Livingstone Homes Ltd Coombe Valley Road, Dover

**Transport Statement** 



## Notice

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## **Document History**

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- Appendix 7 Census Data
- Appendix 8 TRICS Data

## 1 Introduction

MLM Consulting Engineers (MLM) has been appointed to provide a Transport Statement (TS) to support a planning application for a proposed residential development at brownfield land south of Coombe Valley Road, Dover.

The overall development will comprise of the following:

- 40No 1 and 2 bed affordable apartments
- Rationalise the existing Site accesses to Coombe Valley Road
- 29 space car park maintaining access to the adjacent Plumbers Merchant site

The purpose of this report is to address the highway and transportation issues regarding the proposed development, to determine how the proposal integrates with the current transport network and to establish the predicted impact associated with the proposed development.

This TS takes due account of current best practice advice contained in 'Transport evidence bases in plan making' 2014 within the government's 'Planning Practice Guidance' website.

This TS is structured in the following way:

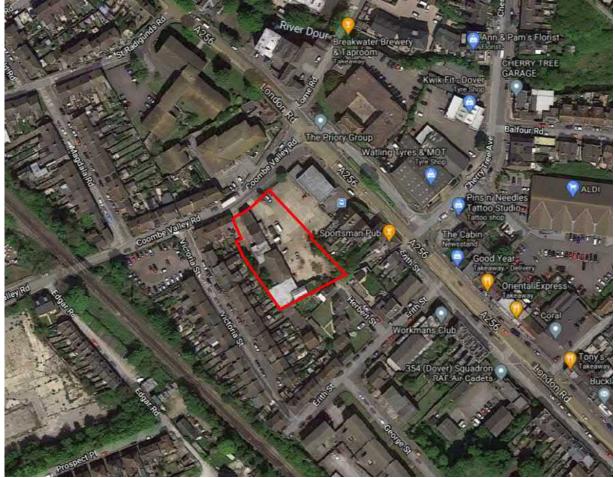
- Section 2 describes the application site, the local highway network and the site's location with regard to public transport accessibility.
- Section 3 considers the details of the proposed development along with a description of the site access arrangements, how the site is located to promote access by non-car modes and proposed parking provision.
- Section 4 considers the level of predicted trips generated by the proposed development against the permitted use and assesses the potential implications of development traffic on the highway network.
- Section 5 draws conclusions.

## 2 The Site & Surrounding Area

## 2.1 Site & Surrounding Area

A street map site location plan is attached at **Appendix 1** and shows the Site within the context of the local area and highway network. The application site is located approximately 1km to the north west of Dover town centre in a mixed residential/commercial area. Refer to Google aerial image in Figure 2.1.

Figure 2.1 – Google Aerial Image of Proposed Site



## 2.1 Existing Site

The application Site forms a rough rectangular shape which is relatively flat and covers an approximate 0.24 hectare area. Refer to existing site layout at **Appendix 2** which shows the existing warehouse/office buildings and service yard areas that has had historical use with the building trade. The northern part of the wider site is currently being used commercially by Graham Plumbers' Merchants and this use is to remain.

## 2.2 Site Access

The application Site has two vehicle accesses to Coombe Valley Road; the main site access located halfway along the Site's road frontage and a secondary access at the western corner of the Site. Refer to Figures 2.2 & 2.3 below.



### Figures 2.2 & 2.3 – Coombe Valley Road existing vehicle accesses

The site is currently accessed by pedestrians via a gated access at the western corner of the plumbers' merchant building from Coombe Valley Road. Refer to Figure 2.4 below.



### Figure 2.4 - Pedestrian access into wider site from Coombe Valley Road

## 2.3 Local Facilities and Walking/Cycling Network

An accessibility plan is attached at Appendix 1 with annotations of distances of 400m (5 minutes walk), 800m (10 minutes walk) and 2km (25 minutes walk/7.5mins cycle). Dover town centre is located 1.2km south east of the site along the A256 London Road and this highway towards the town centre provides access to a wide range of facilities including food, non-food retail, cafes, bars, restaurants, hairdressers, chemists, leisure activities etc and local service providers. Primary, Senior and further educational establishments are located within 2km of the site and there are substantial employment opportunities available in the Coombe Valley within a short walk of the site. Further employment options are available elsewhere in inner and central Dover though accessible from the site by the local bus services.

The existing area surrounding the Site have streets provided with footways, dropped kerb crossings and street lighting. As a result, the permeability of the immediate area for pedestrians and cyclists is good, reflecting the use of the area by all modes of transport and not just the private car. There are controlled pedestrian crossings provided at the Coombe Valley Road/London Road junction adjacent to the Site. Refer to Figures 2.5 & 2.6 below.



Figures 2.5 & 2.6 – Looking southeast & southwest at the London Rd/Coombe Valley Rd junction

There are no dedicated cycle route facilities in this part of Dover but the light traffic in the local roads in the Coombe Valley and in other parts of the town are conducive to cycling, and even on the ordinary main roads such as London Road, Cherry Tree Avenue etc the motor traffic is much less heavy than in many comparable towns. 4No National Cycle Routes (Nos 1, 2, 16 & 17) converge nearer to the town centre/ seafront and provide long distance cycle routes to Deal, Folkestone & Canterbury amongst other destinations. Although Dover is a hilly town it is possible to make many journeys by cycle in many populous areas of the town avoiding steep and/or long hills.

## 2.4 Public Transport Accessibility

### 2.4.1 Bus Services

The nearest bus stops to the site are located on London Road less than a 100m walk away from the Site. Refer to Figure 2.7 below. These stops are provided with bus shelters, seating, timetable information, bus cages and raised kerbs. The southbound stop is served by bus services 90 & 91 with the northbound stop served by bus services 15, 68, 88, 88A, 89, 89A, 89B, 91A, 93 and 96. A summary of the main bus services is shown below in Table 2.8 with bus route map attached at **Appendix 3**. For further information on bus services, timetables and providers visit the web site – http://www.travelinesoutheast.org.uk.



Figure 2.7 – Looking southeast along London Road towards Bus Stops

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Bus No.	Route	Peak Time Frequency
15	Sandown – Deal – Dover - Canterbury	10mins Mon-Fri, 20mins Saturday, hourly Sunday
68	Maxton – Town Centre – Temple Ewell	Hourly Mon-Fri, hourly Saturday
88	Ramsgate – Sandwich – Eythorne - Dover	2 per day
88A	Dover – Christ Church Academy	1 per day
89	Dover – Eythorne – Aylesham - Canterbury	Hourly Mon-Fri, half hourly Saturday
89B	Aylesham - Canterbury	2 per day
90	Deal-Whitfield-River-Buckland Hospital - Dover	Hourly Mon-Fri, hourly Saturday
91	Dover – River – Kearsney – Alkham – Folkestone - Broadmead	Hourly Mon-Fri, hourly Saturday
91A	Folkestone – Hawkinge – Tower Hamlets – Dover	1 per day
93	Deal – Western Heights – Buckland Valley	1 per day
96	Chillenden – Shepherdswell – Tower Hamlets	1 per day

## Table 2.8 – Existing Local Bus Routes

## 2.4.2 Rail Services

The nearest railway station is Dover Priory rail station located about a 1.2km walk (20 minutes) to the south of the Site. The station is serviced by Southeastern trains with frequent limited-stop trains to/from London including high speed Javelin trains (London Victoria, St Pancras International & Charing Cross) and local services including the coastal route to Deal and Thanet. More information about routes and timetables is available from the website at www.nationalrail.co.uk. Also included in Appendix 3 are details of onward travel information from the station.

## 2.5 Local Highway Network

A site visit was undertaken on Wednesday 16th October, 2020 before, during and after the AM peak hour to observe the conditions on the surrounding highway network to the Site.

Coombe Valley Road is generally a straight single carriageway local distributor road running up the valley bottom from London Road and terminating at its west end with a large roundabout. From there Poulton Close and Barwick Road continue westwards up the valley, providing access to a large industrial/ commercial area as well as housing to the north of Barwick Road, before continuing westwards under other names as narrow country lanes into the open down land and farm land beyond. Adjacent to the Site the carriageway widens considerably for the signalised junction with the A256 London Road but at the western end of the Site's frontage the width is approximately 6m. Coombe Valley Road is subject to a mix of weekday daytime and 'any time' single and double yellow line waiting restrictions and dual use (resident permit unlimited stay and general user short stay) parking bays.

Approximately 100m to the east of the Site is a railway overbridge which narrows the Coombe Valley Road to single way working and is controlled by signals. Traffic on Coombe Valley Road is relatively light and though it can be busy at peak times (exacerbated by the signals) any congestion is quickly dispersed.

London Road is part of an extensive main road one-way traffic system being one way northbound while the southbound A256 route runs via Buckland Avenue and Barton Road on the opposite side of the Dour Valley. There two one-way routes are linked by Cherry Tree Avenue which joins London Road at a traffic signal junction approximately 80 metres southeast of the Coombe Valley Road/ London Road traffic signal junction. Traffic on the A256 one way system and on Cherry Tree Avenue is fairly heavy at peak times but not normally congested, the current A2 and A20 having long relieved this main road system of the heavy traffic to and from the port, the A20 being the major of the two for long-distance traffic.

## 2.6 Personal Injury Accidents

Personal Injury Accident (STATS 19) data has been obtained from crashmap.co.uk for the latest available 5 year period in the vicinity of the Site. Refer to **Appendix 4** for personal injury highway accident records on the adjacent highways to the site. Within the most recent 5 year study period there has been no accidents recorded along Coombe Valley Road but 3No accidents at or near to the London Road/Coombe Valley Rd junction. One of these was a fatal accident involving a pedestrian crossing London Road (not at the designated crossing) and being struck by a passing vehicle. One was a serious accident involving a child cyclist being struck by a passing vehicle and the remaining one was a slight accident involving a vehicle turning right out of Coombe Valley Road and colliding with a vehicle on London Road. For the slight accident it would appear that one of the involved may have jumped a red light. There are other isolated slight accidents further along London Road but there are no clusters of accidents.

Analysis of this accident data indicates that the local highway network would not in itself appear to be a precipitating cause of the accident as these appear to be unfortunate isolated incidents. The development proposals are unlikely, therefore, to have a detrimental impact on the accident rate in the area.

## 3 Development Proposals, Access & Parking

## 3.1 Development Proposals

Refer to the Proposed Site Layout plan attached at Appendix 5 which consists of the following:-

- 4 storey building block of 40 apartments; 12No 1-beds & 28No 2-beds
- Creating a single vehicle access junction from Coombe Valley Road
- Access Road leading to 29No space car park and adjacent Plumbers Merchant site

At **Appendix 6**, a swept path analysis of the relocated Coombe Valley Road access junction and the internal access road has been undertaken to demonstrate that refuse, service and emergency vehicles can serve the site and enter and leave in forward gear including delivery vehicles to the Plumbers' Merchant site. The internal access road will be private but larger vehicles entering the Site will have unrestricted access into the adjacent Plumbers Merchant site to turn around if necessary.

### 3.2 Access

Refer to the existing site layout plan at Appendix 2 which shows the 2No vehicle accesses from Coombe Valley Road into the Site. The western access is to be removed completely with the remaining main access to be relocated approximately 8m to the east but with a more formal larger access radii of 6m with drop kerbed tactile pedestrian crossing points. The initial internal access road width will be 5.5m wide with a 1.8m wide footway on its eastern side leading to the apartment block entrances. The access road width will widen to 6m adjacent to the proposed perpendicular parking spaces.

Refer to Figures 3.1 & 3.2 below for visibility splays views of the proposed relocated access position. The splay to the west is in excess of 2.4 x 43m commensurate with the 30mph speed limit of Coombe Valley Road. The splay to the east is affected by the radius of the A256 London Road junction but vehicles turning into Coombe Valley Road at this bend are travelling less than 25mph. The achievable visibility splay in this direction is 2.4 x 33m visibility splay which is commensurate with a 25mph approach speed. Refer to the plan at Appendix 6 that detail these splays.



Figures 3.1 & 3.2 – Visibility Splay looking east & west from Proposed Access Location

### 3.3 Parking

The exact quantum of car parking provision for the development will take into account the Kent County Council's current parking standards 'Interim Guidance Note 3 : Residential Parking' 2008. Within this standard the parking standards are determined by location and dwelling type. The location of the site is deemed to fall within the 'Edge of Centre' category which are maximum standards. This gives a maximum of 1 space per 1 & 2 bedroom flats equating to a maximum provision of 40 parking spaces. There is also a

maximum requirement for visitor parking of 0.2 spaces per dwelling which for 40 dwellings equates to a maximum of 8 spaces giving a total maximum provision of 48 spaces.

The proposed site layout shows a total of 29 car parking spaces which equates to 0.73 spaces per dwelling and is in accordance with the maximum parking standards. One of these spaces is designated for the mobility impaired. 2No motorcycle parking spaces are also provided in accordance with the standards.

Using the 2011 Census data the car ownership data for types of dwelling has been reviewed for the Site which is located in the Dover 011 census super output area. Refer to **Appendix 7**. The database shows that the average flat dwelling in this area has an ownership level of 0.42 cars per household and therefore the proposed parking provision for the development is considered acceptable to cater for existing car ownership levels in the area and visitors.

Cycle parking standards are taken from the Kent County Council (KCC) Supplementary Planning Guidance SPG 4 Kent Vehicle Parking Standards (July 2006) attached to Kent and Medway Structure Plan 2006. They are minimum standards and 1 space per unit for flats and maisonettes. This equates to 40 cycle parking spaces which are located in 2 covered and secure cycle stores in the rear communal area on the eastern side of the residential block

#### 4 **Trip Generation**

The permitted use of the Site can attract a considerable amount of vehicular movements and the proposed uses on the Site would be heavily offset by this.

Notwithstanding the above the development is still likely to generate an appreciable level of trips, the impacts of which are addressed below. To consider the suitability of the potential impact that the proposed development may have on the local highway network, it is necessary to determine the level of trip generation expected during the weekday morning and evening peak periods.

#### 4.1 Existing Traffic Attraction of Site – Builders Merchants

The guantum of vehicle trips attracted by the Site in the weekday peak periods has been assessed using the TRICS database 2020. The TRICS database contains 3 sites of relevance in England for multi-modal surveys from the 'Builders Merchant' category which are comparable in terms of location to the existing Site. This category is considered the most appropriate category to assess the overall Site area with its buildings and storage yard areas.

Average trip rates for the selected sites have been adopted as recommended by TRICS where less than 20 sites are available from the database. The TRICS data is produced at Appendix 8 with the total number of trips summarised in Tables 4.1-4.5 below for the weekday AM & PM peak periods. The AM and PM peak hours for the existing site use roughly corresponds with the local highway network AM & PM peak hours of 08.00 to 09.00hrs and 17.00 to 18.00hrs respectively.

#### 4.2 Proposed Development Traffic Generation - Residential

The quantum of vehicle trips generated by this proposed element of the Site in the weekday peak periods has also been assessed using the TRICS database 2020 using comparable sites in size and location for this land use. The TRICS database contains 6 sites of relevance in southern and mid England from the 'Affordable/Local Authority Flats' category which are comparable in terms of size and location to the Site. The TRICS data is also produced at Appendix 8 with the total number of trips for different travel modes also summarised in Tables 4.1-4.5 for the weekday AM & PM peak periods with the net movements against the Site's permitted use.

#### 4.3 Person Trip Assessment

## Table 4.1 – Predicted Peak Hour Person Trips for Land Uses

AM P	AM Peak Hour – 8-9am			PM Peak Hour – 5-6pm		
In	Out	Total	In	Out	Total	
21	16	37	4	7	12	
4	14	18	12	10	22	
-17	-2	-19	+8	+3	+10	
	ln 21 4	In Out   21 16   4 14	In Out Total   21 16 37   4 14 18	In Out Total In   21 16 37 4   4 14 18 12	In Out Total In Out   21 16 37 4 7   4 14 18 12 10	

NOTE: Rounding errors may occur

The predicted net decrease use of 19 person trips in the AM peak hour equates on average to about 1 less person trip every 3 minutes during the AM peak hour. The net increase of 10 person trips in the PM peak hour equates on average to 1 additional person trip every 6 minutes of this peak hour period.

## 4.4 Public Transport Trip Assessment

Land Use	AM Peak Hour – 8-9am			PM Peak Hour – 5-6pm		
	In	Out	Total	In	Out	Total
Existing						
Permitted Use – Builders Merchant (2,394m²)	1	0	1	0	0	0
Proposed						
Flats – 40 units	0	1	1	0	0	0
NET TOTAL	-1	+1	0	0	0	0

### Table 4.2 - Predicted Peak Hour Public Transport Trips for Land Uses

NOTE: Rounding errors may occur

The predicted public transport trips is predicted to be virtually unchanged during the peak hours although the use of sustainable travel modes will be promoted by the development.

## 4.5 Pedestrian Trip Assessment

### Table 4.3 – Predicted Peak Hour Pedestrian Trips for Land Uses

	AM Peak Hour – 8-9am			PM Peak Hour – 5-6pm		
Land Use	In	Out	Total	In	Out	Total
Existing						
Permitted Use – Builders Merchant (2,394m²)	0	0	0	0	1	1
Proposed						
Flats – 40 units	1	4	5	2	3	6
					1	1
NET TOTAL	+1	+4	+5	+2	+2	+5

NOTE: Rounding errors may occur

The net increase of 5 people walking in the AM and PM peak hour respectively will be adequately accommodated on the footway network infrastructure and will not provide any material impact. This equates on average to 1 additional person trip every 12 minutes during the weekday peak hour periods. The local and proposed Site's infrastructure will also support and allow for any modal shift from other forms of travel to this form. With the proximity of the local facilities from the Site being a short walk away it is expected that walking would be the main transport modes between these areas.

## 4.6 Cycle Trip Assessment

## Table 4.4 – Predicted Peak Hour Cycle Trips for Land Uses

AM P	AM Peak Hour – 8-9am			PM Peak Hour – 5-6pm		
In	Out	Total	In	Out	Total	
0	0	0	0	0	0	
0	2	2	1	0	1	
		1	1	1	1	
0	+2	+2	+1	0	+1	
	In   0   0   0	In Out   0 0   0 0   0 2	In Out Total   0 0 0   0 0 0   0 2 2	In Out Total In   0 0 0 0   0 0 0 0 0   0 2 2 1	In Out Total In Out   0 0 0 0 0 0   0 0 0 0 0 0 0   0 2 2 1 0	

NOTE: Rounding errors may occur

A small net amount of cycling trips is predicted with 2 and 1 cycle trips predicted in the AM and PM peak hours respectively. The proposed Site's cycle parking provision and promotion of sustainable travel modes will look to increase the use of this travel mode.

## 4.7 Vehicle Trip Assessment

## Table 4.5 – Predicted Peak Hour Vehicle Trips for Land Uses

Land Use	AM Peak Hour – 8-9am			PM Peak Hour – 5-6pm		
	In	Out	Total	In	Out	Total
Existing						
Permitted Use – Builders Merchant (2,394m²)	16	13	29	4	6	10
Proposed						
Flats – 40 units	2	5	7	6	4	10
NET TOTAL	-14	-8	-22	+2	-2	0

NOTE: Rounding errors may occur

The table above indicates that the proposals are predicted to generate a net decrease of 22 vehicle movements in the weekday AM peak hour and no change in the PM peak hour. The AM peak hour decrease equates on average to about 1 less vehicle movement every 3 minutes during the peak hours. It should also be noted from the TRICS data that the permitted use also attracts 2 and 1 heavy goods vehicular movements in the AM and PM peak hour respectively.

## 5 Conclusions

MLM Consulting Engineers have been appointed by Livingstone Homes Ltd to prepare a Transport Statement to accompany a planning application for the proposed residential re-development of brownfield land at Coombe Valley Road, Dover near its junction with A256 London Road. The proposals consists of 40No 1 &2-bed flats but will maintain access to the adjacent plumbers' merchant site.

The report demonstrates that the site is accessible by modes of transport other than the private car with pedestrian infrastructure to local facilities. There are limited designated cycle routes/facilities in Dover but the light traffic in the local roads in the Coombe Valley and in other parts of the town are conducive to cycling. Although Dover is a hilly town it is possible to make many journeys by cycle in many populous areas of the town avoiding steep and/or long hills. The nearest bus stops to the site are located on London Road less than a 100m walk away and are served by numerous services providing frequent services to Canterbury and Deal and other destinations. Dover Priory rail station is located about 1.2km to the south east of the Site which is approximately a 20 minute walk and provides frequent services to/from London and local stations.

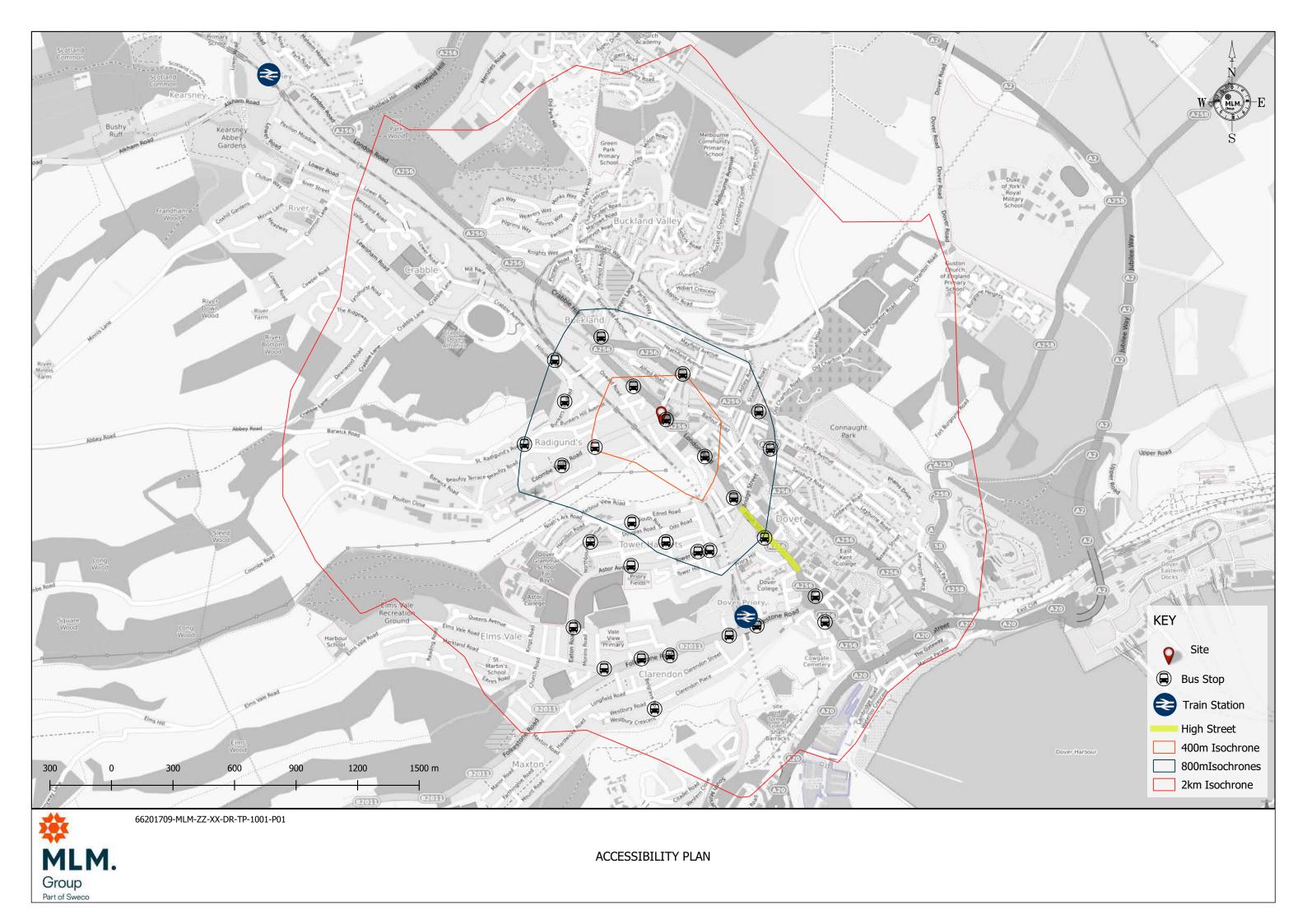
Personal injury accident data on the public highway has been reviewed for the most recent 5 year period. Analysis of the overall accident data indicates that the local highway network would not in itself appear to be a precipitating cause of the accidents. The proposed development is not expected to result in a material impact on the accident rate in the area.

The proposed site will be served by a new T-junction access to Coombe Valley Road and will replace the 2No existing vehicle accesses. This will lead into the Site's new internal access road and parking areas and will also serve the adjacent Plumbers Merchant site. This new access will also have footways providing pedestrian access into the new residential area. Pedestrian access to the adjacent Plumbers Merchant site will retain its existing Coombe Valley Road pedestrian access. The proposed parking for the development is in accordance with Kent Parking Standards.

The proposed residential development is predicted to generate less weekday peak hour vehicle movements than the permitted builders' merchant/offices use of the Site and similar movements using other transport modes of travel.

Having undertaken a comprehensive analysis of the development Site there is no basis for highway and transportation objections to the proposals especially when the proposed residential use compared to the permitted commercial use of the Site is preferential in terms of reduced traffic impact.

# Appendix 1 – Site Location & Accessibility Plan



# Appendix 2 – Existing Site Layout





Revision PO

# Title | EXISTING SITE PLAN $\mathsf{Status}$ |PLANNING

Project | COOMBE VALLEY RD DOVER Client | LIVINGSTON HOMES LTD

Kent | The Tramway Stables | Rampart Road | Hythe | Kent | CT21 5BG T +44 (0)1303 260 515 | E kent@hollawaystudio.co.uk | W www.hollawaystudio.co.uk





- Existing empty warehouse

# Existing disused brick structures

# Existing disused access to rear of site

# - Existing vehicle and pedestrian access

# - Existing plumbing merchants

# Appendix 3 - Sustainable Transport