

APPENDIX A

Willows

SCALE
5 METRE 25 METRE 50 METRE

LIDSEY ROAD

Wings

Landscape Wings Area

Stockhearn House

Stockhearn

The Cott

Chippings Cottage

Aston

A 29

APPENDIX B



WINGS NURSERY, LIDSEY, WEST SUSSEX

PROPOSED NEW ACCESS

Stage 1 Road Safety Audit

September 2017

SR/LS/17/1545/RSA1

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Steve Richards	Laurie Shaw		13/09/2017
Designer's Response				
Authority's Response				
Audit Response				

Client:	
Russell Giles Partnership	The Safety Forum Ltd
Shackleford Suite Mill Pool House Mill Lane Godalming GU7 1EY	PO Box 831 Godalming Surrey GU7 9HT
	Date: 13 September 2017

TABLE OF CONTENTS

1.0	INTRODUCTION.....	3
2.0	ITEMS CONSIDERED	5
3.0	MATTERS ARISING FROM THIS STAGE 1 AUDIT.	6
4.0	OBSERVATIONS.....	8
5.0	AUDITOR STATEMENT	9

APPENDIX A Location Plan

APPENDIX B Road Safety Audit Response

1.0 INTRODUCTION

- 1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the proposed access arrangements, for a Residential Development at Wings Nursery, Lidsey Road, Lidsey, West Sussex.
- 1.2 The highway proposals include: the construction of a new access junction on the west side of Lidsey Road to the south of the level crossing.
- 1.3 The Stage 1 RSA was carried out at the request of the Russell Giles Partnership. A previous Stage 1 RSA was carried out by the Safety Forum in January 2015 (LS/DH/15/0926/RSA1) on a different arrangement. One issue was resolved, the second issue is included in this RSA.
- 1.4 The Audit was carried out between 11th and 12th September 2017 by consultants working on behalf of The Safety Forum Limited. The Audit Team, which is established from The Safety Forum Ltd and independent of the project design team, has had no involvement with the project:

The Auditors were:

Steve Richards – Team Leader, MCIHT, MSoRSA

Laurie Shaw – Team Member (MSoRSA, Cert of Comp)

- 1.5 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.6 The Audit consisted of a desktop study and a site visit. The site visit was carried out on 11th September 2017, between 12:00 and 12:30 hours by all member of the Audit Team together. The weather was bright and sunny and the road surface was dry. Traffic conditions were moderate.
- 1.7 Issues relating to the health & safety of operatives constructing, operating or maintaining the highway are not covered by Road Safety Audit. Only issues relating to the design and construction of facilities for highway maintenance that may potentially contribute to a Road Safety Matter are considered by the Road Safety Audit process.

Road Safety Audit is not a technical check that the design conforms to Standards and/or best practice guidance. Design Organisations are responsible for ensuring that their designs have been subjected to the appropriate design reviews (including, where applicable, Non-Motorised User (NMU) assessment and review) prior to Road Safety Audit.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.

- 1.8 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.9 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.10 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the LHA on final completion.
- 1.11 All problems identified in this Road Safety Audit Report are indicated on a location plan in Appendix A

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following Russell Giles Partnership documentation.

Drawing No.	Rev	Title
2017/3711/001	A	Swept Path Analysis and Visibility Splays
2017/3711/002	A	Swept Path Analysis
2017/3711/003	A	Site Overview and Visibility Splays

- 2.2 No departure from standards or other information was submitted to the Audit Team.

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT.

3.1 PROBLEM

LOCATION: In the vicinity of the proposed access (In previous RSA)

SUMMARY: Poor drainage may lead to accidents

In the vicinity of the proposed upgraded access drainage is poor and ponding occurs at the location of the new access junction and at other locations close to the site currently undergoing investigation. During periods of very cold weather such ponding may freeze which may result in ice patches which could lead to cars skidding or to pedestrian fall accidents.



RECOMMENDATION

The levels of the carriageway and footway should be modified to allow the drainage to operate correctly.

3.2 PROBLEM

LOCATION: Junction access.

SUMMARY: Risk to blind and partially sighted pedestrians.

The Audit Team noted the tactile paving shown on the drawings do not conform to the tactile paving standards for an inline crossing point. There is a risk that this would confuse blind and partially sighted pedestrians.

RECOMMENDATION

Ensure that the correct tactile paving layout is installed.

3.3 PROBLEM

LOCATION: Junction access.

SUMMARY: Trees may obscure visibility.

The Audit Team noted that the trees to the north of the access were obscuring the visibility of vehicles exiting the development. There is a risk that sight lines would be hindered which may result in collisions.



RECOMMENDATION

Ensure that all vegetation is cut back and regularly maintained.

4.0 OBSERVATIONS

- 4.1 During the site visit it was noted that the level crossing closed three times in 30 minutes causing vehicles to queue back a distance past the proposed access road. Residents exiting the development who wish to proceed south would be blocked by queuing traffic which would result in frustration. It would be prudent to install a KEEP CLEAR on the west side of Lidsey Road to alleviate this potential problem.

5.0 AUDITOR STATEMENT

5.1 We certify that this audit has been carried out in accordance with HD 19/15.

AUDIT TEAM LEADER

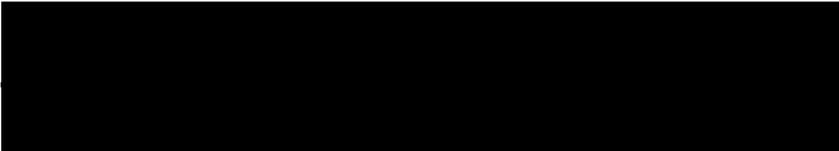
Steve Richards
The Safety Forum Ltd
PO Box 831
Godalming
Surrey
GU7 9HT

Sign 

Date: 12 September 2017

AUDIT TEAM MEMBER

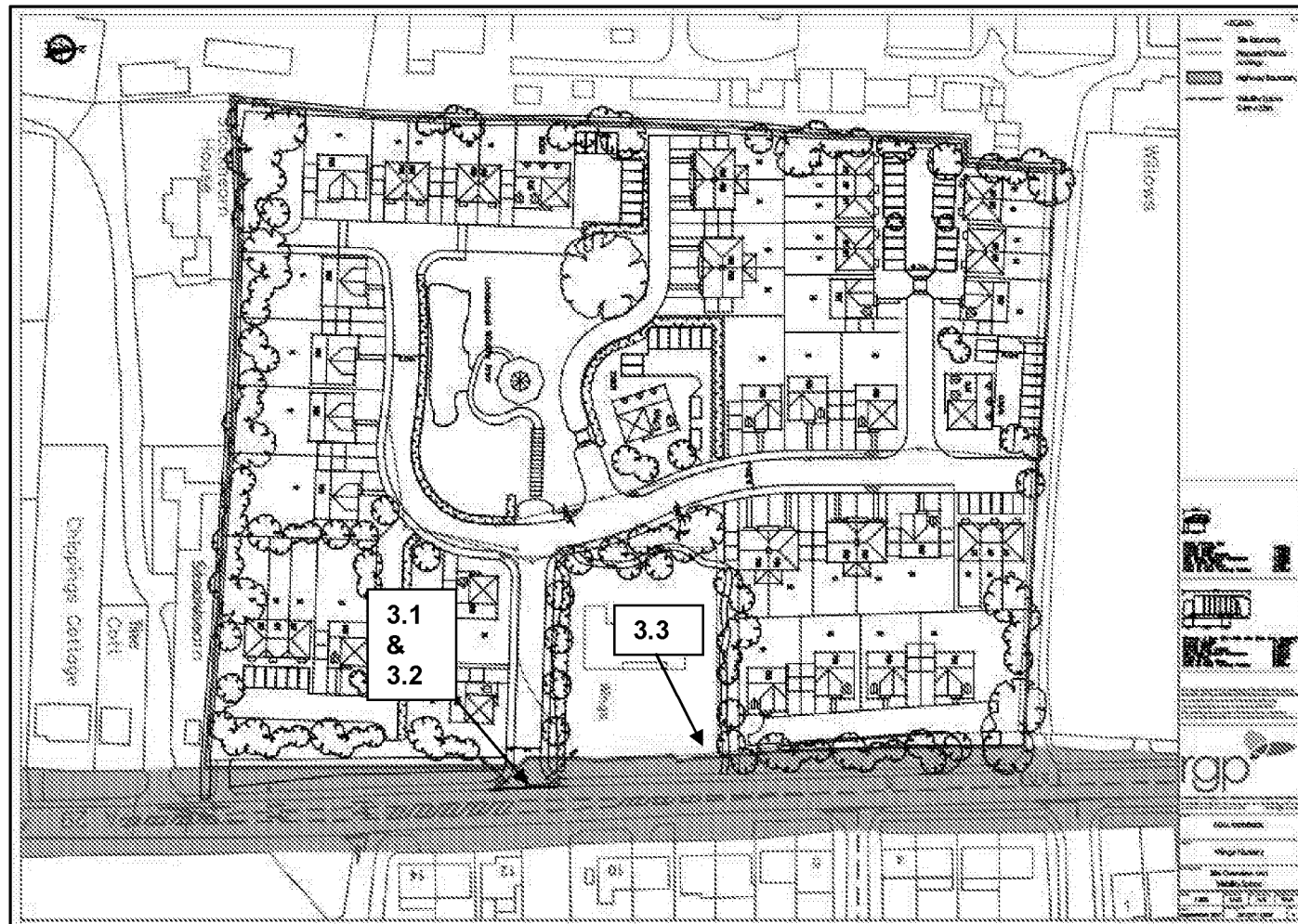
Laurie Shaw

Sign 

Date: 12 September 2017

APPENDIX A: LOCATION PLAN

Road Safety Audit – Stage 1
Wings Nursery, Lidsey Road
Proposed Access Arrangements



APPENDIX B: Road Safety Audit Response

Auditors: Steve Richards (Team Leader) and Name (Team Member).

Date Response Completed:

Scheme: Wings Nursery, Lidsey Road, Proposed Access Arrangements

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1	Yes	Yes	
3.2	Yes	Yes	
3.3	Yes	Yes	

Principal Engineer's / Audit Project Sponsor's Statement:

Road Safety Audit for Wings Nursery, Lidsey Road, Proposed Access Arrangements

I certify that I have considered the items raised in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.

..... Date.....

Principal Engineer

Chief Engineer's / Director's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer

APPENDIX C

This parking demand tool has been compiled by West Sussex County Council. If you have queries relating to the information provided or require additional information please contact darryl.hemmings@westsussex.gov.uk.

Please input the ward name for your development location below by double clicking in the box or click box and use the drop down menu to the right of the box. The spreadsheet will automatically show the District and Ward of this location. If the ward is not known please input postcode into the Ward Finder. The tool will allow input up to 3 wards in the boxes below. Please refer to notes for more details.

Ward 1	Barnham
District	Arun
Ward 2	North Mundham
District	Chichester
Ward 3	Bersted
District	Arun
Ward Tempro Factor 2009-2026	1.043369
District Tempro Factor 2009-2026	1.053688



Ward Finder			
Postcode		Ward	

Note:

No special provision need be made for visitors where at least half of the total parking provision for a development is unallocated. In other circumstances, it may be appropriate to allow for additional demand for visitor parking of up to 0.2 spaces per dwelling.

In areas of parking constraint, levels of provision below predicted demand may be applicable.

The tool is expressed as number of Rooms (Per Unit). If data is not available in this format and n Bedrooms is used this will need to be converted. A general guide for conversion is as follows but in some cases.

Houses	Flats
1 bed = 3 rooms	Studio = 1 room
2 bed = 4 rooms	1 bed = 2 rooms
3 bed = 5 rooms	2 bed = 3 rooms
4 bed = 6 rooms	3 bed = 4 rooms
5 bed = 7 rooms	4 bed = 5 rooms

Garages will count as 1 space when allocating spaces.

Ward data used can be checked by the user by referring to the District-Ward Data Tables. The W Tables highlight if the Census data does not include data for certain dwelling sizes. In such cases ownership values have been obtained using the nearest sized dwelling with same tenure and w example, if no data is available for a private house with 1 room then data for a private house w has been used. The Car Ownership Data is highlighted in purple where such an approach has be Where Census data contains small samples for certain sized dwellings this is highlighted in red if green if <50 in the Total Demand column. In such cases, other wards should be selected to achie sample size.

Report Summary Table

DEVELOPMENT MIX				
Ref.	Unit Type	Unit Tenure	Habitable Rooms (Per Unit)	No. of Units (Total)
A	Houses	Private	5	13
B	Houses	Private	4	33
C	Flats	Private	3	6
D	Flats	Private	2	3
E				
F				
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
Q				
R				
S				
Total				55

[illegible]

PARKING DEMAND					
Allocated No.	Unallocated for Residents		Unallocated for Visitors		Total Demand
	per unit	Total	per unit	Total	
26	0	2	0	3	30
66	0	3	0	7	76
0	1	4	0	1	5
0	1	2	0	1	3
92		11.08		11.00	114

**PROJECT
CENTRE**
PEOPLE | PASSION | PLACES

APPENDIX D

Calculation Reference: AUDIT-728001-170704-0745

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLESSelected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	SC SURREY	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	3 days
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
09	NORTH	
	CB CUMBRIA	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: 10 to 82 (units:)
 Range Selected by User: 6 to 150 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 29/11/16

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	1 days
Wednesday	2 days
Thursday	4 days
Friday	3 days

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

Selected survey types:

Manual count	10 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 undertaken using machines.

Selected Locations:

Edge of Town	10
--------------	----

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	8
No Sub Category	2

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

Secondary Filtering selection:Use Class:

C3	10 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:

1,001 to 5,000	1 days
5,001 to 10,000	5 days
10,001 to 15,000	4 days

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

Population within 5 miles:

25,001 to 50,000	4 days
50,001 to 75,000	1 days
75,001 to 100,000	4 days
100,001 to 125,000	1 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	4 days
1.1 to 1.5	6 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	1 days
No	9 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	10 days
-----------------	---------

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

RGP Mill Pool House Godalming

Licence No: 728001

LIST OF SITES relevant to selection parameters

1	CB-03-A-04	SEMI DETACHED		CUMBRIA
	MOORCLOSE ROAD			
	SALTERBACK			
	WORKINGTON			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:	82		
	Survey date: FRIDAY	24/04/09		Survey Type: MANUAL
2	CH-03-A-09	TERRACED HOUSES		CHESHIRE
	GREYSTOKE ROAD			
	HURDSFIELD			
	MACCLESFIELD			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	24		
	Survey date: MONDAY	24/11/14		Survey Type: MANUAL
3	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
4	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
5	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
6	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
7	SH-03-A-03	DETACHED		SHROPSHIRE
	SOMERBY DRIVE			
	BICTON HEATH			
	SHREWSBURY			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:	10		
	Survey date: FRIDAY	26/06/09		Survey Type: MANUAL

RGP Mill Pool House Godalming

Licence No: 728001

LIST OF SITES relevant to selection parameters (Cont.)

8	SH-03-A-05	SEMI-DETACHED/ TERRACED	SHROPSHIRE
	SANDCROFT		
	SUTTON HILL		
	TELFORD		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: THURSDAY	24/10/13	Survey Type: MANUAL
9	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
10	WK-03-A-02	BUNGALOWS	WARWICKSHIRE
	NARBERTH WAY		
	POTTERS GREEN		
	COVENTRY		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	17	
	Survey date: THURSDAY	17/10/13	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
NY-03-A-10	Survey included flats

RGP Mill Pool House Godalming

Licence No: 728001

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

VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	34	0.103	10	34	0.307	10	34	0.410
08:00 - 09:00	10	34	0.159	10	34	0.345	10	34	0.504
09:00 - 10:00	10	34	0.130	10	34	0.186	10	34	0.316
10:00 - 11:00	10	34	0.156	10	34	0.177	10	34	0.333
11:00 - 12:00	10	34	0.159	10	34	0.186	10	34	0.345
12:00 - 13:00	10	34	0.156	10	34	0.177	10	34	0.333
13:00 - 14:00	10	34	0.177	10	34	0.159	10	34	0.336
14:00 - 15:00	10	34	0.186	10	34	0.150	10	34	0.336
15:00 - 16:00	10	34	0.265	10	34	0.189	10	34	0.454
16:00 - 17:00	10	34	0.277	10	34	0.162	10	34	0.439
17:00 - 18:00	10	34	0.327	10	34	0.139	10	34	0.466
18:00 - 19:00	10	34	0.236	10	34	0.136	10	34	0.372
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.331			2.313			4.644

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: $COUNT/TRP \times FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 10 - 82 (units:)
 Survey date range: 01/01/09 - 29/11/16
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 1

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