



Land South of Barnhorn Road, Bexhill

Local Plan – Regulation 18 – Transport Reps

Client: Bidwells

i-Transport Ref: SJ/OT/DM/ITS200222-001C

Date: 22 July 2024

Land South of Barnhorn Road, Bexhill

Local Plan – Regulation 18 – Transport Reps

Client: Bidwells

i-Transport Ref: SJ/OT/DM/ITS200222-001C

Date: 22 July 2024

i-Transport LLP

Building 1000
Lakeside North Harbour
Western Road
Portsmouth
PO6 3EZ

Tel: 0331 6300 366

www.i-transport.co.uk

COPYRIGHT

The contents of this document must not be copied or reproduced in whole or in part without the written consent of i-Transport LLP

If this report is to be placed on any approved website for planning purposes, this should comply with data protection principles, please seek our permission and you must ensure that all the private and personal information and data within this report is redacted.

Quality Management

Report No.	Comments	Date	Author	Authorised
ITS200222-001	Draft	July 2024	OT/DM	SJ
ITS200222-001A	2 nd Draft	July 2024	OT/DM	SJ
ITS200222-001B	3 rd Draft	July 2024	OT/DM	SJ
ITS200222-001C	Final	July 2024	OT/DM	SJ

File Ref: S:\Projects\200000 Series\200222ITS - Land south of Barnhorn Road Bexhill\Admin\Report and Tech
Notes

Contents

SECTION 1	Introduction	1
SECTION 2	Policy Overview	4
SECTION 3	Connectivity to Local Services and Facilities	6
SECTION 4	Existing Transport Conditions	10
SECTION 5	Access to Key Locations	14
SECTION 6	Site Access	16
SECTION 7	Traffic Impact	20
SECTION 8	Transport Benefits of Development	26
SECTION 9	Summary	33

Figures

Figure 1 **Local Facilities Plan**

Drawings

ITS200222-GA-001 **Access General Arrangement**

SECTION 1 Introduction

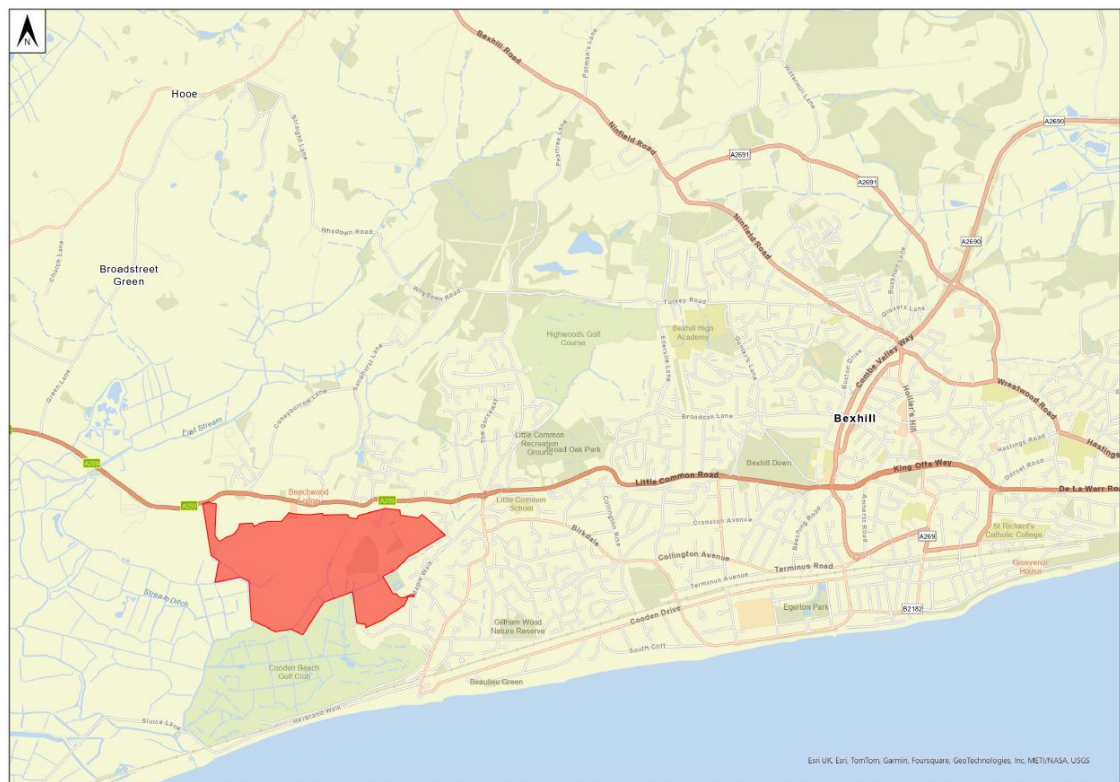
1.1 Introduction

- 1.1.1 Bidwells has appointed i-Transport LLP to provide highways and transport advice for a proposed site allocation for inclusion in the *Rother District Council Draft Local Plan (2020 – 2040)* to provide a minimum of 340 new homes and 4,000sqm of employment space on Land South of Barnhorn Road, Bexhill.

1.2 Site Location

- 1.2.1 The site currently comprises a series of agricultural fields located to the south of Barnhorn Road Road, which itself is located to the west of Bexhill. The site is bordered by agricultural fields on its southern western and eastern extent with housing to the north. A site location plan has been extracted below in **Image 1.1** which illustrates the site within a red line boundary.

Image 1.1: Site Location Plan



1.3 Policy Context

1.3.1 Rother District Council (RDC) are currently preparing their new Local Plan which outlines how the Council intends to meet development needs and protect the environment in Rother District up to 2040. The Plan focuses on the opportunities for new homes, employment spaces and infrastructure provision in and around existing settlements.

1.3.2 The Local Plan Regulation 18 consultation period runs from 30th April to 23rd July 2024 under the Town and Country Planning (Local Planning) England Regulations 2012. This will allow comments and reviews to be submitted in relation to the emerging Local Plan.

1.4 The Local Highway Authority (LHA) is East Sussex County Council (ESCC) with National Highways (NH) being responsible for maintenance of the A259 (Barnhorn Road). The site has been identified within the associated Housing and Economic Land Availability Assessment (HELAA) as being a 'Potential Site'. The Site ID BEX0050 (*Land south of Barnhorn Road*) has been assessed that it is potentially suitable, potentially available and potentially deliverable, subject to further assessment or investigation.

1.4.1 An increased quantum of development within the area will facilitate the delivery of a full Mobility Strategy, discussed later in this report, making the most of the sustainable location of the site and enhancing connectivity for the existing community. It would also integrate better with the local area and minimises impact upon the existing community.

1.5 Scope

1.5.1 This Transport Appraisal considers the proposed site allocation against the key transport 'tests' set out in paragraph 114 of the National Planning Policy Framework. It provides an overview of how Bexhill is a sustainable location for development as well as the accessibility of the potential development site to key services and facilities by non-car modes of transport. It also presents how access to the site can be achieved and provides a high-level overview of the forecast traffic impact of a development to provide a minimum of 340 new homes and 4,000sqm of employment space.

1.6 Structure

1.6.1 The remainder of the report is structured as follows:

- Section 2 – Strategy Review
- Section 3 – Connectivity to Local Services and Facilities.
- Section 4 – Existing Transport Conditions.

- Section 5 – Site Access.
- Section 6 – Access to Employment Areas.
- Section 7 – Traffic Impact
- Section 8 – Summary and Conclusions.

SECTION 2 Policy Overview

2.1 Overview

- 2.1.1 This section of the report considers the context of the site allocation within the National Planning Policy Framework (NPPF) and the RDC Local Plan 2040.

2.2 National Planning Policy Framework

- 2.2.1 Paragraph 114 of the NPPF, section (a), states that:

‘appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location’.

- 2.2.2 The focus of paragraph 114 is that **‘appropriate opportunities’** have been taken up to promote sustainable transport, considering the scale and location of development proposed. It is clear that the NPPF does not advocate a one size fits all approach (i.e. what is appropriate in central urban locations will be different from what is appropriate in a localised settlement). Importantly, the NPPF clearly does not seek to preclude or inhibit appropriate development on the edges of existing settlements, as set out in paragraph 109:

‘Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural area, and this should be taken into account in both plan-making and decision making.’

- 2.2.3 Sections 3 and 4 of this Transport Appraisal demonstrate that the proposed site allocation benefits from appropriate opportunities to maximise walking, cycling and public transport mode shares with good access to local facilities.

2.3 Local Plan 2040

- 2.3.1 The Local Plan considers how best to meet the identified development needs of the District during the Local Plan period. The Government provides a standardised assessment methodology for assessing housing need, which is based on household projections produced by the ONS, that are adjusted to take account of affordability.

2.3.2 For Rother, this has identified the need of 737 homes per year. This figures nearly triples the approximate 204 homes that have been delivered each year over the past 12 years¹. RDC are working with town and parish councils who are preparing Neighbourhood Plans for their area. Where site allocations are proposed in areas that are developing a Neighbourhood Plan, the Local Plan will set the high-level strategic aims.

2.3.3 The Local Plan has identified that:

‘Bexhill will be the key focus for sustainable residential and commercial growth.’

2.4 Planning History

2.4.1 The site has no planning history of relevance or a history of unimplemented permissions. There are no impediments to the site being phased for potential development commencing within the 0 – 5-year period.

2.4.2 A site immediately to the east of the proposed development has been approved in outline for a residential development of circa 160 dwellings (ref: RR/2017/1705/P). This has helpfully established the principle of development within the area.

2.5 Summary

2.5.1 The requirement for nearly three times the number of homes than have previously been delivered each year within the Rother District highlights the importance of identifying new development sites.

2.5.2 The Local Plan 2040 has stated that development should be focused in town locations, such as Bexhill, to help facilitate the required housing delivery. The site to the south of Barnhorn Road presents an excellent opportunity to contribute to this identified need and would be available for the delivery of housing in the early plan period.

¹ <https://rdcpublish.blob.core.windows.net/website-uploads/2024/04/HEDNA-2024-Main-Report-and-Appendices-A-D.pdf>

SECTION 3 Connectivity to Local Services and Facilities

3.1 Introduction

- 3.1.1 This section of the report considers the existing accessibility of the site to local services and facilities available by walking and cycling. Additionally, a review of the National Travel Survey (2019) has been undertaken to review travel behaviour characteristics. Whilst more up to date data has been published (National Travel Survey – 2022) the availability of data, response rate and analysis has been impacted by the COVID-19 pandemic.

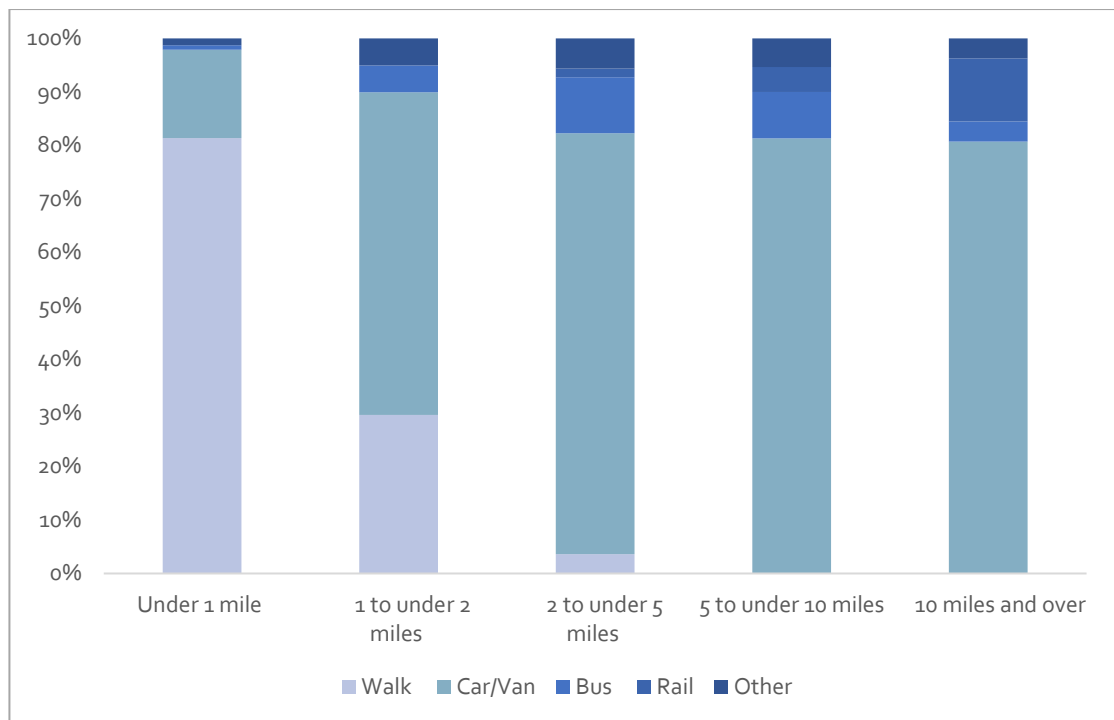
3.2 Walking Distances

- 3.2.1 Paragraph 4.4.1 of the Manual for Streets (MfS) states:

“Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes’ (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2km. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents.”

- 3.2.2 The National Travel Survey 2019 confirms that some 80% of all trips under 1 mile (circa 1.6km) are walking journeys (see **Image 3.1**), whilst walking accounts for some 31% of all trips between 1 and under 2 miles (circa 1.6km – 3.2km).

Image 3.1: Mode Share of Trips by Main Mode for Different Trip Lengths



Source: National Travel Survey: England 2019

3.2.3 Providing new homes within one mile (1.6km) of facilities and services will provide the greatest opportunity for a significant proportion of trips to be made by walking.

3.2.4 However, that is not to say that a mile is the maximum that people are prepared to walk, nor that development must be located within a mile of everything. The NTS data (**Image 3.1**) identifies that around 31% of all trips between one and two miles are undertaken on foot. Therefore, a significant proportion of people are prepared to walk for journeys of up to 2 miles (3.2km). This demonstrates that walking is a realistic and viable travel option for many people for such journeys.

3.2.5 Taking the above into consideration, the following walking distances have been used in this Report.

- 800m – A comfortable walking distance
- 1,600m – A reasonable walking distance; and
- 3,200m – A maximum walking distance

3.3 Cycling Distances

3.3.1 Guidance within CIHT “Planning for Cycling” states that:

“The majority of cycling trips are for short distances, with 80% being less than five miles and with 40% being less than two miles. However, the majority of trips by all modes are also short distances (67% are less than five miles, and 38% are less than two miles); therefore, the bicycle is a potential mode for many of these trips (DfT, 2014a)”

3.3.2 Paragraph 2.2.2 in the Department for Transport’s (DfT) Local Transport Note 1/20 ‘Cycle Infrastructure Design’ (July 2020) states that:

“There is significant potential for change in travel behaviour and more people cycle for everyday journeys where acceptable conditions are provided. Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking.”

3.3.3 On this basis, the following cycling distances have been used in this Report:

- 2km – A comfortable cycle distance
- 5km – A reasonable cycle distance; and
- 8km – A maximum cycling distance

3.4 Accessibility to Local Facilities

3.4.1 Bexhill is identified as being a location sustainable for development and has been identified in the Local Plan as being suitable for residential and commercial. It offers a range of local facilities and services which future residents of the development are likely to visit on a day-to-day basis as shown on the Local Facilities Plan at **Figure 1**, which has been extracted below in **Image 3.2**.

A detailed map of the Bexhill and Little Common area. The map shows a network of roads including A259, A209, and A206. Key locations marked include Little Common Golf Course, Bexhill Down, and various residential areas. A large red-shaded area is visible on the left side of the map. A legend on the right side of the map provides a key for various facilities and landmarks.

Key

- Site Boundary
- Rail Station
- Bus Stop

Employment

- Beeching Road Industrial Estate
- Bexhill Enterprise Park

Education

- Little Common School
- Bexhill High Academy
- Cresleigh Park Primary Academy

Health

- The Gables Medical Group
- Little Common Pharmacy
- Little Common Surgery
- East Sussex Dental Laboratory
- Collington Surgery
- Booths Pharmacy
- Bexhill Hospital

Retail

- Little Common Post Office
- Tesco Express
- Cowdroy Park Store
- ALDI
- Sainsbury's
- Jordan
- Barnham Farming
- Whitethorn Farm
- Little Common Barnham Cricket Club
- Little Common Community Centre
- Broad Oak Park
- Cooden Beach Tennis & Squash Club
- Cooden Beach Golf Club
- Highwoods Golf

3.4.3 Therefore, the location of the site provides a viable opportunity for residents to complete a range of journeys through sustainable transport modes to access everyday services and facilities.

SECTION 4 Existing Transport Conditions

4.1 Introduction

- 4.1.1 This section of the Transport Appraisal describes the existing accessibility of the site by walking, cycling and public transport.

4.2 Walking and Cycling

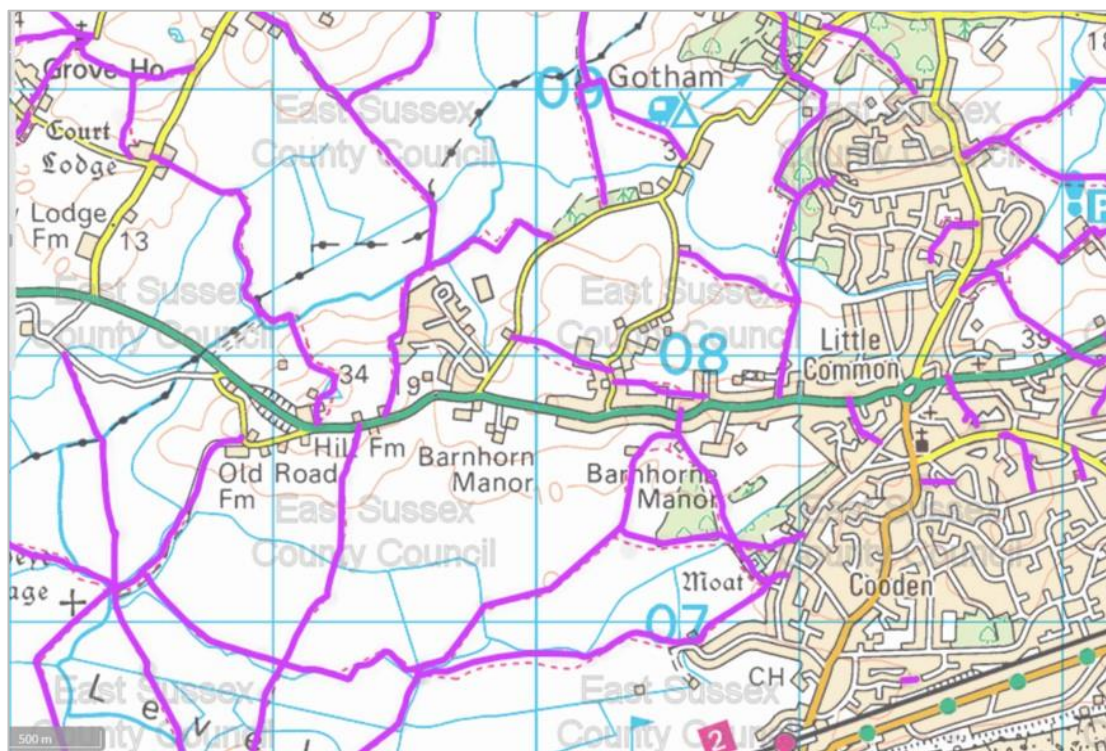
Walking

- 4.2.1 Immediately north of the site there is a continuous footway located on the northern side of the A259 Barnhorn Road that continues towards Little Common village centre. A footway on the southern side of the carriageway begins east of the Ashridge Court Care Centre and also continues towards Little Common. There is also adequate street lighting on both sides of the carriageway, with the accesses off Barnhorn Road also equipped with dropped kerbs to enable pedestrians to cross safely. In addition, a signalised pedestrian crossing at Brookfield Road and a zebra crossing exists east of the site opposite Kites Nest Walk.
- 4.2.2 Further afield, the Little Common roundabout also has dropped kerbs and tactile paving at each of the arms along with pedestrian refuge islands, with Cooden Sea Road and A259 Little Common Road equipped with also signalised pedestrian crossings.

Public Rights of Way (PRoW)

- 4.2.3 A number of Public Rights of Way exist around the vicinity of the site, with footpaths BEX/62/1 and BEX/10/2 both crossing the site providing connections between A259 Barnhorn Road and Cooden Wood. BEX/12/1 also runs north of the site between Coneyburrow Lane and Barnhorn Road.
- 4.2.4 Further PRoWs exist to the east and west of the site providing connections towards High Peartree Wood and Normans Bay respectively.
- 4.2.5 **Image 4.1** below shows an extract of the PRoW network around the site.

Image 4.1: Extract of PRow Map



Source: East Sussex County Council

Cycling

- 4.2.6 A259 Barnhorn Road, which runs immediately north of the site, has on-road cycle lanes on both sides of the carriageway where the speed limit becomes 40mph, both of which continue up Sunny View Caravan Park, located west of the site.
- 4.2.7 The nearest National Cycle Network route is Route 2, which runs parallel to Cooden Beach and provides connections between Dover and Cornwall.

4.3 Public Transport

Bus

- 4.3.1 The closest bus stops to the site are located opposite Coneyburrow Lane, circa 500m north of the site. **Table 4.1** provides a summary of the local bus route serving this bus stop as well as the stop opposite Wheatsheaf Inn and their typical weekday and weekend frequencies.

Table 4.1: Summary of Local Bus Services

Bus Stop	Route No.	Route	Frequency		
			Mon-Fri	Sat	Sun
Coneyburrow Lane	99	Silverhill – Hastings – St. Leonards – Bexhill – Little Common – Eastbourne	c. every 30 mins from 06:47, then every 20m mins until 18:22, then hourly until 21:35	c. every 30 mins from 07:07 to 20:16	c. every hour from 09:02 to 20:12
	356 (Sch)	Little Common – Bexhill – Claverham College	One service at 07:56 and 15:30	N/A	N/A
Wheatsheaf	11/A	Bexhill – Little Common – Bexhill	Two services a day at 11:30 and 16:00	Two services a day at 11:30 and 16:00	N/A
	13/A	Bexhill – Cooden Beach – Bexhill	Two services a day at 11:03 and 15:33	Two services a day at 11:03 and 15:33	N/A
	95 (Sch)	Little Common – Bexhill – Claverham College	Two services per day	N/A	N/A
	96	Little Comon – Bexhill	c. every 90 mins from 08:28 to 14:33	N/A	N/A

Source: Stagecoach [July 2024]

Rail

- 4.3.2 The nearest rail station to the site is Cooden Beach, located c.4km south of the site. Collington is also located close to the site and is an additional 1km away and can be accessed directly via bus service 99 from the site. Both stations are operated by Southern Trains.
- 4.3.3 **Table 4.2** below outlines the destinations that can be reached directly from either station alongside service frequencies.

Table 4.2: Summary of Rail Services from Cooden Beach Station

Destination	Typical Weekday Frequency		Average Journey Duration
	Peak	Off-Peak	
Eastbourne	1 service per hour	1 service per hour	20 mins
Gatwick Airport	1 service per hour	1 service per hour	80 mins
Ashford International	1 service per hour	1 service per hour	60 mins

Destination	Typical Weekday Frequency		Average Journey Duration
	Peak	Off-Peak	
London Victoria	1 service per hour	1 service per hour	115 mins

Source: Southern Trains [July 2024]

- 4.3.4 There are four cycle parking spaces at Cooden Beach. Overall, the site is connected to range of destinations as future residents of the site will be able to travel by bus or rail to larger settlements such as Bexhill, Hastings or Eastbourne.

SECTION 5 Access to Key Locations

5.1 Travel Destinations

5.1.1 Analysis of 2011 Census data has been undertaken to understand other key service centres for people living within Rother District, particularly those locations where there are regular commuting journeys. **Table 5.1** provides a summary of the significant locations where employment opportunities are accessed.

Table 5.1: Journey to Work Destinations – Rother District

Destination	Proportion (all modes)
Rother	45%
Hastings	19%
Wealden	6%
Eastbourne	5%
Tunbridge Wells	6%
Other	19%
Total	100%

Source: Census 2011

5.1.2 **Table 5.1** demonstrates that key local employment destinations for residents of Rother District are within the District, Hastings, Wealden, Eastbourne and Tunbridge Wells with approximately 81% of journeys being made to these areas. A high-level analysis of journey times to these destinations from Bexhill by combined walking and public transport use is provided in **Table 5.2**.

Table 5.2: Access to Key District Employment Locations – Public Transport

Destination	% of Journeys	Journey Time from Proposed Barnhorn Road Development (minutes)
Hastings	19%	44
Eastbourne	5%	36
Tunbridge Wells	6%	54

Source: Consultants Estimates – Based on likely routes from Google*

5.2 Employment Opportunities

- 5.2.1 There are a range of key employment areas accessible from the site, such as the Beeching Road industrial estate and the Bexhill Enterprise Park. The industrial estate is home to a number of industrial and retail businesses and can be accessed in a 14- and 25-minute cycle from the site respectively.
- 5.2.2 Local services and facilities also provide opportunities for employment, with a wide range of retail and local businesses within a short walking or cycling distance from the site.
- 5.2.3 It is evident that the proposed development site is located where there is a large range of employment opportunities within the surrounding areas of Bexhill, that can be accessed quickly and easily by modes of transport other than private car. This is in keeping with the requirements of the National Planning Policy Framework (NPPF), which seeks to locate development where the use of sustainable transport is a viable alternative.
- 5.2.4 Such access by sustainable transport reduces the demand for road capacity and helps in providing progress towards net zero objectives, gearing residents for the use of active travel modes of transport and enabling financial contributions from development to be targeted towards the enhancement of active travel infrastructure, benefitting the wider community in which the development is located.

SECTION 6 Site Access

6.1 Local Highway Network

6.1.1 The main road in the area is the A259 Barnhorn Road which routes to the north of the site and is part of the strategic road network (SRN) managed by NH. The majority of the remaining roads surrounding the site are managed by ESCC as local highway authority and comprise a mix of classified roads and streets.

6.1.2 The A259 Barnhorn Road runs west from Little Common Roundabout as a single carriageway with a 50mph speed restriction. The carriageway is generally 9-10m wide and the centre is intermittently hatched out or used to form right turning pockets for side roads. The alignment generally comprises sweeping bends.

6.2 Access Design

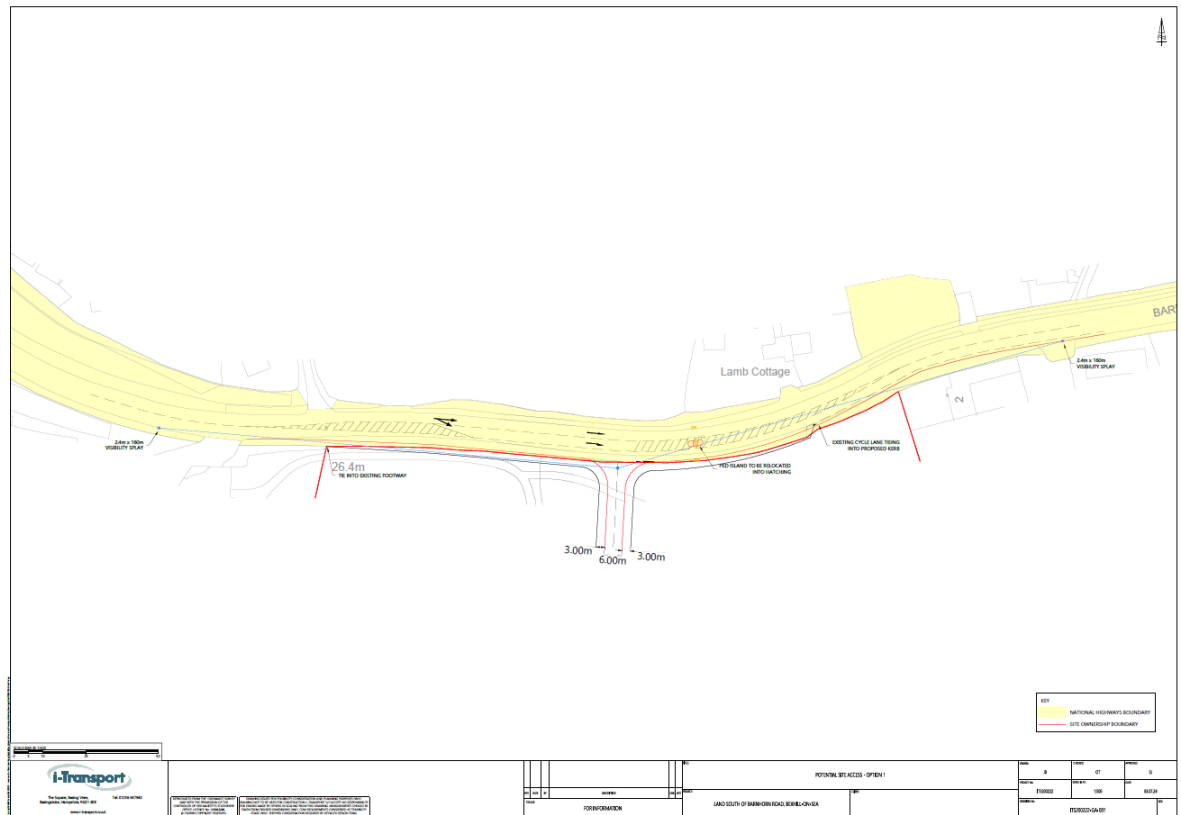
6.2.1 Access to the site can be achieved through a priority-controlled junction with a right-turn lane from the A259. The location of the proposed site access, within the context of the wider highway network, is illustrated in **Image 6.1**.

Image 6.1: Location of proposed site access.



6.2.2 The junction has been designed in accordance with Design Manual for Roads and Bridges (DMRB) CD123. The design is illustrated on drawing **ITS200222-GA-001** of which an extract is included as **Image 6.2**.

Image 6.2: Access Design.

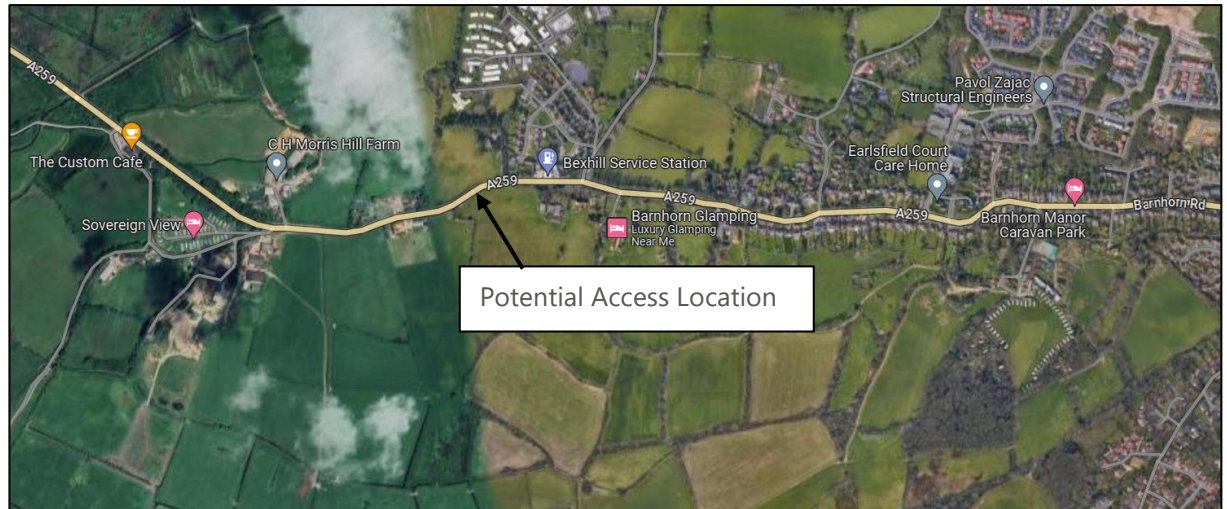


- 6.2.3 The access design has incorporated an existing on-carriageway cycleway on the A259 to ensure sustainable transport infrastructure is incorporated within the design proposals.
- 6.2.4 Visibility splays of 2.4m x 160m (suitable for a design speed of 50mph) can be achieved within the highway boundary in both the primary and secondary directions.
- 6.2.5 An internal access width of 6.0m can be achieved, with a 3.0m shared footway / cycleway on either side of the carriageway, entering the site.

Additional Access Options

- 6.2.6 The landowner has been in discussions with various landowners adjoining the site to discuss the availability of new potential site access points. An additional access point can be achieved to the east of that proposed in **Image 6.2** / drawing **ITS200222-GA-001**. Similarly, the access at this location can incorporate an existing on-carriageway cycleway on the A259 to ensure sustainable transport infrastructure is incorporated within the design proposals. Visibility splays of 2.4m x 160m (suitable for a design speed of 50mph) can be achieved within the highway boundary in both the primary and secondary directions. **Image 6.3** illustrates the location of this additional access point within the context of the wider highway network.

Image 6.3: Additional Potential Access Location



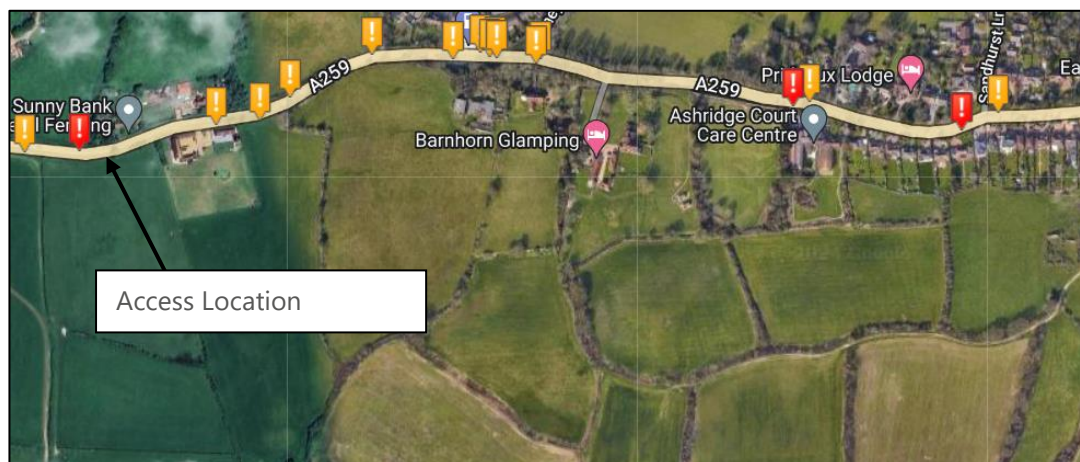
Proximity to Persimmon Homes Site

- 6.2.7 Due to the proximity of the site to the adjacent Persimmon Homes development, which was granted outline permission via Appeal on 27th July 2021 (planning ref: RR/2017/1705/P) there is the potential to provide a link between that development and Land South of Barnhorn Road.

6.3 PIA Data

- 6.3.1 Personal Injury Accident (PIA) data has been obtained from CrashMap for the latest available five-year period (2018 – 2022) along the proposed site frontage, as shown in **Image 6.4**. A total of 16 collisions have occurred across the study period, of which 13 are recorded as 'Slight' and three as 'Serious'. No fatal collisions have occurred within the study area.

Image 6.4: PIA Data.



Source: CrashMap

- 6.3.2 There is no trend or cluster of collisions that would indicate that there are any operational or safety issues within the local highway network in the vicinity of the site. It is concluded that the proposed development would not exacerbate any existing deficiencies.

SECTION 7 Traffic Impact

7.1 Overview

- 7.1.1 The traffic impact from the potential development site has been assessed using the TRICS 'Decide and Provide' (February 2021) guidance. The application of Decide and Provide is a vision led planning approach, rather than a forecast led (Predict and Provide) approach, which aims to improve the resilience of the transport appraisal process. TRICS has published guidance responding to significant social, technological, economic and environmental drivers that are creating new challenges for transport planning. This change has been further impacted by the COVID-19 pandemic and its influence on travel behaviour.
- 7.1.2 The use of a Decide and Provide approach is to review historical trends in travel behaviour and data and determine how these trends may change in the future, applying a vision led assessment to factor in changes to commuting patterns, car ownership and increased working from home. This will enable planning to ensure sufficient infrastructure is in place to meet the vision assessment demand.
- 7.1.3 This contrasts to the traditional Predict and Provide approach where historic traffic data is averaged and assumed that future developments will adhere to these same principles. In turn, this led to an approach where road capacity is prioritised over the delivery of sustainable transport infrastructure, whereas road capacity increases should be the 'last resort' in terms of transport mitigation, and used only where the impacts of development cannot be mitigated by the encouragement of sustainable transport measures alone.
- 7.1.4 The trip generation assessment has been undertaken based on the provision of a minimum of 340 new homes and 4,000sqm of employment space.

7.2 Decide and Provide

- 7.2.1 To undertake a Decide and Provide assessment, three scenarios need to be completed:
- Scenario 1 – traditional TRICS trip generation assessment;
 - Scenario 2 – reviewing historic changes in trip generation data and extrapolating this data to 2050 for the residential element of the site; and
 - Scenario 3 – same as Scenario 2 but applying a vision led assessment to determine the influence of changing travel behaviour and technology for the residential element of the site.

Scenario 1

Table 7.1: Scenario 1 Trip Rate and Generation – 340 Homes

	Trip Rate			Traffic Generation		
	In	Out	Two-Way	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	0.132	0.372	0.504	45	126	171
Evening Peak (17:00 – 18:00)	0.332	0.153	0.485	113	52	165

Source: TRICS (v.7.4.3) and Consultant Calculations

Table 7.2: Scenario 1 Trip Rate and Generation – 4,000sqm Employment Space²

	Trip Rate			Traffic Generation		
	In	Out	Two-Way	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	1.251	0.093	1.344	50	4	54
Evening Peak (17:00 – 18:00)	0.098	1.256	1.354	4	50	54

Source: TRICS (v.7.4.3) and Consultant Calculations

Table 7.3: Scenario 1 Trip Rate – Total Development

	Traffic Generation		
	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	95	130	225
Evening Peak (17:00 – 18:00)	117	102	219

Source: TRICS (v.7.4.3) and Consultant Calculations

7.2.2 Following a traditional TRICS generation assessment, the site would be forecast to generate 225 and 219 two-way trips in the morning and evening peak periods respectively. This equates to an addition of less than four vehicles per minute onto the local highway network.

Scenario 2

7.2.3 The TRICS database has been reviewed for housing sites³ that meet the same selection parameters as Scenario 1, but to determine how trends in trip rates have changed over time. **Table 7.4.** demonstrates the trip rate and generation for a housing site surveyed in 2000 and extrapolated for a development of 340 dwellings.

² The TRICS database has been filtered based on 'Office' trip rates relating to the proposed employment space on site.

³ For a more robust assessment, the 'Decide and Provide' assessment has only been applied to the housing element of the proposals.

Table 7.4: Trip Rate and Generation (Year 2000) – 340 Dwellings

	Trip Rate (2000)			Traffic Generation		
	In	Out	Two-Way	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	0.165	0.638	0.803	56	217	273
Evening Peak (17:00 – 18:00)	0.531	0.335	0.866	181	114	295

Source: TRICS (v.7.4.3) and Consultant Calculations

7.2.4 A housing site in the year 2000 for 340 dwellings would be forecast to generate 273 and 295 two-way vehicle trips in the morning and evening peak periods respectively, equivalent to an additional three vehicles per minute onto the highway network.

7.2.5 **Table 7.5.** demonstrates the trip rate and generation for a housing site surveyed in 2023 extrapolated for a development of 340 dwellings.

Table 7.5: Trip Rate and Generation (Year 2023) – 340 Dwellings

	Trip Rate (2023)			Traffic Generation		
	In	Out	Two-Way	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	0.118	0.297	0.415	40	101	141
Evening Peak (17:00 – 18:00)	0.297	0.165	0.462	101	56	157

Source: TRICS (v.7.4.3) and Consultant Calculations

7.2.6 A housing site in the year 2023 for 340 dwellings would be forecast generate 141 and 157 vehicles in the morning and evening peak periods respectively. This equates to an addition of just over two vehicles per minute.

7.2.7 To determine the historical trend in trip rates, and the likely extrapolation of this to a future assessment year, the difference between the 2000 and 2022 has been calculated. This difference has been divided by 22 to calculate the average change in trip rates in each year. This difference has been extrapolated by seven years, based on the trip rates in **Table 7.5**, to determine a trip rate and generation of a future year of 2029, when development of the site would be operational. This is shown in **Table 7.6**.

Table 7.6: Trip Rate and Generation (Year 2029)

	Trip Rate (2028)			Traffic Generation		
	In	Out	Two-Way	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	0.105	0.204	0.309	36	69	105
Evening Peak (17:00 – 18:00)	0.233	0.119	0.352	79	40	120

Source: TRICS (v.7.4.3) and Consultant Calculations

- 7.2.8 The site will likely generate 105 and 120 two-way trips in the morning and evening peak periods respectively. This equates to less than two an additional vehicle per minute onto the local highway network.

Scenario 3

- 7.2.9 A 'vision based' assessment has been undertaken to apply a 10% mode share shift to **Table 7.6**, as a result of the implementation of a Travel Plan for the development and to account for variations in car ownership and home working. This is shown in **Table 7.7**.

Table 7.7: Trip Rate and Generation (Year 2029) – Vision Based

	Trip Rate (2029)			Traffic Generation		
	In	Out	Two-Way	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	0.095	0.184	0.278	32	62	95
Evening Peak (17:00 – 18:00)	0.210	0.107	0.317	71	36	108

Source: TRICS (v.7.4.3) and Consultant Calculations

- 7.2.10 The 'vision based' assessment will result in the generation of 95 and 108 two-way trips in the morning and evening peak periods respectively. This equates to an addition of just over one vehicle every two minutes onto the local highway network.
- 7.2.11 With the addition of the employment space outlined in Scenario 1, the site would be forecast to generate the following total trip generation, shown in **Table 7.8**.

Table 7.8: Total Traffic Generation – 340 Dwellings and 4,000sqm of Employment Space

	Traffic Generation		
	In	Out	Two-Way
Morning Peak (08:00 – 09:00)	82	66	149
Evening Peak (17:00 – 18:00)	75	86	162

Source: TRICS (v.7.4.3) and Consultant Calculations

- 7.2.12 The site would be expected to generate a two-way movement of 149 and 162 trips in the morning and evening peak periods respectively.
- 7.2.13 The application of a vision-based approach is also supported by changing travel behaviour characteristics, as summarised from results in the National Travel Survey:
- The percentage of households with 2 or more cars or vans decreased 4% from 2019 to 2022;
 - Average trips per person per year was down 11% from 2002 to 2019 and decreased an additional 10% from 2019 to 2022; and

- Average distance (miles) per year was down 10% from 2002 to 2019 and decreased an additional 17% from 2019 to 2022.

7.3 Impact of Development Traffic

7.3.1 Traffic data for the A259 (Barnhorn Road) within the vicinity of the proposed site and access has been obtained from the National Highways WebTris database. **Table 7.9** summarises the typical morning and evening peak westbound and eastbound traffic flows on the A259.

Table 7.9: A259 Traffic Data – Average Day

Direction	Morning Peak	Evening Peak
Westbound	785	831
Eastbound	570	853
Two-way	1,355	1,684

7.3.2 The trip generation associated with both Scenario 1 and Scenario 3 of the proposed development (to ensure a robust assessment) has been proportionally assessed against the existing traffic flows on the A259. The proportional assessment for Scenario 1 is summarised in **Table 7.10** and in **Table 7.11** for Scenario 3.

Table 7.10: A259 Traffic Impact – Scenario 1

Direction	Morning Peak	% Impact	Evening Peak	% Impact
Westbound	898	14.3	941	13.2
Eastbound	680	19.2	963	12.8
Two-way	1,578	16.4	1,904	13.1

Table 7.11: A259 Traffic Impact – Scenario 3

Direction	Morning Peak	% Impact	Evening Peak	% Impact
Westbound	859	9.4	912	9.7
Eastbound	651	14.1	934	9.4
Two-way	1510	11.4	1845	9.6

7.3.3 The impact of the proposed development traffic, in both scenarios, falls far short of a 'severe' impact on the existing traffic flows on the A259. Whilst a scenario of 340 new homes has been assessed, the local highway network will be able to accommodate a higher quantum of housing on the site.

7.4 Sustainable Location to Minimise Traffic Impact

7.4.1 Referencing paragraph 115 of the National Planning Policy Framework (NPPF) this states that:

‘Development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe’.

7.4.2 The addition of less than three vehicles every minute onto the local highway network will not result in a ‘severe’ impact, and therefore the presumption in favour of sustainable development would be relevant.

7.4.3 The assessments demonstrate that the location of the site provides a real opportunity to minimise impact on the road network in line with carbon reduction initiatives, providing a development location where vehicular trips would be much lower than sites that are remote to local services and facilities.

7.4.4 This is coupled with a general trend whereby people are evidenced in completing less trips and travelling less miles compared to previous years.

7.4.5 Subject to an appropriate package of mitigation to encourage sustainable travel, the site has the potential to forecast less than three additional movement every minute using the local highway network, with a vision-based residential trip rate of c. 0.3 movements per dwelling during peak network conditions. To maximise the uptake of sustainable travel, the allocation of a development of up to 340 new homes, plus employment space, at this location would allow for much greater benefits for the wider community. It will allow for a greater investment into a mobility strategy that sits alongside the development proposals.

SECTION 8 Transport Benefits of Development

8.1 Sustainable Location

8.1.1 This Transport Appraisal has demonstrated that the site is located within an accessible location with appropriate opportunities to take up sustainable transport modes. This is in accordance with the principles of section (a) of paragraph 114 of the NPPF which states:

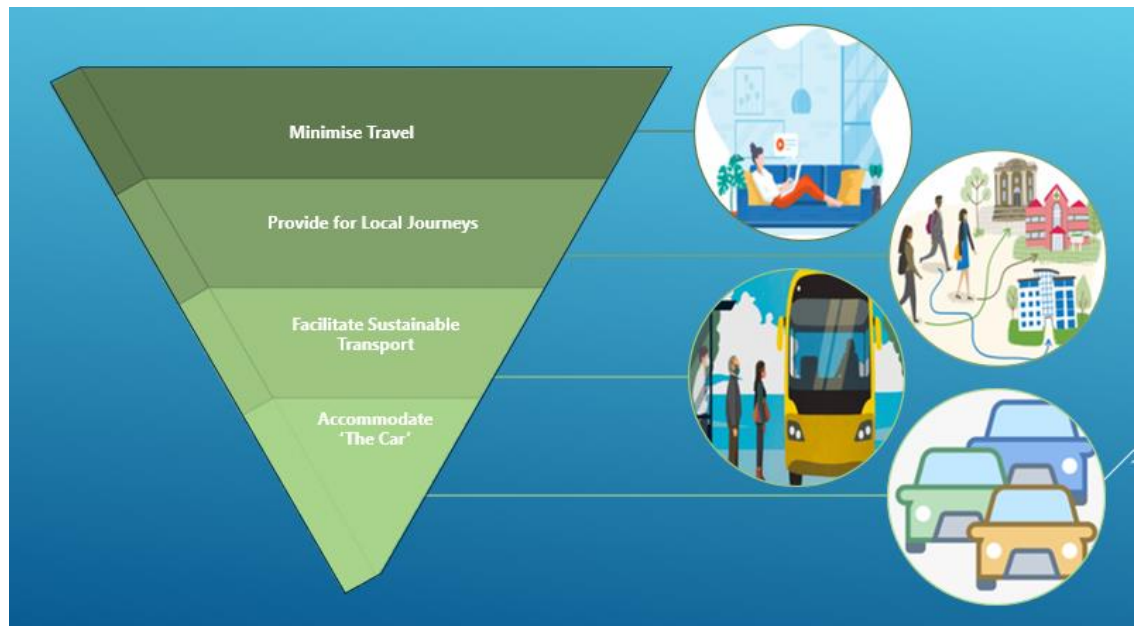
- *'Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location.'*
- *The focus of paragraph 114 is that 'appropriate opportunities' have been taken up to promote sustainable transport, considering the scale and location of development proposed. It is clear that the NPPF does not advocate a one size fits all approach (i.e. what is appropriate in central urban locations will be different from what is appropriate in a settlement). Importantly, the NPPF clearly does not seek to preclude or inhibit appropriate development in less urban areas on sustainability grounds, as set out in paragraph 105:*
- *'Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural area, and this should be taken into account in both plan-making and decision making.'*

8.2 Delivery of a Mobility Strategy

8.2.1 The allocation of 340 new homes at the site, in addition to 4,000sqm of employment space, would mean that the scale of the development is such that it would be able to support the delivery of a comprehensive mobility strategy, designed to encourage the uptake of sustainable modes of transport. Such a strategy would benefit not only residents of the development, but also the wider community who would be able to access the provided infrastructure and benefit from investment in public transport services and pedestrian / cycle infrastructure.

8.2.2 The mobility strategy would focus on **reducing** the use of private vehicles. Where this is not possible the strategy would like to **contain** trips within the site. The final step would be to **facilitate** off-site trips by sustainable modes of travel, as summarised in **Image 8.1**.

Image 8.1: Overarching Mobility Strategy



8.3 Reduce

- 8.3.1 The first step of the strategy will be to seek to minimise the need for travel. One of the biggest contributors to travel demand during peak periods, as identified by NTS 2019, is that attributed to commuting journeys.
- 8.3.2 The national response to Covid has resulted in a significant shift in the working culture. More and more employees are able to work either from home or remotely, with less time spent in offices as a result of hybrid working approaches. As a result, the design of residential dwellings has become a key focus, with many homebuyers now seeking space within properties to enable home working, and travel demand can be reduced by providing dwellings that reflect these requirements.
- 8.3.3 Providing the necessary support for employees to work remotely, through the creation of on-site business hubs, will reduce the need for residents to travel off-site for work purposes, providing a space within the site to accommodate business needs – be this room for meetings or co-sharing workspaces.
- 8.3.4 While residents of the development will seek to own their own vehicles, the provision of a comprehensive on-plot electric vehicle charging will enable residents to reduce the reliance upon traditional combustion engine vehicles, and own private vehicles that have a lessened impact on the environment, while overcoming one of the major obstacles to electric car ownership in providing dedicated facilities to enable charging.

8.4 Contain

8.4.1 One of the key aspects of larger scale development is that it provides the opportunity to provide on-site infrastructure that can help contain some travel demands generated by the site within its boundaries and ‘internalising’ the generated trips. This has the benefit of reducing the traffic impacts of the development, and reducing overall journey length so that the undertaking these movements on foot or by bicycle becomes the first-choice mode of transport. For example, this could be the provision of open space for recreational activities or community buildings.

8.4.2 Key to encouraging local journeys will be to provide for a layout that has ‘walkable neighbourhoods’, characterised as being within 10 minutes walking distance (around 800 metres). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating and the design of the site will strive to achieve this through good design and prioritising journeys on foot and by bicycle. Well designed open space within the site can reduce the need for residents to travel elsewhere for such activity.

8.5 Facilitate Sustainable Travel

8.5.1 While the reduce and contain aspects of the strategy will minimise the need and distances travelled, there will still be a travel demand arising from the site.

8.5.2 Analysis of travel patterns enables targeted investment in sustainable transport infrastructure to encourage the uptake of sustainable modes of transport to accommodate these journeys, and the opportunity exists to embrace new and innovative methods to capture these trips. Allocation of the site will enable the improvement of infrastructure in the south of the town, benefitting not only new residents both those within the existing community. This could range from the enhancement of pedestrian routes, financial support and additional patronage to existing bus services, financial contributions toward the delivery of additional cycle parking capacity at the station or within public areas etc.

8.5.3 This can also be facilitated by the delivery of an on-site Green Travel Hub, also known as Mobility Hubs, which are defined by CoMoUk as being:

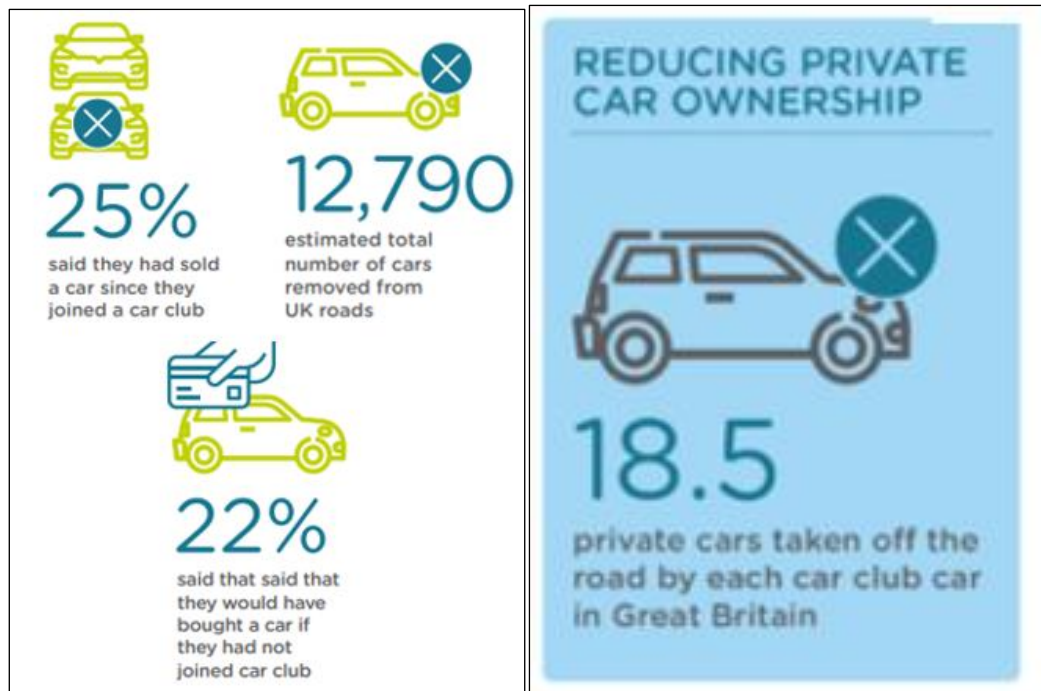
“highly visible, safe and accessible spaces where public, shared and active travel modes are co-located alongside improvements to public realm and, where relevant, enhanced community facilities. The redesign and reallocation of space from the private car is intended to enhance the experience of travellers as well as benefitting local residents and businesses. The concept has been applied to the streetscape in many European and North American cities and is now being replicated in the UK”.

A mobility hub presents an opportunity for a range of sustainable travel measures to be brought together so that they can be easily accessed by residents, and act as a 'one stop shop' for sustainable travel needs. An on-site mobility hub within the site could include:

- ## Car Clubs

Date: 22 July 2024 Ref: SJ/OT/DM/ITS200222-001C

Image 8.3: Car Club Characteristics



Source: CoMoUK 2019 Survey

Source: CoMoUK 2020 Survey

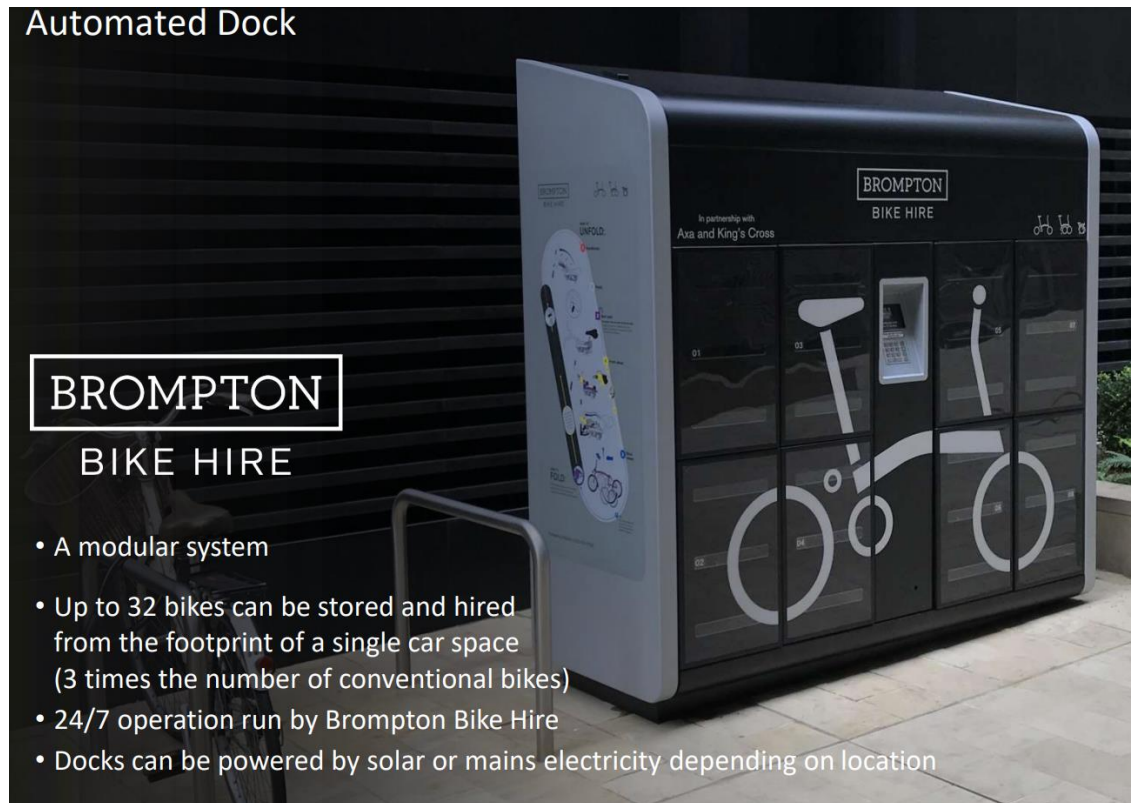
8.5.6 Car Clubs are proven to reduce the need for car ownership and provide residents the ability to access the car for occasional use, without the considerable costs associated with ownership of a vehicle including maintenance and insurance. Electric vehicles now comprise a large proportion of car club fleets, vehicles can be hired on an hourly basis or over a longer period of time, and can be conveniently booked using a mobile application, through the Car Club website or over the phone.

Bike Hire

8.5.7 Access to high quality bike hire opportunities will also be incorporated into the on-site mobility hub. This will provide residents of the development who may not have their own bicycle, or require a different type of cycle to their own (e.g. electric bicycle to undertake a longer journey), over a temporary period.

8.5.8 The site benefits from being in close proximity to rail services, for residents to be able to undertake a dual mode journey, by accessing the station by bicycle and then completing a longer section of the journey by rail services to key commuting destinations and other urban centres. To facilitate this, folding Brompton bike hire can be utilised to make onward travel with a bicycle more accessible.

Image 8.4: Brompton Bike Hire Dock



Source: Brompton

- 8.5.9 Extensive research has been undertaken in relation to bike hire services, which identifies that time, convenience and saving money are amongst key reasons for the use of such schemes.

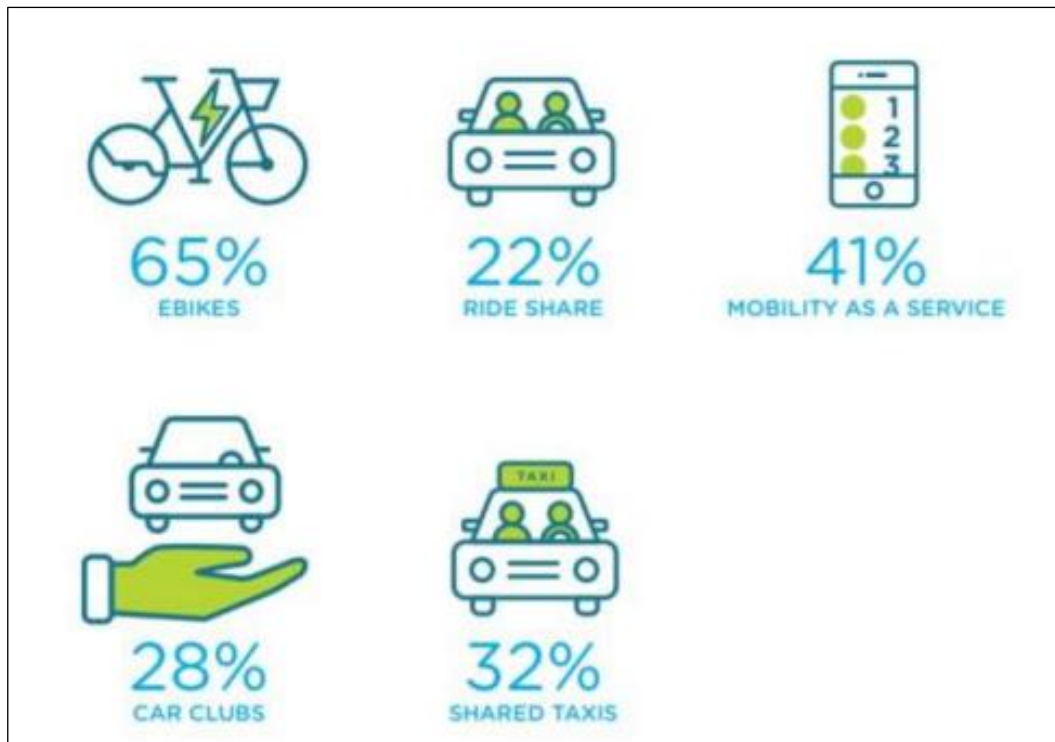
Image 8.5: Why People Use Bike Hire



Source: Bike Share Users Survey (2018)

- 8.5.10 It has also identified such schemes also work towards normalising the share/hire economy, with users much more likely to use other such services – this will help to support other on-site modal shift initiatives such as lift sharing and car clubs.

Image 8.6: Propensity to Use Other Share Schemes



Source: Bike Share Users Survey (2018)

8.6 Enhancement of Transport Infrastructure

8.6.1 The development brings with it the opportunity to enhance local transport infrastructure, including:

- Financial contributions towards the enhancement of local bus service quality and frequency.
- The implementation of a Travel Plan with a 10% modal shift target, supported by a range of modal shift measures and initiatives funded by the Developer and managed by a Travel Plan Coordinator.
- A comprehensive Walking and Cycling Audit of key corridors to local services and facilities, aimed at identifying improvements to the routes to facilitate sustainable journeys.

SECTION 9 Summary

9.1 Overview

- 9.1.1 This Transport Appraisal has been prepared to demonstrate the suitability of Land South of Barnhorn Road for residential development for a minimum of 340 dwellings, plus 4,000sqm of employment space, to be included as an allocated development site within the emerging Rother District Local Plan 2040.

9.2 Accessibility

- 9.2.1 There is a good range of local facilities and services that are within a distance where many residents will choose to walk or cycle, instead of using private cars. These include educational, employment, leisure and recreation uses.
- 9.2.2 Existing walking connections are generally attractive and convenient to make walking a realistic option for many local trips and will be further enhanced by the development proposal.

9.3 Access

- 9.3.1 Access to the site can be achieved through a priority-controlled junction with a right-turn lane from the A259. The junction has been designed in accordance with Design Manual for Roads and Bridges (DMRB) CD123. The access has been designed to provide visibility splays of 2.4m x 160m in both the primary and secondary directions.

9.4 Benefits of Development

- 9.4.1 The allocation of the site enables the realisation of many benefits. Primarily, it will enable a greater level of investment to be made towards the delivery of a mobility strategy, supporting a greater level growth and thus the ability to maximise the opportunities for sustainable travel, not just for residents but for the existing, wider community.
- 9.4.2 A mobility strategy for the site would focus on a 'Reduce, Contain and Facilitate' approach, providing such benefits as:

Reduce	Contain	Modal Shift
Dwelling Design	On-Site Services / Infrastructure	Mobility Hub
Broadband	Walkable Neighbourhoods	Car Club
Electric Vehicle/Cycle Parking	Internal Travel Infrastructure	Cycle Hire
		Bus Service Support

Reduce	Contain	Modal Shift
		Pedestrian and Cycle Infrastructure
		Forming Connections to Established Networks and Rail Services
		Travel Plan

9.4.3 Development of the site will bring with it a range of other transport improvements. This would include:

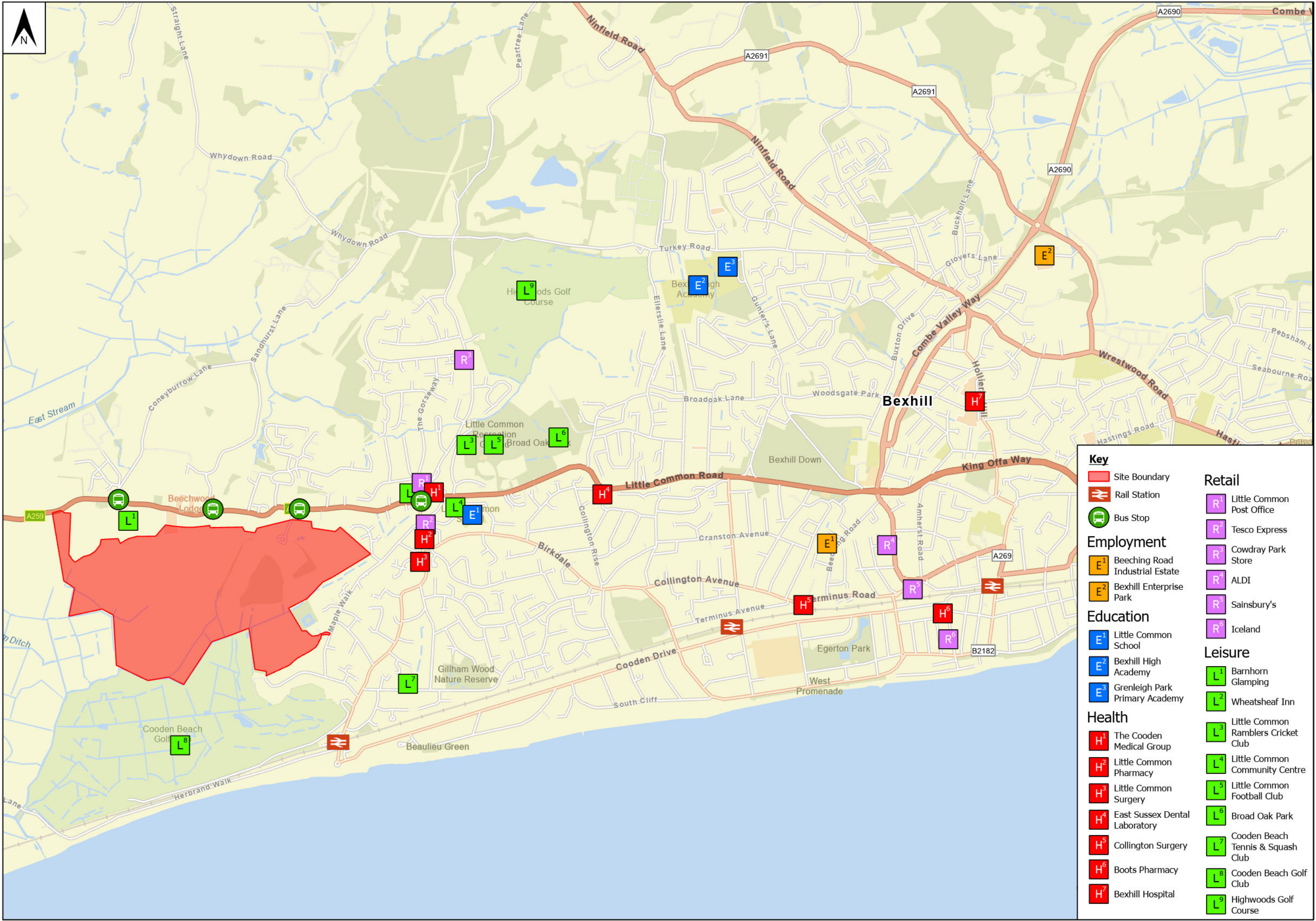
- The implementation of a Travel Plan with a 10% modal shift target, supported by a range of modal shift measures and initiatives funded by the Developer and managed by a Travel Plan Coordinator.
- Comprehensive Walking and Cycling Audits, enabling the identification of local corridor improvements.
- Enhancing local permeability, by providing pedestrian and cycling connections through the development site.
- Providing walking and cycle access to on-site public open space.

9.4.4 In transport terms, the site satisfies paragraph 114 of the National Planning Policy Framework in that:

- It is a sustainable location for development.
- Safe and suitable access can be provided.
- The forecast traffic generation of the site would have an imperceptible impact on network operation.

9.4.5 Thus, there are no transport constraints to the allocation for a minimum of 340 new homes, and 4,000sqm of employment space, at Land to the South of Barnhorn Road, which itself will make a meaningful contribution to housing targets and can be brought forward in the Plan period.

FIGURES



Key

- Site Boundary
- Rail Station
- Bus Stop

Employment

- Beeching Road Industrial Estate
- Bexhill Enterprise Park

Education

- Little Common School
- Bexhill High Academy
- Grenleigh Park Primary Academy

Health

- The Cooden Medical Group
- Little Common Pharmacy
- Little Common Surgery
- East Sussex Dental Laboratory
- Collington Surgery
- Boots Pharmacy
- Bexhill Hospital

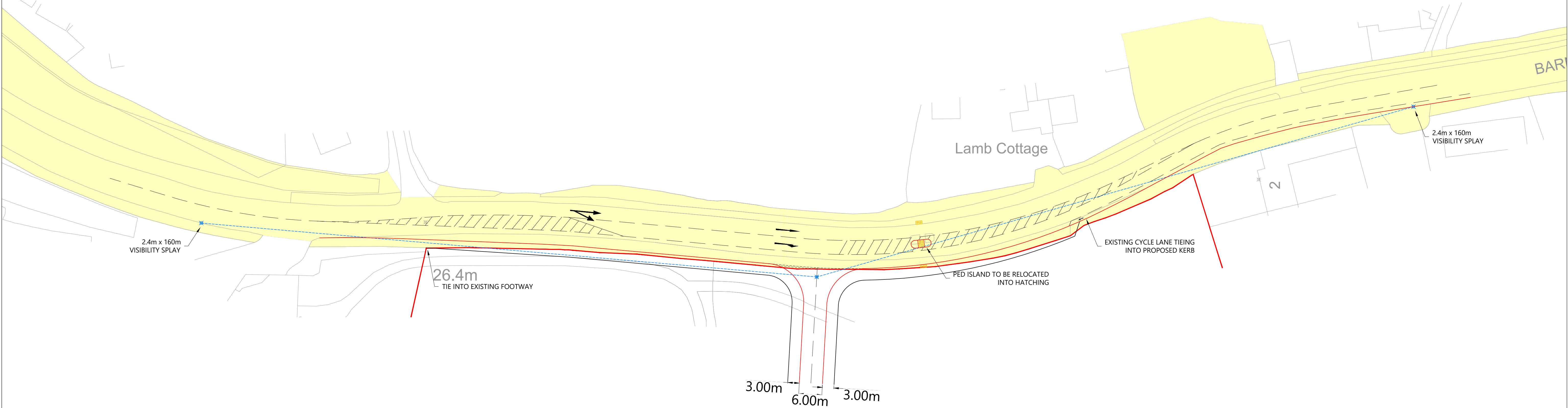
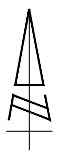
Retail

- Little Common Post Office
- Tesco Express
- Cowdray Park Store
- ALDI
- Sainsbury's
- Iceland

Leisure

- Barnhorn Glamping
- Wheatsheaf Inn
- Little Common Ramblers Cricket Club
- Little Common Community Centre
- Little Common Football Club
- Broad Oak Park
- Cooden Beach Tennis & Squash Club
- Cooden Beach Golf Club
- Highwoods Golf Course

DRAWINGS



The Square, Basing View,
Basingstoke, Hampshire, RG21 4EB
www.i-transport.co.uk

Tel: 01256 637940

REPRODUCED FROM THE ORDNANCE SURVEY
MAP WITH THE PERMISSION OF THE
CONTROLLER OF HER MAJESTY'S STATIONERY
OFFICE. LICENCE No. 10004286.
© CROWN COPYRIGHT RESERVED.

DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY.
DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY
FOR ERRORS MADE BY OTHERS IN SCAILING FROM THIS DRAWING. MEASUREMENTS SHOULD BE
TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY
STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.

						TITLE: POTENTIAL SITE ACCESS - OPTION 1			DRAWN: JB	CHECKED: OT	APPROVED: SJ
REV	DATE	BY	DESCRIPTION			CHK	APP	PROJECT:	PROJECT No: ITS200222		
STATUS:			FOR INFORMATION			LAND SOUTH OF BARNHORN ROAD, BEXHILL-ON-SEA			CLIENT: ITS200222-GA-001		
									SCALE @ A1: 1:500		
									DATE: 03.07.24		
									REV		

