

Project Title: Land West of Bilsham Road, Yapton

Project No/ Document Reference: A361-TN007/A

Date: 31 May 2022

Author: T. Moloney

Response to Comments by National Highways Ref: HAMIS 93768

1. Introduction

- 1.1. This Technical Note has been prepared to address comments made in a formal response by National Highways (NH) to information previously submitted within ALP Report A361-TN005 Rev A, on 11th March 2022.
- 1.2. This report was prepared in response to a holding objection implemented within a NH consultee response to West Sussex Country Council with reference to an application (Ref: Y/3/22/OUT) for a proposed development of 140 dwellings on land to the west of the B2132 Bilsham Road, Yapton.
- 1.3. The NH initial consultee response cited concerns regarding potential cumulative development impacts within Arun upon the safety and capacity of the A27/ Yapton Lane junction, see **Appendix A**.
- 1.4. The holding objection expired on 18th May 2022, with a subsequent response being received on the 23rd May 2022 (two days before the scheduled committee hearing) requesting the submission of more information and stipulating an extension of the holding objection until 23rd August 2022.
- 1.5. For context, it should be noted that the Transport Assessment (ALP Reference: A361-R002 Rev C) identified that the proposed development at of 140 dwellings is expected to generate approximately 70 two-way traffic movements during each peak hour period. Moreover, after accounting for the distribution of traffic within the local areas, only 14 two-way traffic movements during the peak hour would utilise the Yapton Lane arm of the junction. This increase in traffic flows is very marginal and is not of a magnitude that would result in any 'severe' impact at the junction.
- 1.6. Notwithstanding, the following sections in this Technical Note reproduces the comments made in the NH formal response (in blue text) before addressing each of the specific points that are raised in turn. For ease of reference, the full NH response dated 23rd May 2022 is attached as **Appendix B**.



2. Response to National Highways Comments

Personal Injury Collision Analysis

Our current holding recommendation cites the following required action in relation to Personal Injury Collision Analysis data:

"ACTION: Personal Injury Collision analysis is required for the A27 Yapton Lane junction". The holding recommendation also states that this is to be undertaken for a five-year period. We observe that you have provided a summary of accident data for a five-year period, citing data protection concerns as the reason for not providing the full details.

We request that you supply detail on the causation of the five identified accidents to validate the stated conclusion that the accidents were attributable to driver error rather than any concern regarding the highway layout of the junction contributing to safety issues. No personal data records need to be supplied alongside the causation factor.

ACTION: The applicant to provide the exact wording of the causation factor of accidents specified in the collision report identified at the A27 Yapton Lane junction.

- 2.1. The exact wording of the causation factors of the five collisions identified in the report previously submitted are summarised in Table 2.1 below.

Table 2.1 – Collision Summary

Collision No.	Reported Causation Factor
1	- Careless/ Reckless/ In a Hurry - Failed to look properly - Disobeyed Give Way or Stop sign or markings
2	Careless/ Reckless/ In a Hurry
3	- Careless/ Reckless/ In a Hurry - Failed to look properly
4	Careless/ Reckless/ In a Hurry
5	- Failed to look properly - Failed to judge other persons path or speed

- 2.2. As can be seen, none of the collisions reported occurred as result of the junctions existing operation, traffic volumes, queuing, physical defects, or available visibility.



A27 / Yapton Lane Junction Modelling

As noted in our previous response detailed modelling of the A27 / Yapton Lane junction is required to support the planning application to determine the potential impact of the National Highways Planning Response (NHPR 21-09) September 2021 proposed development on the junction operation. Our previous response identified the following action:

"ACTION: Calibrated and Validated base model to be provided for review to ensure that it is a fair representation of typical junction operating conditions during morning and evening peak hours."

No detail on how the model has been validated to ensure that the model is a fair representation of typical peak junction operating conditions has been provided. This is required. Until such time you demonstrate that the model has been validated to observed conditions, we are unable to comment on the junction modelling results. To validate the base model, it is suggested that a comparison is made between the queue length data on the relevant approach arms of the junction and the right turn pocket with the baseline modelling results and if the base model is not accurately reflecting observed conditions, then the model should be calibrated and re-run. Use of queue length data from the Ford Airfield application (if available), as per the baseline traffic flows would be acceptable to serve this purpose.

ACTION: The applicant to detail the method taken to validate and if necessary, calibrate the base local junction model to reflect observed baseline conditions.

The A27 / Yapton Lane junction model uses baseline traffic flows from the Ford Airfield planning application (Ref: F/4/20/OUT) and it is understood that 2018 baseline traffic surveys are upscaled to a 2021 baseline. The approach of using these traffic surveys is accepted in principle.

- 2.3. Whilst the Ford Airfield Transport Assessment presented recent traffic flow data for a wide area of the surrounding highway network, including the A27 / Yapton Lane Junction, no queue length data was provided within the information available. As such validation of the model on this basis alone is not possible.
- 2.4. The most recent significant applications in the area required to assess their direct and cumulative impact upon the A27 / Yapton Lane junction were Y/91/17/OUT and Y/92/17/OUT for a total of 550 dwellings located within Yapton. Both these applications received planning consent in 2019.
- 2.5. The modelling documentation submitted in support of those two approved applications was identical (see extracts in **Appendix C**) and utilised the validated model for the approved development of 175 dwellings on Land East of Tye Lane, Walberton (WA/44/17/OUT).
- 2.6. While no queue length survey data is available for the 2018 turning movements that NH have agreed to in principle, queue length data for the 2017 observed traffic turning movements (gathered 02/02/2017 / 21/03/2017 see **Appendix D**) at the junction are available from the approved and validated Walberton Transport Assessment. Further analysis of these data sets demonstrates the surveys are comparable, as summarised in Table 2.2.



Table 2.2 – A27 / Yapton Lane Turning Movements Comparison

Movement	2017		2018		+/- % Variation	
	AM	PM	AM	PM	AM	PM
A27 Eastbound	885	999	945	840	6%	-19%
A27 EB to Yapton Lane	165	354	175	371	6%	5%
A27 Westbound	1,055	881	1,008	911	-5%	3%
A27 WB to Yapton Lane	40	75	36	65	-11%	-15%
Yapton Lane to A27 Westbound	495	167	453	170	-9%	2%
Total	2,640	2,476	2,617	2,357	-1%	-5%

- 2.7. As can be seen, the turning movements from both surveys are very similar, with an overall reduction in total traffic of between -1% to -5% at the junction from 2017 to 2018.
- 2.8. On this basis the 2018 flows are well within acceptable tolerances for normal daily variation of flows. Therefore, the queue lengths used to validate the 2017 assessments in the Walberton TA are valid to calibrate the 2018 baseline scenario of the model.
- 2.9. The queue length data for the original 2017 surveys obtained from the WA/95/18/RES Lane East of Tye Lane, Walberton planning application have been interrogated to establish the average peak hour queue lengths for each arm of the junction, as summarised in Table 2.3 below.

Table 2.3 – A27 / Yapton Lane 2017 Observed Queue Lengths

Movement	Lane	Average Queue Length	
		AM Peak (08:00 – 09:00)	PM Peak (17:00 – 18:00)
A27 East Bound	Ahead	0	0
	Ahead	0	0
	Right Turn	1.4	5.5
Yapton Lane	Left Turn	0	1.5

- 2.10. The data indicates that the average queue length for all movements is relatively minor, with the maximum average queue length being 5.5 vehicles during the PM peak hour on the A27 Eastbound to Yapton Lane movement (right turn lane).
- 2.11. For further clarity, a calibration assessment has been undertaken for the 2017 and 2018 Baseline Scenarios in Junctions 10, as summarised in Table 2.4 (see full report in **Appendix E**).

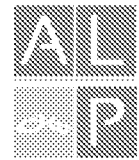


Table 2.4 – Calibration Capacity Assessment

Arm	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
2017 Observed Base				
Yapton Lane	0.72	3	0.23	0
A27	0.25	0	0.51	1
2018 Observed Base				
Yapton Lane	0.64	2	0.24	0
A27	0.26	0	0.54	1

- 2.12. As can be seen, the results are consistent with the variation in flows compared in Table 2.2, and generally reflect the observed queue lengths that are summarised in Table 2.3. On this basis it is considered unnecessary to arbitrarily alter the slope intercept which can sometimes unrealistically alter the capacity of the junction in modelled form.
- 2.13. It must also be noted that the model set up used in this calibration assessment matches those used in the three previous applications mentioned above (WA/44/17/OUT, Y/91/17/OUT and Y/92/17/OUT), which have been accepted by National Highways on each occasion. As such this most recent model is considered to be validated.

Committed Developments

We observe that you have provided a list of committed developments included within the assessment, together with trip distribution/assignment information for the A27/Yapton Lane junction.

We have examined your comments in relation to trip assignment for the Chichester area. As the alternative route you cite that avoids the A27/Yapton junction has a longer journey time by 2-3 minutes, we are unable to accept this point.

Additionally, the distribution/assignment of trips has been approved as part of the process of granting planning permission for the committed development sites and should therefore be assessed as per the outcome of Table 4.1 identified in your Technical Note, with the total traffic assigned to the North End Road/ Yapton Lane being 203 vehicles in the AM and 180 vehicles in the PM peak periods

ACTION: The applicant to align the volume of committed development trips routing via the A27/Yapton Lane junction to the distribution presented in Table 4.1 of the Technical Note.

Furthermore, we have undertaken a planning search which has identified a series of applications that have not been included in the committed development list factored within your junction modelling. These applications are detailed in the table below, alongside the number of dwellings or commercial floor area. These additional sites equate to a total of 177 dwellings and 3,785sqm of light industrial use.



Planning Application	No. Dwellings	Location
Y/121/19/PL	11	The Steadies North End Road BN18 0DT
Y/74/17/RES	18	Land at Kings Close Yapton BN18 0EX
Y/32/17/OUT	19	Land at Southern End of Cinders Lane Yapton, BN18 0JJ
BN/51/16/RES	107	Land at former Pollards Nursery Lake Lane Barnham
BN/57/19/RES	3,785sqm B2 Use	Land East of Fontwell Ave, Fontwell BN18 0SB
WA/23/17/OUT	22	Barnfield House Arundel Road, Fontwell BN18 0SD

ACTION: For relevant scenarios, applicant to include the additional committed developments identified by us

- 2.14. In addition to the 17 'committed' developments previously identified within ALP Report A361-005 Rev A, NH have requested the inclusion of an additional six 'committed' sites, as summarised in the above comments.
- 2.15. Having reviewed these sites, it is agreed that three qualify (Y/121/19/PL, Y/74/17/RES and BN/51/16/RES) for inclusion in this assessment. Table 2.5 summarises the sites requested and reasons for whether these sites should be included or not.

Table 2.5 – Additional Committed Development

Planning Application	No. Dwellings	Included	Site Status
Y/121/19/PL	11	Yes	Fully Built by 2020 / 2021
Y/74/17/RES	18	Yes	Fully Built by 2020 / 2021
Y/32/17/OUT	19	No	Already included in previous analysis Y/26/20/RES
BN/51/16/RES	107	Yes	Fully Built, Assessment based upon TA
BN/57/19/RES	3,785sqm B2 Use	No	Assessment of A27 / Yapton Lane Junction was not required by NH as part of original assessment and no development traffic is assigned to Yapton Lane.
WA/23/17/OUT	22	No	Permission expired (3-years from 22/02/2018).

- 2.16. On this basis therefore, the additional 'committed' development to be added to the assessment totals 136 dwellings.
- 2.17. It is noted that the applications for the sites (Y/121/19/PL and Y/74/17/RES) comprising 11 and 18 dwellings did not provide a Transport Assessment or Statement as part of the planning documents. Given the location of these two sites in Yapton, trip rates and assignment and distribution for these have been based upon the trip generation and assignment and distribution agreed as part of the Transport Assessment for this planning application.



2.18. The traffic generation associated with these developments and agreed assignment and distribution impact has been added to the Committed Development Assignment and Distribution summarised in Table 2.6 below.

Table 2.6 – Committed Development Assignment and Distribution

Site	No. Units	Total Trip Generation		% Dev Traffic Assigned to A27 / Yapton Lane		Total Traffic Assigned to North End Road / Yapton Lane	
		AM	PM	AM	PM	AM	PM
Y/80/16/OUT*	100	58	65	24%*	27%*	14	18
WA/44/17/OUT*	175	95	101	69%	66%	66	67
Y/5/17/OUT**	51	27	26	19%	19%	5	5
Y/44/17/OUT*	70	35	32	40%	41%	14	13
Y/49/17/OUT*	45	28	29	25%*	28%*	7	8
BN/43/16/PL*	95	55	67	0%	0%	0	0
BN/28/17/RES*	38	19	19	0%	0%	0	0
Y/71/20/RES*	38	22	22	41%	41%	9	9
Y/98/18/RES*	108	74	76	26%	16%	19	12
Y/63/19/RES*	56	45	37	4%	5%	2	2
Y/26/20/RES*	19	8	8	25%	13%	2	1
Y/83/19/OUT**	33	25	23	6%	13%	5	4
WA/68/20/OUT**	155	84	89	6%	13%	5	12
Y/71/21/OUT**	73	47	42	9%	10%	4	4
Y/83/19/OUT**	33	25	23	20%	17%	5	4
Y/91/17/OUT / Y/92/17/OUT	550	280	263	21%	16%	60	41
CM/1/17/OUT*	300	172	173	0%	0%	0	0
Y/121/19/PL**	11	6	5	15%	13%	1	1
Y/74/17/RES**	18	9	9	15%	13%	1	1
BN/51/16/RES*	107	61	50	30%	26%	18	13
WA/68/20/OUT* (Appeal)	155	84	89	0%	0%	0	0
Y/71/21/OUT* (Appeal)	73 + 405sqm B2 Use	38	42	16%	14%	6	6
F/4/20/OUT	1500	537	577	6%	6%	34	37
Total	2303	1297	1290			243	221

*Assignment and Distribution based upon data available on ADC Planning Portal

** Assignment and Distribution based upon agreed methodology for Lamb Field Application

2.19. As can be seen the total number of dwellings now included in this assessment total 2,303 dwellings. The cumulative total two-way traffic increase along North End Road, generated by these development sites is 243 trips in the AM peak and 221 trips in the PM Peak.



- 2.20. It is noted that NH consider all traffic assigned in this manner to be a direct impact upon the A27 / Yapton Lane junction, with alternative available route choices through Fontwell along The Street not being accepted.
- 2.21. While it is unlikely that 100% of traffic would route to the junction in this manner, in the interests of producing an irrefutably robust assessment, the capacity analysis has been re-evaluated in this light.

Sensitivity Test

As per previous correspondence from us on 30 March 2022, we request that a sensitivity test is run for junction model A27/Yapton Lane which includes current planning applications lodged before Y/3/22/OUT (including those going to Appeal) so we can understand the potential impacts of Y/3/22/OUT in the event that these are consented before the application currently under consideration.

ACTION: A sensitivity test of junction model A27/Yapton Lane needs to be run which includes current planning applications lodged before Y/3/22/OUT (including those going to Appeal) so we can understand the potential impacts of Y/3/22/OUT in the event that these are consented before the application currently under consideration.

- 2.22. As previously demonstrated, the assessment now includes all current and relevant applications lodged before Y/3/22/OUT previously identified in ALP Report A361-005 Rev A as well as the additional sites identified by NH and two appeal sites as requested in NH email dated 30th March 2022 (See **Appendix F**).

Traffic Impact Assessment – Model Year Scenarios

In previous correspondence we requested the assessment scenarios are to include the following as a minimum in line with the requirements of DfT Circular 02/2013.

- Opening Year + Permitted development*
- Opening Year + Permitted + Proposed development*
- Review Period + Permitted + Local Plan development*
- Review Period + Permitted + Local Plan + Proposed development*

The opening year is the date at which the development first becomes available for occupation, unless agreed otherwise, but assuming the full development quantum.

The identified action was as follows:

“ACTION: Detailed junction assessments of A27/Yapton Lane junction, in line with guidance set out in DfT Circular 02/2013 to be provided for review”.

Regrettably, you have not presented an opening year assessment, and this therefore must be provided to align with the requirements of DfT Circular 02/2013. You will need to use an appropriate growth factor to scale up baseline traffic survey flows.



It is observed that you content that as the committed development includes all likely development to come forward by the time of the opening year of the development (suggested to be 2026), the 2021 scenario is effectively the opening year. However, TEMPRO or a similar method should be used to assess the background traffic growth and the committed developments can be subtracted from the growth assessment to avoid double counting whilst still accounting for development further afield.

ACTION: The applicant to present an opening year assessment of the A27/Yapton Lane junction in accordance with the required assessment years of DfT Circular 02/2013.

- 2.23. The Transport Assessment included a 2021 Base scenario and a 2031 scenario which accounted for the allocated growth to the end of the local plan period. In accordance with the requirements of DfT Circular 02/2013, NH have requested an additional model year to represent conditions at the year of opening.
- 2.24. It is anticipated that the outline planning application for the development will receive planning consent in 2022 and that approval for a reserved matters application could be granted in 2023. On this basis it is considered that first occupations could be achieved in 2024 which would represent the year of opening. A 2024 scenario has therefore been compiled for assessment. Notwithstanding, for completeness an additional scenario for 2026 has also been prepared which reflects the forecast year when the development is first likely to be fully operational.
- 2.25. Section 3 of this Technical Note sets out an updated assessment of the junction in the following scenarios.
- 2024 Base
 - 2024 Base + 'Committed' Development
 - 2024 Base + 'Committed' Development + Proposed Development
 - 2026 Base
 - 2026 Base + 'Committed' Development
 - 2026 Base + 'Committed' Development + Proposed Development
 - 2031 Base
 - 2031 Base + 'Committed' Development
 - 2031 Base + 'Committed' Development + Proposed Development

Growth Factors

TEMPRO growth factor calculations are required for the opening assessment year.

ACTION: The applicant to provide growth factor calculations for the opening assessment year.

- 2.26. Table 2.7 summarises the TEMPRO Growth factors utilised to establish the opening year baselines of 2024 and 2026. Also included is the growth factor between 2021 and 2031 previously presented in the Transport Assessment and ALP report A361-005 Rev A.



Table 2.7 - TEMPRO Growth Factors

Time Period	Growth Factor	
	AM	PM
2021 - 2024	1.050	1.050
2021 - 2026	1.079	1.080
2021 - 2031	1.114	1.117

2.27. Diagrams indicating the future year traffic flows for each scenario based on the TEMPRO growth factors have been included in **Appendix G**.

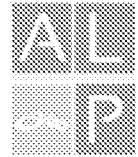


3. Revised Capacity Assessments

- 3.1. This section sets out a summary of the revised capacity assessments results for the A27 / Yapton Lane Junction in the scenarios outlined in Section 2.
- 3.2. In the interests of a robust assessment, the model has been re-run as a One Hour profile which is generally considered to represent a worst-case scenario in terms of traffic arriving at the junction and showing less favourable results.
- 3.3. Table 3.1 summarises the capacity assessment, while the full Junctions 10 Report can be found in **Appendix H**.

Table 3.1 – A27 / Yapton Lane Junction

	AM Peak		PM Peak	
	Queue (Veh)	RFC	Queue (Veh)	RFC
	2024 Base			
Yapton Lane	30	1.05	1	0.39
A27	1	0.39	5	0.85
	2024 + Committed			
Yapton Lane	60	1.16	1	0.43
A27	1	0.43	10	0.94
	2024 + Committed + Dev			
Yapton Lane	66	1.17	1	0.44
A27	1	0.44	12	0.95
	2026 Base			
Yapton Lane	41	1.10	1	0.41
A27	1	0.41	7	0.88
	2026 + Committed			
Yapton Lane	159	1.39	1	0.53
A27	1	0.53	76	1.13
	2026 + Committed + Dev			
Yapton Lane	168	1.41	1	0.54
A27	1	0.53	86	1.15
	2031 Base			
Yapton Lane	56	1.15	1	0.43
A27	1	0.43	9	0.93
	2031 + Committed			
Yapton Lane	187	1.45	1	0.55
A27	1	0.55	110	1.18
	2031 + Committed + Dev			
Yapton Lane	197	1.46	1	0.56
A27	1	0.55	120	1.19



- 3.4. The results at Table 3.1 above identify that during the 2024 opening year, when accounting for committed development, the junction is forecast to operate with an RFC of 1.16 during the AM peak period along the Yapton Lane arm.
- 3.5. When then also accounting for the effect of the development, the junction continues to operate within capacity during the PM peak period. However, during the morning peak period the RFC increases to 1.17 with the associated queue on the Yapton Lane arm increasing by 6 vehicles.
- 3.6. Although shown to be operating over capacity, it should be noted that using a TEMPRO factor in addition to specific committed development traffic does involve an element of 'double counting' of future growth. Moreover, this scenario assumes that the committed developments are all fully operational by 2024 whereas in reality, the completion of such developments is likely to be staggered over several years.
- 3.7. Notwithstanding, it is evident that the very marginal increase in RFC that would occur because of the proposed development indicates that the impact at this location would be minimal. Indeed, as previously stated, the proposed development would result in only 14 additional two-way traffic movements along the Yapton Lane approach during the peak hours. This level of traffic, which equates to less than 1 vehicle every 4 minutes would not result in any 'severe' impacts at the junction.
- 3.8. As can also be seen, the junction is already shown to operate above capacity in the AM 2031 Base scenario and very close to capacity in the PM. It should however be noted that the Junctions 10 software is limited when assessing this form of priority junction as the Yapton Lane arms features a c.100m running / merge lane with the A27. It is therefore likely that queues forming on Yapton Lane will be significantly shorter.
- 3.9. The analysis also shows that in the PM peak, the A27 Right turn is expected to operate above capacity (RFC 1.18) in the 2031 Base + Committed scenario. Again, it is noted however that the effect of the proposed development is very modest in comparison to the cumulative impact already expected to take effect because of other sites and background growth, which, as already demonstrated has been applied in an extremely robust manner.
- 3.10. It is also of note that information available in the Ford Airfield application, for which NH did not require to assess the A27 / Yapton Lane junction despite it introducing over 30 peak hour vehicle movements to the junction, indicates that by 2031 the full strategic development of 1,500 dwellings along with its associated highway improvements will result in a redistribution of traffic utilising the A27 / Yapton Lane junction.
- 3.11. To account for this, a sensitivity test has been undertaken utilising the 2031 Ford Airfield flows as a base, Table 3.2 summarises the assessment results.

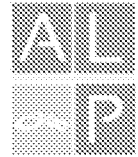
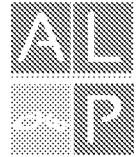


Table 3.2 – A27 / Yapton Lane Junction Sensitivity Test

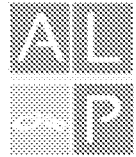
	Queue (Veh)	RFC	Queue (Veh)	RFC
2031 Ford Base				
Yapton Lane	19	1.01	1	0.37
A27	1	0.37	4	0.81
2031 Ford + Committed				
Yapton Lane	45	1.11	1	0.49
A27	1	0.41	32	1.05
2031 Ford + Committed + Dev				
Yapton Lane	50	1.12	1	0.50
A27	1	0.42	36	1.07

- 3.12. As can be seen the delivery of the Ford Airfield application will result in the A27 / Yapton Lane junction operating with similar capacity and queue lengths as indicated in the 2024 Base + Committed scenario.
- 3.13. It is also noted that the Ford Airfield application was recommended for Approval by Arun District Council on 27 April 2022.
- 3.14. On this basis therefore it is considered that the proposed development of 140 dwellings on land west of Bilsham Road will not result in itself in a 'severe' impact on the Strategic Road Network. Indeed, an appropriate mitigation scheme has already been identified to be delivered by the Ford Airfield Strategic site which will address queuing on the National Highways elements of the strategic network.



4. Summary and Conclusion

- 4.1. The proposed development of 140 dwellings is expected to generate approximately 70 two-way traffic movements during each peak hour period, which equates to less than 2 vehicle movements per minute. Moreover, after accounting for the distribution of traffic within the local areas, only 14 two-way traffic movements during the peak hour would utilise the Yapton Lane arm of the junction.
- 4.2. Given the very minimal impact the proposed development is shown to have on the junction on a standalone basis, the overly robust approach taken towards assignment and distribution of development traffic to Yapton Lane, as well as the inclusion of several 'committed' sites that have yet to receive planning consent, it is considered that the development proposals do not represent a 'severe' impact in NPPF terms.
- 4.3. It is also clear that the imminent approval of one of Arun's key strategic sites will have a significant positive effect upon the local highway network and effectively mitigates the impact of windfall in Arun upon the A27 / Yapton Lane junction.
- 4.4. Notwithstanding, if it transpires that such mitigation measures are not fully funded a discussion towards a proportionate contribution to the delivery of such works may be appropriate.



APPENDIX B

National Highways Comments (23rd May 2022)



National Highways Planning Response (NHPR 21-09)
Formal Recommendation to an Application for Planning Permission

From: Nicola Bell (Regional Director)
Operations Directorate
South East Region
National Highways
planningse@highwaysengland.co.uk

To: Arun District Council FAO Simon Davis
planning_responses@arun.gov.uk

CC: transportplanning@dft.gov.uk
spatialplanning@nationalhighways.co.uk

Council's Reference: Y/3/22/OUT

Location: Land West of Bilsham Road, Yapton

Proposal: Hybrid Application comprising of: Outline planning application for further phases of up to 110 No dwellings and associated infrastructure (with all matters reserved) and Full application for Phase 1 for 30 No residential dwellings, new access from Bilsham Road, public open space, landscaping, sustainable urban drainage and associated works. This application is a Departure from the Development Plan and is in CIL Zone and is CIL Liable as new dwellings.

National Highways Ref: HAMIS 93768

Referring to the consultation on a planning application dated 24 January 2022 referenced above, in the vicinity of the A27 that forms part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

- ~~a) offer no objection (see reasons at Annex A);~~
- ~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~
- c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);**

d) ~~recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is/is not relevant to this application.¹

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

The Local Planning authority must also copy any consultation under the 2018 Direction to planningse@highwaysengland.co.uk.

Signature:		Date: 23 May 2022
Name: Kevin Bown		
Position: Area 4 Spatial Planning Manager		
National Highways: Bridge House, 1 Walnut Tree Close, Guildford, GU1 4LZ		
PlanningSE@highwaysengland.co.uk		

¹ Where relevant, further information will be provided within Annex A.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommend that planning permission not be granted for a specified period: Reasons

National Highways recommends that planning permission is not granted for a period of three months expiring **23 August 2022**.

We require further information to be provided by the applicant on this application in order that an informed decision can be made in relation to the potential impacts of the proposed development on the strategic road network. In particular, we have the following comments and actions for the applicant:

Personal Injury Collision Analysis

Our current holding recommendation cites the following required action in relation to Personal Injury Collision Analysis data:

"ACTION: Personal Injury Collision analysis is required for the A27 Yapton Lane junction".

The holding recommendation also states that this is to be undertaken for a five-year period.

We observe that you have provided a *summary* of accident data for a five-year period, citing data protection concerns as the reason for not providing the full details.

We request that you supply detail on the causation of the five identified accidents to validate the stated conclusion that the accidents were attributable to driver error rather than any concern regarding the highway layout of the junction contributing to safety issues. No personal data records need to be supplied alongside the causation factor.

ACTION: The applicant to provide the exact wording of the causation factor of accidents specified in the collision report identified at the A27 Yapton Lane junction.

A27/Yapton Lane Junction Modelling

As noted in our previous response detailed modelling of the A27/Yapton Lane junction is required to support the planning application to determine the potential impact of the

proposed development on the junction operation. Our previous response identified the following action:

“ACTION: Calibrated and Validated base model to be provided for review to ensure that it is a fair representation of typical junction operating conditions during morning and evening peak hours.”

No detail on how the model has been validated to ensure that the model is a fair representation of typical peak junction operating conditions has been provided. This is required. Until such time you demonstrate that the model has been validated to observed conditions, we are unable to comment on the junction modelling results. To validate the base model, it is suggested that a comparison is made between the queue length data on the relevant approach arms of the junction and the right turn pocket with the baseline modelling results and if the base model is not accurately reflecting observed conditions, then the model should be calibrated and re-run. Use of queue length data from the Ford Airfield application (if available), as per the baseline traffic flows would be acceptable to serve this purpose.

ACTION: The applicant to detail the method taken to validate and if necessary, calibrate the base local junction model to reflect observed baseline conditions.

The A27/Yapton Lane junction model uses baseline traffic flows from the Ford Airfield planning application (Ref: F/4/20/OUT) and it is understood that 2018 baseline traffic surveys are upscaled to a 2021 baseline. The approach of using these traffic surveys is accepted in principle.

Committed Developments

We observe that you have provided a list of committed developments included within the assessment, together with trip distribution/assignment information for the A27/Yapton Lane junction.

We have examined your comments in relation to trip assignment for the Chichester area. As the alternative route you cite that avoids the A27/Yapton junction has a longer journey time by 2-3 minutes, we are unable to accept this point.

Additionally, the distribution/assignment of trips has been approved as part of the process of granting planning permission for the committed development sites and should therefore be assessed as per the outcome of Table 4.1 identified in your Technical Note, with the total traffic assigned to the North End Road/ Yapton Lane being 203 vehicles in the AM and 180 vehicles in the PM peak periods

ACTION: The applicant to align the volume of committed development trips routing via the A27/Yapton Lane junction to the distribution presented in Table 4.1 of the Technical Note.

Furthermore, we have undertaken a planning search which has identified a series of applications that have *not* been included in the committed development list factored within your junction modelling. These applications are detailed in the table below, alongside the number of dwellings or commercial floor area. These additional sites equate to a total of 177 dwellings and 3,785sqm of light industrial use.

Planning Application	No of dwellings/ sqm commercial	Location
Y/121/19/PL	11	The Steddles North End Road Yapton BN18 0DT
Y/74/17/RES	18	Land At Kings Close Yapton BN18 0EX
Y/32/17/OUT	19	Land at Southern end of Cinders Lane Yapton BN18 0JJ
BN/51/16/RES	107	Land at former Pollards Nursery Lake Lane Barnham
BN/57/19/RES	3,785sqm light industrial	Land East of Fontwell Avenue Fontwell Avenue Fontwell BN18 0SB
WA/23/17/OUT	22	Barnfield House Arundel Road Fontwell BN18 0SD

ACTION: For relevant scenarios, applicant to include the additional committed developments identified by us.

Sensitivity Test

As per previous correspondence from us on 30 March 2022, we request that a sensitivity test is run for junction model A27/Yapton Lane which includes current planning applications lodged before Y/3/22/OUT (including those going to Appeal) so we can understand the potential impacts of Y/3/22/OUT in the event that these are consented before the application currently under consideration.

ACTION: A sensitivity test of junction model A27/Yapton Lane needs to be run which includes current planning applications lodged before Y/3/22/OUT (including those going to Appeal) so we can understand the potential impacts of Y/3/22/OUT in the event that these are consented before the application currently under consideration.

Traffic Impact Assessment – Model Year Scenarios

In previous correspondence we requested the assessment scenarios are to include the following as a minimum in line with the requirements of DfT Circular 02/2013.

- Opening Year + Permitted development
- Opening Year + Permitted + Proposed development
- Review Period + Permitted + Local Plan development
- Review Period + Permitted + Local Plan + Proposed development

The opening year is the date at which the development first becomes available for occupation, unless agreed otherwise, but assuming the full development quantum.

The identified action was as follows:

“ACTION: Detailed junction assessments of A27/Yapton Lane junction, in line with guidance set out in DfT Circular 02/2013 to be provided for review”.

Regrettably, you have not presented an opening year assessment, and this therefore must be provided to align with the requirements of DfT Circular 02/2013. You will need to use an appropriate growth factor to scale up baseline traffic survey flows.

It is observed that you content that as the committed development includes all likely development to come forward by the time of the opening year of the development (suggested to be 2026), the 2021 scenario is effectively the opening year. However, TEMPRO or a similar method should be used to assess the background traffic growth and the committed developments can be subtracted from the growth assessment to avoid double counting whilst still accounting for development further afield.

ACTION: The applicant to present an opening year assessment of the A27/Yapton Lane junction in accordance with the required assessment years of DfT Circular 02/2013.

Growth Factors

TEMPRO growth factor calculations are required for the opening assessment year.

ACTION: The applicant to provide growth factor calculations for the opening assessment year.

Mitigation Scheme

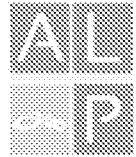
As per previous correspondence, it must be noted that there is already a committed mitigation scheme for the A27/Yapton Lane junction, as shown on drawing number ITB11324-GA-014 Revision C. Once the detailed junction modelling has been updated considering the above actions, the results will inform our decision on whether any further mitigation is required as per our previous stance.

Conclusion

Our current position is that the impact of the proposed development on the SRN is not agreed. This response details the steps that need to be taken in order to resolve this issue.

For the reasons set out above, we recommend that planning permission not be granted for a period of three months from the date of this response to allow the applicant to resolve the outstanding matters.

This application has been assessed by the National Highways South East Region Spatial Planning Team. This NHPR form represents National Highways' formal recommendation regarding the application. It is copied to the Department for Transport as per the terms of our Licence.



APPENDIX C

Extracts from Previously Agreed Models of A27 / Yapton Lane Junction

TRANSPORT ASSESSMENT

LAND EAST OF TYE LANE, WALBERTON

JUNE 2017



PICADY 9 - Priority Intersection Module

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Path: T:\Projects\11000 Series Project Numbers\11324\TB Land North of Walberton\Tech\Junc Models\Picady\A27-Yapton\Saturn

Report generation date: 17/05/2017 09:15:39

[illegible]

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
2031 LP with MIT				
Stream B-AC	0.5	8.68	0.35	A
Stream C-AB	0.3	7.47	0.22	A
2031 LP with MIT + Day				
Stream B-AC	0.8	10.17	0.45	B
Stream C-AB	0.3	7.77	0.25	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	Existing Arrangement
Location	
Site number	
Date	17/05/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	A27 - Yapton Lane - SATURN

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 LP with MIT	AM	2031 Local Plan with Mitigaion (Without Development)	ONE HOUR	07:00	08:30	15	✓
D2	2031 LP with MIT + Dev	AM	2031 Local Plan with Mitigaion + Development	ONE HOUR	07:00	08:30	15	✓

Analysis Set Details

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

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	A27 / Yapton Lane	T-Junction	Two-way	0.99	A

Driving side	Lighting
Left	Normal/unknown

Arms

Arm	Name	Description	Arm type
A	A27 (E)		Major
B	Yapton Lane		Minor
C	A27 (W)		Major

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A27 (W)	14.60	✓	7.00	✓	4.48	250.0	✓	20.00

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

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Yapton Lane	One lane	4.96	250	250

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	964	0.095	0.240	0.151	0.343
1	B-C	935	0.090	0.227	-	-
1	C-B	897	0.218	0.218	-	-

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 LP with MIT	AM	2031 Local Plan with Mitigation (Without Development)	ONE HOUR	07:00	08:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 (E)		ONE HOUR	✓	1174	100.000
B - Yapton Lane		ONE HOUR	✓	206	100.000
C - A27 (W)		ONE HOUR	✓	1342	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A27 (E)	B - Yapton Lane	C - A27 (W)
From	A - A27 (E)	0	0	1174
	B - Yapton Lane	0	0	206
	C - A27 (W)	1220	122	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (E)	B - Yapton Lane	C - A27 (W)
From	A - A27 (E)	0	0	0
	B - Yapton Lane	0	0	0
	C - A27 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.35	8.68	0.5	A	189	284
C-AB	0.22	7.47	0.3	A	112	168
C-A					1119	1679
AB					0	0
AC					1077	1616

07:00 - 07:15

07:15 - 07:3007:30 - 07:4507:45 - 08:0008:00 - 08:1508:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	155	39	734	0.211	155	0.4	0.3	6.225	A
C-AB	92	23	705	0.130	92	0.2	0.2	5.878	A
C-A	918	230			918				
A-B	0	0			0				
A-C	884	221			884				

2031 LP with MIT + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	A27 / Yapton Lane	T-Junction	Two-way	1.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2031 LP with MIT + Dev	AM	2031 Local Plan with Mitigation + Development	ONE HOUR	07:00	08:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 (E)		ONE HOUR	✓	1178	100.000
B - Yapton Lane		ONE HOUR	✓	261	100.000
C - A27 (W)		ONE HOUR	✓	1368	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A27 (E)	B - Yapton Lane	C - A27 (W)
From	A - A27 (E)	0	4	1174
	B - Yapton Lane	0	0	261
	C - A27 (W)	1230	138	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (E)	B - Yapton Lane	C - A27 (W)
From	A - A27 (E)	0	0	0
	B - Yapton Lane	0	0	0
	C - A27 (W)	0	0	0

Results Summary for whole modelled period

Main Results for each time segment

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	287	72	641	0.448	287	0.8	0.8	10.169	B
C-AB	152	38	615	0.247	152	0.3	0.3	7.774	A
C-A	1354	339			1354				
A-B	4	1			4				
A-C	1293	323			1293				

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	235	59	695	0.338	236	0.8	0.5	7.858	A
C-AB	124	31	667	0.186	124	0.3	0.2	6.645	A
C-A	1106	276			1106				
A-B	4	0.90			4				
A-C	1055	264			1055				

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	196	49	734	0.268	197	0.5	0.4	6.713	A
C-AB	104	26	704	0.148	104	0.2	0.2	6.003	A
C-A	926	232			926				
A-B	3	0.75			3				
A-C	884	221			884				

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Report generation date: 17/05/2017 09:20:56

~~2001 LP with Mr. P.~~

2026 456789 10111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989910010110210310410510610710810911011111211311411511611711811912012112212312412512612712812913013113213313413513613713813914014114214314414514614714814915015115215315415515615715815916016116216316416516616716816917017117217317417517617717817918018118218318418518618718818919019119219319419519619719819920020120220320420520620720820921021121221321421521621721821922022122222322422522622722822923023123223323423523623723823924024124224324424524624724824925025125225325425525625725825926026126226326426526626726826927027127227327427527627727827928028128228328428528628728828929029129229329429529629729829930030130230330430530630730830931031131231331431531631731831932032132232332432532632732832933033133233333433533633733833934034134234334434534634734834935035135235335435535635735835936036136236336436536636736836937037137237337437537637737837938038138238338438538638738838939039139239339439539639739839940040140240340440540640740840941041141241341441541641741841942042142242342442542642742842943043143243343443543643743843944044144244344444544644744844945045145245345445545645745845946046146246346446546646746846947047147247347447547647747847948048148248348448548648748848949049149249349449549649749849950050150250350450550650750850951051151251351451551651751851952052152252352452552652752852953053153253353453553653753853954054154254354454554654754854955055155255355455555655755855956056156256356456556656756856957057157257357457557657757857958058158258358458558658758858959059159259359459559659759859960060160260360460560660760860961061161261361461561661761861962062162262362462562662762862963063163263363463563663763863964064164264364464564664764864965065165265365465565665765865966066166266366466566666766866967067167267367467567667767867968068168268368468568668768868969069169269369469569669769869970070170270370470570670770870971071171271371471571671771871972072172272372472572672772872973073173273373473573673773873974074174274374474574674774874975075175275375475575675775875976076176276376476576676776876977077177277377477577677777877978078178278378478578678778878979079179279379479579679779879980080180280380480580680780880981081181281381481581681781881982082182282382482582682782882983083183283383483583683783883984084184284384484584684784884985085185285385485585685785885986086186286386486586686786886987087187287387487587687787887988088188288388488588688788888989089189289389489589689789889990090190290390490590690790890991091191291391491591691791891992092192292392492592692792892993093193293393493593693793893994094194294394494594694794894995095195295395495595695795895996096196296396496596696796896997097197297397497597697797897998098198298398498598698798898999099199299399499599699799899910001001100210031004100510061007100810091010101110121013101410151016101710181019102010211022102310241025102610271028102910301031103210331034103510361037103810391040104110421043104410451046104710481049105010511052105310541055105610571058105910601061106210631064106510661067106810691070107110721073107410751076107710781079108010811082108310841085108610871088108910901091109210931094109510961097109810991100110111021103110411051106110711081109111011111112111311141115111611171118111911201121112211231124112511261127112811291130113111321133113411351136113711381139114011411142114311441145114611471148114911501151115211531154115511561157115811591160116111621163116411651166116711681169117011711172117311741175117611771178117911801181118211831184118511861187118811891190119111921193119411951196119711981199120012011202120312041205120612071208120912101211121212131214121512161217121812191220122112221223122412251226122712281229123012311232123312341235123612371238123912401241124212431244124512461247124812491250125112521253125412551256125712581259126012611262126312641265126612671268126912701271127212731274127512761277127812791280128112821283128412851286128712881289129012911292129312941295129612971298129913

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
2031 LP with MIT				
Stream B-AC	0.3	7.58	0.23	A
Stream C-AB	1.3	13.91	0.57	B
2031 LP with MIT + Dev				
Stream B-AC	0.4	8.14	0.28	A
Stream C-AB	1.7	16.90	0.64	C

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	Existing Arrangement
Location	
Site number	
Date	17/05/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	A27 - Yapton Lane - SATURN

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031 LP with MIT	PM	2031 Local Plan with Mitigaion (Without Development)	ONE HOUR	16:30	18:00	15	✓
D5	2031 LP with MIT + Dev	PM	2031 Local Plan with Mitigaion + Development	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	A27 / Yapton Lane	T-Junction	Two-way	1.82	A

Driving side	Lighting
Left	Normal/unknown

Arms

Arm	Name	Description	Arm type
A	A27 (E)		Major
B	Yapton Lane		Minor
C	A27 (W)		Major

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A27 (W)	14.60	✓	7.00	✓	4.48	250.0	✓	20.00

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

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Yapton Lane	One lane	4.96	250	250

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	964	0.095	0.240	0.151	0.343
1	B-C	935	0.090	0.227	-	-
1	C-B	897	0.218	0.218	-	-

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031 LP with MIT	PM	2031 Local Plan with Mitigation (Without Development)	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 (E)		ONE HOUR	✓	1264	100.000
B - Yapton Lane		ONE HOUR	✓	131	100.000
C - A27 (W)		ONE HOUR	✓	1484	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A27 (E)	B - Yapton Lane	C - A27 (W)
	From			
	A - A27 (E)	0	0	1264
	B - Yapton Lane	0	0	131
	C - A27 (W)	1179	305	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (E)	B - Yapton Lane	C - A27 (W)
	From			
	A - A27 (E)	0	0	0
	B - Yapton Lane	0	0	0
	C - A27 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	7.58	0.3	A	120	180
C-AB	0.57	13.91	1.3	B	280	420
C-A					1082	1623
AB					0	0
AC					1160	1740

16:20 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	99	25	719	0.137	98	0.0	0.2	5.791	A
C-AB	230	57	690	0.333	228	0.0	0.5	7.753	A
C-A	888	222			888				
A-B	0	0			0				
A-C	952	238			952				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	118	29	677	0.174	118	0.2	0.2	6.432	A
C-AB	274	69	650	0.422	273	0.5	0.7	9.536	A
C-A	1060	265			1060				
A-B	0	0			0				
A-C	1136	284			1136				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	144	36	619	0.233	144	0.2	0.3	7.573	A
C-AB	336	84	594	0.565	334	0.7	1.3	13.694	B
C-A	1298	325			1298				
A-B	0	0			0				
A-C	1392	348			1392				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	144	36	619	0.233	144	0.3	0.3	7.578	A
C-AB	336	84	594	0.565	336	1.3	1.3	13.906	B
C-A	1298	325			1298				
A-B	0	0			0				
A-C	1392	348			1392				

17:20 - 17:43

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	118	29	677	0.174	118	0.3	0.2	6.443	A
C-AB	274	69	650	0.422	276	1.3	0.7	9.691	A
C-A	1060	265			1060				
A-B	0	0			0				
A-C	1136	284			1136				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	99	25	719	0.137	99	0.2	0.2	5.808	A
C-AB	230	57	690	0.333	231	0.7	0.5	7.851	A
C-A	888	222			888				
A-B	0	0			0				
A-C	952	238			952				

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	A27 / Yapton Lane	T-Junction	Two-way	2.41	A

Driving side	Lighting
Left	Normal/unknown

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2031 LP with MIT + Dev	PM	2031 Local Plan with Mitigation + Development	ONE HOUR	16:30	18:00	15	✓

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

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 (E)		ONE HOUR	✓	1273	100.000
B - Yapton Lane		ONE HOUR	✓	160	100.000
C - A27 (W)		ONE HOUR	✓	1530	100.000

Demand (PCU/hr)

		To		
From		A - A27 (E)	B - Yapton Lane	C - A27 (W)
	A - A27 (E)	0	9	1264
	B - Yapton Lane	0	0	160
	C - A27 (W)	1185	345	0

Heavy Vehicle Percentages

		To		
From		A - A27 (E)	B - Yapton Lane	C - A27 (W)
	A - A27 (E)	0	0	0
	B - Yapton Lane	0	0	0
	C - A27 (W)	0	0	0

Results Summary for whole modelled period

Main Results for each time segment

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	176	44	618	0.285	176	0.4	0.4	8.141	A
C-AB	380	95	592	0.641	380	1.7	1.7	16.900	B
C-A	1305	326			1305				
A-B	10	2			10				
A-C	1392	348			1392				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	144	36	676	0.213	144	0.4	0.3	6.771	A
C-AB	310	78	648	0.479	313	1.7	0.9	10.855	B
C-A	1065	266			1065				
A-B	8	2			8				
A-C	1136	284			1136				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	120	30	718	0.168	121	0.3	0.2	6.026	A
C-AB	260	65	689	0.377	261	0.9	0.6	8.446	A
C-A	892	223			892				
A-B	7	2			7				
A-C	952	238			952				

Project Name : Land South of B2233 Main Road and West of B2132 Bilsham Road

Job No. : 14-111

Note Title : Sensitivity Assessment of Development Impact on A27 / Yapton Lane

Author : TDM

Approved : RJH

Date : February 2018

1.0 INTRODUCTION

- 1.1 Odyssey have been commissioned by Landlink Estates and Gleeson Strategic Land to provide highways and transport advice for two proposed residential developments of up to 300 and 250 dwellings respectively.
- 1.2 Highways England (HE) have provided comments for both applications and raised the need for an assessment of the cumulative impact upon the A27 / Yapton Lane Junction because of these two developments and other committed or potentially committed development sites within Yapton. As such HE has asked for more information to be submitted before a decision can be made. A copy of HE comments can be found in **Appendix A**, for ease of reference.
- 1.3 This Technical Note (TN) sets out sensitivity tests of the A27 / Yapton Lane junction to allow HE to make an informed decision with respects the development impact upon the strategic highway network.

2.0 COMMITTED DEVELOPMENT

- 2.1 HE has indicated that the assessment should take account of five planning applications in Yapton, totalling 441 dwellings, these being:
- Y/80/16/OUT – Land South of Ford Lane and East of North End Road, Yapton – 100 Dwellings
 - WA/44/17/OUT – Land East of Tye Lane, Walberton – 175 Dwellings

PICADY

GUI Version: 5.1 AE
Analysis Program Release: 5.0 (MAY 2010)

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Web: www.trlsoftware.co.uk

The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution

Run Analysis

Parameter	Values
File Run	\\O..\\Picady\\A27 - Yapton Lane Sensitivity Test.vpi
Date Run	07 February 2018
Time Run	13:11:58
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	A27 WB	100
Arm B	Yapton Lane	100
Arm C	A27 EB	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	A27 / Yapton Lane, Arun
Location	Arun
Date	07 February 2018
Enumerator	-

Job Number	14-111
Status	Preliminary
Client	Landlink / Gleesons
Description	-

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

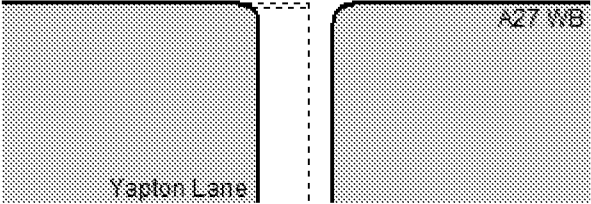
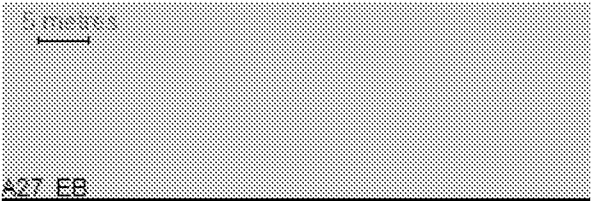
Parameter	Minor Arm B
Major Road Carriageway Width (m)	14.60
Major Road Kerbed Central Reserve Width (m)	7.00
Major Road Right Turning Lane Width (m)	4.50
Minor Road First Lane Width (m)	5.00
Minor Road Visibility To Right (m)	250
Minor Road Visibility To Left (m)	250
Major Road Right Turn Visibility (m)	250
Major Road Right Turn Blocks Traffic	Yes (if over 20 veh)

Slope and Intercept Values

Stream	Intercept for Stream	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	967.347	0.095	0.241	0.152	0.344
B-C	937.767	0.090	0.227	-	-
C-B	898.655	0.218	0.218	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	08:00-09:30	90	15
Second Modelling Period	17:00-18:30	90	15

ODTAB Turning Counts

Demand Set: 2031 AM Base + Com + Dev

Modelling Period: 08:00-09:30

From/To	Arm A	Arm B	Arm C
Arm A	0.0	24.0	1174.0
Arm B	0.0	0.0	358.0
Arm C	1230.0	175.0	0.0

Demand Set: 2031 PM Base + Com + Dev

Modelling Period: 17:00-18:30

From/To	Arm A	Arm B	Arm C
Arm A	0.0	31.0	1264.0
Arm B	0.0	0.0	211.0
Arm C	1185.0	412.0	0.0

ODTAB Synthesised Flows

Demand Set: 2031 AM Base + Com + Dev
Modelling Period: 08:00-09:30

Arm	Rising Time	Rising Flow (veh/min)	Peak Time	Peak Flow (veh/min)	Falling Time	Falling Flow (veh/min)
Arm A	08:15	14.975	08:45	22.463	09:15	14.975
Arm B	08:15	4.475	08:45	6.712	09:15	4.475
Arm C	08:15	17.563	08:45	26.344	09:15	17.563

Heavy Vehicles Percentages

Demand Set: 2031 AM Base + Com + Dev
Modelling Period: 08:00-09:30

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2031 PM Base + Com + Dev
Modelling Period: 17:00-18:30

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Queues & Delays

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:30
Modelling Period: 08:00-09:30

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	4.49	12.25	0.367	-	0.00	0.57	-	8.2	0.13
	C-AB	2.20	11.70	0.188	-	0.00	0.23	-	3.4	0.10
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.30	-	-	-	-	-	-	-	-
	A-C	14.73	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
---------	--------	---------------------	-----------------------	-----	---------------------------	----------------------	--------------------	--	--------------------------------	---

08:15-08:30	B-AC	5.36	11.60	0.463	-	0.57	0.84	-	12.2	0.16
	C-AB	2.62	11.07	0.237	-	0.23	0.31	-	4.6	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.36	-	-	-	-	-	-	-	-
	A-C	17.59	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	6.57	10.69	0.614	-	0.84	1.53	-	21.5	0.24
	C-AB	3.21	10.19	0.315	-	0.31	0.45	-	6.8	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.44	-	-	-	-	-	-	-	-
	A-C	21.54	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	6.57	10.69	0.614	-	1.53	1.56	-	23.3	0.24
	C-AB	3.21	10.19	0.315	-	0.45	0.46	-	6.9	0.14
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.44	-	-	-	-	-	-	-	-
	A-C	21.54	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	5.36	11.60	0.463	-	1.56	0.88	-	13.8	0.16
	C-AB	2.62	11.07	0.237	-	0.46	0.31	-	4.7	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.36	-	-	-	-	-	-	-	-
	A-C	17.59	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
09:15-09:30	B-AC	4.49	12.25	0.367	-	0.88	0.59	-	9.1	0.13
	C-AB	2.20	11.70	0.188	-	0.31	0.23	-	3.5	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.30	-	-	-	-	-	-	-	-
	A-C	14.73	-	-	-	-	-	-	-	-

[illegible]

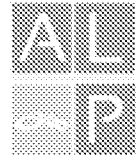
	A-B	0.46	-	-	-	-	-	-	-	-
	A-C	18.94	-	-	-	-	-	-	-	-
Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:15-18:30	B-AC	2.65	11.99	0.221	-	0.39	0.29	-	4.4	0.11
	C-AB	5.17	11.44	0.452	-	1.39	0.84	-	12.8	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.39	-	-	-	-	-	-	-	-
	A-C	15.86	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.

In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.

Delays marked with '##' could not be calculated.

PICADY 5 Run Successful



APPENDIX D

2017 Flows and Queue Lengths

TRANSPORT ASSESSMENT

LAND EAST OF TYE LANE, WALBERTON

JUNE 2017

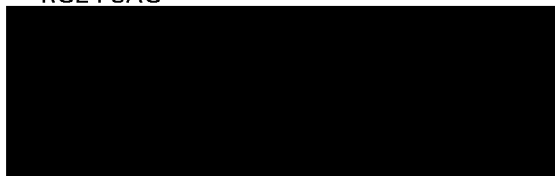


TRANSPORT ASSESSMENT

LAND EAST OF TYE LANE, WALBERTON

Client: Wates Developments

i-Transport LLP
Grove House
Lutyens Close
Chineham Court
Basingstoke
Hampshire
RG24 8AG



i-Transport Ref: TW/ZB/RS/ITB11324-004B R

Date: 7 June 2017

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SECTION 6 TRAFFIC IMPACT – METHODOLOGY

6.1 Introduction

- 6.1.1 This section of the Transport Assessment details the methodology used to assess the potential traffic impact of the development. This methodology has been agreed with both WSCC and Highways England.

6.2 Baseline Conditions

- 6.2.1 Peak period manual classified turning counts were undertaken on 2 February 2017 and 21 March 2017 at the junctions identified in Section 3.4. The observed morning and evening peak hour traffic flows are shown on **Figures TF1 and TF2** respectively.

6.3 Committed Developments

- 6.3.1 To consider the cumulative impact of local development that has been permitted but not built, the assessment of traffic impacts on the local network has been undertaken including the additional traffic associated with committed development in the area. The traffic assessment of the local road network therefore makes an allowance for the following committed developments, as agreed with WSCC and HE: -

- Land to the East of Fontwell Avenue (pending decision);
- Land West of Westergate Street and east of Hook Lane, Westergate; and
- Land at Nyton Road and Northfields Lane, Aldingbourne.

- 6.3.2 The traffic flows associated with the committed developments have been taken from the Transport Assessment submitted with the planning applications.

- 6.3.3 For assessment on the Strategic Road Network (i.e. the A27), Highways England required use of the Arun District Local Plan strategic (SATURN) model which includes all draft allocations from the latest draft Arun Local Plan, as well as background growth and mitigation schemes. Traffic flows from the model have been obtained from WSCC.

6.4 Traffic Generation

- 6.4.1 In accordance with WSCC's TAM guidance, the TRICS database (version 2015 7.4.1) has been used to calculate the potential traffic generation of the proposed development. Full details are presented in the TA Scoping Note (**Appendix B**).

Source: LINSIG 3

7.3.21 On this basis, no further improvement to the junction is required.

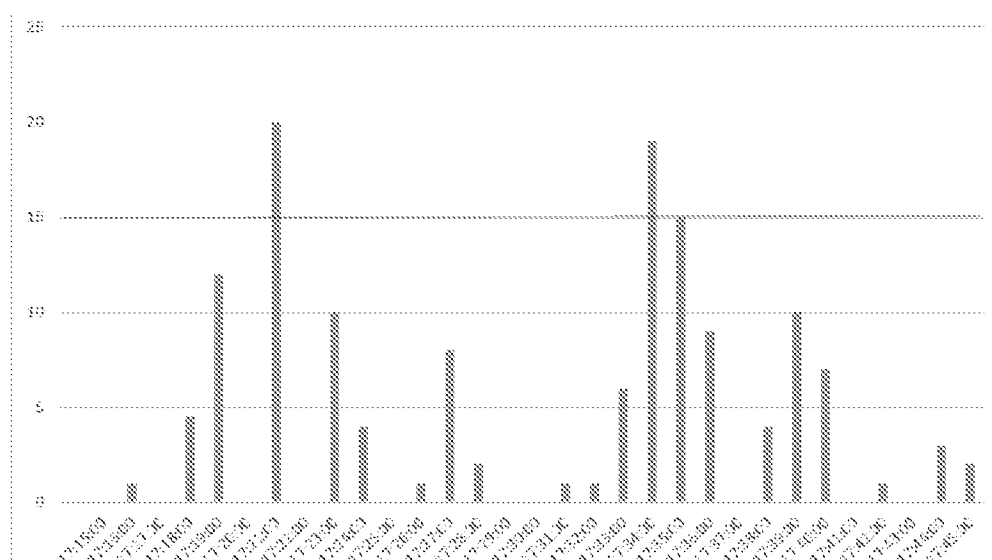
7.3.23 To assess the capacity of the A27 Arundel Road / Yapton Lane priority junction, Junctions 9 has been used and the results are summarised in **Table 7.7**.

	Morning Peak Hour			Evening Peak Hour		
	RFC	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)
2031 With LP and LP Mitigation						
Yapton Lane – Left-out	0.35	1	9	0.23	<1	8
A27 (W) – Ahead and Right	0.22	0	7	0.57	1	14
2031 With LP and LP Mitigation Plus Development						
Yapton Lane – Left-out	0.45	1	10	0.28	<1	8
A27 (W) – Ahead and Right	0.25	0	8	0.64	2	17

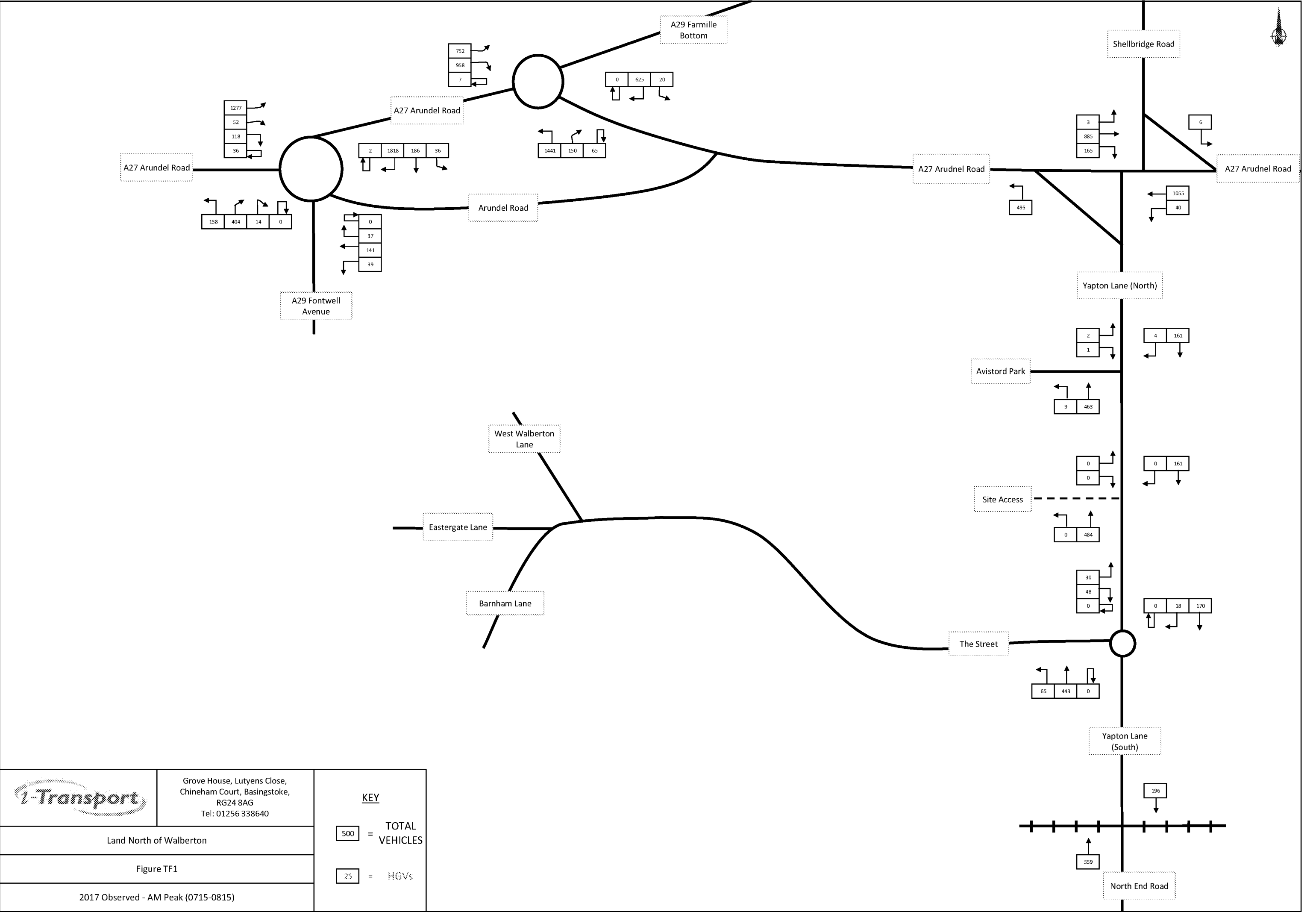
Ref: TW/ZB/RS/ITB11324-004B R
Date: 7 June 2017

- 7.3.24 The operational analysis demonstrates that in 2031, both with and without development traffic, the junction will operate below design capacity in both peak periods, with a maximum RFC of 0.45 and a queue of one vehicle in the morning peak hour on Yapton Lane, and a maximum RFC of 0.64 and a queue of two vehicles in the evening peak hour on the A27 right-turn to Yapton Lane. Average delay for vehicles turning right into Yapton Lane is 17 seconds.
- 7.3.25 Notwithstanding that the junction is projected to operate well within capacity under all scenarios, and that queue surveys demonstrate that the average queue on the A27 right-turn lane to Yapton Lane is limited (one vehicle in the morning peak and three in the evening peak – **Appendix M**), site observations confirm that there are isolated and short lived instances of more extensive queuing at the junction whereby right-turn queues can project outside of the available right-turning space, primarily in the evening peak period. This was confirmed by residents during the public consultation.
- 7.3.26 The existing A27 right-turn lane is 110m in length, and can accommodate a maximum of 19 vehicles dependent upon vehicle mix. However, in practice, it is observed that queues of some 15 vehicles can lead to blocking back to the A27 mainline. **Image 7.1** presents a snapshot of the queue survey for the evening peak which demonstrates that there were three instances where queue demand exceeds 15 vehicles.

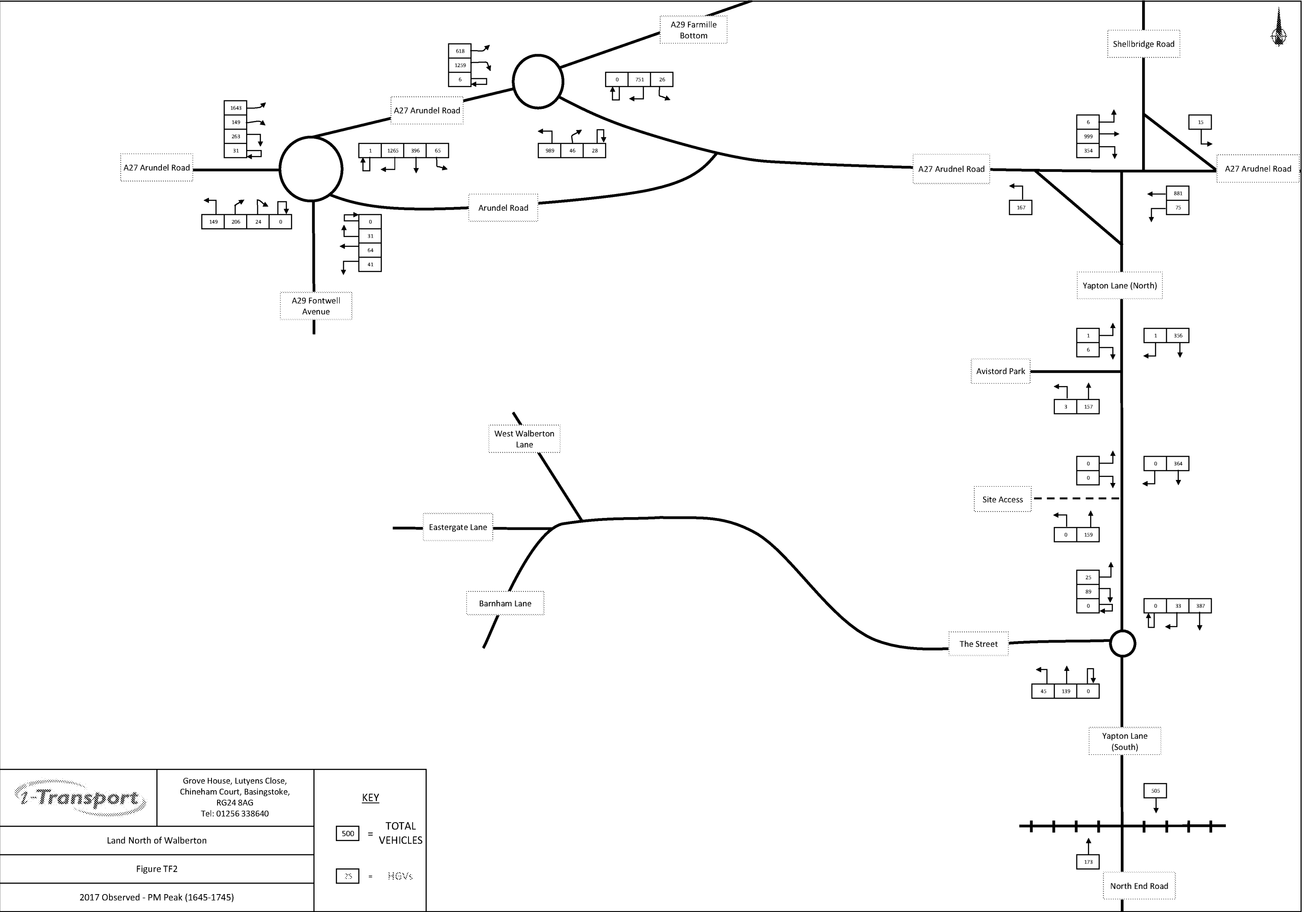
Image 7.1: Evening Peak Queuing at A27 / Yapton Lane



- 7.3.27 The proposed development would add some 40-additional right-turning movements to the junction in the evening peak hour, less than one additional right-turning movement each minute. Notwithstanding that this impact is small, Highways England has sought an improvement to the junction to extend the right-turn reservoir.



	Grove House, Lutyens Close, Chineham Court, Basingstoke, RG24 8AG Tel: 01256 338640	KEY
Land North of Walberton		= TOTAL VEHICLES
Figure TF1		= HGVs
2017 Observed - AM Peak (0715-0815)		

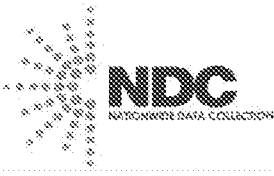


	Grove House, Lutyens Close, Chineham Court, Basingstoke, RG24 8AG Tel: 01256 338640	KEY 500 = TOTAL VEHICLES 25 = HGVs
Land North of Walberton		
Figure TF2		
2017 Observed - PM Peak (1645-1745)		

APPENDIX M

A27/YAPTON LANE QUEUE SURVEY



	Site / Location:	Site 3, A27 Arundel Road / Yapton Lane / Shellbridge Road	Project No:	7279	Drawing No:	7279-03	Drawn By:	SR
	Survey Date:	Tuesday 21st March 2017	Project Name:		Walberton			
	Survey Times:	07:00 to 10:00 & 16:00 to 19:00	Drawing Title:		Site Layout and Observed Movements			



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm A - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
07:00:00	0	0	0	0	0	0
07:01:00	0	0	0	0	0	0
07:02:00	0	0	0	0	0	0
07:03:00	0	0	0	0	0	0
07:04:00	0	0	0	0	0	0
07:05:00	0	0	0	0	0	0
07:06:00	0	0	0	0	0	0
07:07:00	0	0	0	0	0	0
07:08:00	0	0	0	0	0	0
07:09:00	0	0	0	0	0	0
07:10:00	0	0	0	0	0	0
07:11:00	0	0	0	0	0	0
07:12:00	0	0	0	0	0	0
07:13:00	0	0	0	0	0	0
07:14:00	0	0	0	0	0	0
07:15:00	0	0	0	0	0	0
07:16:00	0	0	0	0	0	0
07:17:00	0	0	0	0	0	0
07:18:00	0	0	0	0	0	0
07:19:00	0	0	0	0	0	0
07:20:00	0	0	0	0	0	0
07:21:00	0	0	0	0	0	0
07:22:00	0	0	0	0	0	0
07:23:00	0	0	0	0	0	0
07:24:00	0	0	0	0	0	0
07:25:00	0	0	0	0	0	0
07:26:00	0	0	0	0	0	0
07:27:00	0	0	0	0	0	0
07:28:00	0	0	0	0	0	0
07:29:00	0	0	0	0	0	0
07:30:00	0	0	0	0	0	0
07:31:00	0	0	0	0	0	0
07:32:00	0	0	0	0	0	0
07:33:00	0	0	0	0	0	0
07:34:00	0	0	0	0	0	0
07:35:00	0	0	0	0	0	0
07:36:00	0	0	0	0	0	0
07:37:00	0	0	0	0	0	0
07:38:00	0	0	0	0	0	0
07:39:00	0	0	0	0	0	0
07:40:00	0	0	0	0	0	0
07:41:00	0	0	0	0	0	0
07:42:00	0	0	0	0	0	0
07:43:00	0	0	0	0	0	0
07:44:00	0	0	0	0	0	0
07:45:00	0	0	0	0	0	0
07:46:00	0	0	0	0	0	0
07:47:00	0	0	0	0	0	0
07:48:00	0	0	0	0	0	0
07:49:00	0	0	0	0	0	0
07:50:00	0	0	0	0	0	0
07:51:00	0	0	0	0	0	0
07:52:00	0	0	0	0	0	0
07:53:00	0	0	0	0	0	0
07:54:00	0	0	0	0	0	0
07:55:00	0	0	0	0	0	0
07:56:00	0	0	0	0	0	0
07:57:00	0	0	0	0	0	0
07:58:00	0	0	0	0	0	0
07:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm A - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
08:00:00	0	0	0	0	0	0
08:01:00	0	0	0	0	0	0
08:02:00	0	0	0	0	0	0
08:03:00	0	0	0	0	0	0
08:04:00	0	0	0	0	0	0
08:05:00	0	0	0	0	0	0
08:06:00	0	0	0	0	0	0
08:07:00	0	0	0	0	0	0
08:08:00	0	0	0	0	0	0
08:09:00	0	0	0	0	0	0
08:10:00	0	0	0	0	0	0
08:11:00	0	0	0	0	0	0
08:12:00	0	0	0	0	0	0
08:13:00	0	0	0	0	0	0
08:14:00	0	0	0	0	0	0
08:15:00	0	0	0	0	0	0
08:16:00	0	0	0	0	0	0
08:17:00	0	0	0	0	0	0
08:18:00	0	0	0	0	0	0
08:19:00	0	0	0	0	0	0
08:20:00	0	0	0	0	0	0
08:21:00	0	0	0	0	0	0
08:22:00	0	0	0	0	0	0
08:23:00	0	0	0	0	0	0
08:24:00	0	0	0	0	0	0
08:25:00	0	0	0	0	0	0
08:26:00	0	0	0	0	0	0
08:27:00	0	0	0	0	0	0
08:28:00	0	0	0	0	0	0
08:29:00	0	0	0	0	0	0
08:30:00	0	0	0	0	0	0
08:31:00	0	0	0	0	0	0
08:32:00	0	0	0	0	0	0
08:33:00	0	0	0	0	0	0
08:34:00	0	0	0	0	0	0
08:35:00	0	0	0	0	0	0
08:36:00	0	0	0	0	0	0
08:37:00	0	0	0	0	0	0
08:38:00	0	0	0	0	0	0
08:39:00	0	0	0	0	0	0
08:40:00	0	0	0	0	0	0
08:41:00	0	0	0	0	0	0
08:42:00	0	0	0	0	0	0
08:43:00	0	0	0	0	0	0
08:44:00	0	0	0	0	0	0
08:45:00	1	1	0	0	0	5.75
08:46:00	0	0	0	0	0	0
08:47:00	0	0	0	0	0	0
08:48:00	0	0	0	0	0	0
08:49:00	0	0	0	0	0	0
08:50:00	0	0	0	0	0	0
08:51:00	0	0	0	0	0	0
08:52:00	0	0	0	0	0	0
08:53:00	0	0	0	0	0	0
08:54:00	0	0	0	0	0	0
08:55:00	0	0	0	0	0	0
08:56:00	0	0	0	0	0	0
08:57:00	0	0	0	0	0	0
08:58:00	0	0	0	0	0	0
08:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm A - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
09:00:00	0	0	0	0	0	0
09:01:00	0	0	0	0	0	0
09:02:00	0	0	0	0	0	0
09:03:00	0	0	0	0	0	0
09:04:00	0	0	0	0	0	0
09:05:00	0	0	0	0	0	0
09:06:00	0	0	0	0	0	0
09:07:00	0	0	0	0	0	0
09:08:00	0	0	0	0	0	0
09:09:00	0	0	0	0	0	0
09:10:00	0	0	0	0	0	0
09:11:00	0	0	0	0	0	0
09:12:00	0	0	0	0	0	0
09:13:00	0	0	0	0	0	0
09:14:00	0	0	0	0	0	0
09:15:00	0	0	0	0	0	0
09:16:00	0	0	0	0	0	0
09:17:00	0	0	0	0	0	0
09:18:00	0	0	0	0	0	0
09:19:00	0	0	0	0	0	0
09:20:00	0	0	0	0	0	0
09:21:00	0	0	0	0	0	0
09:22:00	0	0	0	0	0	0
09:23:00	0	0	0	0	0	0
09:24:00	0	0	0	0	0	0
09:25:00	0	0	0	0	0	0
09:26:00	0	0	0	0	0	0
09:27:00	0	0	0	0	0	0
09:28:00	0	0	0	0	0	0
09:29:00	0	0	0	0	0	0
09:30:00	0	0	0	0	0	0
09:31:00	0	0	0	0	0	0
09:32:00	0	0	0	0	0	0
09:33:00	0	0	0	0	0	0
09:34:00	0	0	0	0	0	0
09:35:00	0	0	0	0	0	0
09:36:00	0	0	0	0	0	0
09:37:00	0	0	0	0	0	0
09:38:00	0	0	0	0	0	0
09:39:00	0	0	0	0	0	0
09:40:00	0	0	0	0	0	0
09:41:00	0	0	0	0	0	0
09:42:00	0	0	0	0	0	0
09:43:00	0	0	0	0	0	0
09:44:00	0	0	0	0	0	0
09:45:00	0	0	0	0	0	0
09:46:00	0	0	0	0	0	0
09:47:00	0	0	0	0	0	0
09:48:00	0	0	0	0	0	0
09:49:00	0	0	0	0	0	0
09:50:00	0	0	0	0	0	0
09:51:00	0	0	0	0	0	0
09:52:00	0	0	0	0	0	0
09:53:00	0	0	0	0	0	0
09:54:00	0	0	0	0	0	0
09:55:00	0	0	0	0	0	0
09:56:00	0	0	0	0	0	0
09:57:00	0	0	0	0	0	0
09:58:00	0	0	0	0	0	0
09:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm A - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
16:00:00	0	0	0	0	0	0
16:01:00	0	0	0	0	0	0
16:02:00	0	0	0	0	0	0
16:03:00	0	0	0	0	0	0
16:04:00	0	0	0	0	0	0
16:05:00	0	0	0	0	0	0
16:06:00	0	0	0	0	0	0
16:07:00	0	0	0	0	0	0
16:08:00	0	0	0	0	0	0
16:09:00	0	0	0	0	0	0
16:10:00	0	0	0	0	0	0
16:11:00	0	0	0	0	0	0
16:12:00	0	0	0	0	0	0
16:13:00	0	0	0	0	0	0
16:14:00	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0
16:16:00	0	0	0	0	0	0
16:17:00	0	0	0	0	0	0
16:18:00	0	0	0	0	0	0
16:19:00	0	0	0	0	0	0
16:20:00	0	0	0	0	0	0
16:21:00	0	0	0	0	0	0
16:22:00	0	0	0	0	0	0
16:23:00	0	0	0	0	0	0
16:24:00	0	0	0	0	0	0
16:25:00	0	0	0	0	0	0
16:26:00	0	0	0	0	0	0
16:27:00	0	0	0	0	0	0
16:28:00	0	0	0	0	0	0
16:29:00	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0
16:31:00	0	0	0	0	0	0
16:32:00	0	0	0	0	0	0
16:33:00	0	0	0	0	0	0
16:34:00	0	0	0	0	0	0
16:35:00	0	0	0	0	0	0
16:36:00	0	0	0	0	0	0
16:37:00	1	1	0	0	0	5.75
16:38:00	0	0	0	0	0	0
16:39:00	0	0	0	0	0	0
16:40:00	0	0	0	0	0	0
16:41:00	0	0	0	0	0	0
16:42:00	0	0	0	0	0	0
16:43:00	0	0	0	0	0	0
16:44:00	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0
16:46:00	0	0	0	0	0	0
16:47:00	0	0	0	0	0	0
16:48:00	0	0	0	0	0	0
16:49:00	0	0	0	0	0	0
16:50:00	0	0	0	0	0	0
16:51:00	0	0	0	0	0	0
16:52:00	0	0	0	0	0	0
16:53:00	0	0	0	0	0	0
16:54:00	0	0	0	0	0	0
16:55:00	0	0	0	0	0	0
16:56:00	0	0	0	0	0	0
16:57:00	0	0	0	0	0	0
16:58:00	0	0	0	0	0	0
16:59:00	0	0	0	0	0	0



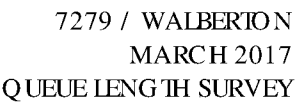
SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm A - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
17:00:00	0	0	0	0	0	0
17:01:00	0	0	0	0	0	0
17:02:00	0	0	0	0	0	0
17:03:00	0	0	0	0	0	0
17:04:00	0	0	0	0	0	0
17:05:00	0	0	0	0	0	0
17:06:00	0	0	0	0	0	0
17:07:00	0	0	0	0	0	0
17:08:00	0	0	0	0	0	0
17:09:00	0	0	0	0	0	0
17:10:00	0	0	0	0	0	0
17:11:00	0	0	0	0	0	0
17:12:00	0	0	0	0	0	0
17:13:00	0	0	0	0	0	0
17:14:00	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0
17:16:00	0	0	0	0	0	0
17:17:00	0	0	0	0	0	0
17:18:00	0	0	0	0	0	0
17:19:00	0	0	0	0	0	0
17:20:00	0	0	0	0	0	0
17:21:00	0	0	0	0	0	0
17:22:00	0	0	0	0	0	0
17:23:00	0	0	0	0	0	0
17:24:00	0	0	0	0	0	0
17:25:00	0	0	0	0	0	0
17:26:00	0	0	0	0	0	0
17:27:00	0	0	0	0	0	0
17:28:00	0	0	0	0	0	0
17:29:00	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0
17:31:00	0	0	0	0	0	0
17:32:00	0	0	0	0	0	0
17:33:00	0	0	0	0	0	0
17:34:00	0	0	0	0	0	0
17:35:00	0	0	0	0	0	0
17:36:00	0	0	0	0	0	0
17:37:00	0	0	0	0	0	0
17:38:00	0	0	0	0	0	0
17:39:00	0	0	0	0	0	0
17:40:00	0	0	0	0	0	0
17:41:00	0	0	0	0	0	0
17:42:00	0	0	0	0	0	0
17:43:00	0	0	0	0	0	0
17:44:00	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0
17:46:00	0	0	0	0	0	0
17:47:00	0	0	0	0	0	0
17:48:00	0	0	0	0	0	0
17:49:00	0	0	0	0	0	0
17:50:00	0	0	0	0	0	0
17:51:00	0	0	0	0	0	0
17:52:00	0	0	0	0	0	0
17:53:00	0	0	0	0	0	0
17:54:00	0	0	0	0	0	0
17:55:00	0	0	0	0	0	0
17:56:00	0	0	0	0	0	0
17:57:00	0	0	0	0	0	0
17:58:00	0	0	0	0	0	0
17:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

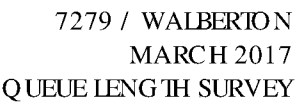
Arm A - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
18:00:00	0	0	0	0	0	0
18:01:00	0	0	0	0	0	0
18:02:00	0	0	0	0	0	0
18:03:00	0	0	0	0	0	0
18:04:00	0	0	0	0	0	0
18:05:00	0	0	0	0	0	0
18:06:00	0	0	0	0	0	0
18:07:00	0	0	0	0	0	0
18:08:00	0	0	0	0	0	0
18:09:00	0	0	0	0	0	0
18:10:00	0	0	0	0	0	0
18:11:00	0	0	0	0	0	0
18:12:00	0	0	0	0	0	0
18:13:00	0	0	0	0	0	0
18:14:00	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0
18:16:00	0	0	0	0	0	0
18:17:00	0	0	0	0	0	0
18:18:00	0	0	0	0	0	0
18:19:00	0	0	0	0	0	0
18:20:00	0	0	0	0	0	0
18:21:00	0	0	0	0	0	0
18:22:00	0	0	0	0	0	0
18:23:00	0	0	0	0	0	0
18:24:00	0	0	0	0	0	0
18:25:00	0	0	0	0	0	0
18:26:00	0	0	0	0	0	0
18:27:00	0	0	0	0	0	0
18:28:00	0	0	0	0	0	0
18:29:00	0	0	0	0	0	0
18:30:00	0	0	0	0	0	0
18:31:00	0	0	0	0	0	0
18:32:00	0	0	0	0	0	0
18:33:00	0	0	0	0	0	0
18:34:00	0	0	0	0	0	0
18:35:00	0	0	0	0	0	0
18:36:00	0	0	0	0	0	0
18:37:00	0	0	0	0	0	0
18:38:00	0	0	0	0	0	0
18:39:00	0	0	0	0	0	0
18:40:00	0	0	0	0	0	0
18:41:00	0	0	0	0	0	0
18:42:00	0	0	0	0	0	0
18:43:00	0	0	0	0	0	0
18:44:00	0	0	0	0	0	0
18:45:00	0	0	0	0	0	0
18:46:00	0	0	0	0	0	0
18:47:00	0	0	0	0	0	0
18:48:00	0	0	0	0	0	0
18:49:00	0	0	0	0	0	0
18:50:00	0	0	0	0	0	0
18:51:00	0	0	0	0	0	0
18:52:00	0	0	0	0	0	0
18:53:00	0	0	0	0	0	0
18:54:00	0	0	0	0	0	0
18:55:00	0	0	0	0	0	0
18:56:00	0	0	0	0	0	0
18:57:00	0	0	0	0	0	0
18:58:00	0	0	0	0	0	0
18:59:00	0	0	0	0	0	0



DATE: 21/03/2017

DAY: TUESDAY

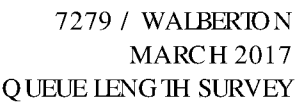
7279 Walberton Queues Site 4Site 3 Arm B



DATE: 21/03/2017

DAY: TUESDAY

7279 Walberton Queues Site 4Site 3 Arm B



DATE: 21/03/2017

DAY: TUESDAY

7279 Walberton Queues Site 4Site 3 Arm B



SITE:3

DATE:21/03/2017

LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge Road

DAY: TUESDAY

Arm B - Lane 1 QUEUES							Arm B - Lane 2 QUEUES							Arm B - Lane 3 QUEUES							Arm B - Lane 4 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
16:00:00	0	0	0	0	0	0	16:00:00	0	0	0	0	0	0	16:00:00	0	0	0	0	0	0	16:00:00	0	0	0	0	0	0
16:01:00	0	0	0	0	0	0	16:01:00	0	0	0	0	0	0	16:01:00	0	0	0	0	0	0	16:01:00	0	0	0	0	0	0
16:02:00	0	0	0	0	0	0	16:02:00	0	0	0	0	0	0	16:02:00	0	0	0	0	0	0	16:02:00	9.1	3	1	2	0	52.325
16:03:00	0	0	0	0	0	0	16:03:00	0	0	0	0	0	0	16:03:00	0	0	0	0	0	0	16:03:00	11	8	2	0	0	63.25
16:04:00	0	0	0	0	0	0	16:04:00	0	0	0	0	0	0	16:04:00	0	0	0	0	0	0	16:04:00	0	0	0	0	0	0
16:05:00	0	0	0	0	0	0	16:05:00	0	0	0	0	0	0	16:05:00	0	0	0	0	0	0	16:05:00	4.3	2	0	1	0	24.725
16:06:00	0	0	0	0	0	0	16:06:00	0	0	0	0	0	0	16:06:00	0	0	0	0	0	0	16:06:00	0	0	0	0	0	0
16:07:00	0	0	0	0	0	0	16:07:00	0	0	0	0	0	0	16:07:00	0	0	0	0	0	0	16:07:00	0	0	0	0	0	0
16:08:00	0	0	0	0	0	0	16:08:00	0	0	0	0	0	0	16:08:00	0	0	0	0	0	0	16:08:00	0	0	0	0	0	0
16:09:00	0	0	0	0	0	0	16:09:00	0	0	0	0	0	0	16:09:00	0	0	0	0	0	0	16:09:00	1	1	0	0	0	5.75
16:10:00	0	0	0	0	0	0	16:10:00	0	0	0	0	0	0	16:10:00	0	0	0	0	0	0	16:10:00	0	0	0	0	0	0
16:11:00	0	0	0	0	0	0	16:11:00	0	0	0	0	0	0	16:11:00	0	0	0	0	0	0	16:11:00	2	2	0	0	0	11.5
16:12:00	0	0	0	0	0	0	16:12:00	0	0	0	0	0	0	16:12:00	0	0	0	0	0	0	16:12:00	0	0	0	0	0	0
16:13:00	0	0	0	0	0	0	16:13:00	0	0	0	0	0	0	16:13:00	0	0	0	0	0	0	16:13:00	0	0	0	0	0	0
16:14:00	0	0	0	0	0	0	16:14:00	0	0	0	0	0	0	16:14:00	0	0	0	0	0	0	16:14:00	7	2	2	0	1	40.25
16:15:00	0	0	0	0	0	0	16:15:00	0	0	0	0	0	0	16:15:00	0	0	0	0	0	0	16:15:00	2.5	1	1	0	0	14.375
16:16:00	0	0	0	0	0	0	16:16:00	0	0	0	0	0	0	16:16:00	0	0	0	0	0	0	16:16:00	0	0	0	0	0	0
16:17:00	0	0	0	0	0	0	16:17:00	0	0	0	0	0	0	16:17:00	0	0	0	0	0	0	16:17:00	0	0	0	0	0	0
16:18:00	0	0	0	0	0	0	16:18:00	0	0	0	0	0	0	16:18:00	0	0	0	0	0	0	16:18:00	0	0	0	0	0	0
16:19:00	0	0	0	0	0	0	16:19:00	0	0	0	0	0	0	16:19:00	0	0	0	0	0	0	16:19:00	0	0	0	0	0	0
16:20:00	0	0	0	0	0	0	16:20:00	0	0	0	0	0	0	16:20:00	0	0	0	0	0	0	16:20:00	1	1	0	0	0	5.75
16:21:00	0	0	0	0	0	0	16:21:00	0	0	0	0	0	0	16:21:00	0	0	0	0	0	0	16:21:00	0	0	0	0	0	0
16:22:00	0	0	0	0	0	0	16:22:00	0	0	0	0	0	0	16:22:00	0	0	0	0	0	0	16:22:00	0	0	0	0	0	0
16:23:00	0	0	0	0	0	0	16:23:00	0	0	0	0	0	0	16:23:00	0	0	0	0	0	0	16:23:00	1	1	0	0	0	5.75
16:24:00	0	0	0	0	0	0	16:24:00	0	0	0	0	0	0	16:24:00	0	0	0	0	0	0	16:24:00	2.5	1	1	0	0	14.375
16:25:00	0	0	0	0	0	0	16:25:00	0	0	0	0	0	0	16:25:00	0	0	0	0	0	0	16:25:00	4	4	0	0	0	23
16:26:00	0	0	0	0	0	0	16:26:00	0	0	0	0	0	0	16:26:00	0	0	0	0	0	0	16:26:00	0	0	0	0	0	0
16:27:00	0	0	0	0	0	0	16:27:00	0	0	0	0	0	0	16:27:00	0	0	0	0	0	0	16:27:00	0	0	0	0	0	0
16:28:00	0	0	0	0	0	0	16:28:00	0	0	0	0	0	0	16:28:00	0	0	0	0	0	0	16:28:00	0	0	0	0	0	0
16:29:00	0	0	0	0	0	0	16:29:00	0	0	0	0	0	0	16:29:00	0	0	0	0	0	0	16:29:00	7	7	0	0	0	40.25
16:30:00	0	0	0	0	0	0	16:30:00	0	0	0	0	0	0	16:30:00	0	0	0	0	0	0	16:30:00	2	2	0	0	0	11.5
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16:33:00	0	0	0	0	0	0	16:33:00	0	0	0	0	0	0	16:33:00	0	0	0	0	0	0	16:33:00	0	0	0	0	0	0
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16:38:00	0	0	0	0	0	0	16:38:00	0	0	0	0	0	0	16:38:00	0	0	0	0	0	0	16:38:00	0	0	0	0	0	0
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16:41:00	0	0	0	0	0	0	16:41:00	0	0	0	0	0	0	16:41:00	0	0	0	0	0	0	16:41:00	0	0	0	0	0	0
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16:43:00	0	0	0	0	0	0	16:43:00	0	0	0	0	0	0	16:43:00	0	0	0	0	0	0	16:43:00	7	7	0	0	0	40.25
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16:47:00	0	0	0	0	0	0	16:47:00	0	0	0	0	0	0	16:47:00	0	0	0	0	0	0	16:47:00	1	1	0	0	0	5.75
16:48:00	0	0	0	0	0	0	16:48:00	0	0	0	0	0	0	16:48:00	0	0	0	0	0	0	16:48:00	0	0	0	0	0	0
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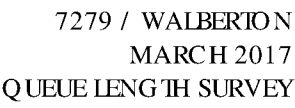
SITE:3

DATE:21/03/2017

LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge Road

DAY: TUESDAY

Arm B - Lane 1 QUEUES							Arm B - Lane 2 QUEUES							Arm B - Lane 3 QUEUES							Arm B - Lane 4 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
17:00:00	0	0	0	0	0	0	17:00:00	0	0	0	0	0	0	17:00:00	0	0	0	0	0	0	17:00:00	1	1	0	0	0	5.75
17:01:00	0	0	0	0	0	0	17:01:00	0	0	0	0	0	0	17:01:00	0	0	0	0	0	0	17:01:00	0	0	0	0	0	0
17:02:00	0	0	0	0	0	0	17:02:00	0	0	0	0	0	0	17:02:00	0	0	0	0	0	0	17:02:00	7	7	0	0	0	40.25
17:03:00	0	0	0	0	0	0	17:03:00	0	0	0	0	0	0	17:03:00	0	0	0	0	0	0	17:03:00	0	0	0	0	0	0
17:04:00	0	0	0	0	0	0	17:04:00	0	0	0	0	0	0	17:04:00	0	0	0	0	0	0	17:04:00	1	1	0	0	0	5.75
17:05:00	0	0	0	0	0	0	17:05:00	0	0	0	0	0	0	17:05:00	0	0	0	0	0	0	17:05:00	0	0	0	0	0	0
17:06:00	0	0	0	0	0	0	17:06:00	0	0	0	0	0	0	17:06:00	0	0	0	0	0	0	17:06:00	2	2	0	0	0	11.5
17:07:00	0	0	0	0	0	0	17:07:00	0	0	0	0	0	0	17:07:00	0	0	0	0	0	0	17:07:00	0	0	0	0	0	0
17:08:00	0	0	0	0	0	0	17:08:00	0	0	0	0	0	0	17:08:00	0	0	0	0	0	0	17:08:00	0	0	0	0	0	0
17:09:00	0	0	0	0	0	0	17:09:00	0	0	0	0	0	0	17:09:00	0	0	0	0	0	0	17:09:00	0	0	0	0	0	0
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17:11:00	0	0	0	0	0	0	17:11:00	0	0	0	0	0	0	17:11:00	0	0	0	0	0	0	17:11:00	5	5	0	0	0	28.75
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17:16:00	0	0	0	0	0	0	17:16:00	0	0	0	0	0	0	17:16:00	0	0	0	0	0	0	17:16:00	1	1	0	0	0	5.75
17:17:00	0	0	0	0	0	0	17:17:00	0	0	0	0	0	0	17:17:00	0	0	0	0	0	0	17:17:00	0	0	0	0	0	0
17:18:00	0	0	0	0	0	0	17:18:00	0	0	0	0	0	0	17:18:00	0	0	0	0	0	0	17:18:00	4.5	3	1	0	0	25.875
17:19:00	0	0	0	0	0	0	17:19:00	0	0	0	0	0	0	17:19:00	0	0	0	0	0	0	17:19:00	12	12	0	0	0	69
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17:29:00	0	0	0	0	0	0	17:29:00	0	0	0	0	0	0	17:29:00	0	0	0	0	0	0	17:29:00	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	17:30:00	0	0	0	0	0	0	17:30:00	0	0	0	0	0	0	17:30:00	0	0	0	0	0	0
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17:32:00	0	0	0	0	0	0	17:32:00	0	0	0	0	0	0	17:32:00	0	0	0	0	0	0	17:32:00	1	1	0	0	0	5.75
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17:37:00	0	0	0	0	0	0	17:37:00	0	0	0	0	0	0	17:37:00	0	0	0	0	0	0	17:37:00	0	0	0	0	0	0
17:38:00	0	0	0	0	0	0	17:38:00	0	0	0	0	0	0	17:38:00	0	0	0	0	0	0	17:38:00	4	4	0	0	0	23
17:39:00	0	0	0	0	0	0	17:39:00	0	0	0	0	0	0	17:39:00	0	0	0	0	0	0	17:39:00	10	10	0	0	0	57.5
17:40:00	0	0	0	0	0	0	17:40:00	0	0	0	0	0	0	17:40:00	0	0	0	0	0	0	17:40:00	7	7	0	0	0	40.25
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17:42:00	0	0	0	0	0	0	17:42:00	0	0	0	0	0	0	17:42:00	0	0	0	0	0	0	17:42:00	1	1	0	0	0	5.75
17:43:00	0	0	0	0	0	0	17:43:00	0	0	0	0	0	0	17:43:00	0	0	0	0	0	0	17:43:00	0	0	0	0	0	0
17:44:00	0	0	0	0	0	0	17:44:00	0	0	0	0	0	0	17:44:00	0	0	0	0	0	0	17:44:00	3	3	0	0	0	17.25
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17:46:00	0	0	0	0	0	0	17:46:00	0	0	0	0	0	0	17:46:00	0	0	0	0	0	0	17:46:00	3	3	0	0	0	17.25
17:47:00	0	0	0	0	0	0	17:47:00	0	0	0	0	0	0	17:47:00	0	0	0	0	0	0	17:47:00	0	0	0	0	0	0
17:48:00	0	0	0	0	0	0	17:48:00	0	0	0	0	0	0	17:48:00	0	0	0	0	0	0	17:48:00	0	0	0	0	0	0
17:49:00	0	0	0	0	0	0	17:49:00	0	0	0	0	0	0	17:49:00	0												



DATE: 21/03/2017

DAY: TUESDAY

7279 Walberton Queues Site 4Site 3 Arm B



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm C - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
07:00:00	0	0	0	0	0	0
07:01:00	0	0	0	0	0	0
07:02:00	0	0	0	0	0	0
07:03:00	0	0	0	0	0	0
07:04:00	0	0	0	0	0	0
07:05:00	0	0	0	0	0	0
07:06:00	0	0	0	0	0	0
07:07:00	0	0	0	0	0	0
07:08:00	0	0	0	0	0	0
07:09:00	0	0	0	0	0	0
07:10:00	0	0	0	0	0	0
07:11:00	0	0	0	0	0	0
07:12:00	0	0	0	0	0	0
07:13:00	0	0	0	0	0	0
07:14:00	0	0	0	0	0	0
07:15:00	0	0	0	0	0	0
07:16:00	0	0	0	0	0	0
07:17:00	0	0	0	0	0	0
07:18:00	0	0	0	0	0	0
07:19:00	0	0	0	0	0	0
07:20:00	0	0	0	0	0	0
07:21:00	0	0	0	0	0	0
07:22:00	0	0	0	0	0	0
07:23:00	0	0	0	0	0	0
07:24:00	0	0	0	0	0	0
07:25:00	0	0	0	0	0	0
07:26:00	0	0	0	0	0	0
07:27:00	0	0	0	0	0	0
07:28:00	0	0	0	0	0	0
07:29:00	0	0	0	0	0	0
07:30:00	0	0	0	0	0	0
07:31:00	0	0	0	0	0	0
07:32:00	0	0	0	0	0	0
07:33:00	0	0	0	0	0	0
07:34:00	0	0	0	0	0	0
07:35:00	0	0	0	0	0	0
07:36:00	0	0	0	0	0	0
07:37:00	0	0	0	0	0	0
07:38:00	0	0	0	0	0	0
07:39:00	0	0	0	0	0	0
07:40:00	0	0	0	0	0	0
07:41:00	0	0	0	0	0	0
07:42:00	0	0	0	0	0	0
07:43:00	0	0	0	0	0	0
07:44:00	0	0	0	0	0	0
07:45:00	0	0	0	0	0	0
07:46:00	0	0	0	0	0	0
07:47:00	0	0	0	0	0	0
07:48:00	0	0	0	0	0	0
07:49:00	0	0	0	0	0	0
07:50:00	0	0	0	0	0	0
07:51:00	0	0	0	0	0	0
07:52:00	0	0	0	0	0	0
07:53:00	0	0	0	0	0	0
07:54:00	0	0	0	0	0	0
07:55:00	0	0	0	0	0	0
07:56:00	0	0	0	0	0	0
07:57:00	0	0	0	0	0	0
07:58:00	0	0	0	0	0	0
07:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapt on Lane / Shellbridge DAY: TUESDAY

Arm C - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
08:00:00	0	0	0	0	0	0
08:01:00	0	0	0	0	0	0
08:02:00	0	0	0	0	0	0
08:03:00	0	0	0	0	0	0
08:04:00	0	0	0	0	0	0
08:05:00	0	0	0	0	0	0
08:06:00	0	0	0	0	0	0
08:07:00	0	0	0	0	0	0
08:08:00	0	0	0	0	0	0
08:09:00	0	0	0	0	0	0
08:10:00	0	0	0	0	0	0
08:11:00	0	0	0	0	0	0
08:12:00	0	0	0	0	0	0
08:13:00	0	0	0	0	0	0
08:14:00	0	0	0	0	0	0
08:15:00	0	0	0	0	0	0
08:16:00	0	0	0	0	0	0
08:17:00	0	0	0	0	0	0
08:18:00	0	0	0	0	0	0
08:19:00	0	0	0	0	0	0
08:20:00	0	0	0	0	0	0
08:21:00	0	0	0	0	0	0
08:22:00	0	0	0	0	0	0
08:23:00	0	0	0	0	0	0
08:24:00	0	0	0	0	0	0
08:25:00	0	0	0	0	0	0
08:26:00	0	0	0	0	0	0
08:27:00	0	0	0	0	0	0
08:28:00	0	0	0	0	0	0
08:29:00	0	0	0	0	0	0
08:30:00	0	0	0	0	0	0
08:31:00	0	0	0	0	0	0
08:32:00	0	0	0	0	0	0
08:33:00	0	0	0	0	0	0
08:34:00	0	0	0	0	0	0
08:35:00	0	0	0	0	0	0
08:36:00	0	0	0	0	0	0
08:37:00	0	0	0	0	0	0
08:38:00	0	0	0	0	0	0
08:39:00	0	0	0	0	0	0
08:40:00	0	0	0	0	0	0
08:41:00	0	0	0	0	0	0
08:42:00	0	0	0	0	0	0
08:43:00	0	0	0	0	0	0
08:44:00	0	0	0	0	0	0
08:45:00	0	0	0	0	0	0
08:46:00	0	0	0	0	0	0
08:47:00	0	0	0	0	0	0
08:48:00	0	0	0	0	0	0
08:49:00	0	0	0	0	0	0
08:50:00	0	0	0	0	0	0
08:51:00	0	0	0	0	0	0
08:52:00	0	0	0	0	0	0
08:53:00	0	0	0	0	0	0
08:54:00	0	0	0	0	0	0
08:55:00	0	0	0	0	0	0
08:56:00	0	0	0	0	0	0
08:57:00	0	0	0	0	0	0
08:58:00	0	0	0	0	0	0
08:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm C - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
09:00:00	0	0	0	0	0	0
09:01:00	0	0	0	0	0	0
09:02:00	0	0	0	0	0	0
09:03:00	0	0	0	0	0	0
09:04:00	0	0	0	0	0	0
09:05:00	0	0	0	0	0	0
09:06:00	0	0	0	0	0	0
09:07:00	0	0	0	0	0	0
09:08:00	0	0	0	0	0	0
09:09:00	0	0	0	0	0	0
09:10:00	0	0	0	0	0	0
09:11:00	0	0	0	0	0	0
09:12:00	0	0	0	0	0	0
09:13:00	0	0	0	0	0	0
09:14:00	0	0	0	0	0	0
09:15:00	0	0	0	0	0	0
09:16:00	0	0	0	0	0	0
09:17:00	0	0	0	0	0	0
09:18:00	0	0	0	0	0	0
09:19:00	0	0	0	0	0	0
09:20:00	0	0	0	0	0	0
09:21:00	0	0	0	0	0	0
09:22:00	0	0	0	0	0	0
09:23:00	0	0	0	0	0	0
09:24:00	0	0	0	0	0	0
09:25:00	0	0	0	0	0	0
09:26:00	0	0	0	0	0	0
09:27:00	0	0	0	0	0	0
09:28:00	0	0	0	0	0	0
09:29:00	0	0	0	0	0	0
09:30:00	0	0	0	0	0	0
09:31:00	0	0	0	0	0	0
09:32:00	0	0	0	0	0	0
09:33:00	0	0	0	0	0	0
09:34:00	0	0	0	0	0	0
09:35:00	0	0	0	0	0	0
09:36:00	0	0	0	0	0	0
09:37:00	0	0	0	0	0	0
09:38:00	0	0	0	0	0	0
09:39:00	0	0	0	0	0	0
09:40:00	0	0	0	0	0	0
09:41:00	0	0	0	0	0	0
09:42:00	0	0	0	0	0	0
09:43:00	0	0	0	0	0	0
09:44:00	0	0	0	0	0	0
09:45:00	0	0	0	0	0	0
09:46:00	0	0	0	0	0	0
09:47:00	0	0	0	0	0	0
09:48:00	0	0	0	0	0	0
09:49:00	0	0	0	0	0	0
09:50:00	0	0	0	0	0	0
09:51:00	0	0	0	0	0	0
09:52:00	0	0	0	0	0	0
09:53:00	0	0	0	0	0	0
09:54:00	0	0	0	0	0	0
09:55:00	0	0	0	0	0	0
09:56:00	0	0	0	0	0	0
09:57:00	0	0	0	0	0	0
09:58:00	0	0	0	0	0	0
09:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm C - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
16:00:00	0	0	0	0	0	0
16:01:00	0	0	0	0	0	0
16:02:00	0	0	0	0	0	0
16:03:00	0	0	0	0	0	0
16:04:00	0	0	0	0	0	0
16:05:00	0	0	0	0	0	0
16:06:00	0	0	0	0	0	0
16:07:00	0	0	0	0	0	0
16:08:00	0	0	0	0	0	0
16:09:00	0	0	0	0	0	0
16:10:00	1	1	0	0	0	5.75
16:11:00	0	0	0	0	0	0
16:12:00	0	0	0	0	0	0
16:13:00	0	0	0	0	0	0
16:14:00	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0
16:16:00	0	0	0	0	0	0
16:17:00	0	0	0	0	0	0
16:18:00	0	0	0	0	0	0
16:19:00	0	0	0	0	0	0
16:20:00	0	0	0	0	0	0
16:21:00	0	0	0	0	0	0
16:22:00	0	0	0	0	0	0
16:23:00	0	0	0	0	0	0
16:24:00	0	0	0	0	0	0
16:25:00	0	0	0	0	0	0
16:26:00	0	0	0	0	0	0
16:27:00	0	0	0	0	0	0
16:28:00	0	0	0	0	0	0
16:29:00	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0
16:31:00	0	0	0	0	0	0
16:32:00	0	0	0	0	0	0
16:33:00	0	0	0	0	0	0
16:34:00	0	0	0	0	0	0
16:35:00	0	0	0	0	0	0
16:36:00	0	0	0	0	0	0
16:37:00	0	0	0	0	0	0
16:38:00	0	0	0	0	0	0
16:39:00	0	0	0	0	0	0
16:40:00	0	0	0	0	0	0
16:41:00	0	0	0	0	0	0
16:42:00	0	0	0	0	0	0
16:43:00	0	0	0	0	0	0
16:44:00	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0
16:46:00	0	0	0	0	0	0
16:47:00	0	0	0	0	0	0
16:48:00	0	0	0	0	0	0
16:49:00	0	0	0	0	0	0
16:50:00	0	0	0	0	0	0
16:51:00	0	0	0	0	0	0
16:52:00	0	0	0	0	0	0
16:53:00	0	0	0	0	0	0
16:54:00	0	0	0	0	0	0
16:55:00	0	0	0	0	0	0
16:56:00	0	0	0	0	0	0
16:57:00	0	0	0	0	0	0
16:58:00	0	0	0	0	0	0
16:59:00	0	0	0	0	0	0



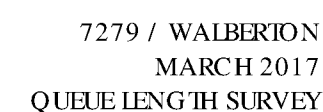
SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

Arm C - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
17:00:00	0	0	0	0	0	0
17:01:00	0	0	0	0	0	0
17:02:00	0	0	0	0	0	0
17:03:00	0	0	0	0	0	0
17:04:00	0	0	0	0	0	0
17:05:00	0	0	0	0	0	0
17:06:00	0	0	0	0	0	0
17:07:00	0	0	0	0	0	0
17:08:00	0	0	0	0	0	0
17:09:00	0	0	0	0	0	0
17:10:00	0	0	0	0	0	0
17:11:00	0	0	0	0	0	0
17:12:00	0	0	0	0	0	0
17:13:00	0	0	0	0	0	0
17:14:00	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0
17:16:00	0	0	0	0	0	0
17:17:00	0	0	0	0	0	0
17:18:00	0	0	0	0	0	0
17:19:00	0	0	0	0	0	0
17:20:00	0	0	0	0	0	0
17:21:00	0	0	0	0	0	0
17:22:00	0	0	0	0	0	0
17:23:00	0	0	0	0	0	0
17:24:00	0	0	0	0	0	0
17:25:00	0	0	0	0	0	0
17:26:00	0	0	0	0	0	0
17:27:00	0	0	0	0	0	0
17:28:00	0	0	0	0	0	0
17:29:00	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0
17:31:00	0	0	0	0	0	0
17:32:00	0	0	0	0	0	0
17:33:00	0	0	0	0	0	0
17:34:00	0	0	0	0	0	0
17:35:00	0	0	0	0	0	0
17:36:00	0	0	0	0	0	0
17:37:00	0	0	0	0	0	0
17:38:00	0	0	0	0	0	0
17:39:00	0	0	0	0	0	0
17:40:00	0	0	0	0	0	0
17:41:00	0	0	0	0	0	0
17:42:00	0	0	0	0	0	0
17:43:00	0	0	0	0	0	0
17:44:00	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0
17:46:00	0	0	0	0	0	0
17:47:00	0	0	0	0	0	0
17:48:00	0	0	0	0	0	0
17:49:00	0	0	0	0	0	0
17:50:00	1.5	0	1	0	0	8.625
17:51:00	0	0	0	0	0	0
17:52:00	0	0	0	0	0	0
17:53:00	0	0	0	0	0	0
17:54:00	0	0	0	0	0	0
17:55:00	0	0	0	0	0	0
17:56:00	0	0	0	0	0	0
17:57:00	0	0	0	0	0	0
17:58:00	0	0	0	0	0	0
17:59:00	0	0	0	0	0	0



SITE: 3 DATE: 21/03/2017
LOCATION: A27 Arundel Road / Yapton Lane / Shellbridge DAY: TUESDAY

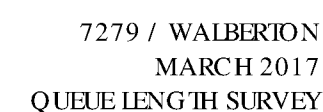
Arm C - Lane 1 QUEUES						
Time	Total	Cars	OGV1	OGV2	PSV	Metres
18:00:00	0	0	0	0	0	0
18:01:00	0	0	0	0	0	0
18:02:00	0	0	0	0	0	0
18:03:00	0	0	0	0	0	0
18:04:00	0	0	0	0	0	0
18:05:00	0	0	0	0	0	0
18:06:00	0	0	0	0	0	0
18:07:00	0	0	0	0	0	0
18:08:00	0	0	0	0	0	0
18:09:00	0	0	0	0	0	0
18:10:00	0	0	0	0	0	0
18:11:00	0	0	0	0	0	0
18:12:00	0	0	0	0	0	0
18:13:00	0	0	0	0	0	0
18:14:00	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0
18:16:00	0	0	0	0	0	0
18:17:00	0	0	0	0	0	0
18:18:00	0	0	0	0	0	0
18:19:00	0	0	0	0	0	0
18:20:00	0	0	0	0	0	0
18:21:00	0	0	0	0	0	0
18:22:00	0	0	0	0	0	0
18:23:00	0	0	0	0	0	0
18:24:00	0	0	0	0	0	0
18:25:00	0	0	0	0	0	0
18:26:00	0	0	0	0	0	0
18:27:00	0	0	0	0	0	0
18:28:00	0	0	0	0	0	0
18:29:00	0	0	0	0	0	0
18:30:00	0	0	0	0	0	0
18:31:00	0	0	0	0	0	0
18:32:00	0	0	0	0	0	0
18:33:00	0	0	0	0	0	0
18:34:00	0	0	0	0	0	0
18:35:00	0	0	0	0	0	0
18:36:00	0	0	0	0	0	0
18:37:00	0	0	0	0	0	0
18:38:00	0	0	0	0	0	0
18:39:00	0	0	0	0	0	0
18:40:00	0	0	0	0	0	0
18:41:00	0	0	0	0	0	0
18:42:00	0	0	0	0	0	0
18:43:00	0	0	0	0	0	0
18:44:00	0	0	0	0	0	0
18:45:00	0	0	0	0	0	0
18:46:00	0	0	0	0	0	0
18:47:00	0	0	0	0	0	0
18:48:00	0	0	0	0	0	0
18:49:00	0	0	0	0	0	0
18:50:00	0	0	0	0	0	0
18:51:00	0	0	0	0	0	0
18:52:00	0	0	0	0	0	0
18:53:00	0	0	0	0	0	0
18:54:00	0	0	0	0	0	0
18:55:00	0	0	0	0	0	0
18:56:00	0	0	0	0	0	0
18:57:00	0	0	0	0	0	0
18:58:00	0	0	0	0	0	0
18:59:00	0	0	0	0	0	0



DATE: 21/03/2017

DAY: TUESDAY

7279 Walberton Queues Site 4Site 3 Arm D

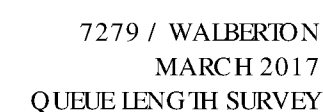


DATE: 21/03/2017

DAY: TUESDAY

7279 Walberton Queues Site 4Site 3 Arm D

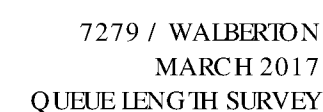
NDC for Client



DATE: 21/03/2017

DAY: TUESDAY

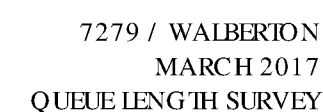
7279 Walberton Queues Site 4Site 3 Arm D



DATE: 21/03/2017

DAY: TUESDAY

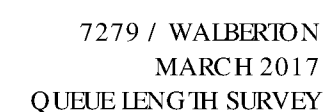
7279 Walberton Queues Site 4Site 3 Arm D



DATE: 21/03/2017

DAY: TUESDAY

7279 Walberton Queues Site 4Site 3 Arm D

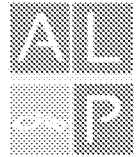


DATE: 21/03/2017

DAY: TUESDAY

7279 Walberton Queues Site 4Site 3 Arm D

Vehicle Type	PCU VALUES
Car/Taxi/Lgv	1
Other Goods Vehicle - OGV1	1.5
Other Goods Vehicle - OGV2	2.3
Coach/PSV	2
Motorcycle - MCL	0.4
Pedal Cycle - PCL	0.2



APPENDIX E

2017 / 2018 Queue Validation - Capacity Assessment Outputs

Junctions 10											
PICADY 10 - Priority Intersection Module											
Version: 10.0.1.1519											
© Copyright TRL Software Limited, 2021											
For sales and distribution information, program advice and maintenance, contact TRL Software:											
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com											
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution											

Filename: A361 - A27 Yapton Road T Junction Existing R007 Calibration.j10

Path: P:\A361 Lamb Field, B2132 Bilsham Road, Yapton\Deliverables\Transport\Modelling\Junction\Capacity Assessment File

Report generation date: 26/05/2022 23:05:30

- »2017 Base, AM
- »2017 Base, PM
- »2018 Base, AM
- »2018 Base, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
2017 Base												
Stream B-AC	D1	4.1	28.12	0.81	D	5.77	D2	0.3	6.84	0.26	A	2.31
Stream C-AB		0.4	7.94	0.29	A			1.4	12.92	0.58	S	
2018 Base												
Stream B-AC	D3	2.6	19.52	0.73	C	3.91	D4	0.4	6.97	0.27	A	2.72
Stream C-AB		0.4	7.92	0.30	A			1.6	14.10	0.62	S	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ALPCE\transportuser
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	2017 Base	AM	ONE HOUR	07:45	09:15	15
D2	2017 Base	PM	ONE HOUR	16:45	18:15	15
D3	2018 Base	AM	ONE HOUR	07:45	09:15	15
D4	2018 Base	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		5.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.77	A

Arms

Arms

Arm	Name	Description	Arm type
A	A27 East		Major
B	Yapton Ln		Minor
C	A27 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	14.60	✓	7.00	✓	4.48	250.0	✓	20.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	5.00	250	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	967	0.095	0.241	0.152	0.344
B-C	938	0.090	0.227	-	-
C-B	897	0.218	0.218	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017 Base	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		✓	1095	100.000
B		✓	495	100.000
C		✓	1050	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	40	1055
	B	0	0	495
	C	885	165	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.81	28.12	4.1	20.5	D
C-AB	0.29	7.94	0.4	1.6	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)	Unsignalised level of service
B-AC	373	754	0.494	369	1.0	9.248	A
C-AB	124	718	0.173	123	0.2	6.048	A
C-A	666			666			
A-B	30			30			
A-C	794			794			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	445	719	0.619	443	1.6	12.910	B
C-AB	148	683	0.217	148	0.3	6.727	A
C-A	796			796			
A-B	36			36			
A-C	948			948			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	545	670	0.814	536	3.8	25.374	C
C-AB	182	635	0.286	181	0.4	7.926	A
C-A	974			974			
A-B	44			44			
A-C	1162			1162			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	545	670	0.814	544	4.1	28.118	C
C-AB	182	635	0.286	182	0.4	7.943	A
C-A	974			974			
A-B	44			44			
A-C	1162			1162			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	445	719	0.619	454	1.7	14.068	B
C-AB	148	683	0.217	149	0.3	6.747	A
C-A	796			796			
A-B	36			36			
A-C	948			948			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	373	754	0.494	375	1.0	9.565	A
C-AB	124	718	0.173	124	0.2	6.070	A
C-A	666			666			
A-B	30			30			
A-C	794			794			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.96	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.57	0.07	1.00	3.50	4.88			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.81	0.04	0.38	9.68	20.46			N/A	N/A
C-AB	0.40	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.05	0.03	0.32	5.75	20.13			N/A	N/A
C-AB	0.40	0.03	0.31	1.30	1.55			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.68	0.04	0.43	4.50	7.51			N/A	N/A
C-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.00	0.03	0.33	2.26	4.91			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2017 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		2.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.31	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017 Base	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		✓	956	100.000
B		✓	167	100.000
C		✓	1353	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	75	881
	B	0	0	167
	C	999	354	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.26	6.84	0.3	1.0	A
C-AB	0.58	12.92	1.4	3.6	B
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)	Unsignalised level of service
B-AC	126	782	0.161	125	0.2	5.475	A
C-AB	267	741	0.360	264	0.6	7.525	A
C-A	752			752			
A-B	56			56			
A-C	663			663			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	150	752	0.200	150	0.2	5.983	A
C-AB	318	710	0.448	317	0.8	9.140	A
C-A	898			898			
A-B	67			67			
A-C	792			792			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	710	0.259	183	0.3	6.836	A
C-AB	390	668	0.583	388	1.4	12.727	B
C-A	1100			1100			
A-B	83			83			
A-C	970			970			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	710	0.259	184	0.3	6.844	A
C-AB	390	668	0.583	390	1.4	12.916	B
C-A	1100			1100			
A-B	83			83			
A-C	970			970			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	150	752	0.200	151	0.3	5.994	A
C-AB	318	710	0.448	320	0.8	9.290	A
C-A	898			898			
A-B	67			67			
A-C	792			792			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	782	0.161	126	0.2	5.490	A
C-AB	267	741	0.360	268	0.6	7.629	A
C-A	752			752			
A-B	56			56			
A-C	663			663			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.55	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.80	0.13	0.90	1.42	1.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	1.36	0.03	0.27	1.36	2.47			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.32	1.01	1.01			N/A	N/A
C-AB	1.38	0.03	0.28	1.38	3.61			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.83	0.07	0.80	1.20	1.67			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.57	0.04	0.45	1.14	1.14			N/A	N/A

2018 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		3.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.91	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2018 Base	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		✓	1044	100.000
B		✓	453	100.000
C		✓	1120	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	36	1008
	B	0	0	453
	C	945	175	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.73	19.52	2.6	12.7	D
C-AB	0.30	7.92	0.4	1.7	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)	Unsignalised level of service
B-AC	341	763	0.447	338	0.8	8.412	A
C-AB	132	726	0.181	131	0.2	6.039	A
C-A	711			711			
A-B	27			27			
A-C	759			759			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	407	729	0.559	405	1.2	11.072	B
C-AB	157	693	0.227	157	0.3	6.715	A
C-A	850			850			
A-B	32			32			
A-C	906			906			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	499	682	0.732	494	2.5	18.613	C
C-AB	193	647	0.298	192	0.4	7.905	A
C-A	1040			1040			
A-B	40			40			
A-C	1110			1110			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	499	682	0.732	498	2.6	19.519	C
C-AB	193	647	0.298	193	0.4	7.922	A
C-A	1040			1040			
A-B	40			40			
A-C	1110			1110			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	407	729	0.559	413	1.3	11.565	B
C-AB	157	693	0.227	158	0.3	6.733	A
C-A	850			850			
A-B	32			32			
A-C	906			906			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	763	0.447	343	0.8	8.613	A
C-AB	132	726	0.181	132	0.2	6.064	A
C-A	711			711			
A-B	27			27			
A-C	759			759			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.80	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.23	0.08	0.99	2.36	3.09			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.54	0.03	0.31	3.76	12.71			N/A	N/A
C-AB	0.42	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.62	0.03	0.29	2.62	9.52			N/A	N/A
C-AB	0.42	0.03	0.31	1.33	1.73			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.30	0.05	0.53	3.10	4.72			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.82	0.04	0.37	1.93	3.43			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

2018 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		2.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.72	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2018 Base	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		✓	976	100.000
B		✓	170	100.000
C		✓	1211	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	65	911
	B	0	0	170
	C	840	371	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.27	6.97	0.4	1.2	A
C-AB	0.62	14.10	1.6	4.3	B
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)	Unsignalised level of service
B-AC	128	777	0.165	127	0.2	5.529	A
C-AB	279	737	0.379	277	0.6	7.781	A
C-A	632			632			
A-B	49			49			
A-C	686			686			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	153	746	0.205	153	0.3	6.060	A
C-AB	334	706	0.472	332	0.9	9.602	A
C-A	755			755			
A-B	58			58			
A-C	819			819			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	187	703	0.266	187	0.4	6.964	A
C-AB	409	663	0.616	406	1.5	13.834	B
C-A	925			925			
A-B	72			72			
A-C	1003			1003			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	187	703	0.266	187	0.4	6.974	A
C-AB	409	663	0.616	408	1.6	14.101	B
C-A	925			925			
A-B	72			72			
A-C	1003			1003			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	153	746	0.205	153	0.3	6.073	A
C-AB	334	706	0.472	336	0.9	9.797	A
C-A	755			755			
A-B	58			58			
A-C	819			819			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	128	777	0.165	128	0.2	5.549	A
C-AB	279	737	0.379	280	0.6	7.901	A
C-A	632			632			
A-B	49			49			
A-C	686			686			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.60	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.88	0.12	0.92	1.01	1.53			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	1.54	0.03	0.28	1.54	4.26			N/A	N/A

17:30 - 17:45

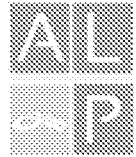
Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.32	1.18	1.18			N/A	N/A
C-AB	1.57	0.03	0.28	1.57	4.16			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.91	0.07	0.80	1.61	1.98			N/A	N/A

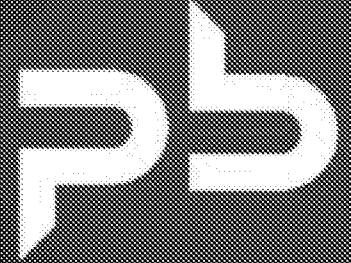
18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.62	0.04	0.44	1.49	1.65			N/A	N/A



APPENDIX F

Additional Committed Development



LAND WEST OF TYE LANE, WALBERTON

TRANSPORT ASSESSMENT

September 2020

David Wilson Homes

7. TRIP DISTRIBUTION AND ROUTE ASSIGNMENT

- 7.1 In order to assess the likely impact of the development on the local road network, the distribution of trips has been assessed using data obtained from the 2011 'Travel to Work' Census Data for Arun 003. Data set WF01BEW has been assessed to determine the likely destinations and route residents of the proposed development would use and by which proportion.
- 7.2 Table 9 summarises the main destinations of residents currently residing in Arun 003 (Walberton) along with the route most likely used. Table 10 then summarises each route by percentage of residents expected to use each one. The full Census data is included in Appendix I.

Destination	Percentage	Route Assignment
Chichester	34%	100% A27 westbound
Arun 003: Eastergate/Westergate	14%	100% The Street/ Eastergate Lane
Worthing	5%	100% A27 Eastbound
Arun 017: Bognor Regis	4%	50% North End Road, 50% Eastergate Lane
Arun 001: Arundel	4%	100% A27 Eastbound
London Districts	3%	100% A29 NB
Arun 014: North Bognor Regis	3%	50% North End Road, 50% Eastergate Lane
Horsham	3%	100% A27 Eastbound
Arun 006: Yapton	2%	100% North End Road
Portsmouth & IOW	2%	100% A27 westbound
Arun 012: North Bersted	2%	100% The Street/ Eastergate Lane
Havant	2%	100% A27 westbound
Arun 004: Toddington	2%	50% A27 EB, 50% North End Road
Arun 011: Littlehampton Central	2%	50% A27 EB, 50% North End Road
Brighton and Hove	1%	100% A27 Eastbound
Arun 009: Littlehampton East	1%	50% A27 Eastbound, 50% North End Road
Crawley	1%	100% A27 Eastbound
Adur	1%	100% A27 Eastbound
Arun 005: Angmering	1%	50% A27 Eastbound, 50% North End Road
Arun 016: Bognor Regis West	1%	50% North End Road, 50% Eastergate Lane
Arun 007: Rustington	1%	100% North End Road
East Hampshire	1%	100% A27 westbound
Guildford	1%	100% A29 NB
Fareham	1%	100% A27 westbound
Other	8%	1% North End Road, 1% Eastergate Lane, 1% A29 NB, 3% A27 WB, 2% A27 EB
TOTAL	100%	N/A

Table 9: Residents' Place of Work (2011 Travel to Work Statistics)

Route Assignment	Percentage
North End Road	11%
Eastergate Lane	21%
A27 Westbound	43%
A27 Eastbound	20%
A29 SB	0%
A29 NB	5%
TOTAL	100%

Table 10: Route Assignment by Percentage

- 7.3 The percentages submitted by Mayer Brown as part of the pre-application stage identified that 62% of development traffic was anticipated to travel northbound on Tye Lane to the A27 junction, with the remaining 38% travelling southbound; of which 14% were to travel east on The Street and 24% were to travel west. These distribution percentages were not considered robust for this assessment by WSCC at the pre-application stage and rather consideration should be given to those submitted as part of the outline application on land east of Tye Lane (application reference: WA/44/17/OUT). Therefore, a comparison has also been made with regards to the distributions for that application.
- 7.4 The outline application (reference: WA/44/17/OUT) identified that 68% of development traffic would travel northbound on Yapton Lane to the A27. From there, 50% would continue along the A27 westbound (albeit 6% would use A29 southbound), 13% would complete a U-turn and head eastbound along the A27 and 5% would travel northbound on the A29. Of the 32% travelling southbound from the site, 22% would use North End road, 5% would use The Street and 5% would use Lake Lane.
- 7.5 The distributions from the proposed development site also suggest a 68/32 split north and southbound respectively. Of the 68% travelling along the A27, 43% is anticipated to continue along the A27 westbound, 5% is anticipated to travel northbound on the A29 and 20% are anticipated to complete a U-turn to continue eastbound. These figures are very similar to those submitted and approved as part of the Land east of Tye Lane application. For southbound traffic, 21% of development trips are anticipated to travel along Eastergate Lane (or Barnham Lane) with the remaining 11% anticipated to use North End Road.
- 7.6 These vary slightly to the Land east of Tye Lane application but are representative of the proposed site's location in relation to Eastergate Lane, which would be utilised for destinations including Eastergate/Westergate and Bognor Regis, whereas the Land East of Tye Lane application would have routed via the A27 and subsequently the A29 southbound. Similarly, the proposed development does not anticipate any vehicles utilising Lake Lane to access Barnham, or a percentage using the A29 southbound from the A27/A29 Fontwell West roundabout.

- 7.7 The distribution of the development traffic from the site access is summarised within the following paragraphs of the report and subsequently demonstrated in the distribution diagram included in Appendix J, however it is felt that these proposed distributions are representative of the site's location and therefore some variation is necessary when compared to the Land East of Tye Lane application.

Site Access

- 7.8 Using the data outlined in Table 10 and Appendix J, it is anticipated that 68% of the development traffic would turn left out of the site and head towards the A27. The remaining 32% are anticipated to travel southbound on Tye Lane.

Tye Lane/A27 Junction

- 7.9 Given that the Tye Lane/A27 junction is provided as 'left out' only, all 68% of development traffic will travel westbound along the A27 towards the Fontwell East roundabout, before continuing their journeys as appropriate (and discussed subsequently). As there is no right turn available back into the Tye Lane/A27 junction, vehicles arriving to the site from the west have been suitably distributed onto other junctions on the local road network. Traffic from the east can utilise the Tye Lane/A27 junction to enter the site.

A27/A29 Farmile Bottom Roundabout (Fontwell East Roundabout)

- 7.10 It is anticipated that of the 68% of development traffic utilising this roundabout, 20% are likely to complete a U-turn to continue eastbound along the A27 towards destinations including Arundel and Brighton. 5% of development traffic is anticipated to utilise the A29 (NB) arm towards Pulborough, areas of Chichester District and the South Downs National Park. The remaining 43% of traffic is anticipated to continue on the A27 westbound to the A27/A29 Fontwell West roundabout.
- 7.11 For vehicles arriving to the site, the 20% of vehicles who completed the U-turn back along the A27 eastbound will return to the site via the Tye Lane/A27 junction. For both the 5% travelling back from the A29 (NB) and the 43% continuing along the A27 towards the A27/A29 Fontwell West roundabout, these have been distributed onto the A27/A29 Fontwell West roundabout and specifically the A29 Fontwell Avenue (SB) arm which connects to Eastergate Lane and subsequently back onto The Street.

A27/A29 Fontwell Avenue Roundabout (Fontwell West Roundabout)

- 7.12 It is anticipated that of the 43% of development traffic utilising this roundabout, all are likely to continue straight across and continue on the A27 westbound. No vehicular traffic is anticipated to travel southbound on the A29 from this roundabout given the connection between the site and Eastergate Lane.

- 7.13 For vehicles arriving to the site, the 43% of vehicles travelling from the A27 are anticipated to enter the roundabout and exit via the A29 Fontwell Avenue in order to complete their journey via Eastergate Lane and The Street. They are also joined by the 5% arriving from the A29 Farmile roundabout.

Tye Lane/The Street Junction

- 7.14 Of the 32% of development traffic travelling southbound from the site, it is anticipated that 11% would turn left onto The Street and head towards the village centre and out to Yapton Lane. The remaining 21% of vehicles are anticipated to turn right onto The Street and subsequently onto either Eastergate Lane or Barnham Lane. For vehicles arriving at the site, the 11% arriving from the east will turn right into Tye Lane, whilst the 21% from the west will turn left in. The 21% of vehicles arriving from the west are also joined by the 48% associated with movements from the A29 (NB) road and the A27 from destinations such as Chichester and Portsmouth.

The Street/Yapton Lane/North End Road Roundabout

- 7.15 Of the 11% of development traffic travelling eastbound along The Street, all of the vehicles are anticipated to travel southbound at The Street/Yapton Lane/North End Road roundabout to continue their journeys.

Traffic Surveys

- 7.16 In order to establish the baseline traffic flows on the local road network, ATC surveys were undertaken on Tye Lane (between 24th February and 3rd March 2018), as demonstrated in Table 8 (Section 6). In addition, turning count survey data was also obtained in March 2018 at the following junctions:
- Tye Lane/A27 junction: and
 - Tye Lane/The Street junction.
- 7.17 In order to establish the baseline traffic flows on the local road network at the required junctions for capacity assessments, the turning count data has been obtained from the outline application on land east of Tye Lane for the following junctions (reference: WA/44/17/OUT):
- The Street/ Yapton Lane Roundabout:
 - Yapton Lane Railway Crossing:
 - Yapton Lane/A27 junction:
 - A29 Fontwell Avenue/A27 Arundel Road Roundabouts
- 7.18 The suitability of using this data should be considered acceptable given that the surveys were undertaken between 2nd February 2017 and 21st March 2017 and are therefore around 3 years old.

TEMPRO Traffic Growth

- 7.19 As the baseline traffic surveys along Tye Lane and at the Tye Lane/The Street and Tye Lane/A27 junctions were undertaken in 2018, a growth factor has been applied to gain a 2020 baseline which can be used to assess the site access capacity for the application year.
- 7.20 In addition, the data obtained from the outline application (reference: WA/44/17/OUT) from 2017 has had growth factors applied which were set out within the TA that supported the application to establish the future impact of the traffic on the local road network and in accordance with the scope agreed at the pre-application stage. At the pre-application stage, it was suggested that the years of assessment reflect those set out within application WA/44/17/OUT.
- 7.21 The application at Land east of Tye Lane identified that a traffic impact assessment should be carried out for the projected 'Opening Year' of development, assuming full development occupation and full occupation of all relevant Committed Development sites along with background traffic growth, and the end of the local plan period (currently being 2031). Application WA/44/17/OUT presented the opening year to be 3 years after the base year, and therefore the same approach has been applied to this development. Therefore, the years of assessment are provided as follows:
- 2020 Baseline:
 - 2023 Baseline:
 - 2023 Baseline + Committed Developments
 - 2023 Baseline + Committed Developments + Proposed Development
 - 2031 Baseline:
 - 2031 Baseline + Committed Developments
 - 2031 Baseline + Committed Developments + Proposed Development
- 7.22 The TEMPRO growth rates are summarised in Table 11. It should be noted that the 2018 – 2020 and the 2018 – 2023 TEMPRO growth rates were submitted as part of the Draft TA prepared by Mayer Brown and were not query by WSCC at the pre-application stage.

TEMPRO	Growth Factor	
2017 – 2020 (as per application WA/44/17/OUT)	AM	1.0330
	PM	1.0320
2018 – 2020	AM	1.0215
	PM	1.0211
2017 – 2023	AM	1.0702
	PM	1.0720
2018 – 2023	AM	1.0629
	PM	1.0630
2017 – 2031 (as per application WA/44/17/OUT)	AM	1.140
	PM	1.143
2018 – 2031	AM	1.1191
	PM	1.1242

Table 11: TEMPRO Growth Rates

Committed Development

7.23 A number of committed developments in the area have been considered in order to establish the predicted traffic pressures on the local road network before the development traffic is added. At the pre-application stage, the 'Committed Developments' that would require consideration as part of an application were identified as those outlined within the Draft TA prepared by Mayer Brown and the developments which make up the SD7 strategic site set out within the Arun District Local Plan. The specific developments to be considered as Committed Development are summarised below:

- Land east of Tye Lane, Walberton (application reference: WA/44/17/OUT):
- Land east of Drove Lane, Yapton (Y/92/17/OUT) and Land at Bilsham Road, Yapton (Y/91/17/OUT) – SD7

7.24 The location of these sites in relation to the proposed development site (Site A) is demonstrated in Figure 13.



Figure 13: Location of Committed Developments

B: Land east of Tye Lane, Walberton

- 7.25 This application was submitted in 2017 for up to 175 dwellings and concluded that 109 trips would be generated in the AM peak period and 115 trips in the PM peak period (albeit the assessment was completed for up to 200 dwellings). Whilst a level of the development has already been constructed, given that the baseline surveys were undertaken in 2018, all of the traffic flows generated by the site have been added to the local road network. The resultant distributions are therefore reflected in the distribution diagrams included in Appendix J.

C: Land east of Drove Lane and Land at Bilsham Road, Yapton

- 7.26 These applications were submitted in 2017 for a minimum of 500 dwellings, split between two applications. The land east of Drove Lane application (reference: Y/92/17/OUT) was submitted for approximately 300 dwellings, with the application at Bilsham Road (reference: Y/91/17/OUT) submitted for up to 250 dwellings. The accompanying TAs identified that a total of 280 vehicle trips would be generated in the AM peak period and 263 vehicle trips would be generated in the PM peak period. The resultant distributions on the local road network have been added to the distribution diagrams in Appendix J.

7.27 Within the TAs submitted to support the SD7 strategic site at Yapton, a number of additional 'Committed Developments' were also referred to that need to be considered. Specifically, these related to:

- Brookworth Homes (application reference: F/15/PL) for 45 dwellings:
- Land south of Fellows Gardens (application reference: Y/30/13) for 34 dwellings:
- Land north of Burndell Road (application reference: APP/C3810/A/11/2155343) for 173 dwellings:
- Land at North End Road (application reference: Y/93/14) for 38 dwellings:
- Land at Bonhams Field, Main Road, Yapton (application reference: Y/1/17/OUT) for 56 dwellings: and
- Land south of Burndell Road (application reference: Y/19/16/OUT) for 108 dwellings.

7.28 Aside from the two planning applications off Burndell Road, the listed committed developments above have not been considered further given the low quantum of traffic generated by the sites and the minimal volumes that would be placed through any junction in the vicinity of the proposed development.

7.29 The land north of Burndell Road application (Y/81/10) was submitted and refused in 2010, but subsequently approved at appeal in 2011. As this development was permitted 9 years ago, the traffic flows associated with the site are already on the local road network and would be recorded within the ATC surveys undertaken in 2018. As such, no further assessment of this application has been undertaken.

7.30 The land south of Burndell Road planning application (Y/19/16/OUT) was submitted and refused in 2016, but subsequently approved at appeal in 2017. As this application was permitted in 2017, and given the distance from the proposed development site, the associated vehicle flows are minimal through junctions we will be assessing and will therefore not be considered further as part of this application.



Nick Culhane
Highway Consultant

**Application for a Residential Development of 73 Units and 34 Allotments
Land at Little Meadow, Bilsham Road, Yapton, West Sussex BN18 0JY**

Transport Statement

Idlewild
Fairclose Drive
Littleton
Winchester
Hampshire
SO22 6QW



- 5.12 The site therefore has a reasonable bus service which gives a real alternative to use of a car for local journeys.
- 5.13 **Rail Services** – The nearest railway station to the site is at Barnham, however Bognor Regis is the most accessible. Both Stations benefit from car and cycle parking however.
- 5.14 Rail services run north to London, east to Brighton and west to Bognor Regis, Portsmouth and Southampton. There are two trains per hour (tph) to London Victoria, 2 tph to Brighton, 2 tph to Littlehampton, 2 tph to Southampton Central and 3 tph to Portsmouth and Southsea, of which 2 continue to Portsmouth Harbour. There are 4 tph to Bognor Regis.
- 5.15 From the above it can be surmised that along with walking to facilities and services and cycling connections to the national cycle route network, the site has good levels and frequencies of bus connectivity and train services.

6 Traffic Impact

- 6.1 This section looks at the likely traffic arising from the existing permitted use of the site and the residential use now being applied for. The site has historically been used as a small light industrial use, and this is to continue.
- 6.2 In order to determine the likely traffic that could be generated by the existing use, the TRICS database V7.7.4 has been interrogated. Very little data is available for similar small, low key Class E (g)(iii) operations such as this, but two edge of town sites of between 2030 and 2759 sqm were selected. The TRICS data is shown below.

TRICS Trip Rate Class E (g)(iii)			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.397	0.647	1.044
PM Peak Hour	0.271	0.250	0.521
Daily Traffic	3.801	4.115	7.916
TRICS Vehicle Trip Generation based 500 sqm			
AM Peak Hour	1.985(2)	3.235 (3)	5
PM Peak Hour	1.355 (1)	1.25 (1)	2
Daily Traffic	19.005 (19)	20.575(21)	40

- 6.3 From the above it can be seen that the exiting permitted use of the site would be likely to generate some 5 vehicular movements in the AM peak, 2 in the PM peak and around 40 daily vehicular traffic movements.
- 6.4 In order to determine the likely vehicular traffic that the proposed residential development would generate, again the TRICS database was interrogated. The site will have a mix of 37 apartments and 36 houses, therefore mixed privately owned houses and flat developments between the size of 15 and 116 units within edge of town locations, excluding Central London were selected. The TRICS data is shown below.

TRICS Trip Rate Houses and Flats (Privately Owned)			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.137	0.432	0.569
PM Peak Hour	0.367	0.169	0.536
Daily Traffic	2.243	2.379	4.622

TRICS Vehicle Trip Generation based 73 Units			
AM Peak Hour	10.001 (10)	31.536(32)	42
PM Peak Hour	26.791 (28)	12.337 (12)	40
Daily Traffic	163.739 (164)	173.667 (174)	338

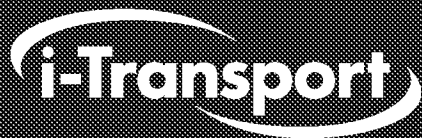
- 6.5 From the above, it can be seen that the proposed residential development is likely to generate some 42 vehicular movements in the AM peak, 40 in the PM peak and 338 daily traffic movements.
- 6.6 When this is combined with the existing traffic from the Class E development, the following flows are likely

	AM (0800 – 0900)	PM (1700 – 1800)	Daily (12 Hour)
B1c Development	5	2	40
Residential Scheme	42	40	338
Net Impact	47	42	378

- 6.7 The above table demonstrates that if permitted, the residential scheme combined with the existing light industrial use would generate just 47 a trips in the AM peak period and 42 in the PM Peak. This equates to less than 1 traffic movement on average in each of the peak periods.
- 6.8 It is likely that the traffic generated by the development would be split between the north, towards Yapton and to the south toward the A259. The TRICS data shows that the development would generate 32 departing vehicles in the AM peak. Assuming a 75% split toward the A259, this would only equate to around 24 additional vehicles passing through the A259 junction, which appears to be currently operating well within its affective capacity. The likely additional traffic from this development would therefore have very little impact on this junction during the peak period. The TRICS data is include as Appendix 3 to this report.

7 Car and Cycle Parking

- 7.1 The application is in outline form with just means of access to be considered at this stage. Any reserved matters submissions will provide details of car and cycle parking, in accordance with the WSCC guidance and with the Arun DC Car Parking Standards (2020).



Land at Little Meadow, Yapton

Agreed Statement on Transport Matters

Client: Ms. A Taylor

i-Transport Ref: SJ/AI/ITB17438-003B

Date: 05 May 2022

Land at Little Meadow, Yapton

Agreed Statement on Transport Matters

Client: Ms. A Taylor

i-Transport Ref: SJ/AI/ITB17438-003B

Date: 05 May 2022

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SECTION 4 Traffic Impact

Introduction

4.1.1 It is agreed that the traffic generation, distribution and assignment of the proposed development has been accurately quantified, thoroughly assessed and that the impact is limited and not “severe” which is the only reason for development to be prevented on highway grounds (Ref: NPPF).

4.1.2 It is also agreed that the Appeal Scheme documents and the TSA provide an acceptable response to the comments in the WSCC response dated 23 November 2021:

5. Clearly evidenced distribution and assignment of the additional trips generated by the development;
6. Capacity assessment of the site access; Bilsham Road/A259 ‘Comet Corner’ junction; and Bilsham Road/B2233 junction.

4.2 Trip Generation

4.2.1 Trip rates were reviewed as part of the Nick Culhane Transport Addendum and agreed with WSCC as part of their response dated 23 November. The agreed trip rates and resulting trip generation are summarised in **Table 4.1**.

Table 4.1: Vehicle Trip Rates and Trip Generation

	Morning Peak (0800 – 0900)			Evening Peak (1700 – 1800)		
	In	Out	In	Out	In	Out
Residential Trip Rates (per dwelling)	0.131	0.336	0.467	0.332	0.209	0.541
Employment Trip Rate (per sqm)	0.397	0.647	1.044	0.271	0.25	0.521
Trip Generation (73 dwellings)	10	25	34	24	15	39
Trip Generation (405 sqm)	2	3	4	1	1	2
Total Trip Generation	11	27	38	25	16	42

Source: Nick Culhane Transport Addendum

4.2.2 It is forecast that the development will produce 38 and 42 two-way vehicle movements in the morning and evening peak periods, respectively; this equates to less than one vehicle movement per minute on average.

4.3 Traffic Distribution

4.3.1 It is agreed that the distribution of development traffic has been undertaken using an appropriate methodology:

- Commuting trips, which Department for Transport data from the National Travel Survey identifies as being 43% of all peak hour trips¹, are distributed in accordance with the employment destinations for local residents identified through Census Journey to Work datasets; and
- A P / T² gravity model has been undertaken to assign the remaining 57% of trips on the network, which are not work-related.

4.3.2 The distribution methodology and the associated Traffic Flow Diagrams (TFD) are provided as **Figures TF1-6** in the TSA and within this ASoTM.

4.3.3 The distribution model showed that approximately 64.9% of development traffic is forecast to route south towards the A259 and the remaining 35.1% of traffic will head north towards Yapton. This equates to approximately 14 two-way vehicle movements on Bilsham Road north of the proposed access and 25 two-way vehicle movements on Bilsham Road south of the proposed access.

4.4 Junction Assessment

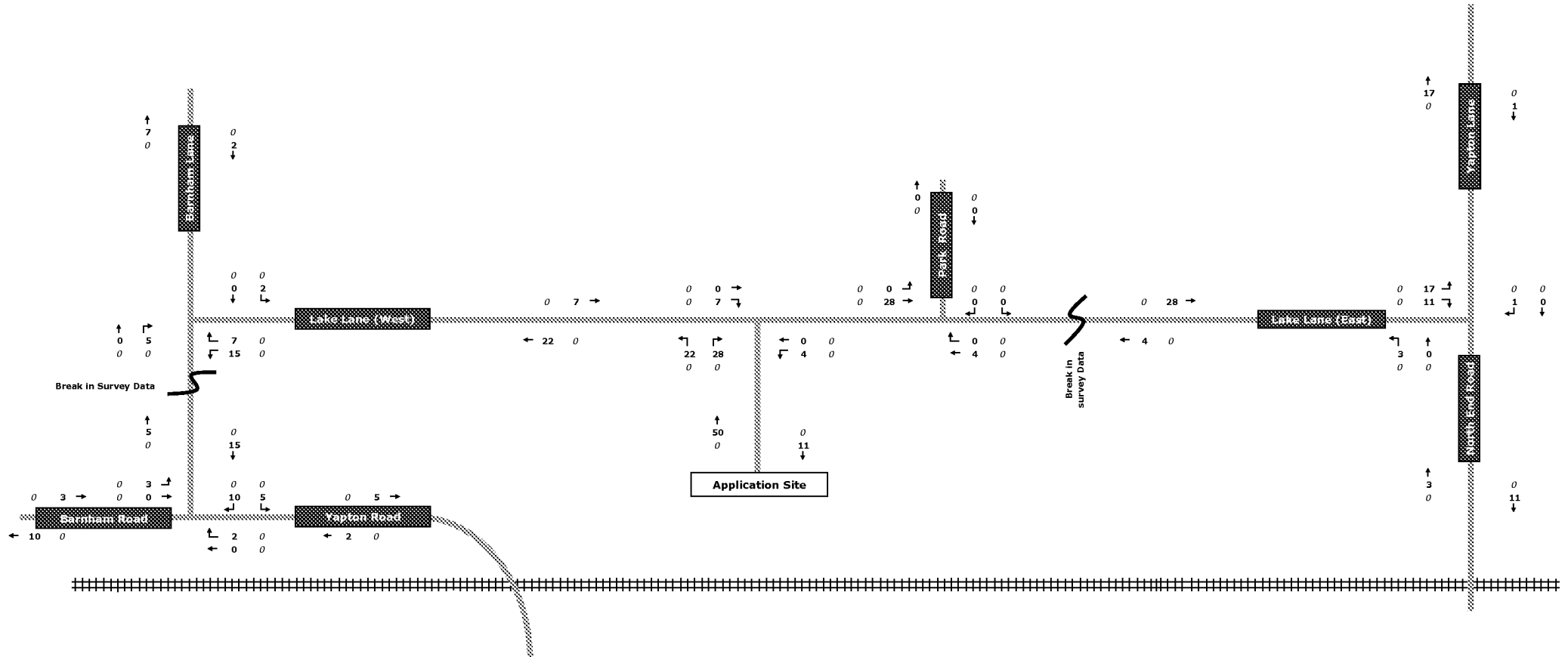
Thresholds

4.4.1 It is agreed that prior to the NPPF, national transport policy was set out in Planning Policy Guidance 13: Transport (PPG13), the last version being published in January 2011. The policy was virtually silent on traffic impact tests; however, transport assessments were generally produced in accordance with Guidance on Transport Assessment (DfT, March 2007). In terms of impact, paragraph 4.92 of this document states:

"If the TA confirms that a development will have material impact on the highway network, the level of impact at all critical locations on the network should be established. A particular example of material impact would be a worsening of congestion."

4.4.2 PPG13 was replaced by the NPPF, which sets a much higher bar at which traffic impact becomes unacceptable. Paragraph 111 of the NPPF identifies that:

¹ NTS advises that 39% of trips are work related during the morning peak hour and 43% during the evening peak hour. The higher evening peak figure has been applied to both peak periods. Work related trips are likely to be to destinations further afield and thus this is a more robust approach.



Traffic Flow Summary		
Location	Total Vehs	Veh./Min
Barnham Road/Barnham Lane	20	0.33
Barnham Lane/Lake Lane (West)	29	0.48
Lake Lane/Site Access/Park Lane	61	1.02
Lake Lane (East)/Yapton Lane	32	0.53

Key:

123 Total Vehicles

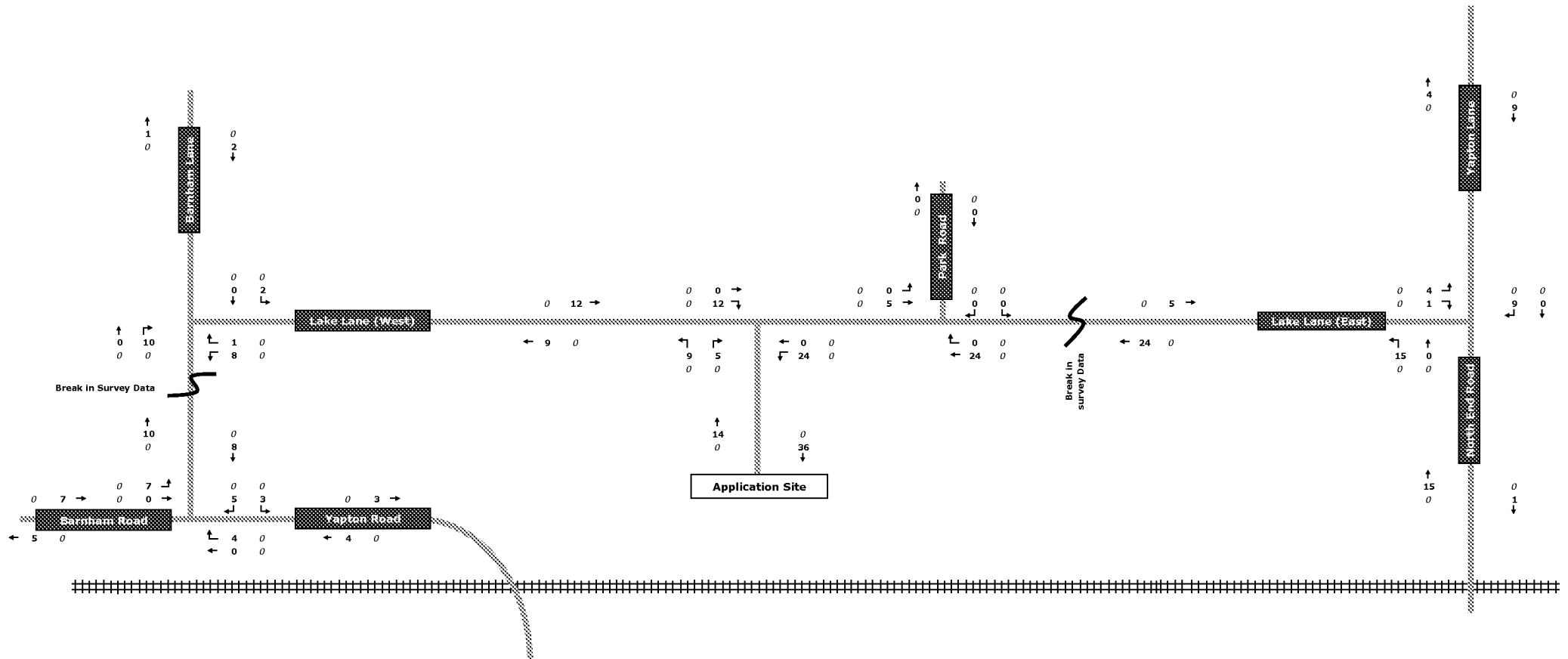
45 Number of HGVs

motion
transport planning

Eric Wall Nursery Limited, Lake Lane, Barnham, West Sussex

Development Traffic - AM Peak Hour Flows (08:00-09:00)

Motion Figure No. 5.3



Traffic Flow Summary		Total Vehs	Veh./Min.
Approach	Barnham Road/Barnham Lane	18	0.30
	Barnham Lane/Lake Lane (West)	21	0.35
	Lake Lane/Site Access/Park Lane	50	0.83
	Lake Lane (East)/Yapton Lane	29	0.48

Key:

123 Total Vehicles

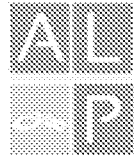
45 Number of HGVs

motion
transport planning

Eric Wall Nursery Limited, Lake Lane, Barnham, West Sussex

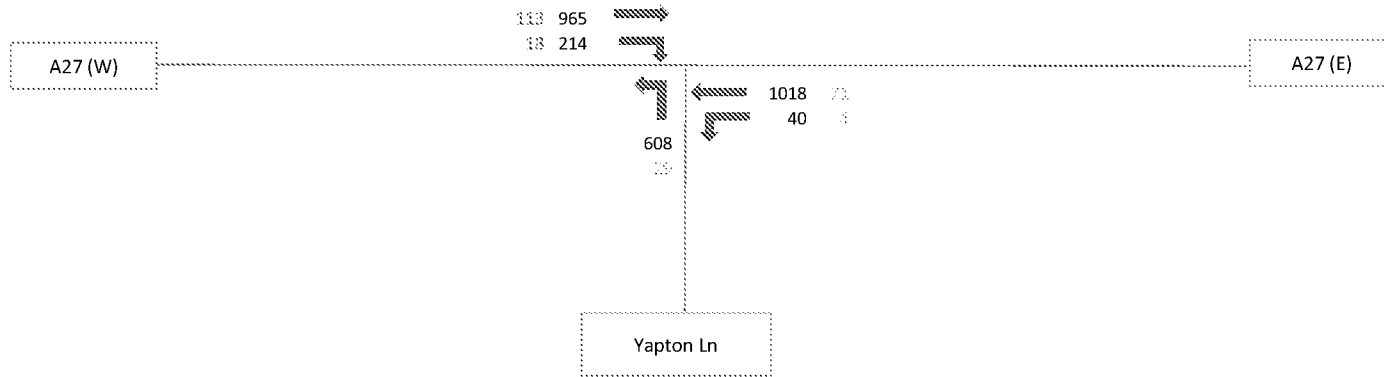
Development Traffic - PM Peak Hour Flows (16:00-17:00)

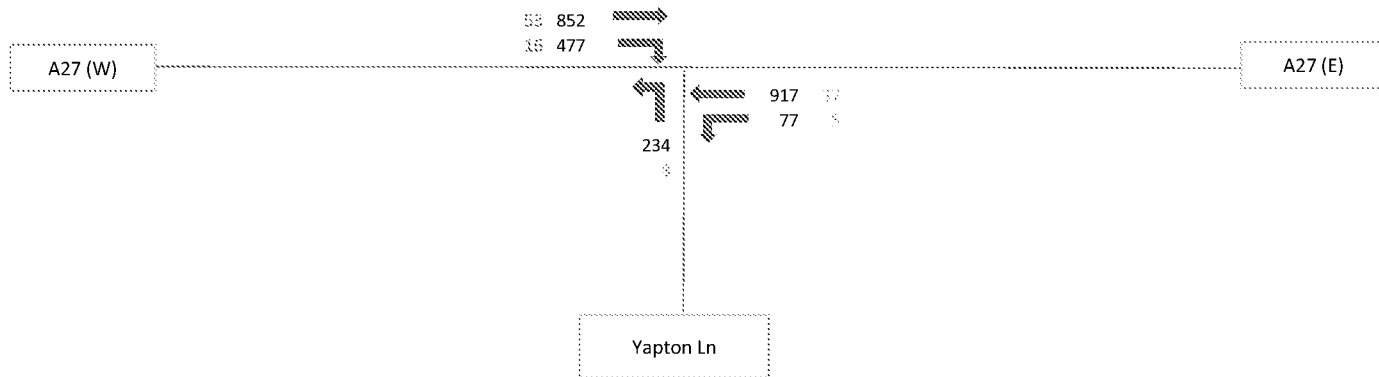
Motion Figure No. 5.4

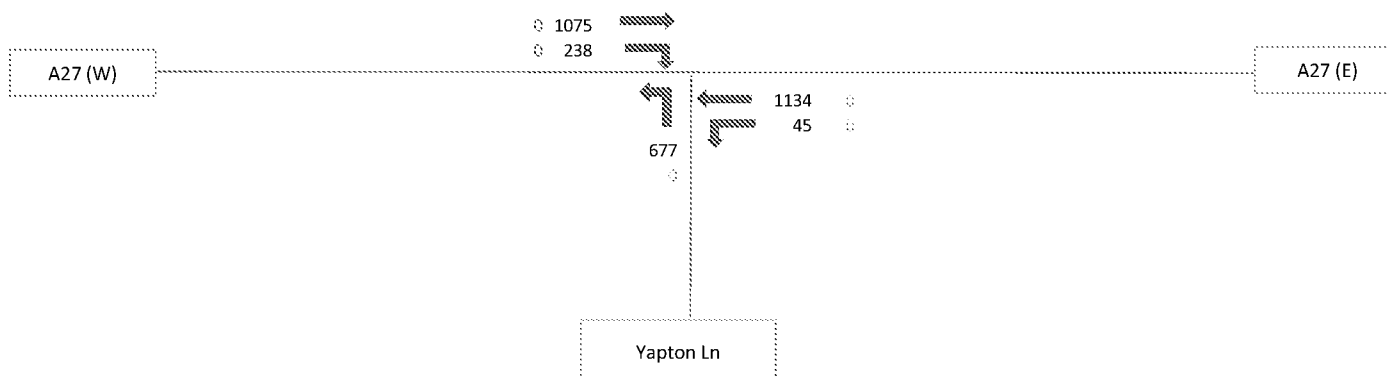


APPENDIX G

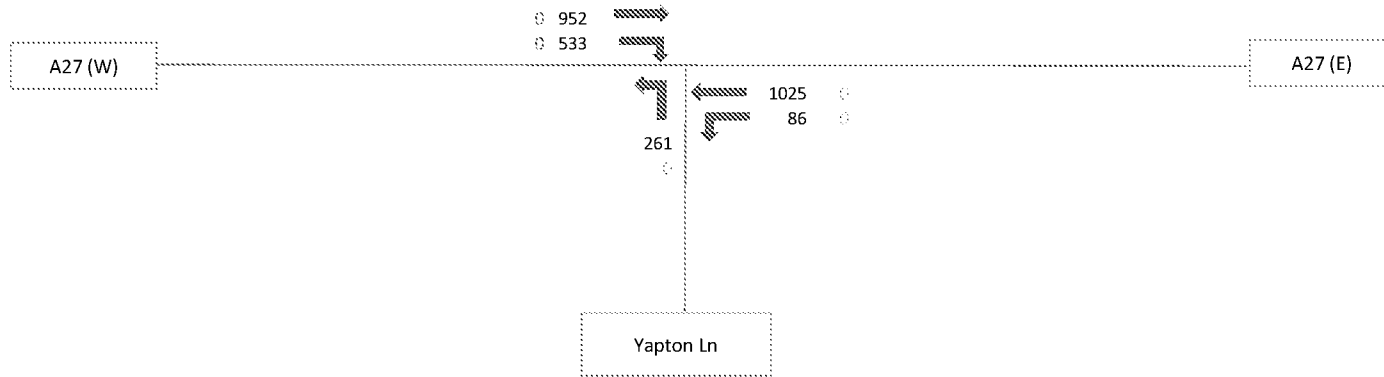
Future Year Traffic Flow Diagrams

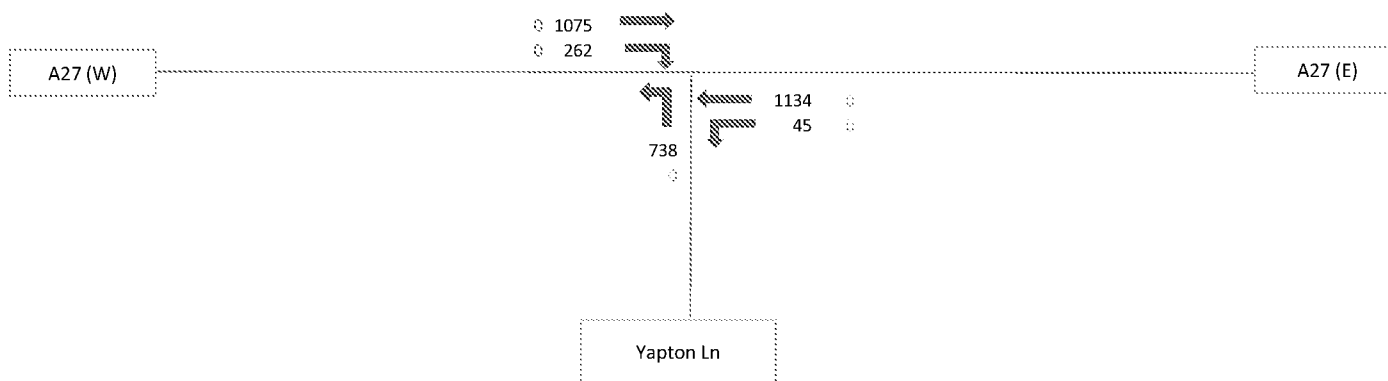


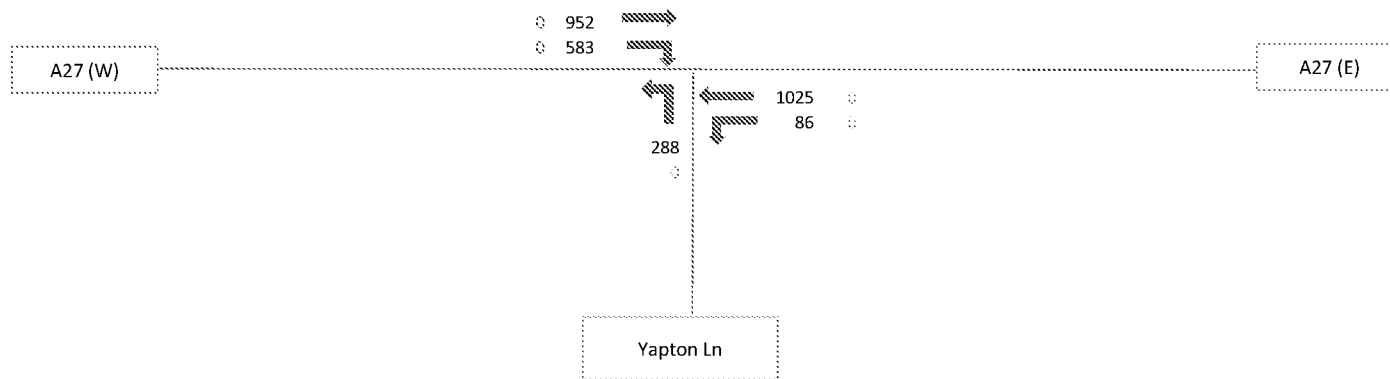


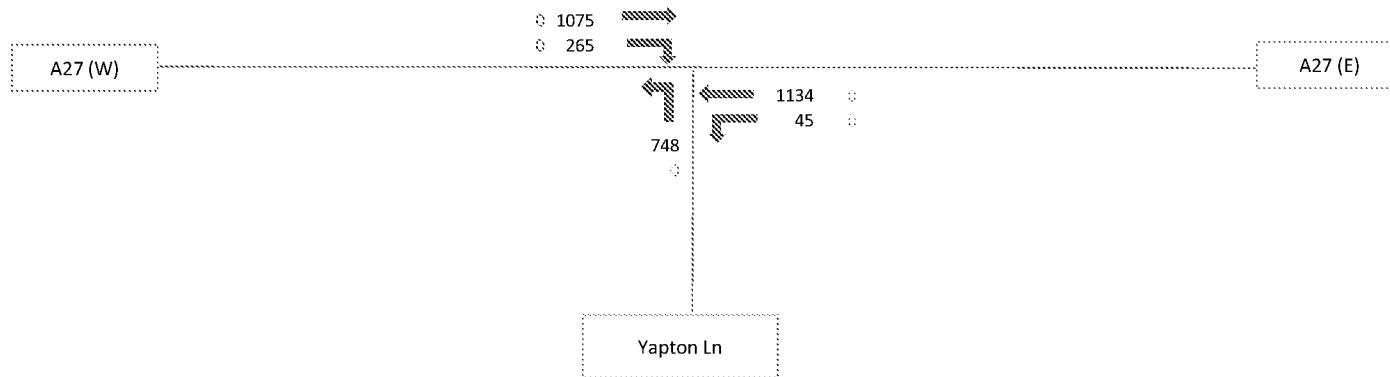


Job No A361	Project : Yapton, West Sussex
Date MAY 2022	Title : Traffic Movements 2031 Base AM
Drawn U	Figure No : NA









Job No

A361

Project :

Yapton, West Sussex

Date

MAY
2022

Title :

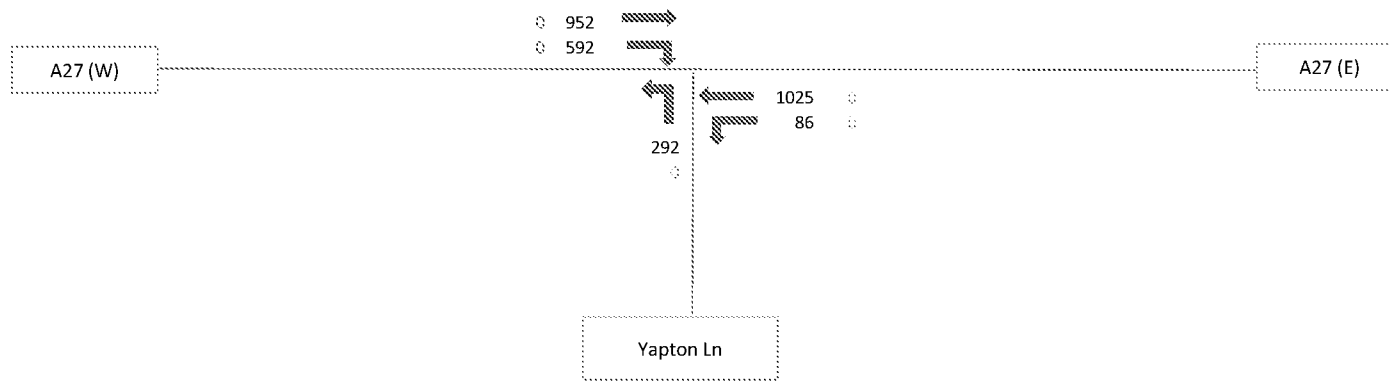
Traffic Movments 2031 + Committed + Dev AM

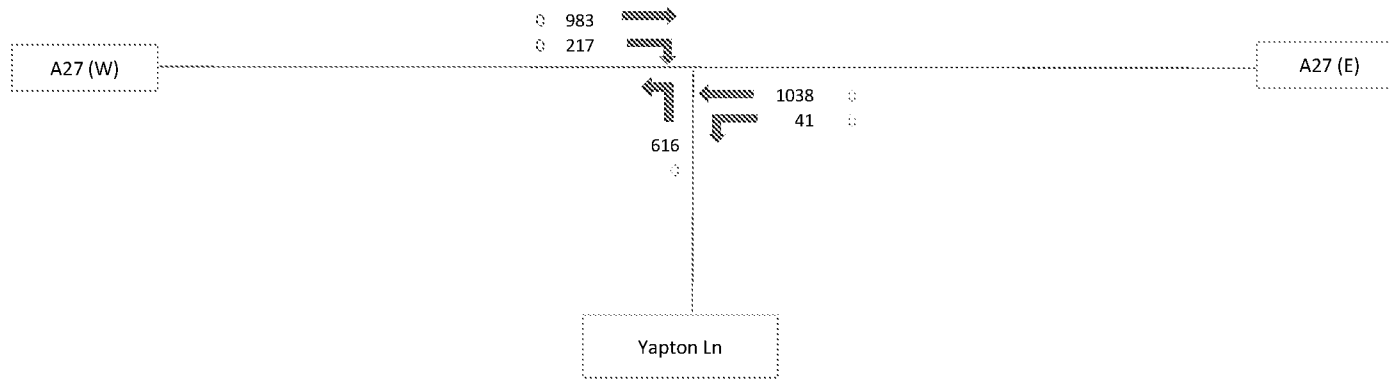
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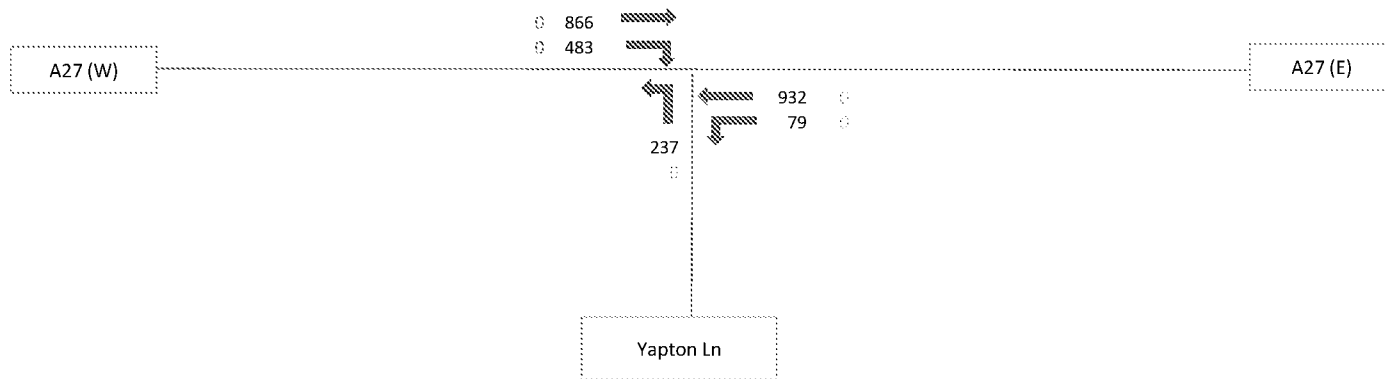
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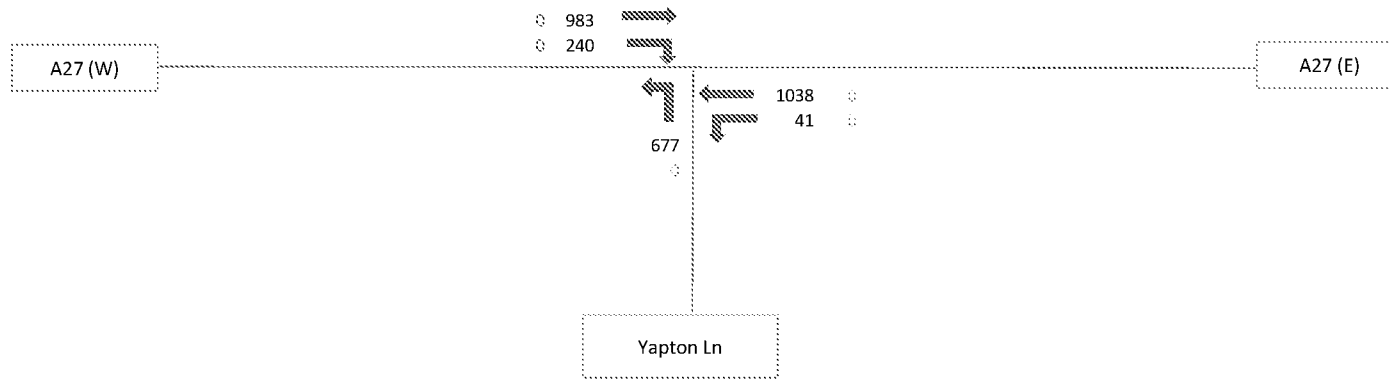


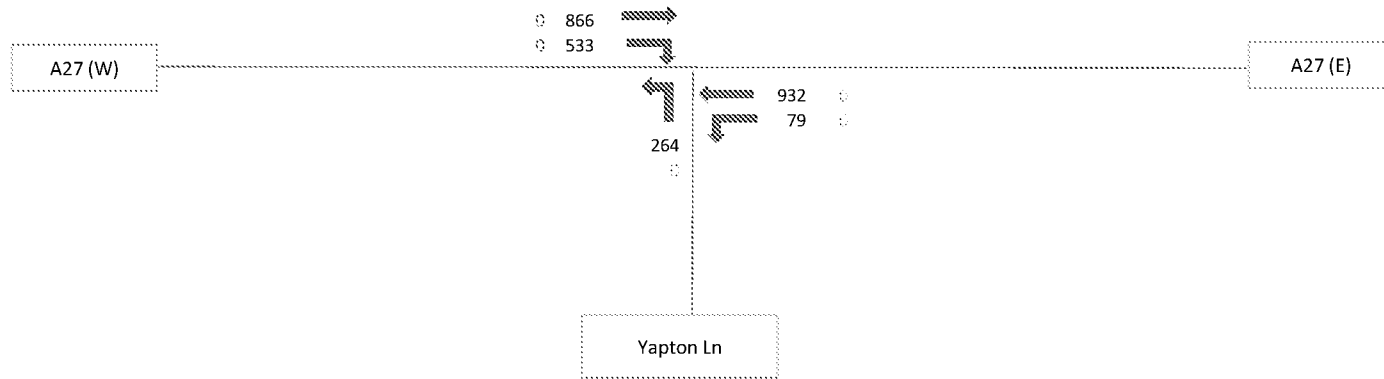


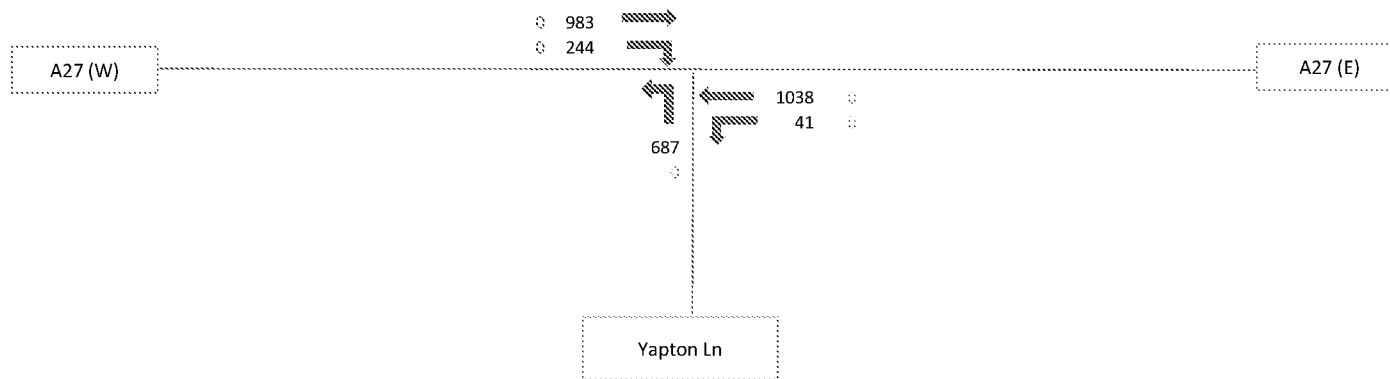
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Date MAY 2022	Title : Traffic Movments 2031 Ford AM
Drawn U	Figure No : NA

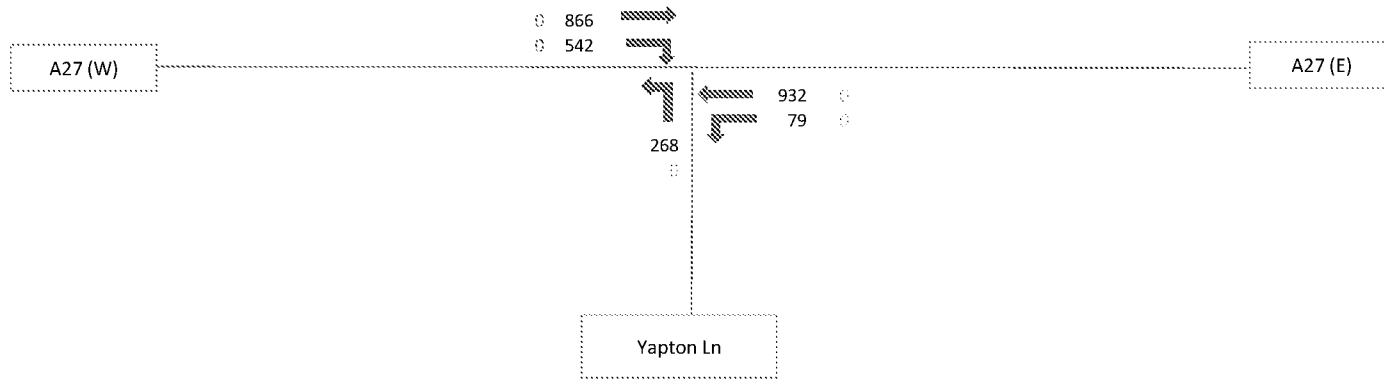


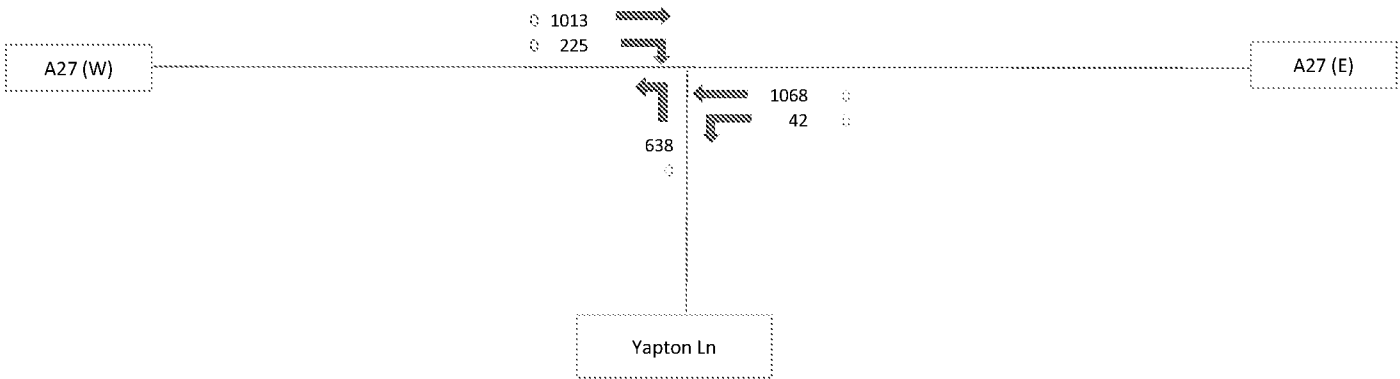
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Date MAY 2022	Title : Traffic Movments 2031 Ford PM
Drawn U	Figure No : NA

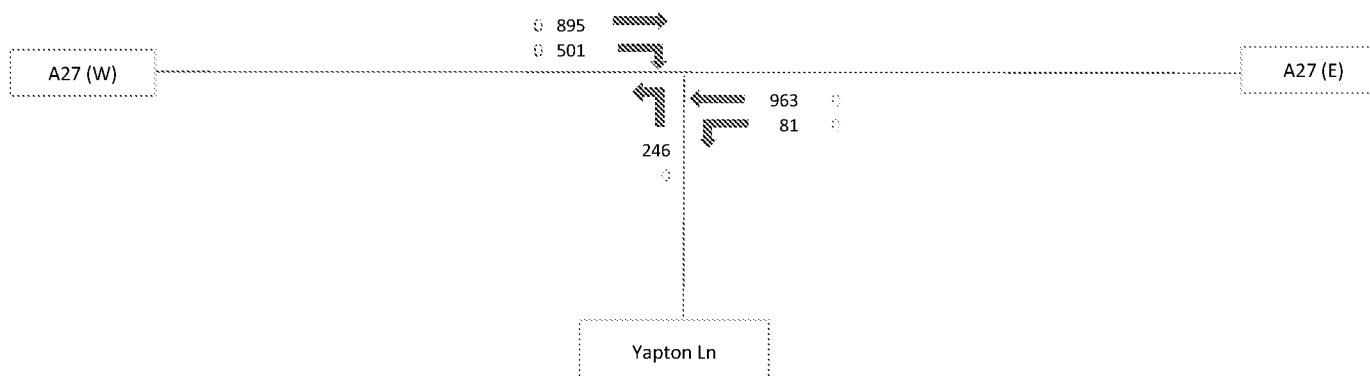




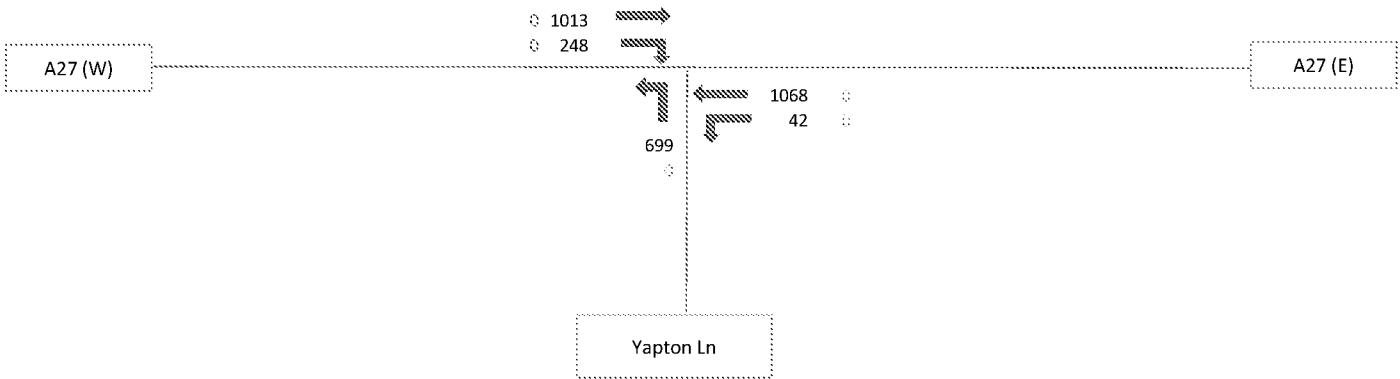








Job No A361	Project : Yapton, West Sussex
Date MAY 2022	Title : Traffic Movements 2024 Base PM
Drawn U	Figure No : NA



Job No

A361

Project :

Yapton, West Sussex

Date

MAY
2022

Title :

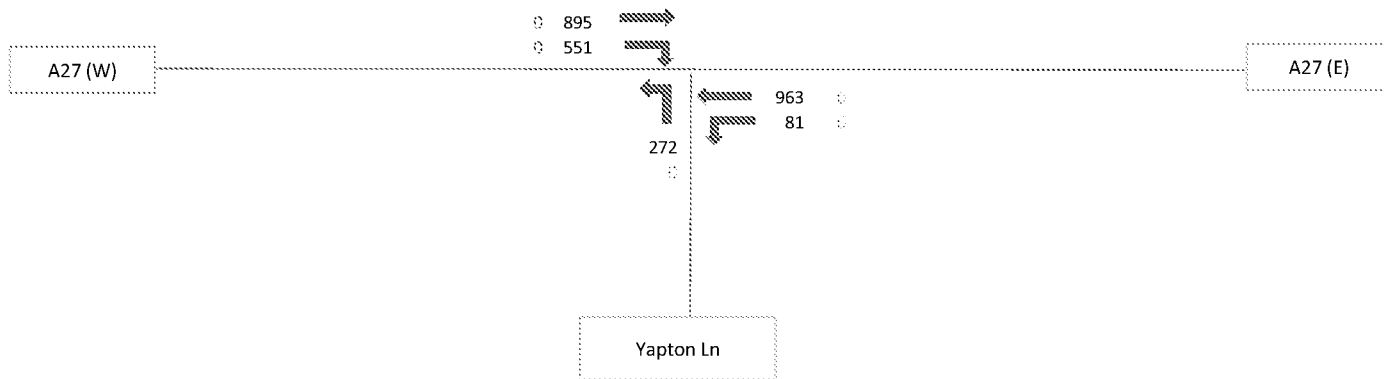
Traffic Movments 2024 + Committed AM

Drawn

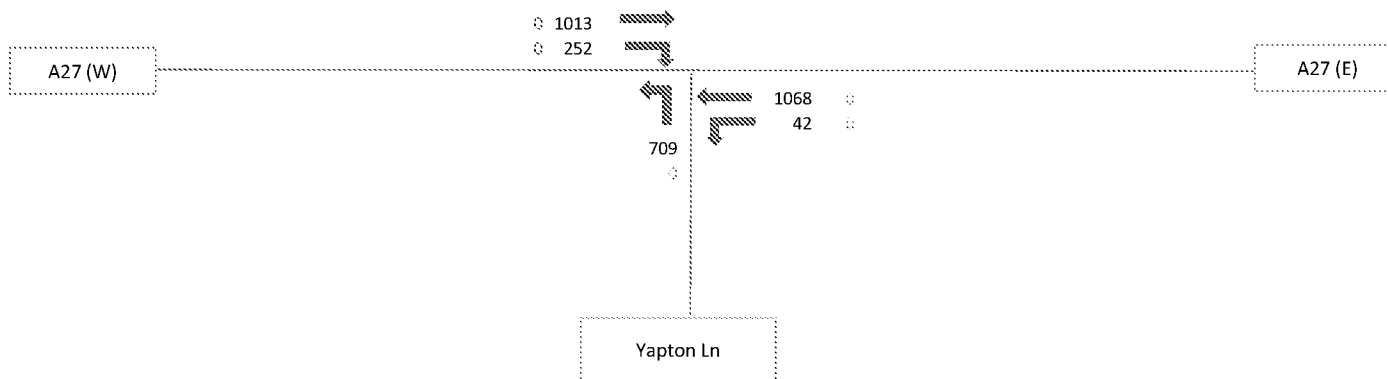
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Figure No :

NA



Job No A361	Project : Yapton, West Sussex
Date MAY 2022	Title : Traffic Movments 2024 + Committed PM
Drawn U	Figure No : NA



Job No

A361

Project :

Yapton, West Sussex

Date

MAY
2022

Title :

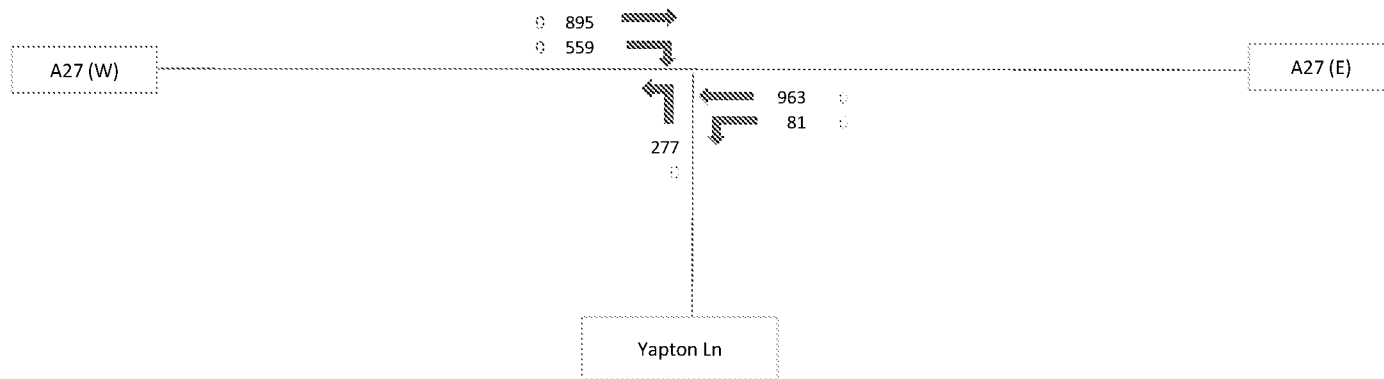
Traffic Movments 2024 + Committed + Dev AM

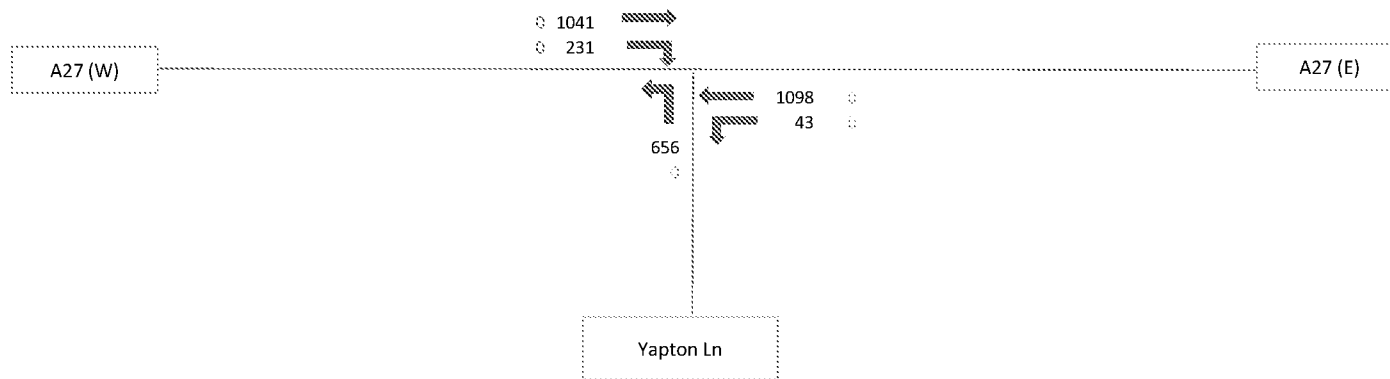
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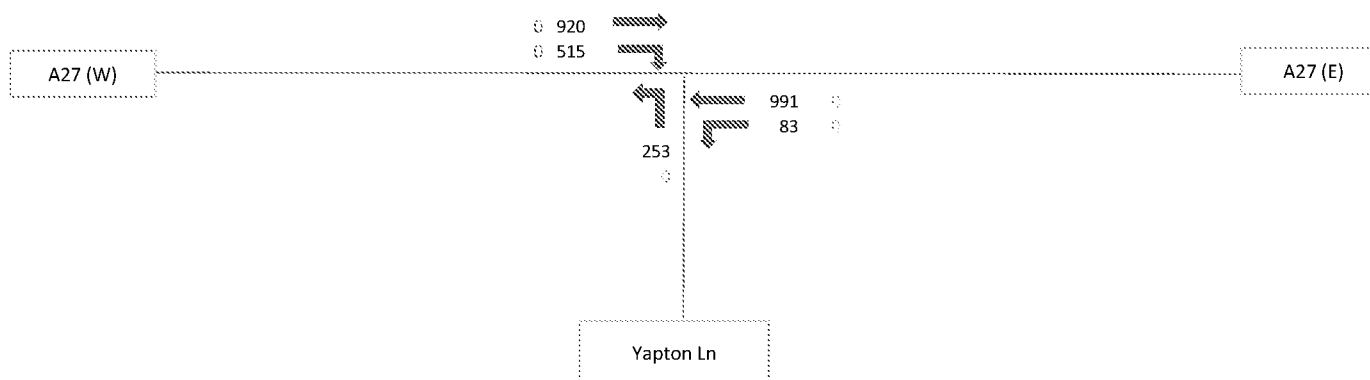
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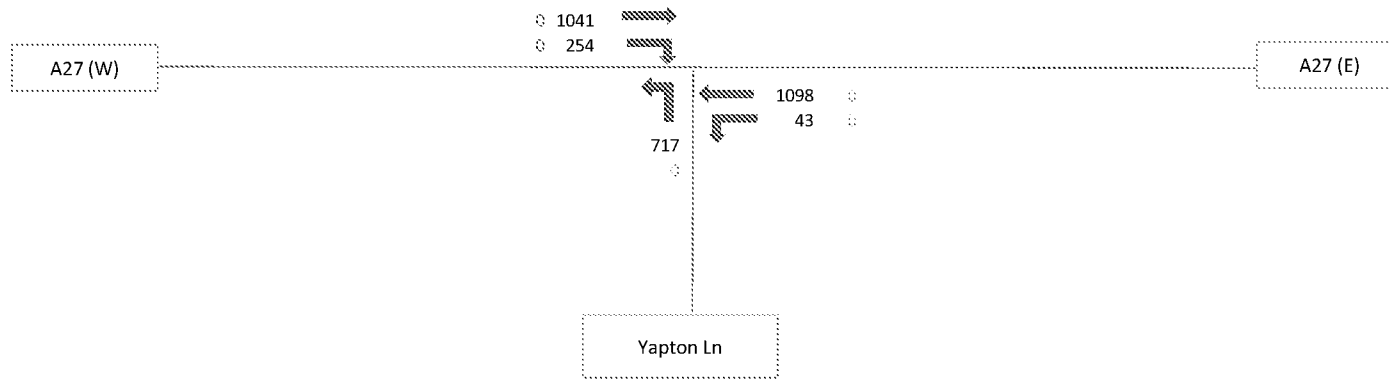
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Job No

A361

Project :

Yapton, West Sussex

Date

MAY
2022

Title :

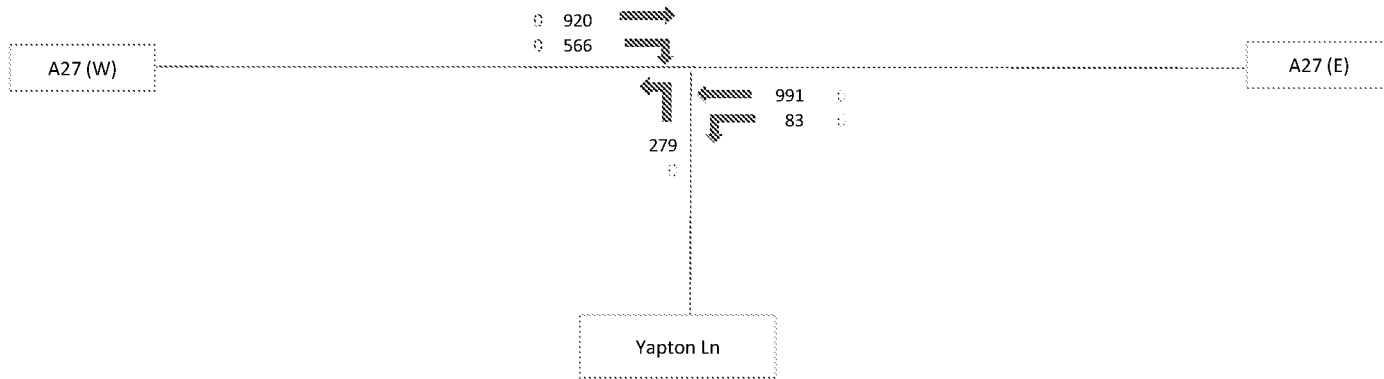
Traffic Movments 2026 + Committed AM

Drawn

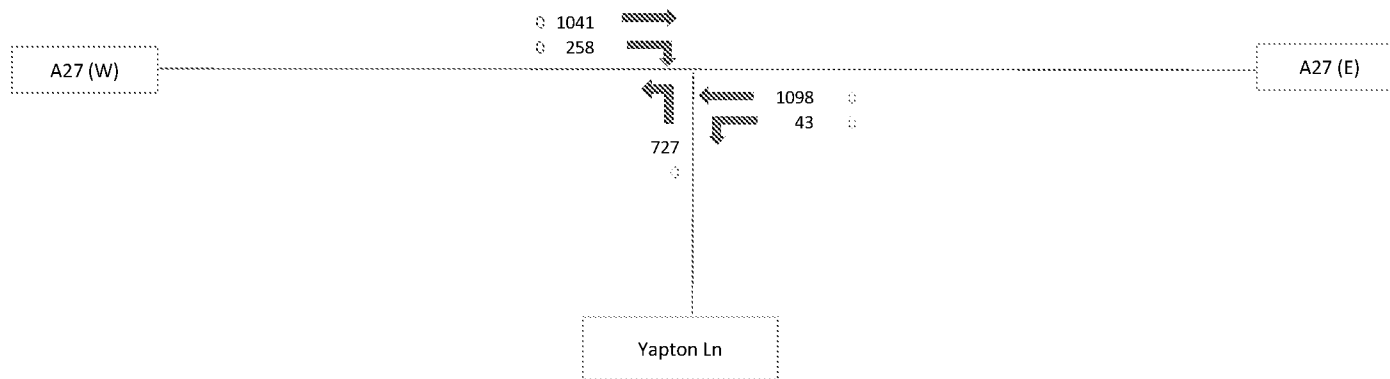
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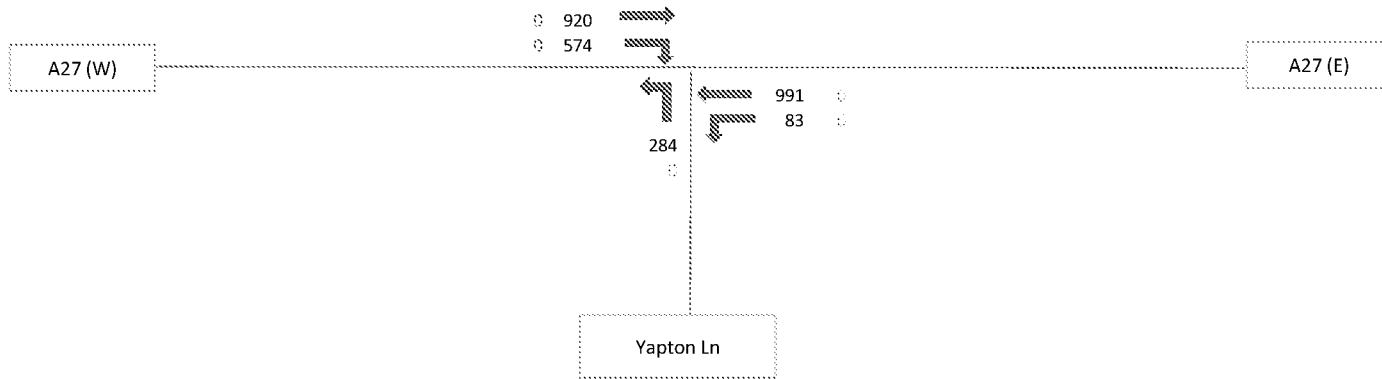
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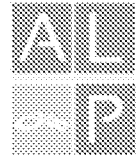
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Job No A361	Project : Yapton, West Sussex
Date MAY 2022	Title : Traffic Movments 2026 + Committed PM
Drawn U	Figure No : NA







APPENDIX H

Junctions 10 Outputs

Junctions 10	
PICADY 10 - Priority Intersection Module	
Version: 10.0.1.1519	
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+44 (0)1344 379777 software@trl.co.uk trlsoftware.com	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: A361 - A27 - yapton Road T Junction 220531.j10

Path: P:\A361 Lamb Field, B2132 Bilsham Road, Yapton\Deliverables\Transport\Modelling\Junction\Capacity Assessment File

Report generation date: 06/06/2022 11:44:22

»2024 Base , AM
 »2024 Base , PM
 »2024 Base + Committed , AM
 »2024 Base + Committed , PM
 »2024 Base + Committed + Development , AM
 »2024 Base + Committed + Development , PM
 »2026 Base, AM
 »2026 Base, PM
 »2026 Base + Committed, AM
 »2026 Base + Committed, PM
 »2026 Base + Committed + Development, PM
 »2026 Base + Committed + Development, AM
 »2031 Base, AM
 »2031 Base, PM
 »2031 Base + Committed, AM
 »2031 Base + Committed, PM
 »2031 Base + Committed + Development, AM
 »2031 Base + Committed + Development, PM
 »2031 Ford TA Revised, AM
 »2031 Ford TA Revised, PM
 »2031 Ford + Comm, AM
 »2031 Ford + Comm, PM
 »2031 Ford + Comm + Dev, AM
 »2031 Ford + Comm + Dev, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	2024 Base													
Stream B-AC	D1	30.0	74.7	146.84	1.05	F	32.10	D2	0.6	2.9	8.62	0.39	A	7.35
Stream C-AB		0.6	2.9	9.36	0.39	A		5.1	27.7	35.11	0.88	E		
	2024 Base + Committed													
Stream B-AC	D3	60.3	165.6	284.01	1.18	F	60.82	D4	0.8	3.0	9.25	0.43	A	12.53
Stream C-AB		0.8	3.1	10.02	0.43	B		10.1	49.0	64.93	0.84	F		
	2024 Base + Committed + Development													
Stream B-AC	D5	65.6	111.4	262.29	1.17	F	66.03	D6	0.8	3.1	9.38	0.44	A	13.55
Stream C-AB		0.8	3.2	10.14	0.44	B		11.5	53.3	66.98	0.86	F		
	2026 Base													
Stream B-AC	D7	41.4	85.9	182.80	1.10	F	41.84	D8	0.7	3.0	8.93	0.41	A	8.87
Stream C-AB		0.7	3.0	9.71	0.41	A		6.5	35.2	42.83	0.88	E		
	2026 Base + Committed													
Stream B-AC	D9	158.6	200.0	770.20	1.39	F	194.61	D10	1.1	3.2	11.27	0.53	B	119.95
Stream C-AB		1.1	3.5	12.12	0.53	B		76.3	135.9	243.98	1.13	F		
	2026 Base + Committed + Development													
Stream B-AC	D12	166.1	200.0	810.95	1.41	F	206.42	D11	1.1	3.3	11.43	0.54	B	138.27
Stream C-AB		1.1	3.6	12.30	0.53	B		85.8	144.8	285.22	1.16	F		
	2031 Base													
Stream B-AC	D13	56.4	101.1	254.83	1.15	F	56.20	D14	0.7	3.1	9.34	0.43	A	11.42
Stream C-AB		0.7	3.1	10.17	0.43	B		9.3	48.2	64.80	0.80	F		
	2031 Base + Committed													
Stream B-AC	D43	166.7	200.0	666.76	1.45	F	226.76	D44	1.2	3.4	11.97	0.55	B	182.55
Stream C-AB		1.2	3.7	12.90	0.55	B		168.7	170.4	624.21	1.18	F		
	2031 Base + Committed + Development													
Stream B-AC	D45	186.8	200.0	984.16	1.48	F	244.66	D46	1.3	3.5	12.15	0.56	B	201.40
Stream C-AB		1.2	3.8	13.05	0.55	B		120.0	181.6	674.95	1.19	F		
	2031 Ford TA Revised													
Stream B-AC	D47	19.4	63.8	100.28	1.01	F	22.67	D48	0.6	2.8	8.26	0.37	A	6.00
Stream C-AB		0.6	2.8	8.98	0.37	A		4.0	29.1	28.20	0.81	D		
	2031 Ford + Comm													
Stream B-AC	D49	45.1	90.2	200.22	1.11	F	46.86	D50	1.0	3.1	10.22	0.49	B	37.15
Stream C-AB		0.7	3.0	9.58	0.41	A		32.0	92.3	104.15	1.06	F		
	2031 Ford + Comm + Dev													
Stream B-AC	D51	50.2	95.6	222.80	1.12	F	51.80	D52	1.0	3.1	10.39	0.50	B	44.68
Stream C-AB		0.7	3.0	9.70	0.42	A		36.1	98.6	126.94	1.07	F		

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ALPCE\transportuser
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	2024 Base	AM	ONE HOUR	07:45	09:15	15
D2	2024 Base	PM	ONE HOUR	16:45	18:15	15
D3	2024 Base + Committed	AM	ONE HOUR	07:45	09:15	15
D4	2024 Base + Committed	PM	ONE HOUR	16:45	18:15	15
D5	2024 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D6	2024 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15
D7	2026 Base	AM	ONE HOUR	07:45	09:15	15
D8	2026 Base	PM	ONE HOUR	16:45	18:15	15
D9	2026 Base + Committed	AM	ONE HOUR	07:45	09:15	15
D10	2026 Base + Committed	PM	ONE HOUR	16:45	18:15	15
D11	2026 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15
D12	2026 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D13	2031 Base	AM	ONE HOUR	07:45	09:15	15
D14	2031 Base	PM	ONE HOUR	16:45	18:15	15
D43	2031 Base + Committed	AM	ONE HOUR	07:45	09:15	15
D44	2031 Base + Committed	PM	ONE HOUR	16:45	18:15	15
D45	2031 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D46	2031 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15
D47	2031 Ford TA Revised	AM	ONE HOUR	07:45	09:15	15
D48	2031 Ford TA Revised	PM	ONE HOUR	16:45	18:15	15
D49	2031 Ford + Comm	AM	ONE HOUR	07:45	09:15	15
D50	2031 Ford + Comm	PM	ONE HOUR	16:45	18:15	15
D51	2031 Ford + Comm + Dev	AM	ONE HOUR	07:45	09:15	15
D52	2031 Ford + Comm + Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		32.10	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	32.10	C

Arms

Arms

Arm	Name	Description	Arm type
A	A27 East		Major
B	Yapton Ln		Minor
C	A27 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	14.60	✓	7.00	✓	4.50	250.0	✓	35.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	5.00	250	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	967	0.095	0.241	0.152	0.344
B-C	938	0.090	0.227	-	-
C-B	899	0.218	0.218	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 Base	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		✓	1110	100.000
B		✓	638	100.000
C		✓	1238	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	42	1068
	B	0	0	638
	C	1013	225	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.05	145.94	30.0	74.7	F
C-AB	0.39	9.36	0.6	2.9	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)	Unsignalised level of service
B-AC	480	752	0.639	474	1.7	12.637	B
C-AB	169	717	0.236	168	0.3	6.550	A
C-A	763			763			
A-B	32			32			
A-C	804			804			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	574	716	0.801	566	3.6	22.884	C
C-AB	202	681	0.297	202	0.4	7.503	A
C-A	911			911			
A-B	38			38			
A-C	960			960			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	702	666	1.054	641	18.8	78.758	F
C-AB	248	632	0.392	247	0.6	9.317	A
C-A	1115			1115			
A-B	46			46			
A-C	1176			1176			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	702	666	1.054	658	30.0	148.948	F
C-AB	248	632	0.392	248	0.6	9.357	A
C-A	1115			1115			
A-B	46			46			
A-C	1176			1176			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	574	716	0.801	673	5.2	31.147	F
C-AB	202	681	0.297	203	0.4	7.542	A
C-A	911			911			
A-B	38			38			
A-C	960			960			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	480	752	0.639	494	1.8	14.596	B
C-AB	169	717	0.236	170	0.3	6.589	A
C-A	763			763			
A-B	32			32			
A-C	804			804			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.70	0.42	1.02	2.65	3.11			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.59	0.08	1.08	9.28	13.45			N/A	N/A
C-AB	0.42	0.00	0.00	0.42	0.42			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	18.84	1.98	14.63	38.09	47.45			N/A	N/A
C-AB	0.63	0.03	0.26	0.63	0.63			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	30.00	3.74	23.85	60.25	74.66			N/A	N/A
C-AB	0.64	0.03	0.29	1.28	2.91			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	5.19	0.05	0.49	14.86	25.83			N/A	N/A
C-AB	0.43	0.00	0.00	0.43	0.43			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.84	0.03	0.29	1.84	7.78			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

2024 Base , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		7.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.35	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024 Base	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		✓	1044	100.000
B		✓	246	100.000
C		✓	1396	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	81	963
	B	0	0	246
	C	895	501	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.39	8.62	0.6	2.9	A
C-AB	0.86	35.11	5.1	27.7	E
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)	Unsignalised level of service
B-AC	185	767	0.241	184	0.3	6.158	A
C-AB	377	727	0.519	373	1.1	10.044	E
C-A	674			674			
A-B	61			61			
A-C	725			725			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	734	0.301	221	0.4	7.002	A
C-AB	450	694	0.649	448	1.8	14.425	E
C-A	805			805			
A-B	73			73			
A-C	866			866			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	689	0.393	270	0.6	8.581	A
C-AB	555	652	0.851	543	4.7	30.303	E
C-A	982			982			
A-B	89			89			
A-C	1060			1060			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	689	0.393	271	0.6	8.616	A
C-AB	555	652	0.851	553	5.1	35.114	E
C-A	982			982			
A-B	89			89			
A-C	1060			1060			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	734	0.301	222	0.4	7.036	A
C-AB	450	694	0.649	463	1.9	16.352	C
C-A	805			805			
A-B	73			73			
A-C	866			866			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	185	767	0.241	186	0.3	6.192	A
C-AB	377	727	0.519	380	1.1	10.475	B
C-A	674			674			
A-B	61			61			
A-C	725			725			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	1.05	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C-AB	1.77	0.07	1.04	4.09	5.83			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C-AB	4.68	0.04	0.44	13.11	24.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.29	1.23	2.89			N/A	N/A
C-AB	5.10	0.03	0.35	10.71	27.71			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	1.93	0.04	0.41	5.20	9.13			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	1.10	0.03	0.32	2.27	5.58			N/A	N/A

2024 Base + Committed , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		80.92	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	80.92	F

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	2024 Base + Committed	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		✓	1110	100.000
B		✓	699	100.000
C		✓	1261	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	42	1068
	B	0	0	699
	C	1013	248	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.15	264.01	59.0	105.5	F
C-AB	0.43	10.02	0.8	3.1	B
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)	Unsignalised level of service
B-AC	526	752	0.700	517	2.2	14.838	B
C-AB	187	717	0.261	185	0.3	6.759	A
C-A	763			763			
A-B	32			32			
A-C	804			804			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	628	716	0.878	615	5.6	31.916	C
C-AB	223	681	0.327	222	0.5	7.840	A
C-A	911			911			
A-B	38			38			
A-C	960			960			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	770	666	1.155	656	34.0	124.820	F
C-AB	273	632	0.432	272	0.7	9.960	A
C-A	1115			1115			
A-B	46			46			
A-C	1176			1176			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	770	666	1.155	664	59.0	264.014	F
C-AB	273	632	0.432	273	0.8	10.017	B
C-A	1115			1115			
A-B	46			46			
A-C	1176			1176			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	628	716	0.878	704	41.3	250.230	F
C-AB	223	681	0.327	224	0.5	7.892	A
C-A	911			911			
A-B	38			38			
A-C	960			960			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	526	752	0.700	681	2.7	50.897	F
C-AB	187	717	0.261	187	0.4	6.807	A
C-A	763			763			
A-B	32			32			
A-C	804			804			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.20	0.17	1.21	4.30	5.57			N/A	N/A
C-AB	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	5.59	0.14	2.56	13.90	19.32			N/A	N/A
C-AB	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	33.96	11.48	30.81	55.68	64.51			N/A	N/A
C-AB	0.75	0.03	0.26	0.75	0.75			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	60.26	25.50	56.39	92.96	105.56			N/A	N/A
C-AB	0.75	0.03	0.29	1.08	3.13			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	41.27	16.52	38.27	64.52	73.64			N/A	N/A
C-AB	0.49	0.05	0.45	1.28	1.39			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.68	0.03	0.30	2.68	11.93			N/A	N/A
C-AB	0.36	0.03	0.27	0.48	0.78			N/A	N/A

2024 Base + Committed , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		12.53	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.53	E

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	2024 Base + Committed	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		✓	1044	100.000
B		✓	272	100.000
C		✓	1446	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	81	963
	B	0	0	272
	C	895	551	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.43	9.25	0.8	3.0	A
C-AB	0.64	54.95	10.1	49.6	F
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)	Unsignalised level of service
B-AC	205	767	0.267	203	0.4	6.367	A
C-AB	415	727	0.570	410	1.3	11.159	B
C-A	674			674			
A-B	61			61			
A-C	725			725			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	245	734	0.333	244	0.5	7.334	A
C-AB	495	694	0.714	491	2.3	17.369	C
C-A	805			805			
A-B	73			73			
A-C	866			866			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	689	0.435	298	0.8	9.201	A
C-AB	698	745	0.936	674	8.2	49.710	E
C-A	894			894			
A-B	89			89			
A-C	1060			1060			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	689	0.435	299	0.8	9.248	A
C-AB	698	745	0.936	690	10.1	54.953	F
C-A	894			894			
A-B	89			89			
A-C	1060			1060			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	245	734	0.333	246	0.5	7.382	A
C-AB	495	694	0.714	525	2.7	24.348	C
C-A	805			805			
A-B	73			73			
A-C	866			866			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	767	0.267	205	0.4	6.412	A
C-AB	415	727	0.570	420	1.4	11.900	B
C-A	674			674			
A-B	61			61			
A-C	725			725			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	1.29	0.56	1.18	1.63	1.82			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	2.34	0.07	1.08	5.92	8.72			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.03	0.26	0.76	0.76			N/A	N/A
C-AB	8.16	0.09	2.25	22.71	33.95			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.03	0.28	0.99	3.05			N/A	N/A
C-AB	10.06	0.06	1.38	29.48	48.97			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.49	1.30	1.40			N/A	N/A
C-AB	2.66	0.04	0.39	7.10	13.67			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.03	0.27	0.49	0.87			N/A	N/A
C-AB	1.36	0.03	0.30	1.92	6.71			N/A	N/A

2024 Base + Committed + Development , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		88.00	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	88.00	F

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	2024 Base + 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		✓	1110	100.000
B		✓	709	100.000
C		✓	1265	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	42	1068
	B	0	0	709
	C	1013	252	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.17	280.29	65.8	111.6	F
C-AB	0.44	10.14	0.8	3.2	B
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)	Unsignalised level of service
B-AC	534	752	0.710	525	2.3	15.265	C
C-AB	190	717	0.265	188	0.4	6.797	A
C-A	763			763			
A-B	32			32			
A-C	804			804			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	637	716	0.890	622	6.1	33.904	C
C-AB	227	681	0.333	226	0.5	7.899	A
C-A	911			911			
A-B	38			38			
A-C	960			960			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	781	666	1.172	658	38.8	130.606	F
C-AB	277	632	0.439	276	0.8	10.113	B
C-A	1115			1115			
A-B	46			46			
A-C	1176			1176			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	781	666	1.172	665	65.8	280.603	F
C-AB	277	632	0.439	277	0.8	10.141	B
C-A	1115			1115			
A-B	46			46			
A-C	1176			1176			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	637	716	0.890	705	49.5	250.234	F
C-AB	227	681	0.333	228	0.5	7.956	A
C-A	911			911			
A-B	38			38			
A-C	960			960			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	534	752	0.710	717	3.1	120.058	F
C-AB	190	717	0.265	190	0.4	6.849	A
C-A	763			763			
A-B	32			32			
A-C	804			804			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.31	0.16	1.23	4.66	6.04			N/A	N/A
C-AB	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	6.06	0.16	2.94	14.89	20.50			N/A	N/A
C-AB	0.49	0.00	0.00	0.49	0.49			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	36.84	13.58	33.80	58.97	67.81			N/A	N/A
C-AB	0.77	0.03	0.26	0.77	0.77			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	65.80	30.11	62.15	98.87	111.38			N/A	N/A
C-AB	0.77	0.03	0.28	1.05	3.17			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	48.82	21.92	45.91	73.57	82.99			N/A	N/A
C-AB	0.50	0.05	0.49	1.30	1.40			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.11	0.03	0.31	4.06	15.10			N/A	N/A
C-AB	0.36	0.03	0.28	0.50	0.98			N/A	N/A

2024 Base + Committed + Development , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		13.55	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.55	E

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	2024 Base + 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		✓	1044	100.000
B		✓	277	100.000
C		✓	1454	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	81	963
	B	0	0	277
	C	895	559	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.44	9.38	0.8	3.1	A
C-AB	0.66	58.98	11.5	53.3	F
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)	Unsignalised level of service
B-AC	209	767	0.272	207	0.4	6.408	A
C-AB	421	727	0.579	416	1.3	11.360	B
C-A	674			674			
A-B	61			61			
A-C	725			725			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	249	734	0.339	248	0.5	7.402	A
C-AB	503	694	0.724	498	2.5	17.943	C
C-A	805			805			
A-B	73			73			
A-C	866			866			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	689	0.443	304	0.8	9.329	A
C-AB	768	809	0.950	742	9.0	41.329	E
C-A	833			833			
A-B	89			89			
A-C	1060			1060			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	689	0.443	305	0.8	9.381	A
C-AB	768	809	0.950	758	11.5	58.982	F
C-A	833			833			
A-B	89			89			
A-C	1060			1060			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	249	734	0.339	250	0.5	7.449	A
C-AB	503	694	0.724	537	2.8	27.007	B
C-A	805			805			
A-B	73			73			
A-C	866			866			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	767	0.272	209	0.4	6.456	A
C-AB	421	727	0.579	426	1.4	12.176	B
C-A	674			674			
A-B	61			61			
A-C	725			725			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	1.33	0.56	1.23	1.71	1.87			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.51	1.00	1.40	1.45			N/A	N/A
C-AB	2.45	0.06	1.06	6.33	9.37			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.78	0.03	0.26	0.78	0.78			N/A	N/A
C-AB	9.01	0.11	2.97	24.65	36.11			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.79	0.03	0.28	0.94	3.07			N/A	N/A
C-AB	11.50	0.07	1.82	33.49	53.25			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.05	0.58	1.32	1.41			N/A	N/A
C-AB	2.82	0.04	0.39	7.51	14.64			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.28	0.62	1.06			N/A	N/A
C-AB	1.41	0.03	0.30	1.83	6.80			N/A	N/A

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		41.94	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	41.94	E

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	2026 Base	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		✓	1141	100.000
B		✓	656	100.000
C		✓	1272	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	43	1098
	B	0	0	656
	C	1041	231	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.10	152.80	41.4	83.8	F
C-AB	0.41	9.71	0.7	3.0	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)	Unsignalised level of service
B-AC	494	747	0.661	486	1.9	13.466	B
C-AB	174	711	0.244	173	0.3	6.660	A
C-A	784			784			
A-B	32			32			
A-C	827			827			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	590	710	0.831	580	4.2	26.042	C
C-AB	208	675	0.308	207	0.4	7.685	A
C-A	936			936			
A-B	39			39			
A-C	987			987			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	722	659	1.097	642	24.4	97.301	F
C-AB	254	625	0.407	253	0.7	9.665	A
C-A	1146			1146			
A-B	47			47			
A-C	1209			1209			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	722	659	1.097	654	41.4	152.801	F
C-AB	254	625	0.407	254	0.7	9.712	A
C-A	1146			1146			
A-B	47			47			
A-C	1209			1209			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	590	710	0.831	693	15.5	180.337	F
C-AB	208	675	0.308	209	0.4	7.732	A
C-A	936			936			
A-B	39			39			
A-C	987			987			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	494	747	0.661	548	2.1	22.717	C
C-AB	174	711	0.244	174	0.3	6.708	A
C-A	784			784			
A-B	32			32			
A-C	827			827			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.87	0.26	1.10	3.15	3.93			N/A	N/A
C-AB	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.22	0.10	1.52	10.83	15.50			N/A	N/A
C-AB	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	24.39	5.08	20.73	44.57	53.51			N/A	N/A
C-AB	0.67	0.03	0.26	0.67	0.67			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	41.37	10.97	36.47	72.64	85.94			N/A	N/A
C-AB	0.68	0.03	0.29	1.22	3.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	15.53	1.25	11.08	33.55	42.91			N/A	N/A
C-AB	0.45	0.00	0.00	0.45	0.45			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.06	0.03	0.29	2.06	8.40			N/A	N/A
C-AB	0.33	0.03	0.25	0.45	0.48			N/A	N/A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		8.87	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.87	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2026 Base	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		✓	1074	100.000
B		✓	253	100.000
C		✓	1435	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	83	991
	B	0	0	253
	C	920	515	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.41	8.93	0.7	3.0	A
C-AB	0.88	42.83	6.5	33.2	B
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)	Unsignalised level of service
B-AC	190	762	0.250	189	0.3	6.265	A
C-AB	388	722	0.537	383	1.1	10.478	B
C-A	693			693			
A-B	62			62			
A-C	746			746			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	728	0.312	227	0.4	7.173	A
C-AB	463	688	0.673	460	2.0	15.519	C
C-A	827			827			
A-B	75			75			
A-C	891			891			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	681	0.409	278	0.7	8.895	A
C-AB	579	655	0.883	564	5.7	35.006	B
C-A	1001			1001			
A-B	91			91			
A-C	1091			1091			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	681	0.409	279	0.7	8.933	A
C-AB	579	655	0.883	576	6.5	42.833	B
C-A	1001			1001			
A-B	91			91			
A-C	1091			1091			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	728	0.312	228	0.5	7.210	A
C-AB	463	688	0.673	480	2.2	18.563	C
C-A	827			827			
A-B	75			75			
A-C	891			891			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	762	0.250	191	0.3	6.306	A
C-AB	388	722	0.537	392	1.2	11.004	B
C-A	693			693			
A-B	62			62			
A-C	746			746			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	1.13	0.55	1.02	1.44	1.49			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	1.96	0.07	1.06	4.71	6.76			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.03	0.26	0.68	0.68			N/A	N/A
C-AB	5.73	0.06	0.88	16.53	27.51			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.03	0.29	1.16	2.96			N/A	N/A
C-AB	6.47	0.04	0.40	16.82	35.18			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	2.16	0.04	0.40	5.83	10.68			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	1.19	0.03	0.31	2.14	6.03			N/A	N/A

2026 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		194.61	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	194.61	F

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)
D9	2026 Base + Committed	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		✓	1141	100.000
B		✓	832	100.000
C		✓	1339	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	43	1098
	B	0	0	832
	C	1041	298	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.38	770.36	158.6	200.0	F
C-AB	0.53	12.12	1.1	3.5	B
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)	Unsignalised level of service
B-AC	626	747	0.839	609	4.4	23.708	C
C-AB	224	711	0.315	223	0.5	7.337	A
C-A	784			784			
A-B	32			32			
A-C	827			827			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	748	710	1.054	686	19.9	80.667	F
C-AB	268	675	0.397	267	0.6	8.806	A
C-A	936			936			
A-B	39			39			
A-C	987			987			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	916	659	1.391	657	84.5	208.375	F
C-AB	328	625	0.525	326	1.1	11.989	B
C-A	1146			1146			
A-B	47			47			
A-C	1209			1209			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	916	659	1.391	658	145.9	327.806	F
C-AB	328	625	0.525	328	1.1	12.121	B
C-A	1146			1146			
A-B	47			47			
A-C	1209			1209			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	748	710	1.054	709	158.6	770.358	F
C-AB	268	675	0.397	270	0.7	8.912	A
C-A	936			936			
A-B	39			39			
A-C	987			987			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	626	747	0.839	742	129.6	660.753	F
C-AB	224	711	0.315	225	0.5	7.417	A
C-A	784			784			
A-B	32			32			
A-C	827			827			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.41	0.03	0.33	7.52	22.98			N/A	N/A
C-AB	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	19.90	0.39	11.09	49.43	67.18			N/A	N/A
C-AB	0.65	0.14	0.89	1.38	1.44			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	84.54	41.54	80.55	123.94	138.53			N/A	N/A
C-AB	1.08	0.03	0.27	1.08	1.12			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	148.95	>199	>199	>199	>199			N/A	N/A
C-AB	1.09	0.03	0.28	1.09	3.52			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	158.60	>199	>199	>199	>199			N/A	N/A
C-AB	0.67	0.07	0.75	1.37	1.45			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	129.64	>199	>199	>199	>199			N/A	N/A
C-AB	0.47	0.04	0.40	1.24	1.38			N/A	N/A

2026 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		119.85	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	119.85	F

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)
D10	2026 Base + Committed	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		✓	1074	100.000
B		✓	329	100.000
C		✓	1580	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	83	991
	B	0	0	329
	C	920	660	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.53	11.27	1.1	3.2	B
C-AB	1.13	343.98	78.3	133.0	F
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)	Unsignalised level of service
B-AC	248	762	0.325	246	0.5	6.942	A
C-AB	497	722	0.688	489	2.1	14.906	B
C-A	693			693			
A-B	62			62			
A-C	746			746			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	296	728	0.406	295	0.7	8.288	A
C-AB	597	693	0.862	585	5.1	30.540	C
C-A	823			823			
A-B	75			75			
A-C	891			891			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	362	681	0.532	361	1.1	11.156	B
C-AB	1740	1534	1.134	1636	39.9	38.562	F
C-A	0			0			
A-B	91			91			
A-C	1091			1091			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	362	681	0.532	362	1.1	11.271	B
C-AB	1740	1534	1.134	1558	78.3	168.729	F
C-A	0			0			
A-B	91			91			
A-C	1091			1091			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	296	728	0.406	297	0.7	8.385	A
C-AB	597	693	0.862	692	52.5	343.354	F
C-A	823			823			
A-B	75			75			
A-C	891			891			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	248	762	0.325	249	0.5	7.014	A
C-AB	497	722	0.688	696	2.7	142.315	F
C-A	693			693			
A-B	62			62			
A-C	746			746			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.00	0.00	0.48	0.48			N/A	N/A
C-AB	2.09	0.10	1.40	4.52	6.07			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.67	0.14	0.89	1.38	1.44			N/A	N/A
C-AB	5.05	0.07	1.47	14.07	21.55			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.11	0.03	0.27	1.11	1.11			N/A	N/A
C-AB	30.90	5.39	25.72	58.85	71.60			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.12	0.03	0.28	1.12	3.24			N/A	N/A
C-AB	76.26	31.72	71.34	118.67	135.04			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.08	0.79	1.38	1.46			N/A	N/A
C-AB	52.53	23.64	49.44	79.16	89.28			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.04	0.42	1.26	1.39			N/A	N/A
C-AB	2.74	0.03	0.29	2.74	11.43			N/A	N/A

2026 Base + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		138.27	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	138.27	F

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)
D11	2026 Base + 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		✓	1074	100.000
B		✓	333	100.000
C		✓	1588	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	83	991
	B	0	0	333
	C	920	668	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.54	11.43	1.1	3.3	B
C-AB	1.15	335.22	85.8	144.3	F
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)	Unsignalised level of service
B-AC	251	762	0.329	249	0.5	6.981	A
C-AB	503	722	0.696	494	2.2	15.251	C
C-A	693			693			
A-B	62			62			
A-C	746			746			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	728	0.411	299	0.7	8.358	A
C-AB	607	695	0.873	594	5.4	31.951	C
C-A	821			821			
A-B	75			75			
A-C	891			891			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	367	681	0.538	365	1.1	11.306	B
C-AB	1748	1524	1.147	1637	33.1	52.833	F
C-A	0			0			
A-B	91			91			
A-C	1091			1091			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	367	681	0.538	367	1.1	11.428	B
C-AB	1748	1524	1.147	1538	85.8	161.705	F
C-A	0			0			
A-B	91			91			
A-C	1091			1091			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	728	0.411	301	0.7	8.458	A
C-AB	607	695	0.873	694	65.8	388.218	F
C-A	821			821			
A-B	75			75			
A-C	891			891			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	762	0.329	252	0.5	7.056	A
C-AB	503	722	0.696	722	9.0	187.872	F
C-A	693			693			
A-B	62			62			
A-C	746			746			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.00	0.00	0.48	0.48			N/A	N/A
C-AB	2.17	0.09	1.30	4.96	6.93			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.14	0.89	1.38	1.44			N/A	N/A
C-AB	5.39	0.07	1.06	15.06	23.04			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.13	0.03	0.27	1.13	1.20			N/A	N/A
C-AB	33.12	6.62	28.08	61.54	74.22			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.15	0.03	0.28	1.15	3.26			N/A	N/A
C-AB	85.82	39.75	81.27	128.67	144.77			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.08	0.79	1.39	1.47			N/A	N/A
C-AB	63.88	29.04	60.28	96.19	108.43			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.04	0.42	1.27	1.40			N/A	N/A
C-AB	8.99	0.09	2.33	25.26	38.08			N/A	N/A

2026 Base + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		208.42	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	208.42	F

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)
D12	2026 Base + 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		✓	1141	100.000
B		✓	842	100.000
C		✓	1343	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	43	1098
	B	0	0	842
	C	1041	302	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.41	210.95	155.1	200.0	F
C-AB	0.53	12.30	1.1	3.6	B
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)	Unsignalised level of service
B-AC	634	747	0.849	615	4.7	24.671	C
C-AB	227	711	0.320	226	0.5	7.380	A
C-A	784			784			
A-B	32			32			
A-C	827			827			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	757	710	1.066	689	21.7	88.888	F
C-AB	271	675	0.402	271	0.7	8.883	A
C-A	936			936			
A-B	39			39			
A-C	987			987			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	927	659	1.406	658	89.1	315.081	F
C-AB	333	625	0.532	331	1.1	12.162	B
C-A	1146			1146			
A-B	47			47			
A-C	1209			1209			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	927	659	1.406	658	155.2	658.050	F
C-AB	333	625	0.532	332	1.1	12.301	B
C-A	1146			1146			
A-B	47			47			
A-C	1209			1209			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	757	710	1.066	709	188.1	810.953	F
C-AB	271	675	0.402	273	0.7	8.995	A
C-A	936			936			
A-B	39			39			
A-C	987			987			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	634	747	0.849	742	141.0	749.888	F
C-AB	227	711	0.320	228	0.5	7.464	A
C-A	784			784			
A-B	32			32			
A-C	827			827			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.67	0.03	0.32	6.57	23.17			N/A	N/A
C-AB	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	21.72	0.39	11.99	54.32	74.06			N/A	N/A
C-AB	0.66	0.14	0.89	1.38	1.44			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	89.07	43.18	84.77	131.37	147.09			N/A	N/A
C-AB	1.11	0.03	0.27	1.11	1.28			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	156.23	>199	>199	>199	>199			N/A	N/A
C-AB	1.12	0.03	0.28	1.12	3.55			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	168.10	>199	>199	>199	>199			N/A	N/A
C-AB	0.68	0.07	0.76	1.38	1.46			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	140.95	>199	>199	>199	>199			N/A	N/A
C-AB	0.48	0.04	0.41	1.26	1.39			N/A	N/A

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		55.20	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	55.20	F

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)
D13	2031 Base	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		✓	1179	100.000
B		✓	677	100.000
C		✓	1313	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A	B	C	
	A	0	45	1134	
	B	0	0	677	
	C	1075	238	0	

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.15	254.83	55.4	101.1	F
C-AB	0.43	10.17	0.7	3.1	B
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)	Unsignalised level of service
B-AC	510	741	0.688	501	2.1	14.581	B
C-AB	179	705	0.254	178	0.3	6.810	A
C-A	809			809			
A-B	34			34			
A-C	854			854			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	609	702	0.867	596	5.2	30.777	C
C-AB	214	668	0.320	213	0.5	7.916	A
C-A	966			966			
A-B	40			40			
A-C	1019			1019			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	745	649	1.148	638	31.9	121.400	F
C-AB	262	616	0.426	261	0.7	10.116	B
C-A	1184			1184			
A-B	50			50			
A-C	1249			1249			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	745	649	1.148	647	55.4	254.833	F
C-AB	262	616	0.426	262	0.7	10.174	B
C-A	1184			1184			
A-B	50			50			
A-C	1249			1249			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	609	702	0.867	690	35.1	242.657	F
C-AB	214	668	0.320	215	0.5	7.971	A
C-A	966			966			
A-B	40			40			
A-C	1019			1019			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	510	741	0.688	644	2.5	70.773	F
C-AB	179	705	0.254	180	0.3	6.859	A
C-A	809			809			
A-B	34			34			
A-C	854			854			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.10	0.17	1.15	3.95	5.11			N/A	N/A
C-AB	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	5.20	0.12	2.23	13.06	18.29			N/A	N/A
C-AB	0.47	0.00	0.00	0.47	0.47			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	31.93	10.20	28.75	53.12	61.84			N/A	N/A
C-AB	0.73	0.03	0.26	0.73	0.73			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	56.43	22.69	52.49	88.53	101.06			N/A	N/A
C-AB	0.73	0.03	0.29	1.15	3.13			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	36.06	13.04	33.00	58.08	66.92			N/A	N/A
C-AB	0.48	0.04	0.41	1.24	1.37			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.46	0.03	0.29	2.46	10.33			N/A	N/A
C-AB	0.34	0.03	0.26	0.47	0.50			N/A	N/A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		11.42	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.42	E

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)
D14	2031 Base	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		✓	1111	100.000
B		✓	261	100.000
C		✓	1485	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	86	1025
	B	0	0	261
	C	952	533	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.43	9.34	0.7	3.1	A
C-AB	0.60	54.00	9.3	48.2	F
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)	Unsignalised level of service
B-AC	196	756	0.260	195	0.3	6.398	A
C-AB	401	716	0.560	396	1.2	11.084	B
C-A	717			717			
A-B	65			65			
A-C	772			772			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	721	0.325	234	0.5	7.382	A
C-AB	479	681	0.704	475	2.2	17.151	C
C-A	856			856			
A-B	77			77			
A-C	921			921			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	673	0.427	286	0.7	9.294	A
C-AB	659	710	0.928	637	7.7	40.515	E
C-A	976			976			
A-B	95			95			
A-C	1129			1129			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	673	0.427	287	0.7	9.342	A
C-AB	659	710	0.928	652	9.3	50.008	F
C-A	976			976			
A-B	95			95			
A-C	1129			1129			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	721	0.325	236	0.5	7.427	A
C-AB	479	681	0.704	506	2.5	23.306	C
C-A	856			856			
A-B	77			77			
A-C	921			921			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	196	756	0.260	197	0.4	6.440	A
C-AB	401	716	0.560	406	1.3	11.780	B
C-A	717			717			
A-B	65			65			
A-C	772			772			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	1.24	0.56	1.13	1.51	1.76			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.00	0.00	0.48	0.48			N/A	N/A
C-AB	2.24	0.07	1.07	5.62	8.21			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.73	0.03	0.26	0.73	0.73			N/A	N/A
C-AB	7.67	0.08	1.88	21.48	32.45			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.74	0.03	0.29	1.07	3.06			N/A	N/A
C-AB	9.33	0.06	1.09	27.19	46.19			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.04	0.43	1.26	1.38			N/A	N/A
C-AB	2.53	0.04	0.39	6.74	12.90			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	1.31	0.03	0.30	1.88	6.45			N/A	N/A

2031 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		225.76	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	225.76	F

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)
D43	2031 Base + Committed	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		✓	1179	100.000
B		✓	853	100.000
C		✓	1381	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A	B	C	
	A	0	45	1134	
	B	0	0	853	
	C	1075	306	0	

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.45	266.75	188.7	200.0	F
C-AB	0.55	12.90	1.2	3.7	B
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)	Unsignalised level of service
B-AC	642	741	0.867	621	5.2	26.774	C
C-AB	230	705	0.327	228	0.5	7.520	A
C-A	809			809			
A-B	34			34			
A-C	854			854			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	767	702	1.092	686	25.4	97.797	F
C-AB	275	668	0.412	274	0.7	9.129	A
C-A	966			966			
A-B	40			40			
A-C	1019			1019			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	939	649	1.446	649	38.1	354.428	F
C-AB	337	616	0.547	335	1.2	12.732	B
C-A	1184			1184			
A-B	50			50			
A-C	1249			1249			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	939	649	1.446	649	170.5	727.029	F
C-AB	337	616	0.547	337	1.2	12.898	B
C-A	1184			1184			
A-B	50			50			
A-C	1249			1249			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	767	702	1.092	702	183.7	858.761	F
C-AB	275	668	0.412	277	0.7	9.260	A
C-A	966			966			
A-B	40			40			
A-C	1019			1019			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	642	741	0.867	737	183.1	858.334	F
C-AB	230	705	0.327	231	0.5	7.611	A
C-A	809			809			
A-B	34			34			
A-C	854			854			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	5.21	0.03	0.30	5.21	22.63			N/A	N/A
C-AB	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	25.44	0.37	13.50	64.74	89.01			N/A	N/A
C-AB	0.69	0.14	0.89	1.38	1.44			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	98.07	45.69	92.99	146.91	165.23			N/A	N/A
C-AB	1.17	0.03	0.27	1.17	1.27			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	170.54	>199	>199	>199	>199			N/A	N/A
C-AB	1.19	0.03	0.28	1.19	3.72			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	186.73	>199	>199	>199	>199			N/A	N/A
C-AB	0.71	0.07	0.76	1.41	1.49			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	163.12	>199	>199	>199	>199			N/A	N/A
C-AB	0.49	0.04	0.41	1.28	1.41			N/A	N/A

2031 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		182.66	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	182.66	F

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)
D44	2031 Base + Committed	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		✓	1111	100.000
B		✓	338	100.000
C		✓	1630	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	86	1025
	B	0	0	338
	C	952	678	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.55	11.97	1.2	3.4	B
C-AB	1.18	524.21	158.7	170.4	F
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)	Unsignalised level of service
B-AC	254	756	0.336	252	0.5	7.114	A
C-AB	510	716	0.713	501	2.3	16.101	C
C-A	717			717			
A-B	65			65			
A-C	772			772			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	304	721	0.421	303	0.7	8.588	A
C-AB	625	699	0.895	610	6.2	35.400	E
C-A	840			840			
A-B	77			77			
A-C	921			921			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	372	673	0.553	370	1.2	11.825	B
C-AB	1795	1520	1.181	1651	42.5	158.389	F
C-A	0			0			
A-B	95			95			
A-C	1129			1129			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	372	673	0.553	372	1.2	11.970	B
C-AB	1795	1520	1.181	1524	158.7	229.245	F
C-A	0			0			
A-B	95			95			
A-C	1129			1129			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	304	721	0.421	306	0.7	8.705	A
C-AB	625	699	0.895	697	61.8	824.215	F
C-A	840			840			
A-B	77			77			
A-C	921			921			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	254	756	0.336	255	0.5	7.196	A
C-AB	510	716	0.713	716	40.4	243.854	F
C-A	717			717			
A-B	65			65			
A-C	772			772			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.50	1.00	1.40	1.45			N/A	N/A
C-AB	2.33	0.05	0.50	6.34	10.17			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.72	0.13	0.89	1.38	1.44			N/A	N/A
C-AB	6.22	0.07	1.40	17.79	28.08			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.20	0.03	0.27	1.20	1.20			N/A	N/A
C-AB	42.04	11.96	37.41	72.57	85.38			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.22	0.03	0.28	1.22	3.41			N/A	N/A
C-AB	109.74	60.03	105.78	154.37	170.41			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.74	0.08	0.79	1.06	1.06			N/A	N/A
C-AB	91.86	40.75	86.62	140.04	158.35			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.04	0.43	1.30	1.42			N/A	N/A
C-AB	40.37	15.19	37.16	64.36	73.88			N/A	N/A

2031 Base + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		244.05	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	244.05	F

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)
D45	2031 Base + 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		✓	1179	100.000
B		✓	863	100.000
C		✓	1384	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	45	1134
	B	0	0	863
	C	1075	309	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.48	604.18	198.8	200.0	F
C-AB	0.55	13.05	1.2	3.8	B
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)	Unsignalised level of service
B-AC	650	741	0.877	628	5.5	27.940	C
C-AB	233	705	0.330	231	0.5	7.556	A
C-A	809			809			
A-B	34			34			
A-C	854			854			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	776	702	1.105	688	27.5	104.814	F
C-AB	278	668	0.416	277	0.7	9.192	A
C-A	966			966			
A-B	40			40			
A-C	1019			1019			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	950	649	1.463	649	100.0	370.040	F
C-AB	340	616	0.552	338	1.2	12.876	B
C-A	1184			1184			
A-B	50			50			
A-C	1249			1249			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	950	649	1.463	649	175.1	789.043	F
C-AB	340	616	0.552	340	1.2	13.050	B
C-A	1184			1184			
A-B	50			50			
A-C	1249			1249			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	776	702	1.105	702	136.5	884.153	F
C-AB	278	668	0.416	280	0.7	9.325	A
C-A	966			966			
A-B	40			40			
A-C	1019			1019			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	650	741	0.877	737	174.5	807.473	F
C-AB	233	705	0.330	234	0.5	7.648	A
C-A	809			809			
A-B	34			34			
A-C	854			854			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	5.55	0.03	0.30	5.55	21.92			N/A	N/A
C-AB	0.49	0.00	0.00	0.49	0.49			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	27.54	0.35	14.15	70.91	98.12			N/A	N/A
C-AB	0.70	0.13	0.89	1.38	1.44			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	102.90	46.48	97.25	155.90	175.90			N/A	N/A
C-AB	1.20	0.03	0.27	1.20	1.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	178.12	>199	>199	>199	>199			N/A	N/A
C-AB	1.22	0.03	0.28	1.22	3.76			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	196.55	>199	>199	>199	>199			N/A	N/A
C-AB	0.72	0.07	0.76	1.07	1.07			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	174.77	>199	>199	>199	>199			N/A	N/A
C-AB	0.50	0.04	0.42	1.29	1.42			N/A	N/A

2031 Base + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		201.40	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	201.40	F

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)
D46	2031 Base + 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		✓	1111	100.000
B		✓	342	100.000
C		✓	1638	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	86	1025
	B	0	0	342
	C	952	686	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.56	12.15	1.3	3.5	B
C-AB	1.18	574.95	125.0	181.5	F
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)	Unsignalised level of service
B-AC	257	756	0.340	255	0.5	7.157	A
C-AB	516	716	0.721	507	2.4	16.498	C
C-A	717			717			
A-B	65			65			
A-C	772			772			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	721	0.426	307	0.7	8.661	A
C-AB	641	708	0.906	624	6.7	38.814	E
C-A	832			832			
A-B	77			77			
A-C	921			921			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	377	673	0.560	375	1.2	11.994	B
C-AB	1803	1509	1.195	1641	47.3	110.349	F
C-A	0			0			
A-B	95			95			
A-C	1129			1129			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	377	673	0.560	376	1.3	12.149	B
C-AB	1803	1509	1.195	1513	129.9	250.990	F
C-A	0			0			
A-B	95			95			
A-C	1129			1129			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	721	0.426	309	0.8	8.782	A
C-AB	641	708	0.906	705	103.9	874.947	F
C-A	832			832			
A-B	77			77			
A-C	921			921			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	756	0.340	258	0.5	7.243	A
C-AB	516	716	0.721	716	52.9	407.231	F
C-A	717			717			
A-B	65			65			
A-C	772			772			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.51	1.00	1.40	1.45			N/A	N/A
C-AB	2.42	0.04	0.44	6.65	11.52			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.73	0.13	0.89	1.39	1.45			N/A	N/A
C-AB	6.69	0.06	1.38	19.23	30.66			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.24	0.03	0.27	1.24	1.40			N/A	N/A
C-AB	47.31	15.38	42.85	78.92	91.83			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.25	0.03	0.28	1.25	3.46			N/A	N/A
C-AB	120.00	68.87	116.23	165.46	181.60			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.08	0.79	1.24	1.24			N/A	N/A
C-AB	103.93	48.95	98.68	155.15	174.32			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.04	0.43	1.31	1.44			N/A	N/A
C-AB	53.94	19.33	49.49	87.68	101.19			N/A	N/A

2031 Ford TA Revised, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		22.67	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	22.67	C

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)
D47	2031 Ford TA Revised	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		✓	1079	100.000
B		✓	616	100.000
C		✓	1200	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	41	1038
	B	0	0	616
	C	983	217	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.01	103.38	19.4	63.8	F
C-AB	0.37	8.98	0.6	2.8	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)	Unsignalised level of service
B-AC	464	757	0.612	458	1.5	11.789	B
C-AB	163	722	0.226	162	0.3	6.422	A
C-A	740			740			
A-B	31			31			
A-C	781			781			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	554	722	0.767	548	3.0	19.966	C
C-AB	195	687	0.284	195	0.4	7.301	A
C-A	884			884			
A-B	37			37			
A-C	933			933			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	678	674	1.007	636	13.6	63.718	F
C-AB	239	640	0.373	238	0.6	8.945	A
C-A	1082			1082			
A-B	45			45			
A-C	1143			1143			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	678	674	1.007	655	19.4	103.382	F
C-AB	239	640	0.373	239	0.6	8.980	A
C-A	1082			1082			
A-B	45			45			
A-C	1143			1143			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	554	722	0.767	616	3.7	45.707	B
C-AB	195	687	0.284	196	0.4	7.335	A
C-A	884			884			
A-B	37			37			
A-C	933			933			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	464	757	0.612	472	1.6	12.965	B
C-AB	163	722	0.226	164	0.3	6.460	A
C-A	740			740			
A-B	31			31			
A-C	781			781			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.53	0.55	1.42	1.97	2.51			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.01	0.07	1.33	7.77	11.36			N/A	N/A
C-AB	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	13.56	0.56	8.58	31.43	41.45			N/A	N/A
C-AB	0.59	0.03	0.26	0.59	0.59			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	19.39	0.45	11.26	47.35	63.81			N/A	N/A
C-AB	0.59	0.03	0.29	1.33	2.76			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.71	0.04	0.41	10.12	19.23			N/A	N/A
C-AB	0.40	0.00	0.00	0.40	0.40			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.63	0.03	0.30	1.63	7.35			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

2031 Ford TA Revised, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		6.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D48	2031 Ford TA Revised	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		✓	1011	100.000
B		✓	237	100.000
C		✓	1349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A	B	C	
	A	0	79	932	
	B	0	0	237	
	C	866	483	0	

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.37	8.26	0.6	2.8	A
C-AB	0.81	28.20	4.0	20.1	D
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)	Unsignalised level of service
B-AC	178	773	0.231	177	0.3	6.031	A
C-AB	364	733	0.496	360	1.0	9.556	A
C-A	652			652			
A-B	59			59			
A-C	702			702			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	213	741	0.288	213	0.4	6.805	A
C-AB	434	701	0.620	432	1.6	13.267	B
C-A	779			779			
A-B	71			71			
A-C	838			838			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	261	697	0.375	260	0.6	8.234	A
C-AB	532	657	0.811	524	3.7	25.518	C
C-A	953			953			
A-B	87			87			
A-C	1026			1026			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	261	697	0.375	261	0.6	8.263	A
C-AB	532	657	0.811	531	4.0	28.197	C
C-A	953			953			
A-B	87			87			
A-C	1026			1026			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	213	741	0.288	214	0.4	6.842	A
C-AB	434	701	0.620	443	1.7	14.452	B
C-A	779			779			
A-B	71			71			
A-C	838			838			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	178	773	0.231	179	0.3	6.066	A
C-AB	364	733	0.496	366	1.0	9.896	A
C-A	652			652			
A-B	59			59			
A-C	702			702			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.96	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	1.57	0.07	1.03	3.48	4.82			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.03	0.26	0.59	0.59			N/A	N/A
C-AB	3.74	0.04	0.38	9.44	20.06			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.03	0.29	1.30	2.76			N/A	N/A
C-AB	3.97	0.03	0.31	5.54	19.64			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C-AB	1.69	0.04	0.44	4.51	7.52			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	1.01	0.03	0.33	2.31	4.94			N/A	N/A

2031 Ford + Comm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		48.96	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	48.96	E

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)
D49	2031 Ford + Comm	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		✓	1079	100.000
B		✓	677	100.000
C		✓	1223	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	41	1038
	B	0	0	677
	C	983	240	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.11	203.22	45.1	90.2	F
C-AB	0.41	9.58	0.7	3.0	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)	Unsignalised level of service
B-AC	510	757	0.673	502	2.0	13.706	B
C-AB	181	722	0.250	179	0.3	6.622	A
C-A	740			740			
A-B	31			31			
A-C	781			781			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	609	722	0.843	598	4.5	27.009	C
C-AB	216	687	0.314	215	0.5	7.618	A
C-A	884			884			
A-B	37			37			
A-C	933			933			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	745	674	1.106	658	28.3	101.687	F
C-AB	264	640	0.413	263	0.7	9.537	A
C-A	1082			1082			
A-B	45			45			
A-C	1143			1143			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	745	674	1.106	670	45.1	203.222	F
C-AB	264	640	0.413	264	0.7	9.584	A
C-A	1082			1082			
A-B	45			45			
A-C	1143			1143			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	609	722	0.843	707	20.5	171.681	F
C-AB	216	687	0.314	217	0.5	7.667	A
C-A	884			884			
A-B	37			37			
A-C	933			933			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	510	757	0.673	583	2.2	29.101	D
C-AB	181	722	0.250	181	0.3	6.669	A
C-A	740			740			
A-B	31			31			
A-C	781			781			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.96	0.25	1.16	3.46	4.33			N/A	N/A
C-AB	0.33	0.00	0.00	0.33	0.33			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.53	0.10	1.73	11.55	16.41			N/A	N/A
C-AB	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	26.31	6.16	22.73	47.03	56.07			N/A	N/A
C-AB	0.69	0.03	0.26	0.69	0.69			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	45.11	13.44	40.39	76.98	90.23			N/A	N/A
C-AB	0.70	0.03	0.29	1.17	3.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	20.61	2.97	16.67	40.00	49.08			N/A	N/A
C-AB	0.46	0.00	0.00	0.46	0.46			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.19	0.03	0.29	2.19	9.12			N/A	N/A
C-AB	0.34	0.03	0.25	0.46	0.48			N/A	N/A

2031 Ford + Comm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		37.15	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	37.15	E

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)
D50	2031 Ford + Comm	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		✓	1011	100.000
B		✓	313	100.000
C		✓	1494	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	79	932
	B	0	0	313
	C	866	628	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.49	10.22	1.0	3.1	B
C-AB	1.05	104.15	32.0	92.3	F
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)	Unsignalised level of service
B-AC	236	773	0.305	234	0.4	6.658	A
C-AB	473	733	0.645	466	1.7	13.166	B
C-A	652			652			
A-B	59			59			
A-C	702			702			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	741	0.380	281	0.6	7.811	A
C-AB	565	701	0.806	557	3.7	23.804	C
C-A	778			778			
A-B	71			71			
A-C	838			838			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	345	697	0.495	343	1.0	10.145	B
C-AB	1645	1561	1.054	1581	19.6	94.184	F
C-A	0			0			
A-B	87			87			
A-C	1026			1026			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	345	697	0.495	345	1.0	10.223	B
C-AB	1645	1561	1.054	1595	32.3	94.924	F
C-A	0			0			
A-B	87			87			
A-C	1026			1026			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	741	0.380	283	0.6	7.883	A
C-AB	565	701	0.806	672	5.3	15.347	C
C-A	778			778			
A-B	71			71			
A-C	838			838			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	236	773	0.305	236	0.4	6.720	A
C-AB	473	733	0.645	486	1.9	15.349	C
C-A	652			652			
A-B	59			59			
A-C	702			702			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C-AB	1.74	0.18	1.43	3.03	3.89			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.13	0.88	1.38	1.44			N/A	N/A
C-AB	3.67	0.06	0.90	10.29	16.34			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.96	0.03	0.26	0.96	0.96			N/A	N/A
C-AB	19.60	1.00	13.07	44.68	58.32			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.97	0.03	0.28	0.97	3.07			N/A	N/A
C-AB	31.97	1.54	22.45	71.51	92.32			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.08	0.77	1.36	1.43			N/A	N/A
C-AB	5.31	0.04	0.42	14.59	28.08			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.04	0.38	1.20	1.35			N/A	N/A
C-AB	1.89	0.03	0.29	1.89	7.04			N/A	N/A

2031 Ford + Comm + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		\$1.90	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	\$1.90	F

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)
D51	2031 Ford + Comm + Dev	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		✓	1079	100.000
B		✓	687	100.000
C		✓	1227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	41	1038
	B	0	0	687
	C	983	244	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.12	222.80	59.2	35.8	F
C-AB	0.42	9.70	0.7	3.0	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)	Unsignalised level of service
B-AC	517	757	0.683	509	2.1	14.073	B
C-AB	184	722	0.255	182	0.3	6.659	A
C-A	740			740			
A-B	31			31			
A-C	781			781			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	618	722	0.856	606	4.9	28.552	C
C-AB	219	687	0.319	219	0.5	7.676	A
C-A	884			884			
A-B	37			37			
A-C	933			933			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	756	674	1.120	660	28.9	108.645	F
C-AB	269	640	0.420	268	0.7	9.648	A
C-A	1082			1082			
A-B	45			45			
A-C	1143			1143			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	756	674	1.120	671	59.2	222.805	F
C-AB	269	640	0.420	269	0.7	9.697	A
C-A	1082			1082			
A-B	45			45			
A-C	1143			1143			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	618	722	0.855	708	27.5	250.580	F
C-AB	219	687	0.319	220	0.5	7.725	A
C-A	884			884			
A-B	37			37			
A-C	933			933			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	517	757	0.683	618	2.3	42.095	E
C-AB	184	722	0.255	184	0.3	6.706	A
C-A	740			740			
A-B	31			31			
A-C	781			781			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.05	0.22	1.19	3.74	4.74			N/A	N/A
C-AB	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.87	0.11	1.96	12.35	17.41			N/A	N/A
C-AB	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	28.88	7.85	25.46	50.01	59.00			N/A	N/A
C-AB	0.71	0.03	0.26	0.71	0.71			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	50.23	17.32	45.85	82.51	95.56			N/A	N/A
C-AB	0.72	0.03	0.29	1.13	3.04			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	27.59	7.08	24.13	48.41	57.36			N/A	N/A
C-AB	0.47	0.04	0.39	1.22	1.36			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.33	0.03	0.29	2.33	9.80			N/A	N/A
C-AB	0.34	0.03	0.26	0.47	0.49			N/A	N/A

2031 Ford + Comm + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A27/Yapton Lane	T-Junction	Two-way	Two-way	Two-way		44.88	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.88	E

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)
D52	2031 Ford + Comm + Dev	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		✓	1011	100.000
B		✓	318	100.000
C		✓	1502	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	79	932
	B	0	0	318
	C	866	636	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.50	10.39	1.0	3.1	B
C-AB	1.07	125.94	38.1	98.6	F
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)	Unsignalised level of service
B-AC	239	773	0.310	238	0.4	6.705	A
C-AB	479	733	0.653	472	1.8	13.439	B
C-A	652			652			
A-B	59			59			
A-C	702			702			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	286	741	0.386	285	0.6	7.887	A
C-AB	572	701	0.816	564	3.9	24.800	C
C-A	778			778			
A-B	71			71			
A-C	838			838			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	350	697	0.503	349	1.0	10.302	B
C-AB	1654	1549	1.007	1584	21.4	88.275	F
C-A	0			0			
A-B	87			87			
A-C	1026			1026			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	350	697	0.503	350	1.0	10.385	B
C-AB	1654	1549	1.007	1595	38.1	100.363	F
C-A	0			0			
A-B	87			87			
A-C	1026			1026			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	286	741	0.386	287	0.6	7.962	A
C-AB	572	701	0.816	691	6.3	123.340	F
C-A	778			778			
A-B	71			71			
A-C	838			838			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	239	773	0.310	240	0.5	6.768	A
C-AB	479	733	0.653	496	2.0	16.217	C
C-A	652			652			
A-B	59			59			
A-C	702			702			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	1.81	0.16	1.44	3.32	4.24			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.13	0.88	1.38	1.44			N/A	N/A
C-AB	3.88	0.06	0.99	10.86	17.13			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.99	0.03	0.26	0.99	0.99			N/A	N/A
C-AB	21.41	1.05	15.18	47.07	60.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.00	0.03	0.28	1.00	3.08			N/A	N/A
C-AB	36.10	3.15	27.35	76.40	96.47			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.08	0.78	1.36	1.43			N/A	N/A
C-AB	6.30	0.05	0.48	18.02	32.24			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.04	0.39	1.22	1.36			N/A	N/A
C-AB	1.97	0.03	0.29	1.97	7.11			N/A	N/A

Transport
Sustainable
Development Planning
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