Preliminary Transport Assessment

Land at Keeley Lane, Wootton,

Borough of Bedford, Bedfordshire

Jubb

PREPARED BY:	FOR:	DATE:	REFERENCE:
Jubb Consulting Engineers Ltd.	Rainier Developments Ltd.	August 2020	19162-PTR-01 v3

Contents

1 Project Information

1.1 Project Information

Client	Rainier Developments Ltd.

1.2 Project Details

Project Name	Land at Keeley Lane, Wootton
Location	Borough of Bedford, Bedfordshire
Jubb Project Number	19162

1.3 Report Details

Version	V3
Status	Issue
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1.4 Project Authorisation

ISSUE HISTORY:

Version	Date	Detail
1	06/03/2019	First Draft
2	29/03/2019	Second Draft
3	12/08/2020	Issue

AUTHORISATION:

Prepared By	Approved By
[redacted]	

2 Introduction

2.1 Preamble

2.1.1 Jubb have been commissioned by Rainier Developments Ltd to provide transport and highways advice in support of a potential residential development on land at Keeley Lane, Wootton, Bedfordshire.

2.1.2 The proposed site lies on the northern fringe of the village of Wootton, which itself is located south west of the town of Bedford. Proposals for the land would see the development of 50 dwellings.

2.1.3 This Preliminary Transport Assessment (PTA) provides an overview of pertinent transport and highways matters related to the proposed site for residential development, the scope of which is outlined in the following section.

2.2 Scope of Report

2.2.1 The scope of this PTA is as follows:

Section 3 Outlines the location of the proposed site, proposals for residential development, and pertinent planning context;

Section 4 Sets out the strategy for vehicular, pedestrian and cyclist access into the proposed site and demonstrates how this meets with current guidance;

Section 5 Examines the accessibility of the proposed site, and provides a high-level review of local facilities and accessibility to these as well as a review of sustainable transport opportunities;

Section 6 Sets out the precited trip rates and the resulting trip generation due to the site and sets out the impact this will have on the Local Highway network.

Section 7 Presents the summary and conclusion of the PTA.

3 Site Location and Development Proposals

3.1 Site Location

3.1.1 Wootton is a large village with a population of around 4,100 which is located in the Borough of Bedford (Bedford Borough Council being the local unitary authority) and in the ceremonial county of Bedfordshire. Wootton lies in the south of the Borough of Bedford where it borders the neighbouring authority area of Central Bedfordshire.

3.1.2 Wootton is located approximately 6km south west of the centre of Bedford, 17km north east of Milton Keynes and 25km north of the towns of Luton & Dunstable.

3.1.3 The proposed site is located approximately 850m to the north (as the crow flies) of the centre of Wootton and immediately south of Keeley Lane.

3.1.4 The location of the site is shown in **Figure 3.1** below.

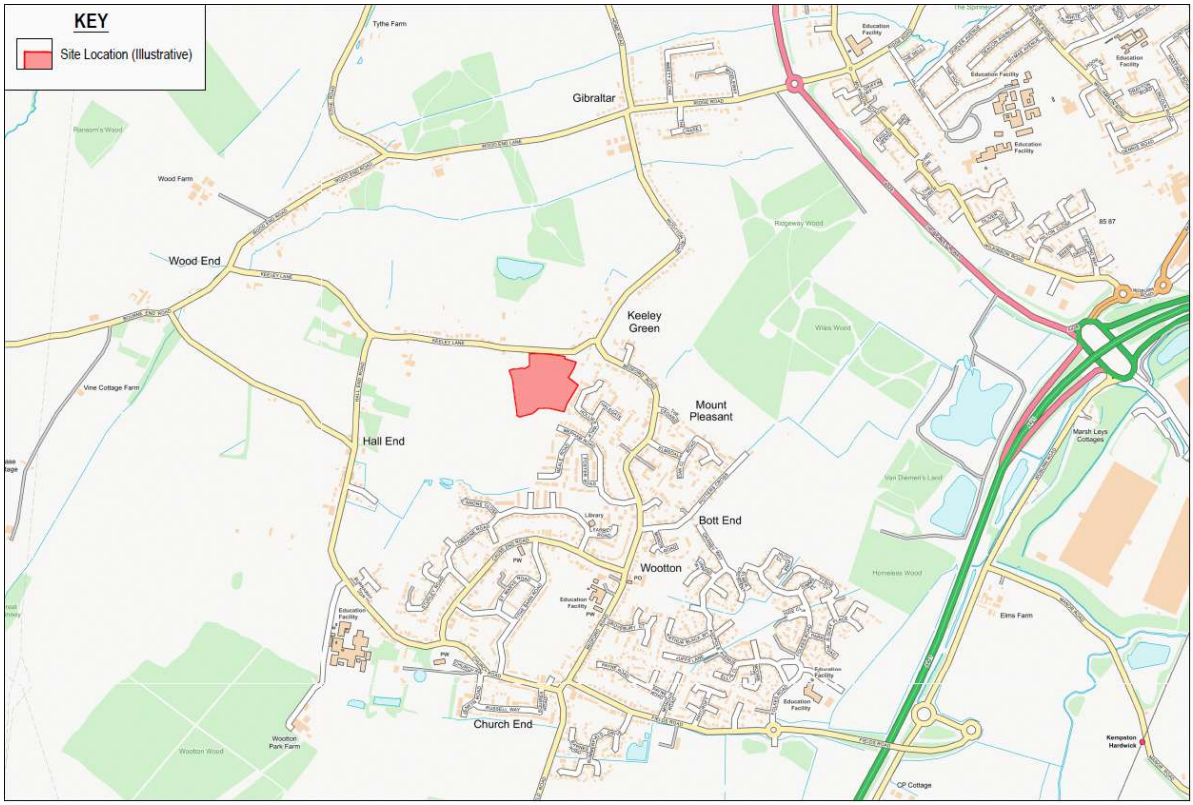

Figure 3.1 – Site Location (Illustrative)

3.1.5 The proposed site is bounded by Keeley Lane to the north, by existing buildings and residential properties to the east, by open agricultural fields to the south and west and a neighbouring residential property to the west.

3.2 Development Proposals

3.2.1 While development proposals are currently at an early stage, it is assumed that the proposed site would deliver a residential development of 50 dwellings.

3.2.2 An illustrative snapshot of the development layout is shown below in **Figure 3.2**. A fully scaled masterplan is attached at **Appendix A.**

Figure 3.2 – Development Layout (Illustrative)

3.3 Planning Context

3.3.1 Wootton is identified in the Bedford 2030 Local Plan as a Key Rural Service Centre due to the good range of services and regular public transport connections to larger settlements.

3.3.2 As a result, Wootton has already been identified as a Village which is capable of further expansion and indeed some local housing developments are already in development.

4 Access Strategy

4.1 Existing Situation

4.1.1 As set out earlier, the site is bounded to the north by the Keeley Lane and is the site's sole frontage that is contiguous with the adopted public highway.

4.1.2 Keeley Lane is a single carriageway street of 5.3m width with a continuous footway abutting the northern side of the carriageway. Keeley Lane is street lit along its length and traffic travelling along it is subject to a 30mph speed limit.

4.1.3 Several existing residential properties front the road along its length with almost all of these benefiting from direct frontage access.

4.1.4 Currently, vehicular access to the site is afforded directly off Keeley Lane in the form of a simple gated field access – the location of which is shown in **Figure 4.1** below.

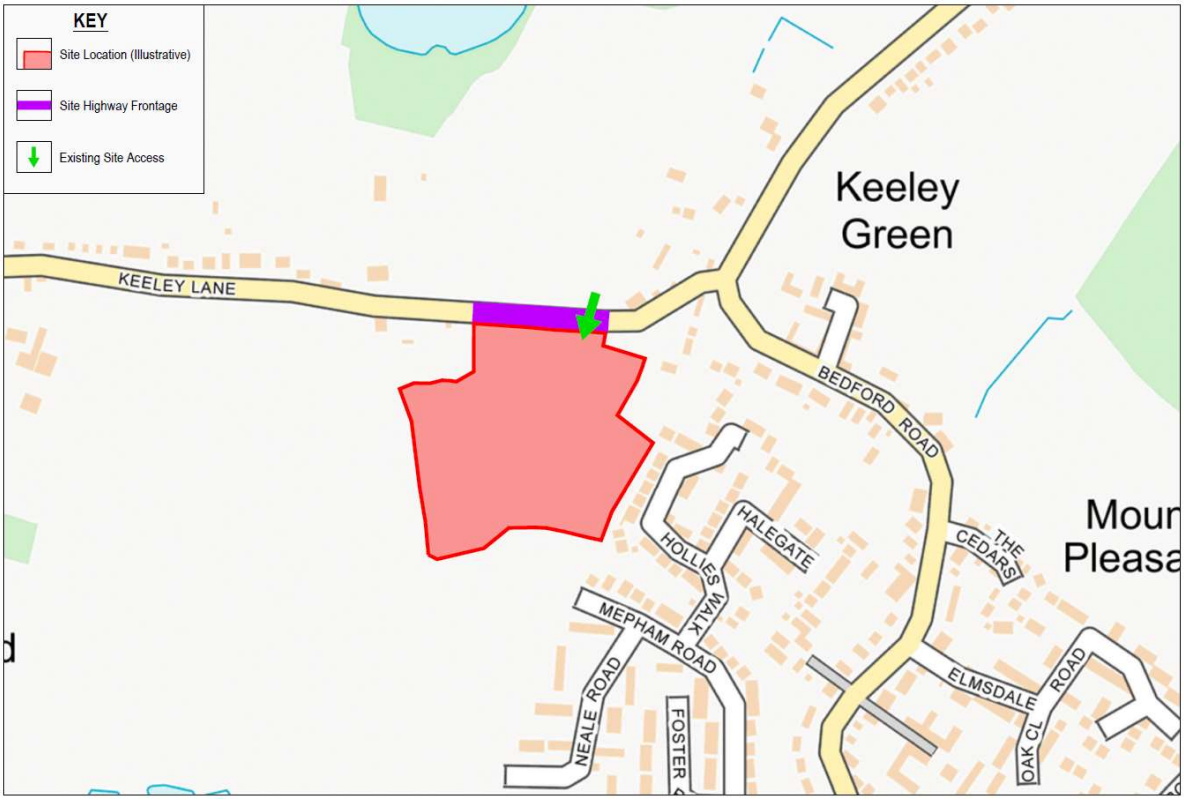

Figure 4.1 – Abutting Highway and Position of Existing Vehicular Access

4.1.5 As set out above, Keeley Lane already provides direct access to residential dwellings along its length, it is suitably wide to carry residential development traffic, benefits from footway provision and with traffic subject to a 30mph speed limit, it is clear that such a street, which has a greater 'place' function rather than a 'movement' function is suitable for access to residential uses.

4.1.6 Hence, access to the proposed development site is proposed to be taken off Keeley Lane, however, the existing access point, which takes the form of a gated field access, is not suitable for the intensification of use that would result from residential development on the land.

4.2 Proposed Access

4.2.1 A new access from Keeley Lane taking the form of a priority 'give-way' junction, is therefore proposed. The new access is located equidistant between the car park access to The Legstraps Public House and the boundary of the neighbouring property to the west. The proposed access to serve the site is shown in **Figure 4.2** (Overview) and **Figure 4.3** (Detail) below and at **Appendix B.**

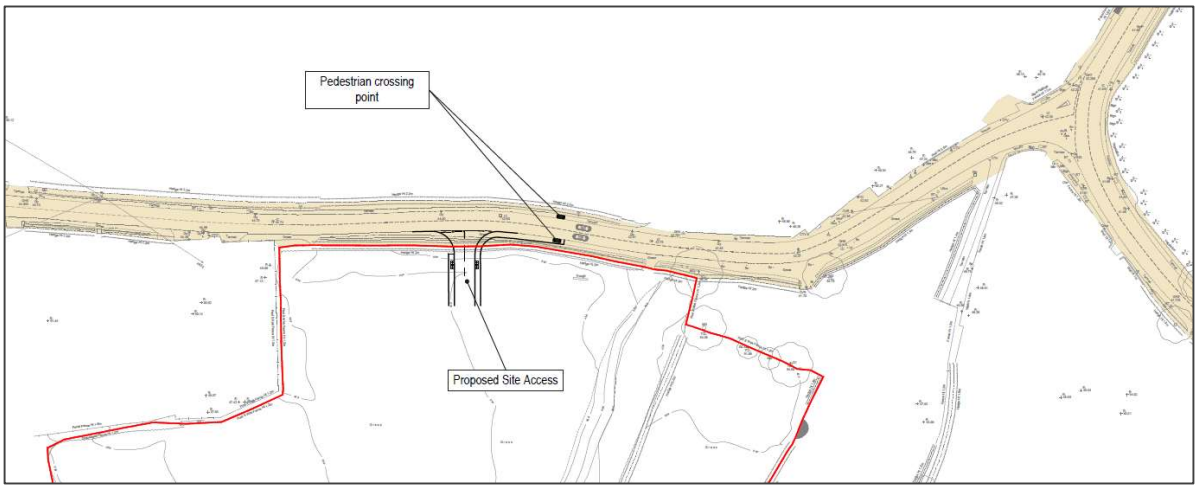

Figure 4.2 – Proposed Site Access (Overview)

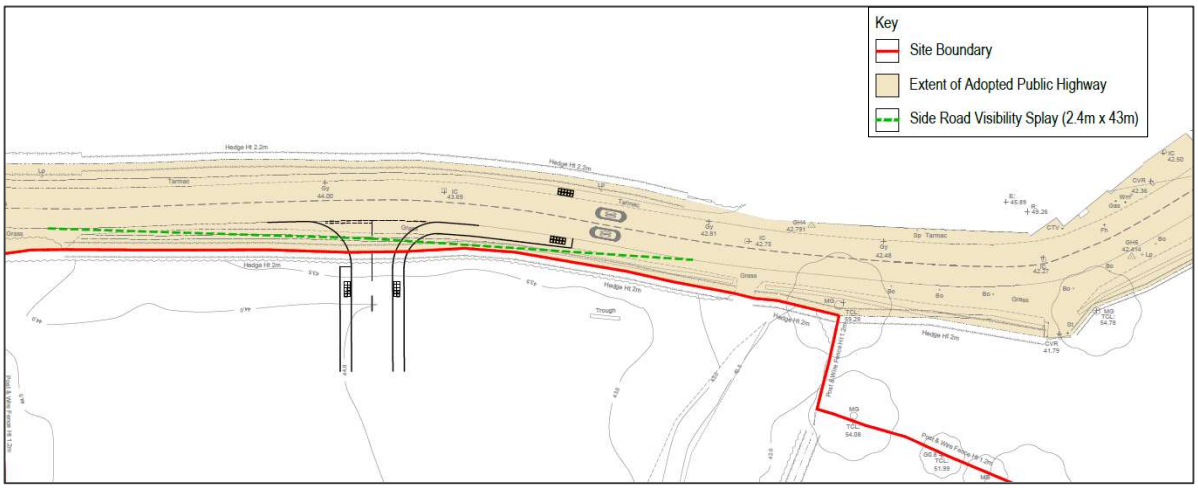

Figure 4.3 – Proposed Site Access (Detail)

4.2.2 The new access road would be provided with a carriageway width of 5.5m and 6.0m radius kerbs at the bell mouth which are suitable dimensions for the types of vehicles that would regularly require access to residential development (i.e. cars, refuse and emergency vehicles).

4.2.3 Visibility splays of 2.4m x 43m are achievable in both directions from the proposed site access junction; this is appropriate for the posted 30mph speed limit and is in line with Manual for Streets standards.

4.3 Pedestrian and Cyclist Access Strategy

4.3.1 As set out previously a continuous footway runs along the northern side of Keeley Lane. In addition, and as will be explored later in this report, part of the local Public Right of Way (PRoW) network crosses the site and links into the wider PRoW network.

4.3.2 The existing footway on Keeley Lane provides links to the existing residential dwellings found to the west of the site, while to the east it links into the footways on Wootton Road/Bedford Road which provide links to the centre of Wootton to the south and to the Kempston area of Bedford to the north.

4.3.3 However, while there is footway provision on the north side of Keeley Lane there is currently no such provision on the southern side of the road adjacent the site.

4.3.4 Therefore, a new section of footway on the southern side of Keeley Lane is proposed to provide pedestrian access to site via the proposed vehicular access on Keeley Lane. Footways would run adjacent the new access road through the site and would emerge onto the southern side of Keeley Lane at the site access.

4.3.5 Set equidistant between the site vehicular access and The Legstraps Public House Car Park a new uncontrolled pedestrian crossing point would be provided thus enabling pedestrians to cross between the site and the existing.

4.3.6 Through the provision of the new uncontrolled pedestrian crossing point, a connection into the existing footway network from the site access point would provide for journeys to local services and facilities located in the vicinity, in the centre of Wootton to the south and Bedford to the north.

4.3.7 The above proposed provision is shown in **Figures 4.2** and **4.3** on the previous page and are extracted from the main site access drawing provided at **Appendix B.**

4.3.8 In addition to the footway connection to Keeley Lane, the local Public Right of Way (PRoW) network crosses the site and a connection into this network could be delivered to support the site. As will be shown in the following section, access to the central area in Wootton is possible using the PRoW network.

4.3.9 Considering access for cyclists, National Route 51 directly passes the site to the north along Keeley Lane. The details of NR51 will be covered in later sections of this Report, however this section of NR51 is part an 'on-road' route which runs from Marston Mortaine to the south and the Kempston area of Bedford to the north.

4.3.10 Hence, in the local rural context, cycle access to the site would be taken from the 'on-road' route of NR51 and via the proposed vehicular site access.

4.4 Internal Road Layout

4.4.1 The internal road network would be designed in line with Manual for Streets guidance and would respond to the likely volume and nature of trips as well as the overall low number of dwellings accessed, the internal road would likely be subject to a 20mph speed limit.

4.4.2 Suitable cycle parking provision will be included within the proposed development, to encourage travel by this means.

4.4.3 To aid the creation of a sustainable development, proposals will be sensitively designed to create a high-quality layout and environment to maximise transport sustainability and integration.

5 Site Accessibility

5.1 Pedestrian Accessibility and Facilities

5.1.1 This section sets out the location of the proposed site in relation to a range of local facilities and services.

5.1.2 Walking is a major mode of travel for local journeys and is recognised as the most sustainable form of travel (IHT, 2000). As such, walking is an important component of sustainable growth.

5.1.3 As set out earlier, the village of Wootton is identified in the Local Plan as a Key Rural Service Centre due to the presence of a number of key day-to-day services and local facilities which are within the settlement; in addition, there are also public transport links to Bedford and Milton Keynes.

5.1.4 The proposed site is connected to these offerings by way of an extensive, continuous network of footways that permeate through the surrounding area. Generally, these footways are of reasonable quality, are equipped with streetlights and provide crossing facilities (through a combination of both controlled and uncontrolled crossing facilities).

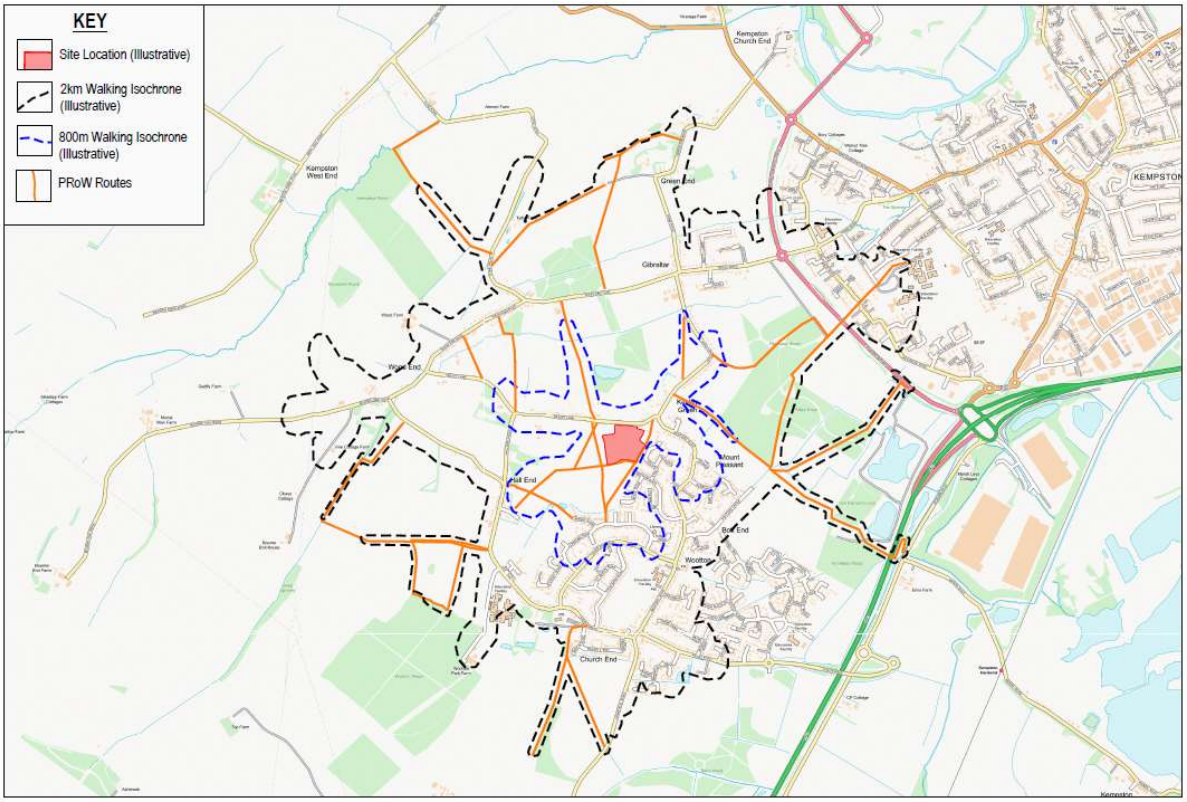

Figure 5.1 – Accessibility to local facilities and services

5.1.5 Manual for Streets guidance notes that "walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot".

5.1.6 Guidance from the Institution of Highways and Transportation (IHT, 2000) suggests that 2000m (which is roughly equivalent to a 25-minute walk) is the preferred maximum walking distance, for pedestrians without a mobility impairment, to common facilities, in a range of situations and purposes.

5.1.7 **Figure 5.1** on the previous page sets out walking isochrones (as measured from the centre of the proposed site) that demonstrate the area that can be reached within an 800m and 2000m walk from the site location. Also included in **Figure 5.1** are the Public Right of Way's (PRoW) which lie within the 2.0km isochrone.

5.1.8 As shown, a large proportion of Wootton is located within a 2km walking distance. Resultantly, several offerings that serve day-to-day needs can be accessed from the proposed site on foot, and therefore there will not be a need to depend on the use of the private car for day-to-day trips to these destinations.

5.1.9 **Table 5.1** below presents some of the facilities which are reachable from the site location by foot. To provide a robust assessment these measurements are based solely on accessibility via the footway network as this can be, in some cases, less direct.

Service/Facility	Location		Distance (metres)	(minutes)
Community				
Wootton Post Office	Bedford Road	MK43 9JT	1190	14
Wootton Library	Lorraine Road	MK43 9LH	1380	16
Education				
Wootton Upper School	Hall End Road	MK43 9HT	1590	19
Wootton Lower School	Bedford Road	MK43 9JT	1260	15
St Marys Playgroup	St Marys Road	MK43 9DE	1920	22
Place of Worship				
Wootton Methodist Church	Cause End Road	MK43 9DE	1240	14
Public House				
The Legstraps	Keeley Lane	MK43 9HR	230	2
Recreation				
Wootton Football Club	Bedford Rd	MK43 9JT	1240	15
Retail				
One Stop Convenience Store	Cause End Road	MK43 9DA	1240	15
Health				
Wootton Pharmacy	Tithe Barn Road	MK43 9EZ	1590	19
Wootton Vale Health Living Centre	Fields Road	MK43 9JJ	1920	22

Table 5.1 – Summary of facilities within a 2km walking distance

5.1.10 All the above listed facilities are located within 2km distance including Community, Education, Place of Worship, Recreation and Health services. It should be recalled that these measurements are taken via the footway network – if the PRoW network were also taken into consideration then accessibility may improve for certain facilities, especially those in the centre of Wootton.

5.1.11 Thus, it should be considered that the proposed site is located within a reasonable walking distance of a range of local facilities and services, that serve day-to-day needs, in line with Manual for Streets and IHT guidance.

Public Rights of Way

5.1.12 Further to the extensive network of footways that permeate through the area surrounding the proposed site, there are a number of Public Rights of Ways (PRoW) which route around the proposed site and provide routes to neighbouring settlements.

5.1.13 **Figure 5.2** below provides an extract of the PRoW's surrounding the site from Bedford Borough Council. As shown below, the site is enclosed by PRoWs to the south, west and east and do not permeate through the site.

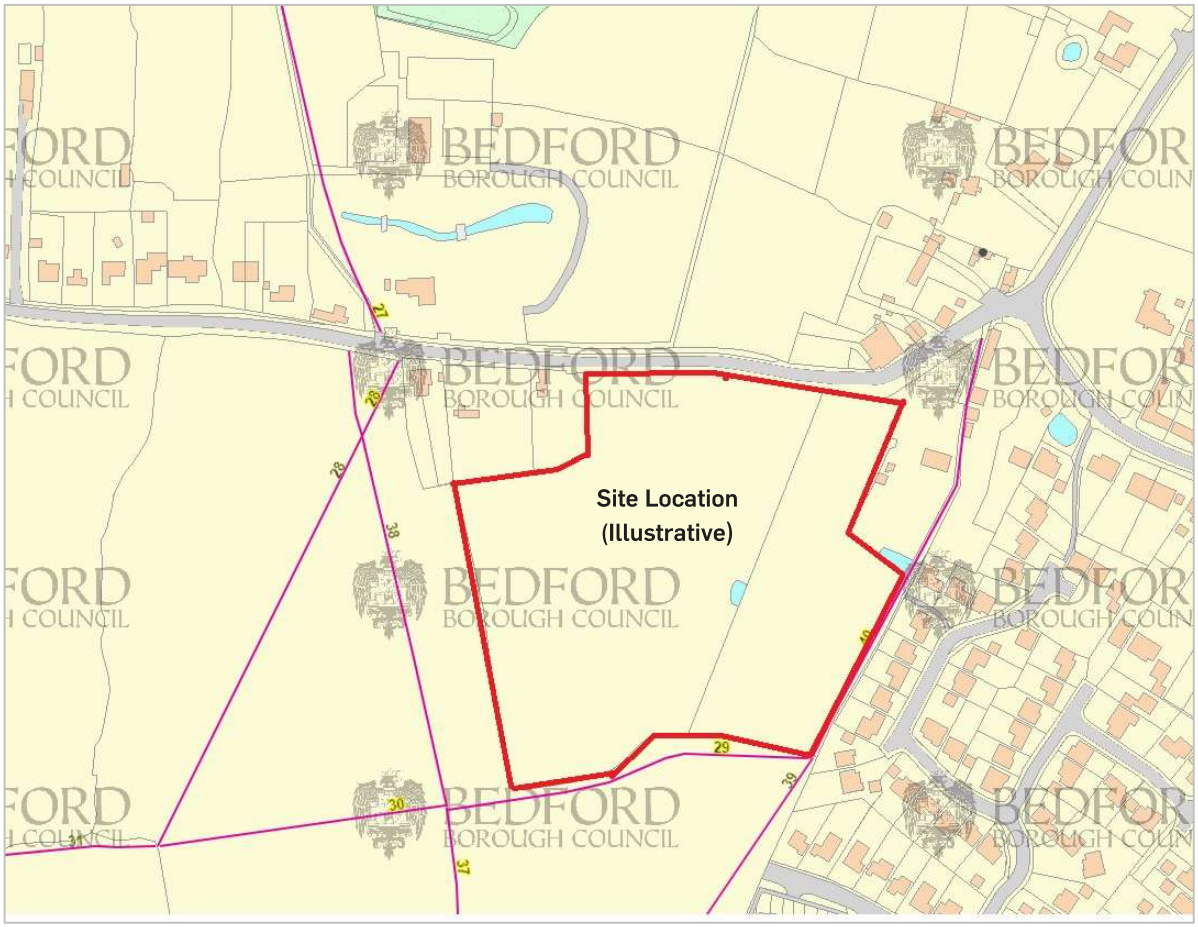

Figure 5.2 – Public Rights of Way around the Site Location
(Source: extracted from Bedford Borough Council's Public Rights of Way Map
http://bedford-borough.maps.arcgis.com)

5.1.14 Furthermore, there is a vast network of PRoW's filtering throughout the wider area of Wootton. These tie into existing routes and provide connections from Wootton towards Cranfield in the south, Kempston in the north and Stewartby towards the east.

5.1.15 **Figure 5.3** on the following page provides an extract from Bedford Borough Council of the wider PRoW network within Wootton.

Figure 5.3 – Public Rights of Way
(Source: extracted from Bedford Borough Council's Public Rights of Way Map http://bedford-borough.maps.arcgis.com)

Summary

5.1.16 As set out, an extensive continuous, street-lit network of footways are found in the area surrounding the proposed site. This footway network is complemented by a wider network of PRoW; combined these networks provide pedestrian links between the proposed site and important local destinations.

5.1.17 Therefore, it has been demonstrated that the proposed site is positioned in a sustainable location, with access to a range of facilities and services within walking distance and as such there will not be a need to rely on the use of the private car for daily trips.

5.2 Cyclist Accessibility

5.2.1 Cycling is recognised as one of the most sustainable modes of transport (as per CIHT's *Planning for Cycling*, 2015) and as such should be encouraged in new developments.

5.2.2 Generally, considering the relatively compact nature of Wootton it is considered that cycling represents a realistic alternative to the private car for local trips from the proposed development.

5.2.3 The proposed site is positioned to connect into the NR51 On-road which forms part of the National Cycle Network. **Figure 5.4** below shows the existing cycle route that runs past the site and towards nearby settlements, as per mapping extracted from the Sustrans website.

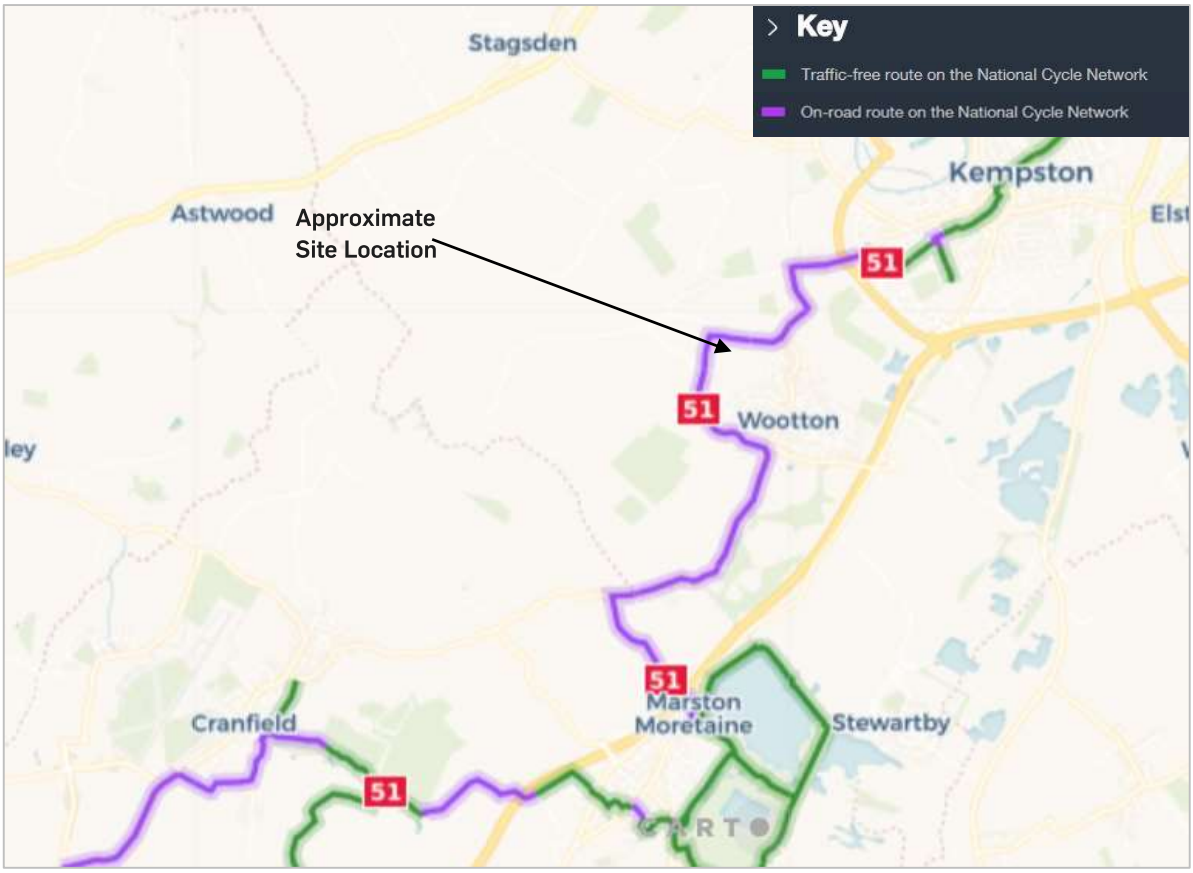

Figure 5.4 – Local Cycle Routes (Source: extracted from Sustrans website)

5.2.4 As set out above, the NR51 runs past the site and provides a long-distance route running from Oxford through to Colchester and provides connections to Cranfield, Marston Moretaine, Stewartby and Kempston. Within Wootton, this route comprises on-road with traffic-free connections in neighbouring settlements such as Kempston and Stewartby.

5.2.5 Therefore, considering the relatively compact nature of Wootton, in tandem with the cycle route that runs past the site, it is considered that cycling represents a realistic alternative to the private car for trips within the town and beyond.

5.3 Public Transport Accessibility

5.3.1 The proposed site is located favourably to tie into existing public transport options, which offer a genuine alternative to the private car.

Bus

5.3.2 The closest bus stops to the proposed site are located along Wootton Road, to the north east of the site. These stops, known as 'Keeley Corner', lie within a 400m walk (equivalent to a 5-minute walk) of the centre of the proposed site.

5.3.3 Notably, 400m is widely-regarded as a cut-off point for bus stops in residential areas (CIHT's *Planning for Walking*, 2015).

5.3.4 **Table 5.2** below summarises the services that supply these bus stops. This table outlines the service route, approximate frequency and operating hours of these services.

Service	Route	Weekday	Saturday	Sunday
53 Stagecoach East	Wootton Kempston Bedford	Every 20 minutes First: 06:38 Last: 20:21	Every 20 minutes First: 07:03 Last: 20:03	Hourly First: 09:29 Last: 17:30
	Bedford Kempston Wootton	Every 20 minutes First: 06:36 Last: 19:56	Every 20 minutes First: 06:41 Last: 19:41	Hourly First: 09:12 Last: 17:12
C1 Uno	Bedford Wootton Central Milton Keynes	Hourly First: 06:40 Last: 22:58	Bi-hourly First: 09:19 Last: 22:56	Three a day First: 12:08 Last: 18:08
	Central Milton Keynes Wootton Bedford	Hourly First: 06:03 Last: 22:19	Bi-hourly First: 08:33 Last: 22:18	Three a day First: 11:18 Last: 17:18

Table 5.2 – Summary of Bus Services serving the 'Keeley Corner' bus stops

5.3.5 As shown, the 53, and C1 services call at the 'Keeley Corner' bus stops and provide bus connections to Bedford, Kempston and Milton Keynes.

5.3.6 Clearly, the 53 bus services provide the most frequent bus services, operating approximately every 20 minutes on weekdays and Saturdays and hourly on Sundays. Thus, the service provides a link for commuters, tying in with typical working hours.

5.3.7 The approximate journey times, from the 'Keeley Corner' bus stops, to a selection of important destinations using these services are listed below:

- Kempston – via 53 service – 9 minutes;
- Bedford– via 53 service – 25 minutes;
- Cranfield – via C1 service – 18 minutes;
- Milton Keynes – via C1 service – 60 minutes.

5.3.8 Therefore, it is considered that the proposed site is well-located to connect into the existing bus services that run along the Wootton Road; the 53 and C1 services offer frequent connections into Bedford Centre (in less than 30 minutes) and to both Kempston and Milton Keynes and more.

Rail

5.3.9 The closest station to the site is Kempston Hardwick Station which lies some 2.5km south east of the proposed site in Wootton. Operated by West Midlands Trains, the station lies on the Marston Vale line.

5.3.10 The station lies beyond the 2km walking distance but lies within a reasonable cycling distance of 5km.

5.3.11 Kempston Hardwick Station provides hourly services Monday to Saturday towards Bedford Station (approximate 12-minute journey time) and Bletchley (approximate 30-minute journey time).

5.3.12 Further services can be accessed at Bedford Station, located approximately 5km north of the proposed site, operated by West Midlands Trains and lies at the northern end of the Marston Vale Line and also the Thameslink Line (for London) and the Midland Main Line (for both London and the north of England).

5.3.13 Bedford Station is accessible by cycle and can also be reached by way of the 53 Stagecoach East bus service which calls a Bedford Bus Station a short 8 minutes' walk from Bedford Station.

5.3.14 **Figure 5.5** below shows the location of both Bedford Station and Kempston Hardwick Station within the local rail network.

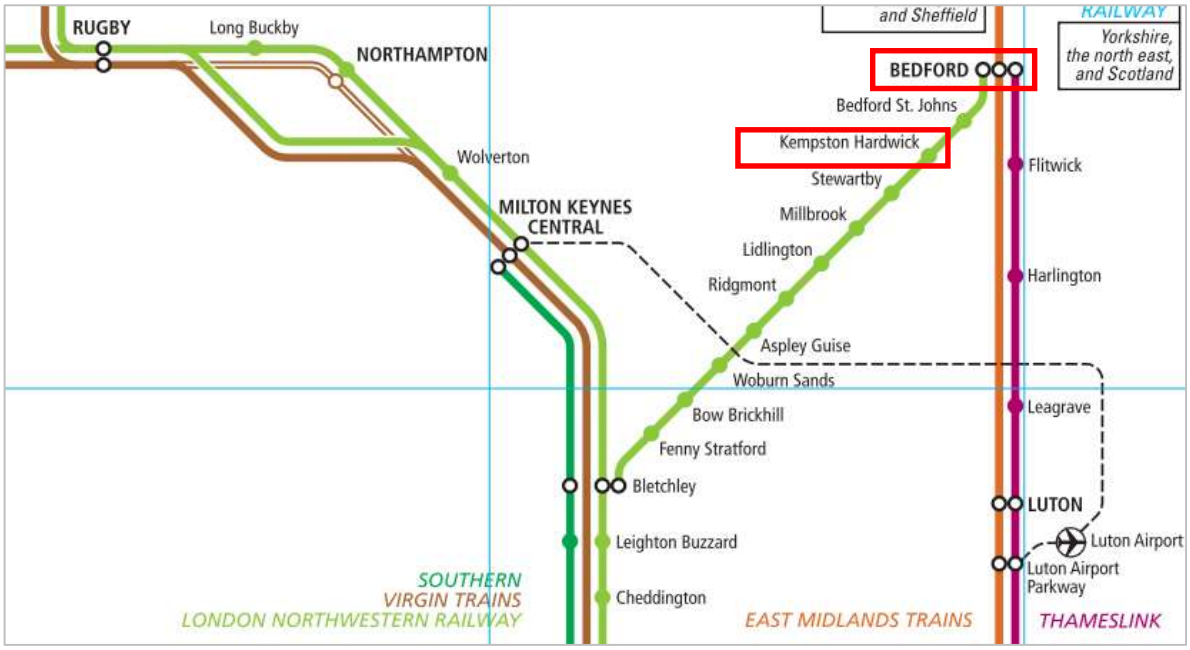

Figure 5.5 – Location of Bedford and Kempton Hardwick Station (Source: extract from National Rail, 2017)

5.3.15 Bedford Station is supplied by a number of services. **Table 5.3** below provides a summary of these services as well as the approximate journey time and frequency. Thus, it is considered that the proposed development is well-located to benefit from the regular services that serve Kempston Hardwick Railway Station which also provide access to Bedford Station.

Destination	Approximate Journey Time	Approximate Frequency
Corby	30 minutes	Hourly
Wellingborough	40 minutes	Every 20-30 minutes
London St Pancras International	50 minutes	Every 10 mins
Gatwick Airport	70 minutes	Every 15 mins

Table 5.3 – Summary of Train Services from Bedford Station

6 Traffic Impact Assessment

6.1 Introduction

6.1.1 This section of report sets out the impact in terms of vehicle trips that would likely be generated by the proposed development.

6.2 Trip Rates

6.2.1 To forecast the traffic generation of the proposed development, trip generation has been calculated using the 'Houses Privately Owned' category of the 'Residential' land use category of the TRICS database (using Version 7.5.4).

6.2.2 The results were filtered using the following criteria:

- Sites within the 'Houses Privately Owned' land use category;
- Sites in England, Scotland & Wales are included;
- Sites in Greater London, Northern Ireland & the Republic of Ireland are excluded;
- Only surveys undertaken on weekdays;
- Only 'Edge of Town' and 'Neighbourhood Centre' sites; and
- Surveys from the most recent 10 years.

6.2.3 **Table 6.1** below sets out the resulting trip rates for the proposed development, with the full TRICS output attached at **Appendix C.**

Time	Arrivals	Departures	Total
AM	0.134	0.366	0.500
PM	0.308	0.138	0.446

Table 6.1 – Vehicle Trip Rates

6.3 Trip Generation

6.3.1 To forecast the trip generation of the proposed development the number of dwellings that would be delivered is applied to the trip rates as set out in **Table 6.1.**

6.3.2 As set out earlier, it is anticipated that the site would deliver 50 dwellings. **Table 6.2** below sets out the resulting peak hour arrival and departure trips for the proposed development.

Time	Arrivals	Departures	Total
AM	7	18	25
PM	15	7	22

Table 6.2 – Vehicle Trip Generation (50 dwellings)

6.3.3 As shown above, it is anticipated that the proposed development would generate a maximum of 25 two-way trips in the AM peak hour, and 22 two-way trips in the PM peak hour.

6.3.4 This equates to, on average, one trip associated with the proposed access every five minutes during the peak hour which is overall a very low level of vehicular movements.

6.3.5 Most traffic from the development will likely be drawn to the main road of Wootton Road/Bedford Road as these provide the most direct links to local major and strategic highway network.

6.3.6 However, even concentrating these additional movements at the Wootton Road/Bedford Road/Keeley Lane priority give-way junction to the east of the site will not impact on the operation of the junction.

6.3.7 Beyond this junction, the additional trips will disperse across the local highway network with the impact becoming more and more diluted the further out trips travel on the network.

6.3.8 Hence in summary, while the proposed development will indeed generate additional movements by car, the total number of movements are low and would not result in a material cumulative severe impact on the local highway network.

7 Summary and Conclusions

7.1 Summary

7.1.1 This PTA has provided a review of pertinent transport and highways matters to the proposed site.

7.1.2 It is proposed that vehicular access to the proposed site is provided off Keeley Lane which is located to the north of the site. Keeley Lane is suitably wide and the posted traffic speed limit is appropriate to serving residential development and indeed already provides direct frontage access to existing residential properties.

7.1.3 The proposed access junction to serve the site would take the form of a simple priority 'give-way' junction where Keeley Lane would form the major arm and the site access would form the minor arm.

7.1.4 The access road is of suitable proportions and dimensions to cater for the typical residential traffic that would be associated with the development. From the site access visibility splays of 2.4m x 43m can be achieved – these accord with current visibility standards for 30mph roads.

7.1.5 In addition, footways would be provided within the site which would connect with a new uncontrolled pedestrian crossing point provided east of the site access. This would enable crossing between the existing footway on Keeley Lane and proposed site access point thus providing access to the wider pedestrian network.

7.1.6 Hence safe, convenient and direct vehicular and pedestrian accesses will be provided to support the site.

7.1.7 The proposed site is located in a sustainable location, with a wide range of local facilities and services, including the centre of the Village of Wootton, lying within a reasonable walking and cycling distance and the site is well placed to access the existing local foot and cycle networks. As such, the site is well placed to reduce reliance on the use of the private car.

7.1.8 An assessment of the likely trip generation due to the site shows only 25 two-way vehicle movements in the AM peak and 22 two-way vehicle movements in the PM peak.

7.1.9 Thus, vehicle movements associated with the proposed development are low and would not result in a material cumulative severe impact on the local highway network.

7.2 Conclusion

7.2.1 In conclusion then, it has been demonstrated that there are no transport or highways matters that make this site unsuitable for residential development.

Appendix A: Illustrative Masterplan

The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

LEGEND

- Site Boundary (3.13ha)
1. Primary Vehicle Access Point from Keeley Lane
2. Primary Vehicular Route
3. Secondary Vehicular Access Routes with Walk / Cycle Priority
4. Footpaths / Cycleways through Green Space
5. Potential Walk / Cycle Link to Public Rights of Way
6. Public Rights of Way
7. Development Parcels
8. Retained Ridge & Furrow Area
9. Thinning or Lowering of Existing Planting Adjacent to Retained Ridge & Furrow Area
10. New Hedge Buffer Planting
11. Local Area of Play (LAP)
12. Retained Hedgerow
13. Proposed SUDs
14. Proposed New Footpath Link

Indicative Concept Only

Design subject to further detailed technical work and development

Project
Land at Keeley Lane, Wootton

N

Drawing Title
Concept Plan

Date	Scale	Drawn by	Check by
18.03.19	NTS	AK	LH

Project No	Drawing No	Revision
29714	Ai-M-01	D

0 10 20 30 40 50m

DRAFT

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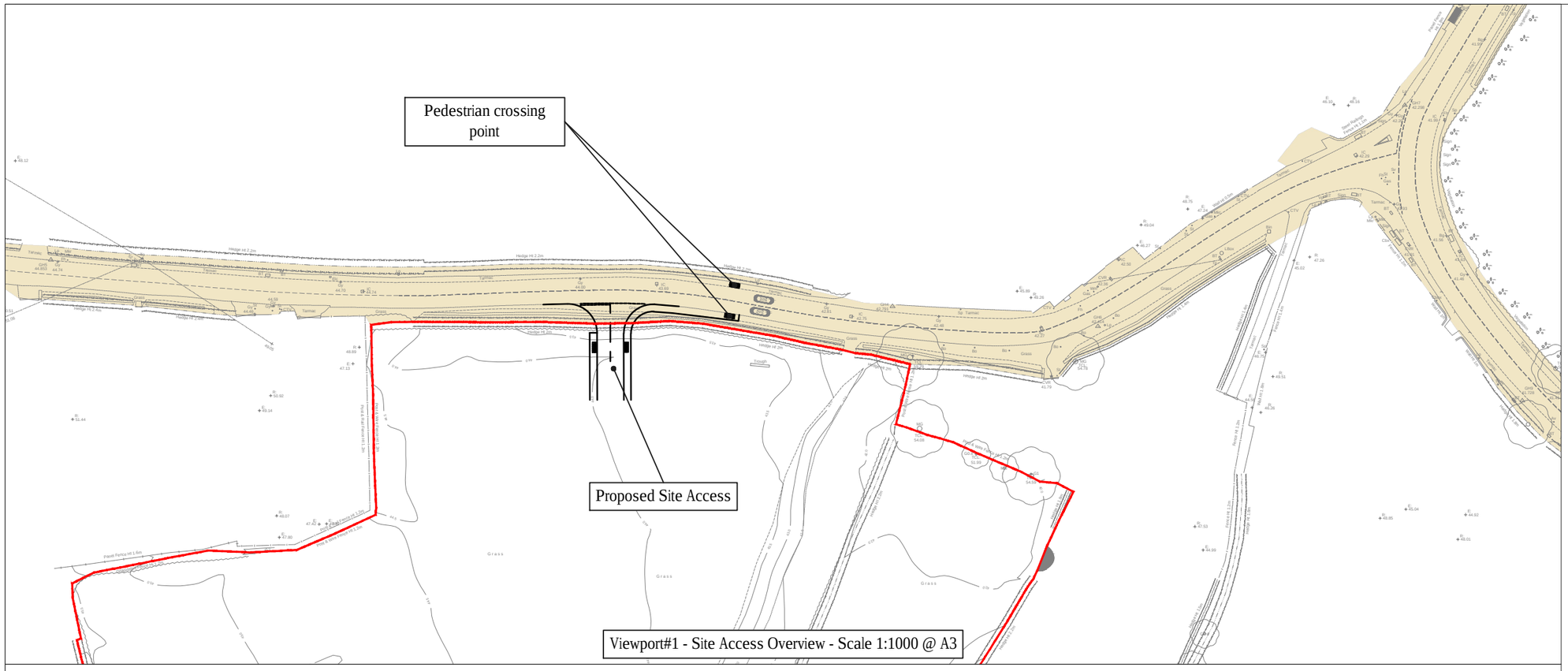
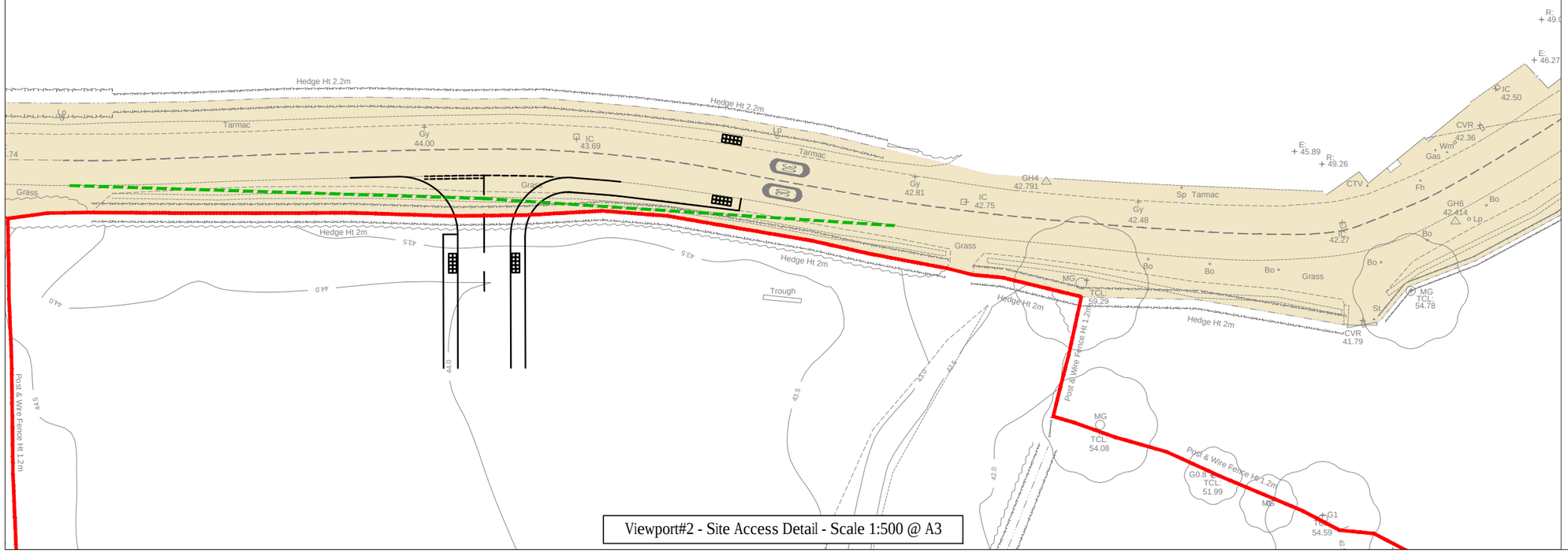
Appendix B: Proposed Vehicular Access Drawing



Viewport#1 - Site Access Overview - Scale 1:1000 @ A3



Viewport#2 - Site Access Detail - Scale 1:500 @ A3

Key

- Site Boundary
- Extent of Adopted Public Highway
- Side Road Visibility Splay (2.4m x 43m)

Rev	Date	Description	By	Apvd
P3	28.03.19	Third Issue - client comments	CS	AK
P2	07.03.19	Second Issue - crossing added	AK	MG
P1	25.02.19	Preliminary issue	AK	MG

PROJECT:
KEELEY LANE,
WOOTTON

TITLE:
PROPOSED SITE ACCESS

CLIENT:
RAINIER DEVELOPMENTS

SCALE@A3:
1:1000 (OVERVIEW) - 1:500 (DETAIL)

PROJECT REF:
PROJECT_REF

DRAWING No: SK_T_001

REV: P3

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

Bristol, Cardiff, Plymouth, Winchester
St James Court, St James Parade, Bristol BS1 3LH
jubb.uk.com
+44(0)117 922 6266

Calculation Reference: AUDIT-829401-190305-0309

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	3 days
	EX	ESSEX	1 days
	KC	KENT	3 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	5 days
03	SOUTH WEST		
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	1 days
	SF	SUFFOLK	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	2 days
	WK	WARWICKSHIRE	1 days
	WM	WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	3 days
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	GM	GREATER MANCHESTER	2 days
	LC	LANCASHIRE	1 days
09	NORTH		
	DH	DURHAM	1 days
	TW	TYNE & WEAR	1 days
10	WALES		
	VG	VALE OF GLAMORGAN	1 days

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

Secondary 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: Number of dwellings
Actual Range: 8 to 805 (units:)
Range Selected by User: 5 to 4334 (units:)

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

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

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

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	8 days
Tuesday	2 days
Wednesday	8 days
Thursday	10 days
Friday	8 days

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

Selected survey types:

Manual count	36 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:
Edge of Town

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	28
Village	5
No Sub Category	3

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	36 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 1 mile:

1,000 or Less	2 days
1,001 to 5,000	7 days
5,001 to 10,000	6 days
10,001 to 15,000	12 days
15,001 to 20,000	3 days
20,001 to 25,000	3 days
25,001 to 50,000	2 days
50,001 to 100,000	1 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	4 days
25,001 to 50,000	4 days
50,001 to 75,000	5 days
75,001 to 100,000	8 days
100,001 to 125,000	1 days
125,001 to 250,000	8 days
250,001 to 500,000	4 days
500,001 or More	2 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	11 days
1.1 to 1.5	23 days
1.6 to 2.0	2 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	5 days
No	31 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	35 days
2 Poor	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CA-03-A-06 MIXED HOUSES CAMBRIDGESHIRE
CRAFT'S WAY
NEAR CAMBRIDGE
BAR HILL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 207
Survey date: FRIDAY *22/06/18* *Survey Type: MANUAL*

2 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

3 DH-03-A-02 MIXED HOUSES DURHAM
LEAZES LANE
BISHOP AUCKLAND
ST HELEN AUCKLAND
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 125
Survey date: MONDAY *27/03/17* *Survey Type: MANUAL*

4 ES-03-A-02 PRIVATE HOUSING EAST SUSSEX
SOUTH COAST ROAD
PEACEHAVEN

Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY *18/11/11* *Survey Type: MANUAL*

5 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

6 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

7 EX-03-A-02 DETACHED & SEMI-DETACHED ESSEX
MANOR ROAD
CHIGWELL
GRANGE HILL
Edge of Town
Residential Zone
Total Number of dwellings: 97
Survey date: MONDAY *27/11/17* *Survey Type: MANUAL*

8 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER
BUTT HILL DRIVE
MANCHESTER
PRESTWICH
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY *12/10/11* *Survey Type: MANUAL*

9 GM-03-A-11 TERRACED & SEMI-DETACHED GREATER MANCHESTER
RUSHFORD STREET
MANCHESTER
LEVENSHULME
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: MONDAY *26/09/16* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

10 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

11 KC-03-A-05 DETACHED & SEMI-DETACHED KENT
ROCHESTER ROAD
NEAR CHATHAM
BURHAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 8
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

12 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

13 LC-03-A-31 DETACHED HOUSES LANCASHIRE
GREENSIDE
PRESTON
COTTAM
Edge of Town
Residential Zone
Total Number of dwellings: 32
Survey date: FRIDAY *17/11/17* *Survey Type: MANUAL*

14 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

15 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

16 NY-03-A-07 DETACHED & SEMI DET. NORTH YORKSHIRE
CRAVEN WAY
BOROUGHBRIDGE

Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

17 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

18 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

19 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

20 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

21 SF-03-A-06 DETACHED & SEMI-DETACHED SUFFOLK
BURY ROAD
KENTFORD

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 38
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

22 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

23 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY *22/05/14* *Survey Type: MANUAL*

24 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

25 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

26 ST-03-A-08 DETACHED HOUSES STAFFORDSHIRE
SILKMORE CRESCENT
STAFFORD
MEADOWCROFT PARK
Edge of Town
Residential Zone
Total Number of dwellings: 26
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

27 TW-03-A-03 MIXED HOUSES TYNE & WEAR
STATION ROAD
NEAR NEWCASTLE
BACKWORTH
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 33
Survey date: FRIDAY *13/11/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

28 VG-03-A-01 SEMI-DETACHED & TERRACED VALE OF GLAMORGAN
ARTHUR STREET
BARRY

Edge of Town
Residential Zone
Total Number of dwellings: 12
Survey date: MONDAY *08/05/17* *Survey Type: MANUAL*

29 WK-03-A-02 BUNGALOWS WARWICKSHIRE
NARBERTH WAY
COVENTRY
POTTERS GREEN
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: THURSDAY *17/10/13* *Survey Type: MANUAL*

30 WM-03-A-04 TERRACED HOUSES WEST MIDLANDS
OSBORNE ROAD
COVENTRY
EARLSDON
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 39
Survey date: MONDAY *21/11/16* *Survey Type: MANUAL*

31 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

32 WS-03-A-06 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 805
Survey date: THURSDAY *02/03/17* *Survey Type: MANUAL*

33 WS-03-A-07 BUNGALOWS WEST SUSSEX
EMMS LANE
NEAR HORSHAM
BROOKS GREEN
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 57
Survey date: THURSDAY *19/10/17* *Survey Type: MANUAL*

34 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total Number of dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

35 WS-03-A-09 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 197
Survey date: THURSDAY *05/07/18* *Survey Type: MANUAL*

36 WY-03-A-01 MIXED HOUSING WEST YORKSHIRE
SPRING VALLEY CRESCENT
LEEDS
BRAMLEY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 46
Survey date: WEDNESDAY *21/09/16* *Survey Type: MANUAL*

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	36	109	0.076	36	109	0.272	36	109	0.348
08:00 - 09:00	36	109	0.134	36	109	0.366	36	109	0.500
09:00 - 10:00	36	109	0.143	36	109	0.175	36	109	0.318
10:00 - 11:00	36	109	0.126	36	109	0.153	36	109	0.279
11:00 - 12:00	36	109	0.138	36	109	0.152	36	109	0.290
12:00 - 13:00	36	109	0.150	36	109	0.144	36	109	0.294
13:00 - 14:00	36	109	0.152	36	109	0.150	36	109	0.302
14:00 - 15:00	36	109	0.163	36	109	0.179	36	109	0.342
15:00 - 16:00	36	109	0.254	36	109	0.177	36	109	0.431
16:00 - 17:00	36	109	0.265	36	109	0.155	36	109	0.420
17:00 - 18:00	36	109	0.308	36	109	0.138	36	109	0.446
18:00 - 19:00	36	109	0.274	36	109	0.160	36	109	0.434
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.276			2.294			4.570

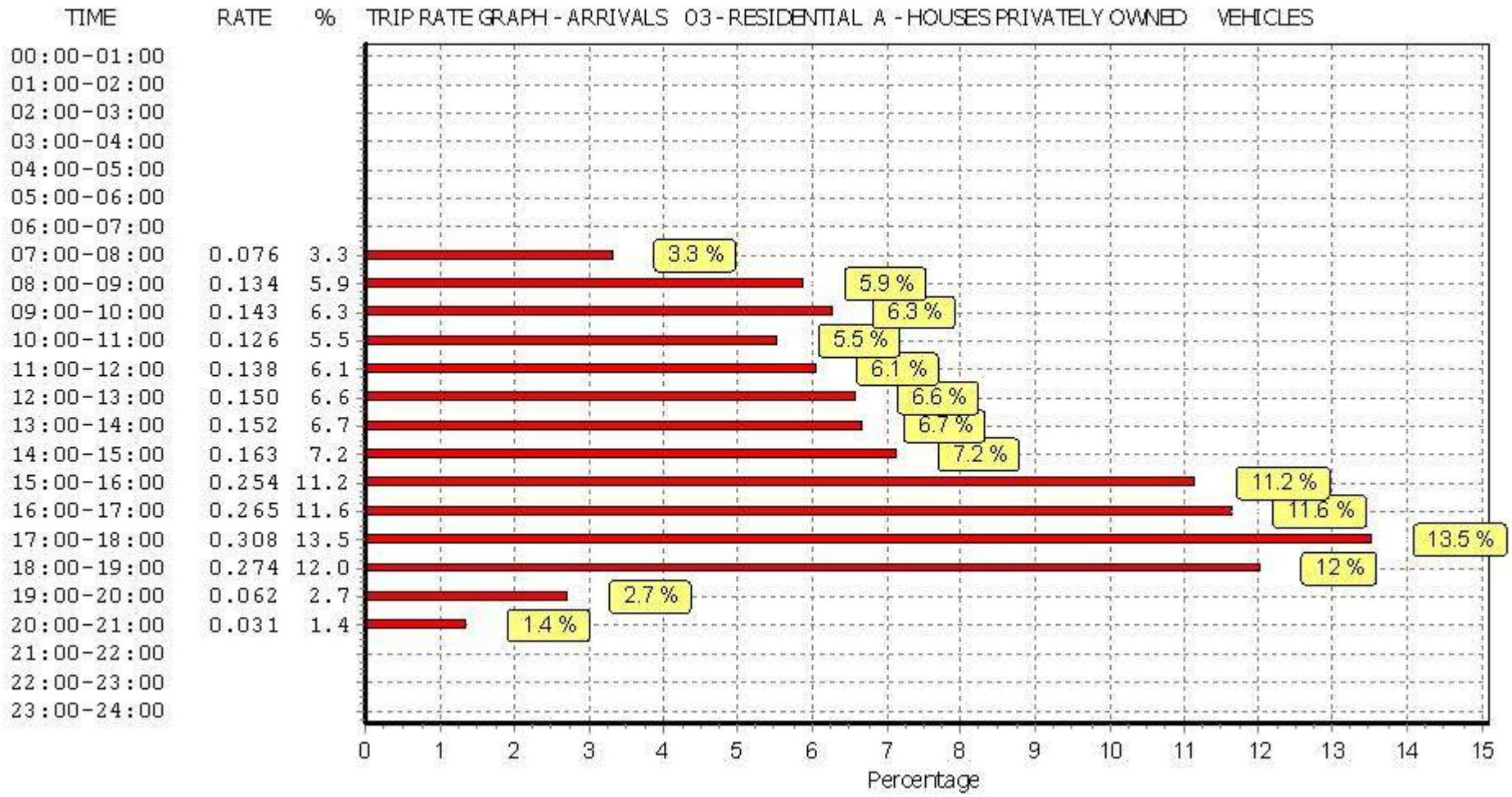
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.*

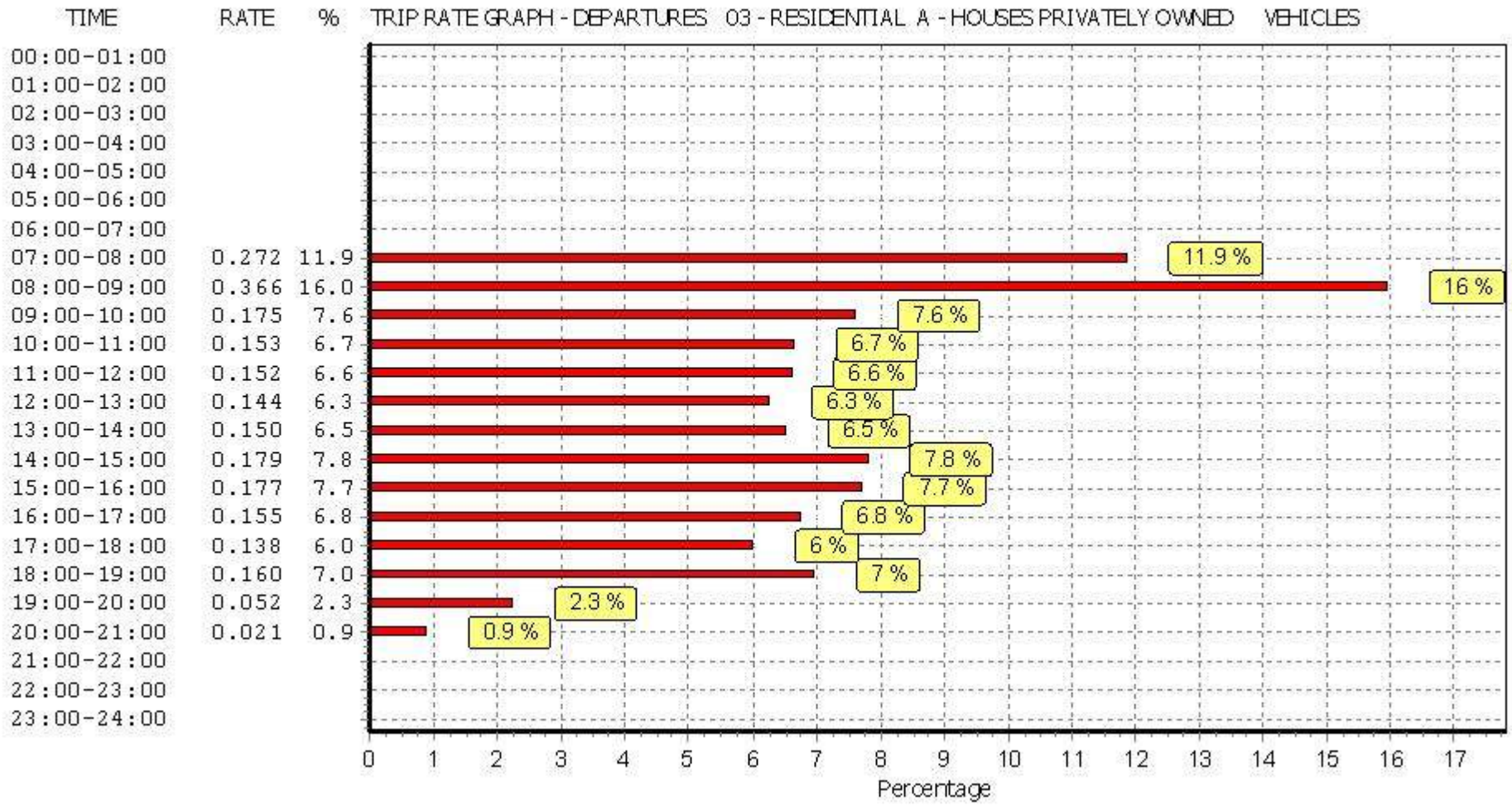
Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 20/11/18
Number of weekdays (Monday-Friday):	36
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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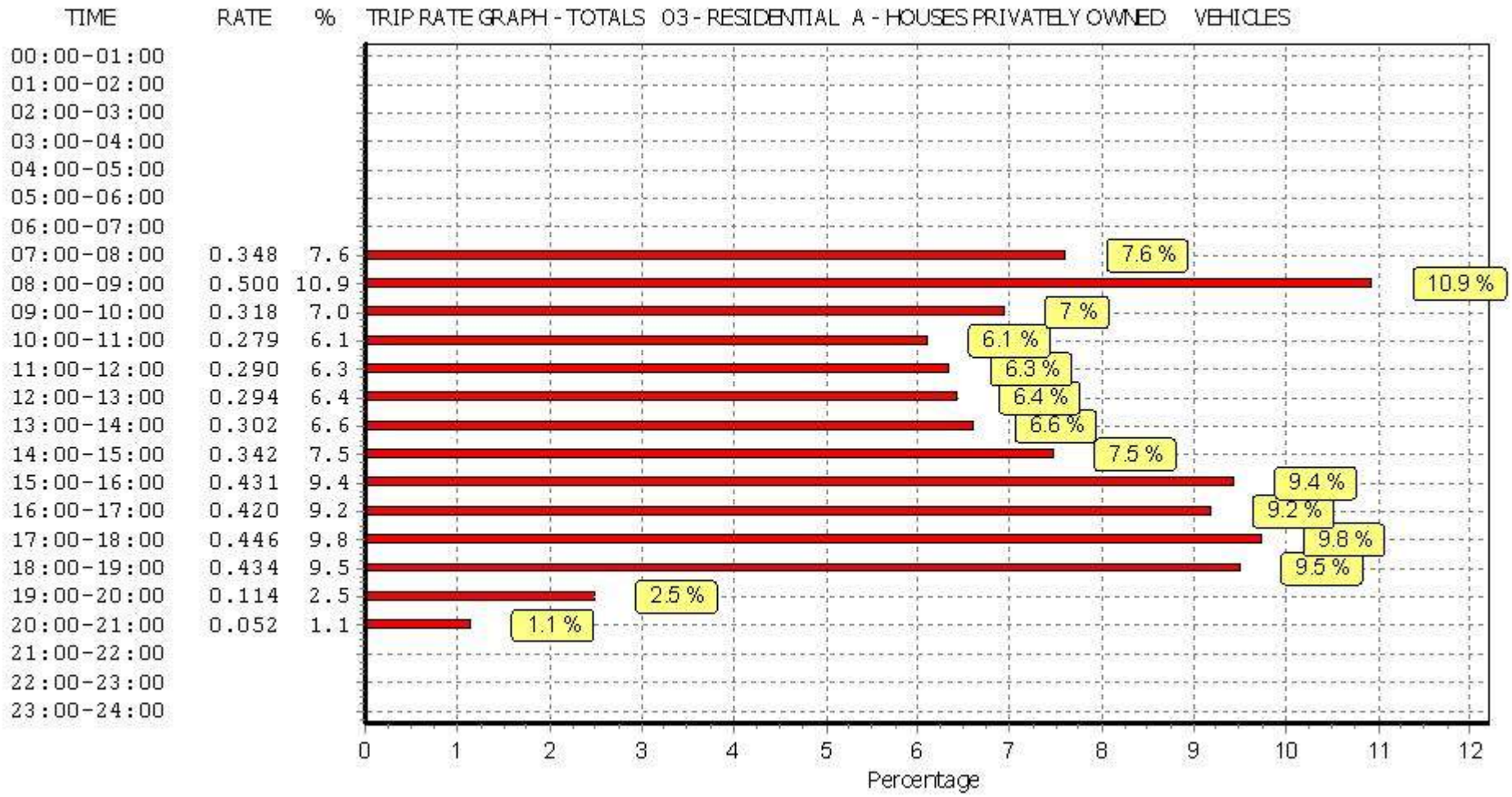


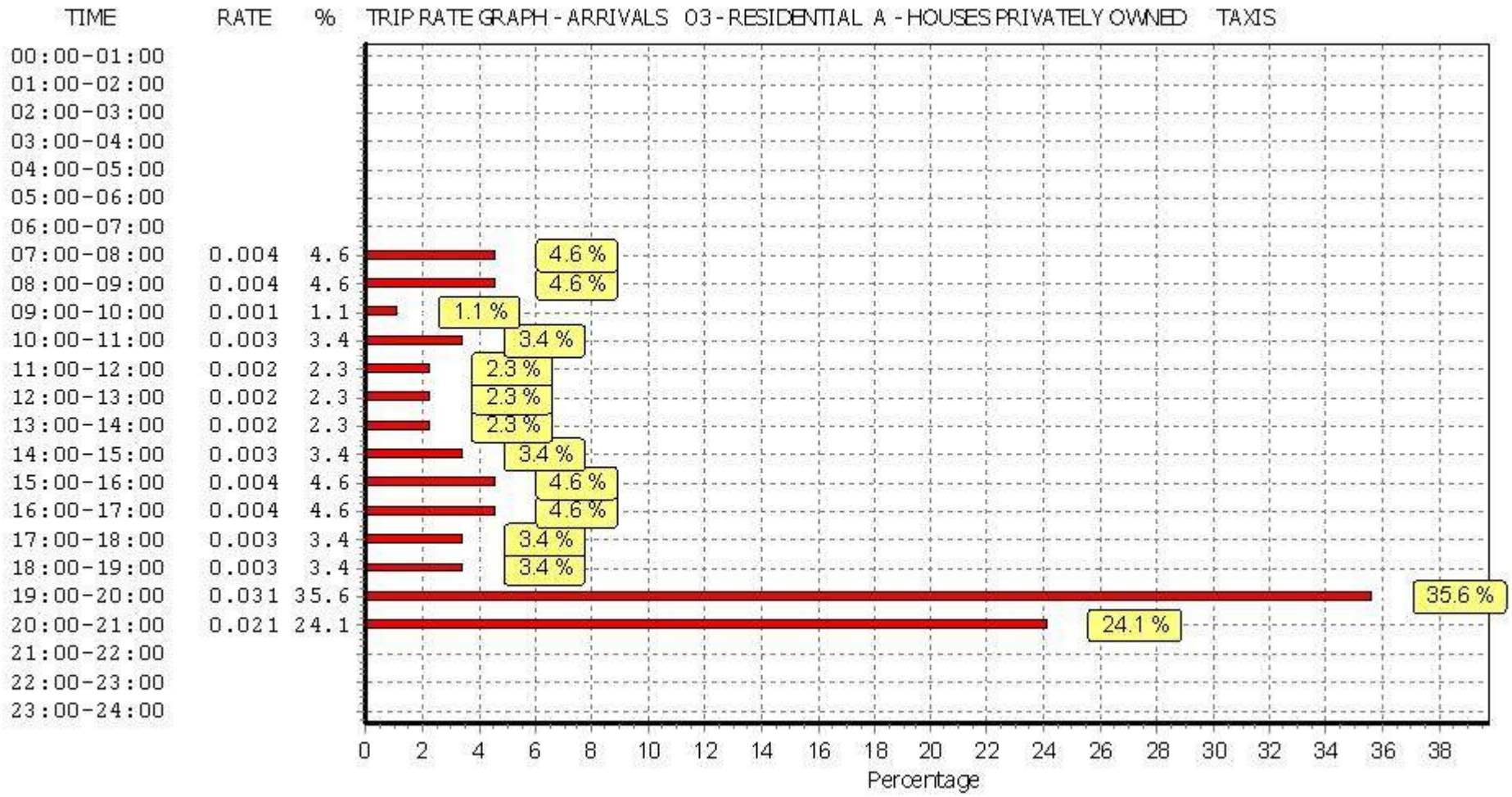
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

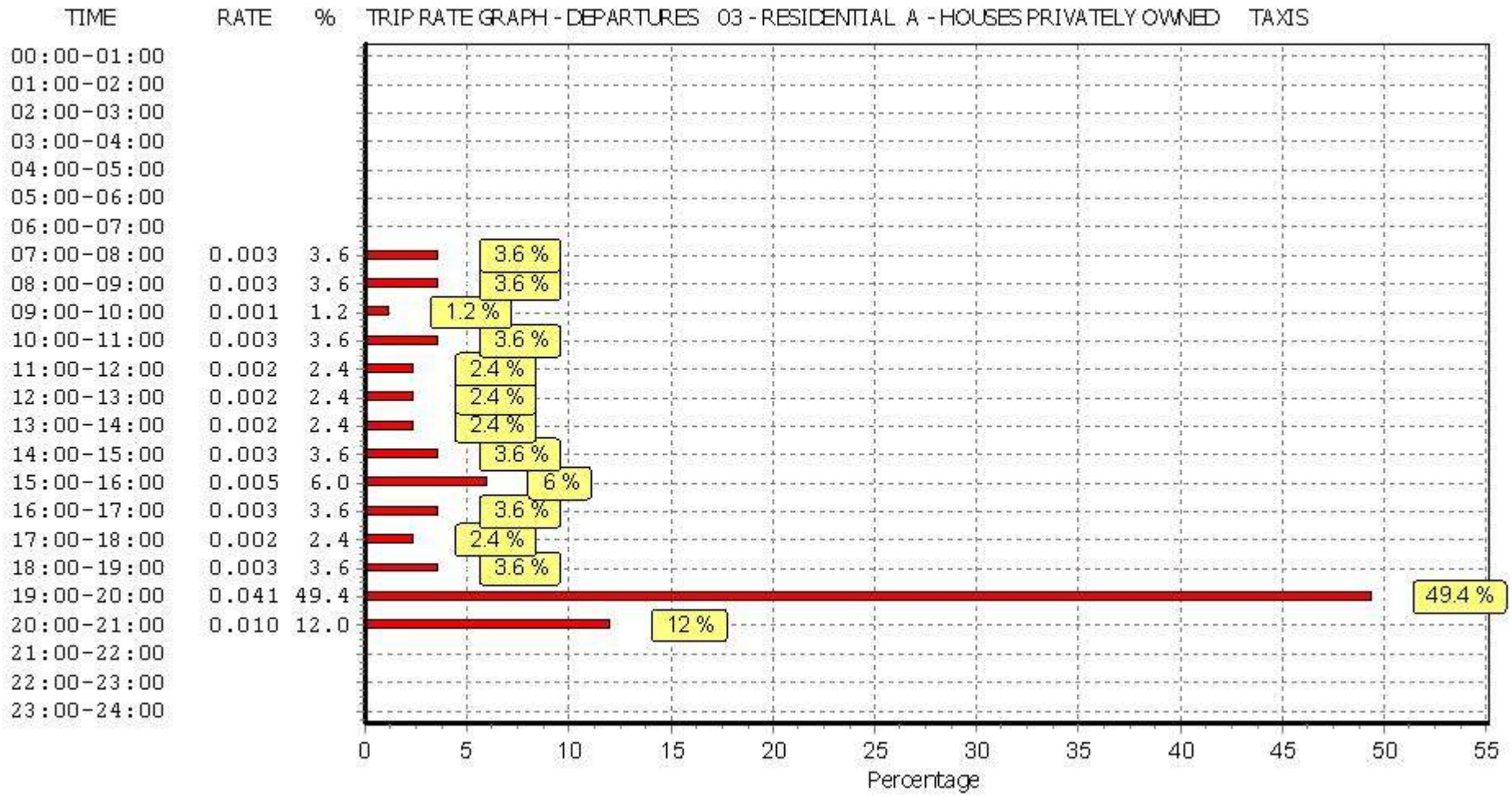
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	36	109	0.004	36	109	0.003	36	109	0.007
08:00 - 09:00	36	109	0.004	36	109	0.003	36	109	0.007
09:00 - 10:00	36	109	0.001	36	109	0.001	36	109	0.002
10:00 - 11:00	36	109	0.003	36	109	0.003	36	109	0.006
11:00 - 12:00	36	109	0.002	36	109	0.002	36	109	0.004
12:00 - 13:00	36	109	0.002	36	109	0.002	36	109	0.004
13:00 - 14:00	36	109	0.002	36	109	0.002	36	109	0.004
14:00 - 15:00	36	109	0.003	36	109	0.003	36	109	0.006
15:00 - 16:00	36	109	0.004	36	109	0.005	36	109	0.009
16:00 - 17:00	36	109	0.004	36	109	0.003	36	109	0.007
17:00 - 18:00	36	109	0.003	36	109	0.002	36	109	0.005
18:00 - 19:00	36	109	0.003	36	109	0.003	36	109	0.006
19:00 - 20:00	1	97	0.031	1	97	0.041	1	97	0.072
20:00 - 21:00	1	97	0.021	1	97	0.010	1	97	0.031
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.087			0.083			0.170

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.

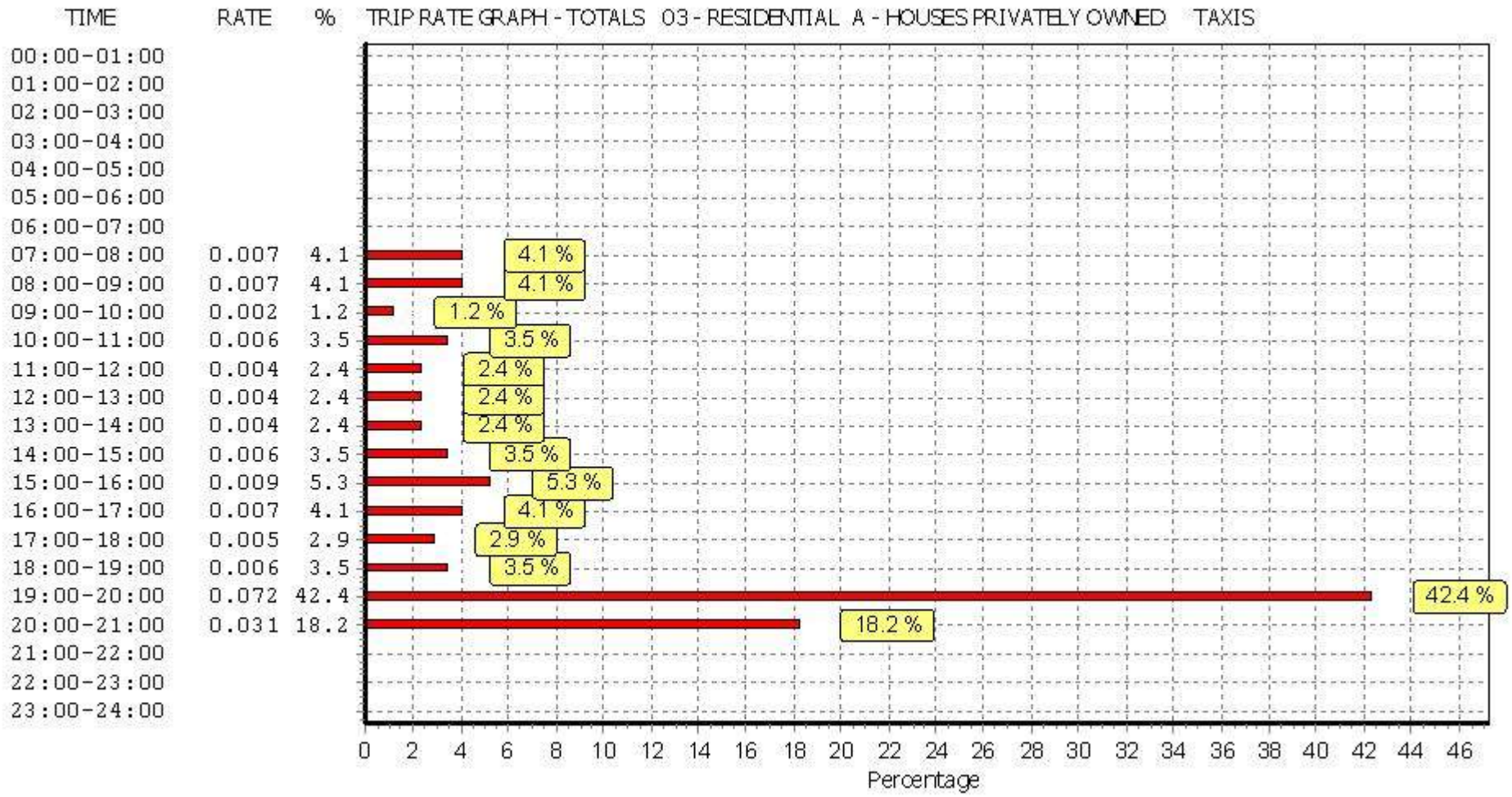
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



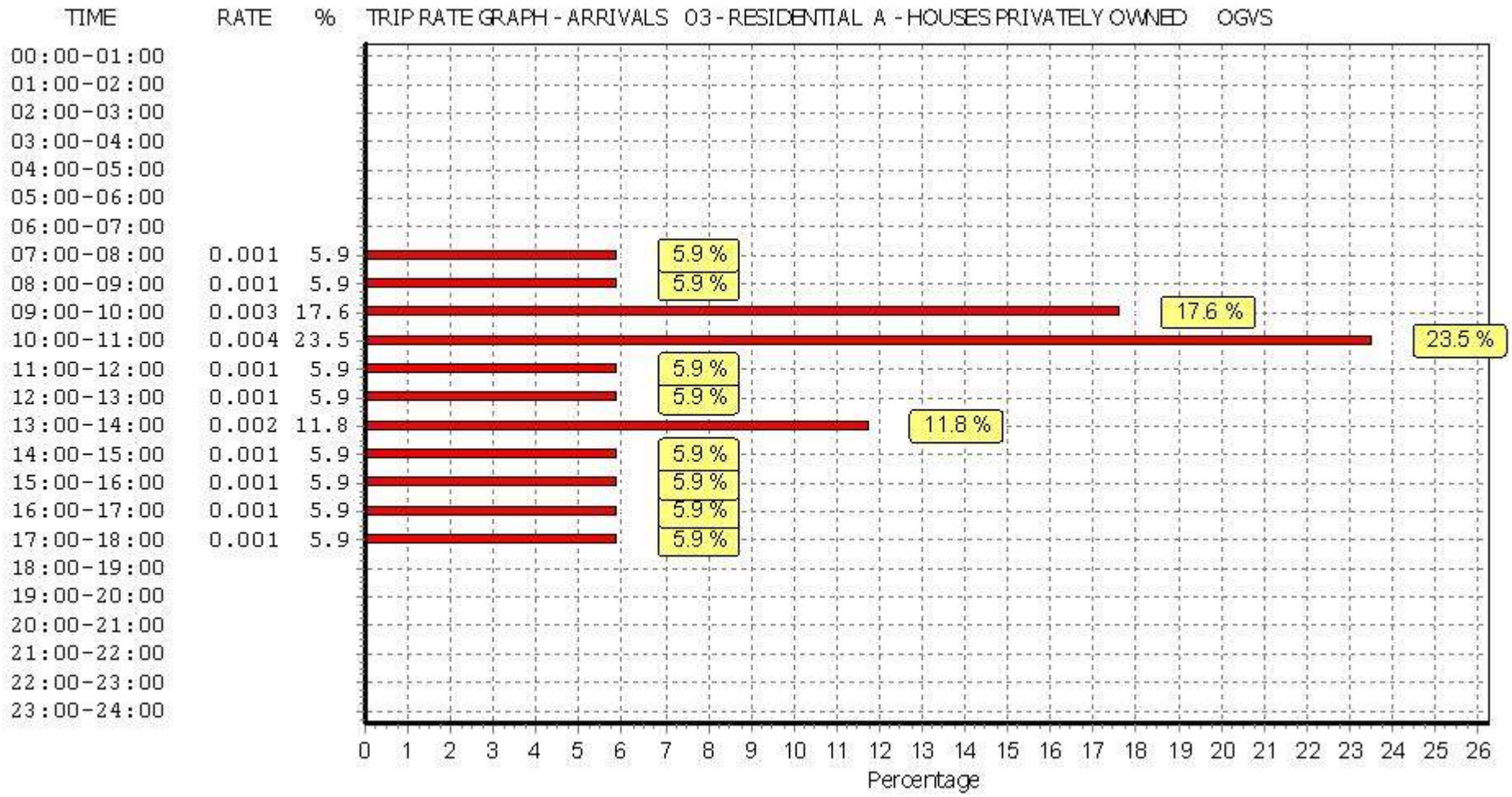
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

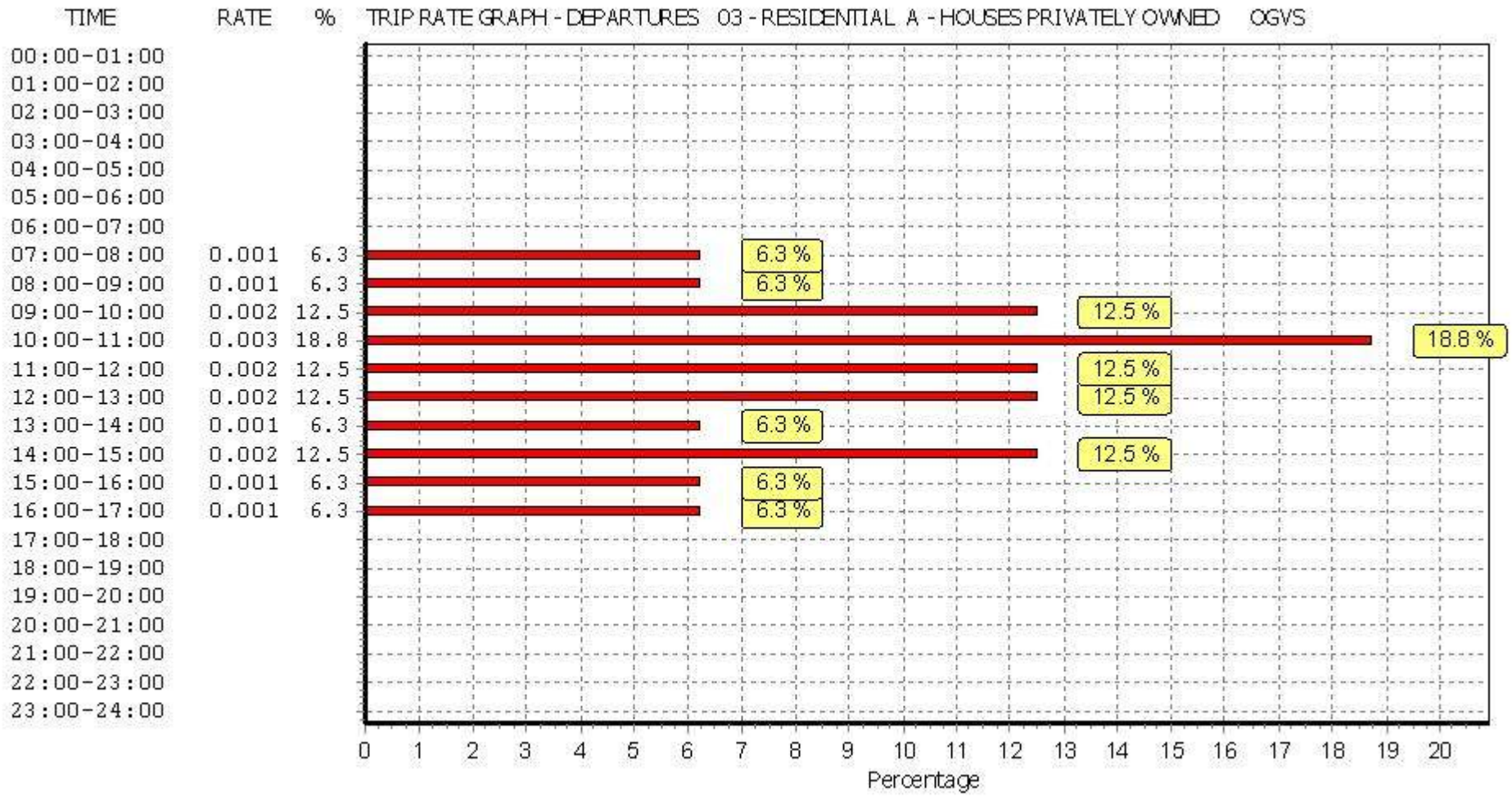
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	36	109	0.001	36	109	0.001	36	109	0.002
08:00 - 09:00	36	109	0.001	36	109	0.001	36	109	0.002
09:00 - 10:00	36	109	0.003	36	109	0.002	36	109	0.005
10:00 - 11:00	36	109	0.004	36	109	0.003	36	109	0.007
11:00 - 12:00	36	109	0.001	36	109	0.002	36	109	0.003
12:00 - 13:00	36	109	0.001	36	109	0.002	36	109	0.003
13:00 - 14:00	36	109	0.002	36	109	0.001	36	109	0.003
14:00 - 15:00	36	109	0.001	36	109	0.002	36	109	0.003
15:00 - 16:00	36	109	0.001	36	109	0.001	36	109	0.002
16:00 - 17:00	36	109	0.001	36	109	0.001	36	109	0.002
17:00 - 18:00	36	109	0.001	36	109	0.000	36	109	0.001
18:00 - 19:00	36	109	0.000	36	109	0.000	36	109	0.000
19:00 - 20:00	1	97	0.000	1	97	0.000	1	97	0.000
20:00 - 21:00	1	97	0.000	1	97	0.000	1	97	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.016			0.033

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.

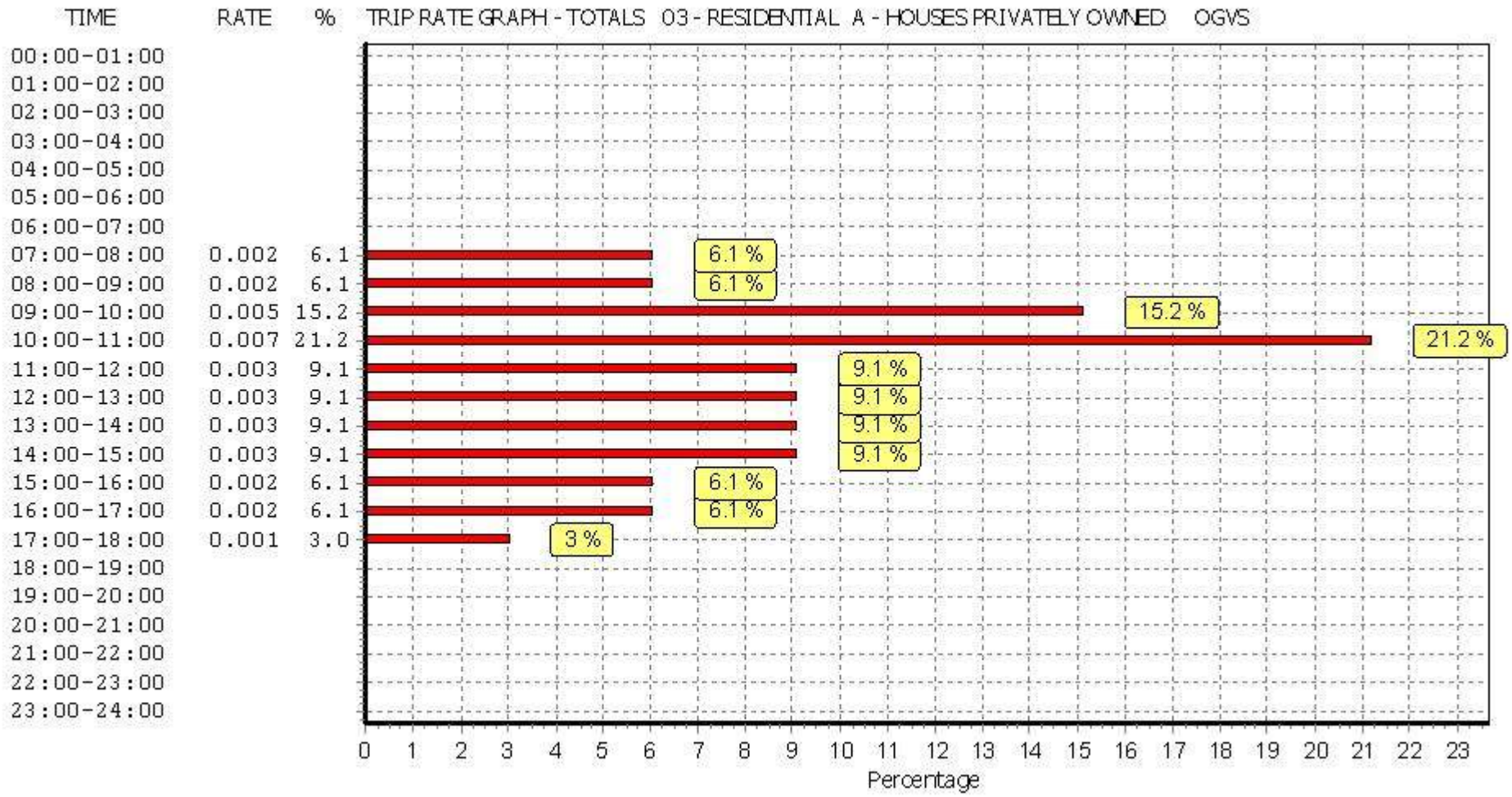
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



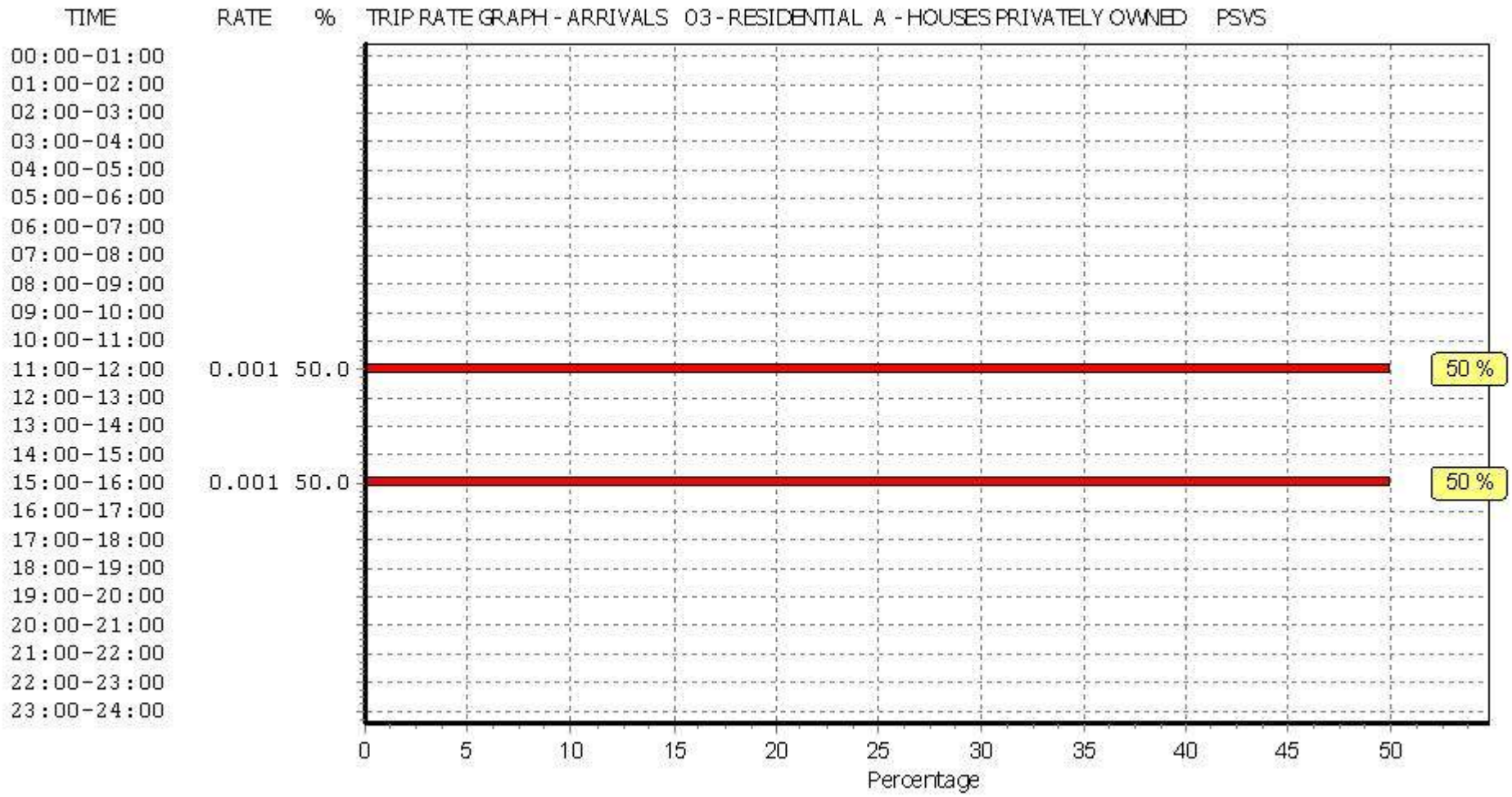
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

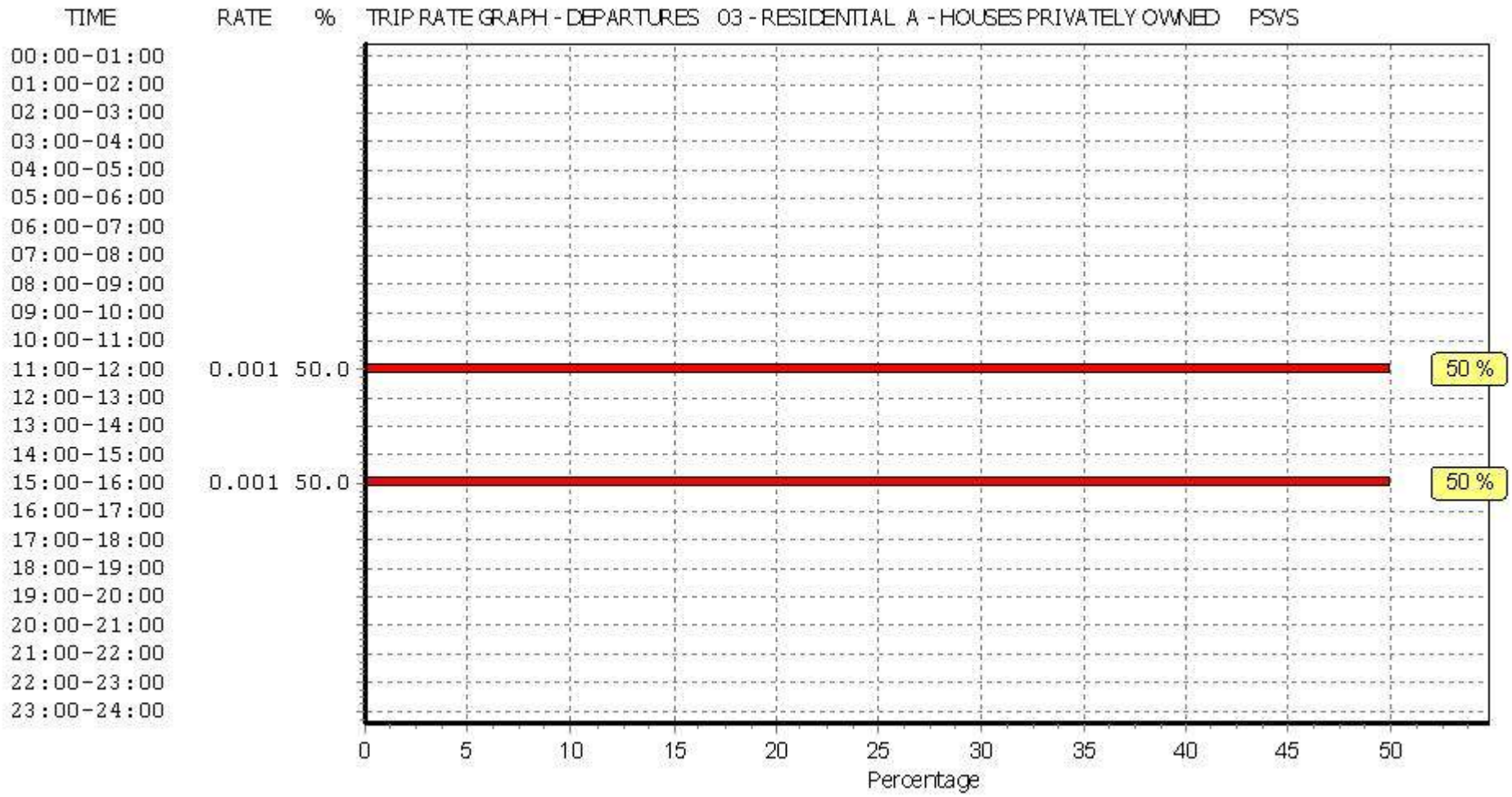
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	36	109	0.000	36	109	0.000	36	109	0.000
08:00 - 09:00	36	109	0.000	36	109	0.000	36	109	0.000
09:00 - 10:00	36	109	0.000	36	109	0.000	36	109	0.000
10:00 - 11:00	36	109	0.000	36	109	0.000	36	109	0.000
11:00 - 12:00	36	109	0.001	36	109	0.001	36	109	0.002
12:00 - 13:00	36	109	0.000	36	109	0.000	36	109	0.000
13:00 - 14:00	36	109	0.000	36	109	0.000	36	109	0.000
14:00 - 15:00	36	109	0.000	36	109	0.000	36	109	0.000
15:00 - 16:00	36	109	0.001	36	109	0.001	36	109	0.002
16:00 - 17:00	36	109	0.000	36	109	0.000	36	109	0.000
17:00 - 18:00	36	109	0.000	36	109	0.000	36	109	0.000
18:00 - 19:00	36	109	0.000	36	109	0.000	36	109	0.000
19:00 - 20:00	1	97	0.000	1	97	0.000	1	97	0.000
20:00 - 21:00	1	97	0.000	1	97	0.000	1	97	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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.

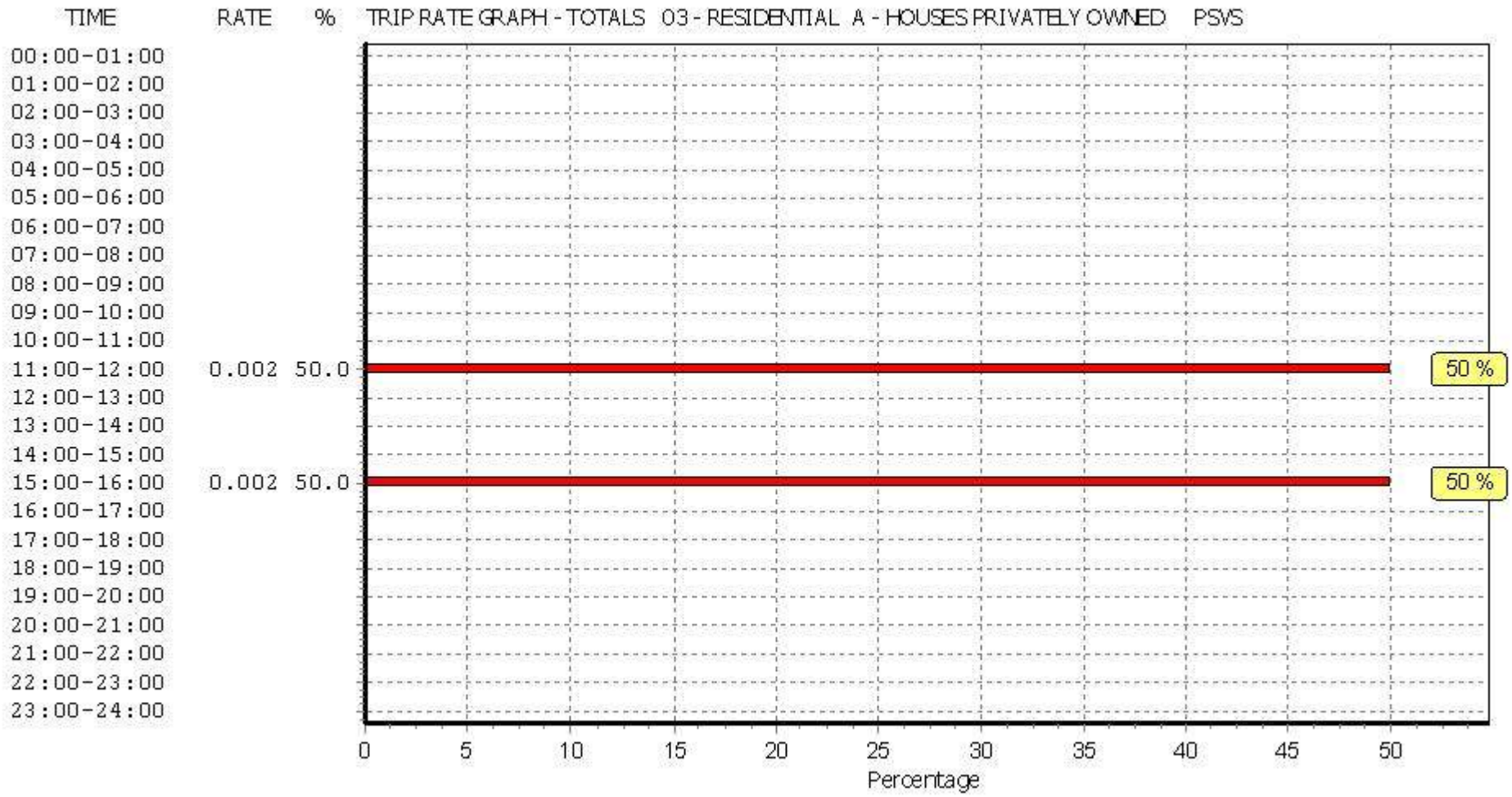
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



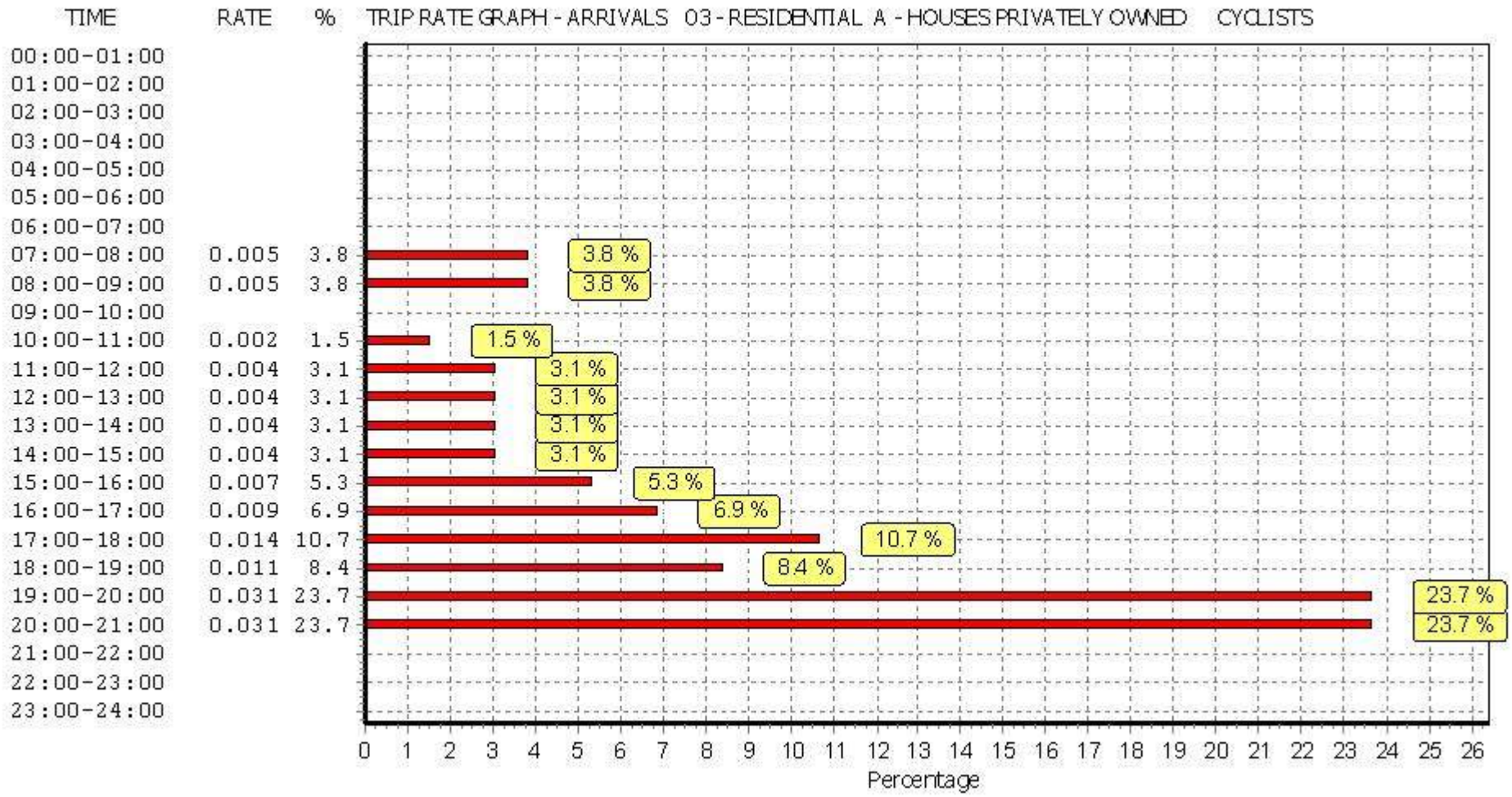
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

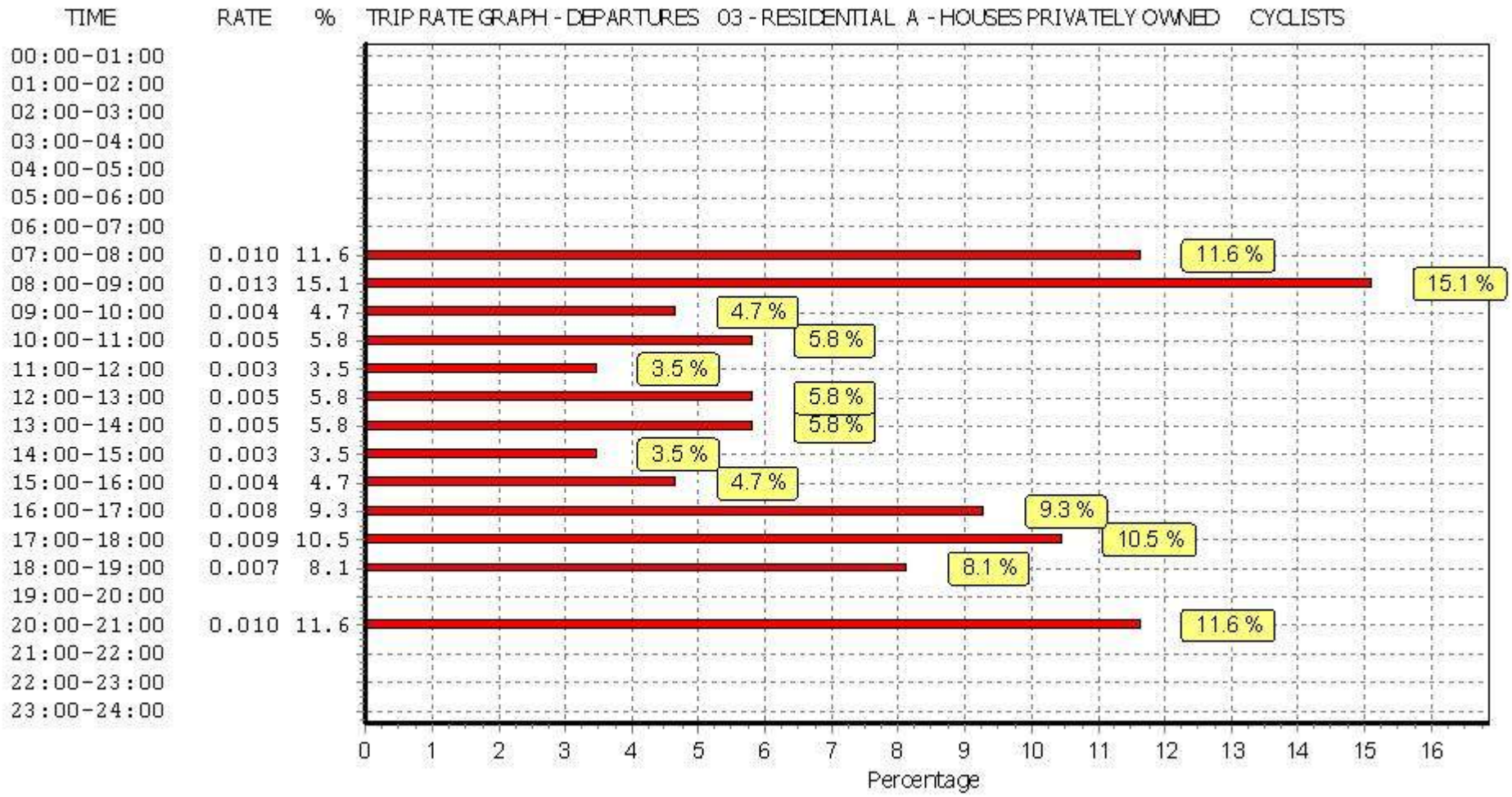
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	36	109	0.005	36	109	0.010	36	109	0.015
08:00 - 09:00	36	109	0.005	36	109	0.013	36	109	0.018
09:00 - 10:00	36	109	0.000	36	109	0.004	36	109	0.004
10:00 - 11:00	36	109	0.002	36	109	0.005	36	109	0.007
11:00 - 12:00	36	109	0.004	36	109	0.003	36	109	0.007
12:00 - 13:00	36	109	0.004	36	109	0.005	36	109	0.009
13:00 - 14:00	36	109	0.004	36	109	0.005	36	109	0.009
14:00 - 15:00	36	109	0.004	36	109	0.003	36	109	0.007
15:00 - 16:00	36	109	0.007	36	109	0.004	36	109	0.011
16:00 - 17:00	36	109	0.009	36	109	0.008	36	109	0.017
17:00 - 18:00	36	109	0.014	36	109	0.009	36	109	0.023
18:00 - 19:00	36	109	0.011	36	109	0.007	36	109	0.018
19:00 - 20:00	1	97	0.031	1	97	0.000	1	97	0.031
20:00 - 21:00	1	97	0.031	1	97	0.010	1	97	0.041
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.131			0.086			0.217

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.

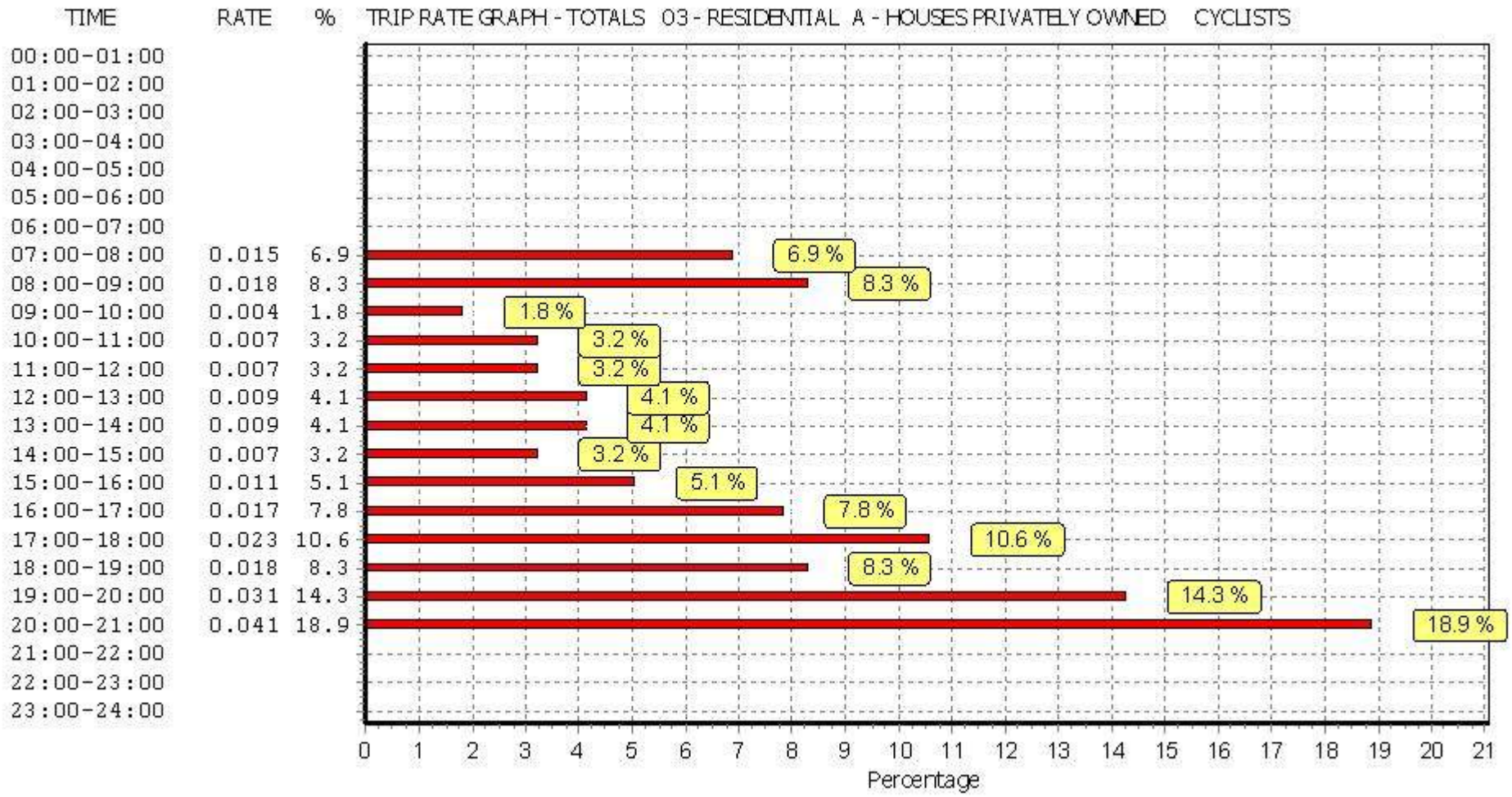
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

Appendix C: TRICS Output