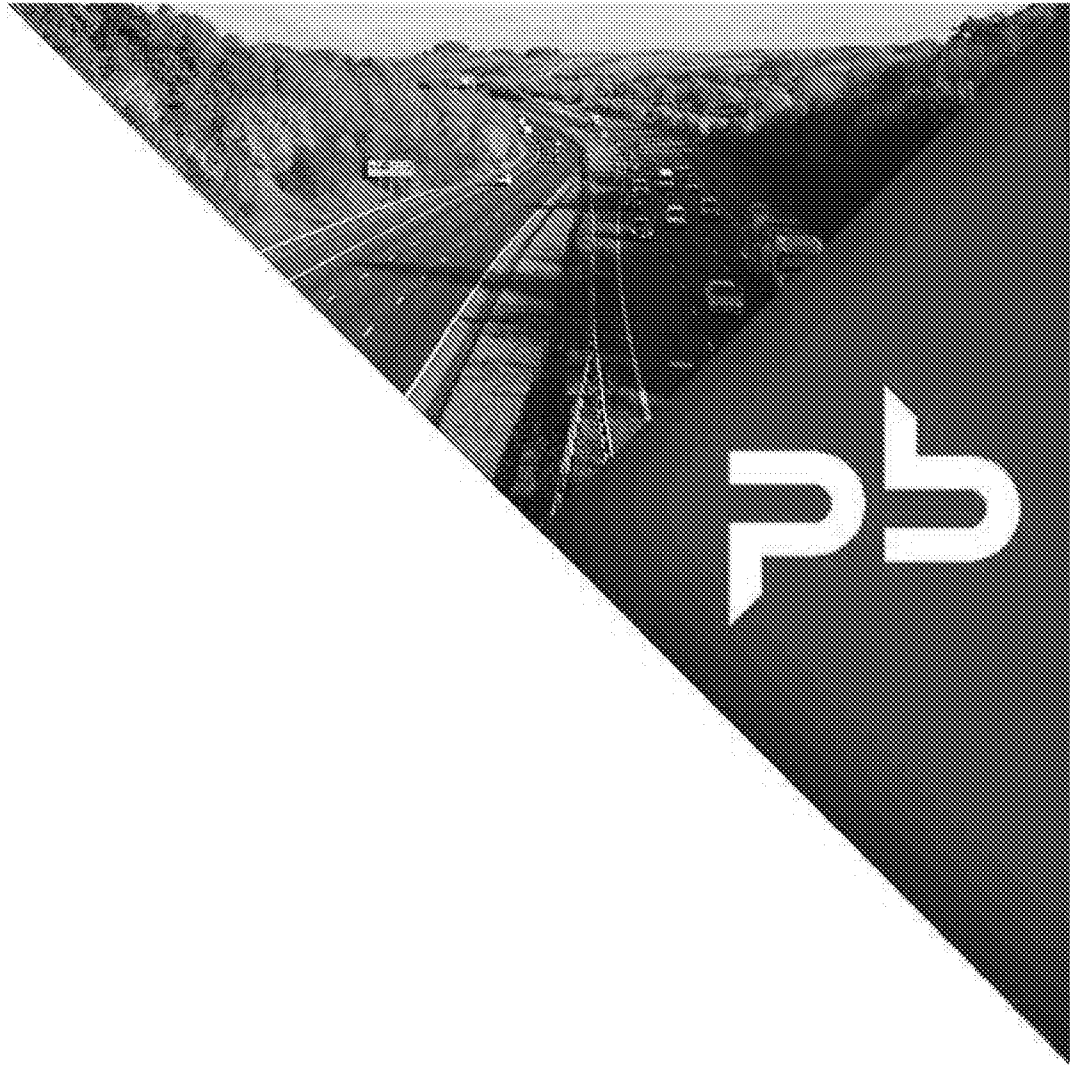




CHANDLERS ACCIDENT REPAIR CENTRE, HIGH STREET, ANGMERING

TRANSPORT STATEMENT

May 2021

McCarthy Stone

MIXED USE DEVELOPMENT
CHANDLERS ACCIDENT REPAIR CENTRE
HIGH STREET, ANGMERING

TRANSPORT STATEMENT

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MIXED USE DEVELOPMENT
CHANLDERS ACCIDENT REPAIR CENTRE
HIGH STREET, ANGMERING

TRANSPORT STATEMENT

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1. INTRODUCTION

- 1.1 This Transport Statement (TS) has been prepared by Paul Basham Associates on behalf of McCarthy Stone in support of a proposed development comprising c. 33 retirement living dwellings and a Convenience Store. The site is located adjacent to the High Street and Water Lane within the village centre of Angmering, West Sussex. Its location is shown in **Figure 1** and the current site layout is included at **Appendix A**.

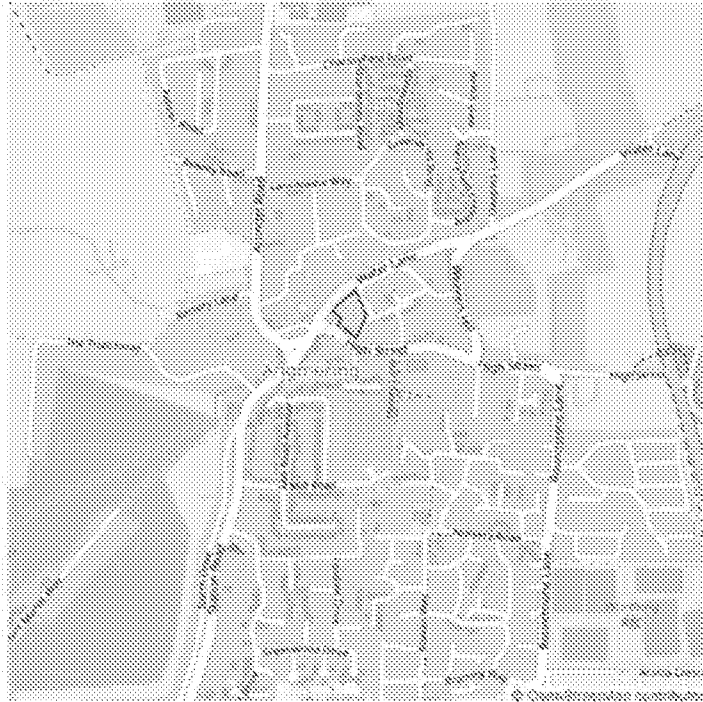


Figure 1: Site Location

SITE PLANNING HISTORY

- 1.2 The site has been vacant since c. 2017 when the previous Car Sales Dealership relocated to new premises. Since then, the site has been subject to a planning application in 2019 which was seeking to obtain planning permission to construct 19 residential dwellings, a local convenience store and community building, together with associated landscaping and parking. This application determined that suitable access could be made and that the impact of the trips associated with the proposals could be accommodated by the current highway network. Whilst the principle for redevelopment was considered positively, the planning application was ultimately refused as it failed to provide sufficient car parking and affordable housing provision.

CONSULTATION

- 1.3 This TS follows a scoping study which was submitted to West Sussex County Council (WSCC) in its role as the Local Highway Authority. WSCC's response to the scoping study is included within **Appendix B**. The following is a summary of their key comments:
- Request that the access onto High Street be closed for vehicular trips,
 - A crossover be provided to the retirement living parking area now it is no longer a through route; and
 - Reduced parking provision acceptable subject to providing acceptable evidence (either research or parking accumulation study at similar sites).
- 1.4 The contents of this Transport Statement have reviewed the local accessibility within **Section 2**, details of the proposed development in **Section 3** and an assessment of the net trip generation impact of the proposals within **Section 4**. Conclusions are made within **Section 5**.



2. EXISTING CONDITIONS AND SITE ACCESSIBILITY

SITE CONTEXT

- 2.1 Angmering is located on the northern fringe of the Littlehampton/Goring-by-Sea/Worthing urban area, within Arun District Council (ADC). The site is located within the centre of Angmering and comprises an area of approximately 1 acre.
- 2.2 The site is flanked to the north west by Water Lane, by the High Street to the south and residential development to the east. The location of the site is shown on **Figure 1** above.

EXISTING HIGHWAY CONDITIONS

Water Lane

- 2.3 Water Lane aligns on a south west to north east axis, connecting with the A280 to the north/east and the A259 to the south. Water Lane acts as a local distributor road within Angmering, providing connections to residential areas to the north and south. Within the vicinity of the site it measures c. 7.3m in width, is street-lit, and located within a 20mph zone. Adjacent to both sides of the carriageway are footways measuring c. 1.5m in width.

High Street

- 2.4 The High Street abuts the southern boundary of the site and meets Water Lane in the form of a priority junction to the immediate south west of the site. The High Street provides access to the village centre with a number of local shops and facilities. The High Street is also located within the 20mph zone, and within the vicinity of the site has a footway flanking the southern side of the carriageway.

PEDESTRIAN NETWORK

- 2.5 As mentioned above there are footways present along Water Lane on both sides of the carriageway which measures approximately 1-1.5m in width and these can be used to access key local facilities to the west on the High Street. To the west of the promenade of shops along High Street/Water Lane there is a Pelican crossing which assists with pedestrians crossing Station Road.
- 2.6 In addition to this formal pedestrian infrastructure there are a number of Public Rights of Way within the proximity of the site. A PRow of particular relevance to the site is Footpath 2150-1 which routes north from Water Lane opposite the junction with High Street. This route dissects residential dwellings providing a more direct route from Lansdown Road and associated estate to the north to the site. Although a number of these will not be of particular interest to the future residents of the site, the scale of footpaths dissecting the conventional road network will aid the permeability of the site with regards to the convenience store, therefore ensuring that local residents can easily access it by foot, often in a way which is more direct than by car.



CYCLE NETWORK

- 2.7 Within the vicinity of the site there is minimal cycling infrastructure, with most cycling accommodated on carriageway given the residential nature of the surrounding streets. To the south of the site there is a shared footway cycle path which routes south towards Angmering Railway Station. In addition, the South Coast Cycle Route is located approximately 1.6km to the south of the site and routes east-west through Littlehampton and Worthing often via coast side cycle paths.

LOCAL FACILITIES

- 2.8 The site is located just 100m from Angmering village centre which provides access to a range of facilities and amenities. A summary of the facilities within Angmering village centre and the surrounding area and their approximate distance and travel time are demonstrated in **Table 1**.

Amenity	Location	Distance	Walking Time	Cycle Time
Pub	The Lamb at Angmering	50m	1 min	< 1 min
Convenience Store	Co-Operative Food	100m	1 min	< 1 min
Post Office	Angmering Post Office	100m	1 min	< 1 min
Bus Stop	Village Green, Water Lane	150m	2 mins	1 min
Library	Angmering Library	250m	3 mins	1 min
Village Hall	Angmering Village Hall	250m	3 mins	1 min
Pharmacy	Lloyds Pharmacy	300m	4 mins	1 min
Doctors	Angmering Medical Centre	300m	4 mins	1 min
Train Station	Angmering Railway Station	1600m	19 mins	5 mins
Supermarket	Sainsbury's	2100m	25 mins	7 mins

Table 1: Summary of Local Facilities

- 2.9 **Table 1** demonstrates that the proposed development has access to a range of local facilities within the vicinity of the proposed development, which can be accessed on foot, by cycle, or by public transport.

BUS NETWORK

- 2.10 The site has access to a range of public transport options with the nearest bus stops located at the Village Green on Water Lane approximately 150m to the south of the site. These bus stops are served by bus service 9 which provides an hourly service Monday-Friday, with a reduced service on Saturdays, between Arundel and Shoreham-by-Sea. **Table 2** provides a summary of the service information for 9 bus service.



Service	Operator	Bus Stop	Route	Frequency		
				Monday – Friday	Saturday	Sunday
9	Stagecoach	Village Green, Water Lane	Shoreham – Angmering – Arundel	Every 60 minutes First Bus: 0708 Last Bus: 1908	Every 60 minutes First Bus: 0813 Last Bus: 1908	N/A

Table 2: Summary of Local Bus Services

- 2.11 The close proximity of these bus stops to the site and the regularity of the bus routes servicing these bus stops ensures bus travel is an attractive modal choice for residents and visitors to the site to utilise.

RAIL NETWORK

- 2.12 There is also a rail station within proximity of the site, with Angmering Station located 1500m to the south of the site. Angmering Station can be reached on foot via a series of pedestrian footways, or alternatively can be reached via bus Service 9 which stops at the station. Angmering Station provides several regular, frequent services and can be used to reach destinations including Southampton Central, Brighton and London Victoria Stations.

PERSONAL INJURY ACCIDENT (PIA) DATA

- 2.13 The CrashMap online database has been interrogated to determine whether any road traffic collisions resulting in personal injury have occurred within the vicinity of the site along Water Lane or the High Street over the past 5 years.
- 2.14 The database shows that there have been two collisions within the vicinity of the access onto Water Lane. These collisions resulted in two slight injuries, one of which was a pedestrian and the other a cyclist. Two further collisions occurred west of the site at the junction between the High Street and Water Lane, resulting in one slight and one serious injury.
- 2.15 The frequency of collisions over the most recent 5 year period does not suggest a specific highway safety issue which requires rectification or physical improvement. There is therefore no specific location or factor that highlights a prevailing highway safety issue which requires more detailed consideration.



3. PROPOSED DEVELOPMENT

- 3.1 The proposed development comprises 33 retirement living flats and a convenience store of 4080sqft (380 sqm) GFA with associated car parking, in place of an existing car sales dealership.

ACCESS ARRANGEMENTS

Vehicular Access

- 3.2 Vehicular access is to be split between the two proposed land uses. Vehicular access for the majority of residents will be via the formalising of the existing access junction from Water Lane to the west side of the site's norther frontage. This arrangement will take the form of a vehicle crossover with an internal access road serving the car parking area as appropriate. This access arrangement, together with the requisite visibility splays, are shown on drawing 034.0135.001 which is included at **Appendix C**. This arrangement was discussed with WSCC Highways as part of the pre-app scoping process and they agreed to the approach, with its recommendation that the access onto High Street being closed off to vehicles and the access onto Water Lane being converted into a vehicle crossover rather than a typical bellmouth junction which has been accommodated as part of the scheme.
- 3.3 Access for the Convenience Store will be via a second access junction which caters for all movements to the north west of the site onto Water Lane. This junction will provide access to the car parking area for the convenience store, as well as a small proportion of the parking for the retirement living dwellings (segregated from the convenience store parking area via a gate. The arrangement of this junction is also shown on drawing 034.0135.001 shown at **Appendix C**.
- 3.4 A Stage 1 Road Safety Audit has been undertaken on the Access Arrangements drawing. This RSA and the Designers Response are included within **Appendix D**.

Pedestrian Access

- 3.5 Pedestrian access to the site will be from Water Lane to the north, with an internal footway link routing through the site providing connection to the retirement living flats. To the south west the existing vehicular access onto High Street will be closed up for vehicular traffic and retained as a pedestrian route for residents. In addition, tactile paving and dropped kerbs will be installed across the site bellmouth access along the existing footway on Water Lane improving the connectivity of the local pedestrian network.



- 3.6 In addition, the existing footway along Water Lane will be widened to a width of approximately 1.8m west of the site and a minimum width of 1.65m within the vicinity of 'Eachways' to the immediate west of the site. Dropped kerbs and tactile paving will also be installed at this location to provide a connection across Water Lane to the footway along the northern side of the carriageway connecting into the public footpath 2150-1 which routes north. These pedestrian infrastructure improvements will aid connectivity towards key local facilities on the High Street. This widening of the footway is achieved through the reduction of road width along Water Lane from the current 6m to 5.5m. This will not only allow the footway to be widened and pedestrian connectivity to be improved but also allow for informal traffic calming in order to reduce speeds which were previously recorded as above the stated 20mph speed limit (at 26mph). This was presented to WSCC highways and received favourably through the pre-application process.

CAR PARKING

Retirement Living

- 3.7 It is fully recognised that parking provision in a new development can influence people's travel choices. Whilst providing too much parking can encourage people to drive rather than use other forms of transport, providing too little could lead to indiscriminate parking and highway safety concerns.
- 3.8 Arun District Council's (ADC) car parking standards are set out in their Parking Standards SPD published in January 2020. Within this Arun do not set out specific parking requirements for retirement living but do set out standards for private dwellings which vary depending on which Parking Behaviour Zone (PBZ) the site lies within. The site, within the settlement of Angmering, falls within PBZ 2 and is required to provide 2 spaces per 1-bedroom and 2-bedroom dwelling, both of which are figures taken from West Sussex's guidance that have then been rounded up. It is, therefore, pertinent to note that WSCC state within their guidance that sites located within close proximity to transport hubs could use a different PBZ if it is more appropriate to the development. They also state more generally that a 10% margin within any PBZ is considered reasonable, subject to appropriate justification.

McCarthy Stone Independent Research

- 3.9 The above parking standards are for a typical residential development. The lower quantum of parking provision required for retirement units has been well documented and evidenced by providers of retirement living developments. McCarthy Stone have periodically undertaken surveys of their Retirement Living developments to determine the age, car ownership and therefore parking requirements of residents.



- 3.10 The latest research on transport impact and parking provision was published in December 2016 by Dr Allan Burns whilst Dr Alan Burns has also produced a car parking study on the proposed development site in March 2021. The study used questionnaires to collect information on the occupancy, age, car ownership, driving licences (including when driving licences are given up) for residents in eight McCarthy Stone retirement living developments. This research is reproduced within **Appendix E**.
- 3.11 The research concluded that that an average of 0.474 spaces should be provided per apartment, however given the higher car ownership in 2 bedroom apartments, consideration should be given to increasing car parking provision where the proportion of two bedroom units is significantly above the 33% level.
- 3.12 The wider research also recommended that provision of visitor parking should be considered on a case by case basis. On-site provision should normally be made for visitor parking at the rate of 0.1 spaces per apartment unless it can be demonstrated that there is sufficient off-site provision on nearby roads or in nearby public car parks. A minimum of 1 disabled visitor parking space should also be provided within the development. The above provision would be appropriate for developments of approximately 50 apartments.
- 3.13 A summary of the proposed and required parking provision as set out by ADC, and McCarthy Stone's research is summarised in **Table 3**.

Unit Type	No. of Units	No. of bedrooms	Arun District Council's Residential Parking Standards		McCarthy & Stone Parking Standards		Proposed Parking Provision
			Standard	Requirement	Standard	Requirement	
Flat	20	1	2 spaces per dwelling	40	0.474 spaces per dwelling	9	26 spaces
Flat	13	2	2 spaces per dwelling	26	0.474 spaces per dwelling	6	
Visitor			20% of provision	13	0.1 spaces per dwelling	3	

Table 3: Summary of the Proposed Parking Provision



- 3.14 The proposed parking provision of 26 spaces in total, and represents the equivalent of 0.66 spaces per dwelling. This is considered an acceptable level of provision on the basis that it exceeds the average parking demand of 0.474 spaces per dwelling for developments of this type. Whilst it represents a reduction from Arun District Council and WSCC's residential parking standards, it is apparent that the proposed development does not share the characteristics of a typical residential development. This approach has been agreed with West Sussex County Council as part of the pre-application scoping and therefore the amount of car parking proposed is deemed appropriate. This approach has been agreed with WSCC through the pre-application scoping process.

Convenience Store Car Parking

- 3.15 For the convenience store the parking requirement has been determined using land use category A1 within Arun District Council's parking standards. The parking provision for the Convenience Food Store provides the requisite parking provision as follows:

Unit Type	GFA	A1 Shops		Proposed Parking Provision
		Standard	Requirement	
Retail	380	1 space per 14 sqm	27	12 spaces

Table 4: Parking Standard and Provision - Convenience Store

- 3.16 As set out in **Table 4**, Arun District Council require 1 space per 14sqm of assumed GFA for an unspecific A1 'Shop' land use. They do not specify a parking standard for convenience stores. The nature of convenience stores mean that a high proportion of trips are made on foot from local trips and that any vehicular trips are short 'basket shopping' journeys and therefore car parking demand has a quick turnover. As a result, despite the under provision against the standards the proposed level of provision is deemed to be acceptable. This level of provision is supported through a comparison to other McCarthy Stone developments which comprise a similar mixture of retirement living dwellings and convenience store. This supporting comparison is made in **Table 5**.

Location	Size of Store	Number of Spaces	Spaces per Sqm
Leigh Road, Eastleigh	327	16	1 per 20 sqm
Hillier Garden Centre, Romsey	363	14	1 per 26 sqm
New Road, Tadley	391	15	1 per 26sqm
Pipers Way, Swindon	460	10	1 per 46 sqm
Average	385	14	1 per 27sqm

Table 5: Convenience Store Parking Comparison



- 3.17 Based on the above comparison it is considered the proposed provision of 12 spaces (which equates to 1 space per 32 sqm) is considered acceptable given the location of the site, being closely located to the existing village centre where car parking is already present and is also situated within a residential area meaning large proportion of trips will be made on foot. It is also considered that in the event that the proposed parking provision on site is not sufficient, there is also a precedent set for on-street parking along Water Lane within the vicinity of the site (as part of the local high street setting) and therefore any additional parking demand can be accommodated on-street as part of a linked shopping trip without any highway issues arising.

CYCLE PARKING

- 3.18 Cycle parking is also set out within Arun District Council's Parking Standards SPD (2020) and stipulates that for A1 (Shop) category 1 space per 100sqm is required for staff and 1 space per 100sqm for staff. Therefore, based on a total GFA of 380sqm the convenience store is required to provide 8 cycle parking spaces. For the McCarthy Stone element of the development, a combined mobility buggy/cycle store is provided on the ground floor.

REFUSE AND SERVICING ARRANGEMENTS

- 3.19 Refuse collection will take place on site with a refuse vehicle turning into the convenience store car park, turning and reversing towards the gated residents parking area to the south. A bin store is located within the building at this point, therefore the carry distances by operatives will be acceptable according to Manual for Streets guidance. Swept path analysis has been undertaken to demonstrate the suitability of a refuse vehicle making this manoeuvre and this is shown within drawing 034.0135.002 in **Appendix F**.
- 3.20 Deliveries and servicing for the convenience store is proposed via the Goods Delivery bay to the front north of the site on Water Lane. The general arrangement of which is shown on Drawing 034.0135.003 included at **Appendix G** the principles of which were agreed with WSCC through the pre-app scoping process. This delivery bay has been designed to accommodate vehicles up to 12m in length following discussions with possible operators, so will not block the access during delivery periods, and is located in a location which minimizes its impact on visibility during the infrequent delivery periods. This delivery bay will be subject to a Traffic Regulation Order (TRO) to ensure that it remains clear for delivery vehicles ('LOADING ONLY') and not used as customer or staff car parking. This loading bay was also subject to the Road Safety Audit detailed within **Appendix D**, which raised no safety issues with the proposals.



4. TRIP GENERATION

EXISTING OPERATION

- 4.1 The site previously operated a Car Dealership and could therefore generate significant vehicular trip generation in its present format. In order to determine the likely current trip generation, the TRICS Database version 7.7.3 has been interrogated. For the purposes of this assessment sites with a GFA of less than 3,000sqm were selected.
- 4.2 Peak hour and daily (12 hour) trip generation has been estimated for the existing site based on a GFA of 1,750sqm. Vehicular trip rates and vehicular trip generation is set out in **Table 6**. The TRICS data is reproduced at **Appendix H**.

Time Period	Arrivals	Departures	Total
Trip Rates per 100sqm GFA – Car Showroom			
AM Peak: 08:00-09:00	1.179	0.35	1.529
PM Peak: 17:00-18:00	0.460	0.866	1.326
12 Hour: 07:00-19:00	9.455	9.512	18.967
Trip Generation - Existing Car Showroom (1,750sqm)			
AM Peak: 08:00-09:00	21	6	27
PM Peak: 17:00-18:00	8	15	23
12 Hour: 07:00-19:00	165	166	332

Table 6: Vehicular Trip Generation - Car Showroom

PROPOSED OPERATION

Retirement Living

- 4.3 McCarthy Stone developments are designed to meet the needs of elderly persons who live a relatively independent life with only an element of support, and therefore differ from traditional retirement housing in terms of staff numbers and care requirements.
- 4.4 To calculate the trips generated by the proposed site the TRICS Database version 7.7.3 has been interrogated. Sites of between 20-80 dwellings have been included. Vehicular trip rates and generation are set out in **Table 7** and the TRICS Data is reproduced at **Appendix I**.

Time Period	Arrivals	Departures	Total
Trip Rates Per Dwelling – Retirement Flats			
AM Peak: 08:00-09:00	0.067	0.084	0.151
PM Peak: 17:00-18:00	0.074	0.061	0.135
12 Hour: 07:00-19:00	1.015	1.020	2.035
Trip Generation - 33 Retirement Living Flats			
AM Peak: 08:00-09:00	2	3	5
PM Peak: 17:00-18:00	2	2	4
12 Hour: 07:00-19:00	33	34	67

Table 7: Vehicular Trip Generation – Retirement Flats (TRICS)

- 4.5 In addition to the TRICS Database, McCarthy Stone have produced their own database of surveyed existing sites which they use to inform both the trips generated by and the likely level of parking demand that their developments produce. **Table 8** sets out the trip generation generated by the current proposals. The independent trip generation research undertaken by McCarthy Stone is included within Appendix J.

Time Period	Arrivals	Departures	Total
Trip Rates Per Dwelling – Retirement Flats			
AM Peak: 08:00-09:00	0.030	0.030	0.060
PM Peak: 17:00-18:00	0.041	0.037	0.078
12 Hour: 07:00-19:00	0.763	0.778	1.541
Trip Generation – 33 Retirement Living Flats			
AM Peak: 08:00-09:00	1	1	2
PM Peak: 17:00-18:00	1	1	3
12 Hour: 07:00-19:00	25	26	51

Table 8: Vehicular Trip Generation – Retirement Flats (McCarthy Stone)

- Convenience Store
- 4.6 In addition to the proposed retirement living the proposals also allow for the provision of a convenience store on the ground floor of the building, with a GFA totalling approximately 380sqm.
- 4.7 Local convenience stores are not usually large trip generators in their own right, instead they experience a large number of linked or diverted trips already which would have otherwise been on the local highway network, either travelling to/from a place of work or already travelling to a local store but now route to this store as it is more conveniently located. Despite this, in order to present a worst-case comparison of the existing permitted development versus the proposed development, the TRICS database version 7.7.3 has been interrogated to determine the likely vehicular trip generation of the proposed Tesco.
- 4.8 Sites were selected in accordance with the following parameters:
- ‘Retail’ use class; ‘Convenience Store’ sub-class;
 - Sites in England (Excluding Greater London);
 - <1000m² GFA;
 - Weekday Surveys only;
 - ‘Suburban Area’ locations only;
 - In locations where the population within 1 mile is less than 25,000.
- 4.9 The resulting TRICS outputs are summarised within **Table 9** and the full outputs included within Appendix K.

Time Period	Arrivals	Departures	Total
Trip Rates Per 100sqm – Convenience Store			
AM Peak: 08:00-09:00	8.145	7.432	15.577
PM Peak: 17:00-18:00	10.107	8.621	18.728
12 Hour: 07:00-19:00	85.671	81.748	167.419
Trip Generation – 380 sqm Convenience Store			
AM Peak: 08:00-09:00	31	28	59
PM Peak: 17:00-18:00	38	33	71
12 Hour: 07:00-19:00	326	311	636

Table 9: Vehicular Trip Generation – 380 sqm Convenience Store

- 4.10 It is pertinent to note that, as mentioned above, the trips summarised in **Table 9** represent arrivals and departures from the site, and not new trips onto the local highway network. A large number of these trips would have been undertaken without the proposed convenience store but have now been diverted to this site rather than other local convenience stores in the area or were previously passing trips that now call into the convenience store when passing. Therefore, the total trip generation shown is not necessarily new trips to the network, but new trips to this location.

NET IMPACT

- 4.11 Based on the above trip generation figures, utilising the TRICS trip generation figures for the proposed retirement living at this stage in order to present the most robust assessment, the development results in the following net change in vehicular trip generation shown in **Table 10**.

Time Period	AM Peak	PM Peak	12 Hour
Existing Operation			
Car Showroom	27	23	332
Proposed Development			
Retirement Flats	5	4	67
Convenience Store	59	71	636
Net Impact			
Additional Trips	37	52	371

Table 10: Development Net Impact

- 4.12 Based on the worst-case figures derived from the TRICS database, the proposed development will result in an increase of 37 trips in the AM and 52 trips in the PM compared to the existing uses. Over the course of a day, this manifests as an increase of 371 trips to/from the site. The majority of these trips are associated with the proposed convenience store and as mentioned above, a large proportion of these trips will be either diverted or passing trips. Therefore, the actual impact on the local highway network will be substantially lower. It is on this basis that the proposals will have a negligible impact on the local highway network from a capacity or highway safety perspective.
- 4.13 WSCC have also already considered the impact of a convenience store and residential development on this site, and found the traffic impact acceptable through the 2019 application.

5. SUMMARY AND CONCLUSIONS

- 5.1 This Transport Statement (TS) has been prepared by Paul Basham Associates on behalf of McCarthy & Stone to support a planning application for a retirement living development comprising 33 dwellings and a convenience store at Chandlers Accident Repair Centre, High Street, Angmering.
- 5.2 The site has access to a good level of walking and cycling routes and public transport provision and is located within close proximity to a variety of local facilities within Angmering, limiting the need for residents to rely on car travel.
- 5.3 Safe and suitable access is achievable for all modes, with two vehicular accesses provided, one for the convenience store and a vehicle crossover for the residents car parking area, as well as a dedicated pedestrian access from the site onto High Street. The geometries of the access points are such that all vehicles likely to use the site can manoeuvre in and out of the access points safely, and suitable visibility is achievable from the access. There is no material accident history in the area and it is therefore considered that the access proposals are appropriate to serve the development.
- 5.4 Parking provision has been informed by research into existing McCarthy Stone developments. This identifies the need for 0.45 spaces per apartment for residents, and a further 0.1 spaces per apartment for staff/visitors. Applying this to the 33 unit development results in a requirement for 18 spaces. 26 spaces have been provided, which will ensure that no overspill parking occurs.
- 5.5 The car parking provision for the convenience store has been determined on similar principals which have been justified through a comparison of other McCarthy Stone developments, whilst also recognising the highly accessible location of the site. The subsequent parking provision for the convenience store is 12 spaces with it noted that a high proportion of trips to the convenience store will be made on foot due to it being a facility for locals within the surrounding area rather than a destination in its own right and that any additional car parking demand can be accommodated via on street parking on Water Lane adjacent to the site. The above approaches have been agreed to in principle by WSCC and the proposed level of car parking is considered to be appropriate for the development.



- 5.6 The proposed development will result in an increase of 37 trips in the AM and 52 trips in the PM compared to the existing uses. The majority of these trips are associated with the proposed convenience store and a large proportion of these trips will be either diverted or passing trips. Therefore, the actual impact on the local highway network will be substantially lower. It is on this basis that the proposals will have a negligible impact on the local highway network from a capacity of highway safety perspective, which is a position that WSCC highways reached with the previous 2019 application on this site.
- 5.7 The proposed development accords with national and local policy, in that it will provide a sustainable development. It will have good access to existing facilities without the need for car travel, thus encouraging travel by sustainable modes. There is therefore no reason in transport terms why the proposed development should not be permitted.



Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix A

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



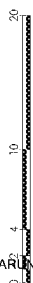
GENERAL NOTES:
This drawing is the copyright of KSA Architects Ltd and may not be copied, altered or reproduced in any form or passed on to a third party without written consent, if in doubt ASK.
The drawing reflects current standards and legislation agreed for this project at the time of original issue.

3.75 sq. m.	2,046 sq. ft.
9 x 11 bed	4 x 2 bed
11 x 11 bed	9 x 2 bed

Parking

Parking
 400 ft. - 26 Parking Spaces
 Entryways - 2 Parking Spaces
 Retail Areas - 12 Spaces

Lorry loading bay to have set delivery times with public parking capability outside of these hours?



The people
orientated
placemakers.

...tient

McCARTHY STONE

Former Chandler's Accident Repair Center
High Street
Angmering
BN16 4DR

Proposed Site Plan

PLANNING ISSUE 1:200 @ A1

neuroinfect. Syst.	Revised	By
50 - 2729 - 03 - AC - 102	B	EG

 KSA Archimeta Ltd. Concept House
 25 Kingston Crescent North End
 Phone: 013 9267 2615
 Email: info@ksaarchimeta.co.uk

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix B

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



**WEST SUSSEX COUNTY COUNCIL
PRE APPLICATION CONSULTATION**

TO:	Organisation:Paul <u>Basham</u> FAO:Tom Peters
FROM:	WSCC - Highways Authority
DATE:	15 March 2021
LOCATION:	Chandlers Accident Repair Centre, High Street, <u>Angmering</u> , <u>BN16 4EH</u>
SUBJECT:	Internal Reference: PRE-25-21 The proposed development comprises 33 retirement dwellings and a Convenience Store. The site is located adjacent to the High Street and Water Lane within the village centre of Angmering, West Sussex.
DATE OF SITE VISIT:	<u>n/a</u>
RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	n/a

Comments are made against the following,

Pre-App Scoping Note (reference 034.0135/PSN/1)
Site Plan (drawing no. So-2729-02-AC-200 revision A)

Where possible comments are made against the numbered point within the Pre App Scoping Note.

1.3- The previous proposal (A/45/19) for this site is noted. However, this was refused by the Local Planning Authority and as such the development proposed through A/45/19 has no particular weight. Comments are made on the merits of the development as currently proposed.

3.2 – The site plan submitted for A/45/19 appears to show only a pedestrian access onto the High Street. The WSCC preference would be for vehicular access on to Water Lane only and for the High Street access to either be closed or retained only as a link for pedestrians. There seems to be very limited purpose in retaining the High Street access for vehicular access. Also, if the access onto Water Lane referred to within this point is only to serve car parking, it would be suggested that the access is shown as a crossover (i.e. without kerb radii).

3.6 – The Arun DC Parking Standards are those applicable in this location. It's therefore inappropriate to refer to a combination of both the ADC and WSCC Car Parking Guidance.

3.7 – Subject to point 3.8 being satisfactorily addressed, WSCC are satisfied with the overall approach to car parking (i.e. using surveys of other comparable developments). I would strongly suggest that an in-principle agreement is also sought from Arun DC towards this.

3.8 – Please could the research and underlying evidence used towards calculating the car parking provision be provided. Based on the limited information provided, it's not apparent what surveys have been undertaken or whether the survey sites are in any way comparable to the location of the proposed development.

3.9 – As per 3.8 above, please could the underlying evidence be provided.

3.10 – As already stated, the approach to car parking must also be agreed with Arun DC.

3.12. – There's no general disagreement with the comments made in relation to how the retail store will operate. However, the parking proposed is significantly below the standard. The acceptability of this would need to be confirmed with Arun DC. As an aside, surveys of the other comparable sites referred could demonstrate that the turnover of spaces is such that parking would be adequate. It's therefore suggested that a parking accumulation survey is undertaken of another site to support the reduced parking provision.

3.15 – It would be beneficial to understand the servicing arrangements and consequently how often visibility would be obstructed by servicing vehicles. Whilst it has to be assumed that the TRO will be effective in preventing indiscriminate parking, it must be noted that the location of the loading bay is very convenient for customers especially given that on-site parking provision is below the ADC standard, the retail car park is quite compact in terms of ease of manoeuvring, and the servicing layby is directly in front of the store entrance.

4 – The general assumptions and overall conclusions within section 4 are noted and accepted. It is recognised that the proposed retail unit will intensify the use of the site but will only provide an alternate destination to trips already on the highway network.

Other Matters

A Stage One Road Safety Audit will be required for this proposal in accordance with current WSCC policy.

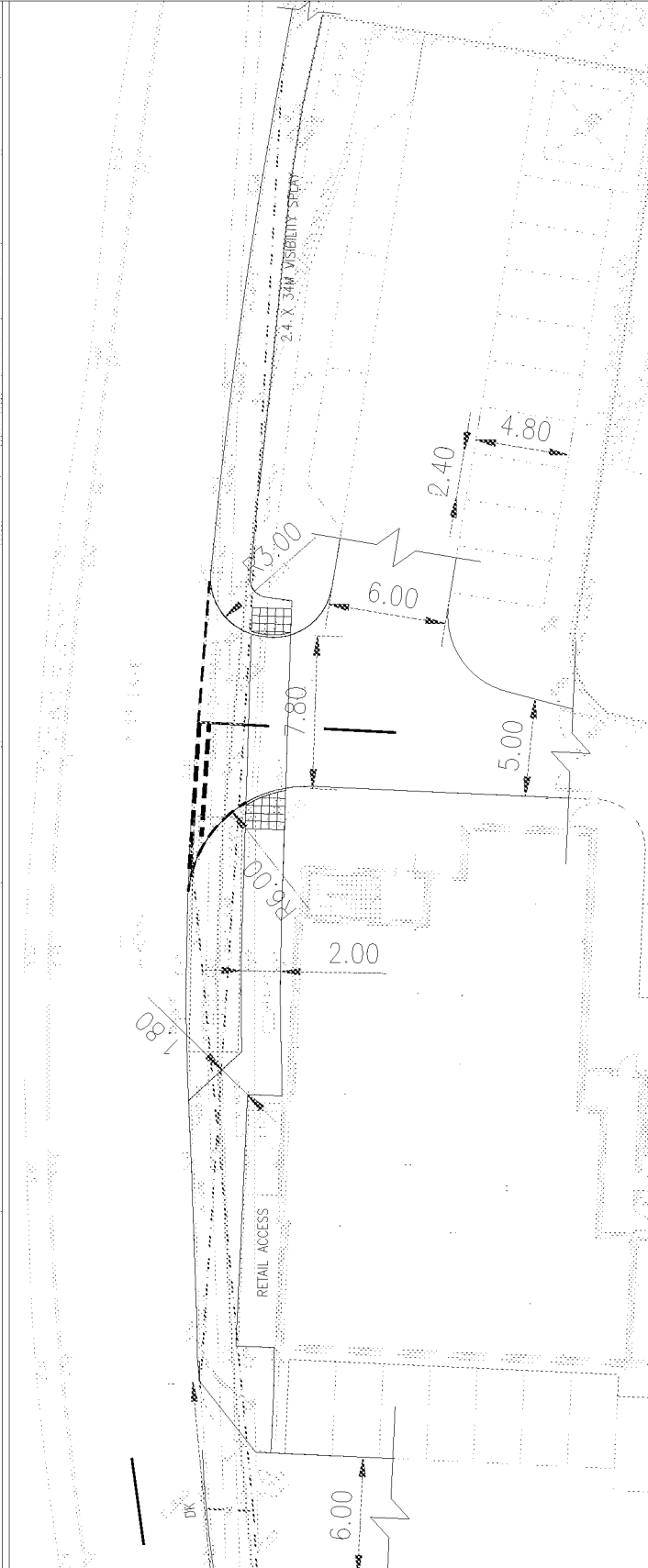
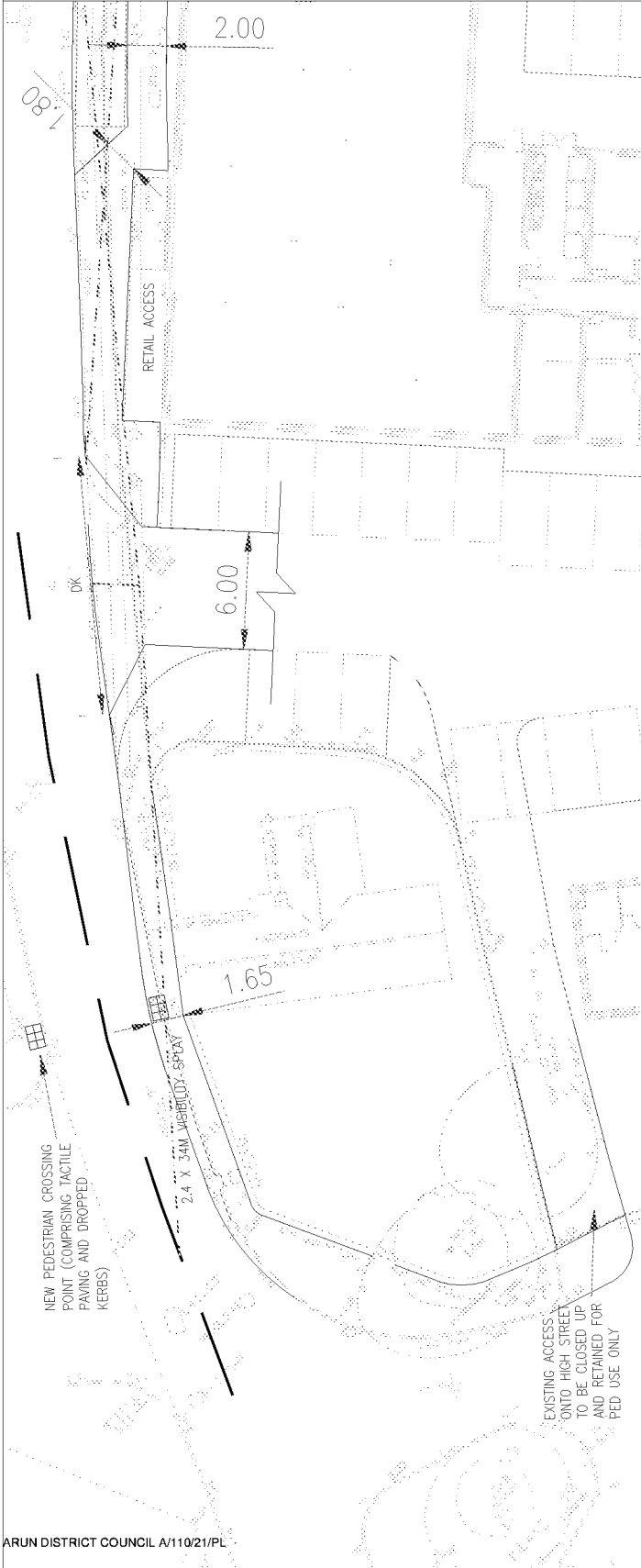
Ian Gledhill
Planning Services

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix C

Paul Basham Associates Ltd
Report No. 034.0135/TS/2





GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.

VISIBILITY SPLAYS

1. VISIBILITY SPLAYS OF 2.4X34M HAVE BEEN PROVIDED BASED ON THE RECORDED 85%ILE SPEEDS OF 26.6MPH NORTHBOUND & 26.0MPH SOUTHBOUND ON WATER LANE.



A	REVISED FOLLOWING PRE-APP COMMENT	13.05.21	TP	MS
B	MAJOR AMENDMENTS TO CROSSOVER	14.05.21	TP	MS
C	MINOR AMENDMENTS	14.05.21	TP	MS
Rev	006-000001	1:250	By	Chad

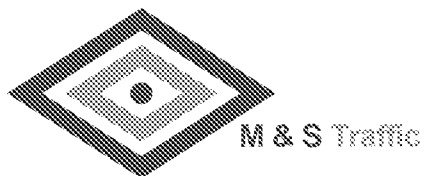
Project Name		Title		Client		Checked By		Checked Date		Scale		Rev		Drawn By		Drawn Date		Client Drawing No.		PBA Drawing No.		Revision		(AT A3 SIZE)	
ARUN DISTRICT COUNCIL A/110/21/PL		PRELIMINARY SITE ACCESS ARRANGEMENTS		Paul Basham Associates		MS		13.11.20		1:250		006		TP		13.11.20		034 0135 001		034 0135 001		C			

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix D

Paul Basham Associates Ltd
Report No. 034.0135/TS/2





Road Safety Audit Stage 1

Proposed Section 278 Works

Chandlers Accident Repair Centre

Water Lane (High Street)

Angmering

West Sussex

Date: 13th May 2021

Report produced for: Paul Basham Associates

Report produced by: M & S Traffic

Registered Office: 32 Hamelin Road, Gillingham, Kent ME7 3EX Registered in Cardiff No:06730905

DOCUMENT CONTROL SHEET

M&S Traffic has prepared this report in accordance with the instructions from Paul Basham Associates. M&S Traffic shall not be liable for the use of any information contained herein for any purpose other than the sole and specific use for which it was prepared.

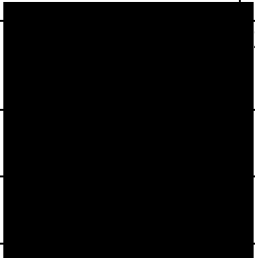
Project Title Chandlers Accident Repair Centre, High Street, Angmering.

Report Title Road Safety Audit Stage 1

Revision A

Status Final

Audit Reference PBA/034.0135/1/21/MM

Document Ref PBA/034.0135/1/21/MM	Prepared by: (Name)	Checked by: (Name)	Approved by (Signature)	Date Approved
Revision A	Martin Morris	Bryan Shawyer		25 th May 2021
Designers Response				
Authority Response				

Record of Issue

Distribution

Organisation	Contact	Copies
Paul Basham Associates	Tom Peters	-

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Document Control Sheet	2
Contents	3
1 Introduction	4
2 Safety issues raised at previous Audits	6
3 Items raised at the Stage 1 Audit	7
4 Issues identified during the Stage 1 Audit that are outside the terms of reference	10
5 Auditors Statement	11

Appendix A..... List of drawings

Appendix B..... Comment location drawing

Appendix C..... Road Safety Audit Decision Log.

Appendix D..... Design Organisation Statement.

Appendix E..... Overseeing Organisation Statement.

1 INTRODUCTION

- 1.1 This report describes a Stage 1 Road Safety Audit carried out on proposed Section 278 works comprising of

- The construction of a priority junction access and a dropped kerb access off Water Lane, Angmering, associated with a proposed retirement living and retail development.
- The construction of a footway link, footway widening and the provision of a footway crossing point.
- The implementation of a delivery bay on Water Lane.

The Audit was requested by the design organisation, Paul Basham Associates, Suite 4, Hitching Court, Blacklands Way, Abingdon Business Park, Abingdon, OX14 1RG on behalf of West Sussex County Council, as the Highway Authority.

- 1.2 The Audit Team membership was as follows:

Martin Morris, PGD, MCIHT, MSoRSA – Audit Team Member
Highways England Approved RSA Certificate of Competency

Bryan Shawyer B.Eng. (Hons), MSc, MCIHT, MSoRSA – Audit Team Leader
Highways England Approved RSA Certificate of Competency

- 1.3 The audit was undertaken in accordance with GG 119, The Design Manual for Roads and Bridges. The documents available at the time the report was compiled are detailed in Appendix A.
- 1.4 The Audit took place at the Gillingham offices of M&S Traffic in May 2021 and comprised an examination of the documents provided as listed in Appendix A, plus a joint visit to the site of the proposed scheme during the afternoon of the 10th May 2021 between 17:00 and 17:30. Weather conditions at the time were fine and the road surface was dry. Traffic flows were moderate to high and free flow speeds were low. There were low level pedestrian and cyclist movements observed during the site visit.
- 1.5 The report has been compiled, only with regards to the safety implications for road users of the layout presented in the supplied drawings. It has not been examined or verified for compliance with any other standards or criteria. This safety audit does not perform any “Technical Check” function on these proposals. It is assumed that the Project Sponsor is satisfied that such a “Technical Check” has been successfully completed prior to requesting this safety audit.
- 1.6 The auditors have not been informed of any Departures from Standards in this scheme construction.

- 1.7 All comments and recommendations are referenced to the detailed drawings and the locations have been detailed relating to the plans supplied with the audit brief, Appendix B.

2 SAFETY ISSUES RAISED AT PREVIOUS AUDITS

2.1 No previous audits were supplied for assessment.

3 ITEMS RAISED AT THE STAGE 1 AUDIT

3.1 General

3.1.1 PROBLEM

Location: The proposed scheme.

Summary: Ponding of surface water could lead to loss of control collisions.

The footway is being widened and kerblines are being amended as part of these proposals, where no details of carriageway drainage have been provided for assessment; ponding on the carriageway or water moving across the carriageway at junctions or bends could lead to loss of control collisions, particularly in wet / icy conditions.

RECOMMENDATION

It is recommended that drainage details should be provided at Stage 2 Safety Audit.

3.2 Local Alignment

3.3 Junctions

3.3.1 PROBLEM

Location: Proposed junction and access on Water Lane.

Summary: Movements of larger vehicles could lead to head on collisions.

Swept path information has been provided for assessment, where insufficient turning space may lead to larger vehicles entering the opposing carriageway leading to possible head on collisions, however in CD123 the Geometric design of at-grade priority and signal-controlled junctions it is stated that:

5.2 Allowance shall be made for the swept turning paths of the worst case design vehicle which is expected to use the priority junction, unless:

- 1} the design vehicle is expected to form only a very small percentage of the total number of vehicles that will use the junction; and*
- 2) any swept path conflicts as a result of the design vehicle encroaching into other lanes will not occur on bends.*

RECOMMENDATIONS

It is recommended that:

- The junction and access should be capable of accommodating by the more frequent vehicle usage types without incursion into the opposing carriageway.
- That parking restrictions should be introduced opposite the junction and access.

3.3.2 PROBLEM

Location: Proposed delivery bay on Water Lane.

Summary: Movements of larger vehicles could lead to head on collisions.

Whilst it is recognised that the proposed delivery arrangements are likely to be an improvement over the delivery arrangements with car transporters that could be associated with the previous car dealership, there is concern that should the delivery bay be used when the access is operational that the delivery vehicle could restrict visibility for traffic emerging from the access. This could lead to side impact collisions.

RECOMMENDATIONS

It is recommended that the delivery bay is relocated or that deliveries are scheduled outside of the operational hours of the access.

3.4 Non-Motorised User Provision

3.4.1 PROBLEM

Location: Water Lane north-western crossing point.

Summary: Insufficient intervisibility could lead to rear end shunt or vehicle to pedestrian collisions.

Parking was observed on the north-western side of the carriageway which was restricting vehicle flow to priority working and could restrict intervisibility between pedestrians and vehicles. Restricted visibility could lead to rear end shunt, or vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that the intervisibility splays should be unobstructed and that parking restrictions should be implemented to cover the visibility splays.

3.4.2 PROBLEM

Location: Water Lane at the proposed junction.

Summary: Insufficient intervisibility could lead to vehicle to pedestrian collisions.

Whilst it is recognised that the proposed delivery arrangements are likely to be an improvement over delivery arrangements with car transporters that could be associated with the previous car dealership. Should the delivery bay be occupied the intervisibility between pedestrians and vehicles turning into the retail park could be restricted. Restricted intervisibility could lead to vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that the delivery bay is relocated or that deliveries are scheduled outside of the operational hours of the access.

3.5 Road Signs, Carriageway Markings and Lighting

3.5.1 No comment.

4 ISSUES IDENTIFIED DURING THE AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

- 4.1 Any issues that the Audit Team wish to bring to the attention of the Client Organisation, which are not covered by the road safety implications of this audit have been included in the following section. These issues could include maintenance items, operational issues or poor existing provision. It should be understood however, that in raising these issues, the Audit Team do not warrant that a full review of the existing highway environment has been undertaken beyond the scope of the audit.
- 4.2 The Audit Team had no issues to raise within this section.

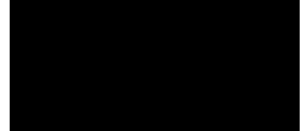
5 AUDITOR TEAM STATEMENT

5.1 We certify that this audit has been carried out in accordance with GG 119.

Audit Team Leader

Martin Morris
PGD, MCIHT, MSoRSA
Highways England Approved RSA Certificate of Competency
M & S Traffic Ltd
Aeolus House
32 Hamelin Road
Gillingham
Kent ME7 3EX

Signed:

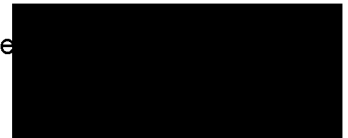


Date: 13/05/2021

Audit Team Member

Bryan Shawyer
BEng (Hons), MSc, MCIHT, MSoRSA
Highways England Approved RSA Certificate of Competency
M & S Traffic Ltd
Aeolus House
32 Hamelin Road
Gillingham
Kent ME7 3EX

Signed:



Date: 13/05/2021

APPENDIX A

List of drawings and documentation submitted for auditing:

Drawing Number	Title
034.0135.001A	PRELIMINARY SITE ACCESS ARRANGEMENTS
SO-2729-03-AC-102	PROPOSED SITE PLAN
034.0135.002A	REFUSE ACCESS ARRANGEMENTS SWEPT PATH ANALYSIS
034.0135.003A	DELIVERY AND SERVICING BAY ARRANGEMENTS
034.0135.006	SWEPT PATH ANALYSIS

Supporting Documentation:

- None supplied.

APPENDIX B

Plan attached showing the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

APPENDIX C: DESIGNERS RESPONSE

Auditors: Martin Morris (Team Leader) and Bryan Shawyer (Team Member).

Scheme: Proposed S278 Works, Chandlers Accident Repair Centre, Water Lane, (High St) Angmering.

Date Audit Completed: 25th May 2021

This response is to a Stage 1 Road Safety Audit to the design standard detailed within GG 119 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

RSA Problem	RSA Recommendation	Design Organisation response)	Overseeing Organisation response	Agreed RSA action
3.1.1 The footway is being widened and kerblines are being amended as part of these proposals, where no details of carriageway drainage have been provided for assessment; ponding on the carriageway or water moving across the carriageway at junctions or bends could lead to loss of control collisions, particularly in wet / icy conditions.	It is recommended that drainage details should be provided at Stage 2 Safety Audit.			
3.3.1 Swept path information has been provided for assessment, where insufficient turning space may lead to larger vehicles entering the opposing carriageway leading to possible head on collisions, however in CD123 the Geometric design of at-grade priority	It is recommended that: The junction and access should be capable of accommodating by the more frequent vehicle usage types without incursion into the opposing carriageway. That parking restrictions should be introduced opposite the junction			

and signal-controlled junctions it is stated that: <i>5.2 Allowance shall be made for the swept turning paths of the worst case design vehicle which is expected to use the priority junction, unless:</i> <i>1) the design vehicle is expected to form only a very small percentage of the total number of vehicles that will use the junction; and</i> <i>2) any swept path conflicts as a result of the design vehicle encroaching into other lanes will not occur on bends.</i>	and access.			
3.3.2 Whilst it is recognised that the proposed delivery arrangements are likely to be an improvement over the delivery arrangements with car transporters that could be associated with the previous car dealership, there is concern that should the delivery bay be used when the access is operational that the delivery vehicle could restrict visibility for traffic emerging from the access. This could lead to	It is recommended that the delivery bay is relocated or that deliveries are scheduled outside of the operational hours of the access.			

side impact collisions.				
3.4.1 Whilst it is recognised that the proposed delivery arrangements are likely to be an improvement over delivery arrangements with car transporters that could be associated with the previous car dealership Should the delivery bay be occupied the intervisibility between pedestrians and vehicles turning into the retail park could be restricted. Restricted intervisibility could lead to vehicle to pedestrian collisions	It is recommended that the intervisibility splay should be unobstructed and that parking restrictions should be implemented to cover the visibility splay.			
3.4.2 Whilst it is recognised that the proposed delivery arrangements are likely to be an improvement over delivery arrangements with car transporters that could be associated with the previous car dealership Should the delivery bay be occupied the intervisibility between pedestrians and vehicles turning into the retail park could be restricted. Restricted intervisibility could lead to vehicle to pedestrian collisions	It is recommended that the delivery bay is relocated or that deliveries are scheduled outside of the operational hours of the access.			

APPENDIX D: DESIGN ORGANISATION STATEMENT

PROJECT NAME: Stage 1 High Street, Angmering.	
behalf of the Design Organisation I certify that:	
1) The actions identified in response to the problems raised in this RSA have been discussed and agreed with the Overseeing Organisation	
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anisation	Il Basham Associates Ltd
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APPENDIX E: OVERSEEING ORGANISATION STATEMENT

PROJECT NAME: Stage 1 High Street, Angmering.	
behalf of the Overseeing Organisation I certify that:	
1) The actions identified in response to the problems raised in this RSA have been discussed and agreed with the Design Organisation; and 2) The agreed RSA actions will be progressed.	
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GENERAL NOTES

1.

THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.

2.

ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.

3.

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VISIBILITY SPLAYS

1.

VISIBILITY SPLAYS OF 2.4X34M HAVE BEEN PROVIDED BASED ON THE RECORDED 85THILE SPEEDS OF 26.6MPH NORTHBOUND & 26.0MPH SOUTHBOUND ON WATER LANE.

0.8

10m

1:250

0m

10m

NORTH

Scale

1:250

Checked Date

13.11.20

Checked By

MS

Client

Paul Basham

0955212835

20A KILBURN PARK DRIVE, TOTTENHAM, T20 0LH

0181 552 1283

Paul Basham Associates Ltd

PRELIMINARY SITE ACCESS ARRANGEMENTS

Project Name

CHANDLER'S ACCIDENT REPAIR CENTRE HIGH STREET, ANDOVER

Project Phase

PRELIMINARY

Scale

1:250

Checked Date

13.11.20

Checked By

MS

Client

Paul Basham

0955212835

20A KILBURN PARK DRIVE, TOTTENHAM, T20 0LH

0181 552 1283

Paul Basham Associates Ltd

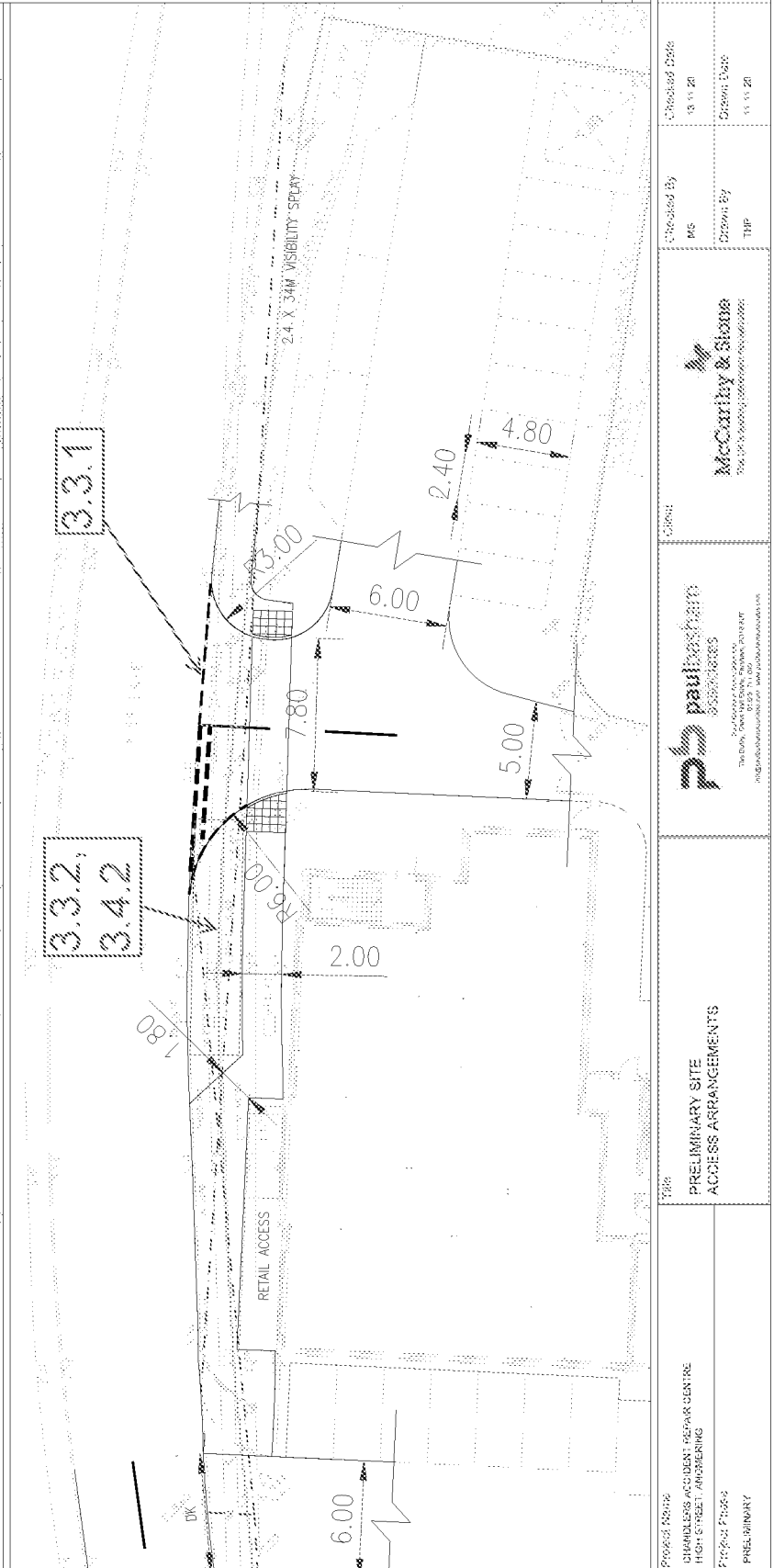
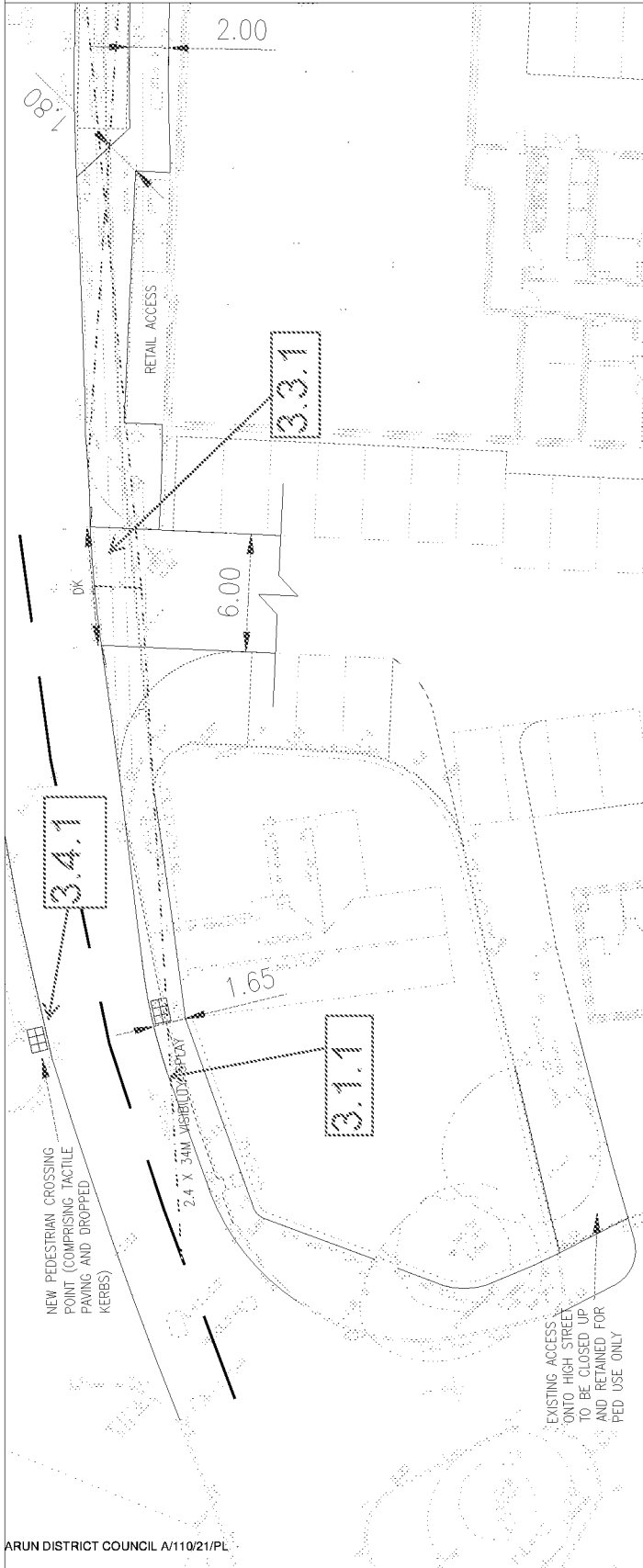
PRELIMINARY SITE ACCESS ARRANGEMENTS

Project Name

CHANDLER'S ACCIDENT REPAIR CENTRE HIGH STREET, ANDOVER

Project Phase

PRELIMINARY



ROAD SAFETY AUDIT RESPONSE REPORT

Project Details	
Report Title:	Stage 1 Road Safety Audit Response Report
Date:	25.05.21
Document reference and revision:	034.0135/DR/1
Prepared by:	Paul Basham Associates
On behalf of:	McCarthy Stone
Overseeing Organisation	West Sussex County Council
Authorisation Sheet	
Project:	Chandlers Accident Repair Centre, High Street, Angmering
Report Title:	Road Safety Audit Stage 1 Designers Response
Prepared By:	
Name:	Tom Peters
Position:	Senior Transport Planner
Signed:	
Organisation:	Paul Basham Associates
Date:	26.05.2021
Approved By:	
Name:	Mark Smith
Position:	Director
Signed:	
Organisation:	Paul Basham Associates
Date:	26.05.2021

ROAD SAFETY AUDIT RESPONSE REPORT

Introduction

This report acts as a Designer's Response to the Stage 1 Road Safety Audit completed by M&S Traffic (their reference: PBA/034.0135/1/21/MM) in relation to the proposed access options to serve the development at Chandlers Accident Repair Centre, High Street, Angmering.

The RSA was undertaken in May 2021.

Key Personnel

Overseeing Organisation:	West Sussex County Council
RSA Team:	M&S Traffic
Design Organisation:	Paul Basham Associates

Road Safety Audit Decision Log

<i>RSA Problem</i>	<i>RSA Recommendation</i>	<i>Design Organisation Response</i>	<i>Overseeing Organisation Response</i>	<i>Agreed RSA Action</i>
The footway is being widened and kerblines are being amended as part of these proposals, where no details of carriageway drainage have been provided for assessment; ponding on the carriageway or water moving across the carriageway at junctions or bends could lead to loss of control collisions, particularly in wet / icy conditions.	It is recommended that drainage details should be provided at Stage 2 Safety Audit.	Agreed, details on highway drainage will be provided at the detailed design stage and provided as part of a Stage 2 RSA.		

ROAD SAFETY AUDIT RESPONSE REPORT

Swept path information has been provided for assessment, where insufficient turning space may lead to larger vehicles entering the opposing carriageway leading to possible head on collisions, however in CD123 the Geometric design of at-grade priority and signal-controlled junctions it is stated that: 5.2 Allowance shall be made for the swept turning paths of the worst case design vehicle which is expected to use the priority junction, unless: 1) the design vehicle is expected to form only a very small percentage of the total number of vehicles that will use the junction; and 2) any swept path conflicts as a result of the design vehicle encroaching into other lanes will not occur on bends.	It is recommended that: •The junction and access should be capable of accommodating by the more frequent vehicle usage types without incursion into the opposing carriageway. •That parking restrictions should be introduced opposite the junction and access.	Swept path analysis has been provided by Paul Basham Associates which demonstrates that large vehicles expected to access the site are able to without impeding oncoming vehicles. Parking restrictions have not been proposed as they would not be in keeping with the character of Water Lane. Water Lane is a residential street within a 20mph zone, with on street parking a regular occurrence alongside other access junctions. In addition the presence of on-street parking acts as an informal traffic calming measure helping to keep speeds down to the 20mph limit.		
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ROAD SAFETY AUDIT RESPONSE REPORT

Whilst it is recognised that the proposed delivery arrangements are likely to be an improvement over the delivery arrangements with car transporters that could be associated with the previous car dealership, there is concern that should the delivery bay be used when the access is operational that the delivery vehicle could restrict visibility for traffic emerging from the access. This could lead to side impact collisions.	It is recommended that the delivery bay is relocated or that deliveries are scheduled outside of the operational hours of the access.	The proposed servicing layby provides a betterment over the existing/previous operations which resulted in car transporters being located alongside the footway. In addition during the previous years of operation no collisions were reported as a result of the HGVs located along Water Lane. It is also pertinent to note that Manual for Streets (MfS) states that parking within the visibility splay in built up areas is common and where speeds are low encroachment into the visibility splay is acceptable. Further to this the stated speed limit is 20mph and therefore speeds of vehicles interacting between the junction, Water Lane and the servicing bay will be low and conflicts will therefore be minimized. In addition servicing and deliveries will typically be scheduled in a way which ensures they do not occur during peak periods and will typically occur once per day. The position of the servicing bay is therefore considered acceptable.		
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ROAD SAFETY AUDIT RESPONSE REPORT

Parking was observed on the north-western side of the carriageway which was restricting vehicle flow to priority working and could restrict intervisibility between pedestrians and vehicles. Restricted visibility could lead to rear end shunt, or vehicle to pedestrian collisions.	It is recommended that the intervisibility splays should be unobstructed and that parking restrictions should be implemented to cover the visibility splays.	The location of the crossing point has been carefully considered. The northern crossing point being on the outside of a bend within a 20mph zone, means that a visibility splays of 20m need to be achieved, these have been shown in drawing 034.0135.007 appended to this report. The on street parking is prevalent on the northern side of Water Lane, in the secondary visibility direction on the northern crossing point. Therefore parked cars will not restrict the visibility from the crossing point to the centreline and oncoming vehicles. In the primary direction visibility is unobstructed. As a result, no parking restrictions have been proposed as they are not required to ensure safe crossing can be made.		
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ROAD SAFETY AUDIT RESPONSE REPORT

Whilst it is recognised that the proposed delivery arrangements are likely to be an improvement over delivery arrangements with car transporters that could be associated with the previous car dealership. Should the delivery bay be occupied the intervisibility between pedestrians and vehicles turning into the retail park could be restricted. Restricted intervisibility could lead to vehicle to pedestrian collisions.	It is recommended that the delivery bay is relocated or that deliveries are scheduled outside of the operational hours of the access.	The proposed servicing bay is located to the front of footway so that conflict between the servicing/delivery vehicles as it enters/exits the bay is managed, whilst being substantially reduced compared to the existing arrangement which often results in car transporters straddling the footway due to an absence in suitable locations to park. Conflict between pedestrians and vehicles is also minimized at the access point as pedestrians are crossing at the bell mouth to a parking court, where vehicles entering/exiting will be doing so at low speeds and generally prepared to pedestrians moving around the car park area and not restricted to the established footways. In addition, as noted above, the delivery/servicing will typically take place once per day outside highway peak periods, when vehicles and pedestrian numbers are at their minimum. The layby location is therefore considered acceptable.		
--	--	--	--	--

ROAD SAFETY AUDIT RESPONSE REPORT

Design Organisation and Overseeing Organisation Statements

On behalf of the design organisation I certify that:

- 1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.

Name:	Tom Peters
Signed:	
Position:	Senior Transport Planner
Organisation:	Paul Basham Associates
Date:	26.05.2021

On behalf of the Overseeing Organisation I certify that:

- 1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and
- 2) The agreed RSA actions will be progressed.

Name:	
Signed:	
Position:	
Organisation:	
Date:	

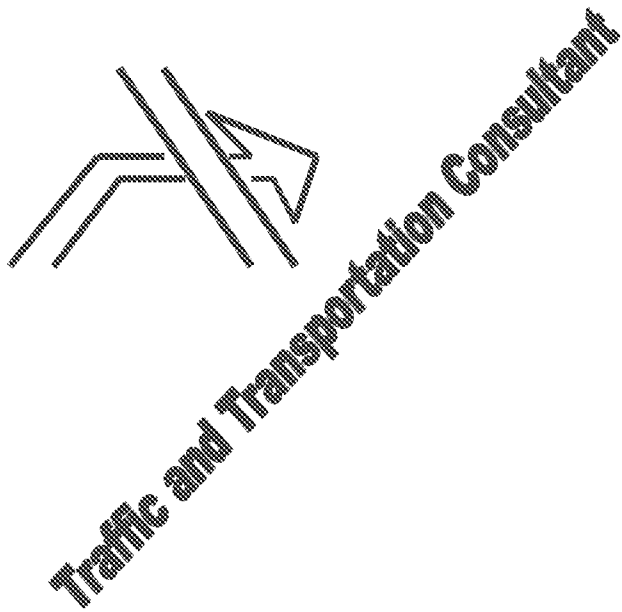
Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix E

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



Dr Allan J Burns



MCCARTHY AND STONE RETIREMENT LIFESTYLES LTD

PROPOSED DEVELOPMENT AT WATER LANE, ANGMERING

REPORT ON PARKING REQUIREMENTS

MARCH 2021

This report has been prepared by :-

Dr. Allan James Burns

Qualifications:-

B.Sc. Hons (Civil Engineering - University of Wales)

M.Sc. (Transportation Planning and Traffic Engineering -
Southampton University)

Ph.D (University of Southampton – thesis subject “Transport and
Related Characteristics of the Residents of Private Category II Sheltered
Housing for the Elderly”)

Chartered Engineer

Member of the Institution of Civil Engineers

Member of the Chartered Institution of Highways and Transportation

Experience:-

Fifteen years (1970 to 1985) in the Transportation Section of the County Surveyor's Department of Hampshire County Council, the last 11 years as team leader responsible for the transport input to all local plans throughout Hampshire. Evidence was presented at a number of local plan inquiries, and advice and evidence given on planning appeals.

From 1985 to present day, independent traffic and transportation consultant working on a wide variety of development proposals, including housing, sheltered housing, employment uses, leisure facilities, shopping, public houses, mineral extraction and car boot sales.

Since 1985 - visiting lecturer at Southampton University on aspects of Transportation at both undergraduate and postgraduate levels.

Advising McCarthy and Stone on transport and car parking issues for over 30 years.

Recent Research:-

Commissioning and analysis of the survey data for existing McCarthy and Stone retirement developments referred to in this report.

1. Introduction

- 1.1 It is proposed to redevelop the former BMW dealership located on Water Lane, between the High Street and Cumberland Road to provide 33 retirement apartments and a 380 square metre convenience store.
- 1.2 This report considers the likely car parking demand for the retirement apartments and also the off-site parking provision in Angmering centre and the area of the application site.

2. Local Car Parking Guidance

Retirement Apartments

- 2.1 As indicated above, there are two forms of development proposed for this site. With reference to the retirement apartments, there does not appear to be any detailed local guidance that takes into account the specific characteristics of the future residents of the apartments. This includes the age profile, the apartment occupancy both in terms of numbers and sex,
- 2.2 Research into the characteristics of the residents of this form of housing shows that the average age of entry is over 78 years. This reflects the fact that people tend to move into this form of housing when their need for security, companionship etc suggests that such a move would be beneficial. At this advanced age, residents may also find that maintaining their existing home and garden become too much of a burden.
- 2.3 Such a move often occurs following the death of a partner and this is reflected in the low occupancy levels, at an average of 1.32 persons per apartment, i.e. some two-thirds of the apartments are occupied by only one person.
- 2.4 Reflecting the fact that women tend to outlive men, it has been found that some two-thirds of residents are typically female. It has been found that women tend to be less likely to be car drivers or owners.
- 2.5 All of the above factors tend to result in this form of retirement housing having a relatively low car ownership. Indeed, it has been found that a significant number of residents give up their cars at about the time they make the move into this form of housing.
- 2.6 Based on these factors, it is unrealistic to rely on car parking standards used for standard forms of housing. Section 3 of this reports looks at the likely demand for parking spaces in this form of housing.

Convenience Store

- 2.7 Arun District Council's "Parking Standards supplementary Planning Document (January 2020)" gives relevant guidance in relation to the retail part of this proposed development. This takes into account the guidance in the National Planning Policy Framework.
- 2.8 Paragraph 2.3 of this guidance states that:-

"Where reduced parking provision is being proposed to optimise the density of development within Arun's town centres, robust evidence must be provided to show that the proposed development would comply with the Guiding Principles for Development set out below."

This site is located on the edge of the retail centre of Angmering.

- 2.9 Principle 1 of the guiding principles includes the following:-

"If parking could reasonably be expected to take place in existing streets, then it will be necessary to demonstrate through a parking capacity survey that there is sufficient capacity to accommodate the expected parking demand."

The availability of on-street parking is considered in Section 4 of this report. Unfortunately, during the Covid 19 restrictions it would not be possible to undertake a car parking survey that could be relied upon to realistically reflect the "normal" situation.

2.10 Principle 5 includes the following:-

“In some circumstances it may be necessary to regulate on-street parking to manage or mitigate the impact of development. If Traffic Regulation Orders (TRO) are required then developers will be expected to fund administration and works costs.”

Consideration may need to be given to the use of a TRO in the vicinity of the site and, if this proves necessary or appropriate, it is accepted that it would be necessary for the developer to fund this.

- 2.11 Paragraph 4.8 of the guidance refers to the parking standards for non-residential land uses. It describes these as “a guide for developers”_Table 4.1 indicates a standard of 1 space per 14 sq. metres for A1 shops.
- 2.12 It is noted that this standard would apply to all forms and scales of retail developments. This proposal is for a small convenience store (380 sq metres). Such a store effectively provides a quick-stop facility, often for top-up shopping. When compared to larger retail stores there is likely to be a more rapid turnover of parking spaces, allowing a lower provision to be made.
- 2.13 The proposed store would be located close to residential areas, including the proposed retirement apartments. It is within easy walking distance of a significant number of the potential customers. Therefore the parking provision can reasonably be lower than that for retail developments surrounded by other stores etc.
- 2.14 The type and location of the unit suggest that a lower parking standard could be applied here. However, should there be any overflow of parking, the possible use of on-street parking is considered in Section 4 of this report.

3. Retirement Apartments - Parking Demand

- 3.1 Traffic surveys were undertaken a few years ago which allowed the accumulation of vehicles parked at the developments to be assessed. More up-to-date surveys were being planned to be carried out in 2020, but have had to be postponed due to the Covid 19 pandemic. Clearly the traffic and parking characteristics of any development would be unlikely to be typical during the travel constraints applicable during 2020. However, there is no reason to expect the car parking demand at McCarthy and Stone retirement developments would have significantly changed during the past few years.
- 3.2 The following table indicates the peak parking demand for each of the surveyed developments, along with the peak number of vehicles parked per apartment. The surveys included any vehicles parked outside the site (within view of the survey staff), where one or more of the occupiers entered or left the development, so the results represent the realistic maximum demand for parking by residents, staff and all visitors.

Table 1 - Peak Parking Demand

Development	Apartments	Date of Survey	Peak Demand	Peak demand – Spaces per Apartment
Haven Court, Hythe, Hampshire	36	Tuesday, 28 April 2015	24	0.667
<i>Haven Court, Hythe</i>	<i>36</i>	<i>Saturday,</i>	<i>19</i>	<i>0.528</i>
<i>Haven Court, Hythe</i>	<i>36</i>	<i>Sunday, 17 May 2015</i>	<i>22</i>	<i>0.611</i>
Hanna Court, Wilmslow	40	Monday, 1 August 2016	14	0.350
Eadhelm Court, Edenbridge	34	Wednesday, 29 April 2015	23	0.676
Pagham Court, Bognor	36	Wednesday, 8 July 2015	20	0.556
Lauder Court, Hamilton	64	Friday, 29 July 2016	21	0.328
Middleton Court, Porthcawl	60	Tuesday, 26 July 2016	26	0.433
Totals (excluding Saturday and Sunday data)	270		128	0.474

- 3.3 The average peak demand of six surveyed developments is 0.474 vehicles per apartment. It can be seen that the maximum demand level shown above is 0.676 vehicles per apartment at the Edenbridge development. The proposed provision for the development in Angmering is 24 spaces for 33 apartments, at a rate of 0.727 spaces per apartment.

- 3.4 Considering which of the surveyed developments are most comparable to the Angmering site, Edendbridge is a town/village of comparable population. However, Eadhelm Court is further from the shopping centre than the Angmering site is to its local centre and so is less accessible by foot for the residents. Furthermore, the proposed convenience store on the site in Angmering ensures that access to most of the daily shopping needs are within close proximity to the retirement apartments.
- 3.5 The nearest surveyed development to the proposed site in Angmering is in Pagham, Bognore Regis. A visit to the Pagham site would show that it is significantly less accessible than the Angmering site. Whilst it has a public house close to the development, as would also be the case for the Angmering development, there are no convenient shops in the immediate vicinity of the Pagham site. It is, therefore, less accessible than the Angmering site. The peak demand observed at the Pagham development was 0.556 spaces per apartment.
- 3.6 Based on the above assessment, it is clear that the proposed provision of parking for the Angmering development would be likely to be more than sufficient to meet the requirements of the 33 retirement living apartments. Based on the peak demand observed from the surveys, of 0.676 vehicle per apartment, the proposed Angmering development might be expected to require no more than 22 spaces. Based on the peak demand at Pagham, Bognor Regis (0.556 vehicles per apartment) the requirement at Angmering would be 18 spaces. The proposed provision is 24 spaces.

4. Off-site Parking - Angmering

- 4.1 As indicated above, there is no sound basis for expecting the retirement housing to generate any significant off-site car parking requirement.
- 4.2 In the pre-application Technical Note prepared by Paul Basham Associates, it is accepted that the proposed parking for the convenience store is below the Arun District Council standard. It states that *“the nature of convenience stores mean that a lot of trips are made on foot from local trips and that any vehicular trips are short, quick journeys and therefore car parking demand has a quick turnover. Therefore, despite the underprovision against the standards the proposed level of provision is deemed to be acceptable”*
- 4.3 It is also likely that visits to the convenience store will sometimes be part of a shared trip to other shops and facilities in the centre of Angmering, and so this visitor would not necessarily park on the application site. Visits may also be diverted from existing retail units, again not requiring an additional car parking space.
- 4.4 There are a significant number of car parking spaces available within the centre of Angmering. Indeed, on street parking is permitted on Water Lane itself. This is shown in photograph 1, below. Should there be a concern over the possibility of parking on both sides of the road causing traffic flow problems, yellow line parking restrictions could be introduced on one side of the road.

Photograph no. 1



- 4.5 Some roadside parking, resulting in a narrowing of the available carriageway, would not be inappropriate, as it could contribute to controlling traffic speeds in line with the 20 mph speed limit. Any parking restrictions could be introduced on Water Lane on the opposite side of the road from the site, which would provide that maximum convenience of anyone visiting the convenience store and would also minimise the risk of users of driveways serving the houses opposite being inconvenienced.

- 4.6 Although any limited overflow parking is likely to take place along the site frontage, it is prudent to look further afield. Some parking is available on the High Street, close to the application site.

Photograph no. 2.



- 4.7 There are a number of parking spaces located in front of the nearby row of shops, as shown in photograph no.3 below. These spaces would mainly serve the adjacent shops, but is within easy walking distance of the proposed development site.

Photograph no. 3



- 4.8 There are other parking spaces spread around the existing centre, at the junction of High Street with Water Lane, as shown in photographs 4 and 5 below.

Photograph no. 4



Photograph no. 5



d

4.8

Even further afield, although still within easy walking distance of the existing centre and the proposed convenience store, there are a number of locations where parking is currently provided. These locations are shown in photographs 6 to 8 below.

Photograph no. 6



Photograph no. 7



Photograph no 8.



- 4.9 It is clear that retail uses in the centre of Angmering already rely on appropriate on-street parking. There appears to be significant scope for any possible limited overflow parking that could occur for the proposed convenience store to be accommodated in the areas shown in the photographs.
- 4.10 As indicated above, in normal circumstances, a car parking survey could be carried out to assess then capacity of the area to accommodate some additional use. However, with the Covid 19 constraints on normal living, any survey at this time is unlikely to be reliable. Given that some of the shops in the centre are currently closed, it could be argued that the use of the parking spaces would be likely to be significantly higher in “normal” circumstances. However, to offset this, it appears that there is a significant switch to local shopping at present, with many people unwilling to travel to large scale shopping provision. The current use of the parking provision is likely to reflect this.

5. Conclusions

- 5.1 The car parking provision for the retirement development is likely to be more than adequate to meet the peak demand for parking spaces. The site is well located for the access to local shops etc. and its accessibility would be improved by the provision of the proposed convenience store of the site.
- 5.2 Whilst it is accepted that the parking provision of the proposed convenience store does not meet the local authority parking standards, it is likely that the nature of the proposal and its location could require a lower level of provision. Should there be any overflow parking, this is likely to occur on Water Lane, along the site frontage. Any consequential narrowing of the available carriageway is compatible with constraining traffic speeds in this 20 mph limited area. Inappropriate parking could be controlled by means of regulation orders.
- 5.3 This report also shows that there are a number of car parking opportunities in the centre of Angmering, close to both the existing retail units and the application site. This provision will cater for shared trips to the existing retail units along with the proposed convenience store.

ALLAN J THOMAS BSc MSc PhD CEng MICE MIET
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Boscombe Manor
Bournemouth BH5 1LR
TEL: 01202 300070

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix F

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



ARUN DISTRICT COUNCIL A/130/21/PL

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS', ENGINEERS', SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES – THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.

Large Refuse Vehicle (3 axle)
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to lock time
Kerr to Kerr Turning Radius



1:250

Area	-SITE LAYOUT- FOLLOWING PRE-APP	21-05-21	TP	MS
Zone	Demolition	Page	29	Chad

Project: 150152	 REFUSE ACCESS ARRANGEMENTS SWEPT PATH ANALYSIS 355/01/18/035 Paul Harris Engineering Ltd 200, Victoria Road, Wokingham, RG40 3AB Tel: 0118 566 1000 info@paulharris.co.uk and paulharris.co.uk	Client:  McCarthy & Stone 355/01/18/035 The following information is confidential	Created By: MS	Created Date: 13/11/20	Size: 1:350	(AT A3 SIZE)
Project: 150152 CHANDLER'S ACCIDENT REPAIR CENTRE HIGH STREET, ANDOVERING			Drawn By: THP	Drawn Date: 13/11/20	Check Drawing No: -	

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix G

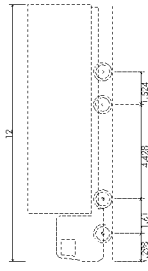
Paul Basham Associates Ltd
Report No. 034.0135/TS/2



GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
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VEHICLE PROFILE



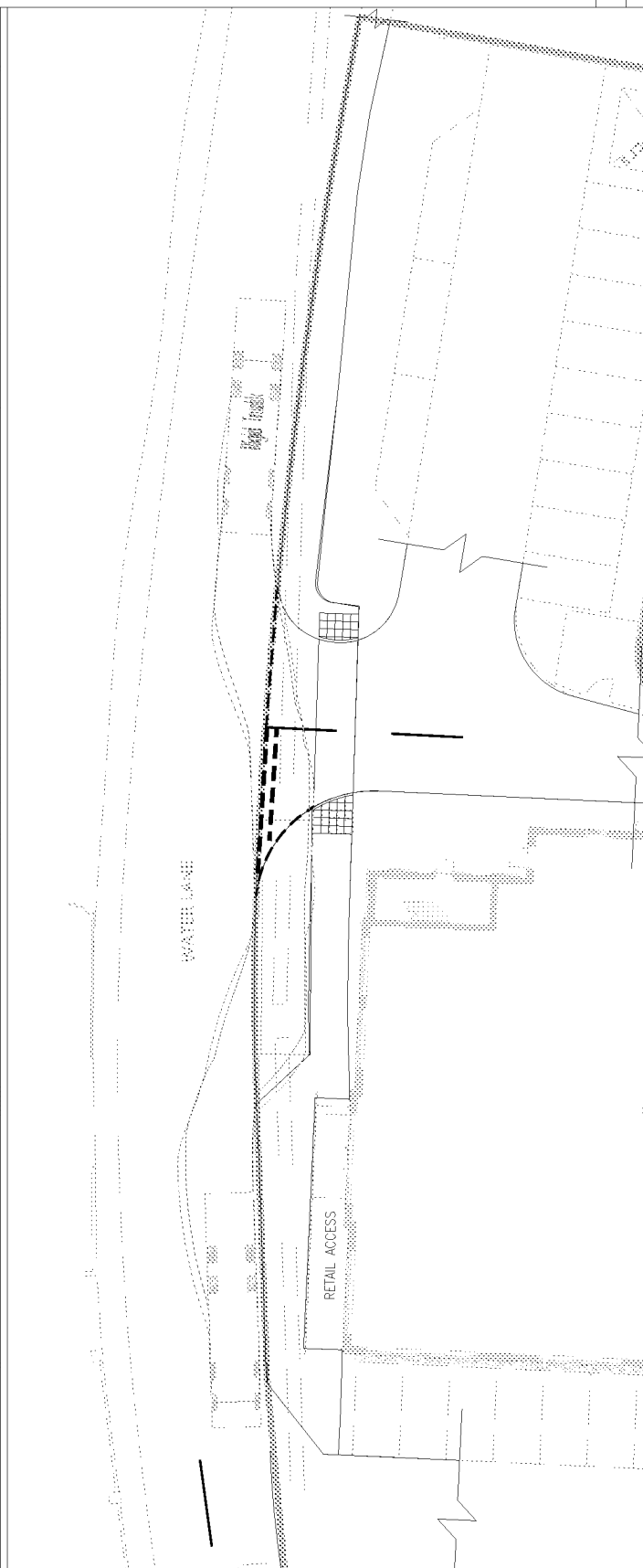
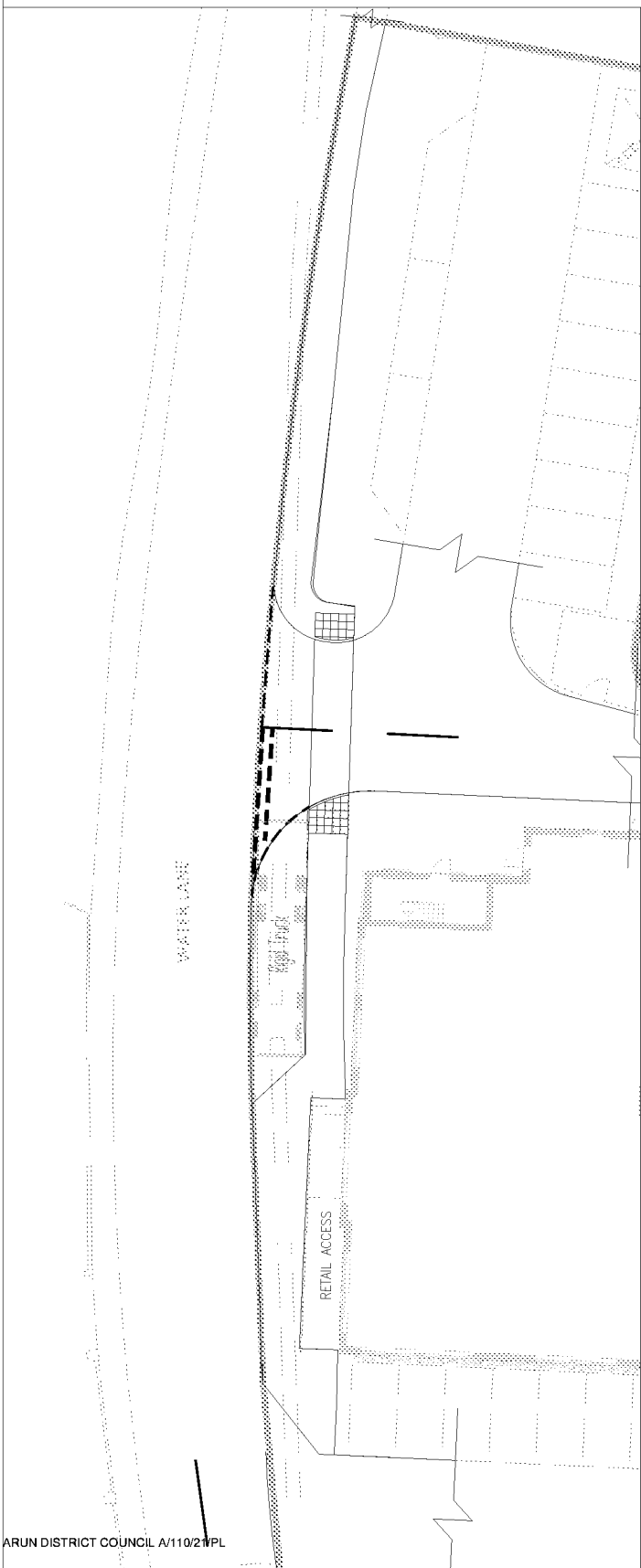
Rigid Truck
Overall Length 12.000m
Overall Width 2.500m
Overall Height 3.928m
Min Body Ground Clearance 0.412m
Track Width 2.471m
Track to Jack Line 6.00m
Kerb to Kerb Turning Radius 11.900m



1:250
0m 10m

A	REVISED FOLLOWING PRELIMINARY COMMENTS		Date	By	Check
	Rev	Use/Action			

Scale	1:250	Checked Date	13.11.20	Checked By	MS	Client	Paul Basham	Project Drawing No	034 0135 003	Revision	A
Drawn Date	11.11.20	Drawn By	TJP								



Project Name	CHANDLER'S ACCIDENT REPAIR CENTRE HIGH STREET / ANDOVERING	Title	DELIVERY AND SERVICING BAY ARRANGEMENTS	Client	Paul Basham 034 0135 003	Project Drawing No	034 0135 003	Revision	A
Project Phase	PRELIMINARY	Drawn Date	11.11.20	Drawn By	TJP				

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix H

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



Calculation Reference: AUDIT-247601-201019-1053

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 14 - CAR SHOW ROOMS

Category : A - CAR SHOW ROOMS

TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
	WS WEST SUSSEX	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
	LN LINCOLNSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	TW TYNE & WEAR	2 days

*This section displays the number of survey days per TRICS® sub-region in the selected set***Primary Filtering selection:***This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.*

Parameter: Gross floor area
 Actual Range: 143 to 2200 (units: sqm)
 Range Selected by User: 45 to 3000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 28/06/19

*This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.*Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Friday	5 days

*This data displays the number of selected surveys by day of the week.*Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

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

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	7

*This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.*Selected Location Sub Categories:

Industrial Zone	6
Development Zone	2
Residential Zone	2

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

Secondary Filtering selection:Use Class:

A1	10 days
----	---------

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	2 days
15,001 to 20,000	3 days
20,001 to 25,000	3 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	5 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	7 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	10 days
----	---------

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

PTAL Rating:

No PTAL Present	10 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CB-14-A-03	PEUGEOT		CUMBRIA
	GILWILLY ROAD			
	PENRITH			
	GILWILLY IND. ESTATE			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:	500 sqm		
	Survey date: WEDNESDAY	11/06/14		Survey Type: MANUAL
2	CH-14-A-01	EVANS HALSHAW FORD		CHESHIRE
	STADIUM WAY			
	CHESTER			
	SEALAND IND. ESTATE			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:	1050 sqm		
	Survey date: WEDNESDAY	12/11/14		Survey Type: MANUAL
3	EX-14-A-02	KIA		ESSEX
	BRAINTREE ROAD			
	BRAINTREE			
	Edge of Town			
	Development Zone			
	Total Gross floor area:	1275 sqm		
	Survey date: FRIDAY	08/07/16		Survey Type: MANUAL
4	LE-14-A-05	HONDA		LEICESTERSHIRE
	45-49 COVENTRY ROAD			
	LEICESTER			
	NARBOROUGH			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:	1300 sqm		
	Survey date: TUESDAY	04/11/14		Survey Type: MANUAL
5	LN-14-A-03	CAR SHOW ROOM		LINCOLNSHIRE
	SOUTH PARK AVENUE			
	LINCOLN			
	CANWICK HILL			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:	143 sqm		
	Survey date: FRIDAY	28/06/19		Survey Type: MANUAL
6	NY-14-A-04	LAND ROVER		NORTH YORKSHIRE
	HUTTON BANK			
	RIPON			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:	2160 sqm		
	Survey date: MONDAY	23/09/13		Survey Type: MANUAL
7	SY-14-A-01	HYUNDAI		SOUTH YORKSHIRE
	MIDDLE BANK			
	DONCASTER			
	HYDE PARK			
	Suburban Area (PPS6 Out of Centre)			
	Industrial Zone			
	Total Gross floor area:	500 sqm		
	Survey date: FRIDAY	21/12/12		Survey Type: MANUAL
8	TW-14-A-02	RENAULT		TYNE & WEAR
	STONEYGATE CLOSE			
	GATESHEAD			
	Suburban Area (PPS6 Out of Centre)			
	Industrial Zone			
	Total Gross floor area:	2200 sqm		
	Survey date: FRIDAY	04/10/13		Survey Type: MANUAL
9	TW-14-A-03	CAR SHOW ROOM		TYNE & WEAR
	SOUTHWICK ROAD			
	SUNDERLAND			
	MONKWEARMOUTH			
	Suburban Area (PPS6 Out of Centre)			
	Development Zone			
	Total Gross floor area:	282 sqm		
	Survey date: WEDNESDAY	05/04/17		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10	WS-14-A-03	FORD	WEST SUSSEX
	BROUGHAM ROAD		
	WORTHING		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	1450 sqm	
	Survey date: FRIDAY	17/10/14	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	1419	0.624	7	1419	0.040	7	1419	0.664
08:00 - 09:00	10	1086	1.179	10	1086	0.350	10	1086	1.529
09:00 - 10:00	10	1086	0.930	10	1086	0.921	10	1086	1.851
10:00 - 11:00	10	1086	0.930	10	1086	0.755	10	1086	1.685
11:00 - 12:00	10	1086	0.948	10	1086	0.893	10	1086	1.841
12:00 - 13:00	10	1086	1.059	10	1086	0.958	10	1086	2.017
13:00 - 14:00	10	1086	0.829	10	1086	0.829	10	1086	1.658
14:00 - 15:00	10	1086	0.884	10	1086	1.050	10	1086	1.934
15:00 - 16:00	10	1086	0.599	10	1086	0.801	10	1086	1.400
16:00 - 17:00	10	1086	0.856	10	1086	1.105	10	1086	1.961
17:00 - 18:00	10	1086	0.460	10	1086	0.866	10	1086	1.326
18:00 - 19:00	8	1277	0.157	8	1277	0.636	8	1277	0.793
19:00 - 20:00	2	1625	0.000	2	1625	0.308	2	1625	0.308
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			9.455			9.512			18.967

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

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

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Parameter summary

Trip rate parameter range selected:	143 - 2200 (units: sqm)
Survey date range:	01/01/12 - 28/06/19
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

TAXIS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	1419	0.000	7	1419	0.000	7	1419	0.000
08:00 - 09:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
09:00 - 10:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
10:00 - 11:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
11:00 - 12:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
12:00 - 13:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
13:00 - 14:00	10	1086	0.009	10	1086	0.009	10	1086	0.018
14:00 - 15:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
15:00 - 16:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
16:00 - 17:00	10	1086	0.009	10	1086	0.009	10	1086	0.018
17:00 - 18:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
18:00 - 19:00	8	1277	0.000	8	1277	0.000	8	1277	0.000
19:00 - 20:00	2	1625	0.000	2	1625	0.000	2	1625	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.018			0.036

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

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

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

OGVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	1419	0.000	7	1419	0.010	7	1419	0.010
08:00 - 09:00	10	1086	0.018	10	1086	0.009	10	1086	0.027
09:00 - 10:00	10	1086	0.037	10	1086	0.028	10	1086	0.065
10:00 - 11:00	10	1086	0.018	10	1086	0.028	10	1086	0.046
11:00 - 12:00	10	1086	0.018	10	1086	0.018	10	1086	0.036
12:00 - 13:00	10	1086	0.000	10	1086	0.009	10	1086	0.009
13:00 - 14:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
14:00 - 15:00	10	1086	0.009	10	1086	0.009	10	1086	0.018
15:00 - 16:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
16:00 - 17:00	10	1086	0.018	10	1086	0.000	10	1086	0.018
17:00 - 18:00	10	1086	0.000	10	1086	0.018	10	1086	0.018
18:00 - 19:00	8	1277	0.000	8	1277	0.000	8	1277	0.000
19:00 - 20:00	2	1625	0.000	2	1625	0.000	2	1625	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.118			0.129			0.247

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

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

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

PSVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	1419	0.000	7	1419	0.000	7	1419	0.000
08:00 - 09:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
09:00 - 10:00	10	1086	0.018	10	1086	0.009	10	1086	0.027
10:00 - 11:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
11:00 - 12:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
12:00 - 13:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
13:00 - 14:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
14:00 - 15:00	10	1086	0.000	10	1086	0.009	10	1086	0.009
15:00 - 16:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
16:00 - 17:00	10	1086	0.009	10	1086	0.018	10	1086	0.027
17:00 - 18:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
18:00 - 19:00	8	1277	0.000	8	1277	0.000	8	1277	0.000
19:00 - 20:00	2	1625	0.000	2	1625	0.000	2	1625	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.036			0.063

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

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

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

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	1419	0.020	7	1419	0.000	7	1419	0.020
08:00 - 09:00	10	1086	0.037	10	1086	0.018	10	1086	0.055
09:00 - 10:00	10	1086	0.018	10	1086	0.009	10	1086	0.027
10:00 - 11:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
11:00 - 12:00	10	1086	0.009	10	1086	0.009	10	1086	0.018
12:00 - 13:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
13:00 - 14:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
14:00 - 15:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
15:00 - 16:00	10	1086	0.000	10	1086	0.000	10	1086	0.000
16:00 - 17:00	10	1086	0.000	10	1086	0.009	10	1086	0.009
17:00 - 18:00	10	1086	0.000	10	1086	0.009	10	1086	0.009
18:00 - 19:00	8	1277	0.000	8	1277	0.029	8	1277	0.029
19:00 - 20:00	2	1625	0.000	2	1625	0.000	2	1625	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.084			0.083			0.167

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

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

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix I

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



Calculation Reference: AUDIT-247601-201014-1016

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : N - RETIREMENT FLATS

TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	IW ISLE OF WIGHT	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	SY SOUTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 25 to 40 (units:)
 Range Selected by User: 20 to 60 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 20/11/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	2 days
Thursday	1 days
Friday	2 days

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

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	9
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This data displays the number of surveys per location sub-category within the selected set. The location sub-categories

Secondary Filtering selection:Use Class:

C3

9 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	2 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	1 days
1.1 to 1.5	6 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	8 days

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

PTAL Rating:

No PTAL Present	9 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	CA-03-N-02	RETIREMENT FLATS		CAMBRIDGESHIRE
	DOGSTHORPE ROAD			
	PETERBOROUGH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	32		
	Survey date: MONDAY	17/10/16		Survey Type: MANUAL
2	CH-03-N-01	RETIREMENT FLATS		CHESHIRE
	HOBSON STREET			
	MACCLESFIELD			
	Edge of Town Centre			
	Residential Zone			
	Total No of Dwellings:	33		
	Survey date: FRIDAY	16/09/16		Survey Type: MANUAL
3	DS-03-N-01	RETIREMENT FLATS		DERBYSHIRE
	LEAPER STREET			
	DERBY			
	Edge of Town Centre			
	Residential Zone			
	Total No of Dwellings:	36		
	Survey date: WEDNESDAY	25/09/19		Survey Type: MANUAL
4	IW-03-N-01	RETIREMENT FLATS		ISLE OF WIGHT
	CHURCH ROAD			
	BEMBRIDGE			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	40		
	Survey date: THURSDAY	27/06/19		Survey Type: MANUAL
5	LN-03-N-01	RETIREMENT FLATS		LINCOLNSHIRE
	NEWPORT ROAD			
	LINCOLN			
	ERMINE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	39		
	Survey date: FRIDAY	28/06/19		Survey Type: MANUAL
6	NY-03-N-01	RETIREMENT FLATS		NORTH YORKSHIRE
	EASTGATE			
	PICKERING			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	30		
	Survey date: MONDAY	26/09/16		Survey Type: MANUAL
7	SY-03-N-01	RETIREMENT FLATS		SOUTH YORKSHIRE
	MOSS CLOSE			
	NEAR ROTHERHAM			
	WICKERSLEY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	28		
	Survey date: WEDNESDAY	19/12/12		Survey Type: MANUAL
8	WM-03-N-01	RETIREMENT BUNGALOWS		WEST MIDLANDS
	SHORT STREET			
	STOURBRIDGE			
	Edge of Town Centre			
	Residential Zone			
	Total No of Dwellings:	25		
	Survey date: TUESDAY	21/11/17		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	WY-03-N-01	RETIREMENT BUNGALOWS	WEST YORKSHIRE
	GROVE AVENUE		
	HALIFAX		
	WHEATLEY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	34	
	Survey date: TUESDAY	23/10/18	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/N - RETIREMENT FLATS

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	33	0.020	9	33	0.027	9	33	0.047
08:00 - 09:00	9	33	0.067	9	33	0.084	9	33	0.151
09:00 - 10:00	9	33	0.114	9	33	0.128	9	33	0.242
10:00 - 11:00	9	33	0.104	9	33	0.138	9	33	0.242
11:00 - 12:00	9	33	0.101	9	33	0.101	9	33	0.202
12:00 - 13:00	9	33	0.111	9	33	0.104	9	33	0.215
13:00 - 14:00	9	33	0.094	9	33	0.091	9	33	0.185
14:00 - 15:00	9	33	0.111	9	33	0.111	9	33	0.222
15:00 - 16:00	9	33	0.064	9	33	0.084	9	33	0.148
16:00 - 17:00	9	33	0.091	9	33	0.047	9	33	0.138
17:00 - 18:00	9	33	0.074	9	33	0.061	9	33	0.135
18:00 - 19:00	9	33	0.064	9	33	0.044	9	33	0.108
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.015			1.020			2.035

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

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

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Parameter summary

Trip rate parameter range selected:	25 - 40 (units:)
Survey date range:	01/01/12 - 20/11/19
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/N - RETIREMENT FLATS

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	33	0.000	9	33	0.000	9	33	0.000
08:00 - 09:00	9	33	0.000	9	33	0.000	9	33	0.000
09:00 - 10:00	9	33	0.003	9	33	0.003	9	33	0.006
10:00 - 11:00	9	33	0.000	9	33	0.000	9	33	0.000
11:00 - 12:00	9	33	0.003	9	33	0.003	9	33	0.006
12:00 - 13:00	9	33	0.000	9	33	0.000	9	33	0.000
13:00 - 14:00	9	33	0.000	9	33	0.000	9	33	0.000
14:00 - 15:00	9	33	0.000	9	33	0.000	9	33	0.000
15:00 - 16:00	9	33	0.003	9	33	0.003	9	33	0.006
16:00 - 17:00	9	33	0.000	9	33	0.000	9	33	0.000
17:00 - 18:00	9	33	0.003	9	33	0.003	9	33	0.006
18:00 - 19:00	9	33	0.007	9	33	0.007	9	33	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.019			0.038

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/N - RETIREMENT FLATS

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	33	0.000	9	33	0.000	9	33	0.000
08:00 - 09:00	9	33	0.000	9	33	0.000	9	33	0.000
09:00 - 10:00	9	33	0.000	9	33	0.000	9	33	0.000
10:00 - 11:00	9	33	0.010	9	33	0.007	9	33	0.017
11:00 - 12:00	9	33	0.000	9	33	0.000	9	33	0.000
12:00 - 13:00	9	33	0.003	9	33	0.003	9	33	0.006
13:00 - 14:00	9	33	0.003	9	33	0.000	9	33	0.003
14:00 - 15:00	9	33	0.000	9	33	0.003	9	33	0.003
15:00 - 16:00	9	33	0.000	9	33	0.000	9	33	0.000
16:00 - 17:00	9	33	0.000	9	33	0.000	9	33	0.000
17:00 - 18:00	9	33	0.000	9	33	0.003	9	33	0.003
18:00 - 19:00	9	33	0.000	9	33	0.000	9	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.016			0.032

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/N - RETIREMENT FLATS

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	33	0.000	9	33	0.000	9	33	0.000
08:00 - 09:00	9	33	0.000	9	33	0.000	9	33	0.000
09:00 - 10:00	9	33	0.007	9	33	0.003	9	33	0.010
10:00 - 11:00	9	33	0.000	9	33	0.003	9	33	0.003
11:00 - 12:00	9	33	0.000	9	33	0.000	9	33	0.000
12:00 - 13:00	9	33	0.000	9	33	0.000	9	33	0.000
13:00 - 14:00	9	33	0.000	9	33	0.000	9	33	0.000
14:00 - 15:00	9	33	0.000	9	33	0.000	9	33	0.000
15:00 - 16:00	9	33	0.000	9	33	0.000	9	33	0.000
16:00 - 17:00	9	33	0.003	9	33	0.003	9	33	0.006
17:00 - 18:00	9	33	0.000	9	33	0.000	9	33	0.000
18:00 - 19:00	9	33	0.000	9	33	0.000	9	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.009			0.019

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/N - RETIREMENT FLATS

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	33	0.003	9	33	0.003	9	33	0.006
08:00 - 09:00	9	33	0.000	9	33	0.000	9	33	0.000
09:00 - 10:00	9	33	0.000	9	33	0.000	9	33	0.000
10:00 - 11:00	9	33	0.000	9	33	0.000	9	33	0.000
11:00 - 12:00	9	33	0.000	9	33	0.000	9	33	0.000
12:00 - 13:00	9	33	0.000	9	33	0.000	9	33	0.000
13:00 - 14:00	9	33	0.000	9	33	0.000	9	33	0.000
14:00 - 15:00	9	33	0.000	9	33	0.007	9	33	0.007
15:00 - 16:00	9	33	0.000	9	33	0.000	9	33	0.000
16:00 - 17:00	9	33	0.000	9	33	0.000	9	33	0.000
17:00 - 18:00	9	33	0.000	9	33	0.000	9	33	0.000
18:00 - 19:00	9	33	0.003	9	33	0.003	9	33	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.013			0.019

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

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

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix J

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



Fact File 7. – Weekday Traffic Generation

The 12 hour traffic generation data for the 6 surveyed developments is given in Table FF7a, below. This is the data obtained from the weekday surveys only.

Table FF7a Traffic Generation (Vehicle Movements per 12 hour day – 0700-1900)

Development	Date of Survey	No of Apartments	Vehicle Movements (12 Hr)	Generation per apartment
Haven Court, Hythe	Tuesday 28 April 2015	36	68	1.89
Hanna Court, Wilmslow	Monday 1 August 2016	40	63	1.58
Eadhelm Court, Edenbridge	Wednesday 29 April 2015	34	56	1.65
Pagham Court, Bognor	Wednesday 8 July 2015	36	107	2.92
Lauder Court, Hamilton	Friday 29 July 2016	64	55	0.86
Middleton Court, Porthcawl	Tuesday 26 July 2016	60	69	1.15
Totals		270	418	1.55

There were no recorded visits by heavy goods vehicles. However, the occasional visit, such as that by the refuse collection vehicle must be expected.

The hourly vehicle movements are derived in the following table FF7b.

For the purposes of this table the developments are labelled as follows:

A – Haven Court, Hythe

B – Hanna Court, Wilmslow

C - Eadhelm Court, Edenbridge

D – Pagham Court, Bognor

E – Lauder Court, Hamilton

F – Middleton Court, Porthcawl

Table FF7b – Hourly movements

Time Period	A		B		C		D		E		F		Totals	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
0700 -0800	0	0	1	1	2	1	0	0	0	1	1	2	4	5
0800-0900	0	1	3	1	1	1	1	3	2	1	1	1	8	8
0900-1000	3	2	3	5	2	4	8	9	2	1	3	6	21	27
1000-1100	4	5	4	4	4	4	10	5	3	4	3	2	28	24
1100-1200	6	4	1	1	6	4	10	9	2	3	5	5	30	26
1200-1300	7	4	4	5	5	6	8	8	5	5	6	8	35	36
1300-1400	5	6	4	4	0	1	3	3	3	2	1	2	16	18
1400-1500	1	2	4	3	1	1	1	2	2	1	2	1	11	10
1500-1600	1	2	3	5	1	2	4	4	2	3	4	7	15	23
1600-1700	3	5	0	0	4	2	3	2	5	4	5	1	20	14
1700-1800	2	2	2	2	1	0	4	4	0	2	2	0	11	10
1800-1900	2	1	1	2	2	1	1	3	1	1	0	1	7	9
Totals	34	34	30	33	29	27	53	52	27	28	33	36	206	210

Based on the final two columns of Table FF7b, the following data can be obtained, as shown in Table FF7c, below. This shows the percentage of the arrivals taking place in each hour along with the percentage of departures.

Table FF7c - Percentage hourly splits

Time period	Arrivals	Departures	% Arrivals	% Departures
0700-0800	4	5	1.94	2.38
0800-0900	8	8	3.88	3.81
0900-1000	21	27	10.19	12.86
1000-1100	28	24	13.59	11.43
1100-1200	30	26	14.56	12.38
1200-1300	35	36	16.99	17.14
1300-1400	16	18	7.77	8.57
1400-1500	11	10	5.34	4.76
1500-1600	15	23	7.28	10.95
1600-1700	20	14	9.71	6.67
1700-1800	11	10	5.34	4.76
1800-1900	7	9	3.40	4.28
Totals	206	210	99.99	99.99

Traffic Generation – 1900 - 0700

The current surveys did not include observing the traffic generation between 7 p.m. and 7 a.m. The best available information is based on a survey at a single development at Swanland, near Hull, undertaken some years ago. This suggested that the 24 hour generation could be obtained by multiplying the 12 hour generation, between 7 a.m. and 7 p.m. by 1.098, i.e. increasing the daytime generation by about 10%. The survey also indicated that there were no vehicle movements between the hours of 10 p.m. and 7 a.m.

Residents and Visitor Traffic Generation

On the basic assumption that all vehicles parked within the site at 7 a.m. are likely to be owned by residents, unless there is a clear indication to the contrary, it is possible to differentiate between vehicle movements made by residents' cars and those of others, which can be described as visitors. This description is used to include staff, servicing vehicles, deliveries, taxis, ambulances, etc. and visits by relatives and friends.

Table FF7d below shows the split between resident and visitor traffic movements. It can be seen that residents undertake significantly fewer vehicle movements than visitors.

Table FF7d Visitor Movements in Relation to Resident Movements

Development	Day of Week	Resident Generation Rate – (Movements/ Apartment)	Visitor + Staff Generation Rate – (Movements/ Apartment)	Ratio – Visitor/Staff movements to Residents' Movements
Haven Court, Hythe	Tuesday	0.58	1.31	2.26
	Saturday	0.5	1.53	3.06
	Sunday	0.56	1.25	2.23
Hanna Court, Wilmslow	Monday	0.5	1.075	2.15
Eadhelm Court, Edenbridge	Wednesday	0.529	1.147	2.16
Paghan Court, Bognor	Wednesday	0.92	2.0	2.17
Lauder Court, Hamilton	Friday	0.28	0.58	2.07
Middleton Court, Porthcawl	Tuesday	0.68	0.47	0.69

It can be seen that for the majority of the developments, visitors undertake some 2 to 3 times as many vehicle movements as residents. The major exception to this is Middleton Court, Porthcawl. The reason for this is difference is unclear. However, there are two possible, or likely, options.

Option 1. Some residents wish to live in a seaside resort, close to the sea. This may mean that they are moving away from their established links with friends and family, rather than moving closer to them, which is a common reason for moving to a specific development. This may result in residents receiving fewer visits from relatives and long-term friends.

Option 2. Although there is on-street parking outside Middleton Court, it is possible that the availability of spaces for use by visitors is very limited, due to the pressure on parking usage on roads just a short distance away from the sea front. If this is the case, a higher level of pedestrian movements would be expected generated by visitors who have had to park some distance away from the development.

The survey does show a higher than average generation of pedestrian movements, which would tend to support this second possible explanation. If this is the reason, the real vehicle generation would be likely to be somewhat higher than the observed level, due to some of the vehicles generated parking away from the site and therefore away from the view of the survey staff. However, it is also possible that a higher than average pedestrian generation could be due to more residents undertaking recreational walks, due to the attractiveness of the waterside.

Motor Cycle Movements

The surveys do not record a single trip by motorcycle to or from the developments.

It is also of note that no resident indicated that they owned any motorcycle.

Fact File 8. – Weekend Traffic Generation

In order to ascertain if the weekend traffic generation is significantly higher than that during weekdays, the development in Hythe near Southampton (Haven Court) was surveyed over the 12 hour period starting at 7 a.m. on both a Saturday and a Sunday.

The following table, FF8a, gives the comparable trip generation rates for the three survey days.

Table FF8a Comparable trip rates – weekday and weekend (Haven Court, Hythe)

Day	Resident Generation Rate	Visitor Generation Rate	Overall Generation Rate
Tuesday 28 April 2015	0.58	1.31	1.89
Saturday 2 May 2015	0.5	1.52	2.02
Sunday 17 May 2015	0.56	1.25	1.81

The full data is reproduced in Appendix II to this report.

This suggests that a Saturday may well have a similar, albeit slightly increased generation, when compared to the weekday generation but that the Sunday is a little quieter.

However, the variations are not significant, with both weekend days having a total generation with 10% of the Tuesday generation. This difference may well be within the daily differences and could be influenced by such factors as the weather.

Chandlers Accident Repair Centre, Angmering
Transport Statement

Appendix K

Paul Basham Associates Ltd
Report No. 034.0135/TS/2



Calculation Reference: AUDIT-247601-201019-1036

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : O - CONVENIENCE STORE

TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 280 to 469 (units: sqm)
 Range Selected by User: 70 to 1000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

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

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Wednesday	1 days
Friday	2 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
------------------------------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	5
------------------	---

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

Secondary Filtering selection:Use Class:

A1	5 days
----	--------

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	5 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	5 days
----	--------

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

PTAL Rating:

No PTAL Present	5 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	DH-01-O-01	SAINSBURY'S LOCAL	DURHAM
	132 STATION LANE		
	HARTLEPOOL		
	SEATON CAREW		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	469 sqm	
	Survey date: MONDAY	26/11/12	Survey Type: MANUAL
2	ES-01-O-01	ONE STOP	EAST SUSSEX
	THE SIDINGS		
	HASTINGS		
	ORE VALLEY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	280 sqm	
	Survey date: WEDNESDAY	19/12/12	Survey Type: MANUAL
3	NF-01-O-01	TESCO EXPRESS	NORFOLK
	DEREHAM ROAD		
	NORWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	298 sqm	
	Survey date: FRIDAY	26/10/12	Survey Type: MANUAL
4	NY-01-O-03	CO-OPERATIVE	NORTH YORKSHIRE
	FOREST ROAD		
	NORTHALLERTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	305 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL
5	TW-01-O-02	CO-OPERATIVE	TYNE & WEAR
	ETHEL TERRACE		
	SUNDERLAND		
	CASTLETOWN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	330 sqm	
	Survey date: FRIDAY	07/04/17	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	294	3.398	3	294	3.171	3	294	6.569
07:00 - 08:00	5	336	7.194	5	336	6.540	5	336	13.734
08:00 - 09:00	5	336	8.145	5	336	7.432	5	336	15.577
09:00 - 10:00	5	336	5.707	5	336	5.291	5	336	10.998
10:00 - 11:00	5	336	5.410	5	336	5.291	5	336	10.701
11:00 - 12:00	5	336	4.459	5	336	4.816	5	336	9.275
12:00 - 13:00	5	336	6.302	5	336	5.707	5	336	12.009
13:00 - 14:00	5	336	5.529	5	336	5.172	5	336	10.701
14:00 - 15:00	5	336	6.243	5	336	6.064	5	336	12.307
15:00 - 16:00	5	336	6.718	5	336	7.313	5	336	14.031
16:00 - 17:00	5	336	9.572	5	336	8.086	5	336	17.658
17:00 - 18:00	5	336	10.107	5	336	8.621	5	336	18.728
18:00 - 19:00	5	336	10.285	5	336	11.415	5	336	21.700
19:00 - 20:00	5	336	6.183	5	336	7.848	5	336	14.031
20:00 - 21:00	5	336	4.043	5	336	5.707	5	336	9.750
21:00 - 22:00	5	336	2.794	5	336	3.270	5	336	6.064
22:00 - 23:00	1	469	1.919	1	469	2.559	1	469	4.478
23:00 - 24:00									
Total Rates:			104.008			104.303			208.311

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

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

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Parameter summary

Trip rate parameter range selected:	280 - 469 (units: sqm)
Survey date range:	01/01/12 - 25/09/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

TAXIS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	294	0.000	3	294	0.000	3	294	0.000
07:00 - 08:00	5	336	0.119	5	336	0.119	5	336	0.238
08:00 - 09:00	5	336	0.297	5	336	0.238	5	336	0.535
09:00 - 10:00	5	336	0.059	5	336	0.119	5	336	0.178
10:00 - 11:00	5	336	0.059	5	336	0.059	5	336	0.118
11:00 - 12:00	5	336	0.119	5	336	0.119	5	336	0.238
12:00 - 13:00	5	336	0.178	5	336	0.178	5	336	0.356
13:00 - 14:00	5	336	0.059	5	336	0.059	5	336	0.118
14:00 - 15:00	5	336	0.059	5	336	0.059	5	336	0.118
15:00 - 16:00	5	336	0.059	5	336	0.059	5	336	0.118
16:00 - 17:00	5	336	0.119	5	336	0.059	5	336	0.178
17:00 - 18:00	5	336	0.059	5	336	0.059	5	336	0.118
18:00 - 19:00	5	336	0.000	5	336	0.000	5	336	0.000
19:00 - 20:00	5	336	0.000	5	336	0.059	5	336	0.059
20:00 - 21:00	5	336	0.059	5	336	0.059	5	336	0.118
21:00 - 22:00	5	336	0.059	5	336	0.059	5	336	0.118
22:00 - 23:00	1	469	0.000	1	469	0.000	1	469	0.000
23:00 - 24:00									
Total Rates:			1.304			1.304			2.608

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

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

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

OGVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	294	0.000	3	294	0.000	3	294	0.000
07:00 - 08:00	5	336	0.238	5	336	0.238	5	336	0.476
08:00 - 09:00	5	336	0.238	5	336	0.119	5	336	0.357
09:00 - 10:00	5	336	0.178	5	336	0.297	5	336	0.475
10:00 - 11:00	5	336	0.119	5	336	0.119	5	336	0.238
11:00 - 12:00	5	336	0.059	5	336	0.059	5	336	0.118
12:00 - 13:00	5	336	0.059	5	336	0.059	5	336	0.118
13:00 - 14:00	5	336	0.059	5	336	0.059	5	336	0.118
14:00 - 15:00	5	336	0.000	5	336	0.000	5	336	0.000
15:00 - 16:00	5	336	0.059	5	336	0.059	5	336	0.118
16:00 - 17:00	5	336	0.000	5	336	0.000	5	336	0.000
17:00 - 18:00	5	336	0.000	5	336	0.000	5	336	0.000
18:00 - 19:00	5	336	0.000	5	336	0.000	5	336	0.000
19:00 - 20:00	5	336	0.000	5	336	0.000	5	336	0.000
20:00 - 21:00	5	336	0.000	5	336	0.000	5	336	0.000
21:00 - 22:00	5	336	0.000	5	336	0.000	5	336	0.000
22:00 - 23:00	1	469	0.000	1	469	0.000	1	469	0.000
23:00 - 24:00									
Total Rates:			1.009			1.009			2.018

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

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

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	294	0.566	3	294	0.453	3	294	1.019
07:00 - 08:00	5	336	0.416	5	336	0.476	5	336	0.892
08:00 - 09:00	5	336	0.773	5	336	0.713	5	336	1.486
09:00 - 10:00	5	336	0.357	5	336	0.238	5	336	0.595
10:00 - 11:00	5	336	0.297	5	336	0.178	5	336	0.475
11:00 - 12:00	5	336	0.238	5	336	0.297	5	336	0.535
12:00 - 13:00	5	336	0.357	5	336	0.297	5	336	0.654
13:00 - 14:00	5	336	0.059	5	336	0.178	5	336	0.237
14:00 - 15:00	5	336	0.178	5	336	0.238	5	336	0.416
15:00 - 16:00	5	336	0.238	5	336	0.238	5	336	0.476
16:00 - 17:00	5	336	0.713	5	336	0.595	5	336	1.308
17:00 - 18:00	5	336	0.595	5	336	0.476	5	336	1.071
18:00 - 19:00	5	336	0.773	5	336	0.773	5	336	1.546
19:00 - 20:00	5	336	0.178	5	336	0.297	5	336	0.475
20:00 - 21:00	5	336	0.119	5	336	0.357	5	336	0.476
21:00 - 22:00	5	336	0.178	5	336	0.178	5	336	0.356
22:00 - 23:00	1	469	0.000	1	469	0.000	1	469	0.000
23:00 - 24:00									
Total Rates:			6.035			5.982			12.017

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

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