**Sworders** 

Sheering Lower Road, Essex

**Highway Impact Statement** 

October 2017











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# SHEERING LOWER ROAD, ESSEX HIGHWAY IMPACT STATEMENT OCTOBER 2017

### 1.0 INTRODUCTION

- 1.1 Bancroft Consulting were appointed by Sworders, to provide highways and transportation advice in relation to a proposed residential development off Sheering Lower Road in Essex. This Highway Impact Statement has been produced to support a planning application for the proposed allocation of the site for residential development of 26 units through the Epping Forest District Council Draft Local Plan.
- 1.2 This Highway Impact Statement is also intended to support the corresponding future planning application for the site, with the objective of demonstrating that the principle of a new access onto Sheering Lower Road should be acceptable, and that a safe and suitable access arrangement can be provided, in accordance with the relevant local planning policy and design guidance.
- 1.3 This Highway Impact Statement has been prepared with due regard to the overarching policy requirements contained within the National Planning Policy Framework [NPPF] (DCLG, 2012), which places emphasis on evidence-led decision making. Of particular relevance is Paragraph 32, which specifies the need for new developments to provide "safe and suitable access". In addition, this report takes account of the adopted design guidance of Essex County Council (ECC), as detailed in the 'Essex Design Guide' (2005). It also considers current national best practice design guidance contained in the document 'Manual for Streets' [MfS] (DfT, 2007) and its companion document 'Manual for Streets 2 Wider Application of the Principles' [MfS2] (CIHT, 2010).
- 1.4 To inform the findings of this report, a site visit was undertaken on 25 September 2017 between 1300 and 1500 hours, when there were no roadworks in the vicinity of the site and the weather was fine and clear, however it had previously been raining and the road surface was damp. A selection of photographs taken during the visit are included at **Appendix A**. A vehicle speed survey was also conducted, the results of which are discussed further below.



#### 2.0 **EXISTING CONDITIONS**

### Site Details

2.1 The proposed site is located to the eastern edge of Sheering Lower Road and currently comprises an overgrown field, which is served by a gated access to the southwestern corner of the plot. It is bound to the north and west by Sheering Lower Road, agricultural land to the east and residential properties to the south. A detailed site location plan is shown at Figure 1.

## **Highway Conditions**

- 2.2 Sheering Lower Road bounds the site to the north and west, forming a priority junction with Sawbridgeworth Road at the northwestern corner of the site. Sheering Lower Road extends in a north/south direction along the western site boundary, providing access to the residential area of Lower Sheering to the south and Sawbridgeworth to the northwest.
- 2.3 Along the southern part of the site frontage, Sheering Lower Road is subject to a 30mph speed limit. However this speed limit increases to 50mph at an approximate midway point along the site frontage.
- 2.4 At the site frontage, Sheering Lower Road has a width of 5.6 metres and is bound by a footway to its eastern and western edges, measuring approximately 2 metres and 1.8 metres wide, respectively. The carriageway features dashed centre line markings in the vicinity of the site, with single yellow line parking restrictions present on both sides at this location. Street lighting is provided at regular intervals along the western side of the carriageway.
- 2.5 As outlined above, at the northwestern corner of the site, Sheering Lower Road forms a priority junction with Sawbridgeworth Road. As part of this junction arrangement, a dedicated left slip road is provided from Sawbridgeworth Road onto Sheering Lower Road. Associated signage is provided at this location noting that Sheering Lower Road is "unsuitable for heavy goods vehicles."



### Sustainable Travel

2.6 Paragraph 29 of the NPPF states that:

"...The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas."

- 2.7 Both Sawbridgeworth Town and Lower Sheering residential area are both within a reasonable walking distance from the site. As mentioned above, Sheering Lower Road is bound by a footway to both sides, which connects to the existing pedestrian facilities along Station Road forming part of a key desire line towards Sawbridgeworth. These facilities allow future residents to access a range of local amenities including Reedings Junior school, Mandeville Primary School, restaurants, retail units and Sawbridgeworth Rail Station. In terms of cycling opportunities, the alignment, width and speed limits of roads within the surrounding highway network should make them suitable to accommodate cyclists.
- 2.8 The closest bus stops are located approximately 280 metres to the north of the site along Station Road. These comprise a flag and pole arrangement. These stops are served by Route Number 347, which operates between Hatfield Broad Oak and Harlow at a frequency of 3 services daily, Monday to Friday, and 1 service on Saturdays.
- 2.9 Sawbridgeworth Rail Station is approximately 276 metres walking distance to the northwest of the site. From this station, there are up to 48 direct services per weekday to London Liverpool Street, with the average journey time being 42 minutes.

### **Highway Boundary**

2.10 Highway land boundary information was obtained from ECC on 26 September 2017. **Appendix B** contains a copy of the data which confirms that the



carriageway, footways and verge along the site frontage are either part of the public highway or under the clients' ownership.

### **Survey Results**

2.11 A manual radar speed survey was undertaken at the proposed site access location at Sheering Lower Road on 25 September 2017, between 1300 and 1500 hours, when the weather conditions were dry however the road surface was slightly wet. The speed survey recorded a total of 200 vehicles, comprising 100 readings in both the northbound and southbound direction. **Appendix C** contains the full survey results which demonstrates 85<sup>th</sup> percentile wet weather speeds of 27.44mph (44.3kph) in the northbound direction and 25.34mph (40.9kph) in the southbound direction.

### **Highway Safety**

- 2.12 An assessment of recent Personal Injury Accident records for the local area was carried out to determine whether there are any existing highway safety issues that could potentially be exacerbated by any increase in movements associated with the proposed development.
- 2.13 The 'CrashMap' website has been examined (www.crashmap.co.uk) and is summarised in Figure 2, it shows that during the latest available three-year period (2014 to 2016), 2 PIA's have occurred on Sheering Lower Road and Station Road in the vicinity of the site.
- 2.14 Overall, a total of 2 isolated incidents within 3 years does not suggest that there are any on-going highway safety issues that could potentially be exacerbated by the proposed development. Therefore, it is deemed unnecessary to undertake further analysis of highway safety at any location within the village.

### 3.0 PROPOSED DEVELOPMENT

3.1 The proposed scheme involves the development of 26 residential dwellings on land to the east of Sheering Lower Road. The development would be served via a new priority controlled T-junction from Sheering Lower Road, as discussed further in

**Section 4**. The precise location of the proposed site access has been determined based upon on-site observations and the proximity to the change in speed limit along the site frontage. The highway boundary information has confirmed that any vegetation along the site frontage can be removed in order to provide a safe and suitable site access arrangement.

### 4.0 SITE ACCESS

### Geometry

- 4.1 Page 122 of the Essex Design Guide provides the geometric standards for private driveways serving up to 50 dwellings. The guidance recommends that a development comprising up to 50 dwellings in a link or loop should be served by a Minor Access Way with a width of 4.8 metres and a separate footway of 1.8 metres width on one side of the carriageway.
- 4.2 In light of the above, **Drawing Number F17020/01** shows the proposed site access arrangement comprising a 4.8 metres wide carriageway, with a 1.8 metre footway to the north of the site access (to align with the key pedestrian desire line to the northwest of the site). This would allow two cars to sit within the access road and restrict any blocking from occurring on the major arm.
- 4.3 In accordance with the above local guidance, the proposed access could serve up to 50 dwellings. Should future demand seek to provide an access to serve up to 200 dwellings in a link or loop, this would require a Minor Access Road to be provided in accordance with the Essex Design Guide. The minimum carriageway requirements for such scale of development would remain at 4.8 metres however footways would need to be provided on both sides. At this stage it is envisaged that such geometric requirements could indeed be achieved.
- 4.4 The internal layout of the future masterplan should ensure that adequate turning area is provided to allow fire tenders to fully enter the site and turning accordingly. The layout of the proposed site access would ensure that safety is maintained and could accommodate all likely vehicle types to the site.

### **Visibility**

4.5 Within the Essex Design Guide, Page 129 states that where a 'Minor Access Way' egress meets the carriageway, 33 metres visibility splays (Y distance) are required at a 2.4 metres set back distance (X distance). In addition to this, Page 154 states:

"These 'Y' distances are to be used in all cases where the speed of vehicles on the through road at the T-junction is not restricted by road alignment within this 'Y' distance. Where the main road at the T-junction contains, within the 'Y' distance, a bend with a deflection angle of over 30 degrees and a centre line radius of less than 75m, it may be possible for the 'Y' distance to be reduced."

- 4.6 Appropriate visibility splays have been calculated using the recorded 85<sup>th</sup> percentile wet weather speeds from this survey, and are based on current best practice guidance contained within MfS2, which recommends in Paragraph 1.3.2 that:
  - "...as a starting point for any scheme affecting non-trunk roads, designers should start with MfS."
- 4.7 Chapter 10 of MfS2 provides detailed formulae for calculating visibility splays, taking into account vehicle speeds, the percentage of HGVs and the carriageway gradient. The results of the speed survey show that 85<sup>th</sup> percentile dry weather vehicle speeds are below 60kph and HGVs comprise less than 5% of the overall traffic in both directions. Therefore, a 1.5 seconds perception-reaction time and a 0.45g deceleration rate have been used.
- 4.8 The calculations contained at **Appendix D**, show that by adopting the above approach, visibility splays of 39 metres to the north (southbound traffic) and 43 metres to the south (northbound traffic) would be required from the proposed site access. **Drawing Number F17020/01** shows how visibility splays of these distances are achievable in the horizontal plane, from a 2.4 metres setback distance, to the nearside edge of the carriageway, in accordance with Page 155 of the Essex Design Guide. To achieve the visibility splays, the vegetation along the site boundary in both directions will need trimming and maintaining, however the highway boundary plan (**Appendix B**) shows these to be either within local highway authority or client land ownership.



4.9 Overall, the geometry of the proposed site access is compliant with the standards contained within the Essex Design Guide for a development of this scale. The required visibility splays based upon a radar speed survey are also achievable in both directions. It must be noted that these visibility splays are actually in excess of those required for a 'Minor Access Way' and are therefore deemed to be robust. Therefore, it is considered that the proposed site access is "safe and suitable access for all people", and therefore is in accordance with Paragraph 32 of the NPPF.

### 5.0 OTHER CONSIDERATIONS

### **Trip Generation**

- 5.1 The TRICS database was examined to identify suitable trip rates to calculate the potential peak hour and daily traffic movements that could be generated by the proposed residential development. The category 'Residential Houses Privately Owned' was selected, specifying a range of between 10 and 50 dwellings, excluding sites in Greater London, Wales, Scotland, Ireland and Northern Ireland, and excluding weekend surveys.
- 5.2 This search resulted in 21 surveys taken from 21 sites. Following inspection of the details of the sites from the above search, a development of 33 dwellings in Backworth, near Newcastle (TRICS reference: TW-03-A-03) was identified as a suitable comparison with the proposed development. This development was ranked as the 85<sup>th</sup> percentile site in the morning peak period and one below the 85<sup>th</sup> percentile in the evening peak period. Therefore, this site was chosen to give a more robust assessment. Full details of the TRICS search are contained at **Appendix E**, with the results summarised in **Table 1**.
- 5.3 The following vehicle trip rates (per dwelling) are therefore considered appropriate for the proposed development:
  - morning peak (0800 to 0900 hours) 0.212 arrive 0.545 depart 0.757 total
  - evening peak (1700 to 1800 hours) 0.333 arrive 0.273 depart 0.606 total



daily (0700 to 1900 hours)

3.242 arrive

3.212 depart 6.454 total

5.4 Based on the above trip rates, the proposed development of 26 dwellings would generate the following additional vehicle movements:

•	morning peak (0800 to 0900)	6 arrive	14 depart	20 total
•	evening peak (1700 to 1800)	9 arrive	7 depart	16 total
•	daily (0700 to 1900)	86 arrive	83 depart	169 total

Based on the above traffic generation calculations, the proposed development 5.5 would result in an increase of only 20 two-way vehicle movements during the morning peak hour, 16 two-way movements in the evening peak hour and 169 daily two-way movements. This increase in traffic is not considered significant and would not have any detrimental impact on capacity or highway safety issues within the local highway network. Therefore, no further detailed assessment should be necessary.

### **Parking**

- 5.6 Section 4 of the Essex "Parking Standards: Design and Good Practice" document (September 2009) provides details on a suitable provision of parking for residential developments. It states the following minimum standards:
  - 1 bedroom 1 space per dwelling
  - 2+ bedroom 2 spaces per dwelling
  - Visitors/unallocated spaces 0.25 spaces per dwelling plus 3 disabled bays or 6% of capacity, whichever is greater
- 5.7 The proposed development comprises the erection of up to 26 residential dwellings, however the number of rooms within the dwellings have not yet been determined for this site. Any future masterplan should follow the standards outlined in ECC Parking Standards.
- 5.8 The guidance document states that standard parking spaces should be 5.5 metres x 2.9 metres with a 6.0 metres length whereas a disabled parking space should be



6.5 metres x 3.9 metres with an extra 1 metre length and a 1 metre width to allow for safe access into the vehicle.

5.9 In terms of cycle parking spaces section 4 of the ECC Parking Standards recommends that a provision should be made for 1 secure covered cycle parking space per dwelling. Therefore, a total of 26 spaces should be provided for the proposed development.

### **Refuse Collection**

5.10 In terms of refuse collection, Page 114 of the Essex Design Guide states that:

"Refuse freighters will circulate all parts of the adopted road system, but not on private drives..... Refuse collection will be made only from those dwellings within 25 metres of an adopted road. In other cases a shared bin collection point screened by an above-eye-level wall will be necessary, located within 25 metres of an adopted road."

5.11 Within the Epping Forest District Council "Waste Recycling provisions for new residential & business development" guidance (2017) Paragraph 4.5 outlines the required dimensions for refuse collection vehicles as being 9.8 metres x 2.5 metres.

Drawing Number F17020/02 shows a swept path analysis of a refuse vehicle with these dimensions satisfactorily entering and exiting the site in a forward gear. Given that the internal road network will be offered up for adoption, the proposed masterplan will need to be developed in line with the maximum carrying distances noted above. A suitable turning head will need to be provided within the site to ensure a refuse vehicle can access all properties.

### 6.0 SUMMARY AND CONCLUSIONS

6.1 Bancroft Consulting were appointed by Sworders to provide highways and transportation advice in respect of proposals to develop 26 residential dwellings, on land to the east of Sheering Lower Road, in Essex. This Highway Impact Statement has been prepared to support a future planning application.

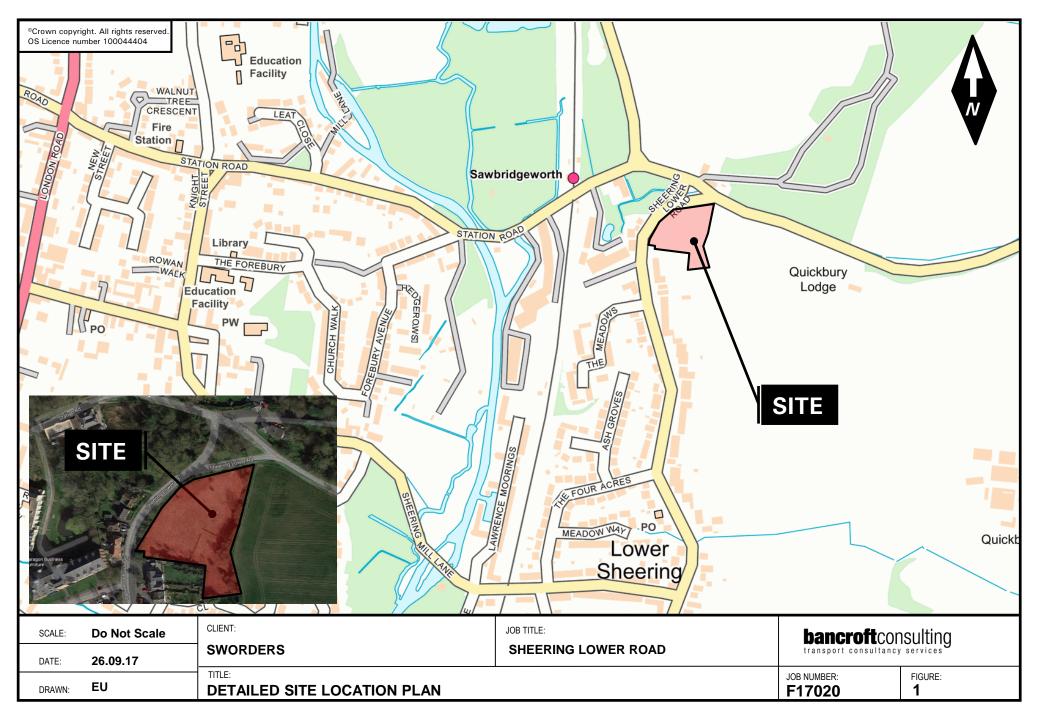
6.2 The proposed site access is compliant with the local standards contained within the Essex Design Guide, for a development of this scale (and is suitable to serve up to

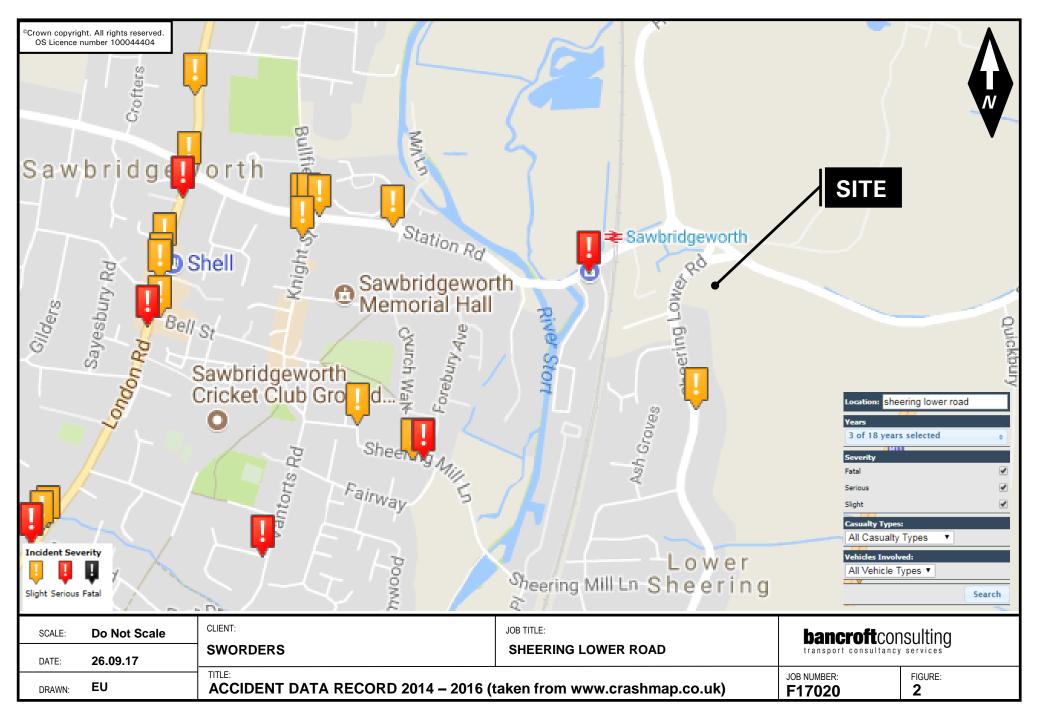
50 dwellings). Furthermore, the proposed access arrangement would be suitable to accommodate a typical refuse vehicle used within Epping Forest District Council. Following the results of the manual radar speed survey, the required visibility splays of 39 metres to the north and 43 metres to the south would be achievable from a 2.4 metres setback distance. These splays are actually in excess of those required within the Essex Design Guide for a Minor Access Way. Overall, the proposed site access shown at **Drawing Number F17087/01** is deemed "safe and suitable" in accordance with Paragraph 32 of the NPPF.

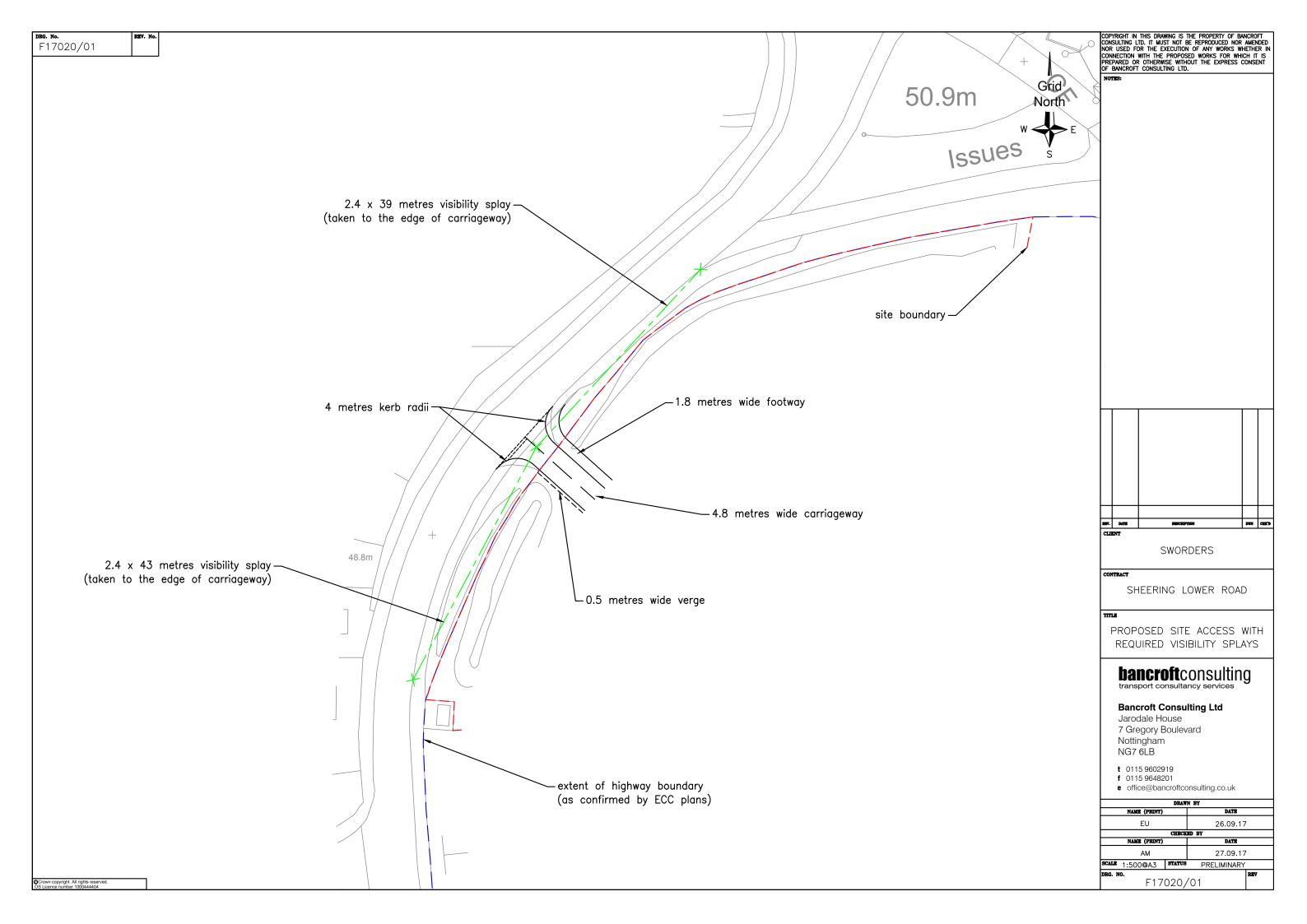
- 6.3 The proposed development would result in an increase of only 20 two-way vehicle movements during the morning peak hour, 16 two-way movements in the evening peak hour and 169 daily two-way movements. This increase in traffic is not considered significant and would not have any detrimental impact on capacity or highway safety issues within the local highway network.
- 6.4 At this stage, the precise site composition is unknown, however the future masterplan should be developed to provide parking in accordance with Section 4 of the Essex "Parking Standards: Design and Good Practice" to ensure that no overspill parking would occur onto Sheering Lower Road or within the turning area on-site.
- 6.5 The proposed development would be well located to access the existing facilities in both Sawbridgeworth Town and Lower Sheering residential area. Footways are provided along both sides of Sheering Lower Road, and provide direct connectivity to the nearest pair of bus stops which are located approximately 280 metres metres to the northwest of the site and provide regular services a frequency of 3 services daily, Monday to Friday, and 1 service on Saturdays to key destinations.
- 6.6 This Highway Impact Statement has identified a compliant access arrangement that could be delivered to serve the proposed development. It also confirms that the site is in a sustainable location. Furthermore, the masterplan shall ensure that a suitable provision of parking could be provided and that vehicles could adequately turn on-site. Therefore, subject to the delivery of the proposed site access, on-site turning areas and adequate levels of parking, it is considered that the site represents a good opportunity for residential development, which should therefore receive the support of the local highway authority.

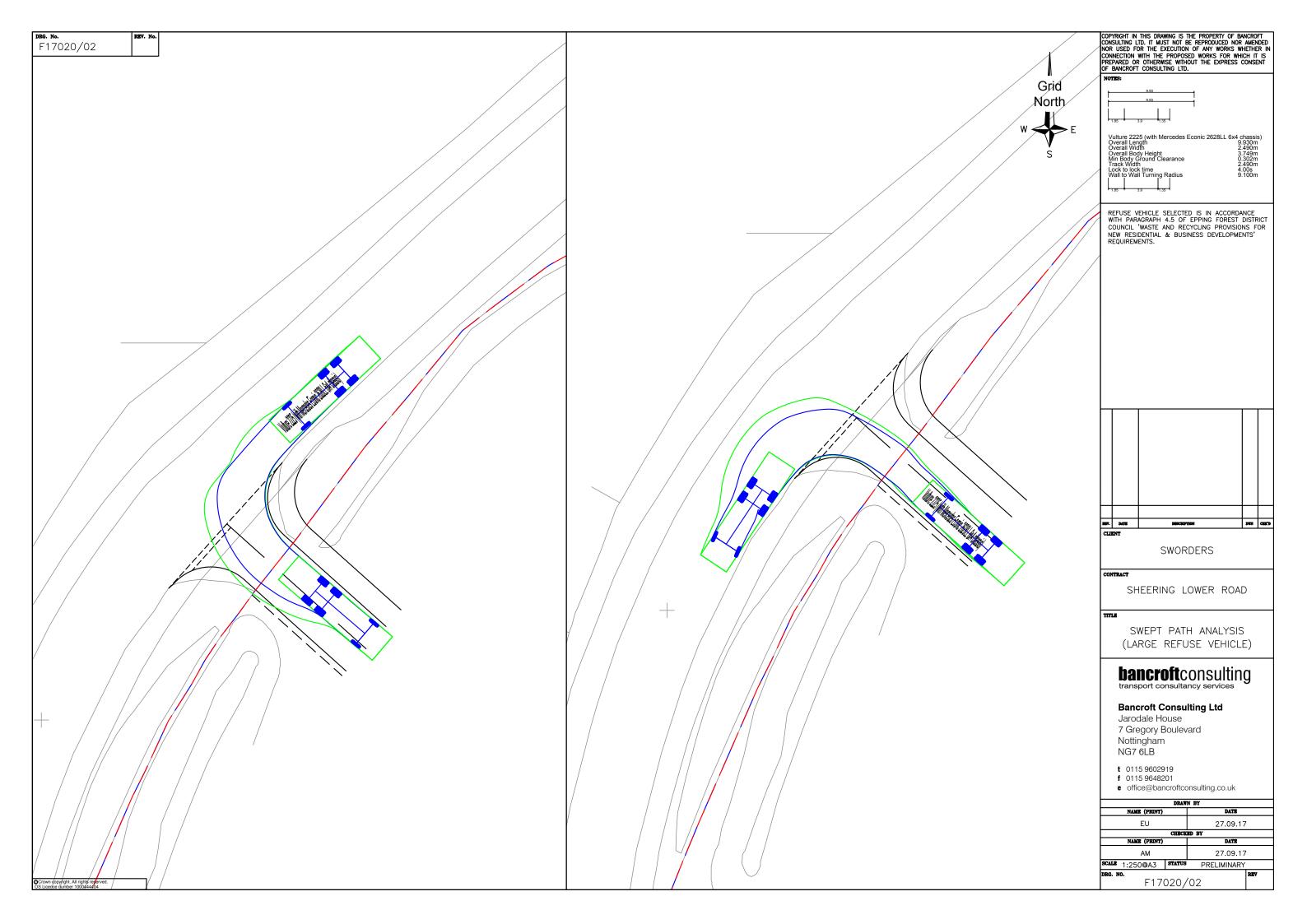
Time Period	Trip Rates (p	er dwelling)	Traffic Generation (26 dwellings)				
Tillie Periou	Arrive	Depart	Arrive	Depart	Total		
Pre 07:00							
07:00-08:00	0.121	0.212	3	6	9		
08:00-09:00	0.212	0.545	6	14	20		
09:00-10:00	0.152	0.273	4	7	11		
10:00-11:00	0.303	0.273	8	7	15		
11:00-12:00	0.212	0.242	6	6	12		
12:00-13:00	0.333	0.273	9	7	16		
13:00-14:00	0.303	0.303	8	8	16		
14:00-15:00	0.364	0.121	9	3	12		
15:00-16:00	0.242	0.424	6	11	17		
16:00-17:00	0.485	0.182	13	5	18		
17:00-18:00	0.333	0.273	9	7	16		
18:00-19:00	0.182	0.091	5	2	7		
Post 19:00							
Daily	3.242	3.212	86	83	169		

TABLE 1: PROPOSED RESIDENTIAL DEVELOPMENT - DAILY TRAFFIC GENERATION PROFILE (WEEKDAY)













▲ 1) Western edge of Sheering Lower Road, looking at the existing site access

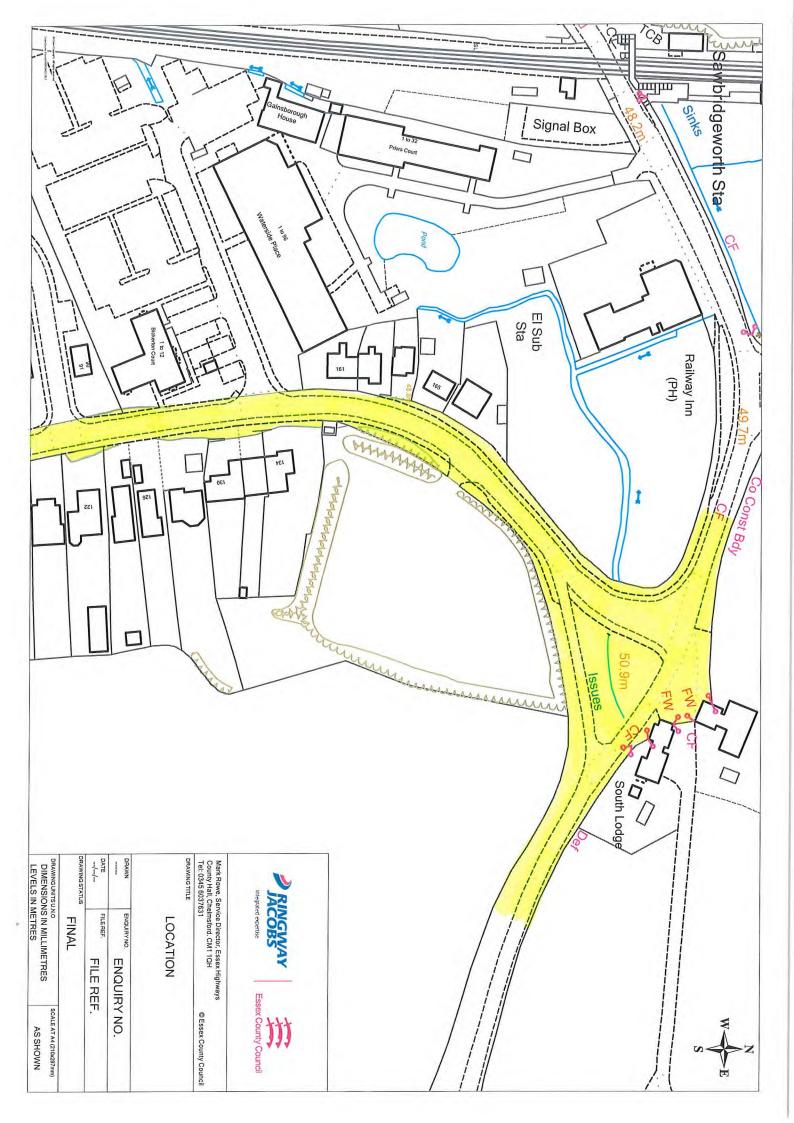


▲ 2) Western edge of Sheering Lower Road, looking south.



▲ 3) Western edge of Sheering Lower Road, looking north.

APPENDIX B - HIGHWAY BOUNDARY PLAN (RECEIVED FROM ECC - 26 SEPTEMBER 2017)





observed	no. of		1	SPEED READINGS
speed	readings			SPEED READINGS
mph	, ,			location: Sheering Lower Road
x	f	fx	fx <sup>2</sup>	direction: Northbound
10			0	day: Monday
10 11	0	0	0 0	date 25.09.17 time: 1300 to 1508
12	0	0	0	******
13	0	0	0	SUMMARY
14 15	0	0	0 0	mean 25.88 mph 41.8 kph
16	0	0	0	85%ile 29.91 mph 48.3 kph
17	3	51	867	wet 85%ile 27.44 mph 44.3 kph
18 19	0	0 57	0 1083	
20	0	0	0	
21	8	168	3528	
22	5	110	2420	
23 24	14 4	322 96	7406 2304	
25	11	275	6875	
26	10	260	6760	
27 28	10 5	270 140	7290 3920	
29	5	145	4205	
30	6	180	5400	
31 32	6 4	186 128	5766 4096	·
32	4	128 132	4096 4356	
34	2	68	2312	$\overline{x} = \frac{\sum fx}{\sum f} =$ 25.88 mph
35	0	0	0	$\angle J$
36 37	0	0	0	
38	0	0	0	Standard deviation
39	0	0	0	
40 41	0	0	0 0	$\left[\begin{array}{ccc} 1 & \left(\sum c\right)^2 \end{array}\right]$
42	0	0	0	$S_{x} = \sqrt{\frac{1}{\sum f - 1} \times \left[ \sum fx^{2} - \frac{\left(\sum fx\right)^{2}}{\sum f} \right]} = 4.03 \text{ mph}$
43	0	0	0	$\left[\begin{array}{ccc} \lambda & \sqrt{\sum f} - 1 & \left[\begin{array}{ccc} \Sigma f \end{array}\right] \right]$
44 45	0	0	0 0	
46	0	0	0	
47	0	0	0	
48 49	0	0	0 0	85 percentile dry weather spot speed
50	0	0	0	$\frac{-}{x} + S_x$ = 29.91 mph
51	0	0	0	
52	0	0	0	
53 54	0	0	0	85 percentile wet weather journey speed
55	0	0	0	_
56	0	0	0	$x + S_x$ - 2.478 = 27.44 mph
57 58	0	0	0 0	
59	0	0	0	
60	0	0	0	0F0(") /
61 62	0	0	0 0	<b>checks:</b> 85%ile/mean = 1.16 should be 1.1 to 1.25
63	0	0	0	3.133.3 33 1.1 (0 1.20
64	0	0	0	S.D./mean = 0.16
65 66	0	0	0 0	should be approx 1/6 (0.17)
67	0	0	0	
68	0	0	0	
69 70	0	0	0 0	
71	0	0	0	
72	0	0	0	
73 74	0	0	0 0	
74 75	0	0	0	
76	0	0	0	
77 70	0	0	0 0	
78 79	0	0	0	
80	0	0	0	
Total Σ	100	2588	68588	

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10 0 0 0 0 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 0 1 1 1 1 0 0 0 0 0 0 1 1 1 1 0	-				location: Sheering Lower Road
10	X	f	fx	fx <sup>2</sup>	direction: Southbound
111 0 0 0 0 0 0 0 12 0 0 0 0 13 13 0 0 0 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0					·
12				_	
14					
15					SUMMARY
16					24.59 mph 20.7 kph
17					·
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44					Г ( <del></del>
44					$S_{x} = \sqrt{\frac{1}{1-x}} \times \left  \sum fx^2 - \frac{(\sum fx)^2}{1-x} \right  = 3.24 \text{ mph}$
45				_	$\sum_{x} \sqrt{\sum_{x} f - 1} = \sum_{x} f$
46				_	
47					
49					
SO					
51					
S2					$x + S_x - 27.02 \text{ inpit}$
54				0	
55					
56					
57	56	0		0	$\frac{\overline{x}}{x} + S_x$ - 2.478 = 25.34 mph
59					
60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					
62					
63					
64 0 0 0 0 S.D./mean = 0.13 65 0 0 0 0 0 66 0 0 0 0 0 67 0 0 0 0 0 68 0 0 0 0 70 0 0 0 0 71 0 0 0 0 72 0 0 0 0 73 0 0 0 0 74 0 0 0 0 75 0 0 0 0 76 0 0 0 0 77 0 0 0 0 78 0 0 0 80 0 0 0				_	
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68 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				_	
69 0 0 0 0 0 70 70 0 0 71 0 0 0 71 0 0 0 72 0 0 0 73 0 0 0 74 0 0 0 75 0 0 0 76 0 0 0 77 0 0 0 0 77 0 0 0 0 78 0 0 0 0					
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79 0 0 0 80 0 0 0	77	0	0	0	
80 0 0 0				_	
Total 5 100 2450 61450					
	Total Σ	100	2458	61458	

Vehicle speeds	<b>29.91</b> mph <b>48.13</b> kph	ı		Formula:	$SSD = vt + v^2/2$	(d+0.1a)		
	<b>13.37</b> v (m	/s)			Manual for	Streets 2	DM	RB
	178.71 v <sup>2</sup>				Light Vehicles	HGVs/Buses	All traffic	All traffic
Driver Perception-Reaction time	<b>1.5</b> t (s)				(less than 5%	`	(Maximum	(Desirable
Driver Ferception-Reaction time	1.5 ( (5)		T-		HGVs)	total vehicles)	decel.)	decel.)
	<b>20.05</b> v x t		Perception-Reaction	Time (t)	1.5s	1.5s	2s	2s
Deceleration Rate	<b>0.45</b> g		Deceleration Rate (g	$g = 9.81 \text{m/s}^2$ )	0.45g	0.375g	0.375g	0.25g
	<b>4.41</b> d (m <b>8.83</b> 2d	n/s)						
Gradient	<b>0.00</b> a*		Enter gradient as positive for	uphill towards june	ction and negative for	downhill towards ju	ınction	
	<b>4.41</b> d+0.	.1a						
	8.829 2(d+	-0.1a)						
	v t	+	v²/2(d+0.1a)	=	SSD			
Stopping Sight Distance (SSD) =	20.05	+	20.24	=	40.29			
SSD Bonnet Adjusted (SSD+2.4)**	42.69							

<sup>\*</sup> for simplicity, gradient will be given as zero where details of levels are unavailable and observed gradients are deemed to be insignificant in terms of the effect on vehicle braking

**VISIBILITY SPLAY CALCULATOR: LOWER SHEERING ROAD - NORTHBOUND** 

<sup>\*\* 2.4</sup> metres added to splay to allow for bonnet length of approaching vehicles

Vehicle speeds	<b>27.82</b> mph <b>44.76</b> kph	ı		Formula:	$SSD = vt + v^2/2$	(d+0.1a)		
	<b>12.43</b> v (m	/s)			Manual for			RB
	<b>154.60</b> v <sup>2</sup>				Light Vehicles	HGVs/Buses		All traffic
Driver Perception-Reaction time	<b>1.5</b> t (s)				(less than 5% HGVs)	(over 5% of total vehicles)	(Maximum decel.)	(Desirable decel.)
	<b>18.65</b> v x t		Perception-Reaction	n Time (t)	1.5s	1.5s	2s	2s
Deceleration Rate	<b>0.45</b> g		Deceleration Rate (	$g = 9.81 \text{m/s}^2$ )	0.45g	0.375g	0.375g	0.25g
	<b>4.41</b> d (m <b>8.83</b> 2d	n/s)						
Gradient	<b>0.00</b> a*		Enter gradient as positive for	r uphill towards jund	ction and negative for	downhill towards ju	unction	
	<b>4.41</b> d+0. <b>8.829</b> 2(d+							
	v t	+	v <sup>2</sup> /2(d+0.1a)	=	SSD			
Stopping Sight Distance (SSD) =	18.65	+	17.51	=	36.16			
SSD Bonnet Adjusted (SSD+2.4)**	38.56							

<sup>\*</sup> for simplicity, gradient will be given as zero where details of levels are unavailable and observed gradients are deemed to be insignificant in terms of the effect on vehicle braking

**VISIBILITY SPLAY CALCULATOR: LOWER SHEERING ROAD - SOUTHBOUND** 

<sup>\*\* 2.4</sup> metres added to splay to allow for bonnet length of approaching vehicles



Licence No: 539501 Bancroft Consulting Jarodale House, Sherwood Nottingham

### TRIP RATE CALCULATION SELECTION PARAMETERS:

: 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED VEHICLES

Seled	cted red	gions and areas:	
02		TH EAST	
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days
	WS	WEST SUSSEX	1 days
03	SOU	TH WEST	
	DC	DORSET	1 days
	DV	DEVON	1 days
	SM	SOMERSET	1 days
04	EAST	ΓANGLIA	
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
05		ΓMIDLANDS	
	LN	LINCOLNSHIRE	1 days
06		T MIDLANDS	
	SH	SHROPSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07		KSHIRE & NORTH LINCOLNSHIRE	
	NY	NORTH YORKSHIRE	3 days
	WY	WEST YORKSHIRE	1 days
80		TH WEST	
	СН	CHESHIRE	1 days
	GM	GREATER MANCHESTER	1 days
	MS	MERSEYSIDE	1 days
09	NOR		
	DH	DURHAM	1 days
	TW	TYNE & WEAR	2 days

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

Page 2

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

### 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: 15 to 50 (units: ) Range Selected by User: 15 to 50 (units: )

#### Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/03/17

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 4 days
Tuesday 4 days
Wednesday 6 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 21 days
Directional ATC Count 0 days

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

### Selected Locations:

Suburban Area (PPS6 Out of Centre) 9
Edge of Town 10
Neighbourhood Centre (PPS6 Local Centre) 2

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 19 Village 1 No Sub Category 1

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:

C1 1 days C3 20 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®.

TRICS 7 4 2	290817 B17 57	(C) 2017	7 TRICS Consortium	I td

Friday 22/09/17

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

Secondary Filtering selection (Cont.):

### Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	6 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	4 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	2 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
125,001 to 250,000	4 days
250,001 to 500,000	4 days
500,001 or More	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	9 days
1.1 to 1.5	12 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	3 days
No	18 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 21 days

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

**Bancroft Consulting** Jarodale House, Sherwood Nottingham Licence No: 539501

LIST OF SITES relevant to selection parameters

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

DC-03-A-08 **BUNGALOWS DORSET** 

HURSTDENE ROAD CASTLE LANE WEST **BOURNEMOUTH** Edge of Town Residential Zone

Total Number of dwellings:

28 Survey date: MONDAY 24/03/14 Survey Type: MANUAL

**DURHAM** DH-03-A-01 SEMI DETACHED

**GREENFIELDS ROAD** 

**BISHOP AUCKLAND** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 50

Survey date: TUESDAY 28/03/17 Survey Type: MANUAL

**TERRACED HOUSES** DV-03-A-01 **DEVON** 

**BRONSHILL ROAD** 

**TORQUAY** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 37

Survey date: WEDNESDAY 30/09/15 Survey Type: MANUAL

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 **GREATER MANCHESTER** 

GM-03-A-10 DETACHED/SEMI

> **BUTT HILL DRIVE PRESTWICH MANCHESTER** Edge of Town Residential Zone

Total Number of dwellings: 29

Survey date: WEDNESDAY Survey Type: MANUAL 12/10/11

HC-03-A-17 HAMPSHIRE **HOUSES & FLATS** 

CANADA WAY

LIPHOOK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 36

> Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

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LINCOLNSHIRE

LIST OF SITES relevant to selection parameters (Cont.)

LN-03-A-03 **ROOKERY LANE BOULTHAM** LINCOLN

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings:

SEMI DETACHED

Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

MS-03-A-03 **DETACHED MERSEYSIDE** 

**BEMPTON ROAD OTTERSPOOL** LIVERPOOL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 15

Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK 10

YARMOUTH ROAD

CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 27

Survey date: TUESDAY 16/10/12 Survey Type: MANUAL 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 **TERRACED HOUSES** NY-03-A-08 NORTH YORKSHIRE

NICHOLAS STREET

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 21

Survey date: MONDAY 16/09/13 Survey Type: MANUAL NORTH YORKSHIRE NY-03-A-11 PRIVATE HOUSING

13 **HORSEFAIR** 

> BOROUGHBRIDGE Edge of Town Residential Zone

Total Number of dwellings: 23

Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

SF-03-A-05 14 **DETACHED HOUSES** SUFFOLK

VALFIANE

**BURY ST EDMUNDS** Edge of Town Residential Zone

Total Number of dwellings: 18

Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

SHROPSHIRE

LIST OF SITES relevant to selection parameters (Cont.)

E131 Of 311E31cicvant to selection parameters (cont.)

**BUNGALOWS** 

**ELLESMERE ROAD** 

SH-03-A-06

SHREWSBURY Edge of Town Residential Zone

Total Number of dwellings: 16

Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

16 SM-03-A-01 DETACHED & SEMI SOMERSET

WEMBDON ROAD NORTHFIELD BRIDGWATER Edge of Town Residential Zone

Total Number of dwellings: 33

Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

17 TW-03-A-02 SEMI-DETACHED TYNE & WEAR

WEST PARK ROAD

**GATESHEAD** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 16

Survey date: MONDAY 07/10/13 Survey Type: MANUAL

18 TW-03-A-03 MIXED HOUSES TYNE & WEAR

STATION ROAD BACKWORTH NEAR NEWCASTLE

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Number of dwellings: 33

Survey date: FRIDAY 13/11/15 Survey Type: MANUAL

19 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

20 WS-03-A-05 TERRACED & FLATS WEST SUSSEX

UPPER SHOREHAM ROAD

SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 48

Survey date: WEDNESDAY 18/04/12 Survey Type: MANUAL 1 WY-03-A-01 MIXED HOUSING WEST YORKSHIRE

SPRING VALLEY CRESCENT

BRAMLEY LEEDS

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.

Bancroft Consulting Jarodale House, Sherwood Nottingham

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED VEHICLES

Ranking Type: TOTALS Time Range: 08:00-09:00

15th Percentile = No. 18 HC-03-A-17 Tot: 0.306 85th Percentile = No. 4 TW-03-A-03 Tot: 0.757

Median Values Mean Values

 Arrivals:
 0.081
 Arrivals:
 0.145

 Departures:
 0.405
 Departures:
 0.382

 Totals:
 0.486
 Totals:
 0.527

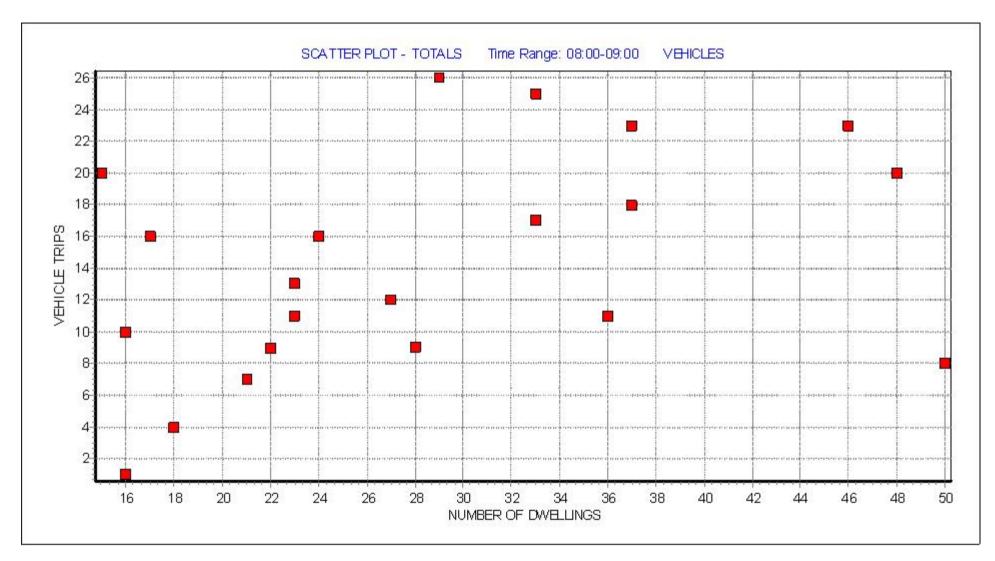
								Trip Rate (Sorted by Totals)		Park Spaces	
Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Arrivals	Departures	Totals	Per Dwelling
1	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.400	0.933	1.333	3.00
2	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.588	0.353	0.941	2.06
3	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.138	0.759	0.897	2.79
4	TW-03-A-03	MIXED HOUSES	NEAR NEWCASTLE	TYNE & WEAR	33	Fri	13/11/15	0.212	0.545	0.757	4.00
5	CH-03-A-09	TERRACED HOUSE	MACCLESFIELD	CHESHIRE	24	Mon	24/11/14	0.250	0.417	0.667	1.33
6	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.188	0.438	0.626	2.38
7	DV-03-A-01	TERRACED HOUSE	TORQUAY	DEVON	37	Wed	30/09/15	0.162	0.459	0.621	2.78
8	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.000	0.565	0.565	6.26
9	SM-03-A-01	DETACHED & SEM	BRIDGWATER	SOMERSET	33	Thu	24/09/15	0.182	0.333	0.515	3.97
10	WY-03-A-01	MIXED HOUSING	LEEDS	WEST YORKSHIRE	46	Wed	21/09/16	0.217	0.283	0.500	1.26
11	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.081	0.405	0.486	1.59
12	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.087	0.391	0.478	1.96
13	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.148	0.296	0.444	2.37
14	WS-03-A-05	TERRACED & FLA	SHOREHAM BY SEA	WEST SUSSEX	48	Wed	18/04/12	0.104	0.313	0.416	2.75
15	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.045	0.364	0.409	1.09
16	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.048	0.286	0.334	1.14
17	DC-03-A-08	BUNGALOWS	BOURNEMOUTH	DORSET	28	Mon	24/03/14	0.179	0.143	0.322	4.68
18	HC-03-A-17	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	36	Thu	12/11/15	0.000	0.306	0.306	2.19
19	SF-03-A-05	DETACHED HOUSE	BURY ST EDMUNDS	SUFFOLK	18	Wed	09/09/15	0.000	0.222	0.222	4.17
20	DH-03-A-01	SEMI DETACHED	BISHOP AUCKLAND	DURHAM	50	Tue	28/03/17	0.020	0.140	0.160	1.74
21	SH-03-A-06	BUNGALOWS	SHREWSBURY	SHROPSHIRE	16	Thu	22/05/14	0.000	0.063	0.062	2.00

Licence No: 539501

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501



This graph is a visual representation of the correlation between the selected trip rate calculation parameter and the rank order trip rates generated by each individual survey day in the selected set. The range of the trip rate parameter is shown along the x axis, with the level of trips shown on the y axis. The selected time range used to create the rank order list from which the graph is derived is displayed at the top of the graph (unless the peak period irrespective of time range has been selected). A line of best fit is sometimes displayed in the graph, should it be selected for inclusion by the user.

Licence No: 539501 Bancroft Consulting Jarodale House, Sherwood Nottingham

### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED VEHICLES

Selected regions and areas:								
02		TH EAST						
	ES	EAST SUSSEX	1 days					
	HC	HAMPSHIRE	1 days					
	WS	WEST SUSSEX	1 days					
03	SOU	TH WEST	-					
	DC	DORSET	1 days					
	DV	DEVON	1 days					
	SM	SOMERSET	1 days					
04	EAST	Γ ANGLI A						
	NF	NORFOLK	1 days					
	SF	SUFFOLK	1 days					
05		「MIDLANDS						
	LN	LINCOLNSHIRE	1 days					
06		T MIDLANDS						
	SH	SHROPSHIRE	1 days					
	WK	WARWICKSHIRE	1 days					
07		KSHIRE & NORTH LINCOLNSHIRE						
	NY	NORTH YORKSHIRE	3 days					
	WY	WEST YORKSHIRE	1 days					
80	NORTH WEST							
	CH	CHESHIRE	1 days					
	GM	GREATER MANCHESTER	1 days					
0.0	MS	MERSEYSIDE	1 days					
09	NOR		4.1					
	DH	DURHAM	1 days					
	TW	TYNE & WEAR	2 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: 15 to 50 (units: ) Range Selected by User: 15 to 50 (units: )

### Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/03/17

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 4 days
Tuesday 4 days
Wednesday 6 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 21 days
Directional ATC Count 0 days

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

# Selected Locations:

Suburban Area (PPS6 Out of Centre) 9
Edge of Town 10
Neighbourhood Centre (PPS6 Local Centre) 2

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 19 Village 1 No Sub Category 1

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:

C1 1 days C3 20 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®.

## Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	6 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	4 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	2 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
125,001 to 250,000	4 days
250,001 to 500,000	4 days
500,001 or More	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	9 days
1.1 to 1.5	12 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	3 days
No	18 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 21 days

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

LIST OF SITES relevant to selection parameters

1 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

2 DC-03-A-08 BUNGALOWS DORSET

HURSTDENE ROAD CASTLE LANE WEST BOURNEMOUTH Edge of Town Residential Zone

Total Number of dwellings: 28

Survey date: MONDAY 24/03/14 Survey Type: MANUAL

B DH-03-A-01 SEMI DETACHED DURHAM

GREENFIELDS ROAD

BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 50

Survey date: TUESDAY 28/03/17 Survey Type: MANUAL

4 DV-03-A-01 TERRACED HOUSES DEVON

**BRONSHILL ROAD** 

**TORQUAY** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 37

Survey date: WEDNESDAY 30/09/15 Survey Type: MANUAL

5 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 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER

O GW-03-A-10 DL

BUTT HILL DRIVE PRESTWICH MANCHESTER Edge of Town Residential Zone

Total Number of dwellings: 29

Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

7 HC-03-A-17 HOUSES & FLATS HAMPSHIRE

CANADA WAY

LIPHOOK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 36

Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

LINCOLNSHIRE

LIST OF SITES relevant to selection parameters (Cont.)

LN-03-A-03 **ROOKERY LANE BOULTHAM** LINCOLN

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings:

SEMI DETACHED

Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

MS-03-A-03 **DETACHED MERSEYSIDE** 

**BEMPTON ROAD OTTERSPOOL** LIVERPOOL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 15

Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK 10

YARMOUTH ROAD

CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 27

Survey date: TUESDAY 16/10/12 Survey Type: MANUAL 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 **TERRACED HOUSES** NY-03-A-08 NORTH YORKSHIRE

NICHOLAS STREET

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 21

Survey date: MONDAY 16/09/13 Survey Type: MANUAL NORTH YORKSHIRE 13 NY-03-A-11 PRIVATE HOUSING

**HORSEFAIR** 

BOROUGHBRIDGE Edge of Town Residential Zone

Total Number of dwellings: 23

Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

SF-03-A-05 14 **DETACHED HOUSES** SUFFOLK

VALFIANE

**BURY ST EDMUNDS** Edge of Town Residential Zone

Total Number of dwellings: 18

Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL **Bancroft Consulting** Licence No: 539501 Jarodale House, Sherwood Nottingham

SHROPSHIRE

LIST OF SITES relevant to selection parameters (Cont.)

**ELLESMERE ROAD** 

SH-03-A-06

**SHREWSBURY** Edge of Town Residential Zone

Total Number of dwellings:

**BUNGALOWS** 

Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

SM-03-A-01 16 **DETACHED & SEMI SOMERSET** 

WEMBDON ROAD **NORTHFIELD BRIDGWATER** Edge of Town Residential Zone

Total Number of dwellings: 33

Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

SEMI-DETACHED TYNE & WEAR 17 TW-03-A-02

WEST PARK ROAD

**GATESHEAD** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 16

Survey date: MONDAY 07/10/13 Survey Type: MANUAL

TYNE & WEAR 18 TW-03-A-03 MIXED HOUSES

STATION ROAD **BACKWORTH NEAR NEWCASTLE** 

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Number of dwellings: 33

> Survey date: FRIDAY 13/11/15 Survey Type: MANUAL

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

WEST SUSSEX 20 WS-03-A-05 **TERRACED & FLATS** 

**UPPER SHOREHAM ROAD** 

SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 48

Survey date: WEDNESDAY Survey Type: MANUAL 18/04/12 WY-03-A-01 MIXED HOUSING WEST YÖRKSHIRE

SPRING VALLEY CRESCENT

**BRAMLEY LEEDS** 

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.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED VEHICLES

Ranking Type: TOTALS Time Range: 17:00-18:00

15th Percentile = No. 18 DH-03-A-01 Tot: 0.240 85th Percentile = No. 4 NY-03-A-07 Tot: 0.739

Median Values Mean Values

 Arrivals:
 0.297
 Arrivals:
 0.308

 Departures:
 0.189
 Departures:
 0.139

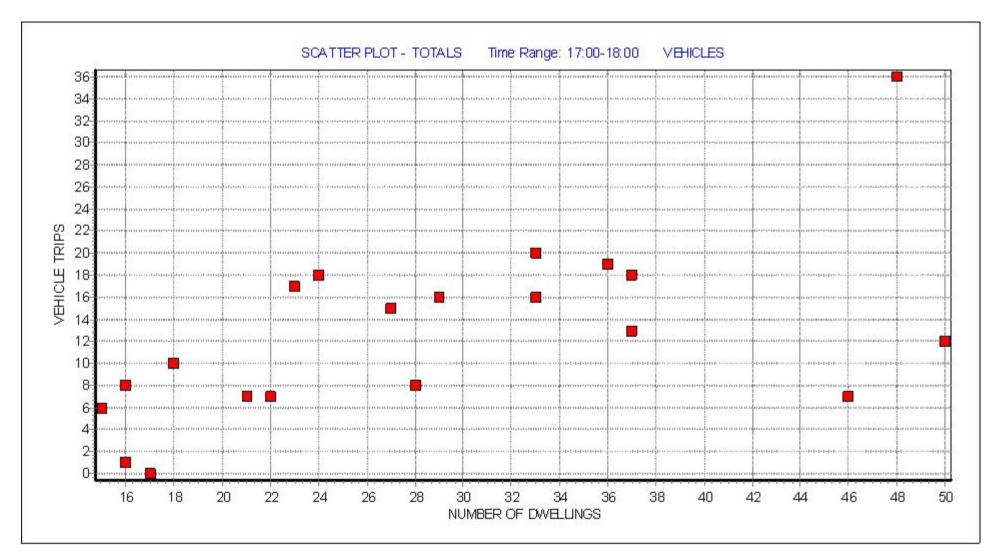
 Totals:
 0.486
 Totals:
 0.447

								Trip Rate (Sorted by Totals)		Totals)	Park Spaces
Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Arrivals	Departures	Totals	Per Dwelling
1	CH-03-A-09	TERRACED HOUSE	MACCLESFIELD	CHESHIRE	24	Mon	24/11/14	0.500	0.250	0.750	1.33
2	WS-03-A-05	TERRACED & FLA	SHOREHAM BY SEA	WEST SUSSEX	48	Wed	18/04/12	0.458	0.292	0.750	2.75
3	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.609	0.130	0.739	6.26
4	NY-03-A-07	<b>DETACHED &amp; SEM</b>	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.478	0.261	0.739	1.96
5	TW-03-A-03	MIXED HOUSES	NEAR NEWCASTLE	TYNE & WEAR	33	Fri	13/11/15	0.333	0.273	0.606	4.00
6	SF-03-A-05	DETACHED HOUSE	BURY ST EDMUNDS	SUFFOLK	18	Wed	09/09/15	0.389	0.167	0.556	4.17
7	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.407	0.148	0.555	2.37
8	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.448	0.103	0.551	2.79
9	HC-03-A-17	<b>HOUSES &amp; FLATS</b>	LIPHOOK	HAMPSHIRE	36	Thu	12/11/15	0.306	0.222	0.528	2.19
10	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.438	0.063	0.500	2.38
11	DV-03-A-01	TERRACED HOUSE	TORQUAY	DEVON	37	Wed	30/09/15	0.297	0.189	0.486	2.78
12	SM-03-A-01	DETACHED & SEM	BRIDGWATER	SOMERSET	33	Thu	24/09/15	0.333	0.152	0.485	3.97
13	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.200	0.200	0.400	3.00
14	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.351	0.000	0.351	1.59
15	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.286	0.048	0.334	1.14
16	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.273	0.045	0.318	1.09
17	DC-03-A-08	BUNGALOWS	BOURNEMOUTH	DORSET	28	Mon	24/03/14	0.107	0.179	0.286	4.68
18	DH-03-A-01	SEMI DETACHED	BISHOP AUCKLAND	DURHAM	50	Tue	28/03/17	0.220	0.020	0.240	1.74
19	WY-03-A-01	MIXED HOUSING	LEEDS	WEST YORKSHIRE	46	Wed	21/09/16	0.043	0.109	0.152	1.26
20	SH-03-A-06	BUNGALOWS	SHREWSBURY	SHROPSHIRE	16	Thu	22/05/14	0.000	0.063	0.062	2.00
21	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.000	0.000	2.06

Licence No: 539501

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.



This graph is a visual representation of the correlation between the selected trip rate calculation parameter and the rank order trip rates generated by each individual survey day in the selected set. The range of the trip rate parameter is shown along the x axis, with the level of trips shown on the y axis. The selected time range used to create the rank order list from which the graph is derived is displayed at the top of the graph (unless the peak period irrespective of time range has been selected). A line of best fit is sometimes displayed in the graph, should it be selected for inclusion by the user.

1 days

1 days

1 days

1 days

1 days

2 days

# TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

WEST YORKSHIRE

**GREATER MANCHESTER** 

CHESHIRE

**DURHAM** 

MERSEYSIDE

TYNE & WEAR

VEHICLES

WY

CH

GM

MS

 $\mathsf{TW}$ 

NORTH DH D

NORTH WEST

80

09

Select	ted regi	ons and areas:	
02	SOUT	H EAST	
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days
	WS	WEST SUSSEX	1 days
03	SOUT	H WEST	-
	DC	DORSET	1 days
	DV	DEVON	1 days
	SM	SOMERSET	1 days
04	EAST	ANGLIA	
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
05	EAST	MIDLANDS	
	LN	LINCOLNSHIRE	1 days
06	WEST	MIDLANDS	
	SH	SHROPSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	YORK	SHIRE & NORTH LINCOLNSHIRE	
	NY	NORTH YORKSHIRE	3 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: 15 to 50 (units: ) Range Selected by User: 15 to 50 (units: )

### Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/03/17

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 4 days
Tuesday 4 days
Wednesday 6 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 21 days
Directional ATC Count 0 days

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

# Selected Locations:

Suburban Area (PPS6 Out of Centre) 9
Edge of Town 10
Neighbourhood Centre (PPS6 Local Centre) 2

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 19 Village 1 No Sub Category 1

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:

C1 1 days C3 20 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®.

# Secondary Filtering selection (Cont.):

## Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	6 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	4 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	2 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
125,001 to 250,000	4 days
250,001 to 500,000	4 days
500,001 or More	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	9 days
1.1 to 1.5	12 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	3 days
No	18 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 21 days

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

LIST OF SITES relevant to selection parameters

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

DC-03-A-08 **BUNGALOWS DORSET** 

HURSTDENE ROAD CASTLE LANE WEST **BOURNEMOUTH** Edge of Town Residential Zone

Total Number of dwellings: 28

Survey date: MONDAY 24/03/14 Survey Type: MANUAL

**DURHAM** DH-03-A-01 SEMI DETACHED

**GREENFIELDS ROAD** 

**BISHOP AUCKLAND** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 50

Survey date: TUESDAY 28/03/17 Survey Type: MANUAL

**TERRACED HOUSES** DV-03-A-01 **DEVON** 

**BRONSHILL ROAD** 

**TORQUAY** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 37

Survey date: WEDNESDAY 30/09/15 Survey Type: MANUAL

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 **GREATER MANCHESTER** 

GM-03-A-10 DETACHED/SEMI

**BUTT HILL DRIVE PRESTWICH MANCHESTER** Edge of Town Residential Zone

Total Number of dwellings: 29

Survey date: WEDNESDAY Survey Type: MANUAL 12/10/11

HC-03-A-17 HAMPSHIRE **HOUSES & FLATS** 

CANADA WAY

LIPHOOK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 36

> Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

LINCOLNSHIRE

LIST OF SITES relevant to selection parameters (Cont.)

LN-03-A-03 **ROOKERY LANE BOULTHAM** LINCOLN

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings:

SEMI DETACHED

Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

MS-03-A-03 **DETACHED MERSEYSIDE** 

**BEMPTON ROAD OTTERSPOOL** LIVERPOOL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 15

Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK 10

YARMOUTH ROAD

CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 27

Survey date: TUESDAY 16/10/12 Survey Type: MANUAL 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 **TERRACED HOUSES** NY-03-A-08 NORTH YORKSHIRE

NICHOLAS STREET

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 21

Survey date: MONDAY 16/09/13 Survey Type: MANUAL NORTH YORKSHIRE 13 NY-03-A-11 PRIVATE HOUSING

**HORSEFAIR** 

BOROUGHBRIDGE Edge of Town Residential Zone

Total Number of dwellings: 23

Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

SF-03-A-05 14 **DETACHED HOUSES** SUFFOLK

VALFIANE

**BURY ST EDMUNDS** Edge of Town Residential Zone

Total Number of dwellings: 18

Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 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

16 SM-03-A-01 DETACHED & SEMI SOMERSET

WEMBDON ROAD NORTHFIELD BRIDGWATER Edge of Town Residential Zone

Total Number of dwellings: 33

Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

17 TW-03-A-02 SEMI-DETACHED TYNE & WEAR

WEST PARK ROAD

**GATESHEAD** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 16

Survey date: MONDAY 07/10/13 Survey Type: MANUAL

18 TW-03-A-03 MIXED HOUSES TYNE & WEAR

STATION ROAD BACKWORTH NEAR NEWCASTLE

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Number of dwellings: 33

Survey date: FRIDAY 13/11/15 Survey Type: MANUAL

19 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

20 WS-03-A-05 TERRACED & FLATS WEST SUSSEX

UPPER SHOREHAM ROAD

SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 48

Survey date: WEDNESDAY 18/04/12 Survey Type: MANUAL WY-03-A-01 MIXED HOUSING WEST YORKSHIRE

SPRING VALLEY CRESCENT

BRAMLEY LEEDS

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.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED VEHICLES

Ranking Type: TOTALS Time Range: 07:00-19:00

15th Percentile = No. 18 NY-03-A-08 Tot: 2.857 85th Percentile = No. 4 NF-03-A-01 Tot: 6.222

Median Values Mean Values

 Arrivals:
 2.394
 Arrivals:
 2.218

 Departures:
 2.333
 Departures:
 2.256

 Totals:
 4.727
 Totals:
 4.474

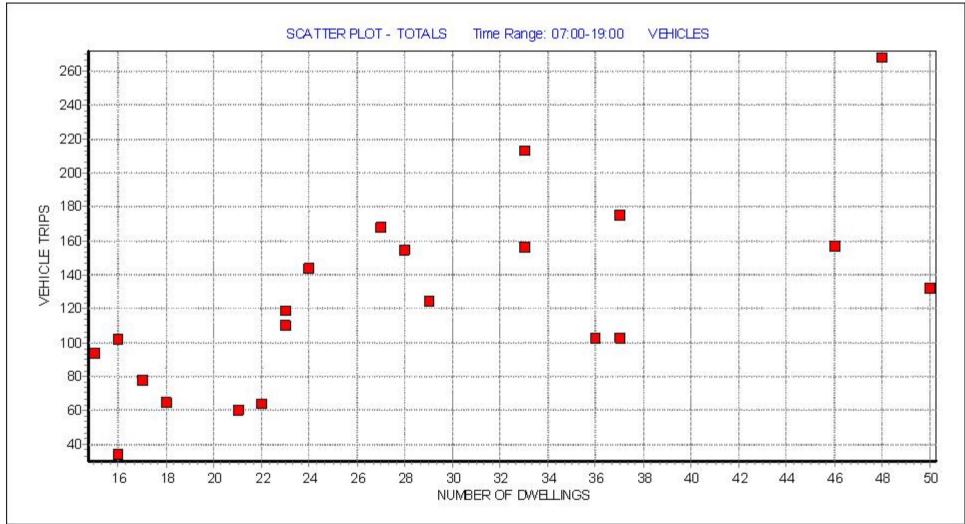
								Trip Rate (Sorted by Totals)		Γotals)	Park Spaces
Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Arrivals	Departures	Totals	Per Dwelling
1	TW-03-A-03	MIXED HOUSES	NEAR NEWCASTLE	TYNE & WEAR	33	Fri	13/11/15	3.242	3.212	6.454	4.00
2	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	3.063	3.313	6.374	2.38
3	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	3.000	3.267	6.267	3.00
4	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	3.074	3.148	6.222	2.37
5	CH-03-A-09	TERRACED HOUSE	MACCLESFIELD	CHESHIRE	24	Mon	24/11/14	2.917	3.083	6.000	1.33
6	WS-03-A-05	TERRACED & FLA	SHOREHAM BY SEA	WEST SUSSEX	48	Wed	18/04/12	2.750	2.833	5.583	2.75
7	DC-03-A-08	BUNGALOWS	BOURNEMOUTH	DORSET	28	Mon	24/03/14	2.821	2.714	5.535	4.68
8	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	2.870	2.304	5.174	1.96
9	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	2.435	2.348	4.783	6.26
10	DV-03-A-01	TERRACED HOUSE	TORQUAY	DEVON	37	Wed	30/09/15	2.270	2.459	4.729	2.78
11	SM-03-A-01	DETACHED & SEM	BRIDGWATER	SOMERSET	33	Thu	24/09/15	2.394	2.333	4.727	3.97
12	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	2.294	2.294	4.588	2.06
13	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	2.069	2.241	4.310	2.79
14	SF-03-A-05	DETACHED HOUSE	BURY ST EDMUNDS	SUFFOLK	18	Wed	09/09/15	1.722	1.889	3.611	4.17
15	WY-03-A-01	MIXED HOUSING	LEEDS	WEST YORKSHIRE	46	Wed	21/09/16	1.717	1.696	3.413	1.26
16	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	1.318	1.591	2.909	1.09
17	HC-03-A-17	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	36	Thu	12/11/15	1.472	1.389	2.861	2.19
18	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	1.476	1.381	2.857	1.14
19	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	1.405	1.378	2.783	1.59
20	DH-03-A-01	SEMI DETACHED	BISHOP AUCKLAND	DURHAM	50	Tue	28/03/17	1.260	1.380	2.640	1.74
21	SH-03-A-06	BUNGALOWS	SHREWSBURY	SHROPSHIRE	16	Thu	22/05/14	1.000	1.125	2.125	2.00

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

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Bancroft Consulting Jarodale House, Sherwood Nottingham

Licence No: 539501



This graph is a visual representation of the correlation between the selected trip rate calculation parameter and the rank order trip rates generated by each individual survey day in the selected set. The range of the trip rate parameter is shown along the x axis, with the level of trips shown on the y axis. The selected time range used to create the rank order list from which the graph is derived is displayed at the top of the graph (unless the peak period irrespective of time range has been selected). A line of best fit is sometimes displayed in the graph, should it be selected for inclusion by the user.

TRICS 7.4.2 290817 B17.57 (C) 2017 TRICS Consortium Ltd SITE DETAILS FOR TW-03-A-03

Friday 22/09/17

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

Site Reference: TW-03-A-03

Created: Version: 7.3.3 14/04/16 Latitude/Longitude: 55.04274, -1.52761

Land Use Type: 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Region/Area NORTHTYNE & WEAR Version/Creation Date: 7.3.3 14/04/16

Description: MIXED HOUSES
Street: STATION ROAD
District: BACKWORTH
Town: NEAR NEWCASTLE

Post Code: NE27 0SH

Planning Authority:

Location: Neighbourhood Centre (PPS6 Local Centre)

Location Sub Category: Village Use Class: C3

Population within 500m: 909

Population within 1 Mile: 5,001 to 10,000 Population within 5 Miles: 250,001 to 500,000

Car ownership within 5 Miles: 0.6 to 1.0

**Public Transport Provision Summary** 

Day	Period	Total buses/trams	Total Trains	Total
		within 400m	within 1000m	Services
Monday-Friday	0700-1900	64		64
Monday-Friday	0700-1000	14		14
Monday-Friday	1600-1900	14		14
Saturday	0700-1900	62		62
Sunday	0700-1900	18		18

Is site associated with a travel plan: No

If not, are there any plans to implement

a Travel Plan in the future? No

Is survey data available before the implementation of the Travel Plan?

Is the location of the site hilly or flat: Flat Urban Regeneration: No

Site area 1.82 hect
Number of dwellings 33
Housing Density 20.89

No. of developments for this Site: 1
No. of survey Days for this Site: 1

### Comments

This site is located in the village of Backworth, between Newcastle and Whitley Bay. The B1322 passes through the village, heading west towards the junction with the A19 and south towards the junction with the A186.

The site is bordered by further residential streets to the east, with Backworth Park Primary School to the west and open land to the south. To the north is the village's main street, Church Road.

## Bus (or tram) site accessibility

- 3. Is there at least 1 bus (or tram) stop within the site frontage or within 400m of the site frontage? : Yes
- 4. If yes to question 3, where it is necessary to cross a road between the development and the stop, is there a conveniently placed crossing facility? : Yes

### Design features encouraging non-car modes

Bancroft Consulting Jarodale House, Sherwood Nottingham

# 12. Pedestrians

The site has footpaths leading to the wider community.

## 13. Pedal cycles

None

# 14. Public transport

The site is located within easy walking distance of bus stops leading to the wider community.

## Design features encouraging non-car modes

Road Network Distance to Local Deve	elopments
Year of Analysis	2016
Nearest Primary School	0.6 kilometres
Nearest Secondary School	4.4 kilometres
Nearest Local Shop/Corner Shop	0.6 kilometres
Nearest Main Supermarket	1.6 kilometres
Nearest Doctors Surgery	2.1 kilometres
Nearest Hospital with Minor Injuries/A & E	6.1 kilometres
Nearest Sports/Leisure Centre	4.2 kilometres

Census Data	
Year of Census	2011
Census Output Area/Data Zone	E00166161
Number of people employed within Census Output Area	145
Number of households within Census Output Area	125
Number of people living within Census Output Area	275
Area of Census Output Area (hectares)	242.00
Population density within Census Output Area (per hectare)	1.10

Site reference: TW-03-A-03
Trade name: CLAVERLEY DRIVE

Site area (h/a): 1.82

Site area excluding public

open spaces (h/a): 1.58

Open since 1990

Occupied dwellings 33
Unoccupied dwellings 0
Total dwellings 33

Housing Density 20.89
Privately owned units 33
Non-Privately owned units 0

Name of nearest site RIDLEY GARDENS

Distance to nearest similar site 2 Km

Residential unit types

	Private	Non-Private	Total
Detached houses	15	0	15
Semi-detached houses	6	0	6
Terraced houses	0	0	0
Bungalows	12	0	12
Flats (in houses)	0	0	0
Flats (in blocks)	0	0	0
Town Houses	0	0	0
Other (specify below)			

Other:

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PARKING DETAILS FOR SITE TW-03-A-03	Page 4

On-Site parking

Total no. of parking spaces 132 Parking Spaces Per Hectare 72.527 Parking Spaces Per dwelling 4.000 Arrivals Per Parking Space 0.81

Number of spaces

On-Street 45 Driveway 54 Garages 33 Communal parking spaces 0

### **General Comments on Parking**

All properties on site have their own drive and may have their own garages as well.

### Types of servicing vehicle parking taking place

on-site (internal, within specified bays or otherwise)

off-site (on-street, in designated loading/servicing bays)

No

off-site (in restricted areas e.g. double yellow lines)

### Off-Site parking details

Is there off-site parking available

Yes

Off-Site parking included in the counts

Free On-Street parking available nearby

If yes, considered easy to find a space

If prepared to pay, easy to find somewhere to park off-site all day

### Parking restrictions

Area subject to parking restrictions (controlled parking zone - CPZ)

No

## Off-Street parking

Off-Street parking available NO

## Park & Ride

Park & Ride Type Facility providing relevant means of accessing the site

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SURVEY DAY DETAILS FOR TW-03-A-03 / 01

Jarodale House, Sherwood Nottingham

Licence No: 539501

Friday 22/09/17

Page 5

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Survey type: Manual Count
AM weather: Cold and Light Rain
PM weather: Cold and Light Rain

Initial car park occupancy: 34 Final car park occupancy: 35

BRACKETED ACCUMULATION FIGURES ARE NOT ABSOLUTE

Parking Capacity 27% (132 On-Site Spaces)

Data proportions in %

Bancroft Consulting

Motor cars 80 Motor cycles 0 Public service 0 Light goods 12 OGV (1) 3 OGV (2) 1 Taxis 4

Arr 107 Dep 106 Totals 213 Time Parking Accum 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 11 31 08:00-09:00 7 18 25 20 9 09:00-10:00 5 14 16 10 9 19 17 10:00-11:00 11:00-12:00 7 8 15 16 9 12:00-13:00 11 20 18 13:00-14:00 10 10 20 18 14:00-15:00 12 4 16 26 15:00-16:00 8 14 22 20 16:00-17:00 16 6 22 30 9 17:00-18:00 11 20 32 18:00-19:00 3 9 6 35 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

## Comments

No PSV's or motorcycles visited the site during this survey.

OGV's visiting the site parked in the general parking area on site.

Friday 22/09/17 Page 6

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: OGV

Data proportions in % OGV (1) 75 OGV (2) 25

 $\ensuremath{\mathsf{1}}$  occupant per OGV is assumed, and included in the vehicle occupants count

Time	Arr 4	Dep 4	Totals 8	Accumulation
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	1	1	2	(0)
08:00-09:00	1	1	2	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	2	2	4	(0)
11:00-12:00	0	0	0	(0)
12:00-13:00	0	0	0	(0)
13:00-14:00	0	0	0	(0)
14:00-15:00	0	0	0	(0)
15:00-16:00	0	0	0	(0)
16:00-17:00	0	0	0	(0)
17:00-18:00	0	0	0	(0)
18:00-19:00	0	0	0	(0)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: Taxis

Time	Arr 4	Dep 4	Totals 8	Accumulation
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	0	0	0	(0)
08:00-09:00	0	0	0	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	0	0	0	(0)
11:00-12:00	0	0	0	(0)
12:00-13:00	1	1	2	(0)
13:00-14:00	1	0	1	(1)
14:00-15:00	1	1	2	(1)
15:00-16:00	0	1	1	(0)
16:00-17:00	1	0	1	(1)
17:00-18:00	0	1	1	(0)
18:00-19:00	0	0	0	(0)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: Cars

Time	Arr 86	Dep 85	Totals 171	Accumulation
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	2	5	7	(-3)
08:00-09:00	4	15	19	(-14)
09:00-10:00	5	9	14	(-18)
10:00-11:00	8	7	15	(-17)
11:00-12:00	6	7	13	(-18)
12:00-13:00	7	5	12	(-16)
13:00-14:00	8	9	17	(-17)
14:00-15:00	11	3	14	(-9)
15:00-16:00	7	12	19	(-14)
16:00-17:00	14	5	19	(-5)
17:00-18:00	8	5	13	(-2)
18:00-19:00	6	3	9	(1)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: LGV

Time	Arr 13	Dep 13	Totals 26	Accumulation
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	1	1	2	(0)
08:00-09:00	2	2	4	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	0	0	0	(0)
11:00-12:00	1	1	2	(0)
12:00-13:00	3	3	6	(0)
13:00-14:00	1	1	2	(0)
14:00-15:00	0	0	0	(0)
15:00-16:00	1	1	2	(0)
16:00-17:00	1	1	2	(0)
17:00-18:00	3	3	6	(0)
18:00-19:00	0	0	0	(0)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

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Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: Cycles

Time	Arr 2	Dep 1	Totals 3	Accumulation
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	0	0	0	(0)
08:00-09:00	0	0	0	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	0	0	0	(0)
11:00-12:00	0	0	0	(0)
12:00-13:00	0	0	0	(0)
13:00-14:00	0	1	1	(-1)
14:00-15:00	0	0	0	(-1)
15:00-16:00	0	0	0	(-1)
16:00-17:00	1	0	1	(0)
17:00-18:00	0	0	0	(0)
18:00-19:00	1	0	1	(1)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Calculation Reference: AUDIT-539501-170922-0921

#### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

VEHIČLES

## Selected regions and areas:

09 NORTH

TW TYNE & WEAR 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: 33 to 33 (units: ) Range Selected by User: 15 to 50 (units: )

### Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/03/17

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:

Friday 1 days

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

### Selected survey types:

Manual count 1 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:

Neighbourhood Centre (PPS6 Local Centre)

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:

Village 1

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 1 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®.

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Friday 22/09/17 Page 2

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000 1 days

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

Population within 5 miles:

250,001 to 500,000 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 1 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:

No 1 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 1 days

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

# LIST OF SITES relevant to selection parameters

1 TW-03-A-03 MIXED HOUSES TYNE & WEAR

STATION ROAD
BACKWORTH
NEAR NEWCASTLE
Neighbourhood Centre (PPS6 Local Centre)
Village

Total Number of dwellings: 33

Survey date: FRIDAY 13/11/15 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
CH-03-A-09	X
DC-03-A-08	X
DH-03-A-01	X
DV-03-A-01	X
ES-03-A-02	X
GM-03-A-10	X
HC-03-A-17	X
LN-03-A-03	X
MS-03-A-03	Х
NF-03-A-01	Х
NY-03-A-07	X
NY-03-A-08	X
NY-03-A-11	Х
SF-03-A-05	Х
SH-03-A-06	Х
SM-03-A-01	Х
TW-03-A-02	Х
WK-03-A-02	Х
WS-03-A-05	Х
WY-03-A-01	X

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		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.121	1	33	0.212	1	33	0.333
08:00 - 09:00	1	33	0.212	1	33	0.545	1	33	0.757
09:00 - 10:00	1	33	0.152	1	33	0.273	1	33	0.425
10:00 - 11:00	1	33	0.303	1	33	0.273	1	33	0.576
11:00 - 12:00	1	33	0.212	1	33	0.242	1	33	0.454
12:00 - 13:00	1	33	0.333	1	33	0.273	1	33	0.606
13:00 - 14:00	1	33	0.303	1	33	0.303	1	33	0.606
14:00 - 15:00	1	33	0.364	1	33	0.121	1	33	0.485
15:00 - 16:00	1	33	0.242	1	33	0.424	1	33	0.666
16:00 - 17:00	1	33	0.485	1	33	0.182	1	33	0.667
17:00 - 18:00	1	33	0.333	1	33	0.273	1	33	0.606
18:00 - 19:00	1	33	0.182	1	33	0.091	1	33	0.273
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.242			3.212			6.454

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: 33 - 33 (units: )
Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 20

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

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

	ARRIVALS		ARRIVALS DEPARTURES				TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.000	1	33	0.000	1	33	0.000
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.030	1	33	0.030	1	33	0.060
13:00 - 14:00	1	33	0.030	1	33	0.000	1	33	0.030
14:00 - 15:00	1	33	0.030	1	33	0.030	1	33	0.060
15:00 - 16:00	1	33	0.000	1	33	0.030	1	33	0.030
16:00 - 17:00	1	33	0.030	1	33	0.000	1	33	0.030
17:00 - 18:00	1	33	0.000	1	33	0.030	1	33	0.030
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.120			0.120			0.240

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: 33 - 33 (units: )
Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 20

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		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.030	1	33	0.030	1	33	0.060	
08:00 - 09:00	1	33	0.030	1	33	0.030	1	33	0.060	
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000	
10:00 - 11:00	1	33	0.061	1	33	0.061	1	33	0.122	
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000	
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000	
13:00 - 14:00	1	33	0.000	1	33	0.000	1	33	0.000	
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000	
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000	
16:00 - 17:00	1	33	0.000	1	33	0.000	1	33	0.000	
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000	
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.121			0.121			0.242	

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: 33 - 33 (units: )
Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 20

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			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip		
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.000	1	33	0.000	1	33	0.000		
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000		
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000		
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000		
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000		
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000		
13:00 - 14:00	1	33	0.000	1	33	0.000	1	33	0.000		
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000		
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000		
16:00 - 17:00	1	33	0.000	1	33	0.000	1	33	0.000		
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000		
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000		
19:00 - 20:00											
20:00 - 21:00											
21:00 - 22:00											
22:00 - 23:00											
23:00 - 24:00											
Total Rates:			0.000			0.000			0.000		

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: 33 - 33 (units: )
Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 20

Bancroft Consulting Jarodale House, Sherwood Nottingham

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		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.000	1	33	0.000	1	33	0.000
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000
13:00 - 14:00	1	33	0.000	1	33	0.030	1	33	0.030
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000
16:00 - 17:00	1	33	0.030	1	33	0.000	1	33	0.030
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000
18:00 - 19:00	1	33	0.030	1	33	0.000	1	33	0.030
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00							<u> </u>		<u> </u>
Total Rates:			0.060			0.030			0.090

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

33 - 33 (units: ) Trip rate parameter range selected: Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): Number of Saturdays: 0 Number of Sundays: 0 Surveys automatically removed from selection: 0 Surveys manually removed from selection: 20

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

CARS

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

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.061	1	33	0.152	1	33	0.213
08:00 - 09:00	1	33	0.121	1	33	0.455	1	33	0.576
09:00 - 10:00	1	33	0.152	1	33	0.273	1	33	0.425
10:00 - 11:00	1	33	0.242	1	33	0.212	1	33	0.454
11:00 - 12:00	1	33	0.182	1	33	0.212	1	33	0.394
12:00 - 13:00	1	33	0.212	1	33	0.152	1	33	0.364
13:00 - 14:00	1	33	0.242	1	33	0.273	1	33	0.515
14:00 - 15:00	1	33	0.333	1	33	0.091	1	33	0.424
15:00 - 16:00	1	33	0.212	1	33	0.364	1	33	0.576
16:00 - 17:00	1	33	0.424	1	33	0.152	1	33	0.576
17:00 - 18:00	1	33	0.242	1	33	0.152	1	33	0.394
18:00 - 19:00	1	33	0.182	1	33	0.091	1	33	0.273
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.605			2.579			5.184

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: 33 - 33 (units: )
Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 20

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

**LGVS** 

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

	ARRIVALS				DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.030	1	33	0.030	1	33	0.060	
08:00 - 09:00	1	33	0.061	1	33	0.061	1	33	0.122	
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000	
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000	
11:00 - 12:00	1	33	0.030	1	33	0.030	1	33	0.060	
12:00 - 13:00	1	33	0.091	1	33	0.091	1	33	0.182	
13:00 - 14:00	1	33	0.030	1	33	0.030	1	33	0.060	
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000	
15:00 - 16:00	1	33	0.030	1	33	0.030	1	33	0.060	
16:00 - 17:00	1	33	0.030	1	33	0.030	1	33	0.060	
17:00 - 18:00	1	33	0.091	1	33	0.091	1	33	0.182	
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.393			0.393			0.786	

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: 33 - 33 (units: )
Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 20

Bancroft Consulting Jarodale House, Sherwood Nottingham

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

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	33	0.000	1	33	0.000	1	33	0.000
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000
13:00 - 14:00	1	33	0.000	1	33	0.000	1	33	0.000
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000
16:00 - 17:00	1	33	0.000	1	33	0.000	1	33	0.000
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00				<u> </u>			<u> </u>		<u> </u>
Total Rates:			0.000			0.000			0.000

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: 33 - 33 (units: ) Survey date date range: 01/01/09 - 28/03/17

Number of weekdays (Monday-Friday): Number of Saturdays: 0 Number of Sundays: 0 Surveys automatically removed from selection: 0 Surveys manually removed from selection: 20