



Transport Assessment

**Proposed Residential Development - Phase 2
Land North of Dukes Meadow Drive
Banbury**

**Revision B: September 2022
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1.0 Introduction

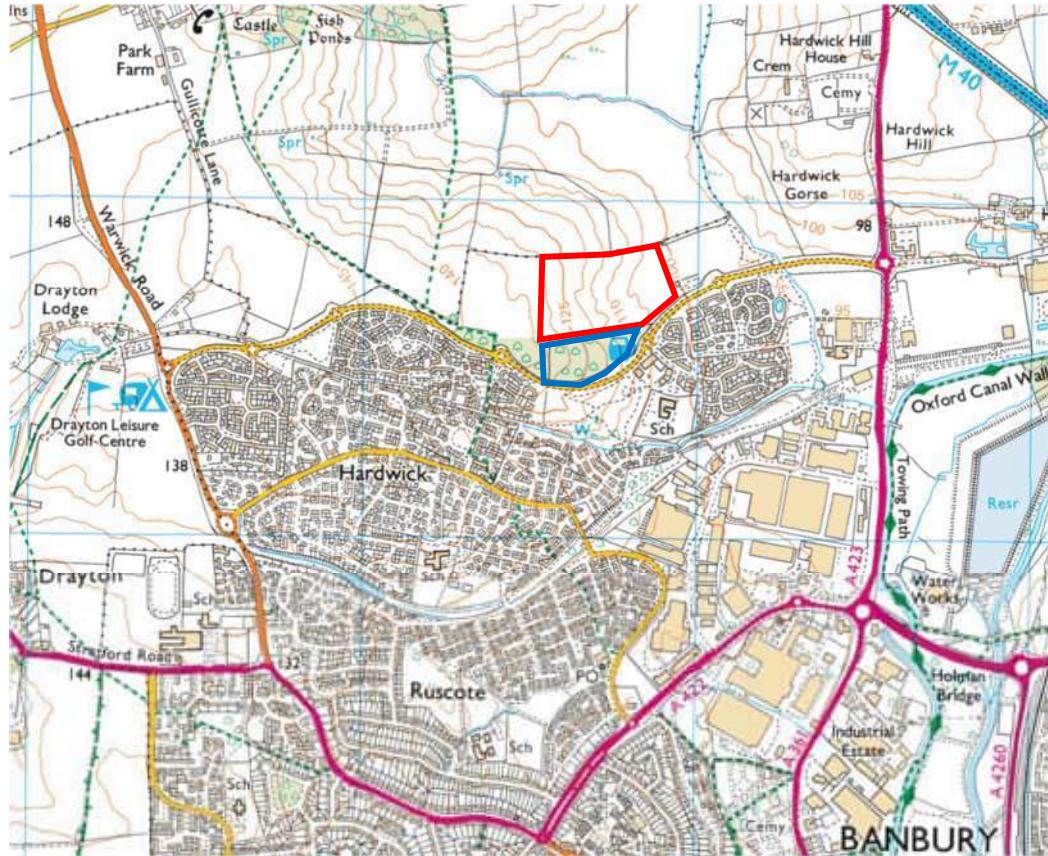
1.1 Instructions

- 1.1.1 MAC have been commissioned by Manor Oak Homes to provide a Transport Assessment to accompany an Outline planning application for a residential development on land north of Dukes Meadow Drive, Banbury, Oxfordshire.
- 1.1.2 The benefit of this report is to our instructing Client.

1.2 Site Location

- 1.2.1 The proposed residential development is located at land north of Dukes Meadow Drive, Banbury, as shown in **Inset 1.1** below and enclosed in **Appendix A**. The approximate National Grid Reference for the site is E444729, N242728.

Inset 1.1: Site Location Plan



- 1.2.2 The application site covers an area of approximately 8.78 hectares and is located to the north of Banbury Town Centre.

1.3 Current Use and Description

- 1.3.1** The site currently comprises undeveloped greenfield land. There has been no previous development on the site.
- 1.3.2** The existing site is shown on the topographical survey enclosed in **Appendix B**.

1.4 Proposed Development

- 1.4.1** The proposed development will comprise 176 dwellings. The proposed development layout is shown on the plan enclosed in **Appendix C**.
- 1.4.2** The adjacent land comprising Phase 1 was granted Outline planning permission in April 2022 for up to 78 dwellings and associated open space with all matters reserved other than access, Cherwell District Council planning application reference 21/03426/OUT.
- 1.4.3** Access to the Phase 1 site was approved from with the creation of a fourth arm off the existing Dukes Meadow Drive/Lapsley Drive roundabout. The Phase 2 site will also be accessed from this point via a slightly altered and upgraded access. The site access arrangement for the Phase 1 site is provided within **Appendix H**.

1.5 Consultations

- 1.5.1** A Transport Assessment Scoping Note (Ref 802-TAS-01-0) was prepared and submitted to Oxfordshire County Council (OCC) as the Local Highway Authority. The Scoping Note agreed key elements such as scope of junction assessment and trip rates. A copy of the Scoping Note and OCC response are enclosed in **Appendix J**.

1.6 Summary

- 1.6.1** This TA has been prepared in accordance with OCC Highway Design Guide and its Guidance on Transport Assessments and Statements. This Transport Assessment has been structured as follows:
 - Section 2** describes the existing conditions including the surrounding highway network, the available facilities for public transport, cyclists and pedestrians and the range of local facilities and amenities. Local highway safety is considered through a review of personal injury collision records.
 - Section 3** presents the proposals of the development, including the site access arrangements, layout, and parking provision for vehicles and cycles.
- 1.6.2** **Section 4** presents the trip generation likely to be associated with the proposed development.
- 1.6.3** **Section 5** summarises the highway impact of the proposed development on the local network and **Section 6** provides a summary and conclusion to this Transport Statement

2.0 Existing Conditions – Site Information

2.1 Site Location

- 2.1.1 The proposed residential development is located at land north of Dukes Meadow Drive, Banbury, as shown in **Inset 1.1** and enclosed in **Appendix A**.

2.2 Permitted Use

- 2.2.1 The site is currently an undeveloped greenfield site with no previous development.

2.3 Neighbouring Land Uses

- 2.3.1 The neighbouring land uses are agricultural land to the west and to the north. To the east, the site is adjacent to a sports facility. To the south is the Phase 1 site beyond which is Dukes Meadow Drive and residential development.
- 2.3.2 We are not aware of any planned changes to the neighbouring land uses other than the Phase 1 development which has been mentioned above.

2.4 Existing Access Arrangements

- 2.4.1 There is an existing gated field access to the site off Dukes Meadow Drive / Lapsley Drive Roundabout. As noted in **paragraph 1.4.3** a new access is to be constructed to support the Phase 1 development.

3.0 Existing Conditions – Baseline Transport Data

3.1 Walking and Cycling

- 3.1.1 Dukes Meadow Drive provides a 3m shared footway / cycleway to the southern / eastern side of the carriageway. This links with other off-road pedestrian / cycle routes through Duke Meadow's Park to the south of the site, as such provides excellent active travel connections to Banbury town centre, the railway station and employment areas.
- 3.1.2 A Public Right of Way (PRoW) is located beyond the western boundary of the site. PRoW No. 120/107/20 connects the village of Hanwell to the north and Banbury town centre to the south. An extract of the PRoW within the vicinity of the site is enclosed in **Appendix C**.
- 3.1.3 Walking and cycling distances to key local facilities is set out in the plan enclosed in **Appendix D**. The plan also shows the proximity of the site to key facilities including: schools, health services, shops etc. The suitability of the walking distance shown on the drawing is based on the guidance described in full below. Cycle journeys are generally considered acceptable if the distance is less than 5km.
- 3.1.4 In 2000 the Institution of Highways and Transportation published the document 'Providing for Journeys on Foot'. This document states that:

"80% of walk journeys and walk stages in urban areas are less than one mile. The average length of a walk journey is one kilometre (0.6 miles). This differs little by age or sex and has remained constant since 1975/76."

It goes on to define an average walking speed thus:

"An average walking speed of approximately 1.4 m/s can be assumed, which equates to approximately 400m in five minutes or three miles per hour."

- 3.1.5 Within the document:

"Table 3.2 contains suggested acceptable walking distances, for pedestrians without a mobility impairment for some common facilities. These may be used for planning and evaluation purposes."

Table 3.2 is replicated below as **Table 3.1**. Predicted journey times have been added to distances based on the 1.4m/s walking pace.

Table 3.1: Suggested Walking Distances - IHT 'Providing for Journeys on Foot'

Town Centres		Commuting / School / Sight-seeing		Elsewhere		
Distance	Time	Distance	Time	Distance	Time	
Desirable	200m	2m 23s	500m	5m 57s	400m	4m 46s
Acceptable	400m	4m 46s	1000m	11m 54s	800m	9m 32s
Preferred Maximum	800m	9m 32s	2000m	23m 48s	1200m	14m 17s

3.2 Local Facilities & Amenities

- 3.2.1 Having regard to the above review of sustainable transport options, consideration has been given to the proximity of the site to the key local services including education, employment, retail and health facilities. The accessibility plan provided within **Appendix D** shows the site is located with respect to a range of facilities and services that can be accessed by walking and cycling in accordance with the principles of the NPPF.
- 3.2.2 A summary of the distances and journey times to the local amenities is provided in **Table 3.2**.

Table 3.2: Distance and Journey Times to Local Facilities & Amenities

Destination	Distance (m)	Journey Time (minutes)	
		Walk	Cycle
Co-op Convenience Store	190	2	1
Hanwell Arms PH	220	3	1
Hanwell Fields Community Centre	250	3	1
Hanwell Fields Community School	310	4	1
Hanwell Fields Sports & Recreation Ground	400	5	2
Penhill Industrial Park	530	6	2
St Francis Church	540	6	2
Cherwell Business Village	820	10	3
Hardwick Primary School	830	10	3
Banbury Cross Retail Park	880	10	4
Tesco Extra	990	12	4
Noral Way Industrial Estate	1050	13	4
Cherry Fields Primary School	1150	14	5
Sainsburys Local	1450	17	6
Banbury Athletics Club	1550	18	6
North Oxfordshire Academy	1550	18	6
Woodgreen Leisure Centre	2050	24	9
Castle Quay Shopping Centre	2150	26	9
Banbury and Bicester College	2250	27	9
Banbury Rail Station	2550	30	11
Banbury United Football Club	2950	35	12

Note: Assumes average walking speed of 1.4m/s and average cycling speed of 4m/s

- 3.2.3 It is evident from **Table 3.2** that there is a range of local amenities within acceptable walking and cycling distances. These distances have been taken from the access into the Phase 2 development site.

3.3 Public Transport

Bus

- 3.3.1 The nearest bus stops are located on Highlands to the south of the site. These bus stops are located approximately 790m from the proposed site's western pedestrian / cyclist access. The bus stops are served by the B9 bus route which provides bus services between 0626 and 2321 operating every 15-30 minutes Monday to Saturday.
- 3.3.2 The Canal bridge bus stop is located on the A423 Southam Road, approximately 10 mins (900m) via walking from the proposed P2 boundary. The bus stop is served by the B3 bus route which provides bus services between 0601 and 1855 operating every 30 minutes Monday to Saturday.
- 3.3.3 The bus stops serve the routes described in **Table 3.3** below. The local bus route and timetable information is provided within **Appendix E**.

Table 3.3: Bus Services and Frequencies

Route No.	Route	Typical Frequency		
		Mon – Fri	Sat	Sun
B9 (SC)	Banbury Gateway - Town Centre – Longelandes Way (for Beaumont Industrial Estate)-Hardwick	Every 20mins from 0626 – 0836. Every 15min from 0851 – 1751. Every 20-30mins from 1751 – 2321.	Every 20min from 0626-0836. Every 15min from 0851 – 1751. Every 20-30min from 1806– 2321.	1-2 Service per hour 0756- 1836.
B9 (SC)	Hardwick – Longelandes Way (for Beaumont Industrial Estate) – Town centre – Banbury Gateway	Every 20mins from 0642 – 0737. Every 15min from 0752 – 1752. Every 20-30mins from 1807 – 2337.	Every 20min from 0642-0837. Every 15min from 0852 – 1752. Every 20-30min from 1807- 2337.	1-2 Service per hour 0811- 1851
B3 (SC)	Hardwick Hill - Southam Road – Banbury town centre – Cherwell Heights – Bodicote.	Every 30 mins from 0601-1926.	0701, then every 30mins from 0755- 1855.	No Service
B3 (SC)	Bodicote – Cherwell Heights -Banbury town centre – Southam Road – Hardwick Hill.	Every 30mins from 0600-1925.	0700, then every 30mins from 0801- 1856.	No Service

SC – Stagecoach

- 3.3.4 The proposed development has good access to frequent bus services and is therefore located in a sustainable location.

Rail

- 3.3.5 The Banbury railway station is located 3.5km from the site and can be reached in approximately 11 minutes (3.5km) by cycling or 7 minutes (3.8km) via car.
- 3.3.6 The railway station can also be reached by the B3 or B9 bus service, as part of a multi modal journey. To use the B3 bus service, this would involve walking approximately 10 minutes (900m) from the proposed site access to the canal bridge bus stop on the A423 Southam Road (S). Proceed to take the southbound bus service to Banbury for approximately 13 minutes (9 stops) until Bridge Street bus stop and continue the rest of the journey by foot for approx. 5 minutes (400m) till Banbury train station.
- 3.3.7 Alternatively, the B9 bus service would involve walking approximately 13 minutes (1km) from the proposed site access to the High Furlong bus stop on Longelandes Way. Proceed to take the southbound bus service towards Banbury town centre for approximately 9 minutes (8 stops) until George Street bus stop and continue the rest of the journey by foot for approx. 8 minutes (650m) till Banbury train station. The total duration of the journey is expected to take approximately 25-30mins.
- 3.3.8 The station is located on the Chiltern Main Line and provides three trains per hour to London Marylebone and two trains per hour to Birmingham Moor Street. Local stops include Leamington Spa, Kings Sutton and Oxford.

3.4 Highway network

- 3.4.1 The proposed development is accessed off Dukes Meadow Drive with the characteristics as set out in **Table 3.4** below. Dukes Meadow Drive is a link road running in an east-west alignment along the northern side of Banbury, between the roundabout with Warwick Road and the roundabout with the A423 Southam Road. Dukes Meadow Drive is subject to a 30mph speed limit and provides a carriageway width of approximately 6.75m. There are five roundabouts along Dukes Meadow Drive providing access to existing residential estates.
- 3.4.2 Street lighting is provided along Dukes Meadow Drive and a shared use pedestrian-cycleway is provided along the southern side of the carriageway, separated by a grass verge. Informal and controlled crossing points are provided across Dukes Meadow Drive along its length.
- 3.4.3 The proximity of Dukes Meadow Drive in relation to the wider highway network can be seen on the plan enclosed within **Appendix D**.

Table 3.4: Dukes Meadow Drive characteristics

Characteristic	Value
Road classification	Link Road
Carriageway Width	6.75m
Footways:	3m
Cycleways	3m
Speed limit	30mph
Other features	Street lit

3.5 Traffic Data

- 3.5.1 In order to consider the current traffic conditions on the local highway network, traffic data has been collected at the following junctions:
- Dukes Meadow Drive / Lapsley Drive roundabout junction
 - Dukes Meadow Drive / Noral Way / A423 Southam Road roundabout
 - Dukes Meadow Drive / B4100 Warwick Road / Walker Road
 - A423 Southam Road / Hennef Way / A361 Southam Road / Ruscote Avenue
- 3.5.2 The surveys was undertaken on Tuesday 14th June 2022 between 0700-1000 and 1600-1900 and comprised of classified turning count at the junction. The survey data is provided within **Appendix F**.
- 3.5.3 The junction data was supplemented by a queue length survey.

3.6 Collision Data

- 3.6.1 The most recent Personal Injury Collision data has been obtained from the Local Highway Authority. The data covers the 5-year period from the 1st January 2016 to 31st May 2021.
- 3.6.2 Over the 5-year period there have been zero reported collisions along Dukes Meadow drive within the proximity of the site. A copy of the collision report and a plot from the Local Highway Authority is enclosed in **Appendix G**.
- 3.6.3 From the reported accident data there does not appear to be a significant accident problem on the surrounding highway infrastructure. As such, we do not consider the proposed development will result in conditions detrimental to highway safety.

3.7 Summary

- 3.7.1 The proposed development is shown to be well served for pedestrian, cyclist and public transport infrastructure.
- 3.7.2 The footway provision between the development and the local facilities is currently limited to allow pedestrians of the development to access the local facilities.
- 3.7.3 The site is shown to be served by frequent bus services to key destinations.
- 3.7.4 A review of the collision data shows that there is not an accident problem on the local highway network within the vicinity of the proposed development site.

4.0 Proposed Development

4.1 Type and Scale

- 4.1.1 The proposed development comprises up to 176 residential dwellings. A plan showing the proposed development is enclosed in **Appendix C**.

4.2 Access – all modes

- 4.2.1 The proposed development will be accessed via an upgraded Phase 1 access to realign the access to ensure that it principally serves the Phase 2 site with the Phase 1 site being accessed off a simple priority junction. The new access is shown in **Appendix H** with the Phase 2 access with an overlay of the Phase 1 access shown in **Appendix I**.
- 4.2.2 The new roundabout arm will have a carriageway width of 5.5m. Either side of the access road leading into the site a 3m wide shared footway / cycle will be provided. To connect these to the existing footway / cycleway provision on the southern / eastern side of Dukes Meadow Drive, two new uncontrolled crossings will be provided.
- 4.2.3 Within the site the 5.5m wide development road will be bound by two 2m wide footways.
- 4.2.4 Towards the western extent of the site additional uncontrolled pedestrian crossing points will be provided across Dukes Meadow Drive as part of the Phase 1 development.
- 4.2.5 The proposed access arrangement and footpath connections to the site have been reviewed and agreed in-principle with the Local Highway Authority as of the Phase 1 approval.

4.3 Parking

- 4.3.1 Parking within the development will be provided in line with current Oxfordshire County Council's Residential Road Design Guide for new development for urban areas in Cherwell as referenced in the Supplementary Planning Document, Cherwell Residential Design Guide, adopted in July 2018.
- 4.3.2 Cycle parking will be provided at a level of at least one space per one bed dwellings and at least two spaces per dwelling of two or more bedrooms.
- 4.3.3 Consideration will also be given to the provision of electric charging points for vehicles. Car and cycle parking provision will be confirmed as part of a Reserved Matters Application.

4.4 Sustainable Travel Strategy

- 4.4.1 In order to promote sustainable travel each household will be provided with a Travel Welcome Pack. The pack will contain a high-quality map of the area, showing cycle, walking and public transport routes, and up-to-date timetables for local bus and connecting train services. The key role of the Travel Welcome Pack will be to raise awareness of sustainable initiatives. A Travel Plan Statement has been prepared and accompanies this Transport Assessment.

4.5 Trip Generation

- 4.5.1 Person trip rates have been obtained from the TRICS 7.8.2 database. The person trip selection criteria is set out in **Table 4.1** below. The trip rates outlined below were adopted within the approved Transport Statement for Phase 1 that accompanied the planning application reference 21/03426/OUT and approved for reuse in the Scoping Note for Phase 2. The full TRICS data is enclosed in **Appendix K**:

Table 4.1: TRICS Parameters

Parameter	Selection
Version	7.8.2
Main land use	03-Residential
Sub land use	A – Houses Privately Owned
Regions	All of England except Greater London
Locations	Suburban Area, Edge of Town, Neighbourhood Centre

- 4.5.2 From the TRICS database the predicted person trip rates are set out in **Table 4.2** below.

Table 4.2: Person Trip Rates

Use	Morning Peak (0800-0900)			Afternoon Peak (1700-1800)		
	Arr	Dep	Total	Arr	Dep	Total
Residential	0.195	0.746	0.941	0.597	0.251	0.848

- 4.5.3 Using the above person trip rates from the TRICS database it is possible to calculate the number of person trips generated by the proposed development. The below calculations are based on the quantum of development specified in **Section 4.1**.

- 4.5.4 To understand the number of trips generated by the development by mode we need to establish the likely modal split for a development in this location. The 2011 Census includes the ‘Method of Travel to Work’ (MTW) dataset which defines mode choice for all local authority wards. MTW data has been extracted from the 2011 Census for the Cherwell 002 ward which includes the development site. The ‘Method of Travel to Work’ data is summarised in **Table 4.3** below.

Table 4.3: Method of Travel to Work - 2011 Census – Cherwell 002 Super Output Area (SOA) Middle Layer

Mode	Number	Proportion
Train	98	2%
Bus	171	4%
Taxi	28	1%
Motorcycle	23	0%
Driving	3,376	72%
Passenger	287	6%
Bicycle	140	3%
On foot	522	11%
Other	24	1%

- 4.5.5 Using the above mode splits in **Table 4.3** above, it is possible to calculate the predicted number of trips generated by each mode. The proposed trips by mode is shown in **Table 4.4** below.

Table 4.4: Trip Numbers by Mode – 176 Dwellings

Mode	Morning Peak (0800-0900)			Afternoon Peak (1700-1800)		
	Arr	Dep	Total	Arr	Dep	Total
Train	1	3	4	2	1	3
Bus	1	6	7	5	2	6
Taxi	0	1	2	1	0	2
Motorcycle	0	0	0	0	0	0
Driving	27	102	129	82	34	116
Passenger	2	9	11	7	3	10
Bicycle	1	4	5	3	1	5
On foot	4	16	20	12	5	18
Other	0	1	2	1	0	2
Total	37	142	179	113	48	161

- 4.5.6 The proposed development is predicted to generate 129 vehicle trips in the morning peak and 116 trips in the evening peak.
- 4.5.7 The number of vehicle trips generated by more sustainable forms of transport is considered to be acceptable considering the existing sustainable transport infrastructure.

4.6 Distribution

- 4.6.1 Vehicle trips have been assigned onto the highway network onto the highway network using observed turning proportions. At the access the vehicles have been signed as per the movements out of Lapsley Drive which has similar characteristics after which vehicles have been assigned as per the existing movements on the highway network. The proposed distribution is shown within **Appendix L**:

5.0 Junction Impact Assessments

5.1 Introduction

- 5.1.1 This section presents a junction impact assessment for the development proposal based on existing traffic survey data in the locality of the site.
- 5.1.2 The assessments have been undertaken using TRL Junctions 9 ARCADY for roundabout junctions. The junction geometry parameters used are shown within **Appendix M**:
- 5.1.3 A junction is considered to be operating within capacity if the RFC (Ratio of Flow to Capacity) value is less than or equal to 0.85. An RFC value of 1.0 represents absolute capacity, however, a lower value of 0.85 is used to reflect the practical capacity of the junction.

5.2 Assessment Year

- 5.2.1 The outline planning application is to be submitted in 2022. It is anticipated the site can deliver the proposed number of dwellings within 5 years. Therefore, junction capacity analysis will be undertaken for an assessment opening year of 2027 when the development is expected to be fully occupied.
- 5.2.2 To growth traffic counts to the future assessment years TEMpro growth factors will be applied utilising the following inputs:

- TEMpro – v7.2b
- Area – Cherwell 002
- NTM AF15 – All

- 5.2.3 The traffic growth factors proposed are set out in **Table 5.1**.

Table 5.1: Local Traffic Growth Factors – Cherwell 002

Period	2022-2027
AM Peak	1.0675
PM Peak	1.0720

5.3 Committed Development

- 5.3.1 The Phase 1 land adjacent to the site was granted outline planning permission; Cherwell District Council planning application reference 21/03426/OUT and will be considered as committed development within the Transport Assessment.

5.4 Background Traffic

5.4.1 Background traffic counts were undertaken on the 14th June 2022 between 0700-1000 and 1600-1900 at the proposed assessment locations listed below and shown within **Appendix F** with the traffic count data:

- A1 – Access Dukes Meadow Drive / Lapsley Drive
- J1 – A423/Dukes Meadow Drive
- J2 – Dukes Meadow Dr/ B4100 Warwick Road/Walker Rd
- J3 – A423/Hennef Way/A361 /Ruscote Avenue

5.5 Junction Assessment Locations

5.5.1 Assessment of vehicular impact will be undertaken at the locations listed below during the morning and afternoon periods of 0800-0900 and 1700-1800.

- A1 – Access Dukes Meadow Drive/Lapsley Drive
- J1 – A423/Dukes Meadow Drive
- J2 – Dukes Meadow Dr/ B4100 Warwick Road/Walker Rd

5.5.2 These junctions are shown to have an increase of at 5% on any arm as defined by OCC.

5.5.3 We have undertaken an assessment of the number of trips expected to be generated at the Southam Road / Hennef Way / Ruscote Avenue junction (J3) and found that the number of arrivals and departures arriving at the Southam Road arm of this junction is less than 5%.

5.6 A1: Access / Dukes Meadow Drive / Lapsley Drive

- 5.6.1 This junction is an existing three arm roundabout junction and will comprise a new fourth access arm to the development site. The arms are labelled thus:

Arm A – Dukes Meadow Drive (N)
 Arm B – Lapsley Drive
 Arm C – Dukes Meadow Drive (S)
 Arm D – Proposed Site Access

- 5.6.2 The full junction input data and results can be found in **Appendix N**. The results of the assessment are summarised below.

Table 5.2: A1 Access / Dukes Meadow Drive / Lapsley Drive–AM Peak 0800-0900

	2027 Background + Committed		2027 Background + Committed + Phase 2 Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
A	0.22	0.3	0.23	0.3	0.01	0
B	0.19	0.2	0.20	0.2	0.01	0
C	0.40	0.7	0.42	0.7	0.02	0
D	0.05	0.1	0.17	0.2	0.12	0.1

Table 5.3: A1 Access / Dukes Meadow Drive / Lapsley Drive– PM Peak 1700-1800

	2027 Background + Committed		2027 Background + Committed + Phase 2 Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
A	0.39	0.6	0.42	0.7	0.03	0.1
B	0.10	0.1	0.11	0.1	0.01	0
C	0.19	0.2	0.22	0.3	0.03	0.1
D	0.01	0.0	0.04	0.0	0.03	0

- 5.6.3 The existing Dukes Meadow Drive / Lapsley Lane roundabout with the proposed site access is shown to operate well within its operational capacity in the future year scenario during both peak periods.

5.7 J1: Southam Rd A423 (N) / Noral Way / Southam Rd A423 (S) / Dukes Meadow Drive.

5.7.1 This junction is an existing four arm roundabout junction. The arms are labelled thus:

- Arm A – Southam Road A423 (N)
- Arm B – Noral Way
- Arm C – Southam Road A423 (S)
- Arm D – Dukes Meadow Drive

5.7.2 The full junction input data and results can be found in **Appendix O**. The results of the assessment are summarised below.

Table 5.4: J1 A423 (N) / Noral Way/ A423 (S) / Dukes Meadow Drive –AM Peak 0800-0900

	2027 Background + Committed		2027 Background + Committed + Phase 2 Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
A	0.53	1.1	0.55	1.2	0.02	0.1
B	0.03	0.0	0.03	0.0	0	0
C	0.47	0.9	0.48	0.9	0.01	0
D	0.38	0.6	0.42	0.7	0.04	0.1

Table 5.5: J1 A423 (N) / Noral Way/ A423 (S) / Dukes Meadow Drive – PM Peak 1700-1800

	2027 Background + Committed		2027 Background + Committed + Phase 2 Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
A	0.28	0.4	0.28	0.4	0	0
B	0.13	0.2	0.13	0.2	0	0
C	0.83	4.8	0.86	5.6	0.03	0.8
D	0.21	0.3	0.22	0.3	0.01	0

5.7.3 The existing A423 Southam Road / Noral Way / Dukes Meadow Drive roundabout is shown to operate within its operational capacity within the 2027 Background and committed development AM and PM peak with an RFC value of 0.47 and 0.83 respectively.

5.7.4 In the AM peak, the junction is shown to operate within capacity for the 2027 Background + Committed +Phase 2 development.

5.7.5 In the evening peak period, Arm C A423 Southam Road (S) operates slightly over capacity in the 2027 Background + Committed +Phase 2 development. RFC values peak at 0.86 with the development increasing RFC values by 0.03 and increasing vehicle queue length by 0.8.

- 5.7.6 As the RFC is marginally exceeding the theoretical RFC value of 0.85, and the impact of the development is minimal we do not consider this to be a significant adverse impact upon the roundabout and therefore nil detriment improvement is required.

5.8 J2: Dukes Meadow Dr / Warwick Rd B4100 (S) / Walker Rd / Warwick Rd B411 (N).

5.8.1 This junction is an existing four arm roundabout junction. The arms are labelled thus:

- Arm A – Dukes Meadow Drive
- Arm B – Warwick Road B4100 (S)
- Arm C – Walker Rd
- Arm D – Warwick Road B4100 (N)

5.8.2 The full junction input data and results can be found in **Appendix P**. The results of the assessment are summarised below.

Table 5.6: J2 Dukes Meadow Dr/ B4100 (S)/ Walker Rd / B4100 (N)–AM Peak 0800-0900

	2027 Background + Committed		2027 Background + Committed + Phase 2 Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
A	0.30	0.4	0.33	0.5	0.03	0.1
B	0.33	0.5	0.33	0.5	0	0
C	0.10	0.1	0.10	0.1	0	0
D	0.29	0.4	0.29	0.4	0	0

Table 5.7: J2 Dukes Meadow Dr/ B4100 (S)/ Walker Rd / B4100 (N)– PM Peak 1700-1800

	2027 Background + Committed		2027 Background + Committed + Phase 2 Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
A	0.33	0.5	0.37	0.6	0.04	0.1
B	0.38	0.6	0.39	0.6	0.01	0
C	0.14	0.2	0.18	0.2	0.04	0
D	0.29	0.4	0.32	0.5	0.03	0.1

5.8.3 The existing Dukes Meadow Drive / Warwick Road / Walker Road roundabout with the proposed site access is shown to operate well within its operational capacity in the future year scenario.

6.0 Conclusion

6.1 Site Location and Permitted Use

- 6.1.1 The proposed residential development is located at land north of Dukes Meadow Drive, Banbury. The site is currently an undeveloped greenfield site with no previous development and is bound by agricultural lands to the north and west, residential area to the south and a leisure facility to the east.

6.2 Existing Conditions

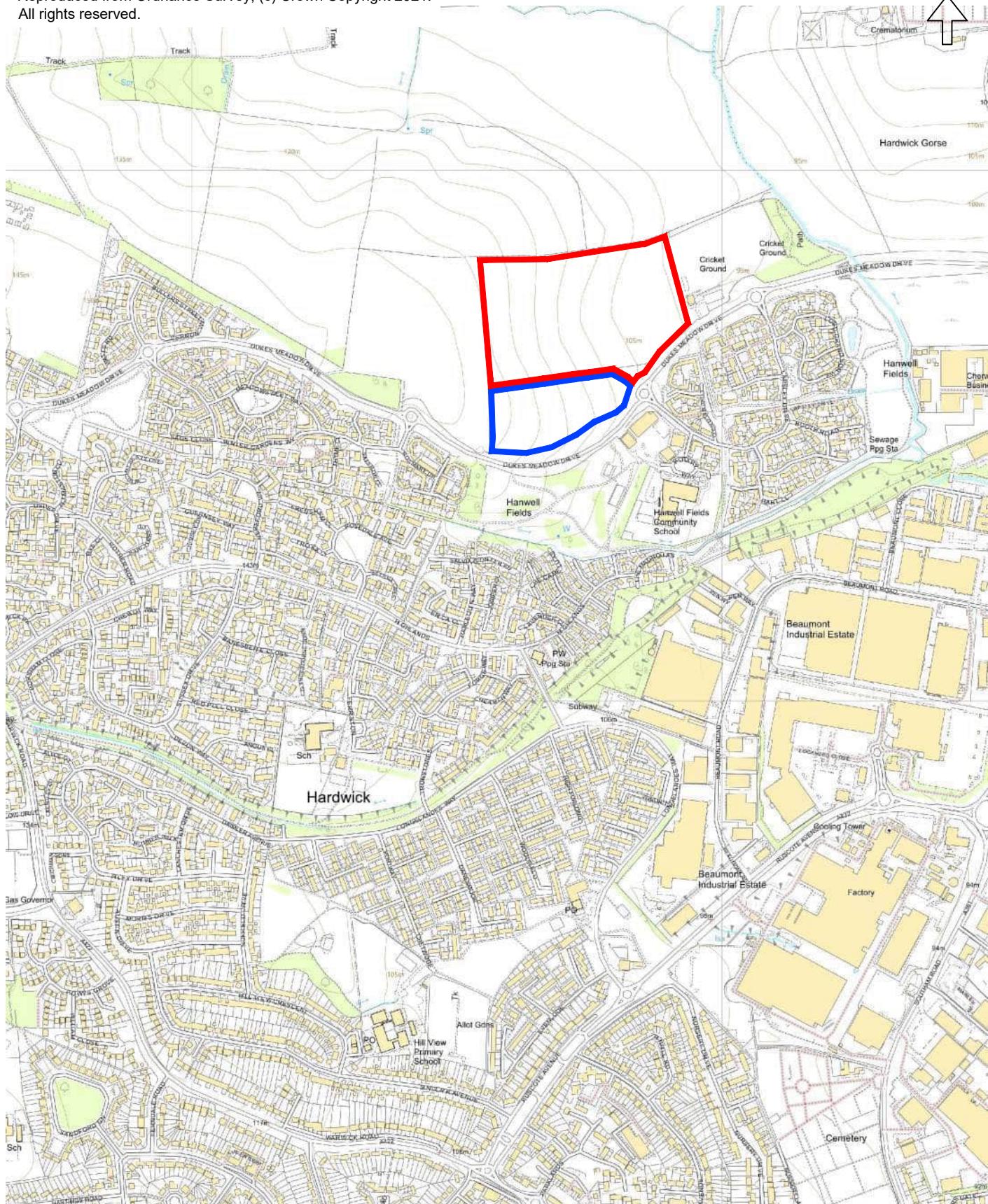
- 6.2.1 The proposed development is shown to be well served for pedestrian, cyclist, and public transport infrastructure. The footway provision between the development and the local facilities is currently limited to allow pedestrians of the development to access the local facilities.
- 6.2.2 The site is shown to be served by frequent bus services to key destinations.
- 6.2.3 A review of the collision data shows that there is not an accident problem on the local highway network within the vicinity of the proposed development site.

6.3 Proposed Development

- 6.3.1 The proposed development will comprise 176 dwellings.
- 6.3.2 The adjacent land comprising Phase 1 was granted Outline planning permission in April 2022 for up to 78 dwellings and associated open space with all matters reserved other than access, Cherwell District Council planning application reference 21/03426/OUT.
- 6.3.3 Access to the Phase 1 site was approved from the creation of a fourth arm off the existing Dukes Meadow Drive/Lapsley Drive roundabout. The Phase 2 site will also be accessed from this point and in addition to the provision of an emergency point of access in the form of an uprated cycle track or a reinforced grass area.
- 6.3.4 Parking within the development will be provided in line with current Oxfordshire County Council's Residential Road Design Guide for new development for urban areas in Cherwell
- 6.3.5 All junctions are shown to operate within capacity except Arm C Southam Road (S) of Junction 1 A423(N) / Noral Way / Dukes Meadow Drive during the 2027 PM peak period. With the proposed development an RFC value of 0.86 is recorded a small increase of 0.1 above the capacity value of 0.85. The development creates a small RFC increase of 0.3 and queue length increase of 0.8 as such the impact of the development is considered insignificant, and mitigation is not considered necessary.
- 6.3.6 It is considered the proposed development will not result in a detrimental impact on highway safety, and the residual cumulative impact on the local road network would not be severe.

Appendix A

Location Plan
MAC drawing no. 802-TA01



T: 01604 340544 Northampton Office
E: info@mac-ltd.co.uk W: mac-ltd.co.uk
Martin Andrews Consulting Ltd

Client: Manor Oak Homes

Project: Hanwell Fields
Banbury

Date: 21/07/22

Drw: SH

Chk: MJA

Scale: 1:10,000

Size: A4


Title: Location Plan

Drawing No. 802-TA01

Revision -

- Transport Assessments
- Flood Risk Assessments
- Highway Advice
- Drainage Strategies

Appendix B
Topographical Survey
Woods Hardwick drawing no. 17525-865



Not

1. Contractors must check all dimensions on site. Only figures shown on the drawing are to be worked from. Discrepancies must be reported to the Architect or Engineer before proceeding.
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Appendix C

Sketch Layout Illustrative - 02
Thrive Architects drawing no. MANO220426 SKL-02 Rev A

A1



Romsey Portishead Camberley
T: 01794 367703 T: 01275 407000 T: 01276 749050
F: 01794 367276 F: 01794 367276 F: 01794 367276

Rev Description
A Planning Issue

Date Au Ch
26.09.22 AB/AA AB/-

Project Hanwell Fields, Banbury Phase 2
Drawing Sketch Layout Illustrative - 02

Client MANOR OAK HOMES

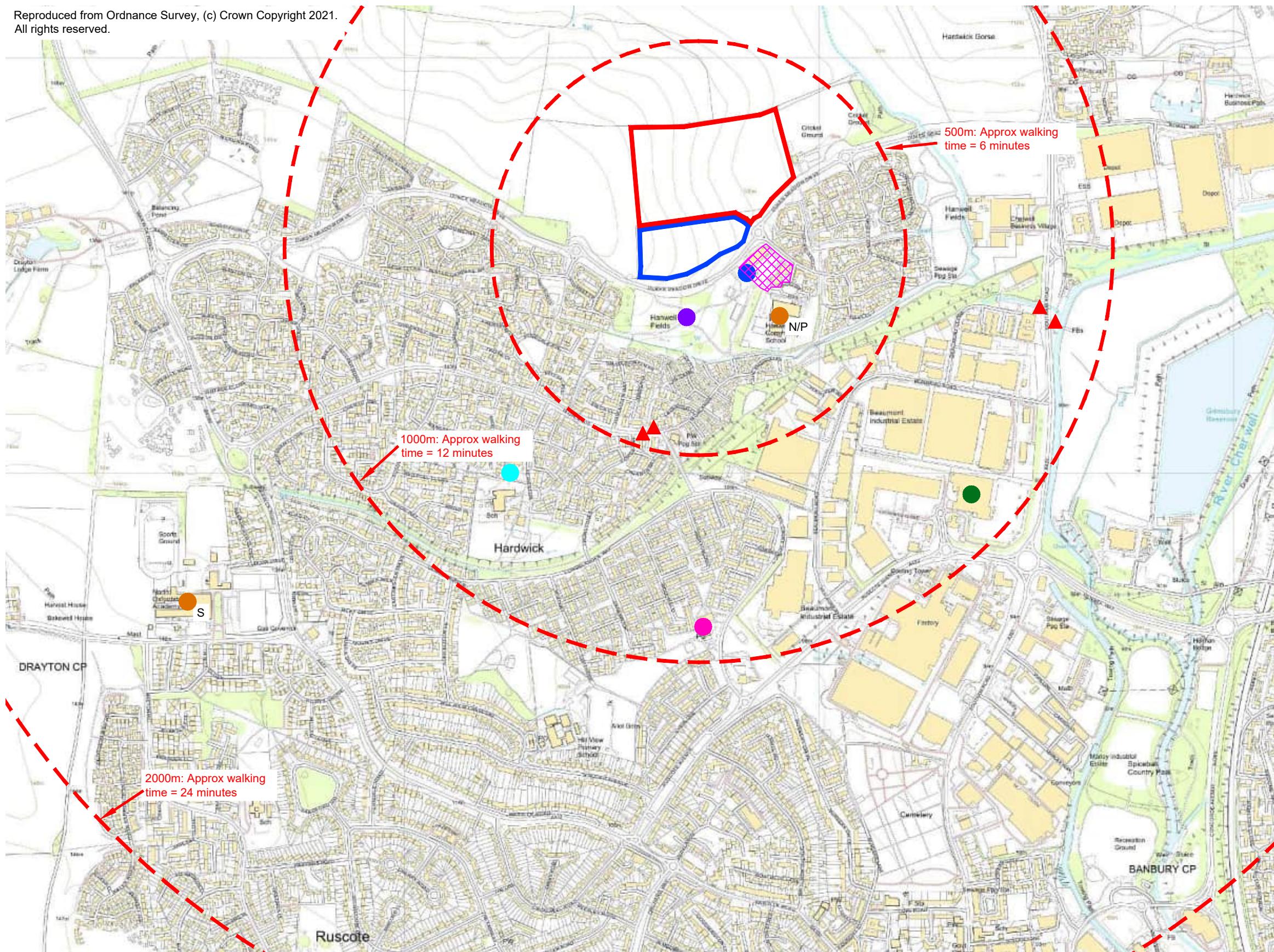
Job no.	MANO220426	Date	26.09.22
Dwg no.	SKL-02	Rev.	A
Author	AB/AA	Checked	AB/-
Status	PLANNING	Scale	1:1000@A1
Client ref.	Romsey		



www.thrivearchitects.co.uk

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Appendix D
Facilities Plan including Distances
MAC drawing no. 802-TA02



Notes:

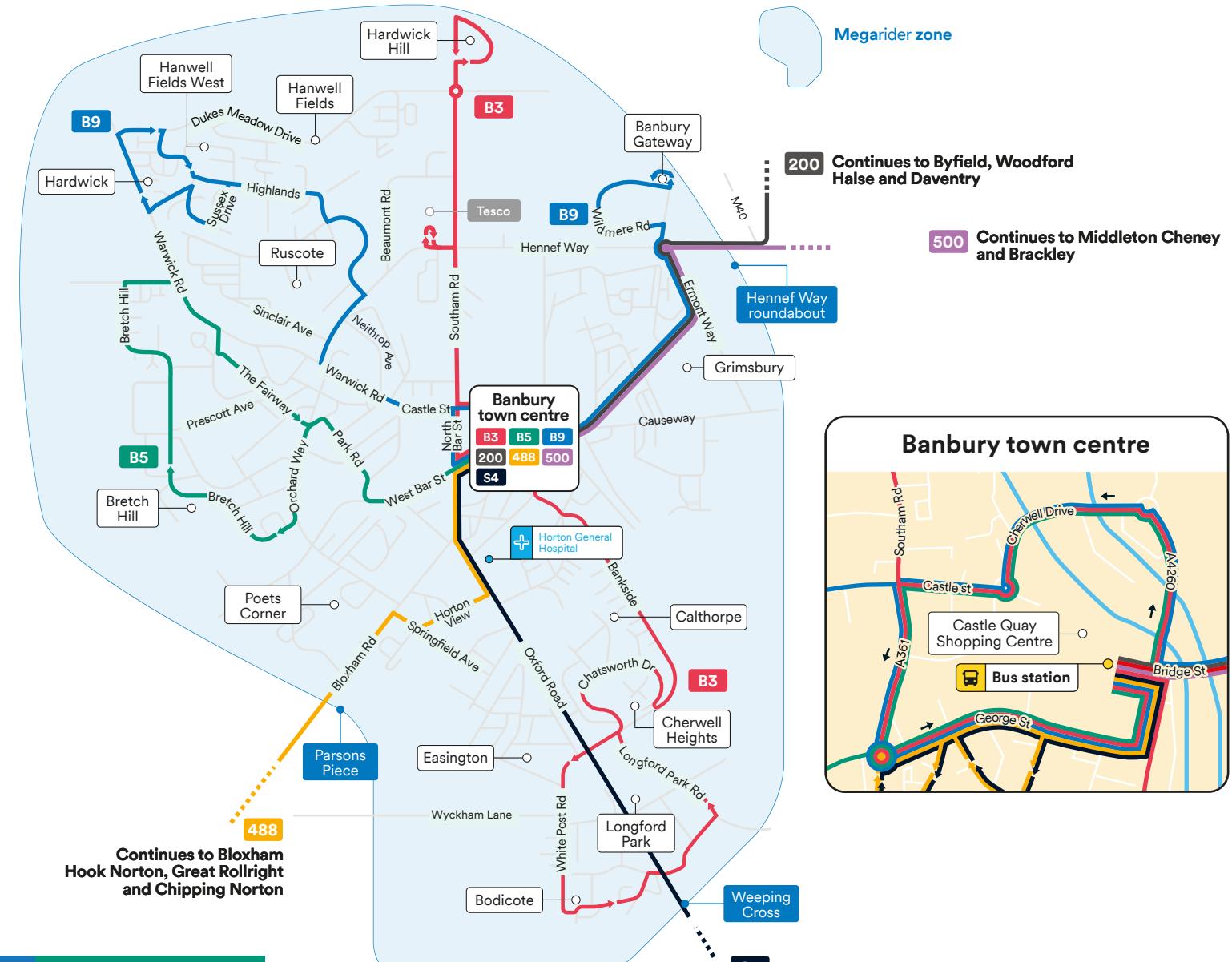
- Walking distances based on a walking speed of 1.4 m/s from 'Providing For Journeys On Foot'.
- Actual walking distances may vary from radial distances shown.
- Nearest of each facility / service shown only.

Key

- | | |
|--|--|
| Site Boundary | |
| Phase 1 Boundary | |
| Walking distances - radial | |
| Doctors Surgery / Pharmacy | |
| Dentist | |
| School - Primary (S) / Secondary (S) / Nursery (N) | |
| Post Office | |
| Supermarket | |
| Local services - convenience store, takeaway, dentist, public house | |
| Park | |
| Bus Stops | |

Appendix E
Bus timetables and routes

Banbury Megarider zone



Correct at time of print; August 2021



For more detailed journey planning and real-time updates
download the Stagecoach Bus App.



S4
Continues to Adderbury,
Deddington and Oxford



B3 Hardwick Hill - Southam Road - Banbury town centre - Cherwell Heights - Bodicote

MONDAYS TO FRIDAYS Except public holidays										Effective from Sunday 07 March 2021		
Hardwick Hill	0601	0631	0701	0731	0801	0831	0901	0931	1001	then	31	01
Tesco Store	-	-	-	-	-	-	-	-	1008	at	38	08
Town Centre High Street	0610	0640	0710	0740	0815	0845	0915	0940	1013	these	43	13
Town Centre Bridge [stand 4] arr.	0615	0645	0715	0745	0820	0850	0920	0945	1018	times	48	18
Town Centre Bridge [stand 4] dep.			0700	0730	0800	0830	0900	0930	1000	each	00	30
Cherwell Heights Farm Way			0705	0735	0805	0835	0905	0935	1005	hour	05	35
Cherwell Heights Blenheim Road			0709	0739	0809	0839	0909	0939	1009		09	39
Bodicote Old Horse & Jockey			0713	0742	0812	0842	0912	0942	1012		12	42
Bodicote Primary School			0718	0747	0817	0847	0917	0947	1017		17	47
Hardwick Hill	1431	1501	1535	1605	1635	1705	1735	1805	1835		1856	1926
Tesco Store	1438	1508	-	-	-	-	-	-	-		-	-
Town Centre High Street	1443	1513	1544	1617	1647	1717	1747	1817	1844		1905	1935
Town Centre Bridge [stand 4] arr.	1448	1518	1549	1622	1652	1722	1752	1822	1849		1910	1940
Town Centre Bridge [stand 4] dep.	1500	1530	1600	1630	1700	1730	1800	1830				
Cherwell Heights Farm Way	1505	1535	1605	1635	1705	1735	1805	1835				
Cherwell Heights Blenheim Road	1509	1539	1609	1639	1709	1739	1809	1839				
Bodicote Old Horse & Jockey	1512	1542	1612	1642	1712	1742	1812	1842				
Bodicote Primary School	1517	1547	1617	1647	1717	1747	1817	1847				

B3 Bodicote - Cherwell Heights - Banbury town centre - Southam Road - Hardwick Hill

MONDAYS TO FRIDAYS Except public holidays										Effective from Sunday 07 March 2021			
Bodicote Old Horse & Jockey					0713	0742	0812	0842	0912	0942	21	42	
Bodicote Primary School					0718	0747	0817	0847	0917	0947	then	17	47
Cherwell Heights Blenheim Road					0721	0751	0821	0851	0921	0951	at	21	51
Cherwell Heights Farm Way					0724	0754	0824	0854	0924	0954	these	24	54
Town Centre Bridge [stand 4] arr.					0738	0808	0838	0905	0935	1005	times	35	05
Town Centre Bridge [stand 4] dep.	0550	0620	0650	0715	0745	0815	0845	0915	0945	1015	each	45	15
Tesco Store	-	-	-	-	-	-	-	-	-	1023	hour	53	23
Hardwick Hill	0600	0630	0700	0727	0757	0827	0857	0927	0957	1030		00	30
Bodicote Old Horse & Jockey	1412	1442	1512	1542	1612	1642	1712	1742	1812	1842			
Bodicote Primary School	1417	1447	1517	1547	1617	1647	1717	1747	1817	1847			
Cherwell Heights Blenheim Road	1421	1451	1521	1551	1621	1651	1721	1751	1821	1851			
Cherwell Heights Farm Way	1424	1454	1524	1554	1624	1654	1724	1754	1824	1854			
Town Centre Bridge [stand 4] arr.	1435	1505	1535	1605	1635	1705	1735	1805	1835	1905			
Town Centre Bridge [stand 4] dep.	1445	1515	1545	1615	1645	1715	1745	1815	1845	1915			
Tesco Store	1453	-	-	-	-	-	-	-	-	-			
Hardwick Hill	1500	1533	1603	1633	1703	1733	1803	1833	1855	1925			

At Easter, Christmas and New Year special timetables may run - please check www.stagecoachbus.com or look out for seasonal publicity

This timetable is valid at the time of download from our website however this may be affected by alteration at short notice.

To read service updates or to re-check your journey go to www.stagecoachbus.com

Route Description:

Hardwick Hill, Bourton Road, Southam Road, Ruscote Avenue*, Lockheed Close*, Ruscote Avenue*, Southam Road, North Bar Street, Horse Fair, High Street, George Street, Cherwell Street, Bridge Street (stand 4), Cherwell Street, Upper Windsor Street, Swan Close Road, Hightown Road, Bankside, Chatsworth Drive, Bankside, White Post Road, High Street, Church Street, Fairholme House, Freemans Road, Lower Close, Molyneux Drive, Weeping Cross, Oxford Road, Longford Park Road, Bankside, Chatsworth Drive, Bankside, Hightown Road, Swan Close Road, Upper Windsor Street, Cherwell Street, Bridge Street, Concord Avenue, Cherwell Drive, Castle Street, Southam Road, Ruscote Avenue*, Lockheed Close*, Ruscote Avenue*, Southam Road, Hardwick Hill

* Journeys via Tesco only

B3 Hardwick Hill - Southam Road - Banbury town centre - Cherwell Heights - Bodicote -

SATURDAYS Except public holidays							Effective from Sunday 07 March 2021						
Hardwick Hill	0701	0801	0831	0901	0931	1001		31	01		1431	1501	1531
Tesco Store	-	-	-	-	-	1008	then	38	08		1438	1508	-
Town Centre High Street	0710	0810	0840	0910	0940	1013	at	43	13		1443	1513	1540
Town Centre Bridge [stand 4] arr.	0715	0815	0845	0915	0945	1018	these	48	18	until	1448	1518	1545
Town Centre Bridge [stand 4] dep.	0725	0800	0830	0900	0930	1000	times	00	30		1500	1530	1600
Cherwell Heights Farm Way	0730	0805	0835	0905	0935	1005	each	05	35		1505	1535	1605
Cherwell Heights Blenheim Road	0734	0809	0839	0909	0939	1009	hour	09	39		1509	1539	1609
Bodicote Old Horse & Jockey	0737	0812	0842	0912	0942	1012		12	42		1512	1542	1612
Bodicote Primary School	0742	0817	0847	0917	0947	1017		17	47		1517	1547	1617
Hardwick Hill	1601	1631	1701	1731	1801	1831	1856						
Tesco Store	-	-	-	-	-	-	-						
Town Centre High Street	1610	1640	1710	1740	1810	1840	1905						
Town Centre Bridge [stand 4] arr.	1615	1645	1715	1745	1815	1845	1910						
Town Centre Bridge [stand 4] dep.	1630	1700	1730	1800	1830								
Cherwell Heights Farm Way	1635	1705	1735	1805	1835								
Cherwell Heights Blenheim Road	1639	1709	1739	1809	1839								
Bodicote Old Horse & Jockey	1642	1712	1742	1812	1843								
Bodicote Primary School	1647	1717	1747	1817	1848								

B3 Bodicote - Cherwell Heights - Banbury town centre - Southam Road - Hardwick Hill

SATURDAYS Except public holidays							Effective from Sunday 07 March 2021							
Bodicote Old Horse & Jockey		0737	0812	0842	0912	0942		21	42		1412	1442	1512	
Bodicote Primary School		0742	0817	0847	0917	0947	then	17	47		1417	1447	1517	
Cherwell Heights Blenheim Road		0746	0821	0851	0921	0951	at	21	51		1421	1451	1521	
Cherwell Heights Farm Way		0749	0824	0854	0924	0954	these	24	54		1424	1454	1524	
Town Centre Bridge [stand 4] arr.		0759	0835	0905	0935	1005	times	35	05		1435	1505	1535	
Town Centre Bridge [stand 4] dep.	0650	0745	0815	0845	0915	0945	1015	each	45	15		1445	1515	1545
Tesco Store	-	-	-	-	-	-	1023	hour	53	23		1453	-	-
Hardwick Hill	0700	0755	0827	0857	0927	0957	1030		00	30		1500	1527	1557
Bodicote Old Horse & Jockey	1542	1612	1642	1712	1742	1812	1843							
Bodicote Primary School	1547	1617	1647	1717	1747	1817	1848							
Cherwell Heights Blenheim Road	1551	1621	1651	1721	1751	1821	1851							
Cherwell Heights Farm Way	1554	1624	1654	1724	1754	1824	1854							
Town Centre Bridge [stand 4] arr.	1605	1635	1705	1735	1805	1835	1905							
Town Centre Bridge [stand 4] dep.	1615	1645	1715	1745	1815	1845								
Tesco Store	-	-	-	-	-	-	-							
Hardwick Hill	1627	1657	1727	1757	1827	1855								

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Hardwick Hill, Bourton Road, Southam Road, Ruscote Avenue*, Lockheed Close*, Ruscote Avenue*, Southam Road, North Bar Street, Horse Fair, High Street, George Street, Cherwell Street, Bridge Street (stand 4), Cherwell Street, Upper Windsor Street, Swan Close Road, Hightown Road, Bankside, Chatsworth Drive, Bankside, White Post Road, High Street, Church Street, Fairholme House, Freemans Road, Lower Close, Molyneux Drive, Weeping Cross, Oxford Road, Longford Park Road, Bankside, Chatsworth Drive, Bankside, Hightown Road, Swan Close Road, Upper Windsor Street, Cherwell Street, Bridge Street, Concord Avenue, Cherwell Drive, Castle Street, Southam Road, Ruscote Avenue*, Lockheed Close*, Ruscote Avenue*, Southam Road, Hardwick Hill

* Journeys via Tesco only



Contactless payment available on board

B9 Banbury Gateway - town centre - Longelandes Way (for Beaumont Industrial Estate) - Hardwick

MONDAYS TO FRIDAYS Except public holidays											Effective from Sunday 29 August 2021			
Banbury Gateway Retail Park	-	-	0645	-	0715	-	0750	-	0815		-	45	-	15
Banbury Bridge Street [1] arr.	-	-	0655	-	0725	-	0800	-	0825	then	-	55	-	25
Banbury Bridge Street [1] dep.	0620	0640	0700	0715	0730	0745	0800	0815	0830	every	45	00	15	30
Beaumont Industrial Estate	0626	0646	0706	0721	0736	0751	0806	0821	0836	15	51	06	21	36
Hardwick Red Poll Close	0633	0653	0713	0728	0743	0758	0813	0828	0843	mins	58	13	28	43
Hardwick Warwick Road	0636	0656	0716	0731	0746	0801	0816	0831	0846	at	01	16	31	46
Hardwick Usher Drive Park	0638	0658	0718	0733	0748	0803	0818	0833	0848		03	18	33	48
Banbury Gateway Retail Park			-	1745	-	1815	1845	1915	1945	2015	2045	2115	2145	2215
Banbury Bridge Street [1] arr.			-	1755	-	1825	1855	1925	1955	2025	2055	2125	2155	2225
Banbury Bridge Street [1] dep.		until	1745	1800	1815	1830	1900	1930	2000	2030	2100	2130	2200	2230
Beaumont Industrial Estate			1751	1806	1821	1836	1906	1936	2006	2036	2106	2136	2206	2236
Hardwick Red Poll Close			1758	1813	1828	1843	1913	1943	2013	2043	2113	2143	2213	2243
Hardwick Warwick Road			1801	1816	1831	1846	1916	1946	2016	2046	2116	2146	2216	2246
Hardwick Usher Drive Park			1803	1818	1833	1848	1918	1948	2018	2048	2118	2148	2218	2248

B9 Hardwick - Longelandes Way (for Beaumont Industrial Estate) - town centre - Banbury Gateway

MONDAYS TO FRIDAYS Except public holidays											Effective from Sunday 29 August 2021			
Hardwick Red Poll Close		0633	0653	0713	0728		43	58	13	28		1743	1758	1813
Hardwick Warwick Road	-	0636	0656	0716	0731	then	46	01	16	31		1746	1801	1816
Hardwick Usher Drive Park	-	0638	0658	0718	0733	every	48	03	18	33		1748	1803	1818
Beaumont Industrial Estate	-	0642	0702	0722	0737	15	52	07	22	37	until	1752	1807	1822
Banbury High Street	-	0648	0708	0728	0743	mins	58	13	28	43		1758	1813	1828
Banbury Bridge Street [2] arr.	-	0656	0716	0739	0754	at	09	24	39	54		1809	1824	1837
Banbury Bridge Street [2] dep.	0630	0700	0720	-	0800		-	30	-	00		-	1830	-
Banbury Gateway Retail Park	0640	0710	0730	-	0810		-	40	-	10		-	1840	-
Hardwick Red Poll Close	1828	1843	1913	1943	2013	2043	2113	2143	2213	2243		2328		
Hardwick Warwick Road	1831	1846	1916	1946	2016	2046	2116	2146	2216	2246		2331		
Hardwick Usher Drive Park	1833	1848	1918	1948	2018	2048	2118	2148	2218	2248		2333		
Beaumont Industrial Estate	1837	1852	1922	1952	2022	2052	2122	2152	2222	2252		2337		
Banbury High Street	1842	1857	1927	1957	2027	2057	2127	2157	2227	2257		2342		
Banbury Bridge Street [2] arr.	1849	1904	1934	2004	2034	2104	2134	2204	2234	2304		2349		
Banbury Bridge Street [2] dep.	-	1905	1935	2005	2035	2105	2135	2205	-	-		-	-	-
Banbury Gateway Retail Park	-	1913	1943	2013	2043	2113	2143	2213	-	-		-	-	-

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B9 Banbury Gateway - town centre - Longelandes Way (for Beaumont Industrial Estate) - Hardwick

SATURDAYS Except public holidays										Effective from Sunday 29 August 2021					
Banbury Gateway Retail Park	-	-	-	-	0725	-	-	0815			-	45	-	15	
Banbury Bridge Street [1] arr.	-	-	-	-	0735	-	-	0825	then		-	55	-	25	
Banbury Bridge Street [1] dep.	0620	0640	0700	0720	0740	0800	0815	0830	every	45	00	15	30		
Beaumont Industrial Estate	0626	0646	0706	0726	0746	0806	0821	0836	15	51	06	21	36	until	
Hardwick Red Poll Close	0633	0653	0713	0733	0753	0813	0828	0843	mins	58	13	28	43		
Hardwick Warwick Road	0636	0656	0716	0736	0756	0816	0831	0846	at	01	16	31	46		
Hardwick Usher Drive Park	0638	0658	0718	0738	0758	0818	0833	0848		03	18	33	48		
Banbury Gateway Retail Park	-	1745	-	1815	1845	1915	1945	2015	2045	2115	2145	2215	-		
Banbury Bridge Street [1] arr.	-	1755	-	1825	1855	1925	1955	2025	2055	2125	2155	2225	-		
Banbury Bridge Street [1] dep.	1745	1800	1815	1830	1900	1930	2000	2030	2100	2130	2200	2230	2315		
Beaumont Industrial Estate	1751	1806	1821	1836	1906	1936	2006	2036	2106	2136	2206	2236	2321		
Hardwick Red Poll Close	1758	1813	1828	1843	1913	1943	2013	2043	2113	2143	2213	2243	2328		
Hardwick Warwick Road	1801	1816	1831	1846	1916	1946	2016	2046	2116	2146	2216	2246	2331		
Hardwick Usher Drive Park	1803	1818	1833	1848	1918	1948	2018	2048	2118	2148	2218	2248	2333		

B9 Hardwick - Longelandes Way (for Beaumont Industrial Estate) - town centre - Banbury Gateway

SATURDAYS Except public holidays										Effective from Sunday 29 August 2021				
Hardwick Red Poll Close	0633	0653	0713	0733	0753	0813	0828		43	58	13	28		1743
Hardwick Warwick Road	0636	0656	0716	0736	0756	0816	0831	then	46	01	16	31		1746
Hardwick Usher Drive Park	0638	0658	0718	0738	0758	0818	0833	every	48	03	18	33		1748
Beaumont Industrial Estate	0642	0702	0722	0742	0802	0822	0837	15	52	07	22	37	until	1752
Banbury High Street	0648	0708	0728	0748	0808	0828	0843	mins	58	13	28	43		1758
Banbury Bridge Street [2] arr.	0656	0716	0739	0757	0817	0839	0854	at	09	24	39	54		1809
Banbury Bridge Street [2] dep.	0700	-	-	0800	0820	-	0900		-	30	-	00		-
Banbury Gateway Retail Park	0710	-	-	0810	0830	-	0910		-	40	-	10		-
Hardwick Red Poll Close	1758	1813	1828	1843	1913	1943	2013	2043	2113	2143	2213	2243	2328	
Hardwick Warwick Road	1801	1816	1831	1846	1916	1946	2016	2046	2116	2146	2216	2246	2331	
Hardwick Usher Drive Park	1803	1818	1833	1848	1918	1948	2018	2048	2118	2148	2218	2248	2333	
Beaumont Industrial Estate	1807	1822	1837	1852	1922	1952	2022	2052	2122	2152	2222	2252	2337	
Banbury High Street	1813	1828	1842	1857	1927	1957	2027	2057	2127	2157	2227	2257	2342	
Banbury Bridge Street [2] arr.	1824	1837	1849	1904	1934	2004	2034	2104	2134	2204	2234	2304	2349	
Banbury Bridge Street [2] dep.	1830	-	-	1905	1935	2005	2035	2105	2135	2205	-	-	-	
Banbury Gateway Retail Park	1840	-	-	1913	1943	2013	2043	2113	2143	2213	-	-	-	

At Easter, Christmas and New Year special timetables may run - please check www.stagecoachbus.com or look out for seasonal publicity

This timetable is valid at the time of download from our website however this may be affected by alteration at short notice.

To read service updates or to re-check your journey go to www.stagecoachbus.com



Contactless payment available on board

B9 Banbury Gateway - town centre - Longelandes Way (for Beaumont Industrial Estate) - Hardwick

SUNDAYS Except public holidays											Effective from Sunday 29 August 2021		
Banbury Gateway Retail Park	-	-	0915	1015	1115	1215	1315	1415	1515	1615	1715	1815	
Banbury Bridge Street [1] arr.	-	-	0925	1025	1125	1225	1325	1425	1525	1625	1725	1825	
Banbury Bridge Street [1] dep.	0750	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	
Beaumont Industrial Estate	0756	0836	0936	1036	1136	1236	1336	1436	1536	1636	1736	1836	
Hardwick Red Poll Close	0802	0842	0942	1042	1142	1242	1342	1442	1542	1642	1742	1842	
Hardwick Warwick Road	0805	0845	0945	1045	1145	1245	1345	1445	1545	1645	1745	1845	
Hardwick Usher Drive Park	0807	0847	0947	1047	1147	1247	1347	1447	1547	1647	1747	1847	

B9 Hardwick - Longelandes Way (for Beaumont Industrial Estate) - town centre - Banbury Gateway

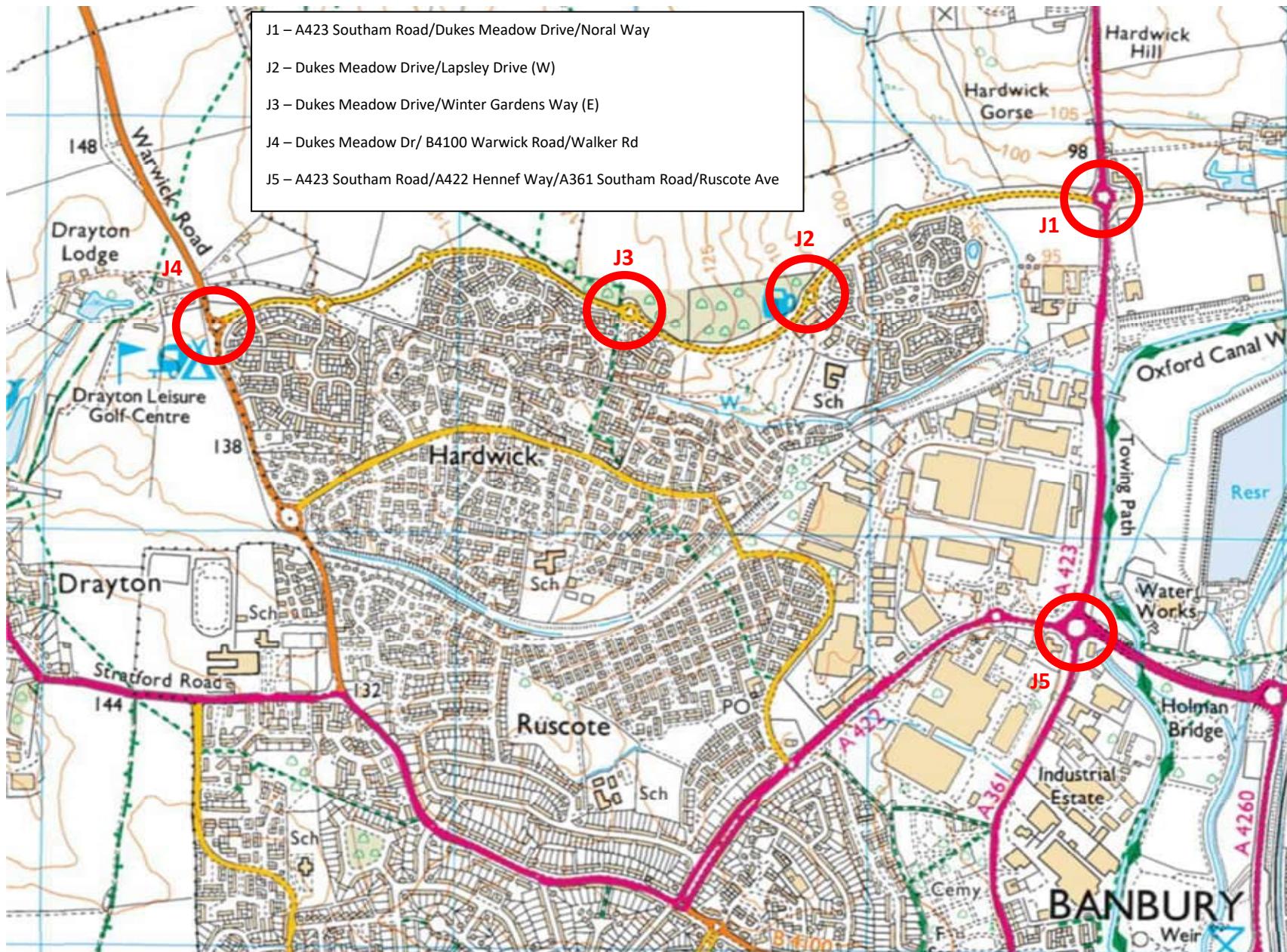
SUNDAYS Except public holidays											Effective from Sunday 29 August 2021		
Hardwick Red Poll Close	0802	0842	0942	1042	1142	1242	1342	1442	1542	1642	1742	1842	
Hardwick Warwick Road	0805	0845	0945	1045	1145	1245	1345	1445	1545	1645	1745	1845	
Hardwick Usher Drive Park	0807	0847	0947	1047	1147	1247	1347	1447	1547	1647	1747	1847	
Beaumont Industrial Estate	0811	0851	0951	1051	1151	1251	1351	1451	1551	1651	1751	1851	
Banbury High Street	0816	0856	0956	1056	1156	1256	1356	1456	1556	1656	1756	1856	
Banbury Bridge Street [2] arr.	0825	0905	1005	1105	1205	1305	1405	1505	1605	1705	1805	1905	
Banbury Bridge Street [2] dep.	-	0905	1005	1105	1205	1305	1405	1505	1605	1705	1805	-	
Banbury Gateway Retail Park	-	0913	1013	1113	1213	1313	1413	1513	1613	1713	1813	-	

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Appendix F
Survey Data



Dukes Meadow Drive, Banbury

Fully Classified Turning Counts

Neutral Weekday Tue, Weds or Thur

Queues lengths recorded at 5-minute intervals

AM 0700-1000 & PM 1600-1900



Banbury, Tuesday 14th June 2022

Junction: A1

Approach: Dukes Meadow Drive East



Banbury, Tuesday 14th June 2022

Junction: A1

Approach: Lapsley Drive

	0.2	0.4	1	1	2	2.3	2		0.2	0.4	1	1	2	2.3	2		0.2	0.4	1	1	2	2.3	2	
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	1	2	0	0	0	3	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	3	1	0	0	0	4	0	0	1	2	0	0	0	3	0	0	0	0	0	0	0	0
07:30 - 07:45	0	0	7	1	0	0	0	8	0	0	10	3	1	0	0	14	0	0	0	0	0	0	0	0
07:45 - 08:00	0	0	10	0	0	0	0	10	0	0	8	2	0	0	0	10	0	0	0	0	0	0	0	0
Hourly Total	0	0	21	4	0	0	0	25	0	0	25	8	1	0	0	34	0							
08:00 - 08:15	0	0	9	2	0	0	0	11	0	0	9	1	0	0	0	10	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	6	0	0	0	0	6	0	0	16	0	0	0	0	16	0	0	0	0	0	0	0	0
08:30 - 08:45	0	0	50	2	0	0	0	52	0	0	44	1	0	0	0	45	0	0	0	0	0	0	0	0
08:45 - 09:00	0	0	22	0	1	0	0	23	0	0	26	0	0	0	0	26	0	0	0	0	0	0	0	0
Hourly Total	0	0	87	4	1	0	0	92	0	0	95	2	0	0	0	97	0							
PCU	0	0	87	4	2	0	0	93	0	0	95	2	0	0	0	97	0							
09:00 - 09:15	0	0	7	2	0	0	0	9	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
09:15 - 09:30	0	0	6	3	0	0	0	9	0	0	5	2	0	0	0	7	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	4	1	0	0	0	5	0	0	13	1	1	0	0	15	0	0	0	0	0	0	0	0
09:45 - 10:00	0	0	5	4	0	0	0	9	0	0	9	0	1	0	0	10	0	0	0	0	0	0	0	0
Hourly Total	0	0	22	10	0	0	0	32	0	0	32	3	2	0	0	37	0							
TOTAL	0	0	130	18	1	0	0	149	0	0	152	13	3	0	0	168	0							
16:00 - 16:15	0	0	12	0	0	0	0	12	0	0	10	0	1	0	0	11	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	28	1	0	0	0	29	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	11	0	0	0	0	11	0	0	14	0	0	0	0	14	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	8	1	0	0	0	9	0	0	9	2	0	0	0	11	0	0	1	0	0	0	0	1
Hourly Total	0	0	59	2	0	0	0	61	0	0	48	3	1	0	0	52	0	0	1	0	0	0	0	1
17:00 - 17:15	0	0	6	1	0	0	0	7	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	13	1	0	0	0	14	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	11	2	0	0	0	13	0	0	7	3	0	0	0	10	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	12	1	0	0	0	13	0	0	9	2	0	0	0	11	0	0	0	0	0	0	0	0
Hourly Total	0	0	42	5	0	0	0	47	0	0	36	6	0	0	0	42	0							
PCU	0	0	42	5	0	0	0	47	0	0	36	6	0	0	0	42	0							
18:00 - 18:15	0	0	6	1	0	0	0	7	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	2	0	0	0	0	2	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	8	0	0	0	0	8	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	2	0	0	0	0	2	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	0	0	18	1	0	0	0	19	0	0	26	1	0	0	0	27	0							
TOTAL	0	0	119	8	0	0	0	127	0	0	110	10	1	0	0	121	0	0	1	0	0	0	0	1



Banbury, Tuesday 14th June 2022

Junction: A1

Approach: Dukes Meadow Drive West

	0.2	0.4	1	1	2	2.3	2		0.2	0.4	1	1	2	2.3	2		0.2	0.4	1	1	2	2.3	2	
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	50	7	1	0	0	58	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0
07:15 - 07:30	1	0	57	6	0	0	0	64	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0
07:30 - 07:45	1	0	54	7	0	0	1	63	0	0	8	2	0	0	0	10	0	0	0	0	0	0	0	0
07:45 - 08:00	1	1	86	7	0	0	0	95	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
Hourly Total	3	1	247	27	1	0	1	280	0	0	21	4	0	0	0	25	0							
08:00 - 08:15	0	2	83	10	1	0	0	96	0	0	21	2	0	0	0	23	0	0	0	0	0	0	0	0
08:15 - 08:30	1	0	64	6	1	0	0	72	0	0	48	1	0	0	0	49	0	0	0	0	0	0	0	0
08:30 - 08:45	0	0	60	11	0	2	0	73	0	0	49	2	0	0	0	51	0	0	0	0	0	0	0	0
08:45 - 09:00	0	1	61	2	0	0	0	64	0	0	19	0	0	0	0	19	0	0	0	0	0	0	0	0
Hourly Total	1	3	268	29	2	2	0	305	0	0	137	5	0	0	0	142	0							
PCU	0.2	1.2	268	29	4	4.6	0	307	0	0	137	5	0	0	0	142	0							
09:00 - 09:15	0	0	36	4	0	0	0	40	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
09:15 - 09:30	0	0	33	1	0	0	0	34	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	25	3	1	0	0	29	0	0	2	0	1	0	0	3	0	0	0	0	0	0	0	0
09:45 - 10:00	0	1	35	6	1	0	0	43	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	0	1	129	14	2	0	0	146	0	0	12	0	1	0	0	13	0							
TOTAL	4	5	644	70	5	2	1	731	0	0	170	9	1	0	0	180	0							
16:00 - 16:15	0	0	31	11	0	0	1	43	0	0	17	0	0	0	0	17	0	0	0	0	0	0	0	0
16:15 - 16:30	0	2	42	7	0	0	0	51	0	1	12	0	0	0	0	13	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	36	4	0	0	0	40	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	0
16:45 - 17:00	0	1	29	3	1	0	1	35	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0
Hourly Total	0	3	138	25	1	0	2	169	0	1	43	3	0	0	0	47	0							
17:00 - 17:15	0	0	41	5	1	0	0	47	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
17:15 - 17:30	0	2	32	1	0	0	0	35	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0
17:30 - 17:45	0	1	37	2	0	0	0	40	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	34	5	0	0	0	39	0	0	9	1	0	0	0	10	0	0	1	0	0	0	0	1
Hourly Total	0	3	144	13	1	0	0	161	0	0	33	4	0	0	0	37	0	0	1	0	0	0	0	1
PCU	0	1.2	144	13	2	0	0	160	0	0	33	4	0	0	0	37	0	0	1	0	0	0	0	1
18:00 - 18:15	1	0	30	1	0	0	0	32	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
18:15 - 18:30	0	1	33	5	0	0	0	39	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
18:30 - 18:45	0	2	35	3	0	0	0	40	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	35	3	0	0	0	38	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	1	3	133	12	0	0	0	149	0	0	19	1	0	0	0	20	0							
TOTAL	1	9	415	50	2	0	2	479	0	1	95	8	0	0	0	104	0	0	1	0	0	0	0	1

Junction: 1
Approach: A423

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	6	0	0	0	0	6	0	0	89	17	3	0	1	110	1	0	4	0	0	0	0	5	0	0	0	0	0	0	0	
07:15 - 07:30	0	0	0	0	0	0	0	0	0	0	108	24	4	0	0	136	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	
07:30 - 07:45	0	0	2	0	0	1	0	3	0	-1	115	24	1	-1	2	144	0	0	23	0	0	1	0	24	0	0	0	0	0	0	0	
07:45 - 08:00	0	0	2	0	0	0	0	2	0	0	144	14	2	4	0	164	0	2	19	0	0	0	1	22	0	0	0	0	0	0	0	
Hourly Total	0	0	10	0	0	1	0	11	0	1	456	79	10	5	3	554	1	2	51	1	0	1	1	57	0							
08:00 - 08:15	0	0	3	1	0	0	0	4	2	0	137	22	0	4	1	166	0	0	12	0	0	1	2	15	0	0	0	0	0	0	0	
08:15 - 08:30	0	0	4	0	0	0	0	4	0	0	115	23	7	0	0	145	0	0	22	0	0	0	0	22	0	0	1	0	0	0	1	
08:30 - 08:45	0	0	5	0	0	0	0	5	0	0	131	18	3	1	2	155	0	0	24	2	0	0	0	26	0	0	0	0	0	0	0	
08:45 - 09:00	0	0	7	0	0	0	0	7	0	3	109	14	2	2	1	131	0	0	13	2	2	0	0	17	0	0	0	0	0	0	0	
Hourly Total	0	0	19	1	0	0	0	20	2	3	492	77	12	7	4	597	0	0	71	4	2	1	2	80	0	0	1	0	0	0	1	
PCU	0	0	19	1	0	0	0	20	0.4	1.2	492	77	24	16.1	8	619	0	0	71	4	4	2.3	4	85	0	0	1	0	0	0	1	
09:00 - 09:15	0	0	6	0	0	0	0	6	0	1	77	14	5	1	1	99	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	
09:15 - 09:30	0	0	1	0	0	0	0	1	2	0	79	11	1	0	1	94	0	0	6	1	0	0	0	7	0	0	2	0	0	0	2	
09:30 - 09:45	0	0	2	0	0	0	0	2	0	0	84	16	3	1	1	105	0	0	9	0	0	0	0	9	0	0	2	1	0	0	3	
09:45 - 10:00	0	0	2	0	0	0	0	2	0	0	85	25	2	3	0	115	0	0	6	2	1	0	0	9	0	0	0	0	0	0		
Hourly Total	0	0	11	0	0	0	0	11	2	1	325	66	11	5	3	413	0	0	30	3	1	0	0	34	0	0	4	1	0	0	5	
TOTAL	0	0	40	1	0	1	0	42	4	5	1273	222	33	17	10	1564	1	2	152	8	3	2	3	171	0	0	5	1	0	0	6	
16:00 - 16:15	0	0	0	0	0	0	0	0	0	0	85	20	0	0	1	106	0	1	28	2	0	0	0	31	0	0	1	0	0	0	1	
16:15 - 16:30	0	0	0	0	0	0	0	0	0	0	62	13	1	0	1	77	1	1	21	0	0	0	0	23	0	0	0	0	0	0	0	
16:30 - 16:45	0	0	1	0	0	0	0	1	0	0	85	9	0	0	1	95	0	1	14	3	0	0	0	18	0	0	0	0	0	0	0	
16:45 - 17:00	0	0	1	0	0	0	0	1	0	0	93	10	1	0	0	104	2	0	13	2	0	0	0	17	0	0	1	0	0	0	1	
Hourly Total	0	0	2	0	0	0	0	2	0	0	325	52	2	0	3	382	3	3	76	7	0	0	0	89	0	0	2	0	0	0	2	
17:00 - 17:15	0	0	0	0	0	0	0	0	0	0	60	8	1	1	1	71	0	1	26	0	0	0	0	27	0	0	1	0	0	0	1	
17:15 - 17:30	0	0	1	0	0	1	0	2	0	3	76	12	0	0	0	91	0	0	16	0	0	0	0	16	0	0	0	0	0	0	0	
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	82	7	2	2	1	94	0	0	14	3	0	0	0	17	0	0	1	0	0	0	1	
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0	79	9	2	2	0	92	0	0	13	0	0	0	0	13	0	0	0	0	0	0	0	
Hourly Total	0	0	1	0	0	1	0	2	0	3	297	36	5	5	2	348	0	1	69	3	0	0	0	73	0	0	2	0	0	0	2	
PCU	0	0	1	0	0	2.3	0	3	0	1.2	297	36	10	11.5	4	360	0	0.4	69	3	0	0	0	72	0							
18:00 - 18:15	0	0	0	0	0	0	0	0	0	0	59	8	1	0	1	69	1	0	12	0	0	0	0	13	0	0	0	0	0	0	0	
18:15 - 18:30	0	0	2	0	0	0	0	2	0	2	66	5	0	0	0	73	0	0	13	1	0	0	0	14	0	0	0	0	0	0	0	
18:30 - 18:45	0	0	0	0	0	0	0	0	0	0	68	3	0	1	1	73	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	
18:45 - 19:00	0	0	0	0	0	0	0	0	0	0	53	6	0	1	0	60	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	
Hourly Total	0	0	2	0	0	0	0	2	0	2	246	22	1	2	2	275	1	0	39	1	0	0	0	41	0							
TOTAL	0	0	5	0	0	1	0	6	0	5	868	110	8	7	7	1005	4	4	184	11	0	0	0	203	0	0	4	0	0	0	4	

Junction: 1

Approach: Noral Way

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:15 - 07:30	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0		
07:30 - 07:45	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:45 - 08:00	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hourly Total	0	0	6	2	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0		
08:00 - 08:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0		
08:15 - 08:30	0	0	1	3	0	0	1	0	0	5	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
08:30 - 08:45	0	0	2	0	0	1	0	3	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
08:45 - 09:00	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0		
Hourly Total	0	1	8	0	1	1	0	11	0	0	2	0	0	0	0	2	0	0	4	0	0	0	4	0	0	0	0	0	0	0		
PCU	0	0.4	8	0	2	2.3	0	13	0	0	2	0	0	0	0	2	0	0	4	0	0	0	4	0	0	0	0	0	0	0		
09:00 - 09:15	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3	0	0	0	0	0	0	0		
09:15 - 09:30	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
09:30 - 09:45	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0		
09:45 - 10:00	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0		
Hourly Total	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0	0	4	0	0	1	0	5	0	0	0	0	0	0	0		
TOTAL	0	1	29	2	1	0	34	0	0	2	0	0	0	0	0	2	0	0	9	0	0	1	0	10	0							
16:00 - 16:15	0	0	8	1	0	0	0	9	0	0	2	0	0	0	0	2	0	0	5	1	0	1	0	7	0	0	0	0	0	0	0	
16:15 - 16:30	0	0	10	0	0	0	0	10	0	0	4	0	0	0	0	4	0	0	8	0	1	1	0	10	0	0	0	0	0	0		
16:30 - 16:45	0	0	9	0	0	0	0	9	0	0	2	0	0	0	0	2	0	0	6	0	0	0	0	6	0	0	0	0	0	0		
16:45 - 17:00	0	0	14	1	0	0	0	15	0	0	2	0	0	0	0	2	0	0	6	1	0	0	0	7	0	0	0	0	0	0		
Hourly Total	0	0	41	2	0	0	0	43	0	0	10	0	0	0	0	10	0	0	25	2	1	2	0	30	0							
17:00 - 17:15	0	0	11	0	1	0	0	12	0	1	5	0	0	0	0	6	0	0	11	0	0	0	0	11	0	0	0	1	0	0		
17:15 - 17:30	0	0	17	0	0	0	0	17	0	0	3	0	0	0	0	3	0	0	9	0	0	0	0	9	0	0	0	0	0	0		
17:30 - 17:45	0	0	21	0	0	1	0	22	0	0	3	0	0	0	0	3	0	0	7	0	0	0	0	7	0	0	0	0	0	0		
17:45 - 18:00	0	0	37	0	0	0	0	37	0	0	4	0	0	0	0	4	0	0	6	1	0	0	0	7	0	0	0	0	0	0		
Hourly Total	0	0	86	0	1	1	0	88	0	1	15	0	0	0	0	16	0	0	33	1	0	0	0	34	0	0	0	1	0	0	1	
PCU	0	0	86	0	2	2.3	0	90	0	0.4	15	0	0	0	0	15	0	0	33	1	0	0	34	0	0	0	0	0	0	0		
18:00 - 18:15	0	0	25	0	0	0	0	25	0	0	5	0	0	0	0	5	0	0	9	0	0	0	0	9	0	0	0	0	0	0		
18:15 - 18:30	0	0	11	1	0	1	0	13	0	0	3	0	0	0	0	3	0	0	9	1	0	0	0	10	0	0	0	0	0	0		
18:30 - 18:45	0	0	9	0	0	0	0	9	0	0	1	0	0	0	0	1	0	0	6	0	0	0	0	6	0	0	0	0	0	0		
18:45 - 19:00	0	0	4	0	0	0	0	4	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3	0	0	0	0	0	0		
Hourly Total	0	0	49	1	0	1	0	51	0	0	10	0	0	0	0	10	0	0	27	1	0	0	0	28	0							
TOTAL	0	0	176	3	1	2	0	182	0	1	35	0	0	0	0	36	0	0	85	4	1	2	0	92	0	0	0	1	0	0	0	

Junction: 1

Approach: A423 Southam Road

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	1	1	15	3	0	0	0	20	2	0	34	11	2	2	0	51	0	1	2	1	0	3	0	7	0	0	0	0	0	0		
07:15 - 07:30	0	0	16	3	0	0	0	19	0	0	54	20	1	2	2	79	0	0	6	0	0	0	0	6	0	0	0	0	0	0		
07:30 - 07:45	0	0	13	5	0	0	0	18	1	-1	51	14	1	-3	0	71	0	0	11	1	1	2	0	15	0	0	0	0	0	0		
07:45 - 08:00	0	0	22	8	1	1	0	32	0	2	66	27	1	0	2	98	0	0	13	1	0	0	0	14	0	0	1	0	0	0		
Hourly Total	1	1	66	19	1	1	0	89	3	3	205	72	5	7	4	299	0	1	32	3	1	5	0	42	0	0	1	0	0	0		
08:00 - 08:15	0	0	23	6	0	1	0	30	0	0	77	13	1	4	0	95	0	0	6	1	0	0	0	7	0	0	0	0	0	0		
08:15 - 08:30	0	0	36	7	0	1	0	44	0	0	62	11	6	0	1	80	0	0	18	1	0	1	0	20	0	0	2	0	0	0		
08:30 - 08:45	0	0	39	6	1	0	0	46	0	0	52	14	2	1	0	69	0	0	16	2	0	0	0	18	0	0	0	1	0	0		
08:45 - 09:00	0	0	38	6	1	0	0	45	0	0	56	16	1	0	0	73	0	1	40	3	0	0	0	44	0	0	1	1	0	0		
Hourly Total	0	0	136	25	2	2	0	165	0	0	247	54	10	5	1	317	0	1	80	7	0	1	0	89	0	0	3	2	0	0		
PCU	0	0	136	25	4	4.6	0	170	0	0	247	54	20	11.5	2	335	0	0.4	80	7	0	2.3	0	90	0	0	3	2	0	0		
09:00 - 09:15	0	0	40	6	0	0	0	46	0	1	48	9	2	3	0	63	1	0	22	0	2	1	0	26	0	0	1	0	0	0		
09:15 - 09:30	0	1	41	5	1	0	0	48	0	2	48	10	1	4	1	66	0	0	13	1	0	2	0	16	0	0	1	0	0	0		
09:30 - 09:45	0	1	31	6	1	0	0	39	0	0	56	14	2	6	0	78	0	0	9	1	0	0	0	10	0	0	0	0	0	0		
09:45 - 10:00	0	0	23	8	0	0	0	31	0	0	47	18	1	3	1	70	0	0	4	0	0	0	0	4	0	0	1	0	0	0		
Hourly Total	0	2	135	25	2	0	0	164	0	3	199	51	6	16	2	277	1	0	48	2	2	3	0	56	0	0	3	0	0	0		
TOTAL	1	3	337	69	5	3	0	418	3	6	651	177	21	28	7	893	1	2	160	12	3	9	0	187	0	0	7	2	0	0		
16:00 - 16:15	1	1	69	6	0	0	0	77	0	4	108	34	0	3	0	149	0	0	3	0	0	2	0	5	0	0	1	0	0	0		
16:15 - 16:30	0	0	64	13	0	0	0	77	0	2	96	14	1	2	2	117	0	0	4	1	0	0	0	5	0	0	0	0	0	0		
16:30 - 16:45	1	0	76	5	2	0	0	84	0	0	109	16	2	2	0	129	0	0	2	1	0	0	0	3	0	0	0	1	0	0		
16:45 - 17:00	0	0	94	6	0	0	0	100	1	0	134	19	2	1	1	158	0	0	3	0	0	1	0	4	0	0	1	0	0	0		
Hourly Total	2	1	303	30	2	0	0	338	1	6	447	83	5	8	3	553	0	0	12	2	0	3	0	17	0	0	2	1	0	0		
17:00 - 17:15	2	0	108	8	0	0	0	118	0	0	120	11	2	0	1	134	0	0	2	0	0	0	0	2	0	0	0	0	0	0		
17:15 - 17:30	1	0	99	4	0	0	0	104	0	3	141	15	1	0	1	161	0	0	1	0	0	0	0	1	0	0	0	0	0	1		
17:30 - 17:45	1	2	96	6	0	0	0	105	0	4	152	15	1	0	0	172	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
17:45 - 18:00	0	1	87	4	0	0	0	92	0	0	132	24	4	0	1	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hourly Total	4	3	390	22	0	0	0	419	0	7	545	65	8	0	3	628	0	0	3	0	0	0	0	3	0	0	2	0	0	0		
PCU	0.8	1.2	390	22	0	0	0	414	0	2.8	545	65	16	0	6	635	0	0	3	0	0	0	0	3	0	0	0	0	0	0		
18:00 - 18:15	0	0	79	13	0	0	0	92	0	3	121	5	1	1	0	131	0	0	2	0	0	0	0	2	0	0	0	0	0	2		
18:15 - 18:30	0	0	74	3	0	0	0	77	0	1	117	7	0	2	2	129	0	0	0	0	0	0	0	0	1	0	0	0	0	1		
18:30 - 18:45	0	1	76	6	0	0	0	83	0	1	97	8	0	0	0	106	0	0	1	0	0	0	0	1	0	0	0	0	0	0		
18:45 - 19:00	0	1	50	5	1	0	0	56	2	0	80	4	0	1	1	88	0	0	0	1	0	0	0	1	0	0	0	0	0	0		
Hourly Total	0	2	279	27	0	0	0	308	2	5	415	24	1	4	3	454	0	0	3	1	0	0	0	4	0	0	3	0	0	0		
TOTAL	6	6	972	79	2	0	0	1065	3	18	1407	172	14	12	9	1635	0	0	18	3	0	3	0	24	0	0	7	1	0	0		



Banbury, Tuesday 14th June 2022

Junction: 1

Approach: Dukes Meadow Drive

	0.2	0.4	1	1	2	2.3	2		0.2	0.4	1	1	2	2.3	2		0.2	0.4	1	1	2	2.3	2		
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	
07:00 - 07:15	1	0	7	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	58	9	1	0	0	0	68
07:15 - 07:30	1	0	7	1	0	0	0	9	0	0	1	1	0	0	0	2	0	0	56	7	1	0	0	0	64
07:30 - 07:45	0	0	9	0	0	0	0	9	0	0	3	0	0	0	0	3	0	0	71	12	1	0	0	0	84
07:45 - 08:00	1	0	12	2	0	0	0	15	0	0	7	0	0	0	0	7	0	0	92	10	0	0	0	0	102
Hourly Total	3	0	35	4	0	0	0	42	0	0	11	1	0	0	0	12	0	0	277	38	3	0	0	0	318
08:00 - 08:15	0	0	21	3	0	0	0	24	0	0	5	0	0	0	0	5	0	0	88	9	1	0	0	0	98
08:15 - 08:30	0	0	11	0	1	0	0	12	0	0	5	1	0	0	0	6	0	0	70	9	0	0	0	0	79
08:30 - 08:45	0	0	14	0	0	0	0	14	0	0	9	4	0	0	0	13	0	0	90	10	1	1	0	0	102
08:45 - 09:00	0	0	19	1	0	1	0	21	0	0	15	0	0	0	0	15	0	0	64	2	0	0	0	0	66
Hourly Total	0	0	65	4	1	1	0	71	0	0	34	5	0	0	0	39	0	0	312	30	2	1	0	0	345
PCU	0	0	65	4	2	2.3	0	73	0	0	34	5	0	0	0	39	0	0	312	30	4	2.3	0	0	348
09:00 - 09:15	0	0	6	0	0	0	0	6	0	0	4	0	0	0	0	4	0	0	44	5	0	0	0	0	49
09:15 - 09:30	0	0	4	2	0	0	0	6	0	0	3	0	0	0	0	3	0	0	37	1	0	0	0	0	38
09:30 - 09:45	0	0	8	1	0	0	0	9	0	0	1	1	0	0	0	2	0	0	34	4	2	0	0	0	40
09:45 - 10:00	0	0	6	2	0	0	0	8	0	1	0	0	0	0	0	1	0	0	43	5	1	0	0	0	49
Hourly Total	0	0	24	5	0	0	0	29	0	1	8	1	0	0	0	10	0	0	158	15	3	0	0	0	176
TOTAL	3	0	124	13	1	1	0	142	0	1	53	7	0	0	0	61	0	0	747	83	8	1	0	0	839
16:00 - 16:15	0	1	4	2	0	0	1	8	0	0	0	0	0	0	0	0	0	0	38	8	0	0	0	0	46
16:15 - 16:30	0	0	20	4	0	0	0	24	0	0	2	0	0	0	0	2	0	2	42	6	0	0	0	0	50
16:30 - 16:45	0	0	17	2	0	0	0	19	0	0	0	0	0	0	0	0	0	0	43	3	0	0	0	0	46
16:45 - 17:00	0	0	12	3	0	0	0	15	0	0	0	0	0	0	0	0	0	1	30	2	0	0	0	1	34
Hourly Total	0	1	53	11	0	0	1	66	0	0	2	0	0	0	0	2	0	3	153	19	0	0	1	176	
17:00 - 17:15	0	0	13	3	0	0	0	16	0	0	1	0	0	0	0	1	0	0	45	3	2	0	0	0	50
17:15 - 17:30	0	1	15	1	0	0	0	17	0	0	0	0	0	0	0	0	0	0	40	1	0	0	0	0	41
17:30 - 17:45	0	0	11	0	0	0	0	11	0	0	1	0	0	0	0	1	0	0	29	5	0	0	0	0	34
17:45 - 18:00	0	0	11	3	0	0	0	14	0	0	1	0	0	0	0	1	0	0	42	3	0	0	0	0	45
Hourly Total	0	1	50	7	0	0	0	58	0	0	3	0	0	0	0	3	0	0	156	12	2	0	0	0	170
PCU	0	0.4	50	7	0	0	0	57	0	0	3	0	0	0	0	3	0	0	156	12	4	0	0	0	172
18:00 - 18:15	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	34	1	0	0	0	0	35
18:15 - 18:30	0	0	14	4	0	0	0	18	0	0	0	0	0	0	0	0	0	0	42	2	0	0	0	0	44
18:30 - 18:45	0	0	8	3	0	0	0	11	0	0	1	0	0	0	0	1	0	0	32	1	0	0	0	0	35
18:45 - 19:00	0	0	12	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	37	3	0	0	0	0	40
Hourly Total	0	0	44	7	0	0	0	51	0	0	1	0	0	0	0	1	0	2	145	7	0	0	0	0	154
TOTAL	0	2	147	25	0	0	1	175	0	0	6	0	0	0	0	6	0	5	454	38	2	0	1	0	500



Banbury, Tuesday 14th June 2022

Junction: 2

Approach: Dukes Meadow Drive



Banbury, Tuesday 14th June 2022

Junction: 2

Approach: Warwick Road South

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	7	0	0	0	0	7	0	0	29	4	0	0	0	33	0	0	8	7	1	0	0	16	0	0	0	0	0	0	0	
07:15 - 07:30	0	0	5	2	0	0	0	7	1	0	35	7	0	0	0	43	0	0	15	2	0	0	0	17	0	0	0	0	0	0	0	
07:30 - 07:45	0	0	3	4	0	0	0	7	0	0	31	9	0	0	1	41	0	0	18	6	0	0	2	26	0	0	0	0	0	0	0	
07:45 - 08:00	0	0	7	1	1	0	0	9	0	0	31	12	1	0	0	44	0	0	24	2	0	0	1	27	0	0	0	0	0	0	0	
Hourly Total	0	0	22	7	1	0	0	30	1	0	126	32	1	0	1	161	0	0	65	17	1	0	3	86	0							
08:00 - 08:15	0	0	5	1	0	0	0	6	0	1	52	4	0	1	0	58	0	0	39	3	0	0	0	42	0	0	1	0	0	0	1	
08:15 - 08:30	0	0	5	1	0	0	0	6	0	0	52	7	1	0	0	60	0	0	42	3	0	0	1	46	0	0	0	1	0	0	1	
08:30 - 08:45	0	0	5	0	0	0	0	5	1	0	33	4	1	0	0	39	0	0	33	2	0	1	1	37	0	0	0	0	0	0	0	
08:45 - 09:00	0	0	12	2	0	0	0	14	0	0	33	6	1	0	0	40	0	0	27	1	0	0	1	29	0	0	0	0	0	0	0	
Hourly Total	0	0	27	4	0	0	0	31	1	1	170	21	3	1	0	197	0	0	141	9	0	1	3	154	0	0	1	1	0	0	2	
PCU	0	0	27	4	0	0	0	31	0.2	0.4	170	21	6	2.3	0	200	0	0	141	9	0	2.3	6	158	0	0	1	1	0	0	2	
09:00 - 09:15	0	0	10	3	0	0	0	13	0	0	33	4	0	1	0	38	0	0	14	2	0	0	1	17	0	0	0	0	0	0	0	
09:15 - 09:30	0	0	6	1	0	0	0	7	2	0	23	6	0	0	0	31	0	0	17	1	1	0	1	20	0	0	0	0	0	0	0	
09:30 - 09:45	0	0	7	2	0	0	0	9	1	0	18	1	1	2	0	23	0	0	12	1	0	0	1	14	0	0	0	0	0	0	0	
09:45 - 10:00	0	0	5	4	0	0	0	9	0	0	25	7	1	1	0	34	0	1	10	5	1	0	1	18	0	0	0	0	0	0	0	
Hourly Total	0	0	28	10	0	0	0	38	3	0	99	18	2	4	0	126	0	1	53	9	2	0	4	69	0							
TOTAL	0	0	77	21	1	0	0	99	5	1	395	71	6	5	1	484	0	1	259	35	3	1	10	309	0	0	1	1	0	0	2	
16:00 - 16:15	0	2	15	2	0	0	0	19	1	0	41	6	1	0	0	49	0	0	35	5	0	0	1	41	0	0	0	0	0	0	0	
16:15 - 16:30	0	0	12	0	0	0	0	12	0	0	39	7	1	0	0	47	0	1	27	6	0	0	1	35	0	0	0	1	0	0	1	
16:30 - 16:45	0	1	11	3	0	0	0	15	1	0	40	8	0	0	0	49	0	0	27	4	0	0	1	32	0	0	0	0	0	0	0	
16:45 - 17:00	0	0	13	2	0	0	0	15	1	0	27	5	0	0	0	33	0	0	19	5	0	0	1	25	0	0	0	0	0	0	0	
Hourly Total	0	3	51	7	0	0	0	61	3	0	147	26	2	0	0	178	0	1	108	20	0	0	4	133	0	0	0	1	0	0	1	
17:00 - 17:15	0	1	18	2	0	0	0	21	0	0	48	5	0	0	0	53	0	1	32	3	1	0	1	38	0	0	0	1	0	0	1	
17:15 - 17:30	0	0	15	1	0	0	0	16	0	0	53	10	0	0	0	63	0	1	36	2	0	0	1	40	0	0	0	0	0	0	0	
17:30 - 17:45	0	0	14	1	0	0	0	15	1	0	46	4	0	1	0	52	0	0	30	3	0	0	1	34	0	0	0	0	0	0	0	
17:45 - 18:00	0	0	18	1	0	0	0	19	0	1	43	6	0	0	0	50	0	0	33	5	0	0	1	39	0	0	0	0	0	0	0	
Hourly Total	0	1	65	5	0	0	0	71	1	1	190	25	0	1	0	218	0	2	131	13	1	0	4	151	0	0	1	0	0	0	1	
PCU	0	0.4	65	5	0	0	0	70	0.2	0.4	190	25	0	2.3	0	218	0	0.8	131	13	2	0	8	155	0							
18:00 - 18:15	0	0	10	1	0	0	0	11	2	2	51	1	0	0	0	56	0	0	18	1	0	0	1	20	0	0	0	0	0	0	0	
18:15 - 18:30	0	0	6	0	0	0	0	6	2	0	38	0	0	0	0	40	0	0	25	2	0	0	1	28	0	0	0	0	0	0	0	
18:30 - 18:45	0	0	13	1	0	0	0	14	0	0	33	1	1	0	0	35	0	2	26	1	0	0	1	30	0	0	0	0	0	0	0	
18:45 - 19:00	0	0	9	3	1	0	0	12	0	0	28	1	0	0	0	29	0	0	16	1	0	0	1	18	0	0	0	0	0	0	0	
Hourly Total	0	0	38	5	0	0	0	43	4	2	150	3	1	0	0	160	0	2	85	5	0	0	4	96	0							
TOTAL	0	4	154	17	0	0	0	175	8	3	487	54	3	1	0	556	0	5	324	38	1	0	12	380	0	0	1	1	0	0	2	

Junction: 2
Approach: Walker Road

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	5	2	0	0	0	7	0	0	5	2	0	0	0	7	0	0	3	0	1	0	0	4	0	0	0	0	0	0		
07:15 - 07:30	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0	8	0	0	0	0	0	0		
07:30 - 07:45	0	0	10	5	0	0	0	15	0	0	6	0	0	0	0	6	0	0	5	0	0	0	0	5	0	0	0	0	0	0		
07:45 - 08:00	0	0	7	1	0	0	0	8	0	0	6	1	0	0	0	7	0	0	6	4	0	0	0	10	0	0	0	0	0	0		
Hourly Total	0	0	30	8	0	0	0	38	0	0	17	3	0	0	0	20	0	0	19	7	1	0	0	27	0	0	0	0	0	0		
08:00 - 08:15	0	0	8	2	0	0	0	10	0	0	5	2	0	0	0	7	0	0	8	2	0	0	0	10	0	0	0	0	0	0		
08:15 - 08:30	0	0	9	1	0	0	0	10	0	0	7	2	0	0	0	9	0	0	4	0	0	0	0	4	0	0	0	0	0	0		
08:30 - 08:45	0	0	3	0	0	0	0	3	0	0	8	0	0	0	0	8	0	0	9	0	1	0	0	10	0	0	0	0	0	0		
08:45 - 09:00	0	0	3	0	0	0	0	3	0	0	7	0	0	0	0	7	0	0	7	2	0	0	0	9	0	0	0	0	0	0		
Hourly Total	0	0	23	3	0	0	0	26	0	0	27	4	0	0	0	31	0	0	28	4	1	0	0	33	0	0	0	0	0	0		
PCU	0	0	23	3	0	0	0	26	0	0	27	4	0	0	0	31	0	0	28	4	2	0	0	34	0	0	0	0	0	0		
09:00 - 09:15	0	0	5	0	0	0	0	5	0	0	3	0	0	0	0	3	0	0	6	3	0	0	0	9	0	0	0	0	0	0		
09:15 - 09:30	0	0	3	1	0	0	0	4	0	0	5	0	0	0	0	5	0	1	7	1	0	0	0	9	0	0	0	0	0	0		
09:30 - 09:45	0	0	5	0	0	0	0	5	0	0	3	0	0	0	0	3	0	0	7	0	1	0	0	8	0	0	0	0	0	0		
09:45 - 10:00	0	0	5	2	0	0	0	7	0	0	3	0	0	0	0	3	0	0	5	1	0	0	0	6	0	0	0	0	0	0		
Hourly Total	0	0	18	3	0	0	0	21	0	0	14	0	0	0	0	14	0	1	25	5	1	0	0	32	0	0	0	0	0	0		
TOTAL	0	0	71	14	0	0	0	85	0	0	58	7	0	0	0	65	0	1	72	16	3	0	0	92	0	0	0	0	0	0		
16:00 - 16:15	0	0	4	2	0	0	0	6	1	2	4	1	0	0	0	8	0	0	6	1	0	0	0	7	0	0	0	0	0	0		
16:15 - 16:30	0	1	11	0	0	0	0	12	0	0	7	2	0	0	0	9	0	0	12	2	0	0	0	14	0	0	0	0	0	0		
16:30 - 16:45	0	0	8	2	0	0	0	10	0	0	9	2	0	0	0	11	0	1	6	3	0	0	0	10	0	0	0	0	0	0		
16:45 - 17:00	0	0	9	0	0	0	0	9	0	0	7	2	0	0	0	9	0	0	11	2	0	0	0	13	0	0	0	0	0	0		
Hourly Total	0	1	32	4	0	0	0	37	1	2	27	7	0	0	0	37	0	1	35	8	0	0	0	44	0	0	0	0	0	0		
17:00 - 17:15	0	0	6	0	0	0	0	6	0	1	4	2	0	0	0	7	0	0	10	1	0	0	0	11	0	0	0	0	0	0		
17:15 - 17:30	0	0	8	0	0	0	0	8	0	0	6	2	0	0	0	8	0	0	14	1	0	0	0	15	0	0	0	0	0	0		
17:30 - 17:45	0	0	13	2	0	0	0	15	0	0	13	1	0	0	0	14	0	0	14	2	0	0	0	16	0	0	0	0	0	0		
17:45 - 18:00	0	0	10	1	0	0	0	11	0	0	6	0	0	0	0	6	0	0	13	0	0	0	0	13	0	0	0	0	0	0		
Hourly Total	0	0	37	3	0	0	0	40	0	1	29	5	0	0	0	35	0	0	51	4	0	0	0	55	0	0	0	0	0	0		
PCU	0	0	37	3	0	0	0	40	0	0.4	29	5	0	0	0	34	0	0	51	4	0	0	0	55	0	0	0	0	0	0		
18:00 - 18:15	0	0	9	0	0	0	0	9	0	0	1	1	0	0	0	2	0	0	9	1	0	0	0	10	0	0	0	0	0	0		
18:15 - 18:30	0	0	7	0	0	0	0	7	0	0	7	1	0	0	0	8	1	0	11	1	0	0	0	13	0	0	0	0	0	0		
18:30 - 18:45	0	0	7	2	0	0	0	9	0	0	7	0	0	0	0	7	0	0	7	0	0	0	0	7	0	0	0	0	0	0		
18:45 - 19:00	1	0	7	1	0	0	0	9	0	0	5	1	0	0	0	6	0	0	9	0	0	0	0	9	0	0	0	0	0	0		
Hourly Total	1	0	30	3	0	0	0	34	0	0	20	3	0	0	0	23	1	0	36	2	0	0	0	39	0	0	0	0	0	0		
TOTAL	1	1	99	10	0	0	0	111	1	3	76	15	0	0	0	95	1	1	122	14	0	0	0	138	1	1	0	0	0	0		



Banbury, Tuesday 14th June 2022

Junction: 2

Approach: Warwick Road North

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	17	3	0	0	0	20	0	1	28	4	0	0	0	33	0	0	2	2	0	0	0	4	0	0	1	0	0	0	1	
07:15 - 07:30	0	0	12	2	0	0	0	14	0	0	35	5	0	0	0	40	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	
07:30 - 07:45	0	0	24	1	0	0	0	25	-1	0	37	10	0	0	0	48	0	0	6	4	0	0	0	10	0	0	0	1	0	0	1	
07:45 - 08:00	0	0	18	2	0	0	0	20	0	0	62	5	0	0	0	67	0	0	5	2	0	0	0	7	0	0	0	0	0	0	0	
Hourly Total	0	0	71	8	0	0	0	79	1	1	162	24	0	0	0	188	0	0	18	8	0	0	0	26	0	0	1	1	0	0	2	
08:00 - 08:15	0	0	26	4	0	0	0	30	0	0	47	6	0	0	0	53	0	0	1	2	0	0	0	3	0	0	0	0	0	0	0	
08:15 - 08:30	0	0	16	3	1	0	0	20	0	0	39	4	0	0	0	43	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	
08:30 - 08:45	1	0	19	5	1	0	0	26	0	0	32	8	1	0	0	41	0	0	3	0	0	0	0	3	0	0	1	0	0	0	1	
08:45 - 09:00	0	0	21	1	0	0	0	22	0	0	36	5	0	0	0	41	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	
Hourly Total	1	0	82	13	2	0	0	98	0	0	154	23	1	0	0	178	0	0	12	4	0	0	0	16	0	0	1	0	0	0	1	
PCU	0.2	0	82	13	4	0	0	99	0	0	154	23	2	0	0	179	0	0	12	4	0	0	0	16	0	0	1	0	0	0	1	
09:00 - 09:15	0	0	13	3	0	0	0	16	0	0	32	3	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
09:15 - 09:30	1	0	9	4	0	0	0	14	0	0	36	2	0	0	0	38	0	1	6	0	0	0	0	7	0	0	0	0	0	0	0	
09:30 - 09:45	0	0	10	1	1	0	0	12	1	0	25	2	1	1	0	30	0	0	1	0	0	0	0	1	0	0	0	0	0	0		
09:45 - 10:00	0	0	8	3	0	0	0	11	0	0	27	3	1	0	0	31	0	0	4	1	0	0	0	5	0	0	2	0	0	0	2	
Hourly Total	1	0	40	11	1	0	0	53	1	0	120	10	2	1	0	134	0	1	11	1	0	0	0	13	0	0	2	0	0	0	2	
TOTAL	2	0	193	32	3	0	0	230	2	1	436	57	3	1	0	500	0	1	41	13	0	0	0	55	0	0	4	1	0	0	5	
16:00 - 16:15	0	0	12	5	0	0	0	17	0	0	46	4	0	0	0	50	0	0	3	1	0	0	0	4	0	1	0	0	0	0	1	
16:15 - 16:30	0	0	12	3	0	0	0	15	0	0	46	15	0	0	0	61	0	0	3	2	0	0	0	5	0	0	0	0	0	0	0	
16:30 - 16:45	0	0	8	0	0	0	0	8	0	1	41	12	1	0	0	55	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	
16:45 - 17:00	0	1	15	3	1	0	1	21	0	1	53	9	0	0	1	64	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	
Hourly Total	0	1	47	11	1	0	1	61	0	2	186	40	1	0	1	230	0	0	16	5	0	0	21	0	1	0	0	0	0	1		
17:00 - 17:15	0	0	14	1	1	0	0	16	1	1	42	8	0	0	0	52	0	0	12	0	0	0	0	12	0	0	0	0	0	0	0	
17:15 - 17:30	0	1	14	2	0	0	0	17	0	1	43	3	1	0	0	48	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	
17:30 - 17:45	0	1	11	0	0	0	0	12	0	0	47	4	0	0	0	51	0	0	14	1	0	0	0	15	0	0	0	0	0	0	0	
17:45 - 18:00	0	0	5	1	0	0	0	6	0	0	49	1	0	0	1	51	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	
Hourly Total	0	2	44	4	1	0	0	51	1	2	181	16	1	0	1	202	0	0	34	2	0	0	36	0	0	0	0	0	0	0		
PCU	0	0.8	44	4	2	0	0	51	0.2	0.8	181	16	2	0	2	202	0	0	34	2	0	0	36	0	0	0	0	0	0	0		
18:00 - 18:15	0	0	9	0	0	0	0	9	0	0	38	5	0	0	0	43	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	
18:15 - 18:30	0	0	12	1	0	0	0	13	1	0	31	2	0	1	1	36	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	
18:30 - 18:45	0	0	6	2	0	0	0	8	0	0	37	5	0	0	0	42	0	0	8	3	0	0	0	11	1	0	0	0	0	0	1	
18:45 - 19:00	1	0	5	2	1	0	0	8	1	0	28	3	0	0	1	32	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	
Hourly Total	1	0	32	5	0	0	0	36	2	0	134	15	0	1	1	153	0	0	30	6	0	0	36	1	0	0	0	0	0	1		
TOTAL	1	3	123	20	2	0	1	150	3	4	501	71	2	1	3	585	0	0	80	13	0	0	0	93	1	1	0	0	0	0	2	

Junction: 5

Approach: A423 Southam Road

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	1	1	95	16	2	0	0	115	0	0	33	4	0	0	1	38	0	0	40	9	0	0	0	49	0	0	0	0	0	0	0	
07:15 - 07:30	0	0	87	21	7	2	0	117	0	0	22	7	0	5	0	34	0	0	42	13	1	1	0	57	0	0	0	0	0	0	0	
07:30 - 07:45	0	1	98	19	0	4	0	122	0	-2	35	10	3	0	0	50	0	0	36	7	1	0	0	44	0	0	0	0	0	0	0	
07:45 - 08:00	0	1	124	21	3	5	1	155	0	0	44	5	2	0	0	51	0	0	54	12	1	1	0	68	0	0	2	0	0	0	2	
Hourly Total	1	3	404	77	12	11	1	509	0	2	134	26	5	5	1	173	0	0	172	41	3	2	0	218	0	0	2	0	0	0	2	
08:00 - 08:15	0	4	126	13	1	3	0	147	0	0	35	10	0	2	1	48	0	0	49	7	0	1	0	57	0	0	0	0	0	0	0	
08:15 - 08:30	0	1	115	24	6	1	0	147	0	0	40	7	1	0	0	48	0	0	40	13	2	0	0	55	0	0	0	0	0	0	0	
08:30 - 08:45	0	0	116	20	3	4	1	144	0	1	48	10	1	0	1	61	0	0	54	7	0	2	0	63	0	0	1	0	0	0	1	
08:45 - 09:00	0	2	93	18	3	2	1	119	0	3	50	6	0	0	0	59	0	0	50	12	0	0	0	62	0	0	0	0	0	0	0	
Hourly Total	0	7	450	75	13	10	2	557	0	4	173	33	2	2	2	216	0	0	193	39	2	3	0	237	0	0	1	0	0	0	1	
PCU	0	2.8	450	75	26	4	1.6	581	0	1.6	173	33	4	4.6	4	220	0	0	193	39	4	6.9	0	243	0	0	1	0	0	0	1	
09:00 - 09:15	0	1	67	18	1	3	0	90	0	0	15	2	0	0	1	18	0	0	38	4	2	1	0	45	0	0	1	0	0	0	1	
09:15 - 09:30	0	1	64	10	4	1	1	81	0	0	25	5	0	0	0	30	0	0	41	7	0	0	0	48	0	0	1	1	0	0	2	
09:30 - 09:45	0	0	72	10	3	6	0	91	0	0	22	2	0	0	0	24	0	0	37	5	2	0	0	44	0	0	0	1	0	0	1	
09:45 - 10:00	0	1	73	11	2	5	0	92	0	0	20	7	2	0	0	29	0	0	35	11	1	0	0	47	0	0	0	0	0	0	0	
Hourly Total	0	3	276	49	10	15	1	354	0	0	82	16	2	0	1	101	0	0	151	27	5	1	0	184	0	0	2	2	0	0	4	
TOTAL	1	13	1130	201	35	36	4	1420	0	6	389	75	9	7	4	490	0	0	516	107	10	6	0	639	0	0	5	2	0	0	7	
16:00 - 16:15	0	0	97	19	1	2	0	119	0	0	30	5	1	0	1	37	0	0	58	8	0	0	0	66	0	0	0	0	0	0	0	
16:15 - 16:30	0	0	71	13	1	3	1	89	0	2	30	3	0	0	0	35	0	0	45	9	0	2	0	56	0	0	1	0	0	0	1	
16:30 - 16:45	0	0	117	17	1	2	0	137	0	0	44	2	0	0	1	47	0	1	62	5	0	0	0	68	0	0	0	0	0	0	0	
16:45 - 17:00	0	1	101	10	0	5	1	118	0	0	24	6	0	0	0	30	0	0	52	3	0	0	0	55	0	0	0	0	0	0	0	
Hourly Total	0	1	386	59	3	12	2	463	0	2	128	16	1	0	2	149	0	1	217	25	0	2	0	245	0	0	1	0	0	0	1	
17:00 - 17:15	0	1	111	13	3	6	0	134	1	1	51	5	0	0	0	58	0	1	53	6	0	0	0	60	0	0	0	0	0	0	0	
17:15 - 17:30	0	1	107	3	0	5	0	116	0	2	29	3	0	0	0	34	0	0	54	3	0	0	0	57	0	0	0	0	0	0	0	
17:30 - 17:45	0	3	108	7	0	4	0	122	1	0	31	1	0	1	1	35	0	1	50	7	0	0	0	58	0	0	1	0	0	0	1	
17:45 - 18:00	0	0	68	8	2	5	0	83	0	0	24	7	1	0	0	32	0	0	58	10	0	0	0	68	0	0	0	0	0	0	0	
Hourly Total	0	5	394	31	5	20	0	455	2	3	135	16	1	1	1	159	0	2	215	26	0	0	0	243	0	0	1	0	0	0	1	
PCU	0	2	394	31	10	46	0	483	0.4	1.2	135	16	2	2.3	2	159	0	0.8	215	26	0	0	0	242	0							
18:00 - 18:15	0	0	75	5	1	1	0	82	0	0	20	5	0	0	1	26	0	1	57	5	0	0	0	63	0	0	0	0	0	0	0	
18:15 - 18:30	0	1	50	3	0	3	0	57	0	0	18	1	0	0	0	19	0	1	55	5	0	0	0	61	0	0	0	0	0	0	0	
18:30 - 18:45	0	0	59	5	0	0	0	64	0	1	17	3	0	2	1	24	0	3	48	6	0	0	0	57	0	0	0	0	0	0	0	
18:45 - 19:00	0	0	46	8	0	3	0	57	0	0	11	4	1	0	0	16	0	1	37	3	0	0	0	41	0	0	0	0	0	0	0	
Hourly Total	0	1	230	21	1	7	0	260	0	1	66	13	1	2	2	85	0	6	197	19	0	0	0	222	0							
TOTAL	0	7	1010	111	9	39	2	1178	2	6	329	45	3	3	5	393	0	9	629	70	0	2	0	710	0	0	2	0	0	0	2	



Banbury, Tuesday 14th June 2022

Junction: 5

Approach: A422 Hennef Way

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	2	0	16	7	0	1	1	27	0	0	58	24	2	8	0	92	0	2	55	9	2	0	0	68	0	0	0	0	0	0	0	
07:15 - 07:30	0	0	30	11	0	2	0	43	0	0	76	12	2	2	0	92	0	0	71	24	1	2	0	98	0	0	0	0	0	0	0	
07:30 - 07:45	2	0	42	11	6	8	0	69	0	3	77	30	4	2	1	117	0	0	91	17	2	4	0	114	0	0	0	0	0	0	0	
07:45 - 08:00	0	1	51	10	2	3	0	67	0	0	86	26	4	4	2	122	0	1	107	29	2	6	1	146	0	0	0	0	0	0	0	
Hourly Total	4	1	139	39	8	14	1	206	0	3	297	92	12	16	3	423	0	3	324	79	7	12	1	426	0							
08:00 - 08:15	0	0	41	14	2	2	0	59	0	0	71	31	6	1	0	109	0	1	81	19	2	4	0	107	0	0	0	0	0	0	0	
08:15 - 08:30	0	0	36	12	3	4	0	55	0	1	75	27	2	8	0	113	0	1	122	18	4	4	0	149	0	0	1	0	0	0	1	
08:30 - 08:45	0	0	55	10	4	2	0	71	0	0	96	21	1	2	0	120	0	2	101	20	8	4	0	135	0	0	0	0	0	0	0	
08:45 - 09:00	0	1	57	7	6	3	1	75	0	0	105	25	2	3	0	135	0	0	114	21	2	0	1	138	0	0	0	1	0	0	1	
Hourly Total	0	1	189	43	15	11	1	260	0	1	347	104	11	14	0	477	0	4	418	78	16	12	1	529	0	0	1	1	0	0	2	
PCU	0	0.4	189	43	30	25.3	2	290	0	0.4	347	104	22	32.2	0	506	0	1.6	418	78	32	27.6	2	559	0	0	1	1	0	0	2	
09:00 - 09:15	0	1	56	9	2	2	0	70	0	0	107	35	1	3	0	146	0	1	75	16	2	5	0	99	0	0	1	0	0	0	1	
09:15 - 09:30	0	0	45	14	1	4	0	64	0	0	109	27	1	3	0	140	1	3	61	15	4	5	0	89	0	0	0	0	0	0	0	
09:30 - 09:45	2	1	50	8	1	2	0	64	0	1	93	32	2	3	1	132	0	0	45	22	5	4	0	76	0	0	1	0	1	0	2	
09:45 - 10:00	0	0	51	10	2	4	0	67	0	1	79	18	2	4	0	104	0	0	52	30	1	4	0	87	0	0	0	0	0	0	0	
Hourly Total	2	2	202	41	6	12	0	265	0	2	388	112	6	13	1	522	1	4	233	83	12	18	0	351	0	0	2	0	1	0	3	
TOTAL	6	4	530	123	29	37	2	731	0	6	1032	308	29	43	4	1422	1	11	975	240	35	42	2	1306	0	0	3	1	1	0	0	5
16:00 - 16:15	1	0	33	7	1	2	0	44	0	0	162	25	0	2	0	189	0	2	92	33	0	3	0	130	0	0	0	0	0	0	0	
16:15 - 16:30	0	1	49	8	0	0	0	58	0	0	123	22	3	3	0	151	0	2	96	15	1	3	0	117	0	0	0	0	0	0	0	
16:30 - 16:45	0	0	30	8	3	3	0	44	0	3	171	23	0	0	0	197	0	0	99	11	3	7	0	120	0	0	0	0	0	0	0	
16:45 - 17:00	0	0	44	4	0	3	0	51	0	2	141	28	1	4	0	176	0	0	124	24	2	3	0	153	0	0	1	0	0	0	1	
Hourly Total	1	1	156	27	4	8	0	197	0	5	597	98	4	9	0	713	0	4	411	83	6	16	0	520	0	0	1	0	0	0	1	
17:00 - 17:15	0	0	37	11	1	0	0	49	0	2	110	23	1	0	0	136	0	3	137	14	1	0	0	155	0	0	1	0	0	0	1	
17:15 - 17:30	0	0	50	4	1	2	1	58	0	0	182	19	1	0	0	202	0	2	139	14	1	1	0	157	0	0	0	0	0	0	0	
17:30 - 17:45	0	0	49	2	0	2	0	53	0	2	163	18	0	0	0	183	0	4	126	21	1	2	0	154	0	0	0	0	0	0	0	
17:45 - 18:00	0	0	45	7	0	1	0	53	0	1	155	18	0	1	0	175	0	0	109	16	3	3	0	131	0	0	1	0	0	0	1	
Hourly Total	0	0	181	24	2	5	1	213	0	5	610	78	2	1	0	696	0	9	511	65	6	6	0	597	0	0	2	0	0	0	2	
PCU	0	0	181	24	4	11.5	2	223	0	2	610	78	4	2.3	0	696	0	3.6	511	65	12	13.8	0	605	0							
18:00 - 18:15	0	0	48	4	0	0	0	52	0	2	185	10	0	1	0	198	0	2	106	15	0	1	0	124	0	0	0	0	0	0	0	
18:15 - 18:30	1	0	39	2	1	0	0	43	0	2	162	16	1	1	0	182	0	1	105	13	0	4	1	124	0	0	1	0	0	0	1	
18:30 - 18:45	0	0	40	6	1	2	0	49	0	1	137	11	2	0	0	151	0	0	79	15	0	2	0	96	0	0	0	0	0	0	0	
18:45 - 19:00	0	3	29	4	0	4	0	40	0	3	172	8	0	1	0	184	0	1	72	8	0	4	0	85	0	0	0	0	0	0	0	
Hourly Total	1	3	156	16	2	6	0	184	0	8	656	45	3	3	0	715	0	4	362	51	0	11	1	429	0	0	1	0	0	0	0	
TOTAL	2	4	493	67	8	19	1	594	0	18	1863	221	9	13	0	2124	0	17	1284	199	12	33	1	1546	0	0	4	0	0	0	4	



Banbury, Tuesday 14th June 2022

Junction: 5

Approach: A361 Southam Road

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	1	17	1	0	0	0	19	0	0	10	1	1	0	0	12	0	0	35	7	1	0	44	0	0	0	0	0	0	0	0	
07:15 - 07:30	0	0	11	3	0	0	0	14	0	0	12	5	0	1	1	19	0	1	37	11	3	1	0	53	0	0	0	0	0	0	0	0
07:30 - 07:45	0	1	22	4	0	0	0	27	0	0	12	5	1	1	0	19	0	0	37	12	0	3	0	52	0	0	0	0	0	0	0	0
07:45 - 08:00	0	0	16	6	2	1	0	25	1	2	18	6	0	2	1	30	1	0	41	8	1	2	0	53	0	0	0	0	0	0	0	0
Hourly Total	0	2	66	14	2	1	0	85	1	2	52	17	2	4	2	80	1	1	150	38	5	7	0	202	0							
08:00 - 08:15	0	0	16	6	0	0	0	22	0	0	22	3	1	4	0	30	0	0	51	10	2	5	0	68	0	0	1	0	0	0	0	1
08:15 - 08:30	0	0	24	3	1	0	0	28	0	0	17	8	2	0	1	28	0	0	40	13	2	1	0	56	0	0	1	0	0	0	0	1
08:30 - 08:45	0	0	27	3	0	1	0	31	0	1	20	5	1	0	0	27	0	0	40	10	1	0	0	51	0	0	0	0	0	0	0	0
08:45 - 09:00	0	0	37	4	0	0	0	41	0	0	20	8	0	0	0	28	0	3	43	12	2	6	0	66	0	0	1	0	0	0	0	1
Hourly Total	0	0	104	16	1	1	0	122	0	1	79	24	4	4	1	113	0	3	174	45	7	12	0	241	0	0	3	0	0	0	0	3
PCU	0	0	104	16	2	2.3	0	124	0	0.4	79	24	8	9.2	2	123	0	1.2	174	45	14	27.6	0	262	0							
09:00 - 09:15	0	0	37	7	0	0	0	44	1	0	22	2	2	1	0	28	0	1	41	5	2	1	0	50	0	0	0	1	0	0	0	1
09:15 - 09:30	0	0	41	6	0	0	0	47	0	1	18	5	1	2	0	27	0	0	44	8	1	6	1	60	0	0	0	0	0	0	0	0
09:30 - 09:45	0	1	45	3	0	1	0	50	0	0	15	7	0	4	0	26	0	0	45	10	2	8	0	65	0	0	0	0	0	0	0	0
09:45 - 10:00	0	0	41	6	1	1	0	49	0	0	17	22	1	1	1	42	0	0	44	12	1	2	1	60	0	0	1	0	0	0	0	1
Hourly Total	0	1	164	22	1	2	0	190	1	1	72	36	4	8	1	123	0	1	174	35	6	17	2	235	0	0	1	1	0	0	0	2
TOTAL	0	3	334	52	4	4	0	397	2	4	203	77	10	16	4	316	1	5	498	118	18	36	2	678	0	0	4	1	0	0	0	5
16:00 - 16:15	0	0	58	7	0	0	0	65	1	2	28	4	2	3	0	40	0	0	62	13	0	2	0	77	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	45	5	1	0	1	52	0	0	26	4	1	1	1	33	0	0	57	8	2	1	0	68	0	0	1	0	0	0	0	1
16:30 - 16:45	0	0	48	4	0	0	0	52	0	0	28	4	1	2	0	35	0	0	70	14	1	2	0	87	0	0	0	0	0	0	0	0
16:45 - 17:00	0	3	51	5	0	0	0	59	0	0	35	3	0	0	0	38	0	2	55	11	0	0	0	68	0	0	1	0	0	0	0	1
Hourly Total	0	3	202	21	1	0	1	228	1	2	117	15	4	6	1	146	0	2	244	46	3	5	0	300	0	0	2	0	0	0	0	2
17:00 - 17:15	0	0	49	4	0	0	0	53	0	0	23	2	0	0	0	25	0	0	78	3	0	0	0	81	0	0	2	0	0	0	0	2
17:15 - 17:30	0	2	48	1	0	0	0	51	0	1	42	2	0	0	0	45	0	0	74	7	0	4	0	85	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	48	1	0	0	0	49	0	0	36	3	1	0	0	40	0	1	70	3	0	0	0	74	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	55	1	0	0	0	56	0	0	38	7	0	0	1	46	0	0	70	9	1	1	0	81	0	0	0	0	0	0	0	0
Hourly Total	0	2	200	7	0	0	0	209	0	1	139	14	1	0	1	156	0	1	292	22	1	5	0	321	0	0	2	0	0	0	0	2
PCU	0	0.8	200	7	0	0	0	208	0	0.4	139	14	2	0	2	157	0	0.4	292	22	2	11.5	0	328	0							
18:00 - 18:15	0	1	63	6	0	0	0	70	0	1	35	3	0	0	0	39	0	0	59	4	3	0	0	66	0	0	0	0	0	0	0	0
18:15 - 18:30	0	1	53	4	0	0	0	58	0	0	40	3	0	1	2	46	0	0	51	3	0	1	0	55	0	0	0	0	0	0	0	0
18:30 - 18:45	0	1	39	6	0	0	0	46	0	1	34	0	0	1	0	36	0	0	47	1	0	1	0	49	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	40	3	1	0	0	43	1	0	20	2	0	0	1	24	0	0	43	4	0	0	0	47	0	0	0	0	0	0	0	0
Hourly Total	0	3	195	19	0	0	0	217	1	2	129	8	0	2	3	145	0	0	200	12	3	2	0	217	0							
TOTAL	0	8	597	47	1	0	1	654	2	5	385	37	5	8	5	447	0	3	736	80	7	12	0	838	0	0	4	0	0	0	0	4



Banbury, Tuesday 14th June 2022

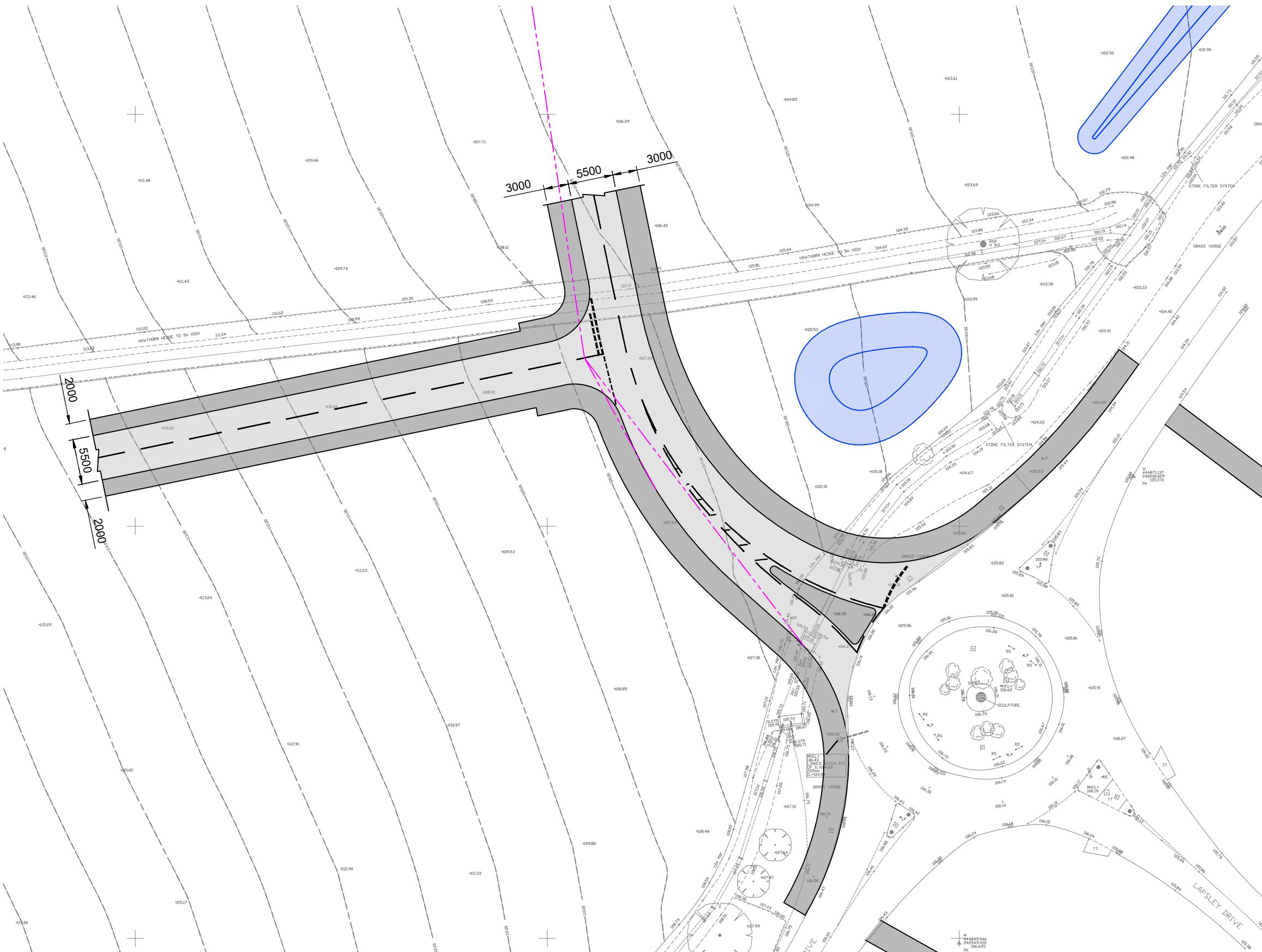
Junction: 5

Approach: A422 Ruscote Avenue

	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2	0.2	0.4	1	1	2	2.3	2				
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	10	4	0	0	0	14	0	1	127	39	1	3	0	171	0	0	27	7	0	0	0	34	0	0	0	0	0	0	0	
07:15 - 07:30	0	0	23	6	0	0	0	29	0	2	160	27	2	1	0	192	0	1	24	6	0	2	0	33	0	0	3	0	0	0	0	
07:30 - 07:45	0	0	14	4	0	0	0	18	0	0	161	29	0	2	0	192	0	0	19	13	1	0	0	33	0	0	0	0	0	0	0	
07:45 - 08:00	0	0	31	3	0	0	0	34	0	0	126	28	1	2	0	157	0	0	35	6	1	0	0	42	0	0	0	1	0	0	1	
Hourly Total	0	0	78	17	0	0	0	95	0	3	574	123	4	8	0	712	0	1	105	32	2	2	0	142	0	0	3	1	0	0	4	
08:00 - 08:15	0	0	29	4	1	0	0	34	0	2	130	29	2	1	0	164	0	0	33	15	1	1	0	50	0	0	0	0	0	0	0	
08:15 - 08:30	0	0	26	4	1	0	0	31	0	2	117	18	1	5	0	143	0	0	37	9	0	0	0	46	0	0	1	0	0	0	1	
08:30 - 08:45	0	0	20	2	0	0	0	22	0	0	99	21	4	3	0	127	0	0	41	8	1	0	0	50	0	0	0	1	0	0	1	
08:45 - 09:00	0	1	31	1	0	1	0	34	0	1	140	16	4	4	0	165	0	1	37	6	2	1	0	47	0	0	1	0	0	0	1	
Hourly Total	0	1	106	11	2	1	0	121	0	5	486	84	11	13	0	599	0	1	148	38	4	2	0	193	0	0	2	1	0	0	3	
PCU	0	0.4	106	11	4	2.3	0	124	0	2	486	84	22	29.9	0	624	0	0.4	148	38	8	4.6	0	199	0	0	2	1	0	0	3	
09:00 - 09:15	0	1	27	6	0	0	0	34	0	1	114	26	3	6	0	150	0	0	35	11	1	1	0	48	0	1	0	0	0	0	1	
09:15 - 09:30	0	1	35	3	0	0	0	39	0	1	112	19	1	2	4	139	0	0	50	11	0	0	0	61	0	0	0	0	0	0	0	
09:30 - 09:45	0	1	35	4	1	0	0	41	0	0	110	14	4	2	0	130	0	0	43	11	0	0	0	54	0	0	0	0	0	0	0	
09:45 - 10:00	0	0	18	7	0	0	0	25	0	0	116	13	2	5	1	137	0	0	37	7	3	1	0	48	0	0	0	0	0	0	0	
Hourly Total	0	3	115	20	1	0	0	139	0	2	452	72	10	15	5	556	0	0	165	40	4	2	0	211	0	1	0	0	0	0	1	
TOTAL	0	4	299	48	3	1	0	355	0	10	1512	279	25	36	5	1867	0	2	418	110	10	6	0	546	0	1	5	2	0	0	8	
16:00 - 16:15	0	1	42	3	0	0	0	46	0	0	122	25	0	2	0	149	0	0	51	6	1	0	0	58	0	0	0	0	0	0	0	
16:15 - 16:30	0	0	33	5	0	0	1	39	0	0	146	29	3	1	0	179	0	0	56	4	0	0	0	60	0	0	0	0	0	0	0	
16:30 - 16:45	0	0	34	4	0	2	0	40	0	0	125	20	0	2	0	147	1	2	50	4	0	0	0	57	0	0	0	0	0	0	0	
16:45 - 17:00	0	0	44	3	0	0	0	47	1	2	149	7	0	4	1	164	0	0	53	8	0	0	0	61	0	0	1	0	0	0	1	
Hourly Total	0	1	153	15	0	2	1	172	1	2	542	81	3	9	1	639	1	2	210	22	1	0	0	236	0	0	1	0	0	0	1	
17:00 - 17:15	0	0	43	4	0	0	1	48	0	0	143	16	0	0	2	161	0	0	31	8	0	0	0	39	0	0	0	0	0	0	0	
17:15 - 17:30	0	1	55	2	0	0	0	58	0	1	123	10	0	1	0	135	0	1	51	6	0	0	0	58	0	0	0	0	0	0	0	
17:30 - 17:45	0	1	52	4	0	0	0	57	0	2	117	8	1	0	0	128	0	2	51	2	0	0	0	55	0	0	1	0	0	0	1	
17:45 - 18:00	0	0	45	4	0	0	0	49	0	1	139	9	1	0	0	150	0	0	46	7	1	0	0	54	0	0	0	0	0	0	0	
Hourly Total	0	2	195	14	0	0	1	212	0	4	522	43	2	1	2	574	0	3	179	23	1	0	0	206	0	1	0	0	0	1		
PCU	0	0.8	195	14	0	0	2	212	0	1.6	522	43	4	2.3	4	577	0	1.2	179	23	2	0	0	205	0	0	0	0	0	0		
18:00 - 18:15	0	1	36	4	0	0	0	41	0	0	139	8	1	2	0	150	0	0	50	6	0	0	0	56	0	0	0	0	0	0	0	
18:15 - 18:30	0	0	42	1	1	0	0	44	0	1	110	6	0	1	0	118	0	0	46	3	0	0	0	49	0	0	1	0	0	0	1	
18:30 - 18:45	0	0	50	3	1	0	0	54	0	0	115	18	0	0	0	133	0	0	54	5	0	0	0	59	0	0	1	0	0	0	1	
18:45 - 19:00	0	0	39	4	0	0	0	43	0	0	129	6	0	0	0	135	0	0	44	3	0	0	0	47	0	0	1	0	0	0	1	
Hourly Total	0	1	167	12	2	0	0	182	0	1	493	38	1	3	0	536	0	0	194	17	0	0	0	211	0	0	3	0	0	0	0	
TOTAL	0	4	515	41	2	2	2	566	1	7	1557	162	6	13	3	1749	1	5	583	62	2	0	0	653	0	0	5	0	0	0	5	

Appendix G
Accident Data

Appendix H
Proposed Access
MAC drawing no. 802-TA10A



Notes:

1. Based on Woods Hardwick 'Topographical Survey', drawing number 17525-7-853 dated 24-03-2016.

2. **Road Dimensions**
Carriageway Width = 5.5m
Footway Width = 2m
Footway / Cycleway - 3m wide

Key

Pink dashed line: Visibility Splay - 2.4m x 43m



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Martin Andrews Consulting Ltd

- Transport Assessments
- Flood Risk Assessments
- Highway Advice
- Access Design
- Drainage Strategies
- Vehicle tracking

Client: Manor Oak Homes

Project: Hanwell Fields, Banbury

Title: Proposed Access - Phase 1 & 2
Without Layout

Date: 16/09/22

Drw: MJA

Chk: MJA

Scale: 1:500

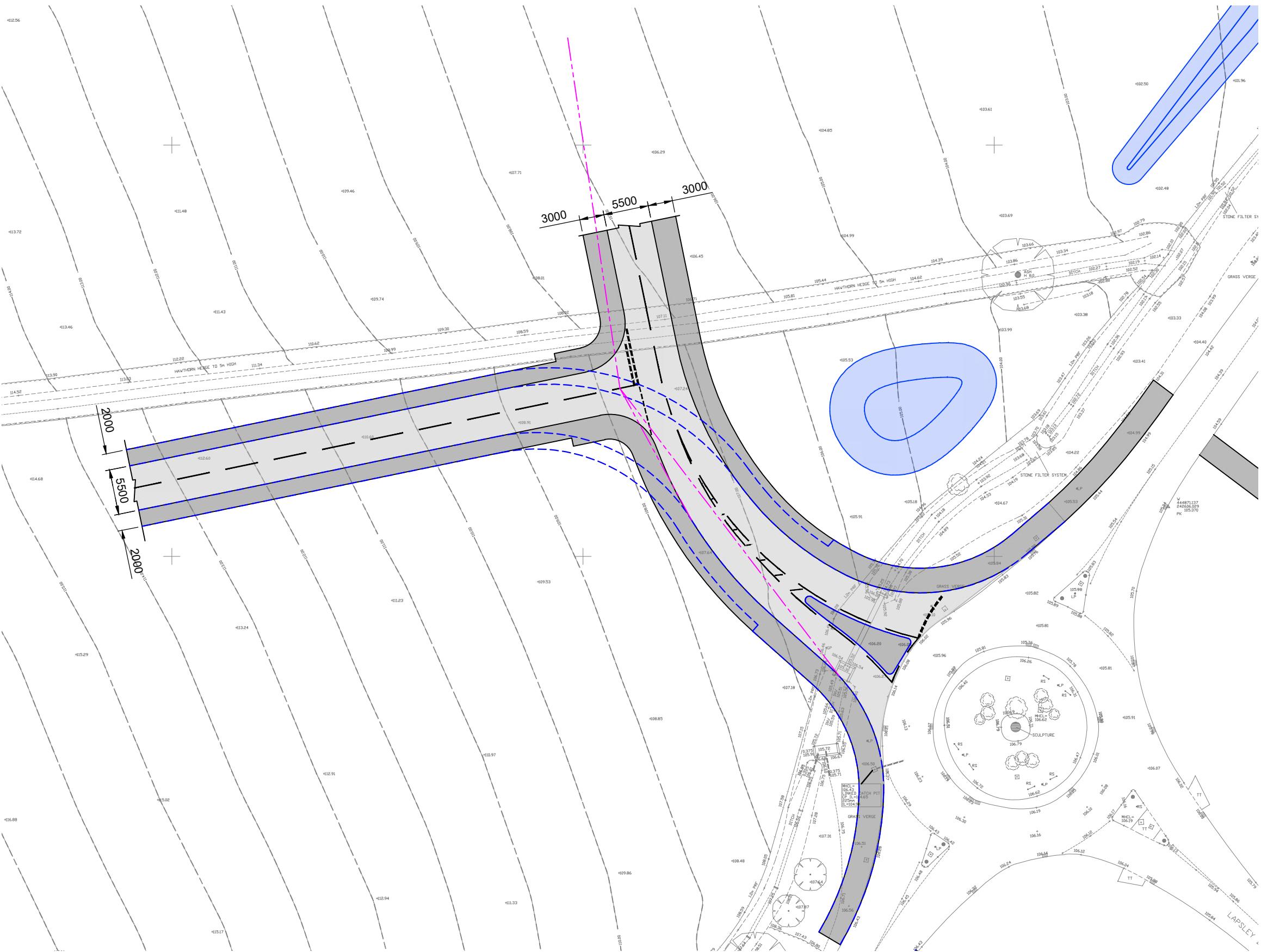
Size: A3

Drawing No: 802-TA10

Revision: A

Appendix I

Proposed Access with Phase 1 overlay
MAC drawing no. 802-TA11A



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Martin Andrews Consulting Ltd

- Transport Assessments
- Flood Risk Assessments
- Highway Advice
- Access Design
- Drainage Strategies
- Vehicle tracking

Client: Manor Oak Homes

Project: Hanwell Fields, Banbury

Title: Proposed Access - Phase 1 & 2
Without Layout
Previous Approved P1 Access Shown (Blue)

Date: 16/09/22
Drw: MJA
Chk: MJA
Scale: 1:500
Size: A3

Drawing No: 802-TA11

Revision: A

Appendix J
Scoping note and OCC Response



Transport Assessment Scoping Note

**Phase 2
Land North of Dukes Meadow Drive
Banbury**

**Revision 0: May 2022
Report Reference: 802-TAS-01-0**

Revision Record

Revision	Date	Description	Written	Approved

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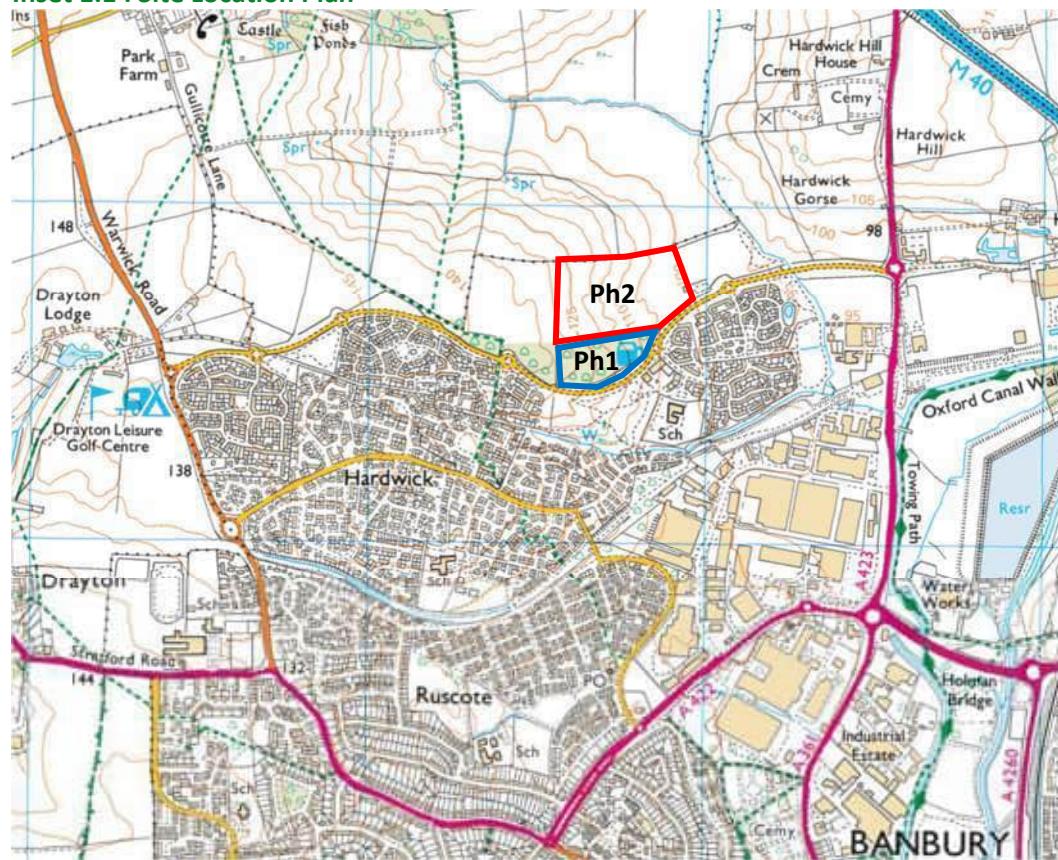
1.0 Introduction

1.1 Context

- 1.1.1 MAC Ltd have been appointed by Manor Oak Homes to undertake a Transport Assessment to accompany a future Outline planning application for a Phase 2 residential development on land north of Dukes Meadow Drive, Banbury, Oxfordshire.
- 1.1.2 The adjacent land comprising Phase 1 was granted Outline planning permission in April 2022 for up to 78 dwellings and associated open space with all matters reserved other than access, Cherwell District Council planning application reference 21/03426/OUT.
- 1.1.3 Access to the Phase 1 site was approved from the creation of a fourth arm off the existing Dukes Meadow Drive/Lapsley Drive roundabout. The Phase 2 site will also be accessed from this point and in addition to the provision of an emergency point of access in the form of an uprated cycle track or a reinforced grass area. The site access arrangement for the Phase 1 site is provided within **Appendix A**.
- 1.1.4 The Site is located immediately north of Dukes Meadow Drive as shown on **Inset 1.1**.
- 1.1.5 The aim of the Transport Assessment Scoping Note is to advise the Local Highway Authority, Oxfordshire County Council, of a forthcoming coming outline planning application for a 190-unit development and agree an approach to the following aspects:
- Traffic count specification;
 - Trip generation;
 - Vehicle distribution and assignment;
 - TEMpro growth factors;
 - Committed developments; and
 - Junction assessment locations.

- 1.1.6 The site is located on land north of Dukes Meadow Drive, Banbury, as shown in **Inset 1.1** below. The approximate National Grid Reference for the site is E444697 N242543.

Inset 1.1 : Site Location Plan



2.0 Development Trip Generation & Distribution

2.1 Trip Generation

- 2.1.1 Person trip rates have been obtained from the TRICS 7.8.2 database. The person trip selection criteria are set out in **Table 2.1** below. The trip rates outlined below were adopted within the approved Transport Statement for Phase 1 that accompanied planning application reference 21/03426/OUT.

Table 2.1: TRICS Parameters

Parameter	Selection
Version	7.8.2
Main land use	03 – Residential
Sub land use	A – Houses Privately Owned
Regions	All of England except Greater London
Locations	Suburban Area, Edge of Town, Neighbourhood Centre

- 2.1.2 From the TRICS database the predicted person trip rates are set out in **Table 2.2** below.

Table 2.2: Person Trip Rates

Use	Morning Peak (0800-0900)			Afternoon Peak (1700-1800)		
	Arr	Dep	Total	Arr	Dep	Total
Residential	0.195	0.746	0.941	0.597	0.251	0.848

- 2.1.3 Using the above person trip rates from the TRICS database it is possible to calculate the number of person trips generated by the proposed development. The below calculations are based on the quantum of development specified in **Section 1**.

- 2.1.4 To understand the number of trips generated by the development by mode we need to establish the likely modal split for a development in this location. The 2011 Census includes the ‘Method of Travel to Work’ (MTW) dataset which defines mode choice for all local authority wards. MTW data has been extracted from the 2011 Census for the Cherwell 002 ward which includes the development site. The ‘Method of Travel to Work’ data is summarised in **Table 2.3** below.

Table 2.3: Method of Travel to Work - 2011 Census – Cherwell 002 Super Output Area (SOA) Middle Layer

Mode	Number	Proportion
Train	98	2%
Bus	171	4%
Taxi	28	1%
Motorcycle	23	0%
Driving	3,376	72%
Passenger	287	6%
Bicycle	140	3%
On foot	522	11%
Other	24	1%

- 2.1.5 Using the above mode splits in **Table 2.3** it is possible to calculate the predicted number of trips generated by each mode. The proposed trips by mode is shown in **Table 2.4** below.

Table 2.4: Trip Numbers by Mode – 190 Dwellings

Mode	Morning Peak (0800-0900)			Afternoon Peak (1700-1800)		
	Arr	Dep	Total	Arr	Dep	Total
Train	1	3	4	2	1	3
Bus	1	6	7	5	2	6
Taxi	0	1	2	1	0	2
Motorcycle	0	0	0	0	0	0
Driving	27	102	129	82	34	116
Passenger	2	9	11	7	3	10
Bicycle	1	4	5	3	1	5
On foot	4	16	20	12	5	18
Other	0	1	2	1	0	2
Total	37	142	179	113	48	161

- 2.1.6 The proposed development is predicted to generate 129 vehicle trips in the morning peak and 116 trips in the evening peak.

2.2 Distribution

- 2.2.1 Vehicle trip distribution data has been obtained from the 2011 Census using the location of usual residence and place of work by Method of Travel to Work (MSOA level)' dataset. The 2011 Census data will be extracted using the following parameters

Method of Travel to Work – Driving a car or van

Place of Work – All

Usual Residence – Cherwell 002

- 2.2.2 The proposed vehicle trips will be assigned onto the highway network using observed turning proportions and online route planning software.

3.0 Junction Assessment

3.1 Assessment Year

- 3.1.1 The outline planning application is likely to be submitted in 2022. It is anticipated the site can deliver the proposed number of dwellings within 5 years. Therefore, junction capacity analysis will be undertaken for an assessment opening year of 2027 when the development is expected to be fully occupied.
- 3.1.2 To growth traffic counts to the future assessment years TEMpro growth factors will be applied utilising the following inputs:
- TEMpro – v7.2b
 - Area – Cherwell 002
 - NTM AF15 – All
- 3.1.3 The traffic growth factors proposed are set out in **Table 3.1**.

Table 3.1: Local Traffic Growth Factors – Cherwell 002

Period	2022-2027
AM Peak	1.0675
PM Peak	1.0720

3.2 Committed Development

- 3.2.1 The Phase 1 land adjacent to the site was granted outline planning permission; Cherwell District Council planning application reference 21/03426/OUT and will be considered as committed development within the Transport Assessment.

3.3 Background Traffic

- 3.3.1 Background traffic counts will be undertaken at the proposed assessment locations below and shown within **Appendix B**:
- A1 – Access Dukes Meadow Drive / Lapsley Drive
 - J1 – A423/Dukes Meadow Drive
 - J2 – Dukes Meadow Dr/ B4100 Warwick Road/Walker Rd

3.3.2 Traffic counts will be undertaken upon confirmation and agreement with OCC to include the following specification:

Classified Turning Counts

- 0700-1000 and 1600-1900
- Queue length survey with queues recorded at 5-minute intervals

3.4 Junction Assessment Locations

3.4.1 Capacity assessment of vehicular impact will be undertaken at the locations listed below.

- A1 – Access Dukes Meadow Drive/Lapsley Drive
- J1 – A423/Dukes Meadow Drive
- J2 – Dukes Meadow Dr/ B4100 Warwick Road/Walker Rd

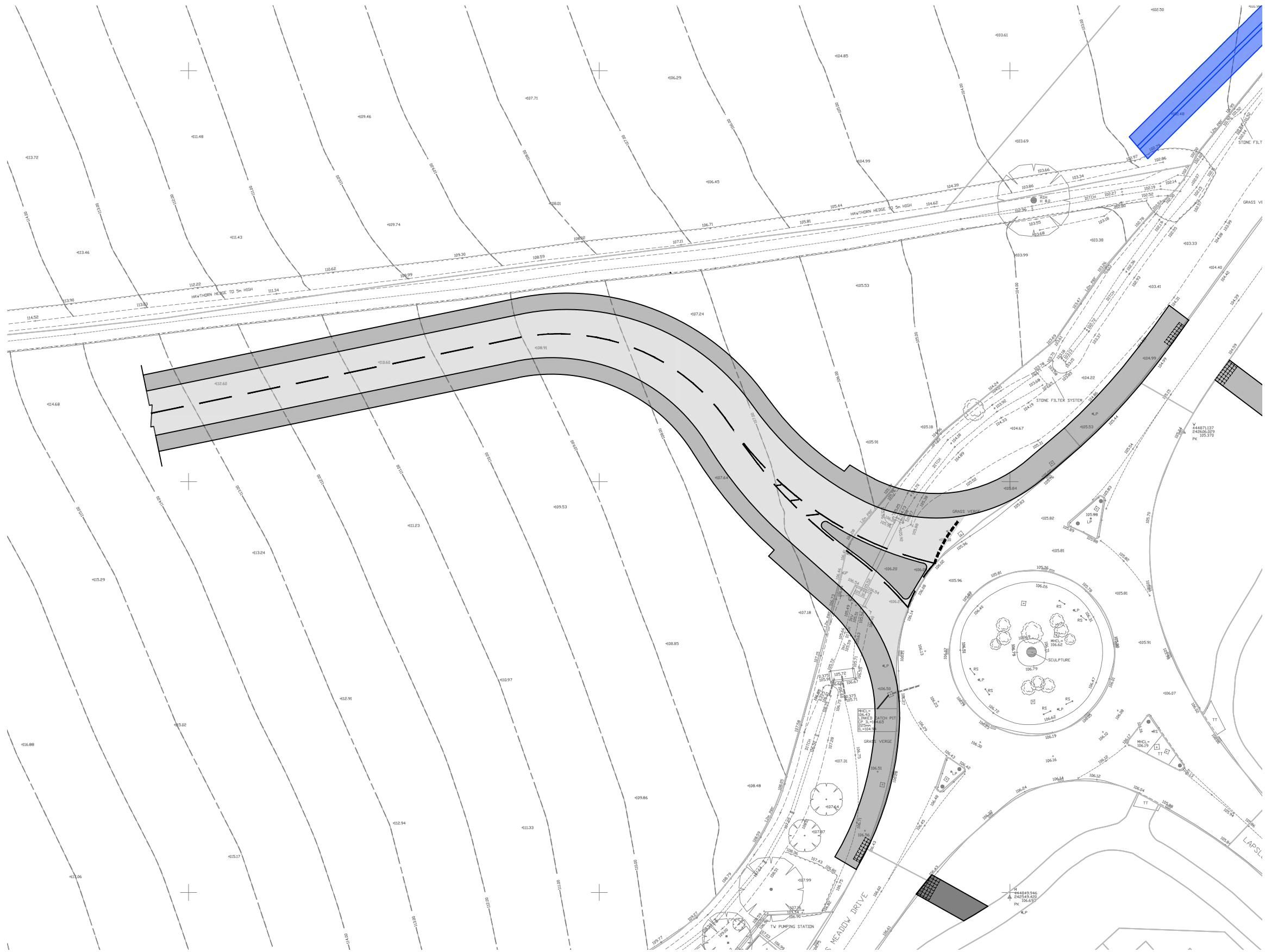
Appendix A
MAC Drawing no. 340-TA114 Phase 1 Proposed Access



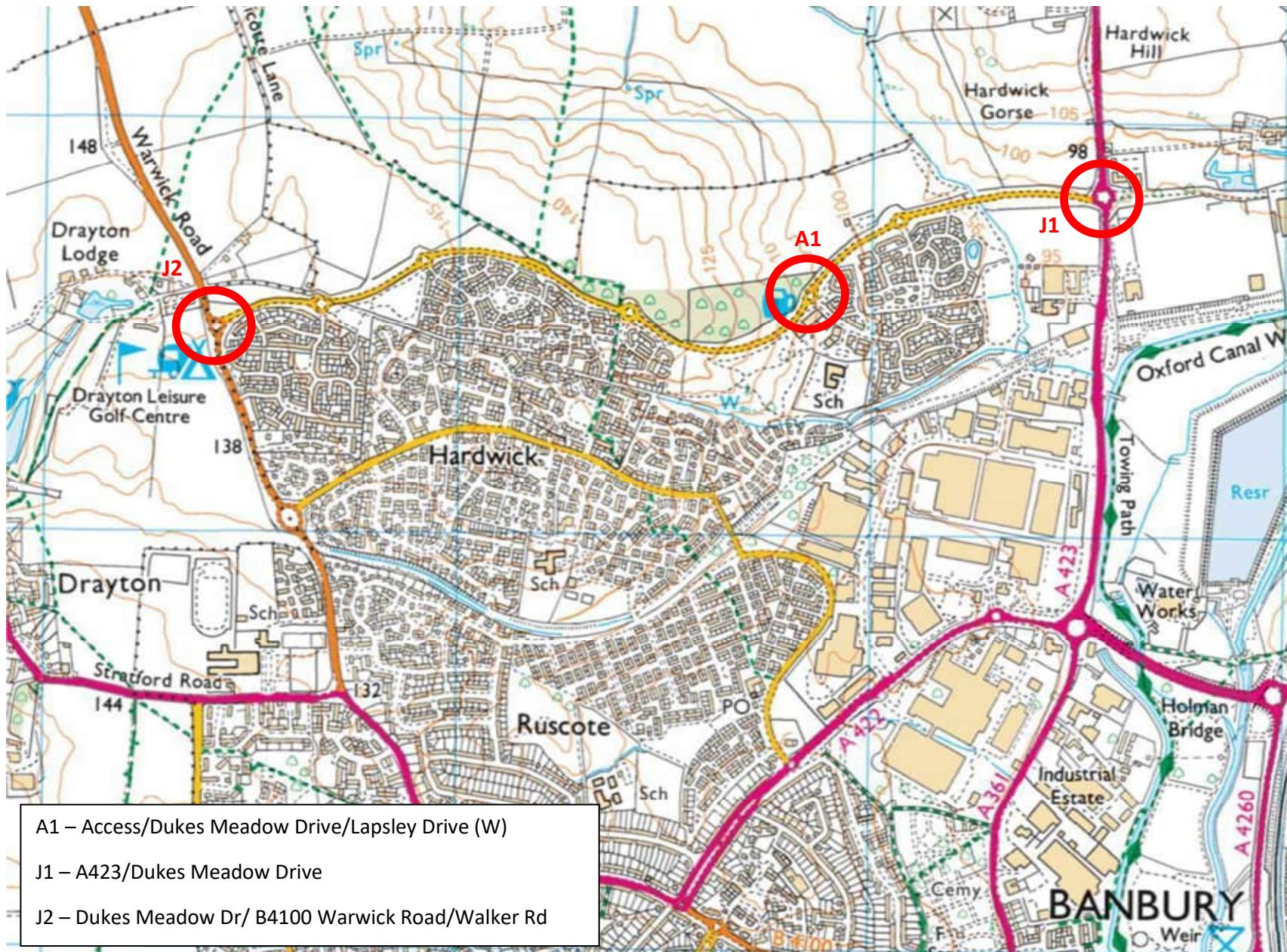
Notes:

1. Based on Woods Hardwick 'Topographical Survey', drawing number 17525-7-853 dated 24-03-2016.

2. **Road Dimensions**
Carriageway Width = 5.5m
Footway Width = 2m
Cycleway - 3m wide



Appendix B
Traffic Count Locations



Dukes Meadow Drive, Banbury

Fully Classified Turning Counts

Neutral Weekday Tue, Weds or Thur

Queues lengths recorded at 5-minute intervals

AM 0700-1000 & PM 1600-1900

Application no: 22/CH0010/Preapp

Location: Land North of Dukes Meadow Drive, Banbury

Transport Development Control

Oxfordshire County Council is a consultee of the local planning authority and provides advice on the likely transport and highways impact of development where necessary. In line with confidentiality requirements, OCC will not carry out any external consultation on the proposals, although we may discuss them with the relevant Local Planning Authority. We encourage the applicant to carry out local engagement and can make recommendations of specific local groups to consult, on request.

It should be noted that the advice below represents the informal opinion of an Officer of the Council only, which is given entirely without prejudice to the formal consideration of any planning application, which may be submitted. Nevertheless, the comments are given in good faith and fairly reflect an opinion at the time of drafting given the information submitted.

I have reviewed the submitted Transport Assessment Scoping Note written by MAC dated May 2022. Based on the information provided therein, I set out the main issues/information that will need to be considered with the proposal, and these are:

Location

The proposed development is located on land to the north of a recently approved development site (also known as Phase 1), north of Dukes Meadow Drive.

Access

The Transport Assessment Scoping Note (TASN) suggests that the principal access for all users shall be off a new (fourth) arm of the existing Dukes Meadow Drive/ Lapsley Drive roundabout that got approval as the access to Phase 1 development. During Phase 1 application consultation, the access was considered appropriate to the extent of the proposals present at the time. While I cannot conclude that the same access arrangements are suitable to accommodate the extra trips likely to be generated by this development, I would expect the applicant to undertake an updated junction capacity assessment on this roundabout to rule out the possibility of unacceptable delays.

The TASN further suggests an emergency access although no indication has been made of where this is likely to be. The efficient use of an emergency access would best be realised if it is located away from the principal access. Noting that the site does not benefit from any highway frontage, it remains to be seen where/how the emergency access shall be provided.

Dukes Meadow Drive benefits from good quality shared use facilities to enhance walking and cycling. This quality of provision however, significantly dies out along the A423 Southam Road which is considered the most direct route for a majority of

work and shopping related walking/ cycle movements. It is my opinion at this stage that a contribution shall be sought to improve active travel routes between this site and Banbury town centre in line with LTN1/20 guidance.

Public Footpaths

The site is in proximity to Public Footpaths 120/107/20 and 239/9/10. These designated footpaths would link to Hanwell and beyond. It is also appropriate for a contribution to be requested to upgrade these footpaths for leisure use to the north of the site, with surface improvements, furniture and signing.

Traffic Assessment

A Transport Assessment (TA), prepared in accordance with OCC's guidance, will need to accompany the planning application for a development of this size. The TA must consider the traffic impact of the site on the local network, as well as sustainable transport links.

Trip Generation and Distribution

TRICS database has been used to estimate the likely amount of person trip rates that the development would generate. The trip rates used in the consented Phase 1 (21/03426/OUT) have been re-applied for consistency - and this is acceptable.

It is my view that the person trip rates and resultant trips by mode presented in Tables 2.2 and 2.4 of the TASN respectively are reasonable for a site of this size in this type of location. The submission predicts that there will be about 129 and 116 two-way vehicular movements in the AM and PM peak periods respectively. As such it is considered that the volume of traffic as set out in the TA is a reasonable prediction of what might generally be generated on a day to day basis.

The peak hour vehicular trips obtained from the trip generation exercise shall then be assigned on to the network using the distribution patterns obtained from the 2011 Census data. This methodology is acceptable.

Junction Assessment

The application proposes to undertake junction capacity analysis with 2027 as the future/horizon year. For the type and scale of development, it is reasonable to assume that 5 years from now, the development shall be completed and fully occupied.

During this period, the local traffic growth shall be adjusted using TEMpro in conjunction with the MSOA and NTM. As part of this report, I have not verified the growth factors proposed in Table 3.1. These will however be checked at submission of a full/ reserved matters application.

The TASN proposes to capture background traffic by traffic surveys/ counts, undertaken at various locations. In addition to background traffic, the assessment shall need to consider developments in the area that have benefited from planning permission but yet to be built out/completed. At the time of drafting this report, the only development in mind is the Phase 1 Application Ref: 21/03426/OUT.

I agree with the list of junctions identified in para 3.4.2 of the TASN for capacity assessment. However, for the scale of this development, we must not limit the assessment to just these three junctions. Subject to reviewing the development related traffic impact on any arm of the junctions further afield, assessment should include junctions further afield that show any arm with a 5% increase.

Car Parking

The applicant should be mindful that the County Council is currently working on updated parking standards for new developments. It is however likely that when the new standards are adopted, these will feature significantly reduced parking allocations than the current.

Closer to the time of submitting a full application and in the absence of the new standards, it is recommended that you engage with the County Council for an update on this.

Travel plan and Construction Traffic Management Plan

It is recommended that drafts are submitted with the planning application, although it is usually considered acceptable to require the final version by a planning condition.

We can also point you to guidance which is contained on the web, and the following links will direct you to a lot of the basic information needed to assist in the highway and transport consideration of many proposals. These are:

- [Oxfordshire County Council Street Design Guide \(2021\)](#)
- [OCC Cycling Design Standards A guide for Developers, Planners and Engineers 2017](#)
- [OCC Walking Design Standards](#)
- [OCC Parking Standards](#)
- [OCC Local Standards and Guidance for Surface Water Drainage](#)
- [OCC Guidance on Transport Assessments and Travel Plans](#)
- [GOV.UK - Cycle infrastructure design \(LTN 1/20\)](#)
- [Transport for new developments | Oxfordshire County Council](#)

Cherwell Local Planning Guidance and Information

Cherwell Local Plan 2011-2031 Part 1: [Local plans | Cherwell District Council](#)

- Supplementary Planning Documents: [Cherwell Residential Design Guide Supplementary Planning Document \(SPD\) \(July 2018\) | Supplementary planning documents - completed | Cherwell District Council](#)

TRICS – National information source for assisting the prediction of trip generation from new developments. <http://www.trics.org/>

Officer's Name: Rashid Bbosa
Officer's Title: Senior Transport Planner
Date: 27/05/2022

Calculation Reference: AUDIT-864401-210713-0733

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	3 days
	HF HERTFORDSHIRE	1 days
	IW ISLE OF WIGHT	1 days
	KC KENT	6 days
	SC SURREY	2 days
	WS WEST SUSSEX	6 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	3 days
	SM SOMERSET	3 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	6 days
	SF SUFFOLK	3 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	5 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	3 days
	MS MERSEYSIDE	1 days
09	NORTH	
	DH DURHAM	3 days
	TW TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 8 to 1817 (units:)
Range Selected by User: 6 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 08/10/20

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	14 days
Tuesday	12 days
Wednesday	13 days
Thursday	16 days
Friday	8 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	63 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	17
Edge of Town	35
Neighbourhood Centre (PPS6 Local Centre)	10
Free Standing (PPS6 Out of Town)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	52
Village	8
Out of Town	1
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:**Use Class:**
C3 63 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days
10,001 to 15,000	17 days
15,001 to 20,000	7 days
20,001 to 25,000	4 days
25,001 to 50,000	6 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	7 days
25,001 to 50,000	7 days
50,001 to 75,000	10 days
75,001 to 100,000	13 days
100,001 to 125,000	1 days
125,001 to 250,000	18 days
250,001 to 500,000	7 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	15 days
1.1 to 1.5	44 days
1.6 to 2.0	4 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	18 days
No	45 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	63 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CA-03-A-05 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES	CAMBRI DGESHI RE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings: <i>Survey date: MONDAY</i>	28 17/10/16	<i>Survey Type: MANUAL</i>
2	CH-03-A-09 GREYSTOKE ROAD MACCLESFIELD HURDSFIELD Edge of Town Residential Zone	TERRACED HOUSES	CHESHIRE
	Total No of Dwellings: <i>Survey date: MONDAY</i>	24 24/11/14	<i>Survey Type: MANUAL</i>
3	CH-03-A-10 MEADOW DRIVE NORTHWICH BARNTON Edge of Town Residential Zone	SEMI -DETACHED & TERRACED	CHESHIRE
	Total No of Dwellings: <i>Survey date: TUESDAY</i>	40 04/06/19	<i>Survey Type: MANUAL</i>
4	CH-03-A-11 LONDON ROAD NORTHWICH LEFTWICH Suburban Area (PPS6 Out of Centre) Residential Zone	TOWN HOUSES	CHESHIRE
	Total No of Dwellings: <i>Survey date: THURSDAY</i>	24 06/06/19	<i>Survey Type: MANUAL</i>
5	DC-03-A-08 HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST Edge of Town Residential Zone	BUNGALOWS	DORSET
	Total No of Dwellings: <i>Survey date: MONDAY</i>	28 24/03/14	<i>Survey Type: MANUAL</i>
6	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED	DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings: <i>Survey date: TUESDAY</i>	50 28/03/17	<i>Survey Type: MANUAL</i>
7	DH-03-A-02 LEAZES LANE BISHOP AUCKLAND ST HELEN AUCKLAND Neighbourhood Centre (PPS6 Local Centre) Residential Zone	MIXED HOUSES	DURHAM
	Total No of Dwellings: <i>Survey date: MONDAY</i>	125 27/03/17	<i>Survey Type: MANUAL</i>
8	DH-03-A-03 PILGRIMS WAY DURHAM	SEMI -DETACHED & TERRACED	DURHAM
	Edge of Town Residential Zone		
	Total No of Dwellings: <i>Survey date: FRIDAY</i>	57 19/10/18	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	DS-03-A-02 RADBOURNE LANE DERBY	MIXED HOUSES	DERBYSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	371	
	<i>Survey date: TUESDAY</i>	<i>10/07/18</i>	<i>Survey Type: MANUAL</i>
10	DV-03-A-01 BRONSHILL ROAD TORQUAY	TERRACED HOUSES	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	37	
	<i>Survey date: WEDNESDAY</i>	<i>30/09/15</i>	<i>Survey Type: MANUAL</i>
11	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	116	
	<i>Survey date: FRIDAY</i>	<i>25/09/15</i>	<i>Survey Type: MANUAL</i>
12	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	70	
	<i>Survey date: MONDAY</i>	<i>28/09/15</i>	<i>Survey Type: MANUAL</i>
13	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone		
	Total No of Dwellings:	212	
	<i>Survey date: MONDAY</i>	<i>11/07/16</i>	<i>Survey Type: MANUAL</i>
14	ES-03-A-04 NEW LYDD ROAD CAMBER	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone		
	Total No of Dwellings:	134	
	<i>Survey date: FRIDAY</i>	<i>15/07/16</i>	<i>Survey Type: MANUAL</i>
15	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS Edge of Town Residential Zone	MIXED HOUSES & FLATS	EAST SUSSEX
	Total No of Dwellings:	99	
	<i>Survey date: WEDNESDAY</i>	<i>05/06/19</i>	<i>Survey Type: MANUAL</i>
16	HC-03-A-21 PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS Edge of Town Residential Zone	TERRACED & SEMI -DETACHED	HAMPSHIRE
	Total No of Dwellings:	39	
	<i>Survey date: TUESDAY</i>	<i>13/11/18</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

17	HC-03-A-22	MIXED HOUSES BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	40 31/10/18	HAMPSHIRE <i>Survey Type: MANUAL</i>
18	HC-03-A-23	HOUSES & FLATS CANADA WAY LIPHOOK Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	62 19/11/19	HAMPSHIRE <i>Survey Type: MANUAL</i>
19	HF-03-A-03	MIXED HOUSES HARE STREET ROAD BUNTINGFORD Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: MONDAY</i>	160 08/07/19	HERTFORDSHIRE <i>Survey Type: MANUAL</i>
20	IW-03-A-01	DETACHED HOUSES MEDHAM FARM LANE NEAR COWES MEDHAM Free Standing (PPS6 Out of Town) Out of Town Total No of Dwellings: <i>Survey date: TUESDAY</i>	72 25/06/19	ISLE OF WIGHT <i>Survey Type: MANUAL</i>
21	KC-03-A-03	MIXED HOUSES & FLATS HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	51 14/07/16	KENT <i>Survey Type: MANUAL</i>
22	KC-03-A-04	SEMI -DETACHED & TERRACED KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: FRIDAY</i>	110 22/09/17	KENT <i>Survey Type: MANUAL</i>
23	KC-03-A-05	DETACHED & SEMI -DETACHED ROCHESTER ROAD NEAR CHATHAM BURHAM Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: FRIDAY</i>	8 22/09/17	KENT <i>Survey Type: MANUAL</i>
24	KC-03-A-06	MIXED HOUSES & FLATS MARGATE ROAD HERNE BAY Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	363 27/09/17	KENT <i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

25	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	<i>Survey date: WEDNESDAY</i>	<i>27/09/17</i>	<i>Survey Type: MANUAL</i>
26	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	<i>Survey date: TUESDAY</i>	<i>22/05/18</i>	<i>Survey Type: MANUAL</i>
27	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS	LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	85	
	<i>Survey date: THURSDAY</i>	<i>28/06/18</i>	<i>Survey Type: MANUAL</i>
28	MS-03-A-03 BEMPTON ROAD LIVERPOOL OTTERSPOOL	DETACHED	MERSEYSIDE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	15	
	<i>Survey date: FRIDAY</i>	<i>21/06/13</i>	<i>Survey Type: MANUAL</i>
29	NE-03-A-02 HANOVER WALK SCUNTHORPE	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE
	Edge of Town No Sub Category		
	Total No of Dwellings:	432	
	<i>Survey date: MONDAY</i>	<i>12/05/14</i>	<i>Survey Type: MANUAL</i>
30	NF-03-A-03 HALING WAY THETFORD	DETACHED HOUSES	NORFOLK
	Edge of Town Residential Zone		
	Total No of Dwellings:	10	
	<i>Survey date: WEDNESDAY</i>	<i>16/09/15</i>	<i>Survey Type: MANUAL</i>
31	NF-03-A-04 NORTH WALSHAM ROAD NORTH WALSHAM	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone		
	Total No of Dwellings:	70	
	<i>Survey date: WEDNESDAY</i>	<i>18/09/19</i>	<i>Survey Type: MANUAL</i>
32	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone		
	Total No of Dwellings:	40	
	<i>Survey date: THURSDAY</i>	<i>19/09/19</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

33	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL Edge of Town Residential Zone Total No of Dwellings:	MIXED HOUSES 275 <i>Survey date: MONDAY 23/09/19</i>	NORFOLK
34	NF-03-A-08 SIR ALFRED MUNNINGS RD NEAR NORWICH COSTESSEY Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: THURSDAY 19/09/19</i>	MIXED HOUSES & FLATS 1817	<i>Survey Type: MANUAL</i> NORFOLK
35	NF-03-A-09 ROUND HOUSE WAY NORWICH CRINGLEFORD Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY 24/09/19</i>	MIXED HOUSES & FLATS 984	<i>Survey Type: MANUAL</i> NORFOLK
36	NY-03-A-08 NICHOLAS STREET YORK Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: MONDAY 16/09/13</i>	TERRACED HOUSES 21	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE
37	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: MONDAY 16/09/13</i>	MIXED HOUSING 52	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE
38	NY-03-A-10 BOROUGHBRIDGE ROAD RIPON Edge of Town No Sub Category Total No of Dwellings: <i>Survey date: TUESDAY 17/09/13</i>	HOUSES AND FLATS 71	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE
39	NY-03-A-11 HORSEFAIR BOROUGHBRIDGE Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY 17/09/13</i>	PRIVATE HOUSING 23	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE
40	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY 10/05/17</i>	TERRACED HOUSES 10	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE

LIST OF SITES relevant to selection parameters (Cont.)

41	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED	SURREY
	Edge of Town Residential Zone		
	Total No of Dwellings:	71	
	<i>Survey date: THURSDAY</i>	<i>23/01/14</i>	<i>Survey Type: MANUAL</i>
42	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES	SURREY
	Edge of Town Residential Zone		
	Total No of Dwellings:	207	
	<i>Survey date: MONDAY</i>	<i>01/04/19</i>	<i>Survey Type: MANUAL</i>
43	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES	SUFFOLK
	Edge of Town Residential Zone		
	Total No of Dwellings:	18	
	<i>Survey date: WEDNESDAY</i>	<i>09/09/15</i>	<i>Survey Type: MANUAL</i>
44	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI -DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	38	
	<i>Survey date: FRIDAY</i>	<i>22/09/17</i>	<i>Survey Type: MANUAL</i>
45	SF-03-A-07 FOXHALL ROAD IPSWICH	MIXED HOUSES	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	73	
	<i>Survey date: THURSDAY</i>	<i>09/05/19</i>	<i>Survey Type: MANUAL</i>
46	SH-03-A-05 SANDCROFT TELFORD SUTTON HILL	SEMI -DETACHED/TERRACED	SHROPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	54	
	<i>Survey date: THURSDAY</i>	<i>24/10/13</i>	<i>Survey Type: MANUAL</i>
47	SH-03-A-06 ELLESMORE ROAD SHREWSBURY	BUNGALOWS	SHROPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	16	
	<i>Survey date: THURSDAY</i>	<i>22/05/14</i>	<i>Survey Type: MANUAL</i>
48	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI	SOMERSET
	Edge of Town Residential Zone		
	Total No of Dwellings:	33	
	<i>Survey date: THURSDAY</i>	<i>24/09/15</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

49	SM-03-A-02	MIXED HOUSES HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village	Total No of Dwellings: <i>Survey date: TUESDAY</i>	42 25/09/18	SOMERSET
50	SM-03-A-03	MIXED HOUSES HYDE LANE NEAR TAUNTON CREECH ST MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village	Total No of Dwellings: <i>Survey date: TUESDAY</i>	41 25/09/18	<i>Survey Type: MANUAL</i> SOMERSET
51	ST-03-A-07	DETACHED & SEMI -DETACHED BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone	Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	248 22/11/17	<i>Survey Type: MANUAL</i> STAFFORDSHIRE
52	SY-03-A-01	SEMI DETACHED HOUSES A19 BENTLEY ROAD DONCASTER BENTLEY RISE Suburban Area (PPS6 Out of Centre) Residential Zone	Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	54 18/09/13	<i>Survey Type: MANUAL</i> SOUTH YORKSHIRE
53	TW-03-A-02	SEMI -DETACHED WEST PARK ROAD GATESHEAD			<i>Survey Type: MANUAL</i> TYNE & WEAR
		Suburban Area (PPS6 Out of Centre)			
		Residential Zone			
54	WK-03-A-02	BUNGALOWS NARBERTH WAY COVENTRY POTTERS GREEN Edge of Town Residential Zone	Total No of Dwellings: <i>Survey date: MONDAY</i>	16 07/10/13	<i>Survey Type: MANUAL</i> WARWICKSHIRE
55	WK-03-A-04	DETACHED HOUSES DALEHOUSE LANE KENILWORTH	Total No of Dwellings: <i>Survey date: THURSDAY</i>	17 17/10/13	<i>Survey Type: MANUAL</i> WARWICKSHIRE
		Edge of Town			
		Residential Zone			
56	WL-03-A-02	SEMI DETACHED HEADLANDS GROVE SWINDON	Total No of Dwellings: <i>Survey date: FRIDAY</i>	49 27/09/19	<i>Survey Type: MANUAL</i> WILTSHIRE
		Suburban Area (PPS6 Out of Centre)			
		Residential Zone			
		Total No of Dwellings: <i>Survey date: THURSDAY</i>	27 22/09/16		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

57	WM-03-A-04	TERRACED HOUSES	WEST MIDLANDS
	OSBORNE ROAD		
	COVENTRY		
	EARLSDON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	39	
	<i>Survey date: MONDAY</i>	<i>21/11/16</i>	<i>Survey Type: MANUAL</i>
58	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	151	
	<i>Survey date: THURSDAY</i>	<i>11/12/14</i>	<i>Survey Type: MANUAL</i>
59	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE		
	NEAR HORSHAM		
	BROOKS GREEN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	57	
	<i>Survey date: THURSDAY</i>	<i>19/10/17</i>	<i>Survey Type: MANUAL</i>
60	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	180	
	<i>Survey date: THURSDAY</i>	<i>19/04/18</i>	<i>Survey Type: MANUAL</i>
61	WS-03-A-09	MIXED HOUSES & FLATS	WEST SUSSEX
	LITTLEHAMPTON ROAD		
	WORTHING		
	WEST DURRINGTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	197	
	<i>Survey date: THURSDAY</i>	<i>05/07/18</i>	<i>Survey Type: MANUAL</i>
62	WS-03-A-10	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	79	
	<i>Survey date: WEDNESDAY</i>	<i>07/11/18</i>	<i>Survey Type: MANUAL</i>
63	WS-03-A-11	MIXED HOUSES	WEST SUSSEX
	ELLIS ROAD		
	WEST HORSHAM		
	S BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	918	
	<i>Survey date: TUESDAY</i>	<i>02/04/19</i>	<i>Survey Type: MANUAL</i>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
SC-03-A-06	Surveyed during covid restrictions

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL 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	63	148	0.067	63	148	0.304	63	148	0.371
08:00 - 09:00	63	148	0.124	63	148	0.359	63	148	0.483
09:00 - 10:00	63	148	0.135	63	148	0.162	63	148	0.297
10:00 - 11:00	63	148	0.114	63	148	0.139	63	148	0.253
11:00 - 12:00	63	148	0.117	63	148	0.126	63	148	0.243
12:00 - 13:00	63	148	0.139	63	148	0.137	63	148	0.276
13:00 - 14:00	63	148	0.145	63	148	0.135	63	148	0.280
14:00 - 15:00	63	148	0.153	63	148	0.161	63	148	0.314
15:00 - 16:00	63	148	0.225	63	148	0.161	63	148	0.386
16:00 - 17:00	63	148	0.254	63	148	0.150	63	148	0.404
17:00 - 18:00	63	148	0.333	63	148	0.148	63	148	0.481
18:00 - 19:00	63	148	0.291	63	148	0.155	63	148	0.446
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		2.097			2.137				4.234

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	8 - 1817 (units:)
Survey date date range:	01/01/13 - 08/10/20
Number of weekdays (Monday-Friday):	63
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	5
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
 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	63	148	0.101	63	148	0.531	63	148	0.632
08:00 - 09:00	63	148	0.195	63	148	0.746	63	148	0.941
09:00 - 10:00	63	148	0.211	63	148	0.292	63	148	0.503
10:00 - 11:00	63	148	0.189	63	148	0.248	63	148	0.437
11:00 - 12:00	63	148	0.195	63	148	0.214	63	148	0.409
12:00 - 13:00	63	148	0.234	63	148	0.221	63	148	0.455
13:00 - 14:00	63	148	0.237	63	148	0.220	63	148	0.457
14:00 - 15:00	63	148	0.266	63	148	0.251	63	148	0.517
15:00 - 16:00	63	148	0.487	63	148	0.276	63	148	0.763
16:00 - 17:00	63	148	0.506	63	148	0.260	63	148	0.766
17:00 - 18:00	63	148	0.597	63	148	0.251	63	148	0.848
18:00 - 19:00	63	148	0.505	63	148	0.278	63	148	0.783
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		3.723			3.788				7.511

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

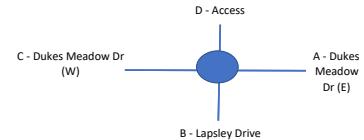
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Appendix L
Proposed distribution

Development Distribution - Traffic Data

	AM Peak 08.00-09.00			PM Peak 17.00-18.00		
	Arr	Dep	Total	Arr	Dep	Total
P2	25	95	119	76	32	107
P1	11	42	53	34	14	48
Total	36	137	172	110	46	155

A1: Access/ Dukes Meadow Drive / Lapsley Drive (W)



Turning Movement

AM %	Turning Movement			
	A	B	C	D
A				51.1%
B				
C				48.9%
D	51.1%		48.9%	

PM %	Turning Movement			
	A	B	C	D
A				47.2%
B				
C				52.8%
D	47.2%		52.8%	

Proposed Development (P2)

AM	A	B	C	D
A				13
B				
C				12
D	48		46	

119

Approved Development (P1)

AM	A	B	C	D
A				6
B				
C				5
D	21		21	

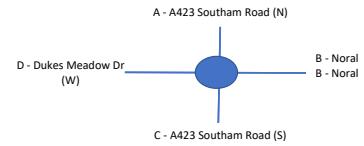
53

Total

AM	A	B	C	D
A	0	0	0	18
B	0	0	0	0
C	0	0	0	17
D	70	0	67	0

172

J1: A423 / Dukes Meadow Drive



AM %	Turning Movement			
	A	B	C	D
A				15.9%
B				8.5%
C				75.6%
D	15.9%	8.5%	75.6%	

PM %	Turning Movement			
	A	B	C	D
A				24.7%
B				1.3%
C				74.0%
D	24.7%	1.3%	74.0%	

AM	A	B	C	D
A				2
B				1
C				10
D	8	4	36	

61

AM	A	B	C	D
A				2
B				1
C				8
D	7	4	32	

53

AM	A	B	C	D
A	0	0	0	4
B	0	0	0	2
C	0	0	0	18
D	14	8	68	0

114

J2: Dukes Meadow Drive / B4100 Warwick Road / Walker Road



AM %	Turning Movement			
	A	B	C	D
A				65.9%
B				5.8%
C				27.9%
D	65.9%	5.8%	27.9%	

PM %	Turning Movement			
	A	B	C	D
A				59.2%
B				12.5%
C				28.3%
D	59.2%	12.5%	28.3%	

AM	A	B	C	D
A		31	3	13
B	8			
C	1			
D	3			

57

AM	A	B	C	D
A				12
B				
C				3
D	3			

15

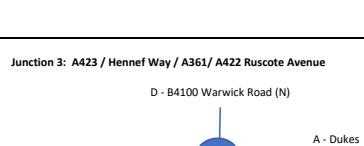
AM	A	B	C	D
A	0	31	3	25
B	8	0	0	0
C	1	0	0	0
D	6	0	0	0

73

PM	A	B	C	D
A	0	10	2	9
B	24	0	0	0
C	5	0	0	0
D	21	0	0	0

70

Junction 3: A423 / Hennef Way / A361/ A422 Ruscot Avenue



AM %	Turning Movement			
	A	B	C	D
A				51.1%
B				48.9%
C				
D	51.1%	48.9%		

AM	A	B	C	D
A	0	0	0	0
B	0			
C	0			
D	0			

0

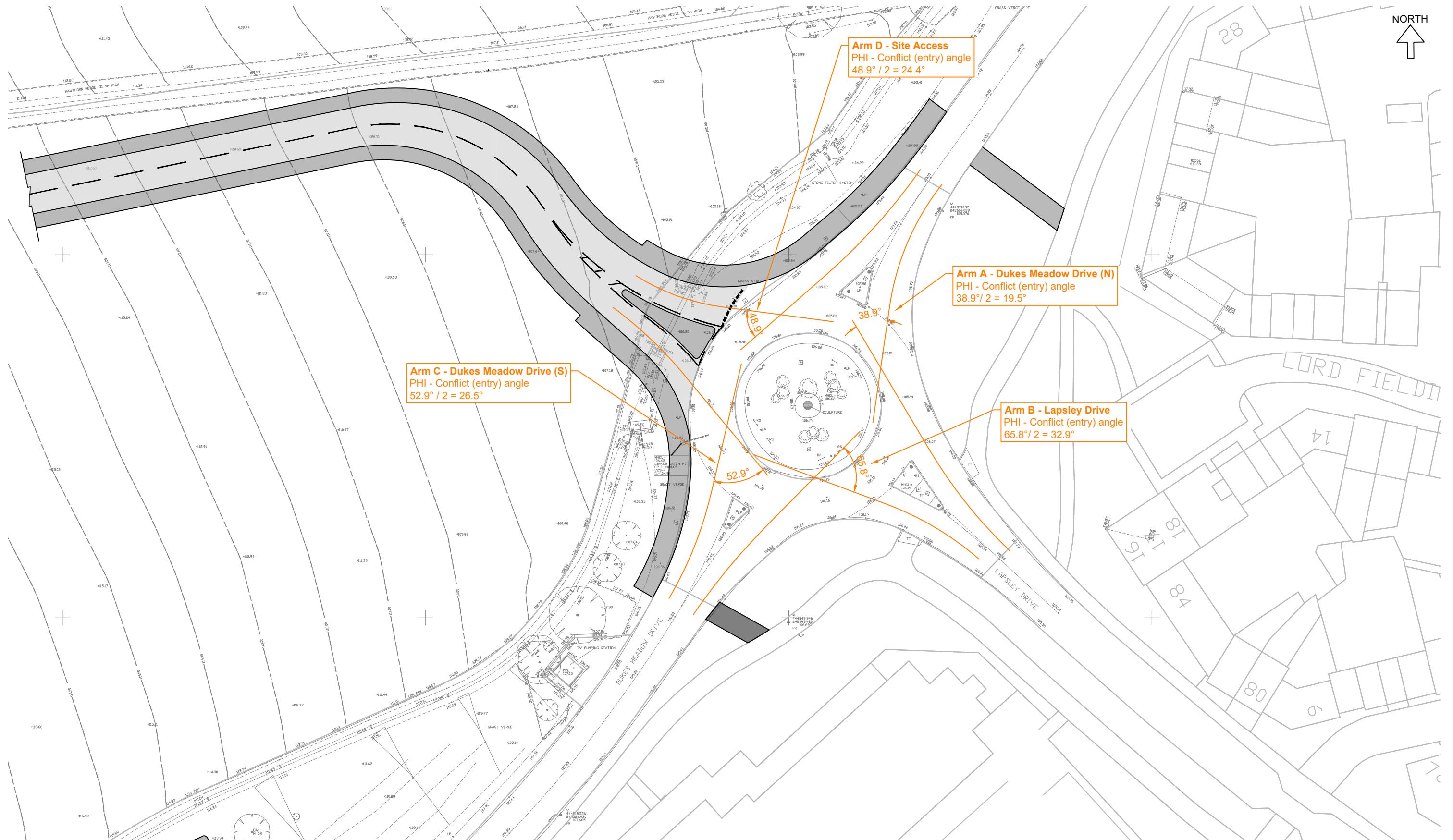
PM	A	B	C	D
A	0	0	0	0
B	0			
C	0			
D	0			

0

PM	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

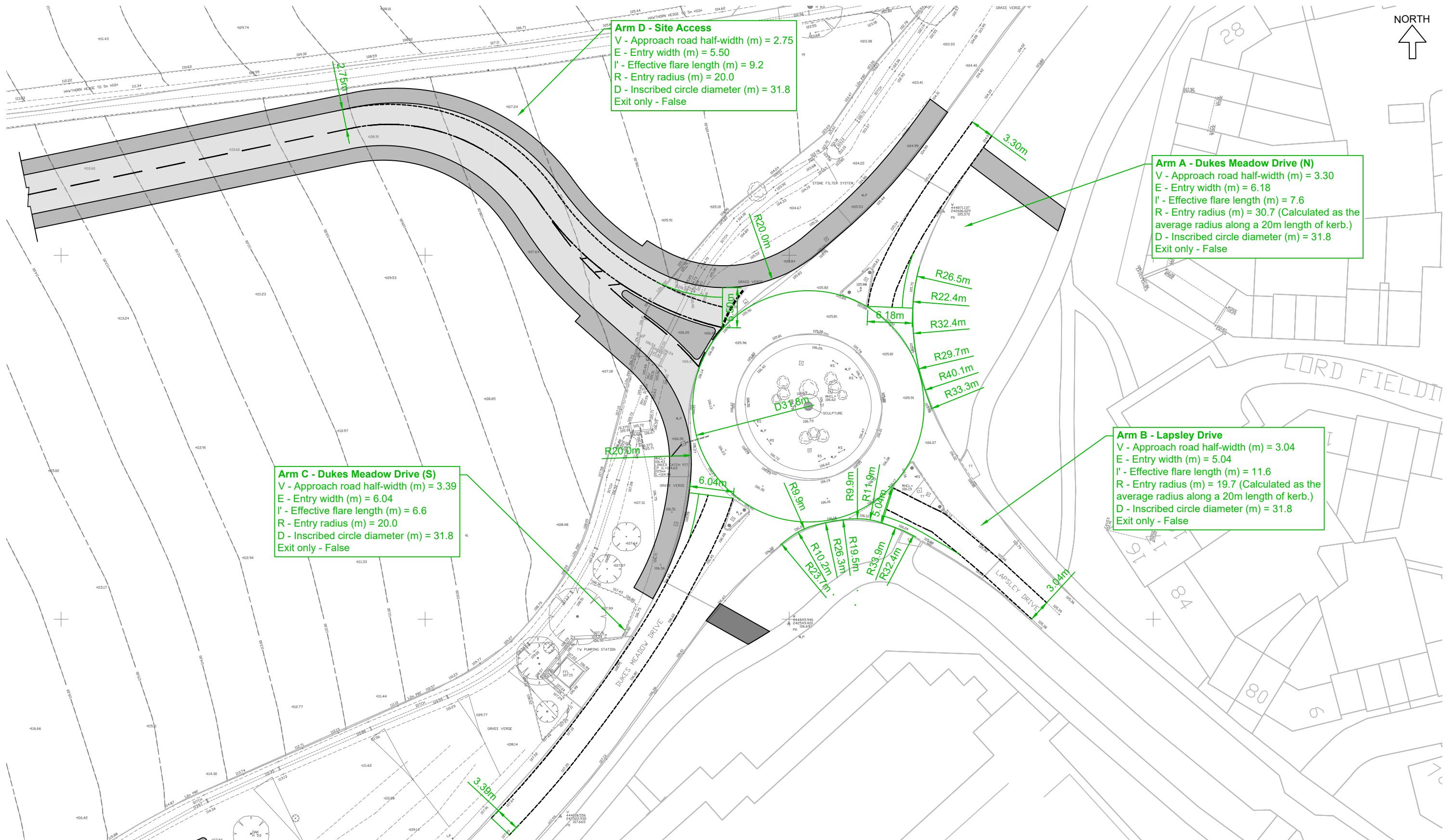
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Appendix M
ARCADY-Junction parameters



Notes:

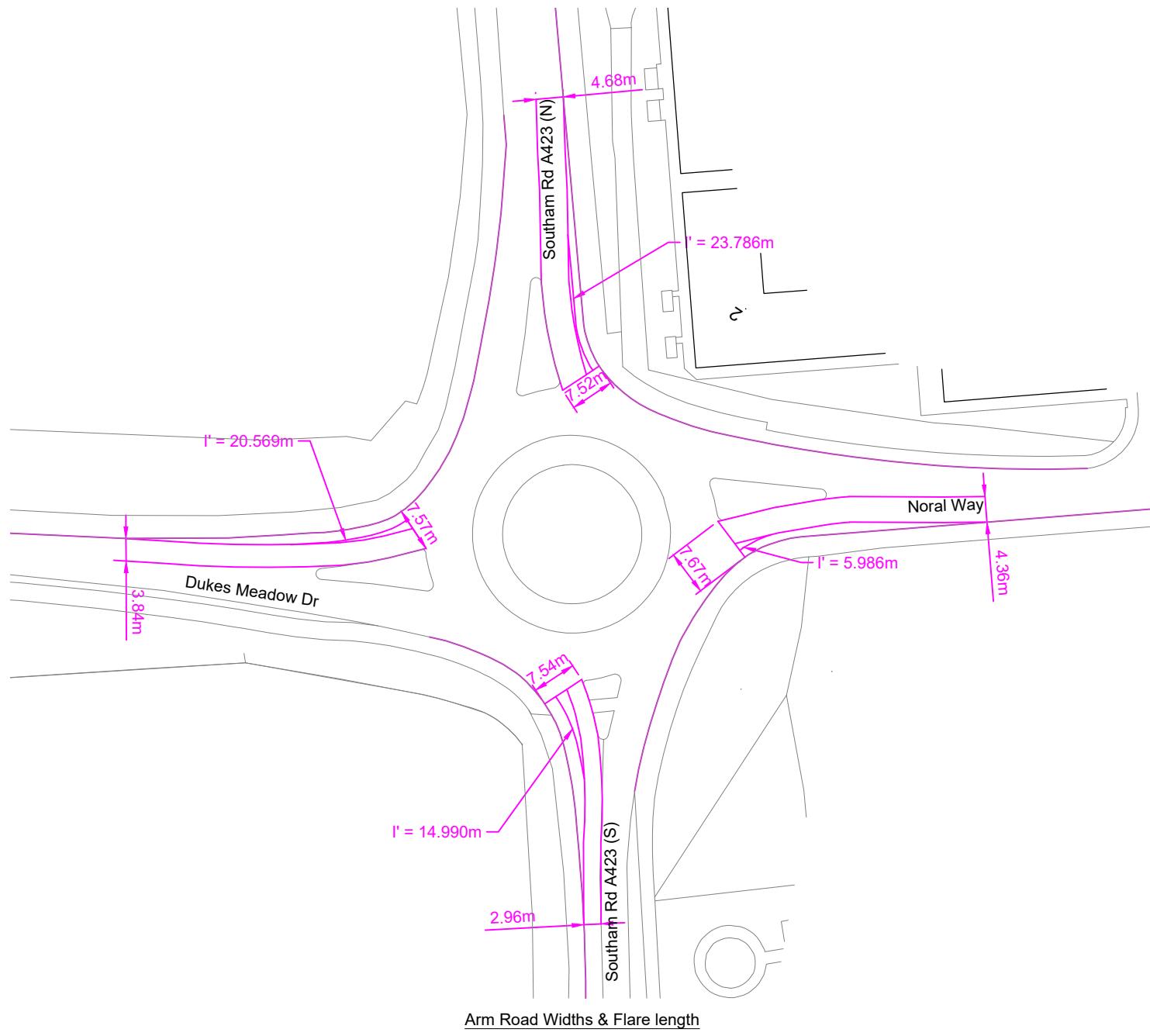
- Based on Woods Hardwick 'Topographical Survey', drawing number 17525-7-853 dated 24-03-2016.



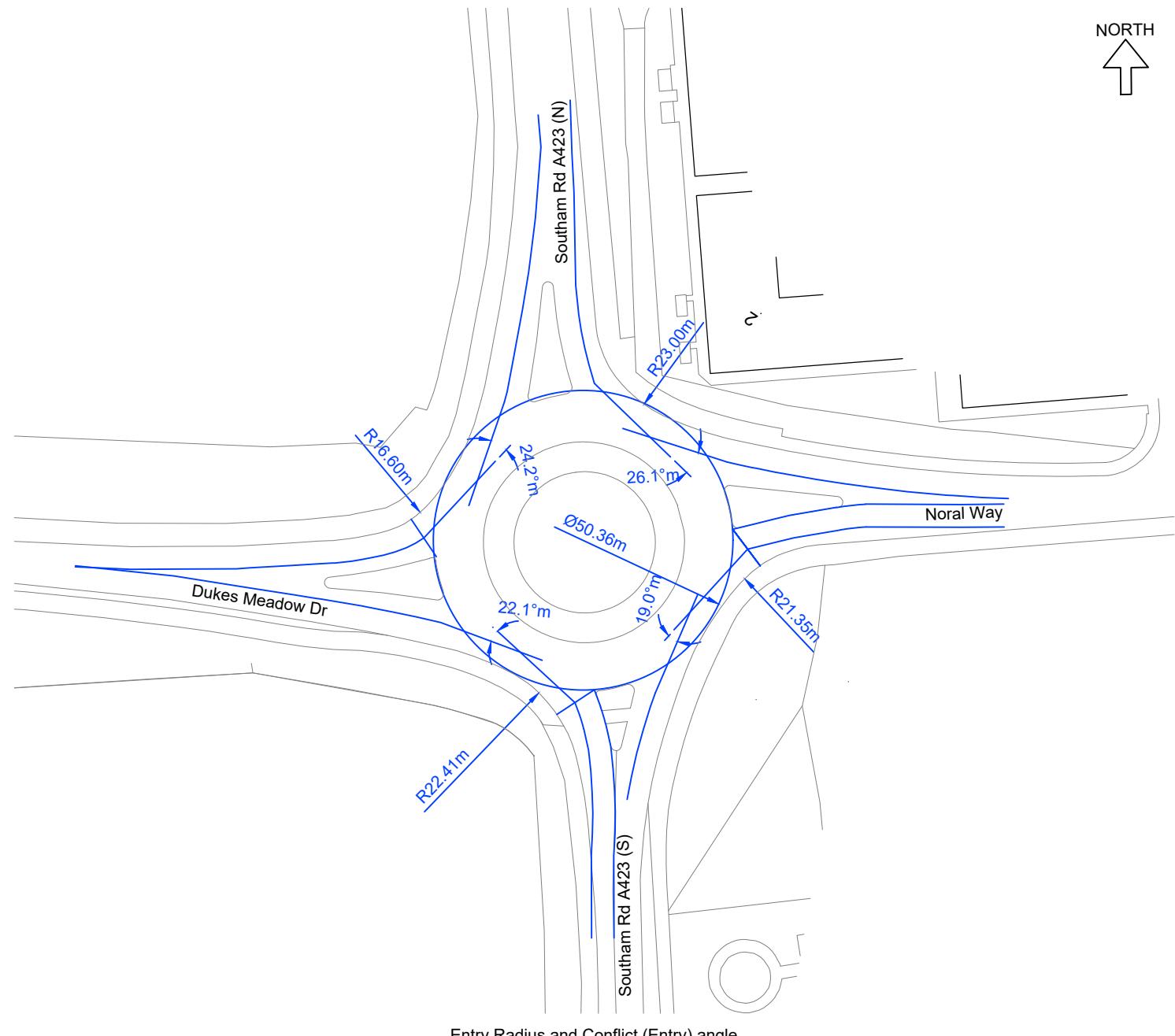
Notes:

- Based on Woods Hardwick 'Topographical Survey', drawing number 17525-7-853 dated 24-03-2016.

NORTH
↑



Arm Road Widths & Flare length



Entry Radius and Conflict (Entry) angle

Notes:

- Based on Ordnance Survey Mapping ©Crown Copyright and database rights 2022 OS 100019980

ARCADY Parameters:

Junction 1 - Southam Rd A423 (N) / Noral Way / Southam Rd A423 (S) / Dukes Meadow

Arm A - Southam Rd A423 (N)

Approach road half-width (m) = 4.68
Entry width (m) = 7.52
Effective flare length (m) = 23.786
Entry radius (m) = 23.00
Inscribed circle diameter (m) = 50.36
Conflict (entry) angle (deg) = 26.1

Arm C - Southam Rd A423 (S)

Approach road half-width (m) = 2.96
Entry width (m) = 7.54
Effective flare length (m) = 14.990
Entry radius (m) = 22.41
Inscribed circle diameter (m) = 50.36
Conflict (entry) angle (deg) = 22.1

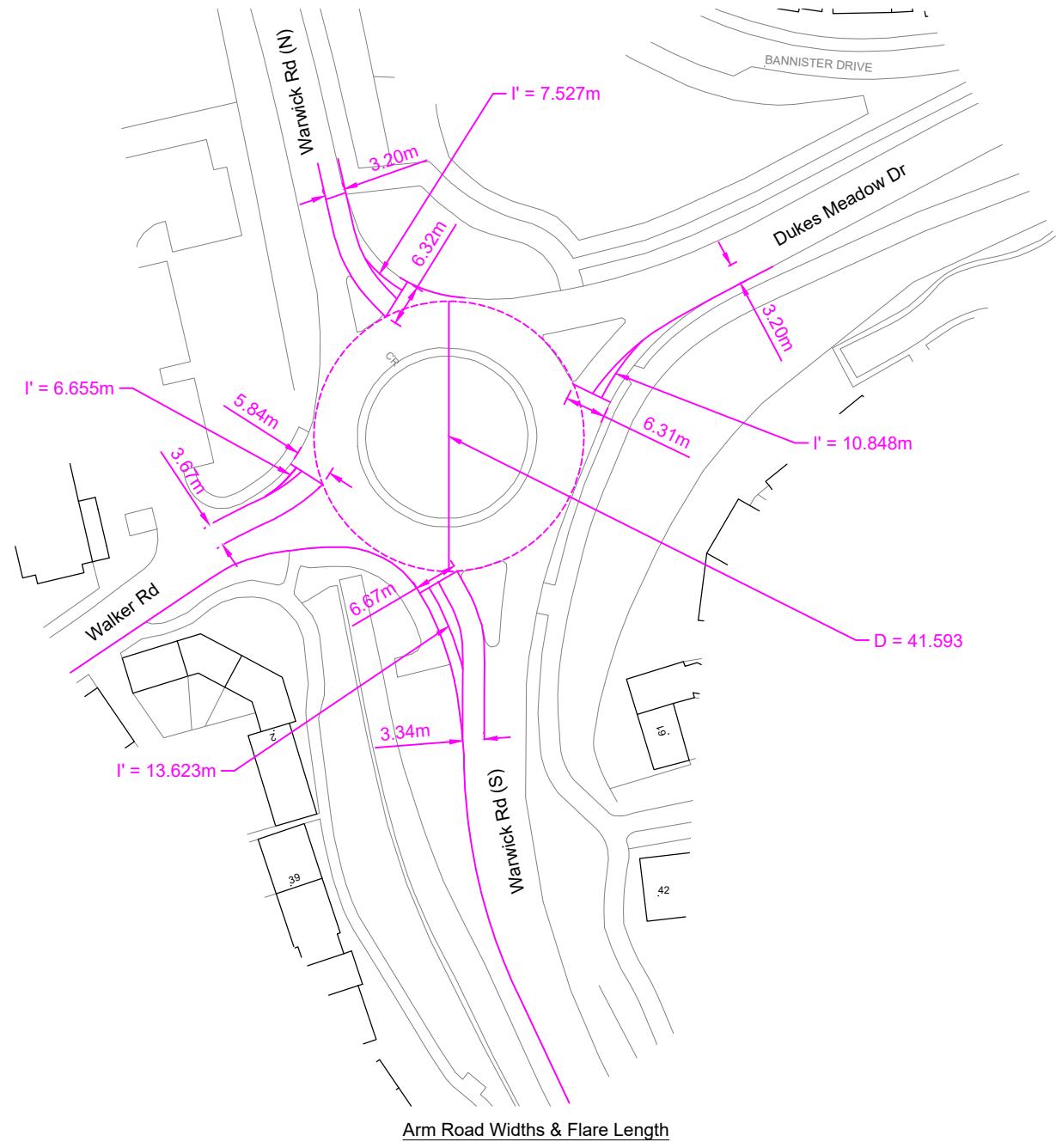
Arm B - Noral Way

Approach road half-width (m) = 4.36
Entry width (m) = 7.67
Effective flare length (m) = 5.986
Entry radius (m) = 21.35
Inscribed circle diameter (m) = 50.36
Conflict (entry) angle (deg) = 19.0

Arm D - Dukes Meadow Dr

Approach road half-width (m) = 3.84
Entry width (m) = 7.57
Effective flare length (m) = 20.569
Entry radius (m) = 16.60
Inscribed circle diameter (m) = 50.36
Conflict (entry) angle (deg) = 24.2

<p>T: 01604 340544 Northampton Office E: info@mac-ltd.co.uk W: mac-ltd.co.uk Martin Andrews Consulting Ltd</p>	<ul style="list-style-type: none"> Transport Assessments Flood Risk Assessments Highway Advice Access Design Drainage Strategies Vehicle tracking 	Client: Manor Oak Homes	Project: Hanwell Fields Banbury
		Title: Arcady geometry Junction 1 Southam Rd A423 (N) / Noral Way / Southam Rd A423 (S) / Dukes Meadow	Date: 21/07/22 Drw: SH Chk: MJA
		Drawing No: 802-TA21	Revision: - Scale: 1:1,000 Size: A3



Notes:

- Based on Ordnance Survey Mapping ©Crown Copyright and database rights 2022 OS 100019980

ARCADY Parameters:

Junction 2 - Dukes Meadow/ Warwick Rd (S)/ Walker Rd/ Warwick Rd (N)

Arm A - Dukes Meadow Dr

Approach road half-width (m) = 3.20

Entry width (m) = 6.31

Effective flare length (m) = 10.848

Entry radius (m) = 58.09

Inscribed circle diameter (m) = 41.593

Conflict (entry) angle (deg) = 31.90

Arm C - Walker Road

Approach road half-width (m) = 3.67

Entry width (m) = 5.84

Effective flare length (m) = 6.655

Entry radius (m) = 19.90

Inscribed circle diameter (m) = 41.593

Conflict (entry) angle (deg) = 24.60

Arm B - Warwick Rd (S)

Approach road half-width (m) = 3.34

Entry width (m) = 6.67

Effective flare length (m) = 13.623

Entry radius (m) = 14.28

Inscribed circle diameter (m) = 41.593

Conflict (entry) angle (deg) = 32.20

Arm D - Warwick Road (N)

Approach road half-width (m) = 3.20

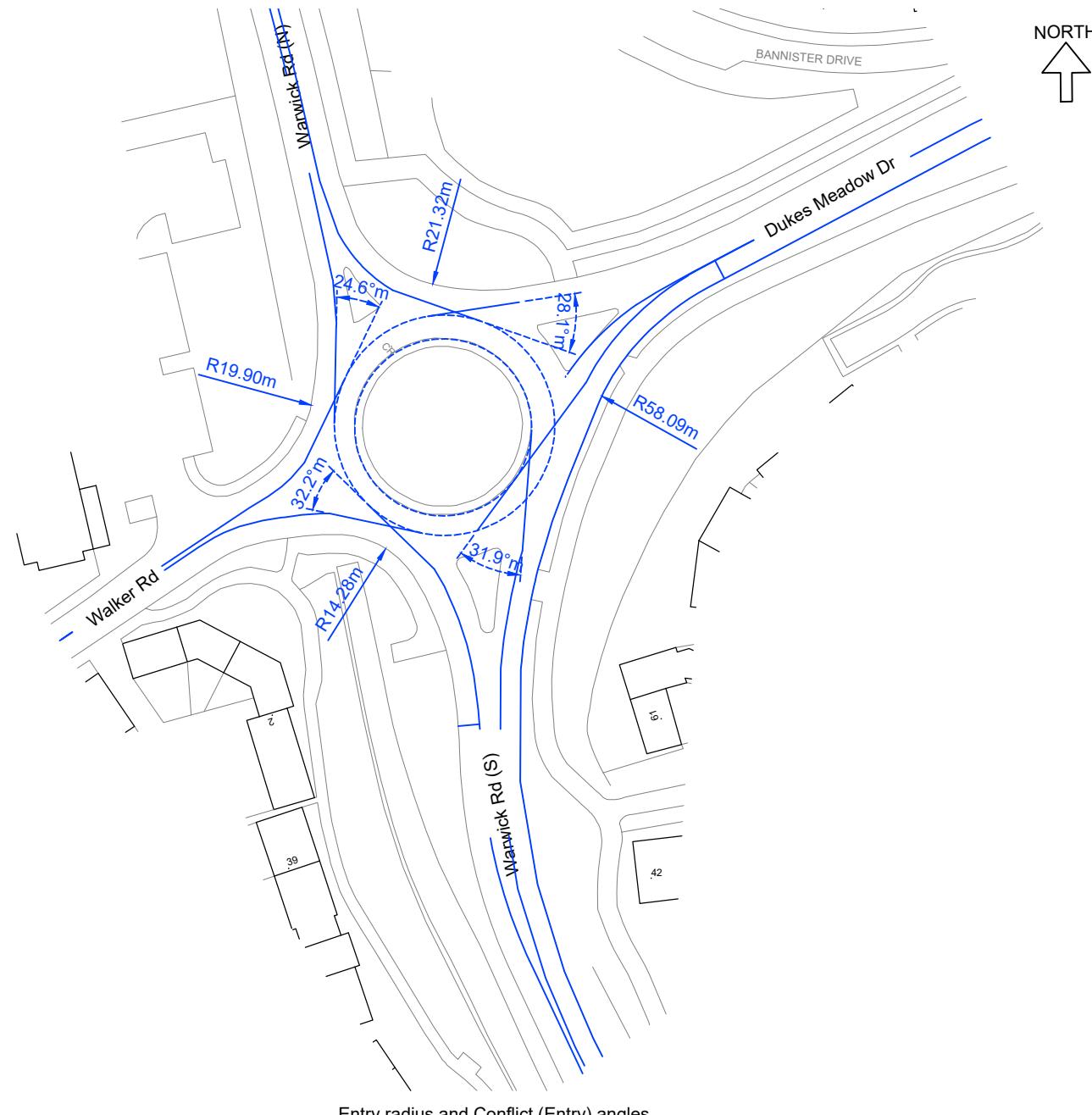
Entry width (m) = 6.32

Effective flare length (m) = 7.527

Entry radius (m) = 21.32

Inscribed circle diameter (m) = 41.593

Conflict (entry) angle (deg) = 28.10



Appendix N
ARCADY Output- Proposed Access



Junction Turning Flows

Survey Date 14th June 2022

Link

Arm A - Dukes Meadow Drive (N)

Arm B - Lapsley Drive

Arm C - Dukes Meadow Drive (S)

Arm D - Access

AM Peak 08:00 - 09:00

PM Peak 17:00 - 18:00



AM Background 2022					
	A	B	C	D	Total
A	0	77	166	0	243
B	97	0	93	0	190
C	307	142	0	0	449
D	0	0	0	0	0
Total	404	219	259	0	

PM Background 2022					
	A	B	C	D	Total
A	0	52	402	0	454
B	42	0	47	0	89
C	160	37	1	0	198
D	0	0	0	0	0
Total	202	89	450	0	

HGV %					
	A	B	C	D	Total
A	0	0.0509554	#DIV/0!	0	
B	#DIV/0!	0.0108696	0	0	
C	0	#DIV/0!	0.0131148	0	
D	0	0	0	0	
Total					

HGV %					
	A	B	C	D	Total
A	0	0	#DIV/0!	0	
B	#DIV/0!	0	0	0	
C	0	0	0.006211	0	
D	0	0	0	0	
Total					

AM Background 2027					
	A	B	C	D	Total
A	0	82	177	0	259
B	104	0	99	0	203
C	328	152	0	0	479
D	0	0	0	0	0
Total	431	234	276	0	

1.0675

PM Background 2027					
	A	B	C	D	Total
A	0	56	431	0	487
B	45	0	50	0	95
C	172	40	1	0	212
D	0	0	0	0	0
Total	217	95	483	0	

1.072

AM Committed Development (Phase 1)					
	A	B	C	D	Total
A	0	0	0	6	6
B	0	0	0	0	0
C	0	0	0	5	5
D	21	0	21	0	42
Total	21	0	21	11	

PM Committed Development (Phase 1)					
	A	B	C	D	Total
A	0	0	0	17	17
B	0	0	0	0	0
C	0	0	0	17	17
D	7	0	7	0	14
Total	7	0	7	34	

AM Background + Committed Dev					
	A	B	C	D	Total
A	0	82	177	6	265
B	104	0	99	0	203
C	328	152	0	5	485
D	21	0	21	0	42
Total	453	234	297	11	

PM Background + Committed Dev					
	A	B	C	D	Total
A	0	56	431	17	504
B	45	0	50	0	95
C	172	40	1	17	229
D	7	0	7	0	14
Total	224	95	489	34	

AM Development (Phase 2)					
	A	B	C	D	Total
A	0	0	0	13	13
B	0	0	0	0	0
C	0	0	0	12	12
D	48	0	46	0	95
Total	48	0	46	25	

PM Development (Phase 2)					
	A	B	C	D	Total
A	0	0	0	39	39
B	0	0	0	0	0
C	0	0	0	37	37
D	16	0	16	0	32
Total	16	0	16	76	

AM Background + Committed Dev + Development (Phase 2)					
	A	B	C	D	Total
A	0	82	177	18	277
B	104	0	99	0	203
C	328	152	0	17	497
D	70	0	67	0	137
Total	501	234	343	36	

PM Back + Comm Dev + Dev (Phase 2)					
	A	B	C	D	Total
A	0	56	431	56	543
B	45	0	50	0	95
C	172	40	1	54	266
D	23	0	22	0	46
Total	240	95	505	110	

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.0.6896 © Copyright TRL Limited, 2018	
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk	
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: 802-Access 1.j9

Path: C:\Users\Administrator\MAC\Projects 800 - 899 - Documents\802 - Banbury Ph2\Design\TA

Report generation date: 22/07/2022 08:56:23

- »Background 2022, AM
- »Background 2022, PM
- »2027 Background + Committed Dev, AM
- »2027 Background + Committed Dev, PM
- »2027 Background + Committed Dev + Phase 2 Dev, AM
- »2027 Background + Committed Dev + Phase 2 Dev, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
Background 2022						
Arm A	0.2	3.33	0.20	0.5	3.82	0.35
Arm B	0.2	3.66	0.18	0.1	3.80	0.09
Arm C	0.6	4.30	0.37	0.2	3.13	0.16
Arm D	0.0	0.00	0.00	0.0	0.00	0.00
2027 Background + Committed Dev						
Arm A	0.3	3.47	0.22	0.6	4.09	0.39
Arm B	0.2	3.80	0.19	0.1	3.97	0.10
Arm C	0.7	4.56	0.40	0.2	3.27	0.19
Arm D	0.1	4.15	0.05	0.0	3.26	0.01
2027 Background + Committed Dev + Phase 2 Dev						
Arm A	0.3	3.62	0.23	0.7	4.35	0.42
Arm B	0.2	3.96	0.20	0.1	4.13	0.11
Arm C	0.7	4.69	0.42	0.3	3.48	0.22
Arm D	0.2	4.72	0.17	0.0	3.36	0.04

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

File summary

File Description

Title	
Location	
Site number	
Date	21/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MAC-13096B\Administrator
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Background 2022	AM	ONE HOUR	08:00	09:30	15
D2	Background 2022	PM	ONE HOUR	16:45	18:15	15
D3	2027 Background + Committed Dev	AM	ONE HOUR	08:00	09:30	15
D4	2027 Background + Committed Dev	PM	ONE HOUR	16:45	18:15	15
D5	2027 Background + Committed Dev + Phase 2 Dev	AM	ONE HOUR	08:00	09:30	15
D6	2027 Background + Committed Dev + Phase 2 Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Background 2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
A1	Access / Dukes Meadow Drive (N) / Lapsley Drive / Dukes Meadow Drive (S)	Standard Roundabout		A, B, C, D	3.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Dukes Meadow Drive (N)	
B	Lapsley Drive	
C	Dukes Meadow Drive (S)	
D	Access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	3.30	6.18	7.6	30.7	31.8	19.5	
B	3.04	5.04	11.6	19.7	31.8	32.9	
C	3.39	6.04	6.6	20.0	31.8	26.5	
D	2.75	5.50	9.2	20.0	31.8	24.4	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.625	1469
B	0.570	1297
C	0.598	1395
D	0.577	1284

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Background 2022	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	243	100.000
B		✓	190	100.000
C		✓	449	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		A	B	C	D
	A	0	77	166	0
B	97	0	93	0	
C	307	142	0	0	
D	0	0	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A	B	C	D
	A	0	5	0	0
B	0	1	0	0	
C	0	0	1	0	
D	0	0	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.20	3.33	0.2	A
B	0.18	3.66	0.2	A
C	0.37	4.30	0.6	A
D	0.00	0.00	0.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	183	106	1380	0.133	182	0.2	3.004	A
B	143	125	1226	0.117	143	0.1	3.319	A
C	338	73	1352	0.250	337	0.3	3.541	A
D	0	409	1047	0.000	0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	218	128	1367	0.160	218	0.2	3.133	A
B	171	149	1212	0.141	171	0.2	3.455	A
C	404	87	1343	0.300	403	0.4	3.827	A
D	0	490	1001	0.000	0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	268	156	1349	0.198	267	0.2	3.326	A
B	209	183	1193	0.175	209	0.2	3.657	A
C	494	107	1332	0.371	494	0.6	4.294	A
D	0	600	937	0.000	0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	268	156	1349	0.198	268	0.2	3.327	A
B	209	183	1193	0.175	209	0.2	3.657	A
C	494	107	1332	0.371	494	0.6	4.299	A
D	0	601	937	0.000	0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	218	128	1367	0.160	219	0.2	3.137	A
B	171	149	1212	0.141	171	0.2	3.457	A
C	404	87	1343	0.301	404	0.4	3.838	A
D	0	492	1000	0.000	0	0.0	0.000	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	183	107	1380	0.133	183	0.2	3.008	A
B	143	125	1226	0.117	143	0.1	3.323	A
C	338	73	1352	0.250	338	0.3	3.553	A
D	0	412	1046	0.000	0	0.0	0.000	A

Background 2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
A1	Access / Dukes Meadow Drive (N) / Lapsley Drive / Dukes Meadow Drive (S)	Standard Roundabout		A, B, C, D	3.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Background 2022	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	454	100.000
B		✓	89	100.000
C		✓	198	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	52	402	0
	B	42	0	47	0	
	C	160	37	1	0	
	D	0	0	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	0	0	0
	B	0	0	0	0	
	C	0	0	1	0	
	D	0	0	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.35	3.82	0.5	A
B	0.09	3.80	0.1	A
C	0.16	3.13	0.2	A
D	0.00	0.00	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	342	29	1451	0.236	341	0.3	3.239	A
B	67	302	1125	0.060	67	0.1	3.401	A
C	149	32	1376	0.108	149	0.1	2.930	A
D	0	180	1180	0.000	0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	408	34	1448	0.282	408	0.4	3.462	A
B	80	362	1091	0.073	80	0.1	3.560	A
C	178	38	1373	0.130	178	0.1	3.012	A
D	0	216	1159	0.000	0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	500	42	1443	0.346	499	0.5	3.814	A
B	98	443	1045	0.094	98	0.1	3.801	A
C	218	46	1368	0.159	218	0.2	3.130	A
D	0	264	1131	0.000	0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	500	42	1443	0.346	500	0.5	3.817	A
B	98	444	1044	0.094	98	0.1	3.803	A
C	218	46	1368	0.159	218	0.2	3.130	A
D	0	264	1131	0.000	0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	408	34	1447	0.282	409	0.4	3.469	A
B	80	363	1091	0.073	80	0.1	3.565	A
C	178	38	1373	0.130	178	0.1	3.015	A
D	0	216	1159	0.000	0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	342	29	1451	0.236	342	0.3	3.246	A
B	67	304	1124	0.060	67	0.1	3.407	A
C	149	32	1376	0.108	149	0.1	2.933	A
D	0	181	1179	0.000	0	0.0	0.000	A

2027 Background + Committed Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
A1	Access / Dukes Meadow Drive (N) / Lapsley Drive / Dukes Meadow Drive (S)	Standard Roundabout		A, B, C, D	4.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027 Background + Committed Dev	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	265	100.000
B		✓	203	100.000
C		✓	485	100.000
D		✓	42	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	82	177	6
	B	104	0	99	0	
	C	328	152	0	5	
	D	21	0	21	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	5	0	0
	B	0	1	0	0	
	C	0	0	1	0	
	D	0	0	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.22	3.47	0.3	A
B	0.19	3.80	0.2	A
C	0.40	4.56	0.7	A
D	0.05	4.15	0.1	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	200	130	1366	0.146	199	0.2	3.082	A
B	153	153	1210	0.126	152	0.1	3.401	A
C	365	83	1346	0.271	364	0.4	3.660	A
D	32	438	1031	0.031	31	0.0	3.601	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	238	155	1350	0.176	238	0.2	3.236	A
B	182	183	1193	0.153	182	0.2	3.561	A
C	436	99	1336	0.326	436	0.5	3.995	A
D	38	524	981	0.038	38	0.0	3.815	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	292	190	1329	0.220	292	0.3	3.470	A
B	224	224	1169	0.191	223	0.2	3.804	A
C	534	121	1323	0.404	533	0.7	4.554	A
D	46	642	913	0.051	46	0.1	4.152	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	292	190	1329	0.220	292	0.3	3.470	A
B	224	225	1169	0.191	224	0.2	3.805	A
C	534	121	1323	0.404	534	0.7	4.562	A
D	46	643	913	0.051	46	0.1	4.154	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	238	156	1350	0.176	238	0.2	3.240	A
B	182	184	1193	0.153	183	0.2	3.566	A
C	436	99	1336	0.326	437	0.5	4.005	A
D	38	526	980	0.039	38	0.0	3.819	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	200	130	1366	0.146	200	0.2	3.086	A
B	153	154	1210	0.126	153	0.1	3.406	A
C	365	83	1346	0.271	366	0.4	3.673	A
D	32	440	1030	0.031	32	0.0	3.606	A

2027 Background + Committed Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
A1	Access / Dukes Meadow Drive (N) / Lapsley Drive / Dukes Meadow Drive (S)	Standard Roundabout		A, B, C, D	3.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 Background + Committed Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	504	100.000
B		✓	95	100.000
C		✓	230	100.000
D		✓	14	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	56	431	17
	B	45	0	50	0	
	C	172	40	1	17	
	D	7	0	7	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	0	0	0
	B	0	0	0	0	
	C	0	0	1	0	
	D	0	0	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.39	4.09	0.6	A
B	0.10	3.97	0.1	A
C	0.19	3.27	0.2	A
D	0.01	3.26	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	379	36	1446	0.262	378	0.4	3.365	A
B	72	342	1102	0.065	71	0.1	3.491	A
C	173	46	1368	0.127	173	0.1	3.011	A
D	11	194	1172	0.009	11	0.0	3.099	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	453	43	1442	0.314	453	0.5	3.637	A
B	85	410	1064	0.080	85	0.1	3.678	A
C	207	56	1362	0.152	207	0.2	3.115	A
D	13	232	1150	0.011	13	0.0	3.164	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	555	53	1436	0.386	554	0.6	4.083	A
B	105	501	1011	0.103	104	0.1	3.969	A
C	253	68	1355	0.187	253	0.2	3.268	A
D	15	284	1120	0.014	15	0.0	3.258	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	555	53	1436	0.386	555	0.6	4.086	A
B	105	502	1011	0.103	105	0.1	3.971	A
C	253	68	1355	0.187	253	0.2	3.268	A
D	15	284	1120	0.014	15	0.0	3.259	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	453	43	1442	0.314	454	0.5	3.647	A
B	85	411	1063	0.080	86	0.1	3.681	A
C	207	56	1362	0.152	207	0.2	3.116	A
D	13	232	1150	0.011	13	0.0	3.167	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	379	36	1446	0.262	380	0.4	3.379	A
B	72	344	1101	0.065	72	0.1	3.495	A
C	173	47	1367	0.127	173	0.1	3.014	A
D	11	194	1171	0.009	11	0.0	3.100	A

2027 Background + Committed Dev + Phase 2 Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
A1	Access / Dukes Meadow Drive (N) / Lapsley Drive / Dukes Meadow Drive (S)	Standard Roundabout		A, B, C, D	4.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2027 Background + Committed Dev + Phase 2 Dev	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	277	100.000
B		✓	203	100.000
C		✓	497	100.000
D		✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	82	177	18
	B	104	0	99	0	
	C	328	152	0	17	
	D	70	0	67	0	

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	5	0	0
	B	0	1	0	0
	C	0	0	1	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.23	3.62	0.3	A
B	0.20	3.96	0.2	A
C	0.42	4.69	0.7	A
D	0.17	4.72	0.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	209	164	1346	0.155	208	0.2	3.162	A
B	153	197	1185	0.129	152	0.1	3.482	A
C	374	91	1341	0.279	373	0.4	3.712	A
D	103	438	1031	0.100	103	0.1	3.876	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	249	197	1326	0.188	249	0.2	3.342	A
B	182	235	1163	0.157	182	0.2	3.669	A
C	447	110	1330	0.336	446	0.5	4.073	A
D	123	524	981	0.126	123	0.1	4.196	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	305	241	1299	0.235	305	0.3	3.621	A
B	224	288	1133	0.197	224	0.2	3.956	A
C	547	134	1315	0.416	547	0.7	4.678	A
D	151	642	913	0.165	151	0.2	4.720	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	305	241	1299	0.235	305	0.3	3.622	A
B	224	288	1133	0.197	224	0.2	3.958	A
C	547	134	1315	0.416	547	0.7	4.687	A
D	151	643	913	0.165	151	0.2	4.725	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	249	197	1326	0.188	249	0.2	3.347	A
B	182	236	1163	0.157	183	0.2	3.675	A
C	447	110	1330	0.336	448	0.5	4.084	A
D	123	526	980	0.126	123	0.1	4.202	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	209	165	1345	0.155	209	0.2	3.169	A
B	153	197	1185	0.129	153	0.1	3.491	A
C	374	92	1340	0.279	375	0.4	3.728	A
D	103	440	1030	0.100	103	0.1	3.888	A

2027 Background + Committed Dev + Phase 2 Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
A1	Access / Dukes Meadow Drive (N) / Lapsley Drive / Dukes Meadow Drive (S)	Standard Roundabout		A, B, C, D	4.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 Background + Committed Dev + Phase 2 Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	543	100.000
B		✓	95	100.000
C		✓	267	100.000
D		✓	45	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	56	431	56
	B	45	0	50	0	
	C	172	40	1	54	
	D	23	0	22	0	

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	1	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.42	4.35	0.7	A
B	0.11	4.13	0.1	A
C	0.22	3.48	0.3	A
D	0.04	3.36	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	409	47	1439	0.284	407	0.4	3.484	A
B	72	382	1079	0.066	71	0.1	3.571	A
C	201	76	1350	0.149	200	0.2	3.129	A
D	34	194	1172	0.029	34	0.0	3.162	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	488	57	1433	0.341	488	0.5	3.804	A
B	85	458	1036	0.082	85	0.1	3.785	A
C	240	91	1341	0.179	240	0.2	3.268	A
D	40	232	1150	0.035	40	0.0	3.244	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	598	69	1426	0.419	597	0.7	4.340	A
B	105	561	978	0.107	104	0.1	4.123	A
C	294	111	1329	0.221	294	0.3	3.477	A
D	50	284	1120	0.044	50	0.0	3.362	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	598	69	1425	0.419	598	0.7	4.349	A
B	105	562	977	0.107	105	0.1	4.125	A
C	294	111	1329	0.221	294	0.3	3.477	A
D	50	284	1120	0.044	50	0.0	3.363	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	488	57	1433	0.341	489	0.5	3.816	A
B	85	459	1036	0.082	86	0.1	3.791	A
C	240	91	1341	0.179	240	0.2	3.270	A
D	40	232	1150	0.035	40	0.0	3.245	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	409	47	1439	0.284	409	0.4	3.496	A
B	72	384	1078	0.066	72	0.1	3.575	A
C	201	76	1350	0.149	201	0.2	3.133	A
D	34	194	1171	0.029	34	0.0	3.166	A

Appendix O
ARCADY Output- Junction 1



Junction Turning Flows
Survey Date 14th June 2022

Link

Arm A - Southam Rd A423 (N)
Arm B - Noral Way
Arm C - Southam Rd A423 (S)
Arm D - Dukes Meadow Drive

AM Peak 08:00 - 09:00
PM Peak 17:00 - 18:00



AM Background 2022					
	A	B	C	D	Total
A	1	20	619	85	725
B	4	0	13	2	19
C	335	90	5	170	599
D	73	39	348	0	461
Total	413	149	985	257	

PM Background 2022					
	A	B	C	D	Total
A	0	3	360	72	435
B	34	0	90	15	140
C	635	3	0	414	1052
D	57	3	172	0	232
Total	726	9	622	502	

HGV %					
	A	B	C	D	Total
A	0	0	4	6	
B	0	0	18	0	
C	5	1	0	2	
D	3	0	1	0	
Total					

HGV %					
	A	B	C	D	Total
A	0	50	3	0	53
B	0	0	2	0	2
C	2	0	0	0	2
D	0	0	1	0	1
Total	0%	0%	0%	0%	

AM Background 2027					
	A	B	C	D	Total
A	1	21	660	91	774
B	4	0	14	2	20
C	357	96	5	181	639
D	78	42	372	0	492
Total	441	159	1051	274	

1.0675

AM Committed Development (Phase 1)					
	A	B	C	D	Total
A	0	0	0	2	2
B	0	0	0	1	1
C	0	0	0	8	8
D	7	4	32	0	42
Total	7	4	32	11	

PM Background 2027

	A	B	C	D	Total
A	0	4	386	78	467
B	36	0	97	17	150
C	681	3	0	444	1128
D	62	3	184	0	249
Total	778	10	667	538	

1.072

AM Background + Committed Dev					
	A	B	C	D	Total
A	1	21	660	93	776
B	4	0	14	3	21
C	357	96	5	189	648
D	85	45	404	0	534
Total	447	162	1083	285	

PM Background + Committed Dev

	A	B	C	D	Total
A	0	4	386	83	472
B	36	0	97	19	153
C	681	3	0	470	1153
D	64	4	195	0	263
Total	781	11	677	572	

AM Development (Phase 2)					
	A	B	C	D	Total
A	0	0	0	2	2
B	0	0	0	1	1
C	0	0	0	10	10
D	8	4	36	0	48
Total	8	4	36	13	

PM Development (Phase 2)

	A	B	C	D	Total
A	0	0	0	9	9
B	0	0	0	0	0
C	0	0	0	26	26
D	4	0	11	0	15
Total	4	0	11	36	

AM Background + Committed Dev + Development (Phase 2)					
	A	B	C	D	Total
A	1	21	660	95	778
B	4	0	14	4	22
C	357	96	5	199	657
D	93	49	440	0	582
Total	455	166	1119	298	

PM Back + Comm Dev + Dev (Phase 2)

	A	B	C	D	Total
A	0	4	386	92	481
B	36	0	97	20	153
C	681	3	0	496	1180
D	67	5	206	0	278
Total	784	11	688	608	

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.0.6896 © Copyright TRL Limited, 2018	
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Filename: 802-Junction 1.j9

Path: C:\Users\Administrator\MAC\Projects 800 - 899 - Documents\802 - Banbury Ph2\Design\TA

Report generation date: 21/07/2022 16:08:14

- » Background 2022, AM
- » Background 2022, PM
- » 2027 Background + Committed Dev, AM
- » 2027 Background + Committed Dev, PM
- » 2027 Background + Committed Dev + Phase 2 Dev, AM
- » 2027 Background + Committed Dev + Phase 2 Dev, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
Background 2022						
Arm A	0.9	4.24	0.48	0.3	2.55	0.25
Arm B	0.0	4.15	0.02	0.1	3.11	0.12
Arm C	0.8	4.20	0.44	3.0	9.51	0.75
Arm D	0.5	3.43	0.33	0.2	3.14	0.18
2027 Background + Committed Dev						
Arm A	1.1	4.84	0.53	0.4	2.66	0.28
Arm B	0.0	4.49	0.03	0.2	3.27	0.13
Arm C	0.9	4.50	0.47	4.8	13.98	0.83
Arm D	0.6	3.80	0.38	0.3	3.35	0.21
2027 Background + Committed Dev + Phase 2 Dev						
Arm A	1.2	5.05	0.55	0.4	2.70	0.28
Arm B	0.0	4.61	0.03	0.2	3.31	0.13
Arm C	0.9	4.58	0.48	5.6	16.08	0.86
Arm D	0.7	4.02	0.42	0.3	3.40	0.22

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

File summary

File Description

Title	
Location	
Site number	
Date	14/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MAC-13096B\Administrator
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Background 2022	AM	ONE HOUR	08:00	09:30	15
D2	Background 2022	PM	ONE HOUR	16:45	18:15	15
D3	2027 Background + Committed Dev	AM	ONE HOUR	08:00	09:30	15
D4	2027 Background + Committed Dev	PM	ONE HOUR	16:45	18:15	15
D5	2027 Background + Committed Dev + Phase 2 Dev	AM	ONE HOUR	08:00	09:30	15
D6	2027 Background + Committed Dev + Phase 2 Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Background 2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southam Rd A423 (N)/ Noral Way/ Southam Rd A423 (S)/ Dukes Meadow Dr	Standard Roundabout		A, B, C, D	4.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Southam Rd A423 (N)	
B	Noral Way	
C	Southam Rd A423 (S)	
D	Dukes Meadow Dr	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	4.68	7.52	23.8	23.0	50.4	26.1	
B	4.36	7.67	6.0	21.4	50.4	19.0	
C	2.96	7.54	15.0	22.4	50.4	25.0	
D	3.84	7.57	20.6	16.6	50.4	24.2	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.684	2081
B	0.629	1753
C	0.601	1635
D	0.647	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Background 2022	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	725	100.000
B		✓	19	100.000
C		✓	600	100.000
D		✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	1	20	619	85
From	B	4	0	13	2	
	C	335	90	5	170	
	D	73	39	348	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	0	4	6
From	B	0	0	18	0	
	C	5	1	0	2	
	D	3	0	1	0	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	546	568
	B	14	16
	C	452	468
	D	346	351
08:15-08:30	A	652	679
	B	17	19
	C	539	558
	D	414	419
08:30-08:45	A	798	831
	B	21	23
	C	661	684
	D	506	513
08:45-09:00	A	798	831
	B	21	23
	C	661	684
	D	506	513
09:00-09:15	A	652	679
	B	17	19
	C	539	558
	D	414	419
09:15-09:30	A	546	568
	B	14	16
	C	452	468
	D	346	351

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.48	4.24	0.9	A
B	0.02	4.15	0.0	A
C	0.44	4.20	0.8	A
D	0.33	3.43	0.5	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	546	362	1759	0.310	544	0.4	2.959	A
B	14	794	1102	0.013	14	0.0	3.308	A
C	452	69	1537	0.294	450	0.4	3.308	A
D	346	326	1658	0.209	345	0.3	2.740	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	652	433	1712	0.381	651	0.6	3.392	A
B	17	950	1012	0.017	17	0.0	3.617	A
C	539	83	1529	0.353	539	0.5	3.635	A
D	414	391	1615	0.256	413	0.3	2.996	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	798	530	1647	0.485	797	0.9	4.227	A
B	21	1163	889	0.024	21	0.0	4.146	A
C	661	101	1517	0.435	660	0.8	4.193	A
D	506	478	1557	0.325	506	0.5	3.424	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	798	531	1647	0.485	798	0.9	4.241	A
B	21	1165	888	0.024	21	0.0	4.151	A
C	661	101	1517	0.435	661	0.8	4.202	A
D	506	479	1556	0.325	506	0.5	3.428	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	652	434	1711	0.381	653	0.6	3.405	A
B	17	953	1011	0.017	17	0.0	3.623	A
C	539	83	1529	0.353	540	0.5	3.645	A
D	414	392	1614	0.256	414	0.3	3.000	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	546	363	1758	0.310	546	0.5	2.972	A
B	14	797	1100	0.013	14	0.0	3.317	A
C	452	69	1537	0.294	452	0.4	3.322	A
D	346	328	1657	0.209	347	0.3	2.750	A

Background 2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southam Rd A423 (N)/ Noral Way/ Southam Rd A423 (S)/ Dukes Meadow Dr	Standard Roundabout		A, B, C, D	6.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Background 2022	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	435	100.000
B		✓	139	100.000
C		✓	1052	100.000
D		✓	232	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
From	A	0	3	360	72	
	B	34	0	90	15	
	C	635	3	0	414	
	D	57	3	172	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
From	A	0	50	3	0	
	B	0	0	2	0	
	C	2	0	0	0	
	D	0	0	1	0	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	327	337
	B	105	106
	C	792	802
	D	175	176
17:00-17:15	A	391	402
	B	125	127
	C	946	957
	D	209	210
17:15-17:30	A	479	492
	B	153	155
	C	1158	1172
	D	255	257
17:30-17:45	A	479	492
	B	153	155
	C	1158	1172
	D	255	257
17:45-18:00	A	391	402
	B	125	127
	C	946	957
	D	209	210
18:00-18:15	A	327	337
	B	105	106
	C	792	802
	D	175	176

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.25	2.55	0.3	A
B	0.12	3.11	0.1	A
C	0.75	9.51	3.0	A
D	0.18	3.14	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	327	134	1934	0.169	327	0.2	2.238	A
B	105	454	1443	0.073	104	0.1	2.689	A
C	792	91	1561	0.507	788	1.0	4.631	A
D	175	503	1554	0.112	174	0.1	2.608	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	391	160	1917	0.204	391	0.3	2.359	A
B	125	543	1387	0.090	125	0.1	2.852	A
C	946	109	1551	0.610	944	1.5	5.910	A
D	209	603	1489	0.140	208	0.2	2.810	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	479	196	1892	0.253	479	0.3	2.546	A
B	153	665	1309	0.117	153	0.1	3.112	A
C	1158	133	1536	0.754	1153	2.9	9.250	A
D	255	736	1402	0.182	255	0.2	3.139	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	479	196	1892	0.253	479	0.3	2.546	A
B	153	665	1309	0.117	153	0.1	3.113	A
C	1158	133	1536	0.754	1158	3.0	9.509	A
D	255	740	1400	0.183	255	0.2	3.145	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	391	160	1916	0.204	391	0.3	2.360	A
B	125	543	1386	0.090	125	0.1	2.854	A
C	946	109	1551	0.610	951	1.6	6.062	A
D	209	608	1486	0.140	209	0.2	2.818	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	327	134	1934	0.169	328	0.2	2.241	A
B	105	455	1442	0.073	105	0.1	2.691	A
C	792	91	1561	0.507	794	1.0	4.707	A
D	175	507	1552	0.113	175	0.1	2.614	A

2027 Background + Committed Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southam Rd A423 (N)/ Noral Way/ Southam Rd A423 (S)/ Dukes Meadow Dr	Standard Roundabout		A, B, C, D	4.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027 Background + Committed Dev	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	775	100.000
B		✓	21	100.000
C		✓	647	100.000
D		✓	534	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	1	21	660	93
	B	4	0	14	3	
	C	357	96	5	189	
	D	85	45	404	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	0	4	6
	B	0	0	18	0	
	C	5	1	0	2	
	D	3	0	1	0	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	583	608
	B	16	18
	C	487	504
	D	402	407
08:15-08:30	A	697	725
	B	19	21
	C	582	602
	D	480	486
08:30-08:45	A	853	889
	B	23	26
	C	712	737
	D	588	595
08:45-09:00	A	853	889
	B	23	26
	C	712	737
	D	588	595
09:00-09:15	A	697	725
	B	19	21
	C	582	602
	D	480	486
09:15-09:30	A	583	608
	B	16	18
	C	487	504
	D	402	407

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.53	4.84	1.1	A
B	0.03	4.49	0.0	A
C	0.47	4.50	0.9	A
D	0.38	3.80	0.6	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	583	413	1725	0.338	581	0.5	3.142	A
B	16	873	1060	0.015	16	0.0	3.446	A
C	487	76	1533	0.318	485	0.5	3.429	A
D	402	347	1644	0.245	401	0.3	2.894	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	697	494	1671	0.417	696	0.7	3.687	A
B	19	1044	961	0.020	19	0.0	3.821	A
C	582	91	1524	0.382	581	0.6	3.816	A
D	480	416	1598	0.300	480	0.4	3.219	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	853	605	1598	0.534	852	1.1	4.814	A
B	23	1278	825	0.028	23	0.0	4.487	A
C	712	111	1512	0.471	711	0.9	4.493	A
D	588	509	1536	0.383	587	0.6	3.790	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	853	606	1597	0.534	853	1.1	4.839	A
B	23	1280	824	0.028	23	0.0	4.494	A
C	712	111	1511	0.471	712	0.9	4.504	A
D	588	510	1536	0.383	588	0.6	3.798	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	697	495	1670	0.417	698	0.7	3.712	A
B	19	1048	959	0.020	19	0.0	3.829	A
C	582	91	1524	0.382	583	0.6	3.831	A
D	480	417	1597	0.301	481	0.4	3.228	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	583	415	1724	0.338	584	0.5	3.163	A
B	16	877	1058	0.015	16	0.0	3.457	A
C	487	76	1533	0.318	488	0.5	3.445	A
D	402	349	1642	0.245	402	0.3	2.903	A

2027 Background + Committed Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southam Rd A423 (N)/ Noral Way/ Southam Rd A423 (S)/ Dukes Meadow Dr	Standard Roundabout		A, B, C, D	9.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 Background + Committed Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	473	100.000
B		✓	152	100.000
C		✓	1154	100.000
D		✓	263	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	4	386	83
	B	36	0	97	19	
	C	681	3	0	470	
	D	64	4	195	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	50	3	0
	B	0	0	2	0	
	C	2	0	0	0	
	D	0	0	1	0	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	356	366
	B	114	116
	C	869	879
	D	198	199
17:00-17:15	A	425	437
	B	137	138
	C	1037	1050
	D	236	238
17:15-17:30	A	521	536
	B	167	169
	C	1271	1286
	D	290	292
17:30-17:45	A	521	536
	B	167	169
	C	1271	1286
	D	290	292
17:45-18:00	A	425	437
	B	137	138
	C	1037	1050
	D	236	238
18:00-18:15	A	356	366
	B	114	116
	C	869	879
	D	198	199

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.28	2.66	0.4	A
B	0.13	3.27	0.2	A
C	0.83	13.98	4.8	B
D	0.21	3.35	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	356	152	1921	0.185	355	0.2	2.297	A
B	114	499	1415	0.081	114	0.1	2.767	A
C	869	104	1554	0.559	864	1.3	5.178	A
D	198	539	1531	0.129	197	0.1	2.697	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	425	181	1901	0.224	425	0.3	2.438	A
B	137	597	1353	0.101	137	0.1	2.959	A
C	1037	124	1542	0.673	1034	2.0	7.050	A
D	236	645	1461	0.162	236	0.2	2.938	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	521	222	1874	0.278	520	0.4	2.659	A
B	167	730	1268	0.132	167	0.2	3.269	A
C	1271	152	1525	0.833	1260	4.6	13.082	B
D	290	787	1369	0.212	289	0.3	3.334	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	521	222	1874	0.278	521	0.4	2.660	A
B	167	731	1268	0.132	167	0.2	3.271	A
C	1271	152	1525	0.833	1270	4.8	13.982	B
D	290	792	1365	0.212	290	0.3	3.345	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	425	182	1901	0.224	426	0.3	2.442	A
B	137	598	1352	0.101	137	0.1	2.963	A
C	1037	124	1542	0.673	1048	2.1	7.440	A
D	236	654	1456	0.162	237	0.2	2.954	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	356	152	1921	0.185	356	0.2	2.302	A
B	114	500	1414	0.081	115	0.1	2.770	A
C	869	104	1554	0.559	872	1.3	5.306	A
D	198	544	1528	0.130	198	0.1	2.707	A

2027 Background + Committed Dev + Phase 2 Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southam Rd A423 (N)/ Noral Way/ Southam Rd A423 (S)/ Dukes Meadow Dr	Standard Roundabout		A, B, C, D	4.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2027 Background + Committed Dev + Phase 2 Dev	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	777	100.000
B		✓	22	100.000
C		✓	657	100.000
D		✓	582	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	1	21	660	95
	B	4	0	14	4	
	C	357	96	5	199	
	D	93	49	440	0	

Vehicle Mix

Heavy Vehicle Percentages

	To					
		A	B	C	D	
From	A	0	0	4	6	
	B	0	0	18	0	
	C	5	1	0	2	
	D	3	0	1	0	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	585	609
	B	17	18
	C	495	512
	D	438	444
08:15-08:30	A	699	727
	B	20	22
	C	591	611
	D	523	530
08:30-08:45	A	855	891
	B	24	27
	C	723	748
	D	641	649
08:45-09:00	A	855	891
	B	24	27
	C	723	748
	D	641	649
09:00-09:15	A	699	727
	B	20	22
	C	591	611
	D	523	530
09:15-09:30	A	585	609
	B	17	18
	C	495	512
	D	438	444

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.55	5.05	1.2	A
B	0.03	4.61	0.0	A
C	0.48	4.58	0.9	A
D	0.42	4.02	0.7	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	585	443	1705	0.343	583	0.5	3.203	A
B	17	901	1049	0.016	16	0.0	3.486	A
C	495	78	1532	0.323	493	0.5	3.458	A
D	438	347	1644	0.267	437	0.4	2.978	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	699	530	1647	0.424	698	0.7	3.787	A
B	20	1078	946	0.021	20	0.0	3.886	A
C	591	93	1523	0.388	590	0.6	3.857	A
D	523	416	1598	0.327	523	0.5	3.346	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	855	649	1569	0.545	854	1.2	5.022	A
B	24	1320	806	0.030	24	0.0	4.606	A
C	723	114	1510	0.479	722	0.9	4.564	A
D	641	509	1536	0.417	640	0.7	4.013	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	855	650	1568	0.546	855	1.2	5.052	A
B	24	1322	804	0.030	24	0.0	4.614	A
C	723	115	1510	0.479	723	0.9	4.577	A
D	641	510	1536	0.417	641	0.7	4.023	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	699	531	1646	0.424	700	0.7	3.811	A
B	20	1082	944	0.021	20	0.0	3.897	A
C	591	94	1522	0.388	592	0.6	3.872	A
D	523	417	1597	0.328	524	0.5	3.356	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	585	445	1704	0.343	586	0.5	3.221	A
B	17	905	1046	0.016	17	0.0	3.497	A
C	495	78	1532	0.323	495	0.5	3.476	A
D	438	349	1642	0.267	439	0.4	2.993	A

2027 Background + Committed Dev + Phase 2 Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southam Rd A423 (N)/ Noral Way/ Southam Rd A423 (S)/ Dukes Meadow Dr	Standard Roundabout		A, B, C, D	10.36	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 Background + Committed Dev + Phase 2 Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	482	100.000
B		✓	153	100.000
C		✓	1180	100.000
D		✓	278	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	4	386	92
	B	36	0	97	20	
	C	681	3	0	496	
	D	67	5	206	0	

Vehicle Mix

Heavy Vehicle Percentages

	To					
		A	B	C	D	
From	A	0	50	3	0	
	B	0	0	2	0	
	C	2	0	0	0	
	D	0	0	1	0	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	363	373
	B	115	117
	C	888	899
	D	209	211
17:00-17:15	A	433	446
	B	138	139
	C	1061	1073
	D	250	252
17:15-17:30	A	531	546
	B	168	171
	C	1299	1314
	D	306	308
17:30-17:45	A	531	546
	B	168	171
	C	1299	1314
	D	306	308
17:45-18:00	A	433	446
	B	138	139
	C	1061	1073
	D	250	252
18:00-18:15	A	363	373
	B	115	117
	C	888	899
	D	209	211

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.28	2.70	0.4	A
B	0.13	3.31	0.2	A
C	0.86	16.08	5.6	C
D	0.22	3.40	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	363	161	1916	0.189	362	0.2	2.315	A
B	115	514	1406	0.082	115	0.1	2.789	A
C	888	111	1550	0.573	883	1.3	5.357	A
D	209	539	1531	0.137	209	0.2	2.720	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	192	1895	0.229	433	0.3	2.462	A
B	138	615	1342	0.103	137	0.1	2.988	A
C	1061	133	1537	0.690	1057	2.2	7.451	A
D	250	645	1461	0.171	250	0.2	2.970	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	531	235	1866	0.284	530	0.4	2.695	A
B	168	752	1254	0.134	168	0.2	3.314	A
C	1299	163	1519	0.855	1287	5.3	14.726	B
D	306	785	1370	0.223	306	0.3	3.383	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	531	236	1866	0.284	531	0.4	2.695	A
B	168	753	1254	0.134	168	0.2	3.315	A
C	1299	163	1519	0.855	1298	5.6	16.083	C
D	306	792	1365	0.224	306	0.3	3.397	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	193	1895	0.229	434	0.3	2.464	A
B	138	616	1341	0.103	138	0.1	2.993	A
C	1061	133	1537	0.690	1074	2.3	7.986	A
D	250	655	1455	0.172	250	0.2	2.987	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	363	161	1916	0.189	363	0.2	2.320	A
B	115	515	1405	0.082	115	0.1	2.792	A
C	888	112	1550	0.573	892	1.4	5.505	A
D	209	544	1528	0.137	209	0.2	2.730	A

Appendix P
ARCADY Output- Junction 2



Junction Turning Flows J2: Dukes Meadow Drive / B4100 (S) / Walker Road / B4100 (N)

Survey Date: 14th June 2022

Link

Arm A - Dukes Meadow Dr

Arm B - B4100 Warwick Road (S)

Arm C - Walker Rd

Arm D - B4100 Warwick Road (N)

AM Peak 08:00 - 09:00

PM Peak 17:00 - 18:00



AM Background 2022					
	A	B	C	D	Total
A	1	208	18	88	315
B	158	2	31	200	391
C	31	34	0	26	91
D	99	179	16	1	295
Total	290	423	65	315	

PM Background 2022					
	A	B	C	D	Total
A	0	213	45	102	360
B	155	0	70	218	443
C	34	55	0	40	129
D	51	202	36	0	289
Total	240	470	151	360	

HGV %					
	A	B	C	D	Total
A	0	0.024631	0	0.035714	
B	0.025974	0	0	0.020305	
C	0	0.030303	#DIV/0!	0	
D	0.020408	0.005618	0	0	
Total	0%	0%	0%	0%	

HGV %					
	A	B	C	D	Total
A	#DIV/0!	0.00	0.00	0.01	
B	0.03	0.00	0.00	0.00	
C	0.00	0.00	#DIV/0!	0.00	
D	0.02	0.01	0.00	#DIV/0!	
Total	0%	0%	0%	0%	

AM Background 2027					
	A	B	C	D	Total
A	1	222	20	94	336
B	169	2	33	213	418
C	33	36	0	28	97
D	106	191	17	1	315
Total	309	451	70	336	

1.0675

AM Committed Development (Phase 1)					
	A	B	C	D	Total
A	0	0	0	12	12
B	0	0	0	0	0
C	0	0	0	0	0
D	3	0	0	0	3
Total	3	0	0	12	

1.072

AM Background + Committed Dev					
	A	B	C	D	Total
A	1	222	20	106	348
B	169	2	33	213	418
C	33	36	0	28	97
D	109	191	17	1	318
Total	312	451	70	348	

PM Committed Development (Phase 1)

	A	B	C	D	Total
A	0	0	0	4	4
B	0	0	0	0	0
C	0	0	0	0	0
D	9	0	0	0	9
Total	9	0	0	4	

PM Background + Committed Dev

	A	B	C	D	Total
A	0	228	48	113	390
B	166	0	75	234	475
C	37	59	0	43	139
D	64	217	39	0	319
Total	267	504	162	390	

PM Development (Phase 2)

	A	B	C	D	Total
A	0	0	0	39	39
B	0	0	0	0	0
C	0	0	0	37	37
D	16	0	16	0	32
Total	16	0	16	76	

PM Back + Comm Dev + Dev (Phase 2)

	A	B	C	D	Total
A	0	228	48	152	428
B	166	0	75	234	475
C	37	59	0	80	176
D	80	217	54	0	351
Total	283	504	178	465	

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.0.6896 © Copyright TRL Limited, 2018	
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Filename: 802-Junction 2.j9

Path: C:\Users\Administrator\MAC\Projects 800 - 899 - Documents\802 - Banbury Ph2\Design\TA

Report generation date: 26/07/2022 10:05:04

- »Background 2022, AM
- »Background 2022, PM
- »2027 Background + Committed Dev, AM
- »2027 Background + Committed Dev, PM
- »2027 Background + Committed Dev + Phase 2 Dev, AM
- »2027 Background + Committed Dev + Phase 2 Dev, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
Background 2022						
Arm A	0.4	3.74	0.27	0.4	3.99	0.31
Arm B	0.4	3.63	0.30	0.5	3.97	0.35
Arm C	0.1	3.45	0.09	0.1	3.59	0.12
Arm D	0.4	3.98	0.26	0.4	4.00	0.26
2027 Background + Committed Dev						
Arm A	0.4	3.94	0.30	0.5	4.21	0.33
Arm B	0.5	3.79	0.33	0.6	4.18	0.38
Arm C	0.1	3.56	0.10	0.2	3.73	0.14
Arm D	0.4	4.14	0.29	0.4	4.22	0.29
2027 Background + Committed Dev + Phase 2 Dev						
Arm A	0.5	4.16	0.33	0.6	4.49	0.37
Arm B	0.5	3.87	0.33	0.6	4.36	0.39
Arm C	0.1	3.61	0.10	0.2	4.00	0.18
Arm D	0.4	4.19	0.29	0.5	4.39	0.32

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

File summary

File Description

Title	
Location	
Site number	
Date	13/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MAC-13096B\Administrator
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Background 2022	AM	ONE HOUR	08:00	09:30	15
D2	Background 2022	PM	ONE HOUR	16:45	18:15	15
D3	2027 Background + Committed Dev	AM	ONE HOUR	08:00	09:30	15
D4	2027 Background + Committed Dev	PM	ONE HOUR	16:45	18:15	15
D5	2027 Background + Committed Dev + Phase 2 Dev	AM	ONE HOUR	08:00	09:30	15
D6	2027 Background + Committed Dev + Phase 2 Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Background 2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2	Dukes Meadow/ Warwick Rd/ Walker Rd/ Warwick Rd	Standard Roundabout		A, B, C, D	3.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Dukes Meadow Dr	
B	Warwick Rd (S)	
C	Walker Rd	
D	Warwick Rd (N)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	3.20	6.31	10.8	58.1	41.6	31.9	
B	3.34	6.67	13.6	14.3	41.6	32.2	
C	3.67	5.84	6.7	19.9	41.6	24.6	
D	3.20	6.32	7.5	21.3	41.6	28.1	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.606	1498
B	0.597	1535
C	0.596	1460
D	0.579	1389

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Background 2022	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	315	100.000
B		✓	391	100.000
C		✓	91	100.000
D		✓	295	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		A	B	C	D
	A	1	208	18	88
B	158	2	31	200	
C	31	34	0	26	
D	99	179	16	1	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A	B	C	D
	A	0	2	0	4
B	3	0	0	2	
C	0	3	0	0	
D	2	1	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.27	3.74	0.4	A
B	0.30	3.63	0.4	A
C	0.09	3.45	0.1	A
D	0.26	3.98	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	237	174	1356	0.175	236	0.2	3.213	A
B	294	93	1448	0.203	293	0.3	3.114	A
C	69	338	1240	0.055	68	0.1	3.072	A
D	222	170	1276	0.174	221	0.2	3.410	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	283	208	1336	0.212	283	0.3	3.418	A
B	352	111	1437	0.245	351	0.3	3.315	A
C	82	404	1200	0.068	82	0.1	3.219	A
D	265	203	1256	0.211	265	0.3	3.632	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	347	255	1308	0.265	346	0.4	3.744	A
B	430	136	1422	0.303	430	0.4	3.627	A
C	100	495	1145	0.088	100	0.1	3.444	A
D	325	249	1229	0.264	324	0.4	3.976	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	347	255	1308	0.265	347	0.4	3.744	A
B	430	137	1422	0.303	430	0.4	3.630	A
C	100	495	1145	0.088	100	0.1	3.445	A
D	325	249	1229	0.264	325	0.4	3.980	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	283	209	1336	0.212	284	0.3	3.424	A
B	352	112	1437	0.245	352	0.3	3.321	A
C	82	405	1199	0.068	82	0.1	3.221	A
D	265	203	1256	0.211	266	0.3	3.638	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	237	175	1356	0.175	237	0.2	3.218	A
B	294	93	1448	0.203	295	0.3	3.124	A
C	69	339	1239	0.055	69	0.1	3.077	A
D	222	170	1275	0.174	222	0.2	3.418	A

Background 2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2	Dukes Meadow/ Warwick Rd/ Walker Rd/ Warwick Rd	Standard Roundabout		A, B, C, D	3.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Background 2022	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	360	100.000
B		✓	443	100.000
C		✓	129	100.000
D		✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	213	45	102
	B	155	0	70	218	
	C	34	55	0	40	
	D	51	202	36	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	0	0	1
	B	3	0	0	0	
	C	0	0	0	0	
	D	2	1	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.31	3.99	0.4	A
B	0.35	3.97	0.5	A
C	0.12	3.59	0.1	A
D	0.26	4.00	0.4	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	271	220	1361	0.199	270	0.2	3.298	A
B	334	137	1433	0.233	332	0.3	3.268	A
C	97	356	1245	0.078	97	0.1	3.136	A
D	218	183	1268	0.172	217	0.2	3.425	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	324	263	1334	0.243	323	0.3	3.561	A
B	398	164	1417	0.281	398	0.4	3.533	A
C	116	427	1202	0.096	116	0.1	3.313	A
D	260	219	1247	0.208	260	0.3	3.647	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	396	322	1298	0.305	396	0.4	3.988	A
B	488	201	1395	0.350	487	0.5	3.962	A
C	142	522	1144	0.124	142	0.1	3.590	A
D	318	268	1218	0.261	318	0.4	3.998	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	396	323	1298	0.305	396	0.4	3.992	A
B	488	201	1395	0.350	488	0.5	3.967	A
C	142	523	1144	0.124	142	0.1	3.592	A
D	318	269	1218	0.261	318	0.4	4.001	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	324	264	1334	0.243	324	0.3	3.568	A
B	398	165	1417	0.281	399	0.4	3.537	A
C	116	428	1202	0.097	116	0.1	3.315	A
D	260	220	1246	0.208	260	0.3	3.653	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	271	221	1360	0.199	271	0.3	3.309	A
B	334	138	1433	0.233	334	0.3	3.276	A
C	97	358	1244	0.078	97	0.1	3.141	A
D	218	184	1267	0.172	218	0.2	3.432	A

2027 Background + Committed Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2	Dukes Meadow/ Warwick Rd/ Walker Rd/ Warwick Rd	Standard Roundabout		A, B, C, D	3.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027 Background + Committed Dev	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	349	100.000
B		✓	417	100.000
C		✓	97	100.000
D		✓	318	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	1	222	20	106
	B	169	2	33	213	
	C	33	36	0	28	
	D	109	191	17	1	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	2	0	4
	B	3	0	0	2	
	C	0	3	0	0	
	D	2	1	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.30	3.94	0.4	A
B	0.33	3.79	0.5	A
C	0.10	3.56	0.1	A
D	0.29	4.14	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	263	185	1349	0.195	262	0.2	3.307	A
B	314	109	1439	0.218	313	0.3	3.195	A
C	73	369	1221	0.060	73	0.1	3.135	A
D	239	181	1269	0.189	238	0.2	3.490	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	314	222	1328	0.236	313	0.3	3.550	A
B	375	130	1426	0.263	375	0.4	3.425	A
C	87	442	1177	0.074	87	0.1	3.302	A
D	286	216	1248	0.229	286	0.3	3.740	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	384	272	1298	0.296	384	0.4	3.936	A
B	459	159	1408	0.326	459	0.5	3.789	A
C	107	541	1117	0.096	107	0.1	3.562	A
D	350	265	1220	0.287	350	0.4	4.137	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	384	272	1298	0.296	384	0.4	3.940	A
B	459	160	1408	0.326	459	0.5	3.793	A
C	107	542	1117	0.096	107	0.1	3.563	A
D	350	265	1219	0.287	350	0.4	4.141	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	314	222	1327	0.236	314	0.3	3.554	A
B	375	131	1425	0.263	375	0.4	3.429	A
C	87	443	1176	0.074	87	0.1	3.307	A
D	286	217	1248	0.229	286	0.3	3.747	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	263	186	1349	0.195	263	0.2	3.315	A
B	314	109	1438	0.218	314	0.3	3.203	A
C	73	371	1220	0.060	73	0.1	3.140	A
D	239	182	1268	0.189	240	0.2	3.499	A

2027 Background + Committed Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2	Dukes Meadow/ Warwick Rd/ Walker Rd/ Warwick Rd	Standard Roundabout		A, B, C, D	4.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 Background + Committed Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	389	100.000
B		✓	475	100.000
C		✓	139	100.000
D		✓	320	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To				
			A	B	C	D
		A	0	228	48	113
B		166	0	75	234	
C		37	59	0	43	
D		64	217	39	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To				
			A	B	C	D
		A	0	0	0	1
B		3	0	0	0	
C		0	0	0	0	
D		2	1	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.33	4.21	0.5	A
B	0.38	4.18	0.6	A
C	0.14	3.73	0.2	A
D	0.29	4.22	0.4	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	293	236	1350	0.217	292	0.3	3.397	A
B	358	150	1425	0.251	356	0.3	3.362	A
C	105	385	1228	0.085	104	0.1	3.205	A
D	241	197	1260	0.191	240	0.2	3.527	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	350	283	1322	0.265	349	0.4	3.701	A
B	427	180	1408	0.303	427	0.4	3.666	A
C	125	461	1182	0.106	125	0.1	3.406	A
D	288	235	1237	0.233	287	0.3	3.791	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	428	346	1283	0.334	428	0.5	4.204	A
B	523	220	1384	0.378	522	0.6	4.174	A
C	153	564	1119	0.137	153	0.2	3.725	A
D	352	288	1206	0.292	352	0.4	4.213	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	428	347	1283	0.334	428	0.5	4.210	A
B	523	220	1384	0.378	523	0.6	4.181	A
C	153	565	1119	0.137	153	0.2	3.727	A
D	352	288	1206	0.292	352	0.4	4.217	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	350	284	1322	0.265	350	0.4	3.707	A
B	427	180	1408	0.303	428	0.4	3.675	A
C	125	462	1181	0.106	125	0.1	3.409	A
D	288	236	1237	0.233	288	0.3	3.796	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	293	237	1350	0.217	293	0.3	3.410	A
B	358	151	1425	0.251	358	0.3	3.377	A
C	105	387	1226	0.085	105	0.1	3.211	A
D	241	197	1259	0.191	241	0.2	3.536	A

2027 Background + Committed Dev + Phase 2 Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2	Dukes Meadow/ Warwick Rd/ Walker Rd/ Warwick Rd	Standard Roundabout		A, B, C, D	4.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2027 Background + Committed Dev + Phase 2 Dev	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	393	100.000
B		✓	425	100.000
C		✓	98	100.000
D		✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A	B	C	D
From	A	1	252	22	118
	B	177	2	33	213
	C	34	36	0	28
	D	112	191	17	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	2	0	4
	B	3	0	0	2
	C	0	3	0	0
	D	2	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.33	4.16	0.5	A
B	0.33	3.87	0.5	A
C	0.10	3.61	0.1	A
D	0.29	4.19	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	296	185	1349	0.219	295	0.3	3.411	A
B	320	119	1432	0.223	319	0.3	3.231	A
C	74	384	1212	0.061	74	0.1	3.161	A
D	242	188	1265	0.191	241	0.2	3.511	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	353	222	1328	0.266	353	0.4	3.694	A
B	382	143	1418	0.269	382	0.4	3.474	A
C	88	460	1166	0.076	88	0.1	3.338	A
D	289	225	1243	0.232	288	0.3	3.770	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	272	1298	0.333	432	0.5	4.155	A
B	468	175	1399	0.335	467	0.5	3.864	A
C	108	563	1104	0.098	108	0.1	3.613	A
D	353	275	1214	0.291	353	0.4	4.181	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	272	1298	0.333	433	0.5	4.161	A
B	468	175	1399	0.335	468	0.5	3.868	A
C	108	564	1103	0.098	108	0.1	3.615	A
D	353	275	1213	0.291	353	0.4	4.185	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	353	222	1327	0.266	354	0.4	3.702	A
B	382	143	1418	0.270	383	0.4	3.478	A
C	88	461	1166	0.076	88	0.1	3.340	A
D	289	225	1243	0.232	289	0.3	3.777	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	296	186	1349	0.219	296	0.3	3.420	A
B	320	120	1432	0.223	320	0.3	3.239	A
C	74	386	1211	0.061	74	0.1	3.167	A
D	242	188	1264	0.191	242	0.2	3.521	A

2027 Background + Committed Dev + Phase 2 Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2	Dukes Meadow/ Warwick Rd/ Walker Rd/ Warwick Rd	Standard Roundabout		A, B, C, D	4.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 Background + Committed Dev + Phase 2 Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	428	100.000
B		✓	475	100.000
C		✓	176	100.000
D		✓	351	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
	A		B	C	D
	A	0	228	48	152
B	166	0	75	234	
C	37	59	0	80	
D	80	217	54	0	

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	0	0	1
	B	3	0	0	0
	C	0	0	0	0
	D	2	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A	0.37	4.49	0.6	A
B	0.39	4.36	0.6	A
C	0.18	4.00	0.2	A
D	0.32	4.39	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	322	247	1343	0.240	321	0.3	3.518	A
B	358	190	1401	0.255	356	0.3	3.439	A
C	133	414	1210	0.110	132	0.1	3.337	A
D	264	197	1260	0.210	263	0.3	3.610	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	385	296	1313	0.293	384	0.4	3.874	A
B	427	228	1379	0.310	427	0.4	3.777	A
C	158	496	1161	0.136	158	0.2	3.590	A
D	316	235	1237	0.255	315	0.3	3.905	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	471	363	1273	0.370	471	0.6	4.484	A
B	523	279	1349	0.388	522	0.6	4.351	A
C	194	607	1093	0.177	194	0.2	4.000	A
D	386	288	1206	0.320	386	0.5	4.386	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	471	363	1272	0.370	471	0.6	4.492	A
B	523	280	1349	0.388	523	0.6	4.359	A
C	194	608	1093	0.177	194	0.2	4.003	A
D	386	288	1206	0.320	386	0.5	4.393	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	385	297	1313	0.293	385	0.4	3.886	A
B	427	229	1379	0.310	428	0.5	3.787	A
C	158	497	1160	0.136	158	0.2	3.595	A
D	316	236	1237	0.255	316	0.3	3.914	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	322	249	1342	0.240	323	0.3	3.534	A
B	358	191	1401	0.255	358	0.3	3.455	A
C	133	416	1209	0.110	133	0.1	3.347	A
D	264	197	1259	0.210	265	0.3	3.620	A