

Future Residential Development Land at Rogers Farm, Fox Hill, Haywards Heath

# **Transport Overview**

for

Sigma Homes Limited





# **Document Control Sheet**

Transport Overview

Future Residential Development/Land at Rogers Farm, Fox Hill, Haywards Heath Sigma Homes Limited

This document has been issued and amended as follows:

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24/07/2020	1 <sup>st</sup> Issue	FT	SGi
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- C Access Arrangement & Visibility Splays
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### **1.0** Introduction

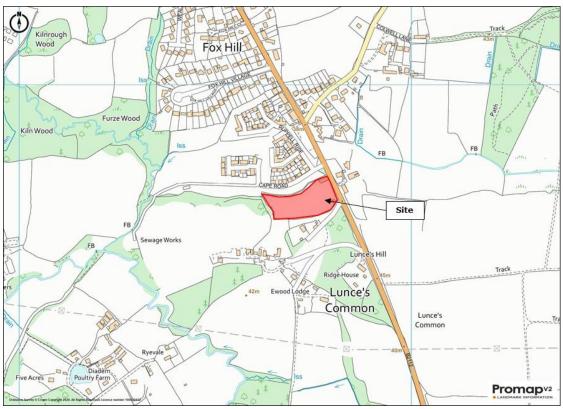
- 1.1 This Transport Overview report has been prepared on behalf of Sigma Homes Limited in relation to potential future residential development on land at Rogers Farm, Fox Hill, Haywards Heath (the site).
- 1.2 The site is undeveloped and is located within the District of Mid Sussex, within the County of West Sussex. The District Council is in the process of preparing a Site Allocations Development Plan Document (DPD). The draft Regulation 19 submission DPD includes an allocation for development of land at Rogers Farm with 25 dwellings. This report has been prepared to provide supporting information with respect of transport and highway matters pursuant to the draft allocation.
- 1.3 The report considers the transport and highway matters associated with residential development of the site with up to 25 homes (Land Use Class C3), in particular focusing on suitability of the site in terms of transport sustainability, feasibility of achieving safe and suitable access, and a high-level consideration of potential traffic generation and impact on the local highway network. An illustrative masterplan is included in **Appendix A**. In summary, this report demonstrates that:
  - Land at Rogers Farm is located adjacent to existing residential development, approximately 1.6 kilometres to the south of Haywards Heath town centre
  - ▶ The site has good connections to existing main routes through the District
  - ► The site is accessible by sustainable modes of transport, including on foot, by cycle and public transport, providing connections to local amenities and employment opportunities in Haywards Heath and to the proposed 2-form entry primary school at Hurstwood Lane
  - Enhancements to the local highway network, pedestrian routes and bus facilities have recently been implemented along Fox Hill in relation to a residential development recently completed to the north of the site
  - Appropriate connections can be delivered as part of future development of the land to secure pedestrian and cycle links to the site, connecting into existing networks and providing connections to existing nearby bus stops
  - > Safe and suitable vehicular access to the site can be achieved in accordance with design guidance
  - Any proposals for creation of new accesses to the land or other highway enhancements will be subject to relevant Road Safety Audit, in line with West Sussex County Council (WSCC) policy
  - The impact of 25 residential units would not give rise to a requirement for more detailed junction modelling, in view of WSCC guidance; and the development could be accommodated within the existing operating capacity of the local highway network
  - It is unlikely that any significant infrastructure or highway upgrades would be required to support potential future development of the site
- 1.4 The report follows the following structure:
  - Section 2 provides information on the site and surrounding area, including a brief review of the relevant planning background with respect to transport matters and the emerging Local Plan
  - Section 3 describes the accessibility of the site to more sustainable forms of travel, including walking, cycling and public transport as well as access by these modes to local amenities
  - Section 4 considers the feasibility of achieving safe and suitable access to the site from Fox Hill/Lunce's Hill
  - Section 5 provides an assessment of traffic impact of potential future housing development of the site
  - **Section 6** presents the summary and conclusions of this report



### 2.0 Background

### Site & Surrounding Area

- 2.1 The site is located adjacent to existing residential development to the north and to the west of Fox Hill, within the administrative boundaries of Mid Sussex District Council and West Sussex County Council. The County boundary is a few metres to the south of the site boundary along Fox Hill/Lunce's Hill. The commercial centre of Haywards Heath is approximately 1.6 kilometres to the north of the site, via the B2112.
- 2.2 The site is located to the south of Cape Road and west of Lunce's Hill and comprises circa 1.3 hectares of land associated with Rogers Farm. Land to the south, west and east is generally undeveloped. Cape Road was constructed as part of the recent residential development to the north. The site in relation to the surrounding area is identified on the plan below.



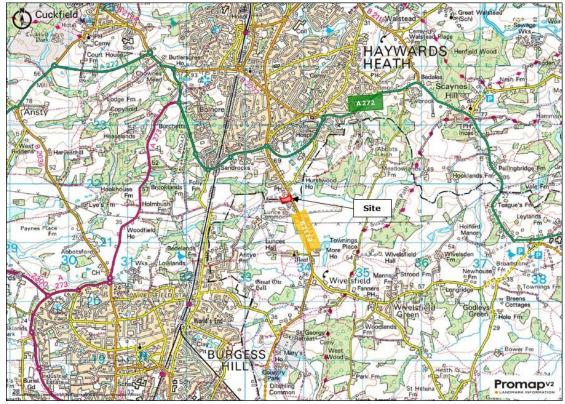
Site & Surrounding Area

### **Highway Network**

- 2.3 Existing access to Rogers Farm is via a private drive, which leads south-west off Lunce's Hill. There is no existing direct access from the development site to the public highway.
- 2.4 The local highway network in the vicinity of the site includes Lunce's Hill and Cape Road.
- 2.5 Lunce's Hill (B2112) adjoins the site to the east and is a single carriageway road subject to the national speed limit in the vicinity of the site (60 mph). The B2112 provides a main route into Haywards Heath town centre from the south. Lunce's Hill connects with the A272 approximately 1 kilometre to the north of the site, which provides onward connections to Ansty and the A23 to the west and Scaynes Hill and North Chailey to the east. To the south, the B2112 leads towards Wivelsfield and the east of Burgess Hill.



- 2.6 Highway enhancements were implemented on Lunce's Hill as part of the recently completed Cape Road development, including a re-aligned carriageway, enhanced road markings and installation of vehicle actuated signs.
- 2.7 The site in relation to the wider highway network is identified on the plan below:



Surrounding Highway Network

### **Planning Background**

- 2.8 An outline planning application was submitted in 2016 for a residential development of 37 dwellings on the site (planning reference: DM/16/3998). Whilst the application was refused, it is notable that no objection was raised to the application in relation to highways and transport matters, subject to planning conditions, by West Sussex County Council in its capacity as local highway authority. Furthermore, given the location of the development at the County boundary, East Sussex County Council was consulted on the proposals and raised no objection, again subject to conditions.
- 2.9 Access to the 2016 scheme was proposed a short distance to the north of the existing access to Rogers Farm and included visibility splays of 2.4 metres by 160 metres in each direction. The application included proposals to enhance the existing footway on the western side of Lunce's Hill to connect into the footway enhancements secured as part of the residential development to the north.
- 2.10 In more recent times, land to the north of the site has been developed with 170 dwellings by Linden Homes, known as Fox Hill. Planning permission for 99 dwellings was originally granted in July 2016 (planning reference: DM/15/3448). The number of units was extended to 151 by a further planning permission granted in September 2017 (planning reference: DM/17/0331). Finally, an additional 19 dwellings were approved at the end of 2019 (planning reference: DM/19/2764). The Fox Hill development is now substantially complete and involved enhancements, including:
  - Provision of an enhanced footway on the western side of Lunce's Hill from Cape Road (the site access) leading towards Haywards Heath



- Installation of informal pedestrian crossings (dropped kerbs and tactile paving) across junctions/accesses as well as across Lunce's Hill to enhance crossing for pedestrians to nearby bus stops
- Improved road markings and signage on Lunce's Hill
- ▶ Installation of vehicle actuated signs to encourage lower vehicle speeds
- Provision of new bus shelters at nearby bus stops (near the Fox and Hound public house) with real time passenger information

#### **Draft Site Allocations DPD**

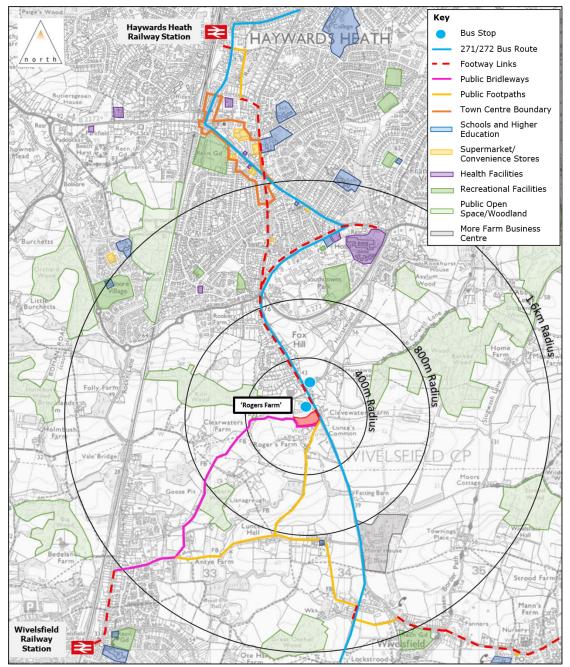
- 2.11 The District Council is in the process of preparing a Site Allocations DPD. The draft Regulation 19 submission DPD includes an allocation for development of land at Rogers Farm with 25 dwellings (site reference: SA 21). This report has been prepared to provide supporting information in respect of transport and highway matters pursuant to the draft allocation.
- 2.12 In relation to 'Highways and Access', the draft allocation outlines the following requirements:
  - ▶ Provide access to Lunce's Hill (B2112), the details of which will need to be investigated further.
  - Provide a sustainable transport strategy to identify sustainable transport infrastructure improvements and how the development will integrate with the existing network, providing safe and convenient routes for walking, cycling and public transport through the development and linking with existing networks.
- 2.13 Under 'Urban Design Principles', the draft allocation also indicates:
  - Seek to enhance the connectivity of the site with Haywards Heath by providing pedestrian and/or cycle links adjacent to existing networks, including a connection to the bridleway to the south of the site.



# 3.0 Transport Sustainability

### Sustainable Transport Strategy

- 3.1 The site is located on the south side of Haywards Heath and west of Fox Hill/Lunce's Hill (B2112). The B2112 is the main route into the town centre from the south and is served by regular bus services. These services are accessed by recently improved pedestrian facilities, delivered as part of residential development constructed to the north of the site. The town centre is approximately 1.6 kilometres to the north, within a comfortable cycle distance and accessible by existing pedestrian facilities.
- 3.2 The development has been designed to provide safe and convenient routes for walking and cycling to integrate with existing networks that offer opportunities for sustainable travel choices. This strategy seeks to ensure future residents can access a range of amenities on foot, by cycle and public transport.



Key Sustainable Transport Connections



- 3.3 A Travel Plan will be prepared to support the new residential development, which will seek to encourage more sustainable travel choices among residents, primarily through the provision of local information on pedestrian, cycle and public transport routes and facilities.
- 3.1 It is generally accepted that walking and cycling provide important alternatives to the private car and should also be encouraged to form part of longer journeys via public transport. The Chartered Institute of Highways and Transportation (CIHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:
  - Most people will walk to a destination that is less than one mile (circa 1.6 kilometres) Planning for Walking, 2015
  - The bicycle is a potential mode of transport for all journeys under five miles (circa 8 kilometres) -Planning for Cycling, 2015
  - Walking distances to bus stops should not exceed 400 metres, whilst people are prepared to walk twice as far to rail stations - Planning for Walking, 2015
- 3.2 The site is accessible by sustainable modes of transport and local amenities are within walking distance of the site. The following paragraphs provide further information on access to the site on-foot, by cycle and public transport as well as further information on local services and facilities.

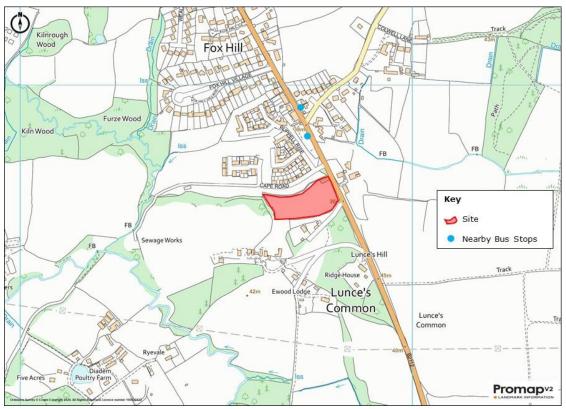
### Walking & Cycling

- 3.3 There is an existing footway on the western side of Lunce's Hill, which leads north from the existing access to Rogers Farm and connects with the recently enhanced footway fronting the Fox Hill development and on towards nearby bus stops and Haywards Heath. Also installed as part of the development to the north, a new informal pedestrian crossing (involving dropped kerbs and tactile paving) has been installed to enhance crossing for pedestrians to the southbound bus stop opposite the Fox and Hounds public house, as well as additional dropped kerbs and tactile paving across a number of other accesses and local junctions.
- 3.4 There are no dedicated cycle routes in the vicinity of the site. However, recent measures have been implemented on the B2112 to the north of the site, which seek to reduce vehicle speeds, including improved road marking and signage as well as installation of vehicle actuated signs. Lower vehicle speeds are likely to be conducive to encouraging an increase in cycling towards the town.
- 3.5 The site also benefits from access to an extensive network of public rights of way (PRoW) to the south of the site between the B2112 and Valebridge Road and beyond. This includes a bridleway (Wivelsfield 3), which leads along the southern boundary of the site and continues in a south-westerly direction to connect with Valebridge Road (a core route between Burgess Hill in the south and the A272 to the north) a short distance to the north of Wivelsfield railway station. A further public footpath (Wivelsfield 15) leads south from the existing access to Rogers Fam towards Lunce's Hall and connects with the wider PRoW network. These routes provide future residents with alternative pedestrian and/or cycle links to other nearby settlements, as well as for recreational purposes.
- 3.6 Within the site, the layout will be designed to encourage low vehicle speeds and to prioritise the needs of pedestrians and cyclists. A footway will lead into the development running along the northern side of the primary access road. Shared surface private drives will lead off this primary access route, which will connect with a footpath extending along the northern boundary of the site. These pedestrian routes will integrate into the existing and recently enhanced footway on the western side of Lunce's Hill, which leads north towards Haywards Heath and nearby bus stops. It is envisaged that the footway on the western side of Lunce's Hill between the new site access and recently enhanced section of footway will be improved, with localised widening and surface improvements.



### **Bus Services**

3.7 The nearest bus stops to the site are located on Fox Hill within 400 metres of the entire site, identified on the plan below. These stops benefit from shelters with seating and are due to be installed with real time passenger travel information.



Location of Nearby Bus Stops

3.8 These stops provide access to regular bus services serving Haywards Heath as well as Brighton and Burgess Hill. A summary of existing services is provided in the table below based on information available online (West Sussex County Council and Traveline websites).

Service	Route	Approximate Frequency		
Service	Koule	Monday - Saturday	Sunday	
271/272	Brighton – Burgess Hill – Haywards Heath - Crawley	Hourly	Every 2 hours	

Table 3.1 – Local Bus Service

### **Rail Services**

3.9 Three railway stations are located within the distance recognised by the CIHT as convenient for cycling, including Haywards Heath (3.2 kilometres), Wivelsfield (2.8 kilometres via bridleway 3, or 4.5 kilometres by road) and Burgess Hill (6.1 kilometres).





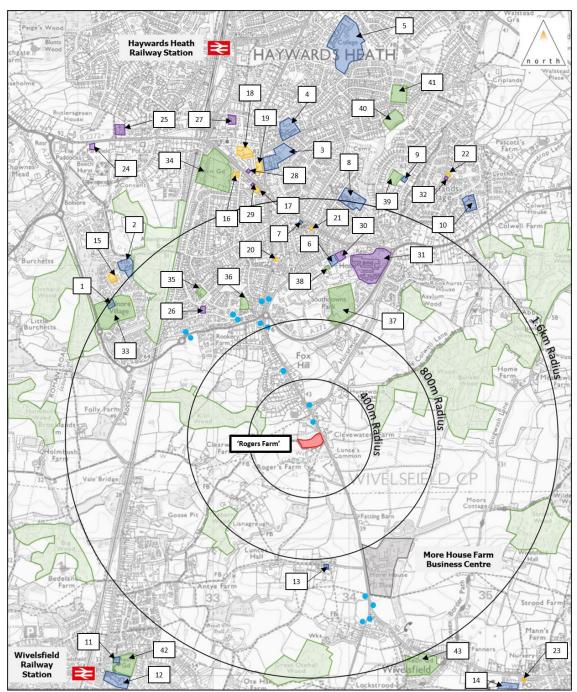
Site in relation to Nearby Railway Stations

3.10 These stations form part of the network managed by Southern and benefit from services to London Victoria, Bedford, and Brighton. Bus services 271/272 (described above) provide connections to Haywards Heath and Burgess Hill stations and stop close to Wivelsfield station in World's End. Each station also benefits from cycle storage.

### **Access to Local Amenities**

- 3.11 Many local services and facilities are available within 1.6 kilometres of the site, the distance referenced in the CIHT guidance within which most people will walk to a destination. The plan below identifies the location of the site in relation to these amenities, as well as those available within a wider catchment and Haywards Heath.
- 3.12 Clearly, a wide range of amenities is available in Haywards Heath including retail, health, education, leisure, and recreation facilities as well as employment opportunities, located within 2 kilometres of the site. The town is within easy cycling distance of the site, based on CIHT guidance, and as identified above, is accessible by regular daily bus services. The 2-form entry primary school with Early Years provision, approved as part of the Hurstwood Farm planning application (reference DM/17/2739), will substantially enhance local education opportunities.





Local Amenities (key overleaf)



Key			
	Cohoolo and Ulaban		Health Facilities
	Schools and Higher Education	24	Haywards Heath Health
1	Bolnore Village Pre-School		Centre
2	Bolnore Village Primary	25	Dolphins Practice
-	School	26	The Vale Surgery
3	St Josephs Catholic Primary School	27	Newton Surgery
4	Warden Park Primary Academy	28	Scrivens Opticians & Hearing Care
5	Othall Community College	29	Boots Pharmacy
6	Chalkhill Education Centre	30	Sussex Orthopaedic
7	Primrose House Montessori		Treatment Centre
	Nursery	31	Princess Royal Hospital
8	Saint Wilfrid's C of E Primary School	32	Northlands Wood Practice
9	Treetops Day Nursery		<b>Recreational Facilities</b>
10	Northlands Wood Primary Academy	33	Tim Farmer Recreational Ground
11	Little Explorers Nursery and	34	Victoria Park
12	Preschool Manor Field Primary School	35	Ashenground Community Centre
13		36	Sandy Vale Open Space
14	Mill Hall Day Nursery Wivelsfield Primary School	37	St Francis Rangers Football Club/ St Francis Swimming Pool
	Supermarket/ Convenience Stores	38	St Francis Social & Sports Club
15	Co-op Food – Haywards	39	Recreational Area
	Heath	40	Hanbury Football Stadium
16	Iceland Foods	44	Recreational Area and
17	Poundland	41	Playground
18	Marks & Spencer Haywards Heath	42	Worlds End Recreation Park
19	Tesco Express	42	Wivelsfield Recreation
20	Sainsbury's Local	43	Ground
21	The Co-operative Food		Public Open
22	Tesco Express		Space/Woodland
23	Londis	•	Bus Stop



### 4.0 Access Strategy

### Access Arrangements

- 4.1 The main access to the development for pedestrians, cyclists and vehicles is proposed at the southeastern corner of the site. The access comprises a new simple priority junction with Lunce's Hill and has been positioned to ensure appropriate sightlines are achieved. The proposed access has been designed to provide safe and suitable access for all users and vehicles anticipated to require access to the development.
- 4.2 The access road is 5.5 metres in width and provided with appropriate bellmouth radii. A 2-metre-wide footway extends into the site on the northern side of the access. Swept path analysis in Appendix B demonstrates the ability of a refuse vehicle to enter the site access and exit in a forward gear. It is also evident that the access is wide enough for a refuse vehicle to pass a car at the access junction.
- 4.3 Visibility splays of 2.4 metres by 160 metres are achievable to the north and south of the access, within land forming the site and public highway, as shown on the plan in Appendix C. Provision of these sightlines will require some cutting back of vegetations within the public highway. These visibility splays were accepted as appropriate by both West Sussex and East Sussex County Councils in considering the Cape Road scheme in 2016. The Transport Statement submitted in support of the earlier application identified vehicle speeds of 49 mph northbound and 51 mph southbound (with a wet weather reduction). It is therefore apparent that the recorded speed of vehicles at the time of the earlier application were travelling below the posted speed limit and 160 metre sightlines are the appropriate splays for roads with vehicle speeds of 50 miles per hour.
- 4.4 The recent enhancements to the local highway in the vicinity of the site, including improved road markings and signage (as well as vehicle actuated signs), are designed to reduce the speeds of vehicles travelling on this section of the B2112.
- 4.5 As part of a future application, it is anticipated that updated speed data will be collected to establish appropriate sightlines for the new access based on current circumstances. However, it is considered safe and suitable access to the site can be achieved in accordance with relevant design guidance.

### **Internal Layout**

- 4.6 Within the site, the layout will be designed to encourage low vehicle speeds and to prioritise the needs of pedestrians and cyclists, having regard to relevant design guidance. A footway will lead into the development running along the northern side of the primary access road. Shared surface private drives will lead off this primary access route, which will connect with a footpath extending along the northern boundary of the site. These pedestrian routes will integrate into the existing and recently enhanced footway on the western side of Lunce's Hill, which leads north towards Haywards Heath and nearby bus stops.
- 4.7 Appropriate provision will also be made for car and cycle parking based on local standards. The illustrative masterplan in Appendix A identifies suitable provision can be achieved to cater for the proposed quantum of development and ensure parking does not overspill onto the adjacent public highway.
- 4.8 Swept path analysis in **Appendix B**, indicates the ability of a 12-metre refuse vehicle to use the site access and turn within the illustrative layout. In this regard, it is evident that appropriate provision can be made for the largest vehicles anticipated to require access to the development.



### **Road Safety**

4.9 To consider the standard of road safety in the vicinity of the site, personal injury collision (PIC) information was requested from Sussex Safer Road Partnership (SSRP). Data received from SSRP for the 5-year period 1<sup>st</sup> June 2015 to 31<sup>st</sup> May 2020 identifies a total of 11 PICs, two of serious and 9 of slight severity, were recorded on the section of Lunce's Hill between Rookery Way and Church Lane. These PICs resulted in 16 casualties, two of serious and 14 of slight severity. The PICs and conditions are summarised in the following table.

Year	Fatal	Serious	Slight	Wet	Dark
2015 (part)	0		1(1)		
2016	0		2(4)	1	1
2017	0	1(3)			1
2018	0		3(4)		
2019	0		2(2)	1	
2020 (part)	0	1(1)	1(1)	2	1
Total	0	2(4)	9(12)	4	3

Table 4.1 – PICs by year (casualties), and conditions

4.10 Further analysis has been carried out on each PIC, listed below from north to south.

#### 30mph zone

- 31/01/2016 at 18.12hrs; south of Weald Rise, in dark and wet conditions, northbound car crossed centreline, clipping southbound car and colliding with following southbound car. Main causation fatigue and distraction in vehicle.
- 25/01/2018 at 13.26hrs; south of Fox Hill Close, in dry and light conditions, southbound car hit stationary waiting vehicles. Main causation failed to look properly and sudden braking.
- 07/01/2020 at 20.04hrs; Hurstwood Lane junction, in dark wet conditions, car turned right out of Hurstwood Lane in front of southbound (stolen) motorcycle. Main causation – defective lights (motorcycle).
- 11/03/2020 at 09.27hrs; Hurstwood Lane junction, in light wet conditions, car turned right across southbound car into Hurstwood Lane. Main causation – careless, reckless, in a hurry and failed to judge other persons path or speed.
- 25/08/2019 at 13.05hrs; Hurstwood Lane junction, in dry light conditions, car turned right out of Hurstwood Lane in front of southbound car (which was indicating left). Main causation – poor turn or manoeuvre.

#### 60mph zone

- 23/06/2015 at 11.50hrs; Gamblemead access, in dry light conditions, car travelling slowly to turn right into Gamblemead is overtaken by following southbound car, when front car makes the right turn. Main causation – failed to look properly and failed to signal.
- 21/08/2018 at 17.07hrs; PH car park entrance, in dry light conditions, southbound car turning right into car park struck from behind by following car. Main causation – failed to judge other persons path or speed.
- 07/11/2019 at 08.14hrs; Lunce's Hill (near overhead lines) in wet light conditions, southbound LGV fails to see stationary vehicles in front and collides with oncoming car. Main causation careless, reckless, in a hurry, failed to judge other persons path or speed, and travelling too fast.
- 07/03/2017 at 20.19hrs; North of Church Lane, in dark dry conditions, northbound car swerving into oncoming traffic strikes oncoming car. Main causation – impaired by alcohol.



- 08/09/2016 at 11.12hrs; North of Church Lane, in dry light conditions, northbound car collides with stationary car waiting for right turning car to make its manoeuvre. Main causation – following too close.
- 06/06/2018 at 21.56hrs; south of Church Lane, in light dry conditions, northbound car overtaking cyclist strikes oncoming car turning left from an access. Main causation poor turn or manoeuvre.
- 4.11 No PICs involved pedestrians, one involved a defective stolen motorcycle and one involved a pedal cyclist, although they were not a casualty. One PIC involved a drunk driver. Three PICs occurred at Hurstwood Lane junction involving right turning vehicles.
- 4.12 Having regard to the review of PICs recorded on the local highway network outlined above, no trends have been identified and it appears that most PICs were the result of human error, rather than defects associated with the highway network. In this regard it is considered that there are no existing highway issues that contribute to the existing standard of road safety.
- 4.13 A Stage 3 road safety audit for the adjacent residential development at Cape Road (completed in August 2019) identified overgrown vegetation on the new section of footway to the south of Cape Road creating a hazard for pedestrians. This will be monitored when tying into the new section of footway linking to the new site access.
- 4.14 A new stage 1 road safety audit has been carried out on the proposed access, the report from which is attached as **Appendix D**. Two minor problems were raised, which are easily addressed as matters of detailed design as described within the Designer's Response at Appendix B of the RSA report.

# 5.0 Traffic Impact

### Vehicle Movements

- 5.1 To establish potential vehicle movements arising from a future residential development at the site, reference has been made to the TRICS database. The assessment below considers vehicle movements during the traditional weekday morning and evening peak hours and across a typical weekday. These periods are generally accepted to be the times where movements associated with residential development and on the local highway networks are likely to be at their greatest.
- 5.2 The table below sets out weekday trip rates extracted from TRICS for private houses for sites in England (excluding Greater London) located in suburban and edge of town areas for developments up to 50 dwellings. The table also identifies the number of vehicle movements during weekday morning and evening peak hours associated with 25 private dwellings. Full TRICS outputs are also available in **Appendix E**.

Time Period	Trip	Trip Rate (per unit)		Traffic Generation (25 houses)		nouses)
Time Period	Arrivals	Departures	Total	Arrivals	Departures	Total
Morning Peak (08:00-09:00)	0.152	0.344	0.496	4	9	12
Evening Peak (17:00-18:00)	0.304	0.157	0.461	8	4	12

Table 5.1 – Weekday Trip Rates (Private Houses) and Traffic Generation

5.3 Based on the trip rate data summarised in the table above, a residential development of 25 dwellings will result in around 12 vehicle movements during the weekday morning and evening peak hours. This assessment is considered to be robust on the basis that the trip rates relate to private houses and therefore does not reflect the lower number of trips typically associated with affordable units, which could form part of a future residential development. Moreover, the proposed scheme includes flats, which also typically generate a lower number of vehicle movements than houses.

### **Traffic Impact**

- 5.4 A more detailed assessment, such as junction modelling, is typically required where vehicle movements on any link/junction would increase by 30 or more movements in any hour. This is confirmed in guidance entitle, 'Transport Assessment Methodology', published by WSCC in June 2007.
- 5.5 On the basis that the proposals would not result in this level of vehicle movements during traditional weekday morning and evening peak hours, it is considered there would be no requirement for more detailed assessment and that additional traffic arising from the development would not give rise to any capacity concerns. Furthermore, no existing issues have been identified in relation to the existing highway network that result in a higher than average accident rate. It is therefore considered the impact of additional vehicle movements on the local highway network would not be detrimental to the existing standard of road safety.
- 5.6 In view of the estimated vehicle movements anticipated to arise, is not considered likely that any significant infrastructure or highway upgrades would be required to support potential future development of the site.



### 6.0 Summary and Conclusions

- 6.1 This Transport Overview report has been prepared on behalf of Sigma Homes Limited in relation to potential future residential development of land at Rogers Farm, Haywards Heath, and the Council's emerging Site Allocations DPD.
- 6.2 In respect of transport, this report demonstrates that:
  - Land at Rogers Farm is located adjacent to existing residential development, approximately 1.6 kilometres to the south of Haywards Heath town centre
  - The site has good connections to existing core routes through the District including the B2112 and A272
  - The site is accessible by the more sustainable modes of transport, including on foot, by cycle and public transport that provide connections to local amenities and employment opportunities in Haywards Heath and to the proposed 2-form entry primary school at Hurstwood Lane
  - Enhancements to the local highway network, pedestrian routes and bus facilities have recently been implemented along Fox Hill in relation to a residential development recently completed to the north of the site
  - Appropriate connections can be delivered as part of future development of the land to secure pedestrian and cycle links to the site, connecting into existing networks and providing connections to existing nearby bus stops
  - Safe and suitable vehicular access to the site can be achieved in accordance with relevant design guidance
  - Any proposals for creation of new accesses to the land or other highway enhancements will be subject to relevant Road Safety Audit, in line with West Sussex County Council (WSCC) policy
  - The impact of 25 residential units at this location would not give rise to a requirement for more detailed junction modelling and, on that basis, that future development could be accommodated within the existing operating capacity of the local highway network
  - It is unlikely that any significant infrastructure or highway upgrades would be required to support potential future development of the site
- 6.3 In conclusion therefore, it is considered that development of land at Rogers Farm for housing purposes, in transport terms, is deliverable and would be consistent with the environmental, social, and economic considerations of the National Planning Policy Framework.



# **Appendix A**

Illustrative Site Masterplan



# **Sketch Site Layout**

Proposed Residential Development, Land at Rogers Farm, Lunce's Hill, Haywards Heath

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	Client Details			

Client Details Sigma Homes Ltd

Project Title

Proposed Residential Development, Land at Rogers Farm, Lunce's Hill, Haywards Heath

Drawing Title Sketch Site Layout

Scale	Date	Drawn	Checked
1:500@A3(approx)	June 2020	KE	
Project Number	Drawing Nu	imber	Drawing Revision
20.212	SK02		A

Canterbury Studio:Logan House, St Andrews Close, Canterbury, CT1 2RP London Studio:Ink Rooms, 25–37 Easton Street, Clerkenwell, WC1X 0DS



# **Appendix B**

Swept Path Analysis





# Appendix C

Access Arrangement & Visibility Splays





# Appendix D

Stage 1 Road Safety Audit

ROGERS FARM, FOX HILL, HAYWARDS HEATH

**Proposed Access Arrangements** 

Stage 1 Road Safety Audit Requested by Motion

July 2020



Project:	Rogers Farm, Fox Hill, Haywards Heath Proposed Access Arrangements	
Client:	Motion	
Project Sponsor:	West Sussex County Council	
Document:	Stage 1 Road Safety Audit	
Gateway TSP ref:	WP/JS/2006082 RSA1 v1.0	
Issue date:	23rd July 2020	
Status:	Issued as version 1.0	
Authorised by:	WP	

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Road Safety Engineering

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# CONTENTS

1	Introduction	1
2	Items Considered by this Road Safety Audit	3
3	Collision Data	4
4	Previous Road Safety Audits	5
5	Problems Identified by this Road Safety Audit	6
6	Audit Team Statement	8

# Appendices

Appendix A:	Location Plan(s)
Appendix B:	Designer's Response



### 1 INTRODUCTION

- **1.1** This report describes a Stage 1 Road Safety Audit (RSA) of proposed access arrangements onto Lunce's Hill, Haywards Heath in West Sussex.
- 1.2 The highway works considered by this Audit comprise a new 5.5m wide access for a development of 25 residential units and a 2m wide footway linking to the adjacent Cape Road footway and junction.
- **1.3** B2112 Lunce's Hill is two-way single carriageway with no parking restrictions. The speed limit is 60mph reducing to 30mph to the north at Hurstwood Lane. The carriageway is generally unlit with one lighting unit opposite the access. A narrow footway is provided on the western side between the Cape Road development and the existing access just to the south of the proposed access. Speed activated signs are located either side of the Cape Road junction, indicating a warning of the side road.
- 1.4 This Road Safety Audit was carried out by Wendy Palmer and Julian Smith and consisted of a desktop study and a site visit, which was carried out on Monday 20<sup>th</sup> July 2020 between the hours of 16.15 and 16.45, when the weather was fine and the road surface dry. Traffic flows were regular and no significant traffic congestion was observed during the site visit.
- 1.5 The terms of reference for this RSA are as described in the Design Manual for Roads and Bridges (DMRB) document GG119. The Audit Team is independent of the project design team and has not been involved in the design process in any other capacity. The audit considers only the potential road safety implications of the scheme and has not verified compliance of the design with any other criteria.
- 1.6 The Audit Team has not been made aware of any Departures from Standard. Whilst reference may be made to design standards, this report is not intended to provide a design check.



1.7 Recommendations are aimed at addressing the identified potential road safety problems. However, there may be other acceptable ways to overcome a problem, considering wider constraints and opportunities; the Auditors would be pleased to discuss such alternative solutions as appropriate. The recommendations contained herein do not absolve the Designer of his/her responsibilities.



# 2 ITEMS CONSIDERED BY THIS ROAD SAFETY AUDIT

Document ref.	Rev.	Originator	Title
2006082-01	-	Motion	Proposed Access Arrangements
2006082-SK01	-	Motion	Proposed Access Arrangements
2006082-TK01	-	Motion	Swept Path Analysis, Refuse Vehicle

Additional/background information provided to the Audit Team

None



# 3 COLLISION DATA

- **3.1** Personal Injury Collision (PIC) information was requested from Sussex Safer Road Partnership (SSRP). Data received from SSRP for the 5-year period 1st June 2015 to 31st May 2020 identifies a total of 11 PICs, two of serious and 9 of slight severity, were recorded on the section of Lunce's Hill between Rookery Way and Church Lane. These PICs resulted in 16 casualties, two of serious and 14 of slight severity. The PICs in the vicinity of the access are extracted from the Transport Overview, detailed below.
  - 23/06/2015 at 11.50hrs; Gamblemead access, in dry light conditions, car travelling slowly to turn right into Gamblemead is overtaken by following southbound car, when front car makes the right turn. Main causation failed to look properly and failed to signal.
  - 21/08/2018 at 17.07hrs; PH car park entrance, in dry light conditions, southbound car turning right into car park struck from behind by following car.
    Main causation failed to judge other persons path or speed.
  - 07/11/2019 at 08.14hrs; Lunce's Hill (near overhead lines) in wet light conditions, southbound LGV fails to see stationary vehicles in front and collides with oncoming car. Main causation careless, reckless, in a hurry, failed to judge other persons path or speed, and travelling too fast.



# 4 PREVIOUS ROAD SAFETY AUDITS

4.1 The Audit Team is unaware of any previous road safety audits on these proposals. GTSP did however carry out the RSAs on the adjacent scheme at Cape Road between 2017 and 2019.



### 5 PROBLEMS IDENTIFIED BY THIS ROAD SAFETY AUDIT

### **General Matters**

5.1 The Audit Team raises no concerns at this Stage 1 RSA in respect of general matters.

### Local Alignment

5.2 The Audit Team raises no concerns at this Stage 1 RSA in respect of local alignment.

### Junctions

5.3 The Audit Team raises no concerns at this Stage 1 RSA in respect of junctions.

### Walking, Cycling and Horse Riding

### 5.4 Problem

Narrow length of footway may lead to pedestrians being struck by a passing vehicle

### Location: proposed footway

It is proposed to provide a short section of footway leading from the new access along Lunce's Hill. This would leave a narrow section of footway prior to the Cape Road site boundary footway. This may lead to pedestrians stepping into the footway and being struck by a passing vehicle.

### **Recommendation**

The mid-section of footway should be improved joining the new sections.

### Traffic Signs, Carriageway Markings and Lighting

### 5.5 Problem

Lack of advance warning to the junction may lead to t-bone or nose to tail collisions.

Location: approaches to the access



The junction at Cape Road has speed activated signs on both approaches warning of the access on this 60mph section of carriageway. The drivers eye view to these signs illuminating may distract from the proposed access, leading to t-bone or nose to tail collisions.

# **Recommendation**

Advance warning of the new access should be provided.



#### AUDIT TEAM STATEMENT 6

6.1 We certify that this Road Safety Audit has been carried out in accordance with DMRB document GG119.

### Audit Team Leader

Wendy Palmer MCIHT, MSoRSA, HE Cert Comp Road Safety Engineer

Signed:

Date: 22<sup>nd</sup> July 2020

### Audit Team Member(s)

Julian Smith **BEng MCIHT** Road Safety Engineer

Signed:

Date: 22<sup>nd</sup> July 2020

> Rogers Farm, Fox Hill, Haywards Heath Stage 1 Road Safety Audit Ref: WP/JS/2006082 RSA1 v1.0 July 2020



APPENDIX A Location Plan(s)







APPENDIX B Designer's Response



Project:	Rogers Farm, Fox Hill, Haywards Heath Proposed Access Arrangements
Client:	Motion
Document:	Stage 1 Road Safety Audit
Gateway TSP ref:	WP/JS/2006082 RSA1 v1.0
Status:	Issued as version 1.0
Issue date:	23rd July 2020

ltem No.	Audit Team Recommendation	Designer's Response	Highway Authority's Comments
5.1	n/a		
5.2	n/a		
5.3	n/a		
5.4	The mid-section of footway should be improved joining the new sections.	Agreed - the footway will be improved along the site frontage to match the footway constructed as part of the Cape Road scheme.	
5.5	Advance warning of the new access should be provided.	Agreed - a junction ahead advance warning sign will be included in the detailed design proposals, for discussion with and approval by the Highway Authority.	



Project:	Rogers Farm, Fox Hill, Haywards Heath
	Proposed Access Arrangements
Client:	Motion
Document:	Stage 1 Road Safety Audit
Gateway TSP ref:	WP/JS/2006082 RSA1 v1.0
Status:	Issued as version 1.0
Issue date:	23rd July 2020

# **Designer's Statement:**

I confirm that I have considered the items that have arisen in the Stage 1 Road Safety Audit Report and my response to its recommendations are set out above.

epun Cilos

.....

Designer: Steve Giles, Director, Motion

Date: 27<sup>th</sup> July 2020

Highway Authority/Project Sponsor/ Client Organisation Statement: I accept/do not accept the Designer's Response (delete as appropriate)

.....

[Name], on behalf of Highway Authority/Project Sponsor/Client Organisation (delete as appropriate)

Date:



# Appendix E

TRICS Output Report

### TRIP RATE CALCULATION SELECTION PARAMETERS:

Calculation Reference: AUDIT-734001-200715-0748

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

02	SOU	TH EAST	
	HC	HAMPSHIRE	3 days
	KC	KENT	1 days
	WS	WEST SUSSEX	1 days
03	SOU	TH WEST	5
	DC	DORSET	1 days
	DV	DEVON	1 days
	SM	SOMERSET	3 days
	WL	WILTSHIRE	1 days
04	EAST	Γ ANGLI A	5
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	3 days
	SF	SUFFOLK	3 days
05	EAST	F MI DLANDS	5
	LN	LINCOLNSHIRE	1 days
06	WES	T MIDLANDS	5
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	2 days
	WM	WEST MIDLANDS	1 days
07	YOR	KSHIRE & NORTH LINCOLNSHIRE	5
	NY	NORTH YORKSHIRE	3 days
	WY	WEST YORKSHIRE	1 days
80	NOR	TH WEST	5
	СН	CHESHIRE	4 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NOR	ТН	5
	DH	DURHAM	1 days
	ΤW	TYNE & WEAR	2 days

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

## Primary Filtering selection:

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

Parameter:	No of Dwellings
Actual Range:	7 to 50 (units: )
Range Selected by User:	6 to 50 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision: Selection by:

Include all surveys

#### Date Range: 01/01/12 to 25/09/19

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.

7 days
9 days
10 days
7 days
5 days

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

<u>Selected survey types:</u>	
Manual count	38 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

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.

<u>Selected Location Sub Categories:</u> Residential Zone Village

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.

33

5

Secondary Filtering selection:

Use Class:C338 days

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

Population within 1 mile:	
1,000 or Less	1 days
1,001 to 5,000	5 days
5,001 to 10,000	9 days
10,001 to 15,000	7 days
15,001 to 20,000	4 days
20,001 to 25,000	5 days
25,001 to 50,000	6 days
50,001 to 100,000	1 days

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

Population within 5 miles:	
5,001 to 25,000	2 days
25,001 to 50,000	3 days
50,001 to 75,000	6 days
75,001 to 100,000	8 days
100,001 to 125,000	1 days
125,001 to 250,000	10 days
250,001 to 500,000	7 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	16 days
1.1 to 1.5	21 days
1.6 to 2.0	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:	
Yes	7 days
No	31 days

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

<u>PTAL Rating:</u> No PTAL Present

38 days

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

lotion		ses					Page 3
	-	h Street	Guildford				Licence No: 734001
	LIST	OF SITES .	relevant to s	selection parameters			
	1	CA-03-A EASTFIEL PETERBO	D ROAD	DETACHED HOUSES		CAMBRI DGESHI RE	
		Residentia Total No o			28 1 <i>7/10/16</i>	Survey Type: MANL	141
	2	CH-03-A WHITCHU CHESTER	-08 JRCH ROAD	DETACHED	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CHESHIRE	
		Residentia Total No o	al Zone of Dwellings		11		
	3	SA CH-03-A GREYSTO MACCLES	KE ROAD	<i>TUESDAY</i> TERRACED HOUSES	22/05/12	<i>Survey Type: MANL</i> CHESHIRE	IAL
		HURDSFI Edge of T Residentia Total No o	ELD own al Zone of Dwellings		24		
	4	SU CH-03-A MEADOW NORTHW BARNTON Edge of T Residentia	DRIVE ICH J own	<i>MONDAY</i> SEMI -DETACHED & TE	24/11/14 RRACED	<i>Survey Type: MANL</i> CHESHIRE	<i>!4L</i>
	5	Total No o St CH-03-A LONDON	of Dwellings <i>urvey date:</i> -11 ROAD		40 <i>04/06/19</i>	<i>Survey Type: MANL</i> CHESHIRE	IAL
		Residentia Total No d	H Area (PPS6	THURSDAY	24 <i>06/06/19</i>	Survey Type: MANL	<i>IAL</i>
	6	Edge of T Residentia	NE ROAD IOUTH ANE WEST own al Zone	BUNGALOWS		DORSET	
	7	Sa DH-03-A GREENFIE	of Dwellings <i>urvey date: .</i> -01 ELDS ROAD AUCKLAND		28 <i>24/03/14</i>	<i>Survey Type: MANL</i> DURHAM	IAL
	8	Residentia Total No o	al Zone of Dwellings <i>urvey date:</i> -01 LL ROAD		50 <i>28/03/17</i>	<i>Survey Type: MANL</i> DEVON	IAL
	9	Residentia Total No o	al Zone of Dwellings <i>urvey date:</i>	Out of Centre) : <i>WEDNESDAY</i> TERRACED & SEMI-DE	37 <i>30/09/15</i> TACHED	<i>Survey Type: MANL</i> GREATER MANCHEST	
		MANCHES LEVENSH Neighbou Residentia Total No o	ULME rhood Centr al Zone of Dwellings		37		141
		30	urvey date: .		26/09/16	Survey Type: MANL	

11	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i> HC-03-A-21 TERRACED & SEMI-D PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS Edge of Town	36 <i>12/11/15</i> ETACHED	<i>Survey Type: MANUAL</i> HAMPSHI RE
12	Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i> HC-03-A-22 MI XED HOUSES BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE	39 <i>13/11/18</i>	<i>Survey Type: MANUAL</i> HAMPSHI RE
13	Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i> KC-03-A-05 DETACHED & SEMI-D ROCHESTER ROAD NEAR CHATHAM BURHAM	40 <i>31/10/18</i> DETACHED	<i>Survey Type: MANUAL</i> KENT
14	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: FRIDAY</i> LC-03-A-31 DETACHED HOUSES GREENSIDE PRESTON	8 <i>22/09/17</i>	<i>Survey Type: MANUAL</i> LANCASHI RE
15	COTTAM Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: FRIDAY</i> LN-03-A-03 ROOKERY LANE LINCOLN	32 17/11/17	<i>Survey Type: MANUAL</i> LINCOLNSHIRE
16	BOULTHAM Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: Survey date: TUESDAY MS-03-A-03 DETACHED BEMPTON ROAD LIVERPOOL	22 <i>18/09/12</i>	<i>Survey Type: MANUAL</i> MERSEYSI DE
17	OTTERSPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: FRIDAY</i> NF-03-A-01 SEMI DET. & BUNGAU YARMOUTH ROAD	15 <i>21/06/13</i> _OWS	<i>Survey Type: MANUAL</i> NORFOLK
	CAISTER-ON-SEA Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: Survey date: TUESDAY	27 <i>16/10/12</i>	Survey Type: MANUAL

<u>ivate Hou</u> otion Hig	gh Street Guildford				Page Licence No: 73400
<u>LIST</u>	T OF SITES relevant to ser	lection parameters (Con	<u>nt.)</u>		
18	NF-03-A-03 D HALING WAY THETFORD	ETACHED HOUSES		NORFOLK	
19	Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: W</i> NF-03-A-05 M HEATH DRIVE HOLT	<i>'EDNESDAY</i> 11 XED HOUSES	10 <i>16/09/15</i>	<i>Survey Type: MANUAL</i> NORFOLK	
20	Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: Tf</i> NY-03-A-08 TI NICHOLAS STREET YORK	<i>HURSDAY</i> ERRACED HOUSES	40 <i>19/09/19</i>	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE	
21	Suburban Area (PPS6 C Residential Zone Total No of Dwellings: <i>Survey date: M</i> NY-03-A-11 P HORSEFAIR BOROUGHBRIDGE		21 <i>16/09/13</i>	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE	
22	CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPO	ERRACED HOUSES	23 <i>18/09/13</i>	<i>Survey Type: MANUAL</i> NORTH YORKSHIRE	:
23	Suburban Area (PPS6 C Residential Zone Total No of Dwellings: <i>Survey date: W</i> SF-03-A-04 D NORMANSTON DRIVE LOWESTOFT		10 <i>10/05/17</i> DWS	<i>Survey Type: MANUAL</i> SUFFOLK	:
24	Suburban Area (PPS6 C Residential Zone Total No of Dwellings: <i>Survey date: TL</i> SF-03-A-05 D VALE LANE BURY ST EDMUNDS		7 <i>23/10/12</i>	<i>Survey Type: MANUAL</i> SUFFOLK	
25	Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: W</i> . SF-03-A-06 D BURY ROAD KENTFORD	<i>'EDNESDAY</i> 'ETACHED & SEMI - DE'	18 <i>09/09/15</i> TACHED	<i>Survey Type: MANUAL</i> SUFFOLK	
26	Neighbourhood Centre Village Total No of Dwellings: <i>Survey date: FK</i> SH-03-A-06 B ELLESMERE ROAD SHREWSBURY		38 <i>22/09/17</i>	<i>Survey Type: MANUAL</i> SHROPSHIRE	
	Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: Tf</i>	HURSDAY	16 <i>22/05/14</i>	Survey Type: MANUAL	

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Wednesday 15/07/20

LIST OF SITES relevant to selection parameters (Cont.)

27	SM-03-A-01 DETACHED & SEMI WEMBDON ROAD		SOMERSET
	BRIDGWATER		
	NORTHFIELD Edge of Town		
	Residential Zone		
	Total No of Dwellings:	33	
28	<i>Survey date: THURSDAY</i> SM-03-A-02 MI XED HOUSES	24/09/15	<i>Survey Type: MANUAL</i> SOMERSET
20	HYDE LANE		SOWERSET
	NEAR TAUNTON		
	CREECH SAINT MICHAEL		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	42	
20	Survey date: TUESDAY	25/09/18	<i>Survey Type: MANUAL</i> SOMERSET
29	SM-03-A-03 MI XED HOUSES HYDE LANE		SOMERSEI
	NEAR TAUNTON		
	CREECH ST MICHAEL		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	41	
20	Survey date: TUESDAY ST-03-A-08 DETACHED HOUSES	25/09/18	<i>Survey Type: MANUAL</i> STAFFORDSHI RE
30	ST-03-A-08 DETACHED HOUSES SILKMORE CRESCENT		STAFFORDSHIRE
	STAFFORD		
	MEADOWCROFT PARK Edge of Town		
	Residential Zone		
	Total No of Dwellings:	26	
31	<i>Survey date: WEDNESDAY</i> TW-03-A-02 SEMI-DETACHED	22/11/17	<i>Survey Type: MANUAL</i> TYNE & WEAR
51	WEST PARK ROAD		THE & WEAR
	GATESHEAD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings: Survey date: MONDAY	16 <i>07/10/13</i>	Survey Type: MANUAL
32	TW-03-A-03 MIXED HOUSES	07710/13	TYNE & WEAR
	STATION ROAD		
	NEAR NEWCASTLE BACKWORTH		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings: Survey date: FRIDAY	33 <i>13/11/15</i>	Survey Type: MANUAL
33	WK-03-A-02 BUNGALOWS	13/11/13	WARWICKSHIRE
	NARBERTH WAY		
	COVENTRY POTTERS GREEN		
	Edge of Town		
	Residential Zone	17	
	Total No of Dwellings: Survey date: THURSDAY	17 1 <i>7/10/13</i>	Survey Type: MANUAL
34	WK-03-A-03 DETACHED HOUSES		WARWICKSHIRE
	WARWICK GUYS CLIFFE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwollings	- )-)	
	Total No of Dwellings: Survey date: WEDNESDAY	23 <i>25/09/19</i>	Survey Type: MANUAL

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Motion		h Street Guildfo	rd			Licence No: 734001
	1157	OF SITES relevant				
	<u>LIJI</u>	U JILS TELEVAIN	to selection parameters	(COM.)		
	35	WL-03-A-02 HEADLANDS GRO SWINDON	SEMI DETACHED VE		WILTSHIRE	
	36	Residential Zone Total No of Dwelli	PS6 Out of Centre) ngs: <i>te: THURSDAY</i> TERRACED HOUSES	27 <i>22/09/16</i>	<i>Survey Type: MANUA</i> WEST MIDLANDS	L
	30	OSBORNE ROAD COVENTRY EARLSDON	entre (PPS6 Local Centre		WEST MIDLANDS	
	37	Total No of Dwelli	<i>te: MONDAY</i> TERRACED & FLATS M ROAD	39 <i>21/11/16</i> 5	<i>Survey Type: MANUA</i> WEST SUSSEX	Z
	38	Residential Zone Total No of Dwelli	<i>te: WEDNESDAY</i> MIXED HOUSING	48 <i>18/04/12</i>	<i>Survey Type: MANUA</i> WEST YORKSHIRE	Z
		Neighbourhood Ce Residential Zone Total No of Dwelli	entre (PPS6 Local Centre) ngs: <i>te: WEDNESDAY</i>	46 <i>21/09/16</i>	Survey Type: MANUA	Z

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. Motion High Street Guildford

### 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	38	28	0.080	38	28	0.271	38	28	0.351	
08:00 - 09:00	38	28	0.152	38	28	0.344	38	28	0.496	
09:00 - 10:00	38	28	0.152	38	28	0.190	38	28	0.342	
10:00 - 11:00	38	28	0.155	38	28	0.144	38	28	0.299	
11:00 - 12:00	38	28	0.162	38	28	0.179	38	28	0.341	
12:00 - 13:00	38	28	0.161	38	28	0.174	38	28	0.335	
13:00 - 14:00	38	28	0.172	38	28	0.171	38	28	0.343	
14:00 - 15:00	38	28	0.173	38	28	0.200	38	28	0.373	
15:00 - 16:00	38	28	0.254	38	28	0.213	38	28	0.467	
16:00 - 17:00	38	28	0.265	38	28	0.166	38	28	0.431	
17:00 - 18:00	38	28	0.304	38	28	0.157	38	28	0.461	
18:00 - 19:00	38	28	0.226	38	28	0.133	38	28	0.359	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			2.256			2.342			4.598	

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

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

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### Parameter summary

Trip rate parameter range selected:	7 - 50 (units: )
Survey date date range:	01/01/12 - 25/09/19
Number of weekdays (Monday-Friday):	38
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

High Street Motion Guildford

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

Wednesday 15/07/20 Page 9

Licence No: 734001

# 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	38	28	0.003	38	28	0.002	38	28	0.005	
08:00 - 09:00	38	28	0.007	38	28	0.005	38	28	0.012	
09:00 - 10:00	38	28	0.005	38	28	0.007	38	28	0.012	
10:00 - 11:00	38	28	0.005	38	28	0.003	38	28	0.008	
11:00 - 12:00	38	28	0.003	38	28	0.005	38	28	0.008	
12:00 - 13:00	38	28	0.000	38	28	0.001	38	28	0.001	
13:00 - 14:00	38	28	0.002	38	28	0.002	38	28	0.004	
14:00 - 15:00	38	28	0.001	38	28	0.001	38	28	0.002	
15:00 - 16:00	38	28	0.001	38	28	0.001	38	28	0.002	
16:00 - 17:00	38	28	0.001	38	28	0.001	38	28	0.002	
17:00 - 18:00	38	28	0.002	38	28	0.002	38	28	0.004	
18:00 - 19:00	38	28	0.000	38	28	0.000	38	28	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.030			0.030			0.060	

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.