

**PROPOSED RESIDENTIAL DEVELOPMENT ON  
LAND AT SOUTH NEWINGTON ROAD, BLOXHAM**

**TRANSPORT ASSESSMENT**

**Client: Gladman Developments Ltd**

**March 2019**

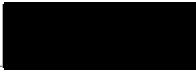
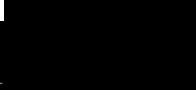
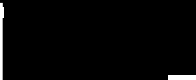


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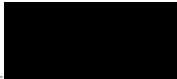
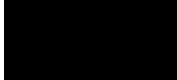
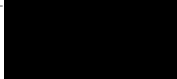
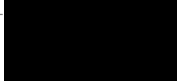
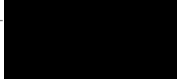
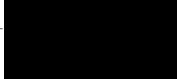
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## **1.0 INTRODUCTION**

A planning application is being submitted for a residential development on land west of South Newington Road, Bloxham. The application is outline with all matters reserved except access. This Transport Assessment has been prepared to assess the transport impact of the development proposals to demonstrate that there are no material issues which would prevent the application going forward.

The Assessment is set out as follows:

- 1.0 INTRODUCTION
- 2.0 SITE DESCRIPTION  
Describes the site and the surrounding infrastructure.
- 3.0 PROPOSED DEVELOPMENT  
Introduces the development proposals.
- 4.0 TRANSPORT POLICY  
Sets out relevant material and local transport policy.
- 5.0 SUSTAINABILITY  
Describes the options for travelling by the more sustainable modes of transport.
- 6.0 TRAFFIC IMPACT  
Analyses the various traffic impacts of the proposals including access, capacity assessment and road safety.
- 7.0 CONCLUSIONS

A Framework Travel Plan accompanies this application and is complementary to this Assessment.

## **2.0 THE SITE**

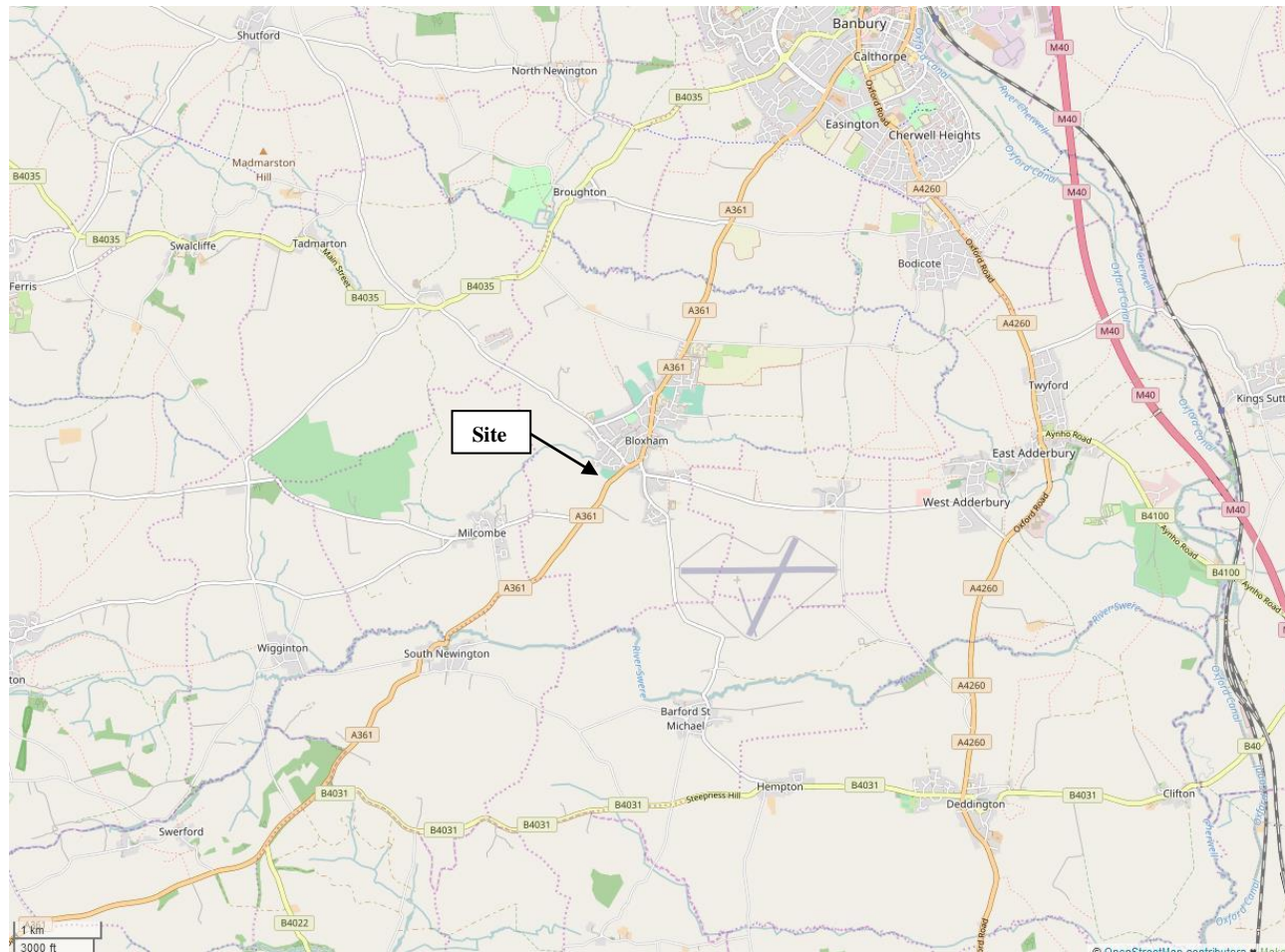
The site is situated on land west of South Newington Road, Bloxham. Location plans are shown overleaf. The site is currently open land with a length of frontage along South Newington Road. Immediately adjacent to the site is the South Newington Road recreation ground and beyond that is existing residential property accessed via Colesbourne Road.

South Newington Road itself is the A361. Past the site it is a single carriageway of good width and alignment. At the southern end of the site frontage it is subject only to the national speed limit of 60 miles per hour but this changes to 30 miles per hour just before the properties at the northern end of the site. There is no pedestrian footway past the site but a short distance to the north is the access to the recreation ground and a pedestrian footway runs from this point into the village.

To the north, South Newington Road travels a short distance into the village before it meets a roundabout at the junction with Barford Road. The A361 then becomes Church Street and then the High Street as it runs through the heart of the village. On leaving the village it continues on up to Banbury which is located a relatively short distance to the north.

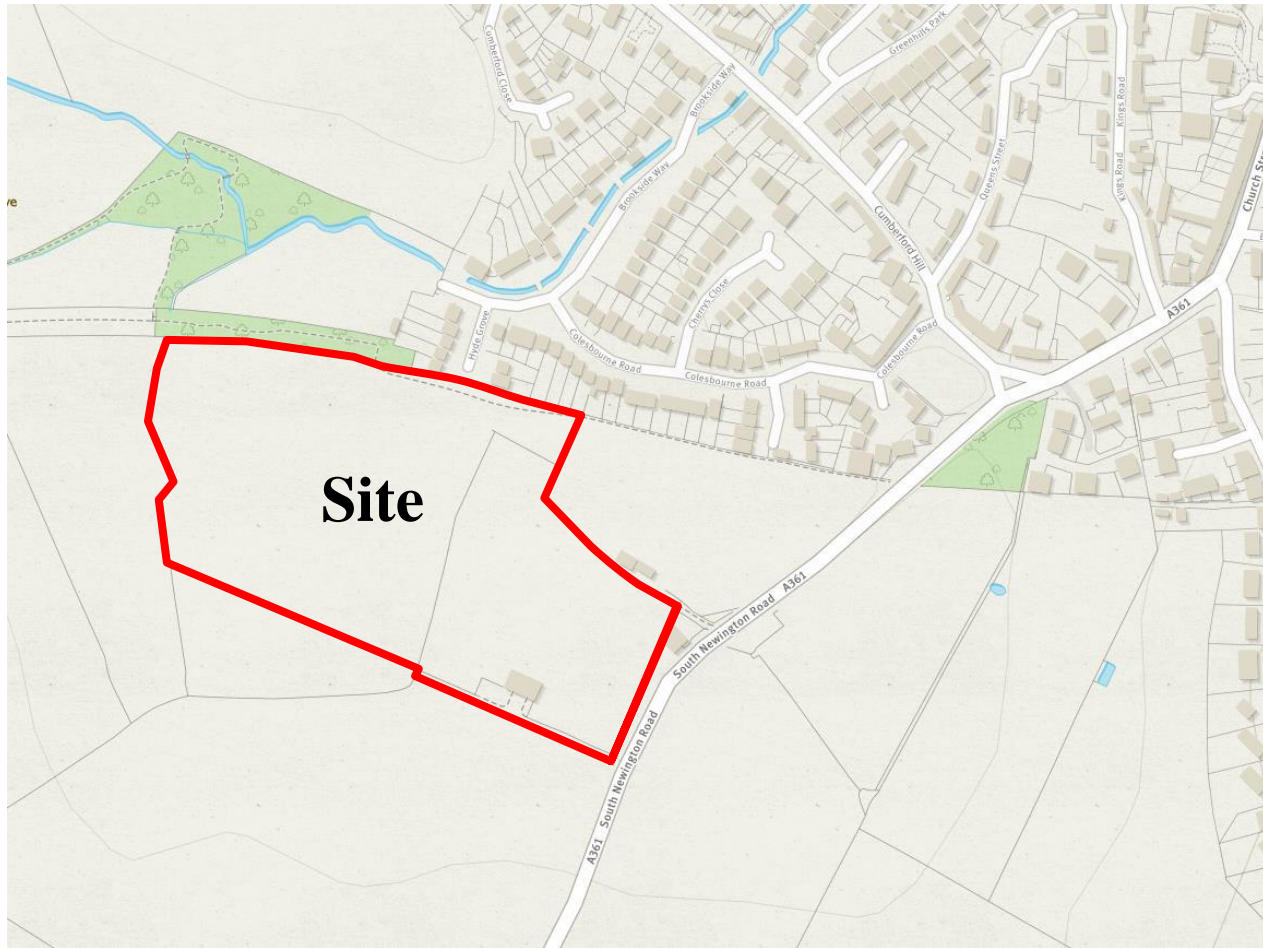
To the south, the A361 runs through the village of South Newington and then carries on to Chipping Norton which is approximately fourteen kilometres away from the site.


Bloxham itself is a large village with a parish population of approximately three and a half thousand residents. It has a good range of facilities for its size (this is discussed further later in this report) and is home to the Bloxham independent school. It is served by a regular bus service between Banbury and Chipping Norton.



<p>Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ</p>	<p>Drawing <b>Location Plan</b></p>			<p>Figure No <b>1a</b></p>
	<p>Project <b>South Newington Road, Bloxham</b></p>	<p>Drawn <b>HC</b></p>	<p>Checked <b>NW</b></p>	
	<p>Client <b>Gladman Developments Limited</b></p>	<p>Scale <b>NTS</b></p>	<p>Date <b>Jan 2019</b></p>	





 Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ	Drawing <b>Location Plan</b>	Figure No 1b	
	Project <b>South Newington Road, Bloxham</b>	Drawn <b>HC</b>	Checked <b>NW</b>
	Client <b>Gladman Developments Limited</b>	Scale <b>NTS</b>	Date <b>Jan 2019</b>



### **3.0 THE PROPOSED DEVELOPMENT**

The application is outline but a draft Development Framework accompanies the application and this confirms the development as up to 95 dwellings. The main points are as follows:

- i) Up to 95 dwelling units.
- ii) New vehicle access on to South Newington Road (this is discussed in detail later in this report).
- iii) Appropriate landscaping.
- iv) Large area of public open space.
- v) New pedestrian footway along South Newington Road.
- vi) Traffic calming along South Newington Road.
- vii) Potential pedestrian links to the existing public footpath that runs along the northern boundary of the recreation ground and continues through the proposed area / public open space.

The detail of the internal road and footpath layout, together with other transport issues such as parking, can be discussed and evolve when the reserved matters application comes forward.

## **4.0 TRANSPORT POLICY**

### **4.1 National Transport Policy**

#### **Creating Growth, Cutting Carbon, Making Sustainable Transport Happen: The Local Transport White Paper 2011**

In January 2011, the Government set out its policy direction for local transport in the Local Transport White Paper. The White Paper provides detail on the Government's approach to shorter local journeys (i.e. trips of five miles or less) with the intention of supporting its principal wider goals of promoting economic growth and reducing carbon. A lot of weight is given to immediate gains from local interventions, especially when it comes to job creation.

The White Paper establishes that creating economic growth and tackling climate change by reducing CO<sub>2</sub> emissions are the primary objectives at the national level for transport. The White Paper argues that by offering sustainable travel options, local authorities can change people's travel behaviour to favour sustainable modes. Deciding which sustainable travel options are most appropriate is best achieved locally, in partnership with local residents, businesses and delivery agencies.

#### **National Planning Policy Framework**

The Government has published a National Planning Policy Framework (recently updated) that sets out its policies for different aspects of land use planning in England. This helps local planning authorities to take a consistent approach to land use and transportation development. Development plans at the local level need to be consistent with these.

The Framework states that, where practical, encouragement should be given to transport solutions in facilitating development which support reductions in greenhouse gas emissions and reduce congestion. The planning system should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

## **4.2 Local Transport Plan**

Under the Transport Act of 2000 (amended by the Local Transport Act 2008), every local transport authority in the country has to publish a Local Transport Plan (LTP). The LTP should set out the authority's transport policies and its proposals for the implementation of those policies.

The Oxfordshire County Council Local Transport Plan 4 (LTP4) came into force in September 2015 and covers the period 2015 to 2031. There are 10 objectives identified in the Council's LTP3 that are aligned with these wider authority priorities and they are:

- Maintain and improve transport connections to support economic growth and vitality across the county
- Make most effective use of all available transport capacity through innovative management of the network
- Increase journey time reliability and minimise end-to-end public transport journey times on main routes
- Develop a high-quality, innovative and resilient integrated transport system that is attractive to customers and generates inward investment
- Minimise the need to travel
- Reduce the proportion of journeys made by private car by making the use of public transport, walking and cycling more attractive
- Influence the location and layout of development to maximise the use and value of existing and planned sustainable transport investment
- Reduce per capita carbon emissions from transport in Oxfordshire in line with UK Government targets
- Mitigate and wherever possible enhance the impacts of transport on the local built, historic and natural environment
- Improve public health and wellbeing by increasing levels of walking and cycling, reducing transport emissions, reducing casualties and enabling inclusive access to jobs, education, training and services

## **5.0 SUSTAINABILITY**

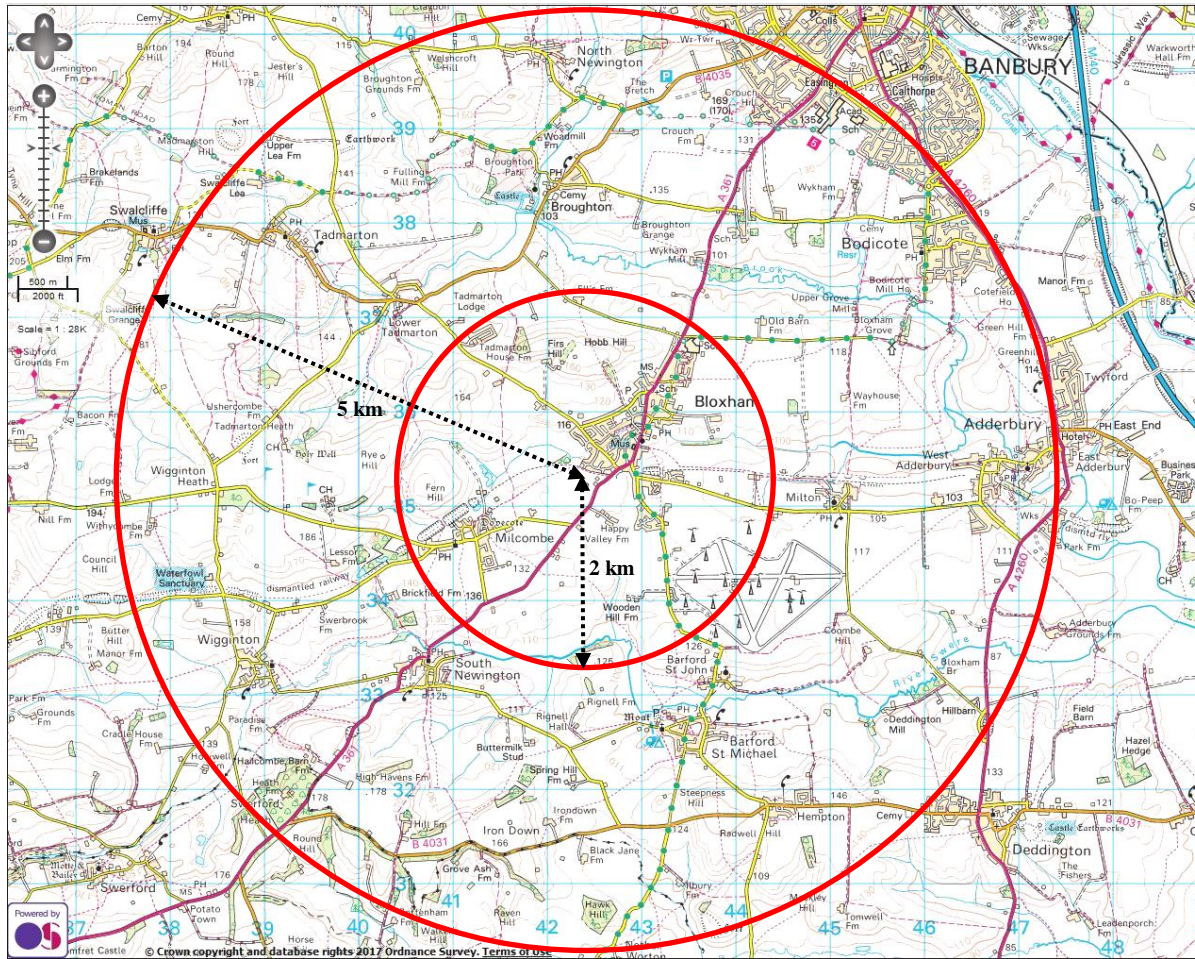
Clearly, it is important for any new development that residents have the opportunity to travel by the more sustainable modes of transport especially walk, cycle and public transport. These modes will be considered in turn.


### **5.1 Walk**

Walk is usually considered an important mode for trips up to two kilometres in length (as confirmed in Manual for Streets Section 4.4 – The Walkable Neighbourhood) and the two kilometre crow-fly catchment is shown on the Figure 2a overleaf. This shows that the whole of Bloxham is well within the walking catchment. This means that all of the village facilities are within walking distance of the site for most people, including the following facilities (this list is not exhaustive):

1. Bloxham Church of England Primary School, Banbury Road
2. Bloxham (All Saints) School (Independent), Banbury Road
3. The Warriner School, Banbury Road
4. PFS / Convenience Store, South Newington Road
5. Various shops on High Street including pharmacy, post office, newsagents, fish bar, Co-op food store
6. Red Lion Public House, High Street
7. Joiners Arms Public House, Old Bridge Road
8. Elephant & Castle Public House, Hunter Street
9. Village Hall, High Street
10. Dental Practice / Surgery, Church Street
11. Restaurant, Bradford Court
12. St Mary's Church, Church Street
13. Bloxham Bowling Club, The Ridgeway
14. Hillside Farm Golf Driving Range, Banbury Road
15. Bloxham Mill Business Park, Barford Road

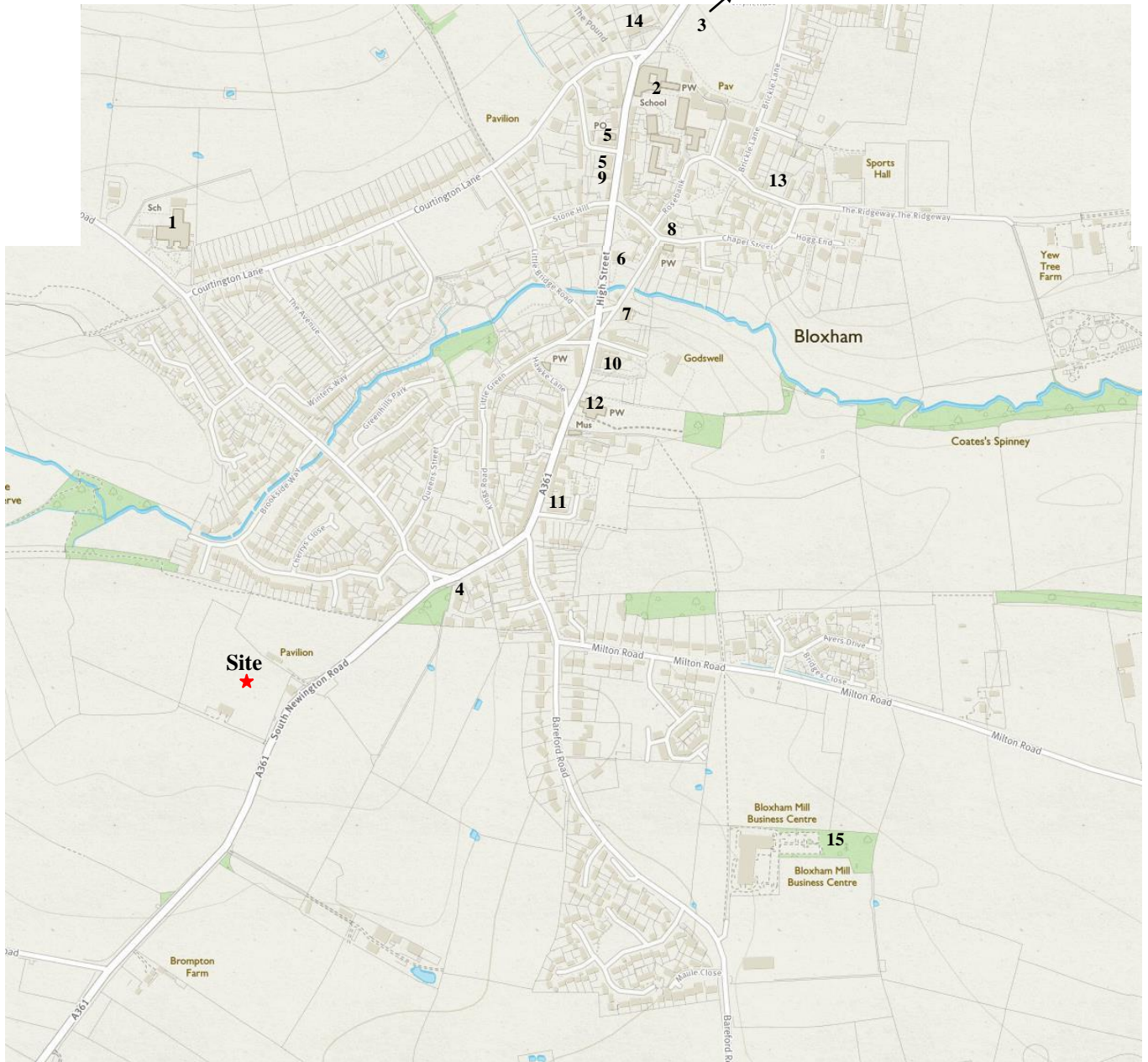
The location of these facilities is shown on Figure 2b.



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	Project        South Newington Road, Bloxham	Drawn      HC	Checked NW
	Client         Gladman Developments Limited	Scale        NTS	Date Jan 2019

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<p>Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ</p>	Drawing <b>Location Of Facilities</b>	Figure No <b>2b</b>	
	Project <b>South Newington Road, Bloxham</b>	Drawn <b>HC</b>	Checked <b>NW</b>
	Client <b>Gladman Developments Ltd</b>	Scale <b>NTS</b>	Date <b>Jan 2019</b>



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There is thus a good range of facilities within walking distance of the site. As will be discussed later in this report (under Access) a new pedestrian footway is proposed from the site access alongside South Newington Road to join up with the existing footpath that starts at the access to the recreation ground. This footway runs up to the roundabout junction at Barford Road. In addition there is a further pedestrian footway on the other side of South Newington Road starting just beyond the garage with a controlled pedestrian crossing at this point as well. There are then pedestrian footways on one or both sides of Church Street and the High Street right through the village with a further controlled pedestrian crossing on the High Street adjacent to the main village shops. As a mature established village there are also footways alongside most side roads in the village as well. It is also relevant to note that further pedestrian access can be obtained via the public footpath through and adjacent to the site both to South Newington Road and to the residential area immediately to the north via the recreation ground. All this means that walking to use the village facilities is a practical as well as a theoretical option for most residents.

## **5.2 Cycle**

Cycle is usually considered an important mode of transport for trips up to five kilometres in length and the five kilometre catchment is also shown on Figure 2a. This confirms of course that all of the facilities within Bloxham are within comfortable cycle distance for most people. In addition the village of South Newington to the south, the south western area of Banbury and Bodicote are within the cycle catchment bringing a further range of facilities within cycle distance. Cycling within the area is however mainly on road.

## **5.3 Public Transport**

The nearest bus stops are located approximately 300 metres from the site entrance on South Newington Road adjacent to the BP garage. The stop directly outside the garage has a cantilever bus shelter. These stops are served by the 488/489 service and these are summarised in the table overleaf and the full timetables enclosed as

Appendix 1 at the rear of this report. As can be seen the route provides a mainly hourly service to Banbury to the north and Chipping Norton to the south from early morning until early evening Monday to Saturday (there is no service on Sunday). This means that both these centres are accessible by bus for a range of work, shopping, retail, leisure and personal business trips. Both Chipping Norton and especially Banbury provide for the full range of facilities required by most people.

The nearest railway station is at Banbury. This is on the Chiltern Main Line and provides regular services to London Marylebone, Birmingham and stations in between. There is in addition a “local” service to Oxford and some long distance trains to destinations such as Manchester, Newcastle and Southampton. Car and cycle parking is available at the station. It is also accessible from the site by bus with a total journey time of just over twenty minutes.

Overall therefore, the site is well located to allow travel by the more sustainable modes of transport to a full range of facilities and destinations. To maximise this potential a Travel Plan will be developed for the site and a framework document accompanies this application.

**Site Off A361 (South Newington Road), Bloxham - Nearby Bus Routes**

<b>Service</b>	<b>Operator</b>	<b>Description</b>	<b>Nearest Bus Stop</b>	<b>Frequency (Mon-Fri)</b>	<b>Frequency (Sat)</b>	<b>Frequency (Sun)</b>
488	Stagecoach Oxfordshire	Banbury – <b>Bloxham</b> – Hook Norton – Chipping Norton	A361 opp Kings Roads	0919-1219 (h), 1419-1724 (h), 1919	0819-1219 (h), 1419-1724 (h), 1919	No service
		Chipping Norton - Hook Norton – <b>Bloxham</b> - Banbury	A361 adj Kings Roads	0636, 0731, 0804, 0936, 1136-1441 (h), 1641-1941 (h)	0746-0936 (h), 1136-1941(h),	No service
489	Stagecoach Oxfordshire	Banbury – <b>Bloxham</b> – Chipping Norton	A361 opp Kings Roads	0620, 0703, 0809	0647	No service
		Chipping Norton - <b>Bloxham</b> - Banbury	A361 adj Kings Roads	1541	No service	No service

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## **6.0 TRAFFIC IMPACT**

### **6.1 Access**

The speed limit changes from 60 miles per hour to 30 miles per hour approximately half way along the site frontage and whilst by observation vehicles are clearly not doing 60 miles an hour as they enter and leave the village, equally it is likely they are exceeding 30 miles per hour. It is therefore proposed to move the 30 miles per hour speed limit west of the site boundary, which would represent the new entrance to the village when the development proceeds, and introduce some traffic calming measures to reinforce the 30 miles per hour speed limit. An access road into the western end of the site is proposed. A layout plan is shown in Appendix 2 and the key features are:

- i) A 5.5 metre wide access road.
- ii) Visibility splays of 2.4 x 43 metres consistent with the new speed limit.
- iii) A pedestrian footway of 2 metres around the access road and then continuing alongside South Newington Road to link up with the existing footway into the village that starts at the entrance to the recreation ground.
- iv) Change of speed limit moved to the west of the site boundary.
- v) New gateway feature.
- vi) Coloured 30 miles per hour rounded markings on road at change of limit.
- vii) Dragon's teeth markings.
- viii) Further colour rounded markings with slight road narrowing and coloured road surface at further points along the road up to the junction with Cumberland Hill.

It is considered that this package of measures allows a safe access to the required standards to be provided whilst also slowing vehicle speeds as they enter the village.

## **6.2 Traffic Impact**

Clearly, despite the sustainability of the site, the proposed development will generate additional traffic from the site and the impact of this traffic needs to be assessed. Based on the location of the site the key junction in addition to the site access is roundabout junction of South Newington Road / Barford Road / Church Street just to the north east of the site.

It was this junction that formed the base of the assessment. The approach was as follows:

- i) Establish base traffic flows via traffic surveys undertaken in 2017.
- ii) Growth to 2024 (five years after submission) using TEMPRO factors and add in flows from adjacent committed development.
- iii) Calculate trip rates and traffic generation for the development using the TRICS database.
- iv) Distribute/assign traffic to the network based on National Census journey to work data.
- v) Add to iii) to obtain 2024 with development flows.
- vi) Test junction capacity using the ARCADY program.

### **6.2.1 Base Traffic Flows**

Traffic surveys were carried out on Tuesday 24<sup>th</sup> January 2017 and the survey results are also enclosed as Appendix 3. The resultant peak hour flows are shown on Figure 3 at the rear of this report.

These flows were then growthed to 2024 (five years after application) using TEMPRO growth factors. The TEMPRO printout is enclosed as Appendix 4 with the factors being 1.156 (AM peak) and 1.159 (PM peak). The resultant 2024 base flows are shown on Figure 4.



At this point it is worth considering any other material development in the area. There is a Bovis development on Barford Road at the southern end of the village. This site is largely built out already and houses not currently occupied are compensated for by construction traffic which would have been included in the traffic surveys. This site is therefore not included as committed development. There is also an outstanding permission for 85 houses on Milton Road. Although this permission was granted a considerable time ago (decision for outline permission issued March 2015) there has been ongoing activity on reserved matters and so the site is included as committed development. In addition there is a permission for 60 houses for a site on land south of Tadmartin Road for Miller Homes. Again this was granted outline permission some time ago but activity has started on site so this site is also included as permitted development. Development flows for these two sites have been taken from the relevant Transport Assessments with the flow from the Miller Homes site shown on Figure 5 and the Milton Road site on Figure 6. Total committed development flows are shown on Figure 7 and the 2024 with committed development flows in Figure 8.

## 6.2.2 Development Related Flows

Peak hour trip rates for the development were obtained from the TRICS database and the TRICS printout is enclosed as Appendix 5. Applying these rates to 95 units, results in the following traffic generations for the site:

	<b>Number of Houses: 95</b>			
	<b>Trip Rates</b>		<b>Development Trips</b>	
	<b>Arrive</b>	<b>Depart</b>	<b>Arrive</b>	<b>Depart</b>
AM Peak	0.138	0.369	13	34
PM Peak	0.327	0.142	30	13

This traffic was distributed based on the National Census Journey to Work (Car Driver) database for 2011. The Census data and resultant distributions are enclosed as Appendix 6 and the percentage distribution shown as Figure 9. Assigning the development related traffic flows in these proportions results in the development

related traffic flows on Figure 10. Adding these figures to the 2024 base flows results in the 2024 with development traffic flows shown in Figure 11.

### 6.2.3 Traffic Impact

The key junctions were analysed using the programs ARCADY and PICADY. In the analysis the key statistics are the ratio of flow to capacity (RFC) and the average maximum queue lengths. If the RFC value exactly equals 1.0 then flow equals theoretical capacity. If it is less than 1.0 then spare capacity exists.

The table overleaf shows the maximum RFC values and queue lengths and the full printouts are enclosed as Appendix 7.

As can be seen the RFCs at the site access are extremely low and clearly capacity at the site access is not an issue. At the roundabout the RFCs are higher as would be expected. However in 2024 with the development in place the maximum RFCs are still below 1.0 (the maximum is 0.99 on Church Street in the AM peak) and queues are relatively modest. Of equal importance is the impact of the development itself. The development traffic causes maximum RFC values to increase only in the second decimal place and queue lengths increase by less than three vehicles. This cannot be considered a material or severe impact.

It is also worth noting the impact on the link flows. Although traffic flows on the A361 are relatively high, as would be expected given its status on location, the increases in link flow (two-way) either side of the junction as a result of the development are as follows:

	AM Peak		PM Peak	
	Flow	% Increase	Flow	% Increase
South Newington Road	44	3.2%	39	3.1%
Church Street	22	1.5%	20	1.4%
Barford Road	21	1.7%	19	1.9%

**Site off A361 South Newington Road, Bloxham - Junction Analysis (95 houses)**

**1. South Newington Road/Church Street/Barford Road - ARCADY Results**

**AM**

Arm	2017		2024 without dev		2024 with com dev		2024 with CD + Prop	
	Max RFC	Queue	Max RFC	Queue	Max RFC	Queue	Max RFC	Queue
South Newington Road	0.66	1.9	0.77	3.1	0.79	3.5	0.82	4.3
Church Street	0.83	4.4	0.96	11.1	0.98	12.8	0.99	15.2
Barford Road	0.60	1.5	0.82	4.1	0.86	5.2	0.87	5.6

**PM**

Arm	2017		2024 without dev		2024 with con dev		2024 with CD + Prop	
	Max RFC	Queue	Max RFC	Queue	Max RFC	Queue	Max RFC	Queue
South Newington Road	0.51	1.0	0.60	1.5	0.62	1.6	0.63	1.7
Church Street	0.66	1.9	0.78	3.4	0.81	3.9	0.83	4.3
Barford Road	0.61	1.6	0.74	2.7	0.77	3.1	0.79	3.4

**2. Proposed Access Off A361 South Newington Road - PICADY Results**

**AM**

Arm	Turn	2024 with CD + Prop	
		Max RFC	Queue
Access	Left/Right	0.09	0.1
South Newington Road NE	All	0.05	0.1

**PM**

Arm	Turn	2024 with CD + Prop	
		Max RFC	Queue
Access	Left/Right	0.03	0.0
South Newington Road NE	All	0.11	0.3

These are very modest increases and even on the South Newington Road arm which carries the heaviest level of development traffic the increase is considerably less than one extra vehicle per minute, again not a material or severe increase.

### **6.3 Road Safety**

An initial accident plot for the five years until the end of December 2017 was obtained and is attached as Appendix 8. This shows a relatively small number of accidents over the network as a whole but this number is not excessive and they are evenly scattered rather than located in one or two hotspots. The amount of traffic generated by the development is modest and quickly disperses through the network and so will not have a material effect on the current situation. On this basis it was concluded that there was no material impact on road safety and no need to take the analysis further.

## **7.0 CONCLUSIONS**

Overall, therefore, the following conclusions are reached:

- i) This is an outline application for a residential development. The Framework Masterplan shows a development of up to 95 units.
- ii) Access to the required design standards is proposed.
- iii) The site is well located to allow travel by the more sustainable modes.
- iv) A Framework Travel Plan accompanies the application.
- v) There are no material traffic impacts associated with the proposal.
- vi) There are no road safety issues associated with the development.

Overall, therefore, it is concluded that there are no material transport issues associated with the application.

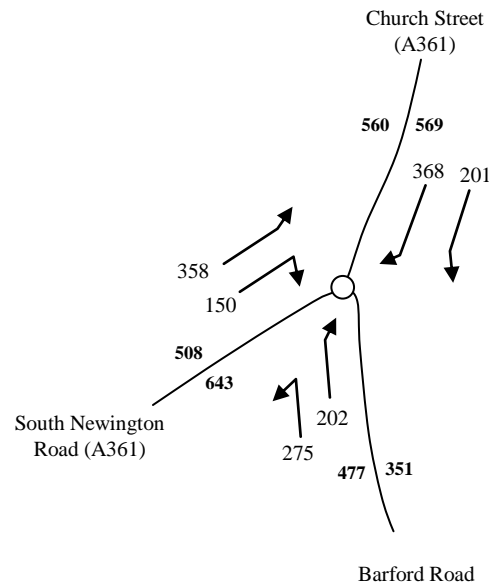
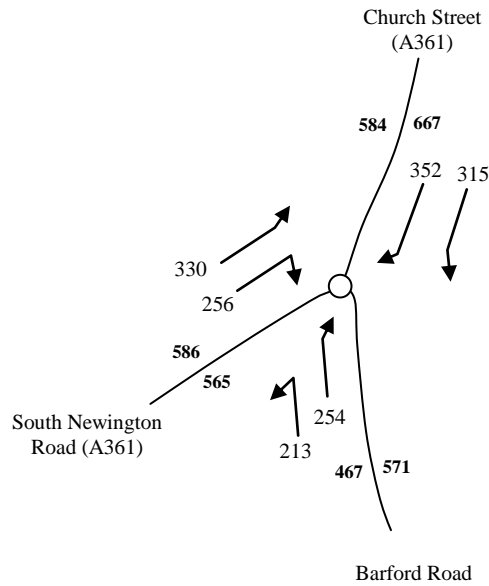
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**FIGURES 3-11**

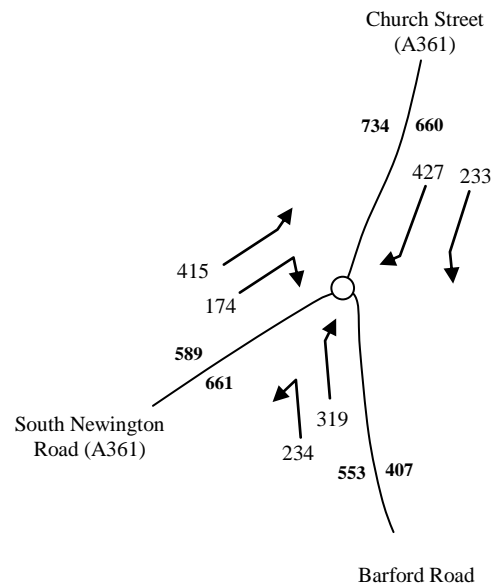
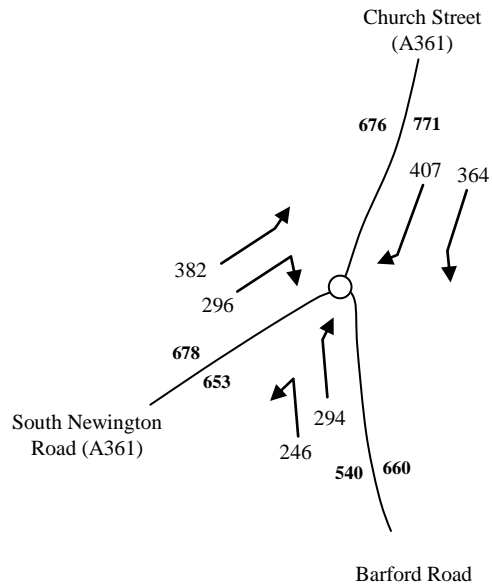
**Traffic Flow Diagrams**



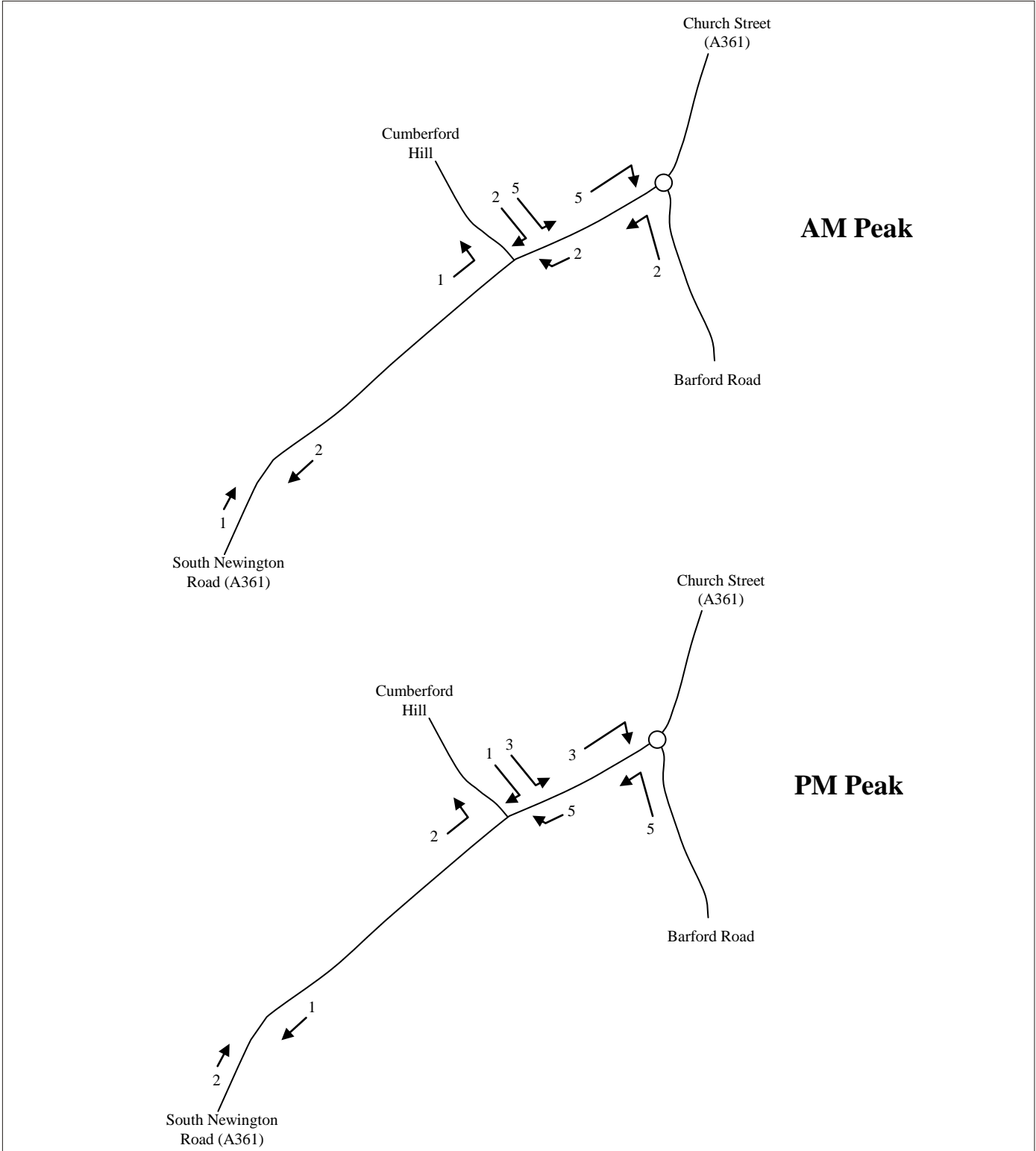
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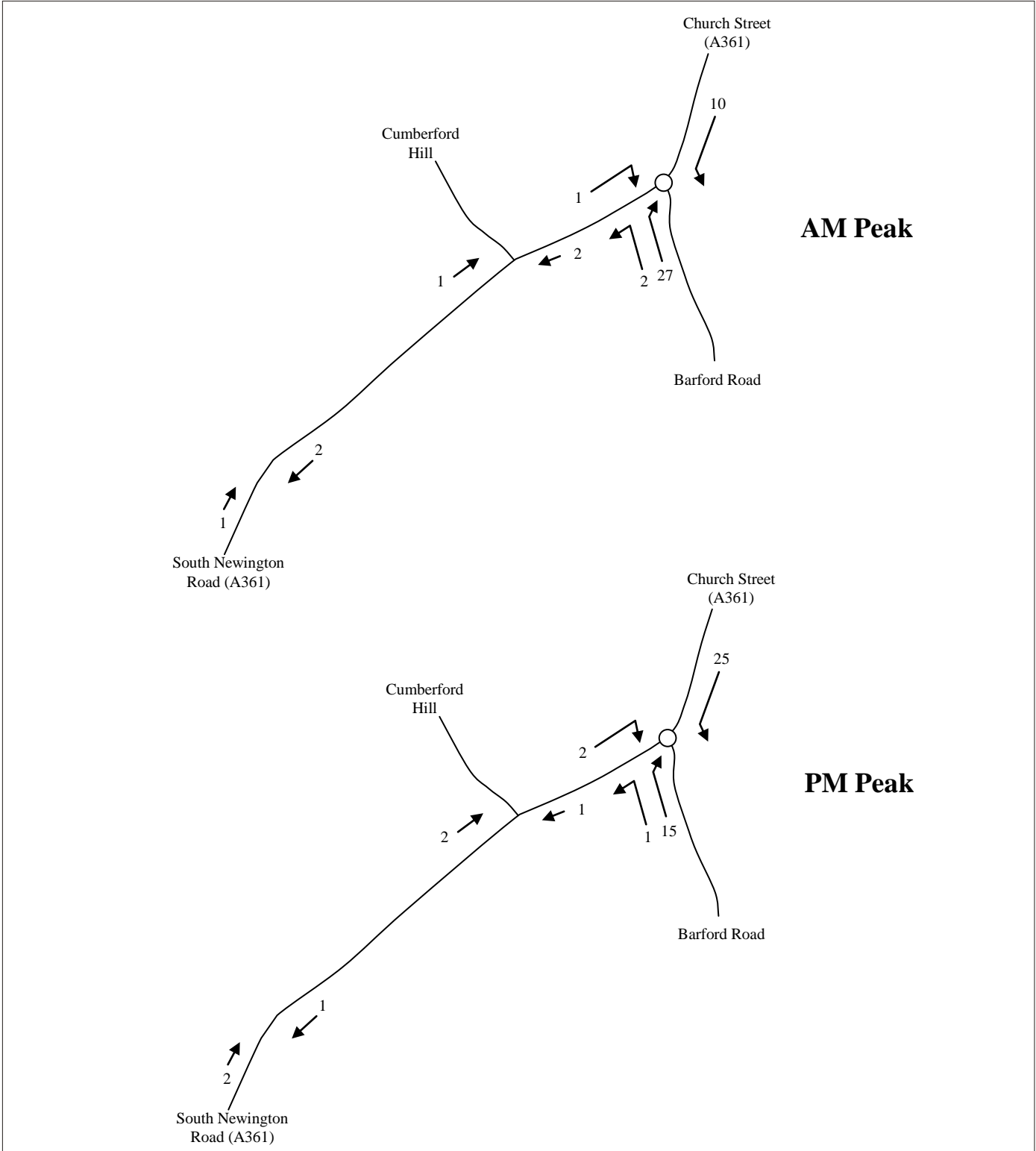
<p>Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ</p>	Drawing <b>2017 AM/PM Peak Observed Turning Flows</b>		Figure No 3
	Project South Newington Road, Bloxham	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019



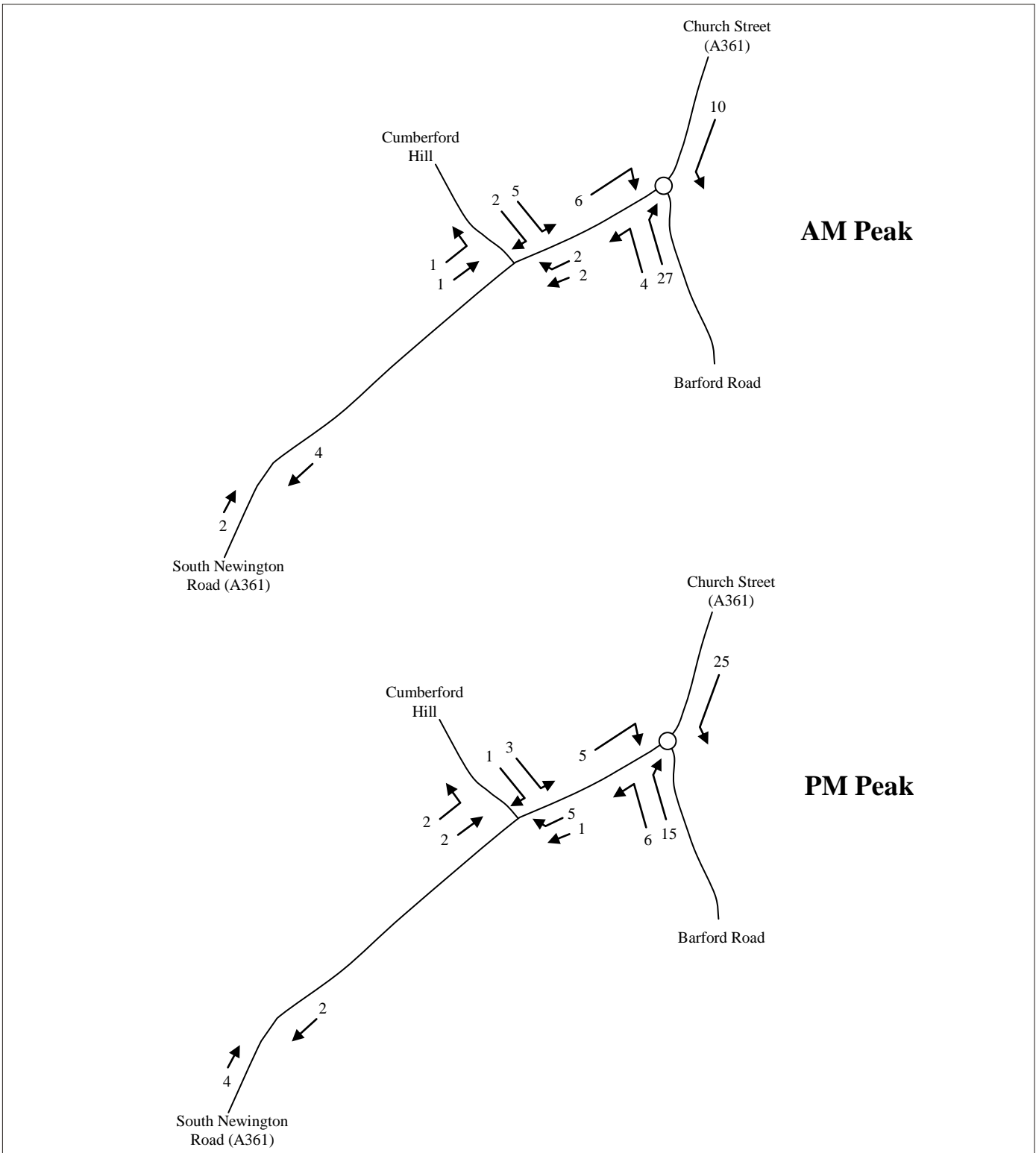
 Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ	Drawing 2024 AM/PM Turning Flows Without Development		Figure No 4
	Project South Newington Road, Bloxham	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019



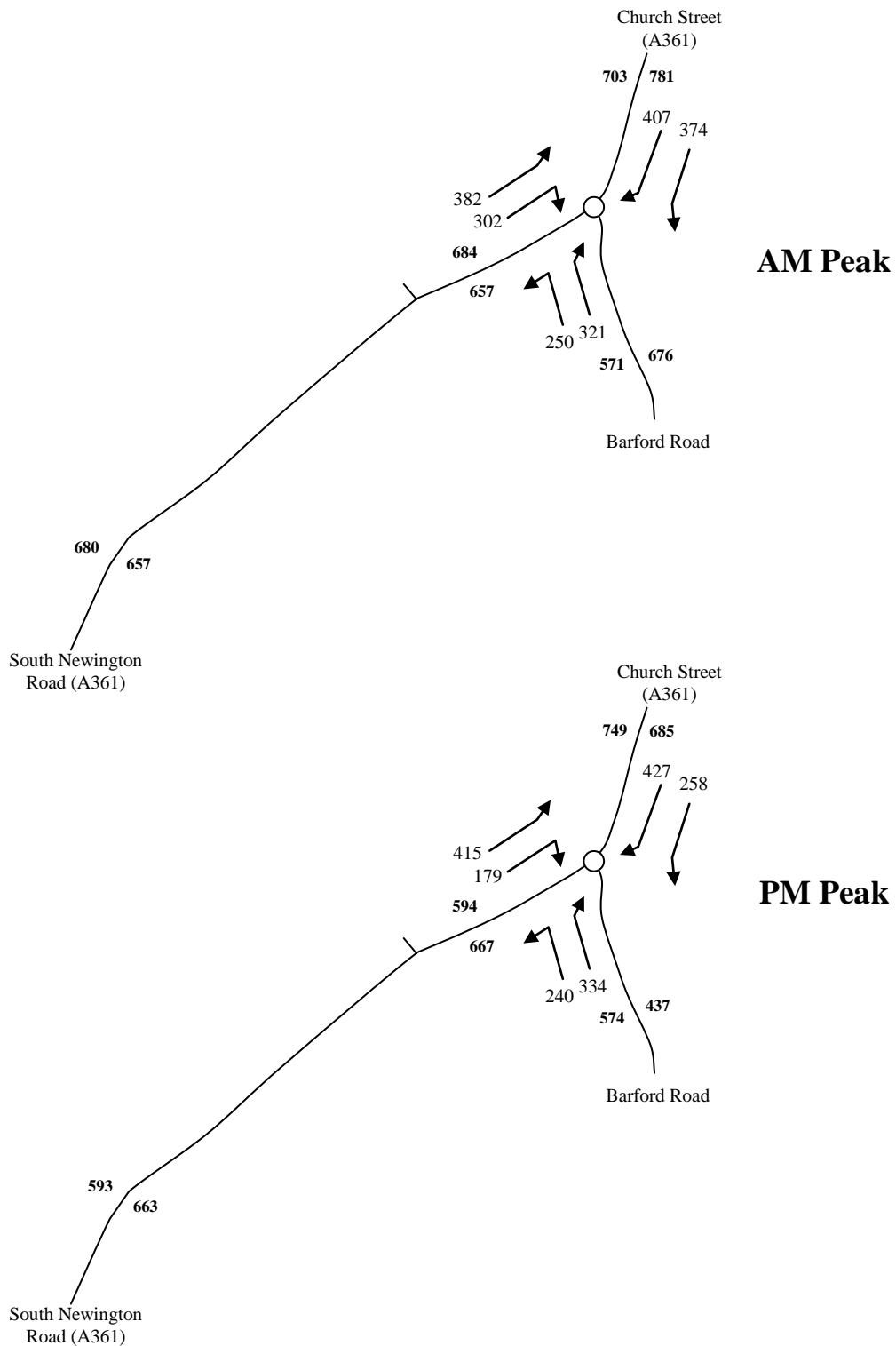
 Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ	Drawing AM/PM Miller Homes Development		Figure No 5
	Project South Newington Road, Bloxham	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019



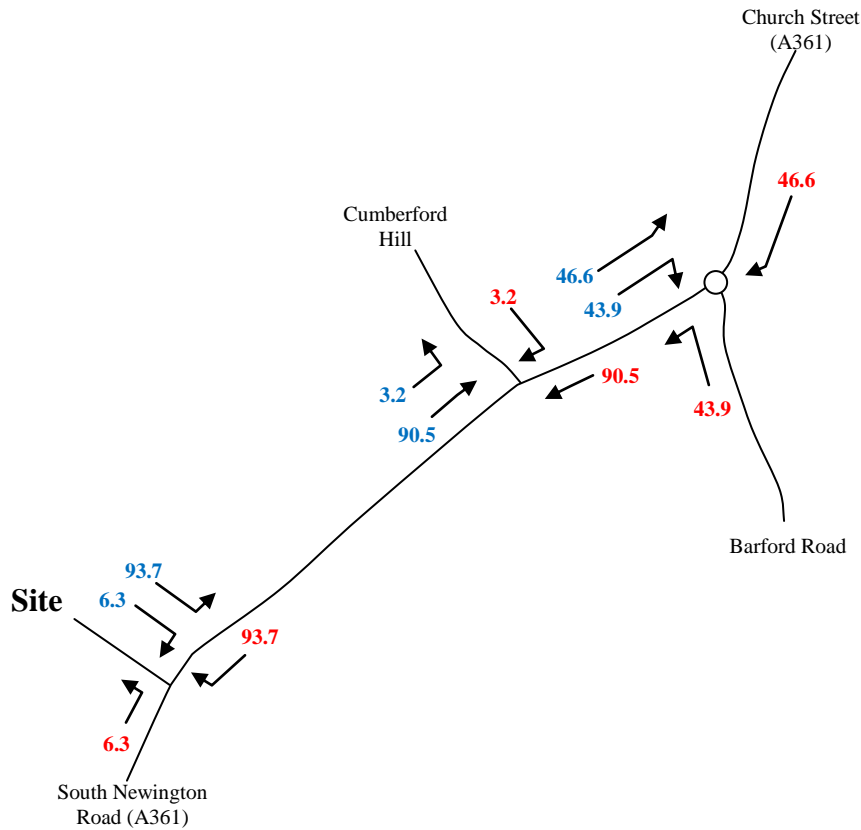
 Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ	Drawing <b>AM/PM Milton Road Development</b>		Figure No 6
	Project <b>South Newington Road, Bloxham</b>	Drawn HC	Checked NW
	Client <b>Gladman Developments Ltd</b>	Scale NTS	Date Jan 2019



<p>Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ</p>	Drawing <b>AM/PM Total Committed Development</b>		Figure No 7
	Project South Newington Road, Bloxham	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019



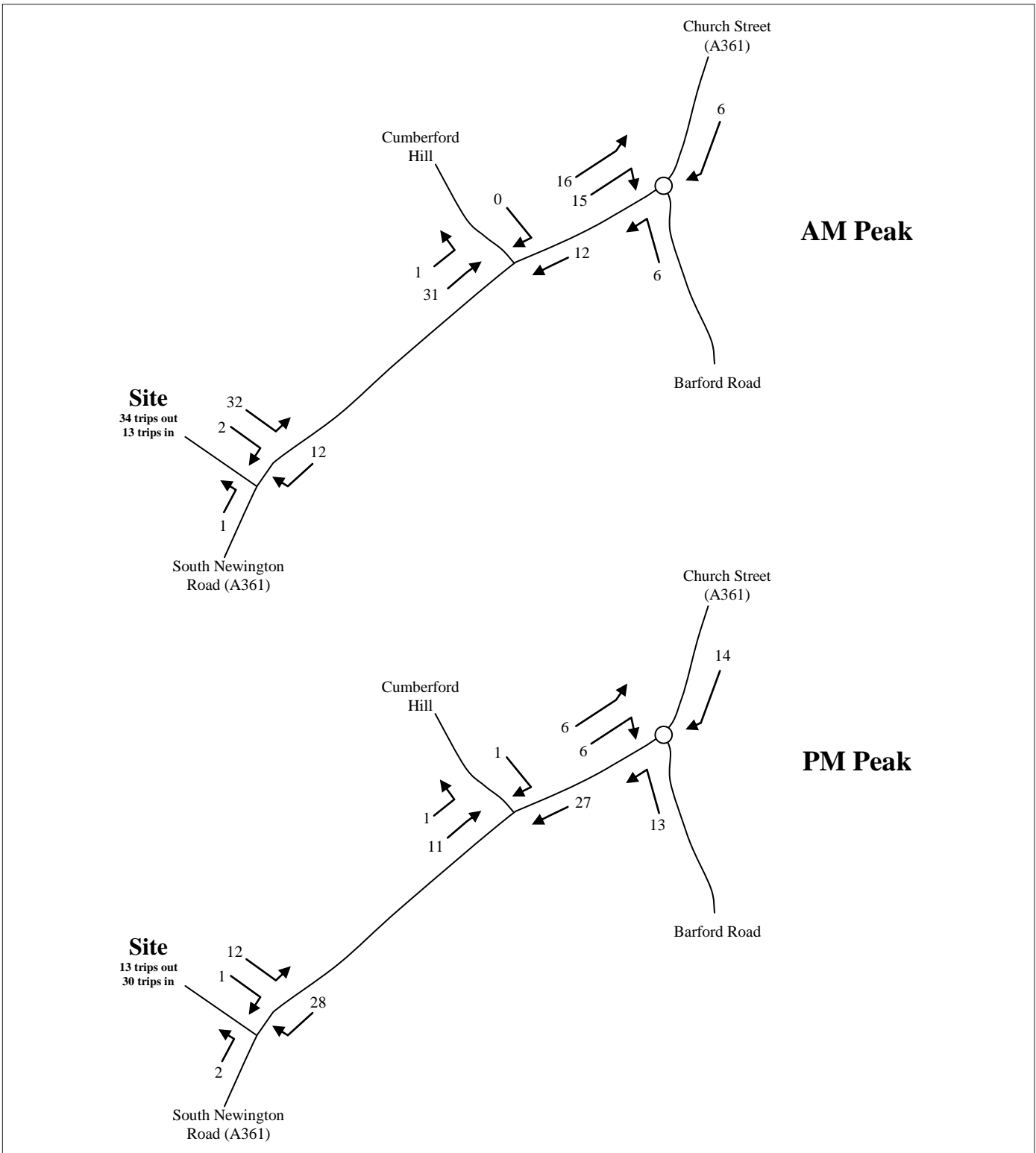
<p>Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ</p>	Drawing <b>2024 AM/PM Flows With Committed Development (CD)</b>		Figure No 8
	Project <b>South Newington Road, Bloxham</b>	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019



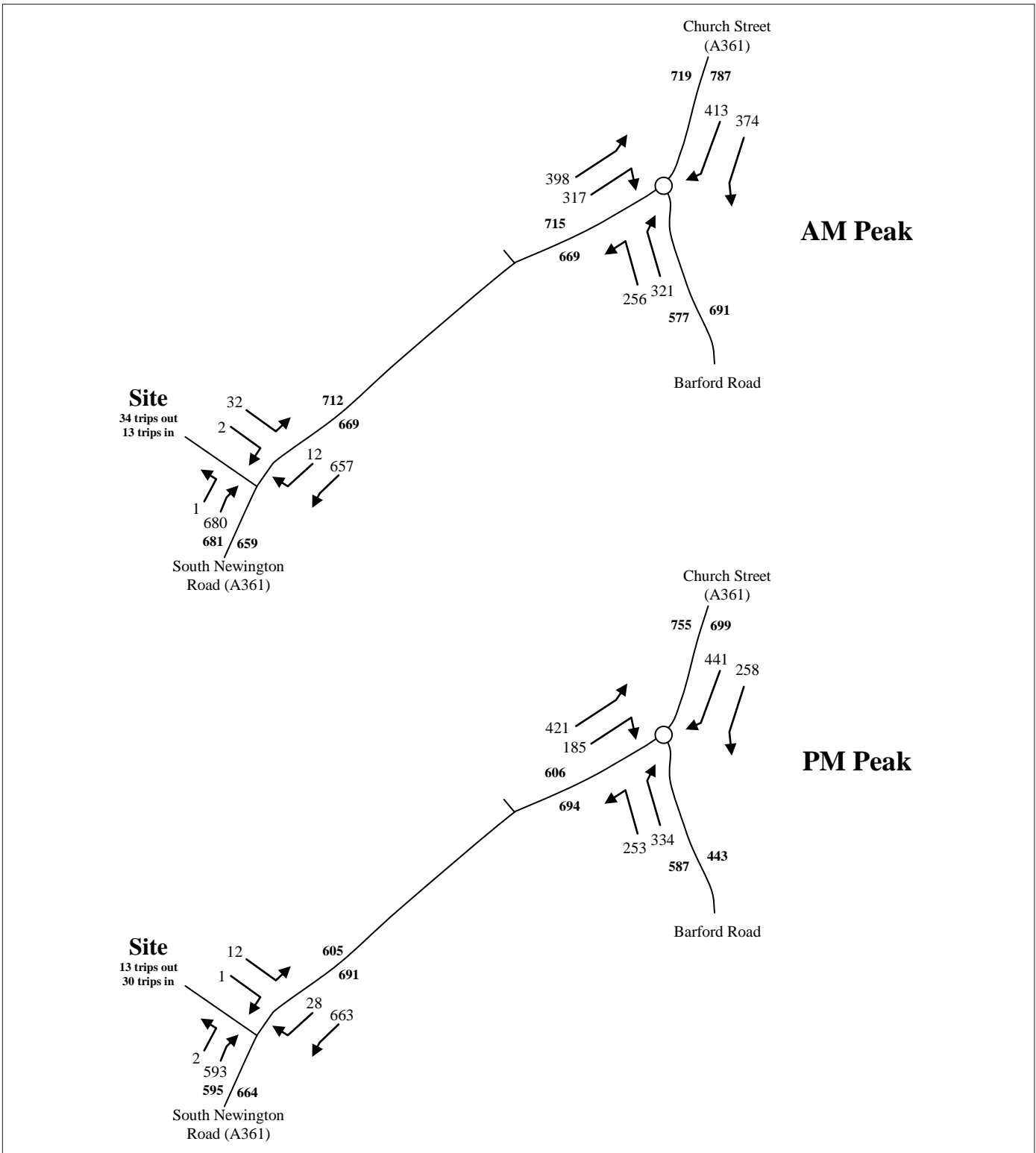
**Key:**  
50.5 - % Departure Trips  
50.5 - % Arrival Trips

 Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ	Drawing Percentage Development Distribution		Figure No 9
	Project South Newington Road, Bloxham	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019





 Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ	Drawing <b>AM/PM Proposed Development Flows</b>		Figure No 10
	Project South Newington Road, Bloxham	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019



 Woolstone Centre 1-2 Mill Lane Woolstone Milton Keynes MK15 0AJ	Drawing 2024 AM/PM Flows With CD + Proposed Dev		Figure No 11
	Project South Newington Road, Bloxham	Drawn HC	Checked NW
	Client Gladman Developments Ltd	Scale NTS	Date Jan 2019

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## **Appendix 1**

### **Bus Timetables**

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**488/489****Banbury - Chipping Norton**

Stagecoach Oxfordshire

The information on this timetable is expected to be valid until at least 30th January 2019. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

**Saturdays**

Service	488	488	488	488	488	488	488
<b>Banbury Town Centre, Bus Station (Bay 7)</b>	<b>1305</b>	<b>1405</b>	<b>1510</b>	<b>1610</b>	<b>1710</b>	<b>1805</b>	<b>1905</b>
§ Banbury Town Centre, opp 62 Calthorpe Street	1308	1408	1513	1613	1713	1808	1908
§ Banbury, adj Dashwood Road	1309	1409	1514	1614	1714	1809	1909
§ Calthorpe, o/s Harriers Ground School	1311	1411	1516	1616	1716	1811	1911
<b>Poets Corner, opp Queensway</b>	<b>1312</b>	<b>1412</b>	<b>1517</b>	<b>1617</b>	<b>1717</b>	<b>1812</b>	<b>1912</b>
§ Easington, opp Wykham Gardens	1312	1412	1517	1617	1717	1812	1912
§ Easington, adj Lansdown Close	1312	1412	1517	1617	1717	1812	1912
§ Bloxham, adj Chipperfield Park Road	1317	1417	1522	1622	1722	1817	1917
§ Bloxham, adj Strawberry Terrace	1317	1417	1522	1622	1722	1817	1917
§ Bloxham, adj Little Bridge Road	1318					1818	
§ Bloxham, adj The Avenue	1318					1818	
<b>Bloxham, adj Courtington Lane</b>	<b>1319</b>					<b>1819</b>	
§ Bloxham, opp Quarry Close	1319					1819	
§ Bloxham, adj Queens Street	1320					1820	
§ Milcombe, opp Milcombe Hall	1324					1824	
<b>Milcombe, o/s New Road Stores</b>	<b>1325</b>					<b>1825</b>	
<b>South Newington, opp The Duck on the Pond</b>	<b>1328</b>					<b>1828</b>	
<b>Wigginton, opp The White Swan Inn</b>	<b>1335</b>					<b>1835</b>	
§ Bloxham, High Street (S-bound)		1418	1523	1623	1723		1918
<b>Bloxham, o/s Church</b>		<b>1419</b>	<b>1524</b>	<b>1624</b>	<b>1724</b>		<b>1919</b>
§ Bloxham, opp Kings Road		1419	1524	1624	1724		1919
§ Milcombe, opp Milcombe Hall							1924
<b>Milcombe, o/s New Road Stores</b>							<b>1925</b>
<b>Milcombe, opp New Road Stores</b>		<b>1425</b>	<b>1530</b>	<b>1630</b>	<b>1730</b>		—
<b>Milcombe, o/s Village Hall</b>		<b>1426</b>	<b>1531</b>	<b>1631</b>	<b>1731</b>		—
§ Milcombe, opp The Green		1426	1531	1631	1731		—
§ Hook Norton, adj Austins Way	1340	1432	1537	1637	1737	1840	—
§ Hook Norton, o/s The Green	1341	1432	1537	1637	1737	1841	—
<b>Hook Norton, opp Church</b>	<b>1342</b>	<b>1433</b>	<b>1538</b>	<b>1638</b>	<b>1738</b>	<b>1842</b>	—
§ Hook Norton, opp The Pear Tree Inn	1343	1434	1539	1639	1739	1843	—
<b>Great Rollright, o/s The Green</b>	<b>1351</b>	<b>1442</b>	<b>1547</b>	<b>1647</b>	<b>1747</b>	<b>1851</b>	—
§ Over Norton, opp Over Norton Turn	1353	1444	1549	1649	1749	1853	—
<b>Over Norton, opp Old Post Office</b>	<b>1355</b>	<b>1446</b>	<b>1551</b>	<b>1651</b>	<b>1751</b>	<b>1855</b>	—
§ Chipping Norton, adj Park Road	1357	1448	1553	1653	1753	1857	—
§ Chipping Norton, opp Spring Street	1358	1449	1554	1654	1754	1858	—
<b>Chipping Norton, West Street (Stop B)</b>	<b>1400</b>	<b>1451</b>	<b>1556</b>	<b>1656</b>	<b>1756</b>	<b>1900</b>	—
§ Chipping Norton, adj Edward Stone Rise	1402	1453	1558	1658	1758	1902	—
§ Chipping Norton, opp Lords Piece Road	1403	1454	1559	1659	1759	1903	—
§ Chipping Norton, opp Churchill House	1403	1454	1559	1659	1759	1903	—
<b>Chipping Norton, Cornish Road (S-bound)</b>	<b>1405</b>	<b>1456</b>	<b>1601</b>	<b>1701</b>	<b>1801</b>	<b>1905</b>	—

**Sundays**

no service

Notes: § - Time at this stop is indicative. You are advised to be at any stop several minutes before the times shown



The information on this timetable is expected to be valid until at least 30th January 2019. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

### Mondays to Fridays

Service	488	488	488	488	488	488	488	488	488	488	489	488	488	488	488
<b>Chipping Norton, Cornish Road (S-bound)</b>	—	0645	0725	—	0900	1000	1100	1200	1300	1405	—	1605	1705	1805	1905
§ Chipping Norton, adj Hannis Road	—	0645	0725	—	0900	1000	1100	1200	1300	1405	—	1605	1705	1805	1905
§ Chipping Norton, o/s 1 Hailey Crescent	—	0646	0726	—	0901	1001	1101	1201	1301	1406	—	1606	1706	1806	1906
§ Chipping Norton, Walterbush Road (NE-bound)	—	0647	0727	—	0902	1002	1102	1202	1302	1407	—	1607	1707	1807	1907
<b>Chipping Norton, inside Chipping Norton School</b>	—	—	—	—	—	—	—	—	—	—	1515	—	—	—	—
<b>Chipping Norton, opp Town Hall</b>	—	0650	0730	—	0905	1005	1105	1205	1305	1410	1520	1610	1710	1810	1910
§ Chipping Norton, adj Spring Street	—	0651	0731	—	0906	1006	1106	1206	1306	1411	—	1611	1711	1811	1911
§ Chipping Norton, opp Park Road	—	0652	0732	—	0907	1007	1107	1207	1307	1412	—	1612	1712	1812	1912
<b>Over Norton, o/s Old Post Office</b>	—	0655	0735	—	0910	1010	1110	1210	1310	1415	—	1615	1715	1815	1915
§ Over Norton, adj Over Norton Turn	—	0656	0736	—	0911	1011	1111	1211	1311	1416	—	1616	1716	1816	1916
<b>Great Rollright, opp The Green</b>	—	0659	0739	—	0914	1014	1114	1214	1314	1419	—	1619	1719	1819	1919
§ Hook Norton, o/s The Pear Tree Inn	—	0707	0747	—	0922	1022	1122	1222	1322	1427	—	1627	1727	1827	1927
<b>Hook Norton, o/s Church</b>	—	0708	0748	—	0923	1023	1123	1223	1323	1428	—	1628	1728	1828	1928
§ Hook Norton, opp The Green	—	0708	0748	—	0923	1023	1123	1223	1323	1428	—	1628	1728	1828	1928
§ Hook Norton, opp Austins Way	—	0709	0749	—	0923	1024	1123	1223	1323	1428	—	1628	1728	1828	1928
<b>Wigginton, o/s The White Swan Inn</b>	—	0715	—	—	1030	—	—	—	—	—	—	—	—	—	—
§ Chipping Norton, Chapel House Island (NE-bound)	—	—	—	—	—	—	—	—	—	—	1522	—	—	—	—
<b>South Newington, o/s The Duck on the Pond</b>	—	0723	—	—	1038	—	—	—	—	—	1537	—	—	—	—
<b>Milcombe, opp New Road Stores</b>	—	0726	—	—	1041	—	—	—	—	—	—	—	—	—	—
§ Milcombe, Milcombe Hall (Entrance)	—	0726	—	—	1041	—	—	—	—	—	—	—	—	—	—
§ Bloxham, opp Queens Street	—	—	—	—	1045	—	—	—	—	—	—	—	—	—	—
§ Bloxham, adj Quarry Close	—	—	—	—	1046	—	—	—	—	—	—	—	—	—	—
<b>Bloxham, opp Courtington Lane</b>	—	—	—	—	1047	—	—	—	—	—	—	—	—	—	—
§ Bloxham, opp The Avenue	—	—	—	—	1047	—	—	—	—	—	—	—	—	—	—
§ Bloxham, opp Little Bridge Road	—	—	—	—	1047	—	—	—	—	—	—	—	—	—	—
§ Milcombe, adj The Green	—	—	0756	—	0929	—	1129	1229	1329	1434	—	1634	1734	1834	1934
<b>Milcombe, opp Village Hall</b>	—	—	0757	—	0930	—	1130	1230	1330	1435	—	1635	1735	1835	1935
<b>Milcombe, o/s New Road Stores</b>	0631	—	0758	—	0931	—	1131	1231	1331	1436	—	1636	1736	1836	1936
§ Bloxham, adj Kings Road	0636	0731	0804	—	0936	—	1136	1236	1336	1441	1541	1641	1741	1841	1941
<b>Bloxham, opp Church</b>	0637	0732	0805	0847	0937	—	1137	1237	1337	1442	1542	1642	1742	1842	1942
§ Bloxham, High Street (N-bound)	0637	0732	0805	0847	0937	—	1137	1237	1337	1442	1542	1642	1742	1842	1942
§ Bloxham, opp Strawberry Terrace	0638	0733	0806	0848	0938	1048	1138	1238	1338	1443	1543	1643	1743	1843	1943
§ Bloxham, opp Chipperfield Park Road	0638	0733	0806	0848	0938	1048	1138	1238	1338	1443	1543	1643	1743	1843	1943
§ Easington, opp Lansdown Close	0642	0737	0810	0852	0942	1052	1142	1242	1342	1447	1547	1647	1747	1847	1947
§ Easington, adj Wykham Gardens	0642	0737	0811	0852	0942	1052	1142	1242	1342	1447	1547	1647	1747	1847	1947
<b>Poets Corner, adj Queensway</b>	0643	0738	0812	0853	0943	1053	1143	1243	1343	1448	1548	1648	1748	1848	1948
§ Calthorpe, opp Harriers Ground School	0643	0738	0813	0853	0943	1053	1143	1243	1343	1448	1548	1648	1748	1848	1948
§ Banbury, opp Dashwood Road	0645	0740	0816	0855	0945	1055	1145	1245	1345	1450	1550	1650	1750	1850	1950
§ Banbury Town Centre, High Street (NE-bound)	0647	0742	0820	0857	0947	1057	1147	1247	1347	1452	1552	1652	1752	1852	1952
§ Banbury Town Centre, George Street (E-bound)	0648	0743	0822	0858	0948	1058	1148	1248	1348	1453	1553	1653	1753	1853	1953
<b>Banbury Town Centre, Bus Station (Arrivals)</b>	0650	0745	0825	0900	0950	1100	1150	1250	1350	1455	1555	1655	1755	1855	1955

### Saturdays

Service	488	488	488	488	488	488	488	488	488	488	488	488
<b>Chipping Norton, Cornish Road (S-bound)</b>	0710	—	0900	1000	1100	1200	1300	1405	—	05	—	1905
§ Chipping Norton, adj Hannis Road	0710	—	0900	1000	1100	1200	1300	1405	—	05	—	1905
§ Chipping Norton, o/s 1 Hailey Crescent	0711	—	0901	1001	1101	1201	1301	1406	—	06	—	1906
§ Chipping Norton, Walterbush Road (NE-bound)	0712	—	0902	1002	1102	1202	1302	1407	—	07	—	1907
<b>Chipping Norton, opp Town Hall</b>	0715	—	0905	1005	1105	1205	1305	1410	—	10	—	1910
§ Chipping Norton, adj Spring Street	0716	—	0906	1006	1106	1206	1306	1411	—	11	—	1911
§ Chipping Norton, opp Park Road	0717	—	0907	1007	1107	1207	1307	1412	—	12	—	1912
<b>Over Norton, o/s Old Post Office</b>	0720	—	0910	1010	1110	1210	1310	1415	—	15	—	1915
§ Over Norton, adj Over Norton Turn	0721	—	0911	1011	1111	1211	1311	1416	—	16	—	1916
<b>Great Rollright, opp The Green</b>	0724	—	0914	1014	1114	1214	1314	1419	—	19	—	1919
§ Hook Norton, o/s The Pear Tree Inn	0732	—	0922	1022	1122	1222	1322	1427	—	27	—	1927
<b>Hook Norton, o/s Church</b>	0733	—	0923	1023	1123	1223	1323	1428	—	28	—	1928
§ Hook Norton, opp The Green	0733	—	0923	1023	1123	1223	1323	1428	—	28	—	1928
§ Hook Norton, opp Austins Way	0733	—	0923	1024	1123	1223	1323	1428	—	28	—	1928
<b>Wigginton, o/s The White Swan Inn</b>	—	—	—	—	1030	—	—	—	—	—	—	—
<b>South Newington, o/s The Duck on the Pond</b>	—	—	—	—	1038	—	—	—	—	—	—	—
<b>Milcombe, opp New Road Stores</b>	—	—	—	—	1041	—	—	—	—	—	—	—
§ Milcombe, Milcombe Hall (Entrance)	—	—	—	—	1041	—	—	—	—	—	—	—
§ Bloxham, opp Queens Street	—	—	—	—	1045	—	—	—	—	—	—	—
§ Bloxham, adj Quarry Close	—	—	—	—	1046	—	—	—	—	—	—	—
<b>Bloxham, opp Courtington Lane</b>	—	—	—	—	1047	—	—	—	—	—	—	—
§ Bloxham, opp The Avenue	—	—	—	—	1047	—	—	—	—	—	—	—
§ Bloxham, opp Little Bridge Road	—	—	—	—	1047	—	—	—	—	—	—	—
§ Milcombe, adj The Green	0739	—	0929	—	1129	1229	1329	1434	—	34	—	1934
<b>Milcombe, opp Village Hall</b>	0740	—	0930	—	1130	1230	1330	1435	—	35	—	1935
<b>Milcombe, o/s New Road Stores</b>	0741	0841	0931	—	1131	1231	1331	1436	—	36	—	1936
§ Bloxham, adj Kings Road	0746	0846	0936	—	1136	1236	1336	1441	—	41	—	1941
<b>Bloxham, opp Church</b>	0747	0847	0937	—	1137	1237	1337	1442	—	42	—	1942
§ Bloxham, High Street (N-bound)	0747	0847	0937	—	1137	1237	1337	1442	—	42	—	1942
§ Bloxham, opp Strawberry Terrace	0748	0848	0938	1048	1138	1238	1338	1443	—	43	—	1943
§ Bloxham, opp Chipperfield Park Road	0748	0848	0938	1048	1138	1238	1338	1443	—	43	—	1943
§ Easington, opp Lansdown Close	0752	0852	0942	1052	1142	1242	1342	1447	—	47	—	1947
§ Easington, adj Wykham Gardens	0752	0852	0942	1052	1142	1242	1342	1447	—	47	—	1947
<b>Poets Corner, adj Queensway</b>	0753	0853	0943	1053	1143	1243	1343	1448	—	48	—	1948
§ Calthorpe, opp Harriers Ground School	0753	0853	0943	1053	1143	1243	1343	1448	—	48	—	1948
§ Banbury, opp Dashwood Road	0755	0855	0945	1055	1145	1245	1345	1450	—	50	—	1950
§ Banbury Town Centre, High Street (NE-bound)	0757	0857	0947	1057	1147	1247	1347	1452	—	52	—	1952
§ Banbury Town Centre, George Street (E-bound)	0758	0858	0948	1058	1148	1248	1348	1453	—	53	—	1953
<b>Banbury Town Centre, Bus Station (Arrivals)</b>	0800	0900	0950	1100	1150	1250	1350	1455	—	55	—	1955

Notes: § - Time at this stop is indicative. You are advised to be at any stop several minutes before the times shown





**488/489**

**Chipping Norton - Banbury**

Stagecoach Oxfordshire

The information on this timetable is expected to be valid until at least 30th January 2019. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

**Sundays**

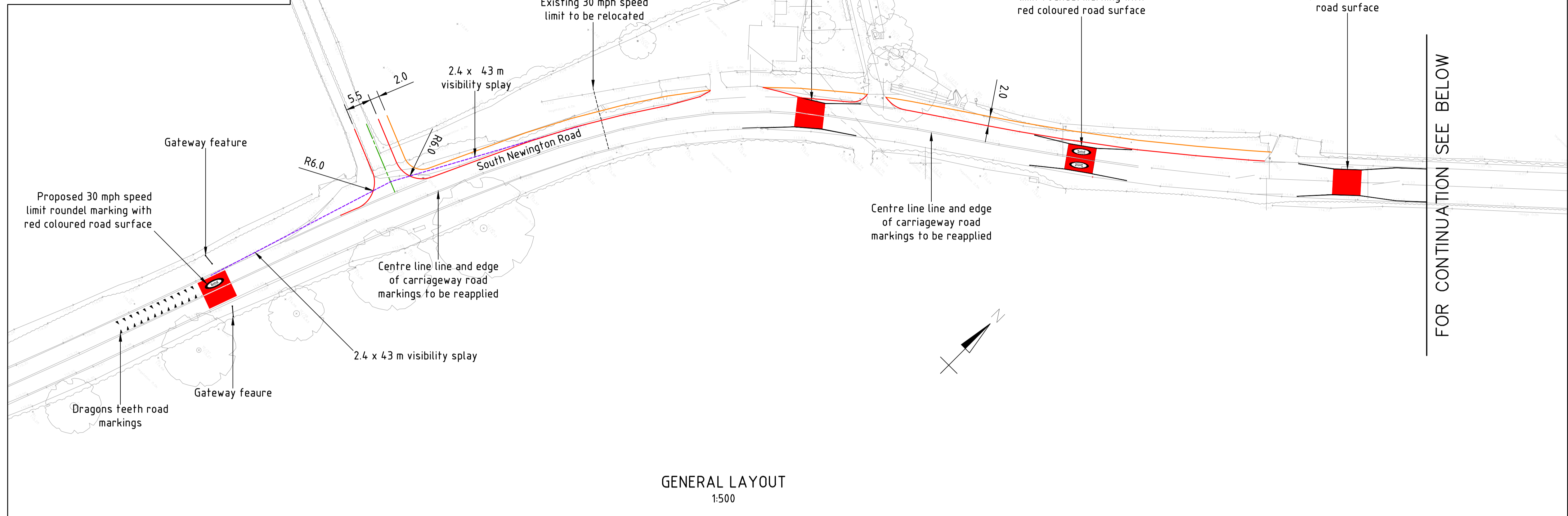
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## **Appendix 2**

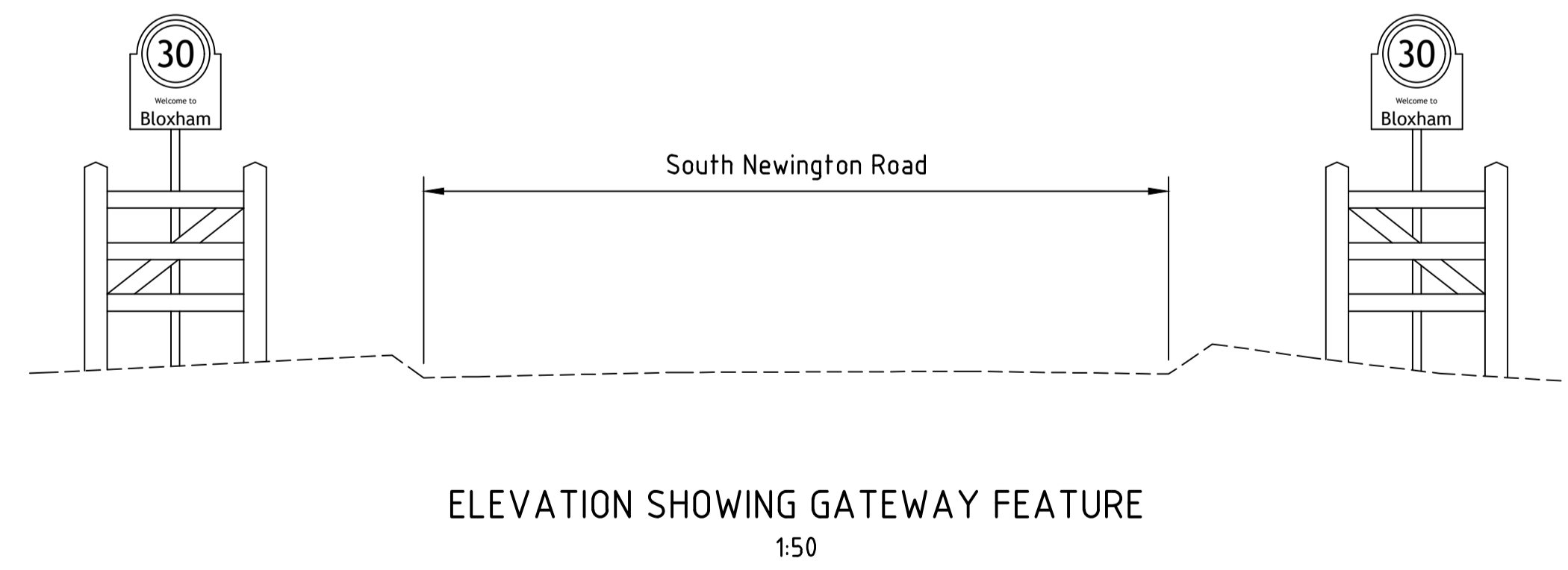
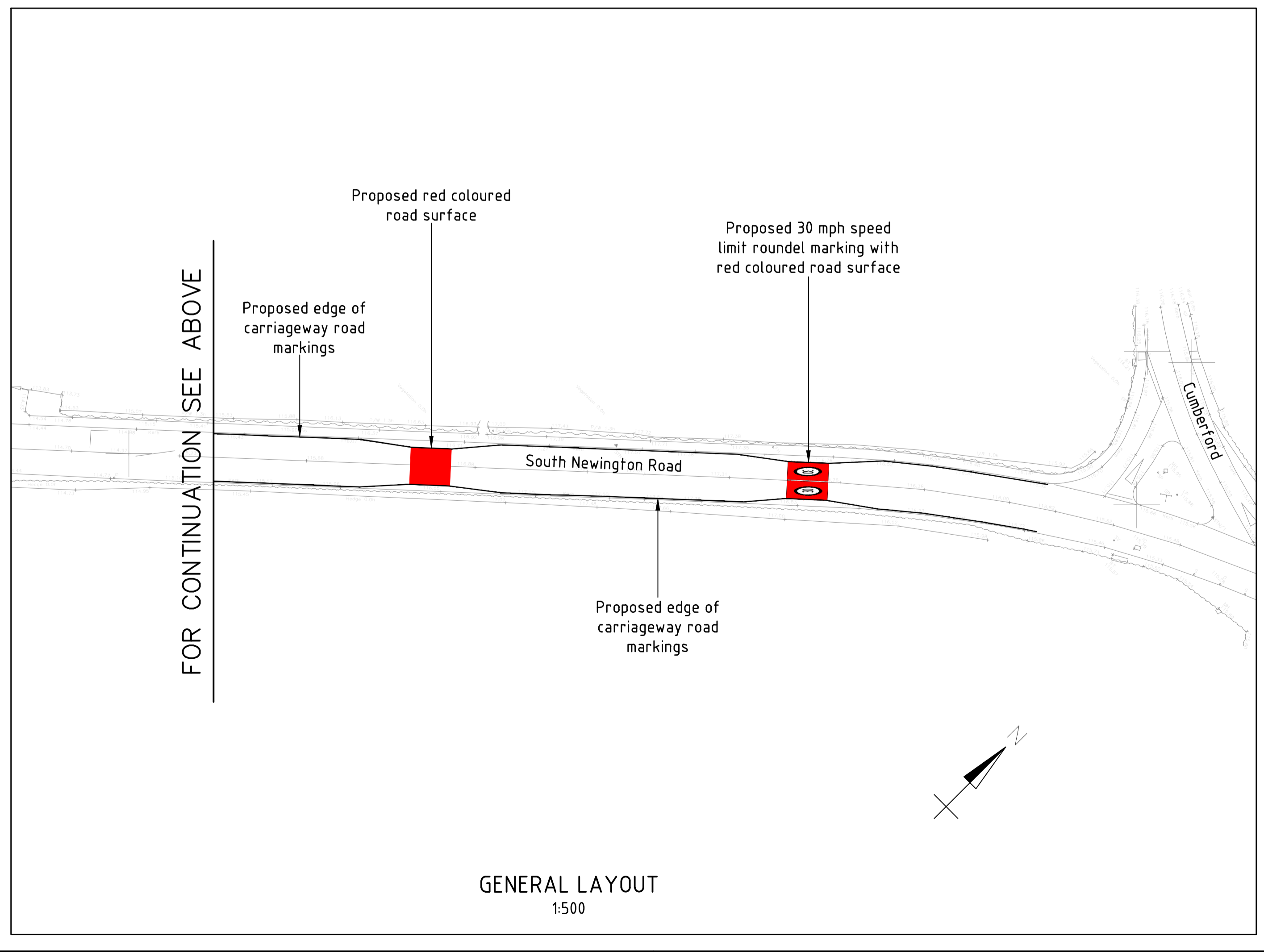
### **Layout Plan plus Road Safety Audit**

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DESIGN INFORMATION	
Design stage	Feasibility
Description of Highway Infrastructure	Simple priority T junction
Checking Authority	County Council / Unitary Authority
Design Codes	MFS & LTN 1/07
Description of Ground Conditions	Not known at this stage



- NOTES
- All dimensions are in metres unless stated otherwise
  - Topographical information provided by others



Ref.	Amendment	Ch'kd	Date
A	Footway added	PSS	25/01/17

**STIRLINGMAYNARD**  
 Construction Consultants  
 Stirling House Rightwell Bretton Peterborough PE3 8DJ  
 Tel 01733 262319 Fax 01733 331527  
 Email enquiries@stirlingmaynard.com www.stirlingmaynard.com

Client  
**GLADMAN DEVELOPMENTS LTD**

Scheme Title  
**LAND OFF SOUTH NEWINGTON ROAD BLOXHAM, OXFORDSHIRE**

Drawing Title  
**PRELIMINARY JUNCTION LAYOUT AND TRAFFIC CALMING MEASURES**

Project Manager	P S SWALLOW	Drawing Status	PRELIMINARY
Drawn	PSS	Scale	@ A1
Checked	PSS	Date	Jan 2017
Drawing No.			<b>4995-00-02 A</b>

Drawings are not to be scaled. Work to stated dimensions only.  
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## **Appendix 3**

### **Survey Data**

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Title: **Church Street, Barford Road, South Newington Road, Bloxham**

Date: **Tues 24th January 2017**

From To	S Newington Road Church Street			S Newington Road Barford Road			Church Street S Newington Road			Church Street Barford Road			Barford Road Church Street			Barford Road S Newington Road			
	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	
07:30 - 07:45	81	5	86	47	0	47	65	2	67	44	1	45	42	1	43	31	1	32	320
07:45 - 08:00	71	2	73	61	2	63	85	1	86	70	0	70	51	0	51	35	0	35	378
07:30-08:00 Total	152	7	159	108	2	110	150	3	153	114	1	115	93	1	94	66	1	67	
08:00 - 08:15	83	3	86	66	1	67	88	3	91	71	3	74	93	5	98	51	2	53	469
08:15 - 08:30	71	5	76	68	0	68	78	6	84	93	6	99	49	0	49	60	0	60	436
08:30 - 08:45	95	0	95	58	0	58	91	0	91	72	0	72	56	0	56	64	1	65	437
08:45 - 09:00	77	4	81	66	1	67	66	2	68	70	1	71	48	1	49	34	2	36	372
08:00-09:00 Total	326	12	338	258	2	260	323	11	334	306	10	316	246	6	252	209	5	214	
09:00 - 09:15	90	0	90	40	0	40	59	2	61	57	0	57	37	1	38	22	1	23	309
09:15 - 09:30	71	1	72	42	1	43	47	0	47	51	0	51	28	1	29	19	1	20	262
09:00-09:30 Total	161	1	162	82	1	83	106	2	108	108	0	108	65	2	67	41	2	43	
Total	639	20	659	448	5	453	579	16	595	528	11	539	404	9	413	316	8	324	

07:30 - 08:30	306	15	321	242	3	245	316	12	328	278	10	288	235	6	241	177	3	180	1603
07:45 - 08:45	320	10	330	253	3	256	342	10	352	306	9	315	249	5	254	210	3	213	1720
08:00 - 09:00	326	12	338	258	2	260	323	11	334	306	10	316	246	6	252	209	5	214	1714
08:15 - 09:15	333	9	342	232	1	233	294	10	304	292	7	299	190	2	192	180	4	184	1554
08:30 - 09:30	333	5	338	206	2	208	263	4	267	250	1	251	169	3	172	139	5	144	1380

From To	S Newington Road Church Street			S Newington Road Barford Road			Church Street S Newington Road			Church Street Barford Road			Barford Road Church Street			Barford Road S Newington Road			
	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	
16:30 - 16:45	85	2	87	36	0	36	80	1	81	51	1	52	64	1	65	46	1	47	368
16:45 - 17:00	93	0	93	35	0	35	87	0	87	42	0	42	55	0	55	50	0	50	362
16:30-17:00 Total	178	2	180	71	0	71	167	1	168	93	1	94	119	1	120	96	1	97	
17:00 - 17:15	96	0	96	35	1	36	85	0	85	52	1	53	62	0	62	53	0	53	385
17:15 - 17:30	91	0	91	40	0	40	87	2	89	46	0	46	69	0	69	48	0	48	383
17:30 - 17:45	89	0	89	37	0	37	84	0	84	48	0	48	67	0	67	47	0	47	372
17:45 - 18:00	81	1	82	37	0	37	108	2	110	54	0	54	77	0	77	54	0	54	414
17:00-18:00 Total	357	1	358	149	1	150	364	4	368	200	1	201	275	0	275	202	0	202	
18:00 - 18:15	84	1	85	34	0	34	85	0	85	51	0	51	64	0	64	48	0	48	367
18:15 - 18:30	72	0	72	29	0	29	70	0	70	39	0	39	52	0	52	40	0	40	302
18:00-18:30 Total	156	1	157	63	0	63	155	0	155	90	0	90	116	0	116	88	0	88	
Total	691	4	695	283	1	284	686	5	691	383	2	385	510	1	511	386	1	387	

16:30 - 17:30	365	2	367	146	1	147	339	3	342	191	2	193	250	1	251	197	1	198	1498
16:45 - 17:45	369	0	369	147	1	148	343	2	345	188	1	189	253	0	253	198	0	198	1502
17:00 - 18:00	357	1	358	149	1	150	364	4	368	200	1	201	275	0	275	202	0	202	1554
17:15 - 18:15	345	2	347	148	0	148	364	4	368	199	0	199	277	0	277	197	0	197	1536
17:30 - 18:30	326	2	328	137	0	137	347	2	349	192	0	192	260	0	260	189	0	189	1455



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## **Appendix 4**

### **TEMPRO Printout**

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## GROWTH FACTORS FOR BLOXHAM

### Parameters

<b>Software</b>	TEMPRO 7.2
<b>Dataset:</b>	NTEM 7.2
<b>Geog Area:</b>	Cherwell (auth)
<b>Area/Road Type:</b>	Rural/Principal
<b>NTM Model</b>	AF15

<b>From</b>	<b>To</b>	<b>AM</b>	<b>PM</b>
2017	2024	1.1561	1.1592

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## **Appendix 5**

### **TRICS Printouts**

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Calculation Reference: AUDIT-201601-190109-0145

## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : A - HOUSES PRIVATELY OWNED  
 MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	KC KENT	2 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DV DEVON	3 days
	SM SOMERSET	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	ST STAFFORDSHIRE	1 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	4 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
	GM GREATER MANCHESTER	1 days

## Secondary Filtering selection:

Parameter: Number of dwellings  
 Actual Range: 21 to 288 (units: )  
 Range Selected by User: 20 to 400 (units: )

Parking Spaces Range: Selected: 12 to 1726 Actual: 12 to 1726

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 20/11/18

Selected survey days:

Monday	6 days
Tuesday	2 days
Wednesday	6 days
Thursday	7 days
Friday	5 days

Selected survey types:

Manual count	26 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	11
Edge of Town	12
Neighbourhood Centre (PPS6 Local Centre)	3

Selected Location Sub Categories:

Residential Zone	24
Village	2

## Secondary Filtering selection:

Use Class:

C3 26 days



## Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	5 days
5,001 to 10,000	5 days
10,001 to 15,000	8 days
15,001 to 20,000	2 days
20,001 to 25,000	2 days
25,001 to 50,000	3 days

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	3 days
50,001 to 75,000	3 days
75,001 to 100,000	6 days
100,001 to 125,000	1 days
125,001 to 250,000	6 days
250,001 to 500,000	2 days
500,001 or More	1 days

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	20 days
1.6 to 2.0	1 days

Travel Plan:

Yes	3 days
No	23 days

PTAL Rating:

No PTAL Present	26 days
-----------------	---------

LIST OF SITES relevant to selection parameters

1	CA-03-A-05 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES		CAMBRI D G E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 28 <i>Survey date: MONDAY 17/10/16</i>			
2	CH-03-A-09 GREYSTOKE ROAD MACCLESFIELD HURDSFIELD	TERRACED HOUSES		C H E S H I R E
	Edge of Town Residential Zone Total Number of dwellings: 24 <i>Survey date: MONDAY 24/11/14</i>			
3	DV-03-A-01 BRONSHILL ROAD TORQUAY	TERRACED HOUSES		D E V O N
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 37 <i>Survey date: WEDNESDAY 30/09/15</i>			
4	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS		D E V O N
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 116 <i>Survey date: FRIDAY 25/09/15</i>			
5	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED		D E V O N
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 <i>Survey date: MONDAY 28/09/15</i>			
6	ES-03-A-02 SOUTH COAST ROAD PEACEHAVEN	PRIVATE HOUSING		E A S T S U S S E X
	Edge of Town Residential Zone Total Number of dwellings: 37 <i>Survey date: FRIDAY 18/11/11</i>			
7	GM-03-A-10 BUTT HILL DRIVE MANCHESTER PRESTWICH	DETACHED/SEMI		G R E A T E R M A N C H E S T E R
	Edge of Town Residential Zone Total Number of dwellings: 29 <i>Survey date: WEDNESDAY 12/10/11</i>			
8	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON	SEMI -DETACHED & TERRACED		K E N T
	Edge of Town Residential Zone Total Number of dwellings: 110 <i>Survey date: FRIDAY 22/09/17</i>			

LIST OF SITES relevant to selection parameters (Cont.)

9	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES		KENT
	Edge of Town Residential Zone Total Number of dwellings:		288	
	<i>Survey date: WEDNESDAY</i>		<i>27/09/17</i>	<i>Survey Type: MANUAL</i>
10	LN-03-A-03 ROOKERY LANE LINCOLN BOULTHAM	SEMI DETACHED		LINCOLNSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		22	
	<i>Survey date: TUESDAY</i>		<i>18/09/12</i>	<i>Survey Type: MANUAL</i>
11	NF-03-A-01 YARMOUTH ROAD CAISTER-ON-SEA	SEMI DET. & BUNGALOWS		NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		27	
	<i>Survey date: TUESDAY</i>		<i>16/10/12</i>	<i>Survey Type: MANUAL</i>
12	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE	BUNGALOWS & SEMI DET.		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		115	
	<i>Survey date: FRIDAY</i>		<i>14/10/11</i>	<i>Survey Type: MANUAL</i>
13	NY-03-A-08 NICHOLAS STREET YORK	TERRACED HOUSES		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		21	
	<i>Survey date: MONDAY</i>		<i>16/09/13</i>	<i>Survey Type: MANUAL</i>
14	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON	MIXED HOUSING		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		52	
	<i>Survey date: MONDAY</i>		<i>16/09/13</i>	<i>Survey Type: MANUAL</i>
15	NY-03-A-11 HORSEFAIR BOROUGHBRIDGE	PRIVATE HOUSING		NORTH YORKSHIRE
	Edge of Town Residential Zone Total Number of dwellings:		23	
	<i>Survey date: WEDNESDAY</i>		<i>18/09/13</i>	<i>Survey Type: MANUAL</i>
16	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED		SURREY
	Edge of Town Residential Zone Total Number of dwellings:		71	
	<i>Survey date: THURSDAY</i>		<i>23/01/14</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

17	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI -DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 38 <i>Survey date: FRIDAY 22/09/17</i>		
18	SH-03-A-05 SANDCROFT TELFORD SUTTON HILL	SEMI -DETACHED/TERRACED	SHROPSHIRE
	Edge of Town Residential Zone Total Number of dwellings: 54 <i>Survey date: THURSDAY 24/10/13</i>		
19	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI	SOMERSET
	Edge of Town Residential Zone Total Number of dwellings: 33 <i>Survey date: THURSDAY 24/09/15</i>		
20	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE	DETACHED & SEMI -DETACHED	STAFFORDSHIRE
	Edge of Town Residential Zone Total Number of dwellings: 248 <i>Survey date: WEDNESDAY 22/11/17</i>		
21	SY-03-A-01 A19 BENTLEY ROAD DONCASTER BENTLEY RISE	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 54 <i>Survey date: WEDNESDAY 18/09/13</i>		
22	WL-03-A-02 HEADLANDS GROVE SWINDON	SEMI DETACHED	WILTSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 27 <i>Survey date: THURSDAY 22/09/16</i>		
23	WM-03-A-04 OSBORNE ROAD COVENTRY EARLSDON	TERRACED HOUSES	WEST MIDLANDS
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings: 39 <i>Survey date: MONDAY 21/11/16</i>		
24	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES	WEST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 151 <i>Survey date: THURSDAY 11/12/14</i>		

LIST OF SITES relevant to selection parameters (Cont.)

25	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE NEAR HORSHAM BROOKS GREEN Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 57 <i>Survey date: THURSDAY 19/10/17</i>		
	<i>Survey Type: MANUAL</i>		
26	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE ANGMERING  Edge of Town Residential Zone Total Number of dwellings: 180 <i>Survey date: THURSDAY 19/04/18</i>		
	<i>Survey Type: MANUAL</i>		

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DH-03-A-01	abnormally low rates
DH-03-A-02	abnormally low rates
ES-03-A-03	excl flats
ES-03-A-04	excl flats
HC-03-A-20	excl flats
KC-03-A-03	excl flats
KC-03-A-06	excl flats
NF-03-A-02	excl flats
NY-03-A-10	excl flats
WS-03-A-09	excl flats

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	26	75	0.090	26	75	0.278	26	75	0.368
08:00 - 09:00	26	75	0.138	26	75	0.369	26	75	0.507
09:00 - 10:00	26	75	0.153	26	75	0.165	26	75	0.318
10:00 - 11:00	26	75	0.138	26	75	0.164	26	75	0.302
11:00 - 12:00	26	75	0.140	26	75	0.152	26	75	0.292
12:00 - 13:00	26	75	0.163	26	75	0.151	26	75	0.314
13:00 - 14:00	26	75	0.173	26	75	0.157	26	75	0.330
14:00 - 15:00	26	75	0.171	26	75	0.183	26	75	0.354
15:00 - 16:00	26	75	0.259	26	75	0.169	26	75	0.428
16:00 - 17:00	26	75	0.265	26	75	0.169	26	75	0.434
17:00 - 18:00	26	75	0.327	26	75	0.142	26	75	0.469
18:00 - 19:00	26	75	0.223	26	75	0.153	26	75	0.376
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.240			2.252			4.492

## Parameter summary

Trip rate parameter range selected:	21 - 288 (units: )
Survey date date range:	01/01/10 - 20/11/18
Number of weekdays (Monday-Friday):	26
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	4
Surveys manually removed from selection:	10

## **Appendix 6**

### **Census Data**



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**WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)**

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population All usual residents aged 16 and over in employment the week before the census  
 units Persons  
 date 2011  
 method of travel to work Driving a car or van

place of work : 2011 super output area - middle layer	usual		
	E02005928 : Cherwell 008	Trips/Route	Route
E02001059 : Manchester 015	2	2	1
E02001095 : Manchester 051	1	1	1
E02001185 : Salford 029	1	1	1
E02001263 : Trafford 005	1	1	1
E02002671 : Kingston upon Hull 020	1	1	1
E02001545 : Doncaster 007	1	1	1
E02001586 : Rotherham 009	1	1	1
E02001604 : Rotherham 027	1	1	1
E02001632 : Sheffield 022	1	1	1
E02001640 : Sheffield 030	1	1	1
E02002279 : Kirklees 009	1	1	1
E02002451 : Wakefield 014	1	1	1
E02002856 : Leicester 030	1	1	1
E02006850 : Leicester 040	1	1	1
E02006851 : Leicester 041	1	1	1
E02004074 : Derbyshire Dales 007	1	1	1
E02005338 : Blaby 006	1	1	1
E02005372 : Harborough 006	1	1	1
E02005458 : North Kesteven 006	1	1	1
E02005616 : Corby 005	1	1	2
E02005623 : Daventry 005	1	1	2
E02005624 : Daventry 006	1	1	1
E02005625 : Daventry 007	1	1	1
E02005626 : Daventry 008	2	2	1
E02005627 : Daventry 009	1	1	2
E02005628 : Daventry 010	9	9	1
E02005631 : East Northamptonshire 003	1	1	2
E02005653 : Northampton 004	1	1	2
E02005664 : Northampton 015	1	1	2
E02005670 : Northampton 021	1	1	2
E02005672 : Northampton 023	1	1	2
E02005673 : Northampton 024	1	1	2
E02005677 : Northampton 028	4	4	2
E02005684 : South Northamptonshire 004	1	1	2
E02005685 : South Northamptonshire 005	2	2	2
E02005686 : South Northamptonshire 006	42	42	1
E02005687 : South Northamptonshire 007	6	3	1
		3	2
E02005688 : South Northamptonshire 008	1	1	2
E02005689 : South Northamptonshire 009	2	2	2
E02005690 : South Northamptonshire 010	31	31	2
E02005691 : South Northamptonshire 011	48	48	2
E02005692 : Wellingborough 001	1	1	2
E02005908 : Rushcliffe 003	1	1	1
E02005914 : Rushcliffe 009	1	1	1
E02006030 : Shropshire 016	1	1	1
E02006147 : Lichfield 002	1	1	1
E02006213 : Staffordshire Moorlands 010	1	1	1
E02006470 : North Warwickshire 003	1	1	1
E02006472 : North Warwickshire 005	1	1	1
E02006479 : Nuneaton and Bedworth 005	1	1	1
E02006482 : Nuneaton and Bedworth 008	2	2	1
E02006489 : Nuneaton and Bedworth 015	1	1	1
E02006493 : Rugby 002	1	1	1
E02006494 : Rugby 003	1	1	1
E02006500 : Rugby 009	1	1	1
E02006505 : Stratford-on-Avon 002	1	1	1
E02006507 : Stratford-on-Avon 004	6	6	1
E02006508 : Stratford-on-Avon 005	6	6	1
E02006511 : Stratford-on-Avon 008	3	3	3
E02006512 : Stratford-on-Avon 009	6	6	3
E02006513 : Stratford-on-Avon 010	1	1	3
E02006514 : Stratford-on-Avon 011	2	2	3

**WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)**

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population All usual residents aged 16 and over in employment the week before the census  
 units Persons  
 date 2011  
 method of travel to work Driving a car or van

place of work : 2011 super output area - middle layer	usual		
	E02005928 : Cherwell 008	Trips/Route	Route
E02006516 : Stratford-on-Avon 013	25	25	3
E02006517 : Stratford-on-Avon 014	1	1	3
E02006518 : Stratford-on-Avon 015	4	2	3
E02006523 : Warwick 005	3	2	4
E02006525 : Warwick 007	4	3	1
E02006526 : Warwick 008	4	4	1
E02006527 : Warwick 009	2	2	1
E02006527 : Warwick 009	1	1	1
E02006529 : Warwick 011	8	8	1
E02006530 : Warwick 012	10	10	1
E02006531 : Warwick 013	2	2	1
E02006533 : Warwick 015	1	1	1
E02001859 : Birmingham 033	1	1	1
E02001863 : Birmingham 037	1	1	1
E02001876 : Birmingham 050	1	1	1
E02001905 : Birmingham 079	1	1	1
E02001907 : Birmingham 081	1	1	1
E02001944 : Birmingham 118	1	1	1
E02001949 : Birmingham 123	1	1	1
E02006899 : Birmingham 138	3	3	1
E02006900 : Birmingham 139	1	1	1
E02001958 : Coventry 001	1	1	1
E02001965 : Coventry 008	3	3	1
E02001966 : Coventry 009	1	1	1
E02001976 : Coventry 019	1	1	1
E02001984 : Coventry 027	1	1	1
E02001988 : Coventry 031	1	1	1
E02001990 : Coventry 033	1	1	1
E02001992 : Coventry 035	1	1	1
E02001993 : Coventry 036	2	2	1
E02001995 : Coventry 038	3	3	1
E02001999 : Coventry 042	2	2	1
E02002035 : Dudley 036	1	1	1
E02002089 : Solihull 009	2	2	1
E02002096 : Solihull 016	1	1	1
E02002102 : Solihull 022	1	1	1
E02002107 : Solihull 027	1	1	1
E02002163 : Wolverhampton 015	1	1	1
E02006704 : Bromsgrove 009	1	1	1
E02006722 : Redditch 002	1	1	1
E02006727 : Redditch 007	1	1	1
E02006743 : Worcester 010	2	2	3
E02006758 : Wychavon 011	1	1	3
E02006765 : Wychavon 018	1	1	4
E02006770 : Wyre Forest 004	1	1	1
E02003631 : Bedford 016	1	1	2
E02003634 : Bedford 019	1	1	2
E02003600 : Central Bedfordshire 002	2	2	2
E02003610 : Central Bedfordshire 012	1	1	2
E02003643 : Central Bedfordshire 024	1	1	2
E02003275 : Luton 018	1	1	2
E02003278 : Luton 021	2	2	2
E02003279 : Southend-on-Sea 001	1	1	2
E02003730 : Cambridge 012	1	1	2
E02003756 : Huntingdonshire 004	1	1	2
E02004456 : Braintree 011	1	1	2
E02004547 : Harlow 004	1	1	2
E02004877 : Dacorum 022	1	1	2
E02004878 : East Hertfordshire 001	1	1	2
E02004905 : Hertsmeare 010	1	1	2
E02004951 : Stevenage 008	1	1	2
E02004975 : Watford 008	2	2	2
E02004976 : Watford 009	1	1	2

**WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)**

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population All usual residents aged 16 and over in employment the week before the census  
 units Persons  
 date 2011  
 method of travel to work Driving a car or van

place of work : 2011 super output area - middle layer	usual		
	E02005928 : Cherwell 008	Trips/Route	Route
E02004989 : Welwyn Hatfield 010	1	1	2
E02000189 : Camden 024	1	1	2
E02000001 : City of London 001	1	1	2
E02000362 : Hackney 018	1	1	2
E02000569 : Islington 016	1	1	2
E02000640 : Lambeth 023	1	1	2
E02006801 : Lambeth 036	1	1	2
E02000869 : Tower Hamlets 006	1	1	2
E02000951 : Wandsworth 029	1	1	2
E02000966 : Westminster 007	1	1	2
E02000971 : Westminster 012	1	1	2
E02000972 : Westminster 013	1	1	2
E02000977 : Westminster 018	1	1	2
E02000979 : Westminster 020	1	1	2
E02000982 : Westminster 023	1	1	2
E02000049 : Barnet 026	1	1	2
E02000066 : Bexley 002	1	1	2
E02000109 : Brent 017	1	1	2
E02000119 : Brent 027	1	1	2
E02000199 : Croydon 006	1	1	2
E02000470 : Havering 007	1	1	2
E02000496 : Hillingdon 003	1	1	2
E02000509 : Hillingdon 016	1	1	2
E02000524 : Hillingdon 031	4	4	2
E02000532 : Hounslow 007	1	1	2
E02000534 : Hounslow 009	1	1	2
E02000538 : Hounslow 013	1	1	2
E02000539 : Hounslow 014	1	1	2
E02000548 : Hounslow 023	1	1	2
E02000602 : Kingston upon Thames 005	1	1	2
E02003355 : Bracknell Forest 004	1	1	2
E02003360 : Bracknell Forest 009	1	1	2
E02003517 : Brighton and Hove 027	1	1	2
E02003465 : Milton Keynes 007	3	3	2
E02003467 : Milton Keynes 009	1	1	2
E02003468 : Milton Keynes 010	1	1	2
E02003472 : Milton Keynes 014	7	7	2
E02003473 : Milton Keynes 015	1	1	2
E02003475 : Milton Keynes 017	2	2	2
E02003476 : Milton Keynes 018	2	2	2
E02003477 : Milton Keynes 019	1	1	2
E02003478 : Milton Keynes 020	1	1	2
E02003479 : Milton Keynes 021	1	1	2
E02003481 : Milton Keynes 023	3	3	2
E02003488 : Milton Keynes 030	1	1	2
E02003489 : Milton Keynes 031	2	2	2
E02003420 : Slough 014	1	1	2
E02003375 : West Berkshire 009	1	1	4
E02003378 : West Berkshire 012	2	2	2
E02003385 : West Berkshire 019	2	2	2
E02003422 : Windsor and Maidenhead 002	1	1	2
E02003431 : Windsor and Maidenhead 011	1	1	2
E02003432 : Windsor and Maidenhead 012	1	1	2
E02003444 : Wokingham 006	1	1	2
E02003652 : Aylesbury Vale 001	4	4	2
E02003653 : Aylesbury Vale 002	1	1	2
E02003654 : Aylesbury Vale 003	1	1	2
E02003655 : Aylesbury Vale 004	8	8	2
E02003656 : Aylesbury Vale 005	1	1	2
E02003659 : Aylesbury Vale 008	1	1	2
E02003661 : Aylesbury Vale 010	3	3	2
E02003666 : Aylesbury Vale 015	2	2	2
E02003668 : Aylesbury Vale 017	1	1	2

**WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)**

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population All usual residents aged 16 and over in employment the week before the census  
 units Persons  
 date 2011  
 method of travel to work Driving a car or van

place of work : 2011 super output area - middle layer	usual		
	E02005928 : Cherwell 008	Trips/Route	Route
E02003670 : Aylesbury Vale 019	1	1	2
E02003673 : Aylesbury Vale 022	3	3	2
E02003688 : South Bucks 001	1	1	2
E02003689 : South Bucks 002	1	1	2
E02003696 : Wycombe 001	1	1	2
E02003698 : Wycombe 003	1	1	2
E02003699 : Wycombe 004	1	1	2
E02003702 : Wycombe 007	1	1	2
E02003703 : Wycombe 008	1	1	2
E02003704 : Wycombe 009	1	1	2
E02003710 : Wycombe 015	2	2	2
E02003712 : Wycombe 017	2	2	2
E02004685 : Basingstoke and Deane 011	1	1	2
E02004690 : Basingstoke and Deane 016	1	1	2
E02004807 : Rushmoor 006	1	1	2
E02004832 : Winchester 004	1	1	2
E02005033 : Dartford 006	1	1	2
E02005078 : Maidstone 011	1	1	2
E02005921 : Cherwell 001	25	25	1
E02005922 : Cherwell 002	13	13	1
E02005923 : Cherwell 003	123	123	1
E02005924 : Cherwell 004	396	396	1
E02005925 : Cherwell 005	7	7	1
E02005926 : Cherwell 006	197	197	1
E02005927 : Cherwell 007	106	106	1
E02005928 : Cherwell 008	232	232	2
E02005929 : Cherwell 009	58	29	3
		29	4
E02005930 : Cherwell 010	72	72	2
E02005931 : Cherwell 011	17	17	2
E02005933 : Cherwell 013	42	42	2
E02005934 : Cherwell 014	12	12	2
E02005935 : Cherwell 015	40	40	2
E02005936 : Cherwell 016	20	20	2
E02005937 : Cherwell 017	16	16	2
E02005938 : Cherwell 018	1	1	2
E02005939 : Cherwell 019	48	48	2
E02005940 : Oxford 001	5	5	2
E02005941 : Oxford 002	5	5	2
E02005942 : Oxford 003	2	2	2
E02005943 : Oxford 004	1	1	2
E02005945 : Oxford 006	22	22	2
E02005946 : Oxford 007	4	4	2
E02005947 : Oxford 008	28	28	2
E02005948 : Oxford 009	13	13	2
E02005949 : Oxford 010	8	8	2
E02005950 : Oxford 011	2	2	2
E02005952 : Oxford 013	29	29	2
E02005953 : Oxford 014	2	2	2
E02005954 : Oxford 015	9	9	2
E02005955 : Oxford 016	9	9	2
E02005956 : Oxford 017	3	3	2
E02005958 : South Oxfordshire 001	2	2	2
E02005960 : South Oxfordshire 003	5	5	2
E02005961 : South Oxfordshire 004	6	6	2
E02005963 : South Oxfordshire 006	3	3	2
E02005964 : South Oxfordshire 007	1	1	2
E02005965 : South Oxfordshire 008	1	1	2
E02005966 : South Oxfordshire 009	1	1	2
E02005968 : South Oxfordshire 011	3	3	2
E02005969 : South Oxfordshire 012	3	3	2
E02005971 : South Oxfordshire 014	1	1	2
E02005973 : South Oxfordshire 016	2	2	2

**WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)**

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population All usual residents aged 16 and over in employment the week before the census  
 units Persons  
 date 2011  
 method of travel to work Driving a car or van

usual				
place of work : 2011 super output area - middle layer	E02005928 : Cherwell 008	Trips/Route	Route	
E02005976 : South Oxfordshire 019	1	1	2	
E02005978 : Vale of White Horse 001	5	5	2	
E02005979 : Vale of White Horse 002	15	15	2	
E02005980 : Vale of White Horse 003	1	1	2	
E02005982 : Vale of White Horse 005	3	3	2	
E02005983 : Vale of White Horse 006	10	10	2	
E02005984 : Vale of White Horse 007	1	1	2	
E02005986 : Vale of White Horse 009	2	2	4	
E02005987 : Vale of White Horse 010	5	5	2	
E02005988 : Vale of White Horse 011	2	2	2	
E02005992 : Vale of White Horse 015	6	6	2	
E02005993 : West Oxfordshire 001	29	29	4	
E02005994 : West Oxfordshire 002	22	22	4	
E02005995 : West Oxfordshire 003	3	3	4	
E02005996 : West Oxfordshire 004	13	6	2	
		7	4	
E02005998 : West Oxfordshire 006	3	3	2	
E02006000 : West Oxfordshire 008	2	2	4	
E02006001 : West Oxfordshire 009	9	9	4	
E02006002 : West Oxfordshire 010	6	6	4	
E02006003 : West Oxfordshire 011	6	6	2	
E02006004 : West Oxfordshire 012	2	2	4	
E02006007 : West Oxfordshire 015	1	1	4	
E02006333 : Elmbridge 017	1	1	2	
E02006397 : Runnymede 005	1	1	2	
E02006412 : Spelthorne 010	1	1	2	
E02006425 : Surrey Heath 010	2	2	2	
E02006435 : Tandridge 008	1	1	2	
E02006463 : Woking 008	1	1	2	
E02006575 : Crawley 001	1	1	2	
E02006578 : Crawley 004	1	1	2	
E02006591 : Horsham 004	1	1	2	
E02006887 : Bristol 054	1	1	4	
E02003909 : Cornwall 043	1	1	4	
E02003945 : Cornwall 058	1	1	4	
E02003100 : South Gloucestershire 011	1	1	4	
E02003212 : Swindon 001	1	1	4	
E02003220 : Swindon 009	1	1	4	
E02003225 : Swindon 014	1	1	4	
E02004605 : Cheltenham 006	1	1	4	
E02004613 : Cheltenham 014	1	1	4	
E02004614 : Cheltenham 015	1	1	4	
E02004616 : Cotswold 002	4	4	4	
E02004617 : Cotswold 003	1	1	4	
E02004619 : Cotswold 005	1	1	4	
E02004621 : Cotswold 007	1	1	4	
E02006074 : Sedgemoor 014	1	1	4	
E02006092 : South Somerset 018	1	1	4	
E02006106 : Taunton Deane 008	1	1	4	
W02000420 : Wrexham 020	1	1	4	
W02000398 : Cardiff 032	1	1	4	
W02000257 : Rhondda Cynon Taf 006	1	1	4	
W02000309 : Caerphilly 020	1	1	4	
<b>Total</b>	<b>2,236</b>	<b>2,236</b>		

Route	No	Trips	% Trips
South New'ton Rd N/A361 N	1	1042	46.6%
South New'ton Rd N/Barford Rd S	2	982	43.9%
South New'ton Rd N/C'ford Hill NW	3	72	3.2%
South New'ton Rd S	4	140	6.3%
<b>Total</b>		<b>2236</b>	<b>100.0%</b>

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## **Appendix 7**

### **PICADY and ARCADY Printouts**



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# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]  
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** j1 south newington rd\_church st\_barford rd dir 2024.arc8

**Path:** T:\Hugh\FP073 Bloxham\Junction 8

**Report generation date:** 09/01/2019 15:46:58

- 
- » 2017, AM
  - » 2017, PM
  - » 2024 without dev, AM
  - » 2024 without dev, PM
  - » 2024 with com dev, AM
  - » 2024 with com dev, PM
  - » 2024 with CD + prop dev, AM
  - » 2024 with CD + prop dev, PM

## Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
<b>2017</b>								
South Newington Road	1.89	10.68	0.66	B	1.03	7.13	0.51	A
Church Street	4.44	22.88	0.83	C	1.92	10.67	0.66	B
Barford Road	1.48	10.48	0.60	B	1.55	10.82	0.61	B
<b>2024 with CD + prop dev</b>								
South Newington Road	4.26	20.79	0.83	C	1.65	9.69	0.63	A
Church Street	15.17	59.91	0.99	F	4.25	19.44	0.83	C
Barford Road	5.61	26.12	0.87	D	3.41	19.62	0.79	C
<b>2024 with com dev</b>								
South Newington Road	3.50	17.94	0.79	C	1.57	9.39	0.62	A
Church Street	12.81	52.25	0.98	F	3.88	18.00	0.81	C
Barford Road	5.16	24.49	0.86	C	3.07	18.00	0.77	C
<b>2024 without dev</b>								
South Newington Road	3.14	16.29	0.77	C	1.49	9.00	0.60	A
Church Street	11.12	46.91	0.96	E	3.36	16.10	0.78	C
Barford Road	4.12	20.82	0.82	C	2.73	16.50	0.74	C

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

"D1 - 2017, AM " model duration: 07:30 - 09:00

"D2 - 2017, PM" model duration: 16:45 - 18:15

"D3 - 2024 without dev, AM" model duration: 07:30 - 09:00

"D4 - 2024 without dev, PM" model duration: 16:45 - 18:15

"D5 - 2024 with com dev, AM" model duration: 07:30 - 09:00

"D6 - 2024 with com dev, PM" model duration: 16:45 - 18:15

"D7 - 2024 with CD + prop dev, AM" model duration: 07:30 - 09:00

"D8 - 2024 with CD + prop dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 09/01/2019 15:46:53

## File summary

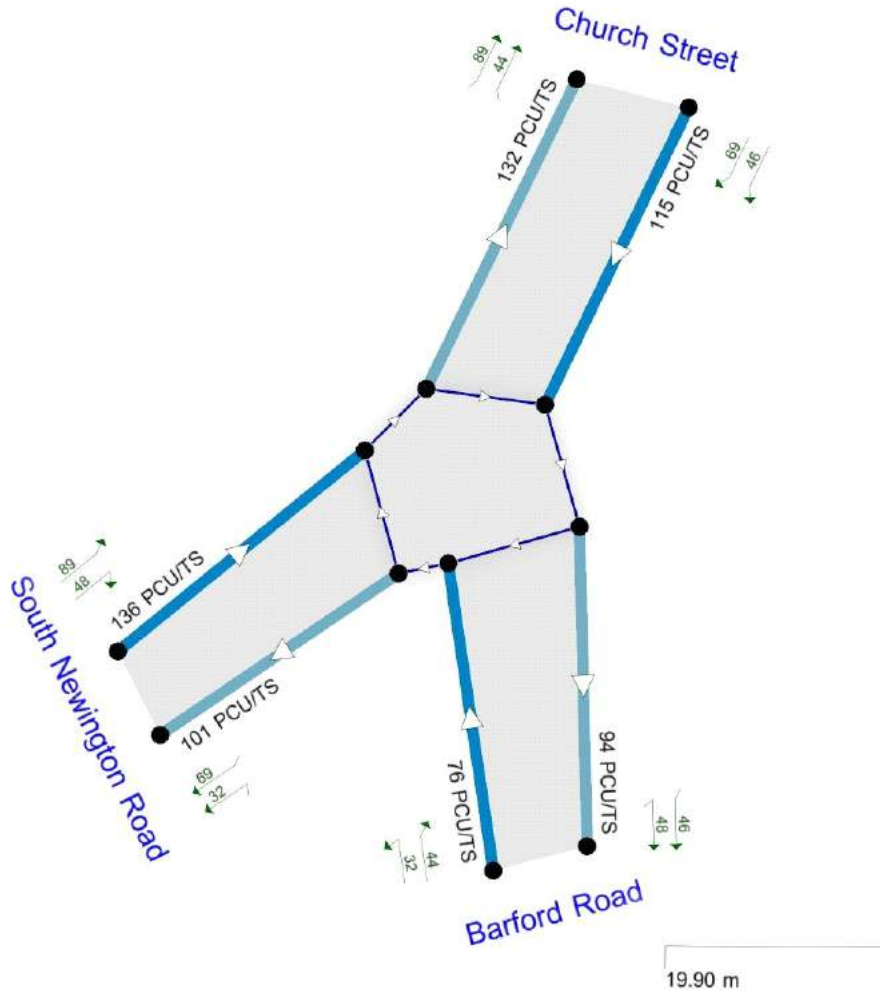
<b>Title</b>	J1 - A361/Barford Road
<b>Location</b>	Bloxham
<b>Site Number</b>	
<b>Date</b>	09/01/2019
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Gisdman Developments Ltd
<b>Jobnumber</b>	FP073
<b>Enumerator</b>	SMT/HC
<b>Description</b>	

## Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

### Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perTimeSegment	s	-Min	perMin



Showing original traffic demand (PCUITS)  
 Time Segment: (07:30-07:45)  
 Showing Analysis Set "A1 - "; Demand Set "D1 - 2017, AM"

The junction diagram reflects the last run of ARCADY.

## 2017, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2017, AM	2017	AM		DIRECT	07:30	09:00	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			15.38	C

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT		N/A	100.000
Church Street	DIRECT		N/A	100.000
Barford Road	DIRECT		N/A	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	86.000	47.000
	Church Street	67.000	0.000	45.000
	Barford Road	32.000	43.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.65	0.35
	Church Street	0.60	0.00	0.40
	Barford Road	0.43	0.57	0.00

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	73.000	63.000
	Church Street	86.000	0.000	70.000
	Barford Road	35.000	51.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.54	0.46
	Church Street	0.55	0.00	0.45
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	86.000	67.000
	Church Street	91.000	0.000	74.000
	Barford Road	53.000	98.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.56	0.44
	Church Street	0.55	0.00	0.45
	Barford Road	0.35	0.65	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	76.000	68.000
	Church Street	84.000	0.000	99.000
	Barford Road	60.000	49.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.53	0.47
	Church Street	0.46	0.00	0.54
	Barford Road	0.55	0.45	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	95.000	58.000
	Church Street	91.000	0.000	72.000
	Barford Road	65.000	56.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.62	0.38
	Church Street	0.56	0.00	0.44
	Barford Road	0.54	0.46	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	81.000	67.000
	Church Street	68.000	0.000	71.000
	Barford Road	36.000	49.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.55	0.45
	Church Street	0.49	0.00	0.51
	Barford Road	0.42	0.58	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	1.000	1.030	1.012
	Church Street	1.028	1.000	1.029
	Barford Road	1.014	1.020	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.0	3.0	1.2
	Church Street	2.8	0.0	2.9
	Barford Road	1.4	2.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.66	10.68	1.89	B
Church Street	0.83	22.88	4.44	C
Barford Road	0.60	10.48	1.48	B

### Main Results for each time segment

#### Main results: (07:30-07:45)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	110.29	109.57	50.03	0.00	262.18	0.421	0.72	5.871	A
Church Street	125.54	124.47	38.72	0.00	241.16	0.521	1.07	7.645	A
Barford Road	87.90	87.27	74.46	0.00	226.53	0.388	0.63	6.435	A



**Main results: (07:45-08:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	131.70	131.37	62.08	0.00	255.84	0.515	1.04	7.212	A
Church Street	149.90	149.15	60.78	0.00	229.68	0.653	1.82	11.071	B
Barford Road	104.96	104.70	82.28	0.00	222.48	0.472	0.88	7.624	A

**Main results: (08:00-08:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	161.30	160.45	82.99	0.00	243.86	0.661	1.89	10.681	B
Church Street	183.59	181.41	70.29	0.00	224.74	0.817	4.00	19.821	C
Barford Road	128.54	127.95	100.05	0.00	213.25	0.603	1.48	10.476	B

**Main results: (08:15-08:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	161.30	161.48	58.11	0.00	258.14	0.625	1.70	9.334	A
Church Street	183.60	183.16	76.19	0.00	221.65	0.828	4.44	22.885	C
Barford Road	128.54	128.61	84.44	0.00	221.55	0.580	1.41	9.697	A

**Main results: (08:30-08:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	131.70	132.39	48.78	0.00	263.01	0.501	1.02	6.927	A
Church Street	149.91	152.53	50.34	0.00	235.11	0.638	1.81	11.224	B
Barford Road	104.96	105.45	84.71	0.00	221.39	0.474	0.92	7.796	A

**Main results: (08:45-09:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	110.29	110.58	50.74	0.00	262.23	0.421	0.73	5.947	A
Church Street	125.54	126.19	49.98	0.00	235.28	0.534	1.17	8.299	A
Barford Road	87.90	88.20	61.86	0.00	233.02	0.377	0.61	6.227	A

## 2017, PM

### Data Errors and Warnings

*No errors or warnings*

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2017, PM	2017	PM		DIRECT	16:45	18:15	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			9.55	A

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT	✓	N/A	100.000
Church Street	DIRECT	✓	N/A	100.000
Barford Road	DIRECT	✓	N/A	100.000

# Turning Proportions

### Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	93.000	35.000
	Church Street	87.000	0.000	42.000
	Barford Road	50.000	55.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.73	0.27
	Church Street	0.67	0.00	0.33
	Barford Road	0.48	0.52	0.00

### Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	96.000	36.000
	Church Street	85.000	0.000	53.000
	Barford Road	53.000	62.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.73	0.27
	Church Street	0.62	0.00	0.38
	Barford Road	0.46	0.54	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	91.000	40.000
	Church Street	89.000	0.000	46.000
	Barford Road	48.000	69.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.69	0.31
	Church Street	0.66	0.00	0.34
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	89.000	37.000
	Church Street	84.000	0.000	48.000
	Barford Road	47.000	67.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.71	0.29
	Church Street	0.64	0.00	0.36
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	82.000	37.000
	Church Street	110.000	0.000	54.000
	Barford Road	54.000	77.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.69	0.31
	Church Street	0.67	0.00	0.33
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	85.000	34.000
	Church Street	85.000	0.000	51.000
	Barford Road	48.000	64.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.71	0.29
	Church Street	0.63	0.00	0.38
	Barford Road	0.43	0.57	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	1.000	1.003	1.007
	Church Street	1.011	1.000	1.005
	Barford Road	1.000	1.000	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.0	0.3	0.7
	Church Street	1.1	0.0	0.5
	Barford Road	0.0	0.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.51	7.13	1.03	A
Church Street	0.66	10.67	1.92	B
Barford Road	0.61	10.82	1.55	B

### Main Results for each time segment

#### Main results: (16:45-17:00)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	128.00	127.08	54.55	0.00	265.29	0.482	0.92	6.470	A
Church Street	129.00	127.93	34.75	0.00	247.98	0.520	1.07	7.433	A
Barford Road	105.00	104.14	86.28	0.00	225.03	0.467	0.86	7.394	A

**Main results: (17:00-17:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	132.00	131.91	61.90	0.00	261.12	0.506	1.01	6.960	A
Church Street	138.00	137.83	35.98	0.00	247.42	0.558	1.24	8.197	A
Barford Road	115.00	114.84	84.96	0.00	225.72	0.509	1.02	8.104	A

**Main results: (17:15-17:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	131.00	130.98	68.91	0.00	257.12	0.509	1.03	7.132	A
Church Street	135.00	135.01	39.96	0.00	245.26	0.550	1.23	8.164	A
Barford Road	117.00	116.94	88.95	0.00	223.66	0.523	1.08	8.428	A

**Main results: (17:30-17:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	126.00	126.06	67.03	0.00	258.20	0.488	0.96	6.814	A
Church Street	132.00	132.07	37.03	0.00	246.84	0.535	1.17	7.848	A
Barford Road	114.00	114.05	84.07	0.00	226.17	0.504	1.03	8.033	A

**Main results: (17:45-18:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	119.00	119.06	76.69	0.00	252.70	0.471	0.90	6.740	A
Church Street	164.00	163.25	37.00	0.00	246.80	0.665	1.92	10.673	B
Barford Road	131.00	130.48	109.46	0.00	213.09	0.615	1.55	10.823	B

**Main results: (18:00-18:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	119.00	119.05	64.34	0.00	259.73	0.458	0.85	6.399	A
Church Street	136.00	136.68	34.04	0.00	248.43	0.547	1.23	8.102	A
Barford Road	112.00	112.55	85.51	0.00	225.43	0.497	1.00	8.012	A

# 2024 without dev, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 without dev, AM	2024 without dev	AM		DIRECT	07:30	09:00	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			29.17	D

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT	✓	N/A	100.000
Church Street	DIRECT	✓	N/A	100.000
Barford Road	DIRECT	✓	N/A	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	99.000	54.000
	Church Street	77.000	0.000	52.000
	Barford Road	37.000	50.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.65	0.35
	Church Street	0.60	0.00	0.40
	Barford Road	0.43	0.57	0.00

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	84.000	73.000
	Church Street	99.000	0.000	81.000
	Barford Road	40.000	59.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.54	0.46
	Church Street	0.55	0.00	0.45
	Barford Road	0.40	0.60	0.00



**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	99.000	77.000
	Church Street	105.000	0.000	86.000
	Barford Road	61.000	113.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.56	0.44
	Church Street	0.55	0.00	0.45
	Barford Road	0.35	0.65	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	88.000	79.000
	Church Street	97.000	0.000	114.000
	Barford Road	69.000	57.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.53	0.47
	Church Street	0.46	0.00	0.54
	Barford Road	0.55	0.45	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	110.000	67.000
	Church Street	105.000	0.000	83.000
	Barford Road	75.000	65.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.62	0.38
	Church Street	0.56	0.00	0.44
	Barford Road	0.54	0.46	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	94.000	77.000
	Church Street	79.000	0.000	82.000
	Barford Road	42.000	57.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.55	0.45
	Church Street	0.49	0.00	0.51
	Barford Road	0.42	0.58	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	1.000	1.030	1.012
	Church Street	1.028	1.000	1.029
	Barford Road	1.014	1.020	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.0	3.0	1.2
	Church Street	2.8	0.0	2.9
	Barford Road	1.4	2.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.77	16.29	3.14	C
Church Street	0.96	46.91	11.12	E
Barford Road	0.82	20.82	4.12	C

### Main Results for each time segment

#### Main results: (07:30-07:45)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	153.00	151.63	49.64	0.00	262.40	0.583	1.37	8.030	A
Church Street	129.00	127.79	53.52	0.00	233.47	0.553	1.21	8.424	A
Barford Road	87.00	86.38	76.28	0.00	225.59	0.386	0.62	6.437	A

**Main results: (07:45-08:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	157.00	156.84	58.85	0.00	257.68	0.609	1.53	8.907	A
Church Street	180.00	177.47	72.77	0.00	223.45	0.806	3.74	18.641	C
Barford Road	99.00	98.78	97.66	0.00	214.55	0.461	0.84	7.758	A

**Main results: (08:00-08:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	176.00	174.39	110.83	0.00	228.05	0.772	3.14	16.288	C
Church Street	191.00	189.40	76.34	0.00	221.59	0.862	5.34	26.391	D
Barford Road	174.00	170.72	104.12	0.00	211.16	0.824	4.12	20.816	C

**Main results: (08:15-08:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	167.00	168.24	59.03	0.00	257.62	0.648	1.90	10.208	B
Church Street	211.00	205.22	79.48	0.00	219.94	0.959	11.12	46.913	E
Barford Road	126.00	128.69	94.83	0.00	216.19	0.583	1.43	10.584	B

**Main results: (08:30-08:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	177.00	176.68	64.75	0.00	253.95	0.697	2.22	11.585	B
Church Street	188.00	193.60	67.06	0.00	226.42	0.830	5.52	30.489	D
Barford Road	140.00	139.51	107.03	0.00	209.89	0.667	1.93	12.687	B

**Main results: (08:45-09:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	171.00	171.21	57.43	0.00	258.42	0.662	2.01	10.353	B
Church Street	161.00	163.70	76.94	0.00	221.27	0.728	2.82	16.293	C
Barford Road	99.00	100.12	80.70	0.00	223.31	0.443	0.81	7.369	A

# 2024 without dev, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 without dev, PM	2024 without dev	PM		DIRECT	16:45	18:15	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			13.88	B

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT	✓	N/A	100.000
Church Street	DIRECT	✓	N/A	100.000
Barford Road	DIRECT	✓	N/A	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	108.000	41.000
	Church Street	101.000	0.000	49.000
	Barford Road	58.000	64.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.72	0.28
	Church Street	0.67	0.00	0.33
	Barford Road	0.48	0.52	0.00

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	111.000	42.000
	Church Street	99.000	0.000	61.000
	Barford Road	61.000	72.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.73	0.27
	Church Street	0.62	0.00	0.38
	Barford Road	0.46	0.54	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	105.000	46.000
	Church Street	103.000	0.000	53.000
	Barford Road	56.000	80.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.70	0.30
	Church Street	0.66	0.00	0.34
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	103.000	43.000
	Church Street	97.000	0.000	56.000
	Barford Road	54.000	78.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.71	0.29
	Church Street	0.63	0.00	0.37
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	95.000	43.000
	Church Street	128.000	0.000	63.000
	Barford Road	63.000	89.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.69	0.31
	Church Street	0.67	0.00	0.33
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	99.000	39.000
	Church Street	99.000	0.000	59.000
	Barford Road	56.000	74.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.72	0.28
	Church Street	0.63	0.00	0.37
	Barford Road	0.43	0.57	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	1.000	1.003	1.007
	Church Street	1.011	1.000	1.005
	Barford Road	1.000	1.000	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.0	0.3	0.7
	Church Street	1.1	0.0	0.5
	Barford Road	0.0	0.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.60	9.00	1.49	A
Church Street	0.78	16.10	3.36	C
Barford Road	0.74	16.50	2.73	C

### Main Results for each time segment

#### Main results: (16:45-17:00)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	149.00	147.69	63.35	0.00	260.30	0.572	1.31	7.904	A
Church Street	150.00	148.46	40.64	0.00	244.88	0.613	1.54	9.194	A
Barford Road	122.00	120.76	99.96	0.00	217.98	0.560	1.24	9.145	A

**Main results: (17:00-17:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	153.00	152.85	71.83	0.00	255.50	0.599	1.46	8.751	A
Church Street	160.00	159.70	41.96	0.00	244.26	0.655	1.84	10.597	B
Barford Road	133.00	132.73	98.90	0.00	218.53	0.609	1.51	10.449	B

**Main results: (17:15-17:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	151.00	150.97	79.85	0.00	250.92	0.602	1.49	8.999	A
Church Street	156.00	156.01	45.95	0.00	242.10	0.644	1.83	10.459	B
Barford Road	136.00	135.87	102.93	0.00	216.45	0.628	1.65	11.142	B

**Main results: (17:30-17:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	146.00	146.09	78.06	0.00	251.95	0.579	1.40	8.513	A
Church Street	153.00	153.11	43.04	0.00	243.67	0.628	1.72	9.957	A
Barford Road	132.00	132.11	97.12	0.00	219.45	0.602	1.54	10.324	B

**Main results: (17:45-18:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	138.00	138.10	88.31	0.00	246.12	0.561	1.30	8.342	A
Church Street	191.00	189.36	43.01	0.00	243.63	0.784	3.36	16.100	C
Barford Road	152.00	150.81	126.84	0.00	204.13	0.745	2.73	16.505	C

**Main results: (18:00-18:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	138.00	138.09	74.73	0.00	253.84	0.544	1.21	7.782	A
Church Street	158.00	159.51	39.06	0.00	245.78	0.643	1.85	10.606	B
Barford Road	130.00	131.21	100.09	0.00	217.92	0.597	1.52	10.521	B

# 2024 with com dev, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	



## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 with com dev, AM	2024 with com dev	AM		DIRECT	07:30	09:00	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			32.69	D

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT	✓	N/A	100.000
Church Street	DIRECT	✓	N/A	100.000
Barford Road	DIRECT	✓	N/A	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	99.000	56.000
	Church Street	77.000	0.000	55.000
	Barford Road	38.000	56.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.64	0.36
	Church Street	0.58	0.00	0.42
	Barford Road	0.40	0.60	0.00

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	84.000	74.000
	Church Street	99.000	0.000	83.000
	Barford Road	41.000	66.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.53	0.47
	Church Street	0.54	0.00	0.46
	Barford Road	0.38	0.62	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	99.000	79.000
	Church Street	105.000	0.000	88.000
	Barford Road	62.000	120.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.56	0.44
	Church Street	0.54	0.00	0.46
	Barford Road	0.34	0.66	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	88.000	80.000
	Church Street	97.000	0.000	117.000
	Barford Road	70.000	63.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.52	0.48
	Church Street	0.45	0.00	0.55
	Barford Road	0.53	0.47	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	110.000	69.000
	Church Street	105.000	0.000	86.000
	Barford Road	76.000	71.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.61	0.39
	Church Street	0.55	0.00	0.45
	Barford Road	0.52	0.48	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	94.000	79.000
	Church Street	79.000	0.000	85.000
	Barford Road	43.000	63.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.54	0.46
	Church Street	0.48	0.00	0.52
	Barford Road	0.41	0.59	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	1.000	1.030	1.012
	Church Street	1.028	1.000	1.029
	Barford Road	1.014	1.020	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.0	3.0	1.2
	Church Street	2.8	0.0	2.9
	Barford Road	1.4	2.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.79	17.94	3.50	C
Church Street	0.98	52.25	12.81	F
Barford Road	0.86	24.49	5.16	C

### Main Results for each time segment

#### Main results: (07:30-07:45)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	155.00	153.54	55.58	0.00	259.07	0.598	1.46	8.418	A
Church Street	132.00	130.71	55.47	0.00	232.45	0.568	1.28	8.740	A
Barford Road	94.00	93.30	76.25	0.00	225.58	0.417	0.71	6.769	A

**Main results: (07:45-08:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	158.00	157.84	65.82	0.00	253.74	0.623	1.61	9.365	A
Church Street	182.00	179.31	73.77	0.00	222.93	0.816	3.97	19.548	C
Barford Road	107.00	106.73	97.59	0.00	214.56	0.499	0.98	8.324	A

**Main results: (08:00-08:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	178.00	176.11	117.20	0.00	224.46	0.793	3.50	17.936	C
Church Street	193.00	191.15	78.20	0.00	220.62	0.875	5.82	28.457	D
Barford Road	182.00	177.82	103.99	0.00	211.21	0.862	5.16	24.489	C

**Main results: (08:15-08:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	168.00	169.49	65.62	0.00	253.89	0.662	2.02	10.843	B
Church Street	214.00	207.01	80.59	0.00	219.36	0.976	12.81	52.254	F
Barford Road	133.00	136.51	94.36	0.00	216.40	0.615	1.64	11.732	B

**Main results: (08:30-08:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	179.00	178.62	70.70	0.00	250.61	0.714	2.40	12.417	B
Church Street	191.00	197.40	69.04	0.00	225.39	0.847	6.41	36.171	E
Barford Road	147.00	146.41	107.28	0.00	209.74	0.701	2.24	14.061	B

**Main results: (08:45-09:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	173.00	173.23	63.53	0.00	254.98	0.678	2.17	11.050	B
Church Street	164.00	167.31	78.93	0.00	220.23	0.745	3.10	17.934	C
Barford Road	106.00	107.32	81.03	0.00	223.12	0.475	0.92	7.858	A

# 2024 with com dev, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 with com dev, PM	2024 with com dev	PM		DIRECT	16:45	18:15	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			15.22	C

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT	✓	N/A	100.000
Church Street	DIRECT	✓	N/A	100.000
Barford Road	DIRECT	✓	N/A	100.000

# Turning Proportions

### Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	108.000	42.000
	Church Street	101.000	0.000	55.000
	Barford Road	59.000	68.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.72	0.28
	Church Street	0.65	0.00	0.35
	Barford Road	0.46	0.54	0.00

### Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	111.000	43.000
	Church Street	99.000	0.000	68.000
	Barford Road	63.000	76.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.72	0.28
	Church Street	0.59	0.00	0.41
	Barford Road	0.45	0.55	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	105.000	48.000
	Church Street	103.000	0.000	60.000
	Barford Road	57.000	84.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.69	0.31
	Church Street	0.63	0.00	0.37
	Barford Road	0.40	0.60	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	103.000	44.000
	Church Street	97.000	0.000	62.000
	Barford Road	56.000	81.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.70	0.30
	Church Street	0.61	0.00	0.39
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	95.000	44.000
	Church Street	128.000	0.000	69.000
	Barford Road	64.000	93.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.68	0.32
	Church Street	0.65	0.00	0.35
	Barford Road	0.41	0.59	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)**

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.000	99.000	41.000
	Church Street	99.000	0.000	65.000
	Barford Road	57.000	78.000	0.000



### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.71	0.29
	Church Street	0.60	0.00	0.40
	Barford Road	0.42	0.58	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	1.000	1.003	1.007
	Church Street	1.011	1.000	1.005
	Barford Road	1.000	1.000	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.0	0.3	0.7
	Church Street	1.1	0.0	0.5
	Barford Road	0.0	0.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.62	9.39	1.57	A
Church Street	0.81	18.00	3.88	C
Barford Road	0.77	18.00	3.07	C

### Main Results for each time segment

#### Main results: (16:45-17:00)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	150.00	148.64	67.27	0.00	258.07	0.581	1.36	8.127	A
Church Street	156.00	154.29	41.62	0.00	244.40	0.638	1.71	9.812	A
Barford Road	127.00	125.64	99.89	0.00	218.02	0.583	1.36	9.607	A

**Main results: (17:00-17:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	154.00	153.84	75.80	0.00	253.24	0.608	1.52	9.036	A
Church Street	167.00	166.61	42.96	0.00	243.77	0.685	2.10	11.594	B
Barford Road	139.00	138.66	98.86	0.00	218.55	0.636	1.70	11.211	B

**Main results: (17:15-17:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	153.00	152.95	83.84	0.00	248.65	0.615	1.57	9.394	A
Church Street	163.00	163.00	47.93	0.00	241.09	0.676	2.10	11.527	B
Barford Road	141.00	140.88	102.92	0.00	216.46	0.651	1.82	11.877	B

**Main results: (17:30-17:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	147.00	147.12	81.08	0.00	250.23	0.587	1.45	8.741	A
Church Street	159.00	159.16	44.06	0.00	243.17	0.654	1.94	10.744	B
Barford Road	137.00	137.12	97.14	0.00	219.43	0.624	1.70	10.956	B

**Main results: (17:45-18:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	139.00	139.10	92.19	0.00	243.92	0.570	1.35	8.597	A
Church Street	197.00	195.06	44.01	0.00	243.14	0.810	3.88	18.005	C
Barford Road	157.00	155.63	126.66	0.00	204.22	0.769	3.07	18.004	C

**Main results: (18:00-18:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	140.00	140.07	78.85	0.00	251.50	0.557	1.28	8.084	A
Church Street	164.00	165.78	41.05	0.00	244.76	0.670	2.10	11.640	B
Barford Road	135.00	136.40	100.25	0.00	217.83	0.620	1.68	11.234	B

## 2024 with CD + prop dev, AM

### Data Errors and Warnings

*No errors or warnings*

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 with CD + prop dev, AM	2024 with CD + prop dev	AM		DIRECT	07:30	09:00	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			36.82	E

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT	✓	N/A	100.000
Church Street	DIRECT	✓	N/A	100.000
Barford Road	DIRECT	✓	N/A	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	103.000	60.000
	Church Street	79.000	0.000	55.000
	Barford Road	39.000	56.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:30-07:45)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.63	0.37
	Church Street	0.59	0.00	0.41
	Barford Road	0.41	0.59	0.00

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	88.000	78.000
	Church Street	101.000	0.000	83.000
	Barford Road	43.000	66.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (07:45-08:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.53	0.47
	Church Street	0.55	0.00	0.45
	Barford Road	0.39	0.61	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	103.000	83.000
	Church Street	107.000	0.000	88.000
	Barford Road	64.000	120.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:00-08:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.55	0.45
	Church Street	0.55	0.00	0.45
	Barford Road	0.35	0.65	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	92.000	84.000
	Church Street	99.000	0.000	117.000
	Barford Road	72.000	63.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:15-08:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.52	0.48
	Church Street	0.46	0.00	0.54
	Barford Road	0.53	0.47	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	114.000	72.000
	Church Street	107.000	0.000	86.000
	Barford Road	78.000	71.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:30-08:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.61	0.39
	Church Street	0.55	0.00	0.45
	Barford Road	0.52	0.48	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	98.000	83.000
	Church Street	80.000	0.000	85.000
	Barford Road	44.000	63.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (08:45-09:00)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.00	0.54	0.46
	Church Street	0.48	0.00	0.52
	Barford Road	0.41	0.59	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	1.000	1.030	1.012
	Church Street	1.028	1.000	1.029
	Barford Road	1.014	1.020	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
From		South Newington Road	Church Street	Barford Road
	South Newington Road	0.0	3.0	1.2
	Church Street	2.8	0.0	2.9
	Barford Road	1.4	2.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.83	20.79	4.26	C
Church Street	0.99	59.91	15.17	F
Barford Road	0.87	26.12	5.61	D

### Main Results for each time segment

#### Main results: (07:30-07:45)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	163.00	161.35	55.57	0.00	259.10	0.629	1.65	9.062	A
Church Street	134.00	132.64	59.39	0.00	230.41	0.582	1.36	9.084	A
Barford Road	95.00	94.28	78.20	0.00	224.58	0.423	0.72	6.871	A

**Main results: (07:45-08:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	166.00	165.81	65.81	0.00	253.75	0.654	1.84	10.203	B
Church Street	184.00	180.99	77.74	0.00	220.86	0.833	4.37	21.159	C
Barford Road	109.00	108.70	99.40	0.00	213.64	0.510	1.02	8.551	A

**Main results: (08:00-08:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	186.00	183.58	116.96	0.00	224.60	0.828	4.26	20.788	C
Church Street	195.00	192.80	81.96	0.00	218.67	0.892	6.57	31.742	D
Barford Road	184.00	179.42	105.79	0.00	210.29	0.875	5.61	26.121	D

**Main results: (08:15-08:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	176.00	177.91	65.85	0.00	253.76	0.694	2.35	12.149	B
Church Street	216.00	207.40	84.78	0.00	217.18	0.995	15.17	59.908	F
Barford Road	135.00	138.88	95.65	0.00	215.74	0.626	1.73	12.260	B

**Main results: (08:30-08:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	186.00	185.60	70.67	0.00	250.63	0.742	2.75	13.725	B
Church Street	193.00	200.72	72.06	0.00	223.82	0.862	7.45	44.096	E
Barford Road	149.00	148.34	109.82	0.00	208.43	0.715	2.38	14.795	B

**Main results: (08:45-09:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	181.00	181.22	63.58	0.00	254.96	0.710	2.53	12.258	B
Church Street	165.00	169.12	82.90	0.00	218.17	0.756	3.32	19.653	C
Barford Road	107.00	108.44	82.52	0.00	222.36	0.481	0.94	7.998	A

## 2024 with CD + prop dev, PM

### Data Errors and Warnings

*No errors or warnings*

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 with CD + prop dev, PM	2024 with CD + prop dev	PM		DIRECT	16:45	18:15	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	S Newington Rd/Church St/Barford Rd	Roundabout	1,2,3			16.34	C

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description
South Newington Road	1	South Newington Road	
Church Street	2	Church Street	
Barford Road	3	Barford Road	

## Capacity Options

Name	Minimum Capacity (PCU/TS)	Maximum Capacity (PCU/TS)
South Newington Road	0.00	24999.75
Church Street	0.00	24999.75
Barford Road	0.00	24999.75

## Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
South Newington Road	3.40	4.00	4.00	57.00	20.00	30.00	
Church Street	3.40	3.70	3.00	27.00	20.00	40.00	
Barford Road	2.70	5.90	6.00	10.00	20.00	40.00	

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/TS)	Final Slope	Final Intercept (PCU/TS)
South Newington Road		(calculated)	(calculated)	0.569	297.409
Church Street		(calculated)	(calculated)	0.528	268.715
Barford Road		(calculated)	(calculated)	0.510	269.496

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



# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00			✓	✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/TS)	Flow Scaling Factor (%)
South Newington Road	DIRECT	✓	N/A	100.000
Church Street	DIRECT	✓	N/A	100.000
Barford Road	DIRECT	✓	N/A	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	109.000	43.000
	Church Street	104.000	0.000	55.000
	Barford Road	63.000	68.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (16:45-17:00)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.72	0.28
	Church Street	0.65	0.00	0.35
	Barford Road	0.48	0.52	0.00

## Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.000	113.000	44.000
	Church Street	102.000	0.000	68.000
	Barford Road	66.000	76.000	0.000

## Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:00-17:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.72	0.28
	Church Street	0.60	0.00	0.40
	Barford Road	0.46	0.54	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	107.000	49.000
	Church Street	107.000	0.000	60.000
	Barford Road	60.000	84.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:15-17:30)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.69	0.31
	Church Street	0.64	0.00	0.36
	Barford Road	0.42	0.58	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	105.000	46.000
	Church Street	101.000	0.000	62.000
	Barford Road	59.000	81.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:30-17:45)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.70	0.30
	Church Street	0.62	0.00	0.38
	Barford Road	0.42	0.58	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	97.000	46.000
	Church Street	131.000	0.000	69.000
	Barford Road	67.000	93.000	0.000

**Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (17:45-18:00)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.00	0.68	0.32
	Church Street	0.66	0.00	0.35
	Barford Road	0.42	0.58	0.00

**Turning Counts / Proportions (Veh/ TS) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)**

		To		
		South Newington Road	Church Street	Barford Road
From				
	South Newington Road	0.000	100.000	42.000
	Church Street	102.000	0.000	65.000
	Barford Road	60.000	78.000	0.000

### Turning Proportions (Veh) - S Newington Rd/ Church St/ Barford Rd - (18:00-18:15)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.00	0.70	0.30
	Church Street	0.61	0.00	0.39
	Barford Road	0.43	0.57	0.00

## Vehicle Mix

### Average PCU Per Vehicle - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	1.000	1.003	1.007
	Church Street	1.011	1.000	1.005
	Barford Road	1.000	1.000	1.000

### Heavy Vehicle Percentages - S Newington Rd/ Church St/ Barford Rd (for whole period)

		To		
		South Newington Road	Church Street	Barford Road
From	South Newington Road	0.0	0.3	0.7
	Church Street	1.1	0.0	0.5
	Barford Road	0.0	0.0	0.0

## Results

### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
South Newington Road	0.63	9.69	1.65	A
Church Street	0.83	19.44	4.25	C
Barford Road	0.79	19.62	3.41	C

### Main Results for each time segment

#### Main results: (16:45-17:00)

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	152.00	150.60	67.23	0.00	258.10	0.589	1.40	8.268	A
Church Street	159.00	157.19	42.60	0.00	243.87	0.652	1.81	10.183	B
Barford Road	131.00	129.51	102.81	0.00	216.51	0.605	1.49	10.180	B

**Main results: (17:00-17:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	157.00	156.81	75.79	0.00	253.25	0.620	1.59	9.308	A
Church Street	170.00	169.58	43.95	0.00	243.24	0.699	2.23	12.134	B
Barford Road	142.00	141.66	101.85	0.00	217.01	0.654	1.83	11.880	B

**Main results: (17:15-17:30)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	156.00	155.94	83.82	0.00	248.66	0.627	1.65	9.695	A
Church Street	167.00	166.99	48.93	0.00	240.56	0.694	2.24	12.225	B
Barford Road	144.00	143.85	106.90	0.00	214.41	0.672	1.98	12.712	B

**Main results: (17:30-17:45)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	151.00	151.10	81.08	0.00	250.22	0.603	1.55	9.094	A
Church Street	163.00	163.13	46.05	0.00	242.10	0.673	2.12	11.425	B
Barford Road	140.00	140.13	101.13	0.00	217.38	0.644	1.86	11.678	B

**Main results: (17:45-18:00)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	143.00	143.11	92.09	0.00	243.97	0.586	1.44	8.935	A
Church Street	200.00	197.86	46.01	0.00	242.07	0.826	4.25	19.438	C
Barford Road	160.00	158.44	129.53	0.00	202.75	0.789	3.41	19.620	C

**Main results: (18:00-18:15)**

Name	Total Demand (Veh/TS)	Entry Flow (Veh/TS)	Circulating Flow (Veh/TS)	Pedestrian Demand (Ped/TS)	Capacity (Veh/TS)	RFC	End Queue (Veh)	Delay (s)	LOS
South Newington Road	142.00	142.12	78.95	0.00	251.44	0.565	1.32	8.246	A
Church Street	167.00	169.01	42.07	0.00	244.21	0.684	2.25	12.266	B
Barford Road	138.00	139.59	103.41	0.00	216.20	0.638	1.82	11.980	B

Junctions 8
PICADY 8 - Priority Intersection Module
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2019
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Filename: prop access off south newington rd 2024.arc8  
 Path: T:\Hugh\FP073 Bloxham\Junction 8  
 Report generation date: 09/01/2019 16:02:04

- » Proposed - 2024 with CD + prop dev, AM
- » Proposed - 2024 with CD + prop dev, PM

### Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Proposed - 2024 with CD + prop dev								
Stream B-AC	0.10	9.40	0.09	A	0.03	8.47	0.03	A
Stream C-AB	0.07	4.49	0.05	A	0.25	4.46	0.11	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

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

"D1 - 2024 with CD + prop dev, AM " model duration: 08:00 - 09:30  
 "D2 - 2024 with CD + prop dev, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 09/01/2019 16:02:02

### File summary

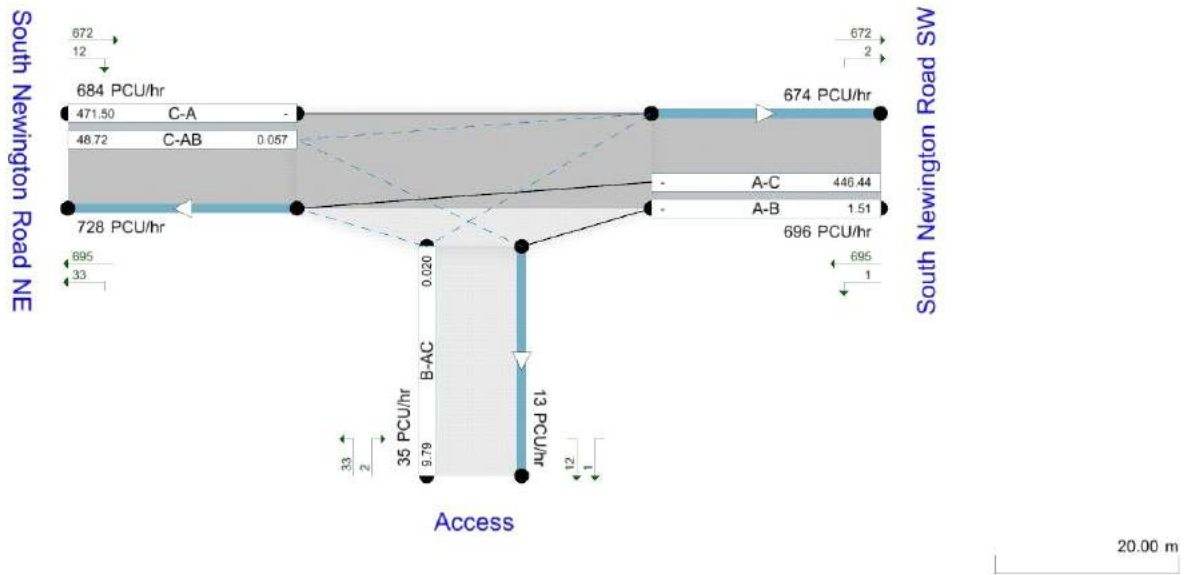
<b>Title</b>	Proposed Access Off A361
<b>Location</b>	Bloxham
<b>Site Number</b>	
<b>Date</b>	09/01/2019
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Glsdman Developments Ltd
<b>Jobnumber</b>	FP073
<b>Enumerator</b>	SMT/HC
<b>Description</b>	

### Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

### 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



Showing original traffic demand (PCU/hr).  
Streams (upstreams) show Total Demand (Veh/hr); Streams (downstreams) show RFC (i)  
Time Segment: (08:00-08:15)  
Showing Analysis Set "A1 - Proposed"; Demand Set "D1 - 2024 with CD + prop dev, AM"

The junction diagram reflects the last run of ARCADY.

## Proposed - 2024 with CD + prop dev, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed	N/A			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 with CD + prop dev, AM	2024 with CD + prop dev	AM		ONE HOUR	08:00	09:30	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Access off South Newington Road	T-Junction	Two-way	A,B,C	6.95	A

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description	Arm Type
South Newington Road SW	A	South Newington Road SW		Major
Access	B	Access		Minor
South Newington Road NE	C	South Newington Road NE		Major

## Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
South Newington Road NE	6.00		0.00		2.20	80.00	✓	0.00

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

## Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Access	One lane	3.00										40	40

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	510.248	0.093	0.235	0.148	0.336
1	B-C	649.118	0.100	0.252	-	-
1	C-B	620.292	0.240	0.240	-	-

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

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

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
South Newington Road SW	ONE HOUR	✓	681.00	100.000
Access	ONE HOUR	✓	34.00	100.000
South Newington Road NE	ONE HOUR	✓	669.00	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/hr) - Access off South Newington Road (for whole period)

		To		
		South Newington Road SW	Access	South Newington Road NE
From	South Newington Road SW	0.000	1.000	680.000
	Access	2.000	0.000	32.000
	South Newington Road NE	657.000	12.000	0.000

## Turning Proportions (Veh) - Access off South Newington Road (for whole period)

		To		
		South Newington Road SW	Access	South Newington Road NE
From	South Newington Road SW	0.00	0.00	1.00
	Access	0.06	0.00	0.94
	South Newington Road NE	0.98	0.02	0.00

# Vehicle Mix

## Average PCU Per Vehicle - Access off South Newington Road (for whole period)

		To		
		South Newington Road SW	Access	South Newington Road NE
From	South Newington Road SW	1.000	1.020	1.022
	Access	1.020	1.000	1.020
	South Newington Road NE	1.023	1.020	1.000



### Heavy Vehicle Percentages - Access off South Newington Road (for whole period)

		To		
From		South Newington Road SW	Access	South Newington Road NE
	South Newington Road SW	0.0	2.0	2.2
	Access	2.0	0.0	2.0
	South Newington Road NE	2.3	2.0	0.0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.09	9.40	0.10	A
C-AB	0.05	4.49	0.07	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

## Proposed - 2024 with CD + prop dev, PM

### Data Errors and Warnings

*No errors or warnings*

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed	N/A			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 with CD + prop dev, PM	2024 with CD + prop dev	PM		ONE HOUR	17:00	18:30	90	15		

## Junction Network

### Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	Access off South Newington Road	T-Junction	Two-way	A,B,C	5.01	A

### Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Name	Arm	Name	Description	Arm Type
South Newington Road SW	A	South Newington Road SW		Major
Access	B	Access		Minor
South Newington Road NE	C	South Newington Road NE		Major

## Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
South Newington Road NE	6.00		0.00		2.20	80.00	✓	0.00

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

## Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Access	One lane	3.00										40	40

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	510.248	0.093	0.235	0.148	0.336
1	B-C	649.118	0.100	0.252	-	-
1	C-B	620.292	0.240	0.240	-	-

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

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

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

# Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

# Entry Flows

## General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
South Newington Road SW	ONE HOUR	✓	595.00	100.000
Access	ONE HOUR	✓	13.00	100.000
South Newington Road NE	ONE HOUR	✓	691.00	100.000

# Turning Proportions

## Turning Counts / Proportions (Veh/hr) - Access off South Newington Road (for whole period)

		To		
		South Newington Road SW	Access	South Newington Road NE
From	South Newington Road SW	0.000	2.000	593.000
	Access	1.000	0.000	12.000
	South Newington Road NE	663.000	28.000	0.000

## Turning Proportions (Veh) - Access off South Newington Road (for whole period)

		To		
		South Newington Road SW	Access	South Newington Road NE
From	South Newington Road SW	0.00	0.00	1.00
	Access	0.08	0.00	0.92
	South Newington Road NE	0.96	0.04	0.00

# Vehicle Mix

## Average PCU Per Vehicle - Access off South Newington Road (for whole period)

		To		
		South Newington Road SW	Access	South Newington Road NE
From	South Newington Road SW	1.000	1.020	1.004
	Access	1.020	1.000	1.020
	South Newington Road NE	1.006	1.020	1.000

## Heavy Vehicle Percentages - Access off South Newington Road (for whole period)

		To		
		South Newington Road SW	Access	South Newington Road NE
From	South Newington Road SW	0.0	2.0	0.4
	Access	2.0	0.0	2.0
	South Newington Road NE	0.6	2.0	0.0

# Results

## Results Summary for whole modelled period

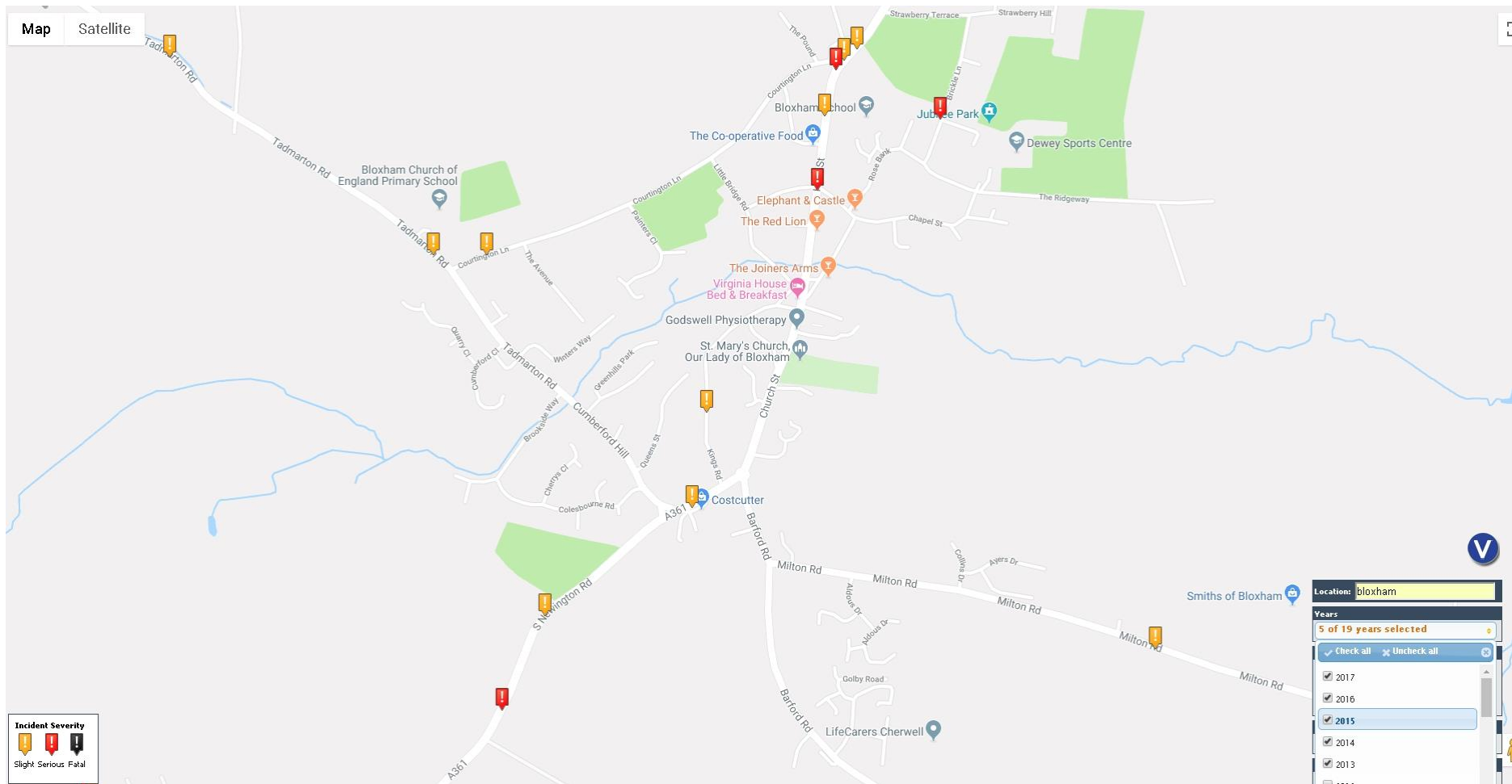
Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.47	0.03	A
C-AB	0.11	4.46	0.25	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

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## **Appendix 8**

### **Traffic Accident Data**

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## BLOXHAM – ACCIDENT PLOT 01/01/2013 – 31/12/2017



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