Blenheim Estates

37 - 41 BRIGHTON ROAD, SHOREHAM

Transport Assessment

70118838-TA
MAY 2025

PUBLIC

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1 INTRODUCTION

1.1 BACKGROUND

1.1.1. WSP has been appointed by Blenheim Estates to provide transportation and highways advice in support of an outline planning application for the redevelopment of 37 - 41 Brighton Road, Shoreham-by-Sea, West Sussex.

1.1.2. The development proposal is for 49 apartments and 57.6sqm of commercial / retail use. A copy of the current indicative masterplan is attached within **Appendix A**.

1.2 WEST SUSSEX COUNTY COUNCIL SCOPING AGREEMENT

1.2.1. This Transport Assessment (TA) provides detail on the impact that the proposed development will have on the operation of the local transportation network. The TA has been prepared in accordance with a scoping report that was submitted to and agreed with West Sussex County Council (WSCC) officers in their capacity as the local highway authority.

1.2.2. A copy of the scoping document and the response that was received from WSCC is attached within **Appendix B**. The comments provided by WSCC have been accounted for within this report, including:

- Parking Beat Survey (section 3.9)
- Cycle Parking Facilities & Larger / Adapted Bikes (section 4.5)
- Car Parking at Neighbouring Application Sites (section 4.5)
- Commercial Car Parking (section 4.5)

1.3 EXISTING SITE USE

1.3.1. The site is currently occupied by a single storey industrial unit with Kwik-Fit as a tenant who offer vehicle maintenance and repair services. The unit area is approximately 420sqm.

1.3.2. Immediately east of the site is a car wash facility which has right of way across the application site, with access provided via the southern site boundary and egress via the northern site boundary. The car wash and access is to be retained.

1.4 SITE LOCATION

1.4.1. The site is located approximately 500m south-east of Shoreham-by-Sea town centre. The site is bordered by the A259 Brighton Road to the north, the Free Wharf development site to the east and south and the Humphrey's Gap industrial area to the west. The location of the site is illustrated on **Figure 1**.

1.4.2. The Free Wharf Development Site is currently under construction and, when complete, will provide over 500 residential units and supporting commercial and retail use.

1.5 REPORT STRUCTURE

1.5.1. The remainder of the report is structured as follows:

- **Chapter 2, Policy Context:** This chapter provides a summary of national and local policy and provides background context to this TA, and helps to demonstrate how the development aligns with relevant policy;
- **Chapter 3, Existing Conditions:** An overview is provided on the location of the development, existing transport conditions, local facilities and opportunities for walking, cycling and public transport;
- **Chapter 4, Proposed Development:** This chapter summarises the development proposals, including the proposed accommodation schedule, site layout, access arrangements and parking provision;
- **Chapter 5, Trip Generation:** The travel demand associated with the proposed development, including detail on the methodology adopted for the assessment work is provided;
- **Chapter 6, Future Year Impact:** This chapter sets out the forecast impact of the development at key junctions within the study area agreed with the local highway authority;
- **Chapter 7, Residential Travel Plan:** Summary detail of the Framework Residential Travel Plan that has been prepared in support of the planning application, setting out the measures, incentives and targets that are proposed to increase the use of sustainable travel modes away from the private car;
- **Chapter 8, Summary & Conclusion:** A summary of the report is provided, drawing conclusions based on the results of the completed analysis work.

2 POLICY CONTEXT

2.1 INTRODUCTION

2.1.1. This section provides an overview of the national and local transport policy considered relevant to provide context for assessment of the transport issues associated with the development proposals.

2.2 NATIONAL POLICY

NATIONAL PLANNING POLICY FRAMEWORK (DECEMBER 2024)

2.2.1. One of the key themes of the National Planning Policy Framework (NPPF) is achieving sustainable development and with regards to this, paragraph 7 of the NPPF states the following:

> *"The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development and supporting infrastructure in a sustainable manner. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs."*

2.2.2. This is further emphasised by paragraph 10 of the document, with this stating the following:

> *"So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development."*

2.2.3. Chapter 9 of the NPPF 'promoting sustainable transport' notes how transport issues should be considered at the earliest stages so that the potential impacts of development can be addressed and that opportunities to promote walking, cycling and public transport can be identified and pursued.

2.2.4. Paragraph 116 of the NPPF notes how:

> *"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."*

2.3 LOCAL POLICY

WEST SUSSEX LOCAL TRANSPORT PLAN 2022-2036

2.3.1. The West Sussex Transport Plan (WSTP) is the County Council's main policy on transport and supports delivery of their Council Plan and its priorities. It was adopted on 1st April 2022.

2.3.2. A number of key issues have been identified that the Plan seeks to address:

- Climate change;
- Local environmental impacts;
- Spatially variable economic performance;
- Development and regeneration pressures and opportunities;
- Growing and ageing population;
- Public health and well-being;
- Access to services; and
- Transport network performance issues.

2.3.3. The vision of the LTP is as follows:

> *"A West Sussex transport network in 2036 that works for communities in the Coastal West Sussex, Gatwick Diamond and Rural West Sussex economic areas by helping to address the spatial economic challenges of the County, level up the coastal economy and provide access to employment and services countywide.*
>
> *The transport network will be on a pathway to achieve net zero carbon emissions by 2050 through more local living, increased use of electric vehicles and reduced use of fossil-fuels. It will also be safer, more efficient and resilient overall with more walking, cycling and use of public or shared transport and less congestion on major routes that connect West Sussex towns with Gatwick Airport, London and nearby cities.*
>
> *The transport network will connect communities and allow residents to live healthy lifestyles with good access to the West Sussex coast and the protected South Downs, High Weald and Chichester Harbour.*
>
> *Active travel modes, public or shared transport will be attractive options in built up areas and between towns, and rural communities will have access to the services they need.*
>
> *Transport impacts such as air pollution, noise and rat-running on adjacent communities and the environment will be minimised to protect a quality of life that reflects the characteristics of the County."*

2.3.4. The LTP transport strategy for the Adur area (in no particular order) is to:

- Improve the performance of the A27;
- Facilitate the introduction of on-street electric vehicle charging infrastructure, initially in Shoreham followed by other areas;

- Increase space for active travel through infrastructure improvements on priority routes such as A259;
- Use traffic signal technology to give priority to shared transport where services operate frequently;
- Use on-street parking and traffic management techniques to manage demand;
- Deliver Air Quality Action Plans in Shoreham and Southwick;
- Tackle inappropriate use of unsuitable routes using behavioural initiatives; and
- Work with strategic partners to deliver faster rail services to Worthing, Chichester, Brighton and the Solent cities in the long term.

ADUR DISTRICT LOCAL PLAN 2017

2.3.5. The Adur Local Plan was adopted on 14th December 2017. The Local Plan sets the strategic development and land-use priorities for Adur (outside the South Downs National Park) up to 2032 and contains the policies against which development management decisions within that area will be made.

2.3.6. The Local Plan lists 11 visions for the district, along with 12 supporting objectives which will be used to help achieve these visions. The visions listed in the Local Plan which are relevant to the proposed development are summarised below:

- Vision 1: Regeneration in the district will ensure the residents of Adur receive improved quality of life and wellbeing, this through improved access to high quality employment, better housing choices and advances in community infrastructure;
- Vision 2: Most future development will be focussed in Adur's main communities Lancing, Sompting, Shoreham-by-Sea, Southwick and Fishersgate;
- Vision 3: Providing new employment opportunities to increase economic prosperity across the Adur region. Specifically through new developments at Shoreham Harbour, Shoreham Airport and New Monks Farm.;
- Vision 4: Regeneration of Shoreham Harbour will offer a mix or residential, employment, community, leisure and retail land uses, whilst also increasing the availability of affordable housing;
- Vision 6: High standards of design are an essential part of any new development proposals, this in order to create attractive, safer and healthier places;
- Vision 8: Work with Highways England and West Sussex to address congestion in the district, resulting in fewer delays on the road network and contributing to easier and more sustainable travel patterns. The station at Shoreham will continue to form an important part of the public transport network;
- Vision 9: Flood risk will be minimised and mitigated through investment in flood defences and careful consideration of the location of any new development; and
- Vision 11: Development which meets the economic, social and environmental objectives of this plan will be supported.

2.3.7. Policy 8 in the Local Plan looks at the regeneration of the Shoreham Harbour Area. The District Council are working with Brighton & Hove City Council, WSCC and Shoreham Port Authority to support the regeneration proposals, with the Joint Area Action Plan (JAAP) having been prepared containing a harbour-wide spatial strategy, area-wide policies and proposals, as well as specific priorities for individual character areas.

2.3.8. The proposed development is in located within Character Area 7 of the Harbour Regeneration Area, Western Harbour Arm. The priorities listed for Character Area 7 are:

- Designating the Western Harbour Arm as a strategic mixed-use area;
- Facilitating the comprehensive redevelopment of the Western Harbour Arm as so it becomes an exemplar sustainable, mixed-use area;
- To secure improvements to legibility, permeability and connectivity through high quality building design, townscape and public realm, ensuring to respect and complement the character of the surrounding area;
- To maximise redevelopment opportunities of existing lower grade, vacant and under-used spaces;
- To facilitate the strategic relocation of industrial uses to elsewhere in the port or local area to free up waterfront sites;
- To improve access arrangements to create better linkages with Shoreham Town Centre and the surrounding areas;
- Improve connections around key linkages including Shoreham High Street/ Norfolk Bridge (A259), Old Shoreham Road (A283), Brighton Road (A259), New Road, Ham Road and Surrey Street;
- To deliver comprehensive flood defence solutions integrated with a publicly accessible riverside route, which is to include a pedestrian / cycle way and facilities for boat users; and
- Enhance the natural biodiversity of the area by incorporating multi-functional green space.

SHOREHAM HARBOUR JOINT AREA ACTION PLAN

2.3.9. The Shoreham Harbour Joint Area Action Plan (JAAP) sets out a plan to guide the regeneration of Shoreham Harbour and surrounding areas. The JAAP sets a planning policy framework to guide development and investment decisions within the Shoreham Harbour Regeneration Area up to 2032.

2.3.10. The JAAP area has been broken down into seven distinct character areas, with the 37-41 Brighton Road site being located in Character Area 7: Western Harbour Arm (CA7). Policy CA7 for Western Harbour Arm includes the delivery of a minimum of 1,100 new homes and 12,000sqm of employment floorspace plus the addition of smaller scale retail outlets, food and drink, and marine-related leisure facilities. The following highway and transport measures are identified:

- Development proposals for sites to the south of Brighton Road (A259) should not unduly prejudice the potential future development of sites to the north of Brighton Road (A259) and vice versa.

- Where appropriate, proposals will be expected to enhance townscape around key linkages and junctions, in particular Shoreham High Street / Norfolk Bridge (A259), Old Shoreham Road (A283), Brighton Road (A259), New Road, Surrey Street and Ham Road;
- A setback from the waterfront is safeguarded to enable delivery of a waterfront pedestrian and cycle route between Shoreham town centre and Kingston Beach;
- Developments should be set back sufficiently from the A259 corridor in agreement with the highways and planning authorities, to provide space for a high-quality segregated cycle route which provides stepped separation from road vehicles and pedestrian facilities, to deliver green infrastructure improvements, and to prevent a canyoning effect to ensure that residents are protected from noise and air quality impacts.

- The partnership will work with developers and stakeholders to deliver a package of transport measures for the Western Harbour Arm as set out in the Shoreham Harbour Transport Strategy.

SHOREHAM HARBOUR JOINT AREA ACTION PLAN: TRANSPORT STRATEGY (SHOREHAM HARBOUR REGENERATION PARTNERSHIP, 2016)

2.3.11. Prepared alongside the Shoreham Harbour JAAP, a Transport Strategy has been prepared to inform planning policies that will support the regeneration and development of Shoreham Harbour. The Transport Strategy is underpinned by technical evidence, proposing a package of transportation infrastructure improvements and initiatives that are vital factors in the delivery of the vision for the Harbour area as a sustainable mixed use development.

2.3.12. Critical measures outlined within the Transport Strategy for the Western Harbour Arm include:

- Implementation of a new waterfront route for pedestrians and cyclists between Shoreham Town Centre and Kingston Beach;
- Improvements to the following junctions:
  - Brighton Road / A259 Norfolk Bridge / A283 Old Shoreham Road;
  - A259 Brighton Road / Surry Street; and
  - A259 Brighton Road / A2025 South Street.
- Improvements to the cycling facilities along the A259;
- Improved pedestrian and cycle crossing points; and
- Improvements to bus stops.

3 EXISTING CONDITIONS

3.1 INTRODUCTION

3.1.1. This section provides a summary of existing conditions, including the existing road network, public transport services, local cycle network and Personal Injury Collision statistics.

3.2 SITE LOCATION

3.2.1. The location of the site is illustrated on **Figure 1**.

3.2.2. The development site is located approximately 500m south east of Shoreham-by-Sea town centre. The site is bordered by the A259 Brighton Road to the north, existing industrial units / commercial units to the west (Ham Business Centre) and the Free Wharf site to the south and east. The Free Wharf site is currently under construction.

3.2.3. The A259 provides a link to Brighton to the east (c. 9km) and Worthing to the west (c. 7km).

3.2.4. The A27 is located approximately 2km to the north of the site, accessible via the A259 Brighton Road – A283 Old Shoreham Road. The A27 provides access to other key destinations including Chichester (c. 36km to the west), Eastbourne, (c. 40km to the east) and Crawley via the A23 (c. 30km to the north).

3.2.5. Shoreham-by-Sea railway station is within a 600m / 7 minute walking distance, located to the north-west of the site.

3.3 EXISTING SITE: KWIK FIT

3.3.1. The site currently accommodates a Kwik Fit, with this accessed via a simple priority controlled junction with Brighton Road.

3.3.2. As discussed later, traffic surveys were completed at this junction and the other study area junctions on Tuesday 5th November 2024 between 07:00-10:00 and 16:00-19:00. The following table sets out the total flows that were observed travelling to and from the Kwik Fit store during the AM and PM peak hours.

Table 3-1 Kwik Fit: Observed AM & PM Peak Hour Vehicle Trips (05.11.24)

	AM Peak Hour (08:15-09:15)			PM Peak Hour (17:00-18:-00)		
	Arrival	Departure	Total	Arrival	Departure	Total
Cars / LGVs	10	0	10	4	1	5
HGVs	1	1	2	0	0	0
Total Vehicles	**11**	**1**	**12**	**4**	**1**	**5**

3.3.3. From the above table, it can be seen that the existing Kwik Fit generates 12 two-way movements during the AM peak hour (11 arrivals, 1 departure) and 5 two-way movements during the PM peak hour (4 arrivals, 1 departure). It is believed that some of these trips are not directly associated with the Kwik Fit and are instead unauthorised vehicles that park on the site (to the rear and side of the building), with there being no active parking enforcement. This may be vehicles of construction workers from the neighbouring Free Wharf site. Either way, these trips will be removed should the development come forward.

3.3.4. The above flows exclude the vehicle movements to the car wash site, with these recorded separately. Due to access restrictions, only cars are able to travel through the car wash, with the following flows observed:

- AM Peak: 20 two-way trips (11 arrivals, 9 departures)
- PM Peak: 17 two-way trips (5 arrivals, 7 departures)

3.4 LOCAL HIGHWAY NETWORK

3.4.1. The highway network within the vicinity of the development is of a mixed variety, with the A259 Brighton Road forming part of the primary road network and other links, such as Ham Road and Eastern Avenue being residential in nature. This section provides summary detail on the local roads.

A259 BRIGHTON ROAD

3.4.2. The A259, which borders the site to the north is a single carriageway road running almost parallel to the A27 from Emsworth in Hampshire along the coast through West and East Sussex to Folkestone in Kent. The Shoreham-by-Sea section of the A259 Brighton Road provides access in to the site and connects to the A283 Old Shoreham Road, which provides access to the A27.

3.4.3. The A259 Brighton Road through Shoreham-by-Sea is subject to a 30mph speed limit due to its town centre location and the number of existing access junctions, many of which serve industrial or commercial premises. Footways are provided on both sides of the carriageway except for a 250m section on the southern side outside of Sussex Yacht Club, approximately 400m west of the site. The footways vary in width between 1.8 to 3.0m, with the surface quality improving towards the town centre. Street lighting is provided approximately every 15m on either side of the carriageway.

3.4.4. A number of pedestrian crossings are provided on the A259, including immediately to the east of the site access. At the Eastern Avenue / Humphrey's Gap junction there are signalised pedestrian crossing facilities, including dropped kerbs and tactile paving.

3.4.5. Further to the west of the site, signal controlled pedestrian crossing are located in the vicinity of the New Road junction (c. 300m from the site) and at the junction with Adur Ferry Bridge (c. 600m from the site). These, along with other crossing facilities, provide good pedestrian access across the local area.

3.4.6. As set out within the previous chapter, as part of the harbour regeneration / JAAP and the wider West Sussex Local Transport Plan aspirations, improvements to the cycling facilities along the A259

have been identified. To support this, land along the northern site boundary with the A259 has been safeguarded to support the improvements.

HUMPHREY'S GAP / EASTERN AVENUE

3.4.7. Approximately 60m to the west of the site is the A259 Brighton Road / Eastern Avenue / Humphrey's Gap signalised junction. Humphrey's Gap provides one of the access points to the Free Wharf development and is approximately 8.5m wide, with footways on each side of the carriageway.

EASTERN AVENUE

3.4.8. Eastern Avenue is a single carriageway road connecting the A259 to Upper Shoreham Road, with a number of residential properties and roads accessed from it. The road is bisected by the West Coast railway line and level crossing, approximately 200m to the north of the site and is subject to a 30mph speed limit.

3.4.9. There is a pedestrian refuge island on Eastern Avenue, directly north of the proposed development site. This provides a convenient crossing facility for pedestrians walking onto Eastern Avenue from the site and to the local bus stops.

3.4.10. Further north, there are three other formal pedestrian crossings points along Eastern Avenue in addition to a number of locations where informal crossing is possible. The only controlled crossing is located at the signal controlled junction with Middle Road (part of National Cycle Network 2), where signal controlled crossings are provided on Eastern Avenue either side of the junction, with dropped kerbs and tactile paving provided on all arms. The other two crossing facilities are located on either side of the level crossing and are refuge islands, with drop kerbs and tactile paving.

HAM ROAD

3.4.11. Ham Road is a mixed use street that features a number of residential buildings, a Co-Operative store, as well as a number of smaller retail and commercial outlets. The road connects the site to Brunswick Road (town centre) and Shoreham railway station. Ham Road is a two-way single carriageway road. Time restricted on street parking is provided on each side of the road at points to the west of Surrey Street. There are three bus stops located along the length of Ham Road. Street lighting is provided on either side of the carriageway.

3.4.12. Ham Road is subject to a 30mph speed limit, and there are footways on both sides of the carriageway which vary between 2m and 3m in width. Footway surface quality on this link is of a high standard. There are no formal cycling facilities on Ham Road but due to the width of the road and the low traffic flows, the road is conducive for use by cyclists.

NEW ROAD

3.4.13. New Road is a residential street providing access from the A259 Brighton Road with East Street and Tarmount Lane, which form part of the town centre network. The road is subject to a 30mph speed limit, and features on-street parking on both sides of the carriageway. Footways are provided on both sides of the carriageway, with these have a width of approximately 1.5m.

3.5 WALKING AND CYCLING ACCESSIBILITY TO LOCAL FACILITIES

3.5.1. The local cycle routes and Public Rights of Way are illustrated on **Figure 2**, with the locations of some of the local facilities illustrated on **Figure 3**.

ACCESSIBLE FACILITIES

3.5.2. As illustrated on **Figure 3**, a significant number of facilities are accessible on foot or by bicycle from the site. A primary school, a convenience store, and a post office can be walked to in under 15 minutes (based on an assumed walking speed of 4.8kph[1]) and cycled to in less than five minutes (based on an assumed cycling speed of 16kph[1]). The town centre is approximately a 650m / 8 minute walk away and offers a range of shops and services. As previously discussed, Shoreham railway station is approximately 600m away from the site.

3.5.3. The following table lists the nearest examples of several types of facility that are within 2km of the site, a distance which can be covered in approximately 25 minutes on foot or eight minutes by bicycle.

[1] Department for Transport Journey Time Statistics: Notes and Definitions (https://assets.publishing.service.gov.uk/media/5dfa46f2ed915d54ab87c859/notes-and-definitions.pdf)

Table 3-2 Local Facilities

Facility Name	Location	Facility Type	Walk / Cycle Distance
The Co-operative	Ham Road	Food Store	500m
Sunshine Day Nursery	Tarmount Lane	Nursery School	550m
Happy Hours Pre- School	Brunswick Road	Nursery School	600m
Edminson Butler Optician	St Mary's Road	Opticians	600m
Shoreham-by-Sea Town Centre	Brunswick Road / East Street	Town centre facilities, including cafes, bars, restaurants, stores, Post Office, etc	650m
Greens Pharmacy	St Mary's Road	Pharmacy	650m
Day Lewis Pharmacy	Brunswick Road	Pharmacy	650m
Bakhai Pharmacy	East Street	Pharmacy	680m
Shoreham Dental Centre	East Street	Dentist	700m
St Peter's Catholic Primary School	Sullington Way	Primary School	700m
Shekinah Pre-School	Western Road	Nursery	750m
St Nicolas & St Mary C of E Primary School	Eastern Avenue	Primary School	750m
Church House Dental Practice	Church Street	Dentist	800m
Boots	A259 High Street	Pharmacy	800m
Shoreham NHS Health Centre	Pond Road	GP Surgery	800m
Swiss Gardens Primary	Swiss Gardens	Primary School	1,100m
Buckingham Park Primary School	Buckingham Road	Primary School	1,200m
Southlands Hospital	Upper Shoreham Road	Hospital	1,500m
Shoreham College	Sullington Way	Secondary School	1,800m

3.5.4. It can be seen from the information presented above that the site has good accessibility to a wide range local facilities, with these accessible by both foot or by bicycle and some, including the town

centre, via the local bus service that runs past the site (detail on local public transport services is provided at section 3.8).

3.5.5. The topography of the local area is generally flat and this will aid access between the site and the local facilities and public transport services. The growth in the ownership and use of electric bikes, along with the planned improvements to local cycle facilities will further assist in accessibility.

3.6 LOCAL CYCLE AND PRoW NETWORK

3.6.1. The local cycle and Public Rights of Way (PRoW) networks surrounding the site are shown on **Figure 2** and described below.

NATIONAL CYCLE NETWORK ROUTE 2

3.6.2. National Cycle Network (NCN) Route 2 traverses the local area from east to west on quiet roads which are conducive for cycling. It is located a short distance from the site, providing a link to Brighton to the east and Worthing to the east. At the junction of A259 Albion Street / Grange Road, NCN2 runs along Grange Road and then west along Park Lane before it doglegs north up Kingston Lane and then continues west along Rectory Road and Middle Road. At the junction with Rosslyn Avenue it turns south for a short distance before continuing west along Rosslyn Road. It then turns south along Buckingham Road and then Shoreham town centre Brunswick Road, before doglegging south to East Street where the route continues south and crosses A259 Brighton Road (to the west of the site) and continues along Adur Ferry Bridge.

NATIONAL CYCLE NETWORK ROUTE 223

3.6.3. NCN 223 runs from Shoreham to Chertsey via Guildford. It follows both main and quiet roads, although the first section north from Shoreham follows the Downs Link until it reaches Steyning, where it passes onto local roads. It has a total length of approximately 45 miles.

REGIONAL CYCLE ROUTE 79

3.6.4. Regional Cycle Route 79 links NCN Route 2 with Route 223. It runs west from NCN Route 2 at Buckingham Road along Queens Road, onto Hebe Road and then northwest along Swiss Gardens and Connaught Avenue. At the junction with Upper Shoreham Road, it heads west and then north along the A283 Steyning Road, where it connects with Route 223 at the Old Toll Bridge.

LOCAL ROAD NETWORK.

3.6.5. Further to the above routes, it is considered that the local highway network in the area surrounding the proposed development beyond the A259 and A283 provides excellent opportunities for cycling, with low vehicle speeds and flat terrain helping to promote use of this sustainable mode. The residential streets to the north of the site, as well as its proximity to the town centre and railway station assist in enhancing the likelihood of bicycle use for short to medium length local trips.

3.7 PUBLIC TRANSPORT

3.7.1. This section provides detail on the public transport services available within the vicinity of the site.

BUS SERVICES

3.7.2. The proposed development is well served by buses. Nearby stops offer services east towards Brighton and west towards Littlehampton and Arundel at a frequency of approximately ten minutes on both weekdays and on Saturdays.

3.7.3. As illustrated on **Figure 4**, the nearest bus stops are located on Brighton Road to the northeast of the site, within a 100m / 2 minute walking distance of the site. These bus stops provide shelter, seating and Real-Time-Passenger-Information (RTPI), showing arrival times for the next three services. An additional bus stop is located on Ham Road, approximately 200m from the site, providing services towards Steyning, Rottingdean, Brighton and Shoreham Beach.

3.7.4. A summary of the bus services available in the immediate vicinity of the site is provided in the following table.

Table 3-3 Local Bus Services

Service Number (Operator)	Bus Stop Location	Route	Service Frequency		
			Monday - Friday	Saturday	Sunday
700 (Stagecoach)	A259 Brighton Road (Eastern Avenue)	Arundel – Littlehampton – Worthing – Shoreham - Brighton	First Bus 04:59 Last Bus 23:17 Frequency: Every 10 minutes from 05:59 to 19:04	First Bus 06:04 Last Bus 23:17 Frequency: Every 10-12 minutes 0700 to 1900	First Bus 06:52 Last Bus 21:58 Frequency: Every 20 minutes 0700 to 1835
N700 (Stagecoach)	A259 Brighton Road (Eastern Avenue)	Brighton – Shoreham – Worthing (circular)	Fri only First Bus: 23:57 Last Bus: 04:01 Frequency: Every 60 minutes	First Bus: 23:57 Last Bus: 04:01 Frequency: Every 60 minutes	No Service
2 & 60 (Brighton & Hove)	Ham Road (Shoreham-by-Sea Station)	Steyning – Shoreham – Hove – Brighton – Woodingdean – Rottingdean	First Bus 05:25 Last Bus 00:24 Frequency: Every 20 minutes from 05:25 to 22:47	First Bus 06:16 Last Bus 00:24 Frequency: Every 20 minutes 07:22 to 19:30	First Bus 07:46 Last Bus 23:21 Frequency: Every 30 minutes 07:46 to 23:21
19 (Compass Bus)	Ham Road (Shoreham-by-Sea Station)	Shoreham Beach – Shoreham – Holmbush Centre	First Bus 07:48 Last Bus 17:07 Frequency: Every hour from 07:48 to 15:36	First Bus 08:41 Last Bus 17:07 Frequency: Every hour from 08:41 to 15:36	No Service

3.7.5. The average journey time from Shoreham to the centre of Brighton and Worthing during the peak periods is approximately 30 minutes and 20 minutes respectively.

3.7.6. The above table shows that a good frequency of service is available from the local bus stops, with up to nine buses per hour running between the site and Shoreham town centre and Brighton, with between three to six buses per hour to other destinations such as Arundel, Littlehampton and Rottingdean. The local buses run throughout the day, from early in the day until late at night.

TRAIN

3.7.7. The closest railway station to the site is Shoreham-by-Sea, located approximately a 600m (8 minute) walk to the north-west, accessed via Eastern Road and Ham Road. The station is managed by Southern trains and the services operate between London, Brighton, Littlehampton, Chichester, Portsmouth and Southampton.

3.7.8. The ticket office is open Monday to Friday from 05:40-19:55, on Saturday between 06:10-19:45 and on Sunday from 06:25-19:30; in addition self-service ticket machines are in operation when the ticket office is closed. The station provides 131 car parking spaces including three accessible spaces. The station also provides 16 Sheffield stands which equates to 32 cycle spaces, of which 20 are covered. There are also 18 two-tier cycle parking stands which equates to 36 cycle spaces, with all of these spaces covered. There is step free access provided to both platforms.

3.7.9. A summary of train services departing from Shoreham-by-Sea, including journey time and frequency of service, is provided in the following table.

Table 3-4 Direct Train Services from Shoreham

Destination	Approximate Journey Time (Minutes)	Peak Frequency (Trains per Hour)	Off-peak Frequency (Trains per Hour)	First Train / Last Return
Worthing	10	7	6	05:14 / 00:37
London Victoria / Bridge	80	2	2	05:43 / 00:02
East Croydon	57	2	2	05:43 / 00:24
Gatwick Airport	42	3	2	05:43 / 00:44
Brighton	15	4	4	05:36 / 01:26
Hove	10	4	6	05:36 / 01:38
Littlehampton	30	2	2	05:30 / 11:53
Chichester	40	3	3	05:14 / 11:23
Portsmouth Harbour	70	3	1	05:14 / 10:52

3.7.10. The above table shows that a number of key destinations can be reached by train in less than 80 minutes including London Victoria, East Croydon, Gatwick Airport, Brighton, Chichester and Portsmouth, therefore making the site a good location for a range of commuting, business or leisure trips by rail. Furthermore, numerous destinations can be easily reached from London Victoria and East Croydon.

3.7.11. In the AM peak hour it is possible to access Brighton City Centre within approximately 22 minutes via foot and rail, as compared to a predicted journey time by car of 18-35 minutes. Similarly, Worthing can be reached in 17 minutes by foot and rail, compared with 16- 26 minutes by car. This shows that the proximity of Shoreham railway station offers an attractive alternative to travel by private car. Having such good public transport connections means that residents who travel to destinations such as Brighton for work or leisure, will not need to plan for car parking, which is generally expensive and of low availability.

3.8 LOCAL CAR PARKING AVAILABILITY

3.8.1. This chapter has demonstrated how the proposed development is in a very sustainable location, with a good range of facilities to support the day to day needs of residents and there being good public transport connections.

3.8.2. As discussed in the following chapter, due to the sustainable location of the site, the level of parking that is to be provided at the site will be below the WSCC recommended design standard for new developments.

3.8.3. Because of this, within their response to our scoping paper, WSCC requested that a parking beat survey be completed in order to identify local on-street parking availability.

3.8.4. The two recognised methods of undertaking parking beat surveys (the Richmond and Lambeth methodologies) both require parking availability within a 200m walking distance to be assessed and identified.

3.8.5. Having reviewed the unrestricted on-street parking opportunities available within a 200m walking distance of the site, it has been determined that there are only two sections of unrestricted parking available:

- Eastern Avenue: A layby on Eastern Avenue, with parking for a maximum of 6 cars;
- Brighton Road: From the 200m distance to the west of the site, there is a length of c.20m / 3 car lengths, unrestricted parking availability.

3.8.6. The location of these two parking areas in relation to the site are illustrated on **Figure 5**, with this also providing Google Street View images. From this, it can be seen that the available spaces are almost at capacity during the daytime.

3.8.7. It is assumed that these spaces are most likely occupied by local workers during the daytime and that there may be some parking availability during the evening / overnight. However, due to the remoteness of these spaces in terms of natural surveillance at these times, the parking is not

considered attractive to future residents of the proposed development, especially when access to a space is not guaranteed.

3.8.8. It is therefore considered reasonable to assume that there is no local unrestricted / attractive on-street parking available to future residents of the proposed development. Therefore, for people wanting to own a car, the proposed development would only be of interest to residents who live in one of the apartments that will have access to one of the on-site parking spaces.

3.8.9. Based on the above, it is considered unnecessary to undertake a parking beat survey as requested by WSCC.

3.9 PERSONAL INJURY ACCIDENT ANALYSIS

3.9.1. Personal Injury Accident (PIA) data was obtained from WSCC for the five-year period from 1 September 2019 to 31 August 2024. The data is included in **Appendix C**, which includes a plan that shows the accident locations. The plan also shows the extent of the study area that was agreed with WSCC during the scoping stage.

3.9.2. PIA accidents are classified into three severity categories: slight, serious and fatal, a definition of which is provided below:

- **Slight Injury**: Injuries of a minor nature, such as sprains, bruises, or cuts not judged to be severe, or slight shock requiring only roadside attention (medical treatment is not a prerequisite for an injury to be defined as slight);
- **Serious Injury**: Injuries for which a person is detained in hospital, as an in-patient, or any of the following injuries, whether or not a person is detained in hospital; fractures, concussion, internal injuries, severe cuts and lacerations, severe general shock requiring medical treatment and injuries which result in death after 30 days of the accident. The serious category, therefore, covers a very broad range of injuries; and
- **Fatal Injury**: Injuries which cause death either immediately or any time up to 30 days after the accident.

3.9.3. Analysis of the PIA showed that a total of 49 PIAs were recorded in the study area during the five-year period, 31 of which resulted in slight injury and 18 in serious injury. There were no fatalities.

3.9.4. A summary of the accidents recorded during the five year period categorised by injury severity and travel mode is provided in the following table.

Table 3-5 Personal Injury Accident Summary (1st September 2019 – 31st August 2024)

Mode of Travel	Slight	Serious	Fatal	Total
Motor Vehicle	15	3	0	**18**
Motorcycle	7	3	0	**10**
Pedal Cycle	7	8	0	**15**
Pedestrian	2	4	0	**6**
TOTAL	**31**	**18**	**0**	**49**

Pedestrian Accidents

3.9.5. From the table above it can be seen that there were six PIAs involving pedestrians, two were recorded as slight and four of serious severity. There were no fatalities. A summary of the accidents is provided below.

- A259 High Street / East Street (09/04/2020): Allegation that whilst the police vehicle was arriving at the scene of a report of a fight, the injured pedestrian claimed that they were struck by the police vehicle (Slight Injury);
- Ham Road (16/09/2021): A child ran out from between cars to cross the road and collided with an oncoming car that was moving at low speed (Serious Injury);
- Western Road at junction with Brunswick Road (25/04/2022): A pedestrian crossing Western Road has been struck by an oncoming car (Serious Injury);
- Brighton Road (16 metres from junction with New Road) (24/06/2023): A car has collided with a pedestrian waiting at a bus stop who had lost their footing and fallen (Slight Injury);
- Brighton Road (18/10/2023): A motorcycle collided with a pedestrian at a pedestrian crossing (Serious Injury);
- Brighton Road (21/06/2024): A car has collided with a line painter that was being pushed by a road worker. The line painter has been pushed into the road worker, causing a cut on their hand (Serious Injury).

3.9.6. From a review of the data, there does not appear to be any concerns with regards to highway conditions being the cause of the accidents that involved pedestrians, with all accidents appearing to be caused by either driver or pedestrian error.

Cyclists

3.9.7. There were 15 PIAs involving cyclists, seven were recorded as slight and eight of serious severity:

- Ham Road / Brunswick Road (17/09/2019): A car on Brunswick Road has come from behind the cyclist and attempted to overtake to turn left onto Ham Road. This resulted in the car making contact with the cyclist which forced them onto the kerb. The cyclist has then fallen off the bike onto the ground (Serious Injury);
- Brighton Road / New Road (18/02/2020): A car was driving onto Brighton Road and collided with the cyclist, knocking them over (Serious Injury);
- Ham Road / Brunswick Road (25/02/2020): A car has steered onto the other side of the carriageway to avoid a pothole and has collided with the cyclist (Serious Injury);
- Brighton Road – A259 (04/04/2020): A car and cyclist are both travelling west along Brighton Road and have collided, causing the cyclist to fall to the ground (Slight Injury);
- Brighton Road – A259 (25/02/2021): A car has collided with a cyclist causing the cyclist to fall off their bike (Slight Injury);
- Tarmount Lane / New Road (26/02/2021): A car was stopped at the junction of Tarmount Lane with New Road, and a cyclist has collided into the rear of the car (Serious Injury);
- Ham Road at junction with Brunswick Road (25/11/2021): A cyclist was travelling southbound on Brunswick Road and has collided with a car that was turning from Brunswick Road onto Ham Road (Slight Injury);
- Brighton Road near junction with New Road (26/10/2022): A goods vehicle has collided with a cyclist whilst turning left onto New Road (Slight Injury);
- Brunswick Road at junction with Ham Road (10/12/2022): A cyclist was travelling on Brunswick Road and has collided with a car that has pulled out of Ham Road onto Brunswick Road (Slight Injury);
- Brighton Road (23/05/2023): A car has collided with a cyclist, causing the cyclist to fall into the road (Slight Injury);
- Brighton Road (134 metres from junction with East Street) (25/05/2023): A cyclist was passing slow moving traffic and has collided with a car entering the carriageway from a car park (Serious Injury);
- Eastern Avenue (08/06/2023): A cyclist has travelled onto the road and collided with a car (Slight Injury);
- Brunswick Road (02/09/2023): A car door has been opened into the path of an incoming cyclist (Serious Injury);

- Ham Road at junction with Brunswick (14/09/2023): A cyclist was turning onto Ham Road from Brunswick Road and has been hit by a car turning onto Brunswick Road from Ham Road (Serious Injury);
- Brighton Road at junction with Eastern Avenue (25/11/2023): A car was traveling westbound on Brighton Road and has turned right and collided with the oncoming cyclist (Serious Injury).

3.9.8. With the exception of the accident caused by a driver avoiding a pothole, none of the accidents that involved cyclists appear to have been caused by highway defects and there was no clustering of accidents.

Motorcycles

3.9.9. There were 10 PIAs that involved motorcycles, seven were recorded as slight and three of serious severity:

- Brighton Road at junction with a private road (26/08/2020): A car was travelling eastbound on Brighton Road and has turned right onto the opposite side of the carriageway, colliding with an oncoming motorcycle. This caused the motorcyclist to fall into the road (Serious Injury);
- Eastern Close at junction with Eastern Avenue (24/09/2020): A motorcyclist attempted to stop and lost control of the motorcycle, which skidded along the ground and hit two parked cars (Slight Injury);
- Brighton Road (134 metres from junction with East Street) (18/05/2021): A bus/coach heading west on the A259 has stopped in slow moving traffic to allow a car, facing north, to leave a private driveway entrance. This resulted in a motorcycle, travelling west, to collide with the car (Serious Injury);
- Brighton Road at junction with private junction (10/03/2022): A motorcyclist has collided with a car after pulling up alongside it (Slight Injury);
- Eastern Avenue near junction with New Road (29/09/2022): A motorcycle has collided with a stationary car waiting at a red light (Slight Injury);
- Brighton Road (99 metres from junction with Eastern Avenue) (10/11/2022): A car has collided with a motorcycle after performing a U turn (Slight Injury);
- Eastern Avenue (71 meters from junction with Dolphin Road) (11/06/2023): A car has collided with a motorcyclist when completing a turn (Slight Injury);
- Eastern Avenue at junction with Ham Road (03/10/2023): A car has collided with a motorcyclist after turning right from Eastern Avenue (Slight Injury);
- Eastern Avenue at junction with Gordon Road (13/01/2023): A car heading southbound has turned right towards Gordon Road and has collided with an oncoming motorcycle (Serious Injury);

- Brighton Road at junction with New Road (16/01/2024): A car has come from New Road to cross Brighton Road onto Surry Hard and has collided with a motorcyclist travelling on Brighton Road (Slight Injury).

3.9.10. From the summary detail, it appears that all the accidents involving motorcyclists are caused by rider / driver error and there is no clustering of accidents.

Remaining Serious Accidents

3.9.11. There were three further serious PIAs recorded that did not involve vulnerable users, with these summarised below:

- Brighton Road (04/09/2020): A car was travelling east along Brighton Road at high speed. The car then crossed the centre line of the road and collided with street furniture on the central island. The car then flipped onto its roof and collided with steel fencing. The PIA was a result of reckless driving and potentially affected by alcohol/drugs (Serious Injury);
- New Road / 89 metres from junction with East Street (09/07/2022): A car was seen driving the wrong way down Upper East Street by a witness. The car hit the side of a parked car which then struck two other vehicles. The PIA was a result of the driver being impaired by alcohol (Serious Injury);
- Eastern Avenue / 81 metres from junction with Adur Drive (2/08/2023): A car was travelling in the centre of the road and hit another car whilst trying to park. The PIA was a result of the driver being distracted within the vehicle (Serious Injury).

PIA Summary

3.9.12. The review of the five-year PIA data indicates no existing trends or clustering of accidents in the vicinity of the proposed development site, and it appears that except for a single accident, the majority, if not all of the accidents can be attributed to human error as opposed to issues with the design or condition of the local highway network. It is therefore considered that the limited traffic generated by the proposed development is unlikely to have a material effect on the safe operation of the highway network.

3.10 OBSERVED TRAFFIC FLOWS

3.10.1. Based on the scale of the proposed development and the level of car parking that is to be provided at the site, it has been agreed with WSCC that the junction assessment work covers the following junctions:

- A259 Brighton Road / Site Access;
- A259 Brighton Road / Eastern Avenue / Humphrey's Gap Signalised Junction;
- A259 Brighton Road / Norfolk Bridge Roundabout; and
- A259 Brighton Road / Kingston Lane Signalised Junction.

3.10.2. Traffic surveys at the above junctions were completed during the morning (07:00-10:00) and evening (16:00-19:00) peak periods on Tuesday 5th November 2024. The survey results are attached within **Appendix D**.

3.10.3. Analysis of the survey results identified the AM and PM peak hours as 08:15 to 09:15 and 17:00 to 18:00 respectively, with these illustrated on the following figures:

- **Figure 6**: AM Peak Hour (08:15-09:15) – Total Vehicles
- **Figure 7**: AM Peak Hour (08:15-09:15) – HGVs
- **Figure 8**: PM Peak Hour (17:00-18:00) – Total Vehicles
- **Figure 9**: PM Peak Hour (17:00-18:00) – HGVs

3.10.4. As well as the classified peak hour turning count surveys that were undertaken at the study area junctions, two weeklong Automatic Traffic Count (ATC) surveys were undertaken on Brighton Road, with these located either side of the site access and completed between Tuesday 5th November and Monday 11th November. The ATC survey that was undertaken to the west of the site access failed due to damage to the counter.

3.10.5. A review of the results from the ATC survey has shown that traffic conditions on Tuesday 5th November were typical, as summarised in the following table.

Table 3-6 Traffic Flows – Tuesday 5th November & Weekday Average

Period	Eastbound		Westbound	
	Tuesday	5 Day Average	Tuesday	5 Day Average
AM Peak	653	611	509	498
PM Peak	503	483	576	538

3.11 HIGHWAY OPERATION

3.11.1. The study area junctions have been assessed with the observed peak period traffic flows, with the results summarised below.

3.11.2. It should be noted that WSP completed the transport assessment work that supported the Free Wharf development and the same models have been used within this assessment work, with the traffic flows updated. The junction capacity models used within the Free Wharf assessment work were agreed for use with the Local Highway Authority.

3.11.3. The junction assessments have been carried out using the industry standard LinSig v3 for the two signalised junctions and Junctions 10 using the ARCADY and PICADY module for the Norfolk Road roundabout and the site access junctions respectively.

3.11.4. LinSig models provide an indication of the Degree of Saturation (DoS) as a percentage and the Mean Maximum Queue (MMQ) in Passenger Car Units (PCUs) for each junction approach, the average delay per vehicle on each approach recorded in seconds and the Practical Reserve Capacity (PRC), which measure of the junctions total capacity (as a percentage). For DoS the thresholds can be categorised as follows:

- Less than 90%: Any queues that have built up will be able to disperse during the relevant stage in each cycle;
- 90-100%: Indicates that an arm is close to its theoretical capacity and any queue that has built up does not fully clear within each cycle; and
- More than 100%: Indicates an arm is over its theoretical capacity and significant queues are likely as a result.

3.11.5. When reviewing the PRC of a junction the following is considered:

- A positive figure indicates the junction operates with reserve capacity;
- A negative figure less than -10%, suggests that the junction would be broadly at capacity; and
- A negative figure more than -10% indicates that the junction cannot accommodate the demand.

3.11.6. The signal junctions assessed as part of this TA are currently operated via Microprocessor Optimised Vehicle Activation (MOVA) which minimises vehicle delays by detecting upstream traffic conditions and altering signal timings accordingly. This operation cannot be fully reflected in LinSig, which optimises traffic signals on a fixed-time basis across the peak hour and therefore it is estimated that the traffic signal junctions will operate 10-15% better in reality than presented within this report.

3.11.7. Junction capacity in Junctions 10 is specified with reference to the Ratio of Flow to Capacity (RFC) for priority and roundabout junctions. In doing so, values of 0.85 would typically indicate the design point at which congestion is likely to occur with value of 1.00 being the theoretical point at which this

congestion is forecast to occur regularly during the assessment period. However, it is important not to use these output values in an arbitrary manner.

3.11.8. The results of the assessments completed at each of the junctions with the observed 2024 AM and PM peak hour flows are summarised below, with the result files attached within **Appendices E** to **H**.

BRIGHTON ROAD / SITE ACCESS

3.11.9. The site access junction is a three arm priority controlled junction, with a right-turn lane provided into the site from the A259 Brighton Road. The results of the assessment for the 2024 observed flows, which include the existing Kwik-Fite and Car Wash, are presented in the following table.

Table 3-7 Site Access: 2024 Observed Flow

Arm	AM Peak Hour			PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Site Access	0.03	0	12	0.04	0	12
Brighton Road (West)	0.03	0	6	0.01	0	6

3.11.10. From the results presented above, it can be seen that the site access junctions operates well within capacity with no vehicle queues.

BRIGHTON ROAD / EASTERN AVENUE / HUMPHREY'S GAP SIGNALISED JUNCTION

3.11.11. The A259 Brighton Road / Eastern Avenue / Humphrey's Gap signalised junction is located immediately west of the site access and will provide access into the Free Wharf site via the southern Humphrey's Gap arm.

3.11.12. All the arms are subject to a 30mph speed limit with a two lane approach from each junction except for Humphrey's Gap which has a single lane approach. The 2024 observed flow modelling results are shown in the following table.

Table 3-8 A259 Brighton Road / Eastern Avenue / Humphrey's Gap: 2024 Observed Flow

Arm	AM Peak Hour			PM Peak Hour		
	Degree of Sat (%)	Average Delay (s)	Mean Max Queue	Degree of Sat (%)	Average Delay (s)	Mean Max Queue
Eastern Avenue	64.3	64	5	49.0	54	4
Brighton Road (East)	45.2	18	9	49.6	21	12
Humphrey's Gap	7.0	70	0	24.9	72	1
Brighton Road (West)	65.8	26	19	51.1	24	13
Overall Junction	PRC: 36.7% Cycle Time 120s			PRC: 76.0% Cycle Time 120s		

3.11.13. The results presented above show how the A259 Brighton Road/ Eastern Avenue/ Humphrey's Gap junction currently operates within capacity in the AM and PM peak hours. The highest degree of saturation is found on the approach from Brighton Road (West) of 66% with an associated mean max queue of 19 vehicles, with these during the AM peak hour. As the junction operates within capacity queueing on each should disperse within one signal cycle.

BRIGHTON ROAD / KINGSTON LANE SIGNALISED JUNCTION.

3.11.14. The A259 Brighton Road/ Kingston Lane is a three arm signalised junction, with all the approaches subject to a 30mph speed limit. The 2024 observed flow modelling results are shown in the following table.

Table 3-9 A259 Brighton Road / Kingston Lane: Observed 2024 Flow

Arm	AM Peak Hour			PM Peak Hour		
	Degree of Sat (%)	Average Delay (s)	Mean Max Queue	Degree of Sat (%)	Average Delay (s)	Mean Max Queue
Kingston Lane (Left Turn)	30.5	24	3	15.1	18	2
Kingston Lane (Right Turn)	45.0	42	2	33.2	40	2
Albion Street (Ahead)	31.2	6	4	40.2	7	5
Albion Street (Right Turn)	67.4	54	4	70.2	44	5
Brighton Road	70.3	19	12	69.9	23	11
Overall Junction	PRC: 27.9% Cycle Time 70s			PRC: 28.2% Cycle Time 70s		

3.11.15. The modelling results presented above show the junction operates within capacity in both the AM and PM peak hours, with the highest DoS forecast on the Brighton Road arm, with AM and PM peak hour values of 70.3% and 69.9% respectively.

HIGH STREET / NORFOLK BRIDGE ROUNDABOUT

3.11.16. As discussed earlier, the same junction models that were used within the assessment work completed for the Free Wharf development have been used, with WSCC reviewing and agreeing to the use of these at that time.

3.11.17. It should be noted that as part of the Free Wharf assessment work, calibration adjustments of the A259 High Street / Norfolk Bridge / A283 Old Shoreham Road roundabout were completed as a result of concerns expressed by local residents and WSCC during the pre-application consultation. A full review of video surveys completed for this junction at this time identified a number of constraints on the A259 High Street related to proximity of bus stops, pedestrian crossings, minor junctions and arrival / departure of delivery vehicles. It was shown that these issues were the main constraint on capacity through the junction, rather than the operation of the junction, leading to slow moving traffic and rolling queues on each approach during the peak hours. As a result of this, capacity adjustments were made. The same model, as agreed with WSCC has been used within this new assessment work.

3.11.18. The junction of A259 High Street/ Norfolk Bridge/ A283 Old Shoreham Road is a 3-arm roundabout providing access to Lancing and Worthing to the west, Shoreham Harbour to the east and the A27 to the north. On the approach to the roundabout there are two lanes on the entrance and one lane on the exit. All the arms are subject to a 30mph speed limit. The results of the assessment for the 2024 observed flows, including the calibration are presented in the following table.

Table 3-10 A259 High Street / Norfolk Bridge / A283 Old Shoreham Road: 2024 Observed Flow

Arm	AM Peak Hour			PM Peak Hour		
	RFC	Queue	Delay (S)	RFC	Queue	Delay (S)
A259 High Street (E)	0.63	2	11	0.82	5	20
A259 Norfolk Bridge	1.14	233	741	0.78	3	15
A283 High Street (N)	0.63	2	10	0.48	1	7

3.11.19. The results show how during the AM peak period the A259 Norfolk Bridge arm of the junction is operating with RFC values above 1, with significant queues shown to occur . During the PM peak, the junction is shown to operate with RFC values below 1, with no material queues or delays shown to occur. As detailed later in this report, the operation of the junction greatly improves with the

mitigation scheme that has been identified to suitably accommodate all the traffic flows associated with the regeneration of Shoreham.

4 PROPOSED DEVELOPMENT

4.1 INTRODUCTION

4.1.1. The proposed development is for 49 apartments and 57.6sqm of commercial use.

4.1.2. The schedule of residential accommodation is as follows:

- 2 x Studio
- 12 x 1 bedroom
- 30 x 2 bedroom
- 5 x 3 bedroom

4.1.3. A copy of the indicative masterplan and development schedule is attached within **Appendix A**.

4.2 SITE ACCESS

4.2.1. The existing access arrangement from Brighton Road is to be retained, with a simple priority controlled junction provided via the eastern boundary of the site.

4.2.2. Consideration was given to the reconfiguration of the junction, to reduce the width of the access in order to assist pedestrian movement.

4.2.3. However, in order to provide suitable access for the largest vehicles that are expected to access the site, it is not possible to make amendments to the junction. This is due to the pedestrian refuge island that has recently been installed on Brighton Road immediately east of the site access, with this delivered as part of the Free Wharf development.

4.2.4. The vehicle tracking for the site access is illustrated on **Drawing Number 8838-WSP-XX-XX-M2-PL-006 (P02)**.

4.3 CAR PARKING

4.3.1. It was originally proposed that 18 car parking spaces were to be provided at the site. However, following the public consultation, the indicative layout for the site was amended, with a total of 24 car parking spaces provided.

4.3.2. The parking provision includes 2 car club parking spaces and this will provide residents with access to a car when / if required, without the need to own their own car. Research by the Centre for Mobility shows each car club vehicle replaces 22 private vehicles (CoMoUK Annual Car Club Report (2022).

4.3.3. As requested by WSCC, tracking of the parking spaces that are positioned opposite walls has been completed in order to demonstrate that suitable access is provided. This tracking is illustrated on **Drawing Number 8838-WSP-XX-XX-M2-PL-005 (P02)**, with this showing that suitable access is provided. In accordance with typical car park design standards, all spaces that are positioned next to a wall have a width of 2.7m, as compared to the standard 2.4m widths that are provided.

RESIDENTIAL USE

4.3.4. The current indicative layout for the site provides 24 car parking spaces, a ratio of 0.49 spaces per residential unit assuming that all spaces are allocated to the residential use (with evidence showing that each car club space is the equivalent of 22 parking spaces, the site would effectively be providing 66 parking spaces, a ratio of 1.35 spaces per unit).

4.3.5. This level of parking is considered sufficient based on the sustainable location of the site, with it being within walking distance of Shoreham town centre and Shoreham train station. The site is also served by local bus routes that run directly past the site on Brighton Road.

4.3.6. Also, as set out within section 3.9 of this report, there is no viable on-street / local unrestricted parking available to future residents of the proposed development who do not have access to one of the on-site parking spaces. It is therefore considered that the proposed development would not be attractive to residents wishing to own a car who do not have access to on-site parking.

4.3.7. Regardless of this, the ratio of parking at the proposed development is in line with other consented applications in the immediate area, as detailed below:

Former Adur Civic Centre

4.3.8. The Adur Civic Centre site is located approximately 130m to the north-east of the proposed development site, on the opposite side of Brighton Road.

- Planning Reference: AWDM/1450/21
- Proposal: Erection of two blocks of development ranging in height between 3 – 11 storeys comprising 171 residential units comprising of 1-bed, 2- bed and 3-bed units (including 30% affordable housing), 1,003sqm of commercial (Class E) floorspace, and associated parking and landscaping.

4.3.9. The Adur Civic Centre development provides 56 car parking spaces. 53 of the spaces are for the residential dwellings (0.3 spaces per dwelling). The provision includes:

- 3 wheelchair accessible spaces;
- 1 car club space;
- 2 spaces for the commercial use.

69-75 Brighton Road

4.3.10. The 69-75 Brighton Road site is located approximately 130m to the west of the proposed development site, positioned on the southern side of Brighton Road.

- Planning Reference: AWDM/2039/22
- Proposal: 176 residential apartments comprising 76 no. 1-bed homes and 100 no. 2-bed homes, along with 595 sqm of commercial development.

4.3.11. The development provides 77 unallocated car parking spaces. Therefore, excluding the commercial use, this would be 0.43 spaces per dwelling.

COMMERCIAL USE PARKING

4.3.12. Within their pre-application response, WSCC requested that some parking be provided for the commercial use.

4.3.13. However, due to the small scale of the proposed commercial element (90sqm), the sustainable and accessible location of the site and that the future use will most likely be targeted towards residents of the development and other local residents, it is not proposed to allocate any car parking spaces to the commercial use, either for staff or customers. This is because staff will be able to travel to the site by sustainable modes and customer parking is not considered appropriate as only one or two spaces would be provided and, if customers were encouraged to drive onto the site, there would no doubt be occasions when cars would need to wait for the space(s) to be free and this, along with the associated risk of inappropriate parking, would compromise safety.

4.3.14. However, if WSCC are adamant that parking be provided for the commercial use, the applicant would be willing to accept an appropriate condition.

4.4 CYCLE PARKING

4.4.1. The level of cycle parking to be provided at the site will be in accordance with the West Sussex County Council Guidance on Parking at New Developments (August 2019).

Residential

4.4.2. The minimum cycle parking standards for apartments are set out in the following table:

Table 4-1 Minimum Cycle Parking Standards for Flats (WSCC, 2019)

Dwelling Size	Cycle Provision (per unit)
Up to 3 rooms (1 & 2 bed)	0.5 space (if communal storage, otherwise 1 space)
4+ rooms (3+ bed)	1 space

4.4.3. Based on the above standards, a total of 27 long-stay cycle spaces would be required to meet the minimum requirement.

4.4.4. From the indicative masterplan it can be seen that 34 long-stay spaces are to be provided in a store room adjacent to the main entrance, with this to include parking for 2 cargo bikes.

4.4.5. Following the pre-application discussions with WSCC Highways, the following amendments were made to the site layout:

- An area for the maintenance of cycles has been provided within the main store, with this including tool storage, a floor pump and a wall mounted repair stand;
- Two spaces suitable for cargo / adapted bicycles are provided.

Commercial

4.4.6. The minimum cycle parking standards for the retail / commercial element is set out in the following table:

Table 4-2 Minimum Cycle Parking Standards for Retail Use (WSCC, 2019)

Land Use	Cycle Provision
A1 Shops	1 space per 100sqm for staff and 1 space per 100sqm for customers

4.4.7. For the staff parking, a single space is required and staff will be provided with access to the main store.

4.5 ELECTRIC VEHICLE CHARGING

4.5.1. The WSCC design standards require the following set levels of active EV charging to be provided at the year of construction:

- 2025: 49%
- 2026: 53%

4.5.2. This level of active charging will be provided, with the remaining spaces provided with passive provision.

4.6 SERVICING DELIVERIES

4.6.1. Vehicle tracking within the site has been completed for the following vehicles, which are considered the largest vehicle types that will access the site:

- Large Refuse Vehicle (11.2m)
- Rigid Vehicle (10.0m)

4.6.2. The tracking, as illustrated on **Drawing Number 8838-WSP-XX-XX-M2-PL-006 (P02)**, demonstrates how these vehicles are able to enter and exit the site in forward gear, with sufficient area provided within the site for simple three-point turns.

4.6.3. **Drawing Number 8838-WSP-XX-XX-M2-PL-008 (P01)** shows how the width of the access road is sufficient to accommodate a parked service vehicle whilst retaining suitable access to the car park and to the car wash.

5 TRIP GENERATION

5.1 INTRODUCTION

5.1.1. This chapter sets out the forecast trip generation and assignment of vehicle movements from the proposed development, with this agreed with WSCC through the scoping process.

5.1.2. The chapter also provides detail on the trip generation that are forecast to be generated by other local sites that are currently either under construction or have been granted planning consent.

5.2 PROPOSED DEVELOPMENT VEHICULAR TRIP GENERATION

PRIVATELY OWNED FLATS

5.2.1. The TRICS database has been used to derive trip rates for the proposed development, with the 'Flats Privately Owned' section used.

5.2.2. Sites located in either 'Suburban Area', 'Edge of Town' and 'Edge of Town Centre' locations were selected, with sites in London, Wales, Scotland and Northern Ireland excluded.

5.2.3. There were two sites that were surveyed during the Covid pandemic and these have also been excluded. Excluding these, the search identified 17 sites, with the trip rates and associated trip generation summarised in the following table. A copy of the TRICS result file is attached within **Appendix I**.

Table 5-1 Trip Rates & Trip Generation of Proposed Development

Peak	Trip Rates (per unit)			Trip Generation (49 units)		
	Arrival	Departure	Total	Arrival	Departure	Total
AM	0.052	0.185	0.237	3	9	12
PM	0.172	0.084	0.256	9	4	13

5.2.4. From the above, it can be seen that the residential element of the proposed development is forecast to generate 12 two-way trips during the AM peak hour and 13 two-way trips during the PM peak hour.

NET IMPACT

5.2.5. Detail on the existing Kwik Fit use of the site and the associated trip generation was provided earlier in this report at section 3.3. This showed that the existing site generated 12 two-way movements during the AM peak hour (11 arrivals, 1 departure) and 5 two-way movements during the PM peak hour (4 arrivals, 1 departure).

5.2.6. The net impact of the proposed development would therefore be low, with the difference between the existing trip generation at the site (Table 3-1) minus the forecast trip generation of the development proposal (Table 5-1).

Table 5-2 Traffic Generation – Net Impact of Development

	AM Peak Hour (08:15-09:15)			PM Peak Hour (17:00-18:-00)		
	Arrival	Departure	Total	Arrival	Departure	Total
Existing Site	11	1	12	4	1	5
Proposed Development	3	9	12	9	4	13
Net Difference	**-8**	**+8**	**0**	**+5**	**+3**	**+8**

5.2.7. From the above table, it can be seen that the proposed development is forecast to result in zero net impact in vehicle trip generation during the AM peak hour and a two-way increase of just 8 vehicles during the PM peak hour (5 arrivals, 3 departures), or one extra vehicle every 7 ½ minutes. This is not considered to be a material increase in traffic.

COMMERCIAL USE

5.2.8. As previously discussed, due to the scale of the proposed unit, it is envisaged that this will be focussed on serving future residents of the proposed development and other local residents, rather than providing a wider reaching offer which may attract vehicle trips.

5.2.9. As a result of this, it is not proposed to provide any parking for the commercial use, including for staff, with it considered that staff would be able to either walk, cycle or use public transport to travel to / from work.

5.2.10. It is therefore considered that a negligible level of vehicle trips would be generated by the commercial use.

5.2.11. However, as some trips may be generated by the commercial use, it is not proposed to remove / discount the existing vehicle trips that are generated to / from the site by the existing site use from the junction assessment work that is to be completed to forecast the impact of the proposed development. It is considered that this will present a worst-case scenario in terms of the level of

vehicle trips that will be generated by the commercial use (regardless of whether a small level of dedicated car parking is provided for the commercial use).

5.3 DEVELOPMENT TRIP DISTRIBUTION

5.3.1. As agreed with WSCC, the level of vehicle trips that are forecast to be generated by the proposed development (Table 5-1) are to be distributed based on 2011 Census 'Travel to Work' data for the Super Output Area Mid Layer Adur 005.

5.3.2. The trips have been assigned via the routes illustrated on the figure attached within **Appendix J,** with the results of the analysis also appended. The distribution proportions are summarised in the following table.

Table 5-3 Trip Distribution

Route	Proportion
1: Eastern Ave North	3.6%
2. Kingston Lane N	1.0%
3. A259 Albion St East	7.1%
4. A259 Brighton Road W	58.6%
5. A283 Old Shoreham Rd N	29.6%
Total	**100%**

5.3.3. The resultant assignment of the total vehicle trips that are forecast to be generated by the proposed development during the AM and PM peak periods are illustrated on **Figures 10** and **11** respectively.

5.4 COMMITTED DEVELOPMENT SITES

5.4.1. The forecast trip generation from local sites that are either currently under construction or have been granted planning consent need to be accounted for within the assessment work and included within the baseline flows.

5.4.2. The TA's completed for the following sites have been reviewed, with the identified traffic flows illustrated on **Figures 12** to **21**.

- **Former Adur Civic Centre** (Ref: AWDM/1450/21): This site is currently under construction and not yet occupied;
- **69-75 Brighton Road** (Ref: AWDM/2039/22): This site is currently vacant and construction has not started;
- **Free Wharf** (Ref: AWDM/1315/22): This site is currently under construction and not yet occupied;
- **New Wharf** (Ref AWDM/0204/20): This site is currently under construction and not yet occupied;
- **The Mannings** (AWDM/1281/19): This site is currently under construction and not yet occupied.

5.4.3. The total committed development flows from the above sites are illustrated on **Figures 22** and **23** for the AM and PM peak hours respectively.

6 FUTURE YEAR IMPACT ASSESSMENT

6.1 INTRODUCTION

6.1.1. As discussed earlier, the study area for the junction assessment work covers the following junctions:

- A259 Brighton Road / Site Access
- A259 Brighton Road / Eastern Avenue / Humphrey's Gap Signalised Junction;
- A259 Brighton Road / Norfolk Bridge Roundabout;
- A259 Brighton Road / Kingston Lane Signalised Junction.

6.1.2. The forecast impact that the proposed development will have on the future operation of the study area junctions is summarised below.

6.2 ASSESSMENT SCENARIOS

6.2.1. It has been agreed with WSCC that the traffic assessment work is undertaken for the following future years for both the Do-Minimum (i.e. No development, but including committed development and background traffic growth) and the Do-Something (i.e. DM plus development trips) scenarios:

- 2029 (5 Years Post-Application)
- 2032 (End of Adur Local Plan Period)

The following growth rates to factor the observed year 2024 flows to the future year values have been derived from the Tempro database, with these agreed with WSCC:

Table 6-1 Tempro Growth Rates

Period	AM	PM
2024 to 2029	1.0540	1.0529
2024 to 2032	1.0850	1.0837

6.2.2. The resultant traffic flows that have been used for the junction assessment work are illustrated on the following figures:

- **Figure 24** 2029 DM Flows, AM Peak Hour (08:15-09:15) – Total Vehicles
- **Figure 25** 2029 DM Flows, AM Peak Hour (08:15-09:15) – HGVs
- **Figure 26** 2029 DM Flows, PM Peak Hour (17:00-18:00) – Total Vehicles
- **Figure 27** 2029 DM Flows, PM Peak Hour (17:00-18:00) – HGVs
- **Figure 28** 2029 DS Flows, AM Peak Hour (08:15-09:15) – Total Vehicles
- **Figure 29** 2029 DS Flows, AM Peak Hour (08:15-09:15) – HGVs
- **Figure 30** 2029 DS Flows, PM Peak Hour (17:00-18:00) – Total Vehicles
- **Figure 31** 2029 DS Flows, PM Peak Hour (17:00-18:00) – HGVs
- **Figure 32** 2032 DM Flows, AM Peak Hour (08:15-09:15) – Total Vehicles
- **Figure 33** 2032 DM Flows, AM Peak Hour (08:15-09:15) – HGVs
- **Figure 34** 2032 DM Flows, PM Peak Hour (17:00-18:00) – Total Vehicles
- **Figure 35** 2032 DM Flows, PM Peak Hour (17:00-18:00) – HGVs
- **Figure 36** 2032 DS Flows, AM Peak Hour (08:15-09:15) – Total Vehicles
- **Figure 37** 2032 DS Flows, AM Peak Hour (08:15-09:15) – HGVs
- **Figure 38** 2032 DS Flows, PM Peak Hour (17:00-18:00) – Total Vehicles
- **Figure 39** 2032 DS Flows, PM Peak Hour (17:00-18:00) – HGVs

6.3 ASSESSMENT RESULTS

6.3.1. The results of the year 2029 and 2032 assessments of the study area junctions for the Do-Minimum and Do-Something scenarios are presented below.

6.3.2. It should be noted that both the Do-Minimum and the Do-Something scenario models have not accounted for the net reduction in traffic flows following the closure of the Kwik-Fite site, with the existing trips retained as well as the flows that will be generated by the proposed development. The results therefore present a worst-case and robust scenario.

BRIGHTON ROAD / SITE ACCESS

6.3.3. The results of the year 2029 and 2032 assessment results for the site access junction are summarised below.

Table 6-2 Site Access: 2029 & 2032 Do-Something Scenario Results

Arm	2029						2032					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	RFC	Queue	Delay	RFC	Queue	Delay	RFC	Queue	Delay	RFC	Queue	Delay
Site Access	0.06	0	12	0.06	0	14	0.07	0	13	0.06	0	14
Brighton Road (West)	0.03	0	7	0.03	0	7	0.04	0	7	0.03	0	7

6.3.4. The results presented above show how the junction is forecast to operate within capacity in both 2029 and 2032, with no queues forecast.

BRIGHTON ROAD / EASTERN AVENUE / HUMPHREY'S GAP SIGNALISED JUNCTION

6.3.5. The results of the year 2029 and 2032 DM and DS assessment results for the Brighton Road / Eastern Avenue junction are summarised in the following tables.

Table 6-3 Brighton Road / Eastern Avenue: 2029 DM & DS Scenario Results

Arm	Do-Minimum						Do-Something					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay
Eastern Avenue	76.1	6	70	70.9	5	66	76.1	6	70	70.9	5	66
Brighton Road (E)	57.5	13	24	70.7	20	25	58.2	14	25	71.0	20	25
Humphrey's Gap	56.2	3	89	48.9	2	83	56.2	3	89	48.9	2	83
Brighton Road (W)	78.6	25	30	60.1	16	26	78.8	25	31	60.8	16	26
Overall Junction	PRC: 14.6% Cycle Time 120s			PRC: 27.0% Cycle Time 120s			PRC: 14.2% Cycle Time 120s			PRC: 26.8% Cycle Time 120s		

Table 6-4 Brighton Road / Eastern Avenue: 2032 DM & DS Scenario Results

Arm	Do-Minimum						Do-Something					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay
Eastern Avenue	79.5	7	74	72.6	5	67	79.5	7	74	72.6	5	67
Brighton Road (E)	58.3	14	24	72.5	21	26	59.0	14	24	72.7	21	26
Humphrey's Gap	56.2	3	88	51.4	3	84	56.2	3	89	51.4	3	84
Brighton Road (W)	80.7	27	32	61.6	16	26	80.8	27	32	62.3	17	26
Overall Junction	PRC: 11.6% Cycle Time 120s			PRC: 24.0% Cycle Time 120s			PRC: 11.3% Cycle Time 120s			PRC: 23.8% Cycle Time 120s		

6.3.6. The results presented above show how the junction is forecast to operate within capacity for both the DM and DS scenarios, although in 2032 the junction is operating with high DoS values during the AM peak period, with values of 80.7% and 80.8% for the DM and DS scenarios respectively.

6.3.7. The results show the negligible impact that the trips generated by the proposed development has on the operation of the junction, which is to be expected with just 10 vehicles from the development travelling through the junction.

BRIGHTON ROAD / KINGSTON LANE SIGNALISED JUNCTION.

6.3.8. The results of the year 2029 and 2032 DM and DS assessment results for the Brighton Road / Kingston Lane junction are summarised in the following tables.

Table 6-5 A259 Brighton Road / Kingston Lane: 2029 DM & DS Scenario Results

Arm	Do-Minimum						Do-Something					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay
Kingston Lane (L/T)	33.8	3	26	16.6	2	19	33.8	3	26	16.6	2	19
Kingston Lane (R/T)	59.1	3	47	46.2	3	43	59.1	3	47	46.2	3	43
Albion Street	37.2	5	7	47.5	7	7	37.2	5	7	47.6	7	7
Albion Street (R/T)	80.0	5	73	79.5	6	54	80.0	5	73	79.5	6	54
Brighton Road	81.7	16	23	83.9	16	29	81.8	16	23	83.9	16	29
Overall Junction	PRC: 10.2% Cycle Time 70s			PRC:7.2% Cycle Time 70s			PRC: 10.0% Cycle Time 70s			PRC: 7.2% Cycle Time 70s		

Table 6-6 A259 Brighton Road / Kingston Lane: 2032 DM & DS Scenario Results

Arm	Do-Minimum						Do-Something					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay	DoS	Queue	Delay
Kingston Lane (L/T)	35.0	3	26	17.0	2	19	35.0	3	26	17.0	2	19
Kingston Lane (R/T)	60.4	4	48	47.0	3	43	60.4	4	48	47.4	3	43
Albion Street	38.2	5	7	48.8	7	8	38.2	5	7	48.9	7	8
Albion Street (R/T)	82.1	5	77	82.0	7	57	82.1	5	77	82.0	7	57
Brighton Road	83.9	17	25	86.0	17	31	83.9	17	25	86.2	17	31
Overall Junction	PRC: 7.3% Cycle Time 70s			PRC: 4.6% Cycle Time 70s			PRC: 7.3% Cycle Time 70s			PRC: 4.5% Cycle Time 70s		

6.3.9. The results presented above show how the junction is forecast to operate within capacity for both the DM and DS scenarios, although in 2032 the junction is operating with high DoS values during the AM and PM peak periods, with values of up to 86.0% and 86.2% for the DM and DS scenarios respectively.

6.3.10. However, the results show the negligible impact that the trips generated by the proposed development has on the operation of the junction, which is to be expected with just 1 additional vehicle from the development travelling through the junction during both the AM and PM peak periods.

HIGH STREET / NORFOLK BRIDGE ROUNDABOUT

6.3.11. As detailed within Chapter 3, the existing High Street / Norfolk Bridge roundabout operates above capacity with the existing junction layout and existing traffic flows.

6.3.12. In order to support the level of development that is coming forward as part of the regeneration of Shoreham Harbour, an improvement scheme for the junction has been identified, as set out within the Adur Local Plan and Shoreham Harbour Transport Study.

6.3.13. The proposed improvement scheme for this junction includes the enlargement of the diameter of the roundabout (from a mini-roundabout to a standard roundabout) and widening of approaches.

6.3.14. As discussed earlier, the same junction models that were used within the assessment work completed for the Free Wharf development have been used, with WSCC reviewing and agreeing to the use of these at that time. The results of the year 2029 and 2032 scenario assessments for the junction with the mitigation in place are summarised in the following table.

Table 6-7 A259 High Street / Norfolk Bridge / A283 Old Shoreham Road: 2029 Results

Arm	Do-Minimum						Do-Something					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	RFC	Queue	Delay	RFC	Queue	Delay	RFC	Queue	Delay	RFC	Queue	Delay
A259 High Street (E)	0.50	1	5	0.66	2	7	0.51	1	5	0.67	2	7
A259 Norfolk Bridge	0.86	7	18	0.62	2	6	0.87	7	18	0.62	2	6
A283 High Street (N)	0.55	1	7	0.42	1	5	0.55	1	7	0.42	1	5

Table 6-8 A259 High Street / Norfolk Bridge / A283 Old Shoreham Road: 2032 Results

Arm	Do-Minimum						Do-Something					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	RFC	Queue	Delay	RFC	Queue	Delay	RFC	Queue	Delay	RFC	Queue	Delay
A259 High Street (E)	0.52	1	5	0.69	2	8	0.52	1	5	0.69	2	8
A259 Norfolk Bridge	0.89	8	22	0.64	2	7	0.89	8	23	0.64	2	7
A283 High Street (N)	0.58	1	7	0.43	1	5	0.58	1	7	0.44	1	5

6.3.15. The results presented above show how the junction is forecast to operate within capacity during the AM and PM peak periods with the future year DM and DS traffic flows.

6.3.16. As with the other study area junctions, the results demonstrate the negligible impact that the trips generated by the proposed development has on the operation of the junction.

7 RESIDENTIAL TRAVEL PLAN

7.1 OVERVIEW

7.1.1. A Framework Residential Travel Plan has been produced and is attached within **Appendix K**. This chapter provides a summary of the key targets that the Travel Plan seeks to meet, and the measures that it suggests to achieve this.

7.2 AIMS & OBJECTIVES

7.2.1. The overarching aim of the Travel Plan is to provide a tool for the provision of appropriate measures to encourage residents of the proposed development to use healthier and lower carbon transport options. As such, this will contribute to a more sustainable development which provides benefits to the wider community.

7.2.2. The objectives of the Travel Plan are to:

- Support the proposed development as a sustainable community;
- Facilitate and encourage greater use of sustainable transport options, in preference to the use of the private car, and especially Single Occupancy Vehicle (SOV) trips;
- Protect and enhance the environment in and around the site;
- Provide the opportunity for residents to live a healthy and sustainable lifestyle; and
- Promote the financial, health and environmental benefits associated with sustainable travel.

7.3 TRAVEL PLAN PROMOTION & MEASURES

7.3.1. A wide range of potential measures which are suitable for incorporation and implementation into the full Travel Plan have been identified and these include:

- Ongoing promotion and marketing in the form of a Travel Plan Information Board within the sales office and a community notice board which would raise awareness of sustainable travel associated with the development location and highlight pedestrian and cycle routes and bus stops close to the site.
- A Sustainable Travel Information Website which can disseminate site wide sustainable travel information to residents;
- One Month Bus Service Trial Tickets to be offered to residents in order to encourage continued use; and
- Cycle Discounts: Each household will be provided with a £50 cycle voucher to redeem against the purchase of a bicycle.

7.4 SUMMARY

The development site is located in an area where there are multiple opportunities to travel by sustainable modes of travel. The Travel Plan, attached in **Appendix K**, provides detail on the incentives and measures that will be provided to encourage residents to travel by such modes.

8 SUMMARY AND CONCLUSION

8.1 SUMMARY

8.1.1. This Transport Assessment has been completed in support of an outline planning application that has been submitted for the redevelopment of 37 - 41 Brighton Road, Shoreham-by-Sea, West Sussex. The development proposal is for 49 apartments and 57.6sqm of commercial / retail use. A copy of the current indicative masterplan is attached within **Appendix A**.

8.1.2. The site, which is currently occupied by a single storey industrial (Kwik-Fit) is located approximately 500m to the south-east of Shoreham-by-Sea town centre. The site is bordered by the A259 Brighton Road to the north, the Free Wharf development site to the east and south and the Humphrey's Gap industrial area to the west.

8.1.3. The Free Wharf Development Site is currently under construction and, when complete, will provide over 500 residential units and supporting commercial and retail use. WSP completed the Transport Assessment work that supported the planning application for the Free Wharf development and the same methodology and junction models have been used within this Transport Assessment. A scoping exercise has been conducted with WSCC Highways Authority to agree the study area and methodology for this assessment, with the associated correspondence attached at **Appendix B**.

8.1.4. This report has demonstrated how the site is located in a very sustainable position and is therefore well placed to support the proposed development, for example:

- The site is within 500m of Shoreham town centre and therefore, along with other retail and commercial facilities outside of the town centre area (which will include facilities within the neighbouring Free Wharf development and the commercial unit at the proposed development) residents will have easy access to the amenities required to support their day to day needs;
- The site is within a 200m / 2 minute walk of bus stops that provide a high frequency of service to key local destinations, with up to nine buses per hour running between the site and Shoreham town centre and Brighton and up to six buses per hour to destinations including Arundel, Littlehampton and Rottingdean. The local buses run throughout the day, from early in the day until late at night, with there also being a night bus that operates with an hourly frequency and provides access to Brighton, Shoreham and Worthing.
- The site is located approximately a 600m / 8 minute walking distance from Shoreham-by-Sea railway station. The station is managed by Southern trains, with services operating between London, Brighton, Littlehampton, Chichester, Portsmouth and Southampton. There is a good level of service provided, for example, up to 7 trains per hour to Worthing and 4 trains per hour to Brighton.

8.1.5. A Travel Plan will be in place at the development, with this providing incentives and measures that will support and encourage residents and visitors to the apartments to travel by sustainable modes.

8.1.6. The site layout safeguards land along the northern boundary in order to assist with the aspiration to provide space for a high-quality segregated cycle route along the A259 Brighton Road that would

provide stepped separation from road vehicles and pedestrian facilities. Secure and covered cycle parking will be provided at the site, including spaces for wider / adapted bikes.

8.1.7. A review of Personal Injury Accident records for the local highway network has been completed and this does not indicate any concerns, with no existing trends or clustering of accidents recorded, with no concerns with regards to the design or condition of the highway network. It is therefore considered that traffic generated by the proposed development is unlikely to have a material effect on the existing safety record.

8.1.8. The proposed development is forecast to have a negligible net impact on the level of vehicle trips generated to and from the site. During the AM peak hour, when compared to the existing Kwik-Fit site use, the development is forecast to result in no increase in trip generation, although the direction of trips will change, with 8 fewer arrivals and 8 additional departures. During the PM peak hour, there is a net increase of just 8 vehicles, with 5 more arrivals and 3 more departures.

8.1.9. The proposed development is forecast to generate 12 two-way vehicle trips during the AM peak hour (3 arrivals, 9 departures) and 13 two-way vehicle trips during trips during the PM peak hour (9 arrivals, 4 departures). It can therefore be seen that, even ignoring the net impact, the additional volume of trips is not significant, with on average one additional trip generated every 5 minutes.

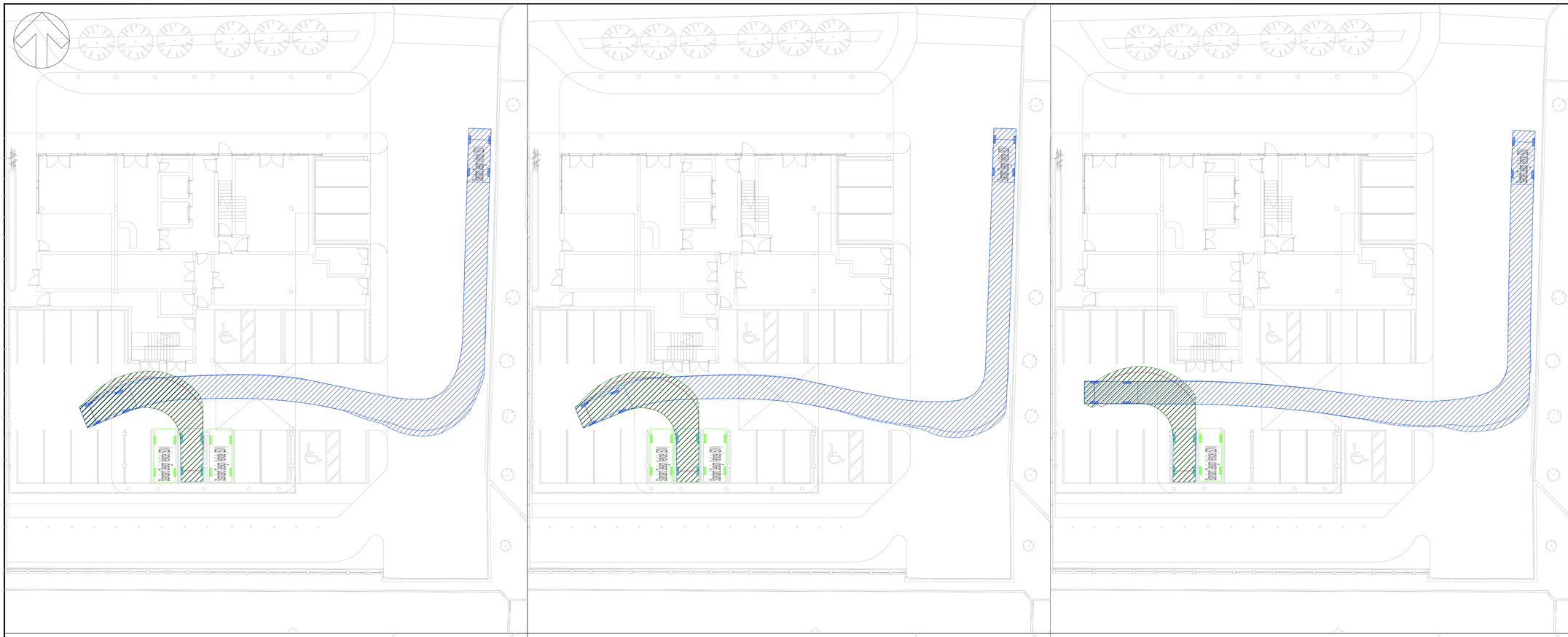
8.1.10. The results of the junction assessment work demonstrate the insignificant impact that the proposed development will have on the operation of the local highway network.

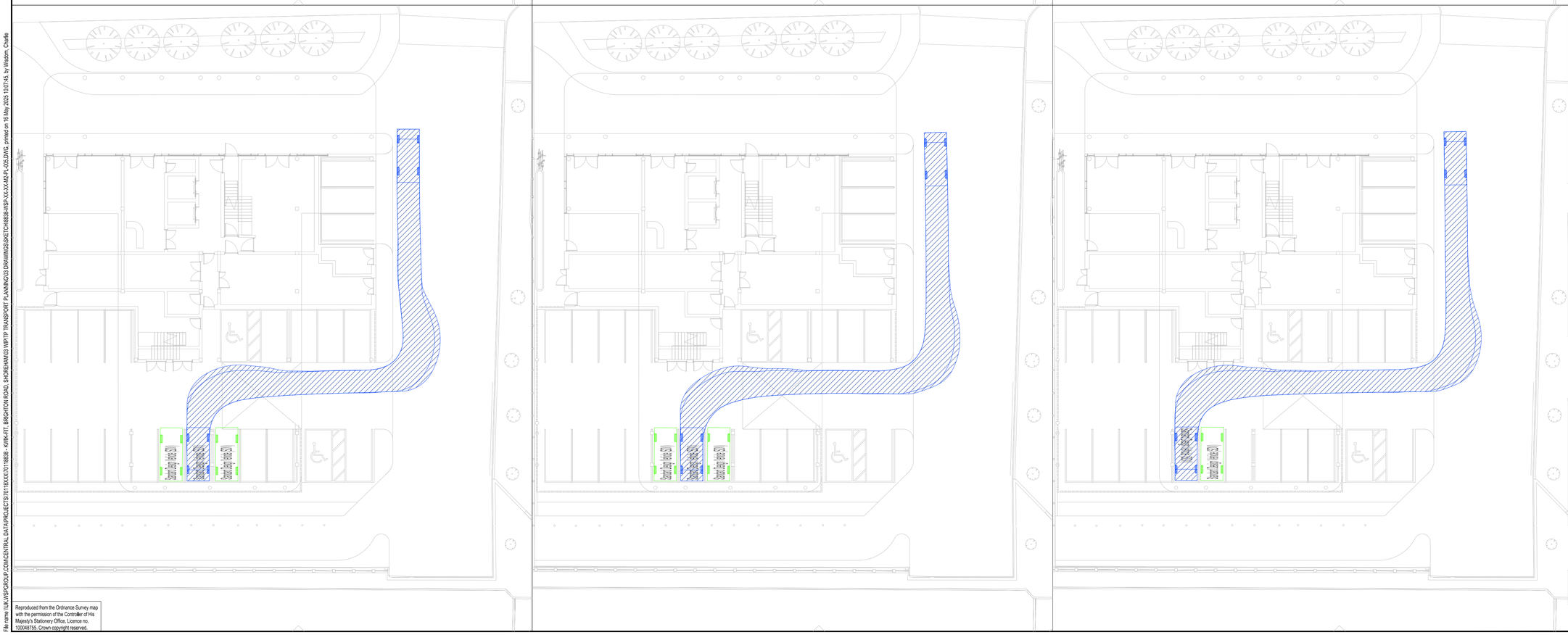
8.1.11. The proposed development is forecast to generate 12 vehicle trips during the AM peak hour (3 arrivals, 9 departures) and 13 vehicle trips during the PM peak hour (9 arrivals, 3 departures). As would be expected with such low flows, the results of the junction assessment work demonstrating the negligible impact that the development would have on the operation of the local highway network.

8.2 CONCLUSION

8.2.1. This Transport Assessment has demonstrated that the site is well placed in terms of sustainability, with it being accessible to a range of local facilities and to the public transport network.

8.2.2. It has been demonstrated that the proposed development will not have an unacceptable impact on highway safety and that the residual cumulative impacts on the road network are not severe. Therefore, in accordance with the National Planning Policy Framework, it is considered that WSCC should support this planning application.





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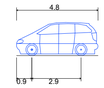


Standard Design Vehicle (SDV)	
Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES OR STATUTORY BODIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR AND / OR EMPLOYER COMMENCE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT THEIR OWN RISK

REV	DATE	BY	DESCRIPTION	CHK	APP
P02	16/05/2025	CW	LAYOUT UPDATED	AC	AC
P01	09/10/2024	CW	DRAWN	AC	AC

DRAWING STATUS:
S2 - FOR INFORMATION

wsp
Matrix House, Basing View, Basingstoke, Hampshire, RG21 4FF
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT:
REIM

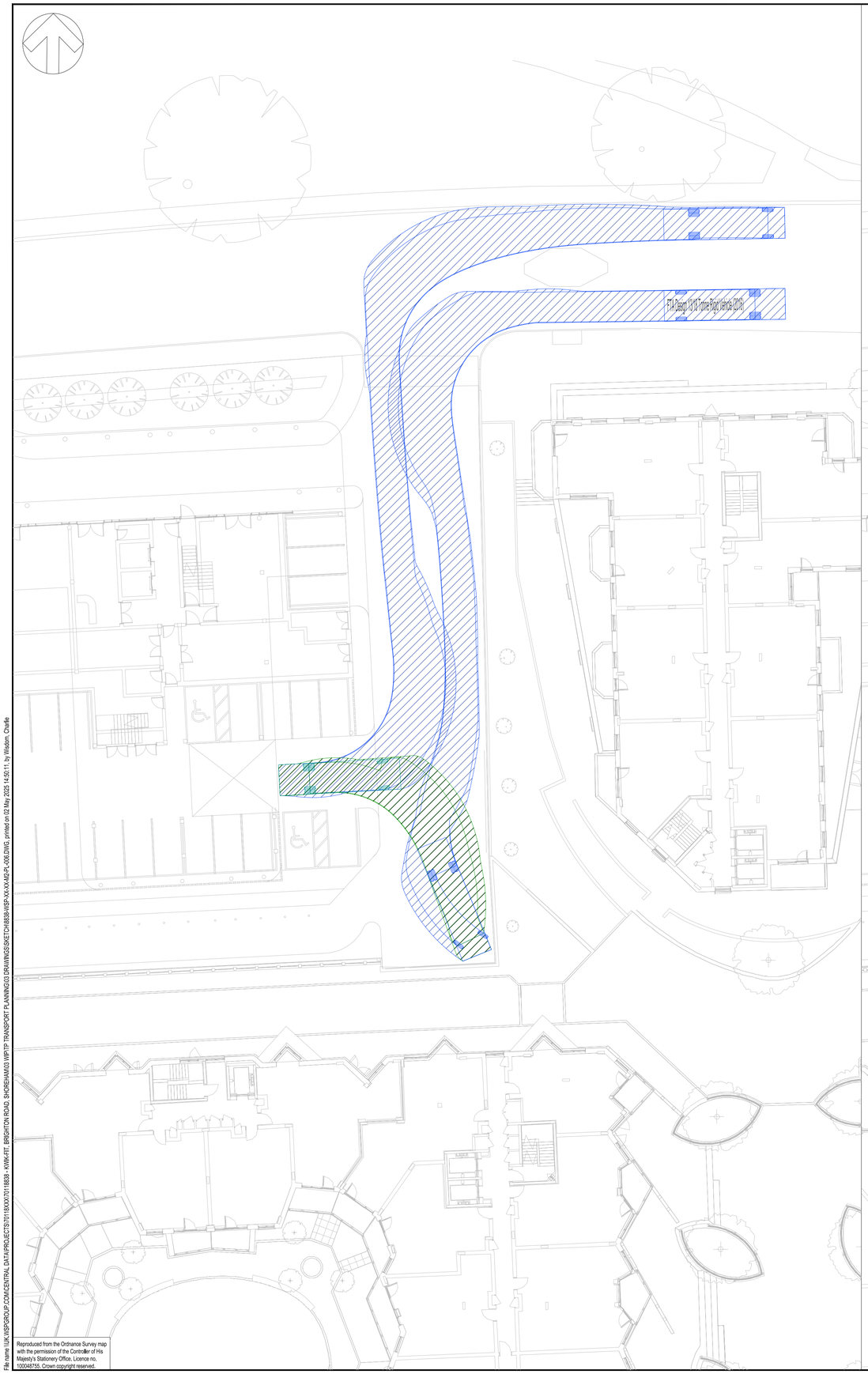
ARCHITECT:
HOLDER MATHIAS ARCHITECTS

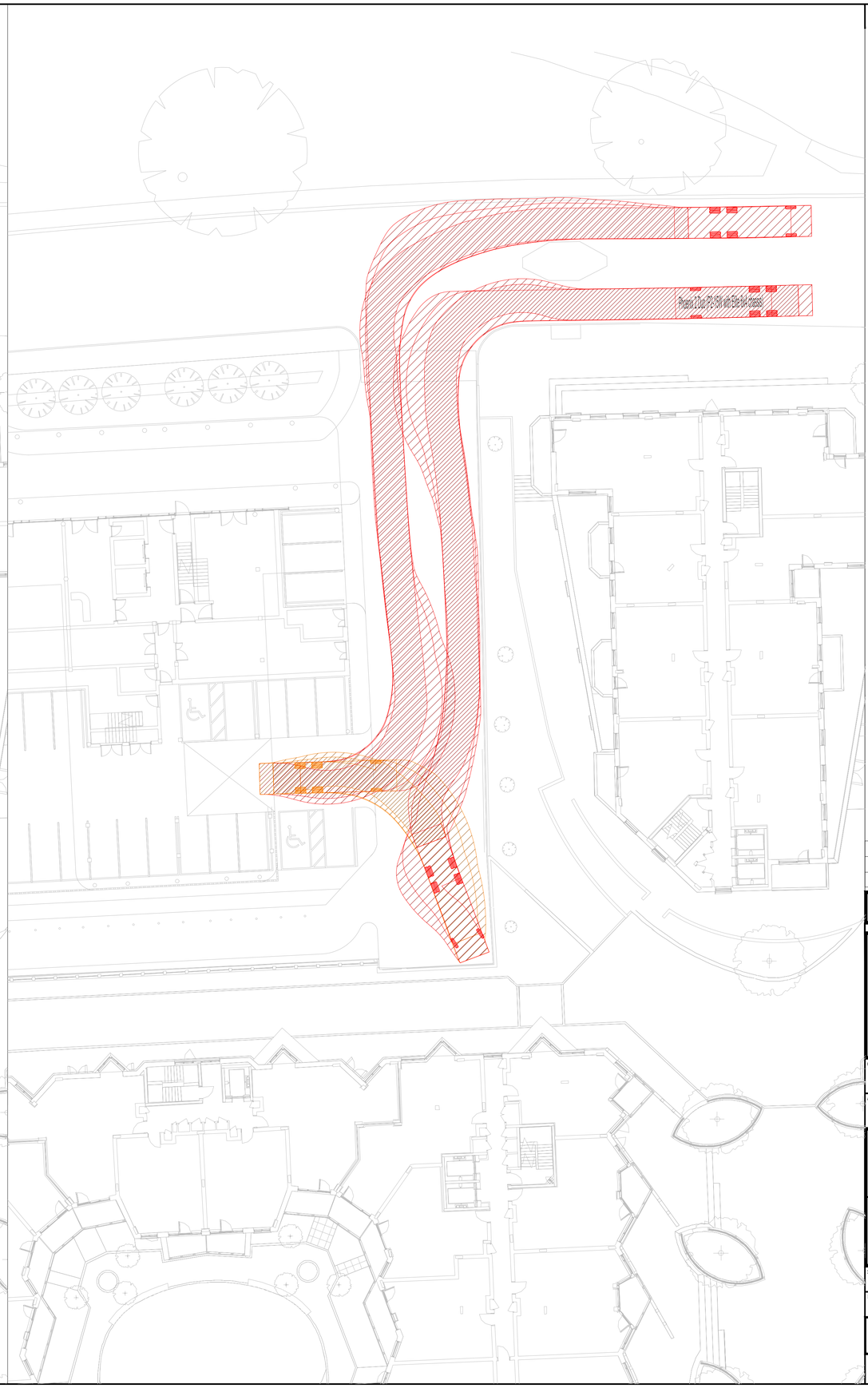
SITE/PROJECT:
FORMER KWIK-FIT SITE,
BRIGHTON ROAD

TITLE:
CAR PARK SWEPT PATH ANALYSIS

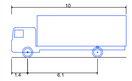
SCALE @ A1:	CHECKED:		APPROVED:
1:100	AC		AC
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70118838	CW	CW	May 25

DRAWING No: 8838-WSP-XX-XX-M2-PL-005
REV: P02



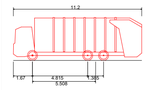


DO NOT SCALE



FTA Design 13/18 Tonne Rigid Vehicle (2016)

Overall Length	10.000m
Overall Width	2.550m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	11.000m



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.761m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES OR STATUTORY BODIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR AND / OR EMPLOYER COMMENCE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT THEIR OWN RISK

REV	DATE	BY	DESCRIPTION	CHK	APP
P02	02/05/2025	CW	UPDATED LAYOUT	AC	AC
P01	10/10/2024	CW	DRAWN	AC	AC

DRAWING STATUS:
S2 - FOR INFORMATION

wsp
Matrix House, Basing View, Basingstoke, Hampshire, RG21 4FF
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT:
REIM

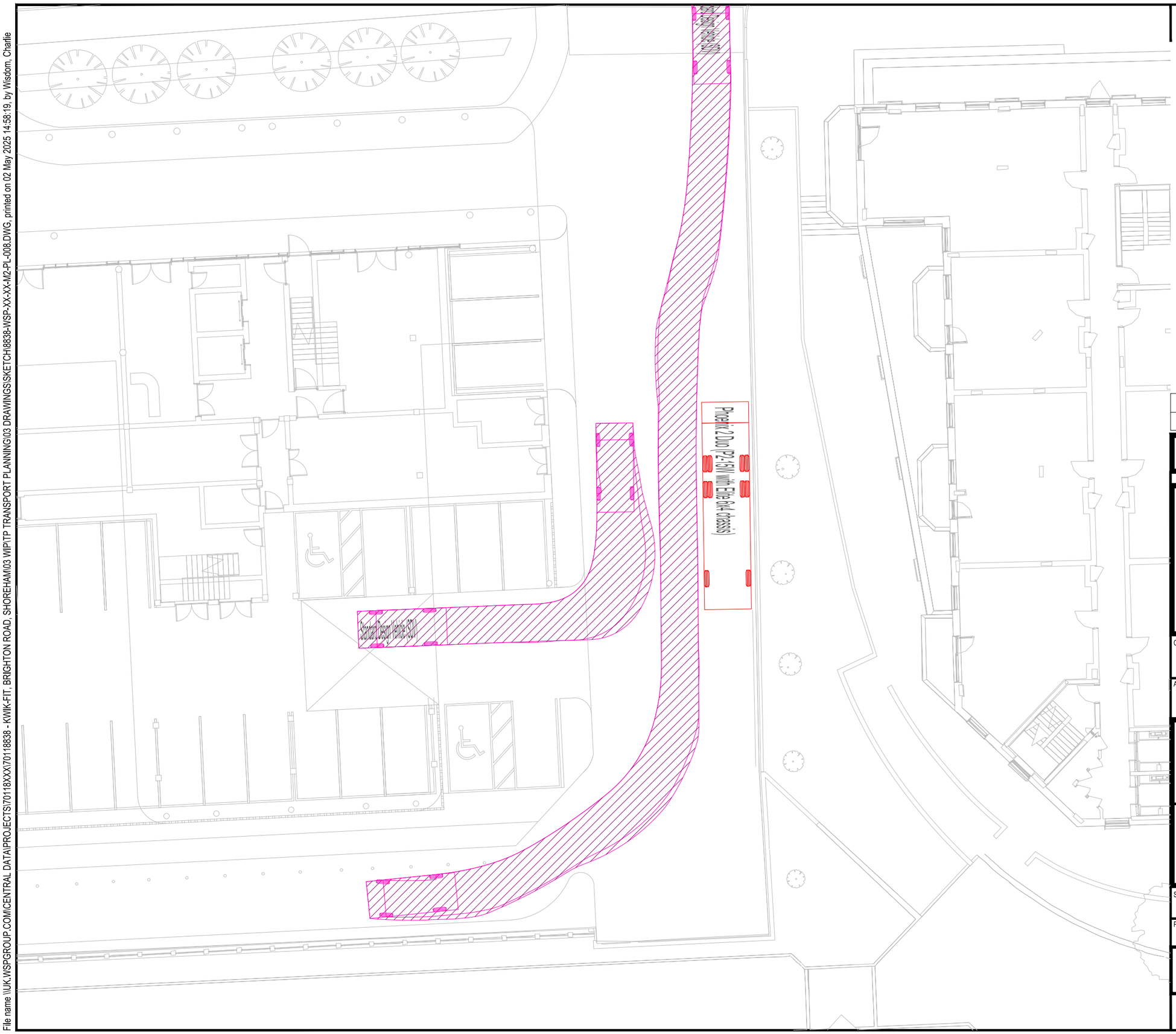
ARCHITECT:
HOLDER MATHIAS ARCHITECTS

SITE/PROJECT:
FORMER KWIK-FIT SITE,
BRIGHTON ROAD

TITLE:
SITE ACCESS SWEPT PATH ANALYSIS

SCALE @ A1:	CHECKED:		APPROVED:
1:500	AC		AC
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70118838	CW	CW	May 25

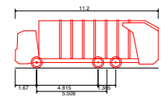
DRAWING No: 8838-WSP-XX-XX-M2-PL-006
REV: P02



DO NOT SCALE

Standard Design Vehicle (SDV)

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES OR STATUTORY BODIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR AND / OR EMPLOYER COMMENCE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT THEIR OWN RISK

REV	DATE	BY	DESCRIPTION	CHK	APP
P01	02/05/2025	CW	FIRST ISSUE	AC	AC

DRAWING STATUS:
S2 - FOR INFORMATION

wsp
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wsp.com

CLIENT:
REIM

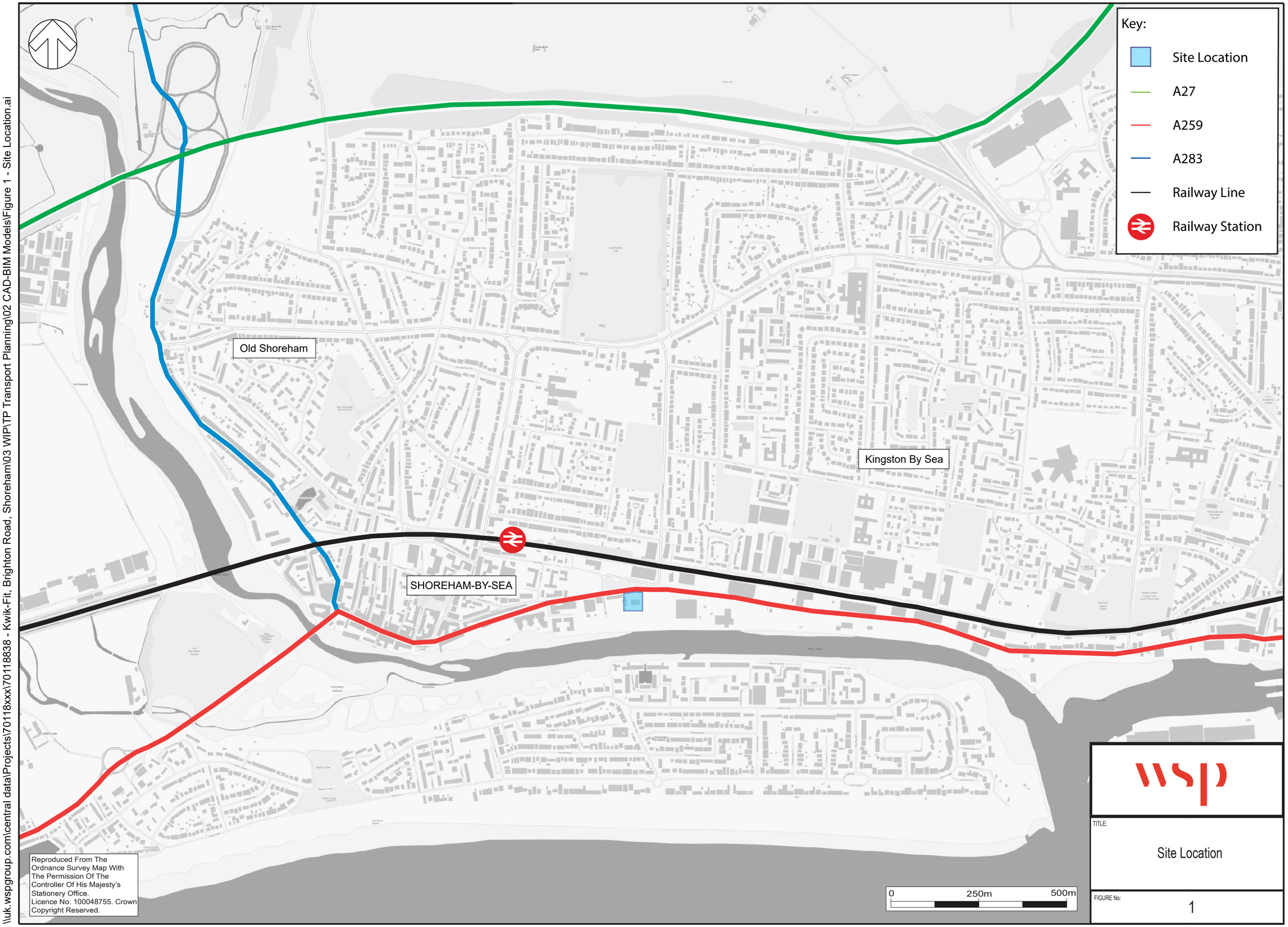
ARCHITECT:
HOLDER MATHIAS ARCHITECTS

PROJECT:
FORMER KWIK-FIT SITE,
BRIGHTON ROAD

TITLE:
SERVICE / DELIVERY ARRANGEMENT

SCALE @ A3:	CHECKED:		APPROVED:
1:200	AC		AC
PROJECT No:	DESIGNED:	DRAWN:	DATE:
70118838	CW	CW	May 25

DRAWING No:	REV:
8838-WSP-XX-XX-M2-PL-008	P01



\\uk.wspgroup.com\central data\Projects\70118xxx\70118838 - Kwik-Fit, Brighton Road, Shoreham\03 WIP\TP Transport Planning\02 CAD-BIM Models\Figure 1 - Site Location.ai

\\uk.wspgroup.com\central data\Projects\70118xxx\70118838 - Kwik-Fit, Brighton Road, Shoreham\03 WIP\TP Transport Planning\02 CAD-BIM Models\Figure 2 - Pedestrian and cycle facilities.ai

wsp

TITLE:

Pedestrian and cycle facilities

FIGURE No:

2

\\uk.wspgroup.com\central data\Projects\70118xxx\70118838 - Kwik-Fit, Brighton Road, Shoreham\03 WIP\TP Transport Planning\02 CAD-BIM Models\Figure 3 - Local facilities.ai

Key

- Site Location
- Railway Line
- Railway Station
- Primary School and Nursey
- Secondary School
- University and College
- Supermarkets
- Shops
- Leisure Centre
- Sports Club
- Doctor's Surgery
- Hospital
- Dentist
- Opticians
- Pharmacy
- Post Offices
- Employment Area
- Sports and Recreation

Old Shoreham

SHOREHAM-BY-SEA

Kingston By Sea

0 250m 500m

wsp

TITLE:

Local Facilities

FIGURE No:

3

Key:

- Site Location
- Railway Line
- Railway Station
- PIA Study Area

Old Shoreham

Kingston By Sea

SHOREHAM-BY-SEA

0 125m 250m

wsp

TITLE:

PIA Study Area

FIGURE No:

4

\\uk.wspgroup.com\central data\Projects\70118xxx\70118838 - Kwik-Fit, Brighton Road, Shoreham\03 WIP\TP Transport Planning\02 CAD-BIM Models\Figure 4 - PIA Study Area.ai