AXIS J9 PHASE 3 TECHNICAL NOTE

Response to OCC Highways Consultation Response

(Application No. 21/03177/F) Under Cover
Dated 7/12/21

DTA
Transport Planning Consultants

Drawings

DTA Drawing 14042-65 Proposed Signalised Pedestrian Crossing on Howes Lane

Figures

Figure 1 Great Wolf (Committed Development) Traffic – AM Peak

Figure 2 Great Wolf (Committed Development) Traffic – PM Peak

Figure 3 Pre-SLR Split Land Use Class Site Traffic Generation (AM Peak)

Figure 4 Pre-SLR Split Land Use Class Site Traffic Generation (PM Peak)

Appendices

Appendix A OCC Consultation Response dated 7/12/21

Appendix B Updated Site Masterplan (Cornish Architects Drawing TP_002L)

Appendix C Approved Appeal DTA Drawing 14042-25-2

Appendix D Classified Turning Count Surveys

Appendix E JUNCTIONS model output

Introduction

1. The OCC response includes separately attributed responses titled "Strategic"; "Transport Development Control (TDC)"; "Lead Local Flood Authority"; and "Local Member Views". A copy of the OCC response is included as **Appendix A**.

2. This Note does not respond to the flooding comments and the response to the TDC comments cover points raised by the local member views.

3. The brief Strategic comments are repeated within the TDC response and so are dealt with in combination below.

Strategic Link Road Context

4. The application Transport Assessment Report (TAR), **DTA Report 14042-39A** focussed on the compatibility of the transport elements of the proposal aligning with the NWB Strategic Link Road (SLR) delivery reflecting the assurances from OCC and their advisors during pre-application discussions that the SLR would be built and open to traffic during 2024. The development proposals reflected close working liaison between applicant, OCC TDC and the SLR delivery team such that the Phase 3 access proposals were all compatible with the SLR design and the resulting post-SLR impact appraisal was largely understood by all parties in advance of submission (subject to detailed junction capacity assessment runs).

5. With the development proposals capable of implementation in advance of the committed SLR timetable, a pre-SLR access strategy was also presented and termed "Interim". In access design terms the "Interim" proposals were entirely compliant with relevant design standards.

6. In terms of off-site traffic impact, the "Interim" situation was justified based on the long established 2014 Memo agreed between NWB developers and OCC which identified a level of NWB development which could come forward in advance of the SLR completion. The application TAR (paras 6.2.6 – 6.2.16) sets out justification for the development proposals to come forward in that context.

7. Whilst the Memo was 7 years old (December 2014) it remained the tool the authorities depended upon in terms of NWB development thresholds on the pre-SLR network.

8. The OCC consultation response identifies that there is now uncertainty regarding SLR deliverability and programme. This uncertainty has evidently arisen from the re-allocation of Growth Fund monies by OCC away from the SLR to locations elsewhere in the County.

9. This is indeed unfortunate. Nevertheless, the TAR had covered the pre-SLR situation with its "Interim" proposals. The "Interim" vehicular access design proposals remain appropriate, irrespective of the period to which its' operation may apply.

10. It is not clear why the findings of the 2014 Memo were deemed appropriate in October 2021, but not so by December 2021. The OCC response makes reference to

"The assessment . . . is now over six years old and was based on a traffic model that did not include development at Heyford. As such it is no longer considered by OCC to be a reliable method of establishing the upper limits of capacity at the critical junction [Howes Lane/Bucknell Road]*, being likely to under-estimate these limits."*

11. Whilst it is acknowledged that within traffic models, site traffic can lead to re-assignment of existing traffic, Heyford Park destination trips do not directly have meaningful cause to route via Howes Lane except to access the north-eastern corner of Bicester.

12. Against the above context, an alternative approach is presented below within this topic-based response following the ordered headings within the OCC response.

Access Arrangements

13. Consistent with the application submission, access arrangements relevant to pre-SLR completion and post-SLR completion outcomes remain appropriate. Given the recent lack of clarity over SLR programme, the pre-SLR arrangement (i.e. the Interim) is liable to be in place for a longer period of time and indeed it has to be assumed that it could even become a permanent arrangement. The OCC response sets out detailed queries

which are dealt with below and has led to a refined design proposal. Of these, only item v) below is provided in response to the length of the Interim period.

i) The footway/cycleway on the western side of the future SLR has been amended to provide a segregated 2.5m cycleway and 2m footway (instead of shared facility). With the planned SLR speed limit of 30mph, a verge is not required.

ii) Consideration of the ability to provide refuges within the site access junctions was given during pre-application discussions with OCC and their advisors. It was demonstrated during pre-app to be impractical due to the swept path tracking of larger commercial/refuse vehicles. OCC and their advisors acknowledged and accepted this during pre-app discussions.

iii) The northern side of the east-west connecting road, to the west of the SLR which forms the access route post SLR for Axis J9 Phase 1 and 2 Units 8-14, and a planned NWB bus link has been amended to provide a segregated 2.5m cycleway and 2m footway.

iv) OCC refer to the protected route for pedestrian-cycle link to Howes Lane in the vicinity of the junction to the south of the Phase 3 site. The safeguarding of land was requested by OCC and agreed with them pre-application. It was agreed at the time that as the link would only be implemented post SLR it would be for OCC to deliver once the adjacent junction details were finalised and hence inappropriate to fix a design as part of the current application.

v) OCC refer to the "Interim" period and the absence of direct linkage to the adjacent existing residential area to the east. The response further references pedestrian infrastructure secured under application 17/00455/HYBRID. Given the previously anticipated limited period (less than a year) under which it was envisaged that the "Interim" position would operate, it was not considered that the costs involved in such a short term pedestrian/cycle connection via Howes Lane were commensurate. Given that the "Interim" period is now liable to be more prolonged, it is proposed to promote pedestrian and cyclist linkage

through the eastern development parcel and a signalised pedestrian crossing on Howes Lane linking into the public footpath through to Wansbeck Drive. This is illustrated on the **DTA Drawing 14042-65** and the Proposed Site Plan TP_002L (**Appendix B**) and the crossing detailing shown on **DTA Drawing 14041-65**.

Public Transport

14. OCC refer to bus stops potentially being accommodated on the road between the SLR and Axis J9 Phases 1 and 2. The NWB bus strategy did not show bus stops on this section. Nearby stops were indicated on the SLR itself and these locations are not prejudiced by the current design proposals. Similarly, the approved Axis J9 Appeal drawing showing access to the consented residential scheme on the Phase 3 land was secured and defined by **DTA Drawing 14042-25-2** (**Appendix C**) and did not show a bus stop on this section. The onus is on the wider development aspiration for the NWB site to secure the locations suitable for the full development. The current proposals do not prejudice this.

15. In the meantime, the pedestrian enhancement linking to Wansbeck Drive will assist with the connectivity to local bus services, where the 21 services into Bicester town centre run approximately 275m from the site.

16. In terms of S106 payment towards public transport services, clarification is sought from OCC regarding the calculation of the sums and justification of request put forward given that the timescales for SLR delivery and hence bus routing is now so unclear.

Public Rights of Way

17. The improvement to PROW contribution is acknowledged and accepted.

Site Layout

18. The suggestion of a planning condition in regards electric vehicle charging is agreed.

19. The OCC review of the on-site cycle parking proposal is not accurate and so clarification is provided. The proposal includes a total of 88 spaces across the site, which exceeds

the local parking standards, with an average provision of one space per 192sqm, better than either the industrial or warehousing standards.

20. The cycle parking is conveniently located. The larger western units have their own provision. The cycle parking for Unit 1 has now been moved even closer to the access doors in the refined proposals shown on Drawing TP_002L (**Appendix B**). The eastern units benefit from shared cycle parking spaces reflecting the smaller nature of the units and hence individual unit cycle parking demand. All spaces are conveniently located to the front doors of the units which they serve.

Traffic Impact

21. The scope and input parameters of the assessments presented in the application TA were those agreed with OCC during pre-app for the post SLR situation. The traffic flows were provided to DTA by OCC as being fit for purpose. The base post SLR data network diagrams being sought as provided by OCC were included within **Appendix I** of the TAR.

22. OCC now seek traffic from Great Wolf committed development to be manually added. The Great Wolf TA, Figures 5.9 and 5.10 illustrate that forecast traffic through the existing Howes Lane/Middleton Stoney roundabout totals 8 trips in the AM peak and 11 trips in the PM peak. Against the context of forecast junction flows of 3,038 trips through the junction in the AM peak, this equated to a 0.02% increase and is not considered material. It is therefore not considered necessary to revisit the post-SLR assessments. The PM data is similarly proportioned. Notwithstanding, the amended approach set out below takes Great Wolf into account in the pre-SLR scenario.

23. In order to evaluate the Axis J9 Phase 3 proposals on the existing (pre-SLR) network, DTA commissioned traffic counts on the adjacent network. The turning counts and queues were undertaken on Wednesday 8th December 2021 prior to "work from home if you can" governmental pandemic instruction. The counts are therefore considered to be representative. The data is provided at **Appendix D**.

24. Peak period surveys were undertaken at:

- Howes Lane/Middleton Stoney Road roundabout;
- Howes Lane/Bucknell Road; and
- Bucknell Road/A4095(E).

25. DTA maintain that the pre-SLR impact from the fully flexible development should be deemed acceptable for the reasons set out in the application TA (paras 6.2.6 to 6.2.16). However, in order to respond positively to OCC concerns, the applicant is prepared to accept pre-SLR condition wording to restrict the western site parcel, Units 1-5 to B8 land use only (i.e. removing the employment flexibility) accounting for 14,188sqm out of the 16,942sqm across the site. Post-SLR the permission would revert to the flexibility originally sought (and appraisal in the application TA).

26. For the pre-SLR development scenario, traffic generation forecasts are prepared below to reflect the western parcel (Units 1-5) operating under the B8 land use classification and the eastern parcel (Units 6-14) remaining flexible land use as per the application TA. On this basis, the pre-SLR development traffic generation is set out in **Table 1**.

Table 1 – Pre-SLR Development Traffic Generation

	GIA (sqm)	AM Peak			PM Peak		
		In	Out	Total	In	Out	Total
B8	14188	10(2)	7(2)	17(4)	5(1)	11(3)	16(4)
E(g)(iii)/B2/B8	2754	11(1)	2(1)	12(2)	1(0)	10(0)	11(1)
Total	16942	21(4)	9(3)	29(6)	6(1)	21(4)	27(5)

Flows are given as total vehicles with HGVs in brackets.

27. These flows should be compared with Table 5 of the application TA, which are summarised below in **Table 2** and referred as post-SLR site flows (i.e. fully flexible).

Table 2 – Site Traffic Flow Comparison

	Post-SLR Proposal	**Pre-SLR Proposal**
AM Peak	81	29
PM Peak	59	27

Flows in total vehicles.

28. The reduced flexibility within the pre-SLR assumptions means AM peak site flows would be only one third of post-SLR flows and only a half of the forecast flow in the PM peak.

29. The resulting distributed and assigned flows are shown on **Figures 3** and **4** with the HGV restrictions on use Howes Lane in place pre-SLR. These demonstrate that pre-SLR the site is forecast to add only 10 two-way trips to the Bucknell Road/Howes Lane junction in the AM peak, and only 9 vehicles in the PM peak. This equates to only one extra vehicle every 6 minutes. These increases are almost identical to those forecasted by Great Wolf which were accepted by OCC without need for intervention.

30. Each existing junction was subject to JUNCTIONS appraisal in 2021 and 2026 before and after the addition of Axis J9 Phase 3 development traffic. The 2021 observed (base) model at Bucknell Road/Howes Lane has been subject to rigorous preparation and review to ensure validation against observed queuing patterns. Traffic growth is applied with TEMPRO applied with a specific additional allowance made for forecasted traffic from Great Wolf as set out within their application TA, which are summarised in **Figures 1 and 2**.

31. **Tables 3, 4** and **5** set out the summarised results. The JUNCTIONS output is included at **Appendix E**. These illustrate that the development traffic impact is very minor in 2021 and 2026. The impact of the development is not severe and can be accommodated on the existing network prior to the delivery of the SLR.

32. The Empire Way/Middleton Stoney Road junction assessment presented in the TA remains appropriate as a worst-case appraisal of its operation pre or post SLR.

Table 3 – Howes Lane/Middleton Stoney Road/Vendee Drive Roundabout Assessment Results

	AM Peak		PM Peak	
	Max RFC	**Queue**	**Max RFC**	**Queue**
2021 Observed				
Howes Lane	0.82	5	0.51	1
Middleton Stoney Road (East)	0.35	1	0.24	0
Vendee Drive	0.36	1	0.49	1
B4030 (West)	0.30	0	0.31	1
2021 Observed + Development				
Howes Lane	0.83	5	0.52	1
Middleton Stoney Road (East)	0.35	1	0.25	0
Vendee Drive	0.37	1	0.50	1
B4030 (West)	0.31	1	0.34	1
2026 Base				
Howes Lane	0.88	7	0.55	1
Middleton Stoney Road (East)	0.37	1	0.26	0
Vendee Drive	0.39	1	0.53	1
B4030 (West)	0.32	1	0.34	1
2026 Base + Development				
Howes Lane	0.89	8	0.56	1
Middleton Stoney Road (East)	0.38	1	0.26	0

Vendee Drive	0.40	1	0.53	1
B4030 (West)	0.33	1	0.37	1

33. The post-SLR assessment remains unchanged from the application TA and have been demonstrated to be acceptable.

Table 4 – Howes Lane/Bucknell Road T-junction Assessment Results

	AM Peak		**PM Peak**	
	Max RFC	**Queue**	**Max RFC**	**Queue**
2021 Observed				
Howes Lane	0.85	6	1.06	34
Bucknell Road (North) Right Turn	1.00	27	0.77	4
2021 Observed + Development				
Howes Lane	0.86	6	1.08	37
Bucknell Road (North) Right Turn	1.01	30	0.78	4
2026 Base				
Howes Lane	0.94	12	1.14	56
Bucknell Road (North) Right Turn	1.07	55	0.82	5
2026 Base + Development				
Howes Lane	0.96	13	1.15	59
Bucknell Road (North) Right Turn	1.08	61	0.83	5

34. It should be noted that the validated AM peak 2021 observed assessment on the Bucknell Road (North) Right Turn is compared against recorded queues **(Appendix D)** both at this junction and the A4095 arm of the Bucknell Road/A4095 mini-

roundabout since they form part of the same queue. The queue arises at the Bucknell Road/Howes Lane T-junction, not as a result of the mini-roundabout operation itself.

Table 5 – Bucknell Road/A4095 Mini-Roundabout Assessment Results

	AM Peak		PM Peak	
	Max RFC	**Queue**	**Max RFC**	**Queue**
2021 Observed				
A4095	0.65	2	0.52	1
Bucknell Road (South)	0.47	1	0.56	1
Bucknell Road (North)	0.11	0	0.11	0
2021 Observed + Development				
A4095	0.66	2	0.52	1
Bucknell Road (South)	0.47	1	0.57	1
Bucknell Road (North)	0.11	0	0.11	0
2026 Base				
A4095	0.69	2	0.55	1
Bucknell Road (South)	0.50	1	0.60	2
Bucknell Road (North)	0.12	0	0.12	0
2026 Base + Development				
A4095	0.70	2	0.55	1
Bucknell Road (South)	0.50	1	0.60	2

Bucknell Road (North)	0.12	0	0.12	0

35. Post-SLR, neither of the junctions assessed in **Tables 4** and **5** are relevant for appraisal as the SLR provides traffic relief. For the avoidance of doubt, with a pre-SLR condition in place, then post SLR, permission would revert to a flexible use across the site as defined by the original application.

36. The applicant has also funded the running of pre-SLR Bicester Traffic Model runs with the fully flexible land use mix in place (along with the revised mix) provided above. These results are due to be available before the end of February 2022 for the original application land use mix, i.e. flexible E(g)(iii)/B2/B8 across the whole site. It is possible this will demonstrate that a fully flexible land use can be accepted pre-SLR. Clearly, if this is the case there will be no need for a restrictive pre-SLR planning condition.

Travel Plan

37. Comments are noted.

S278 Highway Works

38. A signalised crossing design is provided as discussed above.

Planning Conditions

39. Comments are noted.

Drawings

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
Transport Planning Consultants

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE	CLIENT
Axis J9 Phase 3	Albion Land

DRAWING TITLE

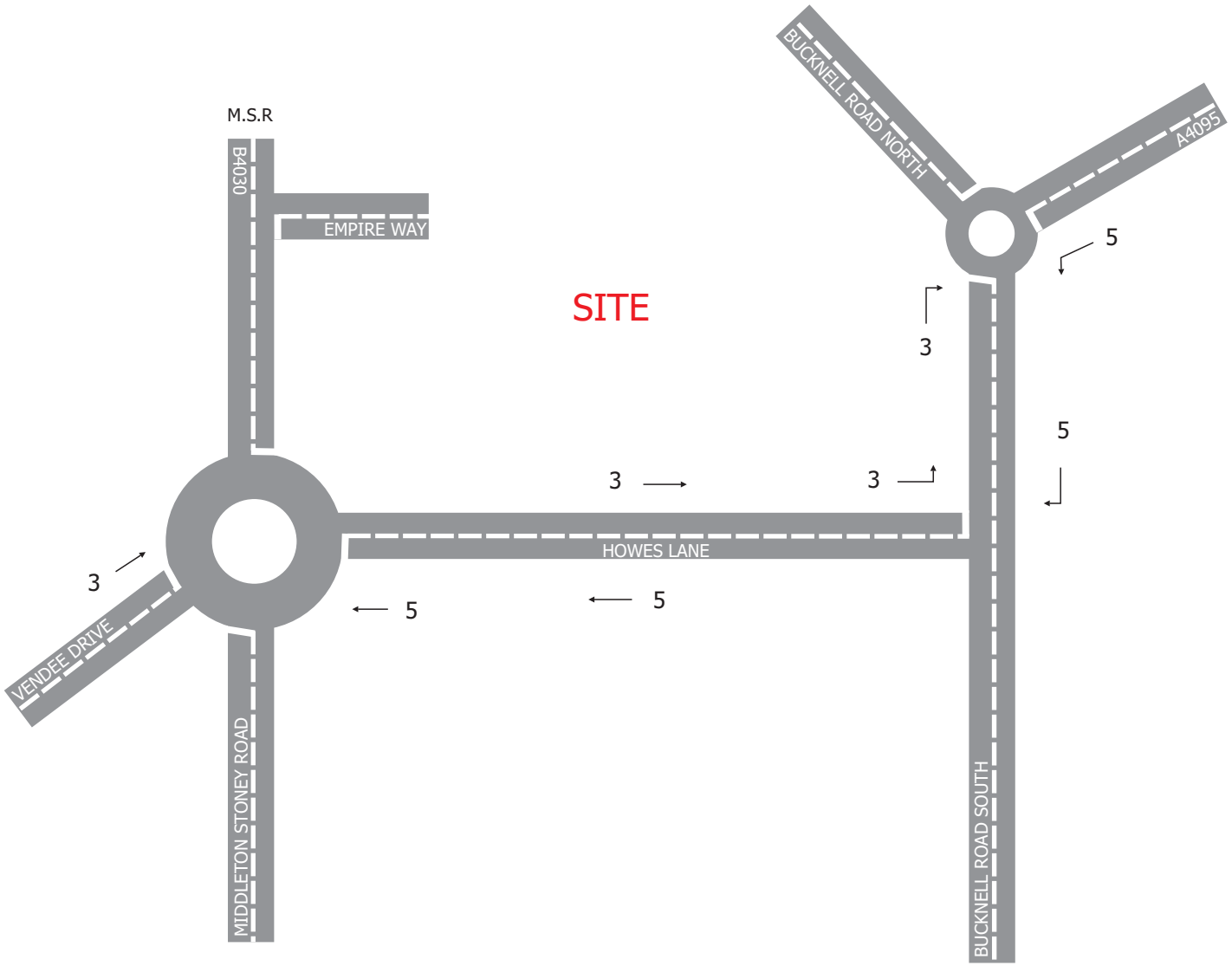
Proposed Signalised Pedestrian Crossing on Howes Lane

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/200@A3	BP	Feb22	14042–65	

Figures

AM PEAK 0800-0900

TOTAL VEHICLES



COMMITTED DEVELOPMENT (IN 2026)

GREAT WOLF

FIGURE 1

Scale : NTS

Notes:

DTA
Transport Planning Consultants

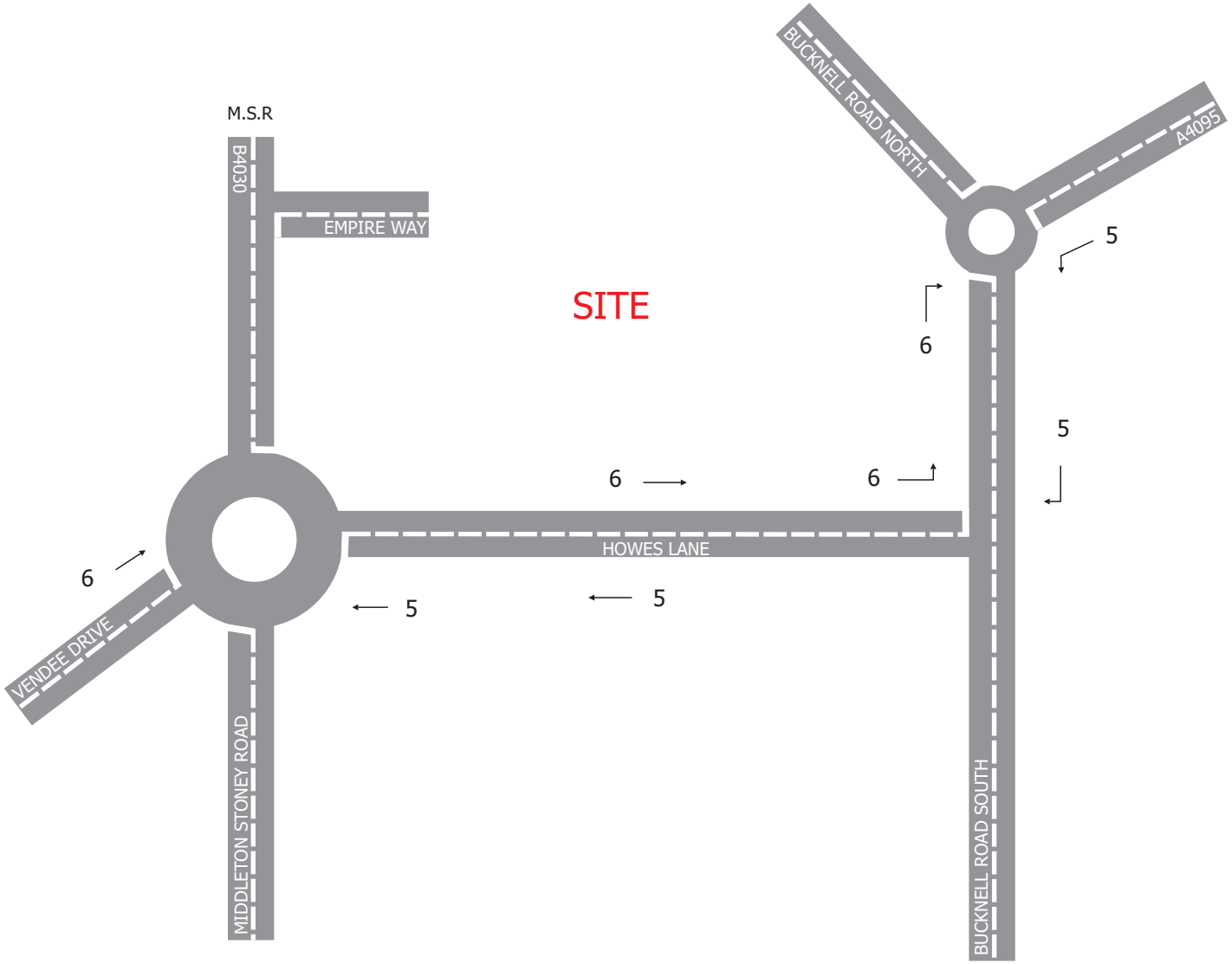
Forester House, Doctors Lane,
Henley-in-Arden, Warwickshire,
B95 5AW
Tel: +44(0) 1564 793598
Fax: +44(0) 1564 793983
www.dtatransportation.co.uk

Drawing No: 14042-66-1

Traffic Flows
Axis J9 Phase 3
Albion Land

PM PEAK 1700-1800

TOTAL VEHICLES



COMMITTED DEVELOPMENT (IN 2026)

GREAT WOLF

FIGURE 2

Scale : NTS

Notes:

DTA
Transport Planning Consultants

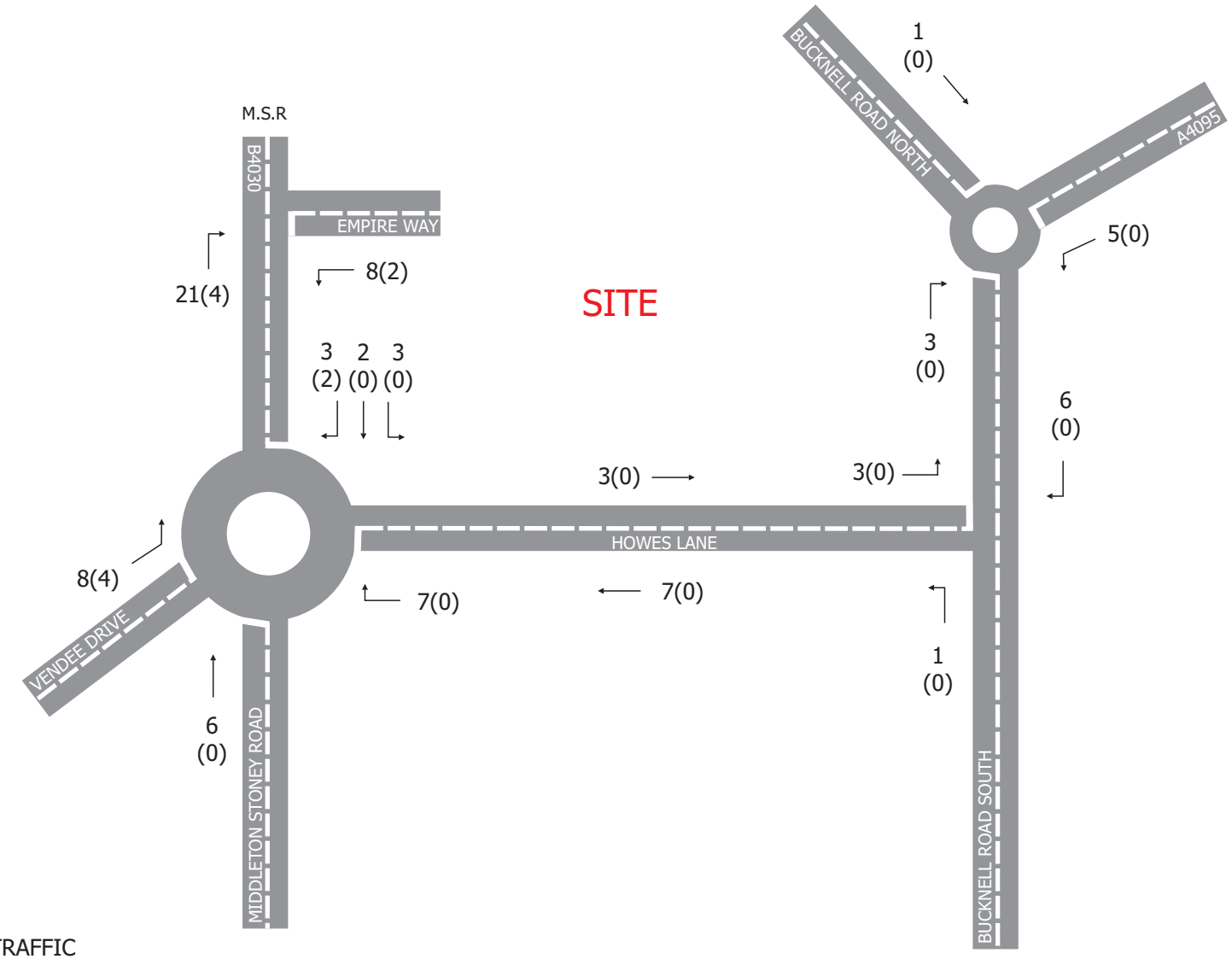
Forester House, Doctors Lane,
Henley-in-Arden, Warwickshire,
B95 5AW
Tel: +44(0) 1564 793598
Fax: +44(0) 1564 793983
www.dtatransportation.co.uk

Drawing No: 14042-66-2

Traffic Flows
Axis J9 Phase 3
Albion Land

AM PEAK 0800-0900

TOTAL VEHICLES (HGV'S)



PRE-SLR SITE TRAFFIC

WESTERN PARCEL - B8

EASTERN PARCEL - E(g)(iii)/B2/B8

FIGURE 3

Scale : NTS

Notes:

DTA
Transport Planning Consultants

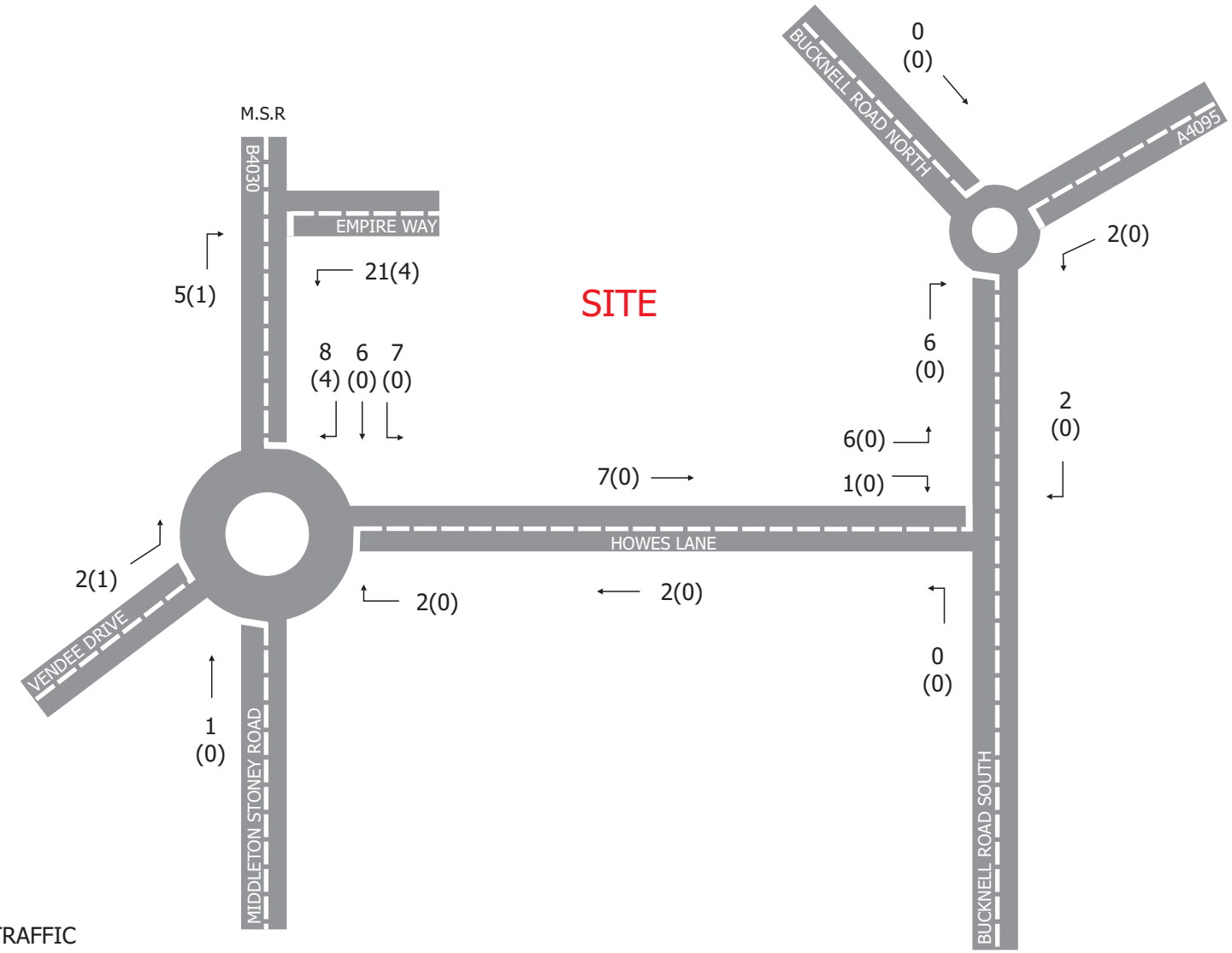
Forester House, Doctors Lane,
Henley-in-Arden, Warwickshire,
B95 5AW
Tel: +44(0) 1564 793598
Fax: +44(0) 1564 793983
www.dtatransportation.co.uk

Drawing No: 14042-66-3

Traffic Flows
Axis J9 Phase 3
Albion Land

PM PEAK 1700-1800

TOTAL VEHICLES (HGV'S)



PRE SLR SITE TRAFFIC

WESTERN PARCEL - B8

EASTERN PARCEL - E(g)(iii)/B2/B8

FIGURE 4

Scale : NTS

Notes:

DTA
Transport Planning Consultants

Forester House, Doctors Lane,
Henley-in-Arden, Warwickshire,
B95 5AW
Tel: +44(0) 1564 793598
Fax: +44(0) 1564 793983
www.dtatransportation.co.uk

Drawing No: 14042-66-4

Traffic Flows
Axis J9 Phase 3
Albion Land

Appendix A

OXFORDSHIRE COUNTY COUNCIL'S RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Cherwell
Application no: 21/03177/F
Proposal: Axis J9 Phase 3 Howes Lane Bicester
Location: Full planning application for employment development (Use Classes E(g)(iii), B2 and/or B8) and associated parking and servicing, landscaping and associated works

Date: 7 December 2021

This report sets out the officer views of Oxfordshire County Council (OCC) on the above proposal. These are set out by individual service area/technical discipline and include details of any planning conditions or Informatives that should be attached in the event that permission is granted and any obligations to be secured by way of a S106 agreement. Where considered appropriate, an overarching strategic commentary is also included. If the local County Council member has provided comments on the application these are provided as a separate attachment.

Application no: 21/03177/F
Location: Full planning application for employment development (Use Classes E(g)(iii), B2 and/or B8) and associated parking and servicing, landscaping and associated works

---

General Information and Advice

Recommendations for approval contrary to OCC objection:
If within this response an OCC officer has raised an objection but the Local Planning Authority are still minded to recommend approval, OCC would be grateful for notification (via planningconsultations@oxfordshire.gov.uk) as to why material consideration outweigh OCC's objections, and to be given an opportunity to make further representations.

Outline applications and contributions
The anticipated number and type of dwellings and/or the floor space may be set by the developer at the time of application which is used to assess necessary mitigation. If not stated in the application, a policy compliant mix will be used. The number and type of dwellings used when assessing S106 planning obligations is set out on the first page of this response.

In the case of outline applications, once the unit mix/floor space is confirmed by reserved matters approval/discharge of condition a matrix (if appropriate) will be applied to establish any increase in contributions payable. A further increase in contributions may result if there is a reserved matters approval changing the unit mix/floor space.

Where a S106/Planning Obligation is required:

- **Index Linked** – in order to maintain the real value of S106 contributions, contributions will be index linked. Base values and the index to be applied are set out in the Schedules to this response.

- **Administration and Monitoring Fee - TBC**
  This is an estimate of the amount required to cover the monitoring and administration associated with the S106 agreement. The final amount will be based on the OCC's scale of fees and will adjusted to take account of the number of obligations and the complexity of the S106 agreement.

- **OCC Legal Fees** The applicant will be required to pay OCC's legal fees in relation to legal agreements. Please note the fees apply whether a S106 agreement is completed or not.

Security of payment for deferred contributions - Applicants should be aware that an approved bond will be required to secure a payment where a S106 contribution is to be paid post implementation and

- the contribution amounts to 25% or more (including anticipated indexation) of the cost of the project it is towards and that project cost £7.5m or more
- the developer is direct delivering an item of infrastructure costing £7.5m or more
- where aggregate contributions towards bus services exceeds £1m (including anticipated indexation).

A bond will also be required where a developer is direct delivering an item of infrastructure.
The County Infrastructure Funding Team can provide the full policy and advice, on request.

Application no: 21/03177/F
Location: Full planning application for employment development (Use Classes E(g)(iii), B2 and/or B8) and associated parking and servicing, landscaping and associated works

---

Strategic Comments

The site is located within an allocation identified in the Adopted Cherwell Local Plan as Policy Bicester 1 for up to 6,000 homes and associated infrastructure. The Northwest Bicester SPD (2016) sets out further detailing for the comprehensive development of the site.

This application seeks full planning permission for 16,901 sqm of B2 and/or B8 employment space development on land that currently has unimplemented planning permission for 150 dwellings which was allowed on appeal (14/01675/OUT).

The application assumes that the Strategic Link Road/A4095 diversion will be in place in 2024 and argues that there is sufficient capacity in the local road network for the development to be occupied before the SLR is open. This point has not yet been established and there is now uncertainty of delivery of the SLR, which means that a resultant severe congestion impact could last many years.

The County Council is raising Transport and Local Lead Flood Authority objections.

Also attached are Local Member Views from Cllrs Sibley, Cllr Waine and Cllr Ford.

Officer's Name: Jacqui Cox
Officer's Title: Infrastructure Locality Lead Cherwell
Date: 6 December 2021

Application no: 21/03177/F
Location: Full planning application for employment development (Use Classes E(g)(iii), B2 and/or B8) and associated parking and servicing, landscaping and associated works

---

Transport Development Control

Recommendation

Objection for the following reasons:

- The application does not adequately demonstrate that the traffic impact of the development will not be severe.
- The development does not provide adequate pedestrian and cycle connectivity to existing residential areas, meaning that it does not provide a range of sustainable transport options. This is also an unacceptable safety risk.
- The amount of cycle parking appears to be insufficient for the size of the development, again meaning that development does not adequately provide for a range of sustainable transport options.
- The proposed cycle facilities are not considered to be compliant with current guidance

If despite OCC's objection permission is proposed to be granted then OCC requires prior to the issuing of planning permission a [S106 agreement including an obligation to enter into a [S278 agreement] [S38 agreement] to mitigate the impact of the development plus planning conditions and informatives] as detailed below.

S106 Contributions

Contribution	**Amount £**	**Price base**	**Index**	**Towards** (details)
Highway works	See below – need for link to existing major infrastructure agreement		Baxter	
Public transport services	£134,375	Q2 2017	RPI-x	Bus services serving NW Bicester
Public transport infrastructure (*if not dealt with under S278/S38*	£19,460	April 2017	Baxter	Bus infrastructure at NW Bicester

agreement)				
Traffic Reg Order (*if not dealt with under S278/S38 agreement*)			RPI-x	
Travel Plan Monitoring	£5,271	Dec 2020	RPI-x	Towards the cost of monitoring the framework and individual travel plans over the life of the plans
Public Rights of Way	£2,846	April 2017	Baxter	Improvements to Bridleway 9 and Bucknell Bridleway 4
Total				

Other obligations:

- On site highway works – see below regarding need to link to existing agreement in relation to the Strategic Link Road
- Obligation to provide a pedestrian/cycle link between the SLR and existing Howes Lane (although note that a lack of a ped/cycle connection to Howes Lane in the interim access proposals is a reason for objection), and for this to be dedicated as highway once the SLR is connected.
- Routing agreement ahead of the SLR being open, to prevent HGV traffic from using Howes Lane.

Key points

- The application assumes that the Strategic Link Road/A4095 diversion will be in place in 2024, and argues that there is sufficient capacity in the local road network for the development to be occupied before the SLR is open. However, I do not accept this argument for reasons set out below. This compares with the current permitted residential use, which is restricted from being occupied before the SLR is open.
- Further, there is now uncertainty of delivery of the SLR (see below), which means that a resultant severe congestion impact could last many years.
- Permanent access would be via two ghost island priority junctions directly off the SLR.
- Temporary access would be via Empire Road directly onto Middleton Stoney Road. This route would be closed off between existing Axis Phase 1 and Phase 2 when the SLR is open to traffic.
- The proposed development includes a small section of the SLR. Cycle facilities on the north side do not appear to be segregated, which is in line with the permitted

layout for the SLR. However, policy has changed since that planning permission was granted, and a segregated, LTN 1/20 compliant facility would be required.

- There is no pedestrian/cycle access proposed onto existing Howes Lane – vehicular or pedestrian/cycle.
- There is no consideration in the TA of walking distances to bus stops in the interim situation (before SLR is open).
- The lack of connectivity is unacceptable even as an interim situation.
- Future bus stop positions need to be shown on the plans and agreed
- S106 contributions secured on the permitted residential development would need to be secured on this development if approved, in order for the site to contribute its share of the overall mitigation for the NW Bicester allocation

Comments:

Introduction

The application is for 16901 sqm of employment space on land that currently has permission for 150 dwellings, instead of those dwellings. This would be on two parcels, the larger being to the west of the future SLR, and the smaller parcel being between the future SLR and existing Howes Lane. The application assumes that the Strategic Link Road/A4095 diversion will be in place in 2024, and argues that there is sufficient capacity in the road network for the development to be occupied before the SLR is open. This compares with the current permitted residential use, which is restricted from being occupied before the SLR is open.

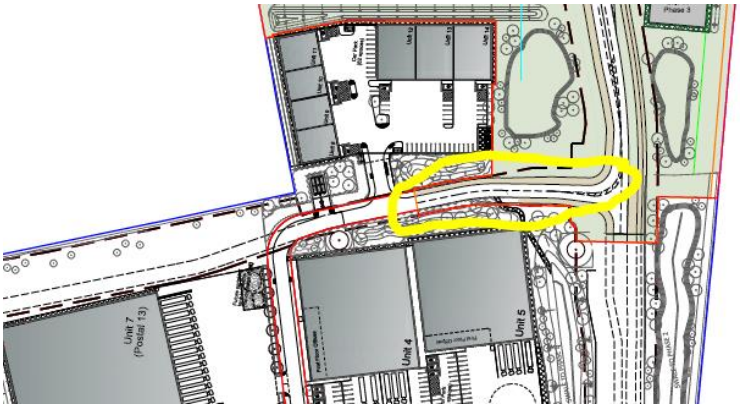
Access arrangements

Access is proposed directly onto the future SLR, a short section of which would be built as part of the development. The carriageway width, and the layout with right turning lanes is considered suitable for the nature of this road, which would be a diversion of an A road and carry significant volumes of traffic, including HGVs.

A 4.0m shared use footway/cycleway would be provided on the northern side, and a 2.5m cycleway and 2m footway on the south side, separated from the carriageway by a 5m verge. 2.5m cycleway is the 'absolute minimum at constraints' for two-way cycling as set out in LTN 1/20. 4m shared use is not compliant with LTN 1/20. Whilst these dimensions meet with the cycle/pedestrian facilities in the approved planning permission for the SLR (ref 14/01968/F) as described in section 4.3 of the Transport Assessment), policy has changed since that permission was granted, and the facility must now be compliant with LTN 1/20. Whilst priority for cyclists is provided across the access junctions, a pedestrian crossing point is missing from the access into the eastern parcel. Given the length of the crossings, consideration should be given to providing a refuge.

Further, the road infrastructure in the area circled yellow below will form part of the permanent road infrastructure linking units 8 to 14 to the SLR and must be designed to

be compliant with LTN 1/20. This link is intended in future to provide pedestrian, cycle and bus access into Himley Village so could experience high levels of pedestrian and cycle use.



A temporary access is proposed, prior to the opening of the SLR, via existing Phase 2 and Phase 1, onto Middleton Stoney Road via Empire Road. There would be no access onto Howes Lane. The TA states that this concept has been agreed with OCC, but this was always subject to a transport assessment. Cycle and ped access would be via 3m shared use facilities on Empire Road, which, given the level of use solely as a cul-de sac into an industrial estate, is likely to fall below the walking and cycling thresholds set out in LTN 1/20 that make 3m shared use acceptable. For information, Empire Road will be closed off after units 4 and 7 to become a cul de sac, once the SLR is open.

Plan 14042-60 Rev H (Access Road General Arrangement) appended to the TA shows an indicative arrow at the SE corner of the site saying 'protected route for pedestrian-cycle link to Howes Lane'. As the application assumes the future connection of the SLR, it should include the provision of a suitable ped/cycle connection to the site boundary to provide for the connection between existing Howes Lane and the SLR.

However, in the interim situation (before the SLR) pedestrian and cycle connectivity to the existing residential area would be poor, involving a long walk south to Middleton Stoney Road, along Middleton Stoney Road and then doubling back north into the residential area via the network of streets. This would discourage walking to the site. There would also be a desire line across existing Howes Lane, especially to the public footpath linking through to Wansbeck Drive. Pedestrians may well make their own way unofficially into the site, to cut off a large detour, leading to unsafe crossing and walking along the verge on Howes Lane.

The permitted housing development, in the situation where it could come forward in advance of the SLR, in lieu of a portion of the employment, (as permitted under 17/00455/HYBRID) would have required a 'pedestrian access leading to a new signalised pedestrian crossing of Howes Lane and a footway connection on the east site of Howes Lane to existing public footpath leading to Wansbeck Drive' (as per the S106 agreement dated 7 August 2017).

The site plan shows an access road leading east through the eastern parcel, ending at a gate. A pedestrian/cycle connection should be made here to Howes Lane, in the interest of providing a range of sustainable transport modes and of highway safety. The absence of a connection is a reason for objection, even in the interim situation, which could last many years.

Within the parcels, pedestrian priority should be provided across the accesses into each unit.

Strategic Link Road

The site is subject to a separate legal agreement committing the owner to paying a proportionate contribution to the major infrastructure at NW Bicester (principally the SLR). This agreement makes provisions for allowances against this contribution where the owner delivers part of the SLR themselves. It also ensures that construction of the part of the SLR cannot proceed until OCC grants technical approval, and various other provisions. The S106 agreement for this site would need to link it to that agreement. The need for technical approval of the SLR element prior to construction is critical to ensure that it is built to an adequate standard, suitable for final adoption.

Public transport

Following completion of the SLR, the site would be on the future NW Bicester bus route. However, no bus bus stops are shown on the plan. These could potentially be accommodated on the road between Phases 1 and 2, but this needs to be demonstrated, and bus stop and shelter provision needs to be taken account of in the design. In accordance with LTN 1/20 a cycle bypass would be required for the shelter, which needs to be accommodated in the design.

The TA mentions bus services that serve the residential area east of Howes Lane, but as no pedestrian connection is proposed, it is unclear how employees would access them. Until the SLR is open, employees and visitors would need to use stops on Middleton Stoney Road near the junction with Empire Road, which currently serve Phases 1 and 2. There is no consideration of the considerable walking distances to these stops in the TA.

Public transport contributions were secured via a S106 agreement on the existing permission. The elements that were to be triggered on occupation of the permitted residential development should be secured on this development to ensure that it pays its proportionate share to the bus strategy for NW Bicester.

Public rights of way

A contribution towards improvements of public rights of way Bicester Bridleway 9 and Bucknell Bridleway 4 was secured on the residential development that the proposed development would replace. The same contribution should be secured on this

development to ensure that it pays its proportionate share to the transport mitigation strategy for NW Bicester.

Site layout

Car and cycle parking

Car parking would be provided overall on the basis of one space per 82sqm. This is only slightly below the recommended 1 space per 50sqm for industrial (B2) use but well above the recommended one space per 200 sqm for warehousing (B8).

10% of spaces would have EV charging, with enabling infrastructure for 25% of spaces to have it in future. The Oxfordshire Electric Vehicle Infrastructure Strategy requires 25% of spaces to have EV charging facilities, so there would need to be a condition to provide it by an agreed date.

Cycle parking – on the basis of the spaces shown for cycle shelters, it looks as though 35 spaces would be provided across the whole site. Allowing for the same balance of B2 and B8 that would result in the proposed number of car parking spaces, and allowing for visitors, this would be well below the recommended number. On the basis that this development would be part of an eco town, this is poor provision and should be increased. Also the cycle parking should be positioned close to the access doors, to give this priority as well as maximum security from overlooking. In some of the buildings the cycle parking appears to be in the HGV area, which is not acceptable. The recommended amounts are shown below.

	Residential	Food Retail	Non Food Retail	A2 - Banks and Profession	B1-Offices	B2 - General Industry	B8 Warehousing	D2 Assembly and Leisure	Cinema & Conference	Hotel and Guest Hse	Hospital	Higher Education	A3 - Restaurant / pubs	Stadia
Long stay/ employee/ resident	1 bed - 1 space; 2+ beds - 2 Spaces ***	1 stand per 12 staff *	1 stand per 6 staff *	1 stand per 12 staff **	1 stand per 150 sqm	1 stand per 350 sqm	1 stand per 500 sqm	1 stand per 12 staff **	1 stand per 12 staff **	1 stand per 12 staff **	1 stand per 12 staff	Subject to individual assessment	1 stand per 12 staff **	1 stand per 12 staff
Visitor	1 stand per 2 units where more than 4 units	1 stand per 200sqm	1 stand per 200sqm	1 stand per 100sqm	1 stand per 500 sqm	1 stand per 500 sqm	1 stand per 1000 sqm	1 stand per 20 sqm	1 stand per 20 sqm	1 stand per 10 beds	on merits	Subject to individual assessment	1 stand per 20 sqm of public space	on merits (guide 1 stand per 30 seats)

Traffic impact

The impact of the development has been assessed for the future year 2031, using a 2018 scenario of the Bicester Transport Model, that includes most committed development, including that at Heyford. The scenario also assumes that the Strategic Link Road (SLR) at North West Bicester (a diversion of the A4095 through the NW Bicester Masterplan area, under the now constructed railway overbridge) will be in place in 2031. However, it has recently been recommended to the Oxfordshire Growth Board that the allocated Growth Deal funding for the project should be reallocated, and with no alternative forward funding currently in place, there is no longer certainty of its delivery

within that timescale. The Growth Board will consider the recommendation on 30 November.

Therefore the predictions in the Transport Assessment can no longer be regarded with any degree of certainty. Without the SLR, there would be severe congestion at the junction of Howes Lane, Bucknell Road and Lords Lane.

Putting this uncertainty aside, I have the following further comments about the 2031 assessment:

- The scenario does not include traffic from the consented Great Wolf resort at Chesterton, which is a non-local plan development for which planning permission was won on appeal. The TA does not provide the model output flows and the accompanying uncertainty log, which it should for completeness.

- It is noted and accepted that in terms of peak hour trips, the proposed uses would generate less traffic than the permitted residential development, albeit there would be a higher proportion of HGVs.

- Network diagrams are provided showing the development traffic, but not for the base flows. Development traffic has been added to 2031 flows from the Bicester Transport Model and the total flows used to assess the site access junctions and Vendee Drive/Middleton Stoney Road/SLR junction. However, flows from the Great Wolf resort have not been taken into account. This needs to be addressed.

- The results show that the SLR arm of the Middleton Stoney/Vendee Drive/SLR junction is predicted to be over capacity without the development, and that the development would make it slightly worse as well as pushing the Middleton Stoney Road East arm slightly over capacity.

Interim assessment

There is a restriction on the current planning permission that the dwellings permitted on this site cannot be occupied prior to the completion of the SLR. However, this application proposes that the development will be occupied ahead of the completion of the SLR. An argument is put forward for this in paragraphs 6.2.6-6.2.16 of the Transport Assessment. This hinges on assessment work carried out by others in 2015 to predict the performance of the existing Bucknell Road/ Howes Lane/ Lords Lane junction as NW Bicester develops. This is a junction that experiences severe congestion, and which will be relieved by the SLR. This assessment has been used to restrict (through planning conditions) the amount of development that can be occupied at NW Bicester before the SLR is connected, including an existing restriction on the Site, by which the permitted 150 homes may not be occupied before the SLR is open.

The assessment referred to above is now over six years old, and was based on a traffic model that did not include development at Heyford. As such it is no longer considered by OCC to be a reliable method of establishing the upper limits of capacity at the critical junction, being likely to under-estimate these upper limits.

Taking the overall theoretical capacity threshold at NW Bicester that was established by the 2015 assessment work referred to above, which was 900 dwellings and proportionate employment, the TA calculates that the application would generate 15% of the remaining traffic capacity (in terms of number of trips) at the critical junction before the threshold is reached. According to the TA this would reduce the number of dwellings that could be occupied across NW Bicester prior to the opening of the SLR by 76. This needs to be carefully considered in the context of live planning applications for dwellings.

My understanding of the argument put forward in the TA is as follows:

- PM Peak hour turning matrices for 900, 1200 and 2256 dwellings provided by Hyder to the applicant in 2015 showed that it was assumed the trip rate from NW Bicester passing through the critical Howes/Bucknell/Lords junction, was 0.373 trips per dwelling plus the proportional level of employment (based on the difference between these matrices).
- From this the TAs calculate that the 900 dwellings proposed to be the threshold across NW Bicester (plus proportionate employment) that can be allowed prior to the SLR, would generate 336 PM peak hour trips through the critical junction.
- The trips assumed to be generated from the employment element of the mixed use consent was 45 in the PM peak through the critical junction.
- Deducting these from the 336 above, would leave 291 for the housing element (900 dwellings) This works out at 0.323 trips per dwelling.
- Applying this to the difference between the 900 threshold and the Exemplar (393) of 507 dwellings, gives 164 peak trips as the permitted but unrealised traffic flow threshold.
- This application is predicted to generate 26 peak hour trips through the critical junction, i.e.15% of unrealised traffic allowed for within the threshold, or the equivalent of 76 vehicles not being occupied ahead of the SLR.

I recommend that the development is not permitted to be occupied ahead of the opening of the SLR, because it is not reliably demonstrated that there would not be severe congestion at the junction of Bucknell Road/Lords Lane/Howes Lane.

In the absence of certainty over delivery of the SLR, a further 2031 assessment would need to be carried out using a baseline scenario without the SLR. This would almost certainly show that there would be severe congestion at the above mentioned junction.

Travel Plan

The EV charging spaces, cycle parking spaces, and changing and shower facilities are all welcomed.

A couple of comments on the submitted Framework Travel Plan:
The mode share targets (table 2) are not very ambitious. We would expect to see a bigger decrease for the car driver mode share.
Please provide an interim TPC contact.

In addition to the overarching framework travel plan, Units 4 and 5 are above the threshold that would trigger a need for their own travel plan, which would be expected to be in line with the framework travel plan.

The final travel plans should be required by condition.

A contribution would be required of £2,379 for the Framework Travel Plan and £1446 each for the two individual travel plans, totalling £5,271 (RPIx Dec 2020).

S106 obligations and their compliance with Regulation 122(2) Community Infrastructure Levy Regulations 2010 (as amended):

£134,375 Public Transport Service Contribution indexed from Q2 2017 using RPI-x
Towards: Bus service linking NW Bicester with the town centre and railway station.

Justification: Needed to provide sustainable transport options to the site, and as part of the overall public transport strategy for the NW Bicester policy allocation.

Calculation: The amount is the same as the instalment of the agreed bus service contribution that is secured upon occupation of the permitted residential development that this development would replace.

£19,460 Public Transport Infrastructure Contribution indexed from April 2017 using Baxter Index
Towards: Provision of bus stop infrastructure serving the site.

Justification: Needed to provide sustainable transport options to the site, and as part of the overall public transport strategy for the NW Bicester policy allocation.

Calculation: The amount is the same as the instalment of the agreed bus infrastructure contribution that is secured upon occupation of the permitted residential development that this development would replace.

£2,846 Public Rights of Way Contribution indexed from April 2017 using Baxter Index
Towards: Improvements to Ardley Bridleway 9 and Bucknell Bridleway 4

Justification: This is necessary to ensure that the site continues to pay a proportionate contribution to the overall public rights of way improvements required for the NW Bicester policy allocation.

Calculation: The amount is the same as the public rights of way contribution that is secured upon occupation of the permitted residential development that this development would replace.

£5,271 Travel Plan Monitoring Fee indexed from December 2020 using RPI-x
Justification: The site will require a framework travel plan and individual travel plans for the two largest units. The fee is required to cover OCC's costs of monitoring the travel plans over their life.

Calculation: The amount is based on standard charging scales, which are in turn calculated on the basis of officer time at cost.

S278 Highway Works:

An obligation to enter into a S278 Agreement will be required to secure mitigation/improvement works for pedestrian/cycle facilities and a signalised crossing on Howes Lane. A drawing will need to be submitted. This is to provide safe access in the interim situation, ahead of the opening of the SLR.

Notes:
This is to be secured by means of S106 restriction not to implement development (or occasionally other trigger point) until S278 agreement has been entered into.
The trigger by which time S278 works are to be completed shall also be included in the S106 agreement.

Identification of areas required to be dedicated as public highway and agreement of all relevant landowners will be necessary in order to enter into the S278 agreements.

Planning Conditions:

In the event that permission is to be given, the following planning conditions should be attached:

Prior to occupation an updated Framework Travel Plan shall be submitted to and approved by the Local Planning Authority, and within three months of occupation of the individual units Travel Plan(s) and / or Travel Plan Statements shall be submitted to and approved by the Local Planning Authority. The development shall be implemented in accordance with the approved travel plans.

Cycle parking - requiring provision of secure, covered parking for an agreed number of spaces for each building/phase, to be provided prior to first occupation of each building/phase. Further discussion with OCC is recommended.

Pedestian and cycle facilities - requiring approval of pedestrian and cycle facilities on the new roads within the site prior to commencement, together with a timetable for their delivery.

Construction traffic management plan
Prior to commencement of the development hereby approved, a Construction Traffic Management Plan (CTMP) shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall not be carried out other than in accordance with the approved CTMP.
Reason: In the interests of highway safety and the residential amenities of neighbouring occupiers and to comply with Government guidance contained within the National Planning Policy Framework.

Officer's Name: Joy White
Officer's Title: Principal Transport Planner
Date: 24 November 2021

Application no: 21/03177/F
Location: Full planning application for employment development (Use Classes E(g)(iii), B2 and/or B8) and associated parking and servicing, landscaping and associated works

---

Lead Local Flood Authority

Recommendation:

Objection

Detailed comments:

Unable to find plan showing the exceedance flood routes.

Calculations provided do not indicate the impermeable area used.

Calculations must show the Max Volume column in the simulation results.

As this is a full application, we expect to have definite indication of all SuDS that will be installed as part of the development. Where SuDS cannot be implemented, valid justification must be provided.

A detailed surface water management strategy must be submitted in accordance with the Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire

In line with this guidance, runoff must be managed at source (i.e. close to where it falls) with residual flows then conveyed downstream to further storage or treatment components, where required. The proposed drainage should mimic the existing drainage regime of the site as much as possible.

In the guidance book, there's a checklist of everything that must be submitted as part of the full application. Please make sure all items on the checklist are submitted so that we can fully assess the strategy provided.

Officer's Name: Sujeenthan Jeevarangan
Officer's Title: LLFA Planning Engineer
Date: 23 November 2021

Application no: 21/03177/F
Location: Full planning application for employment development (Use Classes E(g)(iii), B2 and/or B8) and associated parking and servicing, landscaping and associated works

---

LOCAL MEMBERS VIEWS.

Cllr. Les Sibley, also on behalf of Cllrs Michael Waine and Donna Ford

Bicester West

Comments with regards to the CDC planning application No 21/03177/F- Axis J9 Phase 3 Howes Lane, Bicester

This planning application has a high level of public interest and concern amongst Bicester Residents.

Bicester Town Council strongly objects to this Planning Application.

This speculative planning application for industrial warehouses on a site earmarked for housing is premature and contrary to both the NW Bicester Master Plan and Bicester Policy 1 of the adopted Cherwell Local Plan.

No further planning applications are allowed on the NW Bicester site other than those applications which have already been approved by the local planning authority (Cherwell District Council) until the new realigned Howes Lane has been constructed.

Last April, it was a fantastic engineering feat over 72 hours to install an under bridge and underpass through the railway embankment at Howes Lane Bicester. This scheme will facilitate the re-alignment of the A4095 Howes Lane that will deliver thousands of zero carbon neutral homes, a fit for purpose road network, social infrastructure and improve essential access links for pedestrians, cyclists, and motorists across the 6,000 home ECO development at NW Bicester.

The proposed application site has an existing planning permission to build 150 residential units as part of the 6,000 home ECO development at the NW Bicester site.

The scale and height of the 11 warehouse buildings that range from 8 -12 metres in height will have an unacceptable landscape impact which will in turn impact on the amenity of existing and new residents.

The proposals are contrary to the Cherwell Local Plan para B42, the supporting text to SLE 1 which states that in all cases very careful consideration should be given to locating employment and housing in close proximity as unacceptable adverse effects on the amenity of residential properties will not be permitted.

The adverse impact the proposed development will have on the character and appearance of the area.

The proposed development by its size scale, height, massing, design, and visual impact will dominate the street scene and blight the skyline.

The proposed development will be built on land at high risk of flooding. During the past few years, the existing Howes Lane, and the Greenwood housing estate has suffered from severe flooding incidents which resulted in residential homes being damaged by excessive amounts of flood water.

The loss of Green Infrastructure and the impact the proposed development will have the Local Walking Cycling Infrastructure Plan (LWCIP) and the internal bus network throughout the NW Bicester.

The adverse impact that the proposed development will have on the large Secondary School site, sport pitches, shops, health, and community centres by marginalising them from the residential development. Concerns for the safety of school children and parents having to use an industrial business park as part of the route to new School.

The adverse impact that the proposed industrial development will have on the road network by traffic congestion, noise, air and light pollution.

The key priority to unlocking the full potential of the 6,000 home ECO development on the NW Bicester site is to get on and build the A4095 Strategic Link Road (new re-aligned Howes Lane) without any further delay.

The proposal to build storage and distribution units on a site zoned for housing is unacceptable and would unnecessarily and unjustifiably erode the ambitions of the Local Plan.

The proposal is contrary to Policy SLE1 and Policy Bicester 1 of the Cherwell Local Plan, and the National Planning Policy Framework (NPPF)

The comments listed above are supported by my
fellow Bicester County Councillors Michael Waine and Donna Ford.

Appendix B

NOTES

Reproduced from the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright.

C A Cornish & Associates Ltd Licence no LIG0908.

Subject to Statutory Approvals.

Subject to Highways Development.

- Perameters Boundary
- Planning Site Boundary
- Ownership Boundary
- Notional Boundary
- Hedgerow Protection
- SLR License
- 2.5m high acoustic fence
- 4m high acoustic fence with acoustic gates
- 1.5m high timber post and rail fence

Rev	Description	Chk	Date
L	Unit 1 Cycle parking relocated closer to the building	SM	08/02/2022
K	Planning boundary updated to include howes lane crossing	SM	04/02/2022
J	Minor adjustments to radii.	SM	01/02/2022
H	Enhanced pathway to include cycle path & crossing point to Howes Lane.	SM	25/01/2022
G	Area Schedule Corrected	SK	02/11/2021
F	Site Boundary Updated	CS	02/09/2021
E	Site Boundary updated	CS	31/08/2021
D	Acousitc fences added	SK	20/08/2021
C	Sheet number amended. Road layout updated. Areas updated.	SK	16/08/2021
B	Paving around units 1-3 yards adjusted. Acoustic fence added and landscaping adjusted between units 10 and 11.	SK	29/07/2021
A	Units 6-11 moved further into the site to acheive 10m buffer to eastern site ownership boundary	SK	16/07/2021

Peer House
8 -14 Verulam Street
London WC1X 8LZ

tel +44(0)20 7400 2120

enquiries@cornisharchitects.com
www.cornisharchitects.com

RIBA Chartered Practice

cornisharchitects

Project Title.
PHASE 3 AXIS J9 BICESTER

Drawing Title.
PROPOSED SITE PLAN

Drawing Status.
TOWN PLANNING

Scale.
0 10 metres 80

Drawn By.	Scale.	Date.	Chk'd By.
S K	1:1000 @ A1	08/07/2021	C S

ALBION LAND

Drawing No. 20019 - TP - 002 Rev. L

Schedule of approximate areas																
UNIT	Ground Floor GEA sm	Ground Floor GEA sf	First Floor GEA sm	First Floor GEA sf	Second Floor GEA sm	Second Floor GEA sf	Total Unit GEA sm	Total Unit GEA sf	Ground Floor GIA sm	Ground Floor GIA sf	First Floor GIA sm	First Floor GIA sf	Second Floor GIA sm	Second Floor GIA sf	Total Unit GIA sm	Total Unit GIA sf	Car Parking
1	1830	19698	224	2411	0	0	**2054**	**22109**	1759	18934	195	2104	0	0	**1954**	**21038**	23
2	1665	17922	202	2174	0	0	**1867**	**20096**	1613	17362	179	1929	0	0	**1792**	**19291**	21
3	1717	18482	211	2271	0	0	**1928**	**20753**	1650	17761	183	1973	0	0	**1833**	**19734**	21
4	4412	47491	272	2928	272	2928	**4956**	**53346**	4278	46048	238	2558	238	2558	**4753**	**51165**	53
5	3552	38234	478	5145	0	0	**4030**	**43379**	3433	36953	423	4553	0	0	**3856**	**41506**	42
6	527	5673	0	0	0	0	**527**	**5673**	491	5285	0	0	0	0	**491**	**5285**	8
7	518	5576	0	0	0	0	**518**	**5576**	492	5296	0	0	0	0	**492**	**5296**	8
8	437	4704	0	0	0	0	**437**	**4704**	412	4435	0	0	0	0	**412**	**4435**	8
9	351	3778	0	0	0	0	**351**	**3778**	328	3531	0	0	0	0	**328**	**3531**	7
10	466	5016	0	0	0	0	**466**	**5016**	430	4629	0	0	0	0	**430**	**4629**	8
11	651	7007	0	0	0	0	**651**	**7007**	600	6458	0	0	0	0	**600**	**6458**	7
TOTAL	**16126**	**173580**	**1387**	**14930**	**272**	**2928**	**17785**	**191438**	**15486**	**166691**	**1219**	**13118**	**238**	**2558**	**16942**	**182367**	**206**

Appendix C

TPO 3

FUTURE BUS LINK TO BE CONSTRUCTED BY OTHERS

7.3m

FOOTWAY CONNECTION

TPO 2

5.0M SWALE
4.0M FOOTWAY/CYCLEWAY
7.3M ACCESS
5.0M SWALE
2.5M CYCLEWAY
2.0M FOOTWAY

ACCESS

7.3m

ACCESS

ACCESS

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DRAWING STATUS	CHECKED BY	DATE

david tucker associates
transport planning consultants

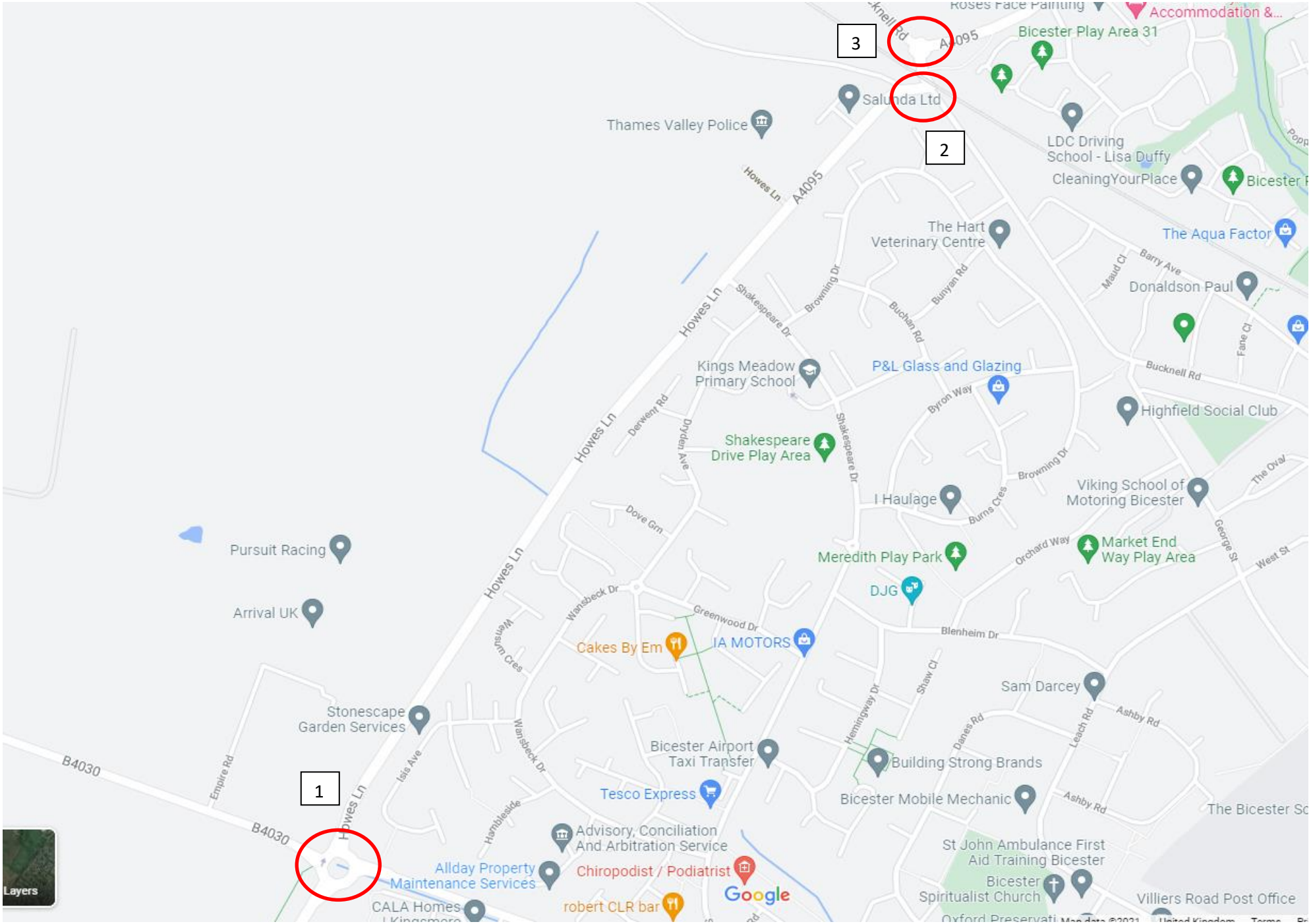
Forester House, Doctors Lane,
Henley In Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE: Howes Lane, Bicester
CLIENT: Albion Land

DRAWING TITLE:
Highway Infrastructure
Post North West Bicester link road

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/1000@A3	BP	Sept2014	14042-25-2	

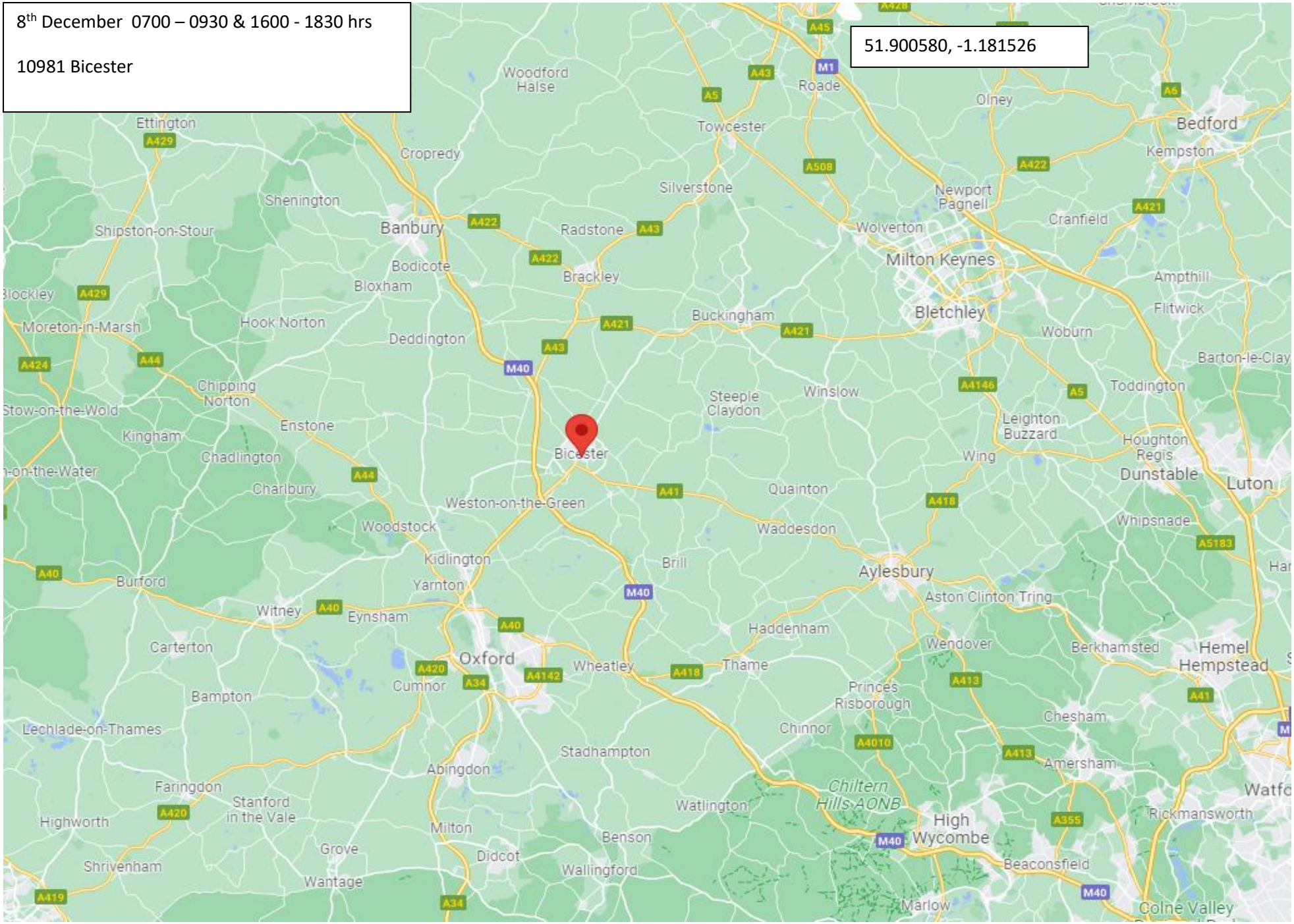
Appendix D


3
2
1
Howes Ln
A4095
B4030
Thames Valley Police
Bicester Play Area 31
LDC Driving School - Lisa Duffy
CleaningYourPlace
The Hart Veterinary Centre
The Aqua Factor
Donaldson Paul
Kings Meadow Primary School
P&L Glass and Glazing
Highfield Social Club
Shakespeare Drive Play Area
I Haulage
Viking School of Motoring Bicester
Pursuit Racing
Arrival UK
Meredith Play Park
Market End Way Play Area
DJG
Cakes By Em
IA MOTORS
Sam Darcey
Stonescape Garden Services
Bicester Airport Taxi Transfer
Building Strong Brands
Tesco Express
Bicester Mobile Mechanic
Advisory, Conciliation And Arbitration Service
St John Ambulance First Aid Training Bicester
Allday Property Maintenance Services
Chiropodist / Podiatrist
Bicester Spiritualist Church
CALA Homes
robert CLR bar
Villiers Road Post Office
Google
Layers

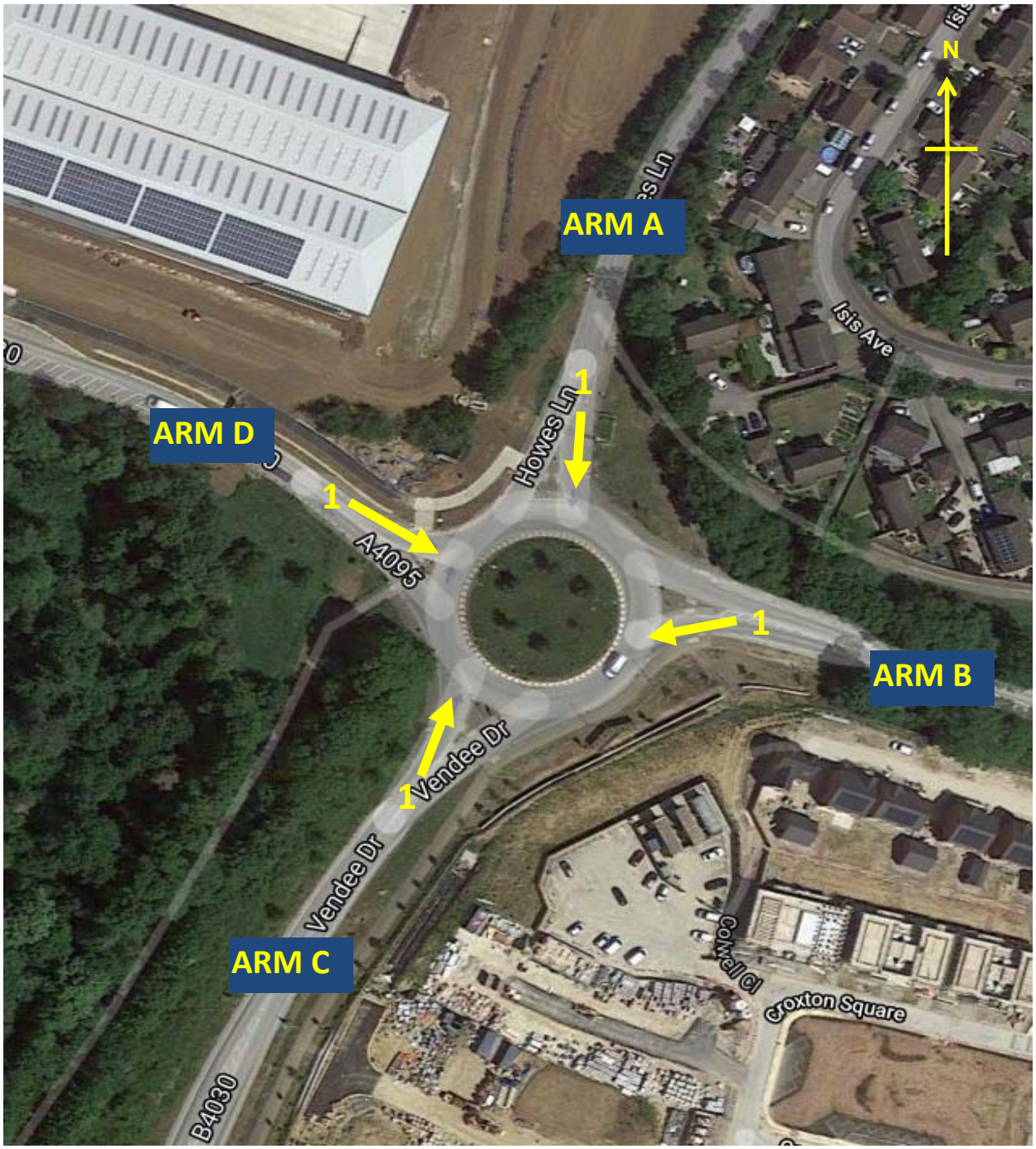
8th December 0700 – 0930 & 1600 - 1830 hrs

10981 Bicester

51.900580, -1.181526



SITE: 1	AUTO SURVEYS LTD	DATE: 8TH DECEMBER 2021
LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030		DAY: WEDNESDAY



JOB TITLE: BICESTER		JOB NUMBER: 10981

QUEUE LENGTHS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:**

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:**

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A HOWES LN	ARM B MIDDLETON STONEY RD	ARM C VENDEE DR	ARM D B4030	TIME	ARM A HOWES LN	ARM B MIDDLETON STONEY RD	ARM C VENDEE DR
	LANE 1	LANE 1	LANE 1	LANE 1		LANE 1	LANE 1	LANE 1
07:00	4	3	0	0	16:00	5	0	3
07:05	5	2	1	1	16:05	8	5	2
07:10	3	4	1	0	16:10	5	4	2
07:15	2	6	1	1	16:15	3	2	4
07:20	11	7	0	2	16:20	6	2	1
07:25	12	14	1	2	16:25	6	2	4
07:30	12	6	3	2	16:30	4	2	4
07:35	5	9	5	2	16:35	6	1	8
07:40	5	4	1	2	16:40	3	2	2
07:45	7	4	1	4	16:45	11	7	3
07:50	8	4	3	2	16:50	4	3	6
07:55	13+	5	3	3	16:55	5	2	2
08:00	6	16	3	2	17:00	8	1	2
08:05	6	4	4	5	17:05	7	5	6
08:10	9	2	3	3	17:10	4	2	2
08:15	11	5	4	3	17:15	6	2	5
08:20	3	8	4	5	17:20	13	2	18
08:25	6	3	3	3	17:25	5	2	4
08:30	9	2	5	4	17:30	3	2	1
08:35	7	6	2	4	17:35	1	2	2
08:40	9	5	3	6	17:40	12	3	3
08:45	13+	3	5	6	17:45	7	2	9
08:50	13+	4	1	6	17:50	3	4	4
08:55	8	4	3	3	17:55	6	2	4
09:00	8	3	2	4	18:00	3	2	4

QUEUE LENGTHS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:**

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:**

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A HOWES LN	ARM B MIDDLETON STONEY RD	ARM C VENDEE DR	ARM D B4030
	LANE 1	LANE 1	LANE 1	LANE 1
09:05	7	3	1	2
09:10	6	3	2	2
09:15	8	2	4	2
09:20	2	5	0	0
09:25	2	1	0	3

TIME	ARM A HOWES LN	ARM B MIDDLETON STONEY RD	ARM C VENDEE DR
	LANE 1	LANE 1	LANE 1
18:05	10	2	5
18:10	9	3	2
18:15	1	2	2
18:20	3	2	2
18:25	4	2	1

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	A TO A FROM HOWES LN TO HOWES LN								A TO B FROM HOWES LN TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0	4	2	1	1	0	0	0	8
07:15	0	0	0	0	0	0	0	0	8	2	1	1	0	0	0	12
07:30	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	9
07:45	0	0	0	0	0	0	0	0	12	4	1	0	0	0	0	17
H/TOT	0	0	0	0	0	0	0	0	28	13	3	2	0	0	0	46
08:00	0	0	0	0	0	0	0	0	10	2	1	0	0	0	1	14
08:15	0	0	0	0	0	0	0	0	16	6	1	0	0	0	0	23
08:30	0	0	0	0	0	0	0	0	13	3	0	1	0	0	0	17
08:45	0	0	0	0	0	0	0	0	29	3	0	0	0	0	0	32
H/TOT	0	0	0	0	0	0	0	0	68	14	2	1	0	0	1	86
09:00	0	0	0	0	0	0	0	0	14	3	1	0	0	0	0	18
09:15	0	0	0	0	0	0	0	0	7	0	2	1	0	0	0	10
H/TOT	0	0	0	0	0	0	0	0	21	3	3	1	0	0	0	28
P/TOT	0	0	0	0	0	0	0	0	117	30	8	4	0	0	1	160

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	A TO A FROM HOWES LN TO HOWES LN								A TO B FROM HOWES LN TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12
16:15	0	0	0	0	0	0	0	0	13	3	0	0	0	0	0	16
16:30	0	0	0	0	0	0	0	0	15	4	0	0	0	0	0	19
16:45	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	11
H/TOT	0	0	0	0	0	0	0	0	48	10	0	0	0	0	0	58
17:00	0	0	0	0	0	0	0	0	15	2	0	0	1	0	0	18
17:15	0	0	0	0	0	0	0	0	18	2	1	0	0	0	0	21
17:30	0	0	0	0	0	0	0	0	16	2	0	0	0	0	0	18
17:45	0	0	0	0	0	0	0	0	11	1	0	1	0	0	0	13
H/TOT	0	0	0	0	0	0	0	0	60	7	1	1	1	0	0	70
18:00	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	16
18:15	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
H/TOT	0	0	0	0	0	0	0	0	21	2	0	0	0	0	0	23
P/TOT	0	0	0	0	0	0	0	0	129	19	1	1	1	0	0	151

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	A TO C FROM HOWES LN TO VENDEE DR								A TO D FROM HOWES LN TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	102	30	5	2	0	0	0	139	7	5	0	1	2	0	0	15
07:15	122	43	9	5	0	1	0	180	5	1	0	0	1	0	0	7
07:30	109	37	3	1	0	0	0	150	14	6	0	0	0	0	0	20
07:45	105	32	4	3	0	2	0	146	23	3	0	0	1	0	0	27
H/TOT	438	142	21	11	0	3	0	615	49	15	0	1	4	0	0	69
08:00	122	24	4	3	0	0	0	153	35	4	1	0	0	0	0	40
08:15	122	22	2	1	0	0	0	147	27	3	1	0	0	0	0	31
08:30	106	25	6	2	1	0	0	140	20	2	2	0	0	0	0	24
08:45	123	21	6	3	0	1	0	154	19	5	0	1	0	0	0	25
H/TOT	473	92	18	9	1	1	0	594	101	14	4	1	0	0	0	120
09:00	119	20	8	2	0	0	1	150	10	2	4	0	0	0	1	17
09:15	67	19	3	4	0	1	0	94	8	3	0	0	0	0	0	11
H/TOT	186	39	11	6	0	1	1	244	18	5	4	0	0	0	1	28
P/TOT	1097	273	50	26	1	5	1	1453	168	34	8	2	4	0	1	217

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	A TO C FROM HOWES LN TO VENDEE DR								A TO D FROM HOWES LN TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	72	12	2	5	0	0	0	91	17	2	0	0	0	0	0	19
16:15	62	17	3	1	0	0	0	83	14	2	0	0	0	0	0	16
16:30	58	7	2	0	0	0	0	67	12	2	2	0	0	0	0	16
16:45	72	13	2	3	0	0	0	90	16	3	0	0	0	0	0	19
H/TOT	264	49	9	9	0	0	0	331	59	9	2	0	0	0	0	70
17:00	67	5	1	2	0	0	0	75	17	4	1	0	0	0	0	22
17:15	83	9	1	0	0	0	0	93	18	2	0	0	0	0	0	20
17:30	87	9	1	0	0	0	0	97	15	2	0	0	0	0	0	17
17:45	82	2	1	2	0	0	0	87	22	0	0	0	0	0	0	22
H/TOT	319	25	4	4	0	0	0	352	72	8	1	0	0	0	0	81
18:00	70	6	3	3	0	0	0	82	15	1	1	0	0	0	0	17
18:15	62	10	1	0	0	0	0	73	9	1	1	0	0	0	0	11
H/TOT	132	16	4	3	0	0	0	155	24	2	2	0	0	0	0	28
P/TOT	715	90	17	16	0	0	0	838	155	19	5	0	0	0	0	179

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	B TO A FROM MIDDLETON STONEY RD TO HOWES LN								B TO B FROM MIDDLETON STONEY RD TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
07:15	5	1	1	0	0	0	0	7	0	0	0	0	0	0	0	0
07:30	5	0	1	1	2	0	0	9	0	0	0	0	0	0	0	0
07:45	14	2	0	0	0	0	0	16	0	1	0	0	0	0	0	1
H/TOT	29	4	2	1	2	0	0	38	0	1	0	0	0	0	0	1
08:00	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
08:15	18	0	1	3	0	0	0	22	1	0	0	0	0	0	0	1
08:30	22	4	0	0	0	0	0	26	1	0	0	0	0	0	0	1
08:45	15	2	0	0	0	0	0	17	0	0	0	0	0	0	0	0
H/TOT	68	6	1	3	0	0	0	78	2	0	0	0	0	0	0	2
09:00	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
09:15	4	1	0	1	0	0	0	6	1	0	0	0	0	0	0	1
H/TOT	11	2	0	1	0	0	0	14	1	0	0	0	0	0	0	1
P/TOT	108	12	3	5	2	0	0	130	3	1	0	0	0	0	0	4

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	B TO A FROM MIDDLETON STONEY RD TO HOWES LN								B TO B FROM MIDDLETON STONEY RD TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	5	5	0	0	0	0	0	10	2	0	0	0	0	0	0	2
16:15	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0
16:30	11	4	0	0	0	0	0	15	0	0	0	0	0	0	0	0
16:45	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0
H/TOT	34	13	0	0	0	0	0	47	2	0	0	0	0	0	0	2
17:00	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0
17:15	12	2	0	0	0	0	0	14	1	0	0	0	0	0	0	1
17:30	6	1	0	0	0	0	0	7	2	0	0	0	0	0	0	2
17:45	12	0	0	0	0	0	0	12	1	0	0	0	0	0	0	1
H/TOT	41	5	0	0	0	0	0	46	4	0	0	0	0	0	0	4
18:00	12	1	0	0	0	0	0	13	1	0	0	0	0	0	0	1
18:15	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
H/TOT	20	2	0	0	0	0	0	22	1	0	0	0	0	0	0	1
P/TOT	95	20	0	0	0	0	0	115	7	0	0	0	0	0	0	7

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	B TO C FROM MIDDLETON STONEY RD TO VENDEE DR								B TO D FROM MIDDLETON STONEY RD TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	20	5	2	0	0	0	1	28	15	5	1	0	0	0	0	21
07:15	35	13	0	0	0	0	0	48	34	5	0	1	1	0	0	41
07:30	30	6	0	0	1	1	0	38	29	7	2	0	1	0	0	39
07:45	34	6	1	0	0	0	0	41	42	9	1	2	0	1	0	55
H/TOT	119	30	3	0	1	1	1	155	120	26	4	3	2	1	0	156
08:00	43	4	0	0	0	0	0	47	23	5	1	0	1	0	0	30
08:15	30	3	1	0	0	0	0	34	26	5	0	1	0	0	1	33
08:30	34	7	0	1	0	0	0	42	23	1	1	1	0	0	0	26
08:45	21	4	2	0	0	0	0	27	21	3	2	0	0	0	0	26
H/TOT	128	18	3	1	0	0	0	150	93	14	4	2	1	0	1	115
09:00	17	5	0	1	0	0	0	23	20	3	3	4	1	1	0	32
09:15	21	5	0	0	0	0	0	26	16	3	1	1	0	0	0	21
H/TOT	38	10	0	1	0	0	0	49	36	6	4	5	1	1	0	53
P/TOT	285	58	6	2	1	1	1	354	249	46	12	10	4	2	1	324

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	B TO C FROM MIDDLETON STONEY RD TO VENDEE DR								B TO D FROM MIDDLETON STONEY RD TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	20	5	1	0	0	0	0	26	32	11	0	0	0	0	0	43
16:15	17	3	0	0	0	1	0	21	19	6	2	0	1	0	0	28
16:30	13	3	0	0	0	0	0	16	32	5	1	1	0	0	0	39
16:45	20	3	0	0	0	0	0	23	30	0	0	0	0	0	0	30
H/TOT	70	14	1	0	0	1	0	86	113	22	3	1	1	0	0	140
17:00	28	4	0	0	0	0	0	32	24	3	0	0	0	0	0	27
17:15	23	3	0	0	0	0	0	26	46	2	0	0	0	0	0	48
17:30	25	1	0	0	0	0	0	26	23	1	0	0	0	0	0	24
17:45	22	1	1	0	0	0	0	24	31	0	1	1	0	1	0	34
H/TOT	98	9	1	0	0	0	0	108	124	6	1	1	0	1	0	133
18:00	19	3	1	0	0	0	0	23	32	0	0	0	0	0	0	32
18:15	13	0	1	0	0	0	0	14	34	0	0	0	0	0	0	34
H/TOT	32	3	2	0	0	0	0	37	66	0	0	0	0	0	0	66
P/TOT	200	26	4	0	0	1	0	231	303	28	4	2	1	1	0	339

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	C TO A FROM VENDEE DR TO HOWES LN								C TO B FROM VENDEE DR TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	16	8	2	0	0	0	0	26	8	2	1	0	0	0	0	11
07:15	14	8	2	5	0	0	0	29	16	4	3	0	0	0	0	23
07:30	27	6	1	2	1	0	0	37	17	3	1	1	0	0	0	22
07:45	45	15	1	1	0	0	0	62	14	7	1	0	0	0	0	22
H/TOT	102	37	6	8	1	0	0	154	55	16	6	1	0	0	0	78
08:00	65	15	1	0	0	0	0	81	21	5	1	0	1	0	0	28
08:15	74	10	1	0	1	0	0	86	26	6	1	1	0	0	0	34
08:30	58	5	5	2	1	0	0	71	21	4	2	0	0	0	0	27
08:45	60	4	1	3	0	0	0	68	32	8	2	1	0	0	0	43
H/TOT	257	34	8	5	2	0	0	306	100	23	6	2	1	0	0	132
09:00	45	12	4	2	0	0	0	63	18	4	4	0	0	0	0	26
09:15	33	3	1	2	0	0	0	39	10	4	0	0	0	0	1	15
H/TOT	78	15	5	4	0	0	0	102	28	8	4	0	0	0	1	41
P/TOT	437	86	19	17	3	0	0	562	183	47	16	3	1	0	1	251

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	C TO A FROM VENDEE DR TO HOWES LN								C TO B FROM VENDEE DR TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	50	25	2	1	0	0	1	79	31	7	1	0	0	0	0	39
16:15	87	27	2	0	0	0	0	116	28	6	2	0	0	0	0	36
16:30	103	23	4	0	0	0	0	130	32	9	1	0	0	1	0	43
16:45	101	26	1	4	0	0	0	132	30	8	0	0	0	0	0	38
H/TOT	341	101	9	5	0	0	1	457	121	30	4	0	0	1	0	156
17:00	119	24	2	0	0	0	0	145	38	9	1	0	0	0	0	48
17:15	101	17	6	1	0	0	0	125	45	9	0	0	0	0	0	54
17:30	85	14	1	0	1	0	0	101	34	2	0	0	0	0	0	36
17:45	106	13	2	1	0	1	0	123	31	4	0	0	0	0	0	35
H/TOT	411	68	11	2	1	1	0	494	148	24	1	0	0	0	0	173
18:00	93	6	0	0	0	1	0	100	33	4	0	0	0	0	0	37
18:15	82	4	1	1	0	0	0	88	26	1	1	0	0	0	0	28
H/TOT	175	10	1	1	0	1	0	188	59	5	1	0	0	0	0	65
P/TOT	927	179	21	8	1	2	1	1139	328	59	6	0	0	1	0	394

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	C TO C FROM VENDEE DR TO VENDEE DR								C TO D FROM VENDEE DR TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
07:15	0	0	0	0	0	0	0	0	15	4	1	1	0	0	0	21
07:30	0	0	0	0	0	0	0	0	9	6	2	1	1	0	0	19
07:45	0	0	0	0	0	0	0	0	15	4	1	1	0	0	0	21
H/TOT	0	0	0	0	0	0	0	0	51	14	4	3	1	0	0	73
08:00	0	0	0	0	0	0	0	0	22	5	2	0	0	0	0	29
08:15	0	0	0	0	0	0	0	0	11	3	1	1	0	0	0	16
08:30	0	0	0	0	0	0	0	0	6	5	1	0	0	0	0	12
08:45	0	0	0	0	0	0	0	0	10	3	1	0	0	0	0	14
H/TOT	0	0	0	0	0	0	0	0	49	16	5	1	0	0	0	71
09:00	0	0	0	0	0	0	0	0	8	2	4	2	0	0	0	16
09:15	0	0	0	0	0	0	0	0	6	6	1	1	0	0	0	14
H/TOT	0	0	0	0	0	0	0	0	14	8	5	3	0	0	0	30
P/TOT	0	0	0	0	0	0	0	0	114	38	14	7	1	0	0	174

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	C TO C FROM VENDEE DR TO VENDEE DR								C TO D FROM VENDEE DR TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	20	4	0	0	0	0	0	24
16:15	0	0	0	0	0	0	0	0	23	3	2	0	0	0	0	28
16:30	0	0	0	0	0	0	0	0	18	3	2	0	0	0	0	23
16:45	0	0	0	0	0	0	0	0	14	5	1	1	0	0	0	21
H/TOT	0	0	0	0	0	0	0	0	75	15	5	1	0	0	0	96
17:00	0	0	0	0	0	0	0	0	19	5	0	0	0	0	0	24
17:15	0	0	0	0	0	0	0	0	19	1	0	0	0	0	0	20
17:30	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	14
17:45	0	0	0	0	0	0	0	0	14	3	0	0	0	0	0	17
H/TOT	0	0	0	0	0	0	0	0	66	9	0	0	0	0	0	75
18:00	0	0	0	0	0	0	0	0	15	1	1	2	0	0	0	19
18:15	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	14
H/TOT	0	0	0	0	0	0	0	0	28	2	1	2	0	0	0	33
P/TOT	0	0	0	0	0	0	0	0	169	26	6	3	0	0	0	204

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	D TO A FROM B4030 TO HOWES LN								D TO B FROM B4030 TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	6	2	0	0	0	0	0	8	23	4	0	0	0	0	0	27
07:15	7	3	0	0	0	0	0	10	23	3	0	1	2	0	0	29
07:30	5	0	0	1	0	0	0	6	19	3	1	0	0	0	0	23
07:45	10	4	1	0	0	0	0	15	24	7	2	0	0	0	0	33
H/TOT	28	9	1	1	0	0	0	39	89	17	3	1	2	0	0	112
08:00	16	0	0	0	0	0	0	16	26	3	2	2	0	0	0	33
08:15	22	2	0	0	0	0	0	24	30	4	0	1	1	0	0	36
08:30	28	4	1	0	0	0	0	33	30	2	0	2	1	0	0	35
08:45	12	2	1	2	1	0	0	18	35	7	1	1	1	1	0	46
H/TOT	78	8	2	2	1	0	0	91	121	16	3	6	3	1	0	150
09:00	10	3	1	0	0	0	0	14	25	5	0	1	0	0	0	31
09:15	7	1	0	1	0	0	0	9	15	6	2	1	0	0	0	24
H/TOT	17	4	1	1	0	0	0	23	40	11	2	2	0	0	0	55
P/TOT	123	21	4	4	1	0	0	153	250	44	8	9	5	1	0	317

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	D TO A FROM B4030 TO HOWES LN								D TO B FROM B4030 TO MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	17	3	1	0	2	0	0	23	29	6	3	0	1	0	0	39
16:15	22	2	1	0	0	0	0	25	24	6	0	0	0	0	0	30
16:30	18	4	0	0	0	0	0	22	21	6	0	0	0	0	0	27
16:45	17	3	1	0	0	0	0	21	32	6	0	0	0	1	0	39
H/TOT	74	12	3	0	2	0	0	91	106	24	3	0	1	1	0	135
17:00	22	2	0	0	0	0	0	24	28	4	1	1	0	0	0	34
17:15	29	3	1	0	0	0	0	33	43	2	1	0	1	0	0	47
17:30	18	0	0	1	0	0	0	19	21	0	0	0	0	0	0	21
17:45	18	1	0	0	0	0	0	19	42	3	0	0	0	0	0	45
H/TOT	87	6	1	1	0	0	0	95	134	9	2	1	1	0	0	147
18:00	8	2	0	0	0	0	0	10	32	3	3	0	0	0	0	38
18:15	13	2	1	0	0	1	0	17	22	0	0	0	1	0	0	23
H/TOT	21	4	1	0	0	1	0	27	54	3	3	0	1	0	0	61
P/TOT	182	22	5	1	2	1	0	213	294	36	8	1	3	1	0	343

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	D TO C FROM B4030 TO VENDEE DR								D TO D FROM B4030 TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0
07:15	11	2	4	0	0	0	0	17	0	0	0	0	0	0	0	0
07:30	8	4	2	1	0	0	0	15	0	0	0	0	0	0	0	0
07:45	11	5	2	0	0	0	0	18	0	0	0	0	0	0	0	0
H/TOT	38	13	8	1	0	0	0	60	0	0	0	0	0	0	0	0
08:00	11	0	1	3	0	0	0	15	0	0	0	0	0	0	0	0
08:15	14	1	2	0	0	0	0	17	0	0	0	0	0	0	0	0
08:30	12	1	5	0	0	0	0	18	0	0	0	0	0	0	0	0
08:45	7	3	0	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	44	5	8	3	0	0	0	60	0	0	0	0	0	0	0	0
09:00	5	2	2	0	0	0	0	9	0	0	0	0	0	0	0	0
09:15	10	3	1	2	0	0	0	16	0	0	0	0	0	0	0	0
H/TOT	15	5	3	2	0	0	0	25	0	0	0	0	0	0	0	0
P/TOT	97	23	19	6	0	0	0	145	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	D TO C FROM B4030 TO VENDEE DR								D TO D FROM B4030 TO B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	14	2	0	0	0	0	0	16	0	0	0	0	0	0	0	0
16:15	7	3	1	1	0	0	0	12	0	0	0	0	0	0	0	0
16:30	9	3	0	0	0	0	0	12	0	0	0	0	0	0	0	0
16:45	11	3	0	0	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	41	11	1	1	0	0	0	54	0	0	0	0	0	0	0	0
17:00	13	2	1	0	0	0	0	16	0	0	0	0	0	0	0	0
17:15	18	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
17:30	16	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0
17:45	15	0	0	0	0	1	0	16	0	0	0	0	0	0	0	0
H/TOT	62	2	1	0	0	1	0	66	0	0	0	0	0	0	0	0
18:00	15	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0
18:15	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
H/TOT	26	1	0	0	0	0	0	27	0	0	0	0	0	0	0	0
P/TOT	129	14	2	1	0	1	0	147	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM A HOWES LN								FROM ARM A HOWES LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	27	11	2	0	0	0	0	40	113	37	6	4	2	0	0	162
07:15	26	12	3	5	0	0	0	46	135	46	10	6	1	1	0	199
07:30	37	6	2	4	3	0	0	52	127	48	3	1	0	0	0	179
07:45	69	21	2	1	0	0	0	93	140	39	5	3	1	2	0	190
H/TOT	159	50	9	10	3	0	0	231	515	170	24	14	4	3	0	730
08:00	94	15	1	0	0	0	0	110	167	30	6	3	0	0	1	207
08:15	114	12	2	3	1	0	0	132	165	31	4	1	0	0	0	201
08:30	108	13	6	2	1	0	0	130	139	30	8	3	1	0	0	181
08:45	87	8	2	5	1	0	0	103	171	29	6	4	0	1	0	211
H/TOT	403	48	11	10	3	0	0	475	642	120	24	11	1	1	1	800
09:00	62	16	5	2	0	0	0	85	143	25	13	2	0	0	2	185
09:15	44	5	1	4	0	0	0	54	82	22	5	5	0	1	0	115
H/TOT	106	21	6	6	0	0	0	139	225	47	18	7	0	1	2	300
P/TOT	668	119	26	26	6	0	0	845	1382	337	66	32	5	5	3	1830

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM A HOWES LN								FROM ARM A HOWES LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	72	33	3	1	2	0	1	112	100	15	2	5	0	0	0	122
16:15	117	31	3	0	0	0	0	151	89	22	3	1	0	0	0	115
16:30	132	31	4	0	0	0	0	167	85	13	4	0	0	0	0	102
16:45	128	31	2	4	0	0	0	165	97	18	2	3	0	0	0	120
H/TOT	449	126	12	5	2	0	1	595	371	68	11	9	0	0	0	459
17:00	152	28	2	0	0	0	0	182	99	11	2	2	1	0	0	115
17:15	142	22	7	1	0	0	0	172	119	13	2	0	0	0	0	134
17:30	109	15	1	1	1	0	0	127	118	13	1	0	0	0	0	132
17:45	136	14	2	1	0	1	0	154	115	3	1	3	0	0	0	122
H/TOT	539	79	12	3	1	1	0	635	451	40	6	5	1	0	0	503
18:00	113	9	0	0	0	1	0	123	100	8	4	3	0	0	0	115
18:15	103	7	2	1	0	1	0	114	77	12	2	0	0	0	0	91
H/TOT	216	16	2	1	0	2	0	237	177	20	6	3	0	0	0	206
P/TOT	1204	221	26	9	3	3	1	1467	999	128	23	17	1	0	0	1168

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM B MIDDLETON STONEY RD								FROM ARM B MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	35	8	2	1	0	0	0	46	40	11	3	0	0	0	1	55
07:15	47	9	4	2	2	0	0	64	74	19	1	1	1	0	0	96
07:30	40	11	2	1	0	0	0	54	64	13	3	1	4	1	0	86
07:45	50	19	4	0	0	0	0	73	90	18	2	2	0	1	0	113
H/TOT	172	47	12	4	2	0	0	237	268	61	9	4	5	2	1	350
08:00	57	10	4	2	1	0	1	75	79	9	1	0	1	0	0	90
08:15	73	16	2	2	1	0	0	94	75	8	2	4	0	0	1	90
08:30	65	9	2	3	1	0	0	80	80	12	1	2	0	0	0	95
08:45	96	18	3	2	1	1	0	121	57	9	4	0	0	0	0	70
H/TOT	291	53	11	9	4	1	1	370	291	38	8	6	1	0	1	345
09:00	57	12	5	1	0	0	0	75	44	9	3	5	1	1	0	63
09:15	33	10	4	2	0	0	1	50	42	9	1	2	0	0	0	54
H/TOT	90	22	9	3	0	0	1	125	86	18	4	7	1	1	0	117
P/TOT	553	122	32	16	6	1	2	732	645	117	21	17	7	3	2	812

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM B MIDDLETON STONEY RD								FROM ARM B MIDDLETON STONEY RD							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	73	14	4	0	1	0	0	92	59	21	1	0	0	0	0	81
16:15	65	15	2	0	0	0	0	82	44	11	2	0	1	1	0	59
16:30	68	19	1	0	0	1	0	89	56	12	1	1	0	0	0	70
16:45	71	16	0	0	0	1	0	88	60	5	0	0	0	0	0	65
H/TOT	277	64	7	0	1	2	0	351	219	49	4	1	1	1	0	275
17:00	81	15	2	1	1	0	0	100	63	9	0	0	0	0	0	72
17:15	107	13	2	0	1	0	0	123	82	7	0	0	0	0	0	89
17:30	73	4	0	0	0	0	0	77	56	3	0	0	0	0	0	59
17:45	85	8	0	1	0	0	0	94	66	1	2	1	0	1	0	71
H/TOT	346	40	4	2	2	0	0	394	267	20	2	1	0	1	0	291
18:00	81	8	3	0	0	0	0	92	64	4	1	0	0	0	0	69
18:15	54	2	1	0	1	0	0	58	55	1	1	0	0	0	0	57
H/TOT	135	10	4	0	1	0	0	150	119	5	2	0	0	0	0	126
P/TOT	758	114	15	2	4	2	0	895	605	74	8	2	1	2	0	692

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM C VENDEE DR								FROM ARM C VENDEE DR							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	130	37	7	2	0	0	1	177	36	10	3	0	0	0	0	49
07:15	168	58	13	5	0	1	0	245	45	16	6	6	0	0	0	73
07:30	147	47	5	2	1	1	0	203	53	15	4	4	2	0	0	78
07:45	150	43	7	3	0	2	0	205	74	26	3	2	0	0	0	105
H/TOT	595	185	32	12	1	4	1	830	208	67	16	12	2	0	0	305
08:00	176	28	5	6	0	0	0	215	108	25	4	0	1	0	0	138
08:15	166	26	5	1	0	0	0	198	111	19	3	2	1	0	0	136
08:30	152	33	11	3	1	0	0	200	85	14	8	2	1	0	0	110
08:45	151	28	8	3	0	1	0	191	102	15	4	4	0	0	0	125
H/TOT	645	115	29	13	1	1	0	804	406	73	19	8	3	0	0	509
09:00	141	27	10	3	0	0	1	182	71	18	12	4	0	0	0	105
09:15	98	27	4	6	0	1	0	136	49	13	2	3	0	0	1	68
H/TOT	239	54	14	9	0	1	1	318	120	31	14	7	0	0	1	173
P/TOT	1479	354	75	34	2	6	2	1952	734	171	49	27	5	0	1	987

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM C VENDEE DR								FROM ARM C VENDEE DR							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	106	19	3	5	0	0	0	133	101	36	3	1	0	0	1	142
16:15	86	23	4	2	0	1	0	116	138	36	6	0	0	0	0	180
16:30	80	13	2	0	0	0	0	95	153	35	7	0	0	1	0	196
16:45	103	19	2	3	0	0	0	127	145	39	2	5	0	0	0	191
H/TOT	375	74	11	10	0	1	0	471	537	146	18	6	0	1	1	709
17:00	108	11	2	2	0	0	0	123	176	38	3	0	0	0	0	217
17:15	124	12	1	0	0	0	0	137	165	27	6	1	0	0	0	199
17:30	128	10	1	0	0	0	0	139	133	16	1	0	1	0	0	151
17:45	119	3	2	2	0	1	0	127	151	20	2	1	0	1	0	175
H/TOT	479	36	6	4	0	1	0	526	625	101	12	2	1	1	0	742
18:00	104	9	4	3	0	0	0	120	141	11	1	2	0	1	0	156
18:15	86	11	2	0	0	0	0	99	121	6	2	1	0	0	0	130
H/TOT	190	20	6	3	0	0	0	219	262	17	3	3	0	1	0	286
P/TOT	1044	130	23	17	0	2	0	1216	1424	264	33	11	1	3	1	1737

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM D B4030								FROM ARM D B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	34	10	1	1	2	0	0	48	37	8	0	0	0	0	0	45
07:15	54	10	1	2	2	0	0	69	41	8	4	1	2	0	0	56
07:30	52	19	4	1	2	0	0	78	32	7	3	2	0	0	0	44
07:45	80	16	2	3	1	1	0	103	45	16	5	0	0	0	0	66
H/TOT	220	55	8	7	7	1	0	298	155	39	12	3	2	0	0	211
08:00	80	14	4	0	1	0	0	99	53	3	3	5	0	0	0	64
08:15	64	11	2	2	0	0	1	80	66	7	2	1	1	0	0	77
08:30	49	8	4	1	0	0	0	62	70	7	6	2	1	0	0	86
08:45	50	11	3	1	0	0	0	65	54	12	2	3	2	1	0	74
H/TOT	243	44	13	4	1	0	1	306	243	29	13	11	4	1	0	301
09:00	38	7	11	6	1	1	1	65	40	10	3	1	0	0	0	54
09:15	30	12	2	2	0	0	0	46	32	10	3	4	0	0	0	49
H/TOT	68	19	13	8	1	1	1	111	72	20	6	5	0	0	0	103
P/TOT	531	118	34	19	9	2	2	715	470	88	31	19	6	1	0	615

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

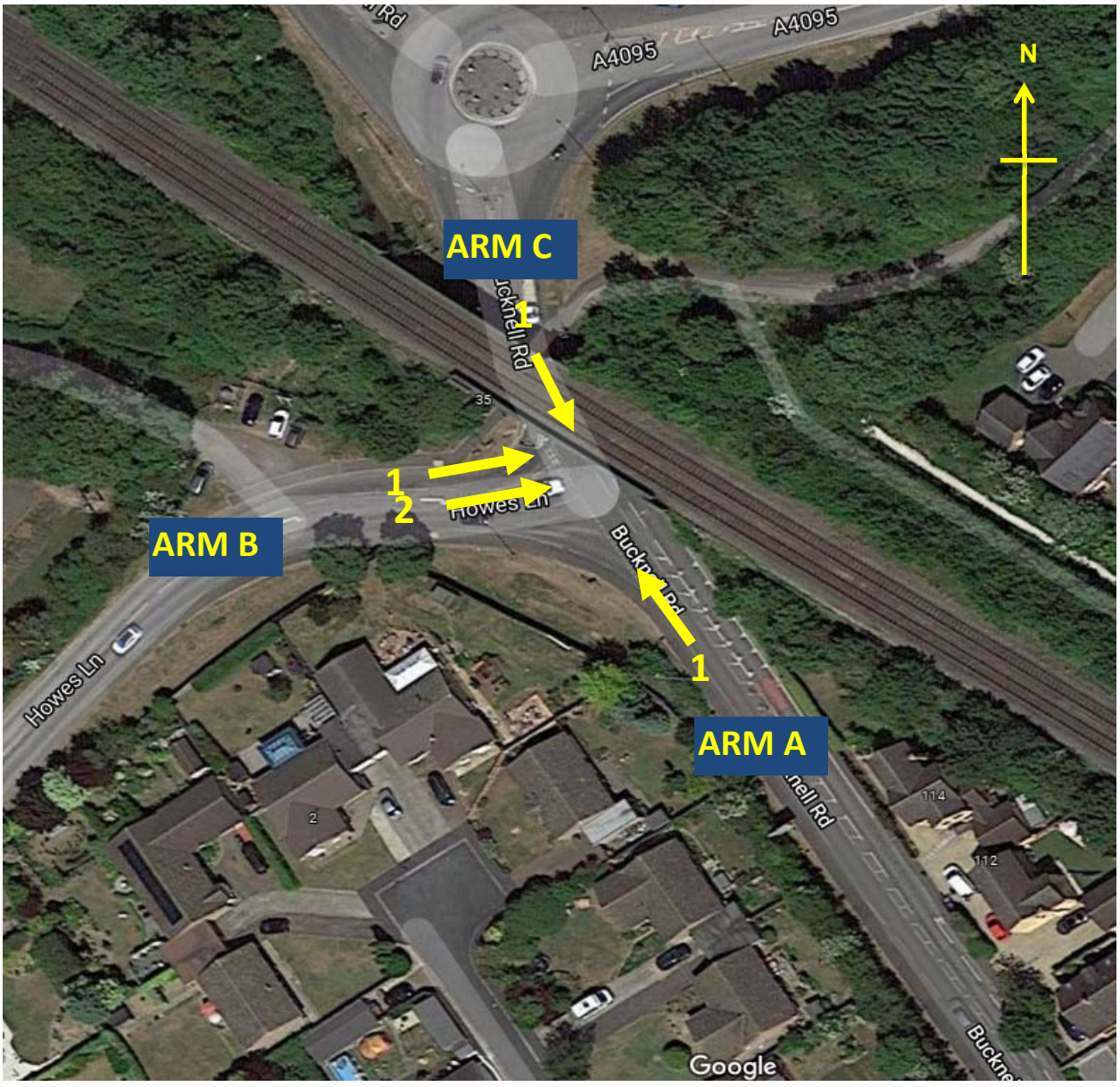
JOB NAME: BICESTER

SITE: 1 **DATE:** 08/12/2021

LOCATION: HOWES LN / MIDDLETON STONEY RD / VENDEE DR / B4030 **DAY:** WEDNESDAY

TIME	TO ARM D B4030								FROM ARM D B4030							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	69	17	0	0	0	0	0	86	60	11	4	0	3	0	0	78
16:15	56	11	4	0	1	0	0	72	53	11	2	1	0	0	0	67
16:30	62	10	5	1	0	0	0	78	48	13	0	0	0	0	0	61
16:45	60	8	1	1	0	0	0	70	60	12	1	0	0	1	0	74
H/TOT	247	46	10	2	1	0	0	306	221	47	7	1	3	1	0	280
17:00	60	12	1	0	0	0	0	73	63	8	2	1	0	0	0	74
17:15	83	5	0	0	0	0	0	88	90	5	2	0	1	0	0	98
17:30	52	3	0	0	0	0	0	55	55	0	0	1	0	0	0	56
17:45	67	3	1	1	0	1	0	73	75	4	0	0	0	1	0	80
H/TOT	262	23	2	1	0	1	0	289	283	17	4	2	1	1	0	308
18:00	62	2	2	2	0	0	0	68	55	5	3	0	0	0	0	63
18:15	56	2	1	0	0	0	0	59	46	3	1	0	1	1	0	52
H/TOT	118	4	3	2	0	0	0	127	101	8	4	0	1	1	0	115
P/TOT	627	73	15	5	1	1	0	722	605	72	15	3	5	3	0	703

SITE: 2		DATE: 8TH DECEMBER 2021
LOCATION: HOWES LN / BUCKNELL RD		DAY: WEDNESDAY



JOB TITLE: BICESTER		JOB NUMBER: 10981

QUEUE LENGTHS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

NOTE: Queue Lengths recorded by the maximum number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A BUCKNELL RD (S)	ARM B HOWES LN		ARM C BUCKNELL RD (N)	TIME	ARM A BUCKNELL RD (S)	ARM B HOWES LN		ARM C BUCKNELL RD (N)
	LANE 1	LANE 1	LANE 2	LANE 1		LANE 1	LANE 1	LANE 2	LANE 1
07:00	0	2	1	2	16:00	0	3	0	7
07:05	0	3	0	5	16:05	0	17	1	7
07:10	0	3	1	6	16:10	0	27	2	6
07:15	0	4	1	5	16:15	0	15	2	5
07:20	0	2	1	6	16:20	0	13	2	3
07:25	0	3	0	7	16:25	0	9	3	4
07:30	0	3	0	3	16:30	0	4	1	2
07:35	0	4	0	6	16:35	0	22	1	7
07:40	0	4	2	3	16:40	0	23	2	7
07:45	0	4	0	4	16:45	0	7	1	2
07:50	0	5	1	7	16:50	0	2	1	5
07:55	0	3	1	7	16:55	0	26	2	3
08:00	0	4	1	6	17:00	0	28	1	8
08:05	0	8	1	7	17:05	1	40	2	5
08:10	0	10	1	7	17:10	0	27	1	7
08:15	0	8	2	6	17:15	0	13	2	6
08:20	0	4	1	6	17:20	0	12	2	7
08:25	0	12	2	7	17:25	0	5	1	5
08:30	0	7	1	7	17:30	0	14	1	7
08:35	0	13	2	7	17:35	0	18	3	8
08:40	0	8	2	5	17:40	0	6	1	4
08:45	0	10	1	6	17:45	0	15	1	6
08:50	0	10	1	7	17:50	0	8	1	7
08:55	0	10	3	8	17:55	0	5	1	7
09:00	0	4	1	8	18:00	0	2	1	3

QUEUE LENGTHS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

NOTE: Queue Lengths recorded by the maximum number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A BUCKNELL RD (S)	ARM B HOWES LN		ARM C BUCKNELL RD (N)	TIME	ARM A BUCKNELL RD (S)	ARM B HOWES LN		ARM C BUCKNELL RD (N)
	LANE 1	LANE 1	LANE 2	LANE 1		LANE 1	LANE 1	LANE 2	LANE 1
09:05	0	8	3	8	18:05	0	8	1	6
09:10	0	1	1	4	18:10	0	4	1	3
09:15	0	4	1	4	18:15	0	3	1	2
09:20	0	6	0	3	18:20	0	2	1	0
09:25	0	1	0	4	18:25	0	3	1	3

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	A TO B FROM BUCKNELL RD (S) TO HOWES LN								A TO C FROM BUCKNELL RD (S) TO BUCKNELL RD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	7	3	2	0	0	0	0	12	16	3	1	0	0	0	0	20
07:15	11	1	0	0	0	0	0	12	29	7	1	0	0	0	0	37
07:30	8	3	0	0	0	0	1	12	31	6	4	0	0	0	0	41
07:45	12	1	2	0	0	1	0	16	34	8	1	0	0	0	0	43
H/TOT	38	8	4	0	0	1	1	52	110	24	7	0	0	0	0	141
08:00	25	1	0	0	0	0	0	26	32	3	0	0	0	0	0	35
08:15	18	2	0	0	0	0	1	21	40	2	2	0	0	0	0	44
08:30	20	5	0	0	0	0	0	25	31	3	1	0	0	0	0	35
08:45	15	0	1	0	0	0	0	16	43	5	1	0	0	0	0	49
H/TOT	78	8	1	0	0	0	1	88	146	13	4	0	0	0	0	163
09:00	10	5	0	0	0	0	0	15	27	3	1	0	0	0	0	31
09:15	7	1	0	1	0	0	0	9	25	0	1	0	0	0	0	26
H/TOT	17	6	0	1	0	0	0	24	52	3	2	0	0	0	0	57
P/TOT	133	22	5	1	0	1	2	164	308	40	13	0	0	0	0	361

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	A TO B FROM BUCKNELL RD (S) TO HOWES LN								A TO C FROM BUCKNELL RD (S) TO BUCKNELL RD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	1	0	1	0	0	0	11	38	3	0	0	0	0	1	42
16:15	10	0	1	0	0	0	0	11	33	4	0	0	0	0	0	37
16:30	10	0	0	0	0	0	0	10	35	1	0	1	0	0	0	37
16:45	6	0	0	0	0	0	0	6	26	4	0	0	0	0	0	30
H/TOT	35	1	1	1	0	0	0	38	132	12	0	1	0	0	1	146
17:00	5	1	0	0	0	0	0	6	34	5	1	0	0	0	0	40
17:15	7	2	0	0	0	0	0	9	23	2	0	0	0	0	0	25
17:30	8	0	0	0	0	0	0	8	29	5	0	0	0	0	0	34
17:45	15	0	0	0	0	0	0	15	28	3	0	0	0	0	0	31
H/TOT	35	3	0	0	0	0	0	38	114	15	1	0	0	0	0	130
18:00	8	0	0	0	0	0	0	8	21	3	1	0	0	1	0	26
18:15	10	1	1	0	0	0	0	12	18	1	1	0	0	0	0	20
H/TOT	18	1	1	0	0	0	0	20	39	4	2	0	0	1	0	46
P/TOT	88	5	2	1	0	0	0	96	285	31	3	1	0	1	1	322

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	B TO A FROM HOWES LN TO BUCKNELL RD (S)								B TO C FROM HOWES LN TO BUCKNELL RD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	2	1	0	0	0	0	0	3	48	11	3	0	0	0	0	62
07:15	2	1	0	0	0	0	0	3	39	12	2	4	0	0	0	57
07:30	2	0	0	0	0	0	0	2	61	14	3	5	2	0	0	85
07:45	3	0	0	0	0	0	0	3	83	18	1	1	0	0	0	103
H/TOT	9	2	0	0	0	0	0	11	231	55	9	10	2	0	0	307
08:00	4	2	0	0	0	0	0	6	96	19	1	0	0	0	0	116
08:15	7	0	1	0	0	0	0	8	119	12	1	1	1	0	0	134
08:30	4	1	3	0	0	0	0	8	128	16	2	3	1	0	0	150
08:45	7	0	0	0	0	0	0	7	110	13	3	5	1	0	0	132
H/TOT	22	3	4	0	0	0	0	29	453	60	7	9	3	0	0	532
09:00	5	3	2	0	0	0	0	10	80	13	2	3	0	0	0	98
09:15	0	1	0	0	0	0	0	1	62	8	2	3	0	0	0	75
H/TOT	5	4	2	0	0	0	0	11	142	21	4	6	0	0	0	173
P/TOT	36	9	6	0	0	0	0	51	826	136	20	25	5	0	0	1012

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	B TO A FROM HOWES LN TO BUCKNELL RD (S)								B TO C FROM HOWES LN TO BUCKNELL RD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	3	3	0	0	0	0	0	6	106	27	3	2	2	0	0	140
16:15	13	1	0	0	0	0	0	14	119	38	3	0	0	0	0	160
16:30	4	2	0	0	0	0	0	6	154	27	1	2	0	0	0	184
16:45	9	2	0	0	0	0	0	11	134	26	2	4	0	0	0	166
H/TOT	29	8	0	0	0	0	0	37	513	118	9	8	2	0	0	650
17:00	5	1	0	0	0	0	0	6	160	32	2	0	0	0	0	194
17:15	11	0	0	0	0	0	0	11	164	24	6	2	0	0	0	196
17:30	7	0	0	0	0	0	0	7	131	14	2	0	1	0	0	148
17:45	3	0	0	0	0	0	0	3	144	17	1	1	0	0	0	163
H/TOT	26	1	0	0	0	0	0	27	599	87	11	3	1	0	0	701
18:00	5	3	0	0	0	0	0	8	118	8	0	0	0	2	0	128
18:15	3	1	1	0	0	0	0	5	110	9	1	1	0	1	0	122
H/TOT	8	4	1	0	0	0	0	13	228	17	1	1	0	3	0	250
P/TOT	63	13	1	0	0	0	0	77	1340	222	21	12	3	3	0	1601

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	C TO A FROM BUCKNELL RD (N) TO BUCKNELL RD (S)								C TO B FROM BUCKNELL RD (N) TO HOWES LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	7	2	1	0	0	0	0	10	113	41	4	4	1	0	0	163
07:15	17	2	1	0	0	0	0	20	130	47	11	6	2	1	0	197
07:30	7	2	0	0	0	0	0	9	135	46	1	0	1	0	0	183
07:45	28	0	0	0	0	0	0	28	150	37	7	4	3	1	0	202
H/TOT	59	6	2	0	0	0	0	67	528	171	23	14	7	2	0	745
08:00	33	2	0	0	0	0	0	35	151	33	4	1	0	0	1	190
08:15	47	6	4	0	0	0	0	57	150	26	4	3	0	0	0	183
08:30	42	4	4	0	0	0	0	50	147	31	7	4	1	0	0	190
08:45	43	3	1	0	0	0	0	47	166	27	5	2	0	0	0	200
H/TOT	165	15	9	0	0	0	0	189	614	117	20	10	1	0	1	763
09:00	23	3	1	0	0	0	0	27	151	23	12	3	0	0	1	190
09:15	19	1	1	0	0	0	0	21	80	22	3	4	0	1	0	110
H/TOT	42	4	2	0	0	0	0	48	231	45	15	7	0	1	1	300
P/TOT	266	25	13	0	0	0	0	304	1373	333	58	31	8	3	2	1808

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	C TO A FROM BUCKNELL RD (N) TO BUCKNELL RD (S)								C TO B FROM BUCKNELL RD (N) TO HOWES LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	31	7	0	0	0	1	0	39	110	18	2	3	0	0	0	133
16:15	36	3	0	0	0	0	0	39	103	21	4	0	0	0	0	128
16:30	38	4	0	0	0	0	0	42	123	17	5	2	0	1	0	148
16:45	33	1	1	0	0	0	0	35	102	18	1	2	0	0	0	123
H/TOT	138	15	1	0	0	1	0	155	438	74	12	7	0	1	0	532
17:00	40	3	0	0	0	0	0	43	130	14	2	1	1	0	0	148
17:15	43	2	0	0	0	0	0	45	134	14	3	0	0	0	0	151
17:30	37	2	1	0	0	0	0	40	145	11	4	0	0	0	0	160
17:45	43	5	0	0	0	0	0	48	122	7	3	3	0	0	0	135
H/TOT	163	12	1	0	0	0	0	176	531	46	12	4	1	0	0	594
18:00	22	3	0	0	0	0	0	25	114	12	4	3	0	0	0	133
18:15	24	1	0	0	0	0	0	25	90	9	2	0	0	0	0	101
H/TOT	46	4	0	0	0	0	0	50	204	21	6	3	0	0	0	234
P/TOT	347	31	2	0	0	1	0	381	1173	141	30	14	1	1	0	1360

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	TO ARM A BUCKNELL RD (S)								FROM ARM A BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	9	3	1	0	0	0	0	13	23	6	3	0	0	0	0	32
07:15	19	3	1	0	0	0	0	23	40	8	1	0	0	0	0	49
07:30	9	2	0	0	0	0	0	11	39	9	4	0	0	0	1	53
07:45	31	0	0	0	0	0	0	31	46	9	3	0	0	1	0	59
H/TOT	68	8	2	0	0	0	0	78	148	32	11	0	0	1	1	193
08:00	37	4	0	0	0	0	0	41	57	4	0	0	0	0	0	61
08:15	54	6	5	0	0	0	0	65	58	4	2	0	0	0	1	65
08:30	46	5	7	0	0	0	0	58	51	8	1	0	0	0	0	60
08:45	50	3	1	0	0	0	0	54	58	5	2	0	0	0	0	65
H/TOT	187	18	13	0	0	0	0	218	224	21	5	0	0	0	1	251
09:00	28	6	3	0	0	0	0	37	37	8	1	0	0	0	0	46
09:15	19	2	1	0	0	0	0	22	32	1	1	1	0	0	0	35
H/TOT	47	8	4	0	0	0	0	59	69	9	2	1	0	0	0	81
P/TOT	302	34	19	0	0	0	0	355	441	62	18	1	0	1	2	525

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	TO ARM A BUCKNELL RD (S)								FROM ARM A BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	34	10	0	0	0	1	0	45	47	4	0	1	0	0	1	53
16:15	49	4	0	0	0	0	0	53	43	4	1	0	0	0	0	48
16:30	42	6	0	0	0	0	0	48	45	1	0	1	0	0	0	47
16:45	42	3	1	0	0	0	0	46	32	4	0	0	0	0	0	36
H/TOT	167	23	1	0	0	1	0	192	167	13	1	2	0	0	1	184
17:00	45	4	0	0	0	0	0	49	39	6	1	0	0	0	0	46
17:15	54	2	0	0	0	0	0	56	30	4	0	0	0	0	0	34
17:30	44	2	1	0	0	0	0	47	37	5	0	0	0	0	0	42
17:45	46	5	0	0	0	0	0	51	43	3	0	0	0	0	0	46
H/TOT	189	13	1	0	0	0	0	203	149	18	1	0	0	0	0	168
18:00	27	6	0	0	0	0	0	33	29	3	1	0	0	1	0	34
18:15	27	2	1	0	0	0	0	30	28	2	2	0	0	0	0	32
H/TOT	54	8	1	0	0	0	0	63	57	5	3	0	0	1	0	66
P/TOT	410	44	3	0	0	1	0	458	373	36	5	2	0	1	1	418

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	TO ARM B HOWES LN								FROM ARM B HOWES LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	120	44	6	4	1	0	0	175	50	12	3	0	0	0	0	65
07:15	141	48	11	6	2	1	0	209	41	13	2	4	0	0	0	60
07:30	143	49	1	0	1	0	1	195	63	14	3	5	2	0	0	87
07:45	162	38	9	4	3	2	0	218	86	18	1	1	0	0	0	106
H/TOT	566	179	27	14	7	3	1	797	240	57	9	10	2	0	0	318
08:00	176	34	4	1	0	0	1	216	100	21	1	0	0	0	0	122
08:15	168	28	4	3	0	0	1	204	126	12	2	1	1	0	0	142
08:30	167	36	7	4	1	0	0	215	132	17	5	3	1	0	0	158
08:45	181	27	6	2	0	0	0	216	117	13	3	5	1	0	0	139
H/TOT	692	125	21	10	1	0	2	851	475	63	11	9	3	0	0	561
09:00	161	28	12	3	0	0	1	205	85	16	4	3	0	0	0	108
09:15	87	23	3	5	0	1	0	119	62	9	2	3	0	0	0	76
H/TOT	248	51	15	8	0	1	1	324	147	25	6	6	0	0	0	184
P/TOT	1506	355	63	32	8	4	4	1972	862	145	26	25	5	0	0	1063

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	TO ARM B HOWES LN								FROM ARM B HOWES LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	119	19	2	4	0	0	0	144	109	30	3	2	2	0	0	146
16:15	113	21	5	0	0	0	0	139	132	39	3	0	0	0	0	174
16:30	133	17	5	2	0	1	0	158	158	29	1	2	0	0	0	190
16:45	108	18	1	2	0	0	0	129	143	28	2	4	0	0	0	177
H/TOT	473	75	13	8	0	1	0	570	542	126	9	8	2	0	0	687
17:00	135	15	2	1	1	0	0	154	165	33	2	0	0	0	0	200
17:15	141	16	3	0	0	0	0	160	175	24	6	2	0	0	0	207
17:30	153	11	4	0	0	0	0	168	138	14	2	0	1	0	0	155
17:45	137	7	3	3	0	0	0	150	147	17	1	1	0	0	0	166
H/TOT	566	49	12	4	1	0	0	632	625	88	11	3	1	0	0	728
18:00	122	12	4	3	0	0	0	141	123	11	0	0	0	2	0	136
18:15	100	10	3	0	0	0	0	113	113	10	2	1	0	1	0	127
H/TOT	222	22	7	3	0	0	0	254	236	21	2	1	0	3	0	263
P/TOT	1261	146	32	15	1	1	0	1456	1403	235	22	12	3	3	0	1678

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	TO ARM C BUCKNELL RD (N)								FROM ARM C BUCKNELL RD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	64	14	4	0	0	0	0	82	120	43	5	4	1	0	0	173
07:15	68	19	3	4	0	0	0	94	147	49	12	6	2	1	0	217
07:30	92	20	7	5	2	0	0	126	142	48	1	0	1	0	0	192
07:45	117	26	2	1	0	0	0	146	178	37	7	4	3	1	0	230
H/TOT	341	79	16	10	2	0	0	448	587	177	25	14	7	2	0	812
08:00	128	22	1	0	0	0	0	151	184	35	4	1	0	0	1	225
08:15	159	14	3	1	1	0	0	178	197	32	8	3	0	0	0	240
08:30	159	19	3	3	1	0	0	185	189	35	11	4	1	0	0	240
08:45	153	18	4	5	1	0	0	181	209	30	6	2	0	0	0	247
H/TOT	599	73	11	9	3	0	0	695	779	132	29	10	1	0	1	952
09:00	107	16	3	3	0	0	0	129	174	26	13	3	0	0	1	217
09:15	87	8	3	3	0	0	0	101	99	23	4	4	0	1	0	131
H/TOT	194	24	6	6	0	0	0	230	273	49	17	7	0	1	1	348
P/TOT	1134	176	33	25	5	0	0	1373	1639	358	71	31	8	3	2	2112

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

TIME	TO ARM C BUCKNELL RD (N)								FROM ARM C BUCKNELL RD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	144	30	3	2	2	0	1	182	141	25	2	3	0	1	0	172
16:15	152	42	3	0	0	0	0	197	139	24	4	0	0	0	0	167
16:30	189	28	1	3	0	0	0	221	161	21	5	2	0	1	0	190
16:45	160	30	2	4	0	0	0	196	135	19	2	2	0	0	0	158
H/TOT	645	130	9	9	2	0	1	796	576	89	13	7	0	2	0	687
17:00	194	37	3	0	0	0	0	234	170	17	2	1	1	0	0	191
17:15	187	26	6	2	0	0	0	221	177	16	3	0	0	0	0	196
17:30	160	19	2	0	1	0	0	182	182	13	5	0	0	0	0	200
17:45	172	20	1	1	0	0	0	194	165	12	3	3	0	0	0	183
H/TOT	713	102	12	3	1	0	0	831	694	58	13	4	1	0	0	770
18:00	139	11	1	0	0	3	0	154	136	15	4	3	0	0	0	158
18:15	128	10	2	1	0	1	0	142	114	10	2	0	0	0	0	126
H/TOT	267	21	3	1	0	4	0	296	250	25	6	3	0	0	0	284
P/TOT	1625	253	24	13	3	4	1	1923	1520	172	32	14	1	2	0	1741

MANUAL CLASSIFIED COUNTS

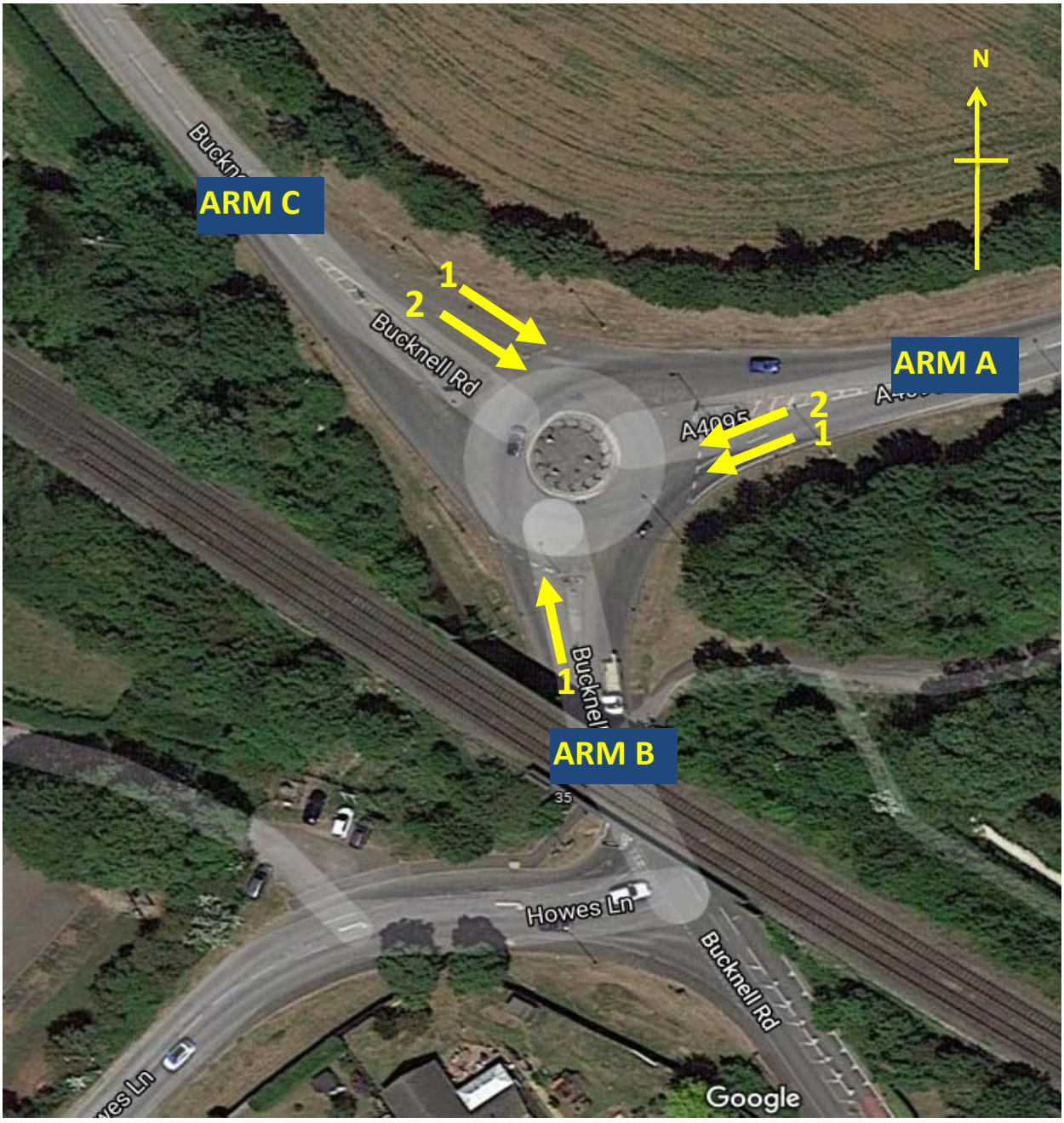
JOB REF: 10981

JOB NAME: BICESTER

SITE: 2 **DATE:** 08/12/2021

LOCATION: BUCKNELL RD (S) / HOWES LN / BUCKNELL RD (N) **DAY:** WEDNESDAY

SITE: 3	AUTO SURVEYS LTD	DATE: 8TH DECEMBER 2021
LOCATION: A4095 / BUCKNELL RD		DAY: WEDNESDAY



JOB TITLE: BICESTER		JOB NUMBER: 10981

QUEUE LENGTHS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A A4095		ARM B BUCKNELL RD (S)	ARM C BUCKNELL RD (NW)		TIME	ARM A A4095		ARM B BUCKNELL RD (S)	ARM C BUCKNELL RD (NW)	
	LANE 1	LANE 2	LANE 1	LANE 1	LANE 2		LANE 1	LANE 2	LANE 1	LANE 1	LANE 2
07:00	1	0	0	0	1	16:00	3	1	6	1	4
07:05	2	0	0	0	0	16:05	12	0	2	0	2
07:10	4	0	0	2	1	16:10	6	0	2	1	2
07:15	1	0	1	0	0	16:15	4	0	3	1	2
07:20	7	1	1	0	0	16:20	0	0	3	1	1
07:25	7	0	1	0	1	16:25	3	0	2	0	2
07:30	0	0	2	0	0	16:30	2	0	4	1	1
07:35	0	0	3	1	0	16:35	1	0	3	2	4
07:40	1	0	0	0	1	16:40	13	0	3	1	3
07:45	0	0	1	1	0	16:45	1	1	5	1	1
07:50	17	0	0	1	0	16:50	5	0	2	1	2
07:55	7	0	1	1	0	16:55	5	0	2	1	1
08:00	1	0	1	0	0	17:00	3	0	3	1	1
08:05	7	0	0	0	1	17:05	6	1	6	1	2
08:10	14	0	1	1	1	17:10	2	0	5	1	0
08:15	20	0	2	0	1	17:15	2	1	3	2	1
08:20	0	0	1	1	1	17:20	7	1	1	2	1
08:25	18	0	1	1	1	17:25	6	0	5	2	2
08:30	5	0	2	3	2	17:30	5	0	2	2	1
08:35	22	0	3	2	1	17:35	7	0	2	0	1
08:40	14	0	2	2	2	17:40	3	1	3	1	1
08:45	10	0	1	1	1	17:45	5	1	3	2	1
08:50	15	0	1	2	1	17:50	9	0	1	0	2
08:55	12	1	1	1	3	17:55	9	0	2	1	1
09:00	9	0	0	0	1	18:00	1	0	1	1	0

QUEUE LENGTHS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A A4095		ARM B BUCKNELL RD (S)	ARM C BUCKNELL RD (NW)	
	LANE 1	LANE 2	LANE 1	LANE 1	LANE 2
09:05	3	0	2	1	1
09:10	1	0	2	0	1
09:15	3	0	0	0	1
09:20	0	1	0	1	1
09:25	0	0	0	0	0

TIME	ARM A A4095		ARM B BUCKNELL RD (S)	ARM C BUCKNELL RD (NW)	
	LANE 1	LANE 2	LANE 1	LANE 1	LANE 2
18:05	4	0	0	2	1
18:10	2	0	3	1	2
18:15	0	0	1	0	1
18:20	1	0	1	0	1
18:25	0	0	0	0	1

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	A TO A FROM A4095 TO A4095								A TO B FROM A4095 TO BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0	109	39	4	5	1	0	0	158
07:15	1	0	0	0	0	0	0	1	138	49	12	6	1	1	0	207
07:30	1	0	0	0	0	0	0	1	142	41	1	1	1	0	0	186
07:45	2	0	0	0	0	0	0	2	168	36	7	4	2	1	0	218
H/TOT	4	0	0	0	0	0	0	4	557	165	24	16	5	2	0	769
08:00	0	0	0	0	0	0	0	0	174	31	4	1	0	0	1	211
08:15	1	1	0	0	0	0	0	2	190	30	7	2	0	0	0	229
08:30	3	2	0	0	0	0	0	5	172	34	10	4	1	0	0	221
08:45	1	1	0	0	0	0	0	2	195	29	6	2	0	0	0	232
H/TOT	5	4	0	0	0	0	0	9	731	124	27	9	1	0	1	893
09:00	2	0	0	0	0	0	0	2	164	26	13	3	0	0	1	207
09:15	0	0	0	0	0	0	0	0	89	21	5	4	0	1	0	120
H/TOT	2	0	0	0	0	0	0	2	253	47	18	7	0	1	1	327
P/TOT	11	4	0	0	0	0	0	15	1541	336	69	32	6	3	2	1989

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	A TO A FROM A4095 TO A4095								A TO B FROM A4095 TO BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	123	21	2	2	0	0	0	148
16:15	1	0	0	0	0	0	0	1	124	25	5	0	0	0	0	154
16:30	2	0	0	0	0	0	0	2	146	18	4	2	0	1	0	171
16:45	0	1	0	0	0	0	0	1	116	17	2	2	0	0	0	137
H/TOT	4	1	0	0	0	0	0	5	509	81	13	6	0	1	0	610
17:00	2	0	0	0	0	0	0	2	153	17	2	1	1	0	0	174
17:15	2	0	0	0	0	0	0	2	155	15	2	0	0	0	0	172
17:30	3	0	0	0	0	0	0	3	172	13	3	1	0	0	0	189
17:45	0	0	0	0	0	0	0	0	151	9	3	3	0	0	0	166
H/TOT	7	0	0	0	0	0	0	7	631	54	10	5	1	0	0	701
18:00	3	0	0	0	0	0	0	3	131	11	3	3	0	0	0	148
18:15	2	0	0	0	0	0	0	2	104	8	2	0	0	0	0	114
H/TOT	5	0	0	0	0	0	0	5	235	19	5	3	0	0	0	262
P/TOT	16	1	0	0	0	0	0	17	1375	154	28	14	1	1	0	1573

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	A TO C FROM A4095 TO BUCKNELL RD (NW)								B TO A FROM BUCKNELL RD (S) TO A4095							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	14	3	0	0	1	0	0	18	50	15	3	0	0	0	0	68
07:15	11	1	0	0	0	0	0	12	60	10	4	4	0	0	0	78
07:30	19	7	1	0	0	0	1	28	68	14	6	6	2	0	0	96
07:45	15	3	0	1	0	0	0	19	103	24	1	1	0	0	0	129
H/TOT	59	14	1	1	1	0	1	77	281	63	14	11	2	0	0	371
08:00	18	4	0	0	0	0	0	22	117	16	1	0	0	0	0	134
08:15	12	3	2	0	0	1	0	18	142	11	2	1	1	0	0	157
08:30	20	0	0	0	0	0	0	20	143	19	2	3	1	0	0	168
08:45	14	1	0	0	0	0	0	15	139	13	4	5	1	0	0	162
H/TOT	64	8	2	0	0	1	0	75	541	59	9	9	3	0	0	621
09:00	16	2	0	0	0	0	0	18	101	14	3	3	0	0	0	121
09:15	9	2	0	0	0	0	0	11	76	8	3	3	0	0	0	90
H/TOT	25	4	0	0	0	0	0	29	177	22	6	6	0	0	0	211
P/TOT	148	26	3	1	1	1	1	181	999	144	29	26	5	0	0	1203

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	A TO C FROM A4095 TO BUCKNELL RD (NW)								B TO A FROM BUCKNELL RD (S) TO A4095							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	3	1	0	0	0	0	13	135	22	3	1	2	0	0	163
16:15	20	1	0	0	0	0	0	21	134	34	3	0	0	0	0	171
16:30	17	5	0	0	0	0	0	22	165	24	1	3	0	0	0	193
16:45	9	2	1	0	0	0	0	12	138	25	2	4	0	0	0	169
H/TOT	55	11	2	0	0	0	0	68	572	105	9	8	2	0	0	696
17:00	19	5	0	0	0	0	0	24	174	31	5	0	0	0	0	210
17:15	16	5	0	0	0	0	0	21	175	23	5	2	0	0	0	205
17:30	17	4	0	0	0	0	0	21	144	13	2	0	1	0	0	160
17:45	10	2	0	0	0	0	0	12	161	15	1	2	0	0	0	179
H/TOT	62	16	0	0	0	0	0	78	654	82	13	4	1	0	0	754
18:00	10	3	0	0	0	0	0	13	123	8	1	0	0	0	0	132
18:15	13	0	0	0	0	0	0	13	121	7	2	1	0	1	0	132
H/TOT	23	3	0	0	0	0	0	26	244	15	3	1	0	1	0	264
P/TOT	140	30	2	0	0	0	0	172	1470	202	25	13	3	1	0	1714

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	B TO B FROM BUCKNELL RD (S) TO BUCKNELL RD (S)								B TO C FROM BUCKNELL RD (S) TO BUCKNELL RD (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	16
07:15	1	0	0	0	0	0	0	1	12	6	0	0	0	0	0	18
07:30	0	0	0	0	0	0	0	0	25	2	0	0	0	0	0	27
07:45	1	0	0	0	0	0	0	1	18	1	1	0	0	0	0	20
H/TOT	2	0	0	0	0	0	0	2	70	10	1	0	0	0	0	81
08:00	0	0	0	0	0	0	0	0	19	3	0	0	0	0	0	22
08:15	3	0	1	0	0	0	0	4	15	2	0	0	0	0	0	17
08:30	2	0	0	0	0	0	0	2	12	1	1	0	0	0	0	14
08:45	0	1	0	0	0	0	0	1	16	3	0	0	0	0	0	19
H/TOT	5	1	1	0	0	0	0	7	62	9	1	0	0	0	0	72
09:00	1	0	0	0	0	0	0	1	8	1	0	0	0	0	0	9
09:15	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
H/TOT	1	0	0	0	0	0	0	1	21	1	0	0	0	0	0	22
P/TOT	8	1	1	0	0	0	0	10	153	20	2	0	0	0	0	175

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	B TO B FROM BUCKNELL RD (S) TO BUCKNELL RD (S)								B TO C FROM BUCKNELL RD (S) TO BUCKNELL RD (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	1	0	0	0	1	16	6	0	0	0	0	0	22
16:15	0	0	0	0	0	0	0	0	23	2	0	0	0	0	0	25
16:30	1	0	0	0	0	0	0	1	28	3	0	0	0	0	0	31
16:45	1	0	0	0	0	0	0	1	24	1	0	0	0	0	0	25
H/TOT	2	0	0	1	0	0	0	3	91	12	0	0	0	0	0	103
17:00	2	0	0	0	0	0	0	2	20	3	1	0	0	0	0	24
17:15	1	0	0	0	0	0	0	1	17	1	0	0	0	0	0	18
17:30	1	0	0	0	0	0	0	1	19	4	0	0	0	0	0	23
17:45	0	0	0	0	0	0	0	0	18	2	0	0	0	0	0	20
H/TOT	4	0	0	0	0	0	0	4	74	10	1	0	0	0	0	85
18:00	0	0	0	0	0	0	0	0	19	3	0	0	0	0	0	22
18:15	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11
H/TOT	0	0	0	0	0	0	0	0	29	4	0	0	0	0	0	33
P/TOT	6	0	0	1	0	0	0	7	194	26	1	0	0	0	0	221

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	C TO A FROM BUCKNELL RD (NW) TO A4095								C TO B FROM BUCKNELL RD (NW) TO BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	1	2	0	0	0	0	0	3	12	2	1	0	0	0	0	15
07:15	2	3	0	0	0	0	0	5	11	1	0	0	0	0	0	12
07:30	6	1	0	0	0	0	0	7	2	1	0	0	0	0	0	3
07:45	9	2	0	0	0	0	0	11	10	2	0	0	0	0	0	12
H/TOT	18	8	0	0	0	0	0	26	35	6	1	0	0	0	0	42
08:00	9	1	0	0	0	0	0	10	8	4	0	0	0	0	0	12
08:15	15	1	0	0	0	0	0	16	8	1	0	1	0	0	0	10
08:30	16	0	0	0	1	0	0	17	19	1	1	0	0	0	0	21
08:45	18	3	0	0	0	0	0	21	13	0	0	0	0	0	0	13
H/TOT	58	5	0	0	1	0	0	64	48	6	1	1	0	0	0	56
09:00	5	1	0	0	0	0	0	6	8	1	0	0	0	0	0	9
09:15	6	2	0	0	0	0	0	8	8	1	0	0	0	0	0	9
H/TOT	11	3	0	0	0	0	0	14	16	2	0	0	0	0	0	18
P/TOT	87	16	0	0	1	0	0	104	99	14	2	1	0	0	0	116

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	C TO A FROM BUCKNELL RD (NW) TO A4095								C TO B FROM BUCKNELL RD (NW) TO BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	2	0	0	0	0	0	8	15	3	0	0	0	0	0	18
16:15	6	1	0	0	0	0	0	7	15	1	0	0	0	0	0	16
16:30	12	2	0	0	0	0	0	14	16	2	0	0	0	0	0	18
16:45	11	1	0	0	0	0	0	12	17	2	0	0	0	0	0	19
H/TOT	35	6	0	0	0	0	0	41	63	8	0	0	0	0	0	71
17:00	7	2	0	0	0	0	0	9	15	2	0	0	0	0	0	17
17:15	17	2	0	0	1	0	0	20	18	1	0	0	0	0	0	19
17:30	10	0	0	0	0	0	0	10	10	2	0	0	0	0	0	12
17:45	9	0	0	0	0	0	0	9	15	1	0	0	0	0	0	16
H/TOT	43	4	0	0	1	0	0	48	58	6	0	0	0	0	0	64
18:00	9	1	0	0	0	0	0	10	9	0	1	0	0	0	0	10
18:15	5	2	0	0	0	0	0	7	9	2	0	0	0	0	0	11
H/TOT	14	3	0	0	0	0	0	17	18	2	1	0	0	0	0	21
P/TOT	92	13	0	0	1	0	0	106	139	16	1	0	0	0	0	156

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	C TO C FROM BUCKNELL RD (NW) TO BUCKNELL RD (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	C TO C FROM BUCKNELL RD (NW) TO BUCKNELL RD (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	TO ARM A A4095								FROM ARM A A4095							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	51	17	3	0	0	0	0	71	123	42	4	5	2	0	0	176
07:15	63	13	4	4	0	0	0	84	150	50	12	6	1	1	0	220
07:30	75	15	6	6	2	0	0	104	162	48	2	1	1	0	1	215
07:45	114	26	1	1	0	0	0	142	185	39	7	5	2	1	0	239
H/TOT	303	71	14	11	2	0	0	401	620	179	25	17	6	2	1	850
08:00	126	17	1	0	0	0	0	144	192	35	4	1	0	0	1	233
08:15	158	13	2	1	1	0	0	175	203	34	9	2	0	1	0	249
08:30	162	21	2	3	2	0	0	190	195	36	10	4	1	0	0	246
08:45	158	17	4	5	1	0	0	185	210	31	6	2	0	0	0	249
H/TOT	604	68	9	9	4	0	0	694	800	136	29	9	1	1	1	977
09:00	108	15	3	3	0	0	0	129	182	28	13	3	0	0	1	227
09:15	82	10	3	3	0	0	0	98	98	23	5	4	0	1	0	131
H/TOT	190	25	6	6	0	0	0	227	280	51	18	7	0	1	1	358
P/TOT	1097	164	29	26	6	0	0	1322	1700	366	72	33	7	4	3	2185

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	TO ARM A A4095								FROM ARM A A4095							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	142	24	3	1	2	0	0	172	133	24	3	2	0	0	0	162
16:15	141	35	3	0	0	0	0	179	145	26	5	0	0	0	0	176
16:30	179	26	1	3	0	0	0	209	165	23	4	2	0	1	0	195
16:45	149	27	2	4	0	0	0	182	125	20	3	2	0	0	0	150
H/TOT	611	112	9	8	2	0	0	742	568	93	15	6	0	1	0	683
17:00	183	33	5	0	0	0	0	221	174	22	2	1	1	0	0	200
17:15	194	25	5	2	1	0	0	227	173	20	2	0	0	0	0	195
17:30	157	13	2	0	1	0	0	173	192	17	3	1	0	0	0	213
17:45	170	15	1	2	0	0	0	188	161	11	3	3	0	0	0	178
H/TOT	704	86	13	4	2	0	0	809	700	70	10	5	1	0	0	786
18:00	135	9	1	0	0	0	0	145	144	14	3	3	0	0	0	164
18:15	128	9	2	1	0	1	0	141	119	8	2	0	0	0	0	129
H/TOT	263	18	3	1	0	1	0	286	263	22	5	3	0	0	0	293
P/TOT	1578	216	25	13	4	1	0	1837	1531	185	30	14	1	1	0	1762

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	TO ARM B BUCKNELL RD (S)								FROM ARM B BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	121	41	5	5	1	0	0	173	65	16	3	0	0	0	0	84
07:15	150	50	12	6	1	1	0	220	73	16	4	4	0	0	0	97
07:30	144	42	1	1	1	0	0	189	93	16	6	6	2	0	0	123
07:45	179	38	7	4	2	1	0	231	122	25	2	1	0	0	0	150
H/TOT	594	171	25	16	5	2	0	813	353	73	15	11	2	0	0	454
08:00	182	35	4	1	0	0	1	223	136	19	1	0	0	0	0	156
08:15	201	31	8	3	0	0	0	243	160	13	3	1	1	0	0	178
08:30	193	35	11	4	1	0	0	244	157	20	3	3	1	0	0	184
08:45	208	30	6	2	0	0	0	246	155	17	4	5	1	0	0	182
H/TOT	784	131	29	10	1	0	1	956	608	69	11	9	3	0	0	700
09:00	173	27	13	3	0	0	1	217	110	15	3	3	0	0	0	131
09:15	97	22	5	4	0	1	0	129	89	8	3	3	0	0	0	103
H/TOT	270	49	18	7	0	1	1	346	199	23	6	6	0	0	0	234
P/TOT	1648	351	72	33	6	3	2	2115	1160	165	32	26	5	0	0	1388

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	TO ARM B BUCKNELL RD (S)								FROM ARM B BUCKNELL RD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	138	24	2	3	0	0	0	167	151	28	3	2	2	0	0	186
16:15	139	26	5	0	0	0	0	170	157	36	3	0	0	0	0	196
16:30	163	20	4	2	0	1	0	190	194	27	1	3	0	0	0	225
16:45	134	19	2	2	0	0	0	157	163	26	2	4	0	0	0	195
H/TOT	574	89	13	7	0	1	0	684	665	117	9	9	2	0	0	802
17:00	170	19	2	1	1	0	0	193	196	34	6	0	0	0	0	236
17:15	174	16	2	0	0	0	0	192	193	24	5	2	0	0	0	224
17:30	183	15	3	1	0	0	0	202	164	17	2	0	1	0	0	184
17:45	166	10	3	3	0	0	0	182	179	17	1	2	0	0	0	199
H/TOT	693	60	10	5	1	0	0	769	732	92	14	4	1	0	0	843
18:00	140	11	4	3	0	0	0	158	142	11	1	0	0	0	0	154
18:15	113	10	2	0	0	0	0	125	131	8	2	1	0	1	0	143
H/TOT	253	21	6	3	0	0	0	283	273	19	3	1	0	1	0	297
P/TOT	1520	170	29	15	1	1	0	1736	1670	228	26	14	3	1	0	1942

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	TO ARM C BUCKNELL RD (NW)								FROM ARM C BUCKNELL RD (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	29	4	0	0	1	0	0	34	13	4	1	0	0	0	0	18
07:15	23	7	0	0	0	0	0	30	13	4	0	0	0	0	0	17
07:30	44	9	1	0	0	0	1	55	8	2	0	0	0	0	0	10
07:45	33	4	1	1	0	0	0	39	19	4	0	0	0	0	0	23
H/TOT	129	24	2	1	1	0	1	158	53	14	1	0	0	0	0	68
08:00	37	7	0	0	0	0	0	44	17	5	0	0	0	0	0	22
08:15	27	5	2	0	0	1	0	35	23	2	0	1	0	0	0	26
08:30	32	1	1	0	0	0	0	34	35	1	1	0	1	0	0	38
08:45	30	4	0	0	0	0	0	34	31	3	0	0	0	0	0	34
H/TOT	126	17	3	0	0	1	0	147	106	11	1	1	1	0	0	120
09:00	24	3	0	0	0	0	0	27	13	2	0	0	0	0	0	15
09:15	22	2	0	0	0	0	0	24	14	3	0	0	0	0	0	17
H/TOT	46	5	0	0	0	0	0	51	27	5	0	0	0	0	0	32
P/TOT	301	46	5	1	1	1	1	356	186	30	2	1	1	0	0	220

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

TIME	TO ARM C BUCKNELL RD (NW)								FROM ARM C BUCKNELL RD (NW)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	25	9	1	0	0	0	0	35	21	5	0	0	0	0	0	26
16:15	43	3	0	0	0	0	0	46	21	2	0	0	0	0	0	23
16:30	45	8	0	0	0	0	0	53	28	4	0	0	0	0	0	32
16:45	33	3	1	0	0	0	0	37	28	3	0	0	0	0	0	31
H/TOT	146	23	2	0	0	0	0	171	98	14	0	0	0	0	0	112
17:00	39	8	1	0	0	0	0	48	22	4	0	0	0	0	0	26
17:15	33	6	0	0	0	0	0	39	35	3	0	0	1	0	0	39
17:30	36	8	0	0	0	0	0	44	20	2	0	0	0	0	0	22
17:45	28	4	0	0	0	0	0	32	24	1	0	0	0	0	0	25
H/TOT	136	26	1	0	0	0	0	163	101	10	0	0	1	0	0	112
18:00	29	6	0	0	0	0	0	35	18	1	1	0	0	0	0	20
18:15	23	1	0	0	0	0	0	24	14	4	0	0	0	0	0	18
H/TOT	52	7	0	0	0	0	0	59	32	5	1	0	0	0	0	38
P/TOT	334	56	3	0	0	0	0	393	231	29	1	0	1	0	0	262

MANUAL CLASSIFIED COUNTS

JOB REF: 10981

JOB NAME: BICESTER

SITE: 3 **DATE:** 08/12/2021

LOCATION: A4095 / BUCKNELL RD (S) / BUCKNELL RD (NW) **DAY:** WEDNESDAY

Appendix E

Appendix E-1

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.2.1574

Filename: Bucknall Road - A4095 (2022)_Split Dev Flows.j10
Path: P:\14000's\14042
Report generation date: 08/02/2022 12:07:52

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	A1 - 2021 Base					
1 - A4095	1.9	6.78	0.65	1.1	4.86	0.52
2 - Bucknell Road S	0.9	4.51	0.47	1.3	5.45	0.56
3 - Bucknell Road N	0.1	3.65	0.11	0.1	3.92	0.11
	A1 - 2021 Base + Split Dev					
1 - A4095	1.9	6.85	0.66	1.1	4.87	0.52
2 - Bucknell Road S	0.9	4.53	0.47	1.3	5.50	0.57
3 - Bucknell Road N	0.1	3.66	0.11	0.1	3.94	0.11
	A1 - 2026 Base + Great Wolf					
1 - A4095	2.3	7.64	0.69	1.2	5.22	0.55
2 - Bucknell Road S	1.0	4.77	0.50	1.5	5.95	0.60
3 - Bucknell Road N	0.1	3.76	0.12	0.1	4.09	0.12
	A1 - 2026 Base + Great Wolf + Split Dev					
1 - A4095	2.3	7.74	0.70	1.2	5.23	0.55
2 - Bucknell Road S	1.0	4.79	0.50	1.5	6.01	0.60
3 - Bucknell Road N	0.1	3.77	0.12	0.1	4.10	0.12

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

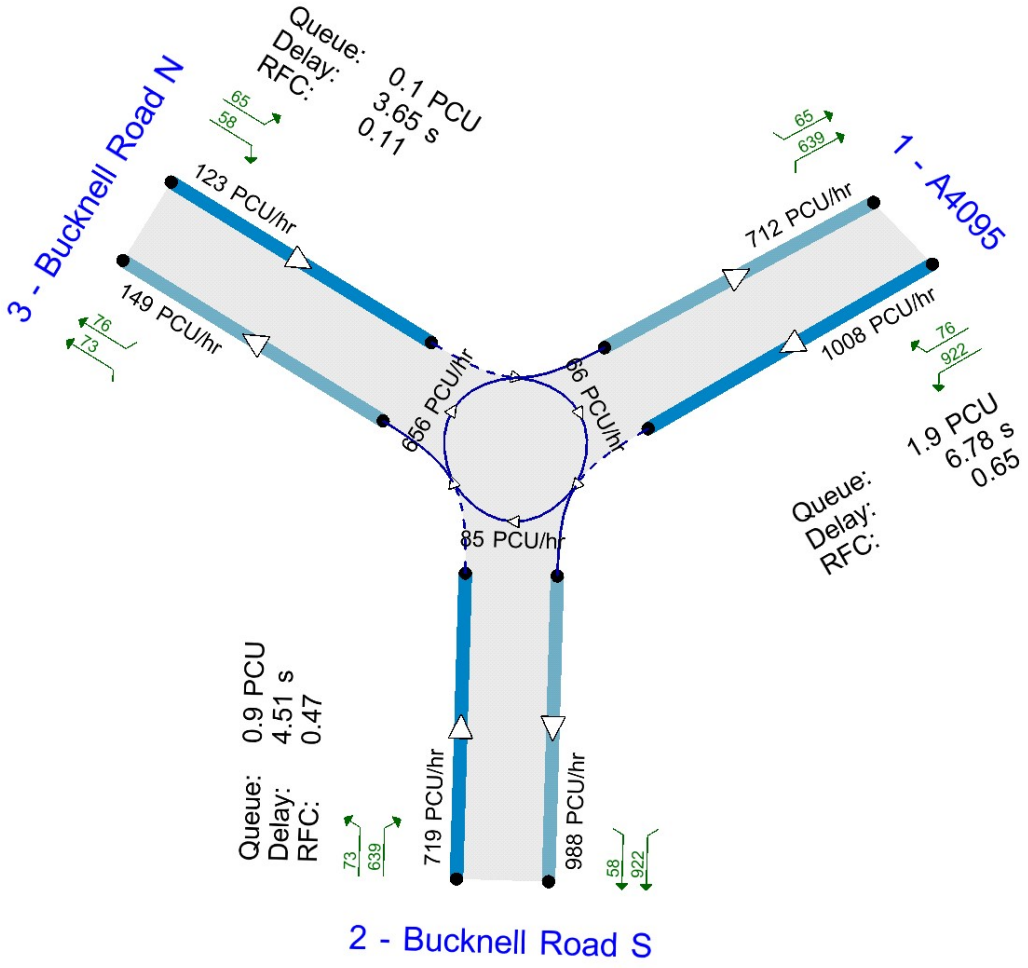
File summary

File Description

Title	A4095/ Bucknall Road
Location	Bicester
Site number	
Date	04/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



Flows show modelled flow through junction (PCU/hr).
Time Segment: 07:45-08:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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 period length (min)	Time segment length (min)	Run automatically
D1	2021 Base	AM	FLAT	07:45	09:15	90	15	✓
D2	2021 Base	PM	FLAT	16:45	18:15	90	15	✓
D3	2021 Base + Split Dev	AM	FLAT	07:45	09:15	90	15	✓
D4	2021 Base + Split Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2026 Base + Great Wolf	AM	FLAT	07:45	09:15	90	15	✓
D8	2026 Base + Great Wolf	PM	FLAT	16:45	18:15	90	15	✓
D9	2026 Base + Great Wolf + Split Dev	AM	FLAT	07:45	09:15	90	15	✓
D10	2026 Base + Great Wolf + Split Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.69	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A4095		
2	Bucknell Road S		
3	Bucknell Road N		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - A4095	2.75	9.00	10.3	69.7	31.0	17.0		
2 - Bucknell Road S	4.10	6.10	8.8	23.6	31.0	34.0		
3 - Bucknell Road N	3.00	7.60	10.4	23.1	31.0	22.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4095	0.660	1595
2 - Bucknell Road S	0.631	1583
3 - Bucknell Road N	0.634	1537

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2021 Base	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1015	100.000
2 - Bucknell Road S		FLAT	✓	723	100.000
3 - Bucknell Road N		FLAT	✓	123	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	929	77
	2 - Bucknell Road S	642	8	73
	3 - Bucknell Road N	65	58	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.53	0.47	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1015	1015
	08:00-08:15	1015	1015
	08:15-08:30	1015	1015
	08:30-08:45	1015	1015
	08:45-09:00	1015	1015
	09:00-09:15	1015	1015
2 - Bucknell Road S	07:45-08:00	723	723
	08:00-08:15	723	723
	08:15-08:30	723	723
	08:30-08:45	723	723
	08:45-09:00	723	723
	09:00-09:15	723	723
3 - Bucknell Road N	07:45-08:00	123	123
	08:00-08:15	123	123
	08:15-08:30	123	123
	08:30-08:45	123	123
	08:45-09:00	123	123
	09:00-09:15	123	123

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.65	6.78	1.9	A	1015	1523
2 - Bucknell Road S	0.47	4.51	0.9	A	723	1085
3 - Bucknell Road N	0.11	3.65	0.1	A	123	185

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1008	712	0.0	1.9	6.593	A
2 - Bucknell Road S	723	181	85	1529	0.473	719	988	0.0	0.9	4.471	A
3 - Bucknell Road N	123	31	656	1121	0.110	123	149	0.0	0.1	3.638	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.773	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

(Default Analysis Set) - 2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.08	A

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
D2	2021 Base	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	802	100.000
2 - Bucknell Road S		FLAT	✓	862	100.000
3 - Bucknell Road N		FLAT	✓	113	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	717	78
	2 - Bucknell Road S	772	4	86
	3 - Bucknell Road N	49	64	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.89	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	802	802
	17:00-17:15	802	802
	17:15-17:30	802	802
	17:30-17:45	802	802
	17:45-18:00	802	802
	18:00-18:15	802	802
2 - Bucknell Road S	16:45-17:00	862	862
	17:00-17:15	862	862
	17:15-17:30	862	862
	17:30-17:45	862	862
	17:45-18:00	862	862
	18:00-18:15	862	862
3 - Bucknell Road N	16:45-17:00	113	113
	17:00-17:15	113	113
	17:15-17:30	113	113
	17:30-17:45	113	113
	17:45-18:00	113	113
	18:00-18:15	113	113

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.52	4.86	1.1	A	802	1203
2 - Bucknell Road S	0.56	5.45	1.3	A	862	1293
3 - Bucknell Road N	0.11	3.92	0.1	A	113	170

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	798	823	0.0	1.1	4.804	A
2 - Bucknell Road S	862	216	85	1530	0.564	857	781	0.0	1.3	5.365	A
3 - Bucknell Road N	113	28	778	1043	0.108	113	163	0.0	0.1	3.904	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1041	0.109	113	164	0.1	0.1	3.919	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

(Default Analysis Set) - 2021 Base + Split Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.74	A

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	2021 Base + Split Dev	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1020	100.000
2 - Bucknell Road S		FLAT	✓	726	100.000
3 - Bucknell Road N		FLAT	✓	124	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	934	77
	2 - Bucknell Road S	645	8	73
	3 - Bucknell Road N	65	59	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.52	0.48	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1020	1020
	08:00-08:15	1020	1020
	08:15-08:30	1020	1020
	08:30-08:45	1020	1020
	08:45-09:00	1020	1020
	09:00-09:15	1020	1020
2 - Bucknell Road S	07:45-08:00	726	726
	08:00-08:15	726	726
	08:15-08:30	726	726
	08:30-08:45	726	726
	08:45-09:00	726	726
	09:00-09:15	726	726
3 - Bucknell Road N	07:45-08:00	124	124
	08:00-08:15	124	124
	08:15-08:30	124	124
	08:30-08:45	124	124
	08:45-09:00	124	124
	09:00-09:15	124	124

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.66	6.85	1.9	A	1020	1530
2 - Bucknell Road S	0.47	4.53	0.9	A	726	1089
3 - Bucknell Road N	0.11	3.66	0.1	A	124	186

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1012	715	0.0	1.9	6.661	A
2 - Bucknell Road S	726	182	85	1529	0.475	722	994	0.0	0.9	4.488	A
3 - Bucknell Road N	124	31	659	1119	0.111	123	149	0.0	0.1	3.649	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.845	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

(Default Analysis Set) - 2021 Base + Split Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.12	A

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	2021 Base + Split Dev	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	804	100.000
2 - Bucknell Road S		FLAT	✓	868	100.000
3 - Bucknell Road N		FLAT	✓	113	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	719	78
	2 - Bucknell Road S	778	4	86
	3 - Bucknell Road N	49	64	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.89	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	804	804
	17:00-17:15	804	804
	17:15-17:30	804	804
	17:30-17:45	804	804
	17:45-18:00	804	804
	18:00-18:15	804	804
2 - Bucknell Road S	16:45-17:00	868	868
	17:00-17:15	868	868
	17:15-17:30	868	868
	17:30-17:45	868	868
	17:45-18:00	868	868
	18:00-18:15	868	868
3 - Bucknell Road N	16:45-17:00	113	113
	17:00-17:15	113	113
	17:15-17:30	113	113
	17:30-17:45	113	113
	17:45-18:00	113	113
	18:00-18:15	113	113

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.52	4.87	1.1	A	804	1206
2 - Bucknell Road S	0.57	5.50	1.3	A	868	1302
3 - Bucknell Road N	0.11	3.94	0.1	A	113	170

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	800	829	0.0	1.1	4.817	A
2 - Bucknell Road S	868	217	85	1530	0.567	863	783	0.0	1.3	5.411	A
3 - Bucknell Road N	113	28	784	1040	0.109	113	163	0.0	0.1	3.920	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.871	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

(Default Analysis Set) - 2026 Base + Great Wolf, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	6.27	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.27	A

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	2026 Base + Great Wolf	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1074	100.000
2 - Bucknell Road S		FLAT	✓	764	100.000
3 - Bucknell Road N		FLAT	✓	129	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	984	81
	2 - Bucknell Road S	679	8	77
	3 - Bucknell Road N	68	61	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.53	0.47	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1074	1074
	08:00-08:15	1074	1074
	08:15-08:30	1074	1074
	08:30-08:45	1074	1074
	08:45-09:00	1074	1074
	09:00-09:15	1074	1074
2 - Bucknell Road S	07:45-08:00	764	764
	08:00-08:15	764	764
	08:15-08:30	764	764
	08:30-08:45	764	764
	08:45-09:00	764	764
	09:00-09:15	764	764
3 - Bucknell Road N	07:45-08:00	129	129
	08:00-08:15	129	129
	08:15-08:30	129	129
	08:30-08:45	129	129
	08:45-09:00	129	129
	09:00-09:15	129	129

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.69	7.64	2.3	A	1074	1611
2 - Bucknell Road S	0.50	4.77	1.0	A	764	1146
3 - Bucknell Road N	0.12	3.76	0.1	A	129	194

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1065	752	0.0	2.2	7.375	A
2 - Bucknell Road S	764	191	89	1527	0.500	760	1045	0.0	1.0	4.719	A
3 - Bucknell Road N	129	32	692	1098	0.117	128	157	0.0	0.1	3.748	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.2	2.2	7.638	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.2	2.3	7.641	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.3	2.3	7.644	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.3	2.3	7.644	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.3	2.3	7.644	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

(Default Analysis Set) - 2026 Base + Great Wolf, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.50	A

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	2026 Base + Great Wolf	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	851	100.000
2 - Bucknell Road S		FLAT	✓	916	100.000
3 - Bucknell Road N		FLAT	✓	120	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	762	82
	2 - Bucknell Road S	821	4	91
	3 - Bucknell Road N	52	68	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.90	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	851	851
	17:00-17:15	851	851
	17:15-17:30	851	851
	17:30-17:45	851	851
	17:45-18:00	851	851
	18:00-18:15	851	851
2 - Bucknell Road S	16:45-17:00	916	916
	17:00-17:15	916	916
	17:15-17:30	916	916
	17:30-17:45	916	916
	17:45-18:00	916	916
	18:00-18:15	916	916
3 - Bucknell Road N	16:45-17:00	120	120
	17:00-17:15	120	120
	17:15-17:30	120	120
	17:30-17:45	120	120
	17:45-18:00	120	120
	18:00-18:15	120	120

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.55	5.22	1.2	A	851	1277
2 - Bucknell Road S	0.60	5.95	1.5	A	916	1374
3 - Bucknell Road N	0.12	4.09	0.1	A	120	180

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	846	874	0.0	1.2	5.148	A
2 - Bucknell Road S	916	229	88	1527	0.600	910	829	0.0	1.5	5.837	A
3 - Bucknell Road N	120	30	827	1013	0.118	119	172	0.0	0.1	4.067	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

(Default Analysis Set) - 2026 Base + Great Wolf + Split Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	6.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.33	A

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	2026 Base + Great Wolf + Split Dev	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1079	100.000
2 - Bucknell Road S		FLAT	✓	767	100.000
3 - Bucknell Road N		FLAT	✓	130	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	989	81
	2 - Bucknell Road S	682	8	77
	3 - Bucknell Road N	68	62	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.52	0.48	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1079	1079
	08:00-08:15	1079	1079
	08:15-08:30	1079	1079
	08:30-08:45	1079	1079
	08:45-09:00	1079	1079
	09:00-09:15	1079	1079
2 - Bucknell Road S	07:45-08:00	767	767
	08:00-08:15	767	767
	08:15-08:30	767	767
	08:30-08:45	767	767
	08:45-09:00	767	767
	09:00-09:15	767	767
3 - Bucknell Road N	07:45-08:00	130	130
	08:00-08:15	130	130
	08:15-08:30	130	130
	08:30-08:45	130	130
	08:45-09:00	130	130
	09:00-09:15	130	130

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.70	7.74	2.3	A	1079	1619
2 - Bucknell Road S	0.50	4.79	1.0	A	767	1151
3 - Bucknell Road N	0.12	3.77	0.1	A	130	195

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1070	755	0.0	2.3	7.456	A
2 - Bucknell Road S	767	192	89	1527	0.502	763	1050	0.0	1.0	4.737	A
3 - Bucknell Road N	130	33	695	1096	0.119	129	157	0.0	0.1	3.759	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.729	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.734	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.735	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.735	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.735	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

(Default Analysis Set) - 2026 Base + Great Wolf + Split Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.54	A

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
D10	2026 Base + Great Wolf + Split Dev	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	853	100.000
2 - Bucknell Road S		FLAT	✓	922	100.000
3 - Bucknell Road N		FLAT	✓	120	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	764	82
	2 - Bucknell Road S	827	4	91
	3 - Bucknell Road N	52	68	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.90	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	853	853
	17:00-17:15	853	853
	17:15-17:30	853	853
	17:30-17:45	853	853
	17:45-18:00	853	853
	18:00-18:15	853	853
2 - Bucknell Road S	16:45-17:00	922	922
	17:00-17:15	922	922
	17:15-17:30	922	922
	17:30-17:45	922	922
	17:45-18:00	922	922
	18:00-18:15	922	922
3 - Bucknell Road N	16:45-17:00	120	120
	17:00-17:15	120	120
	17:15-17:30	120	120
	17:30-17:45	120	120
	17:45-18:00	120	120
	18:00-18:15	120	120

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.55	5.23	1.2	A	853	1280
2 - Bucknell Road S	0.60	6.01	1.5	A	922	1383
3 - Bucknell Road N	0.12	4.10	0.1	A	120	180

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	848	880	0.0	1.2	5.160	A
2 - Bucknell Road S	922	231	88	1527	0.604	916	831	0.0	1.5	5.893	A
3 - Bucknell Road N	120	30	833	1009	0.119	119	172	0.0	0.1	4.084	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

Appendix E-2

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.2.1574

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: Howes Lane_Bucknell Road (2022)_Split Dev Flows.j10
Path: P:\14000's\14042
Report generation date: 08/02/2022 12:06:12

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	2021 Base					
Stream B-C	5.3	31.54	0.85	29.9	122.09	1.06
Stream B-A	0.8	69.06	0.45	3.6	328.10	1.01
Stream C-AB	26.5	90.23	1.00	4.0	17.46	0.77
	2021 Base + Split Dev					
Stream B-C	5.6	32.81	0.86	33.5	133.62	1.08
Stream B-A	0.8	74.14	0.47	3.9	328.77	1.02
Stream C-AB	29.8	100.02	1.01	4.1	17.79	0.78
	2026 Base + Great Wolf					
Stream B-C	9.5	50.93	0.94	51.3	194.25	1.14
Stream B-A	2.1	169.36	0.78	4.5	558.62	1.08
Stream C-AB	54.8	172.02	1.07	5.3	21.59	0.82
	2026 Base + Great Wolf + Split Dev					
Stream B-C	10.4	54.66	0.96	54.7	213.13	1.15
Stream B-A	2.4	197.97	0.85	4.8	581.43	1.09
Stream C-AB	60.6	189.29	1.08	5.4	22.02	0.83

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

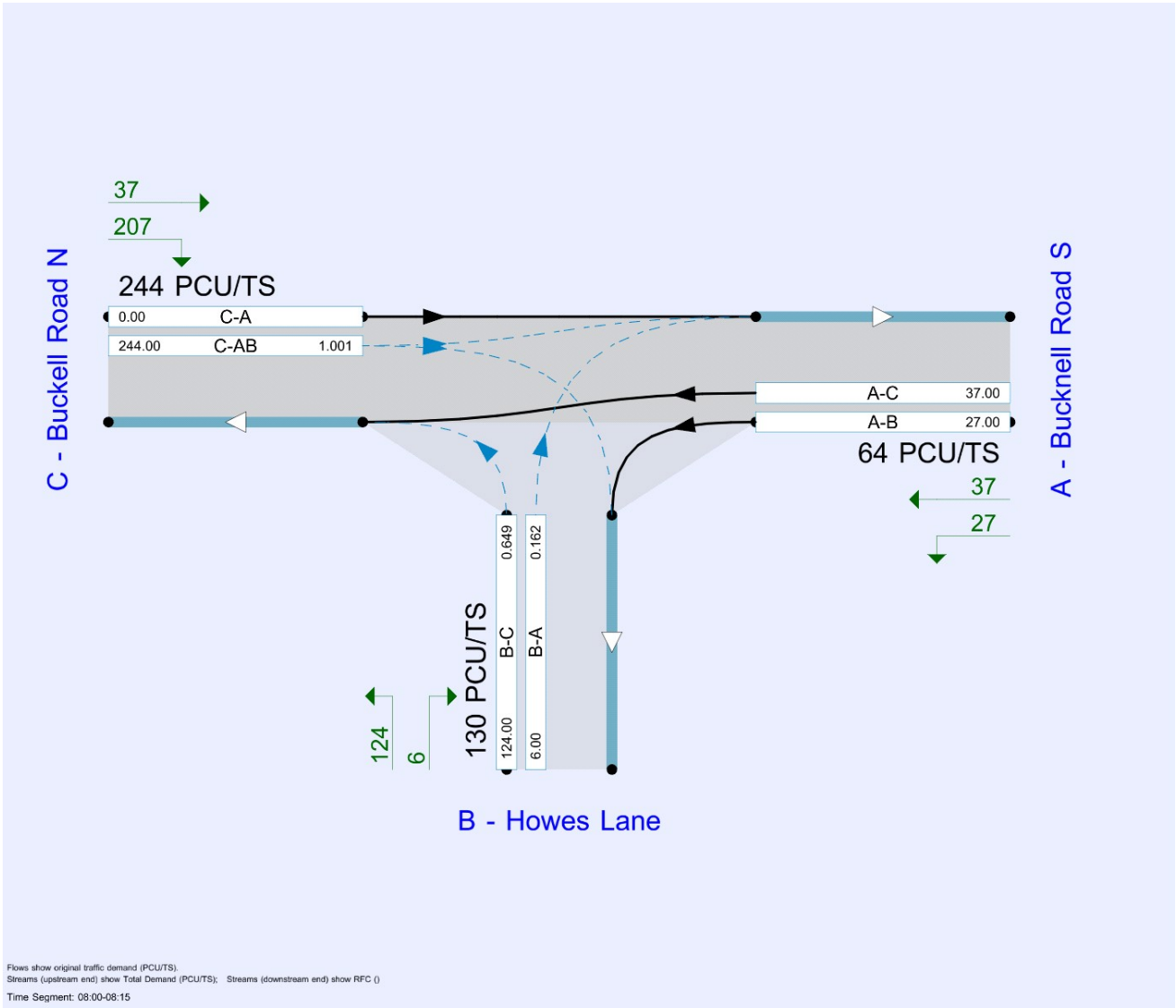
File summary

File Description

Title	Howes Lane/ Bucknall Road
Location	Bicester
Site number	
Date	04/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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 period length (min)	Time segment length (min)	Run automatically
D1	2021 Base	AM	DIRECT	08:00	09:00	60	15	✓
D2	2021 Base	PM	DIRECT	17:00	18:00	60	15	✓
D3	2021 Base + Split Dev	AM	DIRECT	08:00	09:00	60	15	✓
D4	2021 Base + Split Dev	PM	DIRECT	17:00	18:00	60	15	✓
D7	2026 Base + Great Wolf	AM	DIRECT	08:00	09:00	60	15	✓
D8	2026 Base + Great Wolf	PM	DIRECT	17:00	18:00	60	15	✓
D9	2026 Base + Great Wolf + Split Dev	AM	DIRECT	08:00	09:00	60	15	✓
D10	2026 Base + Great Wolf + Split Dev	PM	DIRECT	17:00	18:00	60	15	✓

Analysis Set Details

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

2021 Base, AM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		58.83	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	58.83	F

Arms

Arms

Arm	Name	Description	Arm type
A	Bucknell Road S		Major
B	Howes Lane		Minor
C	Buckell Road N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Buckell Road N	6.50	✓	1.75	✓	2.20	140.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Howes Lane	One lane plus flare	10.00	7.50	5.50	5.50	5.50		3.00	20	22

Slope / Intercept / Capacity

Custom Intercept Adjustments

Custom stream intercept adjustment	Stream	Use adjustment	Reason	Direct intercept adjustment (PCU/TS)
1	B-C	✓		21.00
2	C-B	✓		59.00

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/TS)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	113.058	0.078	0.196	0.123	0.280
B-C	212.279	0.115	0.290	-	-
C-B	222.760	0.248	0.248	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2021 Base	AM	DIRECT	08:00	09:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	26.00	35.00
	B - Howes Lane	6.00	0.00	117.00
	C - Buckell Road N	35.00	195.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.43	0.57
	B - Howes Lane	0.05	0.00	0.95
	C - Buckell Road N	0.15	0.85	0.00

08:15 - 08:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	21.00	46.00
	B - Howes Lane	9.00	0.00	137.00
	C - Buckell Road N	61.00	190.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.31	0.69
	B - Howes Lane	0.06	0.00	0.94
	C - Buckell Road N	0.24	0.76	0.00

08:30 - 08:45

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	25.00	36.00
	B - Howes Lane	11.00	0.00	156.00
	C - Buckell Road N	54.00	202.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.41	0.59
	B - Howes Lane	0.07	0.00	0.93
	C - Buckell Road N	0.21	0.79	0.00

08:45 - 09:00

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	17.00	50.00
	B - Howes Lane	7.00	0.00	141.00
	C - Buckell Road N	48.00	207.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.25	0.75
	B - Howes Lane	0.05	0.00	0.95
	C - Buckell Road N	0.19	0.81	0.00

Vehicle Mix

HV %s

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0	10	10
	B - Howes Lane	10	0	10
	C - Buckell Road N	10	10	0

Av. PCU Per Veh

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	1.000	1.100	1.100
	B - Howes Lane	1.100	1.000	1.100
	C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	08:00-08:15	61.00	61.00
	08:15-08:30	67.00	67.00
	08:30-08:45	61.00	61.00
	08:45-09:00	67.00	67.00
B - Howes Lane	08:00-08:15	123.00	123.00
	08:15-08:30	146.00	146.00
	08:30-08:45	167.00	167.00
	08:45-09:00	148.00	148.00
C - Buckell Road N	08:00-08:15	230.00	230.00
	08:15-08:30	251.00	251.00
	08:30-08:45	256.00	256.00
	08:45-09:00	255.00	255.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.85	31.54	5.3	D	137.75	551.00
B-A	0.45	69.06	0.8	F	8.25	33.00
C-AB	1.00	90.23	26.5	F	244.13	976.51
C-A					3.87	15.49
A-B					22.25	89.00
A-C					41.75	167.00

Main Results for each time segment

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	117.00	117.00	192.50	0.608	115.36	0.0	1.6	12.582	B
B-A	6.00	6.00	41.86	0.143	5.82	0.0	0.2	27.344	D
C-AB	226.05	226.05	240.68	0.939	215.34	0.0	10.7	32.949	D
C-A	3.95	3.95			3.95				
A-B	26.00	26.00			26.00				
A-C	35.00	35.00			35.00				

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	137.00	137.00	184.49	0.743	135.71	1.6	2.9	19.762	C
B-A	9.00	9.00	31.75	0.283	8.77	0.2	0.4	42.660	E
C-AB	242.21	242.21	262.77	0.922	240.47	10.7	12.5	43.883	E
C-A	8.79	8.79			8.79				
A-B	21.00	21.00			21.00				
A-C	46.00	46.00			46.00				

08:30 - 08:45

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	156.00	156.00	182.67	0.854	153.63	2.9	5.3	31.535	D
B-A	11.00	11.00	24.58	0.447	10.62	0.4	0.8	69.057	F
C-AB	253.25	253.25	260.29	0.973	247.37	12.5	18.3	62.275	F
C-A	2.75	2.75			2.75				
A-B	25.00	25.00			25.00				
A-C	36.00	36.00			36.00				

08:45 - 09:00

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	141.00	141.00	183.98	0.766	142.38	5.3	3.9	24.609	C
B-A	7.00	7.00	25.28	0.277	7.34	0.8	0.5	56.089	F
C-AB	255.00	255.00	253.92	1.004	246.82	18.3	26.5	90.233	F
C-A	0.00	0.00			0.00				
A-B	17.00	17.00			17.00				
A-C	50.00	50.00			50.00				

2021 Base, PM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		63.87	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	63.87	F

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
D2	2021 Base	PM	DIRECT	17:00	18:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	6.00	41.00
	B - Howes Lane	6.00	0.00	196.00
	C - Buckell Road N	43.00	152.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.13	0.87
	B - Howes Lane	0.03	0.00	0.97
	C - Buckell Road N	0.22	0.78	0.00

17:15 - 17:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	9.00	25.00
	B - Howes Lane	11.00	0.00	204.00
	C - Buckell Road N	45.00	154.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.26	0.74
	B - Howes Lane	0.05	0.00	0.95
	C - Buckell Road N	0.23	0.77	0.00

17:30 - 17:45

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	8.00	34.00
	B - Howes Lane	7.00	0.00	151.00
	C - Buckell Road N	41.00	164.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.19	0.81
	B - Howes Lane	0.04	0.00	0.96
	C - Buckell Road N	0.20	0.80	0.00

17:45 - 18:00

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	15.00	31.00
	B - Howes Lane	3.00	0.00	165.00
	C - Buckell Road N	48.00	141.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.33	0.67
	B - Howes Lane	0.02	0.00	0.98
	C - Buckell Road N	0.25	0.75	0.00

Vehicle Mix

HV %s

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0	10	10
	B - Howes Lane	10	0	10
	C - Buckell Road N	10	10	0

Av. PCU Per Veh

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	1.000	1.100	1.100
	B - Howes Lane	1.100	1.000	1.100
	C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	17:00-17:15	47.00	47.00
	17:15-17:30	34.00	34.00
	17:30-17:45	42.00	42.00
	17:45-18:00	46.00	46.00
B - Howes Lane	17:00-17:15	202.00	202.00
	17:15-17:30	215.00	215.00
	17:30-17:45	158.00	158.00
	17:45-18:00	168.00	168.00
C - Buckell Road N	17:00-17:15	195.00	195.00
	17:15-17:30	199.00	199.00
	17:30-17:45	205.00	205.00
	17:45-18:00	189.00	189.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	1.06	122.09	29.9	F	179.00	716.00
B-A	1.01	328.10	3.6	F	6.75	27.00
C-AB	0.77	17.46	4.0	C	176.28	705.12
C-A					20.72	82.88
A-B					9.50	38.00
A-C					32.75	131.00

Main Results for each time segment

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	196.00	196.00	194.38	1.008	181.05	0.0	14.9	52.535	F
B-A	6.00	6.00	5.95	1.008	3.90	0.0	2.1	328.103	F
C-AB	174.97	174.97	242.99	0.720	171.92	0.0	3.1	13.538	B
C-A	20.03	20.03			20.03				
A-B	6.00	6.00			6.00				
A-C	41.00	41.00			41.00				

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	204.00	204.00	192.11	1.062	189.07	14.9	29.9	122.090	F
B-A	11.00	11.00	11.49	0.957	9.53	2.1	3.6	312.012	F
C-AB	177.94	177.94	247.64	0.719	177.85	3.1	3.1	14.296	B
C-A	21.06	21.06			21.06				
A-B	9.00	9.00			9.00				
A-C	25.00	25.00			25.00				

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	151.00	151.00	191.31	0.789	175.81	29.9	5.1	80.006	F
B-A	7.00	7.00	21.06	0.332	9.94	3.6	0.6	103.425	F
C-AB	189.04	189.04	244.75	0.772	188.20	3.1	4.0	17.455	C
C-A	15.96	15.96			15.96				
A-B	8.00	8.00			8.00				
A-C	34.00	34.00			34.00				

17:45 - 18:00

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	165.00	165.00	198.49	0.831	164.91	5.1	5.2	29.120	D
B-A	3.00	3.00	32.82	0.091	3.51	0.6	0.1	34.287	D
C-AB	163.17	163.17	244.56	0.667	164.48	4.0	2.7	12.675	B
C-A	25.83	25.83			25.83				
A-B	15.00	15.00			15.00				
A-C	31.00	31.00			31.00				

2021 Base + Split Dev, AM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		64.73	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	64.73	F

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	2021 Base + Split Dev	AM	DIRECT	08:00	09:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	26.00	35.00
	B - Howes Lane	6.00	0.00	118.00
	C - Buckell Road N	35.00	197.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.43	0.57
	B - Howes Lane	0.05	0.00	0.95
	C - Buckell Road N	0.15	0.85	0.00

08:15 - 08:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	22.00	46.00
	B - Howes Lane	9.00	0.00	138.00
	C - Buckell Road N	61.00	192.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.32	0.68
	B - Howes Lane	0.06	0.00	0.94
	C - Buckell Road N	0.24	0.76	0.00

08:30 - 08:45

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	25.00	36.00
B - Howes Lane	11.00	0.00	157.00
C - Buckell Road N	54.00	204.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.41	0.59
B - Howes Lane	0.07	0.00	0.93
C - Buckell Road N	0.21	0.79	0.00

08:45 - 09:00

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	17.00	50.00
B - Howes Lane	7.00	0.00	141.00
C - Buckell Road N	48.00	209.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.25	0.75
B - Howes Lane	0.05	0.00	0.95
C - Buckell Road N	0.19	0.81	0.00

Vehicle Mix

HV %s

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0	10	10
B - Howes Lane	10	0	10
C - Buckell Road N	10	10	0

Av. PCU Per Veh

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	1.000	1.100	1.100
B - Howes Lane	1.100	1.000	1.100
C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	08:00-08:15	61.00	61.00
	08:15-08:30	68.00	68.00
	08:30-08:45	61.00	61.00
	08:45-09:00	67.00	67.00
B - Howes Lane	08:00-08:15	124.00	124.00
	08:15-08:30	147.00	147.00
	08:30-08:45	168.00	168.00
	08:45-09:00	148.00	148.00
C - Buckell Road N	08:00-08:15	232.00	232.00
	08:15-08:30	253.00	253.00
	08:30-08:45	258.00	258.00
	08:45-09:00	257.00	257.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.86	32.81	5.6	D	138.50	554.00
B-A	0.47	74.14	0.8	F	8.25	33.00
C-AB	1.01	100.02	29.8	F	246.82	987.27
C-A					3.18	12.73
A-B					22.50	90.00
A-C					41.75	167.00

Main Results for each time segment

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	118.00	118.00	192.41	0.613	116.32	0.0	1.7	12.747	B
B-A	6.00	6.00	41.20	0.146	5.82	0.0	0.2	27.849	D
C-AB	228.66	228.66	240.98	0.949	217.17	0.0	11.5	34.572	D
C-A	3.34	3.34			3.34				
A-B	26.00	26.00			26.00				
A-C	35.00	35.00			35.00				

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	138.00	138.00	184.08	0.750	136.64	1.7	3.0	20.281	C
B-A	9.00	9.00	30.78	0.292	8.76	0.2	0.4	44.483	E
C-AB	245.39	245.39	263.13	0.933	243.18	11.5	13.7	48.000	E
C-A	7.61	7.61			7.61				
A-B	22.00	22.00			22.00				
A-C	46.00	46.00			46.00				

08:30 - 08:45

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	157.00	157.00	182.17	0.862	154.48	3.0	5.6	32.807	D
B-A	11.00	11.00	23.53	0.468	10.58	0.4	0.8	74.137	F
C-AB	256.22	256.22	260.76	0.983	249.57	13.7	20.4	68.361	F
C-A	1.78	1.78			1.78				
A-B	25.00	25.00			25.00				
A-C	36.00	36.00			36.00				

08:45 - 09:00

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	141.00	141.00	183.46	0.769	142.58	5.6	4.0	25.136	D
B-A	7.00	7.00	24.40	0.287	7.37	0.8	0.5	59.201	F
C-AB	257.00	257.00	253.46	1.014	247.60	20.3	29.8	100.015	F
C-A	0.00	0.00			0.00				
A-B	17.00	17.00			17.00				
A-C	50.00	50.00			50.00				

2021 Base + Split Dev, PM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		69.23	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	69.23	F

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	2021 Base + Split Dev	PM	DIRECT	17:00	18:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	6.00	41.00
	B - Howes Lane	6.00	0.00	198.00
	C - Buckell Road N	43.00	153.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.13	0.87
	B - Howes Lane	0.03	0.00	0.97
	C - Buckell Road N	0.22	0.78	0.00

17:15 - 17:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	9.00	25.00
	B - Howes Lane	12.00	0.00	206.00
	C - Buckell Road N	45.00	155.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.26	0.74
	B - Howes Lane	0.06	0.00	0.94
	C - Buckell Road N	0.23	0.78	0.00

17:30 - 17:45

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	8.00	34.00
B - Howes Lane	7.00	0.00	153.00
C - Buckell Road N	41.00	165.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.19	0.81
B - Howes Lane	0.04	0.00	0.96
C - Buckell Road N	0.20	0.80	0.00

17:45 - 18:00

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	15.00	31.00
B - Howes Lane	3.00	0.00	167.00
C - Buckell Road N	48.00	142.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.33	0.67
B - Howes Lane	0.02	0.00	0.98
C - Buckell Road N	0.25	0.75	0.00

Vehicle Mix

HV %s

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0	10	10
B - Howes Lane	10	0	10
C - Buckell Road N	10	10	0

Av. PCU Per Veh

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	1.000	1.100	1.100
B - Howes Lane	1.100	1.000	1.100
C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	17:00-17:15	47.00	47.00
	17:15-17:30	34.00	34.00
	17:30-17:45	42.00	42.00
	17:45-18:00	46.00	46.00
B - Howes Lane	17:00-17:15	204.00	204.00
	17:15-17:30	218.00	218.00
	17:30-17:45	160.00	160.00
	17:45-18:00	170.00	170.00
C - Buckell Road N	17:00-17:15	196.00	196.00
	17:15-17:30	200.00	200.00
	17:30-17:45	206.00	206.00
	17:45-18:00	190.00	190.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	1.08	133.62	33.5	F	181.00	724.00
B-A	1.02	328.77	3.9	F	7.00	28.00
C-AB	0.78	17.79	4.1	C	177.58	710.30
C-A					20.42	81.70
A-B					9.50	38.00
A-C					32.75	131.00

Main Results for each time segment

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	198.00	198.00	194.35	1.019	181.91	0.0	16.1	55.179	F
B-A	6.00	6.00	5.89	1.019	3.88	0.0	2.1	328.765	F
C-AB	176.26	176.26	243.18	0.725	173.14	0.0	3.1	13.723	B
C-A	19.74	19.74			19.74				
A-B	6.00	6.00			6.00				
A-C	41.00	41.00			41.00				

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	206.00	206.00	191.06	1.078	188.62	16.1	33.5	133.622	F
B-A	12.00	12.00	12.15	0.988	10.24	2.1	3.9	325.586	F
C-AB	179.24	179.24	247.84	0.723	179.15	3.1	3.2	14.528	B
C-A	20.76	20.76			20.76				
A-B	9.00	9.00			9.00				
A-C	25.00	25.00			25.00				

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	153.00	153.00	190.90	0.801	180.60	33.5	5.9	97.554	F
B-A	7.00	7.00	15.57	0.450	9.75	3.9	1.1	190.516	F
C-AB	190.33	190.33	244.93	0.777	189.46	3.2	4.1	17.790	C
C-A	15.67	15.67			15.67				
A-B	8.00	8.00			8.00				
A-C	34.00	34.00			34.00				

17:45 - 18:00

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	167.00	167.00	198.04	0.843	167.00	5.9	5.9	31.833	D
B-A	3.00	3.00	30.49	0.098	4.01	1.1	0.1	38.609	E
C-AB	164.47	164.47	244.78	0.672	165.82	4.1	2.7	12.866	B
C-A	25.53	25.53			25.53				
A-B	15.00	15.00			15.00				
A-C	31.00	31.00			31.00				

2026 Base + Great Wolf, AM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		111.38	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	111.38	F

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	2026 Base + Great Wolf	AM	DIRECT	08:00	09:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	27.00	37.00
	B - Howes Lane	6.00	0.00	124.00
	C - Buckell Road N	37.00	207.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.42	0.58
	B - Howes Lane	0.05	0.00	0.95
	C - Buckell Road N	0.15	0.85	0.00

08:15 - 08:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	22.00	48.00
	B - Howes Lane	9.00	0.00	145.00
	C - Buckell Road N	64.00	201.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.31	0.69
	B - Howes Lane	0.06	0.00	0.94
	C - Buckell Road N	0.24	0.76	0.00

08:30 - 08:45

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	26.00	38.00
B - Howes Lane	12.00	0.00	165.00
C - Buckell Road N	57.00	214.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.41	0.59
B - Howes Lane	0.07	0.00	0.93
C - Buckell Road N	0.21	0.79	0.00

08:45 - 09:00

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	18.00	53.00
B - Howes Lane	7.00	0.00	149.00
C - Buckell Road N	51.00	219.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.25	0.75
B - Howes Lane	0.04	0.00	0.96
C - Buckell Road N	0.19	0.81	0.00

Vehicle Mix

HV %s

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0	10	10
B - Howes Lane	10	0	10
C - Buckell Road N	10	10	0

Av. PCU Per Veh

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	1.000	1.100	1.100
B - Howes Lane	1.100	1.000	1.100
C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	08:00-08:15	64.00	64.00
	08:15-08:30	70.00	70.00
	08:30-08:45	64.00	64.00
	08:45-09:00	71.00	71.00
B - Howes Lane	08:00-08:15	130.00	130.00
	08:15-08:30	154.00	154.00
	08:30-08:45	177.00	177.00
	08:45-09:00	156.00	156.00
C - Buckell Road N	08:00-08:15	244.00	244.00
	08:15-08:30	265.00	265.00
	08:30-08:45	271.00	271.00
	08:45-09:00	270.00	270.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.94	50.93	9.5	F	145.75	583.00
B-A	0.78	169.36	2.1	F	8.50	34.00
C-AB	1.07	172.02	54.8	F	261.85	1047.42
C-A					0.65	2.58
A-B					23.25	93.00
A-C					44.00	176.00

Main Results for each time segment

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	124.00	124.00	191.15	0.649	122.06	0.0	1.9	13.967	B
B-A	6.00	6.00	37.01	0.162	5.80	0.0	0.2	31.331	D
C-AB	244.00	244.00	243.85	1.001	227.03	0.0	17.0	44.790	E
C-A	0.00	0.00			0.00				
A-B	27.00	27.00			27.00				
A-C	37.00	37.00			37.00				

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	145.00	145.00	181.51	0.799	143.07	1.9	3.9	24.549	C
B-A	9.00	9.00	24.97	0.360	8.64	0.2	0.6	59.427	F
C-AB	262.42	262.42	268.14	0.979	257.19	17.0	22.2	73.692	F
C-A	2.58	2.58			2.58				
A-B	22.00	22.00			22.00				
A-C	48.00	48.00			48.00				

08:30 - 08:45

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	165.00	165.00	174.62	0.945	159.33	3.9	9.5	50.929	F
B-A	12.00	12.00	15.38	0.780	10.48	0.6	2.1	169.364	F
C-AB	271.00	271.00	261.97	1.034	257.38	22.2	35.8	111.209	F
C-A	0.00	0.00			0.00				
A-B	26.00	26.00			26.00				
A-C	38.00	38.00			38.00				

08:45 - 09:00

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	149.00	149.00	174.52	0.854	151.00	9.5	7.5	45.371	E
B-A	7.00	7.00	15.02	0.466	7.94	2.1	1.2	149.331	F
C-AB	270.00	270.00	252.90	1.068	251.04	35.8	54.8	172.020	F
C-A	0.00	0.00			0.00				
A-B	18.00	18.00			18.00				
A-C	53.00	53.00			53.00				

2026 Base + Great Wolf, PM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		99.89	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	99.89	F

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	2026 Base + Great Wolf	PM	DIRECT	17:00	18:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	6.00	43.00
	B - Howes Lane	6.00	0.00	208.00
	C - Buckell Road N	45.00	162.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.12	0.88
	B - Howes Lane	0.03	0.00	0.97
	C - Buckell Road N	0.22	0.78	0.00

17:15 - 17:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	9.00	26.00
	B - Howes Lane	12.00	0.00	217.00
	C - Buckell Road N	47.00	164.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.26	0.74
	B - Howes Lane	0.05	0.00	0.95
	C - Buckell Road N	0.22	0.78	0.00

17:30 - 17:45

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	8.00	36.00
B - Howes Lane	7.00	0.00	161.00
C - Buckell Road N	43.00	174.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.18	0.82
B - Howes Lane	0.04	0.00	0.96
C - Buckell Road N	0.20	0.80	0.00

17:45 - 18:00

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	16.00	33.00
B - Howes Lane	3.00	0.00	176.00
C - Buckell Road N	51.00	150.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.33	0.67
B - Howes Lane	0.02	0.00	0.98
C - Buckell Road N	0.25	0.75	0.00

Vehicle Mix

HV %s

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0	10	10
B - Howes Lane	10	0	10
C - Buckell Road N	10	10	0

Av. PCU Per Veh

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	1.000	1.100	1.100
B - Howes Lane	1.100	1.000	1.100
C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	17:00-17:15	49.00	49.00
	17:15-17:30	35.00	35.00
	17:30-17:45	44.00	44.00
	17:45-18:00	49.00	49.00
B - Howes Lane	17:00-17:15	214.00	214.00
	17:15-17:30	229.00	229.00
	17:30-17:45	168.00	168.00
	17:45-18:00	179.00	179.00
C - Buckell Road N	17:00-17:15	207.00	207.00
	17:15-17:30	211.00	211.00
	17:30-17:45	217.00	217.00
	17:45-18:00	201.00	201.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	1.14	194.25	51.3	F	190.50	762.00
B-A	1.08	558.62	4.5	F	7.00	28.00
C-AB	0.82	21.59	5.3	C	190.44	761.75
C-A					18.56	74.25
A-B					9.75	39.00
A-C					34.50	138.00

Main Results for each time segment

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	208.00	208.00	193.47	1.075	184.74	0.0	23.3	71.347	F
B-A	6.00	6.00	5.58	1.075	3.75	0.0	2.3	351.507	F
C-AB	189.27	189.27	246.05	0.769	185.36	0.0	3.9	15.677	C
C-A	17.73	17.73			17.73				
A-B	6.00	6.00			6.00				
A-C	43.00	43.00			43.00				

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	217.00	217.00	189.97	1.142	188.98	23.3	51.3	191.823	F
B-A	12.00	12.00	11.27	1.065	9.79	2.3	4.5	406.342	F
C-AB	192.26	192.26	250.96	0.766	192.13	3.9	4.0	17.020	C
C-A	18.74	18.74			18.74				
A-B	9.00	9.00			9.00				
A-C	26.00	26.00			26.00				

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	161.00	161.00	189.08	0.852	185.11	51.3	27.2	194.253	F
B-A	7.00	7.00	10.21	0.686	8.06	4.5	3.4	497.626	F
C-AB	203.54	203.54	247.79	0.821	202.30	4.0	5.3	21.590	C
C-A	13.46	13.46			13.46				
A-B	8.00	8.00			8.00				
A-C	36.00	36.00			36.00				

17:45 - 18:00

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	176.00	176.00	195.05	0.902	188.32	27.2	14.9	107.709	F
B-A	3.00	3.00	6.15	0.488	4.64	3.4	1.8	558.621	F
C-AB	176.68	176.68	248.06	0.712	178.57	5.3	3.4	14.826	B
C-A	24.32	24.32			24.32				
A-B	16.00	16.00			16.00				
A-C	33.00	33.00			33.00				

2026 Base + Great Wolf + Split Dev, AM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		122.55	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	122.55	F

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	2026 Base + Great Wolf + Split Dev	AM	DIRECT	08:00	09:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	27.00	37.00
	B - Howes Lane	6.00	0.00	125.00
	C - Buckell Road N	37.00	208.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.42	0.58
	B - Howes Lane	0.05	0.00	0.95
	C - Buckell Road N	0.15	0.85	0.00

08:15 - 08:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	23.00	48.00
	B - Howes Lane	9.00	0.00	146.00
	C - Buckell Road N	64.00	203.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.32	0.68
	B - Howes Lane	0.06	0.00	0.94
	C - Buckell Road N	0.24	0.76	0.00

08:30 - 08:45

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	26.00	38.00
B - Howes Lane	12.00	0.00	166.00
C - Buckell Road N	57.00	216.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.41	0.59
B - Howes Lane	0.07	0.00	0.93
C - Buckell Road N	0.21	0.79	0.00

08:45 - 09:00

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	18.00	53.00
B - Howes Lane	7.00	0.00	149.00
C - Buckell Road N	51.00	221.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.25	0.75
B - Howes Lane	0.04	0.00	0.96
C - Buckell Road N	0.19	0.81	0.00

Vehicle Mix

HV %s

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0	10	10
B - Howes Lane	10	0	10
C - Buckell Road N	10	10	0

Av. PCU Per Veh

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	1.000	1.100	1.100
B - Howes Lane	1.100	1.000	1.100
C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	08:00-08:15	64.00	64.00
	08:15-08:30	71.00	71.00
	08:30-08:45	64.00	64.00
	08:45-09:00	71.00	71.00
B - Howes Lane	08:00-08:15	131.00	131.00
	08:15-08:30	155.00	155.00
	08:30-08:45	178.00	178.00
	08:45-09:00	156.00	156.00
C - Buckell Road N	08:00-08:15	245.00	245.00
	08:15-08:30	267.00	267.00
	08:30-08:45	273.00	273.00
	08:45-09:00	272.00	272.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.96	54.66	10.4	F	146.50	586.00
B-A	0.85	197.97	2.4	F	8.50	34.00
C-AB	1.08	189.29	60.6	F	263.93	1055.74
C-A					0.32	1.26
A-B					23.50	94.00
A-C					44.00	176.00

Main Results for each time segment

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	125.00	125.00	191.10	0.654	123.01	0.0	2.0	14.160	B
B-A	6.00	6.00	36.59	0.164	5.79	0.0	0.2	31.953	D
C-AB	245.00	245.00	243.67	1.005	227.42	0.0	17.6	45.946	E
C-A	0.00	0.00			0.00				
A-B	27.00	27.00			27.00				
A-C	37.00	37.00			37.00				

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	146.00	146.00	180.99	0.807	143.95	2.0	4.0	25.374	D
B-A	9.00	9.00	24.04	0.374	8.61	0.2	0.6	62.761	F
C-AB	265.74	265.74	268.53	0.990	259.04	17.6	24.3	79.058	F
C-A	1.26	1.26			1.26				
A-B	23.00	23.00			23.00				
A-C	48.00	48.00			48.00				

08:30 - 08:45

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	166.00	166.00	173.33	0.958	159.60	4.0	10.4	54.664	F
B-A	12.00	12.00	14.16	0.847	10.16	0.6	2.4	197.966	F
C-AB	273.00	273.00	261.46	1.044	257.66	24.3	39.6	121.683	F
C-A	0.00	0.00			0.00				
A-B	26.00	26.00			26.00				
A-C	38.00	38.00			38.00				

08:45 - 09:00

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	149.00	149.00	171.57	0.868	150.78	10.4	8.7	51.631	F
B-A	7.00	7.00	13.61	0.514	7.99	2.4	1.4	188.690	F
C-AB	272.00	272.00	252.47	1.077	250.98	39.6	60.6	189.290	F
C-A	0.00	0.00			0.00				
A-B	18.00	18.00			18.00				
A-C	53.00	53.00			53.00				

2026 Base + Great Wolf + Split Dev, PM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		108.87	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	108.87	F

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
D10	2026 Base + Great Wolf + Split Dev	PM	DIRECT	17:00	18:00	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 - Bucknell Road S		DIRECT	✓	100.000
B - Howes Lane		DIRECT	✓	100.000
C - Buckell Road N		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	6.00	43.00
	B - Howes Lane	6.00	0.00	210.00
	C - Buckell Road N	45.00	162.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.12	0.88
	B - Howes Lane	0.03	0.00	0.97
	C - Buckell Road N	0.22	0.78	0.00

17:15 - 17:30

Demand (PCU/TS)

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	9.00	26.00
	B - Howes Lane	13.00	0.00	218.00
	C - Buckell Road N	47.00	164.00	0.00

Proportions

		To		
		A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
From	A - Bucknell Road S	0.00	0.26	0.74
	B - Howes Lane	0.06	0.00	0.94
	C - Buckell Road N	0.22	0.78	0.00

17:30 - 17:45

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	8.00	36.00
B - Howes Lane	7.00	0.00	162.00
C - Buckell Road N	43.00	175.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.18	0.82
B - Howes Lane	0.04	0.00	0.96
C - Buckell Road N	0.20	0.80	0.00

17:45 - 18:00

Demand (PCU/TS)

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	16.00	33.00
B - Howes Lane	3.00	0.00	177.00
C - Buckell Road N	51.00	151.00	0.00

Proportions

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0.00	0.33	0.67
B - Howes Lane	0.02	0.00	0.98
C - Buckell Road N	0.25	0.75	0.00

Vehicle Mix

HV %s

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	0	10	10
B - Howes Lane	10	0	10
C - Buckell Road N	10	10	0

Av. PCU Per Veh

From \ To	A - Bucknell Road S	B - Howes Lane	C - Buckell Road N
A - Bucknell Road S	1.000	1.100	1.100
B - Howes Lane	1.100	1.000	1.100
C - Buckell Road N	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/TS)	Demand in PCU (PCU/TS)
A - Bucknell Road S	17:00-17:15	49.00	49.00
	17:15-17:30	35.00	35.00
	17:30-17:45	44.00	44.00
	17:45-18:00	49.00	49.00
B - Howes Lane	17:00-17:15	216.00	216.00
	17:15-17:30	231.00	231.00
	17:30-17:45	169.00	169.00
	17:45-18:00	180.00	180.00
C - Buckell Road N	17:00-17:15	207.00	207.00
	17:15-17:30	211.00	211.00
	17:30-17:45	218.00	218.00
	17:45-18:00	202.00	202.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	1.15	213.13	54.7	F	191.75	767.00
B-A	1.09	581.43	4.8	F	7.25	29.00
C-AB	0.83	22.02	5.4	C	191.10	764.42
C-A					18.40	73.58
A-B					9.75	39.00
A-C					34.50	138.00

Main Results for each time segment

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	210.00	210.00	193.47	1.085	185.24	0.0	24.8	74.641	F
B-A	6.00	6.00	5.53	1.085	3.73	0.0	2.3	351.621	F
C-AB	189.27	189.27	246.05	0.769	185.36	0.0	3.9	15.677	C
C-A	17.73	17.73			17.73				
A-B	6.00	6.00			6.00				
A-C	43.00	43.00			43.00				

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	218.00	218.00	188.93	1.154	188.08	24.8	54.7	204.022	F
B-A	13.00	13.00	11.89	1.094	10.44	2.3	4.8	407.610	F
C-AB	192.26	192.26	250.96	0.766	192.13	3.9	4.0	17.020	C
C-A	18.74	18.74			18.74				
A-B	9.00	9.00			9.00				
A-C	26.00	26.00			26.00				

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	162.00	162.00	188.63	0.859	184.91	54.7	31.8	213.132	F
B-A	7.00	7.00	10.30	0.680	8.45	4.8	3.4	528.528	F
C-AB	204.86	204.86	247.98	0.826	203.48	4.0	5.4	22.018	C
C-A	13.14	13.14			13.14				
A-B	8.00	8.00			8.00				
A-C	36.00	36.00			36.00				

17:45 - 18:00

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	177.00	177.00	195.04	0.908	190.59	31.8	18.2	127.891	F
B-A	3.00	3.00	5.96	0.503	4.51	3.4	1.9	581.433	F
C-AB	178.02	178.02	248.28	0.717	179.96	5.4	3.5	15.102	C
C-A	23.98	23.98			23.98				
A-B	16.00	16.00			16.00				
A-C	33.00	33.00			33.00				

Appendix E-3

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.2.1574

Filename: Bucknall Road - A4095 (2022)_Split Dev Flows.j10
Path: P:\14000's\14042
Report generation date: 08/02/2022 12:07:52

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	A1 - 2021 Base					
1 - A4095	1.9	6.78	0.65	1.1	4.86	0.52
2 - Bucknell Road S	0.9	4.51	0.47	1.3	5.45	0.56
3 - Bucknell Road N	0.1	3.65	0.11	0.1	3.92	0.11
	A1 - 2021 Base + Split Dev					
1 - A4095	1.9	6.85	0.66	1.1	4.87	0.52
2 - Bucknell Road S	0.9	4.53	0.47	1.3	5.50	0.57
3 - Bucknell Road N	0.1	3.66	0.11	0.1	3.94	0.11
	A1 - 2026 Base + Great Wolf					
1 - A4095	2.3	7.64	0.69	1.2	5.22	0.55
2 - Bucknell Road S	1.0	4.77	0.50	1.5	5.95	0.60
3 - Bucknell Road N	0.1	3.76	0.12	0.1	4.09	0.12
	A1 - 2026 Base + Great Wolf + Split Dev					
1 - A4095	2.3	7.74	0.70	1.2	5.23	0.55
2 - Bucknell Road S	1.0	4.79	0.50	1.5	6.01	0.60
3 - Bucknell Road N	0.1	3.77	0.12	0.1	4.10	0.12

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

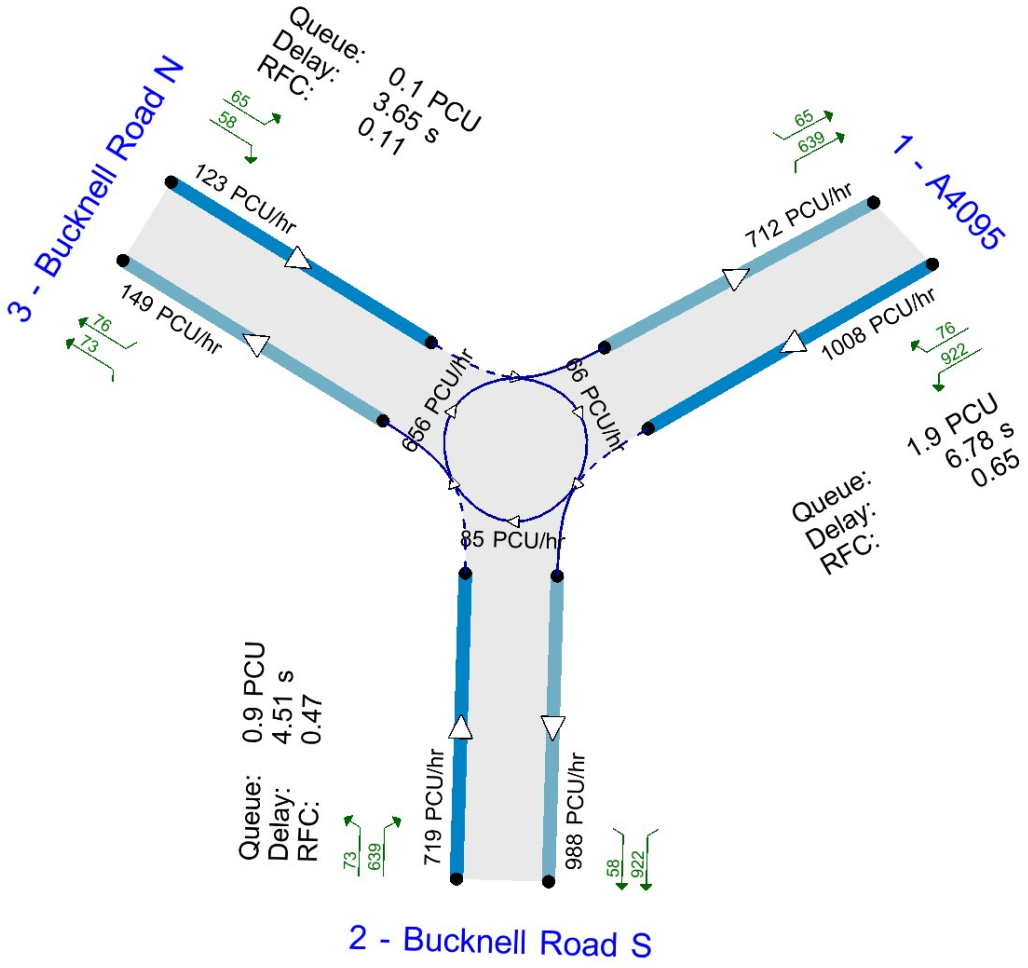
File summary

File Description

Title	A4095/ Bucknall Road
Location	Bicester
Site number	
Date	04/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



Flows show modelled flow through junction (PCU/hr).
Time Segment: 07:45-08:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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 period length (min)	Time segment length (min)	Run automatically
D1	2021 Base	AM	FLAT	07:45	09:15	90	15	✓
D2	2021 Base	PM	FLAT	16:45	18:15	90	15	✓
D3	2021 Base + Split Dev	AM	FLAT	07:45	09:15	90	15	✓
D4	2021 Base + Split Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2026 Base + Great Wolf	AM	FLAT	07:45	09:15	90	15	✓
D8	2026 Base + Great Wolf	PM	FLAT	16:45	18:15	90	15	✓
D9	2026 Base + Great Wolf + Split Dev	AM	FLAT	07:45	09:15	90	15	✓
D10	2026 Base + Great Wolf + Split Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.69	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A4095		
2	Bucknell Road S		
3	Bucknell Road N		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - A4095	2.75	9.00	10.3	69.7	31.0	17.0		
2 - Bucknell Road S	4.10	6.10	8.8	23.6	31.0	34.0		
3 - Bucknell Road N	3.00	7.60	10.4	23.1	31.0	22.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4095	0.660	1595
2 - Bucknell Road S	0.631	1583
3 - Bucknell Road N	0.634	1537

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2021 Base	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1015	100.000
2 - Bucknell Road S		FLAT	✓	723	100.000
3 - Bucknell Road N		FLAT	✓	123	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	929	77
	2 - Bucknell Road S	642	8	73
	3 - Bucknell Road N	65	58	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.53	0.47	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1015	1015
	08:00-08:15	1015	1015
	08:15-08:30	1015	1015
	08:30-08:45	1015	1015
	08:45-09:00	1015	1015
	09:00-09:15	1015	1015
2 - Bucknell Road S	07:45-08:00	723	723
	08:00-08:15	723	723
	08:15-08:30	723	723
	08:30-08:45	723	723
	08:45-09:00	723	723
	09:00-09:15	723	723
3 - Bucknell Road N	07:45-08:00	123	123
	08:00-08:15	123	123
	08:15-08:30	123	123
	08:30-08:45	123	123
	08:45-09:00	123	123
	09:00-09:15	123	123

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.65	6.78	1.9	A	1015	1523
2 - Bucknell Road S	0.47	4.51	0.9	A	723	1085
3 - Bucknell Road N	0.11	3.65	0.1	A	123	185

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1008	712	0.0	1.9	6.593	A
2 - Bucknell Road S	723	181	85	1529	0.473	719	988	0.0	0.9	4.471	A
3 - Bucknell Road N	123	31	656	1121	0.110	123	149	0.0	0.1	3.638	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.773	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1015	254	66	1552	0.654	1015	716	1.9	1.9	6.775	A
2 - Bucknell Road S	723	181	86	1529	0.473	723	995	0.9	0.9	4.512	A
3 - Bucknell Road N	123	31	659	1119	0.110	123	150	0.1	0.1	3.649	A

(Default Analysis Set) - 2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.08	A

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
D2	2021 Base	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	802	100.000
2 - Bucknell Road S		FLAT	✓	862	100.000
3 - Bucknell Road N		FLAT	✓	113	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	717	78
	2 - Bucknell Road S	772	4	86
	3 - Bucknell Road N	49	64	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.89	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	802	802
	17:00-17:15	802	802
	17:15-17:30	802	802
	17:30-17:45	802	802
	17:45-18:00	802	802
	18:00-18:15	802	802
2 - Bucknell Road S	16:45-17:00	862	862
	17:00-17:15	862	862
	17:15-17:30	862	862
	17:30-17:45	862	862
	17:45-18:00	862	862
	18:00-18:15	862	862
3 - Bucknell Road N	16:45-17:00	113	113
	17:00-17:15	113	113
	17:15-17:30	113	113
	17:30-17:45	113	113
	17:45-18:00	113	113
	18:00-18:15	113	113

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.52	4.86	1.1	A	802	1203
2 - Bucknell Road S	0.56	5.45	1.3	A	862	1293
3 - Bucknell Road N	0.11	3.92	0.1	A	113	170

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	798	823	0.0	1.1	4.804	A
2 - Bucknell Road S	862	216	85	1530	0.564	857	781	0.0	1.3	5.365	A
3 - Bucknell Road N	113	28	778	1043	0.108	113	163	0.0	0.1	3.904	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1041	0.109	113	164	0.1	0.1	3.919	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	802	201	68	1550	0.517	802	828	1.1	1.1	4.858	A
2 - Bucknell Road S	862	216	85	1529	0.564	862	785	1.3	1.3	5.448	A
3 - Bucknell Road N	113	28	783	1040	0.109	113	164	0.1	0.1	3.919	A

(Default Analysis Set) - 2021 Base + Split Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.74	A

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	2021 Base + Split Dev	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1020	100.000
2 - Bucknell Road S		FLAT	✓	726	100.000
3 - Bucknell Road N		FLAT	✓	124	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	934	77
	2 - Bucknell Road S	645	8	73
	3 - Bucknell Road N	65	59	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.52	0.48	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1020	1020
	08:00-08:15	1020	1020
	08:15-08:30	1020	1020
	08:30-08:45	1020	1020
	08:45-09:00	1020	1020
	09:00-09:15	1020	1020
2 - Bucknell Road S	07:45-08:00	726	726
	08:00-08:15	726	726
	08:15-08:30	726	726
	08:30-08:45	726	726
	08:45-09:00	726	726
	09:00-09:15	726	726
3 - Bucknell Road N	07:45-08:00	124	124
	08:00-08:15	124	124
	08:15-08:30	124	124
	08:30-08:45	124	124
	08:45-09:00	124	124
	09:00-09:15	124	124

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.66	6.85	1.9	A	1020	1530
2 - Bucknell Road S	0.47	4.53	0.9	A	726	1089
3 - Bucknell Road N	0.11	3.66	0.1	A	124	186

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1012	715	0.0	1.9	6.661	A
2 - Bucknell Road S	726	182	85	1529	0.475	722	994	0.0	0.9	4.488	A
3 - Bucknell Road N	124	31	659	1119	0.111	123	149	0.0	0.1	3.649	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.845	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1020	255	67	1551	0.658	1020	719	1.9	1.9	6.847	A
2 - Bucknell Road S	726	182	86	1529	0.475	726	1001	0.9	0.9	4.529	A
3 - Bucknell Road N	124	31	662	1117	0.111	124	150	0.1	0.1	3.659	A

(Default Analysis Set) - 2021 Base + Split Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.12	A

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	2021 Base + Split Dev	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	804	100.000
2 - Bucknell Road S		FLAT	✓	868	100.000
3 - Bucknell Road N		FLAT	✓	113	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	719	78
	2 - Bucknell Road S	778	4	86
	3 - Bucknell Road N	49	64	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.89	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	804	804
	17:00-17:15	804	804
	17:15-17:30	804	804
	17:30-17:45	804	804
	17:45-18:00	804	804
	18:00-18:15	804	804
2 - Bucknell Road S	16:45-17:00	868	868
	17:00-17:15	868	868
	17:15-17:30	868	868
	17:30-17:45	868	868
	17:45-18:00	868	868
	18:00-18:15	868	868
3 - Bucknell Road N	16:45-17:00	113	113
	17:00-17:15	113	113
	17:15-17:30	113	113
	17:30-17:45	113	113
	17:45-18:00	113	113
	18:00-18:15	113	113

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.52	4.87	1.1	A	804	1206
2 - Bucknell Road S	0.57	5.50	1.3	A	868	1302
3 - Bucknell Road N	0.11	3.94	0.1	A	113	170

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	800	829	0.0	1.1	4.817	A
2 - Bucknell Road S	868	217	85	1530	0.567	863	783	0.0	1.3	5.411	A
3 - Bucknell Road N	113	28	784	1040	0.109	113	163	0.0	0.1	3.920	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.871	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	804	201	68	1550	0.519	804	834	1.1	1.1	4.872	A
2 - Bucknell Road S	868	217	85	1529	0.568	868	787	1.3	1.3	5.497	A
3 - Bucknell Road N	113	28	789	1037	0.109	113	164	0.1	0.1	3.936	A

(Default Analysis Set) - 2026 Base + Great Wolf, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	6.27	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.27	A

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	2026 Base + Great Wolf	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1074	100.000
2 - Bucknell Road S		FLAT	✓	764	100.000
3 - Bucknell Road N		FLAT	✓	129	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	984	81
	2 - Bucknell Road S	679	8	77
	3 - Bucknell Road N	68	61	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.53	0.47	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1074	1074
	08:00-08:15	1074	1074
	08:15-08:30	1074	1074
	08:30-08:45	1074	1074
	08:45-09:00	1074	1074
	09:00-09:15	1074	1074
2 - Bucknell Road S	07:45-08:00	764	764
	08:00-08:15	764	764
	08:15-08:30	764	764
	08:30-08:45	764	764
	08:45-09:00	764	764
	09:00-09:15	764	764
3 - Bucknell Road N	07:45-08:00	129	129
	08:00-08:15	129	129
	08:15-08:30	129	129
	08:30-08:45	129	129
	08:45-09:00	129	129
	09:00-09:15	129	129

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.69	7.64	2.3	A	1074	1611
2 - Bucknell Road S	0.50	4.77	1.0	A	764	1146
3 - Bucknell Road N	0.12	3.76	0.1	A	129	194

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1065	752	0.0	2.2	7.375	A
2 - Bucknell Road S	764	191	89	1527	0.500	760	1045	0.0	1.0	4.719	A
3 - Bucknell Road N	129	32	692	1098	0.117	128	157	0.0	0.1	3.748	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.2	2.2	7.638	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.2	2.3	7.641	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.3	2.3	7.644	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.3	2.3	7.644	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1074	269	69	1550	0.693	1074	756	2.3	2.3	7.644	A
2 - Bucknell Road S	764	191	90	1526	0.501	764	1053	1.0	1.0	4.770	A
3 - Bucknell Road N	129	32	696	1096	0.118	129	158	0.1	0.1	3.760	A

(Default Analysis Set) - 2026 Base + Great Wolf, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.50	A

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	2026 Base + Great Wolf	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	851	100.000
2 - Bucknell Road S		FLAT	✓	916	100.000
3 - Bucknell Road N		FLAT	✓	120	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	762	82
	2 - Bucknell Road S	821	4	91
	3 - Bucknell Road N	52	68	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.90	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	851	851
	17:00-17:15	851	851
	17:15-17:30	851	851
	17:30-17:45	851	851
	17:45-18:00	851	851
	18:00-18:15	851	851
2 - Bucknell Road S	16:45-17:00	916	916
	17:00-17:15	916	916
	17:15-17:30	916	916
	17:30-17:45	916	916
	17:45-18:00	916	916
	18:00-18:15	916	916
3 - Bucknell Road N	16:45-17:00	120	120
	17:00-17:15	120	120
	17:15-17:30	120	120
	17:30-17:45	120	120
	17:45-18:00	120	120
	18:00-18:15	120	120

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.55	5.22	1.2	A	851	1277
2 - Bucknell Road S	0.60	5.95	1.5	A	916	1374
3 - Bucknell Road N	0.12	4.09	0.1	A	120	180

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	846	874	0.0	1.2	5.148	A
2 - Bucknell Road S	916	229	88	1527	0.600	910	829	0.0	1.5	5.837	A
3 - Bucknell Road N	120	30	827	1013	0.118	119	172	0.0	0.1	4.067	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	851	213	72	1548	0.550	851	880	1.2	1.2	5.219	A
2 - Bucknell Road S	916	229	89	1527	0.600	916	834	1.5	1.5	5.952	A
3 - Bucknell Road N	120	30	832	1009	0.119	120	173	0.1	0.1	4.087	A

(Default Analysis Set) - 2026 Base + Great Wolf + Split Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	6.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.33	A

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	2026 Base + Great Wolf + Split Dev	AM	FLAT	07:45	09:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	1079	100.000
2 - Bucknell Road S		FLAT	✓	767	100.000
3 - Bucknell Road N		FLAT	✓	130	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	9	989	81
	2 - Bucknell Road S	682	8	77
	3 - Bucknell Road N	68	62	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.92	0.08
	2 - Bucknell Road S	0.89	0.01	0.10
	3 - Bucknell Road N	0.52	0.48	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	07:45-08:00	1079	1079
	08:00-08:15	1079	1079
	08:15-08:30	1079	1079
	08:30-08:45	1079	1079
	08:45-09:00	1079	1079
	09:00-09:15	1079	1079
2 - Bucknell Road S	07:45-08:00	767	767
	08:00-08:15	767	767
	08:15-08:30	767	767
	08:30-08:45	767	767
	08:45-09:00	767	767
	09:00-09:15	767	767
3 - Bucknell Road N	07:45-08:00	130	130
	08:00-08:15	130	130
	08:15-08:30	130	130
	08:30-08:45	130	130
	08:45-09:00	130	130
	09:00-09:15	130	130

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.70	7.74	2.3	A	1079	1619
2 - Bucknell Road S	0.50	4.79	1.0	A	767	1151
3 - Bucknell Road N	0.12	3.77	0.1	A	130	195

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1070	755	0.0	2.3	7.456	A
2 - Bucknell Road S	767	192	89	1527	0.502	763	1050	0.0	1.0	4.737	A
3 - Bucknell Road N	130	33	695	1096	0.119	129	157	0.0	0.1	3.759	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.729	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.734	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.735	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.735	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	1079	270	70	1549	0.697	1079	759	2.3	2.3	7.735	A
2 - Bucknell Road S	767	192	90	1526	0.503	767	1059	1.0	1.0	4.789	A
3 - Bucknell Road N	130	33	699	1094	0.119	130	158	0.1	0.1	3.771	A

(Default Analysis Set) - 2026 Base + Great Wolf + Split Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Roundabout	Standard Roundabout		1, 2, 3	5.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.54	A

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
D10	2026 Base + Great Wolf + Split Dev	PM	FLAT	16:45	18:15	90	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A4095		FLAT	✓	853	100.000
2 - Bucknell Road S		FLAT	✓	922	100.000
3 - Bucknell Road N		FLAT	✓	120	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	7	764	82
	2 - Bucknell Road S	827	4	91
	3 - Bucknell Road N	52	68	0

Proportions

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	0.01	0.90	0.10
	2 - Bucknell Road S	0.90	0.00	0.10
	3 - Bucknell Road N	0.43	0.57	0.00

Vehicle Mix

HV %s

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1	1	1
	2 - Bucknell Road S	1	1	1
	3 - Bucknell Road N	1	1	1

Av. PCU Per Veh

		To		
		1 - A4095	2 - Bucknell Road S	3 - Bucknell Road N
From	1 - A4095	1.010	1.010	1.010
	2 - Bucknell Road S	1.010	1.010	1.010
	3 - Bucknell Road N	1.010	1.010	1.010

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1 - A4095	16:45-17:00	853	853
	17:00-17:15	853	853
	17:15-17:30	853	853
	17:30-17:45	853	853
	17:45-18:00	853	853
	18:00-18:15	853	853
2 - Bucknell Road S	16:45-17:00	922	922
	17:00-17:15	922	922
	17:15-17:30	922	922
	17:30-17:45	922	922
	17:45-18:00	922	922
	18:00-18:15	922	922
3 - Bucknell Road N	16:45-17:00	120	120
	17:00-17:15	120	120
	17:15-17:30	120	120
	17:30-17:45	120	120
	17:45-18:00	120	120
	18:00-18:15	120	120

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095	0.55	5.23	1.2	A	853	1280
2 - Bucknell Road S	0.60	6.01	1.5	A	922	1383
3 - Bucknell Road N	0.12	4.10	0.1	A	120	180

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	848	880	0.0	1.2	5.160	A
2 - Bucknell Road S	922	231	88	1527	0.604	916	831	0.0	1.5	5.893	A
3 - Bucknell Road N	120	30	833	1009	0.119	119	172	0.0	0.1	4.084	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095	853	213	72	1548	0.551	853	886	1.2	1.2	5.234	A
2 - Bucknell Road S	922	231	89	1527	0.604	922	836	1.5	1.5	6.011	A
3 - Bucknell Road N	120	30	838	1006	0.119	120	173	0.1	0.1	4.105	A

Forester House
Doctor's Lane
Henley-in-Arden
Warwickshire
B95 5AW

Tel: +44(0)1564 793598
inmail@dtatransportation.co.uk
www.dtatransportation.co.uk