



**CHANDLERS BMW, WORTHING,
ANGMERING**

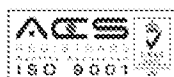
**PROPOSED RESIDENTIAL
DEVELOPMENT**

Transport Planning Statement

**Prepared on behalf of Marshall Clark
LLP and Chandlers BMW, Worthing**

MARS/12/1592 PJC TPS01

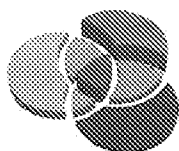
December 2012



RGP TRANSPORT PLANNING AND INFRASTRUCTURE DESIGN CONSULTANTS

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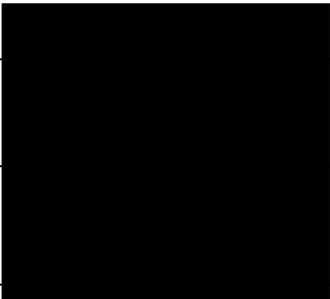
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Proposed Residential Development

Document: Transport Planning Statement

Client: Marshall Clark LLP and Chandlers BMW, Worthing

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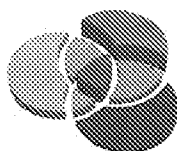
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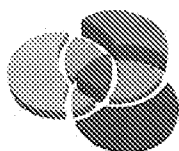
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PLANS

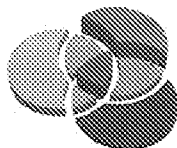
Plan 01	Site Location and Accessibility Plan
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DRAWINGS

2012/1592/001	Refuse Vehicle Tracking Plot
2012/1592/002	Eachways Road Vehicle Track
2012/1592/003	Site Access and Visibility Splays

APPENDICES

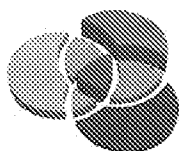
Appendix A	Stage 1 Road Safety Audit and Designers Response
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INTRODUCTION

1.1 Background

- 1.1.1 Russell Giles Partnership has been retained by Marshall Clark LLP and Chandlers BMW, Worthing to provide Highways and Transportation advice in respect to the proposed change of use and redevelopment of the current Chandlers Worthing BMW vehicle showroom and vehicle repair garage on Water Lane, Angmering to provide for a residential development.
- 1.1.2 This Transport Planning Statement (TPS) has been prepared to address the key Highway and Transportation aspects related to the proposed development of the site to provide a mix of 22No. residential dwellings, internal roads, parking spaces, and associated access works via Water Lane.
- 1.1.3 This TPS has been produced in accordance with the Department for Transport's (DfT) "Guidance on Transport Assessment" document and WSCC's "Transport Assessment Methodology" document. These documents influence the structure and scope of this report and define the methodology used in the assessment work.
- 1.1.4 Based on the published DfT thresholds for the preparation of Transport Assessments (reflected in the WSCC Transport Assessment Methodology) it is accepted that a development of this scale in this location would be adequately supported by the preparation of a Transport Planning Statement.
- 1.1.5 This report has also been compiled with consideration of National Planning Policy Framework (NPPF) which supersedes all previous PPG and PPS Guidance.
- 1.1.6 Therefore the content of PPG13 is no longer relevant to the proposals and NPPF should be considered in assessing the proposals (however, traditionally accepted guidance set out in PPG13 in respect to acceptable walking and cycling distances relative to residential development have been considered later in this report).
- 1.1.7 Paragraphs 29 to 41 of NPPF hold particular relevance to the promoting sustainable transport and, where necessary, supporting cost effective improvements to the transport network that effectively limit the significant impacts of the development.
- 1.1.8 NPPF re-enforces that transport policies provide an important role in facilitating sustainable development and contributing to wider sustainability and health objectives. The NPPF states that:



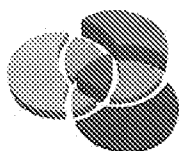
"The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel."

"... the Government recognises that different policies and measures will still be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas."

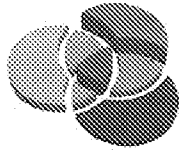
"... decisions should take account of whether: ...opportunities for sustainable transport modes have to be taken up depending on the nature and location of the site... safe and suitable access to the site can be achieved for all people... improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. "

"... developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas."

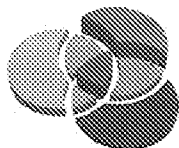
- 1.1.9 It is made clear in Paragraph 32 of NPPF that Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.
- 1.1.10 The proposals are also considered in respect of current highway design guidance contained within Manual for Streets together with West Sussex County Council current policy in respect to Road Safety Audits, Travel Planning, Residential Parking Standards and the West Sussex County Council Local Design Guide, Supplementary Guidance for Residential Development Proposals.
- 1.1.11 The site is currently a car dealership located in a central position within Angmering. There are a series of vehicle access points via Water Lane, to the north, and the High Street, to the West of the site.
- 1.1.12 The sites location is illustrated on **Plan 01** together with details of facilities and amenities local to the site.
- 1.1.13 The proposals would see the site provide 2 flats and 20 semi-detached houses split between affordable dwellings and open market dwellings.
- 1.1.14 The proposals comprise 2No. one-bed flats; 5No. two-bed houses; 7No. three-bed houses and 8No. four-bed houses with a total of 7 units being allocated as affordable dwellings and the remaining 15 being open market dwellings.



- 1.1.15 The layout also provides for principle vehicular, pedestrian and cycle access via Water Lane as well as access for pedestrians and bicycles via the High Street and a combined vehicle crossover via Cumberland Crescent.
- 1.1.16 There are additional gated pedestrian access points to individual dwellings from the High Street, Water Lane and Cumberland Crescent.
- 1.1.17 A total of 47 car parking spaces are provided through the site split between allocated parking spaces, allocated parking barns and unallocated visitor parking spaces together with suitable cycle parking in the form of Sheffield type stands to the rear of the parking barns and / or gated garden access providing for access to lockable sheds.
- 1.1.18 Vehicular access onto the site is via a new priority junction on the southern kerbline of Water lane. In addition to this the proposals provide for access to a small number of individual units via a crossover of the southern kerbline of Water Lane and a crossover on Cumberland Crescent. Additional pedestrian and access to the site will also be provided from High Street.
- 1.1.19 The site is within an acceptable walking distance from a wide range of services within Angmering Village and the wider area including local convenience stores, medical facilities, libraries, playing fields, employment areas, schools and leisure facilities together with good public transport connections across the region.
- 1.1.20 The development proposals provide car parking and cycle parking at a level commensurate with the current West Sussex County Council Parking Standards.
- 1.1.21 The main highways and transportation issues relating to the proposals are considered within the following sections of this report:
- (i) **Section 2** describes the existing site, its local surroundings and considers the accessibility credentials of the site by non-car modes of transport;
 - (ii) **Section 3** highlights the access, layout and servicing arrangements and reviews the supporting Stage 1 Road Safety Audit;
 - (iii) **Section 4** highlights the traffic generation potential of the proposed development in reflection of the existing use on site and the associated traffic impact on the local highway network together with Travel Planning opportunities;



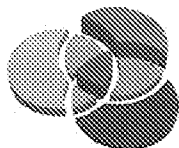
- (iv) **Section 5** details the highway safety implications of the proposals in relation to the recently recorded Personal Injury Accident data.
- (v) **Section 6** discusses the parking proposals with reference to current West Sussex County Council residential parking standards;
- (vi) **Section 7** contains a summary of conclusions of the report and RGP's recommendations.



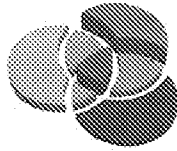
2 EXISTING SITE, SURROUNDINGS AND ACCESSIBILITY CREDENTIALS

2.1 Development Site and Local Context

- 2.1.1 The site is located to the south of Water Lane in a central location within the village of Angmering, as indicated on the attached **Plan 01**.
- 2.1.2 Chandlers BMW in Worthing currently operates via four distinct and separate sites in the area, each with its own access and highway characteristics.
- 2.1.3 The main BMW dealership is located on Water Lane, Angmering. The Water Lane site is characterised primarily by the surrounding residential development and is not suited to its current use given the constraints in vehicular access.
- 2.1.4 The current Water Lane site generates a high number of traffic movements and a high parking demand on a very constrained site in a predominantly residential area which may cause some inconvenience to local residents.
- 2.1.5 Primary access to the site will be via new priority junction on the southern kerbline of Water Lane in the form of a bell-mouth. There will be a secondary access further east providing access to a small number of dwellings in the form of a simple crossover.
- 2.1.6 There will also be access to a number of parking spaces via a simple crossover on Cumberland Crescent. Furthermore, additional access for pedestrians and cyclists is available via a footpath from the High Street.
- 2.1.7 Water Lane is one of the principle distributor routes within Angmering village, providing for the movement of traffic, particularly from the A280, with access to a number of residential streets. Water Lane also provides direct access to residential frontages in addition to the current car showroom.
- 2.1.8 Water Lane provides direct access to key services in Angmering village and the wider area including local schools, convenience store, health centre and local employment centres.
- 2.1.9 At its north-eastern extent Water Lane forms a left in/ left out junction with the A280 with a segregated right turn lane from the southbound carriageway of the A280. The A280 joins the A259 to the south via a roundabout junction and the A27 to its north via a grade separated junction.



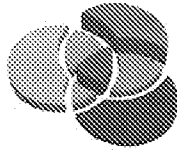
- 2.1.10 The A280 continues north from its junction with the A27 to form a junction with the A24 providing further access to the wider Strategic Road Network providing access to major centres to the north.
- 2.1.11 To the south-west Water Lane becomes Station Road, which links Angmering to Roundstone Lane roundabout, with the A259 providing access to neighbouring coastal towns and further regional destinations.
- 2.1.12 It is considered that the site is very well located in respect to access to the wider strategic road network without any significant impact on urban centres for those who need to travel by car.
- 2.1.13 Water Lane is supported by adjacent footways on both sides of the carriageway. These provide continuous links around the village, allowing pedestrian access from the site to a variety of local amenities.
- 2.1.14 A number of residential properties on Water Lane benefit from access to off-street parking provision in the form of direct drives. However, despite these provisions, there are regularly vehicles parked along the westbound carriageway of Water Lane, some of which may be attributed to the sites current use and some of which may be attributed to existing residential parking demand.
- 2.1.15 Water Lane exhibits a number of access protection lines on the westbound carriageway in order to prevent vehicles from parking in front of private driveways however, there are no formal parking restrictions in place in the immediate vicinity of the site.
- 2.1.16 Notwithstanding this, there are currently a series of bollards on the southern kerbline of Water Lane adjacent to the showroom designed to deter possibly obstructive parking on the southern kerbline.
- 2.1.17 To the west of the site, along Water Lane and on the northern kerbline of High Street there are single yellow lines preventing parking from Monday to Saturday, between 08.30 and 18.00. The southern kerbline of High Street has double yellow lines, prohibiting parking at any time.
- 2.1.18 Observed traffic speeds on Water Lane and through the village of Angmering were not considered to be high in respect to either the posted speed limits or the visibility splays achievable from the proposed site.



- 2.1.19 To the east of the site Water Lane is subject to a posted speed limit of 30mph. Speeds are generally retained within this threshold. This is achieved by a combination of the calming effect resulting from some on-street parking on Water Lane and the series of traffic calming features further to the north east on Water Lane in the form of a pair of single lane / priority passing places.
- 2.1.20 To the immediate west of the site, the posted speed limit provides for a 20mph speed limit through the village and for the majority of the length of High Street providing a low flow and low speed environment within the village.
- 2.1.21 These features, together with the A280 effectively providing a by-pass for the village of Angmering, result in a relatively modest traffic flow through the village.

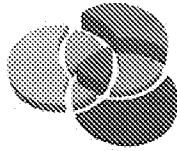
2.2 Sustainable Travel and Accessibility

- 2.2.1 Key to the consideration of the sites accessibility credentials is the ability for future residents of the site, to be able to access the proposed site and other relevant local facilities without significant journey time or without a dependence on the private car.
- 2.2.2 As with any new development it is important to understand how occupiers of the proposed facility will travel to and from the site.
- 2.2.3 A review of the opportunity for users of the site to travel by alternative modes of travel has therefore been undertaken to understand whether the development proposals conform to the key principles of the National Planning Policy Framework (the Framework) with particular relevance to paragraphs 29 – 32 and 35 – 37 contained within Chapter 4 – Promoting Sustainable Transport.
- (i) Providing choice for use of sustainable transport and encouraging solutions which support reductions in greenhouse gas emissions and reduce congestion;
 - (ii) Provide for the efficient delivery of goods and supplies;
 - (iii) Reduce the need to travel, especially by car;
 - (iv) Provide safe and suitable access to the site for all people;



Walking

- 2.2.4 It is considered that the site benefits from its location relative to the pedestrian network and, as has historically been accepted through PPG13 (though superseded by the NPPF), the sites accessibility to the wider catchment area is considered within a walking distance of 2km.
- 2.2.5 PPG 13 stated that:
- ... "Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres"...*
- 2.2.6 The centre of the proposed site is approximately 200m walking distance (approximately 2 minutes walking time) from the Village Centre with associated facilities as shown on **Plan 01**.
- 2.2.7 The site provides for pedestrian connections to the footway on Water Lane and a dedicated pedestrian / cycle access onto High Street in line with the existing dropped kerb adjacent to the parade of shops.
- 2.2.8 The proposals will also remove the current series of bollards on Water Lane (which are currently in place to discourage obstructive parking), which will open up better clear access for mobility impaired and parents with buggies.
- 2.2.9 The local environment is relatively flat making the likelihood of undertaking short trips by foot a realistic option for those with impaired mobility or those pushing a buggy.
- 2.2.10 The village of Angmering benefits from a wide range of facilities and amenities providing for nursery, primary and secondary education, food retail, employment and healthcare within an acceptable walking distance, in addition to a range of community facilities which would allow a wide range of services to be accessible locally, without the requirement for residents to travel away from Angmering by private car.
- 2.2.11 It is noteworthy that the residential area between Station Road and Roundstone Lane (to the south of the site) is characterised by a network of pedestrian and cycle links between residential streets providing for a high degree of permeability and pedestrian priority towards facilities and amenities to the south.



- 2.2.12 Bus stops are located within a close walking distance of the site (within 50m) along Water Lane. The bus stops are served by regular services to the wider area, including Shoreham, Worthing and Littlehampton.
- 2.2.13 Angmering rail station is approximately 2km (30 minutes walking time) south of the site via Station Road. Pedestrian footways are in place for the entire route between the village and the rail station including a pedestrian / cycle over-bridge crossing the A259 and other supporting cycle infrastructure.
- 2.2.14 Trains from this station offer regular and fast connections to Worthing, Brighton, Chichester and Portsmouth as well as rail travel further afield.
- 2.2.15 Footways along Water Lane and adjoining streets are well maintained and in excess of 1.5m in width, with street lighting and suitable crossing points providing a good quality, continuous pedestrian network through the wider area.

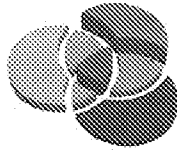
Cycling

- 2.2.16 It is considered that the site benefits from its location relative to the wider cycle network and, as has widely been accepted through PPG13 (though superseded by the NPPF), the sites accessibility to the wider catchment area is considered within a cycling distance of 5km.

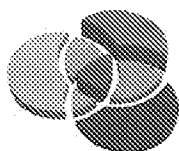
- 2.2.17 PPG 13 stated that:

... "Cycling also has the potential to substitute for short car trips, particularly those under 5km and to form part of a longer journey by public transport"...

- 2.2.18 The local highway network in the vicinity of the site is conducive to cycling given the low traffic and speeds on Water Lane and connections to identified cycle routes and the proximity of a range of services and amenities within Angmering and it is realistic to cycle to Rustington, Littlehampton, Patching, Clapham, Durrington, Goring and West Worthing within the 5km catchment area where a wider range of services, facilities and amenities are present.
- 2.2.19 It is noteworthy that the residential area between Station Road and Roundstone Lane (to the south of the site) is characterised by a network of pedestrian and cycle links between residential streets providing for a high degree of permeability and pedestrian priority towards facilities and amenities to the south.



- 2.2.20 Key to this cycle accessibility is the ease of cycle access to the A259 which, for the majority of its length in this locality is supported by an adjacent cycle route on the southern side of the carriageway or quiet residential streets adjacent to the A259.
- 2.2.21 The A259 cycle route links the areas of Goring / West Worthing with Rustington / Littlehampton and beyond, tying into the wider cycle networks and quiet residential roads.
- 2.2.22 The cycle route in the vicinity of the site forms part of the Sustrans National Cycle Network (NCN) route of cycle links and in this case constitutes part of the South Coast Cycle Route, which links all the key settlements along the south coast through West Sussex and beyond.
- 2.2.23 The A259 cycle route provides direct links, via a pedestrian / cycle bridge over the A259 to the segregated cycle route on Station Road provided high quality cycle access to the village of Angmering.
- 2.2.24 The local topography is relatively flat and conducive to cycling and hence it is anticipated that occupiers of the development could utilise cycling as a primary transport mode from a wide residential catchment.
- 2.2.25 Covered and secure cycle parking is to be provided throughout the site and secure cycle parking is available at key destinations throughout the surrounding towns including secondary education, comprehensive healthcare, library, employment areas, leisure centres, rail station etc. and it would be reasonable to expect confident cyclists to be able to undertake journeys by cycle on a regular basis.
- 2.2.26 The Accessibility Plan, **Plan 01**, attached hereto illustrates the accessibility of the site's location relative to local facilities and amenities and public transport which are available within walking and cycling distance. Local cycle paths are illustrated, showing the cycle network available for people choosing to make journeys by bike and links to the NCN2 for wider cycle access.
- 2.2.27 Available, identified cycle routes provide for safe cycle journeys to a range of destinations and cycle movements across the A259 are supported by a pedestrian / cycle bridge over the A259 at the southern end of Station Road, with excellent links onto Angmering Rail Station.
- 2.2.28 It is therefore considered that prospective residents of the site can realistically walk and cycle to local destinations including convenience store, healthcare, education and employment and the local public transport connections without a reliance on the private car.



2.3 Public Transport

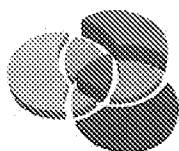
Bus Services

- 2.3.1 Travel to and from destinations further afield by sustainable modes of transport is an attractive and realistic option for residents of the proposed site with a number of bus stops within walking distance of the site providing direct links to the wider area.
- 2.3.2 With regards to specific bus routes in proximity to the site, **Plan 01** illustrates the bus stops in the immediate vicinity of the site and **Table 2.1** below summarises the routes taken by buses serving the stops.
- 2.3.3 The closest bus stops are located on the Water Lane within 50m walking distance of the centre of the site with clear pedestrian links to the bus stops.
- 2.3.4 The bus stops located on Water Lane are served by Bus Routes 9 and X4 providing regular services from Angmering Village Centre to Shoreham, Worthing and Littlehampton.
- 2.3.5 A summary of local bus services is provided at **Table 2.1** which demonstrates the site benefits from a good level of accessibility to local destinations by public transport. In addition to these local services, the flagship Route 700 operates via the A259 with bus stops within an approximate 1.5km walking distance providing fast and frequent bus services to local centres along the south coast.

NUMBER	ROUTE SUMMARY	TYPICAL FREQUENCY	HOURS OF OPERATION
9	SHOREHAM – WORTHING – ANGMERING - LITTLEHAMPTON	MON – SAT: HOURLY SUN: NO SERVICE	MON-FRI: 07.11-19.05 SAT: 08.14-19.08
X4	SHOREHAM – WORTHING – ANGMERING – LITTLEHAMPTON	MON – FRI: 1 PER DAY	9.30 TO SHOREHAM 13.00 TO LITTLEHAMPTON
R1, R3	SAINSBURY'S SERVICE	MON – FRI: 1 PER DAY	MON,WED,FRI: 10.10 TUE,THU: 10.26

Table 2.1 - Bus Services and Frequencies

- 2.3.6 The number 9 bus route offers a regular link into neighbouring towns, allowing a range of services to be accessed which may not be accessible in Angmering. As well as providing access to wider education, healthcare, employment and retail opportunities this service connects residents to Angmering rail station, which in turn links to them to the national rail infrastructure and major centre in the south east.



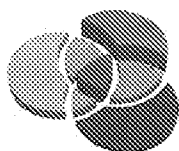
- 2.3.7 Journey times between the site and local centres are supportive of the regular use of the bus for journeys to work, education or leisure. AM and PM peak journey times to Worthing are under 40 minutes and to Littlehampton are under 30 minutes.
- 2.3.8 These journey times would be able to support typical journey to work patterns locally and, with the Route 700 service accessible within a short walking distance to the south, it is also realistic that this service could be used for typical local journeys to work.
- 2.3.9 In addition to the X4 and 9 bus services from Angmering to Worthing and Littlehampton, there are also weekday school bus services and daily shuttle bus to supermarkets, which further provide for sustainable travel for education and shopping trips.
- 2.3.10 It is therefore considered that prospective residents of the site can realistically use bus services for journeys to and from local destinations including food retail, healthcare, education and employment and local public transport connections without a reliance on the private car.

Rail Services

- 2.3.11 The nearest train station is Angmering rail station which is approximately 2km south of the site and can be accessed by bus, cycle, or on foot via a series of connected footways and identified cycle routes / networks of quiet streets including a safe crossing of the A259 via a pedestrian / cycle bridge..
- 2.3.12 Angmering rail station has regular services to Worthing, Brighton, Chichester, Portsmouth and also provides for fast and frequent links to destinations to the north including Horsham, Crawley Gatwick Airport and London Victoria via Barnham Station. These provide fast and frequent links to major centres of employment, leisure and the wider transport network.
- 2.3.13 A summary of common train routes is provided in **Table 2.2** which further demonstrates strong public transport links available to the site.

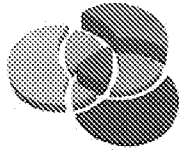
DESTINATION	TYPICAL FREQUENCY	JOURNEY TIME
WORTHING	EVERY 15 MINUTES	11 MINUTES
BRIGHTON	EVERY 15 MINUTES	35 MINUTES
CHICHESTER	EVERY 30 MINUTES	18 MINUTES
PORTSMOUTH	EVERY 30 MINUTES	1 HOUR
GATWICK AIRPORT	EVERY 12 MINUTES	1 HOUR

Table 2.2 – Typical Train Services and Frequencies

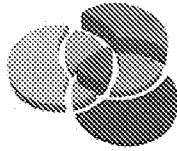


Summary

- 2.3.14 Overall it is considered the development site is well located in terms of its accessibility to a wide range of destinations including primary and secondary education, extensive healthcare, employment and a wide range of retail and leisure opportunities and far reaching public transport.
- 2.3.15 A good range of services and amenities are accessible by sustainable modes with Angmering Village Centre within walking distance together with wider cycle and public transport facilities providing a good level of sustainable access to the wider area, in particular larger towns such as Littlehampton and Worthing.
- 2.3.16 Residents of the site could realistically undertake a number of daily journeys by modes other than the private car allowing day to day needs to be met as well as undertaking sustainable journeys to work and education establishments.
- 2.3.17 The use and uptake of sustainable travel opportunities will be promoted through the Home Buyer packs with details and maps highlighting the location of key services and facilities together with details of walking, cycling and public transport infrastructure.
- 2.3.18 A review of the National Census data taken in 2001 in relation to Travel to Work reveals that historically there has been a relatively high level of car use when compared with Arun District or the wider south east.
- 2.3.19 This may be due to the location of Angmering Village relative to major local centres of employment (such as Worthing, Littlehampton, Brighton, Chichester etc.). However, in recent years there have been both improvements to the sustainable transport infrastructure and global incentives for people to consider their mode of travel in favour of sustainable modes.
- 2.3.20 Notwithstanding this, there is also a relatively high proportion of journeys to work being undertaken by sustainable modes including train, foot and cycle, demonstrating that sustainable journey patterns are realistic for the site.
- 2.3.21 It is also important to note that this data considers modes of travel to work whereas Angmering Village benefits from a wide range of other services and amenities which are highly accessible to the site and would encourage sustainable travel for a wide range of journeys. The village benefits from excellent access to both primary and secondary education, medical and dental facilities, local retail including convenience store and community uses all being within a short walking distance.



- 2.3.22 Angmering Rail Station is also within an acceptable walking distance and a short cycling distance and provides regular services to all major local centres.
- 2.3.23 It is wholly realistic that a number of day to day journeys associated with residents of the site will be undertaken sustainably and it is key to encourage this use at an early stage, therefore it is proposed to promote these options through home buyer information.



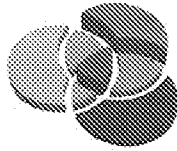
3 ACCESS, LAYOUT AND SERVICING ARRANGEMENTS

3.1 Site Access and Layout

- 3.1.1 The site will take primary pedestrian and vehicular access via the southern kerbline of Water Lane together with a secondary access to a small number of dwellings a short distance further east as illustrated on **ECE Architecture Site Plan** with further detail in respect to proposed highway geometry contained in RGP Site Access and Visibility Splay **Drawing No. 2012/1592/003** and Vehicle Tracking Plots **No. 2012/1592/001**.

Visibility Splays

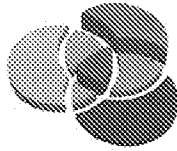
- 3.1.2 The visibility splays from the proposed access points, as designed, are based on the posted speed limit on Water Lane and are considered in light of the guidance as contained in Manual for Streets.
- 3.1.3 To the east of the site Water Lane is subject to a posted speed limit of 30mph. Speeds are generally retained within this threshold. This is achieved by a combination of the calming effect resulting from some on-street parking on Water Lane and the series of traffic calming features further to the north east on Water Lane in the form of a pair of single lane / priority passing places.
- 3.1.4 Observations on site confirm that typical traffic speeds past the site are generally contained within these posted speed limits. This is partially achieved by the current on-street parking in the vicinity of the site and wider traffic management features.
- 3.1.5 While the removal of the Car Showroom may remove some on-street parking activity from the site, it is considered that a certain level of on-street parking will remain as a result of the parking demand of existing dwellings on the northern kerbline of Water Lane, where-by a number of dwellings do not benefit from sufficient off-street parking space.
- 3.1.6 Visibility splays from the primary site access onto Water Lane can be achieved from a setback of 2.4m to 43m to the west (towards the 20mph speed limit) and in excess of 50m to the east (within the 30mph speed limit).
- 3.1.7 Visibility splays from the secondary access can be achieved from a setback of 2.4m to in excess of 50m to both the east and west.
- 3.1.8 Achievable visibility splays from both points of access are illustrated on RGP Drawing Number 2012/1592/003.



- 3.1.9 Given the nature and function of Water Lane in the vicinity of the site and the posted speed limits locally, the achievable visibility splays are in line with guidance contained within Manual for Streets (paragraphs 7.5, 7.6 and 7.7 of Manual for Streets).
- 3.1.10 It should be noted that it is necessary to base visibility splays on observation of traffic movements on Water Lane and the posted speed limits as the current parking activity on Water Lane would make any Automatic Traffic County (ATC) an unreliable basis on which to base visibility splays as an ATC would be likely to result in an unrealistically low speed reading.

Site Layout

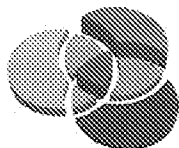
- 3.1.11 The main site access is in the form of a standard bell mouth access. The typical carriageway width within the access road is set out at 4.8m to provide for the safe two-way movement of traffic together with minimum width 1.8m footway access to the site frontage and into the site.
- 3.1.12 The access road will be at carriageway level for the first 10m from the junction with Water Lane together with segregated pedestrian footway and will then take the form of a raised surface / shared surface providing for vehicular and pedestrian access through the site.
- 3.1.13 The main site access road widens into a courtyard which provides for vehicle parking and direct access to dwelling frontages.
- 3.1.14 Kerb radii are set at 6m which allow for the safe movement of private vehicles entering and exiting the site simultaneously. The access design also provides adequate width and radii to allow typical refuse vehicles to enter and exit the site.
- 3.1.15 The nature of the main access road will influence low traffic speeds and retain these below 20mph in reflection of Manual for Streets philosophy and the principles contained within Chapter 7 of the same document to provide for a safe environment.
- 3.1.16 The eastern part of the site provide access for a small number of dwellings / parking spaces via a simple crossover with sufficient space provided for the safe manoeuvring of vehicles to ensure entry and exit in a forward gear.
- 3.1.17 The site layout has been designed to retain low traffic speeds and provide adequate space and priority to allow pedestrians and cyclists to move through the site in reflection of the philosophy of Manual for Streets.



- 3.1.18 Visibility and forward visibility throughout the site is commensurate with the anticipated low traffic speeds within the site and on Water Lane and reflects the guidance contained within Manual for Streets.
- 3.1.19 An additional vehicle crossover is proposed on Cumberland Crescent in order to provide for vehicle access to a small number of curtilage parking spaces. These spaces can be accessed with good levels of inter-visibility between manoeuvring vehicles and those passing on Cumberland Crescent
- 3.1.20 Pedestrian visibility splays of 2m x 2m are achievable from all points of pedestrian access onto the site access roads and from the main site access points onto Water Lane and High Street.
- 3.1.21 To improve the local pedestrian environment, the current bollards in place in the southern kerbline of Water Lane will be removed and the footway reinstated providing for better, un-obstructed pedestrian movements.
- 3.1.22 The site also provides for a pedestrian / cycle access via High Street which provides direct access to the adjacent parade of shops and the wider village facilities. The pedestrian access coincides with the existing dropped kerb crossing point on the opposite kerbline with adequate inter-visibility for safe pedestrian movement.
- 3.1.23 The proposed access junction works together with detailed construction and materials are to be addressed through detailed design and Section 39 / 278 Agreements with the Highway Authority, subject to Planning Approval.

3.2 Site Servicing

- 3.2.1 All units will be provided with bins for general refuse, recycling and compost which can be placed to the property frontage on collection days via garden gates, providing access for refuse workers to collect various waste streams.
- 3.2.2 The site layout has been tested using AutoTrack to demonstrate a typical, large refuse vehicles is able to enter and exit the site in a forward gear and safely turn within the turning head provided through the site.
- 3.2.3 The relevant tracking plots are illustrated at RGP Refuse Vehicle Track **Drawing No. 2012/1592/001.**
- 3.2.4 It is demonstrated that a typical refuse vehicles is able to enter and exit the site and can safely manoeuvre through the site access in reflection of low site traffic flows and the advice contained in Manual for Streets.



3.3 Stage 1 Road Safety Audit and Designers Response

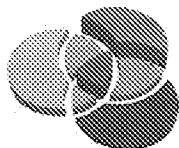
3.3.1 In accordance with the West Sussex County Council Safety Audit Adopted Policy the site access proposals have been the subject of an independent Stage 1 Road Safety Audit conducted by an Audit Team from the Safety Forum Ltd. A copy of the Audit is attached at **Appendix A**.

3.3.2 The Stage 1 Road Safety Audit raised the following broad issues:

- (i) Difficulty of vehicles manoeuvring to and from driveways on the vehicle crossovers on Cumberland Crescent with potential conflict in vehicles from the northern most space overrunning opposing running lanes.
- (ii) The risk of vehicles using the proposed footpath onto High Street and potential for conflict with pedestrians.
- (iii) The visibility splays of the site access junctions onto Water Lane appear to cross-over land which appears to be private
- (iv) The provision of a centre line on the site access junction, which may artificially narrow the site access and result in conflict
- (v) Concerns regarding the Auditors consideration / interpretation of the vehicle access for Eachways (adjacent private dwelling) and achievable visibility onto Water Lane.
- (vi) Concerns regarding the Auditors consideration / interpretation of the private vehicle access to Eachways and potential difficulty entering and exiting.

3.3.3 Having considered the issues raised through the Road Safety Audit the Designer has accepted all issues which will be address through the Detailed Design stage subsequent to planning permission together with a further explanation of the proposed re-provision of vehicular access to Eahways. The full Designers Response is attached at **Appendix A**.

3.3.4 In addition to the issues raised above, the Auditors also made two general observations in relation to bus access and a suggestion to further extend footway into the shared use area.



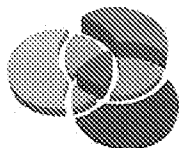
4 TRAFFIC GENERATION AND IMPACT

4.1 Traffic Generation

- 4.1.1 It is necessary to understand the extent of the likely highway impact, in traffic terms, on the local highway network associated with the proposed development.
- 4.1.2 As the site is currently in use as a car showroom and vehicle repair garage and the extent of current traffic impact needs to be accounted for in understanding the likely extent of traffic impact from the proposed residential development.
- 4.1.3 Vehicle trip generation for the existing uses on site and the proposed development have been derived by an interrogation of the TRICS database and a comparison is made of the two uses (primarily during the AM and PM network peak periods) in order to determine the likely NET change in traffic movements which would result from the proposed change of use.
- 4.1.4 TRICS is the industry standard tool for determining trip rates for a variety of land uses in a variety of geographical locations.
- 4.1.5 The Car Showrooms category (which includes an element of vehicle service and repair) has been used to assess the existing uses on site, taking into account the dealerships size, locational aspects and public transport levels of the locality. Full TRICS data is contained within **Appendix B**.
- 4.1.6 The Residential / Mixed Private Non Private Housing category was investigated in respect of the proposed 22 affordable and open market dwellings, taking into account size, locational aspects and public transport levels of the locality. Full TRICS data is contained within **Appendix B**.

Existing Use

- 4.1.7 The existing use on site comprises the sale of both new and used BMW vehicles together with vehicles service / repair and vehicle body shop. The gross internal floor area is estimated by the Architects at 1850sqm.
- 4.1.8 Based on the outputs from the TRICS database the vehicle trip rates and the likely traffic generation is summarised in **Table 4.1** and **Table 4.2** below.



Trip Rates (Car Showroom / Vehicle Repair Use)			
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	0.694	0.195	0.889
PM Peak Hour (17:00-18:00)	0.244	0.674	0.918
Daily Traffic	4.295	4.268	8.563

Table 4.1 – Summary of Existing Use Trip Rates

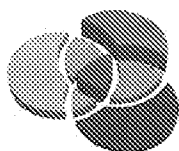
Traffic Generation (1850sqm Car Showroom)			
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	13	4	17
PM Peak Hour (17:00-18:00)	5	12	17
Daily Traffic	79	79	158

Table 4.2 – Summary of Existing Use

- 4.1.9 Based on the likely traffic generation of the existing use on site, as derived from the TRICS database, it is likely the current site would result in approximately 13 arrivals and 4 departures in the AM peak (17 two-way movements); 5 arrivals and 12 departures through the PM peak (17 two-way movements) and; 79 arrivals and 79 departures between 07:00 and 19:00 (158 two way movements).

Proposed Use

- 4.1.10 The proposed site, as previously detailed, would comprise 22 residential units and the based on the outputs from the TRICS database the vehicle trip rates and the likely traffic generation is summarised in **Table 4.3** and **Table 4.4** below:



Trip Rates (Mixed Private / Non-Private Housing)			
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	0.141	0.317	0.458
PM Peak Hour (17:00-18:00)	0.370	0.204	0.574
Daily Traffic	2.538	2.565	5.103

Table 4.3 – Summary of Proposed Use Trip Rates

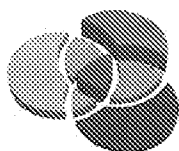
Traffic Generation (22 affordable and open market residential units)			
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	3	7	10
PM Peak Hour (17:00-18:00)	8	4	12
Daily Traffic	56	56	112

Table 4.4 – Summary of Proposed Use

- 4.1.11 Based on the predicted generation of the proposed use on site, as derived from the TRICS database, it is likely the proposals would result in approximately 3 arrivals and 7 departures in the AM peak (10 two-way movements); 8 arrivals and 4 departures through the PM peak (12 two-way movements) and; 56 arrivals and 56 departures between 07:00 and 19:00 (122 two way movements).

Net Traffic Impact

- 4.1.12 The trip rates derived from the TRICS database have been applied to both the current and proposed development on the site with **Table 4.5** below comparing the current permitted and proposed traffic generation and the overall net impact.



Net Change in Traffic			
	AM Peak	PM Peak	DAILY TOTAL
Existing Use (Car Showroom)	17	17	158
Proposed Use (Residential)	10	12	112
Net Change	-7	-5	-46

Table 4.5 – Summary of Net Traffic Generation

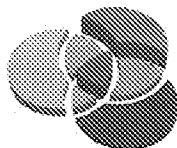
- 4.1.13 From the traffic generation data it is demonstrated that the proposed residential development is likely to generate in the region of 7 less vehicle movements in during the AM and 5 less vehicle movements during the PM peak and in the region of 46 less daily movements.
- 4.1.14 It is demonstrated that the proposed development would be likely to result in a reduction in total weekday daily movements associated with the site with the resultant benefits for the local highway network in terms of both perceived capacity through Angmering Village as well as highway safety benefits.
- 4.1.15 Given the overall low level of traffic generation associated with the site and the potential reduction in traffic impact associated with the site, it has not been considered necessary to undertaken any detailed traffic modelling or assessment on either the site access junctions or the local highway network.
- 4.1.16 Notwithstanding the likely reductions in weekday vehicle movements in the vicinity which would result from the proposals, it is evident from further TRICS research that typical Car Showroom uses would generate a significant number of weekend vehicle movements during a time when residential movements would be significantly reduced.
- 4.1.17 The proposals would not only result in a general reduction in weekday traffic movements locally, there would also be a significant reduction in weekend traffic movements.
- 4.1.18 It is considered that, in traffic terms, the proposed residential use would be more sympathetic to the locality than the current use in respect to highway capacity, safety and amenity.



5 **HIGHWAY SAFETY**

5.1 **Road Traffic Accidents**

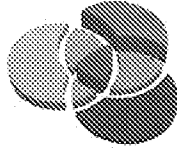
- 5.1.1 As would be required for any proposals which would impact on the local highway network and / or require alterations to the general highway layout / assess design, a review of recent personal injury accident data for the highway in the vicinity of the site has been undertaken in respect of the proposed development.
- 5.1.2 Road Traffic Accident Data for the preceding 5 year period (between 1st August 2007 and 31st July 2012) was obtained from Sussex Police. A copy of the data is contained within **Appendix C** including a plot diagram indicating the location of the incidents and Sussex Police's descriptions of the incidents to allow them to be better reported through this report.
- 5.1.3 Records show that over the last 5 years there have been 5 accidents reported in the vicinity of the development. The location and severity of the recorded personal injury accidents is shown on the plan provided by Sussex Police.
- 5.1.4 All of the recorded accidents were classed as having resulted in slight injury. All of the reported accidents occurred to the west of the site, in the vicinity of the junction with Arundel Road / Church Road.
- 5.1.5 The circumstances contributing to the recorded accidents have been reviewed to consider whether inadequacies in the highway layout may have been contributing factors, which may need to be addressed through this application.
- 5.1.6 A review of the data provided by Sussex Police suggest these were the result of combinations of driver error, failure to observe or react in time to other road users or failure to observe / obey road markings and one incidence of 'road rage'.
- 5.1.7 Two of the incidents involved pedestrians. In both cases it appears the pedestrians may have stepped out onto the carriageway having failed to observe or misjudge approaching vehicles.
- 5.1.8 Given the circumstances described through the Sussex Police data it is apparent that there are no existing road safety issues in the vicinity of the site that would be exacerbated by the additional development traffic and the recorded accidents were very much driver error / road user error incidents which did not result from poor highway design.



6 **PARKING PROVISION**

6.1 **Car Parking**

- 6.1.1 A review of the National Statistics Car / Van ownership records based on Census 2001 data suggests the level of car ownership within the Angmering Ward is relatively high when compared with the averages for Arun District and the wider South East region, reflecting the location of the ward in relation to major local centres.
- 6.1.2 The Census data attached at **Appendix D** states approximately 15% of households do not own a car or van, 45% of households own one car or van with 40% households owning two or more vehicles.
- 6.1.3 The 2001 Census data for local car ownership equates to an average car ownership in the region of 1.4 vehicles per dwelling throughout the Ward however, it is acknowledged that car ownership levels would have fluctuated between 2001 and present day.
- 6.1.4 When providing parking for any new development it is important to consider local policy and parking standards that should be adopted. The relevant parking standards to be applied in this instance are set out in the West Sussex County Council Parking Standards which have been revised in respect to residential parking provision applying an evidence based approach through a parking demand calculator.
- 6.1.5 The proposed layout provides a total of 42 car parking spaces within the development inclusive of private, allocated car barns and parking spaces for the use of residents of the site.
- 6.1.6 This relates to a rate of approximately 1.9 spaces per dwelling, which would reflect the local levels of car ownership inclusive of anticipated changes in levels of car ownership.
- 6.1.7 In addition to the allocated resident parking provision, the site also provides a total of 5 marked, un-allocated visitor parking bays in order to accommodate the anticipated visitor parking demand in order to limit any possibility of parking overspill onto the adjacent highway and avoid both parking clutter and highway obstruction internally and externally to the site.
- 6.1.8 In reviewing the site parking provision, the WSCC Parking Demand Calculator is used to validate the proposed provision. The parking demand calculator defines the anticipated total parking demand for residential development based on evidence of recent development within the locality together with historic census data and predicted changes in car ownership and car use.



6.1.9 The parking demand tool suggests the proposed development would require approximately 49 car parking spaces for both residents and visitors of the development. The outputs of the parking demand calculator are reproduced at **Appendix E**.

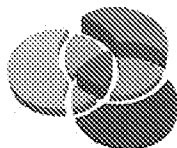
6.1.10 It is considered that the proposals address the parking demand for the site as determined by the proposed uses in reflection of the West Sussex parking demand calculator. The site will provide adequate allocated parking for all dwellings including the anticipated potential for visitor parking demand. The proposals provide parking at approximately 96% of that suggested through the WSCC Parking Demand Calculator, which is considered acceptable.

6.2 Cycle Parking

6.2.1 Cycle parking will be provided at a minimum rate of 2 spaces per dwelling which accords with the West Sussex County Council Cycle Parking Standards which requires cycle parking at a rate of 2 secure and covered spaces per 2 or more bed dwelling.

6.2.2 Those dwellings allocated car barns will be able to secure cycles within the car barn through the provision of Sheffield type cycle stands. Those dwellings not allocated parking barns will benefit from lockable sheds in the rear gardens.

6.2.3 The site cycle parking is complemented by the high levels of cycle parking available at local destinations such as schools, rail stations etc. which are accessible via the identified cycle routes and local network of quiet streets.



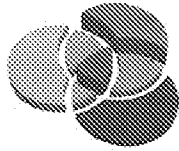
7 SUMMARY AND CONCLUSIONS

7.1.1 RGP has investigated the transport planning considerations relating to the proposed residential development of Chandlers Worthing BMW, on Water Lane, Angmering to provide a total of 22 residential dwellings, parking and associated access works.

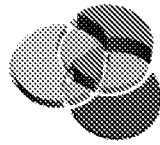
7.1.2 A general summary of the key points in this report is as follows:

- (i) The site is highly accessible to a wide range of local education, healthcare, employment, retail and leisure opportunities, including a range of facilities within Angmering Village, within walking and cycling distance and wider local centres, within cycling and bus travel distance, which would reduce the need to travel by private car for many day to day journeys;
- (ii) Local public transport provision is good with bus stops within walking distance serving a range of local destinations and those further afield with a wide range of facilities and amenities including Rail Stations.
- (iii) The site layout is designed to maintain low traffic speeds and provides for good levels of pedestrian access demonstrating safe and convenient access can be provided via Water Lane.
- (iv) The site access proposals are sufficient to support the proposed development and have been subject to an independent Stage 1 Road Safety Audit and Designers Response is provided to address all issues raised through the Audit.
- (v) The development proposed would be likely to result in a moderate reduction in traffic movements on the local highway network and would not result in a material impact in the operation of local junctions or severe residual impacts in terms of highway safety or capacity;
- (vi) The proposals provide sufficient car parking to cater for all anticipated vehicles on site in accordance with current guidance.

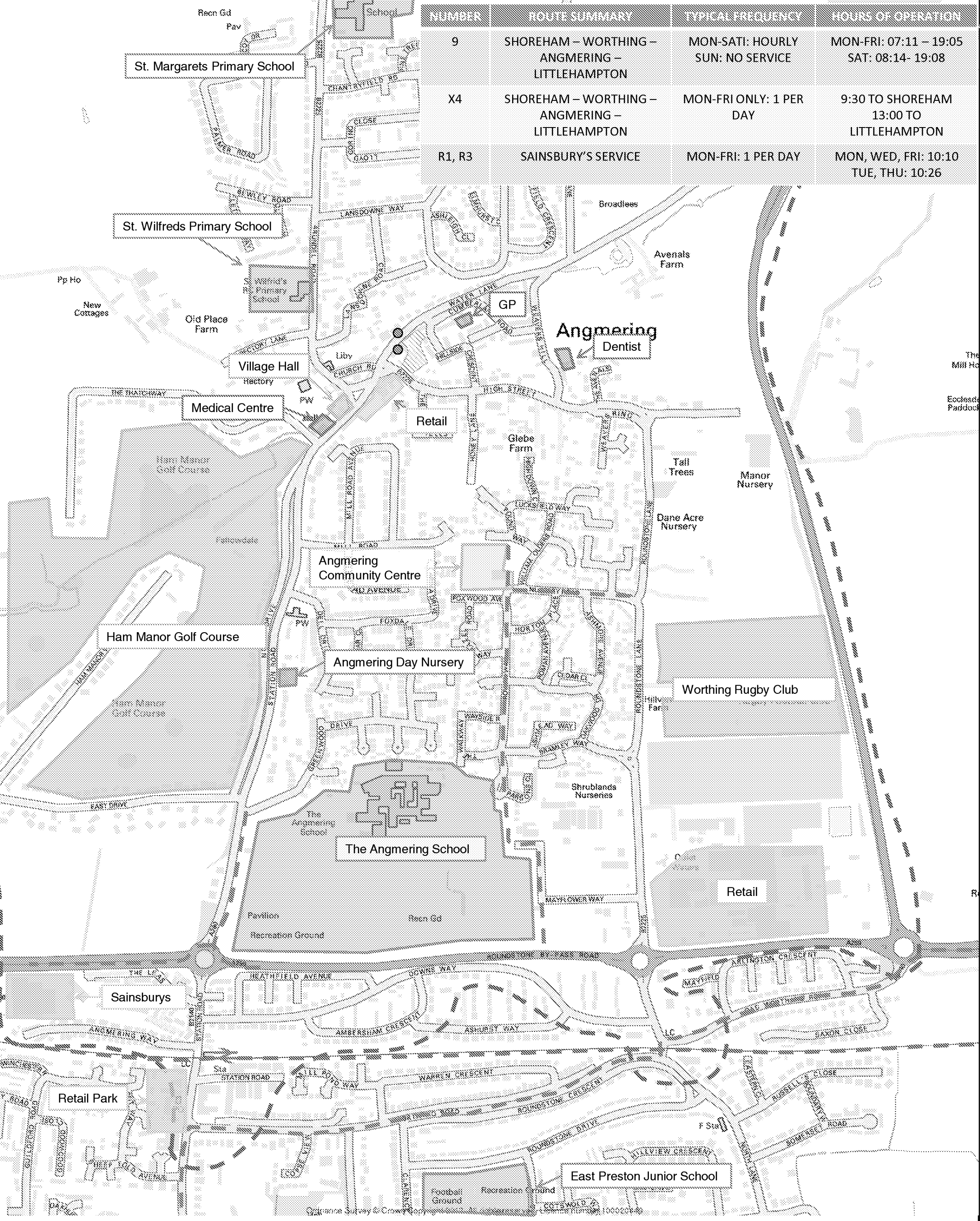
7.1.3 In conclusion, the proposals would give residents of the site a real choice in how they travel with a range of sustainable travel modes allowing for access to a range of key day to day needs including food retail, education, employment and healthcare.



- 7.1.4 Safe and suitable access can be achieved for all people, including the mobility impaired with good sustainable access links locally and the site access design providing for safe vehicular access.
- 7.1.5 The proposals would effectively reduce traffic locally and result in a highway environment more conducive to the village setting with associated improvement in local highway capacity and safety.
- 7.1.6 In light of this report, West Sussex County Council Highways Officers are respectfully asked to confirm that the proposals are acceptable from a highway and transportation point of view and no objections are raised.



PLANS



NUMBER	ROUTE SUMMARY	TYPICAL FREQUENCY	HOURS OF OPERATION
9	SHOREHAM – WORTHING – ANGMERING – LITTLEHAMPTON	MON-SATI: HOURLY SUN: NO SERVICE	MON-FRI: 07:11 – 19:05 SAT: 08:14- 19:08
X4	SHOREHAM – WORTHING – ANGMERING – LITTLEHAMPTON	MON-FRI ONLY: 1 PER DAY	9:30 TO SHOREHAM 13:00 TO LITTLEHAMPTON
R1, R3	SAINSBURY'S SERVICE	MON-FRI: 1 PER DAY	MON, WED, FRI: 10:10 TUE, THU: 10:26

Site Location

Railway

Rail Stations

Bus Stops

Education

Leisure

Shops

Medical/ Dentist

2km Isochrone

Cycle Routes

Transport Planners and Civil Engineers
The Old Stables, Fry's Yard, Bridge Street, Godalming,
Surrey, GU7 2JN
Tel: 01483 861681 Fax: 01483 861682
www.rtp.co.uk

Client Name:
Marshall Clark LLP

Job Title:
Chandlers Worthing Site,
Angmering

Plan Title:
Accessibility Plan

Plan No:
Plan 01

Job No:
1592

Date:
Dec 2012

Scale:
NTS

Drawn By:
PJB

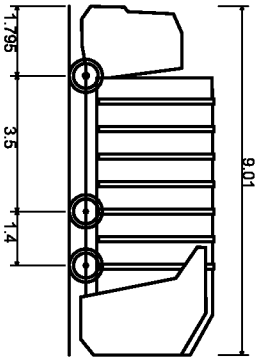
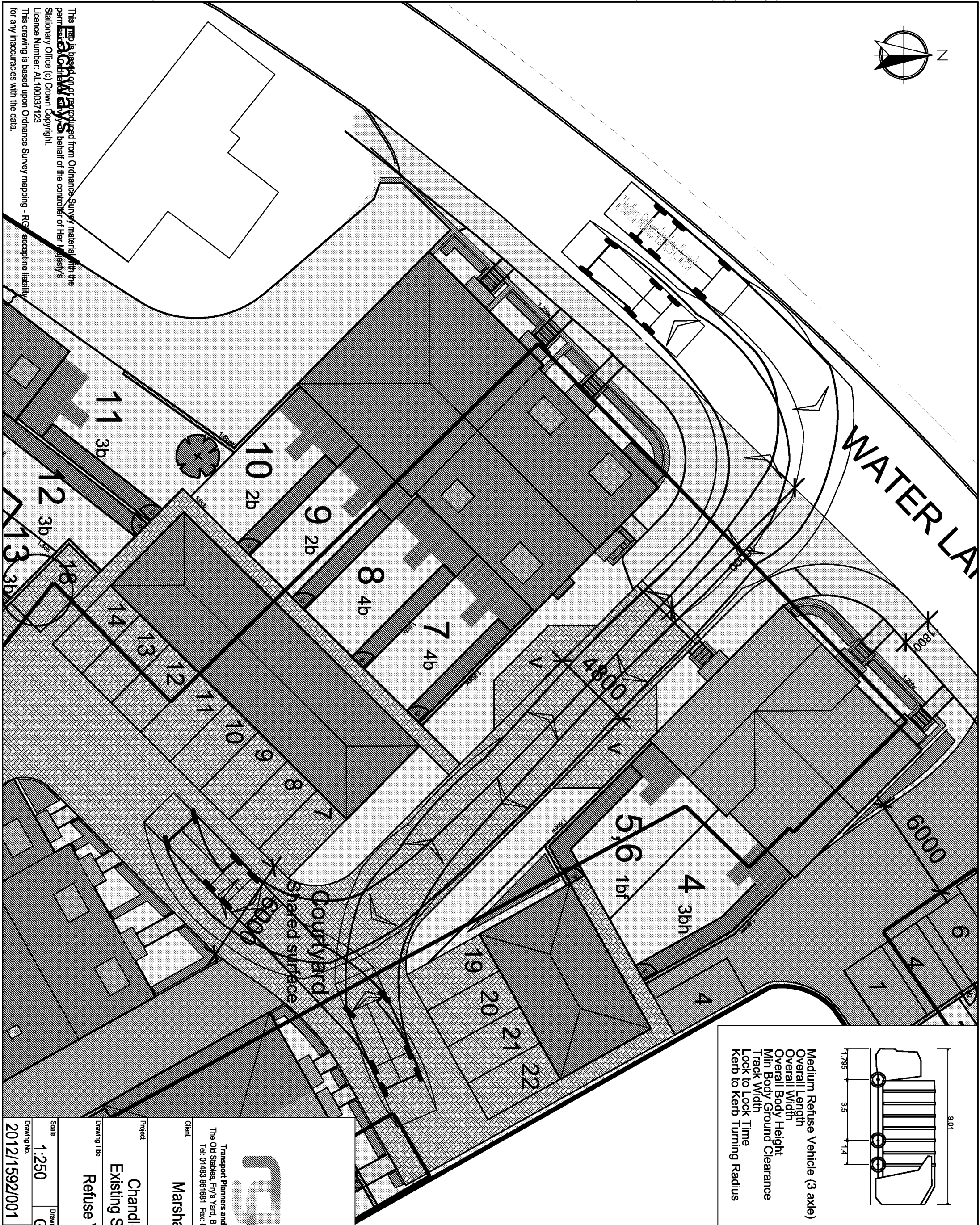
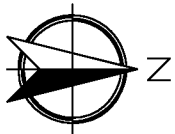
Checked By:
PJC

Approved By:
PMR

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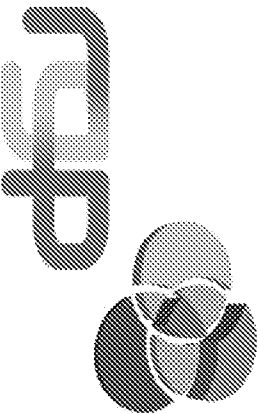


DRAWINGS



Medium Refuse Vehicle (3 axle)

Overall Length	9.010m
Overall Width	2.450m
Overall Body Height	3.742m
Min Body Ground Clearance	0.295m
Track Width	2.450m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	8.200m



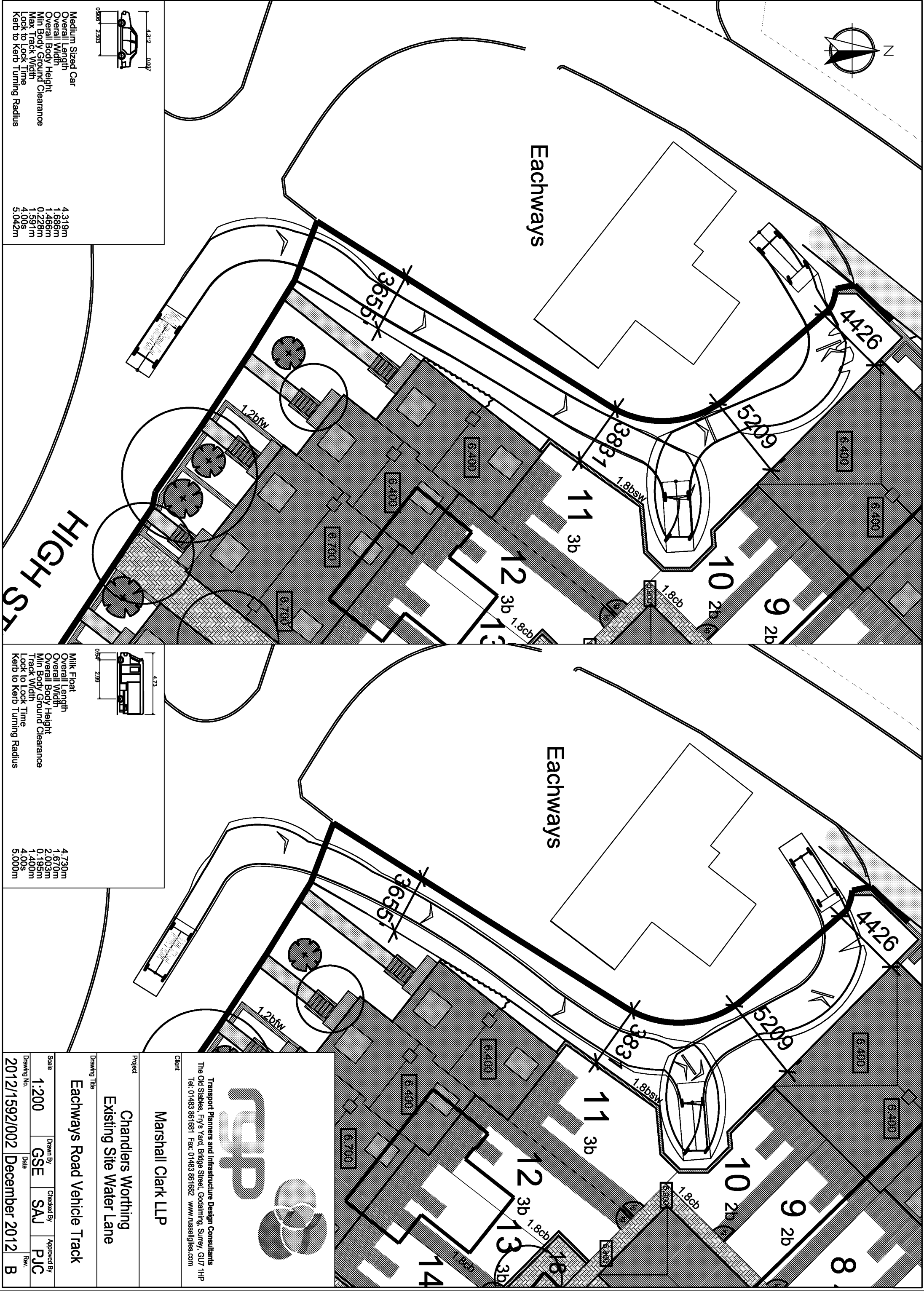
Transport Planners and Infrastructure Design Consultants
The Old Stables, Fry's Yard, Bridge Street, Godalming, Surrey, GU7 1HP
Tel: 01483 861681 Fax: 01483 861682 www.russellgiles.com

Client
Marshall Clark LLP

Project
**Chandlers Worthing
Existing Site Water Lane**

Drawing Title
Refuse Vehicle Track

Scale	1:250	Drawn By	GSE	Checked By	SAJ	Approved By	PJC
Drawing No.	2012/1592/001	Date	November 2012	Rev.	A		



Client

Marshall Clark LLP

Project

Chandlers Worthing
Existing Site Water Lane

Drawing Title

Eachways Road Vehicle Track

Scale

1:200

Drawn By

GSE

Checked By

SAJ

Approved By

PJC

Drawing No.

2012/1592/002

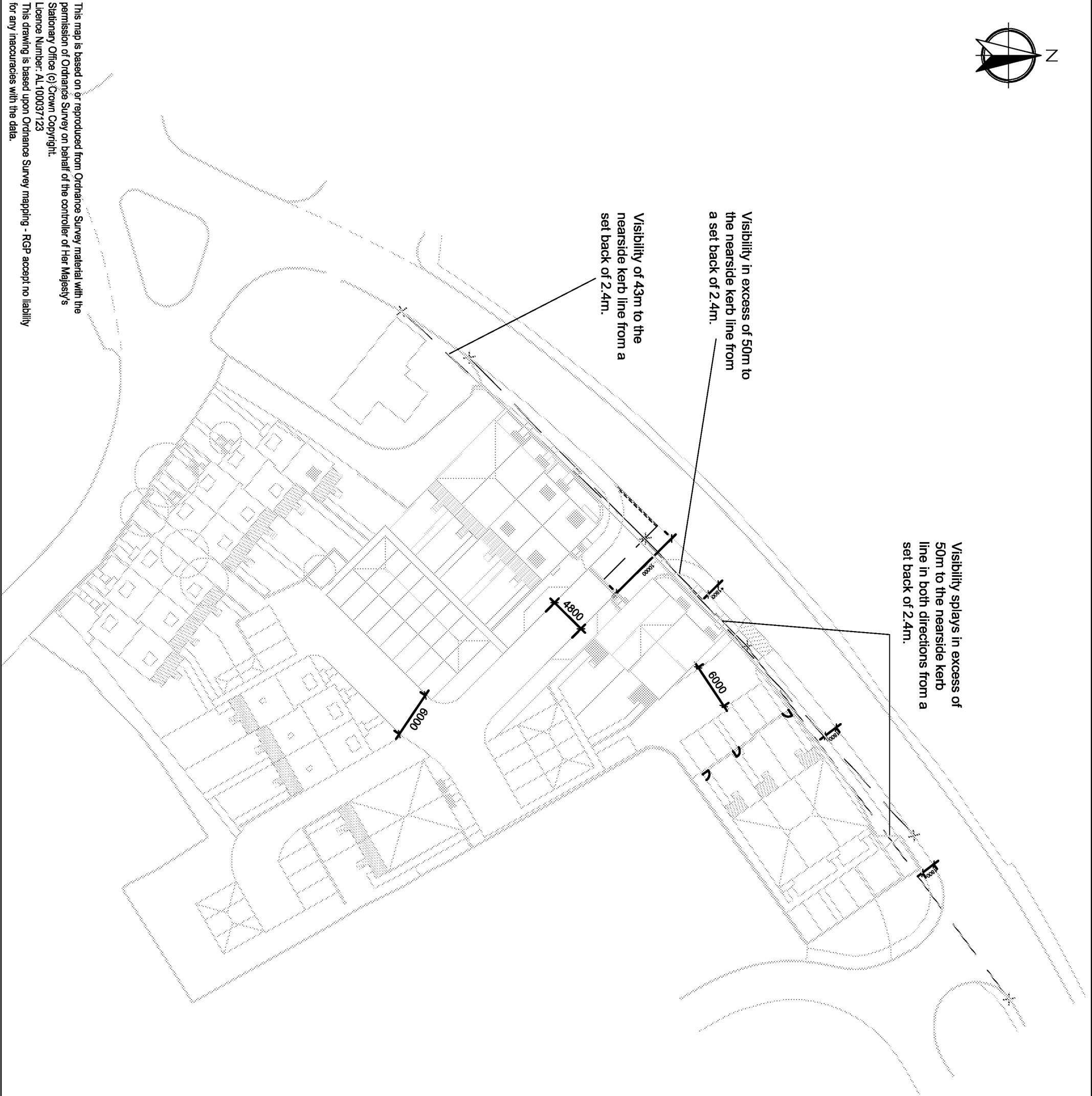
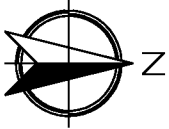
Date

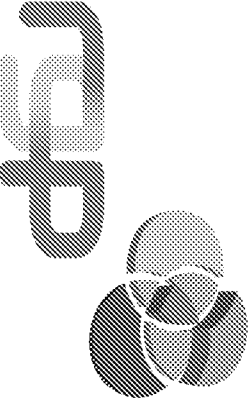
December 2012

Rev.

B

Transport Planners and Infrastructure Design Consultants
The Old Stables, Fry's Yard, Bridge Street, Godalming, Surrey, GU7 1HP
Tel: 01483 861681 Fax: 01483 861682 www.russelldesign.com





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Client

Chandlers Worthing

Project

Chandlers Worthing - Existing Site Water Lane

Drawing Title

Site Access and Visibility Splays

Scale	Drawn By	Checked By	Approved By
1:500	PJB	SAJ	PJC
Drawing No.	Date	Rev.	
2012/1592/003	December 2012	-	



APPENDIX A

CHANDLERS BMW, ANGMERING

PROPOSED RESIDENTIAL DEVELOPMENT AND ACCESS ARRANGEMENTS

Stage 1 Road Safety Audit

December 2012

RDW/LS/12/0621/RSA1

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	R Westhead	L Shaw		12 Dec 2012
Designer's Response	P. Jackson-Cole	S. Jones		14 th December 2012
Authority's Response				
Audit Response				

Client:	
Russell Giles Partnership	The Safety Forum Ltd
The Old Stables Fry's Yard Bridge St Godalming Surrey GU7 1HP	PO Box 744 Godalming Surrey GU7 9DU
	Date: 12 Dec 2012

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1.0	INTRODUCTION	3
2.0	ITEMS CONSIDERED	5
3.0	MATTERS ARISING FROM THIS STAGE 1 AUDIT.	6
4.0	GENERAL OBSERVATIONS	9
5.0	AUDITOR STATEMENT	10

APPENDIX A Location Plan

APPENDIX B Designer's Response

1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the proposed access arrangements and internal highway layout for the residential development on the current BMW site, Water Lane, Angmering.
- 1.1.2 The highway proposals include: the construction of a new access junction from Water Lane leading to a new internal highway; amendments to an existing access to the west of the site; and two new vehicle crossovers leading to private parking spaces.
- 1.1.3 The Stage 1 RSA was carried out at the request of Russell Giles Partnership.
- 1.1.4 The Audit was carried out between 7th and 10th December 2012 by consultants working on behalf of The Safety Forum Limited. The Audit Team, which is established from THE SAFETY FORUM LTD and independent of the project design team, has had no involvement with the project. The Auditors were:
- Rob Westhead
- Laurence Shaw
- 1.1.5 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/03.
- 1.1.6 Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme
- 1.1.7 The Audit consisted of a desktop study and a site visit. The site visit was carried out on 10th December 2012, between 13:30 and 14:15 hours. The weather was dry and sunny.
- 1.1.8 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.

-
- 1.1.9 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
 - 1.1.10 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the LHA on final completion.

2.0 ITEMS CONSIDERED

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

Drawing No.	Rev	Title
2012/1592/003	-	Site Access and Visibility Splays
002	-	Site Plan
-	-	PIA Plot, 5 years to 31/07/12

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

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT.

3.1 PROBLEM

LOCATION: Vehicles crossover on Cumberland Crescent.

SUMMARY: Difficult for vehicles to manoeuvre to / from driveways.

The Audit team note that vehicles exiting the driveways / parking spaces from Cumberland Crescent will have difficulty manoeuvring from the northern most spaces without overrunning the opposing traffic lanes on Cumberland Crescent. This could lead to conflict with opposing traffic.

RECOMMENDATION

Ensure that vehicles accessing and exiting all private driveways onto the public highway can do so without having to encroach into opposing traffic lanes.

3.2 PROBLEM

LOCATION: Proposed footpath onto High Street.

SUMMARY: Could be used by cars.

The Audit Team are concerned that cars could be driven down the proposed footpath from the development to High Street and potentially conflict with pedestrians.

RECOMMENDATION

Provide bollards or other deterrent / preventative measures to stop cars using the footpath injudiciously.

3.3 PROBLEM

LOCATION: Development frontage onto Water Lane.

SUMMARY: Visibility splays through area of land that may be private.

The Audit Team are concerned that visibility splays shown on the drawings supplied are through areas of private land to the rear of the footways that may be in private ownership and therefore out of the control of the highway authority. This could result in the introduction of future landscaping or other features by residents that could obscure visibility splays from the proposed accesses.

RECOMMENDATION

Ensure that visibility splays from the access junctions are all within areas that will not be obscured or can be controlled by the highway authority.

3.4 PROBLEM

LOCATION: Access junction onto Water Lane.

SUMMARY: Proposed centre line on narrow carriageway.

A centre line leading to the junction give way marking is proposed on the new development road at the junction with Water Lane. The development road is proposed to be 4.8m. Introduction of a centre line here could suggest that the road is of adequate width for opposing traffic to pass without caution and could therefore lead to side swipe conflict between opposing traffic.

RECOMMENDATION

Omit the centre line from the development road.

3.5 PROBLEM

LOCATION: Access between development and Eachways.

SUMMARY: Visibility from access to Water Lane further obscured.

The Audit Team are concerned that narrowing of the access between the proposed development and Eachways from its current width will result in vehicles exiting the access onto Water Lane much closer to the boundary wall of Eachways. This would further reduce visibility from the access towards traffic approaching from the west, due to the location of the boundary wall of Eachways.

The Audit Team were also concerned that the development property boundaries to the east of the access could obscure visibility from the access to below an adequate distance.

RECOMMENDATION

Ensure that visibility splays appropriate for the local traffic environment are provided. It is also suggested that the access between the development and Eachways could be made one way in from Water Lane, with traffic passing through and exiting onto High St.

3.6 PROBLEM

LOCATION: Private vehicular access to Eachways.

SUMMARY: May be difficult to enter or exit access.

The Audit Team noted that the private vehicular access to Eachways is from the land between the property and the BMW garage. Reduction in the width of the access could result in vehicles having difficulty entering or exiting this access and may therefore overrun Water Lane or the footway in the process of using the access.

RECOMMENDATION

Ensure that adequate space is provided for vehicles to manoeuvre into and from the private access to Eachways.

4.0 GENERAL OBSERVATIONS

No comments.

5.0 AUDITOR STATEMENT

5.1 I certify that this audit has been carried out in accordance with HD 19/03.

AUDIT TEAM LEADER

Rob Westhead
The Safety Forum Ltd
PO Box 744
Godalming
Surrey
GU7 9DU

AUDIT TEAM MEMBER

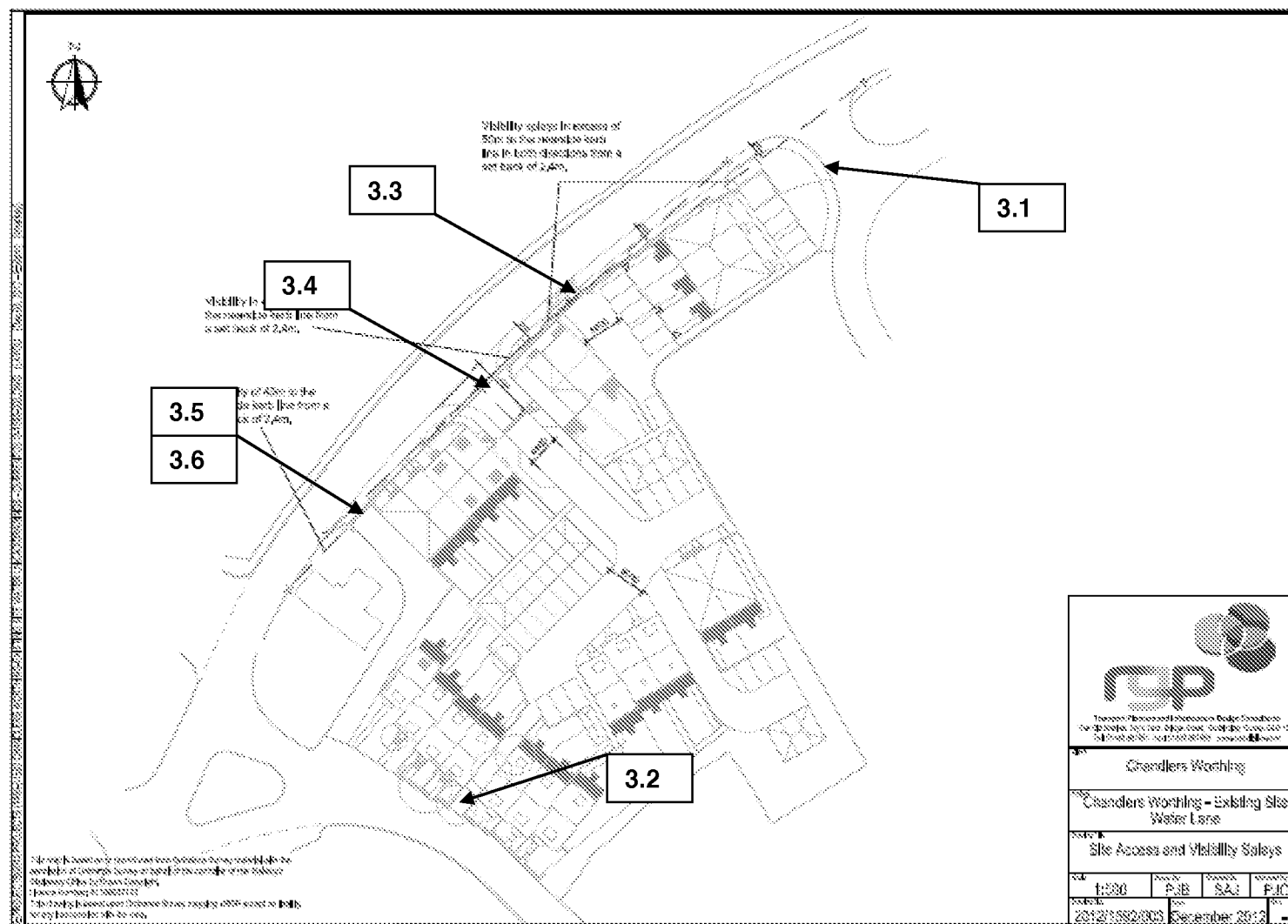
Laurence Shaw



Signed: Rob Westhead

Date: 12 December 2012

APPENDIX A: LOCATION PLAN



APPENDIX B: DESIGNERS RESPONSE

Auditors: Rob Westhead (Team Leader) and Laurence Shaw (Team Member). Date Audit Completed: 12 December 2012.

Scheme: Chandlers BMW Angmering, Proposed Residential Development and Access Arrangements

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/03 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1	YES	YES	While the space concerned will generate only a small number of daily movements and the risk of conflict is very low given the wide envelope of visibility for any vehicles manoeuvring or driving past the site, the Designer accepts the Audit Teams comments. The northern boundary of the driveway / parking space will be re-aligned to allow for a wider swing to provide for manoeuvring through the site without risk of overrunning into the opposing traffic lanes on Cumberland Crescent. The site layout will be revised at the Detailed Design Stage to reflect the comments of the Audit Team.
3.2	YES	YES	A suitable bollard and / or feature will be specified and included within the design to restrict the use of the footpath by vehicles. The site layout will be revised at the Detailed Design Stage to reflect the comments of the Audit Team.

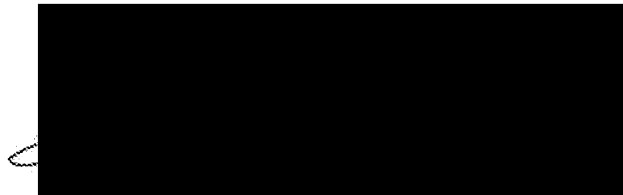
3.3	YES	YES	The layout provides for a new brick and flint wall across the site frontage of the buildings. All visibility splays are taken to the front of the wall with grass verge to be specified between the wall and the footway. Through both detailed design and subsequent S278 / S38 Agreements it will be specified that no planting / landscaping will take place within this area which will obscure the visibility splays.
3.4	YES	YES	It is agreed that the proposed centre line of the main site access road would act to artificially narrow the access and may lead drivers to assume they can pass without caution. The centre line will be removed in order to encourage some caution of drivers passing each other through the junction. The site layout will be revised at the Detailed Design Stage to reflect the comments of the Audit Team.
3.5	NO	NO	The existing vehicular access to 'Eachways' is taken via the current dealership forecourt which is an historical agreement. However as part of the proposals, the applicants have sought to agree with the occupiers of Eachways that vehicular access will be via a new private drive to High Street as shown on the Architects Drawings. This arrangement provides the occupier of Eachways with a significant area of driveway / hardstanding and a suitable access. The existing access via Water Lane will be permanently closed and will form a brick and flint wall frontage to Water Lane. Therefore, the issue raised by the Auditor has not been accepted and

			suitable arrangements are in place to provide for safe access to Eachways.
3.6	NO	NO	The existing vehicular access to 'Eachways' is taken via the current dealership forecourt which is an historical agreement. However as part of the proposals, the applicants have sought to agree with the occupiers of Eachways that vehicular access will be via a new private drive to High Street as shown on the Architects Drawings. This arrangement provides the occupier of Eachways with a significant area of driveway / hardstanding and a suitable access. The existing access via Water Lane will be permanently closed and will form a brick and flint wall frontage to Water Lane. Tracking plots have been undertaken to demonstrate that a typical private car is able to enter and exit the site in a forward gear. Therefore, the issue raised by the Auditor has not been accepted and suitable arrangements are in place to provide for safe access to Eachways.

Principal Engineer's Statement:

Road Safety Audit for Chandlers BMW Angmering, Proposed Residential Development and Access Arrangements

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



Paul Jackson-Cole
Principal Engineer

Date 14th December 2012

Chief Engineer's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer



APPENDIX B

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 14 - CAR SHOW ROOMS

Category : A - CAR SHOW ROOMS

VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	1 days
08	NORTH WEST	
	LC LANCASHIRE	2 days
09	NORTH	
	TV TEES VALLEY	1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
 Actual Range: 1925 to 3160 (units: sqm)
 Range Selected by User: 1925 to 3160 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/04 to 16/11/09

Selected survey days:

Monday	3 days
Wednesday	1 days

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	1

Selected Location Sub Categories:

Residential Zone	1
No Sub Category	3

Filtering Stage 3 selection:

Use Class:

Sui Generis	4 days
-------------	--------

Population within 1 mile:

10,001 to 15,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	1 days

Population within 5 miles:

100,001 to 125,000	1 days
125,001 to 250,000	3 days

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	1 days

Travel Plan:

No	4 days
----	--------

LIST OF SITES relevant to selection parameters

1	BD-14-A-01	DAEWOO, LUTON	BEDFORDSHIRE
		DUNSTABLE ROAD	
		LUTON	
		Suburban Area (PPS6 Out of Centre)	
		No Sub Category	
		Total Gross floor area:	1925 sqm
		Survey date: MONDAY	05/07/04
			Survey Type: MANUAL
2	LC-14-A-02	FIAT, BLACKBURN	LANCASHIRE
		PENDLE STREET	
		BLACKBURN	
		Suburban Area (PPS6 Out of Centre)	
		No Sub Category	
		Total Gross floor area:	3160 sqm
		Survey date: WEDNESDAY	23/06/04
			Survey Type: MANUAL
3	LC-14-A-03	CAR SHOW ROOM, PRESTON	LANCASHIRE
		FYLDE ROAD	
		ASHTON-ON-RIBBLE	
		PRESTON	
		Suburban Area (PPS6 Out of Centre)	
		No Sub Category	
		Total Gross floor area:	2400 sqm
		Survey date: MONDAY	16/11/09
			Survey Type: MANUAL
4	TV-14-A-03	VOLKSWAGEN, DARLINGTON	TEES VALLEY
		A68 WEST AUCKLAND ROAD	
		FAVERDALE	
		DARLINGTON	
		Edge of Town	
		Residential Zone	
		Total Gross floor area:	2750 sqm
		Survey date: MONDAY	25/04/05
			Survey Type: MANUAL

RGP Fry's Yard Godalming

Licence No: 728001

TRIP RATE for Land Use 14 - CAR SHOW ROOMS/A - CAR SHOW ROOMS

VEHICLES

Calculation factor: 100 sqm

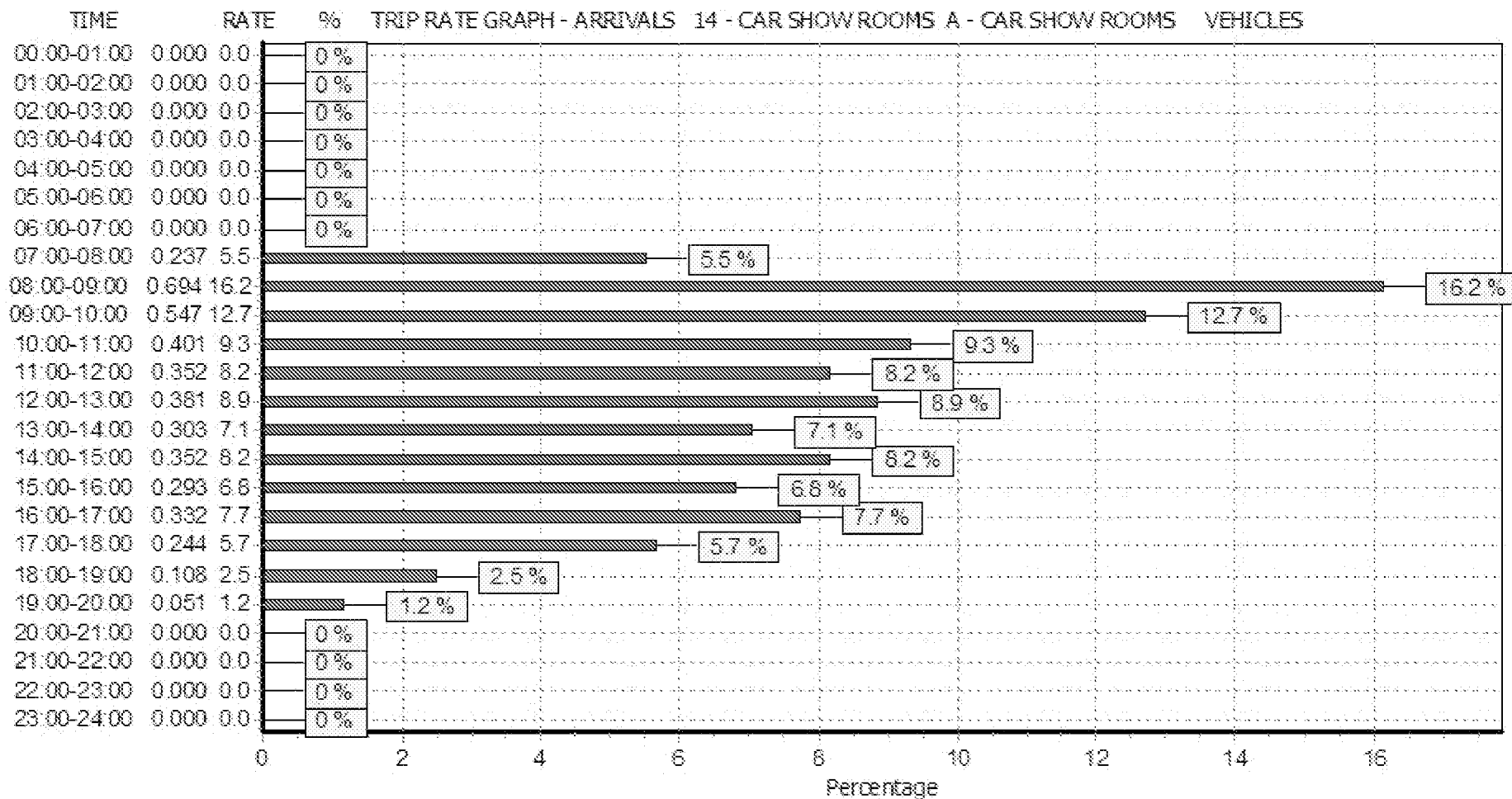
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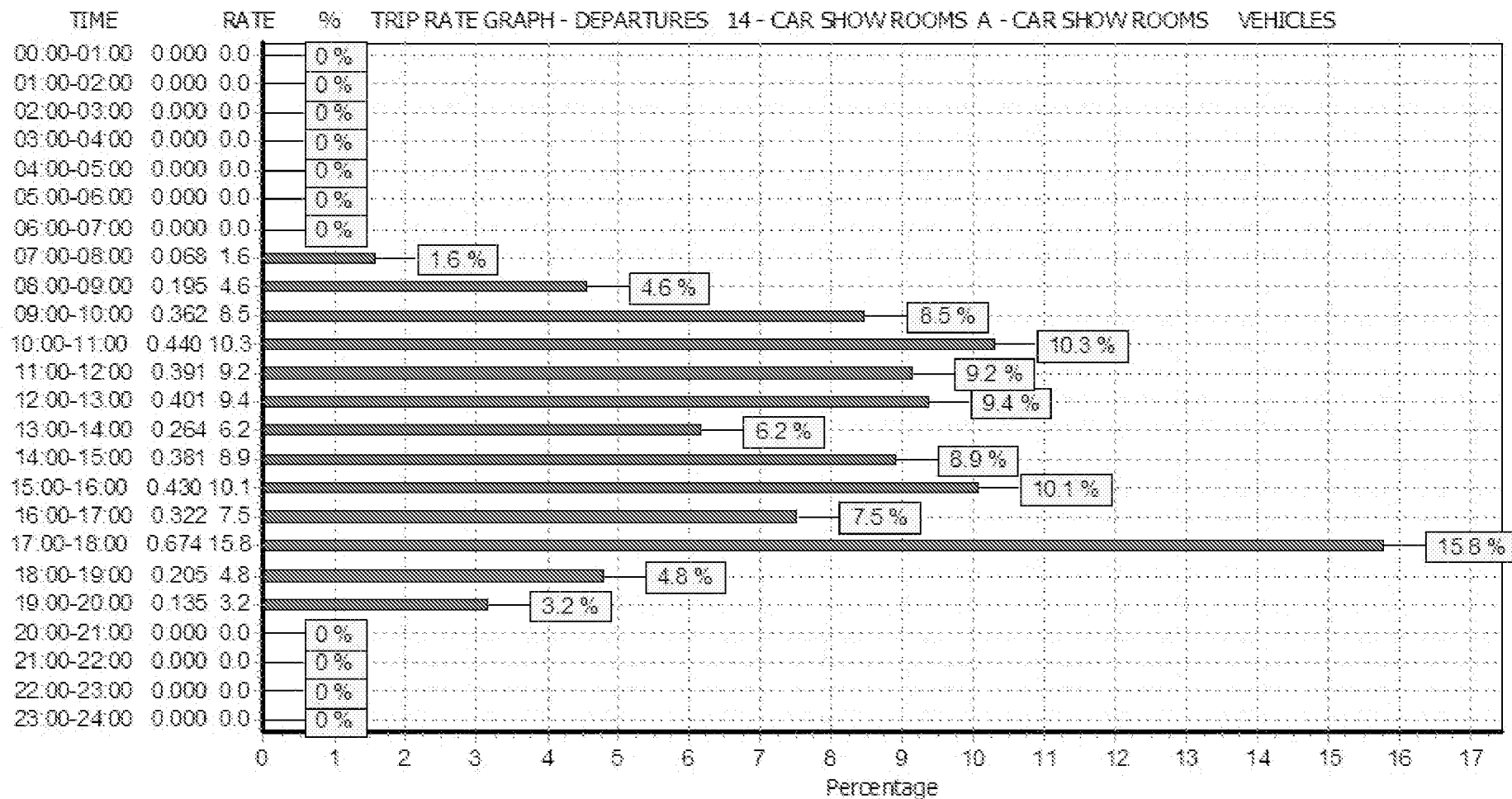
BOLD print indicates peak (busiest) period

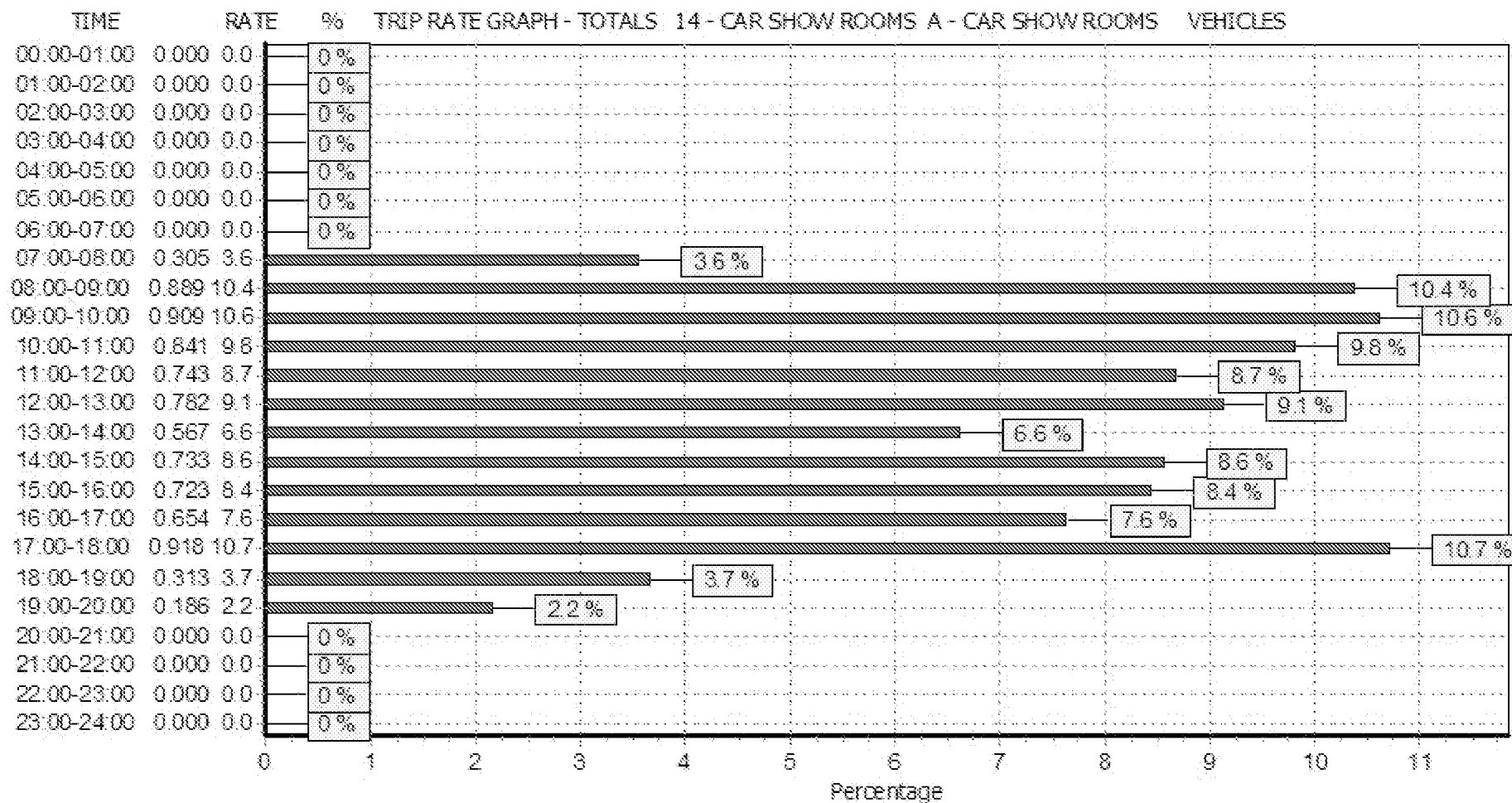
Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
01:00 - 02:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
02:00 - 03:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
03:00 - 04:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
04:00 - 05:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
05:00 - 06:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
06:00 - 07:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
07:00 - 08:00	2	2955	0.237	4.382	2	2955	0.068	1.252	2	2955	0.305	5.634
08:00 - 09:00	4	2559	0.694	12.833	4	2559	0.195	3.615	4	2559	0.889	16.448
09:00 - 10:00	4	2559	0.547	10.122	4	2559	0.362	6.688	4	2559	0.909	16.810
10:00 - 11:00	4	2559	0.401	7.411	4	2559	0.440	8.134	4	2559	0.841	15.545
11:00 - 12:00	4	2559	0.352	6.507	4	2559	0.391	7.230	4	2559	0.743	13.737
12:00 - 13:00	4	2559	0.381	7.049	4	2559	0.401	7.411	4	2559	0.782	14.460
13:00 - 14:00	4	2559	0.303	5.603	4	2559	0.264	4.880	4	2559	0.567	10.483
14:00 - 15:00	4	2559	0.352	6.507	4	2559	0.381	7.049	4	2559	0.733	13.556
15:00 - 16:00	4	2559	0.293	5.423	4	2559	0.430	7.953	4	2559	0.723	13.376
16:00 - 17:00	4	2559	0.332	6.146	4	2559	0.322	5.965	4	2559	0.654	12.111
17:00 - 18:00	4	2559	0.244	4.519	4	2559	0.674	12.472	4	2559	0.918	16.991
18:00 - 19:00	3	2770	0.108	2.004	3	2770	0.205	3.785	3	2770	0.313	5.789
19:00 - 20:00	2	2955	0.051	0.939	2	2955	0.135	2.504	2	2955	0.186	3.443
20:00 - 21:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
21:00 - 22:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
22:00 - 23:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
23:00 - 24:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
Total Rates:			4.295	79.445			4.268	78.938			8.563	158.383

Parameter summary

Trip rate parameter range selected: 1925 - 3160 (units: sqm)
 Survey date range: 01/01/04 - 16/11/09
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0







TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : M - MIXED PRIVATE/NON-PRIVATE HOUSING

VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	DH DURHAM	1 days
10	WALES	
	CM CARMARTHENSHIRE	1 days
11	SCOTLAND	
	FA FALKIRK	1 days

Filtering Stage 2 selection:

Parameter: Number of dwellings
 Actual Range: 39 to 138 (units:)
 Range Selected by User: 14 to 1874 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/04 to 20/06/12

Selected survey days:

Monday	2 days
Wednesday	3 days
Thursday	1 days

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	2

Selected Location Sub Categories:

Residential Zone	3
Village	2
No Sub Category	1

Filtering Stage 3 selection:

Use Class:

C3	6 days
----	--------

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days

Filtering Stage 3 selection (Cont.):

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	3 days
75,001 to 100,000	2 days

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	3 days

Travel Plan:

No	6 days
----	--------

LIST OF SITES relevant to selection parameters

- | | |
|--|--|
| <p>1 CB-03-M-03 SEMI -DETACHED, WORKINGTON
 MOORCLOSE ROAD
 SALTERBECK
 WORKINGTON
 Edge of Town
 No Sub Category
 Total Number of dwellings: 82
 Survey date: MONDAY 20/06/05</p> | <p>CUMBRIA</p> <p>Survey Type: MANUAL</p> |
| <p>2 CM-03-M-01 HOUSES & FLATS, CARMARTHEN
 COLLEGE ROAD

 CARMARTHEN
 Suburban Area (PPS6 Out of Centre)
 Residential Zone
 Total Number of dwellings: 48
 Survey date: THURSDAY 18/09/08</p> | <p>CARMARTHENSHIRE</p> <p>Survey Type: MANUAL</p> |
| <p>3 DH-03-M-02 SEMI -DET./ DETACHED, DURHAM
 PUDSEY WALK

 DARLINGTON
 Edge of Town
 Residential Zone
 Total Number of dwellings: 39
 Survey date: WEDNESDAY 10/11/10</p> | <p>DURHAM</p> <p>Survey Type: MANUAL</p> |
| <p>4 ES-03-M-02 HOUSES & FLATS, NR UCKFIELD
 A26 CROWBOROUGH RD
 FIVE ASH DOWN VILLAGE
 NEAR UCKFIELD
 Neighbourhood Centre (PPS6 Local Centre)
 Village
 Total Number of dwellings: 44
 Survey date: MONDAY 27/06/11</p> | <p>EAST SUSSEX</p> <p>Survey Type: MANUAL</p> |
| <p>5 FA-03-M-01 SEMI D./ TERRACED, FALKIRK
 FAIRLIE STREET

 FALKIRK
 Edge of Town
 Residential Zone
 Total Number of dwellings: 138
 Survey date: WEDNESDAY 29/06/05</p> | <p>FALKIRK</p> <p>Survey Type: MANUAL</p> |
| <p>6 LC-03-M-03 MIXED HOUSES, NR LANCASTER
 HIGH ROAD
 HALTON
 NEAR LANCASTER
 Neighbourhood Centre (PPS6 Local Centre)
 Village
 Total Number of dwellings: 81
 Survey date: WEDNESDAY 14/06/06</p> | <p>LANCASHIRE</p> <p>Survey Type: MANUAL</p> |

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/NON-PRIVATE HOUSING

VEHICLES

Calculation factor: 1 DWELLS

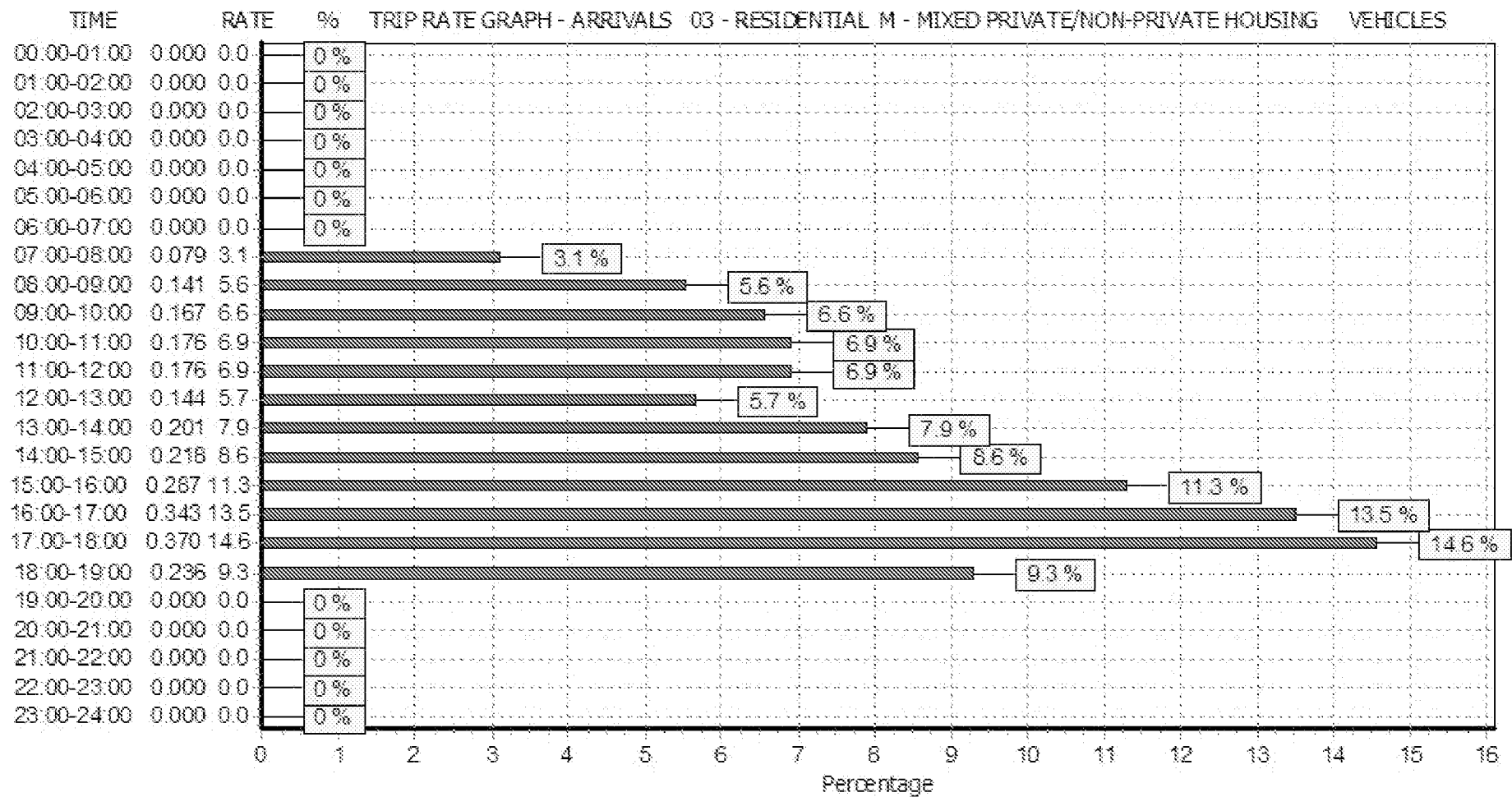
Estimated TRIP rate value per 22 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

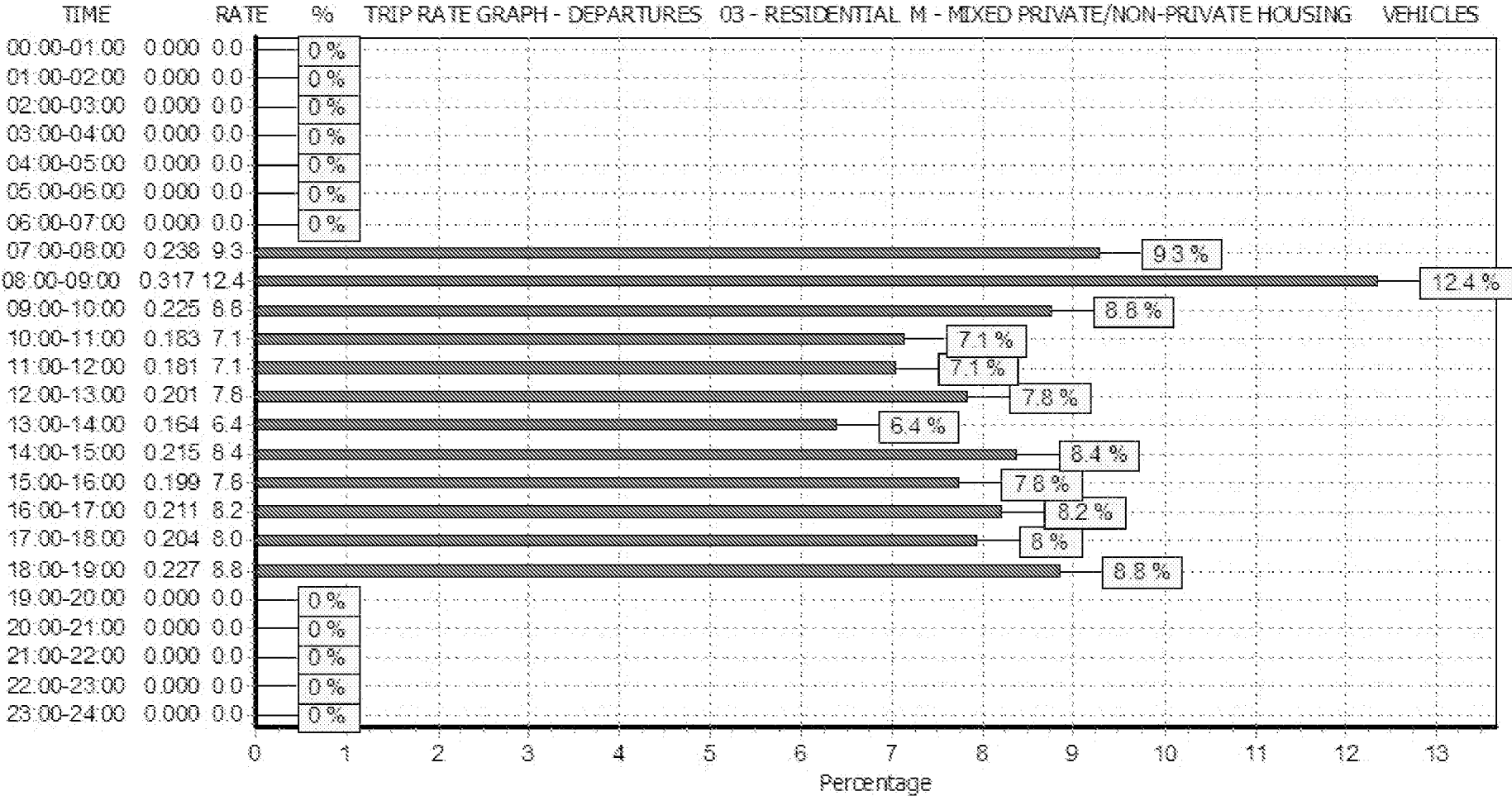
Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
01:00 - 02:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
02:00 - 03:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
03:00 - 04:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
04:00 - 05:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
05:00 - 06:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
06:00 - 07:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
07:00 - 08:00	6	72	0.079	1.731	6	72	0.238	5.245	6	72	0.317	6.976
08:00 - 09:00	6	72	0.141	3.106	6	72	0.317	6.977	6	72	0.458	10.083
09:00 - 10:00	6	72	0.167	3.667	6	72	0.225	4.940	6	72	0.392	8.607
10:00 - 11:00	6	72	0.176	3.870	6	72	0.183	4.023	6	72	0.359	7.893
11:00 - 12:00	6	72	0.176	3.870	6	72	0.181	3.972	6	72	0.357	7.842
12:00 - 13:00	6	72	0.144	3.157	6	72	0.201	4.431	6	72	0.345	7.588
13:00 - 14:00	6	72	0.201	4.431	6	72	0.164	3.616	6	72	0.365	8.047
14:00 - 15:00	6	72	0.218	4.787	6	72	0.215	4.736	6	72	0.433	9.523
15:00 - 16:00	6	72	0.287	6.315	6	72	0.199	4.380	6	72	0.486	10.695
16:00 - 17:00	6	72	0.343	7.537	6	72	0.211	4.634	6	72	0.554	12.171
17:00 - 18:00	6	72	0.370	8.148	6	72	0.204	4.481	6	72	0.574	12.629
18:00 - 19:00	6	72	0.236	5.194	6	72	0.227	4.991	6	72	0.463	10.185
19:00 - 20:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
20:00 - 21:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
21:00 - 22:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
22:00 - 23:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
23:00 - 24:00	0	0	0.000	0.000	0	0	0.000	0.000	0	0	0.000	0.000
Total Rates:			2.538	55.813			2.565	56.426			5.103	112.239

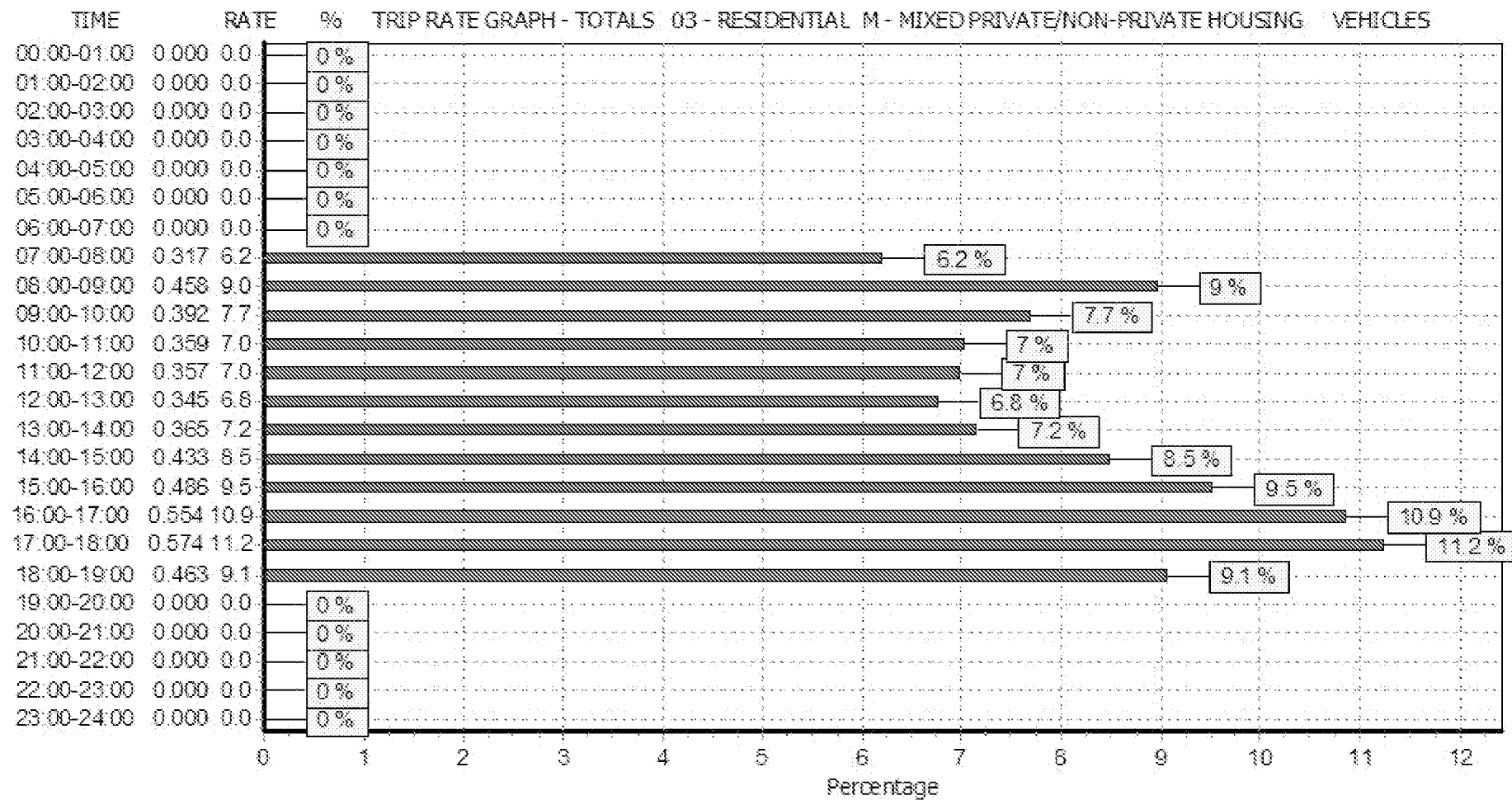
Parameter summary

Trip rate parameter range selected:	39 - 138 (units:)
Survey date date range:	01/01/04 - 20/06/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0



Licence No: 728001







APPENDIX C

Angmering – Water Lane (RGP)

Collision report 01/08/2007 to 31/07/2012

30 August 2012

Sussex Safer Roads
P A R T N E R S H I P

Safer Roads
Safer Communities
Sharing the Responsibility

Produced by Sussex Safer Roads Partnership on behalf of Sussex Police

Data regarding personal injury collisions is recorded by Sussex Police in accordance with the DfT Stats 19 requirements. The data is subsequently used by Sussex Safer Roads Partnership for monitoring and planning. While every effort is made to ensure that this data is accurate, it is subject to change should further information become available.

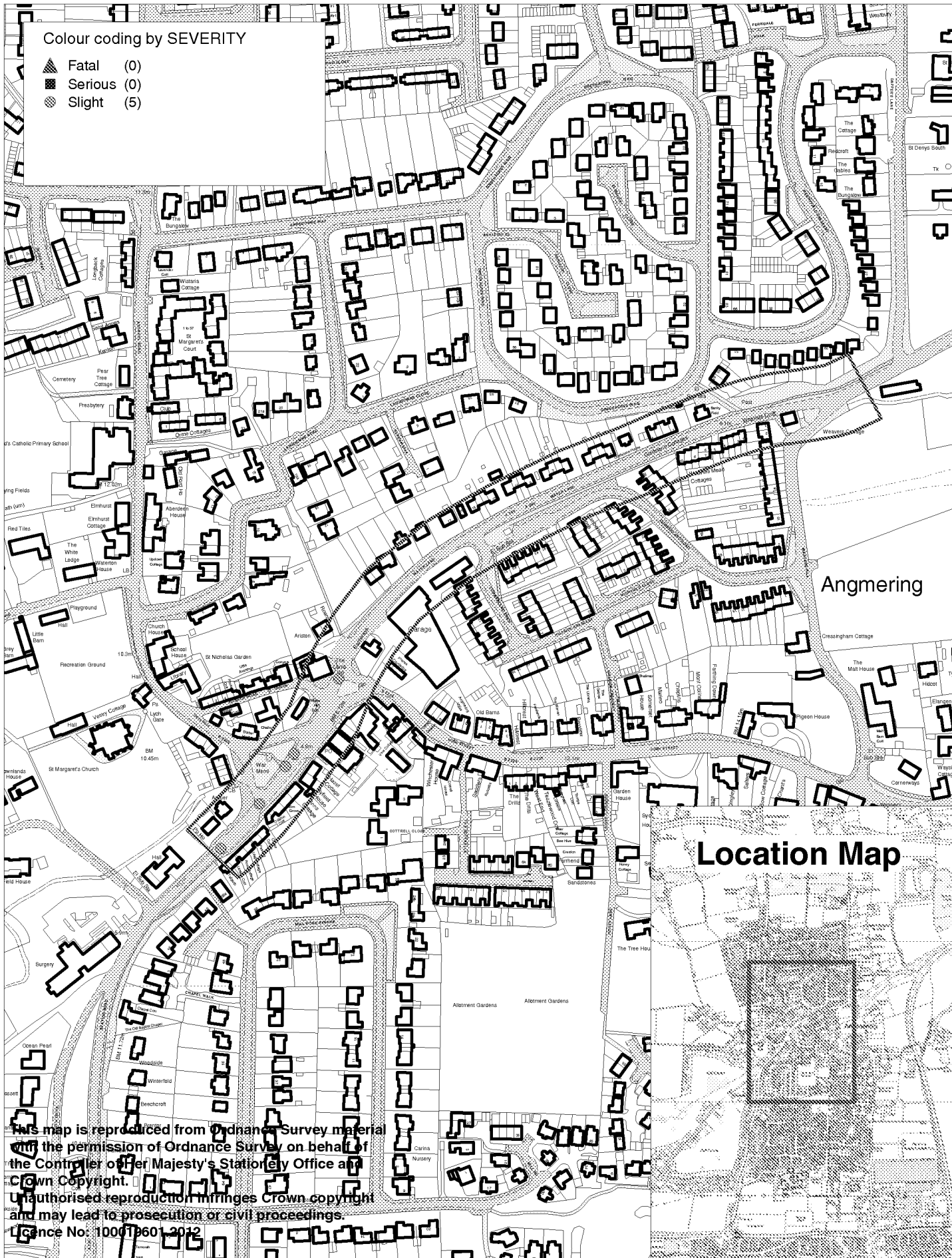
This data may not be fully validated and while every effort is made to ensure its accuracy any statistics provided may not match those published elsewhere.

Sussex Safer Roads Partnership does not hold collision data either where there are no recorded casualties or the incident has not been reported to Sussex Police.

For further information:

web: www.sussexsaferroads.gov.uk

email: data@sussexsaferroads.gov.uk



Sussex Safer Roads PARTNERSHIP	Her Majesty's Office (c) Crown Copyright	
	Angmering - Water Lane	
	Collision Data: 01/08/2007 - 31/07/2012	
	SCALE	1 : 3500
	DATE	30/08/2012
	DRAWING No.	
	DRAWN BY	

Details of Personal Injury Accidents for Period - **01/08/2007** to **31/07/2012** (60) months

Selection:

Selected using Manual Selection

Notes:

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
Grid Ref.	Time									
	DL									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									

0709777 Wednesday C618 WATER LANE, ANGMERING M 21/11/2007 OF B2225 ARUNDEL ROAD Veh 1 Car Starting W to S
C 618 Veh 2 M/C < 50 cc Going ahead N to S Dri M 16 Slight
 1750hrs
 Darkness: street lights present a
E 506,818 Wet/Damp
N 104,312 Raining without high winds
 30 mph

VEHICLE 1 WAS PULLING OUT OF ARUNDEL ROAD FACING EAST. VEHICLE 2 WAS HEADING SOUTH ALONG WATER LANE. VEHICLE 1 PULLED ACROSS THE PATH OF VEHICLE 2, CAUSING THE RIDER OF VEHICLE 2 TO GO OVER THE BONNET OF VEHICLE 1.

0901034 Friday U STATION ROAD 15m North of U 06/02/2009 ARUNDEL ROAD Veh 1 Car Going ahead S to N Ped F 15 Slight
U 1717hrs
 Darkness: street lights present a
E 506,836 Wet/Damp
N 104,338 Snowing without high winds
 30 mph

FEMALE PEDESTRIAN CROSSED ROAD FROM EAST TO WEST, V1 TRAVELLING FROM THE SOUTH TO NORTH RUN OVER CASUALTY 1 RIGHT FOOT, V1 DID NOT STOP AND CARRIED ON NORTH INTO WATER LANE.

1002143 Saturday U WATER LANE of B2225 HIGH 03/04/2010 STREET THE LAMB PUBLIC HOUSE Veh 2 Car Turning right SW to E FSP M 16 Slight
U Veh 1 Car Going ahead SW to NE RSP M 18 Slight
 2105hrs
 Darkness: street lights present a
E 506,873 Wet/Damp
N 104,399 Raining without high winds
 30 mph

V1 AND V2 TRAVELLING NORTH IN WET WEATHER. V2 SLOWED IN ORDER TO TURN RIGHT INTO JUNCTION. V1 BRAKED BUT SKIDDED, FAILING TO STOP, AND COLLIDED WITH REAR OF V2.

1006290 Wednesday C0 WATER LANE 30m South of B2225 22/09/2010 ARUNDEL ROAD ANGMERING Veh 1 Car Going ahead S to N Ped F 11 Slight
C 1549hrs VILLAGE HALL
 Daylight:street lights present
E 506,791 Dry
N 104,281 Fine without high winds
 30 mph

V1 TRAVELLING NORTHBOUND ALONG SINGLE CARRIAGEWAY, WHEN CHILD PEDESTRAIN WITH LEARNING DIFFICULTIES HAS STEPPED OUT INTO THE ROAD IN ATTEMPT TO CROSS, FROM THE WEST SIDE OF THE ROAD TOWARDS EAST SIDE. V1 HAS CLIPPED PEDESTRIAN CAUSING SLIGHT INJURY.

INTERMEDIATE ACCIDENT REPORT

Run on: 30/ 08/2012

Details of Personal Injury Accidents for Period - 01/08/2007 to 31/07/2012 (60) months

Selection:

Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
	Date		Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
1200137	Friday	U STATION ROAD of U ARUNDEL	Veh 2	Car		Stopping	S	to	N	
U	06/01/2012	ROAD	Veh 1	M/C < 50 cc		Going ahead	S	to	N	Dri M 18 Slight
	1400hrs	Daylight:street lights present								
E 506,842	Dry									
N 104,347	Fine without high winds									
	30 mph									

INFORMANT WAS TRAVELLING EASTBOUND ON HIS MOPED AND HAD RIGHT OF WAY THROUGH THE TRAFFIC CALMING ISLANDS. VEHICLE 2 WAS COMING TOWARDS HIM THROUGH THE TRAFFIC CALMING ISLANDS. BOTH PARTIES MISSED EACH OTHER. INFORMANT TOOK OFFENCE AS IT WAS HIS RIGHT OF WAY. HE SPUN AROUND IN THE ROAD AND CHASED VEHICLE 2 (CAR) BACK DOWN THE HILL, SOUNDING HIS HORN. DRIVER OF VEHICLE 2 STOPPED SUDDENLY. DRIVER VEHICLE 1 (MOPED) RAN INTO THE REAR OF THE CAR.



APPENDIX D

Neighbourhood Statistics



Original URL: <http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=3&b=6269800&c=angmering&d=14&e=15&f=26&g=495052&i=1001x1003x1004x1005&l=51&o=1&m=0&r=1&s=1355479944466&enc=1>

Cars or Vans, 2001 (KS17)

Period: Apr01

Area: Angmering (Ward)

Variable	Measure	Angmering	Arun (Non-Metropolitan District)	South East	England
All Households (Households) ¹	Count	2,562	62,733	3,287,489	20,451,427
Households with no cars or vans (Households) ¹	Count	381	13,597	638,772	5,488,386
Households with no cars or vans (Households) ¹	%	14.87	21.67	19.43	26.84
Households with one car or van (Households) ¹	Count	1,142	29,523	1,400,989	8,935,718
Households with one car or van (Households) ¹	%	44.57	47.06	42.62	43.69
Households with two cars or vans (Households) ¹	Count	824	15,759	971,698	4,818,581
Households with two cars or vans (Households) ¹	%	32.16	25.12	29.56	23.56
Households with three cars or vans (Households) ¹	Count	168	2,882	206,914	924,289
Households with three cars or vans (Households) ¹	%	6.56	4.59	6.29	4.52
Households with four or more cars or vans (Households) ¹	Count	47	972	69,116	284,453
Households with four or more cars or vans (Households) ¹	%	1.83	1.55	2.10	1.39
All cars or vans in the area (Vehicles) ¹	Count	3,511	73,997	4,271,483	22,607,629

Last Updated: 01 March 2007
Source: Office for National Statistics

Notes

¹ National Statistics

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Neighbourhood Statistics



Original URL: <http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=3&b=6269800&c=angmering&d=14&e=15&f=275&g=495052&i=1001x1003x1004x1005&l=283&o=1&m=0&r=1&s=1355480356564&enc=1>

Travel to Work, 2001 (KS15)

Period: Apr01

Area: Angmering (Ward)

Variable	Measure	Angmering	Arun (Non-Metropolitan District)	South East	England
All people aged 16-74 in employment (Persons) ¹	Count	2,617	60,400	3,888,756	22,441,498
People who work mainly at or from home (Persons) ¹	Count	299	6,326	386,302	2,055,224
People who work mainly at or from home (Persons) ¹	%	11.43	10.47	9.93	9.16
People aged 16-74 who usually travel to work by: Underground, Metro, Light Rail or Tram (Persons) ¹	Count	0	44	8,949	709,386
People aged 16-74 who usually travel to work by: Underground, Metro, Light Rail or Tram (Persons) ¹	%	0.00	0.07	0.23	3.16
People aged 16-74 who usually travel to work by: Train (Persons) ¹	Count	90	1,975	218,822	950,023
People aged 16-74 who usually travel to work by: Train (Persons) ¹	%	3.44	3.27	5.63	4.23
People aged 16-74 who usually travel to work by: Bus, Mini Bus or Coach (Persons) ¹	Count	38	1,429	169,312	1,685,361
People aged 16-74 who usually travel to work by: Bus, Mini Bus or Coach (Persons) ¹	%	1.45	2.37	4.35	7.51
People aged 16-74 who usually travel to work by: Motorcycle, Scooter or Moped (Persons) ¹	Count	35	744	43,731	249,456
People aged 16-74 who usually travel to work by: Motorcycle, Scooter or Moped (Persons) ¹	%	1.34	1.23	1.12	1.11
People aged 16-74 who usually travel to work by: Driving a Car or Van (Persons) ¹	Count	1,725	36,695	2,301,493	12,324,166
People aged 16-74 who usually travel to work by: Driving a Car or Van (Persons) ¹	%	65.92	60.75	59.18	54.92
People aged 16-74 who usually travel to work by: Passenger in a Car or Van (Persons) ¹	Count	159	3,667	219,850	1,370,685
People aged 16-74 who usually travel to work by: Passenger in a Car or Van (Persons) ¹	%	6.08	6.07	5.65	6.11
People aged 16-74 who travel to work by: Taxi or Minicab (Persons) ¹	Count	9	354	16,032	116,503
People aged 16-74 who travel to work by: Taxi or Minicab (Persons) ¹	%	0.34	0.59	0.41	0.52
People aged 16-74 who usually travel to work by: Bicycle (Persons) ¹	Count	93	3,058	119,315	634,588
People aged 16-74 who usually travel to work by: Bicycle (Persons) ¹	%	3.55	5.06	3.07	2.83
People aged 16-74 who usually travel to work by: On foot (Persons) ¹	Count	153	5,808	385,450	2,241,901

Variable	Measure	Angmering	Arun (Non-Metropolitan District)	South East	England
People aged 16-74 who usually travel to work by: On foot (Persons) ¹	%	5.85	9.62	9.91	9.99
People aged 16-74 who usually travel to work by: Other (Persons) ¹	Count	16	300	19,500	104,205
People aged 16-74 who usually travel to work by: Other (Persons) ¹	%	0.61	0.50	0.50	0.46
Average distance (km) travelled to fixed place of work (Persons) ¹	km	15.11	14.30	14.89	13.31
Public transport users in households: With car or van (Persons) ¹	Count	115	2,741	323,282	2,307,988
Public transport users in households: With car or van (Persons) ¹	%	89.84	79.50	81.41	69.00
Public transport users in households: Without car or van (Persons) ¹	Count	15	675	70,393	1,018,494
Public transport users in households: Without car or van (Persons) ¹	%	11.72	19.58	17.73	30.45

Last Updated: 02 June 2006

Source: Office for National Statistics

Notes

¹ National Statistics

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APPENDIX E

Peverel

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

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

Ward 1	angmering
District	Arun
Ward 2	
District	
Ward 3	
District	
Ward Temp Pro Factor 2009-2026	1.095580
District Temp Pro Factor 2009-2026	1.067644



west
sussex
county
council

Ward Finder

Postcode		Ward	
----------	--	------	--

Note:

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

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

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

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

Garages will count as 1 space when allocating spaces.

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

Report Summary Table

DEVELOPMENT MIX				
Ref.	Unit Type	Unit Tenure	Habitable Rooms (Per Unit)	No. of Units (Total)
A	Flats	Council/Housing Association (not including shared ownership)	2	2
B	Houses	Council/Housing Association (not including shared ownership)	4	3
C	Houses	Council/Housing Association (not including shared ownership)	5	2
D	Houses	Private	4	2
E	Houses	Private	5	5
F	Houses	Private	6	8
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
Q				
R				
S				
Total				22

ALLOCATED PARKING
Spaces (Per Unit)
1
2
2
2
2
2
2