.03	515.56	0.601	309.44	1.5	4.353	A
2 - A27 On Slip		354.47						
3 - A280 South	162.00	1.99	468.37	0.346	162.03	0.5	2.937	A
4 - A27 Off-Slip	94.00	164.02	307.94	0.305	94.02	0.4	4.209	A
5 - Arundel Road	14.00	246.06	222.02	0.063	13.99	0.1	4.326	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	267.00	120.95	507.28	0.526	267.37	1.1	3.759	A
2 - A27 On Slip		332.27						
3 - A280 South	169.00	2.00	468.51	0.361	168.97	0.6	3.004	A
4 - A27 Off-Slip	92.00	170.97	307.29	0.299	92.01	0.4	4.182	A
5 - Arundel Road	13.00	247.99	221.53	0.059	13.00	0.1	4.317	A

2021+Committed+Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	7.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	2021+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	4.00	175.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	211.00	64.00	0.00	0.00	5.00
	4 - A27 Off-Slip	48.00	6.00	141.00	0.00	0.00
	5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	165.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	185.00	58.00	0.00	0.00	6.00
	4 - A27 Off-Slip	48.00	6.00	83.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	211.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	147.00	142.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	103.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	151.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	200.00	75.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	90.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.55	5.07	1.2	A
2 - A27 On Slip				
3 - A280 South	0.62	4.90	1.6	A
4 - A27 Off-Slip	0.77	14.29	3.2	B
5 - Arundel Road	0.16	8.50	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	179.00	210.25	423.06	0.423	178.27	0.7	3.666	A
2 - A27 On Slip		314.96						
3 - A280 South	280.00	0.00	474.83	0.590	278.58	1.4	4.554	A
4 - A27 Off-Slip	195.00	278.58	252.00	0.774	191.81	3.2	14.286	B
5 - Arundel Road	6.00	465.42	111.71	0.054	5.94	0.1	8.505	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	168.00	158.71	458.02	0.367	168.15	0.6	3.105	A
2 - A27 On Slip		255.76						
3 - A280 South	249.00	0.00	474.74	0.525	249.31	1.1	3.999	A
4 - A27 Off-Slip	137.00	249.31	265.08	0.517	139.10	1.1	7.258	A
5 - Arundel Road	11.00	382.41	153.79	0.072	10.98	0.1	6.302	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	216.00	258.04	392.34	0.551	215.37	1.2	5.067	A
2 - A27 On Slip		318.94						
3 - A280 South	293.00	0.00	475.82	0.616	292.53	1.6	4.897	A
4 - A27 Off-Slip	153.00	292.53	244.38	0.626	152.46	1.6	9.730	A
5 - Arundel Road	11.00	440.99	124.80	0.088	10.98	0.1	7.906	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	159.00	187.54	436.97	0.364	159.63	0.6	3.254	A
2 - A27 On Slip		254.82						
3 - A280 South	280.00	1.99	473.15	0.592	280.11	1.5	4.667	A
4 - A27 Off-Slip	142.00	282.11	248.35	0.572	142.27	1.4	8.509	A
5 - Arundel Road	22.00	417.39	136.40	0.161	21.91	0.2	7.854	A

2021+Committed+Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	4.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	2021+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	269.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	154.00	47.00	0.00	0.00	0.00
	4 - A27 Off-Slip	37.00	4.00	62.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	8.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	12.00	236.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	114.00	60.00	0.00	0.00	5.00
	4 - A27 Off-Slip	41.00	1.00	59.00	0.00	0.00
	5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	304.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	108.00	55.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	46.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	264.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	112.00	57.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	62.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.62	4.63	1.6	A
2 - A27 On Slip				
3 - A280 South	0.43	3.35	0.8	A
4 - A27 Off-Slip	0.35	4.76	0.5	A
5 - Arundel Road	0.07	5.01	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	279.00	123.42	505.43	0.552	277.78	1.2	3.932	A
2 - A27 On Slip		337.45						
3 - A280 South	201.00	0.00	467.78	0.430	200.25	0.7	3.354	A
4 - A27 Off-Slip	103.00	200.25	291.02	0.354	102.46	0.5	4.760	A
5 - Arundel Road	14.00	302.71	193.39	0.072	13.92	0.1	5.012	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	249.00	128.03	502.55	0.495	249.23	1.0	3.555	A
2 - A27 On Slip		302.28						
3 - A280 South	179.00	1.00	469.03	0.382	179.13	0.6	3.107	A
4 - A27 Off-Slip	101.00	180.12	301.52	0.335	101.04	0.5	4.491	A
5 - Arundel Road	12.00	275.18	207.59	0.058	12.02	0.1	4.603	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	314.00	121.04	507.21	0.619	313.38	1.6	4.628	A
2 - A27 On Slip		362.42						
3 - A280 South	173.00	1.99	468.68	0.369	173.03	0.6	3.043	A
4 - A27 Off-Slip	98.00	175.03	302.67	0.324	98.03	0.5	4.399	A
5 - Arundel Road	14.00	261.08	214.48	0.065	13.99	0.1	4.488	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	271.00	132.94	498.94	0.543	271.40	1.2	3.963	A
2 - A27 On Slip		340.30						
3 - A280 South	181.00	2.00	468.78	0.386	180.96	0.6	3.126	A
4 - A27 Off-Slip	96.00	182.96	301.33	0.319	96.01	0.5	4.385	A
5 - Arundel Road	13.00	263.99	213.49	0.061	13.00	0.1	4.488	A

2031+Committed+Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	10.38	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D15	2031+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	190.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	228.00	68.00	0.00	0.00	6.00
	4 - A27 Off-Slip	52.00	7.00	153.00	0.00	0.00
	5 - Arundel Road	5.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	179.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	200.00	62.00	0.00	0.00	7.00
	4 - A27 Off-Slip	52.00	7.00	90.00	0.00	0.00
	5 - Arundel Road	1.00	5.00	7.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	229.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	159.00	154.00	0.00	0.00	5.00
	4 - A27 Off-Slip	47.00	8.00	112.00	0.00	0.00
	5 - Arundel Road	5.00	1.00	7.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	7.00	162.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	213.00	74.00	0.00	0.00	6.00
	4 - A27 Off-Slip	46.00	10.00	95.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.62	6.24	1.6	A
2 - A27 On Slip				
3 - A280 South	0.67	5.66	2.0	A
4 - A27 Off-Slip	0.88	23.01	5.9	C
5 - Arundel Road	0.18	10.34	0.2	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	195.00	225.11	413.07	0.472	194.11	0.9	4.094	A
2 - A27 On Slip		339.83						
3 - A280 South	302.00	0.00	474.78	0.636	300.28	1.7	5.108	A
4 - A27 Off-Slip	212.00	300.28	240.79	0.883	206.07	5.9	23.015	C
5 - Arundel Road	7.00	500.38	93.91	0.075	6.92	0.1	10.336	B

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	182.00	174.55	447.29	0.407	182.20	0.7	3.396	A
2 - A27 On Slip		279.57						
3 - A280 South	269.00	0.00	474.70	0.567	269.40	1.3	4.392	A
4 - A27 Off-Slip	149.00	269.40	254.79	0.585	153.49	1.4	9.262	A
5 - Arundel Road	13.00	415.89	136.69	0.095	12.98	0.1	7.272	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	235.00	280.53	377.33	0.623	234.07	1.6	6.243	A
2 - A27 On Slip		346.30						
3 - A280 South	318.00	0.00	475.78	0.668	317.34	2.0	5.656	A
4 - A27 Off-Slip	167.00	317.34	231.64	0.721	165.98	2.5	13.493	B
5 - Arundel Road	13.00	478.32	105.84	0.123	12.97	0.1	9.688	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	171.00	193.08	433.46	0.395	171.97	0.7	3.453	A
2 - A27 On Slip		272.48						
3 - A280 South	293.00	1.99	473.06	0.619	293.33	1.6	5.017	A
4 - A27 Off-Slip	151.00	293.32	241.48	0.625	151.74	1.7	10.113	B
5 - Arundel Road	23.00	439.08	125.29	0.184	22.92	0.2	8.784	A

2031+Committed+Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	4.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D16	2031+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	294.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	168.00	51.00	0.00	0.00	0.00
	4 - A27 Off-Slip	41.00	5.00	67.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	9.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	13.00	258.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	124.00	65.00	0.00	0.00	6.00
	4 - A27 Off-Slip	45.00	1.00	64.00	0.00	0.00
	5 - Arundel Road	5.00	2.00	7.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	9.00	333.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	118.00	59.00	0.00	0.00	10.00
	4 - A27 Off-Slip	49.00	8.00	50.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	12.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	288.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	122.00	61.00	0.00	0.00	13.00
	4 - A27 Off-Slip	35.00	1.00	67.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	13.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.69	5.69	2.2	A
2 - A27 On Slip				
3 - A280 South	0.47	3.59	0.9	A
4 - A27 Off-Slip	0.40	5.30	0.7	A
5 - Arundel Road	0.08	5.48	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	304.00	134.30	497.77	0.611	302.45	1.5	4.573	A
2 - A27 On Slip		368.05						
3 - A280 South	219.00	0.00	467.77	0.468	218.13	0.9	3.594	A
4 - A27 Off-Slip	113.00	218.13	281.59	0.401	112.34	0.7	5.298	A
5 - Arundel Road	15.00	330.46	179.16	0.084	14.91	0.1	5.477	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	272.00	139.05	494.86	0.550	272.32	1.2	4.051	A
2 - A27 On Slip		330.38						
3 - A280 South	195.00	1.00	469.05	0.416	195.16	0.7	3.287	A
4 - A27 Off-Slip	110.00	196.15	293.18	0.375	110.06	0.6	4.918	A
5 - Arundel Road	14.00	299.24	195.28	0.072	14.01	0.1	4.966	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	344.00	131.05	500.19	0.688	343.07	2.2	5.694	A
2 - A27 On Slip		396.13						
3 - A280 South	187.00	1.99	468.58	0.399	187.05	0.7	3.199	A
4 - A27 Off-Slip	107.00	189.04	295.40	0.362	107.03	0.6	4.780	A
5 - Arundel Road	15.00	284.10	202.67	0.074	15.00	0.1	4.795	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	296.00	142.94	491.97	0.602	296.63	1.5	4.622	A
2 - A27 On Slip		370.51						
3 - A280 South	196.00	2.00	468.73	0.418	195.95	0.7	3.299	A
4 - A27 Off-Slip	104.00	197.95	293.48	0.354	104.02	0.6	4.750	A
5 - Arundel Road	14.00	285.99	202.24	0.069	14.00	0.1	4.780	A

2021+Committed+Development + Sensitivity, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	7.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D17	2021+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
	08:00 - 08:15	0.00	4.00	176.00	0.00	0.00
		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		214.00	70.00	0.00	0.00	5.00
		48.00	6.00	142.00	0.00	0.00
		4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	167.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	189.00	63.00	0.00	0.00	6.00
	4 - A27 Off-Slip	48.00	6.00	83.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	212.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	151.00	148.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	103.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	153.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	204.00	80.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	91.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.56	5.21	1.2	A
2 - A27 On Slip				
3 - A280 South	0.64	5.18	1.7	A
4 - A27 Off-Slip	0.79	15.51	3.5	C
5 - Arundel Road	0.17	8.91	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	180.00	216.96	418.62	0.430	179.25	0.7	3.750	A
2 - A27 On Slip		316.71						
3 - A280 South	289.00	0.00	474.89	0.609	287.46	1.5	4.763	A
4 - A27 Off-Slip	196.00	287.46	247.48	0.792	192.50	3.5	15.514	C
5 - Arundel Road	6.00	474.99	106.94	0.056	5.94	0.1	8.907	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	170.00	163.94	454.57	0.374	170.15	0.6	3.165	A
2 - A27 On Slip		257.97						
3 - A280 South	258.00	0.00	474.80	0.543	258.33	1.2	4.165	A
4 - A27 Off-Slip	137.00	258.33	260.50	0.526	139.37	1.1	7.569	A
5 - Arundel Road	11.00	391.71	149.15	0.074	10.98	0.1	6.513	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	217.00	263.95	388.44	0.559	216.35	1.2	5.210	A
2 - A27 On Slip		319.88						
3 - A280 South	303.00	0.00	475.84	0.637	302.48	1.7	5.176	A
4 - A27 Off-Slip	153.00	302.48	239.32	0.639	152.41	1.7	10.283	B
5 - Arundel Road	11.00	450.88	119.88	0.092	10.98	0.1	8.261	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	161.00	193.57	433.02	0.372	161.65	0.6	3.323	A
2 - A27 On Slip		257.84						
3 - A280 South	289.00	1.99	473.19	0.611	289.14	1.6	4.895	A
4 - A27 Off-Slip	143.00	291.13	243.80	0.587	143.27	1.4	8.981	A
5 - Arundel Road	22.00	427.42	131.39	0.167	21.90	0.2	8.212	A

2021+Committed+Development + Sensitivity, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	4.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D18	2021+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
	17:00 - 17:15	0.00	10.00	273.00	0.00	0.00
		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		156.00	50.00	0.00	0.00	0.00
		37.00	4.00	64.00	0.00	0.00
		3.00	3.00	8.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	12.00	240.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	116.00	63.00	0.00	0.00	5.00
	4 - A27 Off-Slip	41.00	1.00	61.00	0.00	0.00
	5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	308.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	110.00	58.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	48.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	268.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	113.00	60.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	64.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.63	4.81	1.7	A
2 - A27 On Slip				
3 - A280 South	0.44	3.42	0.8	A
4 - A27 Off-Slip	0.36	4.87	0.6	A
5 - Arundel Road	0.07	5.11	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	283.00	128.38	501.96	0.564	281.72	1.3	4.063	A
2 - A27 On Slip		343.38						
3 - A280 South	206.00	0.00	467.90	0.440	205.22	0.8	3.416	A
4 - A27 Off-Slip	105.00	205.22	288.57	0.364	104.43	0.6	4.873	A
5 - Arundel Road	14.00	309.65	189.89	0.074	13.92	0.1	5.112	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	253.00	133.04	499.06	0.507	253.24	1.0	3.664	A
2 - A27 On Slip		308.29						
3 - A280 South	184.00	1.00	469.12	0.392	184.13	0.6	3.161	A
4 - A27 Off-Slip	103.00	185.13	299.07	0.344	103.04	0.5	4.593	A
5 - Arundel Road	12.00	282.19	204.06	0.059	12.02	0.1	4.686	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	318.00	126.04	503.72	0.631	317.35	1.7	4.814	A
2 - A27 On Slip		368.39						
3 - A280 South	178.00	1.99	468.77	0.380	178.03	0.6	3.097	A
4 - A27 Off-Slip	100.00	180.03	300.26	0.333	100.03	0.5	4.495	A
5 - Arundel Road	14.00	268.08	210.95	0.066	13.99	0.1	4.569	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	275.00	137.94	495.45	0.555	275.43	1.3	4.098	A
2 - A27 On Slip		346.33						
3 - A280 South	185.00	2.00	468.88	0.395	184.97	0.6	3.169	A
4 - A27 Off-Slip	98.00	186.97	299.38	0.327	98.01	0.5	4.469	A
5 - Arundel Road	13.00	269.99	210.47	0.062	13.00	0.1	4.559	A

2031+Committed+Development + Sensitivity, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	11.24	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D19	2031+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
	1 - A280 Long Furlong	0.00	5.00	191.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	231.00	74.00	0.00	0.00	6.00
	4 - A27 Off-Slip	52.00	7.00	154.00	0.00	0.00
	5 - Arundel Road	5.00	0.00	2.00	0.00	0.00

08:00 -
08:15

Demand (Veh/TS)

08:15 -
08:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	181.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	204.00	67.00	0.00	0.00	7.00
	4 - A27 Off-Slip	52.00	7.00	90.00	0.00	0.00
	5 - Arundel Road	1.00	5.00	7.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	230.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	162.00	160.00	0.00	0.00	5.00
	4 - A27 Off-Slip	47.00	8.00	112.00	0.00	0.00
	5 - Arundel Road	5.00	1.00	7.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	7.00	166.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	220.00	86.00	0.00	0.00	6.00
	4 - A27 Off-Slip	46.00	10.00	98.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.63	6.46	1.7	A
2 - A27 On Slip				
3 - A280 South	0.69	5.99	2.2	A
4 - A27 Off-Slip	0.90	25.83	6.8	D
5 - Arundel Road	0.20	10.89	0.2	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	196.00	231.36	408.94	0.479	195.09	0.9	4.191	A
2 - A27 On Slip		341.14						
3 - A280 South	311.00	0.00	474.84	0.655	309.13	1.9	5.372	A
4 - A27 Off-Slip	213.00	309.13	236.29	0.831	206.16	6.8	25.826	B
5 - Arundel Road	7.00	509.33	89.47	0.078	6.92	0.1	10.891	B

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	184.00	180.21	443.55	0.415	184.20	0.7	3.474	A
2 - A27 On Slip		282.19						
3 - A280 South	278.00	0.00	474.75	0.586	278.44	1.4	4.596	A
4 - A27 Off-Slip	149.00	278.44	250.22	0.596	154.33	1.5	9.886	A
5 - Arundel Road	13.00	425.77	131.75	0.099	12.98	0.1	7.574	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	236.00	286.39	373.47	0.632	235.03	1.7	6.456	A
2 - A27 On Slip		347.19						
3 - A280 South	327.00	0.00	475.81	0.687	326.28	2.2	5.988	A
4 - A27 Off-Slip	167.00	326.28	227.09	0.735	165.88	2.6	14.432	B
5 - Arundel Road	13.00	487.15	101.45	0.128	12.96	0.1	10.167	B

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	175.00	207.92	423.69	0.413	175.98	0.7	3.646	A
2 - A27 On Slip		279.37						
3 - A280 South	312.00	1.99	473.16	0.659	312.19	2.0	5.598	A
4 - A27 Off-Slip	154.00	314.18	232.01	0.664	154.59	2.0	11.719	B
5 - Arundel Road	23.00	460.78	114.45	0.201	22.90	0.2	9.819	A

2031+Committed+Development + Sensitivity, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	5.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D20	2031+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
	17:00 - 17:15	0.00	10.00	298.00	0.00	0.00
		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		170.00	54.00	0.00	0.00	0.00
		41.00	5.00	69.00	0.00	0.00
		3.00	3.00	9.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	13.00	262.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	126.00	68.00	0.00	0.00	6.00
	4 - A27 Off-Slip	45.00	1.00	66.00	0.00	0.00
	5 - Arundel Road	5.00	2.00	7.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	9.00	337.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	120.00	62.00	0.00	0.00	10.00
	4 - A27 Off-Slip	49.00	8.00	52.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	12.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	292.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	124.00	64.00	0.00	0.00	13.00
	4 - A27 Off-Slip	35.00	1.00	69.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	13.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.70	5.97	2.3	A
2 - A27 On Slip				
3 - A280 South	0.48	3.66	0.9	A
4 - A27 Off-Slip	0.41	5.44	0.7	A
5 - Arundel Road	0.09	5.60	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	308.00	139.26	494.31	0.623	306.37	1.6	4.749	A
2 - A27 On Slip		373.95						
3 - A280 South	224.00	0.00	467.88	0.479	223.09	0.9	3.663	A
4 - A27 Off-Slip	115.00	223.09	279.14	0.412	114.31	0.7	5.437	A
5 - Arundel Road	15.00	337.40	175.67	0.085	14.91	0.1	5.596	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	276.00	144.06	491.36	0.562	276.33	1.3	4.191	A
2 - A27 On Slip		336.40						
3 - A280 South	200.00	1.00	469.13	0.426	200.16	0.7	3.350	A
4 - A27 Off-Slip	112.00	201.16	290.71	0.385	112.06	0.6	5.041	A
5 - Arundel Road	14.00	306.25	191.75	0.073	14.01	0.1	5.063	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	348.00	136.05	496.70	0.701	347.00	2.3	5.971	A
2 - A27 On Slip		402.06						
3 - A280 South	192.00	1.99	468.66	0.410	192.05	0.7	3.256	A
4 - A27 Off-Slip	109.00	194.04	292.98	0.372	109.04	0.6	4.893	A
5 - Arundel Road	15.00	291.10	199.14	0.075	15.00	0.1	4.887	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	300.00	147.94	488.48	0.614	300.68	1.6	4.809	A
2 - A27 On Slip		376.55						
3 - A280 South	201.00	2.00	468.80	0.429	200.95	0.7	3.359	A
4 - A27 Off-Slip	106.00	202.95	290.99	0.364	106.02	0.6	4.867	A
5 - Arundel Road	14.00	292.99	198.72	0.070	14.00	0.1	4.872	A

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.0.2.5947 © Copyright TRL Limited, 2017	
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Filename: A27 North Roundabout.j9

Path: T:\Projects\9000 Series Project Numbers\9105ITB Land at Angmering, Arun Distr, W Susx\Tech\Assessments\Northern Site\Updated Jan 2018

Report generation date: 19/01/2018 16:11:49

»2017 Baseline, AM Peak
 »2017 Baseline, PM Peak
 »2021 Growth, AM Peak
 »2021 Growth, PM Peak
 »2021+Committed, AM Peak
 »2021+Committed, PM Peak
 »2021+Committed+Development, AM Peak
 »2021+Committed+Development, PM Peak
 »2031+Committed+Development, AM Peak
 »2031+Committed+Development, PM Peak
 »2021+Committed+Development + Sensitivity, AM Peak
 »2021+Committed+Development + Sensitivity, PM Peak
 »2031+Committed+Development + Sensitivity, AM Peak
 »2031+Committed+Development + Sensitivity, PM Peak

Summary of junction performance

	AM Peak				PM Peak			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline								
1 - A280 Long Furlong	1.7	7.83	0.64	A	2.2	7.04	0.69	A
3 - A280 South	1.1	3.99	0.53	A	0.6	3.07	0.37	A
4 - A27 Off-Slip	2.0	9.65	0.67	A	0.4	4.20	0.30	A
5 - Arundel Road	0.1	6.82	0.12	A	0.1	4.51	0.07	A
2021 Growth								
1 - A280 Long Furlong	2.0	8.78	0.68	A	2.6	7.86	0.73	A
3 - A280 South	1.2	4.16	0.55	A	0.6	3.13	0.39	A
4 - A27 Off-Slip	2.4	11.10	0.72	B	0.4	4.32	0.31	A
5 - Arundel Road	0.2	7.32	0.14	A	0.1	4.62	0.07	A
2021+Committed								
1 - A280 Long Furlong	2.2	9.34	0.69	A	3.2	9.32	0.77	A
3 - A280 South	1.4	4.52	0.58	A	0.7	3.23	0.41	A
4 - A27 Off-Slip	2.7	12.38	0.74	B	0.5	4.54	0.33	A
5 - Arundel Road	0.2	7.87	0.15	A	0.1	4.81	0.07	A
2021+Committed+Development								
1 - A280 Long Furlong	2.5	10.34	0.72	B	3.6	10.47	0.79	B
3 - A280 South	1.6	4.90	0.62	A	0.8	3.35	0.43	A
4 - A27 Off-Slip	3.2	14.29	0.77	B	0.5	4.76	0.35	A
5 - Arundel Road	0.2	8.50	0.16	A	0.1	5.01	0.07	A
2031+Committed+Development								
1 - A280 Long Furlong	4.1	15.56	0.82	C	6.4	16.71	0.88	C
3 - A280 South	2.0	5.66	0.67	A	0.9	3.59	0.47	A
4 - A27 Off-Slip	5.9	23.01	0.88	C	0.7	5.30	0.40	A
5 - Arundel Road	0.2	10.34	0.18	B	0.1	5.48	0.08	A
2021+Committed+Development + Sensitivity								
1 - A280 Long Furlong	2.6	10.86	0.73	B	4.0	11.33	0.81	B
3 - A280 South	1.7	5.18	0.64	A	0.8	3.42	0.44	A
4 - A27 Off-Slip	3.5	15.51	0.79	C	0.6	4.87	0.36	A
5 - Arundel Road	0.2	8.91	0.17	A	0.1	5.11	0.07	A
2031+Committed+Development + Sensitivity								
1 - A280 Long Furlong	4.4	16.66	0.83	C	7.3	18.71	0.90	C
3 - A280 South	2.2	5.99	0.69	A	0.9	3.66	0.48	A
4 - A27 Off-Slip	6.8	25.83	0.90	C	0.7	5.44	0.41	A
5 - Arundel Road	0.2	10.89	0.20	B	0.1	5.60	0.09	A

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	A27 Roundabout North
Location	Angmering
Site number	ITB9105
Date	19/05/2016
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\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	perTimeSegment	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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15
D7	2021+Committed	AM Peak	DIRECT	08:00	09:00	60	15
D8	2021+Committed	PM Peak	DIRECT	17:00	18:00	60	15
D9	2021+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15
D10	2021+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15
D15	2031+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15
D16	2031+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15
D17	2021+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D18	2021+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15
D19	2031+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D20	2031+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017 Baseline, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	6.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A280 Long Furlong	
2	A27 On Slip	
3	A280 South	
4	A27 Off-Slip	
5	Arundel Road	

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 - A280 Long Furlong	3.65	7.30	29.0	35.0	60.0	35.0	
2 - A27 On Slip							✓
3 - A280 South	3.65	8.10	14.0	37.0	60.0	12.0	
4 - A27 Off-Slip	3.65	6.60	30.0	15.0	60.0	44.0	
5 - Arundel Road	3.65	6.30	6.5	25.0	60.0	45.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1 - A280 Long Furlong	0.593	475.299
2 - A27 On Slip		
3 - A280 South	0.618	481.273
4 - A27 Off-Slip	0.535	417.497
5 - Arundel Road	0.493	348.221

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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	4.00	162.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	184.00	48.00	0.00	0.00	5.00
	4 - A27 Off-Slip	46.00	6.00	132.00	0.00	0.00
	5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	153.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	160.00	42.00	0.00	0.00	6.00
	4 - A27 Off-Slip	46.00	6.00	76.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	196.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	123.00	123.00	0.00	0.00	4.00
	4 - A27 Off-Slip	42.00	7.00	96.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	139.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	174.00	58.00	0.00	0.00	5.00
	4 - A27 Off-Slip	41.00	9.00	83.00	0.00	0.00
	5 - Arundel Road	9.00	1.00	10.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.64	7.83	1.7	A
2 - A27 On Slip				
3 - A280 South	0.53	3.99	1.1	A
4 - A27 Off-Slip	0.67	9.65	2.0	A
5 - Arundel Road	0.12	6.82	0.1	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	166.00	186.29	339.36	0.489	165.05	0.9	5.136	A
2 - A27 On Slip		293.63						
3 - A280 South	237.00	0.00	473.88	0.500	236.01	1.0	3.768	A
4 - A27 Off-Slip	184.00	236.01	273.43	0.673	182.01	2.0	9.652	A
5 - Arundel Road	6.00	413.04	137.80	0.044	5.95	0.0	6.825	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	156.00	134.96	369.05	0.423	156.21	0.7	4.232	A
2 - A27 On Slip		236.12						
3 - A280 South	208.00	0.00	473.75	0.439	208.20	0.8	3.393	A
4 - A27 Off-Slip	128.00	208.20	285.50	0.448	129.17	0.8	5.798	A
5 - Arundel Road	11.00	331.37	179.25	0.061	10.98	0.1	5.348	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	201.00	232.31	313.98	0.640	200.00	1.7	7.828	A
2 - A27 On Slip		296.73						
3 - A280 South	250.00	0.00	474.63	0.527	249.69	1.1	3.995	A
4 - A27 Off-Slip	145.00	249.69	265.68	0.546	144.64	1.2	7.413	A
5 - Arundel Road	11.00	390.32	149.86	0.073	10.99	0.1	6.480	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	147.00	161.42	352.43	0.417	148.02	0.7	4.423	A
2 - A27 On Slip		235.14						
3 - A280 South	237.00	1.99	472.16	0.502	237.09	1.0	3.829	A
4 - A27 Off-Slip	133.00	239.08	269.81	0.493	133.20	1.0	6.599	A
5 - Arundel Road	20.00	365.29	162.33	0.123	19.94	0.1	6.317	A

2017 Baseline, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	5.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15	From	To				
			1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip
		1 - A280 Long Furlong	0.00	9.00	241.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	141.00	32.00	0.00	0.00
		4 - A27 Off-Slip	36.00	4.00	50.00	0.00
		5 - Arundel Road	3.00	3.00	8.00	0.00

Demand (Veh/TS)

17:15 - 17:30	From	To				
			1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip
		1 - A280 Long Furlong	0.00	11.00	210.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	102.00	44.00	0.00	0.00
		4 - A27 Off-Slip	40.00	1.00	47.00	0.00
		5 - Arundel Road	4.00	2.00	6.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	275.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	97.00	39.00	0.00	0.00	9.00
	4 - A27 Off-Slip	43.00	7.00	35.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	10.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	236.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	100.00	41.00	0.00	0.00	11.00
	4 - A27 Off-Slip	31.00	1.00	50.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.69	7.04	2.2	A
2 - A27 On Slip				
3 - A280 South	0.37	3.07	0.6	A
4 - A27 Off-Slip	0.30	4.20	0.4	A
5 - Arundel Road	0.07	4.51	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	250.00	96.58	408.62	0.612	248.45	1.6	5.566	A
2 - A27 On Slip		297.23						
3 - A280 South	173.00	0.00	465.24	0.372	172.41	0.6	3.066	A
4 - A27 Off-Slip	90.00	172.41	303.48	0.297	89.58	0.4	4.200	A
5 - Arundel Road	14.00	261.99	213.49	0.066	13.93	0.1	4.509	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	222.00	100.02	406.90	0.546	222.34	1.2	4.885	A
2 - A27 On Slip		264.38						
3 - A280 South	151.00	0.99	466.68	0.324	151.11	0.5	2.852	A
4 - A27 Off-Slip	88.00	152.10	314.01	0.280	88.03	0.4	3.982	A
5 - Arundel Road	12.00	234.15	227.89	0.053	12.01	0.1	4.170	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	285.00	93.03	410.84	0.694	284.00	2.2	7.039	A
2 - A27 On Slip		321.05						
3 - A280 South	145.00	1.99	466.31	0.311	145.03	0.5	2.803	A
4 - A27 Off-Slip	85.00	147.02	315.08	0.270	85.02	0.4	3.912	A
5 - Arundel Road	13.00	221.06	234.33	0.055	13.00	0.1	4.066	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	243.00	103.95	404.36	0.601	243.68	1.5	5.626	A
2 - A27 On Slip		299.58						
3 - A280 South	152.00	2.00	466.50	0.326	151.97	0.5	2.861	A
4 - A27 Off-Slip	83.00	153.97	314.46	0.264	83.01	0.4	3.890	A
5 - Arundel Road	12.00	222.99	233.78	0.051	12.00	0.1	4.057	A

2021 Growth, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	7.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15		To					
	From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
		1 - A280 Long Furlong	0.00	4.00	168.00	0.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	192.00	50.00	0.00	0.00	5.00
		4 - A27 Off-Slip	48.00	6.00	138.00	0.00	0.00
		5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 - 08:30		To					
	From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
		1 - A280 Long Furlong	0.00	3.00	159.00	0.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	166.00	43.00	0.00	0.00	6.00
		4 - A27 Off-Slip	48.00	6.00	79.00	0.00	0.00
		5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	204.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	128.00	128.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	100.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	145.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	181.00	60.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	87.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.68	8.78	2.0	A
2 - A27 On Slip				
3 - A280 South	0.55	4.16	1.2	A
4 - A27 Off-Slip	0.72	11.10	2.4	B
5 - Arundel Road	0.14	7.32	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	172.00	193.96	335.03	0.513	170.96	1.0	5.453	A
2 - A27 On Slip		305.24						
3 - A280 South	247.00	0.00	474.21	0.521	245.92	1.1	3.925	A
4 - A27 Off-Slip	192.00	245.92	268.45	0.715	189.60	2.4	11.103	B
5 - Arundel Road	6.00	430.54	128.97	0.047	5.95	0.0	7.316	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	162.00	139.23	366.66	0.442	162.24	0.8	4.409	A
2 - A27 On Slip		245.40						
3 - A280 South	215.00	0.00	474.08	0.454	215.24	0.8	3.479	A
4 - A27 Off-Slip	133.00	215.24	282.00	0.472	134.50	0.9	6.161	A
5 - Arundel Road	11.00	343.74	173.00	0.064	10.98	0.1	5.554	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	209.00	241.22	309.13	0.676	207.77	2.0	8.775	A
2 - A27 On Slip		308.45						
3 - A280 South	260.00	0.00	475.42	0.547	259.64	1.2	4.164	A
4 - A27 Off-Slip	150.00	259.64	260.89	0.575	149.58	1.3	8.054	A
5 - Arundel Road	11.00	405.21	142.55	0.077	10.98	0.1	6.840	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	153.00	169.45	347.98	0.440	154.23	0.8	4.675	A
2 - A27 On Slip		246.36						
3 - A280 South	246.00	1.99	472.56	0.521	246.10	1.1	3.977	A
4 - A27 Off-Slip	139.00	248.09	265.34	0.524	139.21	1.1	7.149	A
5 - Arundel Road	22.00	380.31	154.78	0.142	21.92	0.2	6.769	A

2021 Growth, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	5.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15		To					
	From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
		1 - A280 Long Furlong	0.00	10.00	252.00	0.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	147.00	33.00	0.00	0.00	0.00
		4 - A27 Off-Slip	37.00	4.00	52.00	0.00	0.00
		5 - Arundel Road	3.00	3.00	8.00	0.00	0.00

Demand (Veh/TS)

17:15 - 17:30		To					
	From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
		1 - A280 Long Furlong	0.00	12.00	219.00	0.00	1.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	106.00	46.00	0.00	0.00	5.00
		4 - A27 Off-Slip	41.00	1.00	49.00	0.00	0.00
		5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	287.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	101.00	40.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	36.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	246.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	104.00	42.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	52.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.73	7.86	2.6	A
2 - A27 On Slip				
3 - A280 South	0.39	3.13	0.6	A
4 - A27 Off-Slip	0.31	4.32	0.4	A
5 - Arundel Road	0.07	4.62	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	262.00	99.56	406.93	0.644	260.23	1.8	6.063	A
2 - A27 On Slip		310.00						
3 - A280 South	180.00	0.00	466.57	0.386	179.38	0.6	3.127	A
4 - A27 Off-Slip	93.00	179.38	300.32	0.310	92.55	0.4	4.323	A
5 - Arundel Road	14.00	271.93	208.67	0.067	13.93	0.1	4.620	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	232.00	104.02	404.62	0.573	232.41	1.4	5.238	A
2 - A27 On Slip		275.45						
3 - A280 South	157.00	0.99	468.02	0.335	157.12	0.5	2.897	A
4 - A27 Off-Slip	91.00	158.11	311.33	0.292	91.03	0.4	4.085	A
5 - Arundel Road	12.00	243.16	223.53	0.054	12.01	0.1	4.256	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	297.00	96.04	409.14	0.726	295.79	2.6	7.855	A
2 - A27 On Slip		334.83						
3 - A280 South	151.00	1.99	467.62	0.323	151.03	0.5	2.844	A
4 - A27 Off-Slip	88.00	153.02	312.37	0.282	88.02	0.4	4.011	A
5 - Arundel Road	14.00	229.07	230.44	0.061	13.99	0.1	4.157	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	253.00	107.95	402.06	0.629	253.84	1.7	6.108	A
2 - A27 On Slip		312.73						
3 - A280 South	158.00	2.00	467.79	0.338	157.97	0.5	2.904	A
4 - A27 Off-Slip	86.00	159.97	311.71	0.276	86.01	0.4	3.989	A
5 - Arundel Road	13.00	230.99	229.91	0.057	13.00	0.1	4.149	A

2021+Committed, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	8.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2021+Committed	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
	1 - A280 Long Furlong	0.00	4.00	172.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	206.00	55.00	0.00	0.00	5.00
	4 - A27 Off-Slip	48.00	6.00	138.00	0.00	0.00
	5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

08:00 -
08:15

Demand (Veh/TS)

		To				
From		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
	1 - A280 Long Furlong	0.00	3.00	162.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	180.00	49.00	0.00	0.00	6.00
	4 - A27 Off-Slip	48.00	6.00	79.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

08:15 -
08:30

Demand (Veh/TS)

08:30 -
08:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	208.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	142.00	133.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	100.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	148.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	195.00	66.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	87.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	0
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.69	9.34	2.2	A
2 - A27 On Slip				
3 - A280 South	0.58	4.52	1.4	A
4 - A27 Off-Slip	0.74	12.38	2.7	B
5 - Arundel Road	0.15	7.87	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	176.00	198.70	332.68	0.529	174.89	1.1	5.665	A
2 - A27 On Slip		308.96						
3 - A280 South	266.00	0.00	476.89	0.558	264.75	1.2	4.218	A
4 - A27 Off-Slip	192.00	264.75	259.55	0.740	189.31	2.7	12.380	B
5 - Arundel Road	6.00	449.08	120.33	0.050	5.95	0.1	7.865	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	165.00	145.41	363.53	0.454	165.27	0.8	4.545	A
2 - A27 On Slip		248.60						
3 - A280 South	235.00	0.00	476.92	0.493	235.27	1.0	3.727	A
4 - A27 Off-Slip	133.00	235.27	272.52	0.488	134.73	1.0	6.610	A
5 - Arundel Road	11.00	364.00	163.42	0.067	10.98	0.1	5.904	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	213.00	246.14	306.68	0.695	211.64	2.2	9.340	A
2 - A27 On Slip		312.28						
3 - A280 South	279.00	0.00	477.25	0.585	278.59	1.4	4.521	A
4 - A27 Off-Slip	150.00	278.59	251.77	0.596	149.53	1.4	8.760	A
5 - Arundel Road	11.00	424.11	133.55	0.082	10.98	0.1	7.342	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	156.00	175.49	344.95	0.452	157.37	0.8	4.831	A
2 - A27 On Slip		249.51						
3 - A280 South	266.00	1.99	475.12	0.560	266.11	1.3	4.309	A
4 - A27 Off-Slip	139.00	266.10	255.88	0.543	139.23	1.2	7.732	A
5 - Arundel Road	22.00	400.34	145.36	0.151	21.91	0.2	7.286	A

2021+Committed, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	6.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2021+Committed	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
17:00 - 17:15	From	1 - A280 Long Furlong	0.00	10.00	265.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	151.00	39.00	0.00	0.00
		4 - A27 Off-Slip	37.00	4.00	58.00	0.00
		5 - Arundel Road	3.00	3.00	8.00	0.00

Demand (Veh/TS)

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
17:15 - 17:30	From	1 - A280 Long Furlong	0.00	12.00	232.00	0.00
		2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		3 - A280 South	110.00	52.00	0.00	5.00
		4 - A27 Off-Slip	41.00	1.00	55.00	0.00
		5 - Arundel Road	4.00	2.00	6.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	300.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	105.00	47.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	42.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	260.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	108.00	49.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	58.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.77	9.32	3.2	A
2 - A27 On Slip				
3 - A280 South	0.41	3.23	0.7	A
4 - A27 Off-Slip	0.33	4.54	0.5	A
5 - Arundel Road	0.07	4.81	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	275.00	111.49	401.85	0.684	272.88	2.1	6.872	A
2 - A27 On Slip		328.63						
3 - A280 South	190.00	0.00	467.39	0.407	189.32	0.7	3.228	A
4 - A27 Off-Slip	99.00	189.32	296.40	0.334	98.50	0.5	4.537	A
5 - Arundel Road	14.00	287.82	200.87	0.070	13.93	0.1	4.811	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	245.00	116.03	399.44	0.613	245.50	1.6	5.865	A
2 - A27 On Slip		294.55						
3 - A280 South	167.00	0.99	468.73	0.356	167.12	0.6	2.984	A
4 - A27 Off-Slip	97.00	168.12	307.42	0.316	97.03	0.5	4.279	A
5 - Arundel Road	12.00	259.18	215.64	0.056	12.02	0.1	4.419	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	310.00	109.03	403.42	0.768	308.43	3.2	9.321	A
2 - A27 On Slip		353.48						
3 - A280 South	162.00	1.99	468.37	0.346	162.03	0.5	2.939	A
4 - A27 Off-Slip	94.00	164.01	307.94	0.305	94.02	0.4	4.208	A
5 - Arundel Road	14.00	246.06	222.02	0.063	13.99	0.1	4.326	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	267.00	120.95	396.36	0.674	268.07	2.1	7.075	A
2 - A27 On Slip		332.95						
3 - A280 South	169.00	2.00	468.51	0.361	168.97	0.6	3.004	A
4 - A27 Off-Slip	92.00	170.97	307.29	0.299	92.01	0.4	4.180	A
5 - Arundel Road	13.00	247.99	221.53	0.059	13.00	0.1	4.315	A

2021+Committed+Development, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	8.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	2021+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	4.00	175.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	211.00	64.00	0.00	0.00	5.00
	4 - A27 Off-Slip	48.00	6.00	141.00	0.00	0.00
	5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	165.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	185.00	58.00	0.00	0.00	6.00
	4 - A27 Off-Slip	48.00	6.00	83.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	211.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	147.00	142.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	103.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	151.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	200.00	75.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	90.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.72	10.34	2.5	B
2 - A27 On Slip				
3 - A280 South	0.62	4.90	1.6	A
4 - A27 Off-Slip	0.77	14.29	3.2	B
5 - Arundel Road	0.16	8.50	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	179.00	210.25	326.16	0.549	177.80	1.2	6.019	A
2 - A27 On Slip		314.51						
3 - A280 South	280.00	0.00	474.83	0.590	278.58	1.4	4.554	A
4 - A27 Off-Slip	195.00	278.58	252.00	0.774	191.81	3.2	14.286	B
5 - Arundel Road	6.00	465.42	111.71	0.054	5.94	0.1	8.505	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	168.00	158.71	356.00	0.472	168.30	0.9	4.804	A
2 - A27 On Slip		255.91						
3 - A280 South	249.00	0.00	474.74	0.525	249.31	1.1	3.999	A
4 - A27 Off-Slip	137.00	249.31	265.08	0.517	139.10	1.1	7.258	A
5 - Arundel Road	11.00	382.41	153.79	0.072	10.98	0.1	6.302	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	216.00	258.04	299.95	0.720	214.43	2.5	10.340	B
2 - A27 On Slip		318.02						
3 - A280 South	293.00	0.00	475.82	0.616	292.53	1.6	4.897	A
4 - A27 Off-Slip	153.00	292.53	244.38	0.626	152.46	1.6	9.730	A
5 - Arundel Road	11.00	440.99	124.80	0.068	10.98	0.1	7.906	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	159.00	187.54	338.19	0.470	160.58	0.9	5.110	A
2 - A27 On Slip		255.74						
3 - A280 South	280.00	1.99	473.15	0.592	280.11	1.5	4.665	A
4 - A27 Off-Slip	142.00	282.10	248.35	0.572	142.27	1.4	8.509	A
5 - Arundel Road	22.00	417.39	136.40	0.161	21.91	0.2	7.854	A

2021+Committed+Development, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	7.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	2021+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	269.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	154.00	47.00	0.00	0.00	0.00
	4 - A27 Off-Slip	37.00	4.00	62.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	8.00	0.00	0.00

17:00 -

17:15

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	12.00	236.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	114.00	60.00	0.00	0.00	5.00
	4 - A27 Off-Slip	41.00	1.00	59.00	0.00	0.00
	5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	304.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	108.00	55.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	46.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	264.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	112.00	57.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	62.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.79	10.47	3.6	B
2 - A27 On Slip				
3 - A280 South	0.43	3.35	0.8	A
4 - A27 Off-Slip	0.35	4.76	0.5	A
5 - Arundel Road	0.07	5.01	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	279.00	123.42	394.77	0.707	276.66	2.3	7.479	A
2 - A27 On Slip		336.37						
3 - A280 South	201.00	0.00	467.78	0.430	200.25	0.7	3.354	A
4 - A27 Off-Slip	103.00	200.25	291.02	0.354	102.46	0.5	4.760	A
5 - Arundel Road	14.00	302.71	193.39	0.072	13.92	0.1	5.012	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	249.00	128.03	392.31	0.635	249.57	1.8	6.330	A
2 - A27 On Slip		302.62						
3 - A280 South	179.00	0.99	469.03	0.382	179.13	0.6	3.107	A
4 - A27 Off-Slip	101.00	180.12	301.52	0.335	101.04	0.5	4.491	A
5 - Arundel Road	12.00	275.18	207.59	0.058	12.02	0.1	4.603	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	314.00	121.04	396.29	0.792	312.15	3.6	10.468	B
2 - A27 On Slip		361.20						
3 - A280 South	173.00	1.98	468.69	0.369	173.03	0.6	3.046	A
4 - A27 Off-Slip	98.00	175.02	302.67	0.324	98.03	0.5	4.398	A
5 - Arundel Road	14.00	261.08	214.48	0.065	13.99	0.1	4.488	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	271.00	132.94	389.24	0.696	272.27	2.4	7.776	A
2 - A27 On Slip		341.14						
3 - A280 South	181.00	2.01	468.78	0.386	180.96	0.6	3.126	A
4 - A27 Off-Slip	96.00	182.97	301.33	0.319	96.01	0.5	4.385	A
5 - Arundel Road	13.00	263.99	213.49	0.061	13.00	0.1	4.488	A

2031+Committed+Development, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	13.15	8

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D15	2031+Committed+Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	190.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	228.00	68.00	0.00	0.00	6.00
	4 - A27 Off-Slip	52.00	7.00	153.00	0.00	0.00
	5 - Arundel Road	5.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	179.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	200.00	62.00	0.00	0.00	7.00
	4 - A27 Off-Slip	52.00	7.00	90.00	0.00	0.00
	5 - Arundel Road	1.00	5.00	7.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	229.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	159.00	154.00	0.00	0.00	5.00
	4 - A27 Off-Slip	47.00	8.00	112.00	0.00	0.00
	5 - Arundel Road	5.00	1.00	7.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	7.00	162.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	213.00	74.00	0.00	0.00	6.00
	4 - A27 Off-Slip	46.00	10.00	95.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.82	15.56	4.1	D
2 - A27 On Slip				
3 - A280 South	0.67	5.66	2.0	A
4 - A27 Off-Slip	0.88	23.01	5.9	C
5 - Arundel Road	0.18	10.34	0.2	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	195.00	225.11	317.63	0.614	193.44	1.6	7.160	A
2 - A27 On Slip		339.18						
3 - A280 South	302.00	0.00	474.78	0.636	300.28	1.7	5.108	A
4 - A27 Off-Slip	212.00	300.28	240.79	0.883	206.07	5.9	23.015	C
5 - Arundel Road	7.00	500.38	93.91	0.075	6.92	0.1	10.336	B

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	182.00	174.55	346.85	0.525	182.44	1.1	5.488	A
2 - A27 On Slip		279.80						
3 - A280 South	269.00	0.00	474.70	0.567	269.40	1.3	4.392	A
4 - A27 Off-Slip	149.00	269.40	254.79	0.585	153.49	1.4	9.262	A
5 - Arundel Road	13.00	415.89	136.69	0.095	12.98	0.1	7.272	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	235.00	280.53	287.14	0.818	232.01	4.1	15.561	C
2 - A27 On Slip		344.30						
3 - A280 South	318.00	0.00	475.78	0.668	317.34	2.0	5.656	A
4 - A27 Off-Slip	167.00	317.34	231.64	0.721	165.98	2.5	13.493	B
5 - Arundel Road	13.00	478.32	105.84	0.123	12.97	0.1	9.688	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	171.00	193.08	335.18	0.510	174.05	1.1	5.688	A
2 - A27 On Slip		274.52						
3 - A280 South	293.00	1.99	473.06	0.619	293.33	1.6	5.018	A
4 - A27 Off-Slip	151.00	295.32	241.48	0.625	151.74	1.7	10.115	B
5 - Arundel Road	23.00	439.08	125.29	0.184	22.92	0.2	8.784	A

2031+Committed+Development, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	10.24	8

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D16	2031+Committed+Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	294.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	168.00	51.00	0.00	0.00	0.00
	4 - A27 Off-Slip	41.00	5.00	67.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	9.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	13.00	258.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	124.00	65.00	0.00	0.00	6.00
	4 - A27 Off-Slip	45.00	1.00	64.00	0.00	0.00
	5 - Arundel Road	5.00	2.00	7.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	9.00	333.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	118.00	59.00	0.00	0.00	10.00
	4 - A27 Off-Slip	49.00	8.00	50.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	12.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	288.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	122.00	61.00	0.00	0.00	13.00
	4 - A27 Off-Slip	35.00	1.00	67.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	13.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.88	16.71	6.4	C
2 - A27 On Slip				
3 - A280 South	0.47	3.59	0.9	A
4 - A27 Off-Slip	0.40	5.30	0.7	A
5 - Arundel Road	0.08	5.48	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	304.00	134.30	388.23	0.783	300.57	3.4	9.914	A
2 - A27 On Slip		366.24						
3 - A280 South	219.00	0.00	467.77	0.468	218.13	0.9	3.594	A
4 - A27 Off-Slip	113.00	218.13	281.59	0.401	112.34	0.7	5.298	A
5 - Arundel Road	15.00	330.46	179.16	0.084	14.91	0.1	5.477	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	272.00	139.05	385.74	0.705	272.97	2.5	8.052	A
2 - A27 On Slip		331.03						
3 - A280 South	195.00	0.99	469.05	0.416	195.16	0.7	3.287	A
4 - A27 Off-Slip	110.00	196.15	293.18	0.375	110.06	0.6	4.918	A
5 - Arundel Road	14.00	299.24	195.28	0.072	14.01	0.1	4.966	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	344.00	131.05	390.30	0.881	340.02	6.4	16.706	C
2 - A27 On Slip		393.13						
3 - A280 South	187.00	1.97	468.60	0.399	187.05	0.7	3.196	A
4 - A27 Off-Slip	107.00	189.02	295.41	0.362	107.03	0.6	4.778	A
5 - Arundel Road	15.00	284.10	202.67	0.074	15.00	0.1	4.795	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	296.00	142.94	383.29	0.772	298.89	3.5	11.004	B
2 - A27 On Slip		372.69						
3 - A280 South	196.00	2.01	468.72	0.418	195.95	0.7	3.299	A
4 - A27 Off-Slip	104.00	197.97	293.47	0.354	104.02	0.6	4.750	A
5 - Arundel Road	14.00	285.99	202.24	0.069	14.00	0.1	4.782	A

2021+Committed+Development + Sensitivity, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	9.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D17	2021+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	4.00	176.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	214.00	70.00	0.00	0.00	5.00
	4 - A27 Off-Slip	48.00	6.00	142.00	0.00	0.00
	5 - Arundel Road	4.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	167.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	189.00	63.00	0.00	0.00	6.00
	4 - A27 Off-Slip	48.00	6.00	83.00	0.00	0.00
	5 - Arundel Road	1.00	4.00	6.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	212.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	151.00	148.00	0.00	0.00	4.00
	4 - A27 Off-Slip	43.00	7.00	103.00	0.00	0.00
	5 - Arundel Road	4.00	1.00	6.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	153.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	204.00	80.00	0.00	0.00	5.00
	4 - A27 Off-Slip	42.00	10.00	91.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	11.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.73	10.86	2.6	B
2 - A27 On Slip				
3 - A280 South	0.64	5.18	1.7	A
4 - A27 Off-Slip	0.79	15.51	3.5	C
5 - Arundel Road	0.17	8.91	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	180.00	216.96	322.38	0.558	178.76	1.2	6.214	A
2 - A27 On Slip		316.23						
3 - A280 South	289.00	0.00	474.89	0.609	287.46	1.5	4.763	A
4 - A27 Off-Slip	196.00	287.46	247.48	0.792	192.50	3.5	15.514	C
5 - Arundel Road	6.00	474.99	106.94	0.056	5.94	0.1	8.907	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	170.00	163.94	353.05	0.482	170.31	0.9	4.934	A
2 - A27 On Slip		258.12						
3 - A280 South	258.00	0.00	474.80	0.543	258.33	1.2	4.165	A
4 - A27 Off-Slip	137.00	258.33	260.50	0.526	139.37	1.1	7.569	A
5 - Arundel Road	11.00	391.71	149.15	0.074	10.98	0.1	6.513	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	217.00	263.95	296.63	0.732	215.33	2.6	10.855	B
2 - A27 On Slip		318.89						
3 - A280 South	303.00	0.00	475.84	0.637	302.48	1.7	5.176	A
4 - A27 Off-Slip	153.00	302.48	239.32	0.639	152.41	1.7	10.283	B
5 - Arundel Road	11.00	450.88	119.88	0.092	10.98	0.1	8.261	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	161.00	193.57	334.81	0.481	162.67	0.9	5.277	A
2 - A27 On Slip		258.84						
3 - A280 South	289.00	1.99	473.20	0.611	289.14	1.6	4.893	A
4 - A27 Off-Slip	143.00	291.13	243.80	0.587	143.27	1.4	8.980	A
5 - Arundel Road	22.00	427.42	131.39	0.167	21.90	0.2	8.212	A

2021+Committed+Development + Sensitivity, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	7.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D18	2021+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	273.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	156.00	50.00	0.00	0.00	0.00
	4 - A27 Off-Slip	37.00	4.00	64.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	8.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	12.00	240.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	116.00	63.00	0.00	0.00	5.00
	4 - A27 Off-Slip	41.00	1.00	61.00	0.00	0.00
	5 - Arundel Road	4.00	2.00	6.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	8.00	308.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	110.00	58.00	0.00	0.00	10.00
	4 - A27 Off-Slip	45.00	7.00	48.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	11.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	268.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	113.00	60.00	0.00	0.00	12.00
	4 - A27 Off-Slip	32.00	1.00	64.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.81	11.33	4.0	B
2 - A27 On Slip				
3 - A280 South	0.44	3.42	0.8	A
4 - A27 Off-Slip	0.36	4.87	0.6	A
5 - Arundel Road	0.07	5.11	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	283.00	128.38	391.81	0.722	280.48	2.5	7.915	A
2 - A27 On Slip		342.18						
3 - A280 South	206.00	0.00	467.90	0.440	205.22	0.8	3.416	A
4 - A27 Off-Slip	105.00	205.22	288.57	0.364	104.43	0.6	4.873	A
5 - Arundel Road	14.00	309.65	189.89	0.074	13.92	0.1	5.112	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	253.00	133.04	389.33	0.650	253.63	1.9	6.665	A
2 - A27 On Slip		308.67						
3 - A280 South	184.00	0.99	469.12	0.392	184.13	0.6	3.158	A
4 - A27 Off-Slip	103.00	185.12	299.07	0.344	103.04	0.5	4.593	A
5 - Arundel Road	12.00	282.19	204.06	0.059	12.02	0.1	4.688	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	318.00	126.04	393.32	0.809	315.93	4.0	11.330	B
2 - A27 On Slip		366.98						
3 - A280 South	178.00	1.98	468.78	0.380	178.03	0.6	3.097	A
4 - A27 Off-Slip	100.00	180.02	300.27	0.333	100.03	0.5	4.494	A
5 - Arundel Road	14.00	268.08	210.95	0.066	13.99	0.1	4.569	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	275.00	137.94	386.26	0.712	276.43	2.5	8.298	A
2 - A27 On Slip		347.29						
3 - A280 South	185.00	2.01	468.88	0.395	184.97	0.6	3.169	A
4 - A27 Off-Slip	98.00	186.97	299.37	0.327	98.01	0.5	4.471	A
5 - Arundel Road	13.00	269.99	210.47	0.062	13.00	0.1	4.559	A

2031+Committed+Development + Sensitivity, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	14.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D19	2031+Committed+Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 -
08:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	5.00	191.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	231.00	74.00	0.00	0.00	6.00
	4 - A27 Off-Slip	52.00	7.00	154.00	0.00	0.00
	5 - Arundel Road	5.00	0.00	2.00	0.00	0.00

Demand (Veh/TS)

08:15 -
08:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	3.00	181.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	204.00	67.00	0.00	0.00	7.00
	4 - A27 Off-Slip	52.00	7.00	90.00	0.00	0.00
	5 - Arundel Road	1.00	5.00	7.00	0.00	0.00

Demand (Veh/TS)

08:30 -
08:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	230.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	162.00	160.00	0.00	0.00	5.00
	4 - A27 Off-Slip	47.00	8.00	112.00	0.00	0.00
	5 - Arundel Road	5.00	1.00	7.00	0.00	0.00

Demand (Veh/TS)

08:45 -
09:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	7.00	166.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	220.00	86.00	0.00	0.00	6.00
	4 - A27 Off-Slip	46.00	10.00	98.00	0.00	0.00
	5 - Arundel Road	10.00	1.00	12.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	6	0	50
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	1	1	0	0	5
	4 - A27 Off-Slip	11	11	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.83	16.66	4.4	C
2 - A27 On Slip				
3 - A280 South	0.69	5.99	2.2	A
4 - A27 Off-Slip	0.90	25.83	6.8	D
5 - Arundel Road	0.20	10.89	0.2	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	196.00	231.36	314.11	0.624	194.38	1.6	7.419	A
2 - A27 On Slip		340.45						
3 - A280 South	311.00	0.00	474.84	0.655	309.13	1.9	5.372	A
4 - A27 Off-Slip	213.00	309.13	236.29	0.831	206.16	6.8	25.826	B
5 - Arundel Road	7.00	509.33	89.47	0.078	6.92	0.1	10.891	B

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	184.00	180.21	343.66	0.535	184.46	1.2	5.669	A
2 - A27 On Slip		282.43						
3 - A280 South	278.00	0.00	474.75	0.586	278.44	1.4	4.596	A
4 - A27 Off-Slip	149.00	278.44	250.22	0.596	154.33	1.5	9.886	A
5 - Arundel Road	13.00	425.77	131.75	0.099	12.98	0.1	7.574	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	236.00	286.39	283.84	0.831	232.73	4.4	16.660	C
2 - A27 On Slip		344.95						
3 - A280 South	327.00	0.00	475.81	0.687	326.28	2.2	5.988	A
4 - A27 Off-Slip	167.00	326.28	227.09	0.735	165.88	2.6	14.432	B
5 - Arundel Road	13.00	487.15	101.45	0.128	12.96	0.1	10.167	B

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	175.00	207.92	326.84	0.535	178.27	1.2	6.188	A
2 - A27 On Slip		281.61						
3 - A280 South	312.00	1.99	473.17	0.659	312.19	2.0	5.600	A
4 - A27 Off-Slip	154.00	314.17	232.01	0.664	154.59	2.0	11.718	B
5 - Arundel Road	23.00	460.78	114.45	0.201	22.90	0.2	9.819	A

2031+Committed+Development + Sensitivity, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27 Roundabout North	Standard Roundabout	1, 2, 3, 4, 5	11.22	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D20	2031+Committed+Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A280 Long Furlong		✓	100.000
2 - A27 On Slip			
3 - A280 South		✓	100.000
4 - A27 Off-Slip		✓	100.000
5 - Arundel Road		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 -
17:15

		To				
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	10.00	298.00	0.00	0.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	170.00	54.00	0.00	0.00	0.00
	4 - A27 Off-Slip	41.00	5.00	69.00	0.00	0.00
	5 - Arundel Road	3.00	3.00	9.00	0.00	0.00

Demand (Veh/TS)

17:15 -
17:30

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	13.00	262.00	0.00	1.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	126.00	68.00	0.00	0.00	6.00
	4 - A27 Off-Slip	45.00	1.00	66.00	0.00	0.00
	5 - Arundel Road	5.00	2.00	7.00	0.00	0.00

Demand (Veh/TS)

17:30 -
17:45

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	9.00	337.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	120.00	62.00	0.00	0.00	10.00
	4 - A27 Off-Slip	49.00	8.00	52.00	0.00	0.00
	5 - Arundel Road	1.00	2.00	12.00	0.00	0.00

Demand (Veh/TS)

17:45 -
18:00

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0.00	6.00	292.00	0.00	2.00
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	124.00	64.00	0.00	0.00	13.00
	4 - A27 Off-Slip	35.00	1.00	69.00	0.00	1.00
	5 - Arundel Road	0.00	1.00	13.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A280 Long Furlong	2 - A27 On Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	8	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A280 Long Furlong	0.30	18.71	7.3	C
2 - A27 On Slip				
3 - A280 South	0.48	3.66	0.9	A
4 - A27 Off-Slip	0.41	5.44	0.7	A
5 - Arundel Road	0.09	5.60	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	308.00	139.26	385.28	0.799	304.25	3.8	10.662	B
2 - A27 On Slip		371.90						
3 - A280 South	224.00	0.00	467.88	0.479	223.09	0.9	3.663	A
4 - A27 Off-Slip	115.00	223.09	279.14	0.412	114.31	0.7	5.437	A
5 - Arundel Road	15.00	337.40	175.67	0.085	14.91	0.1	5.596	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	276.00	144.06	382.76	0.721	277.09	2.7	8.606	A
2 - A27 On Slip		337.15						
3 - A280 South	200.00	0.99	469.13	0.426	200.16	0.7	3.350	A
4 - A27 Off-Slip	112.00	201.15	290.71	0.385	112.06	0.6	5.039	A
5 - Arundel Road	14.00	306.25	191.75	0.073	14.01	0.1	5.065	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	348.00	136.05	387.32	0.898	343.32	7.3	18.710	C
2 - A27 On Slip		398.44						
3 - A280 South	192.00	1.97	468.68	0.410	192.05	0.7	3.253	A
4 - A27 Off-Slip	109.00	194.02	292.99	0.372	109.04	0.6	4.894	A
5 - Arundel Road	15.00	291.10	199.14	0.075	15.00	0.1	4.887	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A280 Long Furlong	300.00	147.94	380.31	0.789	303.41	3.9	12.176	B
2 - A27 On Slip		379.21						
3 - A280 South	201.00	2.02	468.79	0.429	200.95	0.7	3.360	A
4 - A27 Off-Slip	106.00	202.97	290.98	0.364	106.02	0.6	4.866	A
5 - Arundel Road	14.00	292.99	198.72	0.070	14.00	0.1	4.874	A

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.0.2.5947 © Copyright TRL Limited, 2017	
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Filename: A27 South Roundabout + mitigation.j9

Path: T:\Projects\9000 Series Project Numbers\9105ITB Land at Angmering, Arun Distr, W Susx\Tech\Assessments\Northern Site\Updated Jan 2018

Report generation date: 19/01/2018 16:01:36

»2017 Baseline, AM Peak
 »2017 Baseline, PM Peak
 »2021 Growth, AM Peak
 »2021 Growth, PM Peak
 »2021 + Committed, AM Peak
 »2021 + Committed, PM Peak
 »2021 + Committed + Development, AM Peak
 »2021 + Committed + Development, PM Peak
 »2031 + Committed + Development, AM Peak
 »2031 + Committed + Development, PM Peak
 »2021 + Committed + Development + Sensitivity, AM Peak
 »2021 + Committed + Development + Sensitivity, PM Peak
 »2031 + Committed + Development + Sensitivity, AM Peak
 »2031 + Committed + Development + Sensitivity, PM Peak

Summary of junction performance

	AM Peak				PM Peak			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline								
1 - A27 Off Slip	0.6	6.65	0.36	A	0.6	5.85	0.38	A
2 - Titnore Lane	0.7	4.09	0.41	A	0.8	5.03	0.45	A
3 - A280 South West	1.2	5.40	0.56	A	0.5	3.54	0.34	A
5 - A280 North	1.9	5.74	0.66	A	1.7	4.95	0.64	A
2021 Growth								
1 - A27 Off Slip	0.7	7.33	0.40	A	0.7	6.39	0.41	A
2 - Titnore Lane	0.7	4.33	0.43	A	0.9	5.41	0.48	A
3 - A280 South West	1.4	5.88	0.58	A	0.5	3.66	0.35	A
5 - A280 North	2.2	6.29	0.69	A	2.0	5.40	0.67	A
2021 + Committed								
1 - A27 Off Slip	0.7	7.76	0.43	A	0.8	7.20	0.45	A
2 - Titnore Lane	0.8	4.42	0.43	A	1.0	5.92	0.50	A
3 - A280 South West	1.7	6.77	0.64	A	0.6	3.84	0.38	A
5 - A280 North	2.3	6.44	0.70	A	2.3	6.10	0.70	A
2021 + Committed + Development								
1 - A27 Off Slip	0.9	8.88	0.48	A	1.0	8.20	0.50	A
2 - Titnore Lane	0.8	4.75	0.46	A	1.2	6.60	0.54	A
3 - A280 South West	2.3	8.33	0.70	A	0.8	4.21	0.43	A
5 - A280 North	2.5	6.93	0.72	A	2.6	6.67	0.73	A
2031 + Committed + Development								
1 - A27 Off Slip	1.3	11.76	0.57	B	1.4	10.91	0.59	B
2 - Titnore Lane	1.1	5.45	0.52	A	1.6	8.54	0.63	A
3 - A280 South West	3.4	11.30	0.78	B	0.9	4.77	0.48	A
5 - A280 North	3.5	8.99	0.79	A	3.7	8.77	0.79	A
2021 + Committed + Development + Sensitivity								
1 - A27 Off Slip	1.0	9.26	0.50	A	1.1	8.75	0.52	A
2 - Titnore Lane	0.9	4.86	0.47	A	1.2	6.98	0.56	A
3 - A280 South West	2.7	9.34	0.74	A	0.8	4.35	0.45	A
5 - A280 North	2.6	7.11	0.73	A	2.8	7.01	0.74	A
2031 + Committed + Development + Sensitivity								
1 - A27 Off Slip	1.5	12.66	0.60	B	1.6	11.95	0.62	B
2 - Titnore Lane	1.1	5.60	0.53	A	1.8	9.17	0.65	A
3 - A280 South West	4.1	13.31	0.82	B	1.0	4.95	0.50	A
5 - A280 North	3.7	9.32	0.79	A	4.0	9.43	0.81	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	(untitled)
Location	
Site number	
Date	19/05/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\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	perTimeSegment	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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15
D7	2021 + Committed	AM Peak	DIRECT	08:00	09:00	60	15
D8	2021 + Committed	PM Peak	DIRECT	17:00	18:00	60	15
D9	2021 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15
D10	2021 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15
D13	2031 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15
D14	2031 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15
D15	2021 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D16	2021 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15
D17	2031 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D18	2031 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017 Baseline, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	5.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 Off Slip	
2	Titnore Lane	
3	A280 South West	
4	A27 On Slip	
5	A280 North	

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 - A27 Off Slip	4.00	6.00	35.0	25.0	60.0	38.0	
2 - Titnore Lane	3.40	7.80	30.0	25.0	60.0	24.0	
3 - A280 South West	3.65	7.50	50.0	20.0	60.0	33.0	
4 - A27 On Slip							✓
5 - A280 North	3.70	7.80	22.0	42.0	60.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1 - A27 Off Slip	0.551	423.329
2 - Titnore Lane	0.617	499.210
3 - A280 South West	0.610	505.157
4 - A27 On Slip		
5 - A280 North	0.648	519.942

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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:00 - 08:15	From	1 - A27 Off Slip	0.00	6.00	60.00	15.00
		2 - Titnore Lane	0.00	0.00	21.00	59.00
		3 - A280 South West	0.00	49.00	0.00	163.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	143.00	82.00	26.00

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:15 - 08:30	From	1 - A27 Off Slip	0.00	5.00	52.00	8.00
		2 - Titnore Lane	0.00	0.00	22.00	49.00
		3 - A280 South West	0.00	41.00	0.00	12.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	107.00	63.00	63.00

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:30 - 08:45	From	1 - A27 Off Slip	0.00	10.00	57.00	10.00
		2 - Titnore Lane	0.00	0.00	13.00	45.00
		3 - A280 South West	0.00	58.00	0.00	13.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	143.00	97.00	63.00

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:45 - 09:00	From	1 - A27 Off Slip	0.00	3.00	63.00	16.00
		2 - Titnore Lane	0.00	0.00	20.00	56.00
		3 - A280 South West	0.00	43.00	0.00	11.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	120.00	44.00	63.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	5	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	4	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.36	6.65	0.6	A
2 - Titnore Lane	0.41	4.09	0.7	A
3 - A280 South West	0.56	5.40	1.2	A
4 - A27 On Slip				
5 - A280 North	0.66	5.74	1.9	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	81.00	298.58	248.51	0.326	80.52	0.5	5.342	A
2 - Titnore Lane	147.00	182.06	373.20	0.394	146.35	0.6	3.956	A
3 - A280 South West	219.00	166.24	393.53	0.557	217.76	1.2	5.085	A
4 - A27 On Slip		284.45						
5 - A280 North	251.00	48.72	467.58	0.537	249.85	1.1	4.112	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	65.00	274.19	260.56	0.249	65.14	0.3	4.608	A
2 - Titnore Lane	115.00	186.08	368.71	0.312	115.19	0.5	3.554	A
3 - A280 South West	209.00	164.08	392.39	0.533	209.09	1.2	4.912	A
4 - A27 On Slip		249.25						
5 - A280 North	233.00	41.05	466.26	0.500	233.14	1.0	3.864	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	77.00	360.03	211.80	0.364	76.77	0.6	6.655	A
2 - Titnore Lane	103.00	226.35	344.00	0.299	103.03	0.4	3.737	A
3 - A280 South West	183.00	162.83	393.63	0.465	183.28	0.9	4.285	A
4 - A27 On Slip		225.23						
5 - A280 North	303.00	57.95	458.05	0.661	302.09	1.9	5.738	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	82.00	270.98	262.90	0.312	82.11	0.5	4.982	A
2 - Titnore Lane	150.00	186.61	369.56	0.406	149.75	0.7	4.090	A
3 - A280 South West	199.00	208.90	365.17	0.545	198.69	1.2	5.396	A
4 - A27 On Slip		277.53						
5 - A280 North	227.00	43.02	464.79	0.488	227.96	1.0	3.814	A

2017 Baseline, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	4.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
17:00 - 17:15	From		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip
		1 - A27 Off Slip	0.00	8.00	50.00	2.00
		2 - Titnore Lane	0.00	0.00	19.00	27.00
		3 - A280 South West	0.00	20.00	0.00	7.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	114.00	112.00	71.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	74.00	1.00	11.00
	2 - Titnore Lane	0.00	0.00	40.00	53.00	45.00
	3 - A280 South West	0.00	19.00	0.00	8.00	94.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	117.00	115.00	67.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	59.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	38.00	40.00	45.00
	3 - A280 South West	0.00	34.00	0.00	6.00	94.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	117.00	115.00	66.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	60.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	44.00	53.00	51.00
	3 - A280 South West	0.00	22.00	0.00	6.00	95.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	118.00	118.00	80.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	4	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.38	5.85	0.6	A
2 - Titnore Lane	0.45	5.03	0.8	A
3 - A280 South West	0.34	3.54	0.5	A
4 - A27 On Slip				
5 - A280 North	0.64	4.95	1.7	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	64.00	315.47	246.70	0.259	63.65	0.3	4.908	A
2 - Titnore Lane	142.00	237.80	340.06	0.418	141.29	0.7	4.511	A
3 - A280 South West	98.00	199.00	372.41	0.263	97.64	0.4	3.271	A
4 - A27 On Slip		190.17						
5 - A280 North	297.00	19.93	498.83	0.595	295.55	1.5	4.397	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	92.00	317.98	245.30	0.375	91.75	0.6	5.851	A
2 - Titnore Lane	138.00	267.75	325.44	0.424	137.98	0.7	4.801	A
3 - A280 South West	121.00	177.07	386.40	0.313	120.90	0.5	3.390	A
4 - A27 On Slip		169.10						
5 - A280 North	299.00	19.00	499.47	0.599	298.97	1.5	4.489	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	72.00	331.89	237.56	0.303	72.16	0.4	5.447	A
2 - Titnore Lane	123.00	245.13	338.75	0.363	123.16	0.6	4.177	A
3 - A280 South West	134.00	156.16	399.56	0.335	133.95	0.5	3.388	A
4 - A27 On Slip		177.02						
5 - A280 North	298.00	33.94	489.85	0.608	297.94	1.5	4.689	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	73.00	337.86	234.15	0.312	72.99	0.4	5.584	A
2 - Titnore Lane	148.00	265.83	326.25	0.454	147.75	0.8	5.034	A
3 - A280 South West	123.00	191.71	377.57	0.326	123.02	0.5	3.537	A
4 - A27 On Slip		173.93						
5 - A280 North	316.00	22.04	497.42	0.635	315.82	1.7	4.950	A

2021 Growth, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	5.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15		To					
	From		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
		1 - A27 Off Slip	0.00	6.00	62.00	0.00	16.00
		2 - Titnore Lane	0.00	0.00	22.00	70.00	61.00
		3 - A280 South West	0.00	51.00	0.00	7.00	169.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	149.00	86.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	54.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	23.00	51.00	46.00
	3 - A280 South West	0.00	42.00	0.00	13.00	162.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	66.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	59.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	14.00	47.00	47.00
	3 - A280 South West	0.00	60.00	0.00	14.00	116.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	101.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	66.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	21.00	58.00	77.00
	3 - A280 South West	0.00	44.00	0.00	12.00	151.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	46.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	5	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	4	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.40	7.33	0.7	A
2 - Titnore Lane	0.43	4.33	0.7	A
3 - A280 South West	0.58	5.88	1.4	A
4 - A27 On Slip				
5 - A280 North	0.69	6.29	2.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	84.00	312.41	240.66	0.349	83.47	0.5	5.706	A
2 - Titnore Lane	153.00	190.95	367.20	0.417	152.29	0.7	4.175	A
3 - A280 South West	227.00	174.16	388.47	0.584	225.62	1.4	5.481	A
4 - A27 On Slip		295.27						
5 - A280 North	263.00	50.69	466.25	0.564	261.72	1.3	4.374	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	67.00	285.24	254.22	0.264	67.17	0.4	4.815	A
2 - Titnore Lane	120.00	194.12	363.26	0.330	120.21	0.5	3.708	A
3 - A280 South West	217.00	171.10	387.79	0.560	217.10	1.3	5.277	A
4 - A27 On Slip		258.28						
5 - A280 North	243.00	42.06	465.60	0.522	243.18	1.1	4.051	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	81.00	374.85	203.22	0.399	80.71	0.7	7.328	A
2 - Titnore Lane	108.00	236.21	337.42	0.320	108.02	0.5	3.923	A
3 - A280 South West	190.00	170.78	388.47	0.489	190.32	1.0	4.550	A
4 - A27 On Slip		234.25						
5 - A280 North	316.00	59.94	456.78	0.692	314.91	2.2	6.294	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	282.16	256.48	0.335	86.15	0.5	5.289	A
2 - Titnore Lane	156.00	195.74	363.48	0.429	155.73	0.7	4.327	A
3 - A280 South West	207.00	217.92	359.35	0.576	206.63	1.3	5.879	A
4 - A27 On Slip		288.46						
5 - A280 North	237.00	44.02	464.14	0.511	238.14	1.1	4.003	A

2021 Growth, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	5.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	52.00	2.00	4.00
	2 - Titnore Lane	0.00	0.00	20.00	29.00	100.00
	3 - A280 South West	0.00	21.00	0.00	7.00	74.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	119.00	117.00	74.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	78.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	41.00	55.00	47.00
	3 - A280 South West	0.00	20.00	0.00	8.00	98.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	120.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	62.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	39.00	41.00	47.00
	3 - A280 South West	0.00	35.00	0.00	6.00	98.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	120.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	63.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	46.00	55.00	53.00
	3 - A280 South West	0.00	23.00	0.00	6.00	99.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	123.00	123.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	4	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.41	6.39	0.7	A
2 - Titnore Lane	0.48	5.41	0.9	A
3 - A280 South West	0.35	3.66	0.5	A
4 - A27 On Slip				
5 - A280 North	0.67	5.40	2.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	66.00	329.29	236.71	0.276	65.62	0.4	5.188	A
2 - Titnore Lane	149.00	247.66	334.70	0.445	148.20	0.8	4.806	A
3 - A280 South West	102.00	207.89	367.88	0.277	101.62	0.4	3.376	A
4 - A27 On Slip		198.09						
5 - A280 North	310.00	20.92	497.47	0.623	308.37	1.6	4.719	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	97.00	331.97	237.21	0.409	96.70	0.7	6.390	A
2 - Titnore Lane	143.00	280.69	318.31	0.449	142.98	0.8	5.133	A
3 - A280 South West	126.00	185.07	382.56	0.329	125.89	0.5	3.504	A
4 - A27 On Slip		177.10						
5 - A280 North	312.00	20.00	498.09	0.626	311.97	1.7	4.833	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	75.00	345.87	229.48	0.327	75.19	0.5	5.842	A
2 - Titnore Lane	127.00	256.16	332.75	0.382	127.19	0.6	4.383	A
3 - A280 South West	139.00	162.19	396.79	0.350	138.95	0.5	3.490	A
4 - A27 On Slip		184.04						
5 - A280 North	311.00	34.94	488.48	0.637	310.93	1.7	5.066	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	76.00	352.82	225.50	0.337	75.99	0.5	6.019	A
2 - Titnore Lane	154.00	277.79	319.70	0.482	153.70	0.9	5.411	A
3 - A280 South West	128.00	199.65	373.71	0.343	128.01	0.5	3.662	A
4 - A27 On Slip		180.91						
5 - A280 North	330.00	23.04	496.05	0.665	329.77	2.0	5.404	A

2021 + Committed, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	6.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2021 + Committed	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	67.00	0.00	16.00
	2 - Titnore Lane	0.00	0.00	22.00	70.00	61.00
	3 - A280 South West	0.00	51.00	0.00	8.00	189.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	89.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	59.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	24.00	51.00	46.00
	3 - A280 South West	0.00	43.00	0.00	13.00	181.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	69.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	64.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	14.00	47.00	47.00
	3 - A280 South West	0.00	61.00	0.00	14.00	136.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	104.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	70.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	21.00	58.00	77.00
	3 - A280 South West	0.00	45.00	0.00	12.00	171.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	49.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	5	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.43	7.76	0.7	A
2 - Titnore Lane	0.43	4.42	0.8	A
3 - A280 South West	0.64	6.77	1.7	A
4 - A27 On Slip				
5 - A280 North	0.70	6.44	2.3	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	89.00	315.33	239.30	0.372	88.41	0.6	5.942	A
2 - Titnore Lane	153.00	198.88	362.45	0.422	152.28	0.7	4.268	A
3 - A280 South West	248.00	174.14	388.96	0.638	246.28	1.7	6.234	A
4 - A27 On Slip		314.94						
5 - A280 North	266.00	50.65	466.51	0.570	264.69	1.3	4.431	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	72.00	289.25	252.29	0.285	72.18	0.4	5.003	A
2 - Titnore Lane	121.00	202.13	358.44	0.338	121.21	0.5	3.799	A
3 - A280 South West	237.00	171.10	388.38	0.610	237.14	1.6	5.959	A
4 - A27 On Slip		278.32						
5 - A280 North	246.00	43.07	465.26	0.529	246.18	1.1	4.111	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	378.81	201.33	0.427	85.67	0.7	7.759	A
2 - Titnore Lane	108.00	244.15	332.67	0.325	108.03	0.5	4.008	A
3 - A280 South West	211.00	170.77	388.93	0.543	211.39	1.2	5.082	A
4 - A27 On Slip		255.32						
5 - A280 North	319.00	60.94	456.42	0.699	317.86	2.3	6.443	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	90.00	286.20	254.45	0.354	90.18	0.6	5.484	A
2 - Titnore Lane	156.00	202.80	359.21	0.434	155.72	0.8	4.416	A
3 - A280 South West	228.00	217.92	359.86	0.634	227.50	1.7	6.773	A
4 - A27 On Slip		309.34						
5 - A280 North	240.00	45.01	463.77	0.518	241.19	1.1	4.064	A

2021 + Committed, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	5.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2021 + Committed	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
	17:00 - 17:15	0.00	8.00	57.00	2.00	4.00
		0.00	0.00	20.00	29.00	100.00
		0.00	22.00	0.00	7.00	85.00
		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		0.00	119.00	136.00	74.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	83.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	42.00	55.00	47.00
	3 - A280 South West	0.00	21.00	0.00	8.00	108.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	139.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	67.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	40.00	41.00	47.00
	3 - A280 South West	0.00	36.00	0.00	6.00	108.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	139.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	68.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	46.00	55.00	53.00
	3 - A280 South West	0.00	24.00	0.00	6.00	109.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	123.00	142.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	4	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.45	7.20	0.8	A
2 - Titnore Lane	0.50	5.92	1.0	A
3 - A280 South West	0.38	3.84	0.6	A
4 - A27 On Slip				
5 - A280 North	0.70	6.10	2.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	71.00	348.99	227.90	0.312	70.55	0.4	5.704	A
2 - Titnore Lane	149.00	271.38	320.53	0.465	148.14	0.9	5.194	A
3 - A280 South West	114.00	207.79	367.79	0.310	113.55	0.4	3.534	A
4 - A27 On Slip		209.98						
5 - A280 North	329.00	21.91	497.46	0.661	327.08	1.9	5.224	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	102.00	351.96	226.24	0.451	101.64	0.8	7.203	A
2 - Titnore Lane	144.00	304.63	303.88	0.474	143.97	0.9	5.626	A
3 - A280 South West	137.00	185.06	382.40	0.358	136.89	0.6	3.663	A
4 - A27 On Slip		188.11						
5 - A280 North	331.00	21.00	498.08	0.665	330.96	2.0	5.363	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	80.00	365.85	218.51	0.366	80.23	0.6	6.518	A
2 - Titnore Lane	128.00	280.18	318.30	0.402	128.21	0.7	4.741	A
3 - A280 South West	150.00	162.22	396.59	0.378	149.95	0.6	3.648	A
4 - A27 On Slip		195.05						
5 - A280 North	330.00	35.94	488.47	0.676	329.91	2.1	5.672	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	81.00	372.77	214.57	0.378	80.98	0.6	6.737	A
2 - Titnore Lane	154.00	301.75	305.26	0.504	153.67	1.0	5.923	A
3 - A280 South West	139.00	199.61	373.58	0.372	139.01	0.6	3.836	A
4 - A27 On Slip		191.90						
5 - A280 North	349.00	24.04	496.05	0.704	348.72	2.3	6.095	A

2021 + Committed + Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	7.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	2021 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	75.00	0.00	16.00
	2 - Titnore Lane	0.00	0.00	28.00	70.00	61.00
	3 - A280 South West	0.00	59.00	0.00	12.00	203.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	95.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	66.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	30.00	51.00	46.00
	3 - A280 South West	0.00	50.00	0.00	18.00	195.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	75.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	72.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	20.00	47.00	47.00
	3 - A280 South West	0.00	68.00	0.00	19.00	150.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	110.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	78.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	27.00	58.00	77.00
	3 - A280 South West	0.00	52.00	0.00	17.00	185.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	55.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	2	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.48	8.88	0.9	A
2 - Titnore Lane	0.46	4.75	0.8	A
3 - A280 South West	0.70	8.33	2.3	A
4 - A27 On Slip				
5 - A280 North	0.72	6.93	2.5	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	97.00	329.09	231.84	0.418	96.29	0.7	6.606	A
2 - Titnore Lane	159.00	212.69	354.39	0.449	158.19	0.8	4.569	A
3 - A280 South West	274.00	174.07	389.66	0.703	271.70	2.3	7.490	A
4 - A27 On Slip		336.37						
5 - A280 North	272.00	58.50	461.70	0.589	270.58	1.4	4.675	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	79.00	302.29	245.22	0.322	79.23	0.5	5.429	A
2 - Titnore Lane	127.00	215.18	350.95	0.362	127.24	0.6	4.026	A
3 - A280 South West	263.00	171.12	389.15	0.676	263.18	2.1	7.156	A
4 - A27 On Slip		299.39						
5 - A280 North	252.00	50.09	461.18	0.546	252.20	1.2	4.310	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	94.00	391.68	194.42	0.484	93.56	0.9	8.885	A
2 - Titnore Lane	114.00	257.97	324.54	0.351	114.03	0.5	4.277	A
3 - A280 South West	237.00	170.74	389.70	0.608	237.55	1.6	5.936	A
4 - A27 On Slip		276.45						
5 - A280 North	325.00	67.95	452.22	0.719	323.73	2.5	6.935	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	98.00	299.30	247.28	0.396	98.26	0.7	6.051	A
2 - Titnore Lane	162.00	216.94	350.85	0.462	161.69	0.8	4.750	A
3 - A280 South West	254.00	217.93	360.56	0.704	253.26	2.3	8.328	A
4 - A27 On Slip		330.10						
5 - A280 North	246.00	51.98	459.74	0.535	247.33	1.2	4.262	A

2021 + Committed + Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	6.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	2021 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/15s)

		To				
From		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
	17:00 - 17:15	0.00	8.00	65.00	2.00	4.00
		0.00	0.00	26.00	29.00	100.00
		0.00	28.00	0.00	11.00	96.00
		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		0.00	119.00	144.00	74.00	0.00

Demand (Veh/TS)

17:15 - 17:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	90.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	48.00	55.00	47.00
	3 - A280 South West	0.00	27.00	0.00	12.00	119.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	148.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	74.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	46.00	41.00	47.00
	3 - A280 South West	0.00	42.00	0.00	10.00	119.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	148.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	75.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	52.00	55.00	53.00
	3 - A280 South West	0.00	30.00	0.00	10.00	120.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	123.00	151.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	3	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.50	8.20	1.0	A
2 - Titnore Lane	0.54	6.60	1.2	A
3 - A280 South West	0.43	4.21	0.8	A
4 - A27 On Slip				
5 - A280 North	0.73	6.67	2.6	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	79.00	362.77	220.19	0.359	78.45	0.6	6.326	A
2 - Titnore Lane	155.00	287.14	311.25	0.498	154.02	1.0	5.689	A
3 - A280 South West	135.00	207.68	367.89	0.367	134.42	0.6	3.846	A
4 - A27 On Slip		226.81						
5 - A280 North	337.00	27.88	493.61	0.683	334.89	2.1	5.600	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	109.00	366.93	217.87	0.500	108.57	1.0	8.201	A
2 - Titnore Lane	150.00	320.54	294.25	0.510	149.95	1.0	6.233	A
3 - A280 South West	158.00	185.06	382.47	0.413	157.88	0.7	4.006	A
4 - A27 On Slip		205.11						
5 - A280 North	340.00	27.00	494.21	0.688	339.93	2.2	5.828	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	87.00	380.82	210.14	0.414	87.27	0.7	7.339	A
2 - Titnore Lane	134.00	296.21	308.65	0.434	134.25	0.8	5.169	A
3 - A280 South West	171.00	162.25	396.55	0.431	170.95	0.8	3.988	A
4 - A27 On Slip		212.06						
5 - A280 North	339.00	41.93	484.59	0.700	338.89	2.3	6.168	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	88.00	387.73	206.20	0.427	87.98	0.7	7.609	A
2 - Titnore Lane	160.00	317.71	295.61	0.541	159.61	1.2	6.599	A
3 - A280 South West	160.00	199.55	373.63	0.428	160.00	0.8	4.214	A
4 - A27 On Slip		208.87						
5 - A280 North	358.00	30.04	492.18	0.727	357.68	2.6	6.672	A

2031 + Committed + Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	9.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D13	2031 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/15s)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	80.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	30.00	76.00	67.00
	3 - A280 South West	0.00	63.00	0.00	13.00	218.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	103.00	30.00	0.00

Demand (Veh/TS)

08:15 - 08:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	71.00	0.00	9.00
	2 - Titnore Lane	0.00	0.00	32.00	55.00	50.00
	3 - A280 South West	0.00	54.00	0.00	19.00	210.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	121.00	81.00	71.00	0.00

Demand (Veh/TS)

08:30 - 08:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	12.00	77.00	0.00	12.00
	2 - Titnore Lane	0.00	0.00	21.00	51.00	51.00
	3 - A280 South West	0.00	73.00	0.00	20.00	160.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	119.00	71.00	0.00

Demand (Veh/TS)

08:45 - 09:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	84.00	0.00	18.00
	2 - Titnore Lane	0.00	0.00	29.00	63.00	84.00
	3 - A280 South West	0.00	56.00	0.00	18.00	198.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	136.00	59.00	71.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	2	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.57	11.76	1.3	S
2 - Titnore Lane	0.52	5.45	1.1	A
3 - A280 South West	0.78	11.30	3.4	S
4 - A27 On Slip				
5 - A280 North	0.79	8.99	3.5	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	104.00	356.52	216.30	0.481	103.09	0.9	7.688	A
2 - Titnore Lane	173.00	228.35	344.65	0.502	172.00	1.0	5.183	A
3 - A280 South West	294.00	188.85	380.17	0.773	290.75	3.3	9.739	A
4 - A27 On Slip		361.36						
5 - A280 North	296.00	62.30	459.38	0.644	294.22	1.8	5.394	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	327.42	230.80	0.373	86.31	0.6	6.241	A
2 - Titnore Lane	137.00	232.26	340.16	0.403	137.32	0.7	4.443	A
3 - A280 South West	283.00	185.18	379.94	0.745	283.24	3.0	9.344	A
4 - A27 On Slip		323.53						
5 - A280 North	273.00	54.12	458.75	0.595	273.29	1.5	4.860	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	101.00	423.97	176.16	0.573	100.30	1.3	11.756	B
2 - Titnore Lane	123.00	277.35	312.30	0.394	123.03	0.7	4.755	A
3 - A280 South West	253.00	184.57	380.64	0.665	253.98	2.0	7.159	A
4 - A27 On Slip		296.82						
5 - A280 North	353.00	72.99	449.16	0.786	350.98	3.5	8.986	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	105.00	324.00	233.23	0.450	105.47	0.8	7.072	A
2 - Titnore Lane	176.00	233.54	340.35	0.517	175.60	1.1	5.449	A
3 - A280 South West	272.00	236.00	348.90	0.780	270.67	3.4	11.304	B
4 - A27 On Slip		354.51						
5 - A280 North	266.00	55.89	457.37	0.582	268.10	1.4	4.806	A

2031 + Committed + Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	8.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D14	2031 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15		To					
	From		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
		1 - A27 Off Slip	0.00	9.00	70.00	2.00	5.00
		2 - Titnore Lane	0.00	0.00	28.00	31.00	110.00
		3 - A280 South West	0.00	30.00	0.00	12.00	103.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	131.00	156.00	82.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	98.00	1.00	13.00
	2 - Titnore Lane	0.00	0.00	52.00	61.00	51.00
	3 - A280 South West	0.00	29.00	0.00	13.00	129.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	159.00	77.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	9.00	80.00	1.00	5.00
	2 - Titnore Lane	0.00	0.00	49.00	45.00	51.00
	3 - A280 South West	0.00	45.00	0.00	11.00	129.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	159.00	76.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	81.00	2.00	7.00
	2 - Titnore Lane	0.00	0.00	56.00	61.00	58.00
	3 - A280 South West	0.00	32.00	0.00	11.00	130.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	135.00	163.00	92.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	3	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.59	10.91	1.4	B
2 - Titnore Lane	0.63	8.54	1.6	A
3 - A280 South West	0.48	4.77	0.9	A
4 - A27 On Slip				
5 - A280 North	0.79	8.77	3.7	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	395.97	201.81	0.426	85.27	0.7	7.677	A
2 - Titnore Lane	169.00	312.48	295.75	0.571	167.69	1.3	6.960	A
3 - A280 South West	145.00	228.21	355.22	0.408	144.32	0.7	4.254	A
4 - A27 On Slip		246.48						
5 - A280 North	369.00	29.86	492.83	0.749	366.11	2.9	6.952	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	119.00	398.94	200.16	0.595	118.31	1.4	10.905	B
2 - Titnore Lane	164.00	347.30	277.82	0.590	163.89	1.4	7.890	A
3 - A280 South West	171.00	203.05	371.44	0.460	170.84	0.8	4.482	A
4 - A27 On Slip		222.15						
5 - A280 North	370.00	29.00	493.43	0.750	369.94	2.9	7.279	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	95.00	413.72	191.93	0.495	95.43	1.0	9.368	A
2 - Titnore Lane	145.00	321.31	293.23	0.495	145.42	1.0	6.106	A
3 - A280 South West	185.00	178.38	386.63	0.478	184.94	0.9	4.461	A
4 - A27 On Slip		230.12						
5 - A280 North	369.00	44.92	483.16	0.764	368.80	3.1	7.847	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	96.00	421.50	187.50	0.512	95.97	1.0	9.825	A
2 - Titnore Lane	175.00	344.52	279.12	0.627	174.35	1.6	8.537	A
3 - A280 South West	173.00	219.28	361.53	0.479	173.00	0.9	4.773	A
4 - A27 On Slip		226.78						
5 - A280 North	390.00	32.05	491.37	0.794	389.45	3.7	8.769	A

2021 + Committed + Development + Sensitivity, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	7.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D15	2021 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	78.00	0.00	16.00
	2 - Titnore Lane	0.00	0.00	29.00	70.00	61.00
	3 - A280 South West	0.00	61.00	0.00	14.00	212.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	97.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	69.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	30.00	51.00	46.00
	3 - A280 South West	0.00	52.00	0.00	19.00	205.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	77.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	74.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	21.00	47.00	47.00
	3 - A280 South West	0.00	70.00	0.00	20.00	159.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	112.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	81.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	28.00	58.00	77.00
	3 - A280 South West	0.00	54.00	0.00	18.00	194.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	57.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	2	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.50	9.26	1.0	A
2 - Titnore Lane	0.47	4.86	0.9	A
3 - A280 South West	0.74	9.34	2.7	A
4 - A27 On Slip				
5 - A280 North	0.73	7.11	2.6	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	100.00	332.98	229.73	0.435	99.24	0.8	6.858	A
2 - Titnore Lane	160.00	217.62	351.38	0.455	159.17	0.8	4.663	A
3 - A280 South West	287.00	174.05	389.56	0.737	284.30	2.7	8.350	A
4 - A27 On Slip		346.99						
5 - A280 North	274.00	60.43	460.53	0.595	272.55	1.4	4.752	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	82.00	306.31	243.04	0.337	82.25	0.5	5.607	A
2 - Titnore Lane	127.00	220.19	347.88	0.365	127.25	0.6	4.085	A
3 - A280 South West	276.00	171.13	389.05	0.709	276.20	2.5	7.997	A
4 - A27 On Slip		311.42						
5 - A280 North	254.00	52.10	460.01	0.552	254.20	1.2	4.377	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	96.00	395.65	192.27	0.499	95.54	1.0	9.260	A
2 - Titnore Lane	115.00	261.92	322.12	0.357	115.02	0.6	4.345	A
3 - A280 South West	249.00	170.73	389.58	0.639	249.69	1.8	6.468	A
4 - A27 On Slip		287.59						
5 - A280 North	327.00	69.96	451.03	0.725	325.68	2.6	7.105	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	101.00	303.33	245.07	0.412	101.27	0.7	6.272	A
2 - Titnore Lane	163.00	221.98	347.76	0.469	162.69	0.9	4.855	A
3 - A280 South West	266.00	217.93	360.47	0.738	265.09	2.7	9.342	A
4 - A27 On Slip		340.94						
5 - A280 North	248.00	53.96	458.60	0.541	249.37	1.2	4.330	A

2021 + Committed + Development + Sensitivity, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	6.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D16	2021 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	67.00	2.00	4.00
	2 - Titnore Lane	0.00	0.00	28.00	29.00	100.00
	3 - A280 South West	0.00	29.00	0.00	12.00	101.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	119.00	151.00	74.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	93.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	50.00	55.00	47.00
	3 - A280 South West	0.00	28.00	0.00	13.00	124.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	154.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	77.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	48.00	41.00	47.00
	3 - A280 South West	0.00	43.00	0.00	11.00	124.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	154.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	78.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	54.00	55.00	53.00
	3 - A280 South West	0.00	31.00	0.00	11.00	125.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	123.00	157.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	2	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.52	8.75	1.1	A
2 - Titnore Lane	0.56	6.98	1.2	A
3 - A280 South West	0.45	4.35	0.8	A
4 - A27 On Slip				
5 - A280 North	0.74	7.01	2.8	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	81.00	370.61	215.80	0.375	80.41	0.6	6.618	A
2 - Titnore Lane	157.00	295.99	305.94	0.513	155.96	1.0	5.961	A
3 - A280 South West	142.00	207.61	368.23	0.386	141.38	0.6	3.957	A
4 - A27 On Slip		232.74						
5 - A280 North	344.00	28.87	492.97	0.698	341.74	2.3	5.868	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	112.00	373.95	213.94	0.524	111.52	1.1	8.745	A
2 - Titnore Lane	152.00	329.50	288.79	0.526	151.94	1.1	6.573	A
3 - A280 South West	165.00	185.05	382.76	0.431	164.87	0.8	4.127	A
4 - A27 On Slip		211.11						
5 - A280 North	346.00	28.00	493.56	0.701	345.95	2.3	6.093	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	90.00	387.81	206.23	0.436	90.29	0.8	7.782	A
2 - Titnore Lane	136.00	305.23	303.18	0.449	136.28	0.8	5.400	A
3 - A280 South West	178.00	162.27	396.76	0.449	177.94	0.8	4.112	A
4 - A27 On Slip		218.07						
5 - A280 North	345.00	42.93	483.94	0.713	344.87	2.4	6.464	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	91.00	394.70	202.30	0.450	90.98	0.8	8.082	A
2 - Titnore Lane	162.00	326.69	290.14	0.558	161.58	1.2	6.978	A
3 - A280 South West	167.00	199.52	373.88	0.447	167.00	0.8	4.350	A
4 - A27 On Slip		214.86						
5 - A280 North	364.00	31.05	491.53	0.741	363.65	2.8	7.015	A

2031 + Committed + Development + Sensitivity, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	10.39	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D17	2031 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	83.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	31.00	76.00	67.00
	3 - A280 South West	0.00	65.00	0.00	14.00	227.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	105.00	30.00	0.00

Demand (Veh/TS)

08:15 - 08:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	74.00	0.00	9.00
	2 - Titnore Lane	0.00	0.00	33.00	55.00	50.00
	3 - A280 South West	0.00	56.00	0.00	20.00	219.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	121.00	83.00	71.00	0.00

Demand (Veh/TS)

08:30 - 08:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	12.00	80.00	0.00	12.00
	2 - Titnore Lane	0.00	0.00	22.00	51.00	51.00
	3 - A280 South West	0.00	76.00	0.00	21.00	170.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	121.00	71.00	0.00

Demand (Veh/TS)

08:45 - 09:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	87.00	0.00	18.00
	2 - Titnore Lane	0.00	0.00	30.00	63.00	84.00
	3 - A280 South West	0.00	58.00	0.00	19.00	208.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	136.00	61.00	71.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.60	12.66	1.5	S
2 - Titnore Lane	0.53	5.60	1.1	A
3 - A280 South West	0.82	13.31	4.1	S
4 - A27 On Slip				
5 - A280 North	0.79	9.32	3.7	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	107.00	360.35	214.22	0.499	106.02	1.0	8.246	A
2 - Titnore Lane	174.00	233.26	341.29	0.510	172.97	1.0	5.316	A
3 - A280 South West	306.00	188.82	380.43	0.804	302.14	3.9	11.012	B
4 - A27 On Slip		371.77						
5 - A280 North	298.00	64.18	456.23	0.650	296.17	1.8	5.493	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	89.00	331.44	228.62	0.389	89.34	0.6	6.476	A
2 - Titnore Lane	138.00	237.29	336.61	0.410	138.33	0.7	4.547	A
3 - A280 South West	295.00	185.19	380.20	0.776	295.27	3.6	10.654	B
4 - A27 On Slip		334.57						
5 - A280 North	275.00	56.14	457.58	0.601	275.30	1.5	4.945	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	104.00	428.86	173.52	0.599	103.20	1.4	12.656	B
2 - Titnore Lane	124.00	282.19	309.01	0.401	124.03	0.7	4.865	A
3 - A280 South West	267.00	184.54	380.91	0.701	268.18	2.4	8.066	A
4 - A27 On Slip		310.00						
5 - A280 North	355.00	76.00	447.34	0.794	352.86	3.7	9.321	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	108.00	328.07	230.99	0.468	108.56	0.9	7.385	A
2 - Titnore Lane	177.00	238.68	336.85	0.525	176.58	1.1	5.601	A
3 - A280 South West	285.00	236.02	349.13	0.816	283.28	4.1	13.306	B
4 - A27 On Slip		366.14						
5 - A280 North	268.00	57.84	456.24	0.587	270.22	1.4	4.896	A

2031 + Committed + Development + Sensitivity, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	8.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D18	2031 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
	1 - A27 Off Slip	0.00	9.00	73.00	2.00	5.00
	2 - Titnore Lane	0.00	0.00	30.00	31.00	110.00
	3 - A280 South West	0.00	31.00	0.00	13.00	108.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	131.00	162.00	82.00	0.00

17:00 - 17:15

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	101.00	1.00	13.00
	2 - Titnore Lane	0.00	0.00	54.00	61.00	51.00
	3 - A280 South West	0.00	30.00	0.00	14.00	134.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	166.00	77.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	9.00	83.00	1.00	5.00
	2 - Titnore Lane	0.00	0.00	51.00	45.00	51.00
	3 - A280 South West	0.00	46.00	0.00	11.00	134.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	166.00	76.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	84.00	2.00	7.00
	2 - Titnore Lane	0.00	0.00	58.00	61.00	58.00
	3 - A280 South West	0.00	34.00	0.00	11.00	135.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	135.00	169.00	92.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	2	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.62	11.95	1.6	B
2 - Titnore Lane	0.65	9.17	1.8	A
3 - A280 South West	0.50	4.95	1.0	A
4 - A27 On Slip				
5 - A280 North	0.81	9.43	4.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	89.00	402.76	196.00	0.449	88.20	0.8	8.138	A
2 - Titnore Lane	171.00	321.27	290.49	0.589	169.60	1.4	7.363	A
3 - A280 South West	152.00	228.10	355.56	0.428	151.26	0.7	4.389	A
4 - A27 On Slip		252.38						
5 - A280 North	375.00	30.85	492.18	0.762	371.91	3.1	7.307	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	122.00	406.90	195.70	0.623	121.20	1.6	11.953	B
2 - Titnore Lane	166.00	357.17	271.79	0.611	165.87	1.5	8.482	A
3 - A280 South West	178.00	203.02	371.72	0.479	177.83	0.9	4.638	A
4 - A27 On Slip		228.14						
5 - A280 North	377.00	30.00	492.76	0.765	376.91	3.2	7.754	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	98.00	421.68	187.47	0.523	98.48	1.1	10.170	B
2 - Titnore Lane	147.00	331.34	287.12	0.512	147.47	1.1	6.466	A
3 - A280 South West	191.00	178.42	386.83	0.494	190.94	1.0	4.593	A
4 - A27 On Slip		236.15						
5 - A280 North	376.00	45.92	482.50	0.779	375.76	3.4	8.400	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	99.00	429.44	183.06	0.541	98.96	1.2	10.694	B
2 - Titnore Lane	177.00	353.48	273.66	0.647	176.28	1.8	9.174	A
3 - A280 South West	180.00	219.22	361.81	0.498	179.98	1.0	4.949	A
4 - A27 On Slip		233.75						
5 - A280 North	396.00	34.05	490.07	0.808	395.40	4.0	9.427	A

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.0.2.5947 © Copyright TRL Limited, 2017	
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Filename: A27 South Roundabout.j9

Path: T:\Projects\9000 Series Project Numbers\9105ITB Land at Angmering, Arun Distr, W Susx\Tech\Assessments\Northern Site\Updated Jan 2018

Report generation date: 19/01/2018 15:51:40

»2017 Baseline, AM Peak
 »2017 Baseline, PM Peak
 »2021 Growth, AM Peak
 »2021 Growth, PM Peak
 »2021 + Committed, AM Peak
 »2021 + Committed, PM Peak
 »2021 + Committed + Development, AM Peak
 »2021 + Committed + Development, PM Peak
 »2031 + Committed + Development, AM Peak
 »2031 + Committed + Development, PM Peak
 »2021 + Committed + Development + Sensitivity, AM Peak
 »2021 + Committed + Development + Sensitivity, PM Peak
 »2031 + Committed + Development + Sensitivity, AM Peak
 »2031 + Committed + Development + Sensitivity, PM Peak

Summary of junction performance

	AM Peak				PM Peak			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline								
1 - A27 Off Slip	0.6	6.65	0.36	A	0.6	5.85	0.38	A
2 - Titnore Lane	0.7	4.09	0.41	A	0.8	5.03	0.45	A
3 - A280 South West	2.3	10.01	0.70	B	0.7	5.13	0.42	A
5 - A280 North	2.1	6.33	0.68	A	1.9	5.42	0.66	A
2021 Growth								
1 - A27 Off Slip	0.7	7.32	0.40	A	0.7	6.39	0.41	A
2 - Titnore Lane	0.7	4.33	0.43	A	0.9	5.41	0.48	A
3 - A280 South West	2.7	11.65	0.74	B	0.8	5.39	0.44	A
5 - A280 North	2.4	7.01	0.72	A	2.2	5.97	0.69	A
2021 + Committed								
1 - A27 Off Slip	0.7	7.75	0.43	A	0.8	7.20	0.45	A
2 - Titnore Lane	0.8	4.42	0.43	A	0.9	5.63	0.48	A
3 - A280 South West	3.9	15.54	0.81	C	0.9	5.44	0.48	A
5 - A280 North	2.5	7.19	0.72	A	2.3	6.29	0.70	A
2021 + Committed + Development								
1 - A27 Off Slip	0.9	8.88	0.48	A	1.0	8.20	0.50	A
2 - Titnore Lane	0.8	4.75	0.46	A	1.2	6.60	0.54	A
3 - A280 South West	7.0	25.02	0.90	D	1.2	6.67	0.54	A
5 - A280 North	2.8	7.81	0.74	A	2.9	7.54	0.75	A
2031 + Committed + Development								
1 - A27 Off Slip	1.3	11.80	0.57	B	1.4	10.90	0.59	B
2 - Titnore Lane	1.1	5.46	0.52	A	1.6	8.53	0.63	A
3 - A280 South West	16.7	58.88	1.00	F	1.5	8.08	0.61	A
5 - A280 North	4.1	10.50	0.81	B	4.3	10.31	0.82	B
2021 + Committed + Development + Sensitivity								
1 - A27 Off Slip	1.0	9.27	0.50	A	1.1	8.74	0.52	A
2 - Titnore Lane	0.9	4.86	0.47	A	1.2	6.98	0.56	A
3 - A280 South West	9.9	33.26	0.94	D	1.3	7.02	0.57	A
5 - A280 North	2.9	8.03	0.75	A	3.2	7.98	0.77	A
2031 + Committed + Development + Sensitivity								
1 - A27 Off Slip	1.5	12.75	0.60	B	1.6	11.95	0.62	B
2 - Titnore Lane	1.1	5.61	0.53	A	1.8	9.17	0.65	A
3 - A280 South West	27.2	74.85	1.04	F	1.7	8.59	0.63	A
5 - A280 North	4.3	10.99	0.82	B	4.8	11.22	0.83	B

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	(untitled)
Location	
Site number	
Date	19/05/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\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	perTimeSegment	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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15
D7	2021 + Committed	AM Peak	DIRECT	08:00	09:00	60	15
D8	2021 + Committed	PM Peak	DIRECT	17:00	18:00	60	15
D9	2021 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15
D10	2021 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15
D13	2031 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15
D14	2031 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15
D15	2021 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D16	2021 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15
D17	2031 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15
D18	2031 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017 Baseline, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	7.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 Off Slip	
2	Titnore Lane	
3	A280 South West	
4	A27 On Slip	
5	A280 North	

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 - A27 Off Slip	4.00	6.00	35.0	25.0	60.0	38.0	
2 - Titnore Lane	3.40	7.80	30.0	25.0	60.0	24.0	
3 - A280 South West	3.65	6.00	36.0	14.0	60.0	33.0	
4 - A27 On Slip							✓
5 - A280 North	3.70	7.80	18.0	42.0	60.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1 - A27 Off Slip	0.551	423.329
2 - Titnore Lane	0.617	499.210
3 - A280 South West	0.539	410.449
4 - A27 On Slip		
5 - A280 North	0.636	503.612

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 period length (min)	Time segment length (min)
D1	2017 Baseline	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:00 - 08:15	From	1 - A27 Off Slip	0.00	6.00	60.00	15.00
		2 - Titnore Lane	0.00	0.00	21.00	59.00
		3 - A280 South West	0.00	49.00	0.00	163.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	143.00	82.00	26.00
						0.00

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:15 - 08:30	From	1 - A27 Off Slip	0.00	5.00	52.00	8.00
		2 - Titnore Lane	0.00	0.00	22.00	44.00
		3 - A280 South West	0.00	41.00	0.00	156.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	107.00	63.00	63.00
						0.00

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:30 - 08:45	From	1 - A27 Off Slip	0.00	10.00	57.00	10.00
		2 - Titnore Lane	0.00	0.00	13.00	45.00
		3 - A280 South West	0.00	58.00	0.00	112.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	143.00	97.00	63.00
						0.00

Demand (Veh/TS)

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
08:45 - 09:00	From	1 - A27 Off Slip	0.00	3.00	63.00	16.00
		2 - Titnore Lane	0.00	0.00	20.00	56.00
		3 - A280 South West	0.00	43.00	0.00	11.00
		4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
		5 - A280 North	0.00	120.00	44.00	63.00
						0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	5	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	4	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.36	6.65	0.6	A
2 - Titnore Lane	0.41	4.09	0.7	A
3 - A280 South West	0.70	10.01	2.3	B
4 - A27 On Slip				
5 - A280 North	0.68	6.33	2.1	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	81.00	298.26	246.68	0.326	80.52	0.5	5.337	A
2 - Titnore Lane	147.00	182.03	373.22	0.394	146.36	0.6	3.956	A
3 - A280 South West	219.00	166.23	312.41	0.701	216.73	2.3	9.203	A
4 - A27 On Slip		283.46						
5 - A280 North	251.00	48.49	452.61	0.555	249.77	1.2	4.411	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	65.00	274.25	260.53	0.249	65.14	0.3	4.609	A
2 - Titnore Lane	115.00	186.08	368.71	0.312	115.19	0.5	3.554	A
3 - A280 South West	209.00	164.07	311.44	0.671	209.18	2.1	8.823	A
4 - A27 On Slip		249.36						
5 - A280 North	233.00	41.10	451.24	0.516	233.15	1.1	4.129	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	77.00	359.92	211.87	0.363	76.77	0.6	6.651	A
2 - Titnore Lane	103.00	226.28	344.04	0.299	103.03	0.4	3.736	A
3 - A280 South West	183.00	162.81	312.49	0.586	183.65	1.4	7.022	A
4 - A27 On Slip		225.59						
5 - A280 North	303.00	57.95	443.16	0.684	301.96	2.1	6.327	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	82.00	271.07	262.85	0.312	82.11	0.5	4.984	A
2 - Titnore Lane	150.00	186.68	369.51	0.406	149.75	0.7	4.091	A
3 - A280 South West	199.00	208.93	287.36	0.693	198.26	2.2	10.013	B
4 - A27 On Slip		277.12						
5 - A280 North	227.00	42.99	449.84	0.505	228.09	1.0	4.077	A

2017 Baseline, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	5.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2017 Baseline	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	50.00	2.00	4.00
	2 - Titnore Lane	0.00	0.00	19.00	27.00	96.00
	3 - A280 South West	0.00	20.00	0.00	7.00	71.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	114.00	112.00	71.00	0.00

Demand (Veh/TS)

17:15 - 17:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	74.00	1.00	11.00
	2 - Titnore Lane	0.00	0.00	40.00	53.00	45.00
	3 - A280 South West	0.00	19.00	0.00	8.00	94.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	117.00	115.00	67.00	0.00

Demand (Veh/TS)

17:30 - 17:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	59.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	38.00	40.00	45.00
	3 - A280 South West	0.00	34.00	0.00	6.00	94.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	117.00	115.00	66.00	0.00

Demand (Veh/TS)

17:45 - 18:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	60.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	44.00	53.00	51.00
	3 - A280 South West	0.00	22.00	0.00	6.00	95.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	118.00	118.00	80.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	4	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.38	5.85	0.6	A
2 - Titnore Lane	0.45	5.03	0.8	A
3 - A280 South West	0.42	5.13	0.7	A
4 - A27 On Slip				
5 - A280 North	0.66	5.42	1.9	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	64.00	315.32	246.78	0.259	63.65	0.3	4.906	A
2 - Titnore Lane	142.00	237.73	340.10	0.418	141.29	0.7	4.510	A
3 - A280 South West	98.00	198.98	293.96	0.333	97.50	0.5	4.570	A
4 - A27 On Slip		190.04						
5 - A280 North	297.00	19.90	483.01	0.615	295.43	1.6	4.758	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	92.00	317.97	245.31	0.375	91.75	0.6	5.851	A
2 - Titnore Lane	138.00	267.74	325.44	0.424	137.98	0.7	4.801	A
3 - A280 South West	121.00	177.07	306.32	0.395	120.85	0.6	4.848	A
4 - A27 On Slip		169.05						
5 - A280 North	299.00	19.00	483.61	0.618	298.97	1.6	4.872	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	72.00	331.85	237.58	0.303	72.16	0.4	5.447	A
2 - Titnore Lane	123.00	245.13	338.75	0.363	123.16	0.6	4.178	A
3 - A280 South West	134.00	156.16	317.89	0.422	133.92	0.7	4.890	A
4 - A27 On Slip		176.99						
5 - A280 North	298.00	33.92	474.17	0.628	297.93	1.7	5.104	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	73.00	337.85	234.15	0.312	72.99	0.4	5.584	A
2 - Titnore Lane	148.00	265.81	326.26	0.454	147.75	0.8	5.034	A
3 - A280 South West	123.00	191.70	298.50	0.412	123.02	0.7	5.130	A
4 - A27 On Slip		173.93						
5 - A280 North	316.00	22.06	481.59	0.656	315.79	1.9	5.419	A

2021 Growth, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	7.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2021 Growth	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	62.00	0.00	16.00
	2 - Titnore Lane	0.00	0.00	22.00	70.00	61.00
	3 - A280 South West	0.00	51.00	0.00	7.00	169.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	86.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	54.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	23.00	51.00	46.00
	3 - A280 South West	0.00	42.00	0.00	13.00	162.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	66.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	59.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	14.00	47.00	47.00
	3 - A280 South West	0.00	60.00	0.00	14.00	116.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	101.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	66.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	21.00	58.00	77.00
	3 - A280 South West	0.00	44.00	0.00	12.00	151.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	46.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	5	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	4	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.40	7.32	0.7	A
2 - Titnore Lane	0.43	4.33	0.7	A
3 - A280 South West	0.74	11.65	2.7	S
4 - A27 On Slip				
5 - A280 North	0.72	7.01	2.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	84.00	312.02	240.87	0.349	83.47	0.5	5.698	A
2 - Titnore Lane	153.00	190.91	367.23	0.417	152.29	0.7	4.174	A
3 - A280 South West	227.00	174.15	307.93	0.737	224.32	2.7	10.455	B
4 - A27 On Slip		294.02						
5 - A280 North	263.00	50.40	451.34	0.583	261.62	1.4	4.710	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	67.00	285.32	254.18	0.264	67.17	0.4	4.816	A
2 - Titnore Lane	120.00	194.11	363.26	0.330	120.21	0.5	3.708	A
3 - A280 South West	217.00	171.09	307.38	0.706	217.21	2.5	10.016	B
4 - A27 On Slip		258.43						
5 - A280 North	243.00	42.12	450.58	0.539	243.20	1.2	4.345	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	81.00	374.70	203.31	0.398	80.71	0.7	7.323	A
2 - Titnore Lane	108.00	236.12	337.48	0.320	108.02	0.5	3.924	A
3 - A280 South West	190.00	170.75	307.95	0.617	190.82	1.6	7.739	A
4 - A27 On Slip		234.74						
5 - A280 North	316.00	59.96	441.91	0.715	314.74	2.4	7.007	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	282.28	256.41	0.335	86.14	0.5	5.289	A
2 - Titnore Lane	156.00	195.83	363.42	0.429	155.73	0.7	4.328	A
3 - A280 South West	207.00	217.95	282.22	0.733	206.01	2.6	11.653	B
4 - A27 On Slip		287.87						
5 - A280 North	237.00	43.96	449.22	0.528	236.32	1.1	4.293	A

2021 Growth, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	5.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2021 Growth	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	52.00	2.00	4.00
	2 - Titnore Lane	0.00	0.00	20.00	29.00	100.00
	3 - A280 South West	0.00	21.00	0.00	7.00	74.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	119.00	117.00	74.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	78.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	41.00	55.00	47.00
	3 - A280 South West	0.00	20.00	0.00	8.00	98.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	120.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	62.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	39.00	41.00	47.00
	3 - A280 South West	0.00	35.00	0.00	6.00	98.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	120.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	63.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	46.00	55.00	53.00
	3 - A280 South West	0.00	23.00	0.00	6.00	99.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	123.00	123.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	4	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.41	6.39	0.7	A
2 - Titnore Lane	0.48	5.41	0.9	A
3 - A280 South West	0.44	5.39	0.8	A
4 - A27 On Slip				
5 - A280 North	0.69	5.97	2.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	66.00	329.11	236.81	0.276	65.62	0.4	5.185	A
2 - Titnore Lane	149.00	247.57	334.75	0.445	148.20	0.8	4.804	A
3 - A280 South West	102.00	207.85	289.88	0.352	101.46	0.5	4.763	A
4 - A27 On Slip		197.94						
5 - A280 North	310.00	20.89	481.67	0.644	308.22	1.8	5.137	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	97.00	331.96	237.22	0.409	96.70	0.7	6.390	A
2 - Titnore Lane	143.00	280.68	318.31	0.449	142.98	0.8	5.133	A
3 - A280 South West	126.00	185.07	302.84	0.416	125.83	0.7	5.080	A
4 - A27 On Slip		177.05						
5 - A280 North	312.00	20.00	482.27	0.647	311.96	1.8	5.283	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	75.00	345.83	229.50	0.327	75.19	0.5	5.839	A
2 - Titnore Lane	127.00	256.16	332.76	0.382	127.19	0.6	4.381	A
3 - A280 South West	139.00	162.19	315.37	0.441	138.93	0.8	5.098	A
4 - A27 On Slip		184.01						
5 - A280 North	311.00	34.92	472.85	0.658	310.92	1.9	5.553	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	76.00	352.80	225.51	0.337	75.99	0.5	6.018	A
2 - Titnore Lane	154.00	277.77	319.72	0.482	153.70	0.9	5.411	A
3 - A280 South West	128.00	199.64	295.01	0.434	128.01	0.8	5.391	A
4 - A27 On Slip		180.91						
5 - A280 North	330.00	23.06	480.26	0.687	329.74	2.2	5.967	A

2021 + Committed, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	9.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2021 + Committed	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	67.00	0.00	16.00
	2 - Titnore Lane	0.00	0.00	22.00	70.00	61.00
	3 - A280 South West	0.00	51.00	0.00	8.00	189.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	89.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	59.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	24.00	51.00	46.00
	3 - A280 South West	0.00	43.00	0.00	13.00	181.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	69.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	64.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	14.00	47.00	47.00
	3 - A280 South West	0.00	61.00	0.00	14.00	136.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	104.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	70.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	21.00	58.00	77.00
	3 - A280 South West	0.00	45.00	0.00	12.00	171.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	49.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	5	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.43	7.75	0.7	A
2 - Titnore Lane	0.43	4.42	0.8	A
3 - A280 South West	0.81	15.54	3.9	C
4 - A27 On Slip				
5 - A280 North	0.72	7.19	2.5	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	89.00	314.80	239.59	0.371	88.42	0.6	5.931	A
2 - Titnore Lane	153.00	198.83	362.48	0.422	152.28	0.7	4.267	A
3 - A280 South West	248.00	174.13	308.33	0.804	244.19	3.8	13.342	B
4 - A27 On Slip		312.92						
5 - A280 North	266.00	50.22	451.68	0.589	264.59	1.4	4.776	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	72.00	289.35	252.24	0.285	72.18	0.4	5.005	A
2 - Titnore Lane	121.00	202.13	358.44	0.338	121.21	0.5	3.799	A
3 - A280 South West	237.00	171.09	307.85	0.770	237.32	3.5	12.854	B
4 - A27 On Slip		278.54						
5 - A280 North	246.00	43.15	450.23	0.546	246.20	1.2	4.417	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	378.67	201.40	0.427	85.67	0.7	7.754	A
2 - Titnore Lane	108.00	244.05	332.73	0.325	108.03	0.5	4.005	A
3 - A280 South West	211.00	170.74	308.31	0.684	212.25	2.2	9.489	A
4 - A27 On Slip		256.14						
5 - A280 North	319.00	60.99	441.53	0.722	317.69	2.5	7.192	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	90.00	286.26	254.41	0.354	90.18	0.6	5.487	A
2 - Titnore Lane	156.00	202.90	359.14	0.434	155.72	0.8	4.417	A
3 - A280 South West	228.00	217.96	282.63	0.807	226.38	3.9	15.541	C
4 - A27 On Slip		308.26						
5 - A280 North	240.00	44.89	448.90	0.535	241.37	1.2	4.364	A

2021 + Committed, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	6.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2021 + Committed	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	57.00	2.00	4.00
	2 - Titnore Lane	0.00	0.00	20.00	29.00	100.00
	3 - A280 South West	0.00	22.00	0.00	7.00	85.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	119.00	136.00	74.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	83.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	42.00	55.00	47.00
	3 - A280 South West	0.00	21.00	0.00	8.00	108.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	139.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	67.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	40.00	41.00	47.00
	3 - A280 South West	0.00	36.00	0.00	6.00	108.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	139.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	63.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	46.00	55.00	53.00
	3 - A280 South West	0.00	24.00	0.00	6.00	99.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	129.00	123.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	4	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.45	7.20	0.6	A
2 - Titnore Lane	0.48	5.63	0.9	A
3 - A280 South West	0.48	5.44	0.9	A
4 - A27 On Slip				
5 - A280 North	0.70	6.29	2.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	71.00	348.76	226.02	0.311	70.55	0.4	5.699	A
2 - Titnore Lane	149.00	271.25	320.61	0.465	148.14	0.9	5.192	A
3 - A280 South West	114.00	207.74	289.82	0.393	113.36	0.6	5.082	A
4 - A27 On Slip		209.80						
5 - A280 North	329.00	21.88	481.67	0.683	326.89	2.1	5.740	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	102.00	351.95	226.25	0.451	101.64	0.8	7.203	A
2 - Titnore Lane	144.00	304.62	303.88	0.474	143.97	0.9	5.626	A
3 - A280 South West	137.00	185.06	302.72	0.453	136.82	0.8	5.419	A
4 - A27 On Slip		188.05						
5 - A280 North	331.00	21.00	482.25	0.686	330.95	2.2	5.944	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	80.00	365.80	218.54	0.366	80.23	0.6	6.519	A
2 - Titnore Lane	128.00	280.17	318.31	0.402	128.21	0.7	4.739	A
3 - A280 South West	150.00	162.21	315.21	0.476	149.92	0.9	5.442	A
4 - A27 On Slip		195.02						
5 - A280 North	330.00	35.91	472.82	0.698	329.89	2.3	6.288	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	76.00	360.04	221.72	0.343	76.06	0.5	6.180	A
2 - Titnore Lane	154.00	278.05	319.82	0.482	153.76	0.9	5.412	A
3 - A280 South West	129.00	199.70	294.88	0.437	129.11	0.8	5.434	A
4 - A27 On Slip		182.03						
5 - A280 North	336.00	24.07	480.29	0.700	335.97	2.3	6.234	A

2021 + Committed + Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	13.08	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	2021 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/15s)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	75.00	0.00	16.00
	2 - Titnore Lane	0.00	0.00	28.00	70.00	61.00
	3 - A280 South West	0.00	59.00	0.00	12.00	203.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	95.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	66.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	30.00	51.00	46.00
	3 - A280 South West	0.00	50.00	0.00	18.00	195.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	75.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	72.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	20.00	47.00	47.00
	3 - A280 South West	0.00	68.00	0.00	19.00	150.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	110.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	78.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	27.00	58.00	77.00
	3 - A280 South West	0.00	52.00	0.00	17.00	185.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	55.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	2	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.48	8.88	0.9	A
2 - Titnore Lane	0.46	4.75	0.8	A
3 - A280 South West	0.50	25.02	7.0	D
4 - A27 On Slip				
5 - A280 North	0.74	7.81	2.8	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	97.00	328.08	232.39	0.417	96.29	0.7	6.579	A
2 - Titnore Lane	159.00	212.64	354.42	0.449	156.19	0.8	4.569	A
3 - A280 South West	274.00	174.06	308.88	0.357	267.53	6.5	19.461	C
4 - A27 On Slip		332.39						
5 - A280 North	272.00	57.61	447.24	0.608	270.47	1.5	5.048	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	79.00	302.44	245.13	0.322	79.23	0.5	5.431	A
2 - Titnore Lane	127.00	215.17	350.95	0.362	127.23	0.6	4.026	A
3 - A280 South West	263.00	171.11	308.46	0.353	263.30	6.2	20.265	C
4 - A27 On Slip		299.61						
5 - A280 North	252.00	50.22	446.18	0.565	252.22	1.3	4.645	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	94.00	391.69	194.42	0.484	93.56	0.9	8.885	A
2 - Titnore Lane	114.00	257.86	324.61	0.351	114.03	0.5	4.274	A
3 - A280 South West	237.00	170.70	308.93	0.767	239.69	3.5	13.466	B
4 - A27 On Slip		278.47						
5 - A280 North	325.00	68.18	437.30	0.743	323.51	2.8	7.809	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	98.00	299.12	247.37	0.396	98.26	0.7	6.045	A
2 - Titnore Lane	162.00	217.07	350.77	0.462	161.69	0.8	4.752	A
3 - A280 South West	254.00	217.97	283.17	0.837	250.50	7.0	25.022	D
4 - A27 On Slip		327.50						
5 - A280 North	246.00	51.57	445.10	0.553	247.55	1.2	4.592	A

2021 + Committed + Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	7.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	2021 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/15s)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	65.00	2.00	4.00
	2 - Titnore Lane	0.00	0.00	26.00	29.00	100.00
	3 - A280 South West	0.00	28.00	0.00	11.00	96.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	119.00	144.00	74.00	0.00

Demand (Veh/TS)

17:15 - 17:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	90.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	48.00	55.00	47.00
	3 - A280 South West	0.00	27.00	0.00	12.00	119.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	148.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	74.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	46.00	41.00	47.00
	3 - A280 South West	0.00	42.00	0.00	10.00	119.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	148.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	75.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	52.00	55.00	53.00
	3 - A280 South West	0.00	30.00	0.00	10.00	120.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	123.00	151.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	3	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.50	8.20	1.0	A
2 - Titnore Lane	0.54	6.60	1.2	A
3 - A280 South West	0.54	6.67	1.2	A
4 - A27 On Slip				
5 - A280 North	0.75	7.54	2.9	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	79.00	362.49	220.35	0.359	78.45	0.6	6.319	A
2 - Titnore Lane	155.00	286.99	311.34	0.498	154.02	1.0	5.686	A
3 - A280 South West	135.00	207.63	289.91	0.466	134.14	0.9	5.747	A
4 - A27 On Slip		226.55						
5 - A280 North	337.00	27.82	477.89	0.705	334.66	2.3	6.187	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	109.00	366.91	217.88	0.500	108.57	1.0	8.201	A
2 - Titnore Lane	150.00	320.53	294.25	0.510	149.95	1.0	6.233	A
3 - A280 South West	158.00	185.06	302.77	0.522	157.78	1.1	6.198	A
4 - A27 On Slip		205.03						
5 - A280 North	340.00	26.99	478.44	0.711	339.92	2.4	6.489	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	87.00	380.76	210.18	0.414	87.27	0.7	7.340	A
2 - Titnore Lane	134.00	296.19	308.66	0.434	134.25	0.8	5.169	A
3 - A280 South West	171.00	162.24	315.18	0.543	170.91	1.2	6.234	A
4 - A27 On Slip		212.02						
5 - A280 North	339.00	41.90	469.02	0.723	338.86	2.6	6.902	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	88.00	387.68	206.23	0.427	87.98	0.7	7.608	A
2 - Titnore Lane	160.00	317.66	295.64	0.541	159.61	1.2	6.598	A
3 - A280 South West	160.00	199.53	294.97	0.542	159.99	1.2	6.667	A
4 - A27 On Slip		208.87						
5 - A280 North	358.00	30.07	476.43	0.751	357.62	2.9	7.544	A

2031 + Committed + Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	22.95	<

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D13	2031 + Committed + Development	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	80.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	30.00	76.00	67.00
	3 - A280 South West	0.00	63.00	0.00	13.00	218.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	103.00	30.00	0.00

Demand (Veh/TS)

08:15 - 08:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	71.00	0.00	9.00
	2 - Titnore Lane	0.00	0.00	32.00	55.00	50.00
	3 - A280 South West	0.00	54.00	0.00	19.00	210.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	121.00	81.00	71.00	0.00

Demand (Veh/TS)

08:30 - 08:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	12.00	77.00	0.00	12.00
	2 - Titnore Lane	0.00	0.00	21.00	51.00	51.00
	3 - A280 South West	0.00	73.00	0.00	20.00	160.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	119.00	71.00	0.00

Demand (Veh/TS)

08:45 - 09:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	84.00	0.00	18.00
	2 - Titnore Lane	0.00	0.00	29.00	63.00	84.00
	3 - A280 South West	0.00	56.00	0.00	18.00	198.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	136.00	59.00	71.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	2	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.57	11.80	1.3	B
2 - Titnore Lane	0.52	5.46	1.1	A
3 - A280 South West	1.00	50.85	16.7	F
4 - A27 On Slip				
5 - A280 North	0.81	10.50	4.1	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	104.00	354.11	217.62	0.478	103.10	0.9	7.800	A
2 - Titnore Lane	173.00	228.29	344.69	0.502	172.00	1.0	5.182	A
3 - A280 South West	294.00	188.83	300.53	0.678	280.21	13.8	33.475	C
4 - A27 On Slip		351.29						
5 - A280 North	296.00	60.05	445.79	0.664	294.06	1.9	5.859	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	327.57	230.71	0.373	86.30	0.6	6.246	A
2 - Titnore Lane	137.00	232.25	340.17	0.403	137.32	0.7	4.444	A
3 - A280 South West	283.00	185.16	300.36	0.642	282.66	14.1	47.003	E
4 - A27 On Slip		323.22						
5 - A280 North	273.00	54.26	443.80	0.615	273.32	1.6	5.289	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	101.00	424.50	175.88	0.574	100.29	1.3	11.797	B
2 - Titnore Lane	123.00	277.09	312.47	0.394	123.03	0.7	4.751	A
3 - A280 South West	253.00	184.48	300.97	0.641	261.23	5.9	25.762	C
4 - A27 On Slip		303.64						
5 - A280 North	353.00	73.99	433.81	0.814	350.51	4.1	10.503	B

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	105.00	322.85	233.84	0.449	105.48	0.8	7.036	A
2 - Titnore Lane	176.00	233.82	340.17	0.517	175.59	1.1	5.455	A
3 - A280 South West	272.00	236.09	272.86	0.837	261.16	16.7	50.847	F
4 - A27 On Slip		345.58						
5 - A280 North	266.00	54.26	443.52	0.600	268.59	1.5	5.220	A

2031 + Committed + Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	9.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D14	2031 + Committed + Development	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/15s)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	9.00	70.00	2.00	5.00
	2 - Titnore Lane	0.00	0.00	28.00	31.00	110.00
	3 - A280 South West	0.00	30.00	0.00	12.00	103.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	131.00	156.00	82.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	98.00	1.00	13.00
	2 - Titnore Lane	0.00	0.00	52.00	61.00	51.00
	3 - A280 South West	0.00	29.00	0.00	13.00	129.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	159.00	77.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	9.00	80.00	1.00	5.00
	2 - Titnore Lane	0.00	0.00	49.00	45.00	51.00
	3 - A280 South West	0.00	45.00	0.00	11.00	129.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	159.00	76.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	81.00	2.00	7.00
	2 - Titnore Lane	0.00	0.00	56.00	61.00	58.00
	3 - A280 South West	0.00	32.00	0.00	11.00	130.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	135.00	163.00	92.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	3	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.59	10.90	1.4	S
2 - Titnore Lane	0.63	8.53	1.6	A
3 - A280 South West	0.61	8.08	1.5	A
4 - A27 On Slip				
5 - A280 North	0.82	10.31	4.3	S

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	86.00	395.50	202.07	0.426	85.27	0.7	7.659	A
2 - Titnore Lane	169.00	312.23	295.91	0.571	167.69	1.3	6.952	A
3 - A280 South West	145.00	228.12	278.75	0.520	143.93	1.1	6.625	A
4 - A27 On Slip		246.13						
5 - A280 North	369.00	29.78	477.13	0.773	365.72	3.3	7.862	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	119.00	398.91	200.18	0.594	118.31	1.4	10.899	B
2 - Titnore Lane	164.00	347.29	277.83	0.590	163.89	1.4	7.889	A
3 - A280 South West	171.00	203.05	293.04	0.584	170.69	1.4	7.336	A
4 - A27 On Slip		222.00						
5 - A280 North	370.00	28.99	477.68	0.775	369.92	3.4	8.336	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	95.00	413.61	191.99	0.495	95.43	1.0	9.362	A
2 - Titnore Lane	145.00	321.28	293.25	0.494	145.42	1.0	6.107	A
3 - A280 South West	185.00	178.37	306.43	0.604	184.88	1.5	7.396	A
4 - A27 On Slip		230.06						
5 - A280 North	369.00	44.87	467.62	0.789	368.74	3.6	9.063	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	96.00	421.37	187.58	0.512	95.97	1.0	9.817	A
2 - Titnore Lane	175.00	344.41	279.19	0.627	174.35	1.6	8.531	A
3 - A280 South West	173.00	219.23	284.30	0.609	172.97	1.5	8.078	A
4 - A27 On Slip		226.76						
5 - A280 North	390.00	32.08	475.63	0.820	389.29	4.3	10.310	B

2021 + Committed + Development + Sensitivity, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	16.18	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D15	2021 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	78.00	0.00	16.00
	2 - Titnore Lane	0.00	0.00	29.00	70.00	61.00
	3 - A280 South West	0.00	61.00	0.00	14.00	212.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	97.00	28.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	69.00	0.00	8.00
	2 - Titnore Lane	0.00	0.00	30.00	51.00	46.00
	3 - A280 South West	0.00	52.00	0.00	19.00	205.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	111.00	77.00	66.00	0.00

Demand (Veh/TS)

08:30 - 08:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	11.00	74.00	0.00	11.00
	2 - Titnore Lane	0.00	0.00	21.00	47.00	47.00
	3 - A280 South West	0.00	70.00	0.00	20.00	159.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	149.00	112.00	66.00	0.00

Demand (Veh/TS)

08:45 - 09:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	81.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	28.00	58.00	77.00
	3 - A280 South West	0.00	54.00	0.00	18.00	194.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	125.00	57.00	66.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	2	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.50	9.27	1.0	A
2 - Titnore Lane	0.47	4.86	0.9	A
3 - A280 South West	0.58	33.26	9.9	D
4 - A27 On Slip				
5 - A280 North	0.75	8.03	2.9	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	100.00	331.52	230.53	0.434	99.24	0.8	6.818	A
2 - Titnore Lane	160.00	217.57	351.41	0.455	159.17	0.8	4.662	A
3 - A280 South West	287.00	174.04	308.80	0.628	277.98	9.0	24.554	C
4 - A27 On Slip		340.98						
5 - A280 North	274.00	59.08	446.37	0.614	272.43	1.6	5.129	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	82.00	306.46	242.96	0.338	82.24	0.5	5.607	A
2 - Titnore Lane	127.00	220.18	347.88	0.365	127.25	0.6	4.085	A
3 - A280 South West	276.00	171.12	308.38	0.558	276.08	8.9	28.338	C
4 - A27 On Slip		311.43						
5 - A280 North	254.00	52.23	445.04	0.571	254.22	1.3	4.722	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	96.00	395.87	192.15	0.500	95.54	1.0	9.270	A
2 - Titnore Lane	115.00	261.79	322.21	0.357	115.02	0.6	4.344	A
3 - A280 South West	249.00	170.69	308.84	0.806	253.46	4.5	17.351	C
4 - A27 On Slip		291.12						
5 - A280 North	327.00	70.42	435.97	0.750	325.44	2.9	8.031	A

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	101.00	302.86	245.32	0.412	101.27	0.7	6.261	A
2 - Titnore Lane	163.00	222.12	347.67	0.469	162.68	0.9	4.857	A
3 - A280 South West	266.00	217.97	283.09	0.940	260.54	9.9	33.261	D
4 - A27 On Slip		336.66						
5 - A280 North	248.00	53.24	444.17	0.558	249.62	1.3	4.665	A

2021 + Committed + Development + Sensitivity, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	7.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D16	2021 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

		To				
From		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
	1 - A27 Off Slip	0.00	8.00	67.00	2.00	4.00
	2 - Titnore Lane	0.00	0.00	28.00	29.00	100.00
	3 - A280 South West	0.00	29.00	0.00	12.00	101.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	119.00	151.00	74.00	0.00

17:00 - 17:15

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	93.00	1.00	12.00
	2 - Titnore Lane	0.00	0.00	50.00	55.00	47.00
	3 - A280 South West	0.00	28.00	0.00	13.00	124.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	154.00	70.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	8.00	77.00	1.00	4.00
	2 - Titnore Lane	0.00	0.00	48.00	41.00	47.00
	3 - A280 South West	0.00	43.00	0.00	11.00	124.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	122.00	154.00	69.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	5.00	78.00	2.00	6.00
	2 - Titnore Lane	0.00	0.00	54.00	55.00	53.00
	3 - A280 South West	0.00	31.00	0.00	11.00	125.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	123.00	157.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	2	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.52	8.74	1.1	A
2 - Titnore Lane	0.56	6.98	1.2	A
3 - A280 South West	0.57	7.02	1.3	A
4 - A27 On Slip				
5 - A280 North	0.77	7.98	3.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	81.00	370.29	215.98	0.375	80.41	0.6	6.609	A
2 - Titnore Lane	157.00	295.82	306.04	0.513	155.96	1.0	5.957	A
3 - A280 South West	142.00	207.56	290.18	0.489	141.05	0.9	5.999	A
4 - A27 On Slip		232.44						
5 - A280 North	344.00	28.81	477.26	0.721	341.49	2.5	6.515	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	112.00	373.93	213.95	0.523	111.52	1.1	8.744	A
2 - Titnore Lane	152.00	329.49	288.79	0.526	151.94	1.1	6.573	A
3 - A280 South West	165.00	185.05	303.00	0.545	164.77	1.2	6.500	A
4 - A27 On Slip		211.02						
5 - A280 North	346.00	27.99	477.81	0.724	345.93	2.6	6.816	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	90.00	387.74	206.26	0.436	90.29	0.8	7.780	A
2 - Titnore Lane	136.00	305.21	303.19	0.449	136.28	0.8	5.400	A
3 - A280 South West	178.00	162.26	315.35	0.564	177.90	1.3	6.541	A
4 - A27 On Slip		218.02						
5 - A280 North	345.00	42.89	468.38	0.737	344.85	2.7	7.270	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	91.00	394.65	202.33	0.450	90.98	0.8	8.080	A
2 - Titnore Lane	162.00	326.63	290.18	0.558	161.58	1.2	6.976	A
3 - A280 South West	167.00	199.49	295.17	0.566	166.99	1.3	7.021	A
4 - A27 On Slip		214.85						
5 - A280 North	364.00	31.07	475.80	0.765	363.58	3.2	7.978	A

2031 + Committed + Development + Sensitivity, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	31.66	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D17	2031 + Committed + Development + Sensitivity	AM Peak	DIRECT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	83.00	0.00	17.00
	2 - Titnore Lane	0.00	0.00	31.00	76.00	67.00
	3 - A280 South West	0.00	65.00	0.00	14.00	227.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	105.00	30.00	0.00

Demand (Veh/TS)

08:15 - 08:30

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	74.00	0.00	9.00
	2 - Titnore Lane	0.00	0.00	33.00	55.00	50.00
	3 - A280 South West	0.00	56.00	0.00	20.00	219.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	121.00	83.00	71.00	0.00

Demand (Veh/TS)

08:30 - 08:45

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	12.00	80.00	0.00	12.00
	2 - Titnore Lane	0.00	0.00	22.00	51.00	51.00
	3 - A280 South West	0.00	76.00	0.00	21.00	170.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	163.00	121.00	71.00	0.00

Demand (Veh/TS)

08:45 - 09:00

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	3.00	87.00	0.00	18.00
	2 - Titnore Lane	0.00	0.00	30.00	63.00	84.00
	3 - A280 South West	0.00	58.00	0.00	19.00	208.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	136.00	61.00	71.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	8	1	0	2
	2 - Titnore Lane	0	0	3	4	1
	3 - A280 South West	0	1	0	3	1
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	4	3	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.60	12.75	1.5	B
2 - Titnore Lane	0.53	5.61	1.1	A
3 - A280 South West	1.04	74.85	27.2	F
4 - A27 On Slip				
5 - A280 North	0.82	10.99	4.3	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	107.00	356.82	216.15	0.495	106.04	1.0	8.105	A
2 - Titnore Lane	174.00	233.20	341.32	0.510	172.97	1.0	5.315	A
3 - A280 South West	306.00	188.80	300.73	1.018	286.24	13.8	42.837	E
4 - A27 On Slip		356.60						
5 - A280 North	298.00	60.80	445.35	0.669	296.02	2.0	5.952	A

08:15 - 08:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	89.00	331.20	228.75	0.389	89.32	0.6	6.468	A
2 - Titnore Lane	138.00	237.27	336.62	0.410	138.33	0.7	4.545	A
3 - A280 South West	295.00	185.17	300.56	0.682	291.99	22.8	72.418	F
4 - A27 On Slip		331.86						
5 - A280 North	275.00	55.87	442.89	0.621	275.32	1.7	5.381	A

08:30 - 08:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	104.00	429.90	172.96	0.601	103.19	1.5	12.751	B
2 - Titnore Lane	124.00	281.90	309.20	0.401	124.03	0.7	4.862	A
3 - A280 South West	267.00	184.44	301.20	0.688	280.13	9.6	47.988	E
4 - A27 On Slip		321.22						
5 - A280 North	355.00	77.58	431.67	0.822	352.33	4.3	10.991	B

08:45 - 09:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	108.00	325.99	232.11	0.465	108.57	0.9	7.320	A
2 - Titnore Lane	177.00	239.01	336.64	0.526	176.58	1.1	5.608	A
3 - A280 South West	285.00	236.12	273.03	1.044	267.44	27.2	74.852	F
4 - A27 On Slip		351.28						
5 - A280 North	268.00	55.21	443.02	0.605	270.78	1.6	5.309	A

2031 + Committed + Development + Sensitivity, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 Off Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4, 5	10.33	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D18	2031 + Committed + Development + Sensitivity	PM Peak	DIRECT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1 - A27 Off Slip		✓	100.000
2 - Titnore Lane		✓	100.000
3 - A280 South West		✓	100.000
4 - A27 On Slip			
5 - A280 North		✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	9.00	73.00	2.00	5.00
	2 - Titnore Lane	0.00	0.00	30.00	31.00	110.00
	3 - A280 South West	0.00	31.00	0.00	13.00	108.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	131.00	162.00	82.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	7.00	101.00	1.00	13.00
	2 - Titnore Lane	0.00	0.00	54.00	61.00	51.00
	3 - A280 South West	0.00	30.00	0.00	14.00	134.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	166.00	77.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	9.00	83.00	1.00	5.00
	2 - Titnore Lane	0.00	0.00	51.00	45.00	51.00
	3 - A280 South West	0.00	46.00	0.00	11.00	134.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	134.00	166.00	76.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0.00	6.00	84.00	2.00	7.00
	2 - Titnore Lane	0.00	0.00	58.00	61.00	58.00
	3 - A280 South West	0.00	34.00	0.00	11.00	135.00
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0.00	135.00	169.00	92.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A27 Off Slip	2 - Titnore Lane	3 - A280 South West	4 - A27 On Slip	5 - A280 North
From	1 - A27 Off Slip	0	0	0	0	0
	2 - Titnore Lane	0	0	1	1	4
	3 - A280 South West	0	1	0	2	2
	4 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - A280 North	0	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - A27 Off Slip	0.62	11.95	1.6	S
2 - Titnore Lane	0.65	9.17	1.8	A
3 - A280 South West	0.63	8.59	1.7	A
4 - A27 On Slip				
5 - A280 North	0.83	11.22	4.8	S

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	89.00	402.22	196.30	0.449	88.20	0.8	8.117	A
2 - Titnore Lane	171.00	320.98	290.66	0.588	169.60	1.4	7.352	A
3 - A280 South West	152.00	228.01	279.02	0.545	150.82	1.2	6.959	A
4 - A27 On Slip		251.98						
5 - A280 North	375.00	30.76	476.50	0.787	371.46	3.5	8.311	A

17:15 - 17:30

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	122.00	406.85	195.73	0.623	121.20	1.6	11.949	B
2 - Titnore Lane	166.00	357.15	271.80	0.611	165.86	1.5	8.481	A
3 - A280 South West	178.00	203.02	293.27	0.607	177.66	1.5	7.760	A
4 - A27 On Slip		227.99						
5 - A280 North	377.00	29.98	477.03	0.790	376.87	3.7	8.960	A

17:30 - 17:45

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	98.00	421.55	187.54	0.523	98.48	1.1	10.161	B
2 - Titnore Lane	147.00	331.29	287.15	0.512	147.47	1.1	6.467	A
3 - A280 South West	191.00	178.40	306.58	0.623	190.89	1.6	7.769	A
4 - A27 On Slip		236.08						
5 - A280 North	376.00	45.86	466.97	0.805	375.69	4.0	9.803	A

17:45 - 18:00

Arm	Total Demand (Veh/TS)	Circulating flow (Veh/TS)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	End queue (Veh)	Delay (s)	LOS
1 - A27 Off Slip	99.00	429.28	183.15	0.541	98.96	1.2	10.682	B
2 - Titnore Lane	177.00	353.35	273.74	0.647	176.28	1.8	9.166	A
3 - A280 South West	180.00	219.16	284.53	0.633	179.93	1.7	8.594	A
4 - A27 On Slip		233.70						
5 - A280 North	396.00	34.07	474.35	0.835	395.21	4.8	11.218	B

Junctions 9			
PICADY 9 - Priority Intersection Module			
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Filename: Access Dappers Lane - OH.j9

Path: T:\Projects\9000 Series Project Numbers\9105ITB Land at Angmering, Arun Distr, W Susx\Tech\Assessments\Northern Site\Updated Jan 2018

Report generation date: 19/01/2018 15:12:32

»2021 + Committed + Development, AM
 »2021 + Committed + Development, PM
 »2031 + Committed + Development, AM
 »2031 + Committed + Development, PM
 »2021 + Committed + Development + Sensitivity, AM
 »2021 + Committed + Development + Sensitivity, PM
 »2031 + Committed + Development + Sensitivity, AM
 »2031 + Committed + Development + Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2021 + Committed + Development								
Stream B-AC	0.0	6.30	0.02	A	0.0	6.09	0.01	A
Stream C-AB	0.0	4.91	0.01	A	0.0	4.83	0.01	A
2031 + Committed + Development								
Stream B-AC	0.0	6.35	0.02	A	0.0	5.96	0.01	A
Stream C-AB	0.0	4.90	0.01	A	0.0	4.73	0.01	A
2021 + Committed + Development + Sensitivity								
Stream B-AC	0.0	6.40	0.02	A	0.0	5.99	0.01	A
Stream C-AB	0.0	4.91	0.01	A	0.0	4.71	0.01	A
2031 + Committed + Development + Sensitivity								
Stream B-AC	0.0	6.45	0.02	A	0.0	6.01	0.01	A
Stream C-AB	0.0	4.90	0.01	A	0.0	4.68	0.01	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.

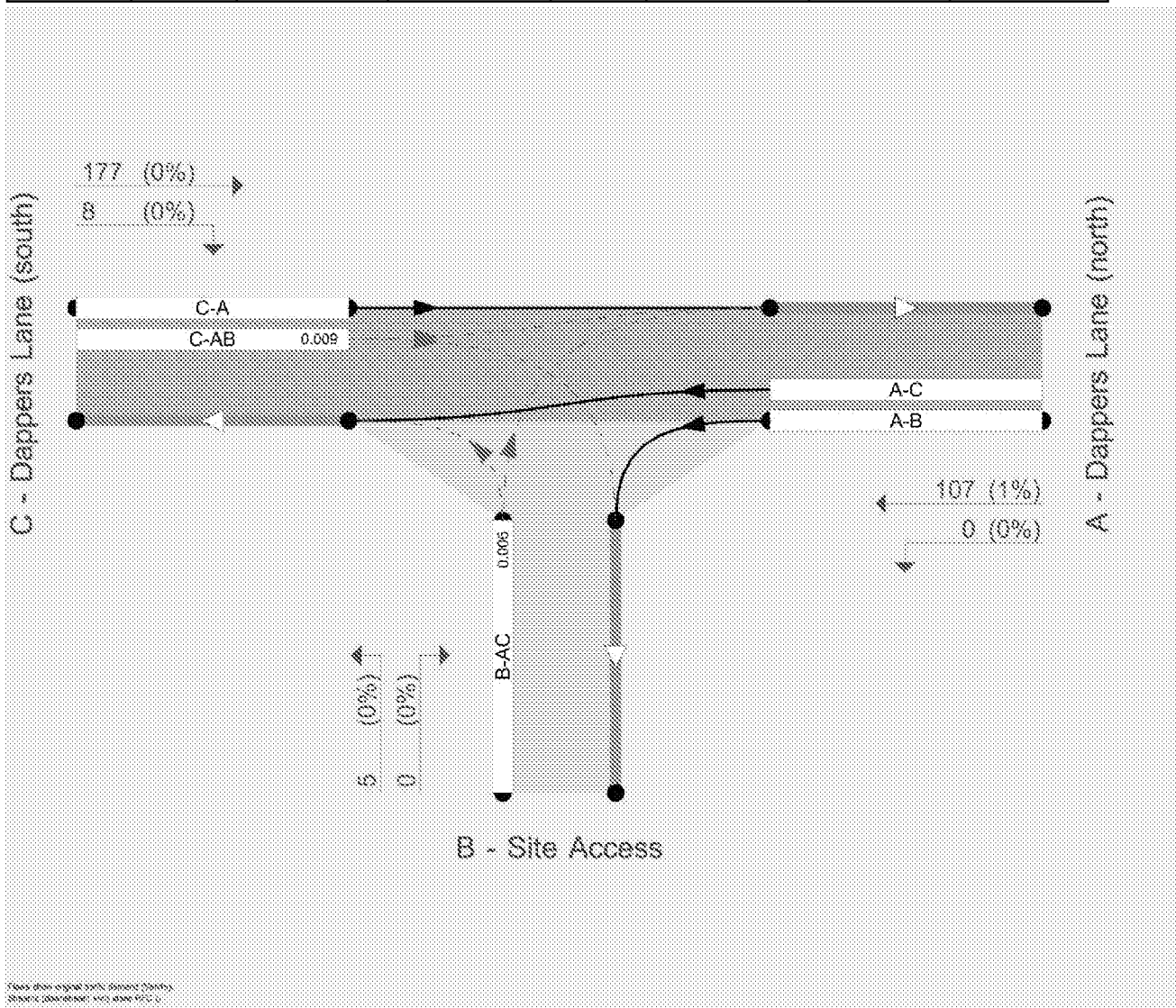
File summary

File Description

Title	A280 and Water Lane
Location	Angmering
Site number	ITB9105
Date	19/05/2016
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\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

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	2021 + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D2	2021 + Committed + Development	PM	ONE HOUR	16:45	18:15	15
D3	2031 + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D4	2031 + Committed + Development	PM	ONE HOUR	16:45	18:15	15
D5	2021 + Committed + Development + Sensitivity	AM	ONE HOUR	07:45	09:15	15
D6	2021 + Committed + Development + Sensitivity	PM	ONE HOUR	16:45	18:15	15
D7	2031 + Committed + Development + Sensitivity	AM	ONE HOUR	07:45	09:15	15
D8	2031 + Committed + Development + Sensitivity	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dappers Lane (north)		Major
B	Site Access		Minor
C	Dappers Lane (south)		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 - Dappers Lane (south)	5.57			250.0	✓	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	3.01	18	15

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	B-A	492	0.091	0.231	0.145	0.329
1	B-C	634	0.099	0.250	-	-
1	C-B	719	0.284	0.284	-	-

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	2021 + Committed + Development	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	186	100.000
B - Site Access		✓	10	100.000
C - Dappers Lane (south)		✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	186
	B - Site Access	0	0	10
	C - Dappers Lane (south)	125	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	1
	B - Site Access	0	0	0
	C - Dappers Lane (south)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	6.30	0.0	A
C-AB	0.01	4.91	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	599	0.013	7	0.0	6.087	A
C-AB	3	737	0.005	3	0.0	4.907	A
C-A	94			94			
A-B	0			0			
A-C	140			140			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	592	0.015	9	0.0	6.174	A
C-AB	4	741	0.006	4	0.0	4.885	A
C-A	112			112			
A-B	0			0			
A-C	167			167			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	582	0.019	11	0.0	6.298	A
C-AB	5	747	0.007	5	0.0	4.854	A
C-A	137			137			
A-B	0			0			
A-C	205			205			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	582	0.019	11	0.0	6.298	A
C-AB	5	747	0.007	5	0.0	4.857	A
C-A	137			137			
A-B	0			0			
A-C	205			205			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	592	0.015	9	0.0	6.174	A
C-AB	4	741	0.006	4	0.0	4.886	A
C-A	112			112			
A-B	0			0			
A-C	167			167			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	599	0.013	8	0.0	6.087	A
C-AB	3	737	0.005	3	0.0	4.910	A
C-A	94			94			
A-B	0			0			
A-C	140			140			

2021 + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 + Committed + Development	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	135	100.000
B - Site Access		✓	5	100.000
C - Dappers Lane (south)		✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	135
	B - Site Access	0	0	5
	C - Dappers Lane (south)	135	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	2
	B - Site Access	0	0	0
	C - Dappers Lane (south)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.01	6.09	0.0	A
C-AB	0.01	4.83	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	608	0.006	4	0.0	5.953	A
C-AB	7	752	0.009	7	0.0	4.833	A
C-A	101			101			
A-B	0			0			
A-C	102			102			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	603	0.007	4	0.0	6.010	A
C-AB	9	759	0.011	9	0.0	4.799	A
C-A	120			120			
A-B	0			0			
A-C	121			121			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	596	0.009	5	0.0	6.091	A
C-AB	11	768	0.014	11	0.0	4.753	A
C-A	147			147			
A-B	0			0			
A-C	149			149			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	596	0.009	6	0.0	6.091	A
C-AB	11	768	0.014	11	0.0	4.755	A
C-A	147			147			
A-B	0			0			
A-C	149			149			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	603	0.007	5	0.0	6.010	A
C-AB	9	759	0.011	9	0.0	4.802	A
C-A	120			120			
A-B	0			0			
A-C	121			121			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	608	0.006	4	0.0	5.953	A
C-AB	7	752	0.009	7	0.0	4.834	A
C-A	101			101			
A-B	0			0			
A-C	102			102			

2031 + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2031 + Committed + Development	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	202	100.000
B - Site Access		✓	10	100.000
C - Dappers Lane (south)		✓	139	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	202
	B - Site Access	0	0	10
	C - Dappers Lane (south)	135	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	2
	B - Site Access	0	0	0
	C - Dappers Lane (south)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	6.35	0.0	A
C-AB	0.01	4.90	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	595	0.013	7	0.0	6.122	A
C-AB	3	738	0.005	3	0.0	4.900	A
C-A	101			101			
A-B	0			0			
A-C	152			152			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	588	0.015	9	0.0	6.218	A
C-AB	4	742	0.006	4	0.0	4.877	A
C-A	121			121			
A-B	0			0			
A-C	182			182			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	577	0.019	11	0.0	6.354	A
C-AB	6	749	0.007	5	0.0	4.843	A
C-A	148			148			
A-B	0			0			
A-C	222			222			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	577	0.019	11	0.0	6.354	A
C-AB	6	749	0.007	6	0.0	4.844	A
C-A	148			148			
A-B	0			0			
A-C	222			222			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	588	0.015	9	0.0	6.220	A
C-AB	4	742	0.006	4	0.0	4.878	A
C-A	121			121			
A-B	0			0			
A-C	182			182			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	595	0.013	8	0.0	6.125	A
C-AB	3	738	0.005	4	0.0	4.901	A
C-A	101			101			
A-B	0			0			
A-C	152			152			

2031 + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2031 + Committed + Development	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	90	100.000
B - Site Access		✓	5	100.000
C - Dappers Lane (south)		✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	90
	B - Site Access	0	0	5
	C - Dappers Lane (south)	149	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	2
	B - Site Access	0	0	0
	C - Dappers Lane (south)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.01	5.96	0.0	A
C-AB	0.01	4.73	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	617	0.006	4	0.0	5.869	A
C-AB	7	768	0.009	7	0.0	4.731	A
C-A	111			111			
A-B	0			0			
A-C	68			68			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	614	0.007	4	0.0	5.908	A
C-AB	9	778	0.011	9	0.0	4.681	A
C-A	132			132			
A-B	0			0			
A-C	81			81			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	609	0.009	5	0.0	5.963	A
C-AB	11	791	0.014	11	0.0	4.613	A
C-A	162			162			
A-B	0			0			
A-C	99			99			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	609	0.009	6	0.0	5.963	A
C-AB	11	791	0.014	11	0.0	4.613	A
C-A	162			162			
A-B	0			0			
A-C	99			99			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	614	0.007	5	0.0	5.911	A
C-AB	9	778	0.011	9	0.0	4.681	A
C-A	132			132			
A-B	0			0			
A-C	81			81			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	617	0.006	4	0.0	5.869	A
C-AB	7	768	0.009	7	0.0	4.731	A
C-A	111			111			
A-B	0			0			
A-C	68			68			

2021 + Committed + Development + Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D5	2021 + Committed + Development + Sensitivity	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	219	100.000
B - Site Access		✓	10	100.000
C - Dappers Lane (south)		✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	219
	B - Site Access	0	0	10
	C - Dappers Lane (south)	139	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	1
	B - Site Access	0	0	0
	C - Dappers Lane (south)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	6.40	0.0	A
C-AB	0.01	4.91	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	593	0.013	7	0.0	6.152	A
C-AB	4	737	0.005	3	0.0	4.908	A
C-A	104			104			
A-B	0			0			
A-C	165			165			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	584	0.015	9	0.0	6.254	A
C-AB	4	741	0.006	4	0.0	4.886	A
C-A	124			124			
A-B	0			0			
A-C	197			197			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	573	0.019	11	0.0	6.401	A
C-AB	6	747	0.007	6	0.0	4.853	A
C-A	152			152			
A-B	0			0			
A-C	241			241			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	573	0.019	11	0.0	6.401	A
C-AB	6	747	0.007	6	0.0	4.856	A
C-A	152			152			
A-B	0			0			
A-C	241			241			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	584	0.015	9	0.0	6.255	A
C-AB	4	741	0.006	4	0.0	4.887	A
C-A	124			124			
A-B	0			0			
A-C	197			197			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	593	0.013	8	0.0	6.155	A
C-AB	4	737	0.005	4	0.0	4.909	A
C-A	104			104			
A-B	0			0			
A-C	165			165			

2021 + Committed + Development + Sensitivity, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D6	2021 + Committed + Development + Sensitivity	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	100	100.000
B - Site Access		✓	5	100.000
C - Dappers Lane (south)		✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	100
	B - Site Access	0	0	5
	C - Dappers Lane (south)	163	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	1
	B - Site Access	0	0	0
	C - Dappers Lane (south)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.01	5.99	0.0	A
C-AB	0.01	4.71	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	615	0.006	4	0.0	5.886	A
C-AB	7	772	0.009	7	0.0	4.704	A
C-A	122			122			
A-B	0			0			
A-C	75			75			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	612	0.007	4	0.0	5.929	A
C-AB	9	783	0.011	9	0.0	4.649	A
C-A	145			145			
A-B	0			0			
A-C	90			90			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	606	0.009	5	0.0	5.990	A
C-AB	11	798	0.014	11	0.0	4.575	A
C-A	177			177			
A-B	0			0			
A-C	110			110			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	606	0.009	6	0.0	5.990	A
C-AB	11	798	0.014	11	0.0	4.577	A
C-A	177			177			
A-B	0			0			
A-C	110			110			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	612	0.007	5	0.0	5.932	A
C-AB	9	783	0.011	9	0.0	4.649	A
C-A	145			145			
A-B	0			0			
A-C	90			90			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	615	0.006	4	0.0	5.886	A
C-AB	7	772	0.009	7	0.0	4.706	A
C-A	122			122			
A-B	0			0			
A-C	75			75			

2031 + Committed + Development + Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D7	2031 + Committed + Development + Sensitivity	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	235	100.000
B - Site Access		✓	10	100.000
C - Dappers Lane (south)		✓	153	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	235
	B - Site Access	0	0	10
	C - Dappers Lane (south)	149	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	1
	B - Site Access	0	0	0
	C - Dappers Lane (south)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	6.45	0.0	A
C-AB	0.01	4.90	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	590	0.013	7	0.0	6.184	A
C-AB	4	738	0.005	4	0.0	4.899	A
C-A	112			112			
A-B	0			0			
A-C	177			177			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	581	0.015	9	0.0	6.294	A
C-AB	4	743	0.006	4	0.0	4.874	A
C-A	133			133			
A-B	0			0			
A-C	211			211			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	569	0.019	11	0.0	6.452	A
C-AB	6	749	0.008	6	0.0	4.838	A
C-A	163			163			
A-B	0			0			
A-C	259			259			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	11	569	0.019	11	0.0	6.452	A
C-AB	6	749	0.008	6	0.0	4.839	A
C-A	163			163			
A-B	0			0			
A-C	259			259			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	9	581	0.015	9	0.0	6.294	A
C-AB	4	743	0.006	4	0.0	4.875	A
C-A	133			133			
A-B	0			0			
A-C	211			211			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	8	590	0.013	8	0.0	6.187	A
C-AB	4	738	0.005	4	0.0	4.901	A
C-A	112			112			
A-B	0			0			
A-C	177			177			

2031 + Committed + Development + Sensitivity, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Dappers Lane (south) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access and Dappers Lane	T-Junction	Two-way	0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D8	2031 + Committed + Development + Sensitivity	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - Dappers Lane (north)		✓	107	100.000
B - Site Access		✓	5	100.000
C - Dappers Lane (south)		✓	185	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	107
	B - Site Access	0	0	5
	C - Dappers Lane (south)	177	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Dappers Lane (north)	B - Site Access	C - Dappers Lane (south)
From	A - Dappers Lane (north)	0	0	1
	B - Site Access	0	0	0
	C - Dappers Lane (south)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.01	6.01	0.0	A
C-AB	0.01	4.68	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	614	0.006	4	0.0	5.899	A
C-AB	7	777	0.009	7	0.0	4.674	A
C-A	132			132			
A-B	0			0			
A-C	81			81			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	610	0.007	4	0.0	5.945	A
C-AB	9	789	0.011	9	0.0	4.613	A
C-A	157			157			
A-B	0			0			
A-C	96			96			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	604	0.009	5	0.0	6.009	A
C-AB	12	806	0.014	12	0.0	4.533	A
C-A	192			192			
A-B	0			0			
A-C	118			118			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	6	604	0.009	6	0.0	6.009	A
C-AB	12	806	0.014	12	0.0	4.535	A
C-A	192			192			
A-B	0			0			
A-C	118			118			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	610	0.007	5	0.0	5.947	A
C-AB	9	789	0.011	9	0.0	4.614	A
C-A	157			157			
A-B	0			0			
A-C	96			96			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	4	614	0.006	4	0.0	5.902	A
C-AB	7	777	0.009	7	0.0	4.676	A
C-A	132			132			
A-B	0			0			
A-C	81			81			

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.0.2.5947 © Copyright TRL Limited, 2017	
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Filename: Dappers Lane_Water Lane OH.j9

Path: T:\Projects\9000 Series Project Numbers\9105ITB Land at Angmering, Arun Distr, W Susx\Tech\Assessments\Northern Site\Updated Jan 2018

Report generation date: 19/01/2018 15:06:29

»2017 Baseline, AM
 »2017 Baseline, PM
 »2021 Growth, AM
 »2021 Growth, PM
 »2021 + Committed, AM
 »2021 + Committed, PM
 »2021 + Committed + Dev, AM
 »2021 + Committed + Dev, PM
 »2031 + Committed + Dev, AM
 »2031 + Committed + Dev, PM
 »2021 + Committed + Dev + Sensitivity, AM
 »2021 + Committed + Dev + Sensitivity, PM
 »2031 + Committed + Dev + Sensitivity, AM
 »2031 + Committed + Dev + Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline								
Stream B-AC	0.7	14.52	0.43	B	0.2	9.32	0.17	A
Stream C-AB	0.1	5.31	0.07	A	0.5	5.30	0.21	A
2021 Growth								
Stream B-AC	0.8	15.47	0.45	C	0.2	9.51	0.18	A
Stream C-AB	0.1	5.30	0.08	A	0.5	5.33	0.22	A
2021 + Committed								
Stream B-AC	1.0	18.18	0.51	C	0.3	10.37	0.21	B
Stream C-AB	0.2	5.33	0.10	A	0.7	5.20	0.26	A
2021 + Committed + Dev								
Stream B-AC	1.3	22.36	0.57	C	0.3	11.40	0.23	B
Stream C-AB	0.2	5.11	0.11	A	0.9	5.30	0.30	A
2031 + Committed + Dev								
Stream B-AC	1.7	27.88	0.65	D	0.4	12.28	0.26	B
Stream C-AB	0.3	5.08	0.12	A	1.1	5.56	0.35	A
2021 + Committed + Dev + Sensitivity								
Stream B-AC	2.0	30.25	0.68	D	0.4	12.55	0.29	B
Stream C-AB	0.3	5.13	0.14	A	1.1	5.79	0.36	A
2031 + Committed + Dev + Sensitivity								
Stream B-AC	2.9	41.52	0.76	E	0.5	13.60	0.32	B
Stream C-AB	0.4	5.10	0.15	A	1.4	6.13	0.41	A

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

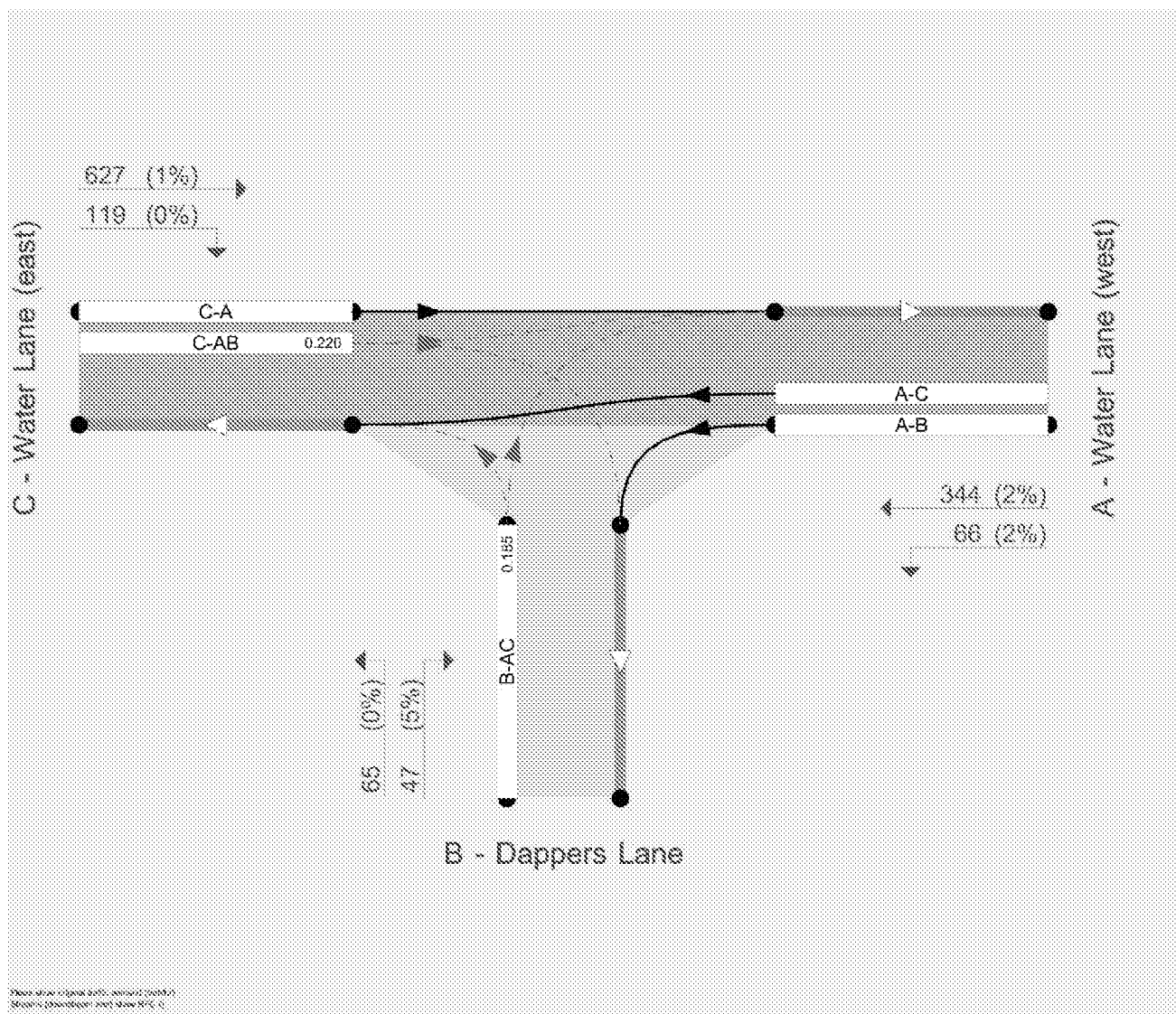
File summary

File Description

Title	A280 and Water Lane
Location	Angmering
Site number	ITB9105
Date	19/05/2016
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\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



The junction diagram reflects the last run of Junctions.

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	2017 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2017 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2021 Growth	AM	ONE HOUR	07:45	09:15	15
D4	2021 Growth	PM	ONE HOUR	16:45	18:15	15
D5	2021 + Committed	AM	ONE HOUR	07:45	09:15	15
D6	2021 + Committed	PM	ONE HOUR	16:45	18:15	15
D7	2021 + Committed + Dev	AM	ONE HOUR	07:45	09:15	15
D8	2021 + Committed + Dev	PM	ONE HOUR	16:45	18:15	15
D9	2031 + Committed + Dev	AM	ONE HOUR	07:45	09:15	15
D10	2031 + Committed + Dev	PM	ONE HOUR	16:45	18:15	15
D11	2021 + Committed + Dev + Sensitivity	AM	ONE HOUR	07:45	09:15	15
D12	2021 + Committed + Dev + Sensitivity	PM	ONE HOUR	16:45	18:15	15
D13	2031 + Committed + Dev + Sensitivity	AM	ONE HOUR	07:45	09:15	15
D14	2031 + Committed + Dev + Sensitivity	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Dappers Lane and Water Lane	T-Junction	Two-way	2.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Water Lane (west)		Major
B	Dappers Lane		Minor
C	Water Lane (east)		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 - Water Lane (east)	7.21			90.0	✓	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 - Dappers Lane	One lane	3.44	23	28

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	B-A	521	0.090	0.227	0.143	0.325
1	B-C	670	0.097	0.246	-	-
1	C-B	626	0.230	0.230	-	-

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	2017 Baseline	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - Water Lane (west)		✓	447	100.000
B - Dappers Lane		✓	167	100.000
C - Water Lane (east)		✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)	
A - Water Lane (west)	0	85	362	
B - Dappers Lane	85	0	82	
C - Water Lane (east)	311	26	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)	
A - Water Lane (west)	0	1	2	
B - Dappers Lane	2	0	0	
C - Water Lane (east)	3	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.43	14.52	0.7	B
C-AB	0.07	5.31	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	126	479	0.262	124	0.4	10.109	B
C-AB	29	708	0.041	29	0.1	5.300	A
C-A	224			224			
A-B	64			64			
A-C	273			273			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	150	459	0.327	150	0.5	11.603	B
C-AB	38	727	0.052	38	0.1	5.226	A
C-A	265			265			
A-B	76			76			
A-C	325			325			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	184	432	0.426	183	0.7	14.407	B
C-AB	53	753	0.070	52	0.1	5.133	A
C-A	318			318			
A-B	94			94			
A-C	399			399			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	184	432	0.426	184	0.7	14.516	B
C-AB	53	753	0.070	53	0.1	5.142	A
C-A	318			318			
A-B	94			94			
A-C	399			399			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	150	459	0.327	151	0.5	11.717	B
C-AB	38	727	0.053	38	0.1	5.239	A
C-A	265			265			
A-B	76			76			
A-C	325			325			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	126	479	0.262	126	0.4	10.220	B
C-AB	29	708	0.041	29	0.1	5.310	A
C-A	224			224			
A-B	64			64			
A-C	273			273			

2017 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Dappers Lane and Water Lane	T-Junction	Two-way	1.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017 Baseline	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - Water Lane (west)		✓	238	100.000
B - Dappers Lane		✓	72	100.000
C - Water Lane (east)		✓	475	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)
From	A - Water Lane (west)	0	41	197
	B - Dappers Lane	30	0	42
	C - Water Lane (east)	395	80	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)
From	A - Water Lane (west)	0	3	3
	B - Dappers Lane	7	0	0
	C - Water Lane (east)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	9.32	0.2	A
C-AB	0.21	5.30	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	54	503	0.108	54	0.1	8.000	A
C-AB	97	783	0.124	96	0.2	5.242	A
C-A	260			260			
A-B	31			31			
A-C	148			148			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	65	488	0.133	65	0.2	8.508	A
C-AB	128	815	0.157	128	0.3	5.238	A
C-A	299			299			
A-B	37			37			
A-C	177			177			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	79	465	0.170	79	0.2	9.311	A
C-AB	179	860	0.208	178	0.5	5.284	A
C-A	344			344			
A-B	45			45			
A-C	217			217			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	79	465	0.170	79	0.2	9.322	A
C-AB	179	861	0.208	179	0.5	5.297	A
C-A	344			344			
A-B	45			45			
A-C	217			217			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	65	487	0.133	65	0.2	8.525	A
C-AB	128	815	0.157	129	0.3	5.262	A
C-A	299			299			
A-B	37			37			
A-C	177			177			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	54	503	0.108	54	0.1	8.024	A
C-AB	98	783	0.125	98	0.2	5.268	A
C-A	260			260			
A-B	31			31			
A-C	148			148			

2021 Growth, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Dappers Lane and Water Lane	T-Junction	Two-way	2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2021 Growth	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - Water Lane (west)		✓	466	100.000
B - Dappers Lane		✓	175	100.000
C - Water Lane (east)		✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)
From	A - Water Lane (west)	0	89	377
	B - Dappers Lane	89	0	86
	C - Water Lane (east)	324	28	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)
From	A - Water Lane (west)	0	1	2
	B - Dappers Lane	2	0	0
	C - Water Lane (east)	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.45	15.47	0.8	C
C-AB	0.08	5.30	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	132	475	0.278	130	0.4	10.401	B
C-AB	32	712	0.045	32	0.1	5.292	A
C-A	233			233			
A-B	67			67			
A-C	284			284			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	157	454	0.346	157	0.5	12.082	B
C-AB	42	731	0.057	42	0.1	5.219	A
C-A	274			274			
A-B	80			80			
A-C	339			339			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	193	425	0.453	192	0.8	15.329	C
C-AB	58	760	0.077	58	0.1	5.131	A
C-A	329			329			
A-B	98			98			
A-C	415			415			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	193	425	0.453	193	0.8	15.466	C
C-AB	58	760	0.077	58	0.1	5.138	A
C-A	329			329			
A-B	98			98			
A-C	415			415			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	157	454	0.346	158	0.5	12.221	B
C-AB	42	731	0.057	42	0.1	5.232	A
C-A	274			274			
A-B	80			80			
A-C	339			339			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	132	475	0.278	132	0.4	10.535	B
C-AB	32	712	0.045	32	0.1	5.302	A
C-A	233			233			
A-B	67			67			
A-C	284			284			

2021 Growth, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Dappers Lane and Water Lane	T-Junction	Two-way	1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2021 Growth	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - Water Lane (west)		✓	247	100.000
B - Dappers Lane		✓	75	100.000
C - Water Lane (east)		✓	496	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)
From	A - Water Lane (west)	0	42	205
	B - Dappers Lane	31	0	44
	C - Water Lane (east)	412	84	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Water Lane (west)	B - Dappers Lane	C - Water Lane (east)
From	A - Water Lane (west)	0	3	3
	B - Dappers Lane	7	0	0
	C - Water Lane (east)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.18	9.51	0.2	A
C-AB	0.22	5.33	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	56	501	0.113	56	0.1	8.085	A
C-AB	104	790	0.132	103	0.2	5.240	A
C-A	269			269			
A-B	32			32			
A-C	154			154			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	67	484	0.139	67	0.2	8.629	A
C-AB	138	824	0.167	137	0.3	5.248	A
C-A	308			308			
A-B	38			38			
A-C	184			184			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	83	461	0.179	82	0.2	9.496	A
C-AB	194	871	0.222	193	0.5	5.312	A
C-A	352			352			
A-B	46			46			
A-C	226			226			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	83	461	0.179	83	0.2	9.509	A
C-AB	194	872	0.223	194	0.5	5.326	A
C-A	352			352			
A-B	46			46			
A-C	226			226			