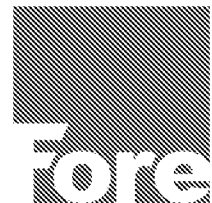


Ropemaker Properties
Former Waitrose, Avon Road, Littlehampton

Transport Statement

19 December 2018
Version 3.0
Issue





Contents

1	Introduction	1
1.1	Commission	1
1.2	The Site & Surrounding Area	1
1.3	The Development Proposal	1
1.4	Pre-Planning Application Advice & Discussions	2
1.5	Purpose of this Report	2
1.6	Structure of the Report	3
2	Local Highway Network	4
2.1	Introduction	4
2.2	Avon Road	4
2.3	B2187 Franciscan Way	4
2.4	East Street	5
2.5	Anchor Springs	5
2.6	Duke Street	5
3	Sustainable Access	7
3.1	Introduction	7
3.2	Pedestrian Access	7
3.2.1	Pedestrian Catchment	7
3.2.2	Pedestrian Facilities	11
3.2.3	Proposed Pedestrian Infrastructure & Amenity	12
3.3	Cycle Access	12
3.4	Public Transport	13
3.4.1	Bus Services	13
3.4.2	Rail Services	16
3.5	Summary	17
4	Transport Planning Policy	18
4.1	Introduction	18
4.2	National Policy	18
4.2.1	National Planning Policy Framework	18
4.2.2	Planning Practice Guidance	20
4.3	Local Policy	21
4.3.1	West Sussex Structure Plan 2001-2016	21

4.3.2	Arun Local Plan 2011-2031	22
4.3.3	West Sussex Transport Plan 2011-2026 (LTP3)	24
5	Development Proposals	25
5.1	Introduction	25
5.2	The Development Proposal	25
5.3	Vehicular Access	25
5.4	Car and Cycle Parking	25
5.4.1	Car Parking	25
5.4.2	Cycle Parking	27
5.5	Servicing	27
6	Vehicle Trip Generations	28
6.1	Introduction	28
6.2	Vehicle Trip Generation	28
7	Total Person Trip Generations by Mode	30
7.1	Introduction	30
7.2	Mode Share	30
7.3	Person Trip Generation	30
8	Personal Injury Accident Data	32
8.1	Introduction	32
8.2	Road Traffic Accidents	32
8.2.1	Anchor Springs / East Street Junction	32
8.2.2	Anchor Springs / St Martins Road Junction	33
8.2.3	B2187 Franciscan Way	33
8.2.4	B2187 Franciscan Way / East Street Junction	33
8.2.5	Summary	33
9	Summary and Conclusions	34

Figures

Figure 1: Site Location

Figure 2: Local Highway Network

Figure 3: Pedestrian Catchment and Local Amenities

Figure 4: Cycling Catchment and Routes

Figure 5: Public Transport

Drawings

Fore Drawing 7042-100-P-001 B - Visibility Splay at Site Access and Swept Path Analysis

Appendices

Appendix A: Proposed Site Layout

Appendix B: WSCC Parking Demand Calculator Extract

Appendix C: TRICS Output

Appendix D: PIA data extract from Crashmap website

1 Introduction

1.1 Commission

Ropemaker Properties are bringing forward a planning application for a proposed residential development at the site of the Former Waitrose, Avon Road, Littlehampton, BN17 6AT.

The proposal is to redevelop the site to provide a total of 83 No. residential apartments and two retail units totalling 159sqm.

Fore Consulting Limited (Fore) has been commissioned by Ropemaker Properties to provide highways and transport advice in relation to the site. This includes the preparation of a Transport Statement to accompany the planning application.

1.2 The Site & Surrounding Area

The site is located within Littlehampton town centre and was previously used as a Waitrose store with a private car park. The former Waitrose building is currently vacant. The site is bound by East Street to the east, B2187 Franciscan Way to the north, Anchor Springs to the south and Duke Street to the west. Avon Road runs through the site, between the former Waitrose building and the car park.

Due to the site's town centre location, there are numerous retail and leisure attractors within close proximity and the site benefits from nearby bus stops. Littlehampton Train Station is also in close proximity.

The site is accessed from the one-way system along Avon Road, connecting Duke Street to East Street. The location of the site is shown on Figure 1.

1.3 The Development Proposal

The proposal is to redevelop the site to provide a total of 83 No. residential apartments and two retail units totalling 159sqm.

The site will consist of two residential buildings, a four-storey building located to the north of Avon Road (Building 1) and a three-storey building to the south (Building 2).

Building 1 will accommodate 34 No. residential apartments and Building 2 will accommodate 49 No. residential apartments. The 159sqm retail units will be located on the ground floor, at the eastern end of the southern building.



It should be noted that the 159 sqm retail units proposed as part of the development are considered ancillary and it is not anticipated that these will generate new additional trips in their own right, given that the units will form part of the wider retail offer in the town centre.

The proposal is to provide vehicular access to the site from the existing one-way arrangement along Avon Road.

It is proposed that a total of 41 No. car park spaces (including 2 No. disabled spaces) are to be provided for the apartments. The main car park comprising 26 No. car park spaces will be located adjacent to Building 1. The remaining spaces will be located along Avon Road. The disabled spaces are to be located at the southern end of the main car park, close to the footways along Avon Road. There are no car park spaces proposed for the retail units.

66 No. internal cycle spaces are to be provided with 42 No. cycle spaces in the form of 21 No. cycle stands provided externally (10 No. stands outside the entrance to Building 1 and 11 No. stands to the west of Building 2).

The proposed site layout is presented at Appendix A.

1.4 Pre-Planning Application Advice & Discussions

The scope of this Transport Statement has been discussed and agreed with Jamie Brown at West Sussex County Council (WSCC) Highways through an initial email dated 12 April 2018 and written pre-application advice received on 25 April 2018.

The work undertaken as part of this Transport Statement is based on the agreed scope of works and the written pre-application advice.

1.5 Purpose of this Report

This report is the Transport Statement for the development proposals. The report has been commissioned to understand and analyse the effects of the proposed development from a transport perspective, and to inform the proposals for the site and the subsequent planning application.

The purpose of this Transport Statement is to provide a robust assessment of the transportation implications of the development. The intention is to provide the necessary information to assist WSCC as the Local Planning Authority and Highway Authority, in determining the planning application.



The structure and content of this Transport Statement follows the national planning policy contained within the National Planning Policy Framework¹ and Planning Practice Guidance². Due consideration has also been given to the relevant local guidance and standards published by WSCC.

1.6 Structure of the Report

This report is structured as follows:

- Section 2 describes the local highway network within the vicinity of the site.
- Section 3 describes the opportunities to access the site by sustainable modes of travel including walking, cycling and public transport.
- Section 4 identifies national and local transport policies that are relevant to the proposed development.
- Section 5 provides an overview of the development proposals and provides a summary of the access, parking and servicing arrangements.
- Section 6 provides an estimate of the predicted vehicle trip generations associated with the proposed development.
- Section 7 provides an estimate of the predicted total person trip generations and mode share associated with the proposed development.
- Section 8 provides a summary of the latest five-year personal injury accident data on the study highway network.
- Section 9 summarises and concludes the findings of the Report.

¹ *National Planning Policy Framework*, Department of Communities and Local Government, 2012.

² *Planning Practice Guidance*, Department of Communities and Local Government, 2014.

2 Local Highway Network

2.1 Introduction

This Section describes the local highway network within the vicinity of the site, comprising the key links and junctions which are identified on Figure 2 and discussed in turn below.

2.2 Avon Road

Vehicular access to the site will be provided from the existing one-way arrangement along Avon Road.

Avon Road is a single lane one-way carriageway which bisects the site, running from Duke Street in the west to East Street east. No entry signs are displayed at the junction with East Street.

The road also provides access to a private residential driveway at the eastern end and two retail showrooms at the western end where there is a smaller private car park.

Avon Road is adopted along its eastern section. The carriageway is lit in places and is approximately 6.0m wide. There are waiting restrictions in the form of double yellow lines along both sides of the carriageway.

Footways are provided on both sides of the road. The footway on the northern side of the road terminates at the private car park to the west and the footway on the southern side of the road terminates outside the former Waitrose building. Dropped kerbs are provided at junction mouths and a zebra crossing with tactile paving is provided close to the car park entrance.

2.3 B2187 Franciscan Way

B2187 Franciscan Way is a two-way carriageway which runs from east to west to the north of the site. In the vicinity of the site, the road has one westbound lane and two eastbound lanes, one of which is a dedicated right-turn lane for the three-arm mini roundabout junction with East Street.

To the west of the site, the road has one lane in both directions, with dedicated ghost-island right-turn lanes at junctions with Duke Street and A284 Arundel Road. To the west of the junction with A284 Arundel Road, the road becomes B2187 Arundel Road.

The carriageway is lit and is subject to a 30 mph speed limit. Waiting restrictions in the form of double yellow lines are provided on both sides of the road.

A footway is provided on the southern side of the road, whilst the footway to the north of the road terminates at a controlled pedestrian crossing point.

2.4 East Street

East Street is a two-way carriageway which runs east of the site in a north-south alignment. The road provides access to the Flintstone Centre to the east of the site and various fast food outlets further south before connecting with High Street.

The road has one lane in both directions and connects to Avon Road via a three-arm exit-only priority junction. A four-arm junction exists to the south of the site with Anchor Springs and Church Street, the Anchor Springs arm being an exit-only arm. To the north, East Street connects with B2187 Franciscan Way and B2187 East Street via a three-arm mini roundabout. East Street continues to the south towards Beach Road, providing access to the coast.

In the vicinity of the site, the carriageway is lit, is approximately 8.0m wide and is subject to a 30mph speed limit. Waiting restrictions in the form of double yellow lines are provided on the eastern side of the road and a single yellow line is provided on the western side of the road. There is a “no stopping” sign in front of a row of houses on the western side of the road, effective between 8am and 6pm. Footways are provided on both sides of the road.

2.5 Anchor Springs

Anchor Springs runs parallel to Avon Road to the south of the site. The road is a single-lane, one-way carriageway, running from west to east. The road provides access to the Anchor Springs pay and display car park to the south and acts as a local bus corridor, with sheltered bus stops provided on the northern side of the road.

Anchor Springs becomes Duke Street to the west and meets a three-arm priority junction with St Martins Road. To the east, a four-arm junction exists with East Street and Church Street. At this point the Anchor Springs arm is exit-only.

The carriageway is lit and is approximately 6.0m wide. There are waiting restrictions in the form of double yellow lines along both sides of the carriageway. Footways are provided on both sides of the road.

2.6 Duke Street

Duke Street runs to the west of the site and is a single-lane, one-way carriageway, running from north to south.



At its northern end the road forms an entry-only three-arm junction with B2187 Franciscan Way and continues south before becoming Anchor Springs and continuing eastbound along the southern boundary of the site.

The carriageway is lit and is approximately 4.5m wide. There are waiting restrictions in the form of double yellow lines along both sides of the carriageway and footways are provided on both sides. An on-road cycle lane is provided on the western side of the carriageway.

3 Sustainable Access

3.1 Introduction

This Section describes the opportunities to access the site by sustainable modes of travel including walking, cycling and public transport.

The Section gives consideration to the existing and proposed new infrastructure within the vicinity of the site along with the potential pedestrian and cycling catchment areas. Details of local public transport services are also provided.

The layout will ensure that the site is fully integrated with the surrounding pedestrian and cycle infrastructure. In doing so, the layout has incorporated pedestrian and cycle accessibility as a key design focus, seeking to connect to the existing infrastructure and provide an attractive and safe environment within the site which is not dominated by traffic movement or vehicular parking.

Given the highly accessible location of the site, the intention is to reduce reliance on the car by encouraging travel by public transport, walking and cycling which would be further supported by promotion of sustainable travel options through implementation of travel planning measures.

3.2 Pedestrian Access

3.2.1 Pedestrian Catchment

Although walking distances will obviously vary between individuals and circumstances the Chartered Institution of Highways & Transportation (CIHT) suggests acceptable walking distances for commuting as follows³:

- Desirable: 500m.
- Acceptable: 1.0km.
- Preferred Maximum: 2.0km

Figure 3 presents the isochrone of a 2.0km walking distance threshold measured from an indicative central point within the site and uses the most convenient and likely pedestrian routes through the site, assuming only formal road crossings and designated footways / footpaths are used.

³ *Guidelines for Providing for Journeys on Foot*, Chartered Institution of Highways & Transportation, 2000, p49.

The site is highly accessible on-foot and due to its location within Littlehampton Town Centre, a wide range of local amenities and facilities are available within the 2.0km walking distance isochrone. Further, a number of local amenities and facilities are located within 500m walking distance of the site. Therefore, many day-to-day needs can be readily accessed from the site on foot.

Amenities and facilities within the 2.0km walking distance isochrone are summarised below. Walking distances and walking times have been estimated based on information from the Google Maps route planner.

Retail:

- Littlehampton High Street is located approximately 160m walking distance (approximately 2 minutes walking time) to the south of the site. There are various retail outlets located along High Street, including Bonmarche, New Look, Card Factory, The Works, WHSmith and Holland & Barrett. Banks such as Halifax and Barclays Bank are also provided. Food and drink outlets are provided, including Costa Coffee and Greggs. A Post Office is also located on High Street, as well as various betting shops, a jewellers, a home hardware store and a PC repair shop. The main shopping area of High Street is pedestrianised.
- The nearest supermarket (Sainsbury's) is located to the southwest of the site, within approximately 280m walking distance (approximately 4 minutes walking time). The store is located at the western end of the pedestrianised section of High Street.
- An Iceland supermarket is located to the south of the site on Surrey Street and is accessible within approximately 350m walking distance (approximately 4 minutes walking time). Further supermarket provision (Lidl) is located on Pier Road and is accessible within approximately 500m walking distance (approximately 6 minutes walking time).
- Approximately 1.3km walking distance (approximately 16 minutes walking time) from the site, on Beaumont Park, there is a Tesco Express Store.
- A Morrisons foodstore is located to the north of the site and is accessible within approximately 1.7km walking distance (approximately 21 minutes walking time).
- A Tesco Superstore is located to the west of the site and is accessible within approximately 1.9km walking distance (approximately 25 minutes walking time).
- Fast-food retail outlets, including Chicken Cottage, The Fish Factory and Shahan Tandoori are located along East Street between approximately 120m and 150m walking distance of the site (approximately 1 to 2 minutes walking time).



- Further fast-food retail outlets are provided along B2140 Beach Road, between approximately 220m and 270m walking distance to the south east of the site. In the same location, various amenities are provided including a dry cleaners, a bicycle service shop, an off licence and a post office.
- Fast-food retail outlets are also provided to the south west of the site, along High Street and Surrey Street, all of which are accessible within approximately 350m walking distance.
- An Esso Petrol Filling Station with an associated convenience store is located on Horsham Road, approximately 800m walking distance (approximately 10 minutes walking time) to the north west of the site.
- To the north of the petrol filling station, on B2187 Horsham Road, there is a row of shops, including an off licence and a carpet shop.
- Approximately 1.6km walking distance (approximately 20 minutes walking time) from the site, off B2187 Bridge Road, there is a Currys PC World store and a Wickes store.
- On A284 Wick Street, to the north of the site, there is a cluster of shops and fast food takeaways outlets. The shops are located within approximately 1.1km to 1.3km walking distance of the site and include a charity shop, a flower shop, a laundrette and Poundstretcher. There is also a bakery, a café, and pizza takeaways shops.

Leisure:

- The coast is accessible within approximately 1.1km walking distance (approximately 14 minutes walking time) from the site, and attractors include East Beach, a children's play area and Norfolk Gardens which includes tennis courts and a pitch and putt golf course.
- The Look and Sea Centre, which is a maritime heritage centre with a café, is located on Surrey Street on the banks of the River Arun and is accessible within approximately 550m walking distance (approximately 6 minutes walking time) of the site.
- Harbour Park Amusements and Windmill Cinema are located on Windmill Road and are accessible within approximately 850m and 900m walking distance of the site, respectively (approximately 11 minutes walking time).
- The Southfields Jubilee Community Centre is located approximately 1.1km walking distance (approximately 14 minutes walking time) from the site.



- The Wickbourne Community Centre is located approximately 900m walking distance (approximately 11 minutes walking time) from the site.
- The Worthing Road Recreation Ground is located approximately 1.7km walking distance (approximately 21 minutes walking time) from the site.
- Littlehampton Badminton and Squash Club is located approximately 300m walking distance (approximately 4 minutes walking time) to the south of the site.
- Littlehampton Rugby Club is located approximately 1.2km walking distance (approximately 15 minutes walking time) from the site.
- The Littlehampton Swimming and Sports Centre is located on B2140 Sea Road and is accessible within approximately 1.9km walking distance (approximately 23 minutes walking time) of the site.
- Daisyfields Campsite is located approximately 2.0km walking distance (approximately 25 minutes walking time) from the site.
- A variety of public houses are located around Littlehampton High Street including The Crown (270m walking distance), The Dolphin Hotel (300m walking distance), The George Inn (350m walking distance), The Coco Lounge (350m walking distance) and The White Hart (400m walking distance). Further provision is provided further afield, including The Empress (600m walking distance) The Sportsman Sports and Social Club (800m walking distance) and The Dew Drop (1.2km walking distance).

Education:

- The nearest secondary school (The Littlehampton Academy) to the site is located to the north east of the site and is accessible within approximately 750m walking distance (approximately 10 minutes walking time).
- Cornfield School is located to the north of Littlehampton and is accessible within approximately 2.0km walking distance (approximately 25 minutes walking time).
- There are four primary schools located within 2.0km walking distance of the site. The nearest primary school to the site (River Beach Primary School) is accessed from York Road to the north of the site and is accessible within approximately 450m walking distance (approximately 6 minutes walking time).
- St Catherine's Catholic Primary School, White Meadows Primary Academy and Lyminster Primary School are located within approximately 950m (12 minutes),

1.1km (14 minutes) and 1.4km (17 minutes) walking distance from the site, respectively.

- Butterfly House Day Nursery is located on Norfolk Road, approximately 1.0km walking distance (approximately 13 minutes walking time) from the site.

Healthcare:

- The nearest medical centre to the site (Fitzalan Medical Centre) is located on Fitzalan Road, approximately 650m walking distance (approximately 8 minutes walking time) to the south east of the site.
- Wick Surgery is located on Clun Road, approximately 1.0km walking distance (approximately 13 minutes walking time) from the site.
- The Glyn Norris Pharmacy is located on A284 Wick Street, approximately 1.3km walking distance (approximately 15 minutes walking time) from the site.

3.2.2 Pedestrian Facilities

Pedestrian facilities within the vicinity of the site are outlined as follows:

Footways:

- Footways are provided along the majority of the northern side of Avon Road and on parts of the southern side. Dropped kerbs are provided at junction mouths and a zebra crossing is provided close to the car park entrance. The footway connects to further provision on Duke Street, providing convenient access to the amenities on Littlehampton High Street.
- A pedestrianised area connects from the zebra crossing on Avon Road to Anchor Springs, providing a convenient route to local bus services.
- Footways along East Street provide pedestrian connections to the pedestrianised section of High Street located to the south of the site.
- Street lighting is provided along the roads within the vicinity of the site.
- A controlled signalised pedestrian crossing point is provided across the B2187 Franciscan Way, connecting to residential areas to the north of the site.

Public Rights of Way:

As shown on Figure 3, there are a number of public rights of way footpaths and bridleways within the vicinity of the site. The main ones are described below.

- A network of short public footpaths exists in the vicinity of the site, providing pedestrian routes through the nearby residential areas.
- A public footpath runs to the north east of the site, beginning at B2187 East Street, before heading north past Littlehampton Police Station towards the northern extent of Littlehampton.
- A network of public footpaths exists to the west of the public footpath described above. The footpaths can be accessed from Whiteways Close and Cornwall Road and provide pedestrian routes through residential areas of Littlehampton. To the west, a public footpath begins at Arundel Road and heads west through residential areas of Littlehampton towards the retail park containing Currys PC World and Wickes.
- Public footpaths run alongside the River Arun, providing the opportunity for recreational walking along the coast and in the local countryside.
- A public bridleway connects Littlehampton to Rustington to the east. The bridleway can be accessed from Berry Lane.

3.2.3 Proposed Pedestrian Infrastructure & Amenity

It is intended that a permeable multi-user network will be established as part of the site's internal layout. This network will allow residents and visitors to move within the site on foot and cycle. Pedestrian access to the site will tie in with existing footway provision on the surrounding network. The proposals include the retention of the existing pedestrianised area connecting Avon Road to Anchor Springs.

3.3 Cycle Access

The Cycling England document *Integrating Cycling into Development Proposals*⁴ suggests acceptable cycling distances of commuting and non-work purposes, as follows:

“Most cycle journeys for non-work purposes and those to rail stations are between 0.5 miles [0.8km] and 2 miles [3.2km], but many cyclists are willing to cycle much further. For work, a distance of 5 miles [8 km] should be assumed.”

⁴ *Integrating Cycling into Development Proposals*, Cycling England, 2009, p4.



With regards to these distances, Figure 4 shows that public amenities, villages and local countryside that can be accessed within 8.0km of the site.

The whole of Littlehampton is accessible within 8.0km cycling distance of the site, providing access to a wide range of public amenities including retail, leisure, education and health facilities detailed above.

The settlements of Wick, Lyminster, Rustington and Angmering are also located within the 8.0km cycling catchment, providing further provision of local services. Arundel, Yapton and parts of Middleton-on-Sea are also accessible within the catchment, as well as the Rudfield Industrial Estate.

The cycle routes that are accessible within 8km of the site are outlined as follows:

- National Cycle Route 2 is a long-distance route, which when complete, will link Dover in Kent with St. Austell in Cornwall. The route in West Sussex is still being developed and currently the only open section exists between Littlehampton and Bognor Regis. The route can be accessed from River Road before heading west towards Bognor Regis.

The West Sussex cycle journey planner identifies a recommended cycle route as part of the South Coast Cycle Route (SCCR) which passes the site on B2187 Franciscan Way and East Street before heading south and continuing along the coast towards Rustington and beyond.

3.4 Public Transport

3.4.1 Bus Services

The CIHT document Planning for Public Transport in Developments⁵ states that:

“The maximum walking distance to a bus stop should not exceed 400m and preferably be no more than 300m.”

The document also states that:

“It is better to provide bus routes that are simple and direct than slavishly follow limits on walk distance to stops. Routes should not be split or diverted to achieve a walk distance of less than 400m from every destination to its nearest bus stop.”

⁵ Planning for Public Transport in Developments, Chartered Institution of Highways & Transportation, 1999, p11.

Figure 5 indicates that the closest bus stops in relation to the site are located on Anchor Springs to the south of the site and these are accessible on foot within 100m of the pedestrian access points into the proposed buildings.

The bus stops provide access to the Number 3, 9, 12, 15, 026, 69, 615, 665 and 700 bus services.

The Table below provides a summary of the bus services available at the bus stops on Anchor Springs, including the respective frequencies and destinations served.

Table 1: Bus Services, Destinations and Frequencies

Service	Operator (Service No.)	Destinations Served	Approximate Daily Frequency (Both Directions)		
			Mon-Fri.	Saturday	Sunday
3	Amberley & Slindon Community Bus	Rackham - Amberley - Houghton - Slindon - Littlehampton - Rustington	Twice daily (Wednesday Only)	-	-
9	Stagecoach	Shoreham by Sea - Lancing - Worthing - Littlehampton - Arundel	60 minutes	60 minutes	60 minutes
12	Compass Travel	Littlehampton Tesco - Littlehampton Sea Front - Rustington Sainsbury's	Five services per day	-	-
15	Compass Travel	Littlehampton Tesco - Kingley Gate - Toddington - Wick - Littlehampton	60 minutes	60 minutes	-
026	National Express Shuttle	London - Brighton - Southwick - Worthing - Goring by Sea - Rustington - Littlehampton - Bognor Regis	Once daily	Once daily	Once daily
69	Stagecoach	Wick - Littlehampton - Bognor Regis - Barfoots of Botley	Four Daily (Two AM, Two PM)	Four Daily (Two AM, Two PM)	Four Daily (Two AM, Two PM)
615	Compass Travel	Poling - Arundel - Littlehampton Academy	Once Daily (School Days Only)	-	-
665	Stagecoach	Wick - Littlehampton - Yapton - Walberton - Barnham - Westergate Ormiston Academy	Once daily	-	-
700	Stagecoach	Littlehampton - Rustington - East Preston - Goring by Sea - Worthing - Shoreham by Sea - Hove - Brighton	10 minutes	10 minutes	20 minutes
700	Stagecoach	Littlehampton - Felpham - Yapton - Bognor Regis - Chichester	20 minutes	20 minutes	30 minutes



Note: Bus services correct as of 16 November 2018.

The Number 3 bus service provides a Wednesday only service between Rackham and Rustington, with one bus in both directions. The service departs Anchor Springs towards Rustington at 1015 hours and departs towards Rackham at 1220 hours.

The Number 9 bus service provides an hourly service between Shoreham by Sea and Arundel, Monday to Sunday. The service operates from Anchor Springs between 0730 hours and 1900 hours (approximate times) in both directions, Monday to Saturday. On Sundays, the services operate between 0900 hours and 1700 hours (approximate times).

The Number 12 bus service provides a service between Littlehampton Tesco and Rustington Sainsbury's. The service runs hourly from Anchor Springs between 1005 hours and 1405 towards Rustington Sainsbury's and hourly between 1044 and 1444 towards Littlehampton Tesco. There is currently no weekend service provided.

The Number 15 bus service provides an hourly loop service from Littlehampton Tesco, Monday to Saturday. The service runs hourly from Anchor Springs between 0900 and 1800 hours (approximate times). Additional services are provided during School Holidays. There is currently no Sunday service provided.

The Number 026 National Express Shuttle service provides a daily service between Bognor Regis and London. Between Monday and Friday, the service departs from Anchor Springs towards London at 0747 hours and returns at 2116 hours, before continuing towards Bognor Regis. On a weekend the service departs at 0827 hours and arrives back at 2106 hours.

The Number 69 bus service provides four services between Wick and Barfoots of Botley, Monday to Sunday. The AM service departs to Barfoots of Botley at 0505 and 0605 hours and the PM services return to Littlehampton at 1847 and 1947.

The Number 615 bus service provides a Monday to Friday (school days only) service between Littlehampton and Poling Corner. The service departs Anchor Springs at 1505 hours. In the morning, the bus runs at 0817 hours from a bus stop on the B2187 Arundel Road, approximately 350m walking distance from the site.

The Number 665 bus service provides a daily service, Monday to Friday (school days only), between Littlehampton and Westergate Ormiston Academy. The service departs Anchor Springs towards Westergate Ormiston Academy at 0717 hours and the bus to Littlehampton arrives at 1517 hours.

The Number 700 bus service provides a service between Littlehampton and Brighton. The service runs every 10 minutes Monday to Saturday and every 20 minutes on a Sunday. The services operate from Anchor Springs between 0600 hours and 2230 hours (approximate



times), Monday to Saturday and between 0700 hours and 2100 hours (approximate times) on a Sunday.

The Number 700 bus service provides a service between Littlehampton and Chichester via Bognor Regis. The service runs every 20 minutes Monday to Saturday and every 30 minutes on a Sunday. The services operate from Anchor Springs between 0600 hours and 2230 hours (approximate times), Monday to Saturday and between 0800 hours and 2100 hours (approximate times) on a Sunday.

3.4.2 Rail Services

The nearest railway station to the site is Littlehampton Railway Station, located within approximately 500m walking distance of the site. The station has facilities including cycle storage and car parking. 82 No. cycle storage spaces are provided. There is also step-free access to platforms and a ramp is available for train access.

Littlehampton Railway Station is served by Southern and at peak times also by Thameslink. The station currently connects Littlehampton to Bognor Regis, Portsmouth and Southsea, and London Victoria.

Between Littlehampton and London Victoria, a train runs approximately every half an hour in both directions, Monday to Saturday. On a Sunday, the service is reduced to approximately one train every hour.

Between Littlehampton and Portsmouth and Southsea, a train runs approximately every hour in both directions, Monday to Saturday. No service is currently provided on a Sunday.

Between Littlehampton and Bognor Regis, a train runs approximately every half an hour in both directions, Monday to Saturday. On a Sunday, the service is reduced to approximately one train every hour.

The Table below provides a summary of the rail services available from Littlehampton Railway Station.

Table 2: Rail Services, Destinations and Frequencies

Operator	Destinations Served	Approximate Daily Frequency		
		Mon-Fri	Saturday	Sunday
Southern Thameslink (Peak times only)	Littlehampton - Angmering - Goring by Sea - Worthing - Shoreham-by-Sea - Hove - Gatwick Airport - East Croydon - Clapham Junction - London Victoria	30 minutes	30 minutes	60 minutes
Southern	Littlehampton - Ford- Chichester - Southbourne - Havant - Portsmouth and Southsea	60 minutes	60 minutes	-
Southern	Littlehampton - Ford - Barnham - Bognor Regis	30 minutes	30 minutes	60 minutes

Note: Rail services correct as of 25 July 2018

3.5 Summary

It can be seen that the proposed development is highly accessible by more sustainable modes of transport than the private car. The site is located within Littlehampton Town Centre with a wide range of facilities and attractors within convenient walking and cycling distances. Further, the site is very accessible by both bus and rail.

4 Transport Planning Policy

4.1 Introduction

This Section identifies national and local transport policies that are relevant to the proposed development and sets out how the development proposals respond to, and accord with, these policies.

4.2 National Policy

4.2.1 National Planning Policy Framework

The National Planning Policy Framework⁶ (NPPF) was published by the Ministry of Housing, Communities and Local Government (DCLG) in July 2018. The NPPF sets out how the planning system will contribute to achieving sustainable development. In effect, this means planning is required to perform the following three specific roles:

- An economic role, contributing to building a strong, responsive and competitive economy.
- A social role, supporting strong, vibrant and healthy communities.
- An environmental role, protecting and enhancing the natural, built and historic environment.

The NPPF sets out a presumption in favour of sustainable development. This effectively means that development proposals that accord with the development plan should be approved without delay. Where the development plan is out-of-date or absent, proposals should be approved unless the adverse impacts would significantly and demonstrably outweigh the benefits when assessed against the NPPF, or specific policies in the NPPF indicate development should be restricted (for example, if the site is subject to certain environmental designations).

The NPPF states that in order to promote sustainable transport, transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- *The potential impacts of development on transport networks can be addressed;*

⁶ *National Planning Policy Framework*, Ministry of Housing, Communities and Local Government, 2018.



- *Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised - for example in relation to the scale, location or density of development that can be accommodated;*
- *Opportunities to promote walking, cycling and public transport use are identified and pursued;*
- *The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account - including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains and;*
- *Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.*

It is stated that in support of the above objectives, the planning system should:

“Actively manage patterns of growth...and significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes”.

Paragraph 111 of the NPPF states that all developments that generate significant amounts of movement should be required to provide a Travel Plan and should be supported by a Transport Statement or Transport Assessment.

In considering applications for development, the NPPF states it should be ensured that:

- *Appropriate opportunities to promote sustainable transport modes can be - or have been - taken up, given the type of development and its location;*
- *Safe and suitable access to the site can be achieved for all users; and*
- *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

Paragraph 109 of the NPPF states that development should only be prevented or refused on transport grounds where the residual cumulative impacts of the development are severe.

Furthermore, Paragraph 110 of the NPPF states that applications for development should:

- *Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second - so far as possible - to facilitating access to high quality public transport, with layouts that maximise the catchment*

area for bus or other public transport services, and appropriate facilities that encourage public transport use;

- *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *Create places that are safe, secure and attractive - which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.*

The proposed development is consistent with the NPPF. The site is highly accessible by sustainable modes of travel such as walking, cycling and public transport including bus and rail travel. A suitable vehicle access arrangement has been identified and the development will not materially affect the operation of the local highway network. A Transport Statement has been prepared for the proposed development and the residual cumulative impact of the proposed development is not considered to be severe within the context of Paragraph 109 of the NPPF.

4.2.2 Planning Practice Guidance

Planning Practice Guidance⁷ (PPG) was launched by the DCLG on 6 March 2014. It brings together many areas of English planning guidance into a new stream-lined format, which is linked to the NPPF. PPG replaces previous planning practice guidance documents. The guidance is a key material consideration in the decision-making process, set within the overarching NPPF.

PPG provides advice on when Transport Assessments and Transport Statements are required and what they should contain⁸:

“Transport Assessments are thorough assessments of the transport implications of development, and Transport Statements are a ‘lighter-touch’ evaluation to be used where this would be more proportionate to the potential impact of the development (i.e. in the case of developments with anticipated limited transport impacts).”

⁷ *Planning Practice Guidance*, Department of Communities and Local Government, 2014.

⁸ *Planning Practice Guidance: Travel Plans, transport assessments and statements in decision-taking*, Department of Communities and Local Government, Revision Date: 06/03/2014, Paragraph 005.

Furthermore, it states that:

“Transport Assessments and Statements can be used to establish whether the residual transport impacts of a proposed development are likely to be “severe”, which may be a reason for refusal, in accordance with the National Planning Policy Framework.”

And:

“The Transport Assessment or Transport Statement may propose mitigation measures where these are necessary to avoid unacceptable or “severe” impacts.”

The content and structure of this Transport Statement has been prepared in accordance with the PPG.

4.3 Local Policy

4.3.1 West Sussex Structure Plan 2001-2016

The West Sussex Structure Plan (2001-2016)⁹ set out the strategic planning framework for growth and development in the county in the years leading up to 2016 and beyond. Though the Plan has no formal status in the current planning system, it remains the strategic policy statement for future development and land-use planning in the county.

The following policies pertinent to the proposed development are set out below:

Policy NE13: Transport

“Proposals for development should be permitted provided that, where possible, they;

- Widen travel choice and promote walking, cycling and passenger transport;*
- Integrate the different types of transport and the various provisions of service to maximise the efficiency of transport systems”*

Policy DEV4: Travel Needs and Choices

“Development should not be permitted unless: the travel needs it generates are met; where possible; it reduces the need to travel; it achieves safe and convenient access by a choice of means of travel; it encourages and enables an increase in walking, cycling and

⁹ West Sussex Structure Plan 2001-2016, West Sussex County Council, 2005

the use of passenger transport; and the number and impact of motorised journeys is minimised.”

“Local plans will include policies to ensure that:

- Wherever possible, development is located close to existing passenger transport, walking and cycling networks or major passenger transport interchanges or where this can be provided as part of the development;*
- Development caters safely, conveniently and adequately for all travel needs;*
- Where necessary, transport assessments are undertaken to assess whether safe and convenient access by all modes of transport can be achieved, that the development encourage and enable and increase in walking, cycling and the use of passenger transport, and that the number and impact of motorised journeys will be minimised; and;*
- Where necessary, the preparation and implementation of travel plans is secured to encourage and enable an increase in walking, cycling and the use of passenger transport.”*

The proposed development accords with the framework set out in the West Sussex Structure Plan 2001-2016 in that the travel needs generated can be met by the existing passenger transport, walking and cycling networks. Further, the central location of the development within Littlehampton reduces the need to travel by car as a wide variety of amenities and services are located within close proximity. A Framework Travel Plan has been prepared to encourage an increase in use of sustainable modes of travel to the site.

4.3.2 Arun Local Plan 2011-2031

The Arun Local Plan 2011 - 2031 was adopted on 18 July 2018 and replaces the Arun Local Plan 2003 and the saved policies within it. The Local Plan sets out a spatial vision, objectives and a sustainable strategy for delivering the needed growth of the District over the period 2011 - 2031. The Local Plan will be used to guide decisions on planning, development and regeneration activity over the plan period.

Strategic objectives for Transport identified in the Local Plan are as follows:

- “Reduce the need to travel and promote sustainable forms of transport.*
- Plan for climate change and work in harmony with the environment to conserve natural resources and increase biodiversity.*

- *Create vibrant, attractive, safe and accessible towns and villages that build upon their unique characters to provide a wide range of uses and which are a focus for quality shopping, entertainment, leisure, tourism and cultural activities.*
- *Promote strong, well integrated and cohesive communities, through the promotion of healthy lifestyles, provision of good quality accessible community facilities and a safe environment, which delivers an enhanced quality of life to all. This includes meeting the needs of a growing elderly population.*
- *Strengthen Arun's economic base and provide local job opportunities by increasing, diversifying and improving the quality of employment within the District through the provision of appropriate employment sites, better infrastructure, including road and rail access, quality affordable accommodation and the development of business support and partnerships".*

Policies that are pertinent to the development proposal from a transport perspective are set out below:

- **Policy T SP1 - Transport and Development:** *"To ensure that growth in the District strengthens Arun's economic base, reduces congestion, works to tackle climate change and promotes healthy lifestyles; the Council will ensure that development: provides safe access on to the highway network; contributes to highway improvements and promotes sustainable transport, including the use of low emission fuels, public transport improvements and the cycle, pedestrian and bridleway network".*
- **Policy T DM1 - Sustainable Travel and Public Rights of Way:** *"New development must ensure ease of movement, prioritising safe pedestrian and cycle access to the green infrastructure network and access to public transport and community transport services where a need has been identified. Access to alternative modes of transport including public transport services, the public right of way and cycle networks, must be available and accessible to all members of the community".*

The proposed development is consistent with Policies T SP1 and DM1 of the Arun Local Plan. A vehicular access strategy has been identified and it is considered that vehicles can safely access the local highway network.

Further, alternative modes of transport including public transport services (bus and rail) and pedestrian / cycle networks are readily accessible from the site, as set out in Section 3 of this Report.

4.3.3 West Sussex Transport Plan 2011-2026 (LTP3)

The Third Local Transport Plan (LTP3) for West Sussex covers the period from 2011 to 2026. The Plan reflects the WSCC's desire to deliver sustainable improvements in quality of life, local economic performance and social inclusion. The main objective of LTP3 is to improve the quality of life for the people of West Sussex by:

- *Promoting economic growth;*
- *Tackling climate change;*
- *Providing access to services, employment and housing;*
- *Improving safety, security and health.*

LTP3 identifies an implementation plan for Arun and identifies the following aims that are considered relevant to the proposed development:

- *“All new development should be designed to promote ‘local living’, for example shops, jobs and homes all being within easy reach of each other.”*
- *“All new development should provide enough secure cycle parking to meet the needs of the development and be within close proximity to public transport.”*
- *“Safeguarding against traffic generated by new development resulting in the capacity of the highway network being exceeded, by including measures to encourage sustainable travel behaviour.”*

The proposed development will adhere to the aspirations of the LTP3.

The proposed development is in a highly accessible and sustainable location. It's location in Littlehampton town centre promotes 'local living,' allowing convenient access to local services, as set out in Section 3 of this Report. A Framework Residential Travel Plan has been prepared to accompany the planning application and it is envisaged that the development of the Travel Plan will be a condition to any planning approval. The overriding aim of the Travel Plan is to reduce the dependency on use of the private car and encourage travel to the site by more sustainable modes including walking, cycling, public transport and car sharing. Further, the predicted trip generation estimates within this Transport Statement demonstrate that the site will not generate a material increase in traffic on the local highway network.

5 Development Proposals

5.1 Introduction

This Section provides an overview of the development proposals and provides a summary of the access, parking and servicing arrangements.

5.2 The Development Proposal

The proposal is to redevelop the site to provide a total of 83 No. residential apartments and two retail units totalling 159sqm.

The site will consist of two residential buildings, a four-storey building located to the north of Avon Road (Building 1) and a three-storey building to the south (Building 2). Building 1 will accommodate 34 No. residential apartments and Building 2 will accommodate 49 No. residential apartments. The 159sqm retail units will be located on the ground floor, at the eastern end of the southern building.

It should be noted that the 159sqm retail units proposed as part of the development are considered ancillary and it is not anticipated that these will generate new additional trips in their own right, given that the units will form part of the wider retail offer in the town centre.

The proposed site layout is presented at Appendix A.

5.3 Vehicular Access

The proposal is to provide vehicular access to the site from the existing one-way arrangement along Avon Road.

Access will be provided to the main car park to the north of Avon Road by means of a three-arm priority junction.

Fore Drawing 7042-100-P-001 B to the rear of this Report shows the proposed access arrangement and visibility splays.

5.4 Car and Cycle Parking

5.4.1 Car Parking

It is proposed that a total of 41 No. car park spaces (including 2 No. disabled spaces) are to be provided for the apartments. The main car park comprising 26 No. car park spaces will

be located adjacent to Building 1. The remaining spaces will be located along Avon Road. The disabled spaces are to be located at the southern extent of the main car park, close to the footways along Avon Road. There are no car park spaces proposed for the retail units.

In order to identify the number of car parking spaces required at new residential developments, WSCC has produced the “*West Sussex Residential Parking Demand Calculator (PDC)*”. The PDC advises a total car parking demand of 116 No. spaces is required at the development. An extract of the PDC showing the required number of parking spaces is provided at Appendix B.

It can be seen that the level of parking proposed at the development is lower than the required demand identified from the PDC. Pre-application advice received from WSCC, stated that if the proposed parking provision is under the required parking demand, the applicant should:

“provide some additional justification considering sustainable transport opportunities within reasonable walking distance of the site”.

With the above in mind, it is important to emphasise that the site is highly accessible by more sustainable modes of travel than the private car. Details of the sustainable travel credentials of the site have been identified in Section 3 of this report. This has demonstrated that the proposed development is highly accessible by alternative modes of transport and that there are a wide range of facilities and attractors that are within convenient distance to the site given its location within Littlehampton Town Centre. Consequently, it is likely that a high proportion of trips to the site would be undertaken on foot, by cycle or by public transport. Additionally, the site will be subject to the implementation of a Residential Travel Plan which will provide measures aimed at further reducing car journeys to the site, the Framework of which has been prepared under separate cover to this Report.

It should also be stressed of course that anyone purchasing a property would be acutely aware as to whether a parking space is provided for that particular property. It is unlikely that someone owning a car would purchase a property at the development if a designated parking space was not provided. That is, any properties without a parking space will likely attract prospective residents who do not own a car and whose intentions are to make full use of the site’s highly accessible location and to choose to travel by non car modes, thereby further promoting sustainable travel and consequently reducing demand on the highway network.

In summary, it is considered that due to the highly accessible and sustainable location of the site the proposed car parking provision at the site should be considered acceptable. Further, it should be emphasised that a development of this type in this location is likely to be considered an attractive proposition to potential residents who choose not to own a car or are unable to drive. That is, the proposed development is likely to attract a number

of residents who do not own cars and whose intentions are to make full use of the site's highly accessible location to travel by non-car modes, thereby further promoting sustainable travel at the site.

5.4.2 Cycle Parking

66 No. internal cycle spaces are to be provided with 42 No. cycle spaces in the form of 21 No. cycle stands provided externally (10 No. stands outside the entrance to Building 1 and 11 No. stands to the west of Building 2).

WSCC guidance for parking at new residential developments provides the following recommended levels of cycle parking provision:

Table 3: WSCC Cycle Parking Guidance

Type	Size	Cycle Provision (per Unit)
Houses	Up to 4 rooms (1 & 2 bed)	1 space
Houses	5+ rooms (3+ bed)	2 spaces
Flats	Up to 3 rooms (1 & 2 bed)	0.5 space (if communal storage otherwise same as 1 & 2 bed house)
Flats	4+ rooms (3+ bed)	1 space

Taking into account the guidance provided above, a minimum of 42 No. cycle parking spaces are required at the site i.e. 0.5 spaces per unit. The proposed development will provide a total of 108 No. cycle parking spaces, thereby exceeding the minimum requirement.

5.5 Servicing

Servicing at the site will be undertaken along Avon Road, to the south of Building 1.

Fore Drawing 7042-100-P-001 B to the rear of this report demonstrates that a large car can pass the largest anticipated service vehicle, an 11.0m long articulated lorry, whilst it is servicing the development.

6 Vehicle Trip Generations

6.1 Introduction

This Section provides an estimate of the predicted vehicle trip generations associated with the proposed development.

The vehicle trip generations have been estimated based on the proposed development of 83 No. residential apartments and have been shown for the typical network Weekday AM and PM peak periods (0800-0900 hours and 1700-1800 hours). These periods are also likely to represent the maximum trip generations from the proposed development.

It should be noted that the 159 sqm retail units proposed as part of the development are considered ancillary and it is not anticipated that these will generate new additional trips in their own right.

6.2 Vehicle Trip Generation

Traffic generation for the proposed development has been estimated based on the proposed 83 No. residential apartments.

Weekday AM and PM peak hour average vehicular trip rates for the land use proposed have been derived from the TRICS database, following interrogation for sites based on the criteria identified in the Table below.

Table 4: TRICS Search Criteria

Proposed Land Use	TRICS Land Use	TRICS Sub-Category	Location
Residential	Residential (03)	Flats Privately Owned (C)	Town Centre

The sites selected have been reviewed to ensure the trip rates are comparable to the proposed development in terms of scale and location. The resulting outputs from the TRICS database are presented in Appendix C and summarised in the Table below for each of the peak hours.

Table 5: Predicted Weekday Vehicular Trip Rates

Land Use	Unit	Vehicular Trip Rates (per dwelling)					
		AM Peak (0800-0900)			PM Peak (1700-1800)		
		Arr	Dep	Two Way	Arr	Dep	Two Way
Residential	1 Dwelling	0.029	0.050	0.079	0.063	0.053	0.116

The resulting predicted vehicular generations for the proposed site are shown in the Table below.

Table 6: Predicted Vehicular Generations

Land Use	Unit	Vehicular Trip Generations (Vehicles)					
		AM Peak (0800-0900)			PM Peak (1700-1800)		
		Arr	Dep	Two Way	Arr	Dep	Two Way
Residential	83 Dwellings	2	4	7	5	4	10

It can be seen that the proposed development is predicted to generate a total of 7 and 10 two-way vehicle trips during the typical Weekday AM and Weekday PM peak hours, respectively. This equates to approximately one new vehicle on the network every 9 and 6 minutes during the typical Weekday AM and Weekday PM peak hours, respectively. This level of additional traffic will not have a material impact on the operation of the local highway network.

It should also be stressed that the predicted vehicle movements outlined above represent the likely busiest periods in terms of the development generated traffic. Throughout the remainder of the day, hourly vehicle movements to / from the site will be lower.

Further, the proposed residential development is likely to generate significantly lower traffic flows than the site's former use as a Waitrose store, thereby resulting in a net reduction in vehicular movements on the highway network in comparison to its previous consented use.

It is therefore concluded that no further assessment of the traffic implications of the proposed development is required.

7 Total Person Trip Generations by Mode

7.1 Introduction

This Section provides an estimate of the predicted total person trip generations and mode share associated with the proposed development.

7.2 Mode Share

The 2011 Census data ('Method of Travel to Work') has been used to derive the baseline mode share for the development proposals. The mode share for the Middle Super Output Area (MSOA) Arun 011 has been used. As this is the MSOA in which the site is located, the mode share accurately represents the likely travel characteristics of the site, with regards to the existing accessibility of the site by public transport and the configuration of the local highway network.

The mode share from this data is summarised in the Table below. The categories 'works mainly at or from home', 'other method of travel to work' and 'not in employment' have been excluded from the assessments.

Table 7: Baseline Mode Share

Mode	Baseline Mode Share (% of journeys by mode)
Underground, metro, light rail, tram	0.1%
Train	8.4%
Bus, minibus or coach	3.1%
Taxi or minicab	0.6%
Motorcycle, scooter or moped	0.7%
Driving a car or van	55.3%
Passenger in a car or van	9.0%
Bicycle	4.4%
On foot	18.3%
Total	100.0%

7.3 Person Trip Generation

By applying the established baseline mode share with the predicted vehicle generations for the proposed development, the predicted person trip generation by mode has been estimated. This is set out in the Table below.

Table 8: Baseline Person Trip Generation by Mode

Mode	Person Trip Generation (Trips)					
	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arr	Dep	Total	Arr	Dep	Total
Underground, metro, light rail, tram	0	0	0	0	0	0
Train	0	1	1	1	1	2
Bus, minibus or coach	0	0	0	0	0	1
Taxi or minicab	0	0	0	0	0	0
Motorcycle, scooter or moped	0	0	0	0	0	0
Driving a car or van	2	4	7	5	5	10
Passenger in a car or van	0	1	1	1	1	2
Bicycle	0	0	1	0	0	1
On foot	1	1	2	2	1	3
Total	4	8	12	10	8	18

It can be seen that the proposed development is predicted to generate a total of 12 and 18 two-way person trips during the identified Weekday AM and Weekday PM peak hours, respectively.

8 Personal Injury Accident Data

8.1 Introduction

This Section provides a summary of the latest five-year personal injury accident data on the study highway network.

A review of the Crashmap website has been undertaken to provide an assessment of the latest five-year personal injury accident record within the vicinity of the site. An extract from the Crashmap website is provided at Appendix D.

8.2 Road Traffic Accidents

A review of the Crashmap website has shown that there have been eight recorded accidents on the study highway network during the latest five-year period. It should be noted that there have been no recorded accidents in the immediate vicinity of the proposed site access onto Avon Road. A summary of the accidents and their locations is provided in the Table below.

Table 9: Road Traffic Accident Summary

Location	Accident Severity		
	Slight	Serious	Fatal
Anchor Springs / East Street Junction	1	3	0
Anchor Springs / St Martins Road Junction	1	0	0
B2187 Franciscan Way	2	0	0
B2187 Franciscan Way / East Street Junction	1	0	0
Total	5	3	0

8.2.1 Anchor Springs / East Street Junction

A total of three accidents were recorded at the Anchor Springs / East Street Junction.

One of the accidents was classified as being of slight severity and occurred on the Anchor Springs arm of the junction. The accident involved a cyclist and a goods vehicle.

Three of the accidents were classified as being of serious severity. One of the accidents involved a motorcyclist and a car and occurred at the junction. Another of the accidents occurred on the East Street (south) arm of the junction and involved a cyclist and a car.



The other accident occurred on East Street, approximately 10m north of the junction and involved one car.

8.2.2 Anchor Springs / St Martins Road Junction

An accident of slight severity occurred on Anchor Springs at the junction with St Martins Road. The accident involved a car and a motorcycle.

8.2.3 B2187 Franciscan Way

Two accidents of slight severity were recorded on B2187 Franciscan Way, both approximately 25m east of the junction with Duke Street.

One of the accidents involved one car and the other involved a car and a cyclist.

8.2.4 B2187 Franciscan Way / East Street Junction

One accident of slight severity was recorded at the B2187 Franciscan Way, on the East Street (south) arm of the junction.

The accident involved a car and a motorcycle.

8.2.5 Summary

Overall, the number of accidents occurring on the highway network within the vicinity of the site over the latest five-year period is considered to be low and there are no obvious accident 'cluster spots'.

Given that the proposed development will generate only low levels of additional traffic, it is unlikely to have a detrimental impact on the accident rate of the local highway network. Further, it should be emphasised that the development will result in a net reduction in traffic movements on the network in comparison to the site's former use as a Waitrose store.

9 Summary and Conclusions

This Transport Statement has been prepared to accompany a planning application for the proposed development of 83 No. residential apartments and 159sqm retail units at the site of the Former Waitrose, Avon Road, Littlehampton, BN17 6AT. The report provides a robust assessment of the transportation implications of the development proposals.

The Transport Statement has:

- Examined the baseline conditions of the study transport network.
- Considered relevant national and local transport planning policy.
- Provided an analysis of sustainable travel opportunities to the site by walking, cycling and public transport.
- Outlined the proposed development including the access, parking and servicing arrangements.
- Determined the predicted Weekday AM and PM peak hour vehicle generations from the development site onto the local highway network.
- Determined the predicted total person trips by mode to the site during the identified Weekday AM and PM peak hours.
- Provided an analysis of the latest recorded five-year personal injury accident data on the study highway network.

It is considered that:

- The development accords with both national and local transport policy.
- The development is highly accessible by sustainable modes of travel, including walking, cycling and public transport. The site lies within the town centre and is within convenient walking and cycling distances to a range of local attractors including a wide range of facilities within the town centre itself. It has been demonstrated that the site offers the opportunity to travel to the development using the wide range of bus services along Anchor Springs, which are located within approximately 100m of the proposed building entrances. Further, Littlehampton Rail Station is located within convenient walking distance, approximately 500m from the building entrances.
- It is proposed that a total of 41 No. car park spaces are to be provided for the apartments. The main car park comprising 26 No. car park spaces will be located



adjacent to Building 1. The remaining spaces will be located along Avon Road. Disabled spaces are to be located to the south of the main car park, close to the footways along Avon Road. There are no car park spaces proposed for the retail units. It is considered that due to the highly accessible and sustainable location of the site, the proposed car parking provision at the site should be considered acceptable. Further, it should be emphasised that a development of this type in this location is likely to be considered an attractive proposition to potential residents who choose not to own a car or are unable to drive. That is, the proposed development is likely to attract a number of residents who do not own cars and whose intentions are to make full use of the site's highly accessible location to travel by non-car modes, thereby further promoting sustainable travel at the site.

- It has been demonstrated that the site is predicted to generate only small levels of traffic during the busiest Weekday AM and Weekday PM hourly periods, which will not have a material impact on the operation of the local highway network. The 159sqm retail units proposed as part of the development are considered ancillary and it is not anticipated that these will generate new additional trips in their own right. Further, the proposed use for the site is likely to generate significantly lower traffic flows than the site's former use as a Waitrose store.
- There have been seven recorded accidents in the vicinity of the site during the latest five-year period. Two of the accidents were classified as 'serious' and five were classified as 'slight'. There have been no recorded accidents in the immediate vicinity of the proposed site access. Given the low levels of additional traffic, the development is unlikely to have a detrimental impact on the accident rate of the local highway network and again it is emphasised that the development will result in a net reduction in traffic movements in comparison to the site's former use as a Waitrose store.

The residual cumulative impacts of the proposed development are not considered to be severe within the context of Paragraph 109 of the NPPF.

It is therefore concluded that, in terms of highways, the development proposals are acceptable.

Figures



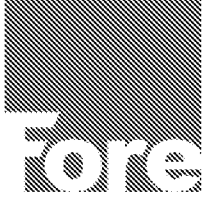
Key:

 Site Location

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Fore Consulting Limited
Suite 14, City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP

0191 255 7778
enquiries@foreconsulting.co.uk
www.foreconsulting.co.uk



Client:
Ropemaker Properties

Project:
Former Waitrose, Avon Road, Littlehampton

Figure Title:
Site Location

Scale: Not to Scale	Figure Status: Issue
Job Number: 7042	Figure Number: Figure 1



Key:

- Site Location
- Key Links

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Suite 14, City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP

0191 255 7778
enquiries@foreconsulting.co.uk
www.foreconsulting.co.uk

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Project:
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Figure Title:
Local Highway Network

Scale: Not to Scale	Figure Status: Issue
Job Number: 7042	Figure Number: Figure 2



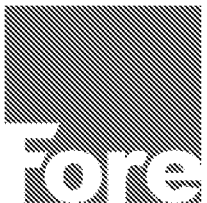
Key:

- Site Location
- 2.0km Walking Distance Isochrone
- Note: Isochrone measured from indicative central point within the site
- Public Right of Way (Footpath)
- Public Right of Way (Bridleway)
- Retail (eg supermarket or fast-food takeaway shop)
- Leisure and Recreation (eg park or public house)
- Education (eg primary school or nursery)
- Health (eg Pharmacy or Medical Centre)
- Littlehampton Train Station
- Area adjacent to site with high concentration of local amenities including leisure, retail and health facilities

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Suite 14, City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP

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enquiries@foreconsulting.co.uk
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Client:
Ropemaker Properties

Project:
Former Waitrose, Avon Road, Littlehampton

Figure Title:
Pedestrian Catchment and Local Amenities

Scale: Not to Scale	Figure Status: Issue
Job Number: 2121	Figure Number: Figure 3



Key:

- Site Location
- 8.0km Cycling Distance Isochrone

Note: Isochrone measured from indicative central point within the site

- National Cycle Route 2
- South Coast Cycle Route

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Suite 14, City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP

0191 255 7778
enquiries@foreconsulting.co.uk
www.foreconsulting.co.uk

Client:
Ropemaker Properties

Project:
Former Waitrose, Avon Road, Littlehampton

Figure Title:
Cycle Catchment and Routes

Scale: Not to Scale	Figure Status: Issue
Job Number: 7042	Figure Number: Figure 4



Key:

Site Location

Bus Route

Bus Stop

Route Number

Littlehampton Train Station

Bus Services:

Number 3 Bus Service: Rackham - Amberley - Slindon - Littlehampton - Rustington

Number 9 Bus Service: Littlehampton - Holmbush Shopping Centre

Number 12 Bus Service: Littlehampton Tesco - Rustington Sainsburys

Number 15 Bus Service: Littlehampton Tesco - Kingley Gate - Toddington - Wick - Littlehampton

Number 69 Bus Service: Wick - Littlehampton - Bognor Regis - Barfoots of Botley

Number 615 Bus Service: Poling - Arundel - Littlehampton

Number 665 Bus Service: Wick - Littlehampton - Yapton - Walberton - Barnham - Westergate Ormiston Academy

Number 700 Bus Service: Littlehampton - Bognor Regis - Chichester - Havant - Portsmouth

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Fore Consulting Limited
Suite 14, City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP

0191 255 7778
enquiries@foreconsulting.co.uk
www.foreconsulting.co.uk

Client:

Ropemaker Properties

Project:

Former Waitrose, Avon Road, Littlehampton

Figure Title:

Public Transport Network

Scale:
Not to Scale

Figure Status:
Issue

Job Number:
7042

Figure Number:
Figure 5

AR0142018 Fore Consulting LLP



Drawings

NOTES

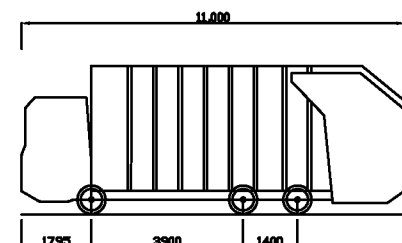
DESIGN NOTES

1. ALL DESIGN AND WORKS TO COMPLY WITH CURRENT VERSION OF THE FOLLOWING DOCUMENTS:
 - DESIGN MANUAL FOR ROADS AND BRIDGES (DMRB);
 - SPECIFICATION FOR ROAD WORKS (SRW);
 - MANUAL FOR STREETS (MFS);
 - ALL PROPOSED ROAD MARKINGS TO BE IN ACCORDANCE WITH THE FOLLOWING:
 - TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS; AND
 - TRAFFIC SIGNS MANUALS CHAPTER 5 - ROAD MARKINGS.
3. THE INFORMATION USED IN PREPARATION OF THIS AND ALL OTHER FORE DESIGNS AND DRAWINGS IS NOT WARRANTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SURVEY INFORMATION PROVIDED AND REPORT ANY ANOMALIES TO FORE.
4. PRELIMINARY LAYOUT SUBJECT TO FULL TOPOGRAPHICAL SURVEY & DETAILED DESIGN INCLUDING CLEARANCE, STORAGE UNDERTAKERS SEARCH, DIVERSION REQUIREMENTS, HIGHWAY DRAINAGE PROVISION, LAND AVAILABILITY AND LOCAL AUTHORITY APPROVAL.
5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL PROJECTS, ENGINEERS & SPECIALISTS DRAWINGS AND SPECIFICATIONS.

KEY:

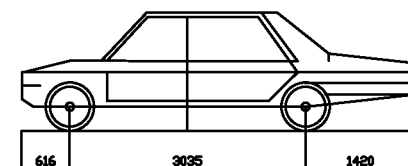
2.0M X 43M VISIBILITY SPLAY

INTERSTATE
 STATE ROUTE
 APPROXIMATE HIGHWAY BOUNDARY



PHEONIX REFUSE VEHICLE (3 AXLE)

OVERALL LENGTH	11.0M
OVERALL WIDTH	2.450M
OVERALL BODY HEIGHT	3.814M
MIN BODY GROUND CLEARANCE	0.366M
TRACK WIDTH	2.450
LOCK TO LOCK TIME	4.00S
KERB TO KERB TURNING RADIUS	9.500M



LARGE CAR (2006)

OVERALL LENGTH	4.80m
OVERALL WIDTH	1.80m
OVERALL BODY HEIGHT	1.525m
MIN BODY GROUND CLEARANCE	0.310m
MAX TRACK WIDTH	1.831m
LOCK TO LOCK TIME	4.00S
KERB TO KERB TURNING RADIUS	5.900m

B	UPDATED SITE PLAN	04/ 12/ 2018	HS
A	UPDATED HIGHWAY BOUNDARY	02/ 08/ 2018	HS
REV	DESCRIPTION	DATE	BY

Client:

ROPEMAKER PROPERTIES

Project

FORMER WAITROSE, AVON ROAD,
LITTLEHAMPTON

36 Spital
London,

www.doc

14410

Project

ACKNOWLEDGMENTS

AVON

2000

=====

Path	Value
Path 1	0.12
Path 2	0.08
Path 3	0.05
Path 4	0.03
Path 5	0.02
Path 6	0.01
Path 7	0.01
Path 8	0.01
Path 9	0.01
Path 10	0.01
Path 11	0.01
Path 12	0.01
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Path 99	0.01
Path 100	0.01

END

~~~~~

444 445 446 447 448

|          |            |            |       |
|----------|------------|------------|-------|
| Drawn by | Checked by | Date       | Scale |
| HS       | GM         | 16.07.2018 | 1:150 |

Job Number **7042** Drawing Number **7042-100-P-001**

# Fore



## Appendix A

---

### Proposed Site Layout

- Drawing based on:  
1. 'Littlehampton Topo Survey' - by D&H  
Surveys | Drawing No. GS-01
- Section reference
  - Elevation reference
  - Site Boundary
  - Callout
  - Visibility Splay

36 SpitalSquare,  
London, E1 6DY  
[www.pod-architects.com](http://www.pod-architects.com)  
T +44 (0)20 7490 2246

pod architects

Project  
**ANCHOR SPRINGS DEVELOPMENT**  
**AVON ROAD**  
**LITTLEHAMPTON**  
**WEST SUSSEX**  
Drawing Title

**PROPOSED BLOCK PLAN**

Status  
**TOWN PLANNING**

© Pod Architects Do not remove this panel from the drawing  
No dimensions to be scaled from this drawing  
Report all errors and omissions to the Architect  
Dimensions to be checked on site before fabrication

|             |              |              |         |
|-------------|--------------|--------------|---------|
| North       | Sheet        | Scale        | Drawn   |
|             | A1           | As Indicated | JB      |
|             | Date         |              | Checked |
|             | 03/12/2018   |              | ps      |
| Project no. | Drawing no.  | Revision     |         |
| 128         | 128_TPP_0021 | 00           |         |



## Appendix B

---

### WSCC Parking Demand Calculator Extract

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

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

Ward 1

River

District

Arun

Ward 2

Beach

District

Arun

Ward 3

Ham

District

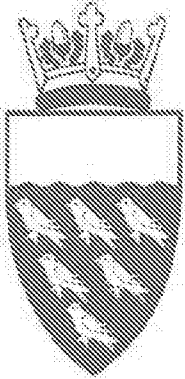
Arun

Ward Tempro Factor 2009-2026

1.079093

District Tempro Factor 2009-2026

1.067644



west

sussex

county

council

Ward Finder

Postcode

BN176AT

Ward

River Ward

Note:

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

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

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

Houses

1 bed = 3 rooms

2 bed = 4 rooms

3 bed = 5 rooms

4 bed = 6 rooms

5 bed = 7 rooms

Flats

Studio = 1 room

1 bed = 2 rooms

2 bed = 3 rooms

3 bed = 4 rooms

4 bed = 5 rooms

Garages will count as 1 space when allocating spaces.

Ward data used can be checked by the user by referring to the District-Ward Data Tables. The Tables highlight if the Census data does not include data for certain dwelling sizes. In such cases ownership values have been obtained using the nearest sized dwelling with same tenure and example, if no data is available for a private house with 1 room then data for a private house with 2 rooms has been used. The Car Ownership Data is highlighted in purple where such an approach has been used. Where Census data contains small samples for certain sized dwellings this is highlighted <20, and green if <50 in the Total Demand column. In such cases, other wards should be selected to achieve a higher sample size.

Report Summary Table

| DEVELOPMENT MIX |           |             |                            |                      | ALLOCATED PARKING | PARKING DEMAND |                           |       |                          |       |              |
|-----------------|-----------|-------------|----------------------------|----------------------|-------------------|----------------|---------------------------|-------|--------------------------|-------|--------------|
| Ref.            | Unit Type | Unit Tenure | Habitable Rooms (Per Unit) | No. of Units (Total) | Spaces (Per Unit) | Allocated No.  | Unallocated for Residents |       | Unallocated for Visitors |       | Total Demand |
|                 |           |             |                            |                      |                   |                | per unit                  | Total | per unit                 | Total |              |
| A               | Flats     | Private     | 2                          | 48                   | 1                 | 48             | 0                         | 11    | 0                        | 10    | 69           |
| B               | Flats     | Private     | 3                          | 35                   | 1                 | 35             | 0                         | 6     | 0                        | 7     | 48           |
| C               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| D               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| E               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| F               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| G               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| H               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| I               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| J               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| K               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| L               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| M               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| N               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| O               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| P               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| Q               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| R               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| S               |           |             |                            |                      |                   |                |                           |       |                          |       |              |
| Total           |           |             |                            | 83                   |                   | 83             |                           | 16.55 |                          | 16.60 | 116          |

PROJECT

CENTRE

PEOPLE | PASSION | PLACES

ARUN DISTRICT COUNCIL LU/3/19/PL

## Appendix C

---

TRICS Output

Calculation Reference: AUDIT-752701-180315-0306

**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 03 - RESIDENTIAL  
 Category : C - FLATS PRIVATELY OWNED

**VEHICLES**Selected regions and areas:

|           |                           |        |
|-----------|---------------------------|--------|
| <b>01</b> | <b>GREATER LONDON</b>     |        |
|           | HM HAMMERSMITH AND FULHAM | 1 days |
|           | HO HOUNSLOW               | 1 days |
| <b>08</b> | <b>NORTH WEST</b>         |        |
|           | GM GREATER MANCHESTER     | 2 days |
| <b>09</b> | <b>NORTH</b>              |        |
|           | CB CUMBRIA                | 1 days |
| <b>11</b> | <b>SCOTLAND</b>           |        |
|           | HI HIGHLAND               | 1 days |

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

**Secondary Filtering selection:**

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

Parameter: Number of dwellings  
 Actual Range: 20 to 154 (units: )  
 Range Selected by User: 6 to 493 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 15/03/18

*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:

|           |        |
|-----------|--------|
| Wednesday | 3 days |
| Thursday  | 2 days |
| Friday    | 1 days |

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

Selected survey types:

|                       |        |
|-----------------------|--------|
| Manual count          | 6 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:

|             |   |
|-------------|---|
| Town Centre | 6 |
|-------------|---|

*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 | 1 |
| Built-Up Zone    | 4 |
| High Street      | 1 |

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

**Secondary Filtering selection:**Use Class:

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

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

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

|                  |        |
|------------------|--------|
| 25,001 to 50,000 | 5 days |
| 100,001 or More  | 1 days |

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

Population within 5 miles:

|                   |        |
|-------------------|--------|
| 75,001 to 100,000 | 2 days |
| 500,001 or More   | 4 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 | 2 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  | 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 | 4 days |
| 3 Moderate      | 1 days |
| 5 Very Good     | 1 days |

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

LIST OF SITES relevant to selection parameters

|          |                            |                       |  |                               |
|----------|----------------------------|-----------------------|--|-------------------------------|
| <b>1</b> | <b>CB-03-C-01</b>          | <b>BLOCK OF FLATS</b> |  | <b>CUMBRIA</b>                |
|          | KING STREET                |                       |  |                               |
|          | CARLISLE                   |                       |  |                               |
|          | Town Centre                |                       |  |                               |
|          | Built-Up Zone              |                       |  |                               |
|          | Total Number of dwellings: | 40                    |  |                               |
|          | Survey date: THURSDAY      | 12/06/14              |  | Survey Type: MANUAL           |
| <b>2</b> | <b>GM-03-C-02</b>          | <b>BLOCK OF FLATS</b> |  | <b>GREATER MANCHESTER</b>     |
|          | WHITWORTH STREET W.        |                       |  |                               |
|          | MANCHESTER                 |                       |  |                               |
|          | Town Centre                |                       |  |                               |
|          | Built-Up Zone              |                       |  |                               |
|          | Total Number of dwellings: | 154                   |  |                               |
|          | Survey date: THURSDAY      | 13/10/11              |  | Survey Type: MANUAL           |
| <b>3</b> | <b>GM-03-C-03</b>          | <b>BLOCK OF FLATS</b> |  | <b>GREATER MANCHESTER</b>     |
|          | FAIRFIELD STREET           |                       |  |                               |
|          | MANCHESTER                 |                       |  |                               |
|          | Town Centre                |                       |  |                               |
|          | Built-Up Zone              |                       |  |                               |
|          | Total Number of dwellings: | 20                    |  |                               |
|          | Survey date: FRIDAY        | 14/10/11              |  | Survey Type: MANUAL           |
| <b>4</b> | <b>HI-03-C-01</b>          | <b>FLATS</b>          |  | <b>HIGHLAND</b>               |
|          | SHORE STREET               |                       |  |                               |
|          | INVERNESS                  |                       |  |                               |
|          | Town Centre                |                       |  |                               |
|          | Residential Zone           |                       |  |                               |
|          | Total Number of dwellings: | 38                    |  |                               |
|          | Survey date: WEDNESDAY     | 20/05/09              |  | Survey Type: MANUAL           |
| <b>5</b> | <b>HM-03-C-01</b>          | <b>BLOCK OF FLATS</b> |  | <b>HAMMERSMITH AND FULHAM</b> |
|          | VANSTON PLACE              |                       |  |                               |
|          | FULHAM                     |                       |  |                               |
|          | Town Centre                |                       |  |                               |
|          | High Street                |                       |  |                               |
|          | Total Number of dwellings: | 42                    |  |                               |
|          | Survey date: WEDNESDAY     | 16/07/14              |  | Survey Type: MANUAL           |
| <b>6</b> | <b>HO-03-C-02</b>          | <b>BLOCK OF FLATS</b> |  | <b>HOUNSLOW</b>               |
|          | HIGH STREET                |                       |  |                               |
|          | BRENTFORD                  |                       |  |                               |
|          | Town Centre                |                       |  |                               |
|          | Built-Up Zone              |                       |  |                               |
|          | Total Number of dwellings: | 86                    |  |                               |
|          | Survey date: WEDNESDAY     | 03/09/14              |  | 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 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

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

| Time Range    | ARRIVALS |             |              | DEPARTURES |             |              | TOTALS   |             |              |
|---------------|----------|-------------|--------------|------------|-------------|--------------|----------|-------------|--------------|
|               | No. Days | Ave. DWELLS | Trip Rate    | No. Days   | Ave. DWELLS | Trip Rate    | No. Days | Ave. DWELLS | Trip Rate    |
| 00:00 - 01:00 |          |             |              |            |             |              |          |             |              |
| 01:00 - 02:00 |          |             |              |            |             |              |          |             |              |
| 02:00 - 03:00 |          |             |              |            |             |              |          |             |              |
| 03:00 - 04:00 |          |             |              |            |             |              |          |             |              |
| 04:00 - 05:00 |          |             |              |            |             |              |          |             |              |
| 05:00 - 06:00 |          |             |              |            |             |              |          |             |              |
| 06:00 - 07:00 |          |             |              |            |             |              |          |             |              |
| 07:00 - 08:00 | 6        | 63          | 0.021        | 6          | 63          | 0.047        | 6        | 63          | 0.068        |
| 08:00 - 09:00 | 6        | 63          | 0.029        | 6          | 63          | 0.050        | 6        | 63          | 0.079        |
| 09:00 - 10:00 | 6        | 63          | 0.021        | 6          | 63          | 0.034        | 6        | 63          | 0.055        |
| 10:00 - 11:00 | 6        | 63          | 0.026        | 6          | 63          | 0.032        | 6        | 63          | 0.058        |
| 11:00 - 12:00 | 6        | 63          | 0.029        | 6          | 63          | 0.021        | 6        | 63          | 0.050        |
| 12:00 - 13:00 | 6        | 63          | 0.029        | 6          | 63          | 0.021        | 6        | 63          | 0.050        |
| 13:00 - 14:00 | 6        | 63          | 0.029        | 6          | 63          | 0.042        | 6        | 63          | 0.071        |
| 14:00 - 15:00 | 6        | 63          | 0.018        | 6          | 63          | 0.037        | 6        | 63          | 0.055        |
| 15:00 - 16:00 | 6        | 63          | 0.034        | 6          | 63          | 0.024        | 6        | 63          | 0.058        |
| 16:00 - 17:00 | <b>6</b> | <b>63</b>   | <b>0.068</b> | 6          | 63          | 0.042        | 6        | 63          | 0.110        |
| 17:00 - 18:00 | 6        | 63          | 0.063        | <b>6</b>   | <b>63</b>   | <b>0.053</b> | <b>6</b> | <b>63</b>   | <b>0.116</b> |
| 18:00 - 19:00 | 6        | 63          | 0.053        | 6          | 63          | 0.026        | 6        | 63          | 0.079        |
| 19:00 - 20:00 |          |             |              |            |             |              |          |             |              |
| 20:00 - 21:00 |          |             |              |            |             |              |          |             |              |
| 21:00 - 22:00 |          |             |              |            |             |              |          |             |              |
| 22:00 - 23:00 |          |             |              |            |             |              |          |             |              |
| 23:00 - 24:00 |          |             |              |            |             |              |          |             |              |
| Total Rates:  |          |             | 0.420        |            |             | 0.429        |          |             | 0.849        |

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

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

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#### Parameter summary

|                                               |                     |
|-----------------------------------------------|---------------------|
| Trip rate parameter range selected:           | 20 - 154 (units: )  |
| Survey date range:                            | 01/01/09 - 15/03/18 |
| Number of weekdays (Monday-Friday):           | 6                   |
| 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/C - FLATS PRIVATELY OWNED

**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 | <b>6</b> | <b>63</b>   | <b>0.003</b> | <b>6</b>   | <b>63</b>   | <b>0.003</b> | <b>6</b> | <b>63</b>   | <b>0.006</b> |
| 08:00 - 09:00 | 6        | 63          | 0.000        | 6          | 63          | 0.003        | 6        | 63          | 0.003        |
| 09:00 - 10:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 10:00 - 11:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 11:00 - 12:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 12:00 - 13:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 13:00 - 14:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 14:00 - 15:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 15:00 - 16:00 | 6        | 63          | 0.003        | 6          | 63          | 0.000        | 6        | 63          | 0.003        |
| 16:00 - 17:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 17:00 - 18:00 | 6        | 63          | 0.003        | 6          | 63          | 0.000        | 6        | 63          | 0.003        |
| 18:00 - 19:00 | 6        | 63          | 0.000        | 6          | 63          | 0.003        | 6        | 63          | 0.003        |
| 19:00 - 20:00 |          |             |              |            |             |              |          |             |              |
| 20:00 - 21:00 |          |             |              |            |             |              |          |             |              |
| 21:00 - 22:00 |          |             |              |            |             |              |          |             |              |
| 22:00 - 23:00 |          |             |              |            |             |              |          |             |              |
| 23:00 - 24:00 |          |             |              |            |             |              |          |             |              |
| Total Rates:  |          |             | 0.024        |            |             | 0.024        |          |             | 0.048        |

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:           | 20 - 154 (units: )  |
| Survey date range:                            | 01/01/09 - 15/03/18 |
| Number of weekdays (Monday-Friday):           | 6                   |
| 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/C - FLATS PRIVATELY OWNED

**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 | <b>6</b> | <b>63</b>   | <b>0.003</b> | <b>6</b>   | <b>63</b>   | <b>0.003</b> | <b>6</b> | <b>63</b>   | <b>0.006</b> |
| 08:00 - 09:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 09:00 - 10:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 10:00 - 11:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 11:00 - 12:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 12:00 - 13:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 13:00 - 14:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 14:00 - 15:00 | 6        | 63          | 0.003        | 6          | 63          | 0.000        | 6        | 63          | 0.003        |
| 15:00 - 16:00 | 6        | 63          | 0.000        | 6          | 63          | 0.003        | 6        | 63          | 0.003        |
| 16:00 - 17:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 17:00 - 18:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 18:00 - 19:00 | 6        | 63          | 0.000        | 6          | 63          | 0.000        | 6        | 63          | 0.000        |
| 19:00 - 20:00 |          |             |              |            |             |              |          |             |              |
| 20:00 - 21:00 |          |             |              |            |             |              |          |             |              |
| 21:00 - 22:00 |          |             |              |            |             |              |          |             |              |
| 22:00 - 23:00 |          |             |              |            |             |              |          |             |              |
| 23:00 - 24:00 |          |             |              |            |             |              |          |             |              |
| Total Rates:  |          |             | 0.009        |            |             | 0.009        |          |             | 0.018        |

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.

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#### Parameter summary

|                                               |                     |
|-----------------------------------------------|---------------------|
| Trip rate parameter range selected:           | 20 - 154 (units: )  |
| Survey date range:                            | 01/01/09 - 15/03/18 |
| Number of weekdays (Monday-Friday):           | 6                   |
| 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/C - FLATS PRIVATELY OWNED

**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 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 08:00 - 09:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 09:00 - 10:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 10:00 - 11:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 11:00 - 12:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 12:00 - 13:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 13:00 - 14:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 14:00 - 15:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 15:00 - 16:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 16:00 - 17:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 17:00 - 18:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 18:00 - 19:00 | 6        | 63          | 0.000     | 6          | 63          | 0.000     | 6        | 63          | 0.000     |
| 19:00 - 20:00 |          |             |           |            |             |           |          |             |           |
| 20:00 - 21:00 |          |             |           |            |             |           |          |             |           |
| 21:00 - 22:00 |          |             |           |            |             |           |          |             |           |
| 22:00 - 23:00 |          |             |           |            |             |           |          |             |           |
| 23:00 - 24:00 |          |             |           |            |             |           |          |             |           |
| Total Rates:  |          |             | 0.000     |            |             | 0.000     |          |             | 0.000     |

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

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

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#### Parameter summary

|                                               |                     |
|-----------------------------------------------|---------------------|
| Trip rate parameter range selected:           | 20 - 154 (units: )  |
| Survey date range:                            | 01/01/09 - 15/03/18 |
| Number of weekdays (Monday-Friday):           | 6                   |
| 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/C - FLATS PRIVATELY OWNED

**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 | 6        | 63          | 0.000        | 6          | 63          | 0.011        | 6        | 63          | 0.011        |
| 08:00 - 09:00 | 6        | 63          | 0.003        | <b>6</b>   | <b>63</b>   | <b>0.016</b> | 6        | 63          | 0.019        |
| 09:00 - 10:00 | 6        | 63          | 0.003        | 6          | 63          | 0.008        | 6        | 63          | 0.011        |
| 10:00 - 11:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 11:00 - 12:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 12:00 - 13:00 | 6        | 63          | 0.000        | 6          | 63          | 0.008        | 6        | 63          | 0.008        |
| 13:00 - 14:00 | 6        | 63          | 0.011        | 6          | 63          | 0.005        | 6        | 63          | 0.016        |
| 14:00 - 15:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 15:00 - 16:00 | 6        | 63          | 0.003        | 6          | 63          | 0.003        | 6        | 63          | 0.006        |
| 16:00 - 17:00 | 6        | 63          | 0.000        | 6          | 63          | 0.003        | 6        | 63          | 0.003        |
| 17:00 - 18:00 | <b>6</b> | <b>63</b>   | <b>0.029</b> | 6          | 63          | 0.003        | <b>6</b> | <b>63</b>   | <b>0.032</b> |
| 18:00 - 19:00 | 6        | 63          | 0.018        | 6          | 63          | 0.008        | 6        | 63          | 0.026        |
| 19:00 - 20:00 |          |             |              |            |             |              |          |             |              |
| 20:00 - 21:00 |          |             |              |            |             |              |          |             |              |
| 21:00 - 22:00 |          |             |              |            |             |              |          |             |              |
| 22:00 - 23:00 |          |             |              |            |             |              |          |             |              |
| 23:00 - 24:00 |          |             |              |            |             |              |          |             |              |
| Total Rates:  |          |             | 0.076        |            |             | 0.074        |          |             | 0.150        |

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

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

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#### Parameter summary

|                                               |                     |
|-----------------------------------------------|---------------------|
| Trip rate parameter range selected:           | 20 - 154 (units: )  |
| Survey date range:                            | 01/01/09 - 15/03/18 |
| Number of weekdays (Monday-Friday):           | 6                   |
| 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.*

## Appendix D

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PIA data extract from Crashmap website

## Crashmap Accident Data (Five Year Search Results)

### Criteria

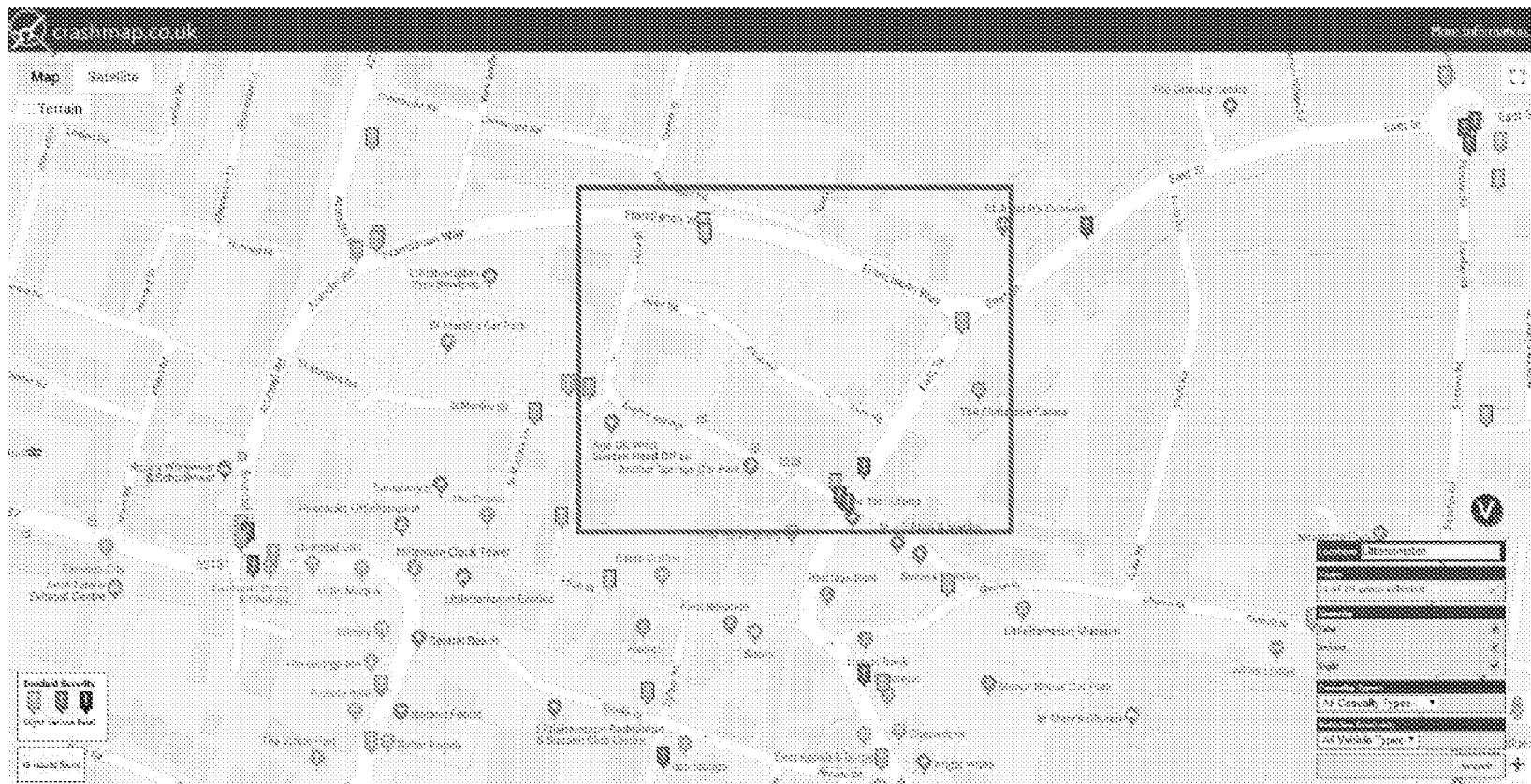
**Location:** Littlehampton, West Sussex

**Years:** 5 of 19 Years Selected

**Severity:** Fatal, Serious, Slight

**Casualty Types:** All Casualty Types

**Vehicles Involved:** All Vehicle Types



Fore Consulting Limited  
2<sup>nd</sup> Floor, Queens House  
Wellington Street  
Leeds  
LS1 2DE



7291952.  
Kingdom  
5 0341 75