

3 Amendments to the ES technical appendices

- 3.1 This section considers the need for amendments to the technical appendices. No changes are required to technical appendices A (Scoping), B (Competent experts involved in the preparation of the ES), C (Cultural heritage), D (Landscape and visual effects) or E (Natural heritage).

Technical appendix F: Transport assessment

- 3.2 An addendum to technical appendix F: Transport assessment has been prepared by David Tucker Associates, which is included at the end of this section and should be read in conjunction with the original report.

Addendum to technical appendix F: Transport assessment

1.0 Introduction

- 1.1 This Addendum Transport Assessment has been prepared by DTA Transportation (DTA) on behalf of Blenheim Estate Homes to support a residential development on Land East of Park View, Woodstock. DTA prepared the Transport Assessment to support the planning application for the site.
- 1.2 Following submission of planning application 22/01715/OUT to Cherwell District Council, Oxfordshire County Council (“OCC”) as Local Highway Authority (“LHA”) submitted their consultation response dated 30th August 2022, within which a number of points were raised. The consultation response is attached in **Appendix A**.
- 1.3 The development proposals comprise of up to 500 dwellings with associated access, open space and infrastructure.
- 1.4 This note responds to those points raised and for ease, the comments of OCC are presented in *italicised blue text*. The note covers the following:
- Access Arrangements.
 - Sustainable transport connectivity/transport sustainability.
 - Public Transport.
 - Public Rights of Way.
 - Traffic Impact.
- 1.5 This Addendum Transport Assessment should be read in conjunction with the Transport Assessment prepared by DTA in June 2022. The trip rates and distribution of development related trips have been agreed with the LHA.
- 1.6 Following comments received by OCC relating to direct pedestrian and cycle access between the site and Bladon Roundabout, Park View and Woodstock, further clarification on the access strategy for the site has been provided. The access strategy is shown on **DTA Drawing 23570-03b GA**. In summary, the access strategy proposes the following:

**A44 Oxford Road/ A44 Woodstock Road/ A4095 Upper Campsfield Road/
A4095 Grove Road (Bladon Roundabout)**

- Additional vehicular flare on the A4095 Upper Campsfield Road entry.
- The existing splitter island on the A4095 Upper Campsfield Road will be extended to accommodate a staggered toucan crossing (>20m from circulatory). The staggered toucan crossing will connect into the 3m wide footway/ cycleway on the eastern side of the A4095 Upper Campsfield Road.
- The existing pedestrian priority crossings on the A44 Woodstock Road (southern arm) will be upgraded to toucan crossings to provide access to the shared footway/ cycleway on the A44 and the bus stop.
- Amended circulatory markings to ensure efficient progression around the roundabout.

Proposed Site Access Roundabout and A4095 Upper Campsfield Road

- A standalone toucan crossing will be provided on the A4095 Upper Campsfield Road southern arm. This will allow a footway/ cycleway connection from the eastern side of Upper Campsfield Road to the site.
- A 3m wide footway/ cycleway with 1m verge (buffer) on the eastern side of the A4095 Upper Campsfield Road.
- Approach alignment smoothed to ensure moderate conflict angle whilst achieving full entry curvature requirements.

Park View Access

- 6.75m wide road with pedestrian/ cycle link into Park View development currently (being) implemented through s38. Turning to be removed. A 2m wide footway to be provided on the northern side of the carriageway and a 3m wide footway/ cycleway to be provided on the southern side of the carriageway.

Pedestrian/ Cycle Access – south-western corner of Site

- A 3m wide footway/ cycleway at the south-western corner of the site onto the A44 Oxford Road. An informal crossing point with dropped kerbing and tactile paving will be provided at this location.

2.0 Access Arrangements

OCC Response:

The suite of access plan does not provide much detail regarding dimensions without which it is not possible to establish whether the new roundabout is feasible and compliant to DMRB standards. Details such as visibility splays, carriageway and shared footway/cycleway widths, inscribed circle diameter will need to be clearly marked out on the plan.

- 2.1 The proposed site access roundabout geometry is shown on **DTA Drawing 23570-03b-GA3**.

OCC Response:

The proposed access arrangement has not been supported by a swept path exercise. This exercise is vital at new junctions to ensure/ demonstrate that the development can be safely served by large vehicles. The swept path drawings must be submitted to show that the site accesses can safely accommodate expected vehicles.

- 2.2 A tracking exercise has been undertaken of the proposed roundabout using the Oxfordshire Refuse Vehicle. This is shown on **DTA Drawing 23570-03b GA3**.

OCC Response:

The application proposes to implement a new footway along the eastern side of the A4095 Upper Campsfield Road to provide a direct pedestrian link between the site and (I assume) Bladon Roundabout. This link will clearly be of benefit to residents and the community. Again, details of this infrastructure are not known, such as the width and extent of the provision, leaving access for pedestrians along here to be an incomplete arrangement.

- 2.3 The application proposes a 3m wide footway/ cycleway with 1m verge (buffer) on the eastern side of the A4095 Upper Campsfield Road. This is shown on **DTA Drawing 23570-03b GA**.

- 2.4 At the proposed site access roundabout, a standalone toucan crossing will be provided on the A4095 Upper Campsfield Road southern arm. This will allow a footway/

cycleway connection from the eastern side of Upper Campsfield Road to the site. The proposals are shown on **DTA Drawing 23570-03b GA3**.

OCC Response:

Para 4.3.1 of the TA as well as the Access and Movement Parameter Plan indicate that the development shall be connected to the A44 and Bladon roundabout by a network of 3m wide footways/cycleways. This is welcomed. However, no further detail is available of how users would cross to the shared footway/ cycleway along the western side of the A44. Are there any plans to provide a crossing point on the A44 to enable residents to access the footway/ cycle way on the opposite side of the road?

- 2.5 It is proposed to provide a 3m wide footway/ cycleway with 1m verge (buffer) on the eastern side of the A4095 Upper Campsfield Road. This is shown on **DTA Drawing 23570-03b GA**.
- 2.6 The existing splitter island on the A4095 Upper Campsfield Road will be extended to accommodate a staggered toucan crossing (>20m from circulatory). The staggered toucan crossing will connect into the 3m wide footway/ cycleway on the eastern side of the A4095 Upper Campsfield Road. This is shown on **DTA Drawing 23570-03b GA2**.
- 2.7 The existing pedestrian priority crossings on the A44 Woodstock Road (southern arm) will be upgraded to toucan crossings to provide access to the shared footway/ cycleway on the A44 and the bus stop. This is shown on **DTA Drawing 23570-03b GA2**.
- 2.8 The development also proposes a 3m wide footway/ cycleway at the south-western corner of the site onto the A44 Oxford Road. An informal crossing point with dropped kerbing and tactile paving will be provided at this location. This is shown on **DTA Drawing 23570-03b GA**.
- 2.9 **DTA Drawing 23570-03b GA** shows the overview access strategy details for Bladon roundabout, the A4095 Upper Campsfield Road and the proposals for the site access roundabout.

3.0 Sustainable transport connectivity / transport sustainability

OCC Response:

Section 3.7 of the TA identifies that 'the centre of Woodstock has a range of local facilities and services all located approximately 1.6km from the centre of the site' and that the nearest primary school to the site is approximately 1.4km from the centre of the site. Although some residents may find such distances walkable, am not convinced that many would find such journeys manageable especially with bags of shopping. As such, I find that there is likely to be a high dependency on car use which will be exacerbated when considering trips beyond Woodstock, for example to employment areas beyond Woodstock (see Table 3 of the TA - Journey to work mode share where car trips are 84% and 62% for Cherwell 016 and West Oxfordshire 004 local areas respectively). On a local front, Woodstock suffers from a lack of sufficient parking provision. It is reasonably feared that residents of the development may add to the already existing parking pressures due to its distance from Woodstock. The applicant is thus requested to explore with the aim of mitigating this issue.

Besides Woodstock, the sites nearest local centres with key employment sites which have an important economic relationship with Oxford and form part of Oxfordshire's.

'Knowledge Spine' include:

- *Oxford Parkway Railway Station.*
- *London-Oxford Airport.*
- *Langford Lane commercial area in Kidlington, and*
- *Begbroke Science Park.*

Most of these cannot readily and safely be accessed by walking. Although the application suggests a provision of a well-designed, safe footpath and cycleway network, together with supporting facilities, these may only go as far as connecting those in close proximity of the site.

Significant enhancements to public transport and walking and cycling provision are to be delivered on key strategic routes through the County Council's Local Transport Plan and strategy for Park and Ride and Rapid Transit.

Walking and cycling network and Strategic Link and routes are to connect in seamlessly with OCC's existing routes and proposed strategic walking and cycling enhancements to Oxford Rd, including Kidlington LCWIP (Local Cycling and Walking Infrastructure Plan), where a primary route includes a link to Bladon Roundabout.

A segregated cycling and walking path from the site to the Bladon roundabout, on the east side of Oxford Road from Bladon roundabout to the edge of Park View development should be in line with LTN1/20. This should be secured via s278 agreement and ensure that it extends from Bladon roundabout all the way through to the A4095/A4260 junction and appropriate connections with adjoining Public Rights of Way and Kidlington LCWIP access points.

- 3.1 As is clear from the Transport Assessment supporting the application, the site (as with the whole of Woodstock) benefits from excellent transport links including public transport, foot and cycle links to adjacent communities and good road links to the principal road network. The need to travel however is significantly reduced by the facilities already available within Woodstock.
- 3.2 The site clearly meets all the necessary National and Local Policy tests on achieving accessible development.
- 3.3 In terms of the detail, there is a well-established network of footways and cycleways in Woodstock. There is a shared pedestrian and cycle path along the south-western side of the A44 Oxford Road.
- 3.4 The site is well located to the National Cycle Network which forms a nationwide network of paths and onto which a number of local routes link. National Cycle Network (NCN) Route 5 runs along the A44 Oxford Road and A44 Woodstock Road to the south of the site. Within Oxfordshire the route is largely off-road, i.e. along segregated paths. To the south of the site NCN5 runs along the A44 towards Oxford. A short distance before the Frieze Way roundabout the route turns off the A44 across to the A40 and then southwards through Wolvercote and onto the Woodstock Road to the City Centre. Beyond the City Centre the route continues south through Oxfordshire linking to Abingdon, Didcot and then onwards to Reading.

3.5 Paragraph 4.4.1 of Manual for Streets (DfT, 2007) confirms that:

“Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes’ (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPS13 states that walking offers the greatest potential to replace short car trips, particularly those under 2 km. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents.”

3.6 Furthermore, it is generally accepted that walking and cycling has the potential to substitute for short car trips, particularly those less than 2km for walking and 5km for cycling.

3.7 The development site is located within a 5km cycling distance of Begbrook Science Park, London Oxford Airport and Langford Lane commercial area in Kidlington. The Oxford Parkway Railway Station is located further away at around 6.5km.

3.8 Begbrook Science Park, London Oxford Airport and Langford Lane commercial area in Kidlington are all accessible by a shared footway/ cycleway along the A44 and footpath along Langford Lane.

3.9 There are high frequency bus services along the A44 corridor and through Kidlington. Stagecoach Oxfordshire service 7 Gold routes through Woodstock, along Langford Lane past Oxford Airport and the Langford Lane commercial area into Kidlington. Service 7 operates a weekday peak of every 30 minutes. Stagecoach S3 routes along the A44 from Oxford to Chipping Norton providing a weekday peak of every 15-20 minutes. Stagecoach S4 routes through Kidlington from Oxford to Banbury providing a weekday peak of every 60 minutes.

3.10 The site is also adjacent to the identified location for a new strategic park and ride to serve Oxford.

4.0 Public Transport

OCC Response:

Oxfordshire County Council seeks financial contributions and infrastructure conditions to support the public transport network, in order to ensure that new development is suitably positioned to facilitate relevant and attractive bus services required to meet the needs for residents, employees and visitors.

Whilst Woodstock as a community is well served by buses, the development site is remote from these existing connections with the centre of the site being 800 metres from a bus stop (as acknowledged in the Transport Assessment). It is not acceptable for a development of this size to be so distant from a bus route, and therefore a bus service will be required to serve the site directly.

- 4.1 The nearest bus stops to the site are located on the A44 Oxford Road at Park View and just to the east of Bladon Roundabout on the A44 Woodstock Road. Both bus stops are approximately 800m from the centre of the site.
- 4.2 The distance from the most furthest dwelling (near Shipton Road) at Park View to the A44 Oxford Road bus stop is around 720m and therefore the distances from the proposed development to the A44 is not much more than distance for Park View.
- 4.3 Discussions have previously been held with Stagecoach on routing a bus service through the site, and Stagecoach have confirmed they do not consider it is appropriate.

OCC Response:

Consequently, the road through the site must be suitable for bus operation – whilst the Design & Access Statement for this application states that the road will be 6.75m wide (and therefore will be suitable), confirmation is required that the road through the Park View site will also be suitable for this purpose. The road must be as free as possible of vertical deflections.

- 4.4 The primary road through the site from the A4095 Upper Campsfield Road to Park View is designed to allow a bus route through the site, should there be a need to provide a bus service through the site in the future.

OCC Response:

The Council is concerned that unacceptable delay will be caused to buses attempting to turn right out of Park View onto the A44 Oxford Road. Signalisation of this junction could be a potential option to facilitate this movement, with the development having to meet the cost of upgrading/signalising the junction.

- 4.5 Whilst the primary road through the site from the A4095 Upper Campsfield Road to Park View is designed to allow a bus route through the site, discussions have previously been held with Stagecoach on routing a bus service through the site. Stagecoach have confirmed they do not consider it is appropriate. Therefore, it is not considered necessary to signalise the Cowells Road (Park View)/ A44 Oxford Road priority junction.

An appropriate footway and crossing point will be required on the A4095 Upper Campsfield Road within the red line to facilitate pedestrian access to the potential future Park & Ride site.

- 4.6 The application proposes a 3m wide footway/ cycleway with 1m verge (buffer) on the eastern side of the A4095 Upper Campsfield Road. This will facilitate pedestrian access to the potential future Park & Ride site. This is shown on **DTA Drawing 23570-03b GA**.
- 4.7 At the proposed site access roundabout, a standalone toucan crossing will be provided on the A4095 Upper Campsfield Road southern arm. This will allow a footway/ cycleway connection from the eastern side of Upper Campsfield Road to the site. The proposals are shown on **DTA Drawing 23570-03b GA3**.

The Council currently applies a fixed public transport services contribution to non-strategic development of £1,133 per dwelling. This results in such a contribution of £566,500 related to this application, indexed to December 2021, which will be used for improvement of bus service provision in the vicinity of the site. It is not possible at this stage to confirm what route that might be, or whether it would be existing or new provision.

- 4.8 This is noted and the contribution is acceptable.

5.0 Public Rights of Way

OCC Response:

There are no recorded public rights of way (PRoW) across this site although there are a number in the vicinity that need connecting to. There is expected to be an increase in numbers of residents and visitors using the rights of way network around the site – simply due to the size of the development in a rural environment. These uses will create more use pressures on the rights of way network. In addition the roads network is expected to see a significant increase in traffic volumes and speed. OCC is proposing a range of mitigation measures that will help address the impact of this traffic on users through the improvement of traffic-free routes and safer road crossings and facilities. It is acknowledged that the development makes some provision for onsite greenspace and active travel - and this is welcomed. It is however, considered necessary to extend mitigation measures outside of the site to provide better connectivity and useability for more people.

For this, OCC seek from this development as mitigation measures as part of a s106 scheme of £90,000 given this development effectively extends the urban edge of Woodstock through the connected spine road and public open space. The site has had a desk assessment to both assess the current situation and look at how public use could be protected and enhanced. With the development site at the centre, the logical and realistic public rights of way network likely to be affected is considered along with the range of measures needed to provide mitigation against the impacts of the development. In this case it is the size and location of the development, access to the surrounding countryside and key access roads serving the development that are the key drivers.

5.1 This is noted and the contribution is acceptable.

6.0 Traffic Impact

OCC Response:

Park View development was granted planning permission for 300 residential units. Currently, a handful of these have been occupied. As per this TA, trips from the consented 300 site have not been captured in the baseline surveys and have been missed from the list of committed sites. As such, without this information, I am not in a position to conclude that a satisfactory assessment has been undertaken.

- 6.1 The junction modelling assessment for Bladon Roundabout has been updated to include the Park View site.
- 6.2 The junction capacity assessment for Bladon Roundabout includes the improvements to the flare length and kerb radii on the A4095 Bladon Road arm and increase the flare length on the A44 Woodstock Road (n) arm. These improvements works have now been implemented. The result of the modelling is summarised in **Table 1** and the outputs are attached at **Appendix B**.

Table 1 – Bladon Roundabout Junction Modelling Results

Arm	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Queue	Delay(s)	RFC	Queue	Delay(s)	RFC
2022 Base						
A4095	2.8	16.72	0.75	0.8	5.88	0.44
A44 Woodstock Road (S)	0.9	3.53	0.48	2.2	5.40	0.69
A4095 Bladon Road	1.3	5.91	0.57	1.0	5.41	0.51
A44 Oxford Road (N)	2.2	8.24	0.70	0.8	4.21	0.44
2027 Base						
A4095	3.3	19.14	0.78	0.8	6.10	0.45
A44 Woodstock Road (S)	1.0	3.63	0.50	2.4	5.77	0.71
A4095 Bladon Road	1.4	6.19	0.58	1.1	5.65	0.52
A44 Oxford Road (N)	2.5	8.93	0.72	0.8	4.35	0.45
2027 Base + Committed Development						
A4095	9.3	51.54	0.93	1.0	7.21	0.51
A44 Woodstock Road (S)	1.5	4.10	0.55	3.8	8.37	0.80
A4095 Bladon Road	1.8	7.37	0.64	1.5	7.18	0.60
A44 Oxford Road (N)	5.3	16.82	0.85	1.2	5.31	0.54
2027 Base + Committed Development + Development						
A4095	78.0	289.29	1.19	1.6	9.30	0.62
A44 Woodstock Road (S)	1.3	4.37	0.58	6.0	12.44	0.86
A4095 Bladon Road	2.0	8.27	0.67	1.9	8.96	0.66
A44 Oxford Road (N)	6.9	21.82	0.88	1.4	6.27	0.59
2031 Base						
A4095	4.0	22.66	0.81	0.9	6.37	0.47
A44 Woodstock Road (S)	1.0	3.75	0.51	2.6	6.24	0.73
A4095 Bladon Road	1.5	6.52	0.60	1.2	5.95	0.54
A44 Oxford Road (N)	2.8	9.89	0.74	0.9	4.53	0.47
2031 Base + Committed Development						
A4095	13.7	71.50	0.97	1.1	7.59	0.53
A44 Woodstock Road (S)	1.3	4.25	0.56	4.4	9.40	0.82
A4095 Bladon Road	1.9	7.86	0.66	1.6	7.66	0.62
A44 Oxford Road (N)	6.6	20.45	0.88	1.3	5.57	0.56
2031 Base + Committed Development + Development						
A4095	92.6	343.87	1.24	1.8	9.94	0.64
A44 Woodstock Road (S)	1.4	4.48	0.59	7.2	14.77	0.88
A4095 Bladon Road	2.2	8.83	0.69	2.1	9.68	0.69
A44 Oxford Road (N)	8.8	27.60	0.91	1.5	6.62	0.61

- 6.3 The above assessment show that there are periods when the junction will be operating at capacity during the peak hour periods and that additional capacity will be required to accommodate existing traffic, growth and the traffic from the proposed development.
- 6.4 It is therefore proposed to provide some mitigation by way of increasing the flare length on the A4095 Upper Campsfield Road arm. In addition to this, the existing splitter island on the A4095 Upper Campsfield Road will be extended to accommodate

a staggered toucan crossing (>20m from circulatory). The staggered toucan crossing will connect into the 3m wide footway/ cycleway on the eastern side of the A4095 Upper Campsfield Road.

- 6.5 The existing pedestrian priority crossings on the A44 Woodstock Road (southern arm) will be upgraded to toucan crossings to provide access to the shared footway/ cycleway on the A44 and the bus stop. The proposals are shown on **DTA Drawing 23570-03b GA2**.
- 6.6 The results of the modelling with the improvements in place is presented in **Table 2** below and the modelling results are attached at **Appendix C**.

Table 2 – Bladon Roundabout Junction Modelling Results – Mitigation

Arm	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Queue	Delay(s)	RFC	Queue	Delay(s)	RFC
2027 Base + Committed Development + Development						
A4095	3.0	12.46	0.76	0.7	4.03	0.42
A44 Woodstock Road (S)	1.4	4.62	0.59	6.0	12.44	0.86
A4095 Bladon Road	2.0	8.41	0.67	1.9	8.96	0.66
A44 Oxford Road (N)	6.9	21.81	0.88	1.4	6.27	0.59
2031 Base + Committed Development + Development						
A4095	3.4	14.03	0.78	0.7	4.16	0.43
A44 Woodstock Road (S)	1.5	4.81	0.60	7.2	14.78	0.88
A4095 Bladon Road	2.2	9.02	0.69	2.1	9.68	0.69
A44 Oxford Road (N)	8.8	27.59	0.91	1.5	6.62	0.61

- 6.7 As can be seen in the table above the junction with the proposed mitigation measures is forecast to operate with improved queuing and delay.
- 6.8 Further refinements in terms of the roundabout geometry have been made to the proposed site access roundabout. The proposed geometry is shown on **DTA Drawing 23570-03b-GA3**. The ARCADY has been updated accordingly and the modelling results are summarised in **Table 3** below and the outputs are attached at **Appendix B**.

Table 3 – Proposed Site Access Roundabout

Arm	AM			PM		
	Queue	Delay (sec)	RFC	Queue	Delay (sec)	RFC
2027 Base + Committed Development + Development						
A4095 (N)	0.8	4.82	0.42	0.8	4.56	0.44
A4095 (S)	0.7	3.76	0.41	0.9	4.12	0.48
Site Access	0.2	3.51	0.15	0.1	3.33	0.08
2031 Base + Committed Development + Development						
A4095 (N)	1.0	5.27	0.47	0.8	4.65	0.45
A4095 (S)	0.8	3.81	0.42	1.0	4.19	0.49
Site Access	0.2	3.54	0.15	0.1	3.36	0.08

6.9 As shown in **Table 3** the results of the modelling demonstrates that the roundabout is forecast to operate within capacity on all arms during the morning and evening peaks.

OCC Response:

The applicant has undertaken operational assessment on various junctions which are all in the vicinity of the site. It is to my dissatisfaction that the application has not assessed other junctions listed during the pre-application consultation. For the scale of development, bearing in mind the cumulative impact from other consented/committed developments around Woodstock, I do not consider this a robust exercise without including wider junctions. In isolation, the impact on other junctions (especially south and west of the Bladon roundabout) may be moderate but significant enough if looked at in a cumulative aspect.

To address this, the application needs to include amongst junctions to assess the following:

- *Upper Campsfield Road/ Shipton Road.*
- *A4260 Banbury Road/ A4095 Bunkers Hill/ A4095 Upper Campsfield Road.*
- *A4095 Main Road/ Lower Road.*
- *A44 Woodstock Road/ Langford Lane.*
- *A44 Woodstock/Sandy Lane/ Rutten Lane.*
- *A44 Woodstock Road/ Cassington Road.*

6.10 As set out in the Transport Assessment, Cherwell District Council, OCC, Blenheim

Estates, Begbroke Tripartite, and Merton College have, since 2018, been working co-operatively on transport issues relating to the A44 corridor and, at a strategic level, the sites allocated for residential development in the Cherwell Local Plan.

6.11 The Transport Statement Common Ground prepared by all parties sets out transport options and improvements that would benefit the A44 corridor and serve the proposed allocation sites in a holistic way.

6.12 There are opportunities to build upon and enhance the current sustainable transport networks to ensure their use is prioritised and maximised. These measures have been developed by OCC and comprise:

- A Park and Ride at London-Oxford airport.
- Public Transport priority works along the A44 corridor.
- Enhanced public transport services along the A44 corridor.
- A shared use path for pedestrians and cyclists along the A44 with signalised crossings.
- Closure of Sandy Lane to through traffic and enhancements to assist its use by pedestrian and cyclists connecting between the A44 corridor and Kidlington.

6.13 The outcome of this work is reflected in the Local Plan Policy PR4A which sets out a contribution strategy for all development along the A44 corridor to provide an area wide solution.

6.14 The Applicant is willing to provide £1,786.85 per dwelling (£884,425) towards the planned bus service infrastructure enhancements along the A44 Woodstock -Oxford corridor (park & ride + southbound bus lane on A44 between Bladon roundabout and Peartree Interchange). The development is wholly compatible with Policy PR4A.

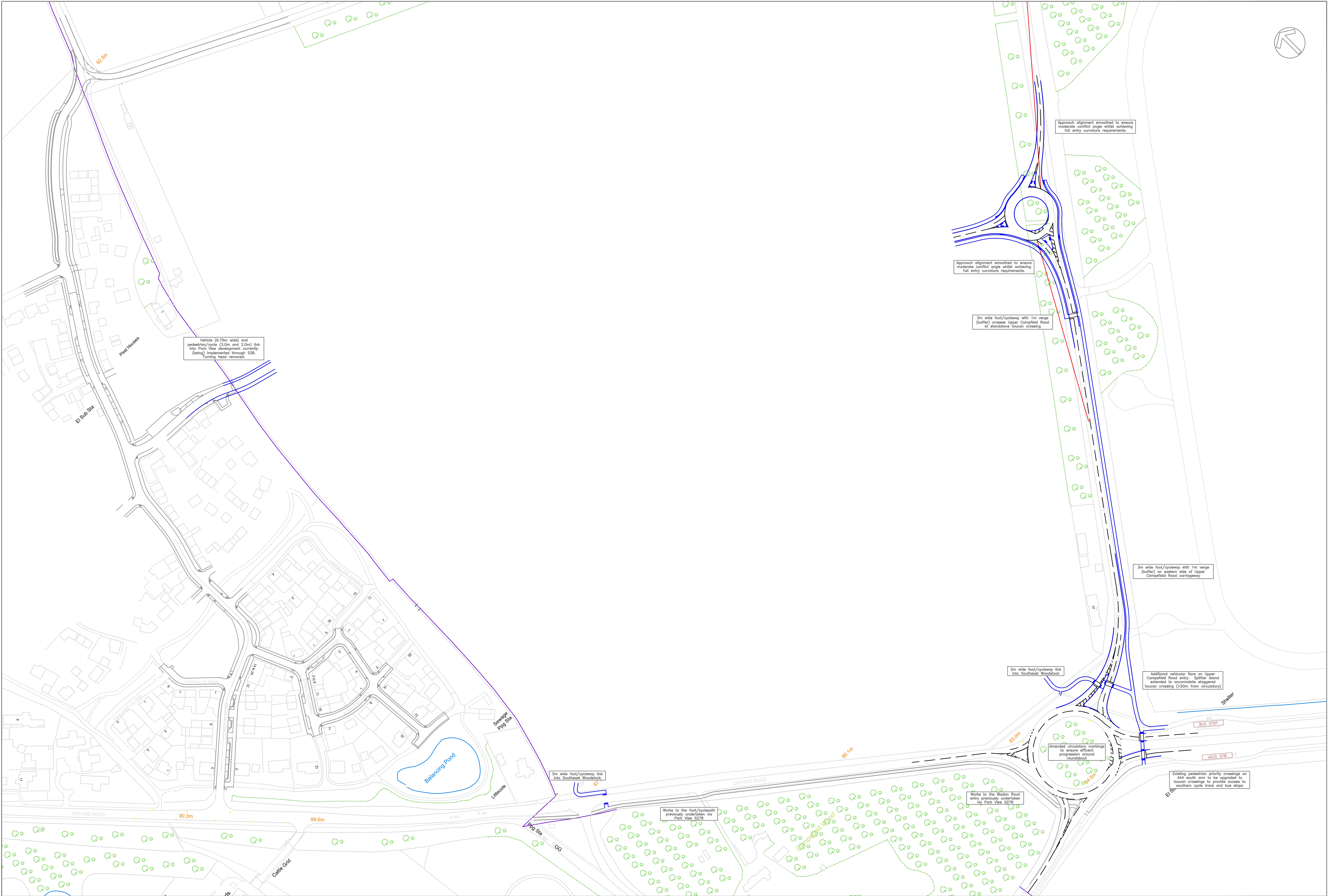
7.0 Summary and Conclusions

7.1 This note has set out responses to the concerns raised by Oxfordshire County Council as Local Highway Authority in their response dated 30th August 2022 to the proposed

residential development at Land East of Park View, Woodstock.

- 7.2 Those matters relating to the site access, traffic impact and sustainability have been responded to and it can be seen that the impact of the development would not materially affect the operation of the local highway network.
- 7.3 The development would not result in a severe impact on highway safety or capacity and would therefore, not be contrary to para 111 of the NPPF in relation to capacity and safety.

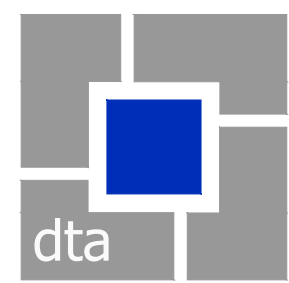
Drawings



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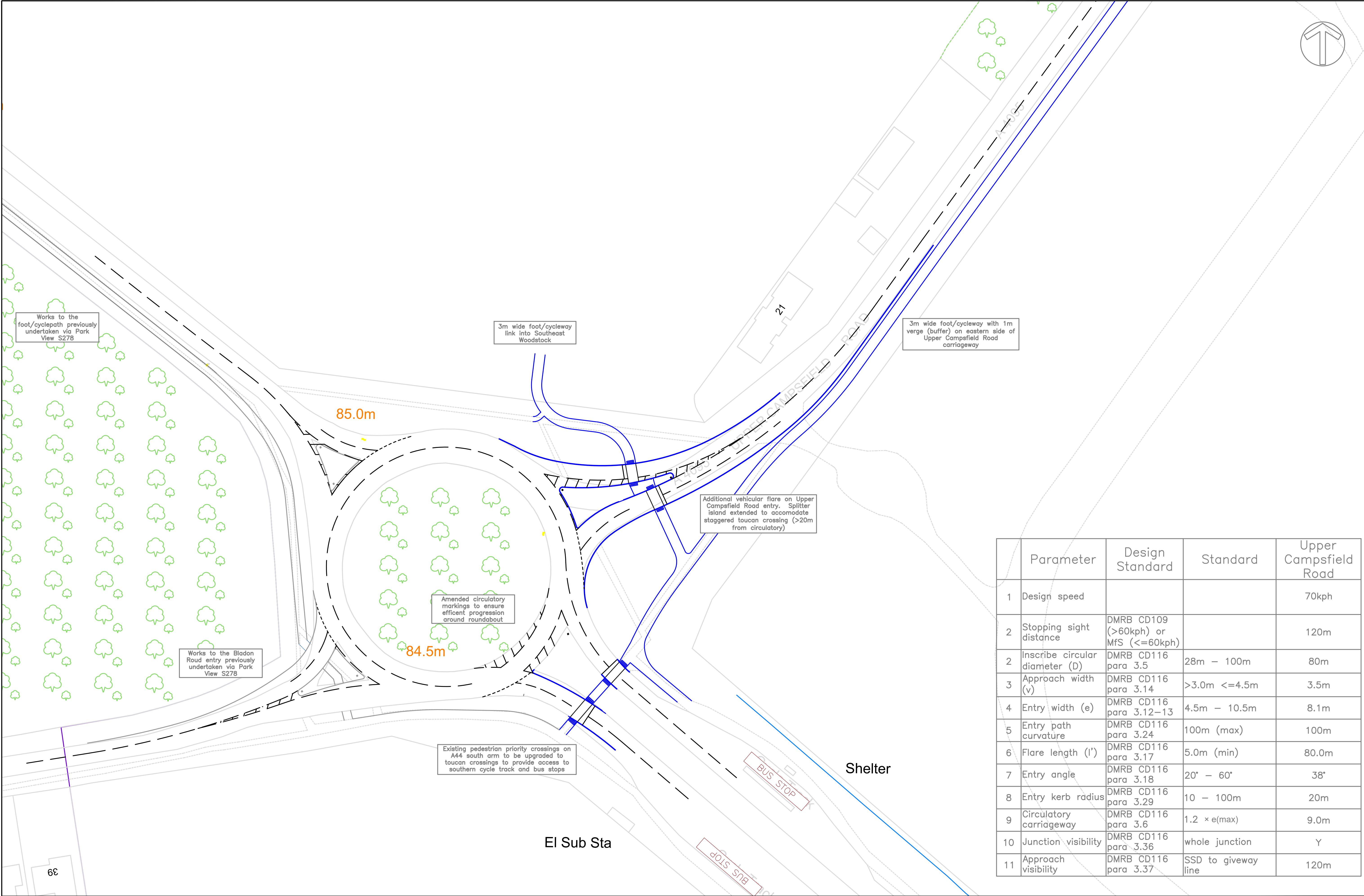
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JOB TITLE		CLIENT	
SOUTHEAST WOODSTOCK		BLENHIEM PARTNERS	
DRAWING TITLE			
ACCESS STRATEGY OVERVIEW GENERAL ARRANGEMENT			
SCALE AT A0 1:1000	DRAWN BY RM	DATE 09/11/22	DRAWING No 23570-03-GA
			REVISION B



	Parameter	Design Standard	Standard	Upper Campsfield Road
1	Design speed			70kph
2	Stopping sight distance	DMRB CD109 (>60kph) or MfS (<=60kph)		120m
2	Inscribe circular diameter (D)	DMRB CD116 para 3.5	28m – 100m	80m
3	Approach width (v)	DMRB CD116 para 3.14	>3.0m <=4.5m	3.5m
4	Entry width (e)	DMRB CD116 para 3.12–13	4.5m – 10.5m	8.1m
5	Entry path curvature	DMRB CD116 para 3.24	100m (max)	100m
6	Flare length (l')	DMRB CD116 para 3.17	5.0m (min)	80.0m
7	Entry angle	DMRB CD116 para 3.18	20° – 60°	38°
8	Entry kerb radius	DMRB CD116 para 3.29	10 – 100m	20m
9	Circulatory carriageway	DMRB CD116 para 3.6	1.2 × e(max)	9.0m
10	Junction visibility	DMRB CD116 para 3.36	whole junction	Y
11	Approach visibility	DMRB CD116 para 3.37	SSD to giveaway line	120m

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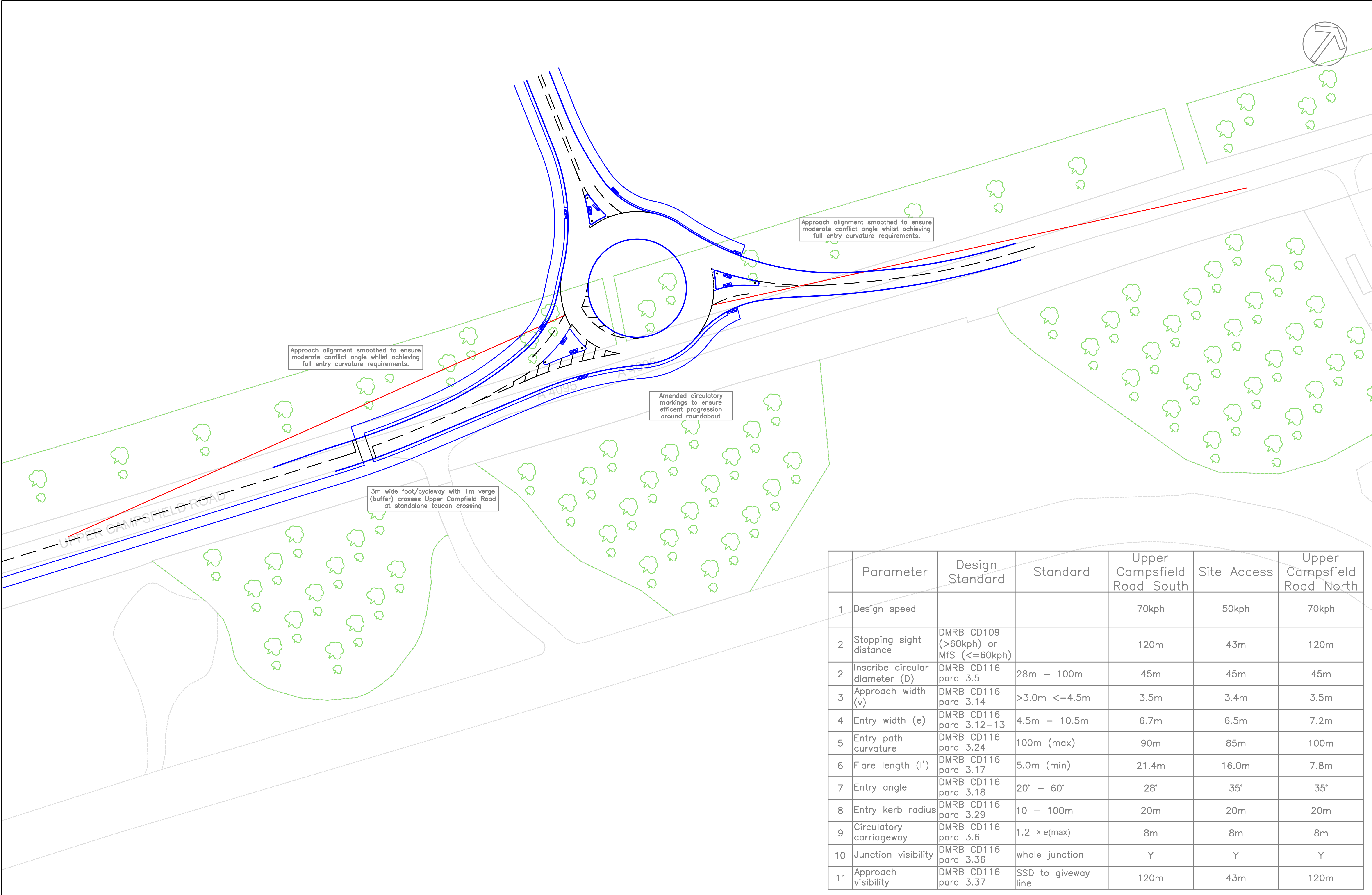
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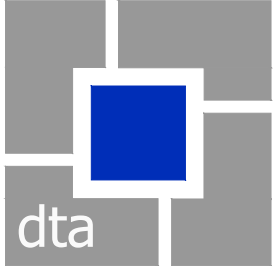
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DRAWING TITLE							
A44 BLADON ROUNDABOUT PROPOSED ACTIVE TRAVEL FOCUSED IMPROVEMENTS GENERAL ARRANGEMENT							
SCALE	DRAWN BY	DATE	DRAWING No	REVISION			
1:500@A1	RJM	11/11/22	23570-03-GA2	B			



	Parameter	Design Standard	Standard	Upper Campsfield Road South	Site Access	Upper Campsfield Road North
1	Design speed			70kph	50kph	70kph
2	Stopping sight distance	DMRB CD109 (>60kph) or MfS (<=60kph)		120m	43m	120m
2	Inscribe circular diameter (D)	DMRB CD116 para 3.5	28m – 100m	45m	45m	45m
3	Approach width (v)	DMRB CD116 para 3.14	>3.0m <=4.5m	3.5m	3.4m	3.5m
4	Entry width (e)	DMRB CD116 para 3.12–13	4.5m – 10.5m	6.7m	6.5m	7.2m
5	Entry path curvature	DMRB CD116 para 3.24	100m (max)	90m	85m	100m
6	Flare length (l')	DMRB CD116 para 3.17	5.0m (min)	21.4m	16.0m	7.8m
7	Entry angle	DMRB CD116 para 3.18	20° – 60°	28°	35°	35°
8	Entry kerb radius	DMRB CD116 para 3.29	10 – 100m	20m	20m	20m
9	Circulatory carriageway	DMRB CD116 para 3.6	1.2 × e(max)	8m	8m	8m
10	Junction visibility	DMRB CD116 para 3.36	whole junction	Y	Y	Y
11	Approach visibility	DMRB CD116 para 3.37	SSD to giveaway line	120m	43m	120m

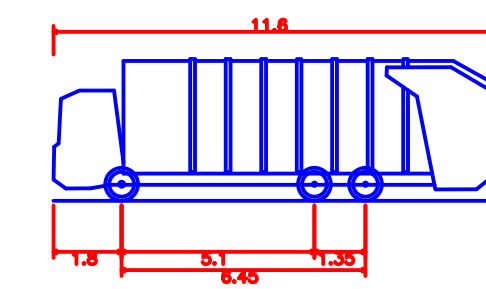
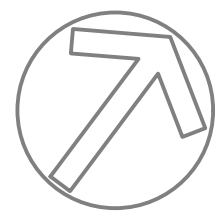
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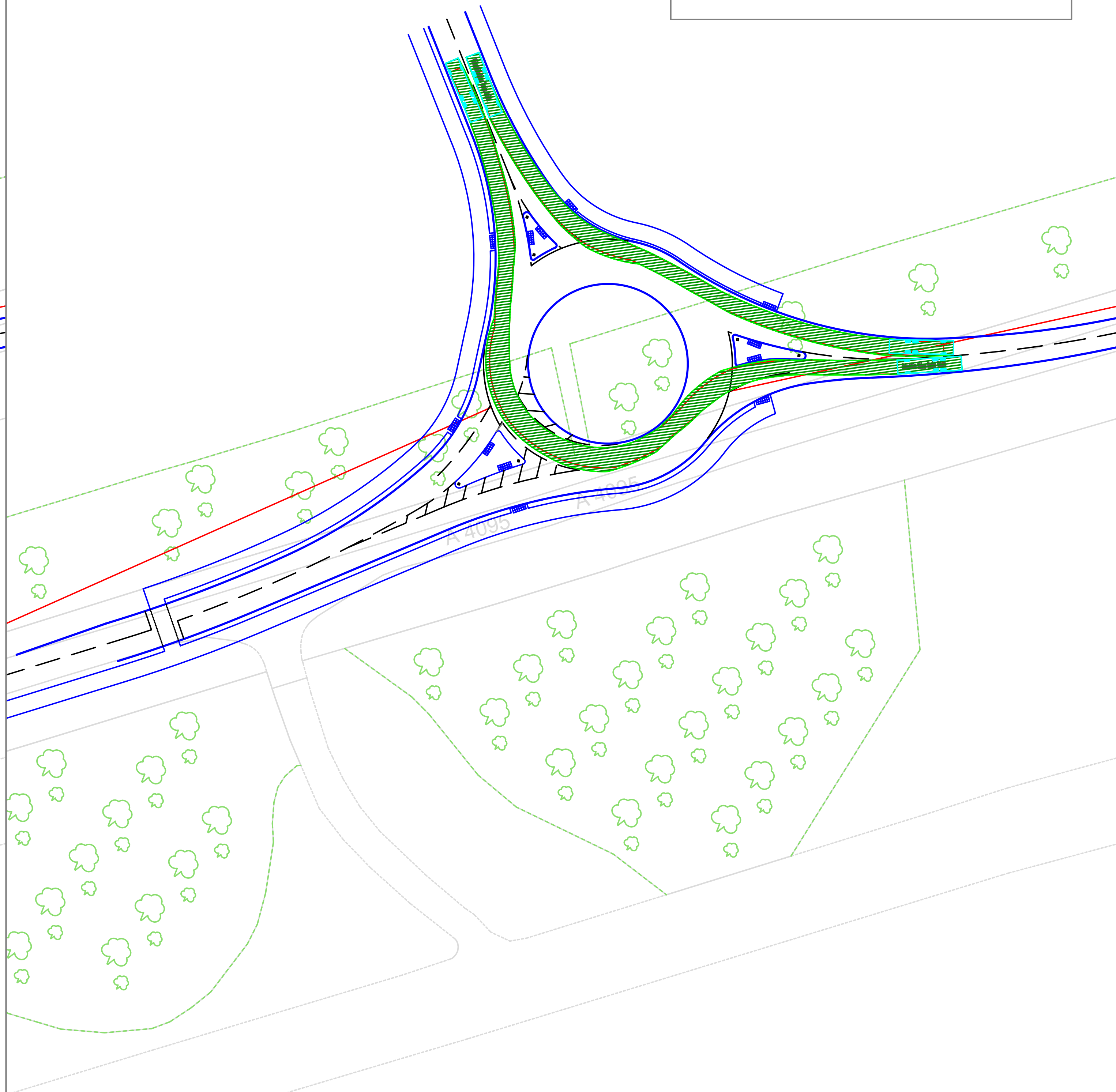
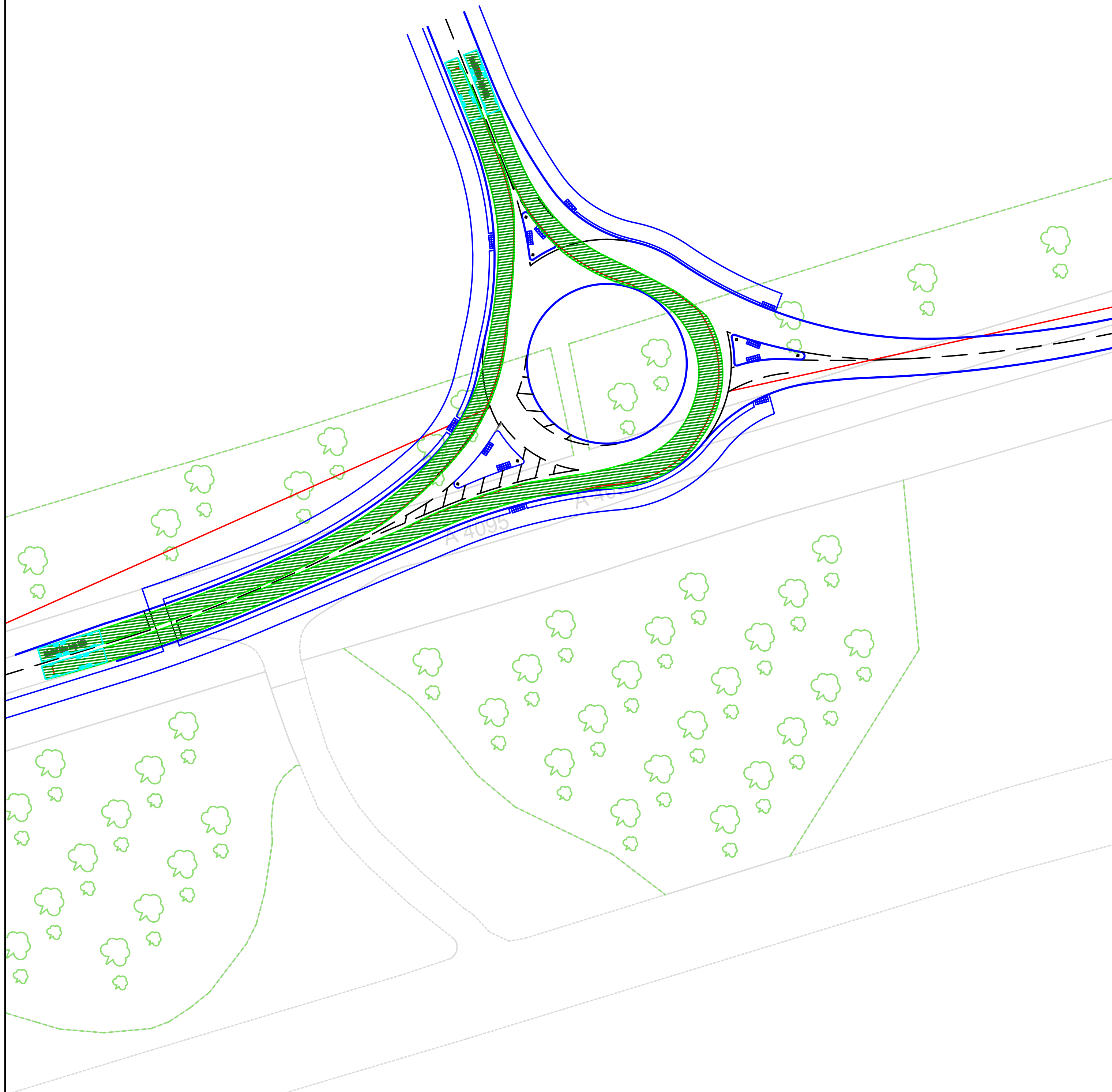


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JOB TITLE			CLIENT		
SOUTHEAST WOODSTOCK			BLENHIEM PARTNERS		
DRAWING TITLE					
A44 BLADON ROUNDABOUT PROPOSED ACTIVE TRAVEL FOCUSED IMPROVEMENTS GENERAL ARRANGEMENT					
SCALE	DRAWN BY	DATE	DRAWING No		REVISION
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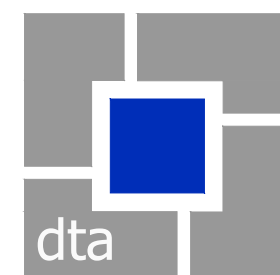


Oxfordshire Refuse Design Vehicle
Overall Length 11.600m
Overall Width 2.490m
Overall Body Height 3.749m
Min Body Ground Clearance 0.302m
Track Width 2.490m
Lock to lock time 4.00s
Wall to Wall Turning Radius 11.250m



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JOB TITLE SOUTHEAST WOODSTOCK			CLIENT BLENHIEM PARTNERS		
DRAWING TITLE A44 BLADON ROUNDABOUT PROPOSED ACTIVE TRAVEL FOCUSED IMPROVEMENTS VEHICLE TRACKING					
SCALE 1:500@A1	DRAWN BY RJM	DATE 11/11/22	DRAWING No 23570-03-TRK		REVISION B

Appendix A

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

District: Cherwell

Application no: 22/01715/OUT

Proposal: Erection of up to 500 dwellings with associated access, open space and infrastructure

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Response Date: 30th August 2022

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.

Assessment Criteria **Proposal overview and mix /population generation**

OCC's response is based on a development as set out in the table below. The development is taken from the application form.

Residential	
1-bed dwellings	61
2-bed dwellings	133
3-bed dwellings	207
4-bed & larger dwellings	99

Based on the completion and occupation of the development as stated above it is estimated that the proposal will generate the population stated below:

Average Population	1242
Nursery children (number of 2- and 3-year olds entitled to funded places)	30
Primary pupils	138
Secondary pupils including Sixth Form pupils	109
Special School pupils	3.6

Application no: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

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 be 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: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Strategic Comments

The proposal is for the development of 500 dwellings with associated access, open space and infrastructure, on land south of Perdiswell Farm, Shipton Road, Shipton on Cherwell.

The site was previously considered as PR10 by the Adopted Cherwell Local Plan 2011-31 (Part 1) Partial Review – Oxford's Unmet Housing Need. Other policies in the development plan may also apply including ESD 13 & ESD 15: Scheduled Monument. The site also falls within Shipton-on-Cherwell and Thrupp Neighbourhood Plan Area designated February 2019.

The County Council is raising Transport and Education objections to the proposal. Also attached are Lead Local Flood Authority, Archaeology, Waste Management and Landscape/GI Infrastructure comments. Local Members Views comments are provided by Councillor Andy Graham.

Officer's Name: Jonathan Wellstead

Officer's Title: Principal Planner

Date: 26/08/2022

Application no: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Transport Schedule

Recommendation: Objection for the following reasons;

- Insufficient details of the proposed access junction including associated infrastructure such as footways and cycleways.
- The site access junction has not been supported by a vehicle tracking exercise
- The TA has not provided a satisfactory assessment of the development impact on the network. Background traffic fails to include trips from consented sites. Such inaccuracies mean that it is not possible to fully assess the impact of the development in accordance with paragraphs 109 and 111 of the NPPF.

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 and a 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	TBC	TBC	Baxter	Planned bus service infrastructure enhancements along the A44 Woodstock - Oxford corridor (Northbound and southbound bus lane on A44 between Bladon roundabout and Langford Lane)
Public transport services	£566,500	December 2021	RPI-x	Improvement of bus service provision in the vicinity of the site
Public transport infrastructure	£37,424	October 2021	Baxter	Two pairs of bus stops required on the development spine road.
	TBC	TBC	Baxter	Financial contribution towards the planned Oxford Airport Park

				and Ride.
Traffic Reg Order	£3,255	April 2022	RPI-x	Administration costs towards a Traffic Regulation Order to enable the relocation of the existing derestricted speed limit on A4095 Upper Campsfield Road from its current location to 50mph at a point further north of the access junction.
Travel Plan Monitoring	£2,563	December 2021	RPI-x	Enabling the travel plan to be monitored for a period of five years
Public Rights of Way	£90,000	July 2022	Baxter	Access mitigation measures on the footpaths to east and north of the site. This would fund surface improvement, signing and furniture along the routes.
Total				

Other obligations:

- A Traffic Regulation Order (TRO) is required under the Road Traffic Regulation Act 1984 to enable the relocation of an existing speed limit on the A4095 Upper Campsfield Road to bring the proposed access within a safe speed limit.
- Two areas of hardstanding to be appropriately located along the primary street/ spine road for bus stops. Shelters to be supplied by OCC.
- Proportionate contribution to infrastructure identified in Connecting Oxfordshire LTP4.
- Promotion of a CPZ within estate roads prior occupation of the development to deter commuter parking within the development.
- Pedestrian/ cycle connections to adjacent sites including measures to ensure their delivery.

Key points

- Details of the proposed access junction have not been availed. This information is required to review the credibility of the proposed access strategy. The proposed access must also be supported by a RSA1 and a swept path analysis

- A further pedestrian/cycle crossing of A44 towards the south east corner of the development is needed to make cycling journeys to/from the Bladon direction as attractive as possible for as many residents of the development as possible

Comments:

The application is outline only seeking development of up to 500 residential properties with associated infrastructure on Land off the A4095 Upper Campsfield Road, to the south east of Woodstock.

Access arrangements

A new 3-arm roundabout is proposed as the principle form of access to the site off Upper Campsfield Road which would provide access for pedestrians, cyclists and vehicles. The detail of the proposed access on Upper Campsfield Road is illustrated on DTA's Proposed Site Access Plan (Drwg No: 23570-01 Rev D).

The suite of access plan does not provide much detail regarding dimensions without which it is not possible to establish whether the new roundabout is feasible and compliant to DMRB standards. Details such as visibility splays, carriageway and shared footway/cycleway widths, inscribed circle diameter will need to be clearly marked out on the plan. **(Reason for objection)**

The application proposes to implement a new footway along the eastern side of the A4095 Upper Campsfield Road to provide a direct pedestrian link between the site and (I assume) Bladon Roundabout. This link will clearly be of benefit to residents and the community. Again, details of this infrastructure are not known, such as the width and extent of the provision, leaving access for pedestrians along here to be an incomplete arrangement. **(Reason for objection)**

Because the access junction poses a significant change along this section of highway, for safety of users it is necessary for the junction to be lit. A street lighting strategy will need to be agreed with Oxfordshire County Council Street Lighting Team which covers a minimum of about 50m either side of the approach arms to the junction. Although the application has not submitted a lighting plan, this can be secured by a planning condition.

A secondary access to the western frontage of the development (through the newly built Park View development) is proposed to link onto the A44 Oxford Road.

The site is located along the western front of the A4095 Upper Campsfield Road to which access shall be acquired. The A4095 Upper Campsfield Road is a single carriageway road and is approximately 6.2m wide. Along the majority of its length, the carriageway is currently subject to national speed limit. It is currently unlit and void of walking and cycling facilities.

The 50mph speed limit will need to be extended to include the new roundabout from Bladon roundabout to be consistent with the 50mph along the A44. The new speed limit zone will need to extend beyond the access, about 150m north of the new roundabout.

Para 4.3.1 of the TA as well as the Access and Movement Parameter Plan indicate that the development shall be connected to the A44 and Bladon roundabout by a network of 3m wide footways/cycleways. This is welcomed. However, no further detail is availed of how users would cross to the shared footway/ cycleway along the western side of the A44. Are there any plans to provide a crossing point on the A44 to enable residents to access the footway/ cycle way on the opposite side of the road? **(Reason for objection)**

The proposed access arrangement has not been supported by a swept path exercise. This exercise is vital at new junctions to ensure/ demonstrate that the development can be safely served by large vehicles. The swept path drawings must be submitted to show that the site accesses can safely accommodate expected vehicles. **(Reason for objection)**

Site layout

As this is an 'Outline' application the internal layout of this site will therefore be finalised at the detailed design stage. The layout plans shall be required to demonstrate the ability of buses, refuse vehicles and cars to manoeuvre within the site and back onto the highway in a forward gear particularly utilising turning heads.

If the proposed development is to be offered for adoption to the Local Highway Authority a Section 38 Agreement under the Highways Act 1980 will be required, alternatively if the development is to remain private a Private Road Agreement will be required between the developer and Oxfordshire County Council.

It is expected that future details on any 'Reserved Matters' or 'Full' application shows a comprehensive pedestrian network throughout the site with footways provided on both sides of the carriageway.

Sustainable transport connectivity/transport sustainability

Section 3.7 of the TA identifies that 'the centre of Woodstock has a range of local facilities and services all located approximately 1.6km from the centre of the site' and that the nearest primary school to the site is approximately 1.4km from the centre of the site. Although some residents may find such distances walkable, am not convinced that many would find such journeys manageable especially with bags of shopping. As such, I find that there is likely to be a high dependency on car use which will be exacerbated when considering trips beyond Woodstock, for example to employment areas beyond Woodstock. (see Table 3 of the TA - Journey to work mode share where car trips are 84% and 62% for Cherwell 016 and West Oxfordshire 004 local areas respectively. On a local front, Woodstock suffers from a lack of sufficient parking provision. It is reasonably feared that residents of the development may add to the already existing

parking pressures due to its distance from Woodstock. The applicant is thus requested to explore with the aim of mitigating this issue.

Besides Woodstock, the sites nearest local centres with key employment sites which have an important economic relationship with Oxford and form part of Oxfordshire's 'Knowledge Spine' include;

- o Oxford Parkway Railway Station,
- o London-Oxford Airport,
- o Langford Lane commercial area in Kidlington and,
- o Begbroke Science Park.

Most of these cannot readily and safely be accessed by walking. Although the application suggests a provision of a well-designed, safe footpath and cycleway network, together with supporting facilities, these may only go as far as connecting those in close proximity of the site.

Significant enhancements to public transport and walking and cycling provision are to be delivered on key strategic routes through the County Council's Local Transport Plan and strategy for Park and Ride and Rapid Transit.

Walking and cycling network and Strategic Link and routes are to connect in seamlessly with OCC's existing routes and proposed strategic walking and cycling enhancements to Oxford Rd, including Kidlington LCWIP (Local Cycling and Walking Infrastructure Plan), where a primary route includes a link to Bladon Roundabout.

A segregated cycling and walking path from the site to the Bladon roundabout, on the east side of Oxford road from Bladon roundabout to the edge of Park View development should be in line with LTN1/20. This should be secured via s278 agreement and ensure that it extends from Bladon roundabout all the way through to the A4095/A4260 junction and appropriate connections with adjoining Public Rights of Way and Kidlington LCWIP access points.

Planning for cycling/walking, space for cycling within highways, transitions between carriageways, cycle lanes and cycle tracks, junctions and crossings, cycle parking and other equipment design within the development site should follow the LTN 1/20 guidance. (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf)

The EV parking provision must align with the 2020 Oxfordshire Electric Vehicle Infrastructure Strategy ensuring sufficient spaces are both dedicated to electric vehicles, the minimum number of charging points are provided but more importantly the infrastructure is prepared to allow for future increased demand without significant interruption. ([https://mycouncil.oxfordshire.gov.uk/\(S\(0qslfpunjtzwla330vlllet55\)\)/documents/s55283/CA_MAR1621R11%20Annex%203%20-%20DRAFT%20Oxfordshire%20Electric%20Vehicle%20Infrastructure%20Strategy%2020210225.pdf](https://mycouncil.oxfordshire.gov.uk/(S(0qslfpunjtzwla330vlllet55))/documents/s55283/CA_MAR1621R11%20Annex%203%20-%20DRAFT%20Oxfordshire%20Electric%20Vehicle%20Infrastructure%20Strategy%2020210225.pdf))

Public Transport

Oxfordshire County Council seeks financial contributions and infrastructure conditions to support the public transport network, in order to ensure that new development is suitably positioned to facilitate relevant and attractive bus services required to meet the needs for residents, employees and visitors.

Whilst Woodstock as a community is well served by buses, the development site is remote from these existing connections with the centre of the site being 800 metres from a bus stop (as acknowledged in the Transport Assessment) It is not acceptable for a development of this size to be so distant from a bus route, and therefore a bus service will be required to serve the site directly.

Consequently the road through the site must be suitable for bus operation – whilst the Design & Access Statement for this application states that the road will be 6.75m wide (and therefore will be suitable), confirmation is required that the road through the Park View site will also be suitable for this purpose. The road must be as free as possible of vertical deflections.

The Council is concerned that unacceptable delay will be caused to buses attempting to turn right out of Park View onto the A44 Oxford Road. Signalisation of this junction could be a potential option to facilitate this movement, with the development having to meet the cost of upgrading/signalising the junction.

An appropriate footway and crossing point will be required on the A4095 Upper Campsfield Road within the red line to facilitate pedestrian access to the potential future Park & Ride site.

The Council currently applies a fixed public transport services contribution to non-strategic development of £1,133 per dwelling. This results in such a contribution of **£566,500** related to this application, indexed to December 2021, which will be used for improvement of bus service provision in the vicinity of the site. It is not possible at this stage to confirm what route that might be, or whether it would be existing or new provision.

Two pairs of bus stops will be required on the development spine road. The Council requires developers to construct the bus stops and provide the required infrastructure consisting of:

- Premium Route VX-O pole and Metroslide flag with two row route number grid;
- 900mm timetable case;
- 24hr clearway plate with associated road markings);
- SMS plate; and
- Two bay shelter with ability to host a real time information screen (power supply required).

The Council will supply and install the real time information screens in the shelter and a financial contribution will be required for this, in order to encourage public transport use and make services more attractive and easy to understand. For four stops this will be **£37,424**, indexed to October 2021.

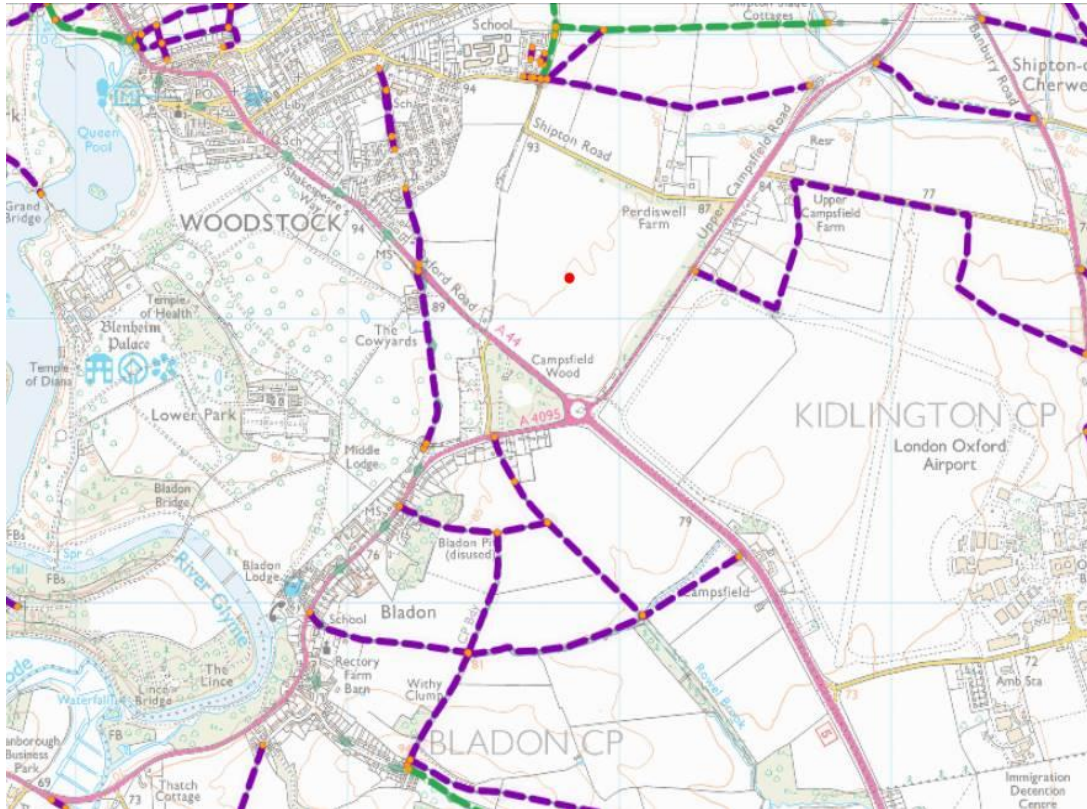
The Council can supply details of our preferred supplier of such infrastructure at the appropriate time.

Public rights of way

Oxfordshire County Council (OCC) manages the legal record and access functions on the public rights of way and access land network. In addition to the statutory functions of recording, protecting and maintaining public rights of way, part of the authority's role includes securing mitigation measures from residential and commercial developments that will have an impact on the public rights of way and access land network in order to make those developments acceptable. The proposed measures also meet the aims and outcomes of the adopted Oxfordshire Rights of Way Management Plan 2015 - 2025 (www.oxfordshire.gov.uk/rowip).

There are no recorded public rights of way (PRoW) across this site although there are a number in the vicinity that need connecting to. There is expected to be an increase in numbers of residents and visitors using the rights of way network around the site – simply due to the size of the development in a rural environment. These uses will create more use pressures on the rights of way network. In addition the roads network is expected to see a significant increase in traffic volumes and speed. OCC is proposing a range of mitigation measures that will help address the impact of this traffic on users through the improvement of traffic-free routes and safer road crossings and facilities. It is acknowledged that the development makes some provision for onsite greenspace and active travel - and this is welcomed. It is however, considered necessary to extend mitigation measures outside of the site to provide better connectivity and useability for more people.

For this, OCC seek from this development as mitigation measures as part of a s106 scheme of **£90,000** given this development effectively extends the urban edge of Woodstock through the connected spine road and public open space. The site has had a desk assessment to both assess the current situation and look at how public use could be protected and enhanced. With the development site at the centre, the logical and realistic public rights of way network likely to be affected is considered along with the range of measures needed to provide mitigation against the impacts of the development. In this case it is the size and location of the development, access to the surrounding countryside and key access roads serving the development that are the key drivers. The rights of way in the vicinity of the site considered to be affected by the development are shown on the attached map extract. :



The proposed off-site measures are in the form of a reasonable financial contribution to allow the Countryside Access Strategy to plan and deliver improvements with third party landowners in a reasonable time period and under the Rights of Way Management Plan aims. The contribution would be index-linked and subject to a 10 year longstop.

The contribution would be spent on improvements to the public rights of way in the vicinity of the development – in the ‘impact’ area up to 3km from the site. Primarily this is to improve the surfaces of all routes to take account of the likely increase in use by residents of the development as well as new or replacement structures like gates, bridges and seating, sub-surfacing and drainage to enable easier access, improved signing and protection measures such as anti-motorcycle barriers. New short links between existing rights of way would also be included.

Traffic impact

Accident Data

A review of the accident data for the area has been carried out and has highlighted a number of incidents that have occurred within a five year period spanning from January 2017 to April 2022. The submitted data does not present clusters of accidents that would cause heightened concern that the proposed development would exacerbate the existing situation. However, the recorded collisions along Upper Campsfield Road may be repeated/exacerbated by intensified use of the highway hence the need to reduce the road speed from derestricted to 50mph within the vicinity of the site.

Trip generation, Distribution and Assignment

The TA seeks to estimate the level of traffic that the development would generate and what impact this might have on the adjacent transport network. The trip rates have been taken from those that were agreed on a not-so-distant site, on Land at Hill Rise. I have reviewed these and found them acceptable.

The anticipated distribution has utilised the 2011 Census Journey to Work data for the Super Middle Output Area of West Oxfordshire 004. This data indicates that the majority of the trips from this development (heading towards Oxford, Witney, Carterton, including parts of Kidlington etc) shall need to be assigned via the Bladon roundabout.

The submission predicts that there will be about 268 and 273 two-way vehicular trip movements in the AM and PM peak periods respectively. Whilst this volume of trips is considered realistic from a residential development in such a location, the TA fails to include committed development trips from the Park View site. The correlation between Park View and this site is high such that capturing the cumulative trips needs to be appropriately presented.

Park View development was granted planning permission for 300 residential units. Currently, a handful of these have been occupied. As per this TA, trips from the consented 300 site have not been captured in the baseline surveys and have been missed from the list of committed sites. As such, without this information, I am not in a position to conclude that a satisfactory assessment has been undertaken. **(Reason for objection)**

Junction Assessment

The applicant has undertaken operational assessment on various junctions which are all in the vicinity of the site. It is to my dissatisfaction that the application has not assessed other junctions listed during the pre-application consultation. For the scale of development, bearing in mind the cumulative impact from other consented/committed developments around Woodstock, I do not consider this a robust exercise without including wider junctions. In isolation, the impact on other junctions (especially south and west of the Bladon roundabout) may be moderate but significant enough if looked at in a cumulative aspect. **(Reason for objection)**

To address this, the application needs to include amongst junctions to assess the following:

- Upper Campsfield Road/ Shipton Road
- A4260 Banbury Road/ A4095 Bunkers Hill/ A4095 Upper Campsfield Road;
- A4095 Main Road/ Lower Road;
- A44 Woodstock Road/ Langford Lane;
- A44 Woodstock/Sandy Lane/ Rutten Lane;
- A44 Woodstock Road/ Cassington Road;

Travel Plan

The distance to bus stops from the furthest point of the development is considerable and may act as a deterrent to using the bus for journeys to and from the site.

A Full Residential Travel Plan will be required for this development of 500 dwellings. This should be produced prior to occupation and then updated on occupation of 50% of the site (250th dwelling) once adequate survey data becomes available. Further information regarding the required criteria can be found within appendices 5 and 8 of the OCC guidance document 'Transport for New Developments – Transport Assessments and Travel Plans March 2014'. A copy has been attached with this response for ease of reference.

A Travel Plan has been submitted in support of this application, but it does not contain the level of information required to meet the necessary criteria. It is therefore advised that the applicant consults appendices 5 and 8 of the guidance document to ensure all criteria has been met before revising and resubmitting for approval.

A Travel Plan Monitoring Fee of £2,563 (RPI Index linked Dec 2021) will be required to enable the travel plan to be monitored for a period of five years.

A Residential Travel Information Pack is required prior to first occupation and should then be distributed to all residents at the point of occupation. Reason – to ensure all residents are aware of the travel choices available to them from the outset. Further information regarding the required criteria can be found within the guidance document attached to this response.

Cycle parking and EV charging for both cycles and vehicles should be provided within residential boundaries.

S38 Highway Works – Spine Road

An obligation to provide [a spine road as part of the highway network will be required for the development. The s106 agreement will secure delivery via future completion of a s38 agreement.

The s106 agreement will identify for the purpose of the s38 agreement;

- Approximate location of the spine road and information as to provision eg minimum width of carriageway, footways etc as appropriate.
- Timing – this may be staged.
- Additional facilities/payments e.g. on-site bus infrastructure and related payments.

Planning Conditions:

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

Accesses: Full Details

Prior to the commencement of the development hereby approved, details of the means of access between the land and Upper Campsfield Road including position, layout and vision splays shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, and prior to the occupation of any dwellings, the means of access onto the highway shall be constructed and retained in accordance with the approved details.

Reason - In the interests of highway safety and to comply with Government guidance contained within the National Planning Policy Framework

Speed Limit on A4095 Upper Campsfield Road

Prior to commencement of development (including changes to the highway) the consultation process and implementation of the Traffic Regulation Order for a new 50 mph speed limit no less than about 150 metres to the north of the new roundabout shall have commenced.

Reason: In the interests of highway safety and to comply with Government guidance contained within the National Planning Policy Framework

CTMP

A Construction Traffic Management Plan should be submitted to the Local Planning Authority and agreed prior to commencement of works. This should identify;

- The routing of construction vehicles and management of their movement into and out of the site by a qualified and certificated banksman,
- Details of times for construction traffic and delivery vehicles, which must be outside network peak and school peak hours,
- Access arrangements and times of movement of construction vehicles (to minimise the impact on the surrounding highway network),
- Details of wheel cleaning / wash facilities to prevent mud, etc from migrating on to the adjacent highway,
- Contact details for the Site Supervisor responsible for on-site works,
- Parking and Travel initiatives for site related worker vehicles,
- Engagement with local residents and neighbours.

Travel Plan and Travel Information Pack

Prior to first occupation a Residential Travel Plan and Residential Travel Information Pack should be submitted to the Local Planning Authority.

Officer's Name: Rashid Bbosa

Officer's Title: Senior Transport Planner

Date: 16/08/2022

Application no: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Lead Local Flood Authority

Recommendation:

No objection subject to conditions.

Condition

Surface Water Drainage

Construction shall not begin until/prior to the approval of first reserved matters; a detailed surface water drainage scheme for the site, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be subsequently be implemented in accordance with the approved details before the development is completed. The scheme shall include:

- A compliance report to demonstrate how the scheme complies with the “Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire”;
- Full drainage calculations for all events up to and including the 1 in 100 year plus 40% climate change;
- A Flood Exceedance Conveyance Plan;
- Comprehensive infiltration testing across the site to BRE DG 365 (if applicable)
- Detailed design drainage layout drawings of the SuDS proposals including cross-section details;
- Detailed maintenance management plan in accordance with Section 32 of CIRIA C753 including maintenance schedules for each drainage element, and;
- Details of how water quality will be managed during construction and post development in perpetuity;
- Confirmation of any outfall details.
- Consent for any connections into third party drainage systems

Surface Water Management Scheme (Phases):

Prior to the approval of any related reserved matters, a detailed Surface Water Management Scheme for each phase or sub-phase of development, shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall be in accordance with the details approved as part of the strategic scheme (Strategic Surface Water Management Scheme) and include all supporting information as listed in the Condition.

The scheme shall be implemented in accordance with the approved details and timetable.

Reason:

To ensure development does not increase the risk of flooding elsewhere; in accordance with Paragraph 155 of the National Planning Policy Framework (NPPF) and Local and National Standards.

Condition:**SuDS As Built and Maintenance Details**

Prior to first occupation, a record of the installed SuDS and site wide drainage scheme shall be submitted to and approved in writing by the Local Planning Authority for deposit with the Lead Local Flood Authority Asset Register. The details shall include:

- (a) As built plans in both .pdf and .shp file format;
- (b) Photographs to document each key stage of the drainage system when installed on site;
- (c) Photographs to document the completed installation of the drainage structures on site;
- (d) The name and contact details of any appointed management company information.

Officer's Name: Kabier Salam

Officer's Title: LLFA Engineer

Date: 23/08/2022

Application no: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Education Schedule

Recommendation:

Objection

This development lies within the designated area of Woodstock CE Primary School. This school is already being expanded to 2 forms of entry to accommodate housing growth in the area, including the East Woodstock development (16/01364/OUT) and the two Woodstock sites allocated in the WODC Local Plan, which are subject to current planning applications. It would not be possible to expand Woodstock CE Primary School any further, and no other school within walking distance could accommodate growth on this scale. As such there is no identified mechanism by which the primary pupils generated by this development could be accommodated in an appropriate manner.

The strategic allocation in the CDC Local Plan at Begbroke includes two sites for new primary schools. When these are built, they could provide an opportunity to create sufficient additional capacity to also meet the needs of this proposed development, although it is doubtful whether they would be within the statutory maximum 2 mile walking distance. However, there is no confirmed timescale for these new schools at this stage, and they cannot, therefore, be relied upon as a solution to this proposed development.

For this proposed development to be acceptable in planning terms, the applicant would need to demonstrate there is a sustainable and viable solution to creating sufficient primary school capacity to mitigate the development's impact.

Officer's Name: Louise Heavey

Officer's Title: Access to Learning Information Analyst

Date: 25/08/2022

Application no: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Archaeology

Recommendation:

The site is in an area of considerable archaeological interest, and has been subject to archaeological evaluations in the past. The evaluation highlighted areas of high archaeological potential which will need to be further investigated through an excavation.

Key issues:

Legal agreement required to secure:

Conditions:

We would, therefore, recommend that, should planning permission be granted, the applicant should be responsible for ensuring the implementation of archaeological investigation to be maintained during the period of construction. This can be ensured through the attachment of a suitable negative condition along the lines of:

- 1 Prior to any demolition and the commencement of the development a professional archaeological organisation acceptable to the Local Planning Authority shall prepare an Archaeological Written Scheme of Investigation, relating to the application site area, which shall be submitted to and approved in writing by the Local Planning Authority.

Reason - To safeguard the recording of archaeological matters within the site in accordance with the NPPF (2021).

2. Following the approval of the Written Scheme of Investigation referred to in condition 1, and prior to any demolition on the site and the commencement of the development (other than in accordance with the agreed Written Scheme of Investigation), a programme of archaeological mitigation shall be carried out by the commissioned archaeological organisation in accordance with the approved Written Scheme of Investigation. The programme of work shall include all processing, research and analysis necessary to produce an accessible and useable archive and a full report for publication which shall be submitted to the Local Planning Authority within two years of the completion of the archaeological fieldwork.

Reason – To safeguard the identification, recording, analysis and archiving of heritage assets before they are lost and to advance understanding of the heritage assets in their wider context through publication and dissemination of the evidence in accordance with the NPPF (2021).

Informatives:

Detailed comments:

We have previously commented on applications for this site (ref. 14/02004/HYBRID and 22/00476/PREAPP), which raised some issues. The wider application site includes the Scheduled Ancient Monument of Blenheim Villa (SAM 35545), and though this is not directly impacted by the development, there will need to be a consideration of the setting of the villa in any development of the site. The proposal site also lies immediately north east of the World Heritage Site of Blenheim Palace, and its Grade One registered parkland. The importance of the setting of these designated sites is highlighted in the NPPF (2021), the NPPF Planning Practice Guidance and the Local Plan Policies of WODC and CDC.

The Cultural Heritage Assessment submitted with the application outlines how the setting of these two assets has been considered, with input made by Historic England. Previous applicants for this site have carried out an aerial photographic survey, geophysical survey and a trenched evaluation. The geophysical survey and trenched evaluation highlighted areas which are of archaeological interest within the development area, suggesting Late Iron Age and Early Roman settlement activity. These areas will need to be subject to a further phase of archaeological mitigation which can be secured through a condition.

Since the development area contains a Scheduled Ancient Monument, Historic England has been consulted. They asked for the setting issues to be addressed through more detailed plans, and they should continue to be consulted in association with this application.

Officer's Name: Victoria Green

Officer's Title: Planning Archaeologist

Date: 8th July 2022

Application no: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Waste Management

Recommendation:

No objection subject to S106 contributions

Legal agreement required to secure:

No objection subject to:

- S106 Contributions as summarised in the tables below and justified in this Schedule.

Contribution	Amount	Price base	Index	Towards (details)
Household Waste Recycling Centres	£46,980	327	BCIS All-In TPI	Expansion and efficiency of Household Waste Recycling Centres (HWRC)

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

£46,980 Household Waste Recycling Centre Contribution indexed from Index Value 327 using BCIS All-in Tender Price Index

Towards:

The expansion and efficiency of Household Waste Recycling Centre (HWRC) capacity.

Justification:

2. Oxfordshire County Council, as a Waste Disposal Authority, is required under the Environmental Protection Act 1990 (Section 51) to arrange:

“for places to be provided at which persons resident in its area may deposit their household waste and for the disposal of waste so deposited”;

and that

“(a) each place is situated either within the area of the authority or so as to be reasonably accessible to persons resident in its area;

(b) each place is available for the deposit of waste at all reasonable times (including at least one period on the Saturday or following day of each week except a week in which the Saturday is 25th December or 1st January);

(c) each place is available for the deposit of waste free of charge by persons resident in the area;”.

3. Such places are known as Household Waste Recycling Centres (HWRCs) and Oxfordshire County Council provides seven HWRCs throughout the County. This network of sites is no longer fit for purpose and is over capacity.
4. Site capacity is assessed by comparing the number of visitors on site at any one time (as measured by traffic monitoring) to the available space. This analysis shows that all sites are currently ‘over capacity’ (meaning residents need to queue before they are able to deposit materials) at peak times, and many sites are nearing capacity during off peak times. The proposed development will provide 500 dwellings. If each household makes four trips per annum the development would impact on the already over capacity HWRCs by an additional 2,000 HWRC visits per year.
5. Congestion on site can reduce recycling as residents who have already queued to enter are less willing to take the time necessary to sort materials into the correct bin. Reduced recycling leads to higher costs and an adverse impact on the environment. As all sites are currently over capacity, population growth linked to new housing developments will increase the pressure on the sites.
6. The Waste Regulations (England and Wales) 2011 require that waste is dealt with according to the waste hierarchy. The County Council provides a large number of appropriate containers and storage areas at HWRCs to maximise the amount of waste reused or recycled that is delivered by local residents. However, to manage the waste appropriately this requires more space and infrastructure meaning the pressures of new developments are increasingly felt. Combined with the complex and varied nature of materials delivered to site it will become increasingly difficult over time to comply with the EU Waste Framework Directive 2008, enacted through the Waste Regulations (England and Wales) 2011 (as amended), maintain performance and a good level of service especially at busy and peak times.

Calculation:

Space at HWRC required per dwelling (m ²)	0.18	Current land available 41,000m ² , needs to increase by 28% to cope with current capacity issues. Space for reuse requires an additional 7%. Therefore, total land required for current dwellings (300,090) is 55,350 m ² , or 0.18m ² per dwelling
Infrastructure cost per m ²	£275	Kidlington build cost/m ² indexed to 327 BCIS
Land cost per m ²	£247	Senior Estates Surveyor valuation
Total land and infrastructure cost /m ²	£522	
Cost/dwelling	£93.96	
No of dwellings in the development	500	
Total contributions requested	£46,980	

Detailed comments:

Oxfordshire councils have ambitious targets to reduce the amount of waste generated and increase the amount recycled as demonstrated in our Joint Municipal Waste Management Strategy 2018-2023. Enabling residents of new dwellings to fully participate in district council waste and recycling collections is vital to allow Oxfordshire's high recycling rates to be maintained and reduce the amount of non-recyclable waste generated.

Given the pressing urgency of climate change and the need to embed the principles of the circular economy into all areas of our society, we encourage the applicant to consider including community spaces that help reduce waste and build community cohesion through assets such as community fridges, space for the sharing economy (library of things), refill stations, space for local food growing etc.

At the reserved matters application stage, we expect to see plans for how the developer will design the development in accordance with waste management policies in Cherwell District Council's waste planning guidance.

Bin storage areas must be able to accommodate the correct number of mixed recycling, refuse and food recycling bins; be safe and easy to use for residents and waste collection crews and meet the requirements of the waste collection authority.

The development will increase domestic waste arisings and the demand for all waste management services including Household Waste Recycling Centres (HWRCs).

Conditions:

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

N/A

Officer's Name: Mark Watson

Officer's Title: Waste Strategy Projects Officer

Date: 03 August 2022

Application no: 22/01715/OUT

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

Landscape / Green Infrastructure

Comments

The District Council's Landscape Officer should be consulted on the proposals and his/her comments taken into account.

Officer's Name: Haidrun Breith

Officer's Title: Landscape Specialist

Date: 20/07/22

RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Cherwell

Application No: 22/01715/OUT

Proposal: Erection of up to 500 dwellings with associated access, open space and infrastructure

Location: Land South Of Perdiswell Farm Shipton Road Shipton On Cherwell

LOCAL MEMBER VIEWS

Cllr: Councillor Andy Graham

Division: Woodstock

Comments:

Infrastructure Impact Issues

The proposed application to build 500 houses in this location will have a profound impact on the neighbouring Woodstock settlement both in terms of infrastructure and the services already fully stretched in terms of health, highways and leisure provision.

The existing health provision through a doctors surgery is already at full capacity and there is no indication in the submission how that will be provided for or how the emerging plans for Hill Rise and Banbury Road developments have been taken into account.

Thames Water network modelling and capacity issues as well as flood mitigation measures are not outlined clearly and as the site is relatively flat, this needs to be robustly tested.

Highways

In highways terms there seems to be a contradiction in the design statement part 4 where it states access from Park View to be used by bus and cycle only when it is clear elsewhere in the submission that the access will include car effectively from the A44 and indeed therefore onto the A44 affecting traffic build up to and from Woodstock and onto the Bladon roundabout. Is the design statement correct or not?

It is not clear how bus capacity/service into the site will be included as part of the overall strategy to decrease car usage and needs more careful consideration if credibility is to be given to the strategy.

The overall impact of increased traffic on the A4095 to and from the Bladon roundabout through the village of Bladon would increase pedestrian highways safety issues and potential air pollution through the particular narrow stretch of the village where the pavement is particularly narrow and by increased car journeys as suggested, particularly commuters to Hanborough station make this routing more hazardous.(referred to in in design statement 6)

Construction access onto the site via Upper Campsfield Road is unacceptable as proposed. The traffic build up and disruption would cause intolerable levels of delay and highway surface danger from unwashed roads entering and leaving the site particularly at the times mentioned when traffic levels are still high. (A roundabout to be built first to avoid massive traffic disruption is the only solution should the development be granted permission)

This development was not previous accepted by the inspectors for inclusion in the Local Plan and was originally taken out.

Date: 24 July 2013

Appendix B

Junctions 10		
ARCADY 10 - Roundabout Module		
Version: 10.0.4.1693		
© Copyright TRL Software Limited, 2021		
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Filename: Bladon Roundabout_Mitigation_Rev B.j10

Path: P:\23000's\23570\Junction Assessments

Report generation date: 03/10/2022 09:55:12

-
- »2027 Base, AM
 - »2027 Base, PM
 - »2027 Base + Com Dev, AM
 - »2027 Base + Com Dev, PM
 - »2027 Base + Com Dev + Dev, AM
 - »2027 Base + Com Dev + Dev, PM
 - »2031 Base, AM
 - »2031 Base, PM
 - »2031 Base + Com Dev, AM
 - »2031 Base + Com Dev, PM
 - »2031 Base + Com Dev + Dev, AM
 - »2031 Base + Com Dev + Dev, PM
 - »2022 Base, AM
 - »2022 Base, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2027 Base						
1 - A4095 Upper Campsfield Road	3.3	19.14	0.78	0.8	6.10	0.45
2 - A44 Woodstock Road (s)	1.0	3.63	0.50	2.4	5.77	0.71
3 - A4095 Bladon Road	1.4	6.19	0.58	1.1	5.65	0.52
4 - A44 Oxford Road (n)	2.5	8.93	0.72	0.8	4.35	0.45
2027 Base + Com Dev						
1 - A4095 Upper Campsfield Road	9.3	51.54	0.93	1.0	7.21	0.51
2 - A44 Woodstock Road (s)	1.2	4.10	0.55	3.8	8.37	0.80
3 - A4095 Bladon Road	1.8	7.37	0.64	1.5	7.18	0.60
4 - A44 Oxford Road (n)	5.3	16.82	0.85	1.2	5.31	0.54
2027 Base + Com Dev + Dev						
1 - A4095 Upper Campsfield Road	78.0	289.29	1.19	1.6	9.30	0.62
2 - A44 Woodstock Road (s)	1.3	4.37	0.58	6.0	12.44	0.86
3 - A4095 Bladon Road	2.0	8.27	0.67	1.9	8.96	0.66
4 - A44 Oxford Road (n)	6.9	21.82	0.88	1.4	6.27	0.59
2031 Base						
1 - A4095 Upper Campsfield Road	4.0	22.66	0.81	0.9	6.37	0.47
2 - A44 Woodstock Road (s)	1.0	3.75	0.51	2.6	6.24	0.73
3 - A4095 Bladon Road	1.5	6.52	0.60	1.2	5.95	0.54
4 - A44 Oxford Road (n)	2.8	9.89	0.74	0.9	4.53	0.47
2031 Base + Com Dev						
1 - A4095 Upper Campsfield Road	13.7	71.50	0.97	1.1	7.59	0.53
2 - A44 Woodstock Road (s)	1.3	4.25	0.56	4.4	9.40	0.82
3 - A4095 Bladon Road	1.9	7.86	0.66	1.6	7.66	0.62
4 - A44 Oxford Road (n)	6.6	20.45	0.88	1.3	5.57	0.56
2031 Base + Com Dev + Dev						
1 - A4095 Upper Campsfield Road	92.6	343.87	1.24	1.8	9.94	0.64
2 - A44 Woodstock Road (s)	1.4	4.48	0.59	7.2	14.77	0.88
3 - A4095 Bladon Road	2.2	8.83	0.69	2.1	9.68	0.69
4 - A44 Oxford Road (n)	8.8	27.60	0.91	1.5	6.62	0.61
2022 Base						
1 - A4095 Upper Campsfield Road	2.8	16.72	0.75	0.8	5.88	0.44
2 - A44 Woodstock Road (s)	0.9	3.53	0.48	2.2	5.40	0.69
3 - A4095 Bladon Road	1.3	5.91	0.57	1.0	5.41	0.51
4 - A44 Oxford Road (n)	2.2	8.24	0.70	0.8	4.21	0.44

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

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

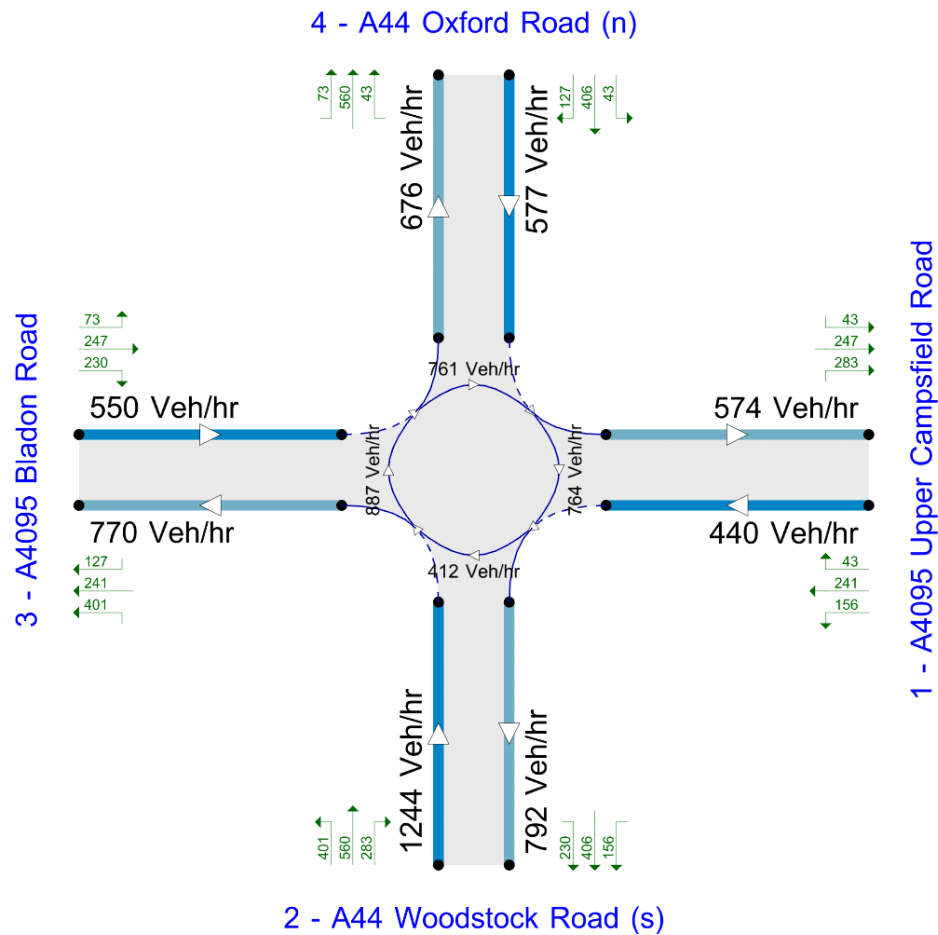
File summary

File Description

Title	Bladon Roundabout - Mitigation Works
Location	Woodstock
Site number	
Date	07/09/2022
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2027 Base	AM	ONE HOUR	07:15	08:45	15	✓
D10	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2027 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓
D12	2027 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓
D13	2027 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓
D14	2027 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D17	2031 Base	AM	ONE HOUR	07:15	08:45	15	✓
D18	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D19	2031 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓
D20	2031 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓
D21	2031 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓
D22	2031 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D23	2022 Base	AM	ONE HOUR	07:15	08:45	15	✓
D24	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2027 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	8.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.71	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A4095 Upper Campsfield Road		
2	A44 Woodstock Road (s)		
3	A4095 Bladon Road		
4	A44 Oxford Road (n)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A4095 Upper Campsfield Road	3.50	7.00	10.7	20.3	82.0	35.5		
2 - A44 Woodstock Road (s)	7.30	8.50	12.0	30.0	82.0	35.2		
3 - A4095 Bladon Road	3.50	7.30	34.0	21.5	82.0	37.0		
4 - A44 Oxford Road (n)	3.50	7.65	42.6	30.0	82.0	29.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4095 Upper Campsfield Road	0.442	1550
2 - A44 Woodstock Road (s)	0.581	2483
3 - A4095 Bladon Road	0.488	1869
4 - A44 Oxford Road (n)	0.524	2059

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2027 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	584	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	890	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	740	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	924	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From					
	1 - A4095 Upper Campsfield Road	0	213	322	49
	2 - A44 Woodstock Road (s)	236	0	210	444
	3 - A4095 Bladon Road	313	399	0	28
	4 - A44 Oxford Road (n)	27	750	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From					
	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.78	19.14	3.3	C	536	804
2 - A44 Woodstock Road (s)	0.50	3.63	1.0	A	817	1225
3 - A4095 Bladon Road	0.58	6.19	1.4	A	679	1019
4 - A44 Oxford Road (n)	0.72	8.93	2.5	A	848	1272

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	440	110	971	1022	0.430	437	432	0.0	0.7	6.120	A
2 - A44 Woodstock Road (s)	670	168	388	2076	0.323	668	1021	0.0	0.5	2.554	A
3 - A4095 Bladon Road	557	139	547	1526	0.365	555	509	0.0	0.6	3.698	A
4 - A44 Oxford Road (n)	696	174	711	1594	0.436	693	391	0.0	0.8	3.979	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	525	131	1163	941	0.558	523	517	0.7	1.2	8.575	A
2 - A44 Woodstock Road (s)	800	200	464	2032	0.394	799	1222	0.5	0.6	2.919	A
3 - A4095 Bladon Road	665	166	655	1472	0.452	664	609	0.6	0.8	4.453	A
4 - A44 Oxford Road (n)	831	208	851	1521	0.546	829	468	0.8	1.2	5.191	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	643	161	1421	831	0.773	635	633	1.2	3.1	17.709	C
2 - A44 Woodstock Road (s)	980	245	565	1974	0.496	979	1492	0.6	1.0	3.612	A
3 - A4095 Bladon Road	815	204	801	1397	0.583	813	742	0.8	1.4	6.134	A
4 - A44 Oxford Road (n)	1017	254	1041	1421	0.716	1012	572	1.2	2.4	8.705	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	643	161	1427	829	0.776	642	634	3.1	3.3	19.141	C
2 - A44 Woodstock Road (s)	980	245	570	1971	0.497	980	1499	1.0	1.0	3.631	A
3 - A4095 Bladon Road	815	204	803	1396	0.583	815	747	1.4	1.4	6.189	A
4 - A44 Oxford Road (n)	1017	254	1044	1420	0.717	1017	574	2.4	2.5	8.933	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	525	131	1171	937	0.560	533	519	3.3	1.3	9.072	A
2 - A44 Woodstock Road (s)	800	200	472	2028	0.395	801	1233	1.0	0.7	2.938	A
3 - A4095 Bladon Road	665	166	657	1470	0.452	667	616	1.4	0.8	4.495	A
4 - A44 Oxford Road (n)	831	208	855	1519	0.547	836	470	2.5	1.2	5.309	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	440	110	978	1019	0.431	442	434	1.3	0.8	6.255	A
2 - A44 Woodstock Road (s)	670	168	392	2074	0.323	671	1028	0.7	0.5	2.567	A
3 - A4095 Bladon Road	557	139	550	1525	0.365	558	513	0.8	0.6	3.725	A
4 - A44 Oxford Road (n)	696	174	715	1592	0.437	697	393	1.2	0.8	4.032	A

2027 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	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 segment length (min)	Run automatically
D10	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	446	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1367	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	633	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	620	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	114	290	42
	2 - A44 Woodstock Road (s)	226	0	513	628
	3 - A4095 Bladon Road	286	294	0	53
	4 - A44 Oxford Road (n)	34	459	127	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.45	6.10	0.8	A	409	614
2 - A44 Woodstock Road (s)	0.71	5.77	2.4	A	1254	1882
3 - A4095 Bladon Road	0.52	5.65	1.1	A	581	871
4 - A44 Oxford Road (n)	0.45	4.35	0.8	A	569	853

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	336	84	660	1220	0.275	334	410	0.0	0.4	4.058	A
2 - A44 Woodstock Road (s)	1029	257	344	2222	0.463	1026	650	0.0	0.9	3.001	A
3 - A4095 Bladon Road	477	119	672	1488	0.320	475	698	0.0	0.5	3.546	A
4 - A44 Oxford Road (n)	467	117	605	1657	0.282	465	542	0.0	0.4	3.016	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	401	100	790	1161	0.345	400	490	0.4	0.5	4.730	A
2 - A44 Woodstock Road (s)	1229	307	412	2183	0.563	1227	778	0.9	1.3	3.762	A
3 - A4095 Bladon Road	569	142	804	1423	0.400	568	835	0.5	0.7	4.208	A
4 - A44 Oxford Road (n)	557	139	724	1595	0.349	557	649	0.4	0.5	3.464	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	491	123	967	1082	0.454	490	600	0.5	0.8	6.069	A
2 - A44 Woodstock Road (s)	1505	376	504	2129	0.707	1501	953	1.3	2.4	5.688	A
3 - A4095 Bladon Road	697	174	984	1335	0.522	695	1021	0.7	1.1	5.613	A
4 - A44 Oxford Road (n)	683	171	885	1511	0.452	682	794	0.5	0.8	4.331	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	491	123	969	1081	0.454	491	601	0.8	0.8	6.101	A
2 - A44 Woodstock Road (s)	1505	376	505	2129	0.707	1505	955	2.4	2.4	5.770	A
3 - A4095 Bladon Road	697	174	986	1334	0.523	697	1024	1.1	1.1	5.654	A
4 - A44 Oxford Road (n)	683	171	887	1510	0.452	683	796	0.8	0.8	4.349	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	401	100	793	1160	0.346	402	492	0.8	0.5	4.755	A
2 - A44 Woodstock Road (s)	1229	307	414	2182	0.563	1233	781	2.4	1.3	3.815	A
3 - A4095 Bladon Road	569	142	808	1421	0.400	571	839	1.1	0.7	4.240	A
4 - A44 Oxford Road (n)	557	139	727	1594	0.350	558	652	0.8	0.5	3.480	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	336	84	663	1218	0.276	336	412	0.5	0.4	4.085	A
2 - A44 Woodstock Road (s)	1029	257	346	2221	0.463	1031	654	1.3	0.9	3.032	A
3 - A4095 Bladon Road	477	119	676	1486	0.321	477	701	0.7	0.5	3.572	A
4 - A44 Oxford Road (n)	467	117	608	1656	0.282	467	545	0.5	0.4	3.030	A

2027 Base + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	17.59	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	17.59	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2027 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	634	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	965	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	787	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1080	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	255	330	49
	2 - A44 Woodstock Road (s)	254	0	215	496
	3 - A4095 Bladon Road	320	408	0	59
	4 - A44 Oxford Road (n)	27	860	193	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	10	6	13
2 - A44 Woodstock Road (s)		9	0	9	7
3 - A4095 Bladon Road		5	2	50	9
4 - A44 Oxford Road (n)		10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.93	51.54	9.3	F	582	873
2 - A44 Woodstock Road (s)	0.55	4.10	1.2	A	886	1328
3 - A4095 Bladon Road	0.64	7.37	1.8	A	722	1083
4 - A44 Oxford Road (n)	0.85	16.82	5.3	C	991	1487

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	477	119	1094	968	0.493	473	451	0.0	1.0	7.219	A
2 - A44 Woodstock Road (s)	727	182	428	2053	0.354	724	1140	0.0	0.5	2.703	A
3 - A4095 Bladon Road	592	148	600	1497	0.396	590	552	0.0	0.7	3.958	A
4 - A44 Oxford Road (n)	813	203	736	1580	0.515	809	453	0.0	1.0	4.642	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	570	142	1310	877	0.650	567	539	1.0	1.8	11.471	B
2 - A44 Woodstock Road (s)	868	217	512	2005	0.433	867	1365	0.5	0.8	3.161	A
3 - A4095 Bladon Road	707	177	717	1437	0.492	706	661	0.7	1.0	4.919	A
4 - A44 Oxford Road (n)	971	243	881	1504	0.645	968	542	1.0	1.8	6.676	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	698	175	1594	756	0.923	675	660	1.8	7.6	36.782	E
2 - A44 Woodstock Road (s)	1062	266	614	1946	0.546	1061	1655	0.8	1.2	4.056	A
3 - A4095 Bladon Road	866	217	877	1356	0.639	863	798	1.0	1.7	7.214	A
4 - A44 Oxford Road (n)	1189	297	1078	1401	0.849	1176	662	1.8	5.0	15.196	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	698	175	1607	751	0.930	691	662	7.6	9.3	51.536	F
2 - A44 Woodstock Road (s)	1062	266	625	1940	0.548	1062	1673	1.2	1.2	4.104	A
3 - A4095 Bladon Road	866	217	879	1355	0.640	866	809	1.7	1.8	7.368	A
4 - A44 Oxford Road (n)	1189	297	1081	1399	0.850	1188	664	5.0	5.3	16.816	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	570	142	1329	869	0.656	599	542	9.3	2.0	14.705	B
2 - A44 Woodstock Road (s)	868	217	534	1992	0.436	869	1394	1.2	0.8	3.212	A
3 - A4095 Bladon Road	707	177	722	1435	0.493	711	682	1.8	1.0	4.992	A
4 - A44 Oxford Road (n)	971	243	886	1502	0.647	985	546	5.3	1.9	7.142	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	477	119	1104	965	0.495	481	453	2.0	1.0	7.507	A
2 - A44 Woodstock Road (s)	727	182	434	2050	0.354	727	1151	0.8	0.6	2.723	A
3 - A4095 Bladon Road	592	148	603	1495	0.396	594	558	1.0	0.7	4.000	A
4 - A44 Oxford Road (n)	813	203	741	1578	0.515	816	456	1.9	1.1	4.746	A

2027 Base + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	7.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.31	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2027 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	476	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1516	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	689	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	138	296	42
	2 - A44 Woodstock Road (s)	264	0	521	731
	3 - A4095 Bladon Road	294	299	0	96
	4 - A44 Oxford Road (n)	34	530	166	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.51	7.21	1.0	A	437	655
2 - A44 Woodstock Road (s)	0.80	8.37	3.8	A	1391	2087
3 - A4095 Bladon Road	0.60	7.18	1.5	A	632	948
4 - A44 Oxford Road (n)	0.54	5.31	1.2	A	670	1005

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	358	90	746	1180	0.304	357	444	0.0	0.4	4.362	A
2 - A44 Woodstock Road (s)	1141	285	378	2200	0.519	1137	725	0.0	1.1	3.371	A
3 - A4095 Bladon Road	519	130	778	1439	0.361	516	737	0.0	0.6	3.895	A
4 - A44 Oxford Road (n)	550	137	643	1638	0.336	548	652	0.0	0.5	3.297	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	428	107	893	1114	0.384	427	531	0.4	0.6	5.235	A
2 - A44 Woodstock Road (s)	1363	341	452	2157	0.632	1360	868	1.1	1.7	4.502	A
3 - A4095 Bladon Road	619	155	931	1363	0.454	618	882	0.6	0.8	4.825	A
4 - A44 Oxford Road (n)	656	164	769	1572	0.418	655	780	0.5	0.7	3.925	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	524	131	1093	1024	0.512	522	649	0.6	1.0	7.149	A
2 - A44 Woodstock Road (s)	1669	417	553	2099	0.795	1661	1062	1.7	3.7	8.073	A
3 - A4095 Bladon Road	759	190	1136	1262	0.601	756	1078	0.8	1.5	7.078	A
4 - A44 Oxford Road (n)	804	201	940	1483	0.542	802	952	0.7	1.2	5.273	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	524	131	1095	1023	0.512	524	652	1.0	1.0	7.213	A
2 - A44 Woodstock Road (s)	1669	417	555	2098	0.796	1669	1065	3.7	3.8	8.368	A
3 - A4095 Bladon Road	759	190	1142	1259	0.602	759	1082	1.5	1.5	7.185	A
4 - A44 Oxford Road (n)	804	201	943	1481	0.543	804	957	1.2	1.2	5.314	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	428	107	897	1112	0.385	430	535	1.0	0.6	5.287	A
2 - A44 Woodstock Road (s)	1363	341	455	2156	0.632	1371	872	3.8	1.7	4.633	A
3 - A4095 Bladon Road	619	155	938	1360	0.456	622	888	1.5	0.8	4.898	A
4 - A44 Oxford Road (n)	656	164	774	1569	0.418	658	786	1.2	0.7	3.960	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	358	90	750	1178	0.304	359	447	0.6	0.4	4.398	A
2 - A44 Woodstock Road (s)	1141	285	380	2199	0.519	1144	729	1.7	1.1	3.419	A
3 - A4095 Bladon Road	519	130	782	1436	0.361	520	742	0.8	0.6	3.934	A
4 - A44 Oxford Road (n)	550	137	647	1636	0.336	550	656	0.7	0.5	3.321	A

2027 Base + Com Dev + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	73.72	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	73.72	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	812	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1017	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	801	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1091	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	375	362	75
	2 - A44 Woodstock Road (s)	306	0	215	496
	3 - A4095 Bladon Road	334	408	0	59
	4 - A44 Oxford Road (n)	38	860	193	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	1.19	289.29	78.0	F	745	1118
2 - A44 Woodstock Road (s)	0.58	4.37	1.3	A	933	1400
3 - A4095 Bladon Road	0.67	8.27	2.0	A	735	1103
4 - A44 Oxford Road (n)	0.88	21.82	6.9	C	1001	1502

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	611	153	1094	966	0.633	605	508	0.0	1.7	9.804	A
2 - A44 Woodstock Road (s)	766	191	470	2028	0.378	763	1229	0.0	0.6	2.843	A
3 - A4095 Bladon Road	603	151	658	1466	0.411	600	575	0.0	0.7	4.143	A
4 - A44 Oxford Road (n)	821	205	786	1553	0.529	817	472	0.0	1.1	4.864	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	730	182	1309	874	0.835	719	609	1.7	4.4	21.765	C
2 - A44 Woodstock Road (s)	914	229	560	1976	0.463	913	1469	0.6	0.9	3.385	A
3 - A4095 Bladon Road	720	180	787	1401	0.514	719	687	0.7	1.0	5.267	A
4 - A44 Oxford Road (n)	981	245	941	1471	0.667	977	565	1.1	2.0	7.240	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	894	224	1590	756	1.183	746	744	4.4	41.4	125.277	F
2 - A44 Woodstock Road (s)	1120	280	611	1946	0.575	1118	1725	0.9	1.3	4.334	A
3 - A4095 Bladon Road	882	220	950	1318	0.669	878	778	1.0	2.0	8.122	A
4 - A44 Oxford Road (n)	1201	300	1150	1361	0.882	1184	679	2.0	6.4	18.663	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	894	224	1606	749	1.194	748	746	41.4	78.0	289.285	F
2 - A44 Woodstock Road (s)	1120	280	615	1944	0.576	1120	1740	1.3	1.3	4.366	A
3 - A4095 Bladon Road	882	220	952	1317	0.670	882	782	2.0	2.0	8.267	A
4 - A44 Oxford Road (n)	1201	300	1154	1359	0.884	1199	680	6.4	6.9	21.818	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	730	182	1334	864	0.845	853	612	78.0	47.2	263.817	F
2 - A44 Woodstock Road (s)	914	229	636	1932	0.473	916	1551	1.3	0.9	3.552	A
3 - A4095 Bladon Road	720	180	801	1393	0.517	724	751	2.0	1.1	5.409	A
4 - A44 Oxford Road (n)	981	245	946	1468	0.668	1000	579	6.9	2.1	7.991	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	611	153	1104	961	0.636	793	511	47.2	1.9	50.318	F
2 - A44 Woodstock Road (s)	766	191	573	1968	0.389	767	1324	0.9	0.6	2.998	A
3 - A4095 Bladon Road	603	151	678	1456	0.414	605	662	1.1	0.7	4.236	A
4 - A44 Oxford Road (n)	821	205	791	1550	0.530	825	492	2.1	1.1	4.991	A

2027 Base + Com Dev + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	9.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	576	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1624	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	718	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	753	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	205	314	57
	2 - A44 Woodstock Road (s)	372	0	521	731
	3 - A4095 Bladon Road	323	299	0	96
	4 - A44 Oxford Road (n)	57	530	166	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.62	9.30	1.6	A	529	793
2 - A44 Woodstock Road (s)	0.86	12.44	6.0	B	1490	2235
3 - A4095 Bladon Road	0.66	8.96	1.9	A	659	988
4 - A44 Oxford Road (n)	0.59	6.27	1.4	A	691	1036

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	434	108	746	1178	0.368	431	564	0.0	0.6	4.810	A
2 - A44 Woodstock Road (s)	1223	306	402	2183	0.560	1218	775	0.0	1.3	3.710	A
3 - A4095 Bladon Road	541	135	870	1392	0.388	538	750	0.0	0.6	4.202	A
4 - A44 Oxford Road (n)	567	142	745	1585	0.358	565	663	0.0	0.6	3.521	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	518	129	893	1112	0.466	517	675	0.6	0.9	6.040	A
2 - A44 Woodstock Road (s)	1460	365	482	2137	0.683	1457	928	1.3	2.1	5.264	A
3 - A4095 Bladon Road	645	161	1040	1308	0.493	644	898	0.6	1.0	5.409	A
4 - A44 Oxford Road (n)	677	169	892	1509	0.449	676	793	0.6	0.8	4.318	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	634	159	1092	1022	0.620	631	823	0.9	1.6	9.135	A
2 - A44 Woodstock Road (s)	1788	447	589	2075	0.862	1774	1134	2.1	5.7	11.432	B
3 - A4095 Bladon Road	791	198	1267	1196	0.661	787	1095	1.0	1.9	8.710	A
4 - A44 Oxford Road (n)	829	207	1088	1406	0.590	827	966	0.8	1.4	6.186	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	634	159	1095	1021	0.621	634	828	1.6	1.6	9.305	A
2 - A44 Woodstock Road (s)	1788	447	591	2074	0.862	1787	1138	5.7	6.0	12.438	B
3 - A4095 Bladon Road	791	198	1276	1192	0.663	790	1102	1.9	1.9	8.959	A
4 - A44 Oxford Road (n)	829	207	1094	1403	0.591	829	973	1.4	1.4	6.269	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	518	129	898	1109	0.467	521	681	1.6	0.9	6.146	A
2 - A44 Woodstock Road (s)	1460	365	485	2135	0.684	1475	934	6.0	2.2	5.573	A
3 - A4095 Bladon Road	645	161	1053	1302	0.496	649	907	1.9	1.0	5.549	A
4 - A44 Oxford Road (n)	677	169	900	1504	0.450	679	802	1.4	0.8	4.379	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	434	108	751	1175	0.369	435	568	0.9	0.6	4.869	A
2 - A44 Woodstock Road (s)	1223	306	405	2181	0.561	1226	780	2.2	1.3	3.786	A
3 - A4095 Bladon Road	541	135	876	1389	0.389	542	756	1.0	0.6	4.256	A
4 - A44 Oxford Road (n)	567	142	750	1582	0.358	568	667	0.8	0.6	3.552	A

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	9.76	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.76	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2031 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	598	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	912	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	758	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	947	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	218	330	50
	2 - A44 Woodstock Road (s)	242	0	215	455
	3 - A4095 Bladon Road	321	409	0	28
	4 - A44 Oxford Road (n)	28	768	151	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	10	6	13
2 - A44 Woodstock Road (s)		9	0	9	7
3 - A4095 Bladon Road		5	2	50	9
4 - A44 Oxford Road (n)		10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.81	22.66	4.0	C	549	823
2 - A44 Woodstock Road (s)	0.51	3.75	1.0	A	837	1255
3 - A4095 Bladon Road	0.60	6.52	1.5	A	696	1043
4 - A44 Oxford Road (n)	0.74	9.89	2.8	A	869	1303

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	450	113	995	1012	0.445	447	443	0.0	0.8	6.337	A
2 - A44 Woodstock Road (s)	687	172	397	2070	0.332	685	1045	0.0	0.5	2.595	A
3 - A4095 Bladon Road	571	143	561	1520	0.376	568	521	0.0	0.6	3.774	A
4 - A44 Oxford Road (n)	713	178	729	1585	0.450	710	400	0.0	0.8	4.099	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	538	134	1191	929	0.579	535	531	0.8	1.3	9.099	A
2 - A44 Woodstock Road (s)	820	205	476	2025	0.405	819	1251	0.5	0.7	2.983	A
3 - A4095 Bladon Road	681	170	671	1464	0.466	680	624	0.6	0.9	4.590	A
4 - A44 Oxford Road (n)	851	213	873	1509	0.564	849	479	0.8	1.3	5.439	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	658	165	1455	817	0.806	649	649	1.3	3.7	20.366	C
2 - A44 Woodstock Road (s)	1004	251	578	1966	0.511	1003	1526	0.7	1.0	3.731	A
3 - A4095 Bladon Road	835	209	821	1387	0.602	832	760	0.9	1.5	6.456	A
4 - A44 Oxford Road (n)	1043	261	1067	1407	0.741	1037	585	1.3	2.7	9.569	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	658	165	1462	814	0.809	657	651	3.7	4.0	22.662	C
2 - A44 Woodstock Road (s)	1004	251	584	1963	0.512	1004	1535	1.0	1.0	3.754	A
3 - A4095 Bladon Road	835	209	822	1386	0.602	835	766	1.5	1.5	6.520	A
4 - A44 Oxford Road (n)	1043	261	1070	1406	0.742	1042	587	2.7	2.8	9.891	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	538	134	1201	925	0.581	548	533	4.0	1.4	9.793	A
2 - A44 Woodstock Road (s)	820	205	485	2020	0.406	821	1264	1.0	0.7	3.006	A
3 - A4095 Bladon Road	681	170	673	1462	0.466	684	633	1.5	0.9	4.641	A
4 - A44 Oxford Road (n)	851	213	877	1507	0.565	857	481	2.8	1.3	5.587	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	450	113	1002	1009	0.446	453	446	1.4	0.8	6.497	A
2 - A44 Woodstock Road (s)	687	172	402	2068	0.332	687	1053	0.7	0.5	2.608	A
3 - A4095 Bladon Road	571	143	563	1518	0.376	572	526	0.9	0.6	3.806	A
4 - A44 Oxford Road (n)	713	178	733	1583	0.450	715	402	1.3	0.8	4.157	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	5.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.85	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	457	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1403	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	650	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	638	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	117	297	43
	2 - A44 Woodstock Road (s)	232	0	527	644
	3 - A4095 Bladon Road	294	302	0	54
	4 - A44 Oxford Road (n)	35	472	131	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.47	6.37	0.9	A	419	629
2 - A44 Woodstock Road (s)	0.73	6.24	2.6	A	1287	1931
3 - A4095 Bladon Road	0.54	5.95	1.2	A	596	895
4 - A44 Oxford Road (n)	0.47	4.53	0.9	A	585	878

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	344	86	679	1212	0.284	342	421	0.0	0.4	4.135	A
2 - A44 Woodstock Road (s)	1056	264	353	2217	0.477	1053	668	0.0	0.9	3.084	A
3 - A4095 Bladon Road	489	122	689	1480	0.331	487	716	0.0	0.5	3.620	A
4 - A44 Oxford Road (n)	480	120	621	1649	0.291	479	556	0.0	0.4	3.073	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	411	103	813	1151	0.357	410	504	0.4	0.6	4.853	A
2 - A44 Woodstock Road (s)	1261	315	423	2176	0.580	1259	800	0.9	1.4	3.918	A
3 - A4095 Bladon Road	584	146	825	1413	0.414	584	857	0.5	0.7	4.335	A
4 - A44 Oxford Road (n)	574	143	743	1585	0.362	573	665	0.4	0.6	3.554	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	503	126	994	1069	0.470	502	616	0.6	0.9	6.328	A
2 - A44 Woodstock Road (s)	1545	386	517	2122	0.728	1540	979	1.4	2.6	6.134	A
3 - A4095 Bladon Road	716	179	1009	1323	0.541	714	1048	0.7	1.2	5.895	A
4 - A44 Oxford Road (n)	702	176	909	1499	0.469	701	813	0.6	0.9	4.499	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	503	126	996	1069	0.471	503	618	0.9	0.9	6.366	A
2 - A44 Woodstock Road (s)	1545	386	519	2121	0.728	1545	981	2.6	2.6	6.241	A
3 - A4095 Bladon Road	716	179	1012	1321	0.542	716	1051	1.2	1.2	5.945	A
4 - A44 Oxford Road (n)	702	176	912	1498	0.469	702	816	0.9	0.9	4.526	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	411	103	816	1150	0.357	412	506	0.9	0.6	4.887	A
2 - A44 Woodstock Road (s)	1261	315	425	2175	0.580	1266	803	2.6	1.4	3.983	A
3 - A4095 Bladon Road	584	146	829	1411	0.414	586	862	1.2	0.7	4.375	A
4 - A44 Oxford Road (n)	574	143	747	1583	0.362	575	669	0.9	0.6	3.573	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	344	86	682	1210	0.284	345	423	0.6	0.4	4.163	A
2 - A44 Woodstock Road (s)	1056	264	355	2215	0.477	1058	672	1.4	0.9	3.117	A
3 - A4095 Bladon Road	489	122	693	1478	0.331	490	720	0.7	0.5	3.650	A
4 - A44 Oxford Road (n)	480	120	624	1647	0.292	481	559	0.6	0.4	3.088	A

2031 Base + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	22.59	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	22.59	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2031 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	649	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	987	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	806	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1104	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	261	338	50
	2 - A44 Woodstock Road (s)	260	0	220	507
	3 - A4095 Bladon Road	328	418	0	60
	4 - A44 Oxford Road (n)	28	879	197	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.97	71.50	13.7	F	596	893
2 - A44 Woodstock Road (s)	0.56	4.25	1.3	A	906	1359
3 - A4095 Bladon Road	0.66	7.86	1.9	A	740	1109
4 - A44 Oxford Road (n)	0.88	20.45	6.6	C	1013	1520

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	489	122	1119	958	0.510	485	462	0.0	1.0	7.538	A
2 - A44 Woodstock Road (s)	743	186	437	2048	0.363	741	1166	0.0	0.6	2.749	A
3 - A4095 Bladon Road	607	152	613	1490	0.407	604	565	0.0	0.7	4.051	A
4 - A44 Oxford Road (n)	831	208	754	1571	0.529	827	463	0.0	1.1	4.809	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	583	146	1339	865	0.675	580	553	1.0	2.0	12.457	B
2 - A44 Woodstock Road (s)	887	222	523	1998	0.444	886	1396	0.6	0.8	3.233	A
3 - A4095 Bladon Road	725	181	733	1429	0.507	723	676	0.7	1.0	5.093	A
4 - A44 Oxford Road (n)	992	248	903	1493	0.665	989	554	1.1	1.9	7.101	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	715	179	1627	743	0.962	682	676	2.0	10.1	45.479	E
2 - A44 Woodstock Road (s)	1087	272	622	1942	0.560	1085	1687	0.8	1.3	4.192	A
3 - A4095 Bladon Road	887	222	896	1347	0.659	884	811	1.0	1.9	7.724	A
4 - A44 Oxford Road (n)	1216	304	1104	1387	0.876	1199	676	1.9	6.1	17.739	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	715	179	1643	736	0.971	700	678	10.1	13.7	71.498	F
2 - A44 Woodstock Road (s)	1087	272	635	1934	0.562	1087	1708	1.3	1.3	4.248	A
3 - A4095 Bladon Road	887	222	898	1345	0.660	887	823	1.9	1.9	7.859	A
4 - A44 Oxford Road (n)	1216	304	1108	1385	0.877	1214	678	6.1	6.6	20.446	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	583	146	1362	855	0.683	629	556	13.7	2.3	18.966	C
2 - A44 Woodstock Road (s)	887	222	556	1979	0.448	889	1435	1.3	0.8	3.309	A
3 - A4095 Bladon Road	725	181	739	1426	0.508	728	706	1.9	1.0	5.184	A
4 - A44 Oxford Road (n)	992	248	908	1490	0.666	1011	559	6.6	2.0	7.777	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	489	122	1129	954	0.512	493	465	2.3	1.1	7.896	A
2 - A44 Woodstock Road (s)	743	186	444	2044	0.364	744	1178	0.8	0.6	2.770	A
3 - A4095 Bladon Road	607	152	616	1488	0.408	608	572	1.0	0.7	4.097	A
4 - A44 Oxford Road (n)	831	208	759	1568	0.530	835	465	2.0	1.1	4.932	A

2031 Base + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	7.97	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.97	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2031 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	488	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1552	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	706	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	747	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	141	304	43
	2 - A44 Woodstock Road (s)	270	0	535	747
	3 - A4095 Bladon Road	302	307	0	97
	4 - A44 Oxford Road (n)	35	542	170	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	4	1	5
	2 - A44 Woodstock Road (s)	5	0	1	3
	3 - A4095 Bladon Road	3	3	0	0
	4 - A44 Oxford Road (n)	2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.53	7.59	1.1	A	448	672
2 - A44 Woodstock Road (s)	0.82	9.40	4.4	A	1424	2136
3 - A4095 Bladon Road	0.62	7.66	1.6	A	648	972
4 - A44 Oxford Road (n)	0.56	5.57	1.3	A	685	1028

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	367	92	764	1172	0.313	366	455	0.0	0.5	4.453	A
2 - A44 Woodstock Road (s)	1168	292	387	2195	0.532	1164	742	0.0	1.1	3.476	A
3 - A4095 Bladon Road	532	133	795	1430	0.372	529	756	0.0	0.6	3.985	A
4 - A44 Oxford Road (n)	562	141	659	1629	0.345	560	665	0.0	0.5	3.363	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	439	110	915	1104	0.397	438	545	0.5	0.7	5.394	A
2 - A44 Woodstock Road (s)	1395	349	464	2151	0.649	1392	889	1.1	1.8	4.731	A
3 - A4095 Bladon Road	635	159	951	1353	0.469	634	905	0.6	0.9	4.994	A
4 - A44 Oxford Road (n)	672	168	789	1562	0.430	671	796	0.5	0.7	4.036	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	537	134	1119	1013	0.531	535	665	0.7	1.1	7.515	A
2 - A44 Woodstock Road (s)	1709	427	567	2091	0.817	1699	1087	1.8	4.2	8.971	A
3 - A4095 Bladon Road	777	194	1161	1250	0.622	774	1106	0.9	1.6	7.524	A
4 - A44 Oxford Road (n)	822	206	964	1471	0.559	820	971	0.7	1.3	5.521	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	537	134	1122	1011	0.531	537	668	1.1	1.1	7.594	A
2 - A44 Woodstock Road (s)	1709	427	569	2090	0.818	1708	1090	4.2	4.4	9.402	A
3 - A4095 Bladon Road	777	194	1167	1247	0.623	777	1111	1.6	1.6	7.663	A
4 - A44 Oxford Road (n)	822	206	968	1469	0.560	822	976	1.3	1.3	5.571	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	439	110	919	1102	0.398	441	549	1.1	0.7	5.455	A
2 - A44 Woodstock Road (s)	1395	349	467	2149	0.649	1405	893	4.4	1.9	4.902	A
3 - A4095 Bladon Road	635	159	960	1349	0.471	638	912	1.6	0.9	5.081	A
4 - A44 Oxford Road (n)	672	168	794	1559	0.431	674	803	1.3	0.8	4.077	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	367	92	769	1170	0.314	368	458	0.7	0.5	4.493	A
2 - A44 Woodstock Road (s)	1168	292	390	2193	0.533	1171	747	1.9	1.1	3.534	A
3 - A4095 Bladon Road	532	133	800	1428	0.372	533	761	0.9	0.6	4.029	A
4 - A44 Oxford Road (n)	562	141	663	1627	0.346	563	669	0.8	0.5	3.389	A

2031 Base + Com Dev + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	87.46	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	87.46	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2031 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	826	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1038	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	819	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1115	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	380	370	76
	2 - A44 Woodstock Road (s)	311	0	220	507
	3 - A4095 Bladon Road	341	418	0	60
	4 - A44 Oxford Road (n)	39	879	197	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	1.24	343.87	92.6	F	758	1137
2 - A44 Woodstock Road (s)	0.59	4.48	1.4	A	952	1429
3 - A4095 Bladon Road	0.69	8.83	2.2	A	752	1127
4 - A44 Oxford Road (n)	0.91	27.60	8.8	D	1023	1535

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	622	155	1119	955	0.651	615	518	0.0	1.8	10.363	B
2 - A44 Woodstock Road (s)	781	195	479	2022	0.386	779	1254	0.0	0.6	2.889	A
3 - A4095 Bladon Road	617	154	670	1460	0.422	614	588	0.0	0.7	4.239	A
4 - A44 Oxford Road (n)	839	210	802	1544	0.544	835	482	0.0	1.2	5.042	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	743	186	1339	862	0.861	729	620	1.8	5.2	24.853	C
2 - A44 Woodstock Road (s)	933	233	570	1970	0.474	932	1498	0.6	0.9	3.466	A
3 - A4095 Bladon Road	736	184	802	1393	0.528	735	701	0.7	1.1	5.455	A
4 - A44 Oxford Road (n)	1002	251	960	1461	0.686	999	576	1.2	2.1	7.717	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	909	227	1621	743	1.224	736	758	5.2	48.6	146.028	F
2 - A44 Woodstock Road (s)	1143	286	610	1947	0.587	1141	1746	0.9	1.4	4.454	A
3 - A4095 Bladon Road	902	225	967	1310	0.689	898	784	1.1	2.1	8.650	A
4 - A44 Oxford Road (n)	1228	307	1174	1349	0.910	1205	691	2.1	7.9	22.149	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	909	227	1641	734	1.239	734	761	48.6	92.6	343.866	F
2 - A44 Woodstock Road (s)	1143	286	612	1946	0.587	1143	1762	1.4	1.4	4.484	A
3 - A4095 Bladon Road	902	225	968	1309	0.689	902	787	2.1	2.2	8.831	A
4 - A44 Oxford Road (n)	1228	307	1178	1347	0.912	1224	692	7.9	8.8	27.598	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	743	186	1371	849	0.875	840	624	92.6	68.4	340.570	F
2 - A44 Woodstock Road (s)	933	233	635	1932	0.483	935	1575	1.4	0.9	3.618	A
3 - A4095 Bladon Road	736	184	814	1387	0.531	740	756	2.2	1.1	5.607	A
4 - A44 Oxford Road (n)	1002	251	966	1458	0.688	1029	588	8.8	2.3	8.877	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	622	155	1130	951	0.654	887	521	68.4	2.2	121.088	F
2 - A44 Woodstock Road (s)	781	195	628	1937	0.404	783	1388	0.9	0.7	3.121	A
3 - A4095 Bladon Road	617	154	698	1445	0.427	618	712	1.1	0.8	4.360	A
4 - A44 Oxford Road (n)	839	210	807	1541	0.545	844	509	2.3	1.2	5.189	A

2031 Base + Com Dev + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	11.33	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.33	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2031 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	588	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1660	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	734	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	770	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	208	322	58
	2 - A44 Woodstock Road (s)	378	0	535	747
	3 - A4095 Bladon Road	330	307	0	97
	4 - A44 Oxford Road (n)	58	542	170	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	4	1	5
	2 - A44 Woodstock Road (s)	5	0	1	3
	3 - A4095 Bladon Road	3	3	0	0
	4 - A44 Oxford Road (n)	2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.64	9.94	1.8	A	540	809
2 - A44 Woodstock Road (s)	0.88	14.77	7.2	B	1523	2285
3 - A4095 Bladon Road	0.69	9.68	2.1	A	674	1010
4 - A44 Oxford Road (n)	0.61	6.62	1.5	A	707	1060

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	443	111	764	1170	0.378	440	574	0.0	0.6	4.920	A
2 - A44 Woodstock Road (s)	1250	312	412	2177	0.574	1244	792	0.0	1.3	3.838	A
3 - A4095 Bladon Road	553	138	887	1384	0.399	550	770	0.0	0.7	4.290	A
4 - A44 Oxford Road (n)	580	145	761	1577	0.368	577	676	0.0	0.6	3.595	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	529	132	914	1102	0.480	527	687	0.6	0.9	6.250	A
2 - A44 Woodstock Road (s)	1492	373	493	2130	0.700	1488	948	1.3	2.3	5.575	A
3 - A4095 Bladon Road	660	165	1061	1298	0.508	658	921	0.7	1.0	5.615	A
4 - A44 Oxford Road (n)	692	173	910	1499	0.462	691	809	0.6	0.9	4.452	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	647	162	1118	1011	0.640	644	837	0.9	1.7	9.729	A
2 - A44 Woodstock Road (s)	1828	457	603	2067	0.884	1810	1159	2.3	6.8	13.159	B
3 - A4095 Bladon Road	808	202	1290	1185	0.682	804	1123	1.0	2.1	9.342	A
4 - A44 Oxford Road (n)	848	212	1110	1395	0.608	845	984	0.9	1.5	6.516	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	647	162	1122	1009	0.642	647	843	1.7	1.8	9.944	A
2 - A44 Woodstock Road (s)	1828	457	605	2066	0.885	1826	1164	6.8	7.2	14.774	B
3 - A4095 Bladon Road	808	202	1301	1179	0.685	808	1130	2.1	2.1	9.676	A
4 - A44 Oxford Road (n)	848	212	1117	1391	0.609	848	992	1.5	1.5	6.623	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	529	132	920	1099	0.481	532	695	1.8	0.9	6.381	A
2 - A44 Woodstock Road (s)	1492	373	497	2128	0.701	1511	955	7.2	2.4	6.010	A
3 - A4095 Bladon Road	660	165	1077	1290	0.511	664	932	2.1	1.1	5.790	A
4 - A44 Oxford Road (n)	692	173	921	1493	0.464	695	820	1.5	0.9	4.522	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	443	111	769	1167	0.379	444	578	0.9	0.6	4.984	A
2 - A44 Woodstock Road (s)	1250	312	415	2176	0.574	1254	798	2.4	1.4	3.924	A
3 - A4095 Bladon Road	553	138	894	1381	0.400	554	775	1.1	0.7	4.365	A
4 - A44 Oxford Road (n)	580	145	766	1574	0.368	581	681	0.9	0.6	3.628	A

2022 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	7.95	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.95	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2022 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	571	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	870	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	723	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	904	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	208	315	48
	2 - A44 Woodstock Road (s)	231	0	205	434
	3 - A4095 Bladon Road	306	390	0	27
	4 - A44 Oxford Road (n)	27	733	144	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.75	16.72	2.8	C	524	786
2 - A44 Woodstock Road (s)	0.48	3.53	0.9	A	798	1197
3 - A4095 Bladon Road	0.57	5.91	1.3	A	663	995
4 - A44 Oxford Road (n)	0.70	8.24	2.2	A	830	1244

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	430	107	950	1031	0.417	427	423	0.0	0.7	5.931	A
2 - A44 Woodstock Road (s)	655	164	379	2081	0.315	653	997	0.0	0.5	2.518	A
3 - A4095 Bladon Road	544	136	535	1533	0.355	542	497	0.0	0.5	3.627	A
4 - A44 Oxford Road (n)	681	170	695	1602	0.425	678	382	0.0	0.7	3.880	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	513	128	1137	952	0.539	512	506	0.7	1.1	8.142	A
2 - A44 Woodstock Road (s)	782	196	454	2037	0.384	781	1194	0.5	0.6	2.864	A
3 - A4095 Bladon Road	650	162	640	1479	0.439	649	596	0.5	0.8	4.333	A
4 - A44 Oxford Road (n)	813	203	832	1531	0.531	811	457	0.7	1.1	4.992	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	629	157	1390	845	0.744	622	620	1.1	2.7	15.763	C
2 - A44 Woodstock Road (s)	958	239	554	1980	0.484	957	1459	0.6	0.9	3.511	A
3 - A4095 Bladon Road	796	199	784	1406	0.566	794	727	0.8	1.3	5.861	A
4 - A44 Oxford Road (n)	995	249	1018	1433	0.695	991	559	1.1	2.2	8.066	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	629	157	1395	842	0.746	628	621	2.7	2.8	16.723	C
2 - A44 Woodstock Road (s)	958	239	558	1978	0.484	958	1465	0.9	0.9	3.528	A
3 - A4095 Bladon Road	796	199	785	1405	0.566	796	731	1.3	1.3	5.907	A
4 - A44 Oxford Road (n)	995	249	1021	1432	0.695	995	560	2.2	2.2	8.239	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	513	128	1144	949	0.541	520	508	2.8	1.2	8.517	A
2 - A44 Woodstock Road (s)	782	196	461	2034	0.385	783	1204	0.9	0.6	2.881	A
3 - A4095 Bladon Road	650	162	642	1478	0.440	652	602	1.3	0.8	4.370	A
4 - A44 Oxford Road (n)	813	203	836	1529	0.532	817	459	2.2	1.1	5.090	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	430	107	956	1029	0.418	432	425	1.2	0.7	6.049	A
2 - A44 Woodstock Road (s)	655	164	383	2078	0.315	656	1005	0.6	0.5	2.532	A
3 - A4095 Bladon Road	544	136	537	1531	0.355	545	501	0.8	0.6	3.656	A
4 - A44 Oxford Road (n)	681	170	699	1601	0.425	682	384	1.1	0.7	3.926	A

2022 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	5.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.23	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	435	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1334	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	618	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	605	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	111	283	41
	2 - A44 Woodstock Road (s)	221	0	501	612
	3 - A4095 Bladon Road	279	287	0	52
	4 - A44 Oxford Road (n)	33	448	124	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.44	5.88	0.8	A	399	599
2 - A44 Woodstock Road (s)	0.69	5.40	2.2	A	1224	1836
3 - A4095 Bladon Road	0.51	5.41	1.0	A	567	851
4 - A44 Oxford Road (n)	0.44	4.21	0.8	A	555	833

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	327	82	644	1227	0.267	326	400	0.0	0.4	3.989	A
2 - A44 Woodstock Road (s)	1004	251	336	2227	0.451	1001	635	0.0	0.8	2.931	A
3 - A4095 Bladon Road	465	116	656	1496	0.311	463	681	0.0	0.4	3.480	A
4 - A44 Oxford Road (n)	455	114	590	1665	0.274	454	529	0.0	0.4	2.969	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	391	98	771	1170	0.334	391	479	0.4	0.5	4.616	A
2 - A44 Woodstock Road (s)	1199	300	402	2188	0.548	1198	760	0.8	1.2	3.627	A
3 - A4095 Bladon Road	556	139	785	1433	0.388	555	815	0.4	0.6	4.097	A
4 - A44 Oxford Road (n)	544	136	707	1604	0.339	543	633	0.4	0.5	3.391	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	479	120	944	1092	0.439	478	585	0.5	0.8	5.849	A
2 - A44 Woodstock Road (s)	1469	367	492	2136	0.688	1465	930	1.2	2.2	5.332	A
3 - A4095 Bladon Road	680	170	960	1347	0.505	679	997	0.6	1.0	5.379	A
4 - A44 Oxford Road (n)	666	167	864	1522	0.438	665	774	0.5	0.8	4.195	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	479	120	946	1091	0.439	479	587	0.8	0.8	5.877	A
2 - A44 Woodstock Road (s)	1469	367	493	2136	0.688	1469	931	2.2	2.2	5.395	A
3 - A4095 Bladon Road	680	170	962	1345	0.506	680	1000	1.0	1.0	5.412	A
4 - A44 Oxford Road (n)	666	167	866	1521	0.438	666	776	0.8	0.8	4.210	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	391	98	774	1169	0.335	392	481	0.8	0.5	4.641	A
2 - A44 Woodstock Road (s)	1199	300	404	2187	0.548	1203	762	2.2	1.2	3.673	A
3 - A4095 Bladon Road	556	139	788	1431	0.388	557	819	1.0	0.6	4.127	A
4 - A44 Oxford Road (n)	544	136	710	1603	0.339	545	636	0.8	0.5	3.405	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	327	82	648	1226	0.267	328	402	0.5	0.4	4.014	A
2 - A44 Woodstock Road (s)	1004	251	338	2225	0.451	1006	638	1.2	0.8	2.957	A
3 - A4095 Bladon Road	465	116	659	1495	0.311	466	685	0.6	0.5	3.501	A
4 - A44 Oxford Road (n)	455	114	593	1663	0.274	456	532	0.5	0.4	2.983	A

Junctions 10		
ARCADY 10 - Roundabout Module		
Version: 10.0.4.1693		
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Filename: Bladon Roundabout_Mitigation_Upper Campsfield Road.j10

Path: P:\23000's\23570\Junction Assessments

Report generation date: 15/11/2022 11:28:16

-
- »2027 Base, AM
 - »2027 Base, PM
 - »2027 Base + Com Dev, AM
 - »2027 Base + Com Dev, PM
 - »2027 Base + Com Dev + Dev, AM
 - »2027 Base + Com Dev + Dev, PM
 - »2031 Base, AM
 - »2031 Base, PM
 - »2031 Base + Com Dev, AM
 - »2031 Base + Com Dev, PM
 - »2031 Base + Com Dev + Dev, AM
 - »2031 Base + Com Dev + Dev, PM
 - »2022 Base, AM
 - »2022 Base, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2027 Base						
1 - A4095 Upper Campsfield Road	1.0	5.65	0.50	0.4	3.24	0.31
2 - A44 Woodstock Road (s)	1.0	3.63	0.50	2.4	5.77	0.71
3 - A4095 Bladon Road	1.4	6.19	0.58	1.1	5.65	0.52
4 - A44 Oxford Road (n)	2.5	8.93	0.72	0.8	4.35	0.45
2027 Base + Com Dev						
1 - A4095 Upper Campsfield Road	1.4	7.40	0.59	0.5	3.58	0.34
2 - A44 Woodstock Road (s)	1.2	4.11	0.55	3.8	8.37	0.80
3 - A4095 Bladon Road	1.8	7.37	0.64	1.5	7.18	0.60
4 - A44 Oxford Road (n)	5.3	16.82	0.85	1.2	5.31	0.54
2027 Base + Com Dev + Dev						
1 - A4095 Upper Campsfield Road	3.0	12.46	0.76	0.7	4.03	0.42
2 - A44 Woodstock Road (s)	1.4	4.62	0.59	6.0	12.44	0.86
3 - A4095 Bladon Road	2.0	8.41	0.67	1.9	8.96	0.66
4 - A44 Oxford Road (n)	6.9	21.81	0.88	1.4	6.27	0.59
2031 Base						
1 - A4095 Upper Campsfield Road	1.1	5.97	0.52	0.5	3.32	0.32
2 - A44 Woodstock Road (s)	1.0	3.75	0.51	2.6	6.24	0.73
3 - A4095 Bladon Road	1.5	6.52	0.60	1.2	5.95	0.54
4 - A44 Oxford Road (n)	2.8	9.89	0.74	0.9	4.53	0.47
2031 Base + Com Dev						
1 - A4095 Upper Campsfield Road	1.6	7.96	0.61	0.5	3.68	0.35
2 - A44 Woodstock Road (s)	1.3	4.27	0.56	4.4	9.40	0.82
3 - A4095 Bladon Road	1.9	7.87	0.66	1.6	7.66	0.62
4 - A44 Oxford Road (n)	6.6	20.45	0.88	1.3	5.57	0.56
2031 Base + Com Dev + Dev						
1 - A4095 Upper Campsfield Road	3.4	14.03	0.78	0.7	4.16	0.43
2 - A44 Woodstock Road (s)	1.5	4.81	0.60	7.2	14.78	0.88
3 - A4095 Bladon Road	2.2	9.02	0.69	2.1	9.68	0.69
4 - A44 Oxford Road (n)	8.8	27.59	0.91	1.5	6.62	0.61
2022 Base						
1 - A4095 Upper Campsfield Road	0.9	5.39	0.49	0.4	3.17	0.30
2 - A44 Woodstock Road (s)	0.9	3.53	0.48	2.2	5.40	0.69
3 - A4095 Bladon Road	1.3	5.91	0.57	1.0	5.41	0.51
4 - A44 Oxford Road (n)	2.2	8.24	0.70	0.8	4.21	0.44

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

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

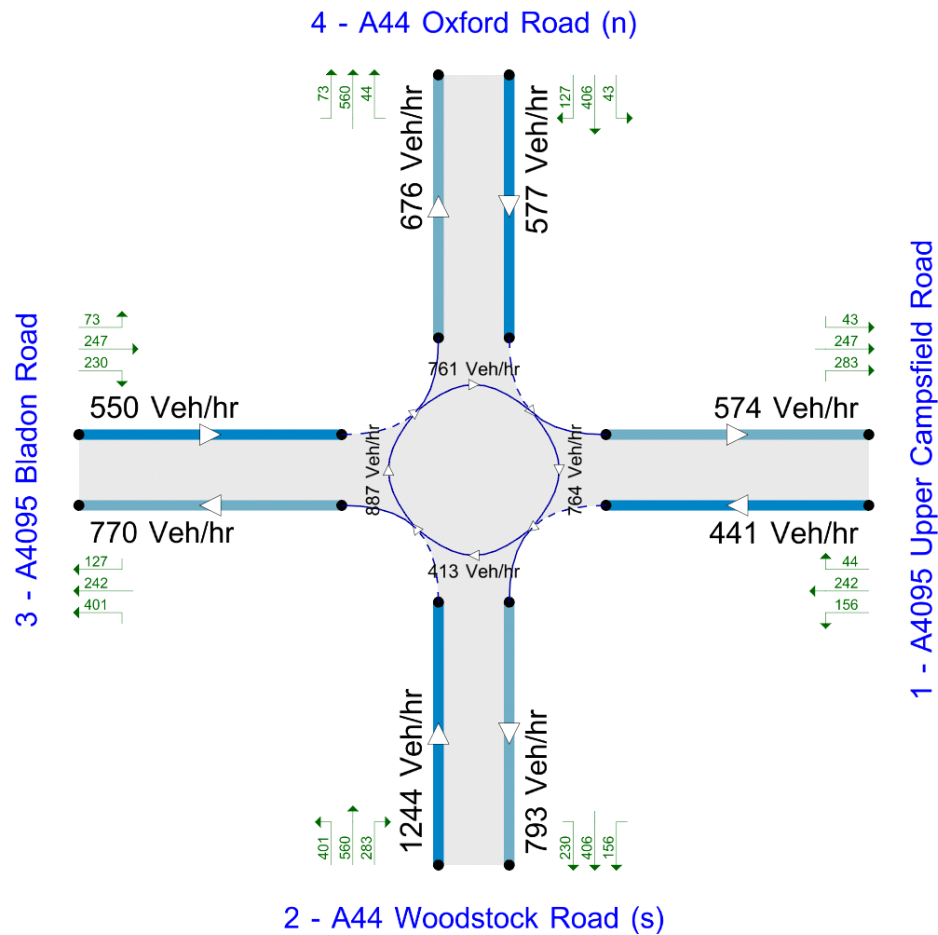
File summary

File Description

Title	Bladon Roundabout - Mitigation Works
Location	Woodstock
Site number	
Date	15/11/2022
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

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



Flows show modelled flow through junction (Veh/hr).
Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.95	50.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2027 Base	AM	ONE HOUR	07:15	08:45	15	✓
D10	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2027 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓
D12	2027 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓
D13	2027 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓
D14	2027 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D17	2031 Base	AM	ONE HOUR	07:15	08:45	15	✓
D18	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D19	2031 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓
D20	2031 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓
D21	2031 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓
D22	2031 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D23	2022 Base	AM	ONE HOUR	07:15	08:45	15	✓
D24	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2027 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	6.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.15	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A4095 Upper Campsfield Road		
2	A44 Woodstock Road (s)		
3	A4095 Bladon Road		
4	A44 Oxford Road (n)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A4095 Upper Campsfield Road	3.50	8.10	80.0	20.0	80.0	38.0		
2 - A44 Woodstock Road (s)	7.30	8.50	12.0	30.0	82.0	35.2		
3 - A4095 Bladon Road	3.50	7.30	34.0	21.5	82.0	37.0		
4 - A44 Oxford Road (n)	3.50	7.65	42.6	30.0	82.0	29.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4095 Upper Campsfield Road	0.536	2176
2 - A44 Woodstock Road (s)	0.581	2483
3 - A4095 Bladon Road	0.488	1869
4 - A44 Oxford Road (n)	0.524	2059

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2027 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	584	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	890	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	740	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	924	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	213	322	49
	2 - A44 Woodstock Road (s)	236	0	210	444
	3 - A4095 Bladon Road	313	399	0	28
	4 - A44 Oxford Road (n)	27	750	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.50	5.65	1.0	A	536	804
2 - A44 Woodstock Road (s)	0.50	3.63	1.0	A	817	1225
3 - A4095 Bladon Road	0.58	6.19	1.4	A	679	1019
4 - A44 Oxford Road (n)	0.72	8.93	2.5	A	848	1272

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	440	110	971	1514	0.290	438	432	0.0	0.4	3.342	A
2 - A44 Woodstock Road (s)	670	168	388	2075	0.323	668	1021	0.0	0.5	2.555	A
3 - A4095 Bladon Road	557	139	547	1526	0.365	555	509	0.0	0.6	3.698	A
4 - A44 Oxford Road (n)	696	174	711	1594	0.436	693	391	0.0	0.8	3.979	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	525	131	1163	1415	0.371	524	517	0.4	0.6	4.036	A
2 - A44 Woodstock Road (s)	800	200	465	2031	0.394	799	1222	0.5	0.6	2.920	A
3 - A4095 Bladon Road	665	166	655	1472	0.452	664	610	0.6	0.8	4.453	A
4 - A44 Oxford Road (n)	831	208	851	1521	0.546	829	468	0.8	1.2	5.191	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	643	161	1421	1283	0.501	641	633	0.6	1.0	5.599	A
2 - A44 Woodstock Road (s)	980	245	568	1972	0.497	979	1494	0.6	1.0	3.620	A
3 - A4095 Bladon Road	815	204	801	1397	0.583	813	746	0.8	1.4	6.137	A
4 - A44 Oxford Road (n)	1017	254	1041	1421	0.716	1012	573	1.2	2.4	8.705	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	643	161	1427	1280	0.503	643	634	1.0	1.0	5.654	A
2 - A44 Woodstock Road (s)	980	245	570	1971	0.497	980	1499	1.0	1.0	3.632	A
3 - A4095 Bladon Road	815	204	803	1396	0.584	815	748	1.4	1.4	6.189	A
4 - A44 Oxford Road (n)	1017	254	1044	1420	0.717	1017	574	2.4	2.5	8.933	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	525	131	1171	1411	0.372	527	519	1.0	0.6	4.077	A
2 - A44 Woodstock Road (s)	800	200	468	2030	0.394	801	1230	1.0	0.7	2.933	A
3 - A4095 Bladon Road	665	166	657	1471	0.452	667	612	1.4	0.8	4.495	A
4 - A44 Oxford Road (n)	831	208	855	1519	0.547	836	469	2.5	1.2	5.309	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	440	110	978	1510	0.291	440	434	0.6	0.4	3.368	A
2 - A44 Woodstock Road (s)	670	168	391	2074	0.323	671	1028	0.7	0.5	2.566	A
3 - A4095 Bladon Road	557	139	549	1525	0.365	558	512	0.8	0.6	3.725	A
4 - A44 Oxford Road (n)	696	174	715	1592	0.437	697	393	1.2	0.8	4.032	A

2027 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	5.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	446	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1367	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	633	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	620	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	114	290	42
	2 - A44 Woodstock Road (s)	226	0	513	628
	3 - A4095 Bladon Road	286	294	0	53
	4 - A44 Oxford Road (n)	34	459	127	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.31	3.24	0.4	A	409	614
2 - A44 Woodstock Road (s)	0.71	5.77	2.4	A	1254	1882
3 - A4095 Bladon Road	0.52	5.65	1.1	A	581	871
4 - A44 Oxford Road (n)	0.45	4.35	0.8	A	569	853

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	336	84	660	1770	0.190	335	410	0.0	0.2	2.508	A
2 - A44 Woodstock Road (s)	1029	257	345	2222	0.463	1026	650	0.0	0.9	3.002	A
3 - A4095 Bladon Road	477	119	672	1488	0.320	475	698	0.0	0.5	3.547	A
4 - A44 Oxford Road (n)	467	117	605	1657	0.282	465	542	0.0	0.4	3.016	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	401	100	790	1699	0.236	401	490	0.2	0.3	2.773	A
2 - A44 Woodstock Road (s)	1229	307	412	2182	0.563	1227	779	0.9	1.3	3.762	A
3 - A4095 Bladon Road	569	142	804	1423	0.400	568	835	0.5	0.7	4.208	A
4 - A44 Oxford Road (n)	557	139	724	1595	0.349	557	649	0.4	0.5	3.464	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	491	123	967	1602	0.307	491	600	0.3	0.4	3.237	A
2 - A44 Woodstock Road (s)	1505	376	505	2129	0.707	1501	953	1.3	2.4	5.690	A
3 - A4095 Bladon Road	697	174	984	1335	0.522	695	1022	0.7	1.1	5.613	A
4 - A44 Oxford Road (n)	683	171	885	1511	0.452	682	794	0.5	0.8	4.331	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	491	123	969	1601	0.307	491	601	0.4	0.4	3.242	A
2 - A44 Woodstock Road (s)	1505	376	505	2129	0.707	1505	955	2.4	2.4	5.770	A
3 - A4095 Bladon Road	697	174	986	1334	0.523	697	1024	1.1	1.1	5.654	A
4 - A44 Oxford Road (n)	683	171	887	1510	0.452	683	796	0.8	0.8	4.349	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	401	100	793	1697	0.236	401	492	0.4	0.3	2.781	A
2 - A44 Woodstock Road (s)	1229	307	413	2182	0.563	1233	781	2.4	1.3	3.814	A
3 - A4095 Bladon Road	569	142	808	1421	0.400	571	838	1.1	0.7	4.240	A
4 - A44 Oxford Road (n)	557	139	727	1594	0.350	558	652	0.8	0.5	3.483	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	336	84	663	1768	0.190	336	412	0.3	0.2	2.514	A
2 - A44 Woodstock Road (s)	1029	257	346	2221	0.463	1031	654	1.3	0.9	3.029	A
3 - A4095 Bladon Road	477	119	676	1486	0.321	477	701	0.7	0.5	3.572	A
4 - A44 Oxford Road (n)	467	117	608	1656	0.282	467	545	0.5	0.4	3.032	A

2027 Base + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	9.36	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.36	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2027 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	634	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	965	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	787	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1080	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	255	330	49
	2 - A44 Woodstock Road (s)	254	0	215	496
	3 - A4095 Bladon Road	320	408	0	59
	4 - A44 Oxford Road (n)	27	860	193	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.59	7.40	1.4	A	582	873
2 - A44 Woodstock Road (s)	0.55	4.11	1.2	A	886	1328
3 - A4095 Bladon Road	0.64	7.37	1.8	A	722	1083
4 - A44 Oxford Road (n)	0.85	16.82	5.3	C	991	1487

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	477	119	1094	1449	0.330	475	451	0.0	0.5	3.691	A
2 - A44 Woodstock Road (s)	727	182	429	2053	0.354	724	1141	0.0	0.5	2.705	A
3 - A4095 Bladon Road	592	148	600	1497	0.396	590	553	0.0	0.7	3.959	A
4 - A44 Oxford Road (n)	813	203	736	1580	0.515	809	453	0.0	1.0	4.642	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	570	142	1310	1338	0.426	569	539	0.5	0.7	4.677	A
2 - A44 Woodstock Road (s)	868	217	513	2004	0.433	867	1366	0.5	0.8	3.163	A
3 - A4095 Bladon Road	707	177	718	1437	0.492	706	662	0.7	1.0	4.919	A
4 - A44 Oxford Road (n)	971	243	881	1504	0.645	968	542	1.0	1.8	6.676	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	698	175	1594	1191	0.586	695	660	0.7	1.4	7.221	A
2 - A44 Woodstock Road (s)	1062	266	626	1939	0.548	1061	1664	0.8	1.2	4.089	A
3 - A4095 Bladon Road	866	217	878	1355	0.639	863	808	1.0	1.7	7.271	A
4 - A44 Oxford Road (n)	1189	297	1078	1401	0.849	1176	664	1.8	5.0	15.195	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	698	175	1607	1185	0.589	698	662	1.4	1.4	7.395	A
2 - A44 Woodstock Road (s)	1062	266	630	1937	0.548	1062	1676	1.2	1.2	4.115	A
3 - A4095 Bladon Road	866	217	880	1355	0.640	866	812	1.7	1.8	7.372	A
4 - A44 Oxford Road (n)	1189	297	1081	1399	0.850	1188	665	5.0	5.3	16.816	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	570	142	1329	1328	0.429	573	542	1.4	0.8	4.783	A
2 - A44 Woodstock Road (s)	868	217	518	2001	0.433	869	1383	1.2	0.8	3.184	A
3 - A4095 Bladon Road	707	177	720	1436	0.493	711	668	1.8	1.0	4.987	A
4 - A44 Oxford Road (n)	971	243	886	1502	0.647	985	544	5.3	1.9	7.145	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	477	119	1104	1444	0.331	478	453	0.8	0.5	3.732	A
2 - A44 Woodstock Road (s)	727	182	432	2051	0.354	727	1150	0.8	0.6	2.721	A
3 - A4095 Bladon Road	592	148	602	1495	0.396	594	557	1.0	0.7	3.999	A
4 - A44 Oxford Road (n)	813	203	741	1578	0.515	816	455	1.9	1.1	4.746	A

2027 Base + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	6.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.80	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2027 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	476	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1516	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	689	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	138	296	42
	2 - A44 Woodstock Road (s)	264	0	521	731
	3 - A4095 Bladon Road	294	299	0	96
	4 - A44 Oxford Road (n)	34	530	166	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	4	1	5
	2 - A44 Woodstock Road (s)	5	0	1	3
	3 - A4095 Bladon Road	3	3	0	0
	4 - A44 Oxford Road (n)	2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.34	3.58	0.5	A	437	655
2 - A44 Woodstock Road (s)	0.80	8.37	3.8	A	1391	2087
3 - A4095 Bladon Road	0.60	7.18	1.5	A	632	948
4 - A44 Oxford Road (n)	0.54	5.31	1.2	A	670	1005

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	358	90	746	1721	0.208	357	444	0.0	0.3	2.638	A
2 - A44 Woodstock Road (s)	1141	285	378	2200	0.519	1137	725	0.0	1.1	3.372	A
3 - A4095 Bladon Road	519	130	778	1439	0.361	516	737	0.0	0.6	3.895	A
4 - A44 Oxford Road (n)	550	137	643	1638	0.336	548	652	0.0	0.5	3.297	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	428	107	893	1641	0.261	428	531	0.3	0.4	2.967	A
2 - A44 Woodstock Road (s)	1363	341	453	2157	0.632	1360	868	1.1	1.7	4.503	A
3 - A4095 Bladon Road	619	155	931	1363	0.454	618	882	0.6	0.8	4.825	A
4 - A44 Oxford Road (n)	656	164	769	1572	0.418	655	780	0.5	0.7	3.925	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	524	131	1093	1532	0.342	523	649	0.4	0.5	3.567	A
2 - A44 Woodstock Road (s)	1669	417	554	2099	0.795	1661	1062	1.7	3.7	8.079	A
3 - A4095 Bladon Road	759	190	1136	1262	0.601	756	1079	0.8	1.5	7.079	A
4 - A44 Oxford Road (n)	804	201	940	1483	0.542	802	952	0.7	1.2	5.273	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	524	131	1095	1531	0.342	524	652	0.5	0.5	3.575	A
2 - A44 Woodstock Road (s)	1669	417	555	2098	0.796	1669	1065	3.7	3.8	8.368	A
3 - A4095 Bladon Road	759	190	1142	1259	0.602	759	1082	1.5	1.5	7.185	A
4 - A44 Oxford Road (n)	804	201	943	1481	0.543	804	957	1.2	1.2	5.314	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	428	107	897	1639	0.261	429	535	0.5	0.4	2.975	A
2 - A44 Woodstock Road (s)	1363	341	454	2156	0.632	1371	872	3.8	1.7	4.630	A
3 - A4095 Bladon Road	619	155	938	1360	0.456	622	887	1.5	0.8	4.896	A
4 - A44 Oxford Road (n)	656	164	774	1569	0.418	658	786	1.2	0.7	3.958	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	358	90	750	1719	0.208	359	447	0.4	0.3	2.648	A
2 - A44 Woodstock Road (s)	1141	285	380	2199	0.519	1144	729	1.7	1.1	3.421	A
3 - A4095 Bladon Road	519	130	782	1436	0.361	520	741	0.8	0.6	3.934	A
4 - A44 Oxford Road (n)	550	137	647	1636	0.336	550	656	0.7	0.5	3.319	A

2027 Base + Com Dev + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	12.13	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.13	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	812	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1017	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	801	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1091	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	375	362	75
	2 - A44 Woodstock Road (s)	306	0	215	496
	3 - A4095 Bladon Road	334	408	0	59
	4 - A44 Oxford Road (n)	38	860	193	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.76	12.46	3.0	B	745	1118
2 - A44 Woodstock Road (s)	0.59	4.62	1.4	A	933	1400
3 - A4095 Bladon Road	0.67	8.41	2.0	A	735	1103
4 - A44 Oxford Road (n)	0.88	21.81	6.9	C	1001	1502

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	611	153	1094	1444	0.423	608	508	0.0	0.7	4.294	A
2 - A44 Woodstock Road (s)	766	191	472	2026	0.378	763	1231	0.0	0.6	2.845	A
3 - A4095 Bladon Road	603	151	658	1466	0.411	600	577	0.0	0.7	4.144	A
4 - A44 Oxford Road (n)	821	205	786	1553	0.529	817	473	0.0	1.1	4.864	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	730	182	1309	1334	0.547	728	608	0.7	1.2	5.927	A
2 - A44 Woodstock Road (s)	914	229	565	1973	0.463	913	1473	0.6	0.9	3.394	A
3 - A4095 Bladon Road	720	180	787	1400	0.514	719	691	0.7	1.0	5.271	A
4 - A44 Oxford Road (n)	981	245	941	1471	0.667	977	566	1.1	2.0	7.240	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	894	224	1590	1190	0.751	887	744	1.2	2.9	11.642	B
2 - A44 Woodstock Road (s)	1120	280	687	1902	0.589	1118	1790	0.9	1.4	4.573	A
3 - A4095 Bladon Road	882	220	963	1311	0.673	878	841	1.0	2.0	8.245	A
4 - A44 Oxford Road (n)	1201	300	1150	1361	0.882	1184	692	2.0	6.4	18.656	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	894	224	1606	1181	0.757	893	746	2.9	3.0	12.456	B
2 - A44 Woodstock Road (s)	1120	280	693	1899	0.590	1120	1807	1.4	1.4	4.619	A
3 - A4095 Bladon Road	882	220	965	1310	0.673	882	847	2.0	2.0	8.406	A
4 - A44 Oxford Road (n)	1201	300	1154	1359	0.884	1199	694	6.4	6.9	21.815	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	730	182	1334	1321	0.553	737	612	3.0	1.3	6.238	A
2 - A44 Woodstock Road (s)	914	229	574	1968	0.465	916	1497	1.4	0.9	3.430	A
3 - A4095 Bladon Road	720	180	791	1399	0.515	724	699	2.0	1.1	5.367	A
4 - A44 Oxford Road (n)	981	245	946	1468	0.668	1000	568	6.9	2.1	7.993	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	611	153	1104	1439	0.425	613	511	1.3	0.7	4.372	A
2 - A44 Woodstock Road (s)	766	191	476	2024	0.378	767	1242	0.9	0.6	2.867	A
3 - A4095 Bladon Road	603	151	661	1465	0.412	605	581	1.1	0.7	4.192	A
4 - A44 Oxford Road (n)	821	205	791	1550	0.530	825	475	2.1	1.1	4.991	A

2027 Base + Com Dev + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	9.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.17	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	576	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1624	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	718	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	753	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	205	314	57
	2 - A44 Woodstock Road (s)	372	0	521	731
	3 - A4095 Bladon Road	323	299	0	96
	4 - A44 Oxford Road (n)	57	530	166	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	4	1	5
	2 - A44 Woodstock Road (s)	5	0	1	3
	3 - A4095 Bladon Road	3	3	0	0
	4 - A44 Oxford Road (n)	2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.42	4.03	0.7	A	529	793
2 - A44 Woodstock Road (s)	0.86	12.44	6.0	B	1490	2235
3 - A4095 Bladon Road	0.66	8.96	1.9	A	659	988
4 - A44 Oxford Road (n)	0.59	6.27	1.4	A	691	1036

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	434	108	746	1717	0.253	432	564	0.0	0.3	2.799	A
2 - A44 Woodstock Road (s)	1223	306	403	2182	0.560	1218	775	0.0	1.3	3.711	A
3 - A4095 Bladon Road	541	135	870	1392	0.388	538	751	0.0	0.6	4.202	A
4 - A44 Oxford Road (n)	567	142	745	1585	0.358	565	663	0.0	0.6	3.521	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	518	129	893	1637	0.316	517	675	0.3	0.5	3.212	A
2 - A44 Woodstock Road (s)	1460	365	482	2137	0.683	1457	928	1.3	2.1	5.266	A
3 - A4095 Bladon Road	645	161	1040	1308	0.493	644	898	0.6	1.0	5.410	A
4 - A44 Oxford Road (n)	677	169	892	1509	0.449	676	793	0.6	0.8	4.318	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	634	159	1092	1529	0.415	633	823	0.5	0.7	4.014	A
2 - A44 Woodstock Road (s)	1788	447	590	2074	0.862	1774	1135	2.1	5.7	11.456	B
3 - A4095 Bladon Road	791	198	1267	1196	0.661	787	1096	1.0	1.9	8.712	A
4 - A44 Oxford Road (n)	829	207	1088	1406	0.590	827	966	0.8	1.4	6.186	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	634	159	1095	1527	0.415	634	828	0.7	0.7	4.031	A
2 - A44 Woodstock Road (s)	1788	447	591	2074	0.862	1787	1138	5.7	6.0	12.441	B
3 - A4095 Bladon Road	791	198	1277	1192	0.663	790	1102	1.9	1.9	8.959	A
4 - A44 Oxford Road (n)	829	207	1094	1403	0.591	829	973	1.4	1.4	6.269	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	518	129	898	1634	0.317	519	681	0.7	0.5	3.229	A
2 - A44 Woodstock Road (s)	1460	365	484	2136	0.684	1475	933	6.0	2.2	5.567	A
3 - A4095 Bladon Road	645	161	1053	1302	0.496	649	906	1.9	1.0	5.548	A
4 - A44 Oxford Road (n)	677	169	900	1504	0.450	679	802	1.4	0.8	4.379	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	434	108	751	1715	0.253	434	568	0.5	0.3	2.811	A
2 - A44 Woodstock Road (s)	1223	306	405	2181	0.560	1226	780	2.2	1.3	3.785	A
3 - A4095 Bladon Road	541	135	876	1389	0.389	542	755	1.0	0.6	4.254	A
4 - A44 Oxford Road (n)	567	142	750	1582	0.358	568	667	0.8	0.6	3.555	A

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	6.60	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.60	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2031 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	598	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	912	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	758	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	947	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	218	330	50
	2 - A44 Woodstock Road (s)	242	0	215	455
	3 - A4095 Bladon Road	321	409	0	28
	4 - A44 Oxford Road (n)	28	768	151	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	10	6	13
2 - A44 Woodstock Road (s)		9	0	9	7
3 - A4095 Bladon Road		5	2	50	9
4 - A44 Oxford Road (n)		10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.52	5.97	1.1	A	549	823
2 - A44 Woodstock Road (s)	0.51	3.75	1.0	A	837	1255
3 - A4095 Bladon Road	0.60	6.52	1.5	A	696	1043
4 - A44 Oxford Road (n)	0.74	9.89	2.8	A	869	1303

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	450	113	995	1502	0.300	449	443	0.0	0.4	3.412	A
2 - A44 Woodstock Road (s)	687	172	398	2070	0.332	685	1046	0.0	0.5	2.596	A
3 - A4095 Bladon Road	571	143	561	1520	0.376	568	522	0.0	0.6	3.775	A
4 - A44 Oxford Road (n)	713	178	729	1585	0.450	710	400	0.0	0.8	4.099	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	538	134	1191	1401	0.384	537	531	0.4	0.6	4.164	A
2 - A44 Woodstock Road (s)	820	205	477	2025	0.405	819	1252	0.5	0.7	2.985	A
3 - A4095 Bladon Road	681	170	671	1463	0.466	680	625	0.6	0.9	4.590	A
4 - A44 Oxford Road (n)	851	213	873	1509	0.564	849	479	0.8	1.3	5.439	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	658	165	1455	1265	0.520	657	649	0.6	1.1	5.899	A
2 - A44 Woodstock Road (s)	1004	251	583	1964	0.511	1003	1529	0.7	1.0	3.742	A
3 - A4095 Bladon Road	835	209	821	1387	0.602	832	764	0.9	1.5	6.460	A
4 - A44 Oxford Road (n)	1043	261	1067	1407	0.741	1037	586	1.3	2.7	9.569	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	658	165	1462	1262	0.522	658	651	1.1	1.1	5.968	A
2 - A44 Woodstock Road (s)	1004	251	585	1962	0.512	1004	1536	1.0	1.0	3.755	A
3 - A4095 Bladon Road	835	209	822	1386	0.602	835	766	1.5	1.5	6.521	A
4 - A44 Oxford Road (n)	1043	261	1070	1406	0.742	1042	587	2.7	2.8	9.891	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	538	134	1201	1396	0.385	539	533	1.1	0.6	4.212	A
2 - A44 Woodstock Road (s)	820	205	479	2023	0.405	821	1261	1.0	0.7	3.001	A
3 - A4095 Bladon Road	681	170	673	1463	0.466	684	628	1.5	0.9	4.637	A
4 - A44 Oxford Road (n)	851	213	877	1507	0.565	857	480	2.8	1.3	5.587	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	450	113	1002	1498	0.301	451	446	0.6	0.4	3.440	A
2 - A44 Woodstock Road (s)	687	172	401	2068	0.332	687	1053	0.7	0.5	2.609	A
3 - A4095 Bladon Road	571	143	563	1518	0.376	572	525	0.9	0.6	3.809	A
4 - A44 Oxford Road (n)	713	178	733	1583	0.450	715	402	1.3	0.8	4.157	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	5.41	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.41	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	457	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1403	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	650	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	638	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	117	297	43
	2 - A44 Woodstock Road (s)	232	0	527	644
	3 - A4095 Bladon Road	294	302	0	54
	4 - A44 Oxford Road (n)	35	472	131	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.32	3.32	0.5	A	419	629
2 - A44 Woodstock Road (s)	0.73	6.24	2.6	A	1287	1931
3 - A4095 Bladon Road	0.54	5.95	1.2	A	596	895
4 - A44 Oxford Road (n)	0.47	4.53	0.9	A	585	878

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	344	86	679	1759	0.196	343	421	0.0	0.2	2.541	A
2 - A44 Woodstock Road (s)	1056	264	354	2216	0.477	1053	668	0.0	0.9	3.085	A
3 - A4095 Bladon Road	489	122	690	1480	0.331	487	717	0.0	0.5	3.620	A
4 - A44 Oxford Road (n)	480	120	621	1649	0.291	479	556	0.0	0.4	3.073	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	411	103	813	1686	0.244	411	504	0.2	0.3	2.821	A
2 - A44 Woodstock Road (s)	1261	315	423	2176	0.580	1259	800	0.9	1.4	3.919	A
3 - A4095 Bladon Road	584	146	825	1413	0.414	584	858	0.5	0.7	4.335	A
4 - A44 Oxford Road (n)	574	143	743	1585	0.362	573	665	0.4	0.6	3.554	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	503	126	994	1587	0.317	503	616	0.3	0.5	3.317	A
2 - A44 Woodstock Road (s)	1545	386	518	2121	0.728	1540	979	1.4	2.6	6.137	A
3 - A4095 Bladon Road	716	179	1009	1323	0.541	714	1049	0.7	1.2	5.896	A
4 - A44 Oxford Road (n)	702	176	909	1499	0.469	701	813	0.6	0.9	4.499	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	503	126	996	1586	0.317	503	618	0.5	0.5	3.323	A
2 - A44 Woodstock Road (s)	1545	386	519	2121	0.728	1545	981	2.6	2.6	6.241	A
3 - A4095 Bladon Road	716	179	1012	1321	0.542	716	1051	1.2	1.2	5.945	A
4 - A44 Oxford Road (n)	702	176	912	1498	0.469	702	816	0.9	0.9	4.526	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	411	103	816	1685	0.244	411	506	0.5	0.3	2.830	A
2 - A44 Woodstock Road (s)	1261	315	424	2176	0.580	1266	803	2.6	1.4	3.980	A
3 - A4095 Bladon Road	584	146	829	1411	0.414	586	861	1.2	0.7	4.376	A
4 - A44 Oxford Road (n)	574	143	747	1583	0.362	575	669	0.9	0.6	3.575	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	344	86	682	1757	0.196	344	423	0.3	0.2	2.547	A
2 - A44 Woodstock Road (s)	1056	264	355	2216	0.477	1058	672	1.4	0.9	3.114	A
3 - A4095 Bladon Road	489	122	693	1478	0.331	490	720	0.7	0.5	3.650	A
4 - A44 Oxford Road (n)	480	120	624	1647	0.292	481	559	0.6	0.4	3.090	A

2031 Base + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	10.74	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.74	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2031 Base + Com Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	649	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	987	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	806	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1104	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	261	338	50
	2 - A44 Woodstock Road (s)	260	0	220	507
	3 - A4095 Bladon Road	328	418	0	60
	4 - A44 Oxford Road (n)	28	879	197	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.61	7.96	1.6	A	596	893
2 - A44 Woodstock Road (s)	0.56	4.27	1.3	A	906	1359
3 - A4095 Bladon Road	0.66	7.87	1.9	A	740	1109
4 - A44 Oxford Road (n)	0.88	20.45	6.6	C	1013	1520

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	489	122	1119	1436	0.340	487	462	0.0	0.5	3.784	A
2 - A44 Woodstock Road (s)	743	186	438	2047	0.363	741	1167	0.0	0.6	2.751	A
3 - A4095 Bladon Road	607	152	613	1490	0.407	604	566	0.0	0.7	4.052	A
4 - A44 Oxford Road (n)	831	208	754	1571	0.529	827	463	0.0	1.1	4.809	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	583	146	1339	1323	0.441	582	553	0.5	0.8	4.856	A
2 - A44 Woodstock Road (s)	887	222	525	1998	0.444	886	1397	0.6	0.8	3.236	A
3 - A4095 Bladon Road	725	181	734	1429	0.507	723	677	0.7	1.0	5.094	A
4 - A44 Oxford Road (n)	992	248	903	1493	0.665	989	554	1.1	1.9	7.101	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	715	179	1627	1175	0.608	712	676	0.8	1.5	7.726	A
2 - A44 Woodstock Road (s)	1087	272	639	1931	0.563	1085	1699	0.8	1.3	4.242	A
3 - A4095 Bladon Road	887	222	898	1345	0.660	884	826	1.0	1.9	7.742	A
4 - A44 Oxford Road (n)	1216	304	1104	1387	0.876	1199	678	1.9	6.1	17.739	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	715	179	1643	1166	0.613	714	678	1.5	1.6	7.961	A
2 - A44 Woodstock Road (s)	1087	272	644	1929	0.563	1087	1714	1.3	1.3	4.273	A
3 - A4095 Bladon Road	887	222	899	1345	0.660	887	831	1.9	1.9	7.869	A
4 - A44 Oxford Road (n)	1216	304	1108	1385	0.877	1214	679	6.1	6.6	20.454	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	583	146	1362	1311	0.445	586	556	1.6	0.8	4.991	A
2 - A44 Woodstock Road (s)	887	222	531	1994	0.445	889	1418	1.3	0.8	3.266	A
3 - A4095 Bladon Road	725	181	736	1427	0.508	728	684	1.9	1.0	5.174	A
4 - A44 Oxford Road (n)	992	248	908	1490	0.666	1011	556	6.6	2.0	7.778	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	489	122	1129	1431	0.341	490	465	0.8	0.5	3.832	A
2 - A44 Woodstock Road (s)	743	186	442	2045	0.363	744	1177	0.8	0.6	2.770	A
3 - A4095 Bladon Road	607	152	616	1489	0.408	608	570	1.0	0.7	4.095	A
4 - A44 Oxford Road (n)	831	208	759	1568	0.530	835	465	2.0	1.1	4.932	A

2031 Base + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	7.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.43	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2031 Base + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	488	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1552	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	706	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	747	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	141	304	43
	2 - A44 Woodstock Road (s)	270	0	535	747
	3 - A4095 Bladon Road	302	307	0	97
	4 - A44 Oxford Road (n)	35	542	170	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.35	3.68	0.5	A	448	672
2 - A44 Woodstock Road (s)	0.82	9.40	4.4	A	1424	2136
3 - A4095 Bladon Road	0.62	7.66	1.6	A	648	972
4 - A44 Oxford Road (n)	0.56	5.57	1.3	A	685	1028

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	367	92	764	1711	0.215	366	455	0.0	0.3	2.673	A
2 - A44 Woodstock Road (s)	1168	292	388	2195	0.532	1164	742	0.0	1.1	3.477	A
3 - A4095 Bladon Road	532	133	795	1430	0.372	529	757	0.0	0.6	3.986	A
4 - A44 Oxford Road (n)	562	141	659	1629	0.345	560	665	0.0	0.5	3.363	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	439	110	915	1629	0.269	438	545	0.3	0.4	3.022	A
2 - A44 Woodstock Road (s)	1395	349	464	2150	0.649	1392	889	1.1	1.8	4.732	A
3 - A4095 Bladon Road	635	159	951	1353	0.469	634	906	0.6	0.9	4.994	A
4 - A44 Oxford Road (n)	672	168	789	1562	0.430	671	796	0.5	0.7	4.036	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	537	134	1119	1518	0.354	537	665	0.4	0.5	3.666	A
2 - A44 Woodstock Road (s)	1709	427	568	2090	0.817	1699	1087	1.8	4.2	8.982	A
3 - A4095 Bladon Road	777	194	1161	1250	0.622	774	1107	0.9	1.6	7.525	A
4 - A44 Oxford Road (n)	822	206	964	1471	0.559	820	971	0.7	1.3	5.521	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	537	134	1122	1516	0.354	537	668	0.5	0.5	3.676	A
2 - A44 Woodstock Road (s)	1709	427	569	2090	0.818	1708	1090	4.2	4.4	9.404	A
3 - A4095 Bladon Road	777	194	1167	1247	0.623	777	1111	1.6	1.6	7.663	A
4 - A44 Oxford Road (n)	822	206	968	1469	0.560	822	976	1.3	1.3	5.571	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	439	110	919	1627	0.270	439	549	0.5	0.4	3.032	A
2 - A44 Woodstock Road (s)	1395	349	466	2150	0.649	1405	893	4.4	1.9	4.899	A
3 - A4095 Bladon Road	635	159	959	1349	0.470	638	911	1.6	0.9	5.081	A
4 - A44 Oxford Road (n)	672	168	794	1559	0.431	674	803	1.3	0.8	4.077	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	367	92	769	1709	0.215	368	458	0.4	0.3	2.684	A
2 - A44 Woodstock Road (s)	1168	292	390	2194	0.533	1171	747	1.9	1.1	3.533	A
3 - A4095 Bladon Road	532	133	800	1428	0.372	533	761	0.9	0.6	4.028	A
4 - A44 Oxford Road (n)	562	141	663	1627	0.346	563	669	0.8	0.5	3.386	A

2031 Base + Com Dev + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	14.34	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.34	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2031 Base + Com Dev + Dev	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	826	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1038	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	819	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	1115	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	380	370	76
	2 - A44 Woodstock Road (s)	311	0	220	507
	3 - A4095 Bladon Road	341	418	0	60
	4 - A44 Oxford Road (n)	39	879	197	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	10	6	13
	2 - A44 Woodstock Road (s)	9	0	9	7
	3 - A4095 Bladon Road	5	2	50	9
	4 - A44 Oxford Road (n)	10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.78	14.03	3.4	B	758	1137
2 - A44 Woodstock Road (s)	0.60	4.81	1.5	A	952	1429
3 - A4095 Bladon Road	0.69	9.02	2.2	A	752	1127
4 - A44 Oxford Road (n)	0.91	27.59	8.8	D	1023	1535

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	622	155	1119	1432	0.434	619	518	0.0	0.8	4.414	A
2 - A44 Woodstock Road (s)	781	195	482	2021	0.387	779	1256	0.0	0.6	2.892	A
3 - A4095 Bladon Road	617	154	671	1460	0.422	614	590	0.0	0.7	4.240	A
4 - A44 Oxford Road (n)	839	210	802	1544	0.544	835	482	0.0	1.2	5.042	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	743	186	1339	1319	0.563	741	620	0.8	1.3	6.202	A
2 - A44 Woodstock Road (s)	933	233	576	1966	0.475	932	1503	0.6	0.9	3.478	A
3 - A4095 Bladon Road	736	184	803	1393	0.529	735	706	0.7	1.1	5.463	A
4 - A44 Oxford Road (n)	1002	251	960	1461	0.686	999	577	1.2	2.1	7.717	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	909	227	1621	1174	0.774	902	757	1.3	3.2	12.848	B
2 - A44 Woodstock Road (s)	1143	286	700	1895	0.603	1140	1822	0.9	1.5	4.755	A
3 - A4095 Bladon Road	902	225	982	1302	0.693	897	858	1.1	2.2	8.812	A
4 - A44 Oxford Road (n)	1228	307	1173	1349	0.910	1205	706	2.1	7.9	22.136	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	909	227	1641	1164	0.782	909	761	3.2	3.4	14.027	B
2 - A44 Woodstock Road (s)	1143	286	707	1891	0.604	1143	1843	1.5	1.5	4.811	A
3 - A4095 Bladon Road	902	225	984	1300	0.693	902	865	2.2	2.2	9.019	A
4 - A44 Oxford Road (n)	1228	307	1178	1347	0.912	1224	708	7.9	8.8	27.589	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	743	186	1371	1302	0.570	751	625	3.4	1.3	6.622	A
2 - A44 Woodstock Road (s)	933	233	587	1960	0.476	936	1534	1.5	0.9	3.524	A
3 - A4095 Bladon Road	736	184	806	1391	0.529	741	716	2.2	1.1	5.574	A
4 - A44 Oxford Road (n)	1002	251	967	1458	0.688	1029	580	8.8	2.3	8.879	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	622	155	1130	1426	0.436	624	521	1.3	0.8	4.503	A
2 - A44 Woodstock Road (s)	781	195	486	2018	0.387	783	1268	0.9	0.6	2.917	A
3 - A4095 Bladon Road	617	154	674	1458	0.423	618	594	1.1	0.7	4.294	A
4 - A44 Oxford Road (n)	839	210	807	1541	0.545	844	485	2.3	1.2	5.189	A

2031 Base + Com Dev + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	10.44	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.44	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2031 Base + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	588	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1660	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	734	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	770	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	208	322	58
	2 - A44 Woodstock Road (s)	378	0	535	747
	3 - A4095 Bladon Road	330	307	0	97
	4 - A44 Oxford Road (n)	58	542	170	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	4	1	5
	2 - A44 Woodstock Road (s)	5	0	1	3
	3 - A4095 Bladon Road	3	3	0	0
	4 - A44 Oxford Road (n)	2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.43	4.16	0.7	A	540	809
2 - A44 Woodstock Road (s)	0.88	14.78	7.2	B	1523	2285
3 - A4095 Bladon Road	0.69	9.68	2.1	A	674	1010
4 - A44 Oxford Road (n)	0.61	6.62	1.5	A	707	1060

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	443	111	764	1708	0.259	441	574	0.0	0.3	2.840	A
2 - A44 Woodstock Road (s)	1250	312	413	2177	0.574	1244	793	0.0	1.3	3.839	A
3 - A4095 Bladon Road	553	138	887	1384	0.399	550	770	0.0	0.7	4.290	A
4 - A44 Oxford Road (n)	580	145	761	1577	0.368	577	676	0.0	0.6	3.595	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	529	132	914	1626	0.325	528	687	0.3	0.5	3.278	A
2 - A44 Woodstock Road (s)	1492	373	494	2130	0.701	1488	949	1.3	2.3	5.577	A
3 - A4095 Bladon Road	660	165	1061	1298	0.508	658	921	0.7	1.0	5.615	A
4 - A44 Oxford Road (n)	692	173	910	1499	0.462	691	809	0.6	0.9	4.452	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	647	162	1118	1515	0.427	646	837	0.5	0.7	4.138	A
2 - A44 Woodstock Road (s)	1828	457	604	2066	0.884	1810	1160	2.3	6.8	13.191	B
3 - A4095 Bladon Road	808	202	1290	1185	0.682	804	1124	1.0	2.1	9.344	A
4 - A44 Oxford Road (n)	848	212	1110	1395	0.608	845	984	0.9	1.5	6.516	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	647	162	1122	1513	0.428	647	843	0.7	0.7	4.159	A
2 - A44 Woodstock Road (s)	1828	457	606	2066	0.885	1826	1164	6.8	7.2	14.782	B
3 - A4095 Bladon Road	808	202	1301	1179	0.685	808	1130	2.1	2.1	9.676	A
4 - A44 Oxford Road (n)	848	212	1117	1391	0.609	848	992	1.5	1.5	6.623	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	529	132	920	1622	0.326	530	695	0.7	0.5	3.296	A
2 - A44 Woodstock Road (s)	1492	373	496	2129	0.701	1511	954	7.2	2.4	6.002	A
3 - A4095 Bladon Road	660	165	1077	1290	0.511	664	931	2.1	1.1	5.787	A
4 - A44 Oxford Road (n)	692	173	921	1493	0.464	695	820	1.5	0.9	4.522	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	443	111	769	1705	0.260	443	578	0.5	0.4	2.856	A
2 - A44 Woodstock Road (s)	1250	312	415	2176	0.574	1254	797	2.4	1.4	3.921	A
3 - A4095 Bladon Road	553	138	893	1381	0.400	554	775	1.1	0.7	4.363	A
4 - A44 Oxford Road (n)	580	145	766	1574	0.368	581	681	0.9	0.6	3.631	A

2022 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	5.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.80	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2022 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	571	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	870	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	723	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	904	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	208	315	48
	2 - A44 Woodstock Road (s)	231	0	205	434
	3 - A4095 Bladon Road	306	390	0	27
	4 - A44 Oxford Road (n)	27	733	144	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	10	6	13
2 - A44 Woodstock Road (s)		9	0	9	7
3 - A4095 Bladon Road		5	2	50	9
4 - A44 Oxford Road (n)		10	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.49	5.39	0.9	A	524	786
2 - A44 Woodstock Road (s)	0.48	3.53	0.9	A	798	1197
3 - A4095 Bladon Road	0.57	5.91	1.3	A	663	995
4 - A44 Oxford Road (n)	0.70	8.24	2.2	A	830	1244

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	430	107	950	1525	0.282	428	423	0.0	0.4	3.279	A
2 - A44 Woodstock Road (s)	655	164	380	2080	0.315	653	998	0.0	0.5	2.519	A
3 - A4095 Bladon Road	544	136	535	1532	0.355	542	498	0.0	0.5	3.627	A
4 - A44 Oxford Road (n)	681	170	695	1602	0.425	678	382	0.0	0.7	3.880	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	513	128	1137	1429	0.359	513	506	0.4	0.6	3.928	A
2 - A44 Woodstock Road (s)	782	196	455	2037	0.384	781	1195	0.5	0.6	2.865	A
3 - A4095 Bladon Road	650	162	640	1479	0.439	649	596	0.5	0.8	4.333	A
4 - A44 Oxford Road (n)	813	203	832	1531	0.531	811	457	0.7	1.1	4.992	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	629	157	1390	1299	0.484	627	620	0.6	0.9	5.349	A
2 - A44 Woodstock Road (s)	958	239	557	1979	0.484	957	1460	0.6	0.9	3.517	A
3 - A4095 Bladon Road	796	199	784	1406	0.566	794	729	0.8	1.3	5.863	A
4 - A44 Oxford Road (n)	995	249	1018	1433	0.695	991	560	1.1	2.2	8.066	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	629	157	1395	1296	0.485	629	621	0.9	0.9	5.394	A
2 - A44 Woodstock Road (s)	958	239	558	1978	0.484	958	1465	0.9	0.9	3.529	A
3 - A4095 Bladon Road	796	199	785	1405	0.566	796	731	1.3	1.3	5.907	A
4 - A44 Oxford Road (n)	995	249	1021	1432	0.695	995	560	2.2	2.2	8.239	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	513	128	1144	1425	0.360	515	508	0.9	0.6	3.963	A
2 - A44 Woodstock Road (s)	782	196	457	2036	0.384	783	1202	0.9	0.6	2.876	A
3 - A4095 Bladon Road	650	162	642	1478	0.440	652	599	1.3	0.8	4.367	A
4 - A44 Oxford Road (n)	813	203	836	1529	0.532	817	458	2.2	1.1	5.088	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	430	107	956	1522	0.282	431	425	0.6	0.4	3.302	A
2 - A44 Woodstock Road (s)	655	164	382	2079	0.315	656	1004	0.6	0.5	2.532	A
3 - A4095 Bladon Road	544	136	537	1531	0.355	545	501	0.8	0.6	3.653	A
4 - A44 Oxford Road (n)	681	170	699	1601	0.425	682	384	1.1	0.7	3.926	A

2022 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4095 Upper Campsfield Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4095 Bladon Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A44 Oxford Road (n) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	4.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.83	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road		ONE HOUR	✓	435	100.000
2 - A44 Woodstock Road (s)		ONE HOUR	✓	1334	100.000
3 - A4095 Bladon Road		ONE HOUR	✓	618	100.000
4 - A44 Oxford Road (n)		ONE HOUR	✓	605	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
From	1 - A4095 Upper Campsfield Road	0	111	283	41
	2 - A44 Woodstock Road (s)	221	0	501	612
	3 - A4095 Bladon Road	279	287	0	52
	4 - A44 Oxford Road (n)	33	448	124	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - A4095 Upper Campsfield Road	2 - A44 Woodstock Road (s)	3 - A4095 Bladon Road	4 - A44 Oxford Road (n)
1 - A4095 Upper Campsfield Road		0	4	1	5
2 - A44 Woodstock Road (s)		5	0	1	3
3 - A4095 Bladon Road		3	3	0	0
4 - A44 Oxford Road (n)		2	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A4095 Upper Campsfield Road	0.30	3.17	0.4	A	399	599
2 - A44 Woodstock Road (s)	0.69	5.40	2.2	A	1224	1836
3 - A4095 Bladon Road	0.51	5.41	1.0	A	567	851
4 - A44 Oxford Road (n)	0.44	4.21	0.8	A	555	833

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	327	82	644	1778	0.184	327	400	0.0	0.2	2.479	A
2 - A44 Woodstock Road (s)	1004	251	336	2226	0.451	1001	635	0.0	0.8	2.931	A
3 - A4095 Bladon Road	465	116	656	1496	0.311	463	681	0.0	0.4	3.480	A
4 - A44 Oxford Road (n)	455	114	590	1665	0.274	454	529	0.0	0.4	2.969	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	391	98	771	1709	0.229	391	479	0.2	0.3	2.731	A
2 - A44 Woodstock Road (s)	1199	300	402	2188	0.548	1198	760	0.8	1.2	3.628	A
3 - A4095 Bladon Road	556	139	785	1433	0.388	555	815	0.4	0.6	4.097	A
4 - A44 Oxford Road (n)	544	136	707	1604	0.339	543	633	0.4	0.5	3.391	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	479	120	944	1615	0.297	478	585	0.3	0.4	3.166	A
2 - A44 Woodstock Road (s)	1469	367	493	2136	0.688	1465	930	1.2	2.2	5.334	A
3 - A4095 Bladon Road	680	170	960	1347	0.505	679	998	0.6	1.0	5.379	A
4 - A44 Oxford Road (n)	666	167	864	1522	0.438	665	774	0.5	0.8	4.195	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	479	120	946	1614	0.297	479	587	0.4	0.4	3.171	A
2 - A44 Woodstock Road (s)	1469	367	493	2136	0.688	1469	931	2.2	2.2	5.395	A
3 - A4095 Bladon Road	680	170	962	1345	0.506	680	1000	1.0	1.0	5.412	A
4 - A44 Oxford Road (n)	666	167	866	1521	0.438	666	776	0.8	0.8	4.210	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	391	98	774	1707	0.229	392	481	0.4	0.3	2.738	A
2 - A44 Woodstock Road (s)	1199	300	403	2188	0.548	1203	762	2.2	1.2	3.669	A
3 - A4095 Bladon Road	556	139	788	1431	0.388	557	818	1.0	0.6	4.125	A
4 - A44 Oxford Road (n)	544	136	710	1603	0.339	545	636	0.8	0.5	3.405	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road	327	82	648	1776	0.184	328	402	0.3	0.2	2.485	A
2 - A44 Woodstock Road (s)	1004	251	338	2226	0.451	1006	638	1.2	0.8	2.954	A
3 - A4095 Bladon Road	465	116	659	1495	0.311	466	684	0.6	0.5	3.504	A
4 - A44 Oxford Road (n)	455	114	593	1663	0.274	456	532	0.5	0.4	2.985	A

Appendix C

Junctions 10						
ARCADY 10 - Roundabout Module						
Version: 10.0.4.1693						
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Filename: Proposed Site Access Roundabout RevB.j10

Path: P:\23000's\23570\Junction Assessments

Report generation date: 15/11/2022 11:19:01

»2027 Base + Committed Development + Development, AM

»2027 Base + Committed Development + Development, PM

»2031 Base + Committed Development + Development, AM

»2031 Base + Committed Development + Development, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2027 Base + Committed Development + Development						
1 - A4095 Upper Campsfield Road N	0.8	4.82	0.42	0.8	4.56	0.44
2 - A4095 Upper Campsfield Road S	0.7	3.76	0.41	0.9	4.12	0.48
3 - Site Access	0.2	3.51	0.15	0.1	3.33	0.08
2031 Base + Committed Development + Development						
1 - A4095 Upper Campsfield Road N	1.0	5.27	0.47	0.8	4.65	0.45
2 - A4095 Upper Campsfield Road S	0.8	3.81	0.42	1.0	4.19	0.49
3 - Site Access	0.2	3.54	0.15	0.1	3.36	0.08

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

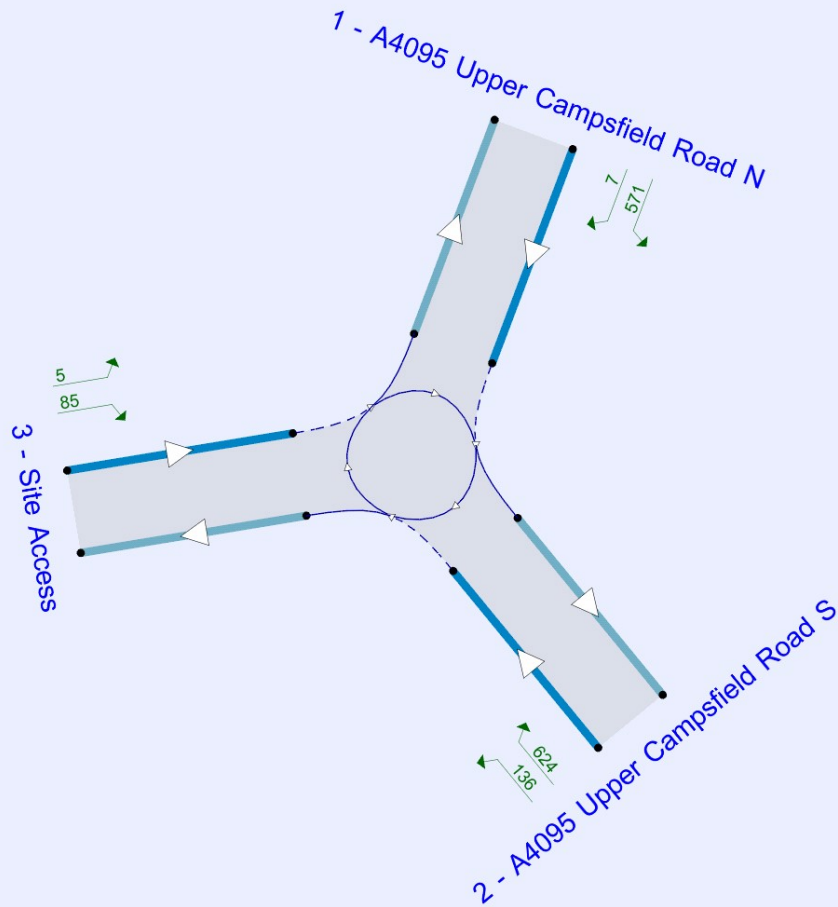
File summary

File Description

Title	Proposed Site Access Roundabout/ A4095
Location	Woodstock
Site number	
Date	15/11/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	23570
Enumerator	DTA\arcady
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 Base + Committed Development + Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2027 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓
D3	2031 Base + Committed Development + Development	AM	ONE HOUR	07:45	09:15	15	✓
D4	2031 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2027 Base + Committed Development + Development, 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	untitled	Standard Roundabout		1, 2, 3	4.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.15	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A4095 Upper Campsfield Road N		
2	A4095 Upper Campsfield Road S		
3	Site Access		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A4095 Upper Campsfield Road N	3.50	7.20	7.8	20.0	45.0	35.0		
2 - A4095 Upper Campsfield Road S	3.50	6.70	21.4	20.0	45.0	28.0		
3 - Site Access	3.40	6.50	16.0	20.0	45.0	35.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4095 Upper Campsfield Road N	0.580	1480
2 - A4095 Upper Campsfield Road S	0.635	1728
3 - Site Access	0.600	1582

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 Base + Committed Development + Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road N		ONE HOUR	✓	531	100.000
2 - A4095 Upper Campsfield Road S		ONE HOUR	✓	644	100.000
3 - Site Access		ONE HOUR	✓	159	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
From	1 - A4095 Upper Campsfield Road N	0	528	3
	2 - A4095 Upper Campsfield Road S	579	0	65
	3 - Site Access	8	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
From	1 - A4095 Upper Campsfield Road N	0	7	0
	2 - A4095 Upper Campsfield Road S	7	0	0
	3 - Site Access	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095 Upper Campsfield Road N	0.42	4.82	0.8	A	487	731
2 - A4095 Upper Campsfield Road S	0.41	3.76	0.7	A	591	886
3 - Site Access	0.15	3.51	0.2	A	146	219

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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	400	100	113	1414	0.283	398	440	0.0	0.4	3.783	A
2 - A4095 Upper Campsfield Road S	485	121	2	1727	0.281	483	509	0.0	0.4	3.071	A
3 - Site Access	120	30	434	1322	0.091	119	51	0.0	0.1	2.994	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	477	119	136	1401	0.341	477	527	0.4	0.5	4.165	A
2 - A4095 Upper Campsfield Road S	579	145	3	1726	0.335	578	610	0.4	0.5	3.329	A
3 - Site Access	143	36	520	1270	0.113	143	61	0.1	0.1	3.192	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	585	146	166	1383	0.423	584	646	0.5	0.8	4.811	A
2 - A4095 Upper Campsfield Road S	709	177	3	1726	0.411	708	747	0.5	0.7	3.753	A
3 - Site Access	175	44	637	1200	0.146	175	75	0.1	0.2	3.510	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	585	146	166	1383	0.423	585	646	0.8	0.8	4.821	A
2 - A4095 Upper Campsfield Road S	709	177	3	1726	0.411	709	748	0.7	0.7	3.759	A
3 - Site Access	175	44	637	1200	0.146	175	75	0.2	0.2	3.512	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	477	119	136	1401	0.341	478	528	0.8	0.6	4.178	A
2 - A4095 Upper Campsfield Road S	579	145	3	1726	0.335	580	611	0.7	0.5	3.337	A
3 - Site Access	143	36	521	1270	0.113	143	61	0.2	0.1	3.198	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	400	100	114	1414	0.283	400	442	0.6	0.4	3.800	A
2 - A4095 Upper Campsfield Road S	485	121	2	1727	0.281	485	512	0.5	0.4	3.081	A
3 - Site Access	120	30	436	1320	0.091	120	51	0.1	0.1	2.998	A

2027 Base + Committed Development + Development, 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	untitled	Standard Roundabout		1, 2, 3	4.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.25	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2027 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road N		ONE HOUR	✓	564	100.000
2 - A4095 Upper Campsfield Road S		ONE HOUR	✓	745	100.000
3 - Site Access		ONE HOUR	✓	90	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
	From			
	1 - A4095 Upper Campsfield Road N	0	557	7
	2 - A4095 Upper Campsfield Road S	609	0	136
	3 - Site Access	5	85	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
	From			
	1 - A4095 Upper Campsfield Road N	0	2	0
	2 - A4095 Upper Campsfield Road S	4	0	0
	3 - Site Access	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095 Upper Campsfield Road N	0.44	4.56	0.8	A	518	776
2 - A4095 Upper Campsfield Road S	0.48	4.12	0.9	A	684	1025
3 - Site Access	0.08	3.33	0.1	A	83	124

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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	425	106	64	1443	0.294	423	461	0.0	0.4	3.593	A
2 - A4095 Upper Campsfield Road S	561	140	5	1725	0.325	559	481	0.0	0.5	3.182	A
3 - Site Access	68	17	457	1308	0.052	68	107	0.0	0.1	2.901	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	507	127	76	1435	0.353	507	551	0.4	0.6	3.951	A
2 - A4095 Upper Campsfield Road S	670	167	6	1724	0.388	669	577	0.5	0.7	3.521	A
3 - Site Access	81	20	547	1254	0.065	81	128	0.1	0.1	3.067	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	621	155	94	1425	0.436	620	675	0.6	0.8	4.554	A
2 - A4095 Upper Campsfield Road S	820	205	8	1723	0.476	819	706	0.7	0.9	4.105	A
3 - Site Access	99	25	670	1181	0.084	99	157	0.1	0.1	3.328	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	621	155	94	1425	0.436	621	676	0.8	0.8	4.563	A
2 - A4095 Upper Campsfield Road S	820	205	8	1723	0.476	820	707	0.9	0.9	4.115	A
3 - Site Access	99	25	671	1180	0.084	99	157	0.1	0.1	3.329	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	507	127	76	1435	0.353	508	553	0.8	0.6	3.962	A
2 - A4095 Upper Campsfield Road S	670	167	6	1724	0.388	671	578	0.9	0.7	3.531	A
3 - Site Access	81	20	548	1253	0.065	81	129	0.1	0.1	3.072	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	425	106	64	1442	0.294	425	463	0.6	0.4	3.612	A
2 - A4095 Upper Campsfield Road S	561	140	5	1725	0.325	562	484	0.7	0.5	3.198	A
3 - Site Access	68	17	459	1307	0.052	68	108	0.1	0.1	2.905	A

2031 Base + Committed Development + Development, 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	untitled	Standard Roundabout		1, 2, 3	4.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.40	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031 Base + Committed Development + Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road N		ONE HOUR	✓	593	100.000
2 - A4095 Upper Campsfield Road S		ONE HOUR	✓	657	100.000
3 - Site Access		ONE HOUR	✓	159	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
	1 - A4095 Upper Campsfield Road N	0	590	3
	2 - A4095 Upper Campsfield Road S	592	0	65
	3 - Site Access	8	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
	1 - A4095 Upper Campsfield Road N	0	7	0
	2 - A4095 Upper Campsfield Road S	7	0	0
	3 - Site Access	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095 Upper Campsfield Road N	0.47	5.27	1.0	A	544	816
2 - A4095 Upper Campsfield Road S	0.42	3.81	0.8	A	603	904
3 - Site Access	0.15	3.54	0.2	A	146	219

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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	446	112	113	1414	0.316	444	450	0.0	0.5	3.964	A
2 - A4095 Upper Campsfield Road S	495	124	2	1727	0.286	493	556	0.0	0.4	3.096	A
3 - Site Access	120	30	444	1316	0.091	119	51	0.0	0.1	3.009	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	533	133	136	1401	0.381	532	539	0.5	0.7	4.431	A
2 - A4095 Upper Campsfield Road S	591	148	3	1726	0.342	590	665	0.4	0.5	3.364	A
3 - Site Access	143	36	532	1263	0.113	143	61	0.1	0.1	3.212	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	653	163	166	1383	0.472	652	660	0.7	0.9	5.254	A
2 - A4095 Upper Campsfield Road S	723	181	3	1726	0.419	723	815	0.5	0.8	3.808	A
3 - Site Access	175	44	651	1192	0.147	175	75	0.1	0.2	3.540	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	653	163	166	1383	0.472	653	661	0.9	1.0	5.271	A
2 - A4095 Upper Campsfield Road S	723	181	3	1726	0.419	723	816	0.8	0.8	3.814	A
3 - Site Access	175	44	652	1191	0.147	175	75	0.2	0.2	3.541	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	533	133	136	1401	0.381	534	540	1.0	0.7	4.450	A
2 - A4095 Upper Campsfield Road S	591	148	3	1726	0.342	591	667	0.8	0.6	3.372	A
3 - Site Access	143	36	533	1262	0.113	143	61	0.2	0.1	3.215	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	446	112	114	1414	0.316	447	452	0.7	0.5	3.986	A
2 - A4095 Upper Campsfield Road S	495	124	2	1727	0.286	495	559	0.6	0.4	3.109	A
3 - Site Access	120	30	446	1315	0.091	120	51	0.1	0.1	3.012	A

2031 Base + Committed Development + Development, 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	untitled	Standard Roundabout		1, 2, 3	4.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.33	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4095 Upper Campsfield Road N		ONE HOUR	✓	578	100.000
2 - A4095 Upper Campsfield Road S		ONE HOUR	✓	760	100.000
3 - Site Access		ONE HOUR	✓	90	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
	From			
	1 - A4095 Upper Campsfield Road N	0	571	7
	2 - A4095 Upper Campsfield Road S	624	0	136
	3 - Site Access	5	85	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A4095 Upper Campsfield Road N	2 - A4095 Upper Campsfield Road S	3 - Site Access
	From			
	1 - A4095 Upper Campsfield Road N	0	2	0
	2 - A4095 Upper Campsfield Road S	4	0	0
	3 - Site Access	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A4095 Upper Campsfield Road N	0.45	4.65	0.8	A	530	796
2 - A4095 Upper Campsfield Road S	0.49	4.19	1.0	A	697	1046
3 - Site Access	0.08	3.36	0.1	A	83	124

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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	435	109	64	1443	0.302	433	472	0.0	0.4	3.631	A
2 - A4095 Upper Campsfield Road S	572	143	5	1725	0.332	570	492	0.0	0.5	3.214	A
3 - Site Access	68	17	468	1301	0.052	68	107	0.0	0.1	2.917	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	520	130	76	1435	0.362	519	565	0.4	0.6	4.003	A
2 - A4095 Upper Campsfield Road S	683	171	6	1724	0.396	683	589	0.5	0.7	3.567	A
3 - Site Access	81	20	560	1246	0.065	81	128	0.1	0.1	3.089	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	636	159	94	1425	0.446	635	692	0.6	0.8	4.641	A
2 - A4095 Upper Campsfield Road S	837	209	8	1723	0.486	836	721	0.7	1.0	4.182	A
3 - Site Access	99	25	686	1171	0.085	99	157	0.1	0.1	3.358	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	636	159	94	1425	0.446	636	693	0.8	0.8	4.652	A
2 - A4095 Upper Campsfield Road S	837	209	8	1723	0.486	837	722	1.0	1.0	4.192	A
3 - Site Access	99	25	687	1170	0.085	99	157	0.1	0.1	3.360	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	520	130	76	1435	0.362	521	566	0.8	0.6	4.018	A
2 - A4095 Upper Campsfield Road S	683	171	6	1724	0.396	684	591	1.0	0.7	3.578	A
3 - Site Access	81	20	562	1245	0.065	81	129	0.1	0.1	3.091	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 side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4095 Upper Campsfield Road N	435	109	64	1442	0.302	436	474	0.6	0.4	3.647	A
2 - A4095 Upper Campsfield Road S	572	143	5	1725	0.332	573	494	0.7	0.5	3.227	A
3 - Site Access	68	17	470	1300	0.052	68	108	0.1	0.1	2.923	A



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