

**To: Leicestershire County Council
Highways Development Control**

From:

SLR Consulting Limited

Date: 14 June 2023

Project No. 403.10671.00001

RE: Dan's Lane/A47 junction Improvement Scheme Trigger Point Analysis

Introduction

This Technical Memorandum (TM) provides a summary of the revised junction capacity assessment at the Dan's Lane/A47 junction, following comments received from Leicestershire County Council (LCC) on the 11th May 2023 and the 30th May 2023 (see **Appendix 01**) in response to the Dan's Lane/A47 junction Improvement Scheme Trigger Point Analysis Technical Note issued to LCC on the 31st March 2023.

SLR responses to the comments received from LCC on the 11th May 2023 are provided in **Appendix 02**.

Assessment Scenarios

The assessment scenarios presented in this TM, as agreed with LCC, are 07:15 – 08:15, 0745 – 08:45 and 16:30 – 17:30 for:

- 2023 base year;
- 2028 base plus committed development and background traffic growth; and
- 2028 base plus background traffic growth, committed development and Griffen Park Units 1 and 2 (with no reductions for Building 1).

Trip Generation

Trip Rates

The consented vehicle trip rates for Griffen Park are presented in **Table 1** and **Table 2**.

Table 1: Consented Griffen Park Trip Rates (AM Peak)

Vehicle Type	B8		B2	
	In	Out	In	Out
Cars/LGVs	0.077	0.007	0.339	0.064
HGVs	0.055	0.044	0.014	0.014
Total	0.132	0.051	0.353	0.078

Table 2: Consented Griffen Park Trip Rates (PM Peak)

Vehicle Type	B8		B2	
	In	Out	In	Out
Cars/LGVs	0.021	0.085	0.113	0.368
HGVs	0.013	0.011	0.009	0.010
Total	0.034	0.096	0.122	0.378

Trip Generation

The consented trip generation for Units 1 and 2 at Griffen Park is presented in **Table 3** and **Table 4**.

Table 3: Consented Griffen Park Trip Generation per Unit (AM Peak)

Unit (sq. m GFA)	Vehicle Type	B8		B2		Total	
		In	Out	In	Out	In	Out
1 11,896	Cars/ LGVs	7	1	7	1	14	2
	HGVs	6	4	0	0	6	4
	Total	13	5	7	1	20	6
2 9,632	Cars/ LGVs	6	1	6	1	12	1
	HGVs	4	3	0	0	4	3
	Total	10	4	6	1	16	5

Table 4: Consented Griffen Park Trip Generation per Unit (PM Peak)

Unit (sq. m GFA)	Vehicle Type	B8		B2		Total	
		In	Out	In	Out	In	Out
1 (11,896)	Cars/ LGVs	2	7	2	7	4	14
	HGVs	1	1	0	0	1	1
	Total	3	8	2	7	5	15
2 (9,632)	Cars/ LGVs	2	2	2	8	4	10
	HGVs	2	2	0	0	2	2
	Total	4	4	2	8	6	12

Trip Distribution

The consented trip distribution for Griffen Park is presented in **Table 5**.

Table 5: Consented Griffen Park Trip Distribution

Arm	Cars / LGVs (%)		HGVs (%)	
	Arrivals	Departures	Arrivals	Departures
A47 north	21.0	11.0	48.9	36.0
A47 south	37.0	55.8	51.1	64.0



Trip Assignment

The consented trip assignment for Griffen Park at the Dan's Lane/A47 junction is presented in **Table 6** and **Table 7**.

Table 6: Consented Griffen Park Vehicle Movements at the Dan's Lane/A47 Junction (AM peak)

Unit (sq. m GFA)	Arm	Cars/ LGVs		HGVs		Total	
		In	Out	In	Out	In	Out
1 (11,896)	A47 north	3	0	2	5	5	5
	A47 south	5	1	1	1	6	2
1 and 2 (21,528)	A47 north	6	0	5	3	10	3
	A47 south	10	2	5	5	15	7

Table 7: Consented Griffen Park Vehicle Movements at the Dan's Lane/A47 Junction (PM peak)

Unit (sq. m GFA)	Arm	Cars/ LGVs		HGVs		Total	
		In	Out	In	Out	In	Out
1 (11,896)	A47 north	1	2	0	0	1	2
	A47 south	1	8	0	0	1	8
1 and 2 (21,528)	A47 north	2	3	1	1	3	4
	A47 south	3	13	2	2	5	15

Surveyed Traffic Flows

The surveyed (February 2023 – see **Appendix 03**) total vehicle movements at the Dan's Lane/A47 junction for the three surveyed peak hours are shown in **Table 8**.

Table 8: 2023 Surveyed Vehicle Movements at the Dan's Lane/A47 Junction

Arm	Time period		
	07:15 - 08:15	07:45 - 08:45	16:30 - 17:30 ¹
A47 Southwest ahead	591	509	454
A47 Southwest left	272	273	143
Dan's Lane right turn	148	166	172
Dan's Lane left turn	54	56	82
A47 Northeast right turn	148	143	85
A47 Northeast ahead	425	411	653
Total	1,638	1,558	1,589

¹ 16:30 evening peak hour chosen as it has the highest number of right turning vehicles from Dan's Lane



Future Year 2028 Traffic Flows

The following growth factors from TEMPRO for the morning and evening peak hours have been applied to the 2023 surveyed traffic flows:

- AM Peak - 1.0387; and
- PM Peak - 1.0388.

The resulting 2028 base year traffic flows are shown in **Table 9**.

Table 9: 2028 Base Year Traffic Flows

Arm	Time period		
	07:15 - 08:15	07:45 - 08:45	16:30 - 17:30
A47 Southwest ahead	614	529	472
A47 Southwest left	283	284	149
Dan's Lane right turn	154	172	179
Dan's Lane left turn	56	58	85
A47 Northeast right turn	154	149	88
A47 Northeast ahead	441	427	678
Total	1,701	1,618	1,651

Committed Development

The committed development traffic flows assumed at the Dan's Lane/A47 junction in 2028, based on the comments received from LCC are set out in **Appendix 04**.

Assessment Traffic Flows

The traffic flows at Dan's Lane/A47 junction for each of the assessment scenarios are set out in **Appendix 05**.

Impact Assessment

The impact assessment has been undertaken using PICADY (Junctions 10) and the outputs are provided in **Appendix 06**.

The base year 2023 model has been accepted by LCC as a basis for the assessment.

A summary of the results is set out in:

- Table 10 for the 07:15 to 08:15 scenario;
- Table 11 for the 07:45 to 08:45 scenario; and
- Table 12 for the 16:30 and 17:30 scenario.



Table 10: Dan's Lane/A47 PICADY Results (07:15 to 08:15)

SLR Scenario	Stream	Maximum RFC	Maximum Queue
2023 base	Dan's Lane to A47 northeast	0.18	0.2
	Dan's Lane to A47 southwest	0.70	2.2
	A47 northeast right turn to Dan's Lane	0.38	0.6
2028 base, background traffic growth, committed developments	Dan's Lane to A47 northeast	0.34	0.5
	Dan's Lane to A47 southwest	1.27	22.6
	A47 northeast right turn to Dan's Lane	0.52	1.1
2028 base, background traffic growth, committed developments, Griffen Park Units 1 and 2	Dan's Lane to A47 northeast	0.36	0.5
	Dan's Lane to A47 southwest	1.37	27.9
	A47 northeast right turn to Dan's Lane	0.56	1.2

Table 11: Dan's Lane/A47 PICADY Results (07:45 to 08:45)

SLR Scenario	Stream	Maximum RFC	Maximum Queue
2023 base	Dan's Lane to A47 northeast	0.18	0.2
	Dan's Lane to A47 southwest	0.70	2.2
	A47 northeast right turn to Dan's Lane	0.35	0.5
2028 base, background traffic growth, committed developments	Dan's Lane to A47 northeast	0.33	0.5
	Dan's Lane to A47 southwest	1.16	18.6
	A47 northeast right turn to Dan's Lane	0.48	0.9
2028 base, background traffic growth, committed developments, Griffen Park Units 1 and 2	Dan's Lane to A47 northeast	0.34	0.5
	Dan's Lane to A47 southwest	1.24	23.7
	A47 northeast right turn to Dan's Lane	0.51	1.0

Table 12: Dan's Lane/A47 PICADY Results (16:30 to 17:30)

SLR Scenario	Stream	Maximum RFC	Maximum Queue
2023 base	Dan's Lane to A47 northeast	0.22	0.3
	Dan's Lane to A47 southwest	0.65	1.8
	A47 northeast right turn to Dan's Lane	0.19	0.2
2028 base, background traffic growth, committed developments	Dan's Lane to A47 northeast	0.32	0.5
	Dan's Lane to A47 southwest	0.90	5.8
	A47 northeast right turn to Dan's Lane	0.26	0.4
2028 base, background traffic growth, committed developments, Griffen Park Units 1 and 2	Dan's Lane to A47 northeast	0.33	0.5
	Dan's Lane to A47 southwest	0.99	9.5
	A47 northeast right turn to Dan's Lane	0.27	0.4



In the morning peak (07:15 to 08:15, as the worst case):

- The junction is operating within its' operational capacity in the base year scenario, with a maximum RFC of 0.70 on Dan's Lane and a maximum queue of 2.2 vehicles;
- The addition of the background traffic growth and committed developments results in the RFC rising to 1.27 with a maximum queue of 22.6 vehicles on Dan's Lane; and
- The addition of Griffen Park Units 1 and 2 results in the RFC rising to 1.37 with a maximum queue of 27.9 vehicles on Dan's Lane.

In summary, in the evening peak:

- The junction is operating within its' operational capacity in the base year scenario, with a maximum RFC of 0.70 on Dan's Lane and a maximum queue of 2.2 vehicles;
- The addition of the background traffic growth and committed developments results in the RFC rising to 0.90 with a maximum queue of 5.8 vehicles on Dan's Lane; and
- The addition of Griffen Park Units 1 and 2 results in the RFC rising to 0.99 with a maximum queue of 9.5 vehicles on Dan's Lane.

As set out above, the critical peak is in the morning peak.

A maximum RFC of 1.36 and a maximum queue of 45.6 PCUs (an increase of nine PCUs from the base plus committed development scenario) in the morning peak hour was accepted by LCC associated with the impact of the Ashfield Farm development (Refs: 19/01243/OUT and 20/00984/OUT) – see **Appendix 07**). As the Griffen Park assessment has been undertaken using vehicle movements and HGV percentages, the maximum queues for the morning peak hour assessment have been converted to PCUs using the relevant average PCU factor per vehicle (see the results in **Appendix 06**) for the Dan's Lane to the A47 southwest movement:

- 2028, with background traffic growth and committed developments – 22.6 vehicles equates to 26 PCUs, using the 1.151 PCU factor; and
- 2028, with background traffic growth, committed developments and Griffen Park Units 1 and 2 – 27.9 vehicles equates to 33 PCUs, using the 1.18 PCU factor.

Based on the above, the maximum queue forecast for Griffen Park Units 1 and 2 in the 2028 morning peak. With background traffic growth and committed developments scenario would be 12 PCUs fewer than the 45.6 PCU queue agreed by LCC for the Ashfield Farm development. This represents an increase of seven PCUs from the 2028 morning peak with background traffic growth and committed developments scenario, which is a smaller increase than that agreed by LCC for the Ashfield Farm development.

SLR therefore considers that the level of traffic associated with Units 1 and 2 of Griffen Park can be accommodated at the Dan's Lane/A47 junction within the operational levels previously accepted by LCC.

Summary and Conclusion

This TM has shown that Units 1 and 2 could be accommodated at the Dan's Lane/A47 junction on top of the 2028 future year with background traffic growth and committed development traffic, with the queue on Dan's Lane (in the morning/critical peak) lower than the level previously accepted by LCC for the Ashfield Farm development.

Furthermore, the assessment presented in this TM is considered a very robust and unrealistic scenario for the following reasons:

- There is a tenant signed up for Unit 1 and strong interest in Unit 2, whereby these units are likely to be occupied by 2025. The anticipated construction period for the traffic



signals scheme is six months and therefore this is more than likely to be in place in 2026;

- Given the Barwell and Earl Shilton Sustainable Urban Extensions are proposed to commence construction in 2026, based on the above, the traffic signals scheme is more than likely to be in place before any vehicle movements associated with these are on the highway network; and
- The baseline traffic data (2023) shows a downward trend, and the assessment includes a large number of committed developments. Therefore, applying background traffic is highly likely to be overestimating future traffic. Applying background traffic growth in this scenario also goes against DfT's recent Transport Decarbonisation Plan, which sets out how we should be moving away from 'predict and provide' approach whereby we predict future demand and then provide for that, instead of a more sustainable 'vision and validate' approach.

Also, to reiterate comments presented in the Technical Note issued to LCC on the 31st March 2023:

- Traffic data collected at the Dan's Lane/A47 junction in February 2023 shows a 12% reduction in vehicle movements in the morning peak hour compared to the data used to inform the Griffen Park, land to the east of Peckleton Lane and Ashfield Farm TAs, with fewer opposing vehicle movements for right turning vehicles out of Dan's Lane. It is also around 5% lower than the original 2018 data, which shows a downward trend in vehicle movements at the junction (further supporting our view that background traffic growth should not be applied);
- The forecast trip generation in the morning peak hour for the full Griffen Park development could be added to the surveyed 2023 traffic flows and the total number of vehicles would be less than the 2023 baseline flows for the assessments in the Griffen Park, land to the east of Peckleton Lane and Ashfield Farm TAs; and
- The Dan's Lane/A47 junction is currently being used by Griffen Park construction traffic (cars, LGVs and HGVs), with approximately 16 vehicle movements through this during the morning peak hour. This is only nine fewer than what would be associated with Units 1 and 2.

Given the above, SLR proposes that the trigger point for Condition no. 35 is amended to allow Units 1 and 2 to be occupied prior to the scheme of mitigation being implemented, but which must be implemented by a date to be agreed between the Applicant and LCC. This Briefing Note has provided a strong evidence base to demonstrate that this would be acceptable in highways terms.



Appendix 01

LCC Comments



PRE-APPLICATION DETAILS:

District Reference Number:

Highway Reference Number: 2023/0130/04/P/HEN/R1

Location: Griffen Park, Dan's Lane - A47 Junction.

Proposal:

Re-consultation. Enquiry. S278 element of Dan's Lane/A47 Junction relating to 21/00619/FUL and the signalisation of the junction.

GENERAL DETAILS

Planning Case Officer:

Applicant: Andrew McGuigan Griffen

Parish: Leicester Forest West

Road Classification: Class A

Please note that the contents of this report including any attachments are offered as my officer opinion and will not prejudice any future decision the Highway Authority may make in relation to this matter.

The following comments are based on a desktop exercise; no site visit is undertaken for pre-application advice.

Background

The Local Highway Authority (LHA) understand that the applicant wishes to revise the trigger point for the A47/Dan's Lane junction highway mitigation scheme as required by condition 35 of application 21/00619/FUL, repeated below in full for ease of reference:

'No part of the development shall be occupied until such time as a scheme of mitigation at the A47 / Dans Lane junction as generally shown on drawing numbers 403.10671.00001.H005.4 and 403.10671.00001.H007.5 or 403.10671.00001.H009.1 and 403.10671.00001.H008.1 has been implemented in full.

Reason: To mitigate the impact of the development, in the general interests of highway safety and in accordance with the National Planning Policy Framework (2019).'

The previously submitted scoping note submitted to the LHA stated that *'at least Unit 1 or Unit 2 at Griffen Park should be permitted to be occupied prior to the construction of the traffic signal mitigation scheme at the Dan's Lane/A47 junction, but that this could be extended to both units*

together'.

In pre-application advice dated 15th February 2023 (reference 2023/0130/04/P/HEN) the LHA advised the applicant that in order to assess the impact of a revised trigger point phased testing would be required. This assessment should establish the baseline performance and then identify the proportionate impact of Units 1 and 2. The following assessment methodology could be undertaken:

- Undertake relevant counts at the existing A47/Dans Lane junction in order to ascertain current turning movements and junction performance,
- Produce a validated and calibrated base model for the junction and detail current performance,
- Calculate trip generation for units 1 and 2 and identify how many of these trips would assign through the A47/Dans Lane junction. (the approach to this being detailed),
- Identify a forecast year for first occupation of Units 1 and 2. (eg 2026).
- Apply an appropriate growth factor to observed turning counts to account for background growth up to the identified forecast year and apply this to the base model. (eg 2023 - 2026 background growth).
- Add the demand associated with Units 1 and 2 to the forecast flows identified above and identify the model performance for the forecast, with development (Unit 1 & 2) scenario,
- The results of the above assessment should then be presented to the LHA for review in addition to the input/output files and the actual junction model.

Submitted assessment

The LHA is subsequently in receipt of a further pre-application enquiry following the submission of SLR's document titled 'Dan's Lane/A47 Mitigation Scheme Trigger Point Analysis' which details the assessment undertaken. The LHA response to this pre-application enquiry is based on a review of this report. The LHA responds below under various sub-headings.

Background

The LHA note that, under sub heading 'Proposed Variation of Condition 35', the submitted report states that:

'Given the interest in tenant occupation of the site, we suggest that, if LCC is supportive, Condition no. 35 could be amended to require the scheme of mitigation to be in place before occupation of Unit 3, but also by a certain date, say by the end of 2025, which would give LCC comfort that the scheme will be delivered, despite the level of occupation at Griffen Park.'

The LHA advise that, for the avoidance of doubt, this is not an approach the LHA would support and that a revised trigger point would need to be underpinned by an appropriate evidence base to justify the trigger point proposed. This response is therefore based on the original request for the condition to be revised following occupation of units 1 and 2 on the basis that this was originally requested and of the information submitted (which covers units 1 and 2).

Trip Generation

The consented vehicle trip generation for Griffen Park between 07:30 - 08:30 is presented in tables 1 and 2, repeated below for ease of reference:

Table 1: Consented Griffen Park Trip Rates (07:30 to 08:30)

Vehicle Type	B8		B2	
	Arrivals	Departures	Arrivals	Departures
Cars/LGVs	0.077	0.007	0.339	0.064
HGVs	0.055	0.044	0.014	0.014
Total	0.132	0.051	0.353	0.078

Table 2: Consented Griffen Park Trip Generation per Unit (07:30 to 08:30)

Unit (sq. m GFA)	Vehicle Type	B8		B2		Total	
		Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
1 (11,896)	Cars/ LGVs	7	1	7	1	14	2
	HGVs	6	4	0	0	6	4
	Total	13	5	7	1	20	6
2 (9,632)	Cars/ LGVs	6	1	6	1	12	1
	HGVs	4	3	0	0	4	3
	Total	10	4	6	1	16	5
3 (15,782)	Cars/ LGVs	10	1	10	2	20	3
	HGVs	7	6	0	0	7	6
	Total	17	7	10	2	27	9
4 (47,199)	Cars/ LGVs	29	3	31	6	60	9
	HGVs	21	17	1	1	22	18
	Total	50	20	32	7	82	27
Total	Cars/ LGVs	52	6	54	10	106	15
	HGVs	37	30	1	1	38	31
	Total	90	36	55	11	145	46

When calculating the vehicle trip rates presented in Table 1 for the Gross Floor Area rates in Table 2 (split 80% for B8 and 20% for B2 as per the consented development) the LHA found that Unit 1 results in 21 arrivals and 7 departures. Furthermore, the LHA found 17 arrivals for the total Unit 2. The LHA would therefore request that table 2 is revised to indicate this.

Table 3 goes on to set out a proposed netting of the trip generation associated with Building 1 that previously operated on site, which was proposed in the consented development. However, the LHA note that table 3 identifies that the 14 AM peak trips have been netted entirely from the Unit 1 vehicle trip generation. On the basis the consented scheme deducted 14 AM peak trips (and 17 PM Peak trips) for the total vehicle trip generation across Units 1 - 4, for consistency and in accordance with the consented development's assessment the LHA request that this calculation is replicated for this assessment. Alternatively, on the basis this building has now been demolished then the LHA would also not object to a robust assessment that did not seek to net off any trips from this demolished building.

As covered below, the LHA also request a PM peak hour assessment and a sensitivity test. The

LHA therefore require the consented units 1 and 2 vehicle trip generation for the PM peak hour and relevant sensitivity test to be submitted for review.

Trip Distribution

The approach undertaken to trip distribution within the submitted report is identified in Table 4 and is in accordance within Table 6-2 of the Transport Assessment submitted in support of the consented development. This is therefore acceptable to the LHA.

Traffic Counts/Assessment hours

Table 6 of the submitted report details the outputs of a traffic survey undertaken at the Dan's Lane/A47 junction on Tuesday 28th February 2023 and is repeated below for ease of reference:

Table 6: 2023 Surveyed Vehicle Movements at the Dan's Lane/A47 Junction

Arm	Time period				
	07:00 - 08:00	07:15 - 08:15	07:30 - 08:30	07:45 - 08:45	08:00 - 09:00
A47 SW ahead	630	591	536	509	485
A47 SW left	217	272	289	273	237
Dan's Lane right turn	138	148	160	166	166
Dan's Lane left turn	65	54	50	56	59
A47 NE right turn	137	148	138	143	125
A47 NE ahead	394	425	430	411	375
Total	1,581	1,638	1,603	1,558	1,447

The LHA note that the assessment undertaken has utilised the 07:15 - 08:15 observed count data for robustness. Whilst this is acceptable for the AM assessment, the LHA also require the applicant to undertake a PM peak hour assessment in order to assess the junction operation during the peak demand hours. This is also required on the basis a key consideration of this assessment is the right turn movement from Dan's Lane to the A47 Hinckley Road (Southbound). As such, the LHA also request a sensitivity test with the time period of greatest flow on this movement to be undertaken and submitted for review e.g. 7:45-8:45.

Forecast Year/Modelling Scenarios

The LHA notes that an assessment year of 2025 has been identified as an estimate for Units 1 and 2 being constructed and occupied. The LHA would not accept this forecast year on the basis this is not five years following the proposed Section 73 application submission year, which is typically required to be assessed. The LHA therefore request that a forecast year of 2028 is assessed.

The LHA also note that the submitted report states that: 'Given the number of committed developments, background traffic growth has not been applied, as this is likely to be double counting'. This is not an approach the LHA supports and would request that an appropriate growth factor is required to be applied to the above traffic counts for the 2028 forecast year.

The submitted report summaries on pages 9 and 10 the assessment scenarios undertaken, which are repeated below for ease of reference:

2023 Base;

- Scenario 1a - 2025 Base + consented schemes;
- Scenario 1b - 2025 Base + consented schemes + Griffen Park Units 1 and 2;
- Scenario 2a - 2025 Base + consented schemes + 25% allocated/not consented schemes;
- Scenario 2b - 2025 Base + consented schemes + 25% allocated/not consented schemes + Griffen Park Units 1 and 2;
- Scenario 3a - 2025 Base + consented schemes + 100% allocated/not consented schemes; and
- Scenario 3b - 2025 Base + consented schemes + 100% allocated/not consented schemes + Griffen Park Units 1 and 2.

It is unclear to the LHA why seven scenarios have been assessed. The LHA would request that the following scenarios are assessed:

- 2023 base
- 2028 do min
- 2028 do min + dev

Committed Developments

In subsequent correspondence with the applicant team following the provision of pre-application advice reference 2023/0130/04/P/HEN, the LHA identified the required background assumptions required for the proposed assessment. For ease of reference and the avoidance of doubt these are repeated below:

- Barwell SUE ref 12/00295/OUT
- Earl Shilton SUE ref 21/01511/OUT
- Hastings Fields ref 19/1610/OUT (please note this is on the Blaby planning portal)
- Hinckley West Normandy Way ref 15/00188/OUT
- Desford residential sites:
 - 12/01125/REM Hunts Lane
 - 14/00816/FUL Land West Of Cambridge Drive
 - 19/00149/OUT; 19/01416/REM Land Opposite Bosworth College,
 - 18/01252/OUT Land East of Peckleton Lane
- Newbold Verdon residential sites:
 - 11/00489/FUL Dragon Lane
 - 20/00143/FUL Land South of Bosworth Lane
 - 22/00277/OUT Brascote Lane
 - any of the identified committed growth included within the 2020 Transport Assessment that are not included in the above list.

The submitted report identifies (in table 9) a review of the above committed developments, which is repeated below for ease of reference:

Table 9: Review of committed developments

Development	Details	Review
12/00295/OUT Barwell SUE	Allocated sites, not yet determined	Unlikely to be many (if any) vehicle movements on the highway network in 2025
21/01511/OUT Earl Shilton SUE		Include in a sensitivity assessments only
19/1610/OUT Hasting Fields		(Assumed flows provided in Appendix 04)
15/00188/OUT Hinckley West Normandy Way	Under construction, some may already be occupied	12km from the Dan's Lane / A47 junction and the TA only shows to the B447 Ashby Road. Include in the assessment, with 50% of the traffic flows at the junction. (Assumed flows provided in Appendix 04)
12/01125/REM Hunts Lane	Already constructed	Vehicle movements would be included in traffic survey data,

Page 7

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		although unlikely to have many (if any) vehicles impacting the junction Do not include in the assessment
14/00816/FUL Land West of Cambridge Drive	1 vehicle movement (which could be to Griffen Park only)	Do not include in the assessment
19/00149/OUT Land Opposite Bosworth College	Currently under construction with some dwellings already occupied (estimate of 25%) Vehicles unlikely to use the junction and would be very few if they did	Do not include in the assessment
18/01252/OUT Land East of Peckleton Lane	Currently under construction	Include in the assessment Trip generation from the TA (Flows provided in Appendix 04)
11/00489/FUL Dragon Lane	Vehicles unlikely to use the junction and would be very few if they did	Do not include in the assessment
20/00143/FUL Land South of Bosworth Lane	Vehicles using the B582 east are unlikely to use Peckleton Lane to Dan's Lane and the A47	
22/00277/OUT Brascote Lane	Vehicles unlikely to use the junction and would be very few if they did Vehicles using the B582 east are unlikely to use Peckleton Lane to Dan's Lane and the A47 Those using Brascote Lane south unlikely to be heading to the A47 and via the Dan's Lane junction	
11/01001/OX Lubbersthorpe SUE	Currently under construction and 871 dwellings are already occupied.	Estimate an additional 300 dwellings occupied by 2025 Include in the assessment (Assumed flows provided in Appendix 04)
14/01279/OUT Westfield Farm	Currently under construction with an estimate of 75% dwellings already occupied	Include 25% of traffic flows in the assessment (Assumed flows provided in Appendix 04)

The LHA note that Barwell SUE, Earl Shilton SUE and Hastings Fields are not included within the assessment because (as the above states) *'Unlikely to be many (if any) vehicle movements on the highway network in 2025'*. Appendix 4 of the submitted report indicates the assumed flows utilised in the sensitivity test. The LHA requires the 2028 forecast year and as such requests that the trajectory and anticipated traffic flows for Barwell SUE and Earl Shilton SUE for this year are submitted for review and included within the assessment where appropriate. The LHA also requires the inclusion of an anticipated traffic flow for an assumed 388 dwelling build out for

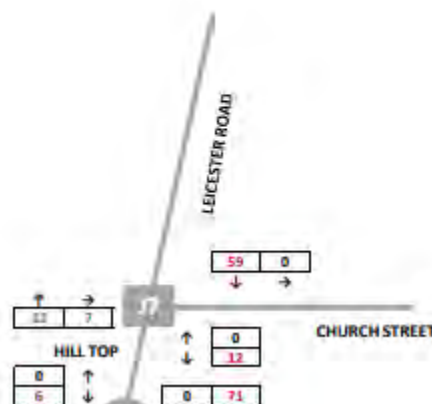
Hastings Fields in 2028 (based upon the DPD allocation). The anticipated amount of traffic estimated through the Dan's Lane/A47 junction should be calculated based on the submitted Transport Assessment and submitted for review.

For Lubbesthorpe SUE (application reference 11/0100/1/OX) the LHA accepts the approach outlined above and in Appendix 4 however requests the assumed build out is revised to a 1427 dwelling build out (for Lubbesthorpe SUE) and revised traffic flows are submitted for review and included within a revised assessment.

For Hinckley West Normandy Way (application reference 15/00188/OUT) the LHA request further information on the build out assumptions applied. The LHA request that the site is assumed to have a 440 dwelling build out by 2028 in accordance with the understood trajectory, and for assumed traffic flows to be submitted for review.

The LHA notes that for application reference 18/01252/OUT (Land East of Peckleton Lane) that Appendix 4 has extrapolated Ashby Road Junction flows and assumes 50% at the A47/Dan's Lane junction. The LHA would require 100% of the identified flows to be included on the basis it is currently anticipated that this site will be fully built out by the forecast year of 2028.

The LHA note that, in relation to application 14/01279/OUT (Westfield Farm) the above table states that 25% of traffic flows have been assumed. Appendix 4 of the submitted report then details this estimate, indicating that 25% of the anticipated AM Peak traffic flows from A47 East to the proposed development (1) and from Leicester Road away from the proposed development (4) utilise the Dan's Lane/A47 Junction. The LHA would accept such an approach however would also require that the applicant also assess 75% of the anticipated proposed development traffic flows from Leicester Road northbound (24 vehicle trips) also route through Dan's Lane/A47 junction given the closer proximity of this junction and the likely possibility of development traffic continuing through the A47. The below is extracted from the Transport Assessment (Appendix I) submitted in support of application 14/01279/OUT for ease of reference:



The LHA note that traffic flows from approved applications 19/00149/OUT, 11/00489/FUL, 20/00143/FUL , 22/00277/OUT are not included in the assessment as indicated in Table 6. The LHA requires evidence to be submitted from the relevant Transport Assessments (such as forecast vehicle trip generation, distribution and assignment) and adopted/draft Local Plan trajectories to be submitted for review prior to this being agreed by the LHA.

Junction Model

The LHA note that the submitted report identifies an issue with calibrating the PICADY model utilised as repeated below:

A process of calibration of the PICADY model used for the Griffen Park, land to the east of Peckleton Lane and Ashfield Farm planning applications has been attempted based on the observed queueing identified in the 2023 traffic survey; however, despite manually adjusting various geometry inputs to the model, the mean maximum queue between 07:15 and 08:15 for the right turn out of Dan's Lane and the right turn in from the A47 northeast could not be replicated, with slight underestimation.

The Junctions 10 file associated with the A47 / Dan's Lane assessments was not provided to the LHA (as identified as a requirement within pre-application advice response reference 2023/0130/04/P/HEN); however, this was subsequently provided to the LHA on 4th May 2023. Notwithstanding this, the LHA have undertaken a review of the Junctions 10 PICADY model provided and accept the calibration of the model. The LHA note however that the base traffic flows are entered in vehicles rather than PCU's and would request that this is revised to PCU's for review. On the basis that the forecast year and inputted assumptions have not been agreed (as covered above) the LHA has not reviewed the inputs to the model. The LHA would therefore firstly request that the applicant review the above response and revise the forecast year, vehicle trip generation, committed development and background growth inputs to the model in the first instance. Once this has been undertaken, a revised report, Junctions 10 PICADY model file and model inputs/outputs should be submitted for review.

Date Received
31 March 2023

Case Officer
Perry Miller

Reviewer
HH

Date issued
11 May 2023

Daniel Moran

From: Perry Miller <Perry.Miller@leics.gov.uk>
Sent: 30 May 2023 16:50
To: Daniel Moran
Cc: Harry Horsley
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement
Attachments: Appendix 4 extract.pdf; Part-7-appendix-c-assessing-the-transport-impacts-of-development.pdf

Hi Dan

Following our discussion Tuesday we have reviewed the matters discussed and respond as below.

For the forecast year required for the assessment of units 1 and 2 prior to the delivery of the Dan's Lane/A47 junction following your proposal to use 2025, our position remains that a 2028 forecast year is required on the basis this will ensure greater certainty over the delivery of the required Peckleton Lane widening to 7.3m which is required prior to occupation of any units in accordance with the wording of condition 33 for decision notice 21/00619/FUL (and subsequently approved discharge of condition application 22/00264/DISCON) which I understand is now at the technical approval stage. This is also required in accordance with the Leicestershire Highway Design Guide Part 7 Appendix C (attached for ease of reference) which states that junctions should normally be assessed at least for a period of not less than five years after you have submitted your last planning application. Please find an extract below:

The capacity assessment year

- 1.29 **The site junction:** This includes new junctions on to the highway network and existing junctions either in their current form or in an improved form. In all cases, junctions should normally be assessed at least:
- for the year the development is expected to open (that is fully completed and occupied);
 - for a period of not less than five years after you have submitted your last planning application - this could be a 'reserved matters' application. The actual period for a particular development will depend on a number of factors including:
 - local development plan documents;
 - the timescale for the full completion of the development; and
 - if there are limits on the volume of traffic the road network can manage within the vicinity of the site); and
 - any time in between the above where the traffic situation may be worse.

Regarding your query in relation to the AM peak in looking at our last pre-application response on this matter it states *'the LHA also request a sensitivity test with the time period of greatest flow on this movement to be undertaken and submitted for review e.g. 7:45-8:45'* which remains required on the basis the submitted traffic survey identified this to be the busiest time period for the Dan's Lane right turning movement which it is key to understand if this will operate sufficiently should units 1 and 2 be brought forward.

Regarding your query in relation flows for the SUE's Barwell SUE, Earl Shilton SUE and Hastings Fields we note that appendix 4 of the SLR report submitted (extract attached) identifies the flows for these sites and we would be content with these being extracted as identified provided these are growthed up to a 2028 forecast year appropriately.

Finally, you also queried Newbold Verdon sites when we met in which we had requested for inclusion of three sites in our last response. From our discussion you suggested that these shouldn't be included owing to their proximity from the development and as such their unlikely traffic impact. I've therefore had a further look at these and from review of their respective Transport Assessments comment further as per the below:

- 11/00489/FUL Dragon Lane – not required for the assessment
- 20/00143/FUL Land South of Bosworth Lane – not required for the assessment
- 22/00277/OUT Brascote Lane – this is required on the basis the submitted PRTM assessment identifies anticipated traffic flows utilising the junction year as per PRTM forecasting report submitted 10th May 2023. Please extract flows from this and the TA extracts published 10th May 2023 and calculate for an forecast assessment year of 2028 to be submitted for review.

I trust this is of assistance.

Kind Regards,

Perry Miller (he/him)

Transport Planner
Highway Development Management
Environment and Transport
Leicestershire County Council
Tel: 0116 305 3266
Email: Perry.Miller@leics.gov.uk

Please note that the contents of this email including any attachments are offered as my officer opinion and will not prejudice any future decision the Highway Authority may make in relation to this matter.

From: Perry Miller
Sent: 19 May 2023 12:51
To: Daniel Moran <dmoran@slrconsulting.com>
Cc: Harry Horsley <Harry.Horsley@leics.gov.uk>
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement

Thanks Dan I've moved it. Hopefully they can sort for good!

Best wishes

Perry

From: Daniel Moran <dmoran@slrconsulting.com>
Sent: 19 May 2023 11:58
To: Perry Miller <Perry.Miller@leics.gov.uk>
Cc: Harry Horsley <Harry.Horsley@leics.gov.uk>
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement

Thanks, Perry

I've been having various issues since a bad fall I had a few months ago – bit fed up of being in discomfort!

Let's go for 09.30 – 10.00

Cheers

Dan

Daniel Moran

Associate - Transport and Mobility Planning

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From: Perry Miller <Perry.Miller@leics.gov.uk>
Sent: 19 May 2023 11:54
To: Daniel Moran <dmoran@slrconsulting.com>
Cc: Harry Horsley <Harry.Horsley@leics.gov.uk>
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement

Hi Dan

Yes no problem and sorry to hear about this – hope you are ok! Our availability is for the Tuesday 23rd is below (apologies we do not have availability Monday):

09:30 -10:00

12:30 – 13:00

14:45 – 15:15

16:30 – 17:00

If you can let me know an I'll move the meeting block and hope the hospital goes ok

Kind Regards,

Perry Miller (he/him)

Transport Planner

Highway Development Management

Environment and Transport

Leicestershire County Council
Tel: 0116 305 3266
Email: Perry.Miller@leics.gov.uk

Please note that the contents of this email including any attachments are offered as my officer opinion and will not prejudice any future decision the Highway Authority may make in relation to this matter.

From: Daniel Moran <dmoran@slrconsulting.com>
Sent: 19 May 2023 11:50
To: Perry Miller <Perry.Miller@leics.gov.uk>
Cc: Harry Horsley <Harry.Horsley@leics.gov.uk>
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement

Hi Perry

Apologies, do you and Harry have any availability on Monday or Tuesday for our Teams call instead of this afternoon?

I've been advised to go to A&E to get checked out due to some swelling in my leg that I have been experiencing recently, which seems to be getting worse and more painful.

Let me know if that works?

Regards

Dan

Daniel Moran
Associate - Transport and Mobility Planning

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M +44 779 595 8353
E dmoran@slrconsulting.com

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From: Perry Miller <Perry.Miller@leics.gov.uk>
Sent: 17 May 2023 09:56
To: Daniel Moran <dmoran@slrconsulting.com>
Cc: Harry Horsley <Harry.Horsley@leics.gov.uk>
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement

Thanks Dan 2 is fine I've sent it across

Best wishes

Perry

From: Daniel Moran <dmoran@slrconsulting.com>
Sent: 17 May 2023 09:53
To: Perry Miller <Perry.Miller@leics.gov.uk>
Cc: Harry Horsley <Harry.Horsley@leics.gov.uk>
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement

Hi Perry

Thanks

I'm free any time from 2pm if that suits?

If not, I am free all-day Monday

Cheers

Dan

Daniel Moran

Associate - Transport and Mobility Planning

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From: Perry Miller <Perry.Miller@leics.gov.uk>
Sent: 17 May 2023 09:31
To: Daniel Moran <dmoran@slrconsulting.com>
Cc: Harry Horsley <Harry.Horsley@leics.gov.uk>
Subject: RE: Griffen park - Dan's Lane / A47 junction improvement

Hi Dan

No problem myself and colleague Harry can discuss this with you. Would you have availability this Friday? If so could you please provide me with a half an hour availability during office hours on the Friday and I will send over a teams meeting calendar slot to yourself so as to facilitate myself and Harry being on the call - thank you

Kind Regards,

Perry Miller (he/him)
Transport Planner
Highway Development Management
Environment and Transport
Leicestershire County Council
Tel: 0116 305 3266
Email: Perry.Miller@leics.gov.uk

Please note that the contents of this email including any attachments are offered as my officer opinion and will not prejudice any future decision the Highway Authority may make in relation to this matter.

From: Daniel Moran <dmoran@slrconsulting.com>
Sent: 15 May 2023 16:23
To: Perry Miller <Perry.Miller@leics.gov.uk>
Subject: Griffen park - Dan's Lane / A47 junction improvement

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Hi Perry

Thanks for your comments on the trigger point analysis, which we have reviewed

Would you have any availability for a Teams call to run through it?

Can you give me availability later this week?

Cheers

Dan

Daniel Moran
Associate - Transport and Mobility Planning

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M +44 779 595 8353
E dmoran@slrconsulting.com

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Appendix 02

SLR Responses to LCC Comments



LCC	SLR
When calculating the vehicle trip rates presented in Table 1 for the Gross Floor Area rates in Table 2 (split 80% for B8 and 20% for B2 as per the consented development) the LHA found that Unit 1 results in 21 arrivals and 7 departures. Furthermore, the LHA found 17 arrivals for the total Unit 2. The LHA would therefore request that table 2 is revised to indicate this.	Rounding errors of 1 vehicle movement. The assessment flows have now been amended as set out further below.
Table 3 goes on to set out a proposed netting of the trip generation associated with Building 1 that previously operated on site, which was proposed in the consented development. However, the LHA note that table 3 identifies that the 14 AM peak trips have been netted entirely from the Unit 1 vehicle trip generation	The revised assessment does not net off the trip generation associated with Building 1 and therefore a robust assessment.
On the basis the consented scheme deducted 14 AM peak trips (and 17 PM Peak trips) for the total vehicle trip generation across Units 1 - 4, for consistency and in accordance with the consented development's assessment the LHA request that this calculation is replicated for this assessment.	
Alternatively, on the basis this building has now been demolished then the LHA would also not object to a robust assessment that did not seek to net off any trips from this demolished building.	
As covered below, the LHA also request a PM peak hour assessment and a sensitivity test. The LHA therefore require the consented units 1 and 2 vehicle trip generation for the PM peak hour and relevant sensitivity test to be submitted for review.	The assessment now includes 07:15-08:15, 07:45-08:45 and 16:30-17:30 scenarios.
The approach undertaken to trip distribution within the submitted report is identified in Table 4 and is in accordance within Table 6-2 of the Transport Assessment submitted in support of the consented development. This is therefore acceptable to the LHA	Noted.
The LHA note that the assessment undertaken has utilised the 07:15 - 08:15 observed count data for robustness. Whilst this is acceptable for the AM assessment, the LHA also require the applicant to undertake a PM peak hour assessment in order to assess the junction operation during the peak demand hours. This is also required on the basis a key consideration of this assessment is the right turn movement from Dan's Lane to the A47 Hinckley Road (Southbound). As such, the LHA also request a sensitivity test with the time period of greatest flow on this movement to be undertaken and submitted for review e.g. 7:45-8:45.	The assessment now includes 07:15-08:15, 07:45-08:45 and 16:30-17:30 scenarios.
The LHA notes that an assessment year of 2025 has been identified as an estimate for Units 1 and 2 being constructed and occupied. The LHA would not accept this forecast year on the basis this is not five years following the proposed Section 73 application submission year, which is typically required to be assessed. The LHA therefore request that a forecast year of 2028 is assessed.	The 2028 assessment scenario has been provided, including background traffic growth. SLR does not consider the requirement for a 2028 scenario to be realistic and goes against DfT's recent Transport Decarbonisation Plan, which sets out how we should be moving away from 'predict and provide' approach

LCC	SLR
The LHA also note that the submitted report states that: 'Given the number of committed developments, background traffic growth has not been applied, as this is likely to be double counting'. This is not an approach the LHA supports and would request that an appropriate growth factor is required to be applied to the above traffic counts for the 2028 forecast year	whereby we predict future demand and then provide for that, instead of a more sustainable 'vision and validate' approach. SLR would also reiterate that the baseline traffic data (2023) shows a downward trend, and the assessment includes a large number of committed developments. Therefore, applying background traffic is likely to be overestimating future traffic volumes.
It is unclear to the LHA why seven scenarios have been assessed. The LHA would request that the following scenarios are assessed: • 2023 base • 2028 do min • 2028 do min + dev	These scenarios have now been provided.
The LHA note that Barwell SUE, Earl Shilton SUE and Hastings Fields are not included within the assessment because (as the above states) 'Unlikely to be many (if any) vehicle movements on the highway network in 2025'. Appendix 4 of the submitted report indicates the assumed flows utilised in the sensitivity test. The LHA requires the 2028 forecast year and as such requests that the trajectory and anticipated traffic flows for Barwell SUE and Earl Shilton SUE for this year are submitted for review and included within the assessment where appropriate.	See updated traffic flows and assumptions in Appendix 04.
The LHA also requires the inclusion of an anticipated traffic flow for an assumed 388 dwelling build out for Hastings Fields in 2028 (based upon the DPD allocation). The anticipated amount of traffic estimated through the Dan's Lane/A47 junction should be calculated based on the submitted Transport Assessment and submitted for review.	
For Lubbesthorpe SUE (application reference 11/0100/1/OX) the LHA accepts the approach outlined above and in Appendix 4 however requests the assumed build out is revised to a 1427 dwelling build out (for Lubbesthorpe SUE) and revised traffic flows are submitted for review and included within a revised assessment	See updated traffic flows and assumptions in Appendix 04.
For Hinckley West Normandy Way (application reference 15/00188/OUT) the LHA request further information on the build out assumptions applied. The LHA request that the site is assumed to have a 440 dwelling build out by 2028 in accordance with the understood trajectory, and for assumed traffic flows to be submitted for review.	See updated traffic flows in Appendix 04.
The LHA notes that for application reference 18/01252/OUT (Land East of Peckleton Lane) that Appendix 4 has extrapolated Ashby Road Junction flows and assumes 50% at the A47/Dan's Lane junction. The LHA would require 100% of the identified flows to be included on the basis it is currently anticipated that this site will be fully built out by the forecast year of 2028.	100% of these flows were applied to the assessment. The extrapolated Ashby Road junction flows are associated with the Hinckley West Normandy Way scheme. See traffic flows and assumptions in Appendix 04.

LCC	SLR
The LHA note that, in relation to application 14/01279/OUT (Westfield Farm) the above table states that 25% of traffic flows have been assumed. Appendix 4 of the submitted report then details this estimate, indicating that 25% of the anticipated AM Peak traffic flows from A47 East to the proposed development (1) and from Leicester Road away from the proposed development (4) utilise the Dan's Lane/A47 Junction. The LHA would accept such an approach however would also require that the applicant also assess 75% of the anticipated proposed development traffic flows from Leicester Road northbound (24 vehicle trips) also route through Dan's Lane/A47 junction given the closer proximity of this junction and the likely possibility of development traffic continuing through the A47.	See updated traffic flows and assumptions in Appendix 04.
The LHA note that traffic flows from approved applications 19/00149/OUT, 11/00489/FUL, 20/00143/FUL, 22/00277/OUT are not included in the assessment as indicated in Table 6. The LHA requires evidence to be submitted from the relevant Transport Assessments (such as forecast vehicle trip generation, distribution and assignment) and adopted/draft Local Plan trajectories to be submitted for review prior to this being agreed by the LHA.	As per the further LCC comments on the 30th May 2022, we have included 22/00277/OUT Brascote Lane. See updated traffic flows and assumptions in Appendix 04.
The Junctions 10 file associated with the A47 / Dan's Lane assessments was not provided to the LHA (as identified as a requirement within pre-application advice response reference 2023/0130/04/P/HEN); however, this was subsequently provided to the LHA on 4th May 2023. Notwithstanding this, the LHA have undertaken a review of the Junctions 10 PICADY model provided and accept the calibration of the model	Noted.
The LHA note however that the base traffic flows are entered in vehicles rather than PCU's and would request that this is revised to PCU's for review.	This is not required. Vehicle numbers are entered with HGV percentages added for each turning movement.
On the basis that the forecast year and inputted assumptions have not been agreed (as covered above) the LHA has not reviewed the inputs to the model. The LHA would therefore firstly request that the applicant review the above response and revise the forecast year, vehicle trip generation, committed development and background growth inputs to the model in the first instance. Once this has been undertaken, a revised report, Junctions 10 PICADY model file and model inputs/outputs should be submitted for review	As set out above and in the summary note.

Appendix 03

Traffic Survey Data



Dan's Lane, Leicester

Tuesday 28th February 2023

Junction: 1

Approach: A47 Hinckley Road North

TIME	Ahead to A47 Hinckley Road (S)									Right to Dan's Lane								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
06:30 - 06:45	0	0	40	10	1	0	0	51	51.5	2	1	106	6	0	1	0	116	115.1
06:45 - 07:00	0	0	47	13	0	1	1	62	64.3	1	2	67	6	2	3	0	81	83.9
Hourly Total	0	0	87	23	1	1	1	113	115.8	3	3	173	12	2	4	0	197	199.0
07:00 - 07:15	1	0	56	11	4	2	1	75	79.8	1	0	14	3	3	3	0	24	28.6
07:15 - 07:30	0	1	74	15	2	1	1	94	96.7	0	1	25	3	1	2	0	32	34.5
07:30 - 07:45	0	1	88	15	7	2	1	114	120.5	0	0	26	4	0	2	0	32	34.6
07:45 - 08:00	1	0	89	14	3	1	3	111	116.0	0	0	38	7	1	3	0	49	53.4
Hourly Total	2	2	307	55	16	6	6	394	413.0	1	1	103	17	5	10	0	137	151.1
08:00 - 08:15	0	0	76	19	8	2	1	106	113.6	0	0	23	2	5	5	0	35	44.0
08:15 - 08:30	0	0	72	20	4	3	0	99	104.9	0	0	19	3	0	0	0	22	22.0
08:30 - 08:45	0	0	68	19	6	0	2	95	100.0	0	0	27	3	3	1	3	37	42.8
08:45 - 09:00	0	0	52	13	5	4	1	75	83.7	0	0	14	5	5	2	5	31	41.1
Hourly Total	0	0	268	71	23	9	4	375	402.2	0	0	83	13	13	8	8	125	149.9
09:00 - 09:15	0	0	62	20	10	4	2	98	110.2	0	0	8	8	3	7	1	27	38.6
09:15 - 09:30	1	0	44	10	8	1	2	66	72.5	0	0	11	3	0	3	0	17	20.9
Hourly Total	1	0	106	30	18	5	4	164	182.7	0	0	19	11	3	10	1	44	59.5

TOTAL	3	2	768	179	58	21	15	1046	1113.7	4	4	378	53	23	32	9	503	559.5
--------------	----------	----------	------------	------------	-----------	-----------	-----------	-------------	---------------	----------	----------	------------	-----------	-----------	-----------	----------	------------	--------------

16:00 - 16:15	0	0	114	18	4	1	3	140	146.3	0	0	18	4	2	3	6	33	43.9
16:15 - 16:30	0	2	134	20	4	1	1	162	165.1	0	1	23	5	2	1	0	32	33.7
16:30 - 16:45	0	1	113	22	3	0	1	140	141.9	0	0	17	3	2	1	1	24	27.3
16:45 - 17:00	0	0	148	26	3	1	3	181	186.8	0	0	11	2	0	1	0	14	15.3
Hourly Total	0	3	509	86	14	3	8	623	640.1	0	1	69	14	6	6	7	103	120.2
17:00 - 17:15	0	1	135	12	2	0	0	150	150.4	0	0	20	1	2	4	0	27	33.2
17:15 - 17:30	0	1	168	10	1	1	1	182	184.2	0	0	17	1	2	0	0	20	21.0
17:30 - 17:45	0	0	155	20	0	0	2	177	179.0	0	0	22	1	1	3	0	27	31.4
17:45 - 18:00	0	1	147	11	2	0	1	162	163.4	0	0	10	3	0	2	0	15	17.6
Hourly Total	0	3	605	53	5	1	4	671	677.0	0	0	69	6	5	9	0	89	103.2
18:00 - 18:15	0	0	110	13	2	1	3	129	134.3	0	0	13	0	0	1	0	14	15.3
18:15 - 18:30	0	2	133	3	0	0	2	140	140.8	0	0	21	0	0	0	0	21	21.0
18:30 - 18:45	0	0	111	6	0	0	1	118	119.0	0	0	13	0	0	2	0	15	17.6
18:45 - 19:00	1	0	74	2	0	0	1	78	78.2	0	0	13	0	0	2	1	16	19.6
Hourly Total	1	2	428	24	2	1	7	465	472.3	0	0	60	0	0	5	1	66	73.5

TOTAL	1	8	1542	163	21	5	19	1759	1789.4	0	1	198	20	11	20	8	258	296.9
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PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Dan's Lane, Leicester

Tuesday 28th February 2023

Junction: 1

Approach: A47 Hinckley Road South

TIME	Left to Dan's Lane									Ahead to A47 Hinckley Road (N)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
06:30 - 06:45	0	0	69	2	1	2	0	74	77.1	0	0	65	16	1	0	2	84	86.5
06:45 - 07:00	0	0	46	3	3	1	0	53	55.8	0	1	85	15	9	1	1	112	118.2
Hourly Total	0	0	115	5	4	3	0	127	132.9	0	1	150	31	10	1	3	196	204.7
07:00 - 07:15	0	0	22	4	0	2	1	29	32.6	0	0	135	31	6	0	1	173	177.0
07:15 - 07:30	0	0	36	4	3	4	2	49	57.7	0	0	145	17	4	0	1	167	170.0
07:30 - 07:45	0	0	50	5	1	1	0	57	58.8	0	1	127	23	5	0	2	158	161.9
07:45 - 08:00	0	1	68	9	2	2	0	82	85.0	0	1	114	13	4	0	0	132	133.4
Hourly Total	0	1	176	22	6	9	3	217	234.1	0	2	521	84	19	0	4	630	642.3
08:00 - 08:15	0	0	64	11	4	5	0	84	92.5	0	1	116	10	4	1	2	134	138.7
08:15 - 08:30	0	0	56	9	0	1	0	66	67.3	0	1	97	6	3	2	3	112	118.5
08:30 - 08:45	0	0	33	5	1	2	0	41	44.1	0	1	114	12	2	1	1	131	133.7
08:45 - 09:00	0	0	34	9	0	3	0	46	49.9	0	1	84	12	5	5	1	108	117.4
Hourly Total	0	0	187	34	5	11	0	237	253.8	0	4	411	40	14	9	7	485	508.3
09:00 - 09:15	0	0	30	6	1	4	0	41	46.7	0	0	80	10	4	0	0	94	96.0
09:15 - 09:30	0	0	22	4	2	3	0	31	35.9	0	1	86	14	5	3	3	112	120.8
Hourly Total	0	0	52	10	3	7	0	72	82.6	0	1	166	24	9	3	3	206	216.8

TOTAL	0	1	530	71	18	30	3	653	703.4	0	8	1248	179	52	13	17	1517	1572.1
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16:00 - 16:15	0	1	26	5	1	1	2	36	39.2	0	0	66	17	6	0	0	89	92.0
16:15 - 16:30	0	0	29	9	0	0	0	38	38.0	0	0	82	8	1	0	2	93	95.5
16:30 - 16:45	0	0	34	8	0	1	0	43	44.3	0	0	85	12	2	0	1	100	102.0
16:45 - 17:00	0	0	34	1	3	0	0	38	39.5	0	0	89	14	1	1	2	107	110.8
Hourly Total	0	1	123	23	4	2	2	155	161.0	0	0	322	51	10	1	5	389	400.3
17:00 - 17:15	0	0	22	3	0	1	0	26	27.3	0	1	94	16	1	2	1	115	118.5
17:15 - 17:30	0	0	31	5	0	0	0	36	36.0	0	2	115	11	1	2	1	132	134.9
17:30 - 17:45	0	0	32	2	0	0	0	34	34.0	1	1	109	8	0	0	1	120	119.6
17:45 - 18:00	0	0	29	2	1	0	0	32	32.5	0	0	128	14	2	0	1	145	147.0
Hourly Total	0	0	114	12	1	1	0	128	129.8	1	4	446	49	4	4	4	512	520.0
18:00 - 18:15	0	0	29	2	0	1	0	32	33.3	1	0	111	6	0	0	2	120	121.2
18:15 - 18:30	0	0	25	0	0	2	0	27	29.6	0	0	103	0	1	1	0	105	106.8
18:30 - 18:45	0	0	16	1	0	0	0	17	17.0	0	2	90	2	2	0	2	98	99.8
18:45 - 19:00	0	0	23	0	0	1	0	24	25.3	0	1	69	1	1	1	0	73	74.2
Hourly Total	0	0	93	3	0	4	0	100	105.2	1	3	373	9	4	2	4	396	402.0

TOTAL	0	1	330	38	5	7	2	383	396.0	2	7	1141	109	18	7	13	1297	1322.3
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PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Dan's Lane, Leicester
 Tuesday 28th February 2023
 Junction: 1
 Approach: Dan's Lane

TIME	Left to A47 Hinckley Road (N)									Right to A47 Hinckley Road (S)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
06:30 - 06:45	0	1	24	0	0	0	0	25	24.4	0	0	10	0	1	2	0	13	16.1
06:45 - 07:00	0	0	6	3	0	4	1	14	20.2	0	0	11	4	1	1	0	17	18.8
Hourly Total	0	1	30	3	0	4	1	39	44.6	0	0	21	4	2	3	0	30	34.9
07:00 - 07:15	0	1	22	2	2	1	0	28	29.7	1	0	26	7	2	0	0	36	36.2
07:15 - 07:30	0	0	8	2	0	0	8	18	26.0	0	0	21	5	0	0	1	27	28.0
07:30 - 07:45	0	0	2	1	1	3	2	9	15.4	0	0	30	3	0	4	0	37	42.2
07:45 - 08:00	0	0	7	1	2	0	0	10	11.0	0	0	28	7	1	2	0	38	41.1
Hourly Total	0	1	39	6	5	4	10	65	82.1	1	0	105	22	3	6	1	138	147.5
08:00 - 08:15	0	0	8	1	1	5	2	17	26.0	0	0	37	7	1	1	0	46	47.8
08:15 - 08:30	0	1	10	1	1	1	0	14	15.2	0	0	31	5	1	2	0	39	42.1
08:30 - 08:45	0	1	10	1	2	1	0	15	16.7	0	0	31	6	4	2	0	43	47.6
08:45 - 09:00	0	0	8	3	0	2	0	13	15.6	0	1	26	6	2	3	0	38	42.3
Hourly Total	0	2	36	6	4	9	2	59	73.5	0	1	125	24	8	8	0	166	179.8
09:00 - 09:15	0	0	10	0	1	2	0	13	16.1	0	0	15	3	2	1	0	21	23.3
09:15 - 09:30	0	0	10	2	2	3	0	17	21.9	0	0	17	10	1	1	0	29	30.8
Hourly Total	0	0	20	2	3	5	0	30	38.0	0	0	32	13	3	2	0	50	54.1

TOTAL	0	4	125	17	12	22	13	193	238.2	1	1	283	63	16	19	1	384	416.3
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16:00 - 16:15	0	0	31	6	1	2	0	40	43.1	1	0	67	9	0	0	0	77	76.2
16:15 - 16:30	0	0	14	3	2	1	1	21	24.3	1	1	58	10	0	1	1	72	72.9
16:30 - 16:45	0	0	15	5	0	3	0	23	26.9	0	0	46	5	0	0	0	51	51.0
16:45 - 17:00	0	0	12	3	0	0	0	15	15.0	0	0	27	1	1	2	0	31	34.1
Hourly Total	0	0	72	17	3	6	1	99	109.3	2	1	198	25	1	3	1	231	234.2
17:00 - 17:15	0	0	19	4	2	3	0	28	32.9	0	1	44	7	0	0	0	52	51.4
17:15 - 17:30	0	0	13	0	1	2	0	16	19.1	0	0	35	2	1	0	0	38	38.5
17:30 - 17:45	0	0	4	0	0	2	0	6	8.6	0	0	27	1	1	0	0	29	29.5
17:45 - 18:00	0	0	12	2	1	1	0	16	17.8	0	0	28	6	0	0	0	34	34.0
Hourly Total	0	0	48	6	4	8	0	66	78.4	0	1	134	16	2	0	0	153	153.4
18:00 - 18:15	0	0	9	1	1	1	0	12	13.8	0	0	19	3	1	1	0	24	25.8
18:15 - 18:30	1	0	6	1	1	2	0	11	13.3	0	0	18	2	0	0	0	20	20.0
18:30 - 18:45	0	0	10	1	1	0	0	12	12.5	0	0	18	2	0	2	0	22	24.6
18:45 - 19:00	0	1	7	0	2	0	0	10	10.4	0	0	16	0	0	1	0	17	18.3
Hourly Total	1	1	32	3	5	3	0	45	50.0	0	0	71	7	1	4	0	83	88.7

TOTAL	1	1	152	26	12	17	1	210	237.7	2	2	403	48	4	7	1	467	476.3
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PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Dan's Lane, Leicester Queue Survey

Tuesday 28th February 2023

Produced by Road Data Services Ltd.

			A47 (North)	Dan's Lane	
Time			Right Turn	Left Turn	Right Turn
6:30	-	6:35	10	0	3
6:35	-	6:40	10	2	5
6:40	-	6:45	6	2	6
6:45	-	6:50	9	0	7
6:50	-	6:55	8	3	3
6:55	-	7:00	3	4	1
7:00	-	7:05	1	3	3
7:05	-	7:10	6	3	4
7:10	-	7:15	2	2	3
7:15	-	7:20	5	1	4
7:20	-	7:25	4	5	4
7:25	-	7:30	1	3	5
7:30	-	7:35	3	2	4
7:35	-	7:40	3	0	5
7:40	-	7:45	4	1	8
7:45	-	7:50	4	1	11
7:50	-	7:55	7	2	10
7:55	-	8:00	5	0	4
8:00	-	8:05	2	1	8
8:05	-	8:10	4	1	7
8:10	-	8:15	4	1	5
8:15	-	8:20	1	0	4
8:20	-	8:25	1	1	5
8:25	-	8:30	1	3	6
8:30	-	8:35	2	1	8
8:35	-	8:40	4	4	6
8:40	-	8:45	2	2	4
8:45	-	8:50	3	1	6
8:50	-	8:55	4	1	4
8:55	-	9:00	0	0	6
9:00	-	9:05	2	0	1
9:05	-	9:10	4	3	2
9:10	-	9:15	3	1	2
9:15	-	9:20	1	0	4
9:20	-	9:25	5	2	5
9:25	-	9:30	3	2	3

16:00	-	16:05	4	2	4
16:05	-	16:10	5	2	9
16:10	-	16:15	1	1	15
16:15	-	16:20	1	4	11
16:20	-	16:25	1	1	16
16:25	-	16:30	1	1	7
16:30	-	16:35	3	1	7
16:35	-	16:40	0	2	9
16:40	-	16:45	3	2	9
16:45	-	16:50	0	1	6
16:50	-	16:55	0	1	4
16:55	-	17:00	3	1	4
17:00	-	17:05	1	1	5
17:05	-	17:10	2	3	4
17:10	-	17:15	1	1	9
17:15	-	17:20	2	1	3
17:20	-	17:25	2	1	5
17:25	-	17:30	2	1	6
17:30	-	17:35	0	1	6
17:35	-	17:40	5	1	5
17:40	-	17:45	2	0	2
17:45	-	17:50	2	1	4
17:50	-	17:55	0	3	3
17:55	-	18:00	1	0	6
18:00	-	18:05	0	1	1
18:05	-	18:10	1	3	4
18:10	-	18:15	1	1	3
18:15	-	18:20	1	1	3
18:20	-	18:25	1	1	3
18:25	-	18:30	3	3	5
18:30	-	18:35	4	2	3
18:35	-	18:40	1	0	5
18:40	-	18:45	3	0	2
18:45	-	18:50	0	0	3
18:50	-	18:55	2	0	3
18:55	-	19:00	4	2	2

Queues are maximum queues each 5 minute period

Appendix 04

Committed Development Calculations and Assumptions



Barwell SUE
12/00295/OUT

The flows shown in the TA for the 2036 scenario are for full build out. Assuming construction starts in 2026, 20% of the total traffic flows have been assumed in 2028.

Using Tables 8.3 to 8.6 of the TA for the total number of vehicles at the Dan's Lane/A47 junction:

A47 straight ahead movements taken from the traffic flow between the A47/Leicester Road junction and Desford Crossroads junction (No. 2.8)

Table 8.3 – Link flow assessment – AM peak (veh/h/ All Scenarios) – Links 1.1 – 4.

No.	Link Description	2021 Baseline (post Covid- 19)	2022 Opening Year Do Minimum	2022 Opening Year Do Something	2022 DS +/	%	2036 Forecast Year Do Minimum	2036 Forecast Year Do Something	2036 DS +/	%
1.1	A5 - NW of A47 Long Shoot Signalised Junction	1221	1346	1351	5	0.37%	1391	1393	2	0.14%
1.2	A5 - Between the A47 Long Shoot Signalised Junction and A5 Dodwells Signalised Roundabout	2248	2301	2328	27	1.17%	2401	2406	5	0.21%
1.3	A5 - SE of the A5 Dodwells Roundabout and NW of the A5 / Hammonds Way Roundabout	1019	1037	1056	19	1.83%	1104	1114	10	0.91%
2.1	A47 Long Shoot - South of the A47 Long Shoot Signalised Junction	1257	1184	1206	22	1.86%	1235	1238	3	0.24%
2.2	A47 - North of the Dodwells Signalised Roundabout and South of the A47 / Roston Drive Roundabout	1095	1079	1115	36	3.34%	1248	1292	44	3.53%
2.3	A47 - North of the A47 / Roston Drive Roundabout and South of A47 / Bloor Homes Site Access Roundabout	1467	1508	1627	119	7.89%	1827	1938	111	6.08%
2.4	A47 - North of A47 / Bloor Homes Site Access Roundabout and West of the A47 / Stoke Road Roundabout	1579	1600	1702	102	6.38%	1801	1921	120	6.66%
2.5	A47 - East of the A47 / Stoke Road Roundabout and West of the A47 / Ashby Road Signalised Crossroads	2435	2444	2423	-21	-0.86%	2519	2573	54	2.14%
2.6	A47 - East of the A47 / Ashby Road Signalised Crossroads and West of A47 / B4668 Roundabout	1546	1427	1441	14	0.98%	1538	1603	65	4.23%
2.7	A47 - East of A47 / B4668 Roundabout and West of A47 / Leicester Road Roundabout	1344	1398	1450	52	3.72%	1568	1626	58	3.70%
2.8	A47 - East of A47 / Leicester Road Roundabout and West of A47 / B581 Signalised Junction	1957	1924	2000	76	3.95%	2064	2197	133	6.46%
2.9	A47 - East of A47 / B581 Signalised Junction and West of A47 / Leicester Road Roundabout	1449	1456	1463	7	0.48%	1721	1766	46	2.67%

Table 8.5 – Link flow assessment – PM peak (veh/h/ All Scenarios) – Links 1.1 – 4.11

No.	Link Description	2021 Baseline (post Covid- 19)	2022 Opening Year Do Minimum	2022 Opening Year Do Something	2022 DS +/	%	2036 Forecast Year Do Minimum	2036 Forecast Year Do Something	2036 DS +/	%
1.1	A5 - NW of A47 Long Shoot Signalised Junction	1295	1435	1437	2	0.14%	1410	1406	-4	-0.28%
1.2	A5 - Between the A47 Long Shoot Signalised Junction and A5 Dodwells Signalised Roundabout	2481	2565	2573	8	0.31%	2704	2706	2	0.07%
1.3	A5 - SE of the A5 Dodwells Roundabout and NW of the A5 / Hammonds Way Roundabout	1130	1201	1214	13	1.08%	1443	1457	14	0.97%
2.1	A47 Long Shoot - South of the A47 Long Shoot Signalised Junction	1456	1399	1405	6	0.43%	1561	1565	4	0.26%
2.2	A47 - North of the Dodwells Signalised Roundabout and South of the A47 / Roston Drive Roundabout	1288	1211	1271	60	4.96%	1184	1235	51	4.31%
2.3	A47 - North of the A47 / Roston Drive Roundabout and South of A47 / Bloor Homes Site Access Roundabout	1796	1759	1895	136	7.73%	1901	2013	112	5.89%
2.4	A47 - North of A47 / Bloor Homes Site Access Roundabout and West of the A47 / Stoke Road Roundabout	1874	1901	2038	137	7.21%	2029	2184	155	7.64%
2.5	A47 - East of the A47 / Stoke Road Roundabout and West of the A47 / Ashby Road Signalised Crossroads	3000	3006	3040	34	1.13%	3047	3131	84	2.76%
2.6	A47 - East of the A47 / Ashby Road Signalised Crossroads and West of A47 / B4668 Roundabout	1665	1535	1421	-114	-7.43%	1636	1503	-133	-8.13%
2.7	A47 - East of A47 / B4668 Roundabout and West of A47 / Leicester Road Roundabout	1323	1412	1651	239	16.92%	1624	1879	255	15.70%
2.8	A47 - East of A47 / Leicester Road Roundabout and West of A47 / B581 Signalised Junction	2218	2198	2337	139	6.33%	2302	2456	155	6.73%
2.9	A47 - East of A47 / B581 Signalised Junction and West of A47 / Leicester Road Roundabout	1554	1552	1587	35	2.26%	1895	1979	84	4.41%

Dan's Lane movements taken from the traffic flow at the Peckleton Lane/Dan's junction (No. 6.4)

Table 8.4 – Link flow assessment – AM peak (veh/h / All Scenarios) – Links 5.0 – 9.2

No.	Link Description	2021 Baseline (post Covid- 19)	2022 Opening Year Do Minimum	2022 Opening Year Do Something	2022 DS +/-	%	2036 Forecast Year Do Minimum	2036 Forecast Year Do Something	2036 DS +/-	%
5.0	Higham Lane / Stoke Lane - South of Station Road and North of Hinckley Lane (Higham on the Hill)	219	221	282	61	27.60%	274	324	50	18.25%
5.1	Station Road (Stoke Goldington) - East of Higham Lane	284	286	421	135	47.20%	434	539	105	24.19%
5.2	Station Road / Main Street (Stoke Goldington) - East of Main Street / Hinckley Road Junction	284	286	421	135	47.20%	434	539	105	24.19%
5.3	Hinckley Road (Stoke Goldington) - West of Main Street / Hinckley Road Junction and East of Stoke Road / Hinckley	296	298	399	101	33.89%	364	451	87	23.90%
5.4	Rogue's Lane - Between Stoke Road and A447 Ashby Road	202	209	322	113	54.07%	258	394	136	52.71%
5.5	Hinckley Road / Mill Street / High Street - East of A447 Ashby Road and West of High Street / Chapel Street / Shilton	412	471	643	172	36.56%	557	703	146	26.24%
5.6	Church Lane / Dovecote Way - Between High Street and Chapel Street	373	376	487	111	29.49%	310	424	114	36.94%
5.7	Chapel Street - South of High Street / Chapel Street / Shilton Road Mini Roundabout and North of Chapel Street /	213	193	230	37	19.17%	187	217	30	16.04%
5.8	The Common - South of Chapel Street / Dovecote Way Junction	599	583	722	139	23.84%	508	646	138	27.17%
5.9	Shilton Road - East of High Street / Chapel Street / Shilton Road Mini Roundabout and West of Shilton Road / Leicester	470	448	659	211	47.15%	549	731	182	33.18%
5.10	Hinckley Road / Wood Street - East of Shilton Road / Leicester Road Junction and West of Wood Street / Station Road /	900	907	1071	164	18.08%	974	1160	186	19.10%
5.11	The Hollow / High Street - East of Wood Street / Station Road / The Hollow Junction and South of Leicester Lane / Hill	469	473	571	98	20.68%	647	751	103	15.97%
5.12	Church Street - East of Leicester Lane / Hill Top / Church Street Junction and West of A47	309	311	390	79	25.40%	648	776	128	19.75%
5.13	Thurlaston Lane - East of A47 and West of Pingle Lane	239	241	307	66	27.39%	512	629	117	22.85%
5.14	Fern Lanes - East of A444 and West of Upton Lane	488	492	550	58	11.79%	638	692	54	8.46%
5.15	Drayton Lane - East of A5 Watling Street and West of Old Forge Road	464	468	519	51	10.90%	541	587	46	8.50%
6.1	Bosworth Road - East of A447 Ashby Road / Bosworth Road Junction and West of Bosworth Road / Newbold Road	636	642	833	191	29.83%	968	1116	147	15.21%
6.2	Main Street - East of Bosworth Road / Newbold Road Junction and West of main Street / Shilton Lane / Barwell Lane	657	662	799	137	20.71%	872	1000	128	14.72%
6.3	Kirkby Lane / Peckleton Common - East of Main Street / Shilton Lane / Barwell Lane Crossroads (Kirkby Mallory) and	558	562	712	150	26.69%	604	740	136	22.52%
6.4	Peckleton Lane - East of Peckleton Lane / Dan's Lane Junction	238	240	321	80	33.49%	253	296	43	16.97%
6.5	Newbold Road / Kirkby Lane - North of Bosworth Road / Newbold Road Junction and South of Kirkby Lane / B582	195	196	363	167	84.95%	395	550	155	39.29%

Table 8.6 – Link flow assessment – PM peak (veh/h / All Scenarios) – Links 5.0 – 9.2

No.	Link Description	2021 Baseline (post Covid- 19)	2022 Opening Year Do Minimum	2022 Opening Year Do Something	%		2022 DS +/-	%	2022 DS +/-	%
5.0	Higham Lane / Stoke Lane - South of Station Road and North of Hinckley Lane (Higham on the Hill)	123	124	162	38	30.65%	226	274	48	21.24%
5.1	Station Road (Stoke Goldington) - East of Higham Lane	260	262	416	154	58.78%	423	608	185	43.74%
5.2	Station Road / Main Street (Stoke Goldington) - East of Main Street / Hinckley Road Junction	260	262	416	154	58.78%	423	608	185	43.74%
5.3	Hinckley Road (Stoke Goldington) - West of Main Street / Hinckley Road Junction and East of Stoke Road /	263	265	405	140	52.83%	378	543	165	43.65%
5.4	Rogue's Lane - Between Stoke Road and A447 Ashby Road	175	179	330	151	84.36%	229	471	242	105.68%
5.5	Hinckley Road / Mill Street / High Street - East of A447 Ashby Road and West of High Street / Chapel Street /	417	455	656	201	44.18%	526	739	213	40.49%
5.6	Church Lane / Dovecote Way - Between High Street and Chapel Street	359	362	411	48	13.34%	309	344	34	11.04%
5.7	Chapel Street - South of High Street / Chapel Street / Shilton Road Mini Roundabout and North of Chapel	356	312	412	100	32.05%	278	380	102	36.69%
5.8	The Common - South of Chapel Street / Dovecote Way Junction	601	577	721	144	24.96%	488	618	130	26.64%
5.9	Shilton Road - East of High Street / Chapel Street / Shilton Road Mini Roundabout and West of Shilton Road /	451	437	595	158	36.16%	516	689	173	33.53%
5.10	Hinckley Road / Wood Street - East of Shilton Road / Leicester Road Junction and West of Wood Street /	1134	1143	1269	126	11.02%	1344	1455	111	8.26%
5.11	The Hollow / High Street - East of Wood Street / Station Road / The Hollow Junction and South of Leicester	584	589	675	86	14.57%	797	901	104	13.07%
5.12	Church Street - East of Leicester Lane / Hill Top / Church Street Junction and West of A47	349	352	435	83	23.58%	824	939	115	13.96%
5.13	Thurlaston Lane - East of A47 and West of Pingle Lane	340	343	423	80	23.32%	778	883	105	13.50%
5.14	Fern Lanes - East of A444 and West of Upton Lane	626	631	696	65	10.30%	885	959	74	8.36%
5.15	Drayton Lane - East of A5 Watling Street and West of Old Forge Road	560	565	621	56	9.91%	792	847	55	6.94%
6.1	Bosworth Road - East of A447 Ashby Road / Bosworth Road Junction and West of Bosworth Road / Newbold	648	654	773	120	18.34%	996	1084	87	8.77%
6.2	Main Street - East of Bosworth Road / Newbold Road Junction and West of main Street / Shilton Lane /	655	661	770	109	16.45%	913	1040	127	13.93%
6.3	Kirkby Lane / Peckleton Common - East of Main Street / Shilton Lane / Barwell Lane Crossroads (Kirkby	555	559	649	90	16.10%	651	745	94	14.44%
6.4	Peckleton Lane - East of Peckleton Lane / Dan's Lane Junction	241	243	260	17	6.94%	254	269	15	6.07%
6.5	Newbold Road / Kirkby Lane - North of Bosworth Road / Newbold Road Junction and South of Kirkby Lane /	257	259	375	116	44.68%	483	583	99	20.53%

*note the table header error for the PM (2022 instead of 2036)

Using the proportion of arrivals and departures for the residential element of the scheme (as the vehicle movements at the Dan's Lane / A47 junction are likely to be predominantly residential in 2028) from Table 6.2, the vehicle movements at the junction have been estimated.

- AM Peak – 75% outbound, 25% inbound; and
- PM Peak – 72% inbound, 28% outbound

Table 6.2 – Proposed Development Gross Vehicular Trips at full occupation (TRICS v7.7.1)

Land Use	Quanta (dw / m2 / pu)	AM Peak 0800-0900			PM Peak 1700-1800		
		In	Out	2-way	In	Out	2-way
Residential	2500	378	1103	1480	980	400	1380
B2 – Industrial Estate	12400	49	22	71	16	49	65
B8 – Warehousing Commercial	12400	14	5	19	2	9	10
Local Retail - local shops	1000	62	60	122	68	71	138
Local Retail - pub/restaurant	1500	93	90	183	102	106	208
Primary School	420	120	73	193	9	15	24
total vehicle trips		715	1353	2068	1176	649	1825

Movement	AM Peak	PM Peak
A47 SW ahead	20	8
A47 SW left		
Dan's Lane right turn		
Dan's Lane left turn	6	3
A47 NE right turn	2	1
A47 NE ahead	7	22

**Earl Shilton SUE
21/01511/OUT**

The traffic flows shown in the TA for the 2026 scenario are full build-out

Paragraph 3.7.1 of the ES states 'construction of the overall Proposed Development is likely to take up to 10 years' and assumes construction would commence in 2026.

Given the above, 20% of the total traffic flows have been assumed in 2028.

AM Peak



PM Peak



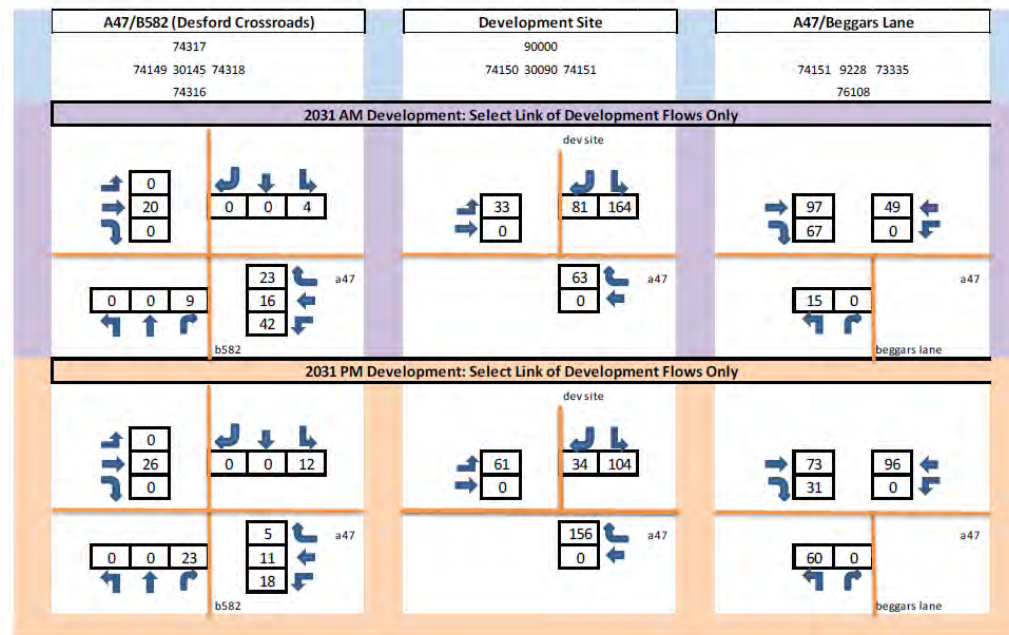
Movement	AM Peak	PM Peak
A47 SW ahead	36	24
A47 SW left	21	9
Dan's Lane right turn	4	5
Dan's Lane left turn		
A47 NE right turn		
A47 NE ahead	17	15

**Hasting Fields
19/1610/OUT**

2031 scenario taken from TA:

Project Reference: 3851.094

2031 Core with Development – Select Link Analysis of Development Flow Only



Use flow to and from A47 southwest at the A47/B582 Desford Crossroads junction

Apply 14% factor for the 885 dwellings now being proposed

Assume that 388 dwellings (43%) are built and occupied at 2028

Movement	AM Peak	PM Peak
A47 SW ahead	9	11
A47 NE ahead	7	5

**Hinckley West
Normandy Way**

The site is 12km from the Dan's Lane/A47 junction and the TA only shows to the A447 Ashby Road

ref
15/00188/OUT

Assume 440 (51%) built and occupied in 2028.

Table 5.8 of the TA identified the total vehicles (full build-out) on the A47 that could pass through the Dan's Lane/A47 junction (assume 75%)

	Southbound	6	18
A47 North of A447 Ashby Road	Northbound	68	19
	Southbound	12	0
A447 Ashby Road - East of A47 Normandy Way	Towards A47	-9	12
	From A47	14	3
A5 - West of M69	Eastbound	-15	-1
	Westbound	-27	-17
A5 - East of M69	Eastbound	-3	0
	Westbound	11	0
M69 - North of A5 Interchange	Northbound	-9	1
	Southbound	-7	-21
A5 - West of The Longshoot	Eastbound	-3	-40
	Westbound	-43	41
A47 - The Longshoot	Towards A47	-12	12
	From A47	19	-29

Table 5.8 2026 Change in Traffic Flow Arising from the Proposed Development (Vehicles)

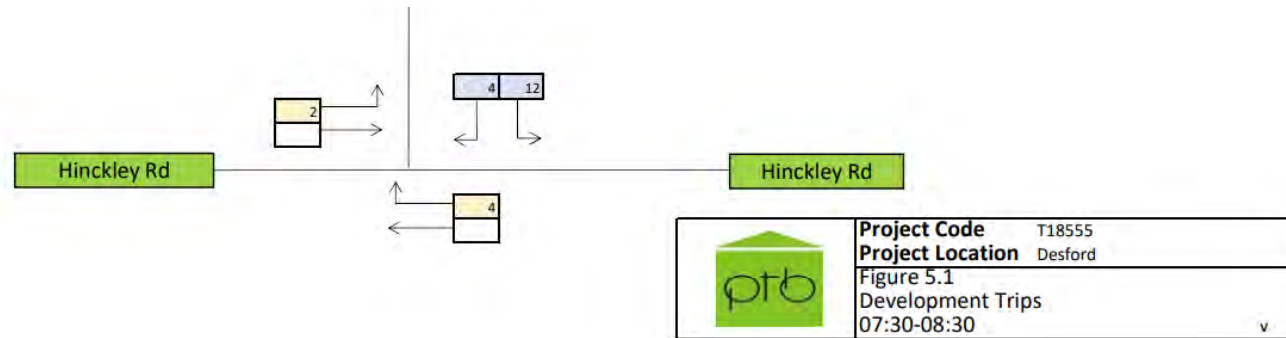
NB The figures in the table above are the difference between traffic with committed and proposed developments and traffic with committed development. A positive figure indicates an increase in traffic arising from the proposed development.

Movement	AM Peak	PM Peak
A47 SW ahead	26	7
A47 NE ahead	5	0

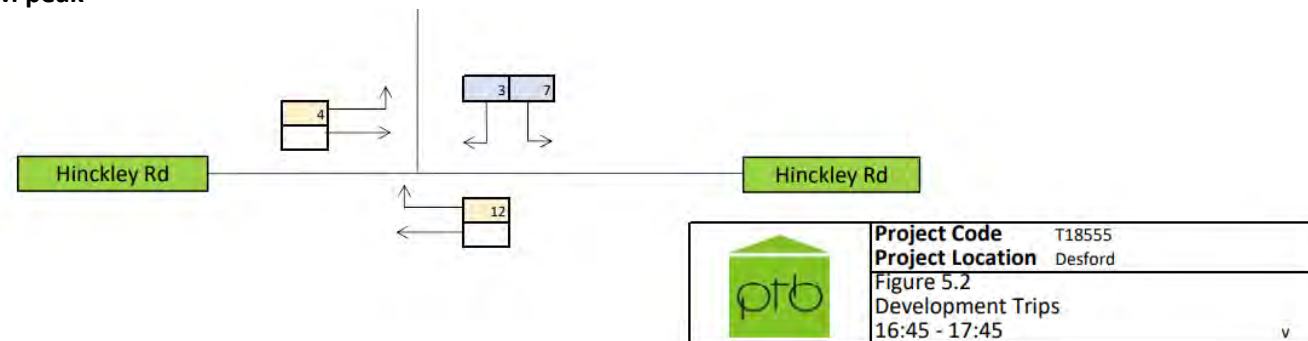
Land East of
Peckleton Lane
18/01252/OUT

AM and PM peak traffic flows from the TA:

AM Peak



PM peak

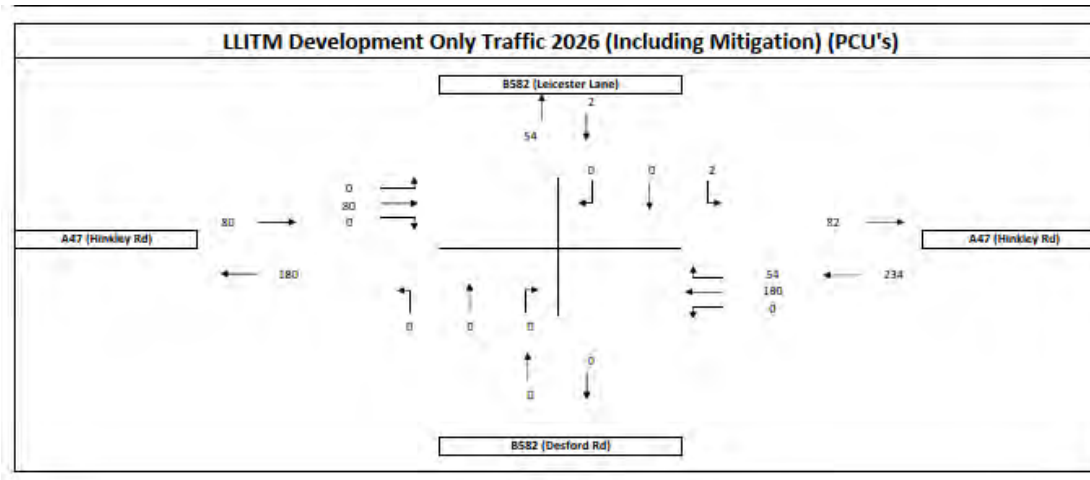


Lubbersthorpe
11/0100/1/OX

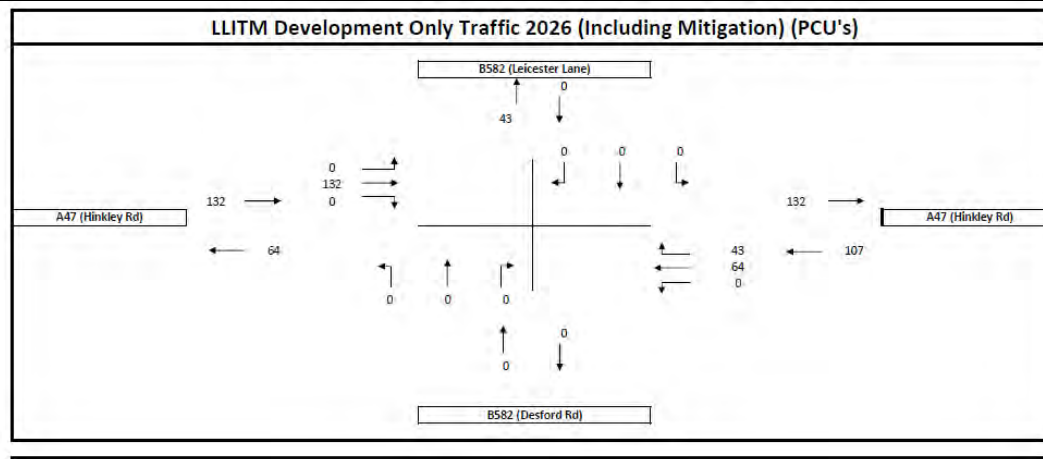
2026 traffic flows are full build out in the TA:

Assume 1,427 (33%) built and occupied in 2028. 871 already occupied, so net increase of 13.1%.

AM Peak



PM Peak



Movement	AM Peak	PM Peak
A47 SW ahead	12	17
A47 NE ahead	23	8

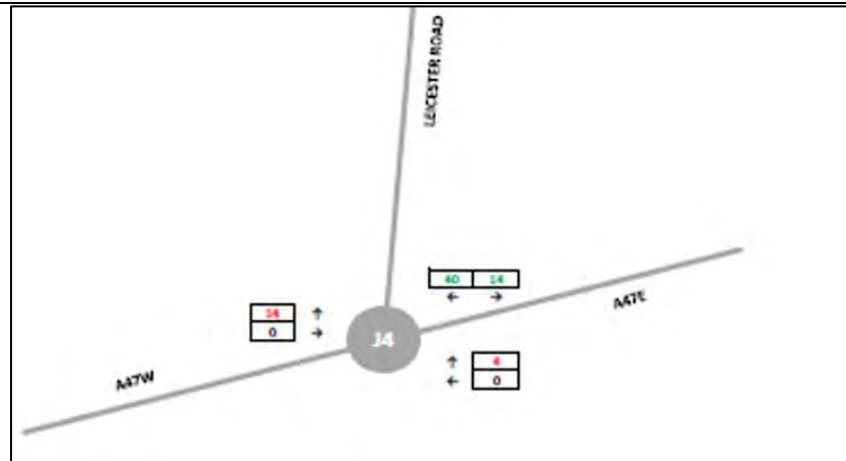
**14/01279/OUT
Westfield Farm**

Traffic flows for the AM and PM peak from the TA at the Leicester Road/A47 junction.

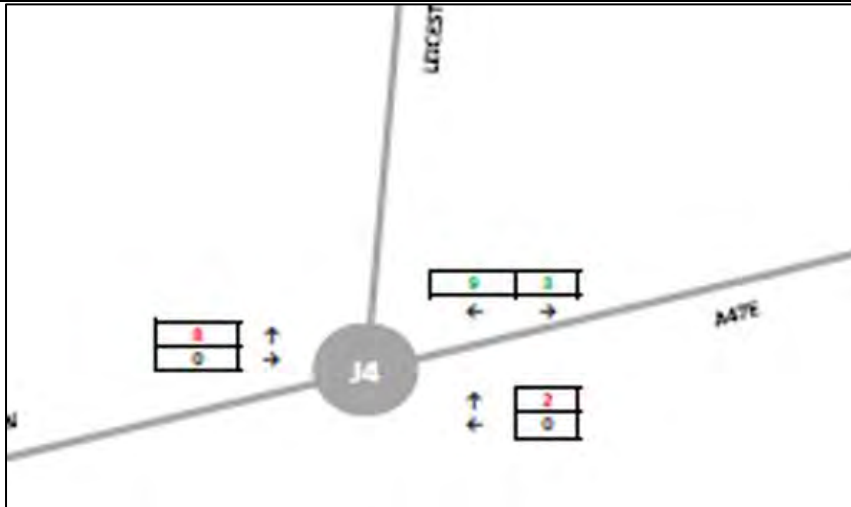
Estimate of 75% occupied.

Assume 75% at the Dan's Lane/A47 junction.

AM Peak



PM Peak

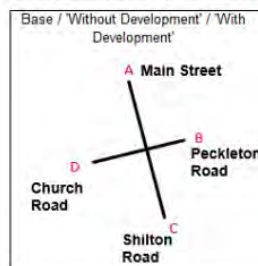


Movement	AM Peak	PM Peak
A47 SW ahead	10	2
A47 NE ahead	3	1

**22/00277/OUT
Brascote Lane**

The TA does not present any traffic flows at the Dan's Lane/A47 junction, the nearest junction is the Main Street/Church Road/Peckleton Road/Shilton Road junction:

Turning flows (vehicles) – Main Street / Peckleton Road / Shilton Road / Church Road



Difference between the with and without development traffic flows:

2029 'Without Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	183	0	183	15%	194	0	194	15%
A-C	317	0	317	22%	238	0	238	17%
A-D	39	0	39	4%	45	0	45	5%
B-C	12	0	12	1%	6	0	6	1%
B-D	50	0	50	5%	75	0	75	7%
B-A	113	0	113	11%	110	0	110	11%
C-D	0	0	0	0%	0	0	0	0%
C-A	236	0	236	14%	317	0	317	19%
C-B	5	0	5	0%	9	0	9	1%
D-A	72	0	72	5%	57	0	57	5%
D-B	80	0	80	8%	117	0	117	12%
D-C	0	0	0	0%	0	0	0	0%

2029 'With Development'

Turning Movement	AM				PM			
	LV	HV	Total	V/C (%)	LV	HV	Total	V/C (%)
A-B	188	0	188	16%	194	0	194	16%
A-C	333	0	333	24%	245	0	245	18%
A-D	82	0	82	9%	68	0	68	7%
B-C	12	0	12	1%	6	0	6	1%
B-D	50	0	50	5%	75	0	75	7%
B-A	111	0	111	12%	110	0	110	12%
C-D	0	0	0	0%	0	0	0	0%
C-A	243	0	243	14%	325	0	325	19%
C-B	5	0	5	0%	9	0	9	1%
D-A	77	0	77	6%	74	0	74	6%
D-B	80	0	80	8%	117	0	117	12%
D-C	0	0	0	0%	0	0	0	0%

Assume the traffic flows are via Dan's Lane and A47 northeast

Movement	AM Peak	PM Peak
Dan's Lane to A47 NE	5	0
A47 NE right to Dan's Lane	2	0

Appendix 05

Assessment Flows



AM (07:15 - 08:15)

	All Vehicles		Diff	HGVs		Diff	Committed Dev		Diff
	2023 forecast	2023 survey		2023 forecast	2023 survey		TA	2023	
A47 SW ahead	647	591	-56	23	19	-4	20	112	92
A47 SW left	312	272	-40	17	16	-1	3	23	20
Dan's Lane right turn	176	148	-28	13	12	-1	5	8	3
Dan's Lane left turn	43	54	11	12	14	2	13	23	10
A47 NE right turn	195	148	-47	17	16	-1	2	8	6
A47 NE ahead	487	425	-62	31	30	-1	53	62	9
	1860	1638	-222	113	107	-6			
			-11.9%						

Base 2023

Total

	A	B	C
A		272	591
B	148		54
C	425	148	

HGVs

	A	B	C
A		16	19
B	12		14
C	30	16	

HGV %

	A	B	C
A		5.9%	3.2%
B	8.1%		25.9%
C	7.1%	10.8%	

	07:00 - 08:00	07:15 - 08:15	07:30 - 08:30	07:45 - 08:45	08:00 - 09:00
A	630	591	536	509	485
B	217	272	289	273	237
C	138	148	160	166	166
	65	54	50	56	59
	137	148	138	143	125
	394	425	430	411	375
Total	1581	1638	1603	1558	1447

TEMPRO factor 2018 - 2023 1.0749
TEMPRO factor 2023 - 2028 1.0387

Flows shown at Dan's Lane / A47

Peckleton Lane Resi	Lubbersthorpe	Westfield Farm	Total
	11	10	21
2			2
4			4
12			12
4			4
	23	3	26

Consented and estimated at the junction

Hinckley West Normandy Way	Brascote Lane	Total
26		26
		0
		0
	5	5
	2	2
5		5

SUEs

Barwell SUE	Earl Shilton	Hastings Fields	Total
20	36	9	65
	21		21
	4		4
6			6
2			2
7	17	7	31

Base 2028

Total

	A	B	C
A	0	283	614
B	154		56
C	441	154	0

HGVs

	A	B	C
A		17	20
B	12		15
C	31	17	

HGV %

	A	B	C
A		5.9%	3.2%
B	8.1%		25.9%
C	7.1%	10.8%	

2028 + Committed

Total

	A	B	C
A		306	726
B	162		79
C	503	162	

HGVs

	A	B	C
A		33	39
B	24		29
C	61	33	

HGV %

	A	B	C
A		10.7%	5.3%
B	15.1%		36.1%
C	12.1%	20.2%	

Units 1 and 2

Total

	A	B	C
A		10	
B	2		
C		6	

HGVs

	A	B	C
A		5	
B	5		3
C		5	

HGV %

	A	B	C
A			
B			
C			

2028 + Cor

Total

	A	B	C
A			
B			
C			

HGVs

	A	B	C
A			
B			
C			

HGV %

	A	B	C
A			
B			
C			

AM (07:45 - 08:45)

	All Vehicles		Diff	HGVs		Diff	Committed Dev		Diff
	2023 forecast	2023 survey		2023 forecast	2023 survey		TA	2023	
A47 SW ahead	647	509	-138	23	19	-4	20	112	92
A47 SW left	312	273	-39	17	16	-1	3	23	20
Dan's Lane right turn	176	166	-10	13	12	-1	5	8	3
Dan's Lane left turn	43	56	13	12	14	2	13	23	10
A47 NE right turn	195	143	-52	17	16	-1	2	8	6
A47 NE ahead	487	411	-76	31	30	-1	53	62	9
	1860	1558	-302	113	107	-6			
			-16.2%						

Base 2023

Total

	A	B	C
A		273	509
B	166		56
C	411	143	

HGVs

	A	B	C
A		16	19
B	12		14
C	30	16	

HGV %

	A	B	C
A		5.9%	3.7%
B	7.2%		25.0%
C	7.3%	11.2%	

Flows shown at Dan's Lane / A47

Peckleton Lane Resl	Lubberthorpe	Westfield Farm	Total
	11	10	21
2			2
4			4
12			12
4			4
	23	3	26

Consented and estimated at the junction

Hinckley West Normandy Way	Brascote Lane	Total
26		26
		0
		0
	5	5
	2	2
5		5

SUEs

Barwell SUE	Earl Shilton SUE	Hastings Fields	Total
20	36	9	65
	21		21
	4		4
6			6
2			2
7	17	7	31

		07:00 - 08:00	07:15 - 08:15	07:30 - 08:30	07:45 - 08:45	08:00 - 09:00
A	A47 SW ahead	630	591	536	509	485
	A47 SW left	217	272	289	273	237
B	Dan's Lane right turn	138	148	160	166	166
	Dan's Lane left turn	65	54	50	56	59
C	A47 NE right turn	137	148	138	143	125
	A47 NE ahead	394	425	430	411	375
Total		1581	1638	1603	1558	1447

TEMPRO factor 2018 - 2023 1.0749
TEMPRO factor 2023 - 2028 1.0387

Base 2028

Total

	A	B	C
A	0	284	529
B	172		58
C	427	149	0

HGVs

	A	B	C
A		17	20
B	12		15
C	31	17	

HGV %

	A	B	C
A		5.9%	3.7%
B	7.2%		25.0%
C	7.3%	11.2%	

2028 + Committed

Total

	A	B	C
A		307	641
B	180		81
C	489	157	

HGVs

	A	B	C
A		33	39
B	24		29
C	61	33	

HGV %

	A	B	C
A		10.6%	6.0%
B	13.6%		35.2%
C	12.5%	20.8%	

Units 1 and 2

Total

	A	B	C
A	0	10	0
B	2	0	0
C	0	6	0

HGVs

	A	B	C
A	0	5	0
B	5	0	3
C	0	5	0

HGV %

	A	B	C
A			
B			
C			

2028 + Cor

Total

	A	B	C
A			
B			
C			

HGVs

	A	B	C
A			
B			
C			

HGV %

	A	B	C
A			
B			
C			

PM (16:30 - 17:30)

	All Vehicles			Diff	HGVs			Diff	Committed Dev		Diff
	2023 forecast	2023 survey			2023 forecast	2023 survey			TA	2023	
A47 SW ahead	471	454	-17		19	10	-9		31	74	43
A47 SW left	191	143	-48		9	5	-4		5	13	8
Dan's Lane right turn	190	172	-18		7	4	-3		5	8	3
Dan's Lane left turn	56	82	26		12	11	-1		7	10	3
A47 NE right turn	76	85	9		4	12	8		14	13	-1
A47 NE ahead	689	653	-36		26	11	-15		15	54	39
	1673	1589	-84		77	53	-24				

-5.0%

Base 2023

Total

	A		
	B	C	
	143	454	
	172	85	82

HGVs

	A		
	B	C	
	5	10	
	4	11	11

HGV %

	A		
	B	C	
	3.5%	2.2%	
	2.3%	13.4%	14.1%

Flows shown at Dan's Lane / A47

Peckleton Lane Resi	Lubbersthorpe	Westfield Farm	Total
	17	2	19
4			4
3			3
7			7
12			12
	8	1	9

Consented and estimated at the junction

Hinckley West Normandy Way	Brascote Lane	Total
12		12
		0
		0
		0
		0
3		3

SUEs

Barwell SUE	Earl Shilton	Hastings Fields	Total
8	24	11	43
	9		9
	5		5
3			3
1			1
22	15	5	42

Base 2028

Total

	A		
	B	C	
	0	149	472
	179	85	0

HGVs

	A		
	B	C	
	5	10	
	4	11	11

HGV %

	A		
	B	C	
	3.5%	2.2%	
	2.3%	13.4%	14.1%

2028 + Committed

Total

	A		
	B	C	
	162	546	
	187	95	

HGVs

	A		
	B	C	
	10	20	
	8	22	24

HGV %

	A		
	B	C	
	6.3%	3.7%	
	4.4%	23.6%	3.1%

Units 1 and 2

Total

	A		
	B	C	
	3		
	13	3	2

HGVs

	A		
	B	C	
	1	1	
	1	1	1

HGV %

	A		
	B	C	

2028 + Cor

Total

	A		
	B	C	

HGVs

	A		
	B	C	

HGV %

	A		
	B	C	

	16:30 - 17:30				
	16:45 - 17:45	17:00 - 18:00	17:15 - 18:15	17:30 - 18:30	
	454	474	512	517	490
	143	134	128	134	125
	172	150	153	125	107
	82	65	66	50	45

TEMPRO factor 2018 - 2023 1.0749
TEMPRO factor 2023 - 2028 1.0388

Appendix 06

PICADY Results



Junctions 10		
PICADY 10 - Priority Intersection Module		
Version: 10.0.3.1598		
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Filename: Dan's Lane_A47 Hinckley Road - Unit 1 and 2 v5.j10

Path: N:\Vectos Job Data\2023\VN232604

Report generation date: 08/06/2023 10:35:54

-
- »Existing Layout - 2023 Base, AM
 - »Existing Layout - 2023 Base, PM
 - »Existing Layout - 2028 Base, AM
 - »Existing Layout - 2028 Base, PM
 - »Existing Layout - 2028 Base + Comm, AM
 - »Existing Layout - 2028 Base + Comm, PM
 - »Existing Layout - 2028 Base + Comm + Dev, AM
 - »Existing Layout - 2028 Base + Comm + Dev, PM
 - »Existing Layout - 2023 Base 0745, AM 0745
 - »Existing Layout - 2028 Base 0745, AM 0745
 - »Existing Layout - 2028 Base + Comm 0745, AM 0745
 - »Existing Layout - 2028 Base + Comm + Dev 0745, AM 0745

Summary of junction performance

	AM					PM					AM 0745				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Existing Layout - 2023 Base														
Stream B-C	D1	0.2	13.46	0.18	B	D2	0.3	11.11	0.22	B					
Stream B-A		2.2	50.35	0.70	F		1.8	34.75	0.65	D					
Stream C-AB		0.6	13.54	0.38	B		0.2	9.01	0.19	A					
	Existing Layout - 2028 Base														
Stream B-C	D3	0.2	14.36	0.20	B	D4	0.3	11.69	0.23	B					
Stream B-A		3.0	67.60	0.77	F		2.2	42.55	0.70	E					
Stream C-AB		0.7	14.43	0.40	B		0.2	9.24	0.20	A					
	Existing Layout - 2028 Base + Comm														
Stream B-C	D5	0.5	21.75	0.34	C	D6	0.5	16.25	0.32	C					
Stream B-A		22.6	441.69	1.27	F		5.8	108.82	0.90	F					
Stream C-AB		1.1	21.82	0.52	C		0.4	11.54	0.26	B					
	Existing Layout - 2028 Base + Comm + Dev														
Stream B-C	D7	0.5	22.82	0.36	C	D8	0.5	16.78	0.33	C					
Stream B-A		27.9	545.10	1.37	F		9.5	160.68	0.99	F					
Stream C-AB		1.2	24.22	0.56	C		0.4	11.77	0.27	B					
	Existing Layout - 2023 Base 0745														
Stream B-C											D9	0.2	12.69	0.18	B
Stream B-A												2.2	45.53	0.70	E
Stream C-AB												0.5	12.27	0.35	B
	Existing Layout - 2028 Base 0745														
Stream B-C											D10	0.2	13.41	0.19	B
Stream B-A												2.9	58.72	0.77	F
Stream C-AB												0.6	12.96	0.37	B
	Existing Layout - 2028 Base + Comm 0745														
Stream B-C											D11	0.5	20.16	0.33	C
Stream B-A												18.6	328.52	1.16	F
Stream C-AB												0.9	18.99	0.48	C
	Existing Layout - 2028 Base + Comm + Dev 0745														
Stream B-C											D12	0.5	21.12	0.34	C
Stream B-A												23.7	413.17	1.24	F
Stream C-AB												1.0	20.87	0.51	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	Griffen Park, Desford
Location	Dan's Lane / A47 Hinckley Road
Site number	
Date	11/09/2020
Version	
Status	
Identifier	
Client	Gulf Ventures 2 Ltd
Jobnumber	403.10671.00001
Enumerator	SLR\jmacpherson
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	AM	ONE HOUR	07:00	08:30	15	✓
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓
D3	2028 Base	AM	ONE HOUR	07:00	08:30	15	✓
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓
D5	2028 Base + Comm	AM	ONE HOUR	07:00	08:30	15	✓
D6	2028 Base + Comm	PM	ONE HOUR	16:15	17:45	15	✓
D7	2028 Base + Comm + Dev	AM	ONE HOUR	07:00	08:30	15	✓
D8	2028 Base + Comm + Dev	PM	ONE HOUR	16:15	17:45	15	✓
D9	2023 Base 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓
D10	2028 Base 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓
D11	2028 Base + Comm 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓
D12	2028 Base + Comm + Dev 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓

Analysis Set Details

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

Existing Layout - 2023 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		6.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.40	A

Arms

Arms

Arm	Name	Description	Arm type
A	A47 South		Major
B	Dan's Lane		Minor
C	A47 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A47 North	7.00		✓	3.00	200.0	✓	24.00

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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Dan's Lane	Two lanes	3.20	3.00	170	135

Minor Arm Geometry Notes

Arm	Notes
B - Dan's Lane	Two lanes extend for approximately 12 PCUs

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	604	0.105	0.266	0.167	0.380
B-C	723	0.106	0.268	-	-
C-B	750	0.278	0.278	-	-

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.

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-A	✓		11
B-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)	Run automatically
D1	2023 Base	AM	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 (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	863	100.000
B - Dan's Lane		ONE HOUR	✓	202	100.000
C - A47 North		ONE HOUR	✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	272	591
	B - Dan's Lane	148	0	54
	C - A47 North	425	148	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.32	0.68
	B - Dan's Lane	0.73	0.00	0.27
	C - A47 North	0.74	0.26	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	6	3
	B - Dan's Lane	8	0	26
	C - A47 North	7	11	0

Average PCU Per Veh

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	1.000	1.055	1.030
	B - Dan's Lane	1.075	1.000	1.260
	C - A47 North	1.070	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:00-07:15	A - A47 South	650	674
	B - Dan's Lane	152	171
	C - A47 North	431	466
07:15-07:30	A - A47 South	776	805
	B - Dan's Lane	182	204
	C - A47 North	515	556
07:30-07:45	A - A47 South	950	986
	B - Dan's Lane	222	250
	C - A47 North	631	682
07:45-08:00	A - A47 South	950	986
	B - Dan's Lane	222	250
	C - A47 North	631	682
08:00-08:15	A - A47 South	776	805
	B - Dan's Lane	182	204
	C - A47 North	515	556
08:15-08:30	A - A47 South	650	674
	B - Dan's Lane	152	171
	C - A47 North	431	466

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.18	13.46	0.2	B	50	74
B-A	0.70	50.35	2.2	F	136	204
C-AB	0.38	13.54	0.6	B	136	204
C-A					390	585
A-B					250	374
A-C					542	813

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	420	0.097	40	0.0	0.1	9.479	A
B-A	111	28	340	0.327	110	0.0	0.5	15.469	C
C-AB	111	28	507	0.220	110	0.0	0.3	9.056	A
C-A	320	80			320				
A-B	205	51			205				
A-C	445	111			445				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	384	0.126	48	0.1	0.1	10.716	B
B-A	133	33	295	0.451	132	0.5	0.8	21.873	C
C-AB	133	33	474	0.281	133	0.3	0.4	10.532	B
C-A	382	96			382				
A-B	245	61			245				
A-C	531	133			531				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	329	0.181	59	0.1	0.2	13.313	B
B-A	163	41	233	0.700	158	0.8	2.0	45.511	E
C-AB	163	41	429	0.380	162	0.4	0.6	13.461	B
C-A	468	117			468				
A-B	299	75			299				
A-C	651	163			651				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	327	0.182	59	0.2	0.2	13.458	B
B-A	163	41	232	0.701	162	2.0	2.2	50.354	F
C-AB	163	41	429	0.380	163	0.6	0.6	13.541	B
C-A	468	117			468				
A-B	299	75			299				
A-C	651	163			651				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	382	0.127	49	0.2	0.1	10.831	B
B-A	133	33	295	0.452	138	2.2	0.9	23.708	C
C-AB	133	33	474	0.281	134	0.6	0.4	10.613	B
C-A	382	96			382				
A-B	245	61			245				
A-C	531	133			531				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	418	0.097	41	0.1	0.1	9.539	A
B-A	111	28	340	0.328	113	0.9	0.5	15.960	C
C-AB	111	28	507	0.220	112	0.4	0.3	9.129	A
C-A	320	80			320				
A-B	205	51			205				
A-C	445	111			445				

Existing Layout - 2023 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		4.89	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.89	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	597	100.000
B - Dan's Lane		ONE HOUR	✓	254	100.000
C - A47 North		ONE HOUR	✓	738	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	143	454
	B - Dan's Lane	172	0	82
	C - A47 North	653	85	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.24	0.76
	B - Dan's Lane	0.68	0.00	0.32
	C - A47 North	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	4	2
	B - Dan's Lane	2	0	13
	C - A47 North	2	14	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.035	1.022
	B - Dan's Lane	1.023	1.000	1.134
	C - A47 North	1.017	1.141	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:15-16:30	A - A47 South	449	461
	B - Dan's Lane	191	202
	C - A47 North	556	573
16:30-16:45	A - A47 South	537	550
	B - Dan's Lane	228	242
	C - A47 North	663	684
16:45-17:00	A - A47 South	657	674
	B - Dan's Lane	280	296
	C - A47 North	813	838
17:00-17:15	A - A47 South	657	674
	B - Dan's Lane	280	296
	C - A47 North	813	838
17:15-17:30	A - A47 South	537	550
	B - Dan's Lane	228	242
	C - A47 North	663	684
17:30-17:45	A - A47 South	449	461
	B - Dan's Lane	191	202
	C - A47 North	556	573

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	11.11	0.3	B	75	113
B-A	0.65	34.75	1.8	D	158	237
C-AB	0.19	9.01	0.2	A	78	117
C-A					599	899
A-B					131	197
A-C					417	625

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	498	0.124	61	0.0	0.1	8.228	A
B-A	129	32	390	0.332	128	0.0	0.5	13.627	B
C-AB	64	16	545	0.117	63	0.0	0.1	7.469	A
C-A	492	123			492				
A-B	108	27			108				
A-C	342	85			342				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	466	0.158	74	0.1	0.2	9.177	A
B-A	155	39	349	0.443	153	0.5	0.8	18.334	C
C-AB	76	19	523	0.146	76	0.1	0.2	8.052	A
C-A	587	147			587				
A-B	129	32			129				
A-C	408	102			408				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	23	416	0.217	90	0.2	0.3	11.032	B
B-A	189	47	292	0.649	186	0.8	1.7	32.813	D
C-AB	94	23	493	0.190	93	0.2	0.2	9.000	A
C-A	719	180			719				
A-B	157	39			157				
A-C	500	125			500				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	23	414	0.218	90	0.3	0.3	11.112	B
B-A	189	47	292	0.649	189	1.7	1.8	34.753	D
C-AB	94	23	493	0.190	94	0.2	0.2	9.011	A
C-A	719	180			719				
A-B	157	39			157				
A-C	500	125			500				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	464	0.159	74	0.3	0.2	9.249	A
B-A	155	39	349	0.444	158	1.8	0.8	19.275	C
C-AB	76	19	523	0.146	77	0.2	0.2	8.066	A
C-A	587	147			587				
A-B	129	32			129				
A-C	408	102			408				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	497	0.124	62	0.2	0.1	8.280	A
B-A	129	32	390	0.332	131	0.8	0.5	13.977	B
C-AB	64	16	545	0.117	64	0.2	0.1	7.491	A
C-A	492	123			492				
A-B	108	27			108				
A-C	342	85			342				

Existing Layout - 2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		8.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Base	AM	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 (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	897	100.000
B - Dan's Lane		ONE HOUR	✓	210	100.000
C - A47 North		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	283	614
	B - Dan's Lane	154	0	56
	C - A47 North	441	154	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.32	0.68
	B - Dan's Lane	0.73	0.00	0.27
	C - A47 North	0.74	0.26	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	6	3
	B - Dan's Lane	8	0	26
	C - A47 North	7	11	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.055	1.030
	B - Dan's Lane	1.075	1.000	1.260
	C - A47 North	1.070	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:00-07:15	A - A47 South	675	701
	B - Dan's Lane	158	178
	C - A47 North	448	484
07:15-07:30	A - A47 South	806	837
	B - Dan's Lane	189	212
	C - A47 North	535	578
07:30-07:45	A - A47 South	988	1025
	B - Dan's Lane	231	260
	C - A47 North	655	708
07:45-08:00	A - A47 South	988	1025
	B - Dan's Lane	231	260
	C - A47 North	655	708
08:00-08:15	A - A47 South	806	837
	B - Dan's Lane	189	212
	C - A47 North	535	578
08:15-08:30	A - A47 South	675	701
	B - Dan's Lane	158	178
	C - A47 North	448	484

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	14.36	0.2	B	51	77
B-A	0.77	67.60	3.0	F	141	212
C-AB	0.40	14.43	0.7	B	141	212
C-A					405	607
A-B					260	390
A-C					563	845

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	413	0.102	42	0.0	0.1	9.690	A
B-A	116	29	331	0.350	114	0.0	0.5	16.396	C
C-AB	116	29	500	0.232	115	0.0	0.3	9.314	A
C-A	332	83			332				
A-B	213	53			213				
A-C	462	116			462				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	375	0.134	50	0.1	0.2	11.069	B
B-A	138	35	284	0.487	137	0.5	0.9	24.176	C
C-AB	138	35	466	0.297	138	0.3	0.4	10.957	B
C-A	396	99			396				
A-B	254	64			254				
A-C	552	138			552				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	316	0.195	61	0.2	0.2	14.128	B
B-A	170	42	220	0.772	163	0.9	2.7	57.383	F
C-AB	170	42	419	0.405	169	0.4	0.7	14.323	B
C-A	486	121			486				
A-B	312	78			312				
A-C	676	169			676				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	312	0.197	62	0.2	0.2	14.359	B
B-A	170	42	219	0.774	168	2.7	3.0	67.595	F
C-AB	170	42	419	0.405	170	0.7	0.7	14.430	B
C-A	486	121			486				
A-B	312	78			312				
A-C	676	169			676				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	371	0.136	51	0.2	0.2	11.242	B
B-A	138	35	284	0.488	146	3.0	1.0	27.494	D
C-AB	138	35	466	0.297	139	0.7	0.4	11.056	B
C-A	396	99			396				
A-B	254	64			254				
A-C	552	138			552				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	411	0.103	42	0.2	0.1	9.763	A
B-A	116	29	331	0.351	118	1.0	0.6	17.037	C
C-AB	116	29	500	0.232	116	0.4	0.3	9.397	A
C-A	332	83			332				
A-B	213	53			213				
A-C	462	116			462				

Existing Layout - 2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	621	100.000
B - Dan's Lane		ONE HOUR	✓	264	100.000
C - A47 North		ONE HOUR	✓	766	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	149	472
	B - Dan's Lane	179	0	85
	C - A47 North	678	88	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.24	0.76
	B - Dan's Lane	0.68	0.00	0.32
	C - A47 North	0.89	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	4	2
	B - Dan's Lane	2	0	13
	C - A47 North	2	14	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.035	1.022
	B - Dan's Lane	1.023	1.000	1.134
	C - A47 North	1.017	1.141	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:15-16:30	A - A47 South	468	479
	B - Dan's Lane	199	210
	C - A47 North	577	595
16:30-16:45	A - A47 South	558	572
	B - Dan's Lane	237	251
	C - A47 North	689	710
16:45-17:00	A - A47 South	684	701
	B - Dan's Lane	291	308
	C - A47 North	843	870
17:00-17:15	A - A47 South	684	701
	B - Dan's Lane	291	308
	C - A47 North	843	870
17:15-17:30	A - A47 South	558	572
	B - Dan's Lane	237	251
	C - A47 North	689	710
17:30-17:45	A - A47 South	468	479
	B - Dan's Lane	199	210
	C - A47 North	577	595

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	11.69	0.3	B	78	117
B-A	0.70	42.55	2.2	E	164	246
C-AB	0.20	9.24	0.2	A	81	121
C-A					622	933
A-B					137	205
A-C					433	650

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	492	0.130	63	0.0	0.1	8.392	A
B-A	135	34	382	0.353	133	0.0	0.5	14.338	B
C-AB	66	17	540	0.123	66	0.0	0.1	7.575	A
C-A	510	128			510				
A-B	112	28			112				
A-C	355	89			355				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	457	0.167	76	0.1	0.2	9.440	A
B-A	161	40	339	0.475	160	0.5	0.9	19.918	C
C-AB	79	20	518	0.153	79	0.1	0.2	8.201	A
C-A	610	152			610				
A-B	134	33			134				
A-C	424	106			424				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	23	404	0.232	93	0.2	0.3	11.572	B
B-A	197	49	280	0.704	192	0.9	2.1	39.025	E
C-AB	97	24	486	0.199	97	0.2	0.2	9.227	A
C-A	746	187			746				
A-B	164	41			164				
A-C	520	130			520				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	23	402	0.233	94	0.3	0.3	11.687	B
B-A	197	49	280	0.704	197	2.1	2.2	42.550	E
C-AB	97	24	486	0.199	97	0.2	0.2	9.240	A
C-A	746	187			746				
A-B	164	41			164				
A-C	520	130			520				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	455	0.168	77	0.3	0.2	9.538	A
B-A	161	40	339	0.475	166	2.2	0.9	21.399	C
C-AB	79	20	518	0.153	79	0.2	0.2	8.217	A
C-A	610	152			610				
A-B	134	33			134				
A-C	424	106			424				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	490	0.130	64	0.2	0.2	8.449	A
B-A	135	34	381	0.353	136	0.9	0.6	14.778	B
C-AB	66	17	540	0.123	66	0.2	0.1	7.596	A
C-A	510	128			510				
A-B	112	28			112				
A-C	355	89			355				

Existing Layout - 2028 Base + Comm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		40.97	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	40.97	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)	Run automatically
D5	2028 Base + Comm	AM	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 (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	1032	100.000
B - Dan's Lane		ONE HOUR	✓	241	100.000
C - A47 North		ONE HOUR	✓	680	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	306	726
	B - Dan's Lane	162	0	79
	C - A47 North	518	162	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.30	0.70
	B - Dan's Lane	0.67	0.00	0.33
	C - A47 North	0.76	0.24	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	11	5
	B - Dan's Lane	15	0	36
	C - A47 North	12	20	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.107	1.053
	B - Dan's Lane	1.151	1.000	1.361
	C - A47 North	1.118	1.202	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:00-07:15	A - A47 South	777	831
	B - Dan's Lane	181	221
	C - A47 North	512	583
07:15-07:30	A - A47 South	928	992
	B - Dan's Lane	217	264
	C - A47 North	611	696
07:30-07:45	A - A47 South	1136	1215
	B - Dan's Lane	265	324
	C - A47 North	749	852
07:45-08:00	A - A47 South	1136	1215
	B - Dan's Lane	265	324
	C - A47 North	749	852
08:00-08:15	A - A47 South	928	992
	B - Dan's Lane	217	264
	C - A47 North	611	696
08:15-08:30	A - A47 South	777	831
	B - Dan's Lane	181	221
	C - A47 North	512	583

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.34	21.75	0.5	C	72	109
B-A	1.27	441.69	22.6	F	149	223
C-AB	0.52	21.82	1.1	C	149	223
C-A					475	713
A-B					281	421
A-C					666	999

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	351	0.170	59	0.0	0.2	12.290	B
B-A	122	30	266	0.458	119	0.0	0.8	23.944	C
C-AB	122	30	432	0.282	120	0.0	0.4	11.506	B
C-A	390	97			390				
A-B	230	58			230				
A-C	547	137			547				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	71	18	304	0.233	71	0.2	0.3	15.377	C
B-A	146	36	214	0.682	141	0.8	1.9	47.406	E
C-AB	146	36	395	0.369	145	0.4	0.6	14.377	B
C-A	466	116			466				
A-B	275	69			275				
A-C	653	163			653				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	252	0.345	86	0.3	0.5	21.534	C
B-A	178	45	141	1.262	134	1.9	12.8	238.991	F
C-AB	178	45	343	0.520	177	0.6	1.0	21.381	C
C-A	570	143			570				
A-B	337	84			337				
A-C	799	200			799				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	252	0.345	87	0.5	0.5	21.745	C
B-A	178	45	141	1.269	139	12.8	22.6	441.688	F
C-AB	178	45	343	0.520	178	1.0	1.1	21.817	C
C-A	570	143			570				
A-B	337	84			337				
A-C	799	200			799				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	71	18	279	0.254	72	0.5	0.3	17.405	C
B-A	146	36	212	0.685	203	22.6	8.2	281.670	F
C-AB	146	36	395	0.369	147	1.1	0.6	14.676	B
C-A	466	116			466				
A-B	275	69			275				
A-C	653	163			653				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	338	0.176	60	0.3	0.2	12.977	B
B-A	122	30	265	0.460	151	8.2	0.9	38.833	E
C-AB	122	30	432	0.282	123	0.6	0.4	11.680	B
C-A	390	97			390				
A-B	230	58			230				
A-C	547	137			547				

Existing Layout - 2028 Base + Comm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		12.77	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.77	B

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	708	100.000
B - Dan's Lane		ONE HOUR	✓	282	100.000
C - A47 North		ONE HOUR	✓	833	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	162	546
	B - Dan's Lane	187	0	95
	C - A47 North	732	101	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.23	0.77
	B - Dan's Lane	0.66	0.00	0.34
	C - A47 North	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	6	3
	B - Dan's Lane	4	0	24
	C - A47 North	3	24	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.055	1.030
	B - Dan's Lane	1.044	1.000	1.236
	C - A47 North	1.031	1.242	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:15-16:30	A - A47 South	533	552
	B - Dan's Lane	212	235
	C - A47 North	627	663
16:30-16:45	A - A47 South	636	659
	B - Dan's Lane	254	281
	C - A47 North	749	791
16:45-17:00	A - A47 South	780	807
	B - Dan's Lane	310	344
	C - A47 North	917	969
17:00-17:15	A - A47 South	780	807
	B - Dan's Lane	310	344
	C - A47 North	917	969
17:15-17:30	A - A47 South	636	659
	B - Dan's Lane	254	281
	C - A47 North	749	791
17:30-17:45	A - A47 South	533	552
	B - Dan's Lane	212	235
	C - A47 North	627	663

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	16.25	0.5	C	87	131
B-A	0.90	108.82	5.8	F	172	257
C-AB	0.26	11.54	0.4	B	93	139
C-A					672	1008
A-B					149	223
A-C					501	752

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	431	0.166	71	0.0	0.2	9.970	A
B-A	141	35	343	0.411	138	0.0	0.7	17.378	C
C-AB	76	19	480	0.158	75	0.0	0.2	8.875	A
C-A	551	138			551				
A-B	122	30			122				
A-C	411	103			411				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	85	21	393	0.217	85	0.2	0.3	11.689	B
B-A	168	42	295	0.571	166	0.7	1.2	27.467	D
C-AB	91	23	456	0.199	91	0.2	0.2	9.838	A
C-A	658	165			658				
A-B	146	36			146				
A-C	491	123			491				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	105	26	329	0.317	104	0.3	0.5	15.906	C
B-A	206	51	228	0.901	192	1.2	4.7	79.841	F
C-AB	111	28	423	0.263	111	0.2	0.4	11.510	B
C-A	806	201			806				
A-B	178	45			178				
A-C	601	150			601				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	105	26	326	0.321	105	0.5	0.5	16.250	C
B-A	206	51	228	0.902	201	4.7	5.8	108.822	F
C-AB	111	28	423	0.263	111	0.4	0.4	11.541	B
C-A	806	201			806				
A-B	178	45			178				
A-C	601	150			601				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	85	21	384	0.222	86	0.5	0.3	12.099	B
B-A	168	42	294	0.571	186	5.8	1.4	37.383	E
C-AB	91	23	456	0.199	91	0.4	0.3	9.872	A
C-A	658	165			658				
A-B	146	36			146				
A-C	491	123			491				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	429	0.167	72	0.3	0.2	10.092	B
B-A	141	35	342	0.411	144	1.4	0.7	18.370	C
C-AB	76	19	480	0.158	76	0.3	0.2	8.919	A
C-A	551	138			551				
A-B	122	30			122				
A-C	411	103			411				

Existing Layout - 2028 Base + Comm + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		51.20	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	51.20	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)	Run automatically
D7	2028 Base + Comm + Dev	AM	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 (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	1042	100.000
B - Dan's Lane		ONE HOUR	✓	243	100.000
C - A47 North		ONE HOUR	✓	686	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	316	726
	B - Dan's Lane	164	0	79
	C - A47 North	518	168	0

Proportions

	To			
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	0.30	0.70
	B - Dan's Lane	0.67	0.00	0.33
	C - A47 North	0.76	0.24	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	12	5
	B - Dan's Lane	18	0	40
	C - A47 North	12	22	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.119	1.053
	B - Dan's Lane	1.180	1.000	1.399
	C - A47 North	1.118	1.224	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:00-07:15	A - A47 South	784	842
	B - Dan's Lane	183	229
	C - A47 North	516	591
07:15-07:30	A - A47 South	937	1005
	B - Dan's Lane	218	273
	C - A47 North	617	705
07:30-07:45	A - A47 South	1147	1231
	B - Dan's Lane	268	335
	C - A47 North	755	864
07:45-08:00	A - A47 South	1147	1231
	B - Dan's Lane	268	335
	C - A47 North	755	864
08:00-08:15	A - A47 South	937	1005
	B - Dan's Lane	218	273
	C - A47 North	617	705
08:15-08:30	A - A47 South	784	842
	B - Dan's Lane	183	229
	C - A47 North	516	591

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.36	22.82	0.5	C	72	109
B-A	1.37	545.10	27.9	F	150	226
C-AB	0.56	24.22	1.2	C	154	231
C-A					475	713
A-B					290	435
A-C					666	999

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	338	0.176	59	0.0	0.2	12.844	B
B-A	123	31	256	0.482	120	0.0	0.9	25.860	D
C-AB	126	32	422	0.300	125	0.0	0.4	12.067	B
C-A	390	97			390				
A-B	238	59			238				
A-C	547	137			547				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	71	18	291	0.244	71	0.2	0.3	16.301	C
B-A	147	37	204	0.723	142	0.9	2.2	54.493	F
C-AB	151	38	384	0.393	150	0.4	0.6	15.313	C
C-A	466	116			466				
A-B	284	71			284				
A-C	653	163			653				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	245	0.356	86	0.3	0.5	22.587	C
B-A	181	45	132	1.364	128	2.2	15.4	292.113	F
C-AB	185	46	333	0.555	183	0.6	1.2	23.594	C
C-A	570	143			570				
A-B	348	87			348				
A-C	799	200			799				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	245	0.356	87	0.5	0.5	22.817	C
B-A	181	45	132	1.373	131	15.4	27.9	545.096	F
C-AB	185	46	333	0.555	185	1.2	1.2	24.220	C
C-A	570	143			570				
A-B	348	87			348				
A-C	799	200			799				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	71	18	271	0.262	72	0.5	0.4	18.143	C
B-A	147	37	203	0.728	196	27.9	15.8	396.540	F
C-AB	151	38	384	0.393	153	1.2	0.7	15.714	C
C-A	466	116			466				
A-B	284	71			284				
A-C	653	163			653				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	313	0.190	60	0.4	0.2	14.256	B
B-A	123	31	255	0.484	183	15.8	1.0	82.568	F
C-AB	126	32	422	0.300	127	0.7	0.4	12.279	B
C-A	390	97			390				
A-B	238	59			238				
A-C	547	137			547				

Existing Layout - 2028 Base + Comm + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		18.87	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.87	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)	Run automatically
D8	2028 Base + Comm + Dev	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	711	100.000
B - Dan's Lane		ONE HOUR	✓	298	100.000
C - A47 North		ONE HOUR	✓	835	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	165	546
	B - Dan's Lane	200	0	98
	C - A47 North	732	103	0

Proportions

	To			
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	0.23	0.77
	B - Dan's Lane	0.67	0.00	0.33
	C - A47 North	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	7	4
	B - Dan's Lane	5	0	25
	C - A47 North	5	25	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.068	1.037
	B - Dan's Lane	1.045	1.000	1.246
	C - A47 North	1.047	1.247	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:15-16:30	A - A47 South	535	559
	B - Dan's Lane	224	249
	C - A47 North	629	674
16:30-16:45	A - A47 South	639	667
	B - Dan's Lane	268	298
	C - A47 North	751	804
16:45-17:00	A - A47 South	783	817
	B - Dan's Lane	328	365
	C - A47 North	919	985
17:00-17:15	A - A47 South	783	817
	B - Dan's Lane	328	365
	C - A47 North	919	985
17:15-17:30	A - A47 South	639	667
	B - Dan's Lane	268	298
	C - A47 North	751	804
17:30-17:45	A - A47 South	535	559
	B - Dan's Lane	224	249
	C - A47 North	629	674

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.33	16.78	0.5	C	90	135
B-A	0.99	160.68	9.5	F	184	275
C-AB	0.27	11.77	0.4	B	95	142
C-A					672	1008
A-B					151	227
A-C					501	752

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	423	0.175	73	0.0	0.2	10.262	B
B-A	151	38	339	0.444	147	0.0	0.8	18.519	C
C-AB	78	19	477	0.163	77	0.0	0.2	8.983	A
C-A	551	138			551				
A-B	124	31			124				
A-C	411	103			411				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	383	0.230	88	0.2	0.3	12.192	B
B-A	180	45	290	0.619	177	0.8	1.5	30.957	D
C-AB	93	23	453	0.205	92	0.2	0.3	9.986	A
C-A	658	165			658				
A-B	148	37			148				
A-C	491	123			491				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	108	27	322	0.335	107	0.3	0.5	16.665	C
B-A	220	55	223	0.986	199	1.5	6.8	103.960	F
C-AB	113	28	419	0.271	113	0.3	0.4	11.739	B
C-A	806	201			806				
A-B	182	45			182				
A-C	601	150			601				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	108	27	322	0.335	108	0.5	0.5	16.782	C
B-A	220	55	223	0.987	210	6.8	9.5	160.682	F
C-AB	113	28	419	0.271	113	0.4	0.4	11.773	B
C-A	806	201			806				
A-B	182	45			182				
A-C	601	150			601				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	368	0.239	89	0.5	0.3	12.915	B
B-A	180	45	290	0.620	210	9.5	1.8	57.116	F
C-AB	93	23	453	0.205	93	0.4	0.3	10.025	B
C-A	658	165			658				
A-B	148	37			148				
A-C	491	123			491				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	420	0.176	74	0.3	0.2	10.425	B
B-A	151	38	339	0.445	155	1.8	0.8	19.951	C
C-AB	78	19	477	0.163	78	0.3	0.2	9.030	A
C-A	551	138			551				
A-B	124	31			124				
A-C	411	103			411				

Existing Layout - 2023 Base 0745, AM 0745

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		6.58	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.58	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Base 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	782	100.000
B - Dan's Lane		ONE HOUR	✓	222	100.000
C - A47 North		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	273	509
	B - Dan's Lane	166	0	56
	C - A47 North	411	143	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.35	0.65
	B - Dan's Lane	0.75	0.00	0.25
	C - A47 North	0.74	0.26	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	6	4
	B - Dan's Lane	7	0	25
	C - A47 North	7	11	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.055	1.037
	B - Dan's Lane	1.072	1.000	1.250
	C - A47 North	1.070	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A - A47 South	589	614
	B - Dan's Lane	167	187
	C - A47 North	417	451
07:45-08:00	A - A47 South	703	733
	B - Dan's Lane	200	223
	C - A47 North	498	538
08:00-08:15	A - A47 South	861	898
	B - Dan's Lane	244	273
	C - A47 North	610	659
08:15-08:30	A - A47 South	861	898
	B - Dan's Lane	244	273
	C - A47 North	610	659
08:30-08:45	A - A47 South	703	733
	B - Dan's Lane	200	223
	C - A47 North	498	538
08:45-09:00	A - A47 South	589	614
	B - Dan's Lane	167	187
	C - A47 North	417	451

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.18	12.69	0.2	B	51	77
B-A	0.70	45.53	2.2	E	152	228
C-AB	0.35	12.27	0.5	B	131	197
C-A					377	566
A-B					251	376
A-C					467	701

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	432	0.097	42	0.0	0.1	9.203	A
B-A	125	31	360	0.347	123	0.0	0.5	15.080	C
C-AB	108	27	522	0.206	107	0.0	0.3	8.652	A
C-A	309	77			309				
A-B	206	51			206				
A-C	383	96			383				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	399	0.126	50	0.1	0.1	10.320	B
B-A	149	37	318	0.470	148	0.5	0.8	21.024	C
C-AB	129	32	492	0.261	128	0.3	0.3	9.887	A
C-A	369	92			369				
A-B	245	61			245				
A-C	458	114			458				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	348	0.177	61	0.1	0.2	12.568	B
B-A	183	46	260	0.702	178	0.8	2.1	41.534	E
C-AB	157	39	451	0.349	157	0.3	0.5	12.217	B
C-A	453	113			453				
A-B	301	75			301				
A-C	560	140			560				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	345	0.179	62	0.2	0.2	12.688	B
B-A	183	46	260	0.703	182	2.1	2.2	45.532	E
C-AB	157	39	451	0.349	157	0.5	0.5	12.274	B
C-A	453	113			453				
A-B	301	75			301				
A-C	560	140			560				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	396	0.127	51	0.2	0.1	10.421	B
B-A	149	37	317	0.470	154	2.2	0.9	22.699	C
C-AB	129	32	492	0.261	129	0.5	0.4	9.946	A
C-A	369	92			369				
A-B	245	61			245				
A-C	458	114			458				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	431	0.098	42	0.1	0.1	9.264	A
B-A	125	31	359	0.348	126	0.9	0.5	15.575	C
C-AB	108	27	522	0.206	108	0.4	0.3	8.710	A
C-A	309	77			309				
A-B	206	51			206				
A-C	383	96			383				

Existing Layout - 2028 Base 0745, AM 0745

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		8.07	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.07	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2028 Base 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	813	100.000
B - Dan's Lane		ONE HOUR	✓	230	100.000
C - A47 North		ONE HOUR	✓	576	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	284	529
	B - Dan's Lane	172	0	58
	C - A47 North	427	149	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.35	0.65
	B - Dan's Lane	0.75	0.00	0.25
	C - A47 North	0.74	0.26	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	6	4
	B - Dan's Lane	7	0	25
	C - A47 North	7	11	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.055	1.037
	B - Dan's Lane	1.072	1.000	1.250
	C - A47 North	1.070	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A - A47 South	612	639
	B - Dan's Lane	173	193
	C - A47 North	434	468
07:45-08:00	A - A47 South	731	763
	B - Dan's Lane	207	231
	C - A47 North	518	559
08:00-08:15	A - A47 South	895	934
	B - Dan's Lane	253	283
	C - A47 North	634	685
08:15-08:30	A - A47 South	895	934
	B - Dan's Lane	253	283
	C - A47 North	634	685
08:30-08:45	A - A47 South	731	763
	B - Dan's Lane	207	231
	C - A47 North	518	559
08:45-09:00	A - A47 South	612	639
	B - Dan's Lane	173	193
	C - A47 North	434	468

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.19	13.41	0.2	B	53	80
B-A	0.77	58.72	2.9	F	158	237
C-AB	0.37	12.96	0.6	B	137	205
C-A					392	588
A-B					261	391
A-C					485	728

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	426	0.102	43	0.0	0.1	9.395	A
B-A	129	32	351	0.369	127	0.0	0.6	15.923	C
C-AB	112	28	516	0.218	111	0.0	0.3	8.874	A
C-A	321	80			321				
A-B	214	53			214				
A-C	398	100			398				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	391	0.134	52	0.1	0.2	10.628	B
B-A	155	39	308	0.503	153	0.6	1.0	23.055	C
C-AB	134	33	485	0.276	134	0.3	0.4	10.240	B
C-A	384	96			384				
A-B	255	64			255				
A-C	476	119			476				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	335	0.190	64	0.2	0.2	13.222	B
B-A	189	47	248	0.764	183	1.0	2.6	50.931	F
C-AB	164	41	442	0.371	163	0.4	0.6	12.887	B
C-A	470	118			470				
A-B	313	78			313				
A-C	582	146			582				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	332	0.192	64	0.2	0.2	13.409	B
B-A	189	47	247	0.765	188	2.6	2.9	58.721	F
C-AB	164	41	442	0.371	164	0.6	0.6	12.961	B
C-A	470	118			470				
A-B	313	78			313				
A-C	582	146			582				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	387	0.135	52	0.2	0.2	10.771	B
B-A	155	39	307	0.504	162	2.9	1.1	25.888	D
C-AB	134	33	485	0.276	135	0.6	0.4	10.311	B
C-A	384	96			384				
A-B	255	64			255				
A-C	476	119			476				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	425	0.103	44	0.2	0.1	9.459	A
B-A	129	32	351	0.369	131	1.1	0.6	16.558	C
C-AB	112	28	516	0.218	113	0.4	0.3	8.940	A
C-A	321	80			321				
A-B	214	53			214				
A-C	398	100			398				

Existing Layout - 2028 Base + Comm 0745, AM 0745

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		35.21	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	35.21	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)	Run automatically
D11	2028 Base + Comm 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	948	100.000
B - Dan's Lane		ONE HOUR	✓	261	100.000
C - A47 North		ONE HOUR	✓	646	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	307	641
	B - Dan's Lane	180	0	81
	C - A47 North	489	157	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.32	0.68
	B - Dan's Lane	0.69	0.00	0.31
	C - A47 North	0.76	0.24	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	11	6
	B - Dan's Lane	14	0	35
	C - A47 North	12	21	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.106	1.063
	B - Dan's Lane	1.136	1.000	1.352
	C - A47 North	1.121	1.208	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A - A47 South	714	769
	B - Dan's Lane	196	236
	C - A47 North	486	555
07:45-08:00	A - A47 South	852	918
	B - Dan's Lane	235	282
	C - A47 North	581	663
08:00-08:15	A - A47 South	1044	1124
	B - Dan's Lane	287	346
	C - A47 North	711	812
08:15-08:30	A - A47 South	1044	1124
	B - Dan's Lane	287	346
	C - A47 North	711	812
08:30-08:45	A - A47 South	852	918
	B - Dan's Lane	235	282
	C - A47 North	581	663
08:45-09:00	A - A47 South	714	769
	B - Dan's Lane	196	236
	C - A47 North	486	555

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.33	20.16	0.5	C	74	111
B-A	1.16	328.52	18.6	F	165	248
C-AB	0.48	18.99	0.9	C	144	216
C-A					449	673
A-B					282	423
A-C					588	882

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	363	0.168	60	0.0	0.2	11.858	B
B-A	136	34	289	0.469	132	0.0	0.8	22.514	C
C-AB	118	30	444	0.266	117	0.0	0.4	10.958	B
C-A	368	92			368				
A-B	231	58			231				
A-C	483	121			483				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	319	0.228	72	0.2	0.3	14.550	B
B-A	162	40	239	0.676	158	0.8	1.8	42.196	E
C-AB	141	35	410	0.345	141	0.4	0.5	13.346	B
C-A	440	110			440				
A-B	276	69			276				
A-C	576	144			576				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	268	0.333	88	0.3	0.5	19.998	C
B-A	198	50	171	1.156	161	1.8	11.1	181.700	F
C-AB	173	43	362	0.477	171	0.5	0.9	18.726	C
C-A	538	135			538				
A-B	338	85			338				
A-C	706	176			706				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	268	0.333	89	0.5	0.5	20.162	C
B-A	198	50	171	1.160	168	11.1	18.6	328.519	F
C-AB	173	43	362	0.477	173	0.9	0.9	18.993	C
C-A	538	135			538				
A-B	338	85			338				
A-C	706	176			706				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	292	0.249	73	0.5	0.3	16.506	C
B-A	162	40	239	0.678	224	18.6	3.2	186.999	F
C-AB	141	35	410	0.345	143	0.9	0.5	13.551	B
C-A	440	110			440				
A-B	276	69			276				
A-C	576	144			576				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	358	0.170	62	0.3	0.2	12.155	B
B-A	136	34	288	0.470	144	3.2	0.9	26.430	D
C-AB	118	30	444	0.266	119	0.5	0.4	11.097	B
C-A	368	92			368				
A-B	231	58			231				
A-C	483	121			483				

Existing Layout - 2028 Base + Comm + Dev 0745, AM 0745

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Dan's Lane - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Dan's Lane / A47 Hinckley Road	T-Junction	Two-way	Two-way	Two-way		44.55	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.55	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)	Run automatically
D12	2028 Base + Comm + Dev 0745	AM 0745	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A47 South		ONE HOUR	✓	958	100.000
B - Dan's Lane		ONE HOUR	✓	263	100.000
C - A47 North		ONE HOUR	✓	652	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	317	641
	B - Dan's Lane	182	0	81
	C - A47 North	489	163	0

Proportions

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	0.33	0.67
	B - Dan's Lane	0.69	0.00	0.31
	C - A47 North	0.75	0.25	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	12	6
	B - Dan's Lane	16	0	39
	C - A47 North	12	23	0

Average PCU Per Veh

From	To			
		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	1.000	1.119	1.063
	B - Dan's Lane	1.162	1.000	1.389
	C - A47 North	1.121	1.231	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A - A47 South	721	780
	B - Dan's Lane	198	244
	C - A47 North	491	564
07:45-08:00	A - A47 South	861	931
	B - Dan's Lane	236	291
	C - A47 North	586	673
08:00-08:15	A - A47 South	1055	1141
	B - Dan's Lane	290	357
	C - A47 North	718	824
08:15-08:30	A - A47 South	1055	1141
	B - Dan's Lane	290	357
	C - A47 North	718	824
08:30-08:45	A - A47 South	861	931
	B - Dan's Lane	236	291
	C - A47 North	586	673
08:45-09:00	A - A47 South	721	780
	B - Dan's Lane	198	244
	C - A47 North	491	564

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.34	21.12	0.5	C	74	111
B-A	1.24	413.17	23.7	F	167	251
C-AB	0.51	20.87	1.0	C	150	224
C-A					449	673
A-B					291	436
A-C					588	882

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	350	0.174	60	0.0	0.2	12.378	B
B-A	137	34	279	0.492	133	0.0	0.9	24.205	C
C-AB	123	31	433	0.283	121	0.0	0.4	11.488	B
C-A	368	92			368				
A-B	239	60			239				
A-C	483	121			483				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	306	0.238	72	0.2	0.3	15.370	C
B-A	164	41	230	0.713	159	0.9	2.1	47.965	E
C-AB	147	37	399	0.367	146	0.4	0.6	14.185	B
C-A	440	110			440				
A-B	285	71			285				
A-C	576	144			576				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	260	0.344	88	0.3	0.5	20.931	C
B-A	200	50	162	1.236	155	2.1	13.5	220.941	F
C-AB	179	45	352	0.510	178	0.6	1.0	20.499	C
C-A	538	135			538				
A-B	349	87			349				
A-C	706	176			706				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	260	0.344	89	0.5	0.5	21.117	C
B-A	200	50	161	1.242	160	13.5	23.7	413.175	F
C-AB	179	45	352	0.510	179	1.0	1.0	20.873	C
C-A	538	135			538				
A-B	349	87			349				
A-C	706	176			706				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	284	0.257	73	0.5	0.4	17.186	C
B-A	164	41	229	0.716	219	23.7	9.8	281.778	F
C-AB	147	37	399	0.367	148	1.0	0.6	14.459	B
C-A	440	110			440				
A-B	285	71			285				
A-C	576	144			576				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	335	0.182	61	0.4	0.2	13.167	B
B-A	137	34	278	0.493	172	9.8	1.0	43.995	E
C-AB	123	31	433	0.283	123	0.6	0.4	11.657	B
C-A	368	92			368				
A-B	239	60			239				
A-C	483	121			483				

Appendix 07

Ashfield Farm PICADY Results



Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.0.6896

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Filename: ADC1969 dans lane junction.j9

Path: C:\Users\ADCteam\Dropbox\~ JN8 TEMP

Report generation date: 16/01/2020 12:54:55

»2018 , AM

»2018 , PM

»2024 BACKGROUND, AM

»2024 BACKGROUND, PM

»2024 BACKGROUND + DEVELOPMENT, AM

»2024 BACKGROUND + DEVELOPMENT, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2018						
Stream B-C	0.2	12.98	0.16	0.3	12.03	0.21
Stream B-A	3.6	51.31	0.81	2.1	31.72	0.69
Stream C-AB	1.3	19.81	0.54	0.2	8.67	0.19
2024 BACKGROUND						
Stream B-C	0.4	16.11	0.26	0.6	15.89	0.33
Stream B-A	37.0	406.48	1.32	7.0	104.47	0.96
Stream C-AB	2.1	29.93	0.67	0.3	9.43	0.23
2024 BACKGROUND + DEVELOPMENT						
Stream B-C	0.4	16.15	0.26	0.6	15.91	0.33
Stream B-A	45.6	512.58	1.36	7.6	115.62	0.97
Stream C-AB	2.2	30.40	0.68	0.3	9.49	0.23

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	Dans Lane Junction Assessment
Location	Desford
Site number	
Date	14/01/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Davids_Toshiba\ADCteam
Description	

Units

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

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	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2018	AM	DIRECT	07:30	08:30	60	15	✓
D4	2018	PM	DIRECT	16:45	17:45	60	15	✓
D6	2024 BACKGROUND	AM	DIRECT	07:30	08:30	60	15	✓
D7	2024 BACKGROUND	PM	DIRECT	16:45	17:45	60	15	✓
D8	2024 BACKGROUND + DEVELOPMENT	AM	DIRECT	07:30	08:30	60	15	✓
D9	2024 BACKGROUND + DEVELOPMENT	PM	DIRECT	16:45	17:45	60	15	✓

Analysis Set Details

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

2018 , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - 2024 BACKGROUND + DEVELOPMENT, PM	Demand Set 9: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Dan's Lane-A47	T-Junction	Two-way		8.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A47 South		Major
B	Dan's Lane		Minor
C	A47 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A47 North	7.00		✓	3.00	200.0	✓	24.00

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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Dan's Lane	Two lanes	3.50	3.50	170	135

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream Intercept adjustment	Use adjustment	Reason	Direct Intercept adjustment (PCU/TS)
B-A	✓		11.00
B-C			

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/TS)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	158.506	0.110	0.279	0.176	0.399
1	B-C	186.103	0.109	0.276	-	-
1	C-B	187.461	0.278	0.278	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2018	AM	DIRECT	07:30	08:30	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - A47 South		DIRECT	✓	100.000
B - Dan's Lane		DIRECT	✓	100.000
C - A47 North		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

07:30 - 07:45

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	68.00	146.00
	B - Dan's Lane	54.00	0.00	12.00
	C - A47 North	121.00	59.00	0.00

Demand (PCU/TS)

07:45 - 08:00

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	107.00	173.00
	B - Dan's Lane	34.00	0.00	15.00
	C - A47 North	107.00	59.00	0.00

Demand (PCU/TS)

08:00 - 08:15

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	70.00	143.00
	B - Dan's Lane	50.00	0.00	10.00
	C - A47 North	113.00	42.00	0.00

Demand (PCU/TS)

08:15 - 08:30

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	67.00	166.00
	B - Dan's Lane	64.00	0.00	16.00
	C - A47 North	125.00	36.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

07:30 - 07:45

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	8	4
	B - Dan's Lane	9	0	23
	C - A47 North	6	13	0

Heavy Vehicle Percentages

07:45 - 08:00

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	8	4
	B - Dan's Lane	9	0	23
	C - A47 North	6	13	0

Heavy Vehicle Percentages

08:00 - 08:15

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	8	4
	B - Dan's Lane	9	0	23
	C - A47 North	6	13	0

Heavy Vehicle Percentages

08:15 - 08:30

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	8	4
	B - Dan's Lane	9	0	23
	C - A47 North	6	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.16	12.98	0.2	B	13.25	53.00
B-A	0.81	51.31	3.6	F	50.50	202.00
C-AB	0.54	19.81	1.3	C	49.00	196.00
C-A					116.50	466.00
A-B					78.00	312.00
A-C					157.00	628.00

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12.00	12.00	109.86	0.109	11.85	0.0	0.1	11.278	B
B-A	54.00	54.00	76.45	0.706	51.72	0.0	2.3	36.952	E
C-AB	59.00	59.00	127.99	0.461	58.06	0.0	0.9	14.362	B
C-A	121.00	121.00			121.00				
A-B	68.00	68.00			68.00				
A-C	146.00	146.00			146.00				

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15.00	15.00	106.06	0.141	14.95	0.1	0.2	12.143	B
B-A	34.00	34.00	66.69	0.510	35.08	2.3	1.2	31.967	D
C-AB	59.00	59.00	109.65	0.538	58.68	0.9	1.3	19.809	C
C-A	107.00	107.00			107.00				
A-B	107.00	107.00			107.00				
A-C	173.00	173.00			173.00				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10.00	10.00	114.88	0.087	10.08	0.2	0.1	10.570	B
B-A	50.00	50.00	84.75	0.590	49.73	1.2	1.5	27.725	D
C-AB	42.00	42.00	128.27	0.327	42.70	1.3	0.6	11.978	B
C-A	113.00	113.00			113.00				
A-B	70.00	70.00			70.00				
A-C	143.00	143.00			143.00				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16.00	16.00	101.08	0.158	15.89	0.1	0.2	12.976	B
B-A	64.00	64.00	79.22	0.808	61.91	1.5	3.6	51.307	F
C-AB	36.00	36.00	122.71	0.293	36.08	0.6	0.5	11.751	B
C-A	125.00	125.00			125.00				
A-B	67.00	67.00			67.00				
A-C	166.00	166.00			166.00				

2018 , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - 2024 BACKGROUND + DEVELOPMENT, PM	Demand Set 9: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Dan's Lane-A47	T-Junction	Two-way		4.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2018	PM	DIRECT	16:45	17:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - A47 South		DIRECT	✓	100.000
B - Dan's Lane		DIRECT	✓	100.000
C - A47 North		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	46.00	128.00
	B - Dan's Lane	40.00	0.00	20.00
	C - A47 North	182.00	25.00	0.00

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	43.00	116.00
	B - Dan's Lane	61.00	0.00	16.00
	C - A47 North	192.00	27.00	0.00

Demand (PCU/TS)

17:15 - 17:30

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	58.00	159.00
	B - Dan's Lane	42.00	0.00	24.00
	C - A47 North	217.00	17.00	0.00

Demand (PCU/TS)

17:30 - 17:45

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	59.00	118.00
	B - Dan's Lane	45.00	0.00	11.00
	C - A47 North	171.00	19.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	5	4
	B - Dan's Lane	3	0	18
	C - A47 North	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.21	12.03	0.3	B	17.75	71.00
B-A	0.69	31.72	2.1	D	47.00	188.00
C-AB	0.19	8.67	0.2	A	22.00	88.00
C-A					190.50	762.00
A-B					51.50	206.00
A-C					130.25	521.00

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20.00	20.00	126.53	0.158	19.78	0.0	0.2	9.929	A
B-A	40.00	40.00	86.75	0.461	39.15	0.0	0.8	19.159	C
C-AB	25.00	25.00	139.11	0.180	24.77	0.0	0.2	8.327	A
C-A	182.00	182.00			182.00				
A-B	46.00	46.00			46.00				
A-C	128.00	128.00			128.00				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16.00	16.00	119.32	0.134	16.03	0.2	0.2	10.286	B
B-A	61.00	61.00	87.79	0.695	59.74	0.8	2.1	31.722	D
C-AB	27.00	27.00	143.28	0.188	26.99	0.2	0.2	8.202	A
C-A	192.00	192.00			192.00				
A-B	43.00	43.00			43.00				
A-C	116.00	116.00			116.00				

17:15 - 17:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24.00	24.00	112.01	0.214	23.87	0.2	0.3	12.030	B
B-A	42.00	42.00	73.72	0.570	42.66	2.1	1.5	30.463	D
C-AB	17.00	17.00	127.16	0.134	17.08	0.2	0.2	8.673	A
C-A	217.00	217.00			217.00				
A-B	58.00	58.00			58.00				
A-C	159.00	159.00			159.00				

17:30 - 17:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11.00	11.00	126.11	0.087	11.20	0.3	0.1	9.259	A
B-A	45.00	45.00	92.37	0.487	45.44	1.5	1.0	19.939	C
C-AB	19.00	19.00	138.27	0.137	19.00	0.2	0.2	7.998	A
C-A	171.00	171.00			171.00				
A-B	59.00	59.00			59.00				
A-C	118.00	118.00			118.00				

2024 BACKGROUND, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - 2024 BACKGROUND + DEVELOPMENT, PM	Demand Set 9: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Dan's Lane-A47	T-Junction	Two-way		53.90	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2024 BACKGROUND	AM	DIRECT	07:30	08:30	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - A47 South		DIRECT	✓	100.000
B - Dan's Lane		DIRECT	✓	100.000
C - A47 North		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	82.00	163.00
	B - Dan's Lane	72.00	0.00	21.00
	C - A47 North	145.00	67.00	0.00

07:30 - 07:45

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	125.00	192.00
	B - Dan's Lane	50.00	0.00	21.00
	C - A47 North	130.00	67.00	0.00

07:45 - 08:00

Demand (PCU/TS)

08:00 - 08:15

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	85.00	159.00
	B - Dan's Lane	69.00	0.00	19.00
	C - A47 North	137.00	53.00	0.00

Demand (PCU/TS)

08:15 - 08:30

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	81.00	185.00
	B - Dan's Lane	84.00	0.00	25.00
	C - A47 North	151.00	46.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0	8	4
	B - Dan's Lane	9	0	23
	C - A47 North	6	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.26	16.11	0.4	C	21.50	86.00
B-A	1.32	406.48	37.0	F	68.75	275.00
C-AB	0.67	29.93	2.1	D	58.26	233.02
C-A					140.74	562.98
A-B					93.25	373.00
A-C					174.75	699.00

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21.00	21.00	99.14	0.212	20.68	0.0	0.3	14.052	B
B-A	72.00	72.00	62.75	1.147	58.17	0.0	13.8	138.482	F
C-AB	67.00	67.00	119.38	0.561	65.62	0.0	1.4	18.487	C
C-A	145.00	145.00			145.00				
A-B	82.00	82.00			82.00				
A-C	163.00	163.00			163.00				

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21.00	21.00	89.62	0.234	20.96	0.3	0.4	16.110	C
B-A	50.00	50.00	51.99	0.962	49.42	13.8	14.4	262.121	F
C-AB	67.02	67.02	99.40	0.674	66.26	1.4	2.1	29.935	D
C-A	129.98	129.98			129.98				
A-B	125.00	125.00			125.00				
A-C	192.00	192.00			192.00				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19.00	19.00	99.72	0.191	19.07	0.4	0.3	13.739	B
B-A	69.00	69.00	69.67	0.990	67.11	14.4	16.3	226.886	F
C-AB	53.00	53.00	119.65	0.443	54.22	2.1	0.9	15.813	C
C-A	137.00	137.00			137.00				
A-B	85.00	85.00			85.00				
A-C	159.00	159.00			159.00				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25.00	25.00	94.67	0.264	24.86	0.3	0.4	15.825	C
B-A	84.00	84.00	63.67	1.319	63.30	16.3	37.0	406.483	F
C-AB	46.00	46.00	113.54	0.405	46.14	0.9	0.8	15.122	C
C-A	151.00	151.00			151.00				
A-B	81.00	81.00			81.00				
A-C	185.00	185.00			185.00				

2024 BACKGROUND, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - 2024 BACKGROUND + DEVELOPMENT, PM	Demand Set 9: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Dan's Lane-A47	T-Junction	Two-way		13.10	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2024 BACKGROUND	PM	DIRECT	16:45	17:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - A47 South		DIRECT	✓	100.000
B - Dan's Lane		DIRECT	✓	100.000
C - A47 North		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	52.00	141.00
	B - Dan's Lane	50.00	0.00	27.00
	C - A47 North	200.00	31.00	0.00

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	49.00	128.00
	B - Dan's Lane	75.00	0.00	22.00
	C - A47 North	211.00	32.00	0.00

Demand (PCU/TS)

17:15 - 17:30

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	64.00	174.00
	B - Dan's Lane	54.00	0.00	32.00
	C - A47 North	237.00	20.00	0.00

Demand (PCU/TS)

17:30 - 17:45

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	65.00	129.00
	B - Dan's Lane	57.00	0.00	17.00
	C - A47 North	187.00	24.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	5	4
	B - Dan's Lane	3	0	18
	C - A47 North	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.33	15.89	0.6	C	24.50	98.00
B-A	0.96	104.47	7.0	F	59.00	236.00
C-AB	0.23	9.43	0.3	A	26.75	107.00
C-A					208.75	835.00
A-B					57.50	230.00
A-C					143.00	572.00

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27.00	27.00	114.69	0.235	26.64	0.0	0.4	12.016	B
B-A	50.00	50.00	76.90	0.650	48.26	0.0	1.7	30.790	D
C-AB	31.00	31.00	133.83	0.232	30.68	0.0	0.3	9.222	A
C-A	200.00	200.00			200.00				
A-B	52.00	52.00			52.00				
A-C	141.00	141.00			141.00				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22.00	22.00	109.08	0.202	22.05	0.4	0.3	12.213	B
B-A	75.00	75.00	78.41	0.957	69.69	1.7	7.0	79.286	F
C-AB	32.00	32.00	138.27	0.231	32.00	0.3	0.3	8.976	A
C-A	211.00	211.00			211.00				
A-B	49.00	49.00			49.00				
A-C	128.00	128.00			128.00				

17:15 - 17:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32.00	32.00	98.34	0.325	31.75	0.3	0.6	15.888	C
B-A	54.00	54.00	64.13	0.842	54.49	7.0	6.6	104.469	F
C-AB	20.00	20.00	121.32	0.165	20.11	0.3	0.2	9.434	A
C-A	237.00	237.00			237.00				
A-B	64.00	64.00			64.00				
A-C	174.00	174.00			174.00				

17:30 - 17:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17.00	17.00	112.12	0.152	17.34	0.6	0.2	11.242	B
B-A	57.00	57.00	83.81	0.680	61.11	6.6	2.4	45.906	E
C-AB	24.00	24.00	133.55	0.180	23.98	0.2	0.2	8.706	A
C-A	187.00	187.00			187.00				
A-B	65.00	65.00			65.00				
A-C	129.00	129.00			129.00				

2024 BACKGROUND + DEVELOPMENT, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - 2024 BACKGROUND + DEVELOPMENT, PM	Demand Set 9: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Dan's Lane-A47	T-Junction	Two-way		68.98	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2024 BACKGROUND + DEVELOPMENT	AM	DIRECT	07:30	08:30	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - A47 South		DIRECT	✓	100.000
B - Dan's Lane		DIRECT	✓	100.000
C - A47 North		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

07:30 - 07:45

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	84.00	163.00
	B - Dan's Lane	75.00	0.00	21.00
	C - A47 North	145.00	67.00	0.00

Demand (PCU/TS)

07:45 - 08:00

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	127.00	192.00
	B - Dan's Lane	53.00	0.00	21.00
	C - A47 North	130.00	67.00	0.00

Demand (PCU/TS)

08:00 - 08:15

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	87.00	159.00
	B - Dan's Lane	72.00	0.00	19.00
	C - A47 North	137.00	53.00	0.00

Demand (PCU/TS)

08:15 - 08:30

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	83.00	185.00
	B - Dan's Lane	86.00	0.00	25.00
	C - A47 North	151.00	46.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	8	4
	B - Dan's Lane	9	0	23
	C - A47 North	6	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.26	16.15	0.4	C	21.50	86.00
B-A	1.36	512.58	45.6	F	71.50	286.00
C-AB	0.68	30.40	2.2	D	58.26	233.02
C-A					140.74	562.98
A-B					95.25	381.00
A-C					174.75	699.00

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21.00	21.00	98.98	0.212	20.68	0.0	0.3	14.082	B
B-A	75.00	75.00	62.53	1.199	58.63	0.0	16.4	157.472	F
C-AB	67.00	67.00	118.82	0.564	65.61	0.0	1.4	18.664	C
C-A	145.00	145.00			145.00				
A-B	84.00	84.00			84.00				
A-C	163.00	163.00			163.00				

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21.00	21.00	89.46	0.235	20.96	0.3	0.4	16.148	C
B-A	53.00	53.00	51.76	1.024	50.45	16.4	18.9	322.167	F
C-AB	67.02	67.02	98.85	0.678	66.24	1.4	2.2	30.397	D
C-A	129.98	129.98			129.98				
A-B	127.00	127.00			127.00				
A-C	192.00	192.00			192.00				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19.00	19.00	99.56	0.191	19.07	0.4	0.3	13.769	B
B-A	72.00	72.00	69.44	1.037	68.11	18.9	22.8	302.417	F
C-AB	53.00	53.00	119.10	0.445	54.24	2.2	0.9	15.963	C
C-A	137.00	137.00			137.00				
A-B	87.00	87.00			87.00				
A-C	159.00	159.00			159.00				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25.00	25.00	94.51	0.265	24.86	0.3	0.4	15.862	C
B-A	86.00	86.00	63.45	1.355	63.23	22.8	45.6	512.579	F
C-AB	46.00	46.00	112.99	0.407	46.14	0.9	0.8	15.248	C
C-A	151.00	151.00			151.00				
A-B	83.00	83.00			83.00				
A-C	185.00	185.00			185.00				

2024 BACKGROUND + DEVELOPMENT, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - 2024 BACKGROUND + DEVELOPMENT, PM	Demand Set 9: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Dan's Lane-A47	T-Junction	Two-way		14.56	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2024 BACKGROUND + DEVELOPMENT	PM	DIRECT	16:45	17:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - A47 South		DIRECT	✓	100.000
B - Dan's Lane		DIRECT	✓	100.000
C - A47 North		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	54.00	141.00
	B - Dan's Lane	51.00	0.00	27.00
	C - A47 North	200.00	31.00	0.00

16:45 - 17:00

Demand (PCU/TS)

		To		
From		A - A47 South	B - Dan's Lane	C - A47 North
	A - A47 South	0.00	51.00	128.00
	B - Dan's Lane	76.00	0.00	20.00
	C - A47 North	211.00	32.00	0.00

17:00 - 17:15

Demand (PCU/TS)

17:15 - 17:30

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	66.00	174.00
	B - Dan's Lane	55.00	0.00	32.00
	C - A47 North	237.00	20.00	0.00

Demand (PCU/TS)

17:30 - 17:45

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0.00	67.00	129.00
	B - Dan's Lane	59.00	0.00	17.00
	C - A47 North	187.00	24.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A47 South	B - Dan's Lane	C - A47 North
From	A - A47 South	0	5	4
	B - Dan's Lane	3	0	18
	C - A47 North	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.33	15.91	0.6	C	24.00	96.00
B-A	0.97	115.62	7.6	F	60.25	241.00
C-AB	0.23	9.49	0.3	A	26.75	107.00
C-A					208.75	835.00
A-B					59.50	238.00
A-C					143.00	572.00

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27.00	27.00	113.88	0.237	26.64	0.0	0.4	12.125	B
B-A	51.00	51.00	76.68	0.665	49.16	0.0	1.8	31.899	D
C-AB	31.00	31.00	133.27	0.233	30.68	0.0	0.3	9.271	A
C-A	200.00	200.00			200.00				
A-B	54.00	54.00			54.00				
A-C	141.00	141.00			141.00				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20.00	20.00	108.92	0.184	20.09	0.4	0.3	11.969	B
B-A	76.00	76.00	78.19	0.972	70.22	1.8	7.6	85.112	F
C-AB	32.00	32.00	137.72	0.232	32.00	0.3	0.3	9.023	A
C-A	211.00	211.00			211.00				
A-B	51.00	51.00			51.00				
A-C	128.00	128.00			128.00				

17:15 - 17:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32.00	32.00	98.17	0.326	31.71	0.3	0.6	15.912	C
B-A	55.00	55.00	63.91	0.861	55.25	7.6	7.4	115.620	F
C-AB	20.00	20.00	120.77	0.166	20.11	0.3	0.2	9.486	A
C-A	237.00	237.00			237.00				
A-B	66.00	66.00			66.00				
A-C	174.00	174.00			174.00				

17:30 - 17:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17.00	17.00	110.47	0.154	17.34	0.6	0.2	11.442	B
B-A	59.00	59.00	83.59	0.706	63.57	7.4	2.8	52.740	F
C-AB	24.00	24.00	132.99	0.180	23.98	0.2	0.2	8.750	A
C-A	187.00	187.00			187.00				
A-B	67.00	67.00			67.00				
A-C	129.00	129.00			129.00				