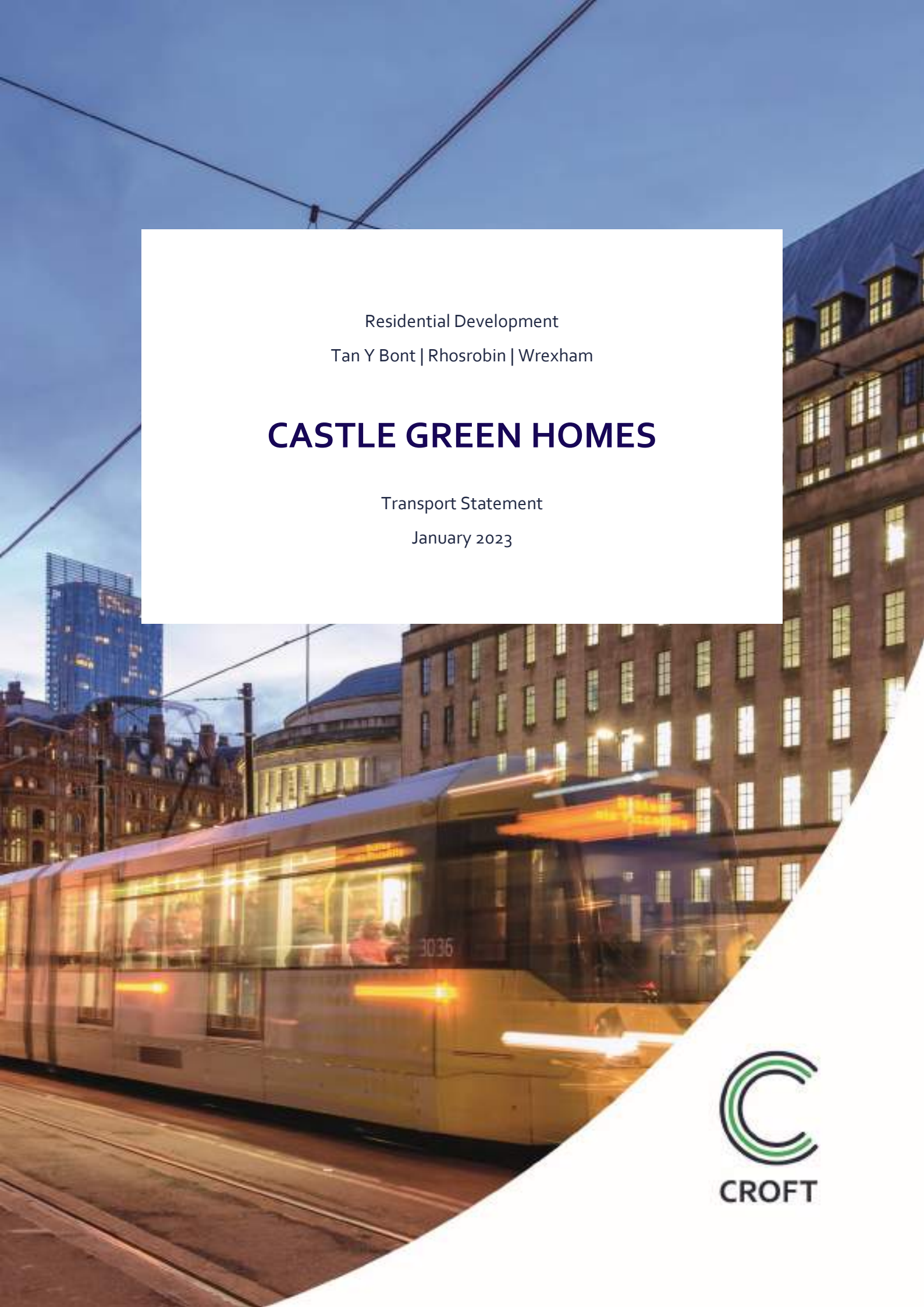


Residential Development

Tan Y Bont | Rhosrobin | Wrexham

CASTLE GREEN HOMES

Transport Statement

January 2023

CROFT

REPORT

Document:	Transport Statement
Project:	Proposed Residential Development – Tan Y Bont, Rhosrobin, Wrexham
Client:	Castle Green Homes
Job Number:	3273
File Origin:	Z:\projects\3273 Tan Y Bont, Main Road, Rhosrobin, Wrexham\Docs\Reports\3273ts.4.docx

Document Checking:

Primary Author	TR	**Initialled:**
Contributor	GM	**Initialled:**
Review By	PW	**Initialled:**

Issue	Date	Status	Checked for Issue
1	09-01-22	Final	
2			
3			
4			

Contents

Contents

1 INTRODUCTION

1.1 Introduction

1.1.1 Eddisons have been instructed by Castle Green Homes to advise on the traffic and transport issues relating to a reserved matters planning application for a residential development on land to the east of Tan Y Bont off Main Road in the Rhosrobin area of Wrexham.

1.1.2 The site has the benefit of outline planning permission for residential development. This Transport Statement has been prepared to support a reserved matters planning application.

1.1.3 The report provides information on the traffic and transport planning aspects of the development proposals and assist the local planning authority in the positive determination of the forthcoming planning application.

1.2 Structure of Report

1.2.1 Following this introduction, Section 2 provides a description of the existing site and the planning history of the site, whilst Section 3 discusses the pertinent issues with the proposals including vehicular access and the internal site layout.

1.2.2 Section 4 will consider the traffic impact of the development on the local road network.

1.2.3 Finally, Section 5 draws together the conclusions to this report.

2 DEVELOPMENT SITE

2.1 Site Location

2.1.1 The site covers an area of around 15.78 hectares. The residential development benefits from its strategic location in relation to the A483(T), Wrexham town centre and the local distributor routes of the B5425 Llay Road, Rhosrobin Road and Plas Acton Road.

2.1.2 The site is bordered by Plas Acton Way to the east, the A483 to the south New Road to the west and the Wrexham-Chester railway line to the north.

2.2 Planning History

2.2.1 An outline planning application (App ref. no P/2016/0189) was submitted for residential development in 2016 and subsequently refused for a number of reasons, none of which were highways based.

2.2.2 The application was then considered at Appeal (App ref no APP/HY955/A/17/3182282).

2.2.3 The Welsh Government endorsed the Inspector's decision to allow the Appeal in June 2019 and granted planning consent for up to 189 residential dwellings, subject to a number of planning conditions.

2.2.4 Those of relevance are listed below:

5. The access into the site shall be laid out in accordance with drawing No. 074-01/GA-02 prior to the occupation of any dwelling erected on the site under the terms of this planning permission.

12. No development shall commence until a scheme detailing the provision of a footway/cycleway link across the site from Main Road to the junction of Plas Acton Road with Blue Bell Lane and a timetable for its completion has been submitted to and agreed in writing by the local planning authority. The footway/cycleway link shall be completed in accordance with the approved details.

16. No development shall take place until a scheme detailing the provision of a traffic controlled junction at the Llay New Road junction with Plas Acton Road has been submitted to and approved in writing by the local planning authority. The approved scheme shall be implemented prior to the occupation of the first dwelling hereby approved.

2.2.5 As detailed in Condition 5, the site will be accessed via a new roundabout from Main Road. The Section 278 design process has commenced and will be progressed with highways officers at the Council.

2.2.6 The other two conditions refer to specific off site highway works that are required by the consent. These refer to the provision of a footway/cycleway link across the site from Main Road to the junction of Plas Acton Road with Blue Bell Lane and the provision of a traffic controlled junction at the Llay New Road junction with Plas Acton Road.

2.2.7 Again the Section 278 design process for the off-site works is ongoing with the relevant officers at the Council to ensure that these works are progressed and in place.

2.2.8 Of additional relevance is confirmation that the site is in a sustainable location and acceptable on transport and highways grounds. Paragraph 16 of the Decision Notice states the following:

'It is in a sustainable location being well related to local services and facilities and accessible by sustainable means of transport. The proposal provides a realistic opportunity to accommodate residential growth in a sustainable location'.

2.2.9 On the same theme, paragraph 38 states the following:

'It is considered the appeal site, whilst located outside the settlement boundary, is in a sustainable location in terms of access to services, amenities and public transport.'

2.2.10 More generally, the Minister confirmed that the proposals were acceptable from a traffic impact point of view in paragraph 28, as below:

'The development would result in increased traffic on the local highway network and the representations made by interested parties raised concerns that this would exacerbate existing traffic congestion problems. The Inspector is satisfied that the highway improvements associated with the scheme would benefit the wider community as well as residents of the site'.

2.2.11 The reserved matters are therefore intended to be determined in accordance with and pursuant to the outline planning permission.

2.2.12 Notwithstanding the above, the following section will confirm the current proposals which result in a slight increase in the number of dwellings when compared to the outline consent.

3 DEVELOPMENT PROPOSALS

3.1 Introduction

3.1.1 The number of units proposed with this reserved matters application is 219 dwellings, which exceeds the consented development (comprising 189 dwellings) by 30 units.

3.1.2 This section of the report will therefore describe the vehicular access to the site, the internal layout and servicing arrangements, whilst the following section will consider the traffic impact of the additional 30 units.

3.2 Vehicular Access

3.2.1 As detailed previously, the site will be accessed via a new roundabout junction from Main Road. The general arrangement plan of this junction is shown on **Plan 1** (Drawing Number 074-01/GA-02).

3.2.2 This is covered by Condition 5 of the outline planning consent and the Section 278 design of the junction is currently being progressed.

3.3 Internal Site Layout

3.3.1 The site will be served by a main spine road which runs east from the Main Road access roundabout. This access road will consist of a formal 5.5 metre wide access road and 2 metre wide footways on both sides.

3.3.2 At the eastern end of the main access spine road will be a formal turning head with footways surrounding it to allow delivery and refuse vehicles to manoeuvre around safely.

3.3.3 Off the main spine road are a number of shorter cul-de-sacs. Most of these continue the geometric parameters of the main spine road with 5.5 metre wide roads and footways on both sides of 2 metre widths. Some of the shorter cul-de-sacs have a reduced road width of 4.8 metres wide with a footway of 2 metres width on one side and a service strip on the other. These will reduce speeds in these areas.

3.3.4 Connecting some of these shorter cul-de-sacs are a small number of shared surface roads where all road users can travel safely with much reduced vehicular speeds and changes of surfacing to denote these shared spaces.

3.3.5 At each end of an adopted section of road will be a formal turning areas for refuse and delivery vehicles to ensure they enter and leave the adopted roads within the site in forward gear. All roads within the site will be offered for formal adoption by the Council.

3.3.6 The proposed site layout is shown in **Plan 2**.

3.3.7 In order to fully advise the local highway authority an illustration of the visibility at junctions and on the bends within the site has been undertaken. This is included at **Plan 3** and demonstrate appropriate geometry is provided. All areas within the visibility envelopes will need to be offered for adoption to ensure that these areas are kept clear of obstruction.

3.4 Service Access

3.4.1 To demonstrate that adequate delivery and refuse vehicle provision is made within the site a swept path analysis has been undertaken of a 11.2m refuse vehicle which is a standard Wrexham refuse vehicle. This is larger than most delivery HGVs and also larger than a standard fire tender so would be the largest vehicle likely to require access to the site.

3.4.2 The analysis, included on **Plan 4,** demonstrates that a delivery and refuse vehicle can safely manoeuvre within the proposed site layout.

3.4.3 In conclusion, the proposed vehicular access and internal site layout should be considered appropriate to serve the residential development.

4 TRAFFIC IMPACT ANALYSIS

4.1 Introduction

4.1.1 As detailed in Section 2 of this report, the outline planning consent related to the construction of 189 dwellings.

4.1.2 As a result, the current proposals equate to an increase of 30 units, when compared to the consented development.

4.1.3 In order to provide continued reassurance to the LHA that the development traffic will not give rise to any highways issues on the adjoining road network, this section considers the potential impact of the additional 30 dwellings.

4.2 Assessment Criteria

4.2.1 Given the proposed residential land use, it is assumed reasonable to consider the AM and PM weekday peak hours, as being those with the greatest impact on the local highway network.

4.3 Proposed Development

4.3.1 The development proposals consist of 30 dwellings over and above the number granted planning permission as part of the outline consent.

4.3.2 In order to establish the number of trips which the now proposed additional 30 dwellings is forecast to generate the TRICS database has been used for the 'Residential – Houses Privately Owned' range of sites.

4.3.3 The parameters used to ascertain the vehicular trip rates are as follows:

- Range between 0 and 300 dwellings
- Monday to Friday surveys
- Sites in Greater London and Eire excluded.

4.3.4 A summary of these trip rates and the likely level of trips that would occur as a result of the extra 30 units is included in **Table 4.1,** below.

Period	Trip Rate		Trips	
	Arr	Dep	Arr	Dep
AM Peak Hour	0.126	0.329	4	10
PM Peak Hour	0.297	0.156	9	5

Table 4.1 Proposed Development Trip Rates and Trips (30 Units)

4.3.5 As can be seen above, the proposed additional 30 units is forecast to generate a total of 14 two-way trips in both the AM and PM peaks.

4.3.6 In light of such a minimal impact, it is considered that such increases are within the normal variation of daily traffic flows and will not result in a material change to traffic conditions.

4.4 Traffic Impact Summary

4.4.1 This section of the Report has considered the impact of the 30 additional dwellings.

4.4.2 The above assessment has demonstrated that the slight increase in unit numbers will not have a material impact or give rise to any highway capacity issues.

4.4.3 It is therefore considered that the predicted level of additional traffic can be accommodated onto the local highway network.

4.4.4 On that basis, it can be assumed that the impact of the proposals on the local highway network would be minimal and should continue to be deemed acceptable in highway terms.

5 CONCLUSIONS

5.1.1 Eddisons have been instructed by Castle Green Homes to advise on the traffic and transport issues relating to a reserved matters planning application for a residential development on land to the east of Tan Y Bont off Main Road in the Rhosrobin area of Wrexham.

5.1.2 A number of conclusions can be drawn from the report, namely:

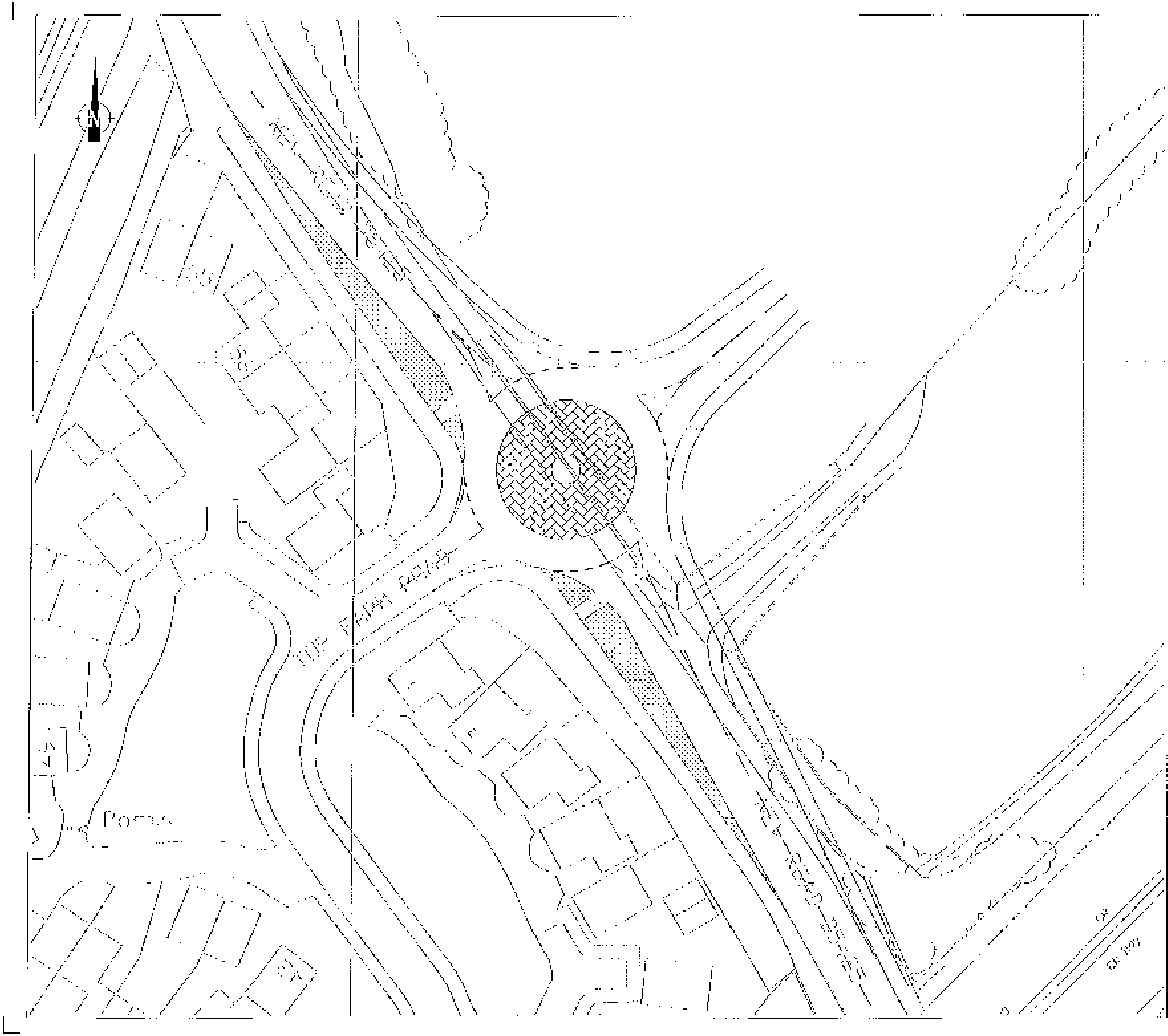
- The site has the benefit of outline planning consent for up to 189 dwellings.
- The proposed vehicular access to the site is acceptable.
- The proposals include off site works that will be progressed through the Section 278 by the applicant.
- The site remains in a sustainable location.
- The proposed site layout can accommodate the swept path requirements of a refuse vehicle.
- The proposed site layout meets the requirement for fire and rescue service vehicles.
- The trip generation exercise undertaken in relation to the additional number of dwellings (when compared to the outline consent) has demonstrated that any potential traffic impact would continue to be minimal.

5.1.3 It can therefore be concluded that the proposals will continue to be acceptable in highway terms.

PLANS

PLAN 1

Proposed Site Access (Drawing Number 074-01/GA-02)



This drawing is the copyright of Cameron Rose Limited and may not be copied, ... or reproduced in any way, or used for any other, ... purposes without written consent of the company in ...

... any figured dimensions – do not scale ...

This drawing has been prepared for feasibility purposes and does not represent a construction plan. All design aspects to be confirmed at the appropriate detailed design stage.

● Revision History	● Date

CAMERON ROSE

client:

project:

Proposed Residential Development

drawing title:

New Road Site Access
Preliminary Design Proposal

scale(s) | date | drawn by | checked

drawing number

status

rev

DATE PRINTED

PLAN 2

Proposed Site Layout

Key:

- Site Boundary
- 1.8m high boundary fence
- 1.8m high screen wall / fence
- Private Drive
- Indicative Landscaping
- Number of parking spaces proposed to Semi-Detached and Detached Dwellings
- Parking space allocation to Terraced Dwellings
- Knee rails to parking bays to Mid-Terraced Dwellings
- * Affordable Housing
- Existing Sewer & Easement

RHOSROBIN - SCHEDULE OF ACCOMMODATION

HOUSETYPE	DESCRIPTION	SQFT	NUMBER	PERCENTAGE
[illegible]	2 Bed 2 Storey Mid Terrace	[illegible] SQFT	26	11.87
[illegible]	3 Bed 2 Storey End Terrace	[illegible] SQFT	[illegible]	[illegible]
[illegible]	2 Bed 2 Storey [illegible]	639 SQFT	3	[illegible]
[illegible]	2 Bed 2 Storey Mid Terrace	595 SQFT	4	[illegible]
[illegible]	3 Bed 2 Storey End Terrace	[illegible]	4	[illegible]
[illegible]	2 Bed 2 Storey Mid Terrace	705 SQFT	8	[illegible]
[illegible]	3 Bed 2 Storey Semi-detached/End Terrace	821 SQFT	14	[illegible]
[illegible]	3 Bed 2 Storey Semi-detached	887 SQFT	[illegible]	[illegible]
Sunningdale	3 Bed 2.5 Storey Semi-detached	1022 SQFT	24	10.96
[illegible]	3 Bed 2 Storey	[illegible]	14	[illegible]
[illegible]	3 Bed 2 Storey	1040 SQFT	12	[illegible]
[illegible]	3 Bed 2 Storey	[illegible] SQFT	22	[illegible]
[illegible]	4 Bed 2 Storey	[illegible]	9	[illegible]
Beaumont	4 Bed 2 Storey	1204 SQFT	16	[illegible]
[illegible]	4 Bed 2 Storey	[illegible]	14	[illegible]
TOTAL		214995 SQFT	219	

Gross Site Area	[illegible] Acres	[illegible] Hectares
[illegible] within Green Barrier	[illegible] Acres	[illegible] Hectares
Landscaped POS within Green Barrier	[illegible] Acres	[illegible] Hectares
Development Area POS	[illegible] Acres	[illegible] Hectares
Undevelopable Entrance, Single Sided Road & Existing Landscaping	[illegible] Acres	[illegible] Hectares
NETT SITE AREA:	14.09 ACRES	5.70 HECTARES
Gross Density	[illegible] Units/Acre	[illegible] Units/Hectare
NETT DENSITY	15.54 UNITS/ACRE	38.41 UNITS/HECTARE
Gross Footage	[illegible] SQFT/Acre	[illegible] SQM/Hectare
NETT FOOTAGE	15258.59 SQFT/ACRE	[illegible] SQM/HECTARE

Rev:	Description:	Date:
A	Blocks updated and mix amended	08.10.20
B	APD layout added	19.10.20
C	Road layout and mix amended.	01.12.20
D	Additional plots added increasing number to 189.	05.01.21
E	Schedule corrected.	07.01.21
F	LEAP indicated	11.01.21
G	Turning heads by plots 118, 79 and between plots 25-26 extended to following vehicle tracking report.	26.01.21
H	Amends following planning officer comments.	07.04.21
I	Amends following planning officer comments.	25.05.21
J	Amends following planning officer comments.	15.06.21
K	Cycle path added on North West part of the site.	01.07.21
	Plots 1-5 repositioned away from Diverted HV Cable.	05.07.21
L	Amends following comments from the Tree Officer.	18.10.21
M	Parking indicated for plot 27, Parking numbering corrected for plots 165 - 175.	03.11.21
N	Amends to plots near site entrance following review of levels. Internal issue.	--.11.21
O	Plots 44-47, 97, 100, 101, 118, 160, 161 Handed. Burlington Roof configuration corrected.	16.02.22
P	Substation and PRI resized.	04.05.22
Q	Amends to area around plots 106-116.	15.06.22
R	Number increased from 189 to 220	22.09.22
S	Amends from comments back from Planning	14.11.22
T	Turning head in front of plot 152 extended.	05.01.23

Castle Green
Unit 20,
St. Asaph Business Park, St Asaph,
Denbighshire. LL17 0LJ.
Tel. 01745 536677

Site: Main Road, Rhosrobin, Wrexham

Title: Proposed Site Plan (1 of 2)

Scale: 1:1000@A1

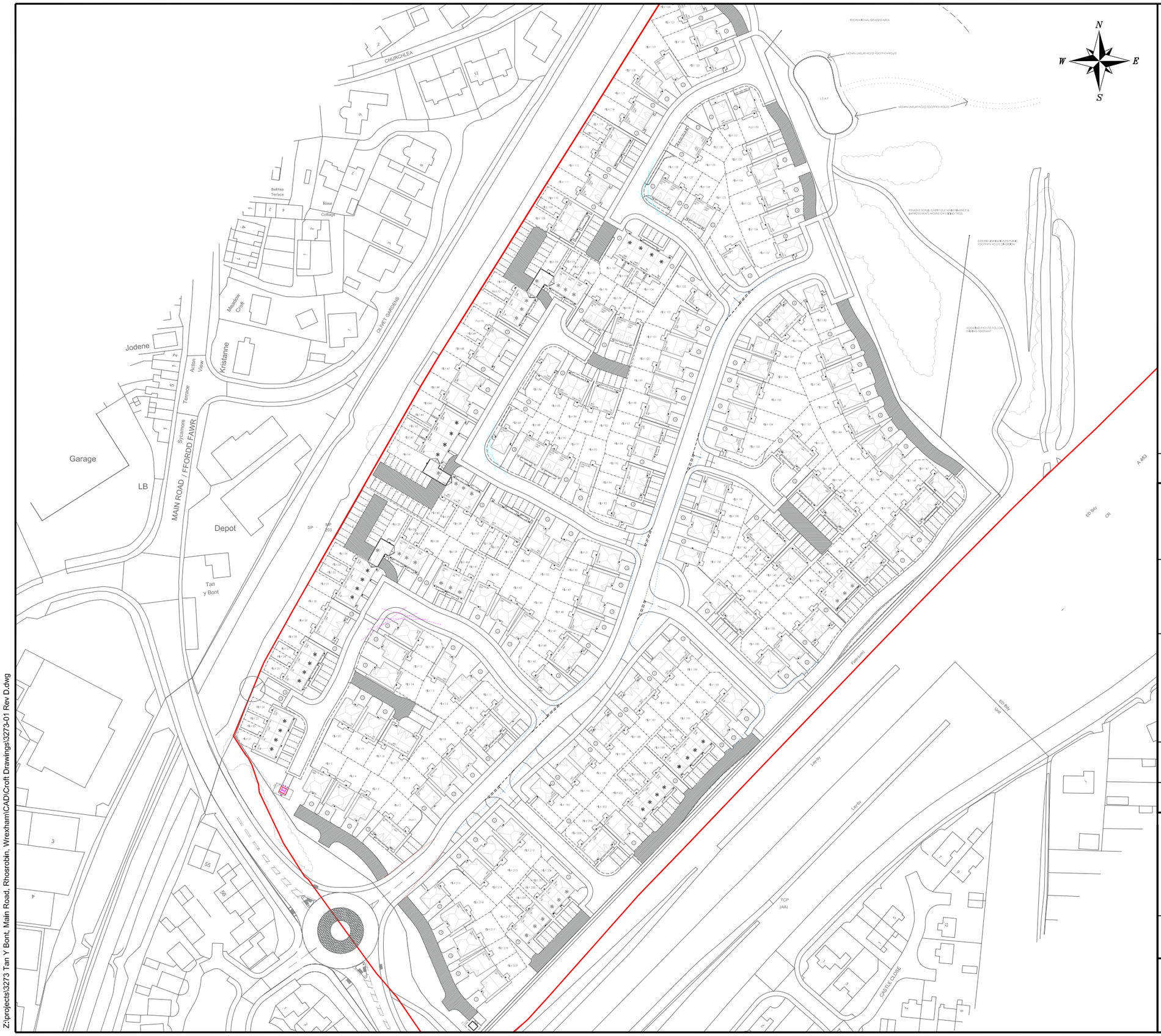
Date: 18.07.19

Ref: RHRO-SP01

Rev: T

PLAN 3

Geometric Parameters Plan



Z:\projects\3273 Tan Y Bont, Main Road, Rhosrobin, Wrexham\CAD\Croft Drawings\3273-01 Rev D.dwg

NOTES

PLAN X

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY.
THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.

- 2.4x25M VISIBILITY SPLAY
- 2.0x25M VISIBILITY SPLAY
- 17M INTERNAL VISIBILITY SPLAY
- 25M INTERNAL VISIBILITY SPLAY

REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:

GREEN CASTLE

PROJECT:

TAN Y BONT, RHOSROBIN, WREXHAM

DRAWING TITLE:

VISIBILITY PLAN

SCALES:

1:1000 @ A3

DRAWN:	CHECKED:	DATE:
LG	MR	JAN 23

Eddisons
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M3 4LY

Email: info@croftts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

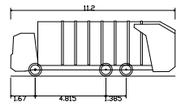
DRAWING NUMBER:	REVISION:
3273-F01	D

Eddisons

PLAN 4

Swept Path Analysis

NOTES



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

CASTLE GREEN

PROJECT:

TAN Y BONT, MAIN ROAD, RHOSROBIN, WREXHAM

DRAWING TITLE:

SWEPT PATH ANALYSIS

SCALES: 1:2000 @ A3

DRAWN:	CHECKED:	DATE:
GW	MR	JAN 2023

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DRAWING NUMBER:	REVISION:
3273-SP01	H

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Z:\projects\3273 Tan Y Bont, Main Road, Rhosrobin, Wrexham\CAD\Croft Drawings\3273-SP01 Rev H.dwg

APPENDICES

APPENDIX 1

TRICS Output

Calculation Reference: AUDIT-851401-180828-0818

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	2 days
	KC	KENT	2 days
	WS	WEST SUSSEX	2 days
03	SOUTH WEST		
	DV	DEVON	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	DH	DURHAM	1 days
11	SCOTLAND		
	FA	FALKIRK	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: 110 to 288 (units:)
Range Selected by User: 100 to 300 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 19/04/18

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	2 days
Tuesday	1 days
Wednesday	3 days
Thursday	2 days
Friday	4 days

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

Selected survey types:

Manual count	12 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 Centre	1
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	7
Neighbourhood Centre (PPS6 Local Centre)	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	12

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	12 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	1 days
1,001 to 5,000	3 days
5,001 to 10,000	1 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	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	5 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	3 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	3 days
1.1 to 1.5	9 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	2 days
No	10 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	12 days

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

LIST OF SITES relevant to selection parameters

1 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*

2 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

3 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*

4 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*

5 FA-03-A-02 MIXED HOUSES FALKIRK
ROSEBANK AVENUE & SPRINGFIELD DRIVE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY *29/05/13* *Survey Type: MANUAL*

6 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*

7 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*

8 NE-03-A-03 PRIVATE HOUSES NORTH EAST LINCOLNSHIRE
STATION ROAD
SCUNTHORPE

Edge of Town Centre
Residential Zone
Total Number of dwellings: 180
Survey date: TUESDAY *20/05/14* *Survey Type: MANUAL*

9 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

10 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*

11 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*

12 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*

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
AN-03-A-06	Ire/Ldn
AN-03-A-08	Ire/Ldn
AN-03-A-09	Ire/Ldn
AR-03-A-01	Ire/Ldn
DL-03-A-03	Ire/Ldn
DL-03-A-06	Ire/Ldn
DN-03-A-05	Ire/Ldn
WA-03-A-04	Ire/Ldn

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	12	168	0.076	12	168	0.235	12	168	0.311
08:00 - 09:00	12	168	0.126	12	168	0.329	12	168	0.455
09:00 - 10:00	12	168	0.140	12	168	0.153	12	168	0.293
10:00 - 11:00	12	168	0.130	12	168	0.155	12	168	0.285
11:00 - 12:00	12	168	0.130	12	168	0.153	12	168	0.283
12:00 - 13:00	12	168	0.152	12	168	0.139	12	168	0.291
13:00 - 14:00	12	168	0.167	12	168	0.153	12	168	0.320
14:00 - 15:00	12	168	0.159	12	168	0.169	12	168	0.328
15:00 - 16:00	12	168	0.244	12	168	0.160	12	168	0.404
16:00 - 17:00	12	168	0.239	12	168	0.164	12	168	0.403
17:00 - 18:00	12	168	0.297	12	168	0.156	12	168	0.453
18:00 - 19:00	12	168	0.221	12	168	0.163	12	168	0.384
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.081			2.129			4.210

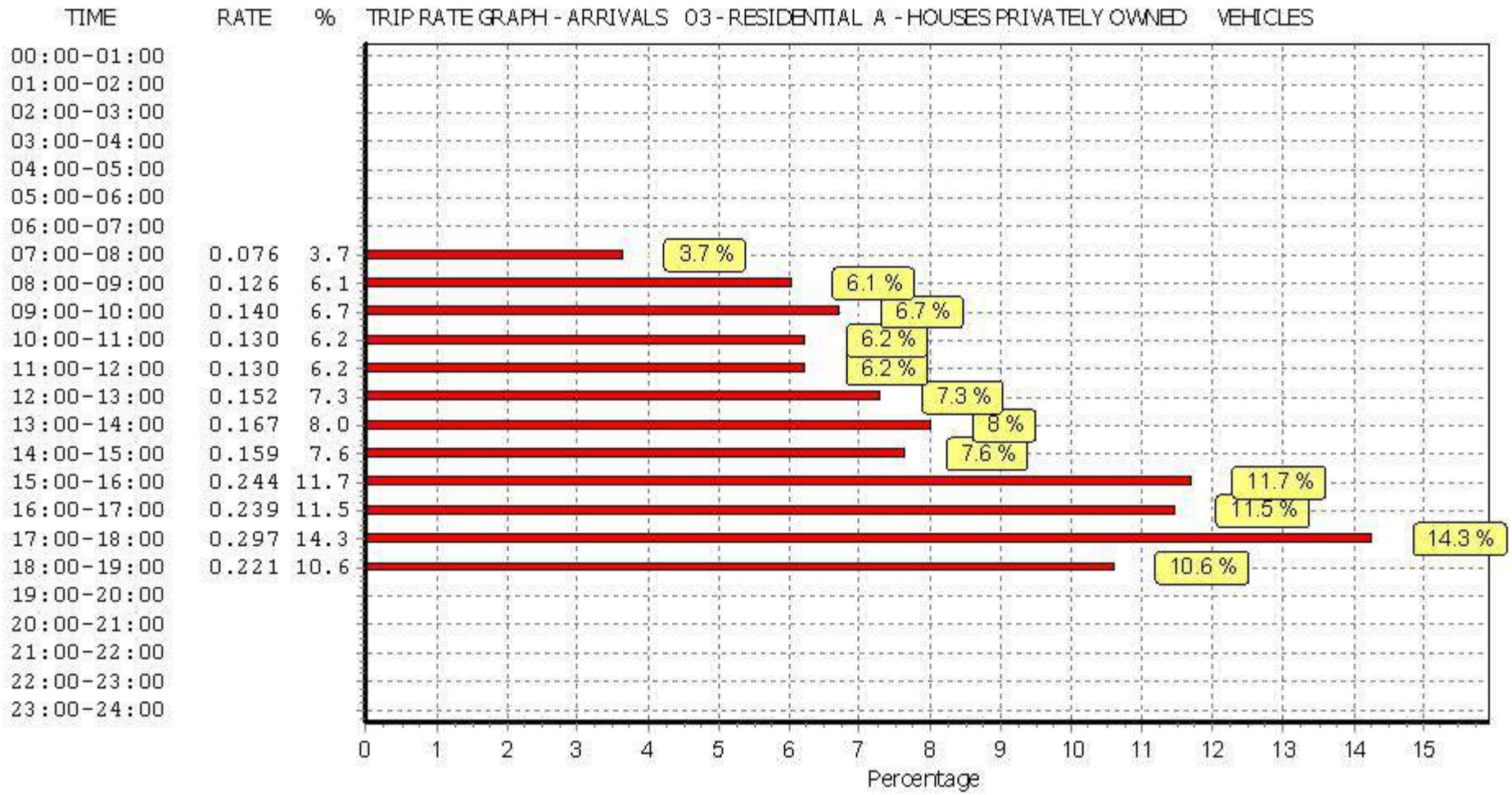
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

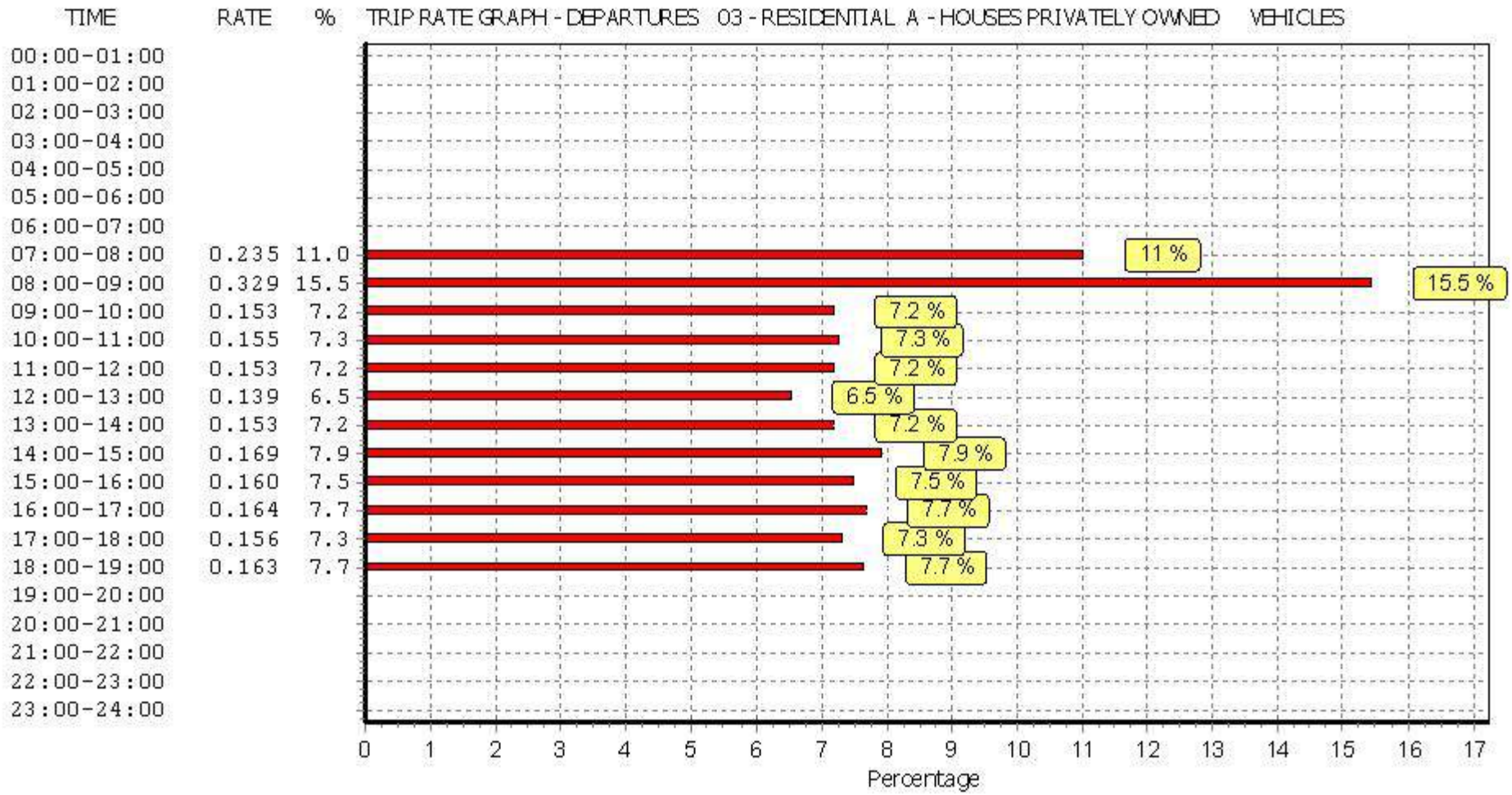
Parameter summary

Trip rate parameter range selected:	110 - 288 (units:)
Survey date date range:	01/01/10 - 19/04/18
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	8

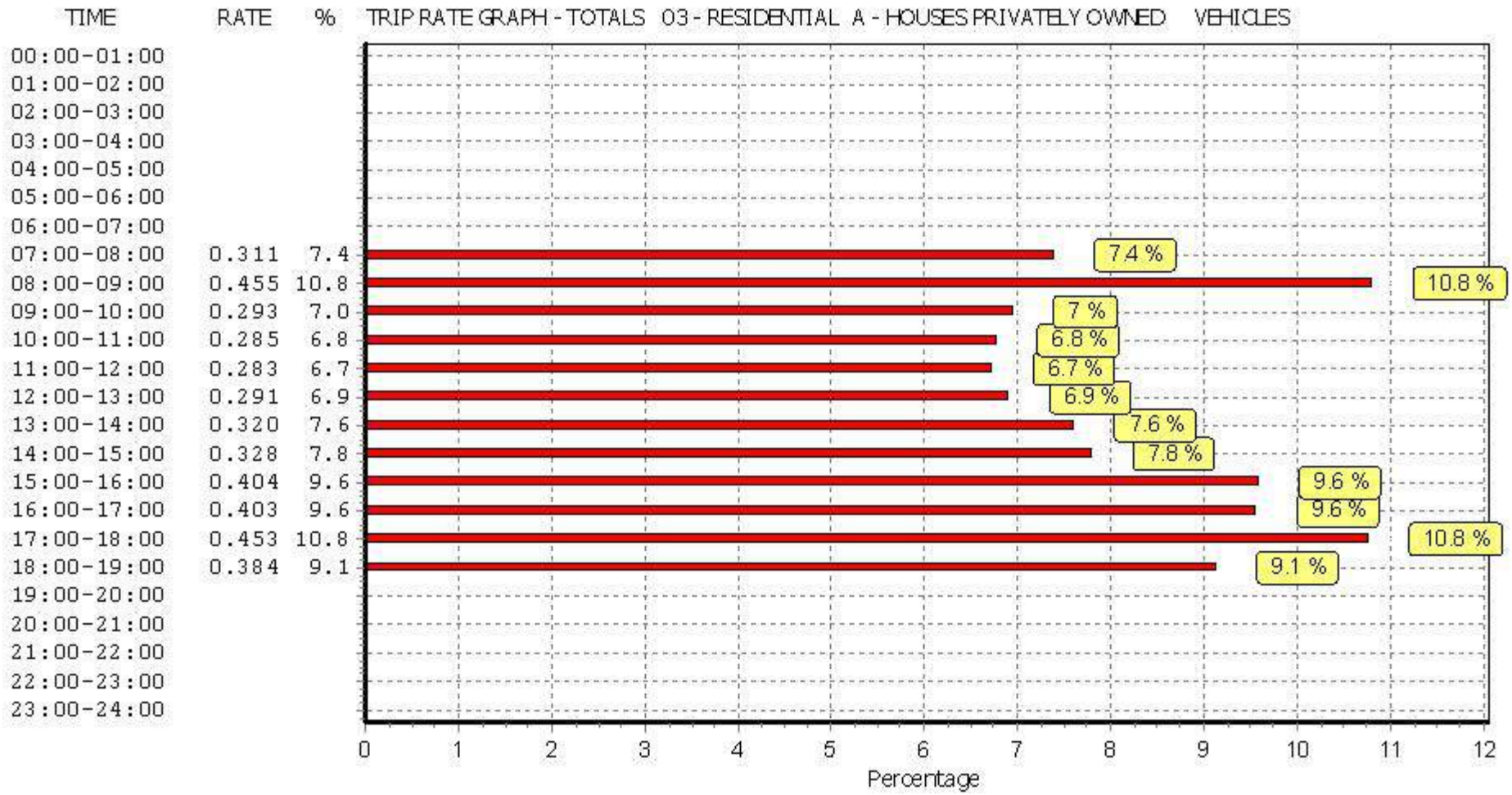
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected 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.



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.



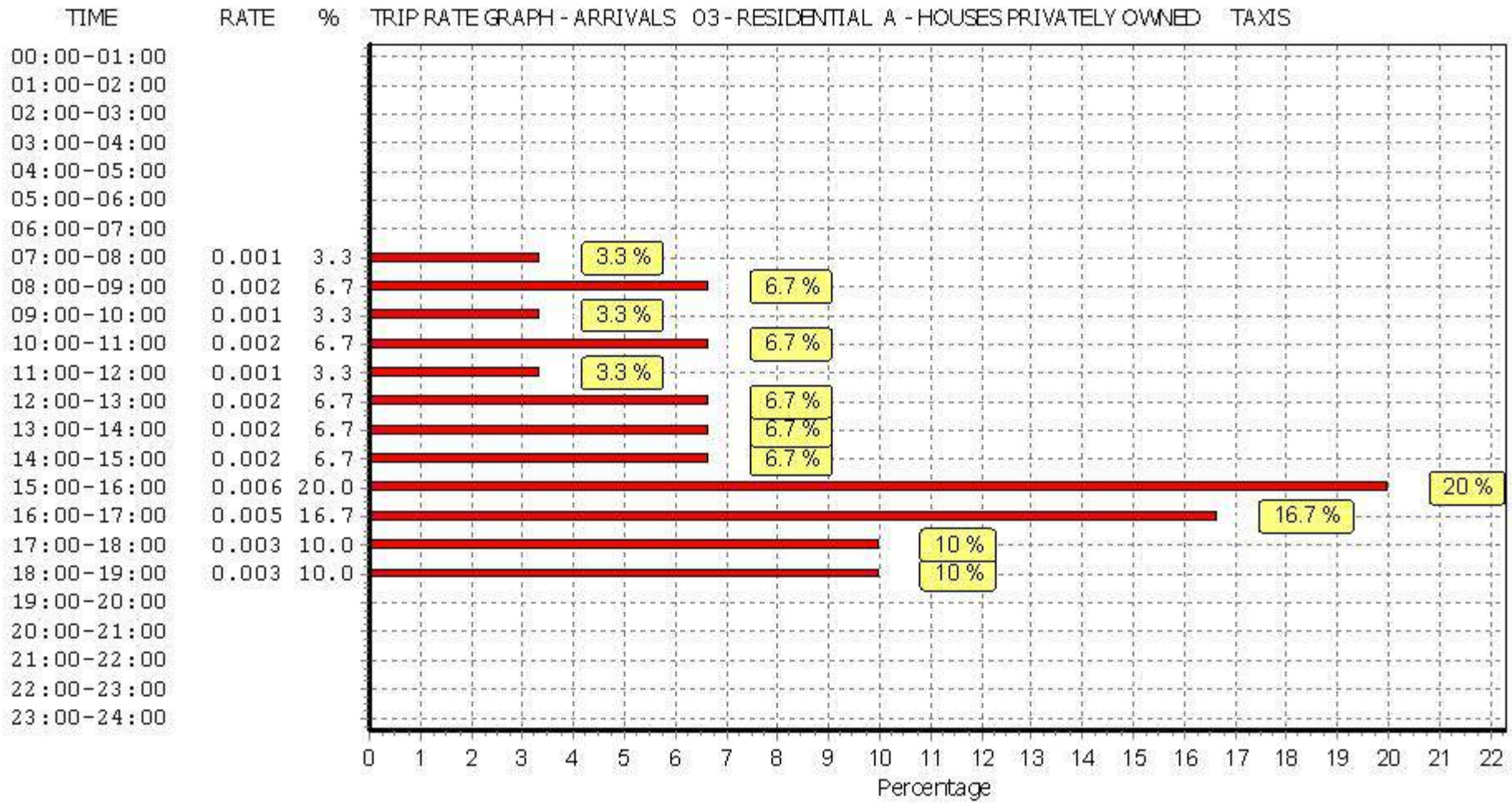
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through 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
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

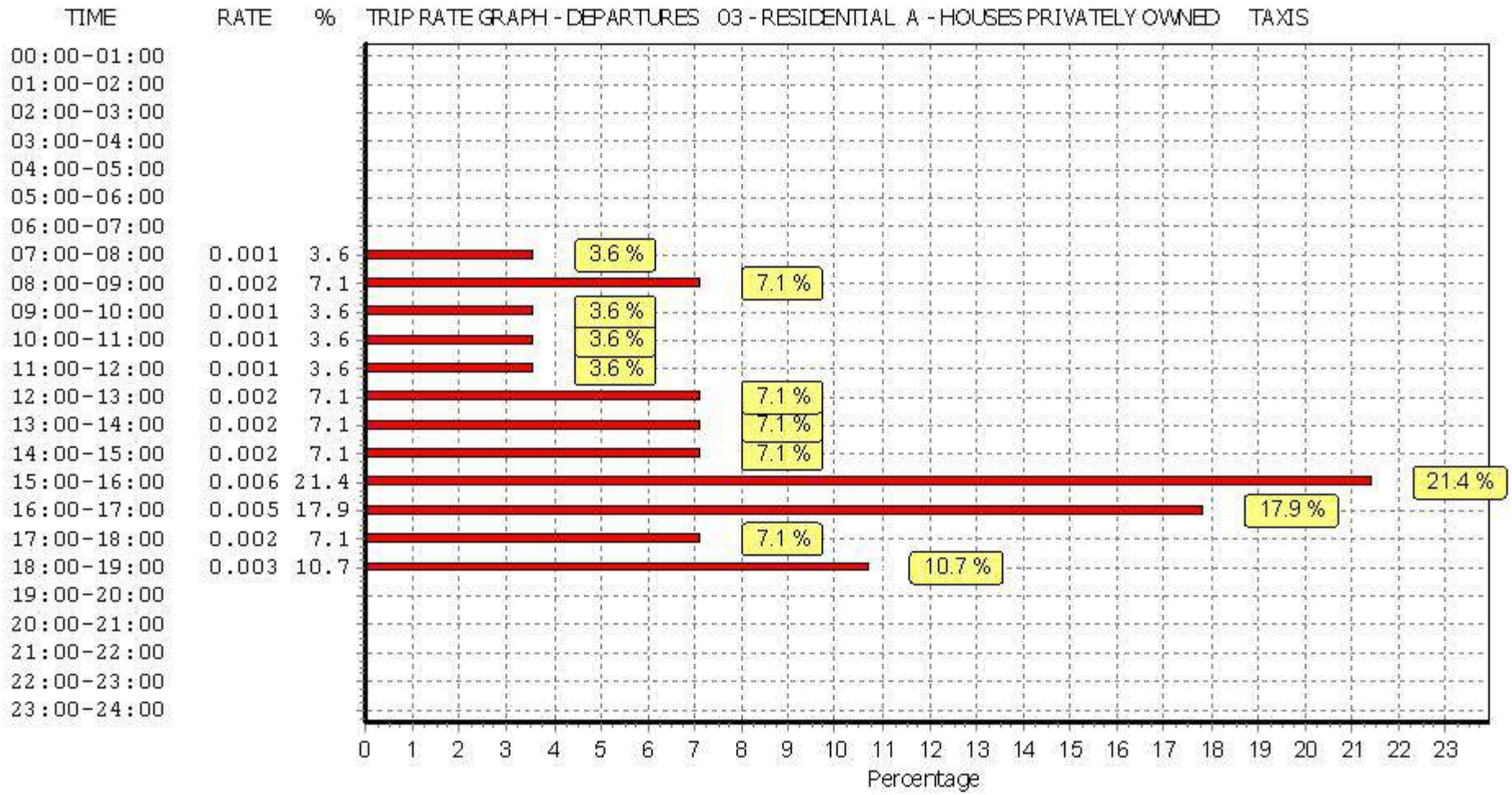
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	168	0.001	12	168	0.001	12	168	0.002
08:00 - 09:00	12	168	0.002	12	168	0.002	12	168	0.004
09:00 - 10:00	12	168	0.001	12	168	0.001	12	168	0.002
10:00 - 11:00	12	168	0.002	12	168	0.001	12	168	0.003
11:00 - 12:00	12	168	0.001	12	168	0.001	12	168	0.002
12:00 - 13:00	12	168	0.002	12	168	0.002	12	168	0.004
13:00 - 14:00	12	168	0.002	12	168	0.002	12	168	0.004
14:00 - 15:00	12	168	0.002	12	168	0.002	12	168	0.004
15:00 - 16:00	12	168	0.006	12	168	0.006	12	168	0.012
16:00 - 17:00	12	168	0.005	12	168	0.005	12	168	0.010
17:00 - 18:00	12	168	0.003	12	168	0.002	12	168	0.005
18:00 - 19:00	12	168	0.003	12	168	0.003	12	168	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.030			0.028			0.058

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.

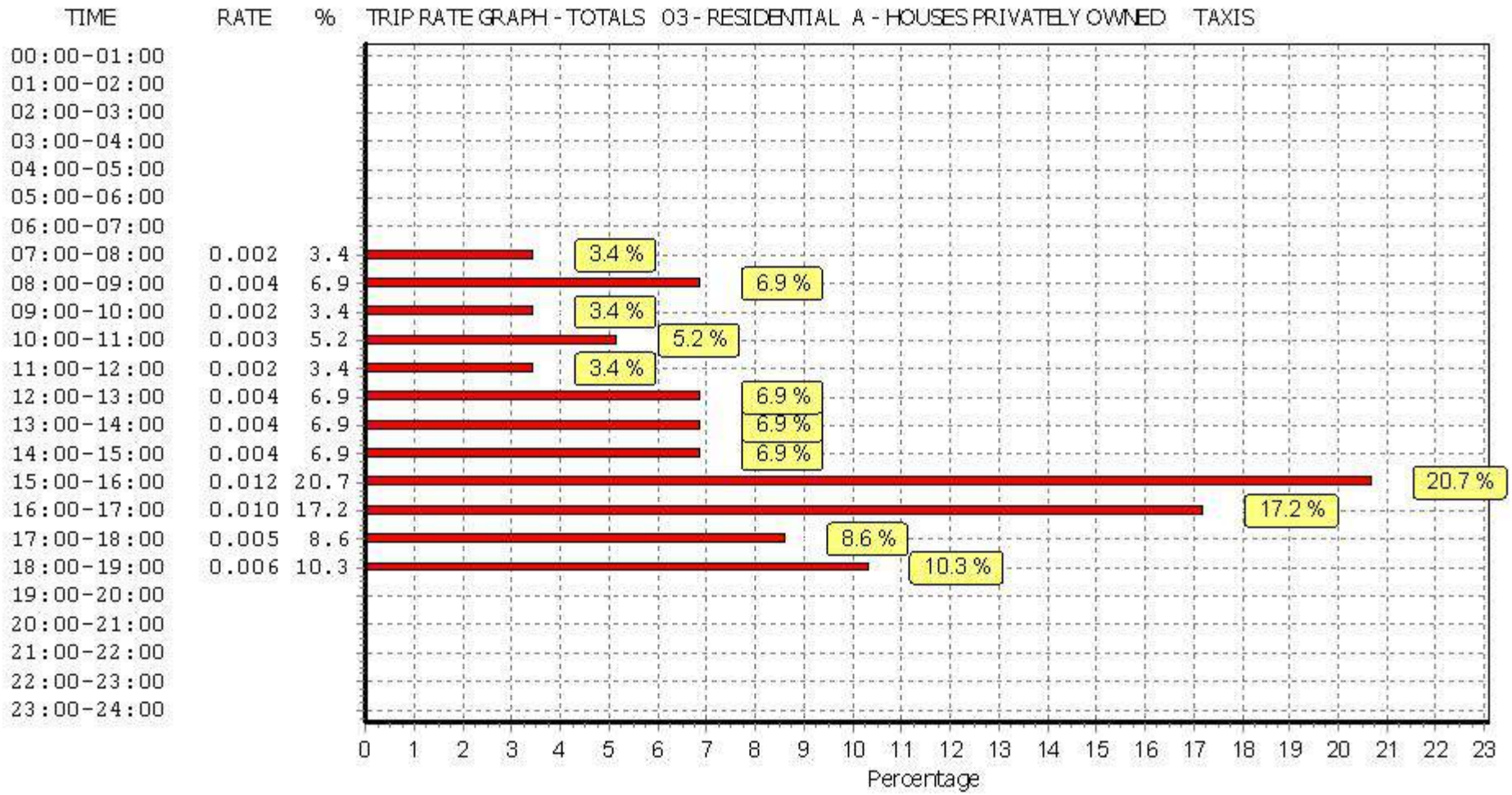
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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	12	168	0.001	12	168	0.000	12	168	0.001
08:00 - 09:00	12	168	0.002	12	168	0.001	12	168	0.003
09:00 - 10:00	12	168	0.002	12	168	0.001	12	168	0.003
10:00 - 11:00	12	168	0.002	12	168	0.001	12	168	0.003
11:00 - 12:00	12	168	0.001	12	168	0.002	12	168	0.003
12:00 - 13:00	12	168	0.001	12	168	0.002	12	168	0.003
13:00 - 14:00	12	168	0.002	12	168	0.000	12	168	0.002
14:00 - 15:00	12	168	0.001	12	168	0.003	12	168	0.004
15:00 - 16:00	12	168	0.001	12	168	0.001	12	168	0.002
16:00 - 17:00	12	168	0.002	12	168	0.002	12	168	0.004
17:00 - 18:00	12	168	0.001	12	168	0.000	12	168	0.001
18:00 - 19:00	12	168	0.000	12	168	0.000	12	168	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.013			0.029

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.

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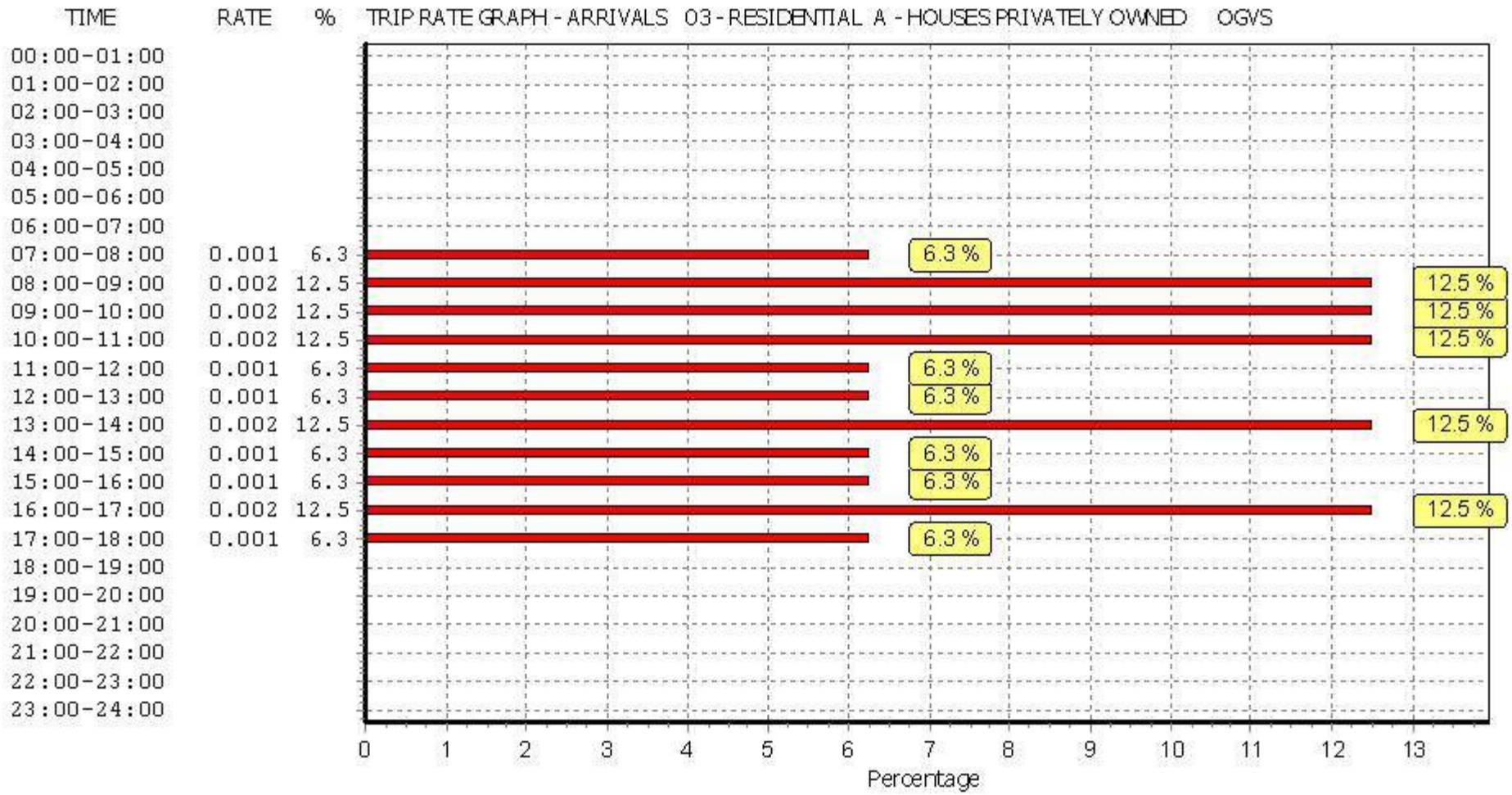
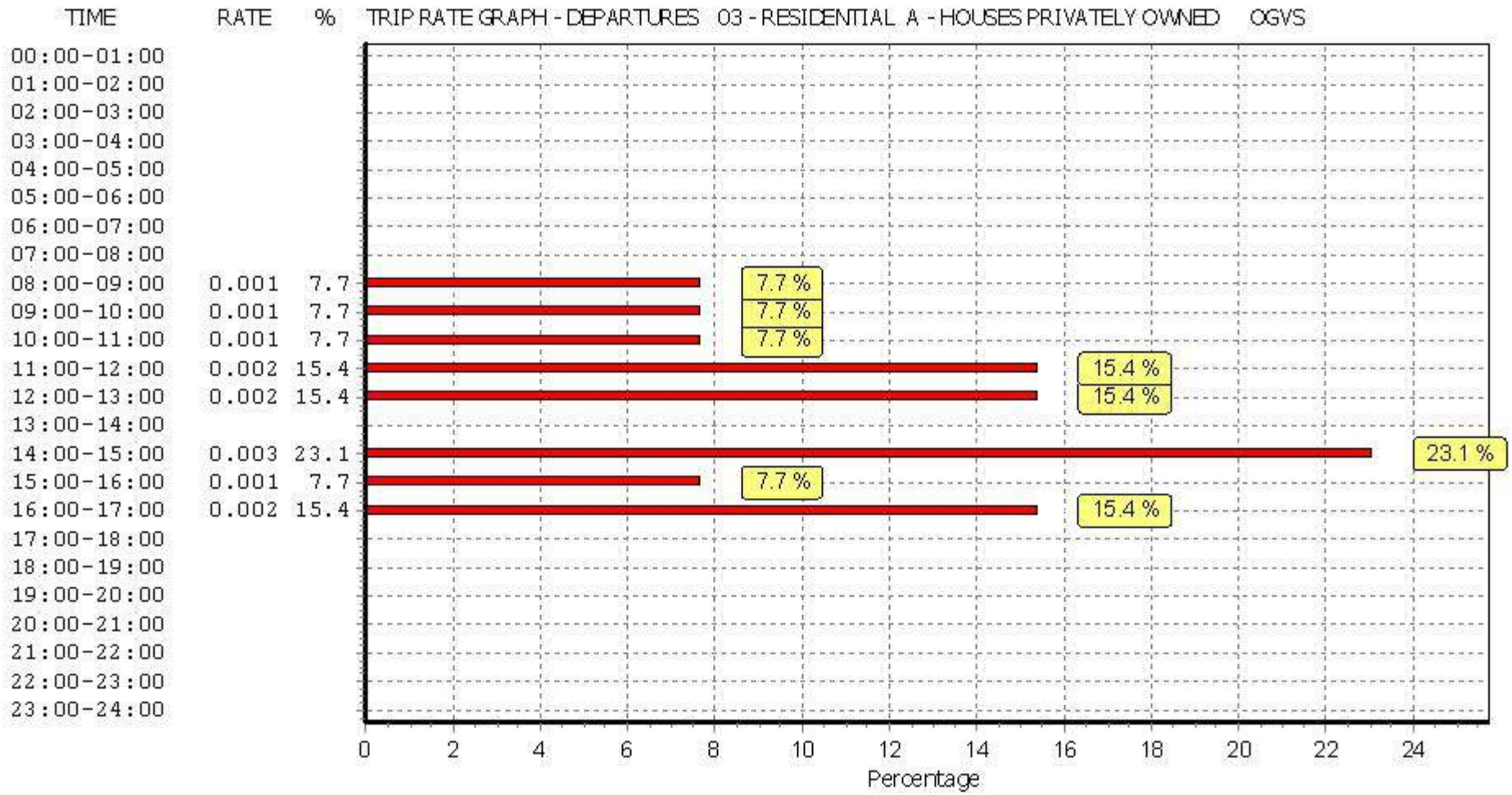
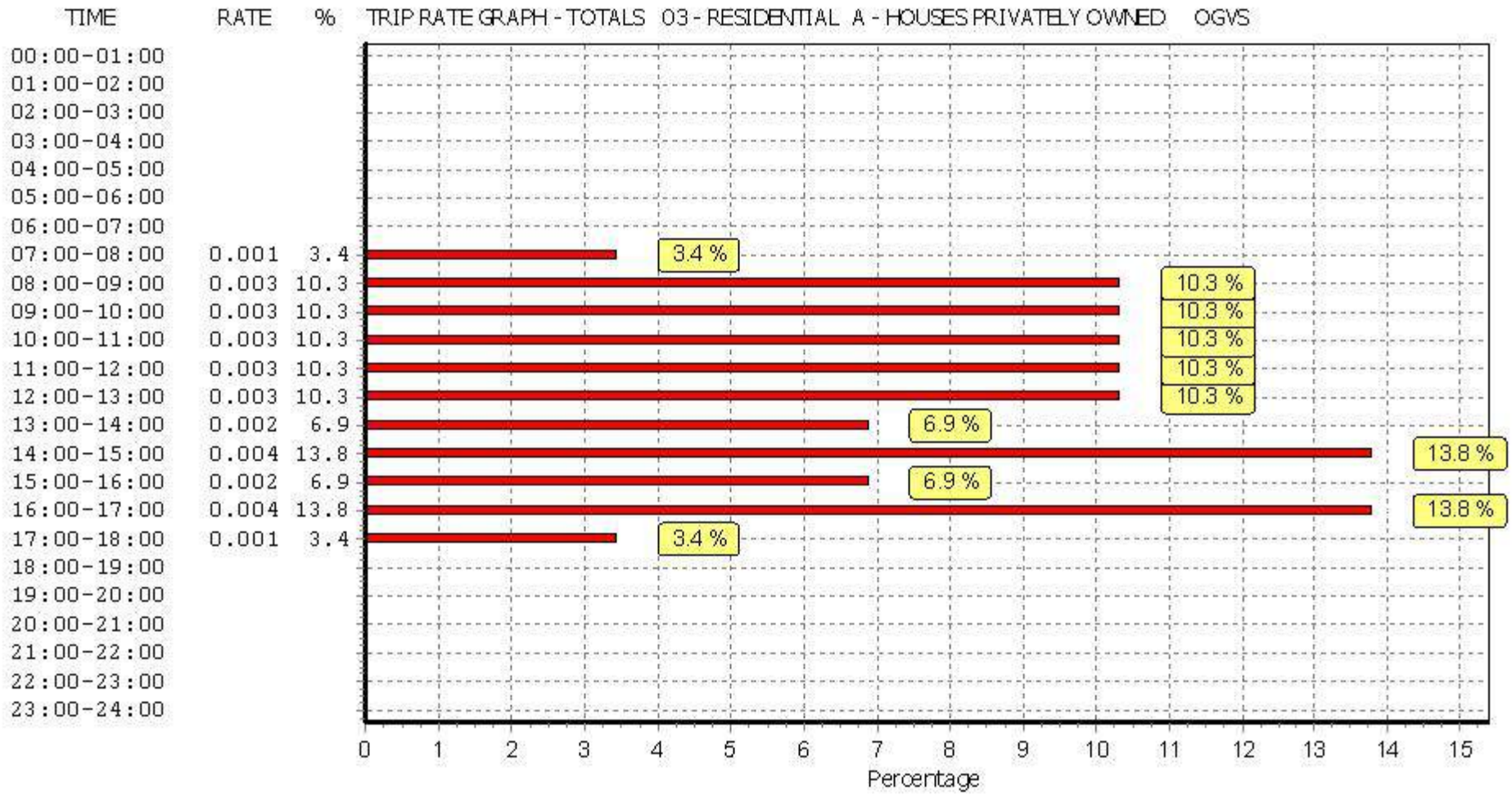


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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



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	12	168	0.005	12	168	0.007	12	168	0.012
08:00 - 09:00	12	168	0.005	12	168	0.006	12	168	0.011
09:00 - 10:00	12	168	0.000	12	168	0.001	12	168	0.001
10:00 - 11:00	12	168	0.003	12	168	0.004	12	168	0.007
11:00 - 12:00	12	168	0.002	12	168	0.002	12	168	0.004
12:00 - 13:00	12	168	0.003	12	168	0.004	12	168	0.007
13:00 - 14:00	12	168	0.001	12	168	0.001	12	168	0.002
14:00 - 15:00	12	168	0.002	12	168	0.003	12	168	0.005
15:00 - 16:00	12	168	0.005	12	168	0.005	12	168	0.010
16:00 - 17:00	12	168	0.004	12	168	0.007	12	168	0.011
17:00 - 18:00	12	168	0.010	12	168	0.005	12	168	0.015
18:00 - 19:00	12	168	0.009	12	168	0.006	12	168	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.049			0.051			0.100

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.

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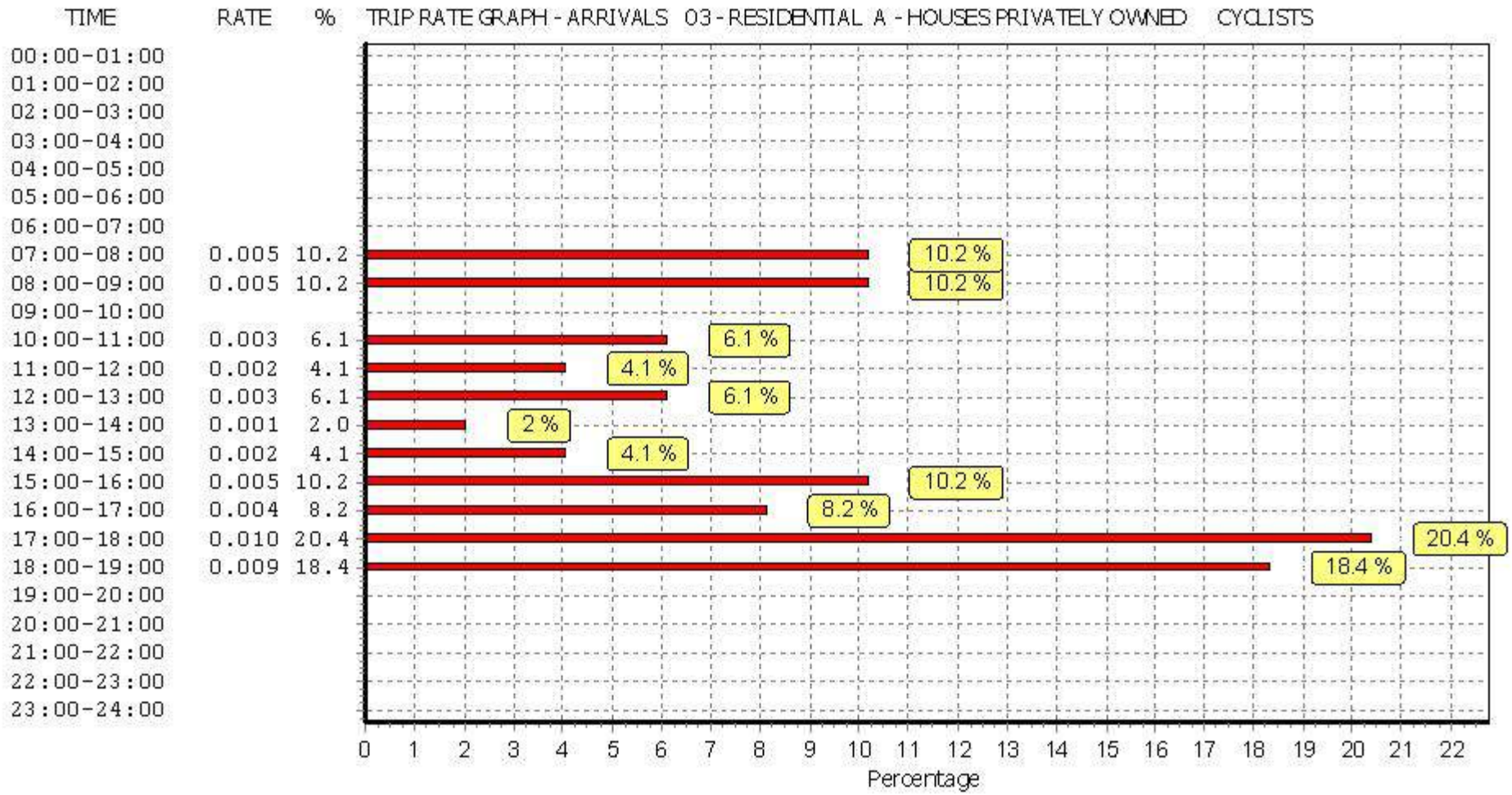

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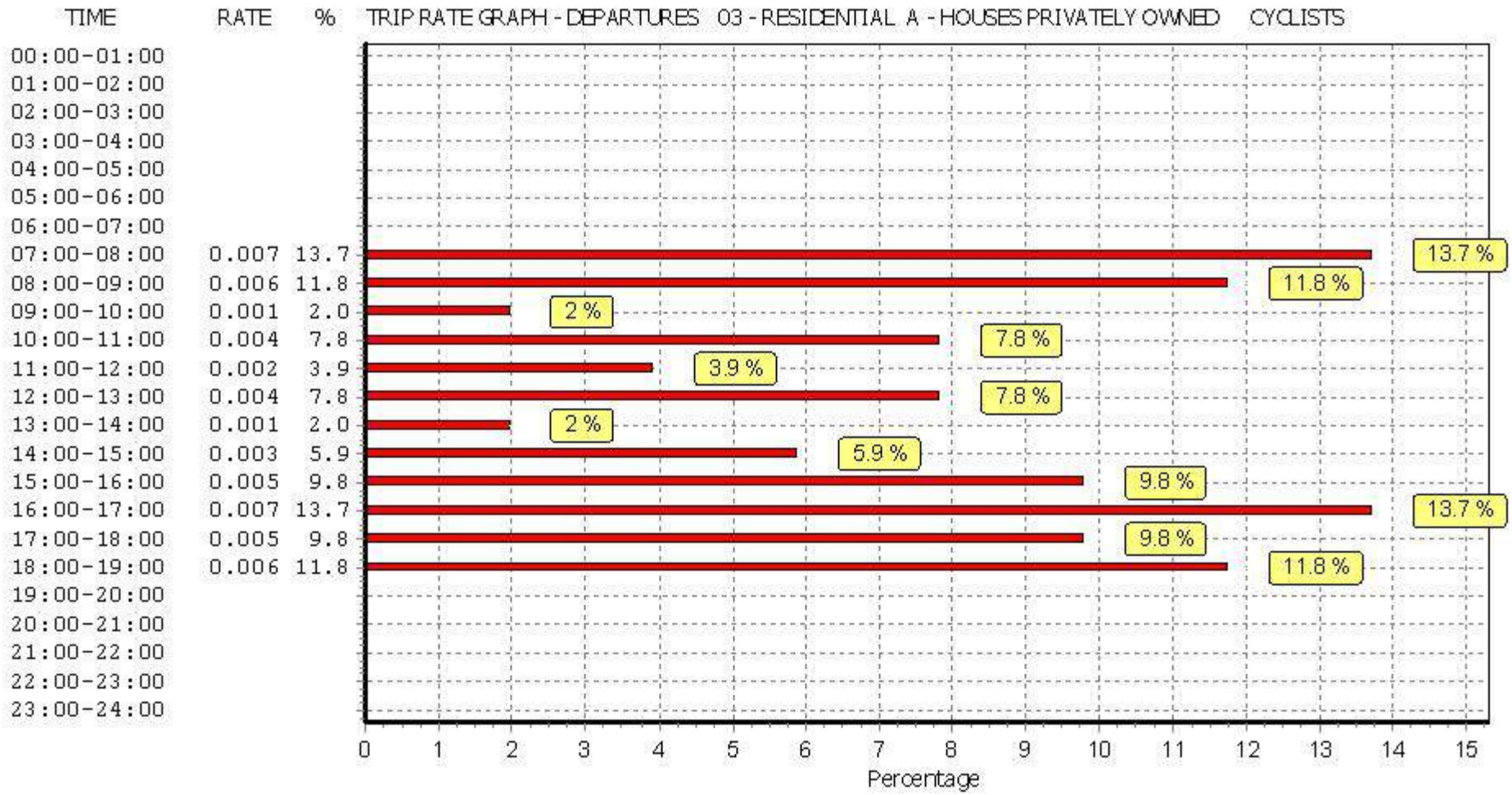

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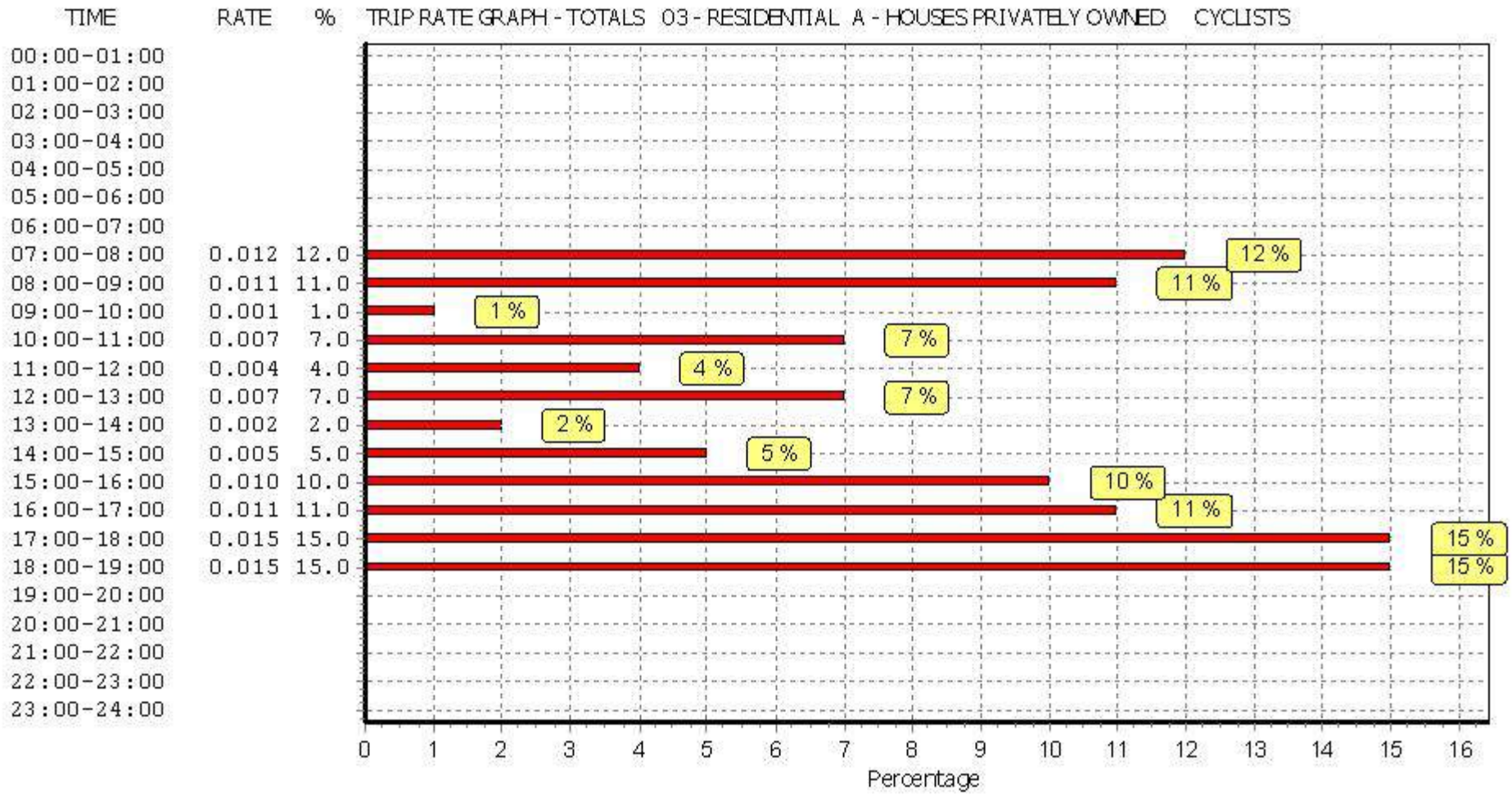

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