Land west of Turners Hill Road and South of Huntsland, Crawley Down

Transport Assessment

Client: Wates Developments Ltd

i-Transport Ref: MS/LJ/MS/ITB9155-052D

Date: 15 January 2025

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Quality Management

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SECTION 1 Introduction

1.1 Overview

1.1.1 Wates Developments Ltd has instructed i-Transport LLP to provide highways and transport advice in support of a residential-led development on land west of Turners Hill Road and south of Huntsland and west of Turners Hill Road, Crawley Down. The application site forms part of a wider allocation (referred to as the 'study area' in this report) for 350 dwellings within the Mid Sussex District Plan 2021-2039 (Policy DPA9).

1.1.2 The study area is being bought forward as two separate planning applications:

Land to the south of Huntsland

a Outline planning application (appearance, landscaping, layout and scale reserved) for the erection of up to 200 dwellings, and associated infrastructure including new access points off of Turners Hill Road with associated spine roads and car and cycle parking; the provision of open space and associated play facilities; utilities infrastructure, surface water drainage features, and associated features, on land west of Turners Hill Road and south of Huntsland, Crawley Down, West Sussex.

Land to the north of Huntsland

b Outline planning application (appearance, landscaping, layout and scale reserved) for the erection of up to 150 dwellings, a 65 bed care home, and community facility; and associated infrastructure including new access points off of Wychwood with associated spine road and car and cycle parking; the provision of open space and associated play facilities; utilities infrastructure, surface water drainage features, and associated features, on land west of Turners Hill Road and north of Huntsland, Crawley Down, West Sussex.

1.1.3 This Transport Assessment (TA) relates to application (a) above; however, it also considers the cumulative implications of the wider development on the study area of applications (a) and (b). It demonstrates that application (a) will be acceptable if this site comes forward individually, but also that it is able to come forward together as part of a site-wide masterplan.

1.1.4 The location of this site in the context of the wider allocation and the local highway network is presented in **Figure 1**, extracted in **Image 1.1** below.

Image 1.1: Site Location Plan

1.1.5 The masterplan for the study area is included at **Appendix A**.

Image 1.2: Study Area Masterplan

Source: Illustrative Masterplan

1.2 Public Consultation

1.2.1 An online public consultation event took place in November and December 2024 and the process is summarised within the Statement of Community Involvement (SCI) which accompanies this application. Several transport matters were raised, and these are summarised below, together with where they are addressed in the TA.

1 Traffic congestion on the local highway network will be worsened by the proposal. The traffic impact of the development has been assessed as part of the Mid Sussex District Plan evidence base. That study identified only one junction requiring mitigation (the A264 / Copthorne Way five-arm roundabout) and has developed a suitable mitigation scheme. For completeness, this Transport Assessment (Section 8) provides a further assessment of the local highway network, using a scope that has been developed and agreed with WSCC. It confirms that the development will have a magnitude of impact that falls below the NPPF's critical 'severe' level that is the only highways reason for resisting development.

2 The site is not in a sustainable location for development with few facilities close by. The site is an allocated residential development site which will bring forward further non-residential amenities (community space, open space and a 65-bed care home among others. It is a 15 to 20 minute walk from most facilities in Crawley Down and also a walkable distance from bus stops. Significant work has been undertaken with West Sussex County Council (WSCC) to enhance the connectivity of the site to the local area and an extensive sustainable transport strategy, incorporating improvements to rights of way and bus services, is provided in Section 6.

1.3 Scope and Structure of Transport Assessment

1.3.1 This Transport Assessment (TA) provides a review of the transport aspects of the development proposal, considering the following key transport criteria (*ref: paragraph 115 of the National Planning Policy Framework (NPPF)*):

1 Will sustainable transport modes be prioritised taking account of the vision for the site, type of development and location?

2 Will safe and suitable access be provided for all modes?

3 Does the design of the internal site arrangement reflect current guidance?

4 Will there be an unacceptable (i.e. 'severe') cumulative residual impact, particularly in terms of queueing and delay at local junctions?

1.3.2 In line with good practice, a significant amount of pre-application discussion has taken place with WSCC, as the local highway authority, to agree the access strategy in principle; present sustainable transport strategy for the site; and present a traffic impact assessment of the proposals. Taking each test in turn, agreement has been reached that:

- The site is identified as a residential allocation in the Mid Sussex District Local Plan, which was submitted for examination in 2024. It is well located to Crawley Down on foot and by cycle, with bus services providing connections further afield and a wealth of day-to-day services easily accessible from within the village (and higher order services accessible by public transport). The TA presents a strategy for enhancing opportunities for prioritising sustainable travel, including enhancements to walking and cycle routes; improvements to bus stops and services; and a car club. The strategy has been discussed at length and agreed with WSCC and takes on board Active Travel England principles.
- The study area will collectively be accessed by three points of access, in line with criterion ix of Policy DPA9. The application site itself will be served by two points of access on Turners Hill Road in the form of priority junctions. The access strategy has been discussed and agreed in principle with WSCC and is in accordance with the criteria of Policy DPA9, subject to a Stage 1 Road Safety Audit (RSA). To provide a genuinely permeable development, several additional pedestrian and / or cycle connections into the site are also proposed in accordance with criterion vi, vii and viii of policy DPA9.
- Whilst the planning application is accompanied by an illustrative masterplan, a reserved matters application will demonstrate how the internal layout of the site can come forward in accordance with relevant design standards.
- Extensive off-site junction capacity assessment has been undertaken, following a methodology which has been agreed with WSCC. The proposal will not result in a 'severe' traffic impact or unacceptable safety impacts on the local highway network. This is true for each application site in isolation or in combination with one another. It is also consistent with the findings of the Mid Sussex Transport Study, which forms part of the evidence base for the District Plan.

1.3.3 The remainder of this TA is structed as follows;

- Section 2 – Policy Context.
- Section 3 – Existing Conditions.
- Section 4 – Accessibility.
- Section 5 - Access and Internal Layout Considerations.
- Section 6 –Sustainable Transport Strategy.
- Section 7 – Active Travel England Assessment.

- Section 8 –Traffic Impact Analysis.
- Section 9 – Summary and Conclusions.

SECTION 2 Policy Context

2.1 National Policy and Guidance

National Planning Policy Framework (December 2024)

2.1.1 The NPPF details the Government's planning policies and set out how these are expected to be applied in relation to development proposals. The NPPF is a material consideration in determining applications for development.

2.1.2 The NPPF confirms (ref: *paragraph 10*) that at the forefront of planning is the ***"presumption in favour of sustainable development."***

2.1.3 The scope and structure of this TA has been prepared to assess the proposal against the four key transport tests outlined in paragraph 115 of the NPPF:

a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;

b) Safe and suitable access to the Site can be achieved for all users;

c) The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach.

2.1.4 Paragraph 116 of the NPPF goes on to state:

> ***"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."***

2.1.5 The new NPPF follows the same themes as the previous one in terms of the transport tests which should be followed: development should provide opportunities for sustainable travel; achieve safe access; be designed in accordance with national design guidance and should only be prevented where the residual cumulative traffic impact is 'severe'.

2.1.6 However, there are two notable differences:

1 An even greater emphasis on sustainable travel, and not just car borne access, to develop a transport 'vision' for the site. This is in line with industry practice which has been evolving in recent years (see National Highways guidance below). The sustainable transport strategy, developed in consultation with WSCC, very much follows this approach, setting out a suite of measures that can plausibly encourage travel by modes other than the car and reduce traffic impact.

2 The 'severe' test, the high bar[1], for preventing development from coming forward for transport reasons, stands. Transport reasons should only prevent development from coming forward when there are very significant unacceptable impacts. The vision-led approach must now form part of the mitigation strategy. This means developing a vision for how future development should be accessed and applying transport planning principles to achieving them, with a focus on sustainable travel

2.1.7 These four key tests are assessed in this TA, and it is against this policy context that development proposals should be considered.

Planning Practice Guidance

2.1.8 Planning Practice Guidance (PPG) is a government published web-based planning guidance resource, first launched in March 2014. It is subject to ongoing updates and replaces several previous guidance documents, including the DfT's 'Guidance for Transport Assessment' (2007).

2.1.9 In accordance with PPG, Section 6 of this TA provides a robust assessment of the development proposal and demonstrates that the transport impacts fall short of the 'severe' test set by the NPPF. A Framework Travel Plan accompanies the planning application, which sets out a long-term, realistic strategy for the promotion of sustainable travel, alongside the site's sustainable transport strategy.

[1] E.g.:

1. Land at Blackfield Farm Church Road, Warton (appeal *ref: APP/M2325/A/14/2217060)*. Both the Inspector and Secretary of State (SoS) concluded that 360 homes would have a significant adverse effect on the local highway network (*ref: paragraph 125 of appeal decision / paragraph 10 of SoS letter*. However, both agreed that the residual cumulative impact would not be 'severe'.

2. At land at Bradford Road, East Ardsley, Leeds *(appeal ref: APP/N4720/W/15/3004034)*, the Inspector agreed that a 50% increase in delay *(ref: Section 8.5 of Decision)* fell short of 'severe'). Again, the SoS agreed *(ref: paragraph 16 of SoS letter)*.

National Highways Circular 01/22.

2.1.10 National Highways Circular 01 / 022 explains NH's approach to engaging with the planning system. Its guidance reflects the move towards vision led assessments of traffic impact, which:

> ***"Expects development promoters to enable a reduction in the need to travel by private car and prioritise sustainable transport opportunities ahead of capacity enhancements and new connections on the SRN. For residential-led developments, due consideration should be given to home and street layouts, broadband infrastructure, safe and secure cycle parking, and access to local amenities"***

National Highways Policy Paper "Strategic Road Network and the Delivery of Sustainable Development" (December 2022)

2.1.11 This document goes into further detail in examining the issues NH consider when reviewing planning application. It sets out the evidence sought by NH and reiterates the vision-led approach, requesting that planning applications include a proposed methodology for a vision led approach (*ref: paragraph 82, bullet 2)*.

2.2 Local Policy and Guidance

West Sussex Local Transport Plan 4 2022-2036

2.2.1 The WSCC Local Transport Plan 4 was adopted in April 2022 and sets out a long-term strategy and implementation plan for making improvements to the transport system from 2022 to 2036.

2.2.2 The LTP includes five thematic strategies, based around active travel, shared transport, rail, access to Gatwick Airport and the Road Network. The LTP also includes several area specific strategies. The Crawley area transport strategy includes the prioritisation of active travel connectivity as development takes place.

Mid Sussex District Plan 2021-2039 (Regulation 19)

2.2.3 The Mid Sussex District Plan was published in 2023 and comprises an updated vision, strategy, site allocations and policies that supersede the 2018 District Plan.

2.2.4 The site forms part of a wider area that is a proposed allocation in the Plan under Policy DPA9: Land to the west of Turners Hill Road, Crawley Down The wider site is allocated specifically for the following on-site:

- Community building.
- Allotments.
- 50 bed (C2) care home.

- Play area.
- Other outdoor provision.
- Outdoor sports (Subject to further discussion regarding overall provision within settlement).
- Informal outdoor space.

2.2.5 There are 10 policy requirements associated with this allocation, four of which are transport related. The transport specific policy requirements are:

- **Policy Requirement 6**: Integrate and enhance the existing Public Rights of Way within the site and retain the character of the Public Rights of Way that border the site.
- **Policy Requirement 7**: Provide suitable pedestrian and cycle connections to Crawley Down, including via the Worth Way.
- **Policy Requirement 8**: Integrate development within the site to the north (Policy DPA10: Hurst Farm, Turners Hill Road, Crawley Down), such as through the design of the site layout and by providing pedestrian and cycling connections between the developments, green infrastructure and ecological corridors.
- **Policy Requirement 9**: Provide suitable access to Turners Hill Road to each of the three areas of the site. the northern access is to be via Wychwood Place and the middle access and route through site is to be separate from Huntsland which will remain a no through road and Public Right of Way.

2.2.6 Policy DPT3 of the District Plan is concerned specifically with active and sustainable travel. It states:

> ***"Development will be required to help remove barriers to active and sustainable travel and create a healthy environment in which people choose to walk, wheel and use sustainable transport."***

2.2.7 Further, the District Plan takes a holistic approach to address climate change, including the consideration of carbon emission reduction in development planning. Policy DPS1 states:

> ***"Development should embed the principles of 20-minute neighbourhood and local living and prioritise active travel such as walking and cycling and sustainable transport such as public transport to reduce reliance on private modes of transport and to facilitate healthy lifestyles."***

Crawley Down Neighbourhood Plan (January 2016)

2.2.8 The Neighbourhood Plan, produced by Worth Parish Council, sets out their vision for Crawley Down during the period from 2014 to 2031. The Plan has five key objectives, number four relating to the environment and number five to transport. These have several sub-objectives, including:

Environment

- O - Protect and enhance footpaths, cycle paths, bridleways and other Rights of Way.

Transport

- S - Address speeding on the main roads through the village.
- T – Protect and promote increased use of public transport services.

2.2.9 Proposal 02 of the Neighbourhood Plan indicates that the Parish Council will promote proposals for improvements in relation to traffic management and sustainable transport, including managing traffic speeds on Turners Hill Road and within the village. It notes development in the village provides a means to deliver suitable mitigation schemes.

2.2.10 Policy CDNP10, entitled 'Promoting Sustainable Transport states that:

"Development that does not conflict with other Policies will be permitted provided that it promotes sustainable transport within the Neighbourhood Area by:

- ***a) Providing safely located vehicular and pedestrian access with adequate visibility.***
- ***b) Demonstrating that adequate sustainable transport links to the principal village facilities including the village centre, the primary school, Health Centre and recreation open space already exist or will be provided.***
- ***c) Identifying and undertaking appropriate measures, such as highway improvements, to address any transport infrastructure inadequacies.***
- ***d) Where development would add to traffic congestion in the village or inappropriate traffic on rural lanes, proposals should be brought forward to mitigate any traffic impact or contribute funding towards local transport schemes.***
- ***e) Development proposals for new developments should include secure cycle storage and ideally storage for children's buggies and mobility scooters where appropriate.***
- ***f) Development proposals would maintain or enhance the existing public footpaths, rights of way, bridle paths and twittens.***
- ***g) A full transport assessment is provided using current data and identified issues addressed developments of more than 50 houses."***

2.3 Summary

2.3.1 National and local policies confirm that safe and suitable access to sites should be achieved for all users. Account should be taken of whether the opportunities for sustainable transport modes have been prioritised, depending on the nature and location of the site, to ensure the need to travel will be minimised and the use of sustainable transport modes can be maximised.

2.3.2 In accordance with the NPPF, development should only be prevented or refused on highways grounds where the residual cumulative impacts are severe or if there are safety concerns. The following sections of this Transport Assessment sets out how the proposed development complies with these national and local transport planning policy considerations.

SECTION 3 Existing Conditions

3.1 Introduction

3.1.1 This section of the TA describes the existing transport conditions in the vicinity of the site, including opportunities for walking, cycling and public transport use and a description of the local highway network.

3.2 Walking and Cycling

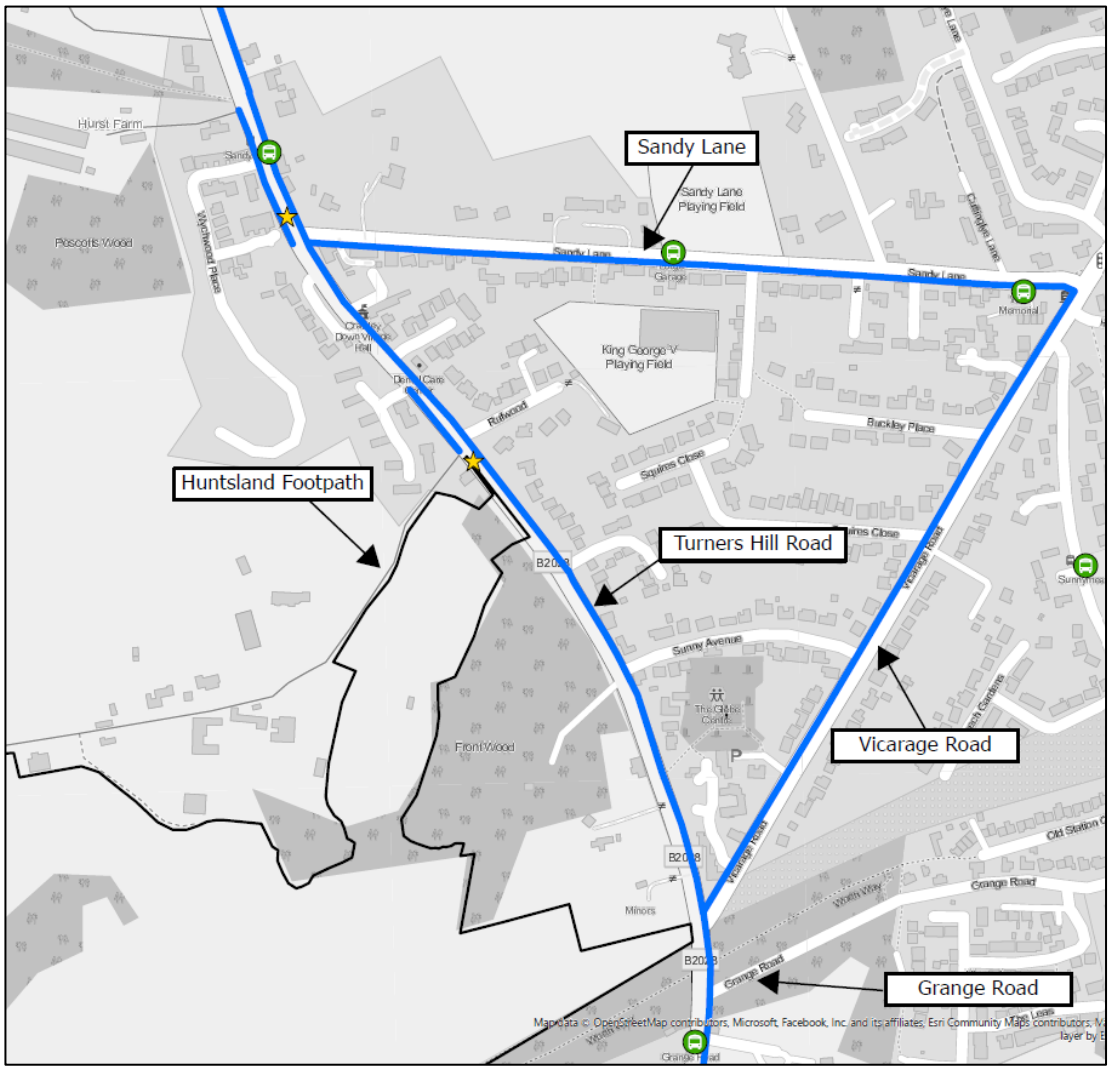
Turners Hill Road

3.2.1 Turners Hill Road is around 6.5m wide. A continuous footway is provided along the eastern side of Turners Hill Road. On the western side, there are footways (shown in **Image 3.1**):

- Between a new signal-controlled crossing south of the Huntsland footpath and The Pheasantry.
- Between Sandy Lane and Hurst Farm (passing Wychwood Place and a further signal-controlled crossing.

3.2.2 Turners Hill Road features street lighting at regular intervals.

Image 3.1: Existing Footways



Sandy Lane

3.2.3 Sandy Lane is around 6m wide and has a continuous footway on the southern side of the carriageway and provides a route from Turners Hill Road to Crawley Down village centre. The street features street lighting at regular intervals.

Wychwood Place

3.2.4 Wychwood Place is part of a development of 67 homes (built out through two planning applications - *14/02000/OUT and DM/15/3614/OUT*) which has good pedestrian infrastructure. Footways are provided on both sides of the carriageway at the access of the development and along much of its length, whilst minor roads act as shared surfaces. A further pedestrian / cycle link is provided into the site a short distance south of the junction with Turners Hill Road and there is a further pedestrian connection to Huntsland.

Image 3.2: Wychwood Place Development Sites

Vicarage Road

3.2.5 Vicarage Road routes between Hophurst Lane / Sandy Lane and Turners Hill Road and has continuous footways on both sides of the carriageway. It is primarily a residential road which features street lighting.

Grange Road

3.2.6 Grange Road routes between Turners Hill Road and Station Road with routes to various side roads on Field Drive, Grange Crescent, Sandy Hill Lane and Kiln Road. A footway is provided on the eastern side of the carriageway.

Public Rights of Way

3.2.7 There are a number of Public Rights of Way within the vicinity of the site, as well as currently routing through the site which will be retained and enhanced as part of the development proposal.

a Footpaths 32W and 33W (known as Huntsland), route east to west within the site connecting Turners Hill Road and footpath 29W. The signal-controlled crossing on Turners Hill Road mentioned above aids onward walks eastward into Crawley Down.

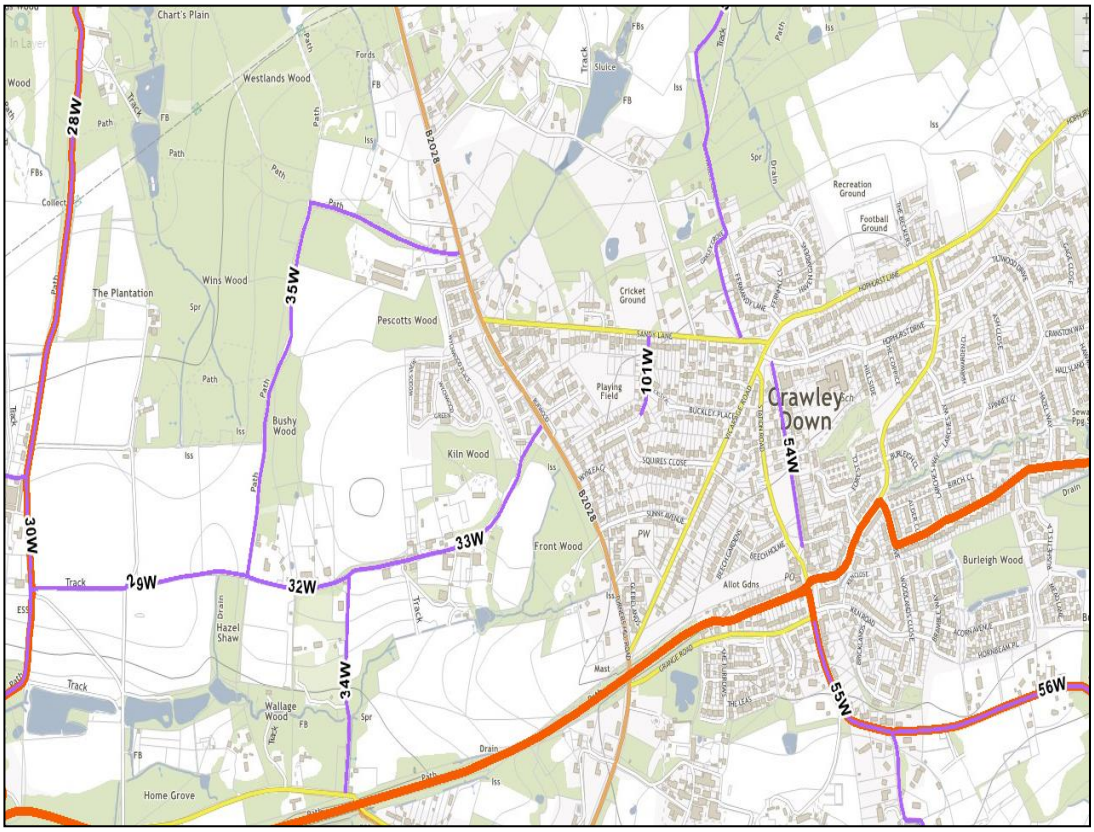
b Footpath 29W continues west outside the site to the Sussex Border Path (30W and 28S).

c Footpath 34W is a north-south route largely within the southern part of the site, linking Huntsland with Wallage Lane. There is also a stepped connection to the Worth Way cycle route.

d Footpath 35W connects Huntsland and Turners Hill Road north of the site. The footpaths run outside the study area although 35W is close to the western boundary of the northern part of the study area.

e Finally, the orange line is a bridleway known as Worth Way. It connects Crawley Down with Crawley and East Grinstead.

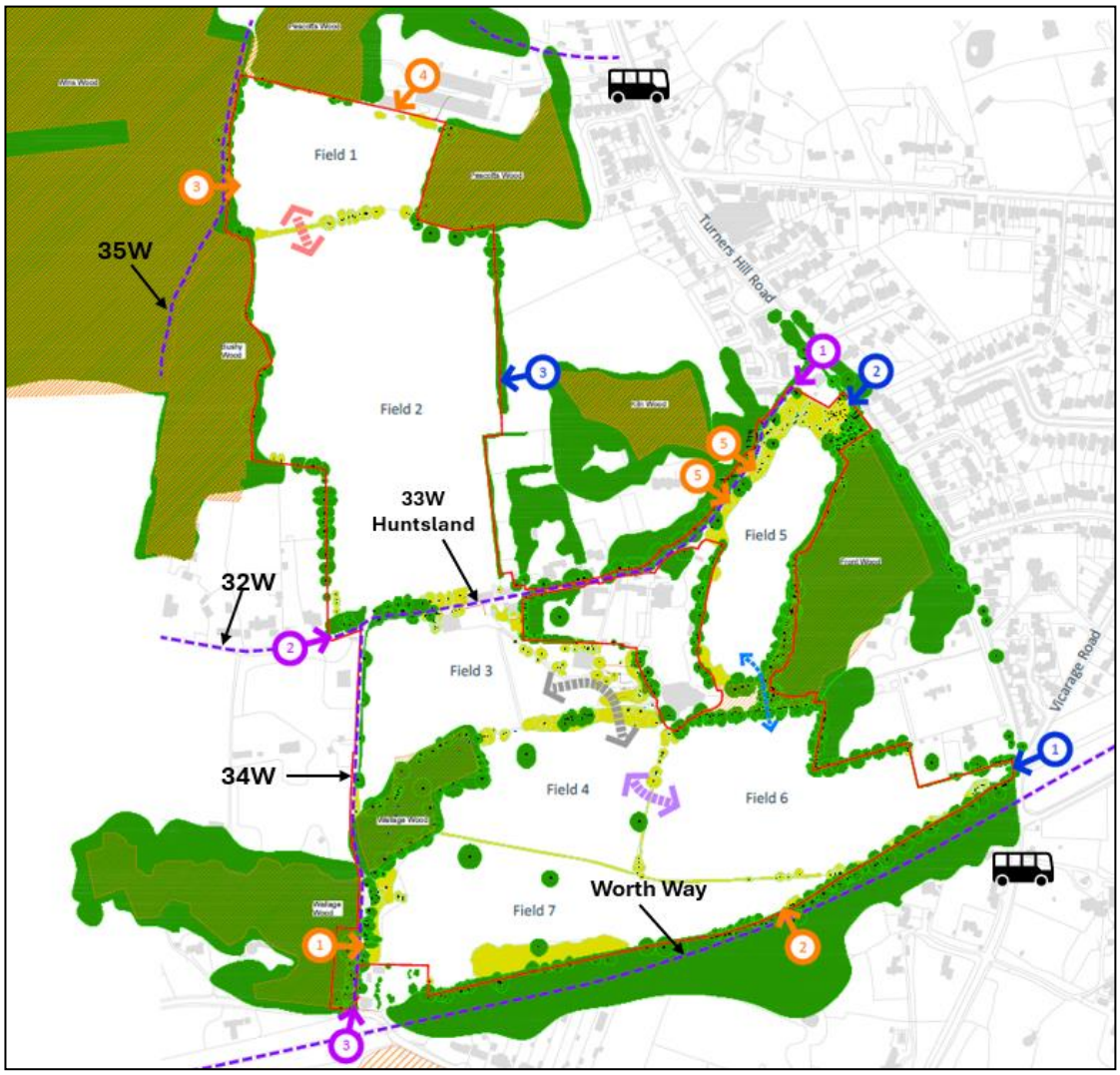
Image 3.3: Public Rights of Way



Source: WSCC iMAP

3.2.8 The plan below shows the location of the Rights of Way in relation to the site boundary:

Image 3.4: Public Rights of Way in relation to study area



Source: Mosaic

Key:

Blue: Vehicular access (1: from opposite Vicarage Lane; 2: from south of Huntsland; 3: from Wychwood Place.

Purple: Pedestrian accesses from existing footpaths (1 and 2: from Huntsland; 3: from footpath 34 W (within site).

Orange: New pedestrian / cycle connections (1: from footpath 34W; 2: from Worth Way (including cyclists); 3: from footpath 35W; 4: from Hurst farm (including cyclists); 5: from Huntsland).

Cycling Infrastructure

3.2.9 The majority of the roads in the vicinity of the site are single carriageway, residential in nature and subject to a 30mph speed limit, and therefore will be seen as cyclable by many. Additionally, the National Cycle Route (21) is located immediately south of the site on the Worth Way bridleway. This route is a predominantly an off-road cycle route connecting East Grinstead, Crawley Down and Crawley. The cycle track is largely traffic free (entirely so leading into Crawley Down) and provides a wide (typically 2-3m) gravel surface.

3.3 Public Transport

Bus

3.3.1 The nearest bus stops are provided on Turners Hill Road south of Grange Road, approximately 600m from the application site. The bus stops are marked by flags and poles with RTPI boards and are served by the 272 route, providing services towards Crawley, Haywards Heath and Burgess Hill.

3.3.2 A further bus stop is provided on Turners Hill Road adjacent to the Wychwood Place and Sandy Lane junctions, circa 950m from the application site. Both stops have flagpole and timetable information and RTPI boards and are served by a broader number of services including the 272, 281 and 291.

3.3.3 A summary of the bus services that operate at these stops is provided in **Table 3.1**.

Table 3.1: Summary of Bus Services

Service	Bus Stop	Route	Frequency		
			Mon-Fri	Saturday	Sunday
272	Grange Road and Sandy Lane	Brighton – Haywards Heath – Burgess Hill - Crawley	Every 1 - 2 hours First: 10:34 Last: 22:40	Every 2 - 3 hours First: 09:22 Last: 18:23	No service
281	Sandy Lane	Crawley – Three Bridges – Crawley Down – East Grinstead – Lingfield	Hourly between 06:55 and 16:27 Last service: 18:27	Hourly between 08:00 and 17:44	No service
291	Sandy Lane	Crawley – Three Bridges – Crawley Down – East Grinstead – Tunbridge Wells	Hourly between 06:27 and 00:35	Hourly between 08:29 and 00:35	Every 1 - 2 hours between 10:21 and 20:04

Source: Bustimes.org

3.3.4 The journey time by bus to the centre of East Grinstead is approximately 20 minutes, to Three Bridges rail station it is circa 18 minutes and to Crawley it is approximately 25 minutes. From Three Bridges station, a 5-minute train to Gatwick Airport departs every 3-7 minutes.

3.3.5 Services 281 and 291 also provide access to Imberhorne Secondary School with a half price fare for children. Both services stop at the upper school campus, and service 281 also stops at the lower school campus. Additionally, services 624 and 643 are term time buses serving the school and pass-through Crawley Down. The 905-bus service is a 'closed door' service serving Crawley Down for entitled school children only.

3.3.6 There are good services towards key destinations from Monday to Saturday, WSCC's previous pre-application comments requested improvements be considered to bus services. Further details of emerging potential improvements are outlined in Section 5.

Rail

3.3.7 Three Bridges Rail Station is located circa 5km to the west and East Grinstead Rail Station is circa 8.3km to the east. Both stations provide frequent services towards East Croydon, Clapham Junction and London. Additionally, Three Bridges provides services towards Haywards Heath, Burgess Hill, and Brighton.

3.3.8 Both stations can be accessed via the 281 or 291 bus service, and additionally Three Bridges and East Grinstead are accessible by bike via Worth Way (approximately a 15-minute cycle ride to Three Bridges and 19 minutes to East Grinstead). Both stations have sheltered storage with CCTV (226 at Three Bridges and 96 at East Grinstead).

3.3.9 A summary of the rail services from Three Bridges and Crawley stations is provided below.

Table 3.2: Summary of Rail Services

Station	Destination	Peak Frequency	Off-peak Frequency	Average Journey Time
Crawley	East Croydon	5 per hour	4 per hour	33 minutes
	Clapham Junction	3 per hour	2 per hour	36 minutes
	London Victoria	4 per hour	4 per hour	46 minutes
	Barnham**	2 per hour	2 per hour	46 minutes
	Gatwick Airport	5 per hour	4 per hour	11 minutes
Three Bridges*	Horsham	4 per hour	4 per hour	15 minutes
	London Bridge	8 per hour	8 per hour	45 minutes
	Haywards Heath	4 per hour	4 per hour	10 minutes

Station	Destination	Peak Frequency	Off-peak Frequency	Average Journey Time
	Brighton	4 per hour	4 per hour	31 minutes
	Gatwick Airport	10 per hour	10 per hour	5 minutes

*Three Bridges also provides services to the same destinations as Crawley

**Onward connections provided towards Chichester, Portsmouth, and Southampton

3.4 Local Highway Network

3.4.1 This local highway network comprises the following links.

- **Turners Hill Road**:
  - A single carriageway north-south link, with a 40mph speed limit, which reduces to 30mph approximately 150m north of Wychwood Place. The speed limit remains 30mph all the way through the village until around 200m south of Grange Road.
  - An Automatic Traffic Counter (ATC) was placed on Turners Hill Road, south of Huntsland for 7days between 9th November 2023 and 16th December 2023. The average hourly daytime traffic flow (07:00-19:00) is circa 344 vehicles northbound and 337 southbound and the 85th percentile speed is 35.7mph in the northbound direction and 35.6mph in the southbound direction.
- **Vicarage Road**:
  - A single north-south residential street subject to a 30mph speed limit. Routing north provides a connection to Hophurst Lane, and routing south provides a connection to Turners Hill Road.
  - An ATC was placed on Vicarage Road between 9th November 2023 and 16th December 2023, south of Squires Close and demonstrated that there is an average hourly traffic flows of c. 60 vehicles northbound and 101 vehicles southbound.
- **Sandy Lane**:
  - A single carriageway east-west route with residential properties on the western side of the carriageway. Routing east provides a connection to Hophurst Lane, whilst west provides a connection to Turners Hill Road. The link is subject to a 30mph speed limit.

- An ATC was placed on Sandy Lane between 9th November 2023 and 16th December 2023, west of Gardener Lane and demonstrated that there is an average hourly daytime traffic flow of c. 120 vehicles eastbound and 77 vehicles westbound.

- **Wychwood Place**:
  - A single residential road which links from Turners Hill Road and forms the main residential spine road through the permitted new residential estate. It is typically 5 to 5.5m wide with 2m footways provided.

- **Grange Road**:
  - A single east-west residential road connecting from Turners Hill Road to Station Road, subject to a 30mph speed limit.

- **A264 Copthorne Common Road:**
  - A single carriageway link which is subject to 50mph speed limit. This link is approximately 8.0m wide throughout and provides a connection between the M23 in the west and Dukes Head Roundabout in the east. This A road (via Turners Hill Road) is the principal connection between Crawley Down and Crawley itself.

- **B2028 North Street:**
  - A single carriageway north-south route, which is a continuation of Turners Hill Road and leads south to the village of Turners Hill. This link is subject to a 30mph speed limit and is approximately 5.0 – 6.0m throughout.

Key Junctions for Traffic Impact Analysis

3.4.2 With the agreement of WSCC, the junctions the subject of capacity testing in this report are:

1. M23 Junction 10 interchange.
2. Copthorne Way three-arm roundabout.
3. Brookhill Road / Copthorne Way / Copthorne Common Road five-arm roundabout.
4. Dukes Head roundabout.
5. Turners Hill Road / Sandy Lane junction.
6. Hophurst Lane / Sandy Lane / Vicarage Road junction.

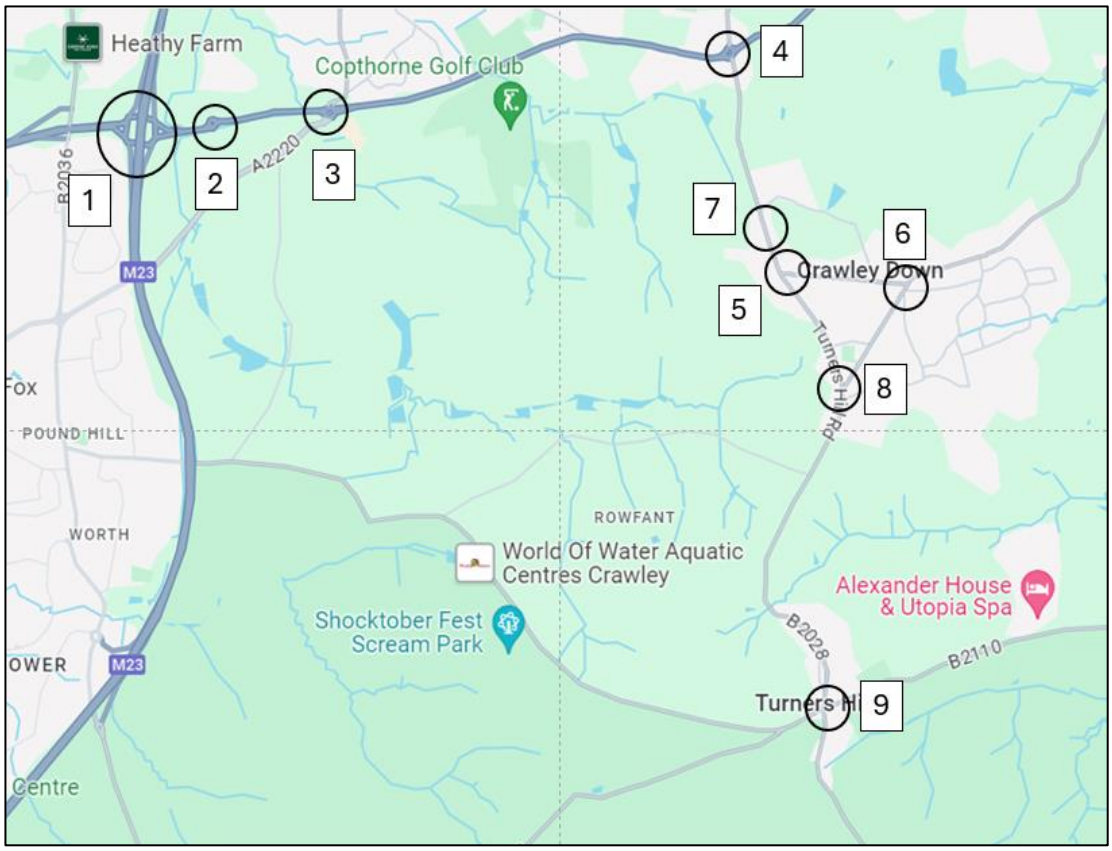
7 Wychwood Place / Turners Hill Road junction.

8 Southern Site Access / Turners Hill Road / Vicarage Road junction.

9 B2018 / B2110 North Street / East Street / Selsfield Road / Church Road crossroads.

3.4.3 The locations of these key junctions are illustrated below:

Image 3.5: Key junctions within the Study Area



Traffic Survey Data

3.4.4 In order to understand the existing traffic conditions of the local highway network, surveys were undertaken between Thursday 9th November – Wednesday 16th November 2023. This included 24 hour Automatic Traffic Counts (ATCs) along Turners Hill Road, Sandy Lane and Vicarage Road and Manual Classified Counts (MCCs) and queue length surveys were undertaken at the key junctions above on Tuesday 14th November 2023, between 07:00 and 10:00 hours and 16:00 and 19:00 hours.

3.4.5 **Table 3.3** summarises the traffic survey data at the key junctions during the peak periods. A full copy of the traffic survey data can be provided upon request.

Table 3.3: Traffic Survey Summary

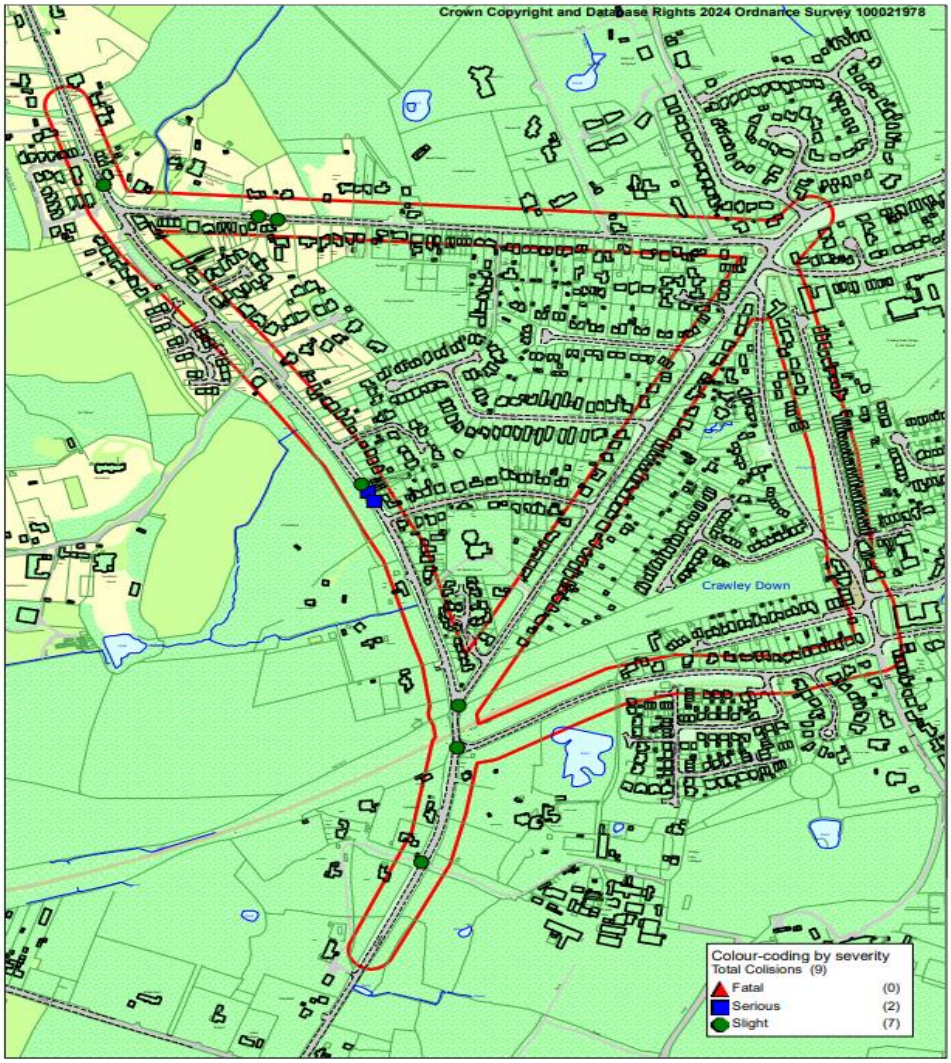
Road	Direction	Morning Peak Period (08:00-09:00)	Evening Peak Period (17:00-18:00)	85th Percentile Speed
Turners Hill Road (north of Wynlea Close)	Northbound	386	339	35.7
	Southbound	346	455	35.6
Sandy Lane (west of Gardner Lane)	Eastbound	90	164	31.9
	Westbound	87	78	31
Vicarage Road (between Squires Close and Sunny Avenue)	Northbound	62	75	36.6
	Southbound	137	97	33.8
A264 west of Dukes Head roundabout	Eastbound	1,153	1,099	-
	Westbound	976	1,016	-
Copthorne Way east of M23 Junction 10	Eastbound	1,071	1,136	-
	Westbound	1,069	1,172	-

Source: Traffic Surveys

3.5 Personal Injury Accident Data

3.5.1 Personal Injury Accident (PIA) data has been obtained from Sussex Safer Roads Partnership for the latest available five-year period (1st April 2019 – 31st March 2024) for the area shown in **Image 3.6**.

Image 3.6: PIA Study Area



3.5.2 In total there have been nine accidents recorded in the study area, of which two were classed as 'serious' and seven classed as 'slight', a summary of the accidents is provided below.

Turners Hill Road

3.5.3 Of the nine accidents, seven were recorded on Turners Hill Road, including five slight and two serious.

3.5.4 A serious incident occurred 40m from junction with Sunny Avenue, when the driver of a vehicle lost control and span into the middle of the road causing a collision with an oncoming vehicle. The causation factor was cited as careless driving and a slippery road due to wet weather conditions.

3.5.5 A second serious incident occurred 30m from junction with Sunny Avenue when a vehicle was travelling southbound and a pedestrian stepped out into the road behind a parked van. The pedestrian was struck by the vehicle resulting in serious injury.

3.5.6 The five slight accidents were as follows:

1 A vehicle turned into Turners Hill Road from Grange Road, failing to look properly, and swerved into the path of a motorcycle causing the driver to fall off.

2 A vehicle turned out of Grange Farm shop and failed to look properly which resulted in a collision with an oncoming vehicle on Turners Hill Road.

3 A vehicle was travelling southbound, and a second vehicle proceeded to turn into Vicarage Road. Both vehicles failed to judge the other's speed and collided.

4 A vehicle passed a cyclist and clipped a cyclist with its wing mirror.

5 A vehicle went to overtake two cyclists. However, this distracted the cyclists, and they collided with each other causing one of the riders to fall.

Sandy Lane

3.5.7 Two slight accidents occurred on Sandy Lane:

1 A passenger allegedly grabbed hold of the steering wheel of the car they were travelling in and caused the vehicle to crash.

2 A vehicle collided with a parked van.

Summary

3.5.8 Analysis of the collision data provided by Sussex Safer Roads Partnership does not identify any particular pattern that could be exacerbated by the development (in terms of location or causal factors), with collisions occurring as a result of human error instead of operational deficiencies. However, road safety is a sensitive and important issue. Section 8 of this report therefore includes a detailed assessment of the traffic impact of development on the area.

3.5.9 The addition of a new controlled facility and traffic calming on Turners Hill Road should provide a benefit in safety terms by slowing vehicles and allowing pedestrians accessing the site to cross more safely.

3.6 Summary of Existing Conditions

3.6.1 The application site is well located with many existing connections to Crawley Down. Turners Hill Road, Sandy Lane and Vicarage Road all feature continuous footways adjacent to at least one side of the carriageway. There are signalised crossings on Turners Hill Road, connecting the site location to these continuous footways.

3.6.2 The application site is currently greenfield and features a number of PROWs. The 33W / 32W footpaths, known as 'Huntsland', route east-west within the study area and Footpath 34W is adjacent to the western side of the study area, in a north-south orientation. The Worth Way bridleway runs east-west to the south of the application site boundary.

3.6.3 The majority of the roads in the vicinity of the site are residential in nature and feature 30mph speed limits and therefore will be seen as cyclable by many. The Worth Way bridleway also acts as a predominantly traffic free cycle route connecting East Grinstead, Crawley Down and Crawley.

3.6.4 The nearest bus stops are provided on Turners Hill Road south of Grange Road, approximately 600m from the application site. Further bus stops are in the north of the village. There are good services towards key destinations Monday to Saturday. The closest rail station to the site is Three Bridges, approximately 5km to the west.

3.6.5 A review of Personal Injury Accident (PIA) data is provided. This does not identify any existing road safety concerns on the surrounding local highway network.

SECTION 4 Accessibility

4.1 Introduction

4.1.1 This section provides a review of the accessibility of the proposed development to local facilities via walking or cycling, including employment, education, healthcare, leisure and retail. The study area's allocation and nearby development set a precedent that the application site is acceptable in transport terms and is located in a sustainable location.

4.2 Existing Travel Patterns

4.2.1 The *Method of Travel to Work* data from the 2021 Census for the MSOA Mid Sussex 005 has been used to identify the current mode share in the local area.

4.2.2 **Table 4.1** summarises the existing methods of travel to work, excluding those who are unemployed and those who work from home.

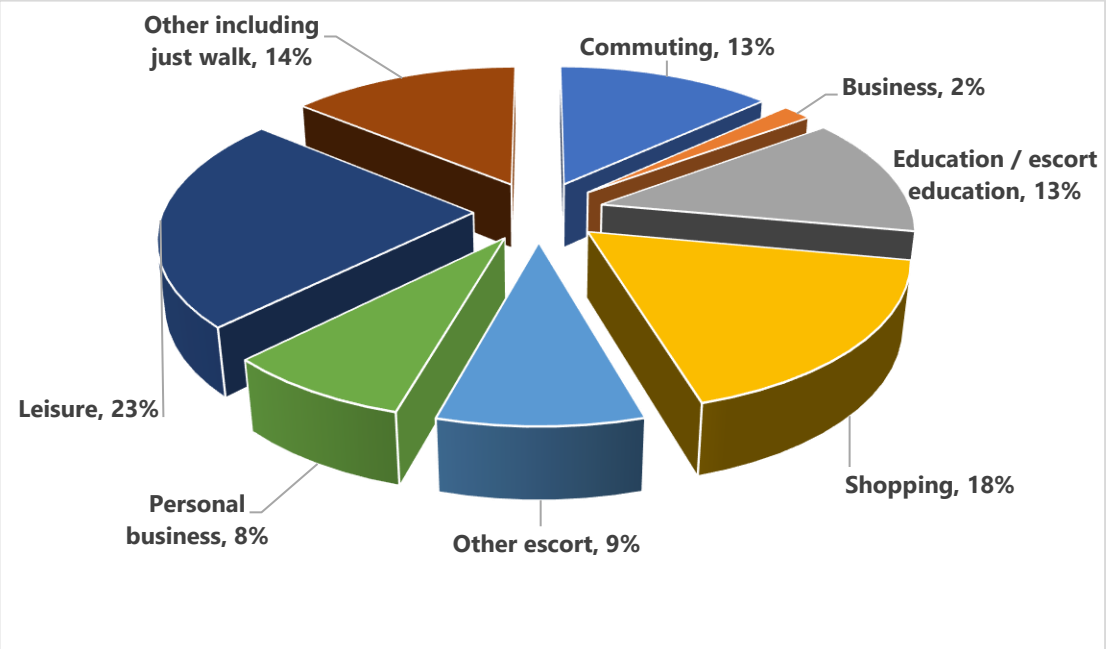
Table 4.1: Method of Travel to Work

Method of Travel	Proportion of Trips (Census 2021)
Driving a car or van	82%
Train	3%
On Foot	5%
Passenger in a car or van	5%
Bus, minibus, or coach	2%
Bicycle	1%
Motorcycle, scooter or moped	1%
Other method of travel to work	1%
Total	**100%**

Source: Census 2021 – MSOA Mid Sussex 005

4.2.3 The Department for Transport's National Travel Survey identifies the reasons for making a journey. The proportion of all trips by purpose (by all modes) is set out in **Image 4.1**.

Image 4.1: Proportion of Trips per Year by Journey Purpose – 2021



Source: Chart NTS0409a of Transport Statistics Great Britain – 2021 Edition

4.3 Walking and Cycling Distances

4.3.1 The distances that people are typically prepared to walk are based on empirical evidence. The following distances are applied for the purpose of assessing the likelihood of walking journeys to and from the site and have been agreed with WSCC through pre-application discussion:

- Up to 800m – comfortable walking distance.
- Between 800m and 1.6km – reasonable walking distance.
- Between 1.6km and 3.2km – acceptable walking distance.

Cycling Distances

4.3.2 For the purposes of the TA, the sustainable transport strategy also sets out what constitutes a cyclable distance:

- 5km cycling distance - desirable cycling distance.
- 8km – acceptable cycling distance.

4.4 Access to Local Facilities and Services

4.4.1 The primary destinations for future residents of the proposed development within the local area are presented in **Table 4.2**. This includes facilities for education, leisure, retail, employment and healthcare.

4.4.2 Distances from the site to the local facilities and services have been measured based on actual walking routes. A comparison with the land in the north of the site, which falls within the wider study area, is also provided.

Table 4.2: Local Facilities and Services

	Wider Study Area			Application Site		
Destination	Total Distance (m)	Walking Journey Time (mins)	Cycling Journey Time (mins)	Total Distance (m)	Walking Journey Time (mins)	Cycling Journey Time (mins)
Employment						
Silverwood Industrial Estate	2000	24	8	2620	31	10
Rowfant Business Centre	3500	-	13	3020	36	11
Barns Court	1550	18	6	1720	20	6
Local Businesses, Sandy Lane	700	8	3	1520	18	6
Leisure						
Crawley Down Village Hall	700	8	3	1120	13	4
All Saints Parish Church Crawley Down	850	10	3	620	7	2
The Haven Centre	1700	15	5	1500	8	3
King George V Playing Field	1100	13	4	1520	18	6
Allotments at Vicarage Road	1200	14	5	520	6	2
Effingham Park Golf Course	2500	30	9	3200	38	12
Crawley Down Gatwick Football Club	1700	20	6	1500	18	6
The Carriage Restaurant	2000	24	8	1100	13	4

	Wider Study Area			Application Site		
Prizefighters Fish and Chips	700	8	3	1250	15	5
Retail						
The Grange Farm Shop	1450	17	5	720	9	3
Co-op Food	1800	21	7	1100	13	4
Asda Express & Esso	2100	25	8	2900	35	11
Crawley Down Post Office	1700	20	6	920	11	4
Education						
Crawley Down Village CofE Primary School	1600	19	6	1300	16	5
Donkey Field Pre-School	1800	21	7	1350	16	5
Health						
Crawley Down Health Centre	1600	19	6	1400	17	5
Elm House Dental Practice	1800	21	7	1000	12	4
Crawley Down Pharmacy	1700	20	6	8550	10	3
Crawley Down Dental	700	8	3	1120	13	4

Key:

Within a desirable walking (800m) / cycling (5km) distance

Within a comfortable walking (1.6km) / cycling (8km) distance

Within an acceptable (3.2km) walking distance

Source: Consultants Estimates

4.4.3 **Table 4.2** demonstrates that there is a wide range of everyday facilities within a comfortable or reasonable walking distance for the whole development site. This includes education, convenience retail, healthcare, and employment opportunities. The journey distances have been measured from the centre of the application site.

4.4.4 It is worth noting that the nearest secondary school is Imberhorne School, located 3.3km to the east and can be accessed along Worth Way; a circa 16-minute cycle.

4.4.5 Alternatively, the following bus routes serve the development and the school:

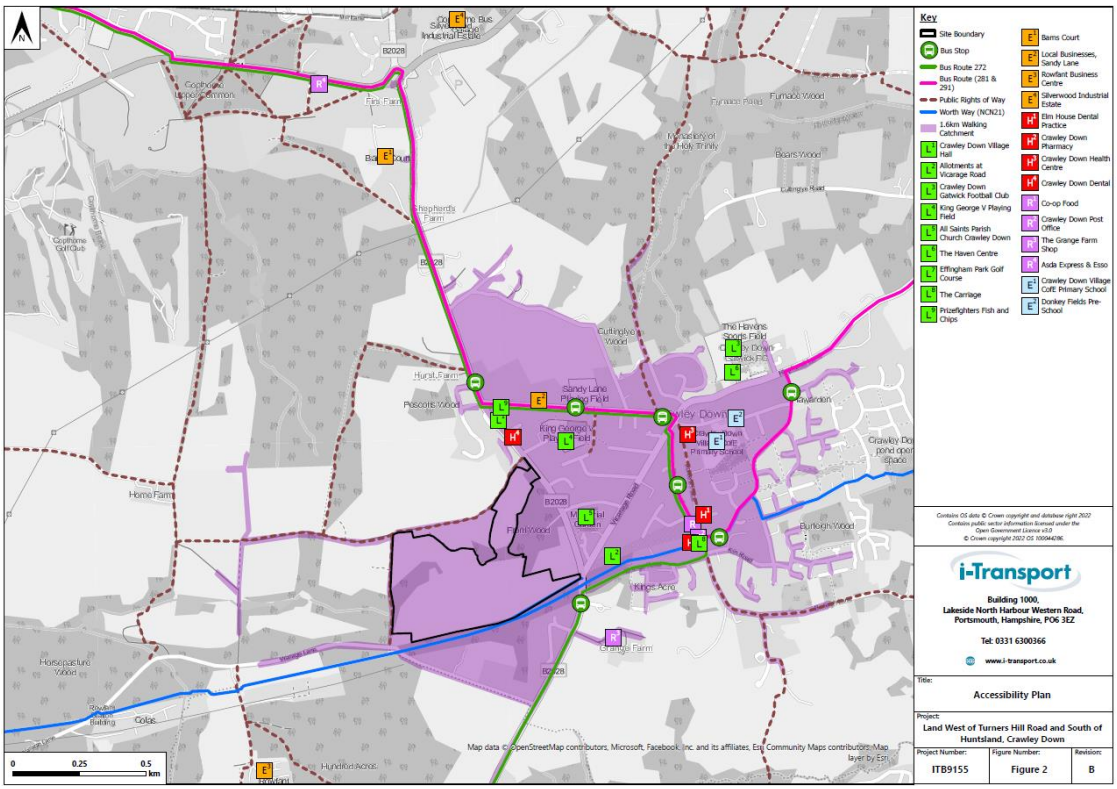
- Bus route 291 serves the upper school from the bus stops adjacent to Wychwood Place.

- Bus Route 281 serves both the upper and lower schools from the bus stops adjacent / opposite Wychwood Place.
- Bus Route 243 is a school only service serving the upper and lower schools from the bus stops adjacent / opposite Wychwhood Place
- Bus Route 264 is a school only service serving the upper and lower schools from the bus stops adjacent / opposite Grange Road.

4.5 WSCC also operate route 905 to Imberhorne School for entitled school children only.

4.5.1 The location of facilities in the context of the site are illustrated on **Figure 2**, extracted in **Image 4.3**.

Image 4.2: Local Accessibility Plan



4.6 Key Sustainable Travel Routes

4.6.1 i-Transport has undertaken a Healthy Streets Assessment (HSA) of how key destinations can be reached from the site by active travel. The audit assesses the quality of the walking and cycling routes. The Healthy Streets Assessment informed the sustainable transport strategy in Section 6.

4.6.2 The routes that have been audited are:

1 North of site to northern bus stops.

2 Huntsland to northern bus stops.

3 Wychwood Place to Crawley Down CofE Primary School via Sandy Lane.

4 South of site to Crawley Down CofE Primary School via Vicarage Road.

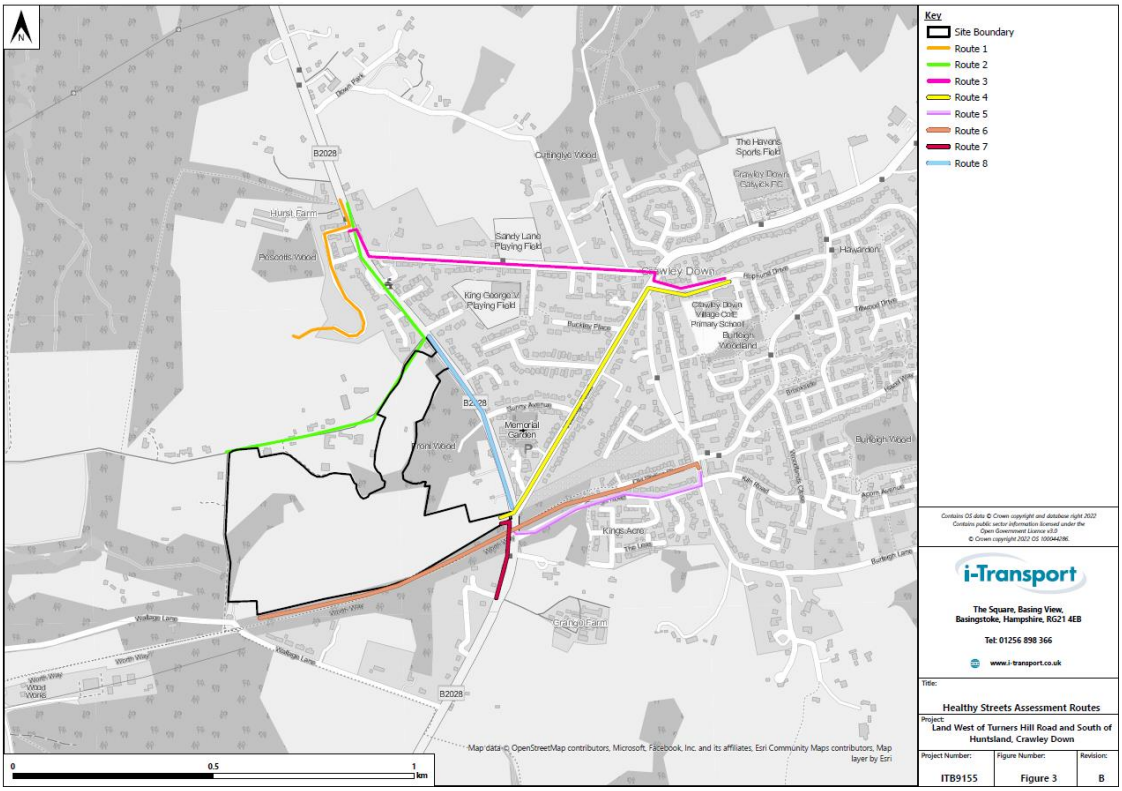
5 South of site to village centre via Grange Road.

6 South of site to village centre Via Worth Way.

7 South of site to southern bus stops via Turners Hill Road.

8 Turners Hill Road between Huntsland and Vicarage Road.

Image 4.3: Healthy Streets Assessment Routes



4.6.3 The assessment audited each of the eight routes and scored them against Active Travel England's 10 *Healthy Street Indicators*. Each route was given a score between 5 (highest score) to 0 (lowest score) for each indicator.

4.6.4 In summary, whilst many of the routes scored well in the Healthy Streets Assessment, there were some opportunities for improvement identified, as follows:

i Short section of Wychwood Place with no footway between the first and second application sites.

ii Scope to improve the bus stops both north and south of the village (e.g. raised kerbs).

iii Potential to improve crossing for pedestrians both across Vicarage Road and across minor arms intersecting with it.

iv Lack of formal pedestrian crossing on Turners Hill Road near the southern end of the site.

v Scope to improve the surface of Worth Way between the site and Old Station Close (a major desire line to the village from the southern part of the site).

vi Relatively narrow footway on Turners Hill Road south of Grange Road.

vii Potential to improve crossing for pedestrians crossing Grange Road and Turners Hill Road when accessing northbound bus stop south of the site.

viii Potential to improve crossing for pedestrians on minor arms intersecting with Turners Hill Road and Vicarage Road east of the site.

ix Potential to introduce traffic calming on Turners Hill Road.

4.6.5 The off-site works proposed as part of this planning application have been derived based on both this Healthy Streets Assessment and through scoping discussions with West Sussex County Council, Mid Sussex District Council. Full details of the offsite works proposed as part of this planning application are provided in Section 6 of this Transport Assessment.

4.7 Summary

4.7.1 The principle that the application site and wider study area provide a sustainable location for development has been established by their allocation in the Mid Sussex District Plan for residential led development (*ref: Policy DPA9)*.

4.7.2 There is a good range of facilities and services within a reasonable walking or cycling distance from both the northern and southern development areas. There are also opportunities for travel by public transport into East Grinstead, Three Bridges and Crawley.

4.7.3 Local transport infrastructure already provides well for walking and cycling although scope for improvements has been identified within a Healthy Streets Assessment. The sustainable transport strategy is presented at Section 6 and outlines a strategy for ensuring the prioritisation of sustainable transport.

SECTION 5 Access and Internal Layout Considerations

5.1 Introduction

5.1.1 This section of the TA summarises the proposed site access arrangements to the local highway network, along with layout considerations including provision to be made for servicing and parking provision, taking into account that the application is outline only.

5.1.2 This TA relates to one of two planning applications for the wider study area. The description of development is as follows:

> ***"Outline planning application (appearance, landscaping, layout and scale reserved) for the erection of up to 200 dwellings, and associated infrastructure including new access points off of Turners Hill Road with associated spine roads and car and cycle parking; the provision of open space and associated play facilities; utilities infrastructure, surface water drainage features, and associated features, on land west of Turners Hill Road and south of Huntsland, Crawley Down, West Sussex."***

5.1.3 Three points of access onto Turners Hill Road are proposed to serve the study area. Providing three points of access will help disperse traffic increases on the local highway network and provide access into each land parcel. This is in line with policy DPA9, criteria 9, which states:

> ***"Provide suitable access to Turners Hill Road to each of the three areas of the site. The northern access is to be via Wychwood Place and the middle access and route through site is to be separate from Huntsland which will remain a no through road and public rights of way."***

5.1.4 The overall site access strategy is presented in **Image 5.1**, which identifies the location of the three accesses. The vehicular accesses have been agreed in principle with WSCC during pre-application discussions, and subject to a Stage 1 Road Safety Audit.

Image 5.1: Site Access Strategy

Source: Illustrative Masterplan

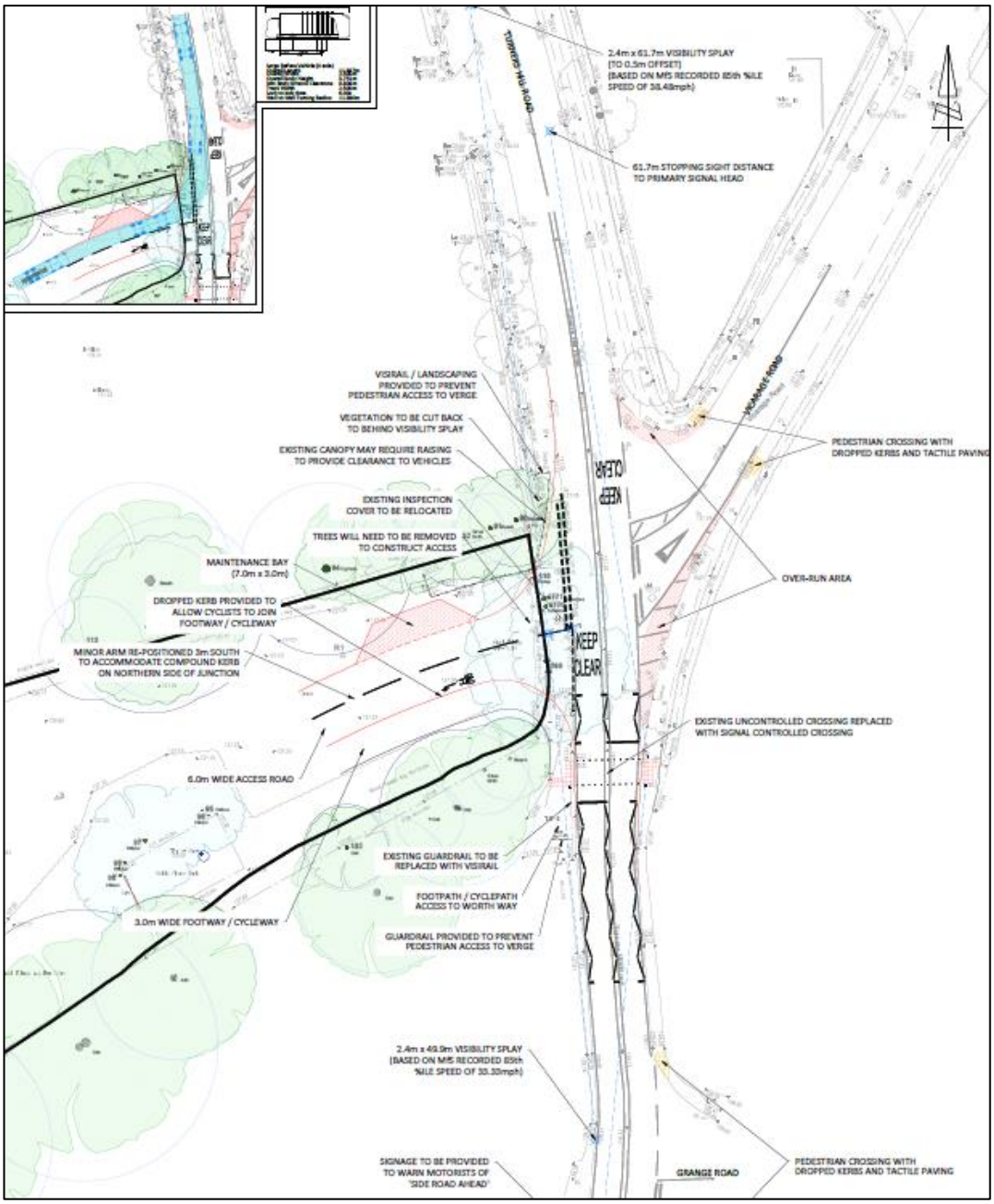
5.1.5 There are no vehicular through routes proposed for vehicular traffic between the three separate accesses although access will be provided between the parcels for pedestrians, cyclists and emergency vehicles.

5.1.6 The application site will be served by accesses 1 and 2. Access 3 will serve the application site to the north. Further information is provided below.

5.2 Access 1: Southern Site Access (opposite Vicarage Road)

5.2.1 The southern access will serve up to around 150 homes at the application site and will take the form of a priority junction, close to the junction with Vicarage Road. This access arrangement is presented on Drawing **ITB9155-GA-29I** which is extracted below.

Image 5.2: Southern access priority junction



Source: Drawing ITB9155-GA-29I

5.2.2 The site access has the following geometric attributes:

- Carriageway width of 6m.
- Forms a slight left-right stagger with Vicarage Road (7m separation from centre line to centre line).
- 3m footway / cycleway on southern side of access, with local widening.
- Dropped kerb / tactile paving signal-controlled crossing on Turners Hill Road and uncontrolled crossing on Vicarage Road.
- Visibility splays at new minor arm at a 2.4m set back of:
  - To the left: 61.7m (appropriate for observed 85th percentile speeds of 38.5 mph).[2]
  - To the right: 49.9m (appropriate for observed 85th percentile speeds of 33.3mph).
- Forward visibility of the same distances to at least one signal head[3]

5.2.3 The access was subject to a Road Safety Audit in 2022, based on an earlier version of the drawing ITB9155-GA-029A. Road safety audits are included in **Appendix B**. A Designer's Response has been provided in **Appendix C**, which outlines how drawing ITB9155-GA-029H addresses the comments made.

5.2.4 Swept path analysis drawings confirm that a refuse collection vehicle can manoeuvre into and out of the access. These are presented at **Appendix D**.

5.2.5 Drawing ITB9155-GA-029I is a minor update to that drawing which picks up WSCC's request for the addition of a signal-controlled drawing as well as other detailed comments provided by WSCC's signals team.

5.2.6 The access design has therefore undergone extensive scrutiny by both WSCC and a safety auditor and found to be acceptable in design terms. Section 8 confirms that the junction will operate within capacity.

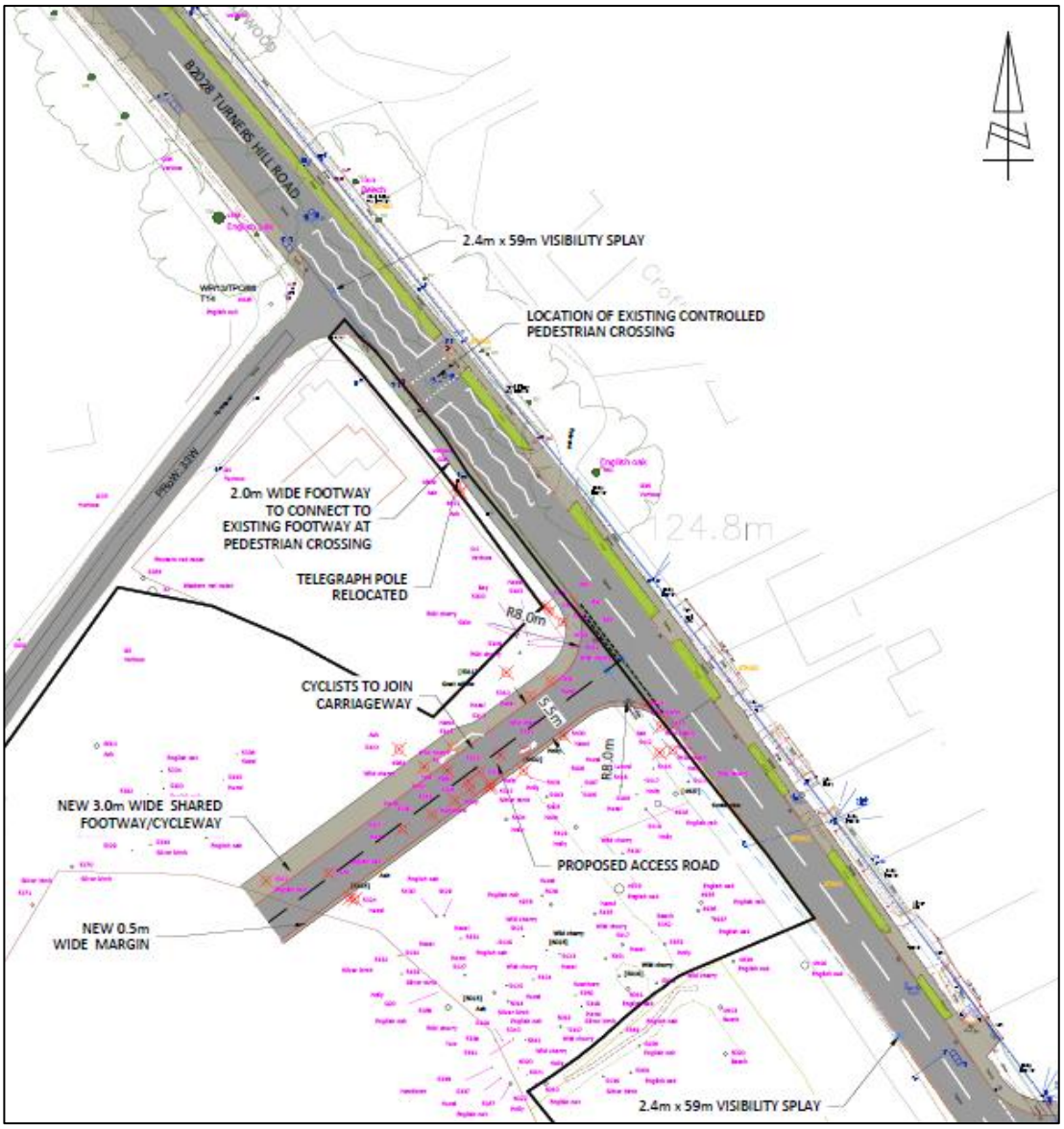
[2] The 85th percentile speeds are derived from ATCs undertaken in 2022 prior to design of the junction. They were presented to WSCC in Scoping Note ITB9155-035 TN, dated 26 August 2022. Surveys to be published upon request.

[3] In accordance with paragraph 7.2 of DMRB CD123 Geometric Design of At-Grade Priority and Signal-Controlled Junctions

5.3 Access 2 – Central Access (south of Huntsland)

5.3.1 This access will take the form of a simple priority junction onto Turners Hill Road, as presented in Drawing **ITB9155-GA-038G** an extract of which is provided below. It will serve up to 50 homes.

Image 5.3: New priority junction on Turners Hill Road (central access)



Source: Drawing ITB9155-GA-38G

5.3.2 The site access has the following geometric attributes:

- Carriageway width of 5.5m.
- 8m junction radii.

- 3.0m wide shared footway / cycleway adjacent to the northern side of the carriageway.
- 0.5m margin on the southern side of the carriageway.
- 2.4m x 59m visibility splays in both directions (adequate for observed 85th percentile speeds of 37mph in both directions based on MfS stopping sight distance parameters). This exceeds observed speeds based on the most recent ATCs.[4]
- Will allow refuse collection vehicles to enter and exit.
- Cyclists rejoins carriageway on approach to Turners Hill Road and footway reduces to 2m where it continues to an existing pedestrian crossing which is located on Turners Hill Road, to the south of Huntsland.

5.4 The layout takes on board the comments of a Stage 1 Road Safety Audit, provided at **Appendix B**. The Designer' Response is provided at **Appendix C**.

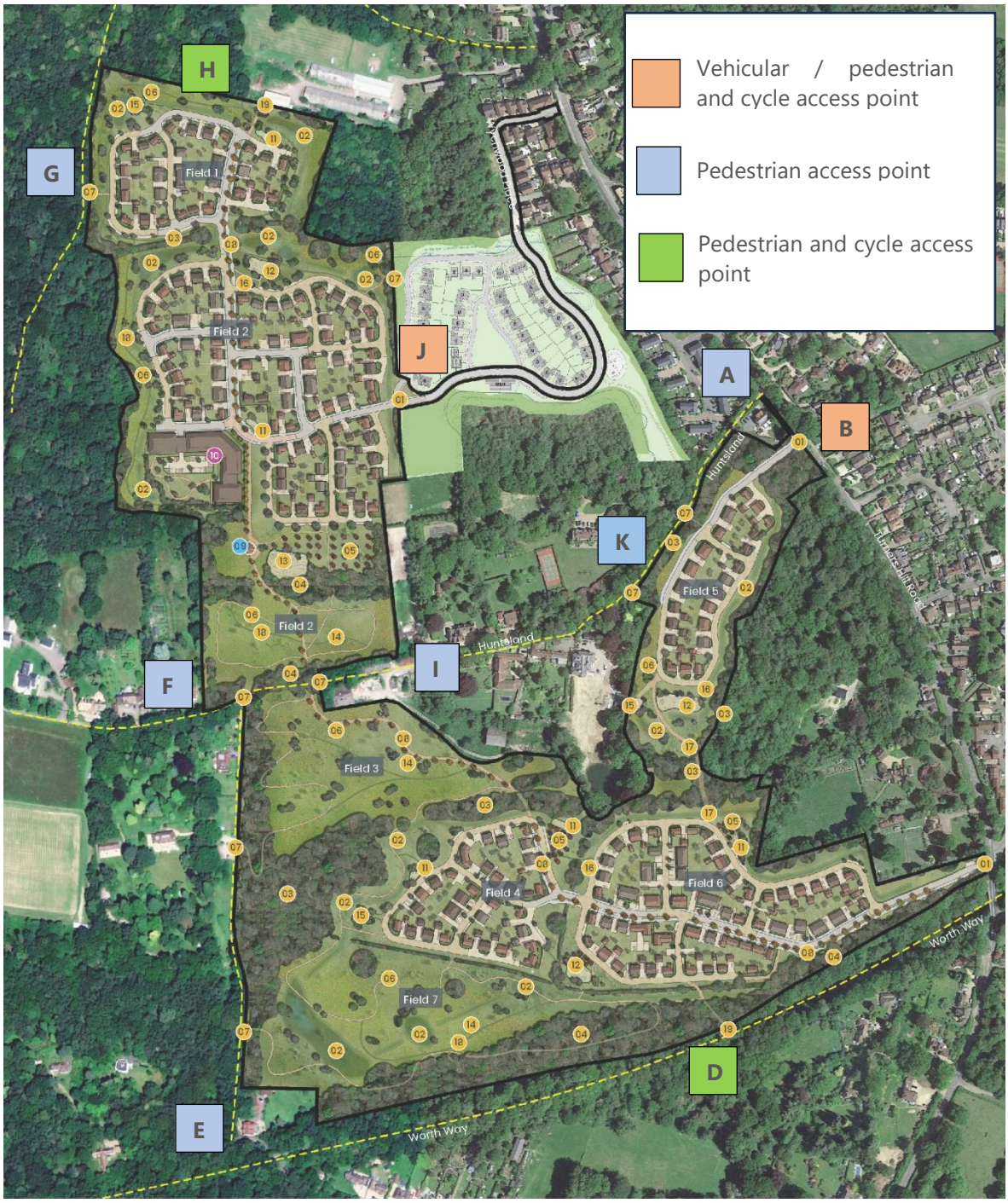
5.4.1 Swept path analysis drawings confirm that a refuse collection vehicle can manoeuvre into and out of the access. These are presented at **Appendix D**.

5.5 Pedestrian and Cycle Access

5.5.1 In addition to the main site access junctions, multiple pedestrian and cycle connections into the application site and wider study area will be provided, in accordance with Policy DPA9. **Image 5.4** provides an overview of all the connections and **Table 5.1** provides a summary of the type of connections which will be provided into both the northern and southern application sites of the development.

[4] Available upon request.

Image 5.4: Proposed Pedestrian and Cycle Strategy



Source: Illustrative Masterplan

Table 5.1: On-site Pedestrian / Cycle Connections

Connection Point	Pedestrian / Cycle Connection?	Description	Development Site
A	Pedestrian	Existing pedestrian connection into site via Huntsland (PRoW footpath 33w) from Turners Hill Road	South of Huntsland
B	Vehicular / Pedestrian / Cycle	Vehicle access onto B2028 Turners Hill Road with a shared footway / cycleway	South of Huntsland
C	Vehicular / Pedestrian / Cycle	Vehicle access onto B2028 Turners Hill Road with a shared footway / cycleway	South of Huntsland
D	Pedestrian / Cycle	Pedestrian and cycle connection with Worth Way on the southern border of the site (to site boundary with improvement works to be funded (via S106) on the bridleway to connect it to the site access)	South of Huntsland
E	Pedestrian	Pedestrian connection with Worth Way on the southwest corner of the site	South of Huntsland
F	Pedestrian	Pedestrian connection into site via Huntsland (PRoW footpath 32w)	Both
G	Pedestrian	Pedestrian connection into PRoW footpath 35W (to site boundary only)	North of Huntsland
H	Pedestrian / Cycle	Shared pedestrian and cycle connection on the northern border of the site	North of Huntsland
I	Pedestrian	Pedestrian connection into Huntsland (PRoW footpath 33w)	Both
J	Vehicular / Pedestrian / Cycle	Vehicle access with 2.0m footway	North of Huntsland
K	Pedestrian	Pedestrian connection into Huntsland (PRoW footpath 33w)	South of Huntsland

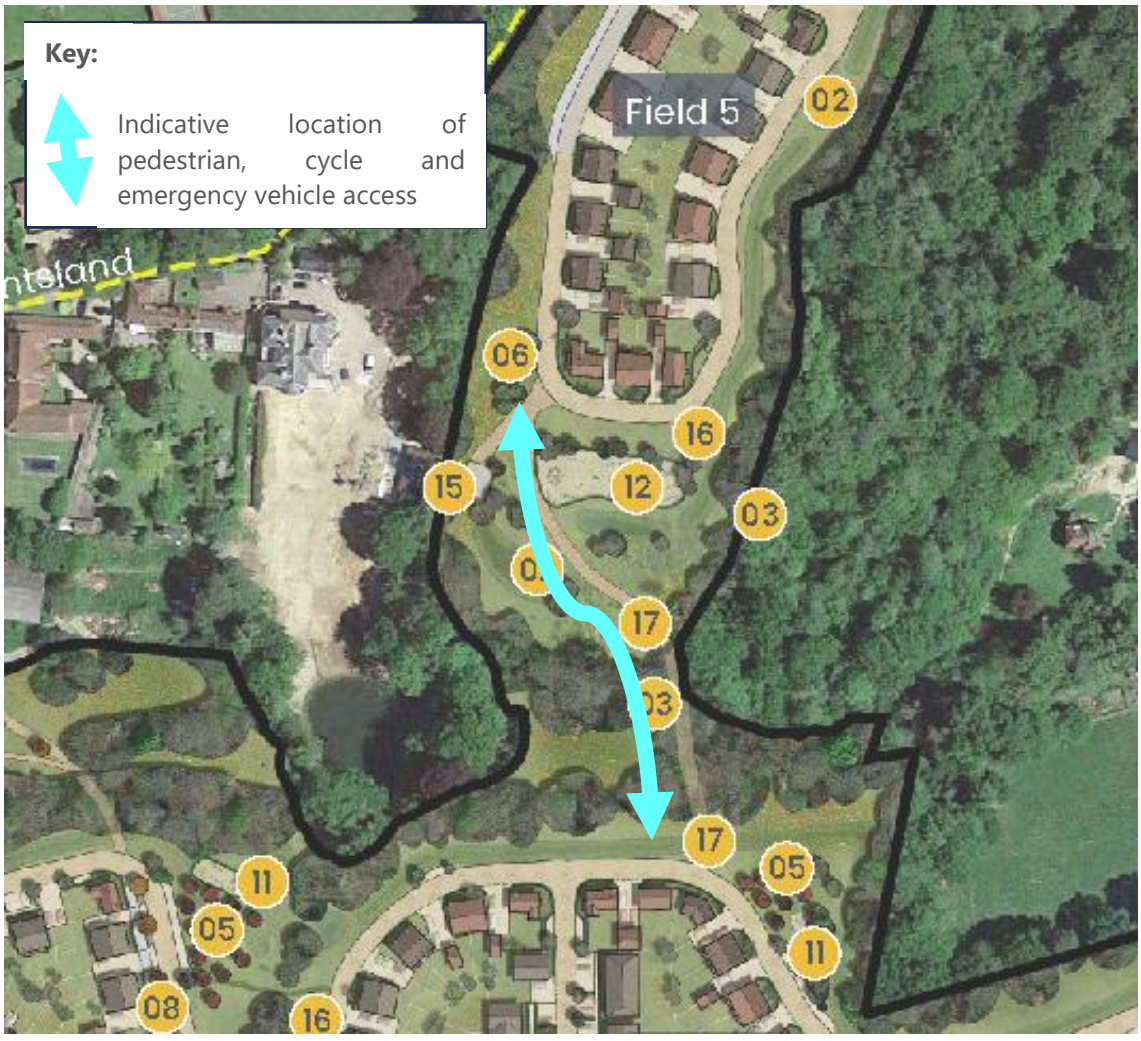
Source: Illustrative Masterplan

5.6 Emergency Link

5.6.1 There are no through routes proposed for vehicular traffic between the parcels of development which are accessible via Access 1 and Access 2. However, the internal layout of the application site does include a pedestrian and cycle link between the parcels of land which, at 3.7m in width, will also serve as an emergency vehicular access link between these parcels of development. As the access route passes through a woodland of veteran trees, the access will be sensitively designed and constructed by no-dig methods.

5.6.2 The indicative location of this emergency link is set out in **Image 5.5**.

Image 5.5: Indicative location of emergency vehicle access point



Source: Illustrative Masterplan

5.7 Internal Layout

5.7.1 The application is in outline form with all matters reserved apart from access. The purpose of the TA is therefore to enable agreement of the principle of development in transport terms and the detail of the proposed accesses. The internal site layout will be determined at Reserved Matters stage.

5.7.2 The following paragraphs provide a statement of intent for the design guidance to be used for subsequent reserved matter(s) applications.

Street Hierarchy

5.7.3 WSCC refers to Manual for Streets as their main source of guidance on design matters. The streets will be designed having regard to the following hierarchy:

Table 5.2: Proposed Street Hierarchy

Criteria	Site access roads / immediate approaches	Primary Street	Secondary Street	Shared Surface	Private Drive
Design Speed	20mph	20mph	10mph	10mph	10mph
Street Width *(Subject to tracking – widening may be needed on bends)*	5.0-6.0m	5.0-5.5m	5.0m	6m	4.1m – 4.5m
Footway Provision	2m, typically on both sides*			None	None
Cycle Provision	Typically in carriageway but network of off-carriageway shared cycleways proposed				
Service Margin	Within footway or 2m grassed margin.			Within carriageway	Within carriageway
Visibility at junctions	2.4m x 25m	2.4m x 25m	2m x 15m	2m x 15m	2m x 15m
Forward visibility requirements	25m	25m	15m	15m	15m
Forward visibility requirements	25m	25m	15m	15m	15m
Traffic Calming	Normally controlled by design. Avoid long, wide straights.			Carriageway narrowing at entry points. Parking, planting, trees to make route arduous	Street geometry lends itself to slow traffic speeds. Usually only very short in length
Junction Spacing	25m	25m / 15m	25m / 15m	N/A	N/A
Direct Vehicle Access	Yes – but away from junctions	Yes	Yes	Yes	Yes

*2m where there is development frontage. 0.5m margin can be used where a footway is not provided / not needed.

5.7.4 The suitability of the internal road layout, including junction and forward visibility assessments, will be assessed during a Reserved Matters planning applications following any outline planning permission.

Car Parking

5.7.5 The proposed development is the subject of an outline planning application and therefore future reserved matters applications will deal with the provision of car and cycle parking. These will be provided having regards to current standards or any other subsequent standards that may be adopted at that time.

5.7.6 For the purposes of the illustrative masterplan, the layout provides car and cycle parking for the residential element in accordance with the standards set out in WSCC's 'Guidance on Parking at New Developments' which are set out below in **Table 5.3**.

5.7.7 The proposed development site is located within Zone 2 of the WSCC Parking Behaviour Zone.

Table 5.3: WSCC Residential Parking Standards – Zone 2

Dwelling Type (number of bedrooms)	Number of Habitable Rooms	Minimum Number of Car Parking Spaces	Minimum Number of Cycle Parking Spaces	
			House	Flat
1	1 to 3	1.4	1	0.5*
2	4	1.7	1	0.5*
3	5 to 6	2.1	2	0.5*
4+	7 or more	2.7	2	1

**If communal storage otherwise same as 1&2 bed house*
Source: West Sussex County Council: Guidance on Parking at New Development

5.7.8 As a statement of intent, the proposed development will also provide the following:

- One visitor car parking space per 0.2 dwellings and sufficient visitor cycle parking.
- Garages will be provided with a minimum internal dimension of 6.0m x 3.0m (0.5 spaces).
- Electric vehicle (EV) charging infrastructure will be provided in accordance with the adopted EV charging standards at the time of the reserved matters application – which is currently a minimum of one charging point for each new dwelling.

5.7.9 Any future reserved matters application will ensure that adequate provision can be made on site, with the refuse collection vehicle able to turn around safely.

5.7.10 Refuse from the proposed dwellings will be collected from the kerbside on the proposed internal site access roads. Where refuse vehicle access is required, the internal carriageways will be a minimum of 5.0m wide and be built to an adoptable standard, i.e., be constructed to accommodate traffic movement including refuse vehicles.

5.7.11 The distance that residents will need to take their bins for collection will not exceed approximately 30m and the distance that refuse collectors will have to walk to collect bins for emptying will not exceed 25m, in accordance with MfS (which is based on Building Regulations).

5.8 Summary

5.8.1 Two vehicular accesses will be provided onto Turners Hill Road and collectively serve up to 200 homes (up to around 150 homes from access 1 and 50 homes from access 2).

5.8.2 A number of pedestrian and cycle connections are provided across the site and will connect to existing infrastructure, encouraging the take up of sustainable travel modes. The internal layout of the site will be permeable to pedestrians and cyclists, encouraging active travel.

5.8.3 Any future site layout will be in accordance with local car and cycle parking and electric vehicle charging standards in force at the time of any reserved matters applications. In addition, any refuse collection will be in line with MSDC's standards.

5.8.4 On this basis, safe and suitable access can be achieved, and the application site will accord with national and local design guidance, in accordance with paragraph 115 of the NPPF.

SECTION 6 Sustainable Transport Strategy

6.1 Introduction

6.1.1 The development of a comprehensive sustainable transport strategy for the site is of critical importance and has been developed in consultation with key stakeholders through the various stages of planning. Encouraging travel by sustainable modes has a key role to play in facilitating future growth against a background of differing pressures and constraints, including:

- Climate emergency.
- Reduced reliance on fossil fuels.
- Reduced congestion.
- Enhanced delivery of much needed housing on a 'busy' highway network.
- Delivering a sustainable development in transport terms.

6.1.2 A full sustainable transport strategy has been prepared and submitted to WSCC through pre-application discussions and this section presents the cumulative strategy of the study area.

6.2 The Vision

6.2.1 In accordance with NH Circular 01/2022 and emerging Government policy in the NPPF, this section of the TA presents the sustainable Transport Vision for the site. This has been the subject of pre-application discussion with WSCC.

6.2.2 The Transport Vision is outlined below:

- The application site and wider study area will provide genuine opportunities for future residents to access local facilities and services via sustainable modes – and access destinations further afield by public transport. These will be enhanced through agreed off-site infrastructure improvements.
- The development will encourage travel by active modes through the provision of off-site improvements and good on-site layout design. It will also minimise the need to travel through on-site infrastructure, e.g. connections to high speed broadband and a network of on-site cycle routes.
- A Framework Travel Plan will aim to achieve at least a 10% reduction in trips by single occupancy vehicles in line with WSCC guidance, through a means of measures including:

- Provision of car club vehicle.
- Improved transport infrastructure.
- Provision of vouchers for discounted travel by bus or cycle / cycling equipment purchase.
- Trip minimisation and containment.

6.3 Pre-application Meeting with MSDC

6.3.1 At a pre-application meeting with MSDC on 20 November 2024, the following matters were raised as points to address through the planning application:

- Pedestrian connectivity southwards across the Worth Way bridge towards the bus stops – specifically the need to access the bus stops via the eastern footway and then re-cross to the western side of the road to access the bus stops. Suggested solutions included a footbridge across the Worth Way and a relocation of the bus stop.
- Traffic speeds in that area and along Turners Hill Road in general.

6.3.2 In light of discussions with WSCC on 11 December 2024 it is agreed that:

- The southern access will introduce a signal-controlled crossing of Turners Hill Road to ensure all pedestrians entering / exiting the site benefit from a controlled crossing of Turners Hill Road and can therefore access the footway on the eastern side of the bridge for journeys south. A bridge would not be fairly and reasonably related in scale and kind to the development and thus does not reach the planning obligations set out at paragraph 58 of the NPPF. However, footway widening is proposed on Turners Hill Road, together with a new tactile paving crossing and improvements to the bus stops as described further in this section to help enhance access to this bus stop.

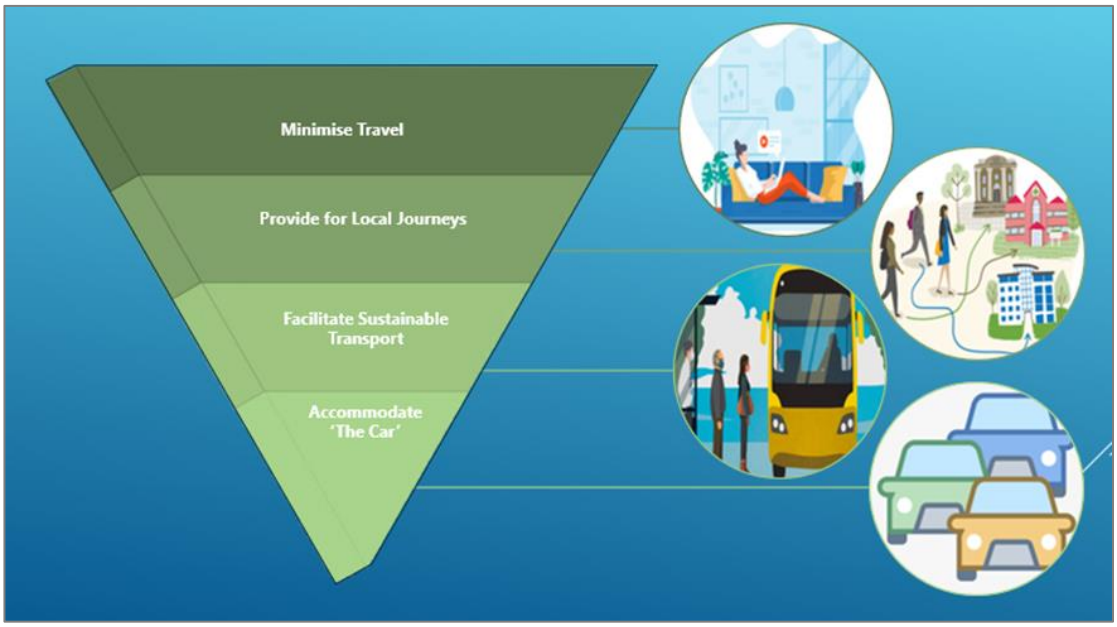
- It is noted that 85th percentile vehicle speeds on Turners Hill Road are above the posted speed limit and it is accepted that the development will increase traffic flow on Turners Hill Road. There is therefore merit in reducing traffic speeds to mitigate traffic impacts within the village. Reductions in traffic speed will particularly benefit pedestrians and cyclists – both new and existing. A traffic calming scheme within the village, incorporating visual narrowing's and repeater roundels (noting MfS is clear that reduced road widths help to lower speeds) has been developed and agreed in principle with WSCC. The scheme follows the same principles as another agreed traffic calming scheme on the B2123 in Loxwood, West Sussex. The proposal is consistent with the aspirations of Worth Parish Council and Proposal 02 of the Neighbourhood Plan.

6.4 Sustainable Transport Strategy

6.4.1 The remainder of this section outlines the sustainable transport strategy. The note incorporates comments received from WSCC during pre-application discussions.

6.4.2 The sustainable transport strategy will seek to take a 'Reduce, Contain and Facilitate Alternatives' approach to travel demands – in line with emerging Government policy and the approach required and accepted by WSCC. It is only after these steps have been taken that the strategy should allow for the mitigation of vehicular impacts.

Image 6.1: Sustainable Transport Strategy



Reduce

6.4.3 There has been a significant change in working habits that has taken place since the pandemic. Providing the necessary support for employees to work remotely, through the provision of fast broadband connectivity, will reduce the need for residents to travel off-site for work purposes. For example, by ensuring fast internet connection are provided within the home.

6.4.4 The development will also be designed to accommodate shopping deliveries, including making provision for delivery vehicles, reducing the need for residents to have to travel off-site for retail purposes.

6.4.5 The provision of comprehensive on-plot electric vehicle charging will enable residents to reduce the reliance upon traditional combustion engines, and own private vehicles that have a lessened impact on the environment, while overcoming one of the major obstacles to electric car ownership by providing dedicated facilities to enable charging.

Contain

6.4.6 As required by Policy DPA9, a community facility, care home, and public open space will be provided on the wider site, limiting the need for residents to travel off-site for certain purposes and thereby internalising trips.

Facilitate Sustainable Travel

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

6.4.8 The site will therefore deliver improvements to infrastructure surrounding the site, benefiting not only new residents but also those within the existing community. These are outlined in the following paragraphs.

Car Club

6.4.9 There is an agreement in principle to provide two electric car club vehicles within the study area for three years, with three years free membership for new residents of the site. One car will be provided in each application site.

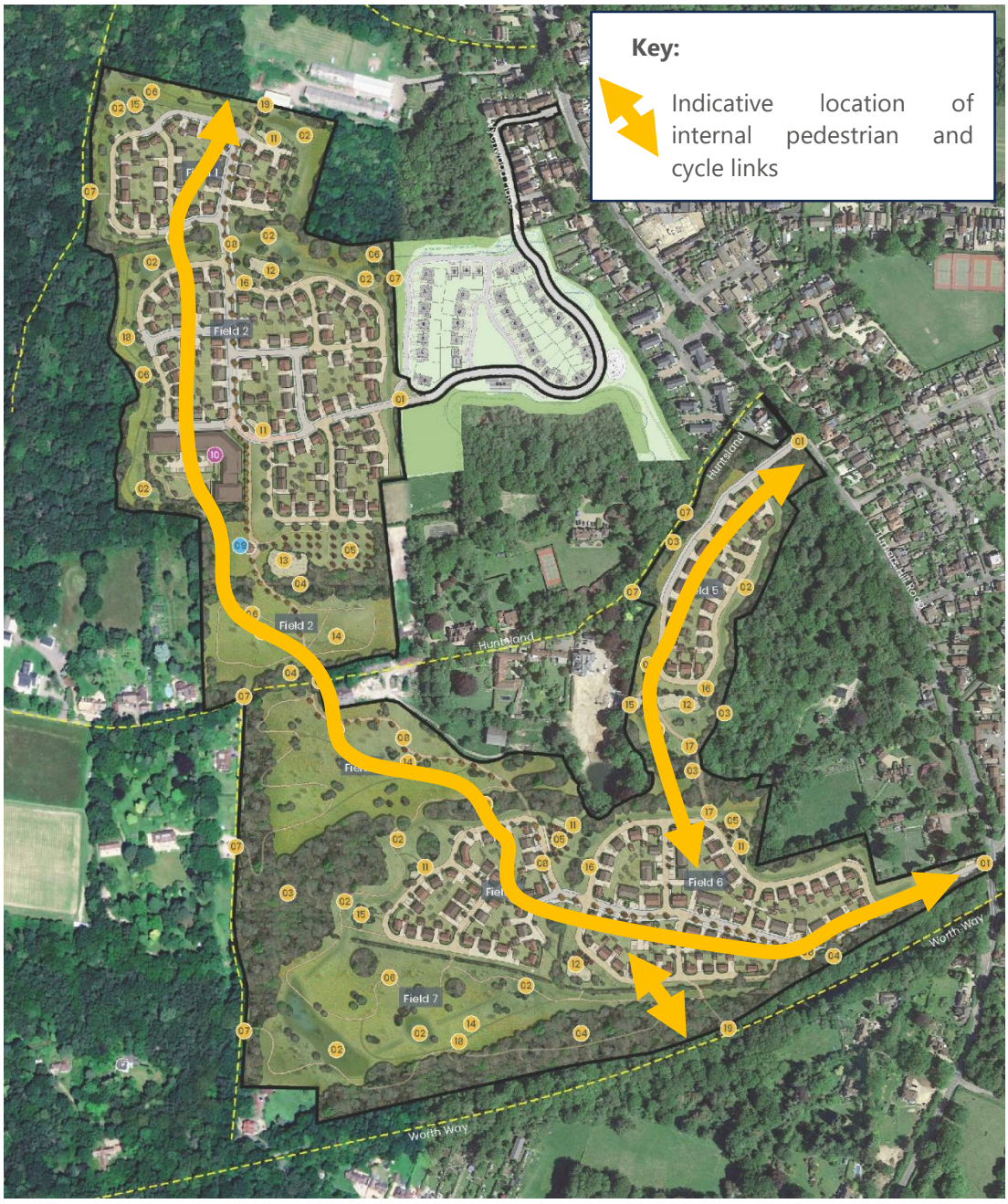
6.4.10 Car clubs are not designed to be exclusive to developments, but rather provided in a location accessible to the wider community to enable use by new and existing residents within a community. Pedestrian connectivity between the site and Crawley Down will enable existing residents to have access to this infrastructure, allowing it to be a facility that benefits Crawley Down as a whole. There are also existing car clubs in Crawley and Horsham suggesting that the uptake for them already exists. One car club vehicle will be provided in each of the planning application sites.

On-site Layout

6.4.11 The site will be designed to accord with the principles of development as per Manual for Streets and more recently, Active Travel England.

6.4.12 The site layout will prioritise pedestrians and cyclists by providing traffic calming and limiting vehicle speeds. Pedestrian and / or cycle routes will connect to the existing infrastructure and Public Rights of Way. In addition, off road traffic routes will be provided, including a north-south cycle route through the study area, connecting Hurst Farm to Worth Way, passing through both application sites. The cycle routes are illustrated in **Image 6.2** below.

Image 6.2: Proposed On Site Cycle Routes

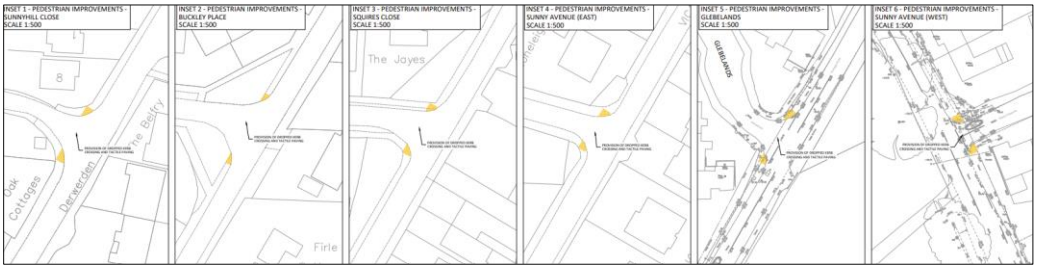


Source: Illustrative Masterplan

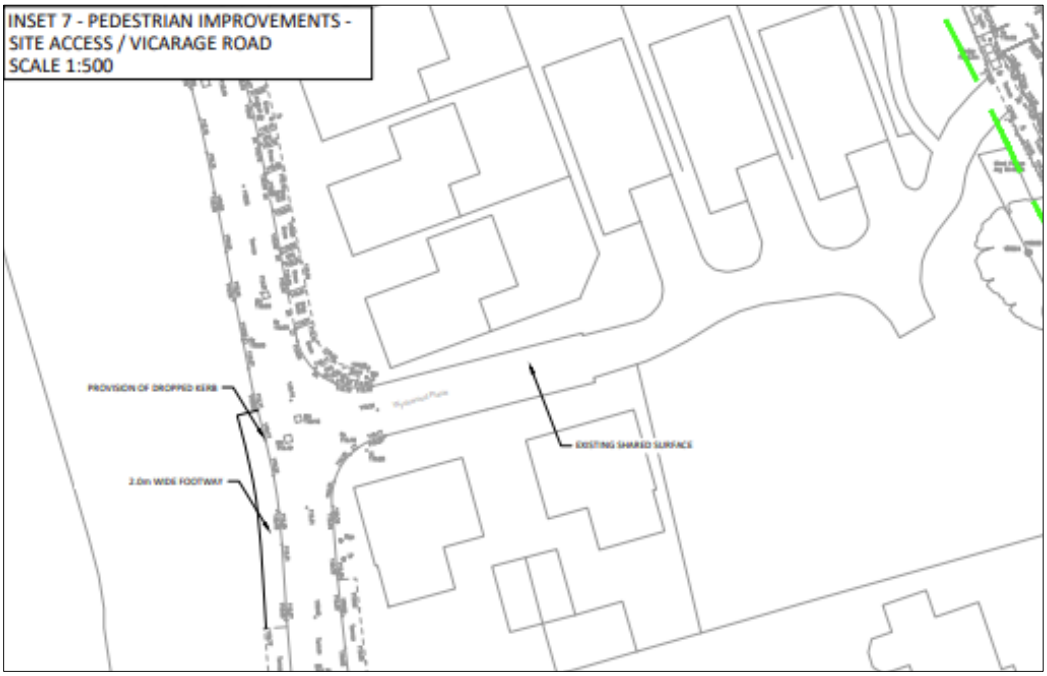
Off-site Improvements

6.4.13 A Healthy Streets Assessment has been undertaken in accordance with the Healthy Streets Assessment criteria[5], to identify potential improvements. The assessment is included at the back of the sustainable transport strategy and its findings are summarised in Section 4. Based on the audit, Wates are willing to deliver off-site highways improvements, as presented in Drawings **ITB9155-GA-056A** and **059**.

i Tactile paving and dropped kerbs at all side roads of Vicarage Road / Turners Hill Road (Glebelands, Sunny Avenue (east and west), Squires Close, Buckley Place and Sunnyhill Close).



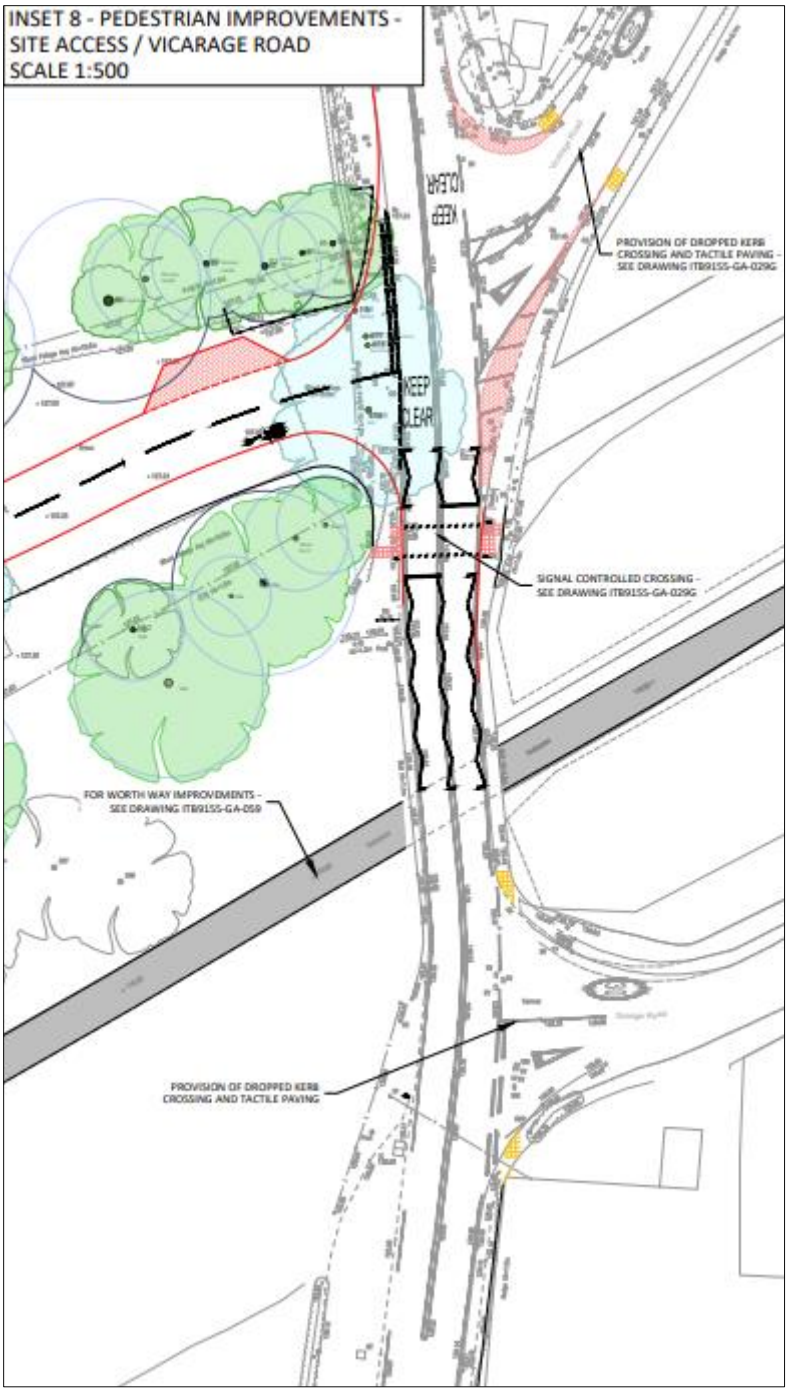
ii Northwards extension of footway on Wychwood Place as far as shared surface leading to pedestrian / cycle access.



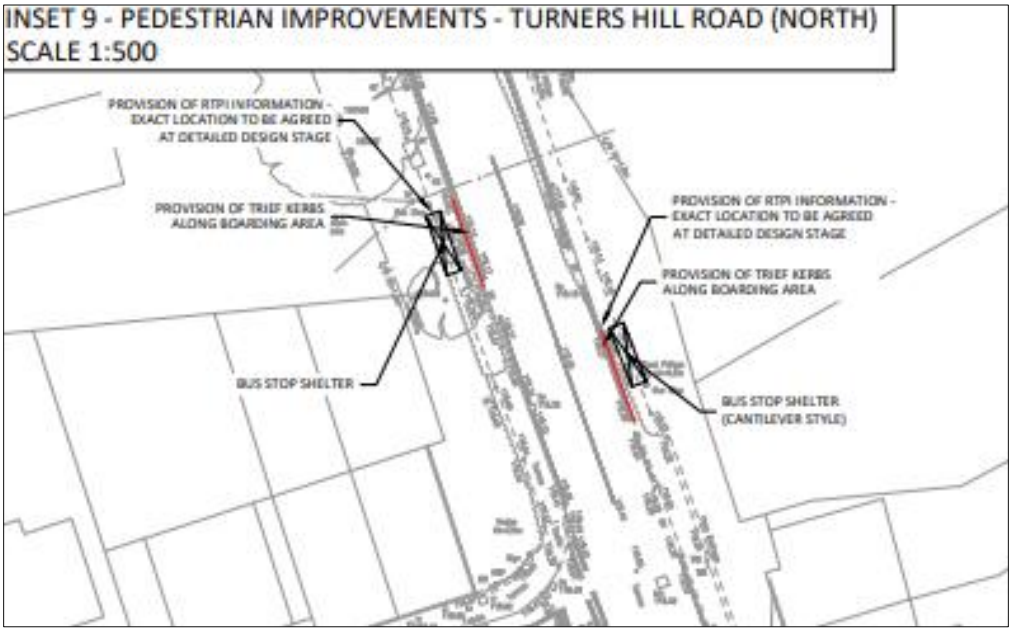
[5] What is Healthy Streets? — Healthy Streets

iii Dropped kerb / tactile paving crossing on Vicarage Road (already proposed as part of the vehicular access and shown separately in access drawing).

iv Signal controlled crossing on Turners Hill Road.

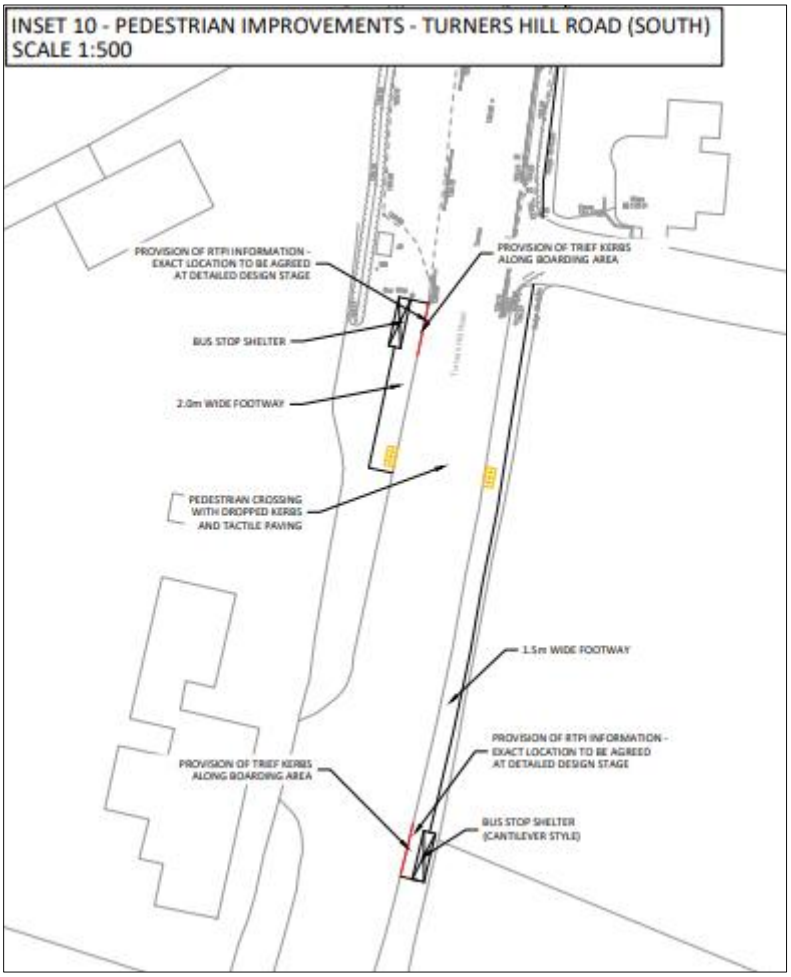


v New facilities, including shelters (cantilever for the southbound bus stop) and raised kerbs at bus stops north of the village.



vi An improved type 1 surface along Worth Way between the site and Old Station Close on land owned by WSCC. This is agreed in principle with WSCC although the precise specifications of the surface will be a matter for agreement at detailed design stage. The route will be 2-3m in width, depending on land available.

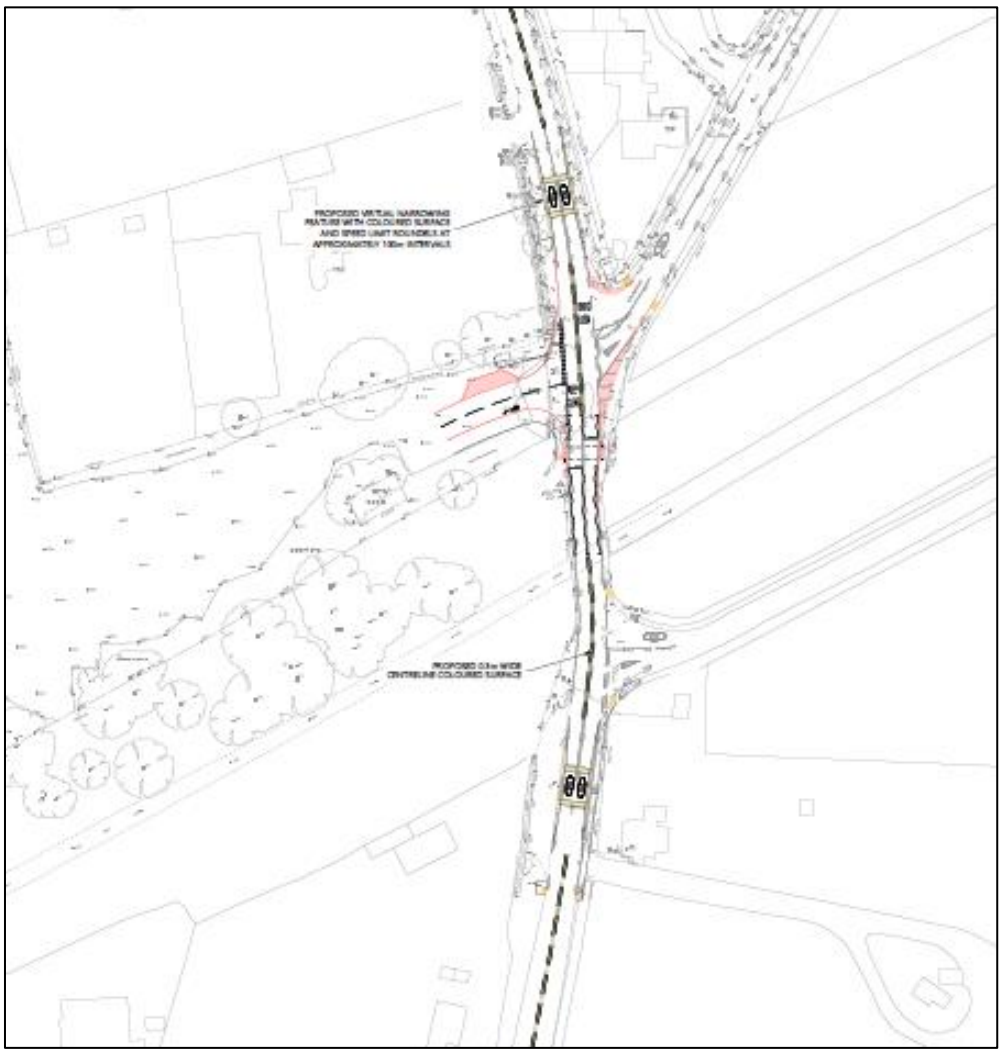
vii Widening of the footway on the eastern side of Turners Hill Road south of Grange Road using the overgrown highway verge to the east, thus enhancing access to the bus stop to the south.



viii Dropped kerb tactile paving crossing to northbound bus stop and across Grange Road at Turners Hill Road junction.

ix Bus shelter, raised kerbs and seating (cantilever for southbound bus stop) south of the village – the design of which will be determined at detailed design stage.

x Traffic calming scheme incorporating visual narrowing's and repeater roundels throughout the village (*ref: drawing* ***ITB9155-GA-066A,*** *excerpt below)*.



Note on Implementation

6.4.14 Works within publicly maintained highway will be undertaken under Section 278 agreement whilst a Section 106 contribution will fund the improvement to Worth Way.

6.4.15 The study area will come forward as two applications. The assignment of works will be a matter for discussion post application. The applicants will make proportionate contributions to the works on Worth Way as such works collectively contribute towards infrastructure that will benefit the entire village and help achieve lower traffic flows[6].

[6] The MSTS cites cycling schemes that support wider modal shift away from car use as a result of cycling schemes (*ref: paragraph 3.4.13 of Scenario 5 report)*

Public Transport

6.4.16 There are good bus routes available on Turners Hill Road, a short walk from the site. Travel vouchers will be offered to the first occupier of each dwelling (through the Framework Travel Plan – see below) to encourage modal shift towards the bus for new residents.

6.4.17 At the request of WSCC, discussions have been held with bus operator Metrobus in respect of potential enhancements to accessibility by bus. The applicant will commit to funding the following through a Section 106 for five years:

- Bus stop improvements as set out above.
- Increased service frequency on service 272 on Saturday evenings and Sundays, noting that there is currently no service at these times (funding to be provided directly to Metrobus as the service is commercially operated).

6.4.18 These improvements will increase the frequency of services and comfort at the bus stops closest to those living within the application site, ensuring seven-day (and later evening) access, e.g. for residents wanting to travel to Gatwick Airport. This is a material enhancement to the service.

6.4.19 It is expected that each development site will pay for 2.5 years of service provision to ensure that services can be funded at the outset, even if both development sites do not come forward simultaneously.

6.5 Framework Travel Plan

6.5.1 While infrastructure, services and facilities are to be provided to facilitate the uptake of sustainable modes of transport, it is also necessary to encourage its use by using a range of 'softer' targeted initiatives. Understanding what transport options are available to an individual and how to access them is one of the key barriers to the uptake of sustainable modes.

6.5.2 This will be brought together through a Framework Travel Plan prepared in accordance with WSCC guidance. This is prepared as a separate document that accompanies the outline planning application (*reference: ITB9155-055*). The plan will have the following objectives:

- The Framework Travel Plan (and any subsequent full Travel Plan) will seek to achieve a 10% modal shift away from private car use, in line with WSCC guidance.
- To promote car sharing, walking, cycling, and public transport as safe, efficient, affordable alternatives to private cars and highlight the health and environmental benefits of using sustainable travel modes.

- To manage car parking demand across the development, and to minimise the impacts of car-based travel on the local and strategic highway network and the environment.

6.5.3 The measures that will be included in the Framework Travel Plan are outlined in **Table 6.1**.

Table 6.1: Framework Travel Plan Measures

Objective	Measure
Overall cross-objective	Appoint a Travel Plan Coordinator
	Develop website / social media feed
	Distribute Travel Welcome Packs
Reduce the Need to Travel	Deliver connections to broadband network
Promotion of Walking and Cycling	Walking and cycling maps and health information
	Package of walking and cycling infrastructure improvements
	Delivery of a walkable neighbourhood layout – interconnecting streets, shared streets and walking / cycling routes
	Offer of a £150 sustainable travel voucher to each dwelling for cycle or electric cycle equipment purchase
	Set up a Bicycle User Group (BUG)
	Promotion of Brompton bike and electric bike hire schemes
Promotion of Public Transport	Promotion of digital travel applications
	Provision of bus stop infrastructure in the site
	Offer of £150 Bus Taster ticket
Managing Car Demand	Promotion of car sharing schemes through WSCC / Liftshare
	Installation of electric vehicle charging facilities
	Installation of car club parking spaces and vehicles

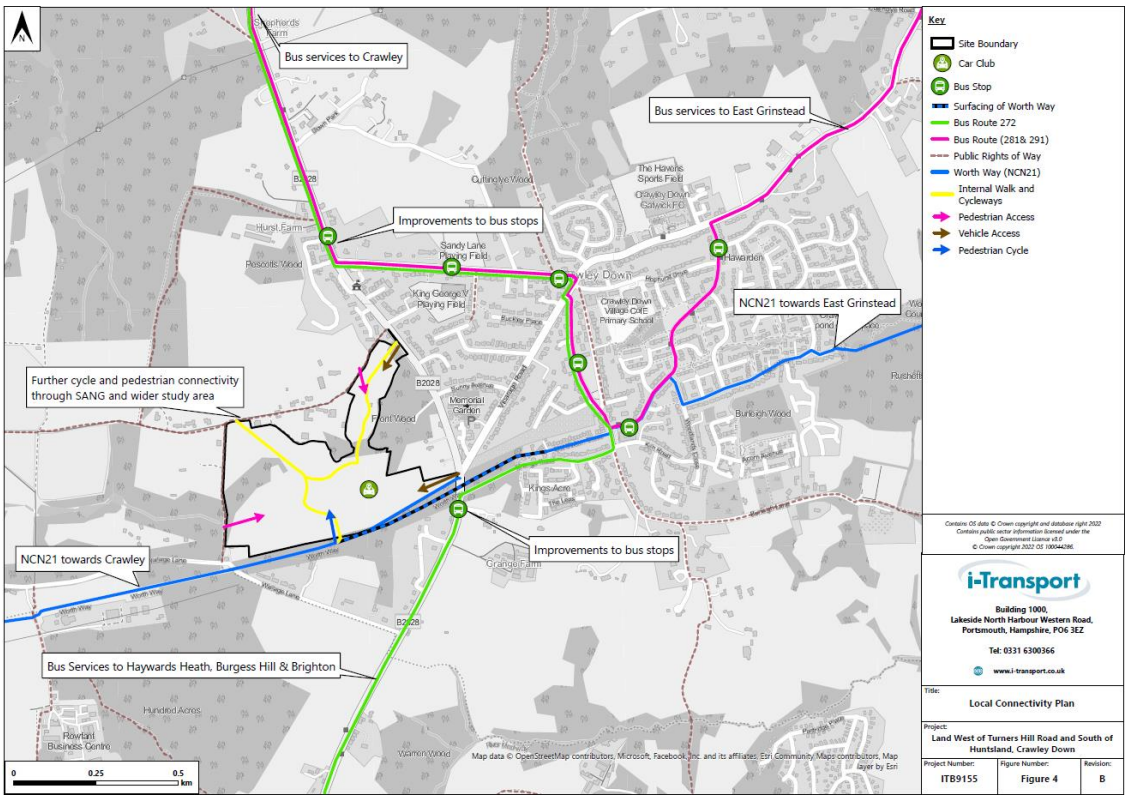
6.5.4 The effectiveness of the Framework Travel Plan will be subject to monitoring and review. It will be operated as 'live' document to enable modification of the plan to ensure it effectively targets the objective of reducing the need for travel by private car.

6.5.5 By presenting a strategy for delivering modal shift, through the Sustainable Transport Strategy and Framework Travel Plan, justification can be made for the target of a 10% modal shift away from car use. It is a reasonable target, which matches with WSCC's normal target for Travel Plans in 'rural' areas *(ref: West Sussex County Council Development Travel Plan Policy, Section 3.3)*. Given the strategy includes significant infrastructure improvements, bus service enhancements and car club provision, a mode shift of at least 10% is entirely plausible. Indeed, this is a lower percentage than that identified in the MSTA Scenario 6 report, which assumes a 20% reduction for commuter trips at all Local Plan sites.

6.6 Summary

6.6.1 This section of the TA demonstrates that opportunities for sustainable travel have been prioritised in accordance with the NPPF. It presents the sustainable Transport Vision for the development in line with National Highways and emerging Government policy. The sustainable transport strategy is summarised below:

Image 6.1: Connectivity Plan



Reduce

1 Provision of fast broadband connectivity, reducing the need for residents to travel off-site for work purposes.

2 Easy access for shopping / parcel drop offs.

3 Comprehensive on-plot electric vehicle charging.

Contain

4 Design of walkable neighbourhoods and a site layout that promotes low vehicle speeds and provides genuine permeability with direct routes for cyclists and pedestrians.

5 Provision of on-site facilities including community facilities, care home, and play areas.

Modal Shift

6 Car club with two vehicles (one per application site), three year's free membership.

7 Bus stop improvements.

8 Contribution to improve and enhance bus service 272.

9 Dropped kerb / tactile paving introduced at local side roads.

10 Provision of a signalised crossing on Turners Hill Road.

11 Widening of the footway on the eastern side of Turners Hill Road, south of Grange Road to enhance access to the southern bus stop.

12 Improvements to Worth Way PRoW's surface.

13 Framework Travel Plan with target for 10% modal shift and vouchers to incentivise bus and cycle use.

SECTION 7 Active Travel England Assessment

7.1.1 This TA and the associated FTP provide the information for ATE to assess the development proposals against their checklist.

7.1.2 **Table 7.1** provides a summary of ATE's new checklist and summarises where / how the criteria is addressed within the report.

Table 7.1: ATE Checklist Summary

Criterion	Addressed
Trip Generation and Assignment. Does the application appropriately forecast all day trips to, from and within the site by walking, wheeling and cycling?	The Framework Travel Plan (*ref: 9155-055*) includes a multi-modal trip demand assessment, based on census modal split data. It goes on to identify potential modal shifts based on target reductions in car use, which are achievable in view of the extensive sustainable transport strategy proposed.
Active Travel Route Audit. Has an appropriate assessment on the design and accessibility of existing active travel routes in the locality of the site been presented?	Yes, a Healthy Streets Assessment which audits existing routes on key desire lines (including to the local primary school) informed the sustainable transport strategy**.** This is based on Healthy Streets criteria.
Pedestrian Access to Local Amenities. Are most buildings within 800m from a range of amenities using well designed routes?	The site is located in a sustainable location and has been allocated for development within the Mid Sussex District Plan 2021-2039. Access to local facilities via walking and cycling is set out in Section 4 of this Transport Assessment – the village provides access to a wealth of facilities within a 20 minute walk. It will also bring forward community facilities, a care home and outdoor open space.
Cycling Accessibility. Are a range of local amenities accessible for cyclist using well-designed routes?	Section 3 of this report identifies the existing cycling accessibility of the site. Improvements are proposed to Worth Way as part of the offsite works proposed alongside the planning application. Worth Way is an existing cycle connection between the site, Crawley, Crawley Down and East Grinstead. Its surface will be improved between the application site and Crawley Down. Within the application site, traffic free connections to Worth Way are proposed. Whilst streets within Crawley Down are single carriageway, relatively flat and subject to 30mph speed limits, on site cycleways and Worth Way will provide a traffic free route into the village. Traffic calming will help slow traffic on Turners Hill Road and improve the feeling of safety for people using that road.

Criterion	Addressed
Access to Public Transport. Are all buildings within 400m of a high frequency bus stop or 800m of a rail station, using well designed routes?	Accessibility to bus stops is discussed in Section 4 of this Transport Assessment. The site is within a walkable distance to local bus stops on Turners Hill Road and new and widened footways will connect with the bus stops south of the village. Enhancements to the bus stops are proposed and funding will be provided to extend the operating hours of the services.
Off-Site Transport Infrastructure. Does the application include proposals to enhance local active travel and public transport infrastructure?	A Healthy Streets Assessment of routes in close proximity to the development site has been undertaken, and a series of off-site improvements have been proposed based upon the findings of this assessment. Full details regarding the off-site measures proposed as part of this planning application can be found in Section 6.3 of this Transport Assessment.
Site Permeability. Does the development prioritise pedestrian and cycle movements within the site?	The illustrative masterplan for the site is included in Section 5 of this Transport Assessment. The indicative design for the development shows a commitment to genuine permeability across the site for pedestrians and cyclists. Multiple points of pedestrian / cycle accesses are proposed, and a network of shared cycleways will be provided within the site. Streets will be designed to minimise vehicle speeds and create an environment conducive to active modes of travel.
Placemaking. Does the development establish a strong sense of place, with well-design streets, public spaces that feel safe and key amenities?	As is set out in Section 5 of this Transport Assessment, this is an outline planning application. The illustrative masterplan however sets out a real opportunity to create a strong sense of place. Further detail will be provided regarding placemaking at reserved matters stage.
Cycle Parking and Trip End Facilities. Does the application provide the requisite quantity and quality of cycle parking and trip end facilities?	Homes will come forward in accordance with cycle parking standards. Further details will be provided at reserved matters application stage.
Travel Planning. Does the Travel Plan outline ambitious mode share targets and measures to embed active travel?	A Framework Travel Plan has been submitted (*ref: ITB9155-055*). This is detailed in Section 6 and includes a target to achieve a 10% reduction in single occupancy car trips. The package of measures, including car clubs and vouchers, has been developed taking on board WSCC feedback.

Source: i-Transport / ATE Checklist

SECTION 8 Traffic Impact Analysis

8.1 Introduction

8.1.1 This section of the TA establishes the likely traffic generation of the proposed development and assesses the vehicular traffic impact of the proposed development on the local highway network. This is based on 350 homes and associated facilities across the study area, including a 65 bed care home (i.e. 200 at the application site, with 150 and 65 bed care home at the site immediately north). If the local highway network can accommodate the traffic flows of the wider study area, then it follows that the traffic impact of this planning application site in isolation is acceptable.

8.1.2 A full detailed Traffic Impact Assessment has been carried out in respect of the local highway network during pre-application discussions with WSCC. The assessment presented in this section follows the agreed parameters of the discussions and the modelling results, based on 350 homes at the wider study area. Traffic flow diagrams supporting this assessment are presented in **Appendix E**. Junction capacity testing outputs can be provided upon request.

8.1.3 The results of the modelling presented in this section are consistent with the findings of the latest version of the MSTS, the transport evidence base that supports the Local Plan. Whilst some junctions operate with limited spare capacity, they can accommodate the development traffic of the allocation, without triggering any impacts that would breach the very high 'severe' test at paragraph 115 of the NPPF.

8.1.4 The only mitigation planned at the junctions that were assessed is at the five arm Copthorne Way roundabout. Whilst development at the study area does not trigger the need for mitigation, the applicant is willing to make a proportionate contribution to it.

8.2 Existing Operational Assessments (Summary)

8.2.1 Junction capacity assessments have been carried out at each of the junctions with the surveyed 2023 traffic flows using Junctions 10 software for priority junctions and roundabouts and LinSig for the signal-controlled junction.

8.2.2 The assessments are summarised in **Table 8.1**, with the worst performing arm shown.

Table 8.1: Summary of Existing Junction Operational Assessments

Junction	AM Peak Hour	PM Peak Hour
M23 Junction 10	M23 NB Off-Slip Ahead 96.8%	A264 Copthorne Way Left 91.4%

Junction	AM Peak Hour	PM Peak Hour
Copthorne Way Roundabout	Copthorne Way (East) 0.62	Copthorne Way (East) 0.67
Brookhill Road / Copthorne Road Roundabout	Copthorne Road 0.6	Copthorne Common Road 0.73
Dukes Head Roundabout	Copthorne Common Road 0.71	A264 Snow Hill 0.89
Turners Hill Road / Sandy Lane	Sandy Lane 0.36	Sandy Lane 0.21
Hophurst Lane / Sandy Lane / Vicarage Road	Sandy Lane 0.20	Sandy Lane 0.36
Site Access		
Turners Hill Crossroad	Church Road 0.93	Church Road 0.83

Key:

	Operates within capacity: Below 0.85 RFC or 90% DoS
	Operates close to capacity: Between 0.85 and 1.00 RFC or 90% and 100% DoS
	Operates over capacity: Greater than 1.00 RFC or 100% DoS

8.3 Future Year Operation Assessments (Summary)

8.3.1 Future year junction capacity assessments at the off-site junctions have been undertaken in the following scenarios

- 2031 + Committed Development
- 2031 + Committed Development + Development ('Predict and Provide' trip rates)
- 2031 + Committed Development + Development ('Vision' trip rates)

8.3.2 The with development scenarios assume 350 homes across the study area. If the highway network can accommodate the traffic of 350 homes, then it follows that it can also accommodate the traffic of the application site in isolation.

8.3.3 The table below summarises the assessment with the worst operating arm represented in the future year assessments.

Table 8.2: Summary of Future Junction Operational Assessments

Junction	2031 + Committed		2031 + Committed + Development ('P&P')		2031 + Committed + Development ('Vision')	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
M23 Junction 10	M23 SB Off Slip 83.2%	M23 SB Off Slip 86.5%	M23 SB Off Slip 84.7%	M23 SB Off Slip 88.6%	M23 SB Off Slip 84.7%	M23 SB Off Slip 87.4%
Copthorne Way Roundabout	Copthorne Way (east) 0.70	Copthorne Way (east) 0.73	Copthorne Way (east) 0.73	Copthorne Way (east) 0.74	Copthorne Way (east) 0.73	Copthorne Way (east) 0.73
Brookhill Road / Copthorne Road Roundabout	Copthorne Road 0.99	Copthorne Way 0.79	Copthorne Road 1.05	Copthorne Way 0.85	Copthorne Road 1.04	Copthorne Way 0.85
Brookhill Road / Copthorne Road Roundabout (With Mitigation)	Copthorne Common Road 0.76	Copthorne Common Road 0.79	Copthorne Common Road 0.82	Copthorne Common Road 0.82	Copthorne Common Road 0.82	Copthorne Common Road 0.81
Dukes Head Roundabout	Copthorne Common Road 0.76	A264 Snow Hill 1.02	Copthorne Common Road 0.78	Turners Hill Road (N) 1.16	Copthorne Common Road 0.78	Turners Hill Road (N) 1.14
Turners Hill Road / Sandy Lane	Sandy Lane 0.40	Sandy Lane 0.23	Sandy Lane 0.44	Sandy Lane 0.27	Sandy Lane 0.43	Sandy Lane 0.27
Hophurst Lane / Sandy Lane / Vicarage Road	Sandy Lane 0.21	Sandy Lane 0.38	Sandy Lane 0.22	Sandy Lane 0.38	Sandy Lane 0.22	Sandy Lane 0.38
Turners Hill Crossroad	Church Road 1.08	Church Road 1.06	Church Road 1.09	Church Road 1.07	Church Road 1.09	Church Road 1.07

Key:

	Operates within capacity: Below 0.85 RFC or 90% DoS
	Operates close to capacity: Between 0.85 and 1.00 RFC or 90% and 100% DoS
	Operates over capacity: Greater than 1.00 RFC or 100% DoS

M23 Junction 10

8.3.4 The results show that currently M23 Junction 10 operates close to capacity. This is when assessed using the observed 2023 survey year traffic flows.

8.3.5 However, the junction is due to have improvements undertaken in association with the St. Modwens committed development. The future year models allow for this. As shown in **Table 8.2**, the junction is able to operate within capacity with development, with a greater amount of residual capacity than at the present time.

Copthorne Way Roundabout

8.3.6 The results show that the junction will operate within capacity with the addition of the proposed development site, with no discernible change in queuing at the junction.

Brookhill Road / Copthorne Road Roundabout

8.3.7 Prior to the addition of the development, the junction is close to capacity with an RFC of 0.99 in the 2031 plus committed development scenario. Following the addition of the development, the junction operates over capacity on the Copthorne Road arm. This is consistent with the findings of the MSTS. It was not judged to be a 'severe' impact

8.3.8 Improvements have been identified within the MSTS which improve the capacity of this junction. When accounting for these improvements, the junction is able to operate within capacity in all scenarios. Whilst development at the study area does not trigger the need for mitigation alone, the applicant would be willing to fund a proportionate contribution towards the improvements.

Dukes Head Roundabout

8.3.9 The Dukes Head Roundabout will operate over capacity in 2031 plus committed development scenario on the A264 Snow Hill. The junction operates further over capacity upon the addition of the development traffic. This is within the level of impact identified in MSTS and has not been judged as a 'severe' impact.

Turners Hill Road / Sandy Lane / Vicarage Road

8.3.10 The results show that the junction can operate within capacity with the addition of the proposed development site, with no discernible change in operation at the junction.

Hophurst Lane / Sandy Lane / Vicarage Road

8.3.11 The results show that the junction can operate within capacity with the addition of the proposed development site, with no discernible change in operation at the junction.

Turners Hill Crossroad

8.3.12 This junction will operate over capacity prior to the development being constructed with an RFC of 1.03. When the development traffic is added to the network, the RFC increases slightly to 1.05. Increases in queuing and delay are minor, reflecting the modest increase in vehicular traffic through the junction as a result of development and the development proposal does not notably exacerbate the existing safety issue.

8.3.13 It is noted that the MSTS considers the traffic impact at that junction severe.

8.3.14 Whilst the definition of 'severe' identified by the MSTS falls far short of what is considered a 'severe' impact in appeal decisions where traffic impact has been considered, i-Transport proposed a mitigation scheme at the crossroads by reassigning carriageway space to allow for a two lane approach on the western (minor) arm, in turn creating more capacity.

8.3.15 Following pre-application discussions, it was agreed with WSCC that this mitigation would not be necessary in light of the very small increases in traffic flow resulting from development. The traffic impact is agreed as not being 'severe'.

8.4 Operation of Site Access

8.4.1 Whilst previous scoping notes have presented the operation of the site access junctions, updated models are provided of access 1 (the southern access) to reflect the final breakdown of housing – i.e. 200homes.

8.4.2 No assessment is provided of access 2, which will serve 50 homes. The accesses are close to one another and similar geometrically. As such, if access 1 can operate acceptably, accommodating the traffic associated with 200 homes, it follows that access 2 will also be able to operate acceptably, accommodating for only 50 homes. The modelling output is provided at **Appendix F.**

Table 8.3: Operation of Proposed Access / Turners Hill Road / Vicarage Road crossroad (worst performing arm)

Junction	2031 + Committed		2031 + Committed + Development ('P&P')		2031 + Committed + Development ('Vision')	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Southern Site Access	Vicarage Road (0.50 RFC)	Vicarage Road (0.22 RFC)	Vicarage Road (0.54 RFC)	Vicarage Road (0.25 RFC)	Vicarage Road (0.54 RFC)	Vicarage Road (0.24 RFC)

8.4.3 The junction will operate well within capacity in all scenarios.

8.5 Conclusion of Traffic Impact Assessment

8.5.1 The results are consistent with the modelling in the MSTS, which forms part of the Local Plan evidence base. The models show that whilst some junctions are sensitive to additional traffic the development proposals will not result in a magnitude of impact that breaches the very high 'severe' bar set by the NPPF.

8.5.2 The only junction judged in that report as needing mitigation is the five arm Copthorne Way roundabout. The improvements there, which incorporate localised widening, will address the traffic impacts of the Local Plan at that junction although development at the application site / wider study area will not trigger the need for mitigation. Nevertheless, the applicant is willing to make a proportionate financial contribution towards mitigation measures at this junction.

SECTION 9 Summary and Conclusions

9.1 Summary

9.1.1 Wates Developments have appointed i-Transport to produce a Transport Assessment in respect of a planning application for the erection of up to 200 dwellings on Land to the west of Turners Hill Road and south of Huntsland, Crawley Down. This forms part of a wider development of 350 homes and associated facilities across the study area (allocation DPA9), incorporating land north of Huntsland. The site is allocated for 350 homes in the Mid Sussex District Plan 2021-2039 (Regulation 19) (Policy DPA9).

9.1.2 The NPPF identifies four key transport tests for development. This TA assesses the development proposal against these tests:

Will sustainable transport modes be prioritised taking account of the vision for the site, type of development and location?

9.1.3 The principle that the application site and wider study area provide a sustainable location for development has been established by their proposed allocation in the Mid Sussex District Plan for residential led development (*ref: Policy DPA9)*.

9.1.4 The study area is well located with many existing connections to Crawley Down. Turners Hill Road, Sandy Lane and Vicarage Road all feature continuous footways adjacent to at least one side of the carriageway. There are signalised crossings in place on Turners Hill Road, connecting the site location to these continuous footways.

9.1.5 The study area is currently greenfield and features a number of PROWs. The 33W / 32W Footpath route, known as 'Huntsland', routes east-west within the study area and Footpath 34W is adjacent to the western side of the study area, in a north-south orientation. The Worth Way bridleway runs east-west to the south of the application site boundary.

9.1.6 The majority of the roads in the vicinity of the site are residential in nature, wide with non-continuous traffic and feature 30mph speed limits. They will be seen as cyclable by many. The Worth Way bridleway also acts as a traffic free cycle route connecting East Grinstead, Crawley Down and Crawley.

9.1.7 The nearest bus stops are provided on Turners Hill Road south of Grange Road, approximately 600m from the application site. Further bus stops are in the north of the village. There are good services towards key destinations from Monday to Saturday. The closest rail station to the site is Three Bridges, approximately 5km to the west, providing connections to London, Horsham, Haywards Heath, Brighton and Gatwick Airport

9.1.8 A comprehensive sustainable transport strategy has been prepared for the study area. This strategy includes the provision of car clubs, internal cycle connections, as well as off-site improvements, including surface improvements to public rights of way and new dropped kerb / tactile paving crossings.

9.1.9 A traffic calming scheme along Turners Hill Road has been developed following feedback from MSDC, and also supports Neighbourhood Plan Proposal 02.

9.1.10 The strategy also includes material improvements to local bus services and measures associated with the Framework Travel Plan (*reference: ITB9155-055*). Collectively, these provide an extensive package of improvements that will provide genuine opportunities to secure the use of sustainable transport.

Will safe and suitable access be provided?

9.1.11 There are two vehicular accesses proposed to serve the application site.

9.1.12 The first access will be a new priority junction opposite Vicarage Road which will serve up to 150 homes. The second access will take the form of a simple priority junction onto Turners Hill Road, to the south of Huntsland. This access will serve a maximum of 50 homes.

9.1.13 There are no through routes proposed for vehicular traffic between the parcels of development. However, a pedestrian / cycle / emergency vehicular access will be provided between the two parcels.

9.1.14 Both proposed accesses have been designed in accordance with appropriate standards, subject to a safety audit and agreed in principle with West Sussex County Council.

9.1.15 Multiple additional pedestrian / cycle routes are proposed, connecting to a network of pedestrian / cycle routes within the application site and wider study area.

Will the design be acceptable?

9.1.16 Subsequent reserved matters application(s) will demonstrate that the site can come forward in accordance with design guidance on car parking, cycle parking, electric vehicle charging, street geometry and servicing.

Will there be a 'severe' traffic impact

9.1.17 A full detailed Traffic Impact Assessment has been carried out in respect of the local highway network. The scope of this Traffic Impact Assessment has been agreed with West Sussex County Council. The modelling undertaken has been based upon the delivery of 350 homes across the study area (200 at the application site and 150 and a 65-bed care home at the site immediately north).

9.1.18 The results are consistent with the modelling in the MSTS, which forms part of the Local Plan evidence base. The models show that whilst some junctions are sensitive to additional traffic, the development proposals will not result in a magnitude of impact that breaches the very high 'severe' bar set by the NPPF. Junction capacity testing which looks at the operation in detail and considers the impact in the context of strategic modelling in the MSTS has been provided to WSCC from an early stage. It is agreed that traffic impacts arising from development will not be 'severe'.

9.1.19 As the local highway network can accommodate the traffic flows of the wider study area, then it follows that the traffic impact of this planning application site in isolation is acceptable.

9.1.20 The MSTS has developed one mitigation scheme at the five arm Copthorne Way roundabout. The improvements there, which incorporate localised widening, will address the traffic impacts of the Local Plan at that junction although development at the application site / wider study area will not trigger the need for mitigation. Nevertheless, the applicant is willing to make a proportionate financial contribution towards mitigation measures at this junction.

9.2 Conclusion

9.2.1 To conclude:

- The proposal prioritises sustainable transport. The principle of developing the site has been established by the site's proposed allocation for residential development in the District Plan. An extensive package of off-site highways works aimed at improving access by active and public transport, has been developed and agreed with WSCC.
- Safe and suitable access will be provided through two new accesses on Turners Hill Road. These accord with design standards, will operate acceptably, have been subject to a Stage 1 safety audit and agreed in principle with WSCC.
- Future reserved matters applications will ensure that the proposals will come forward in accordance with design standards.

- The MSTS includes modelling which has found the local highway network to be capable of accommodating development traffic. Notwithstanding this, a further assessment of the local highway network has been undertaken and does not identify any impacts that would breach the high bar set by the 'severe' test. The traffic analysis has been shared and agreed with WSCC prior to submission of the planning application.

9.2.2 The development proposal is acceptable in highways and transport terms.

FIGURES

Key

Site Boundary

i-Transport

Building 1000,
Lakeside North Harbour Western Road,
Portsmouth, Hampshire, PO6 3EZ

Tel: 0331 6300366

www.i-transport.co.uk

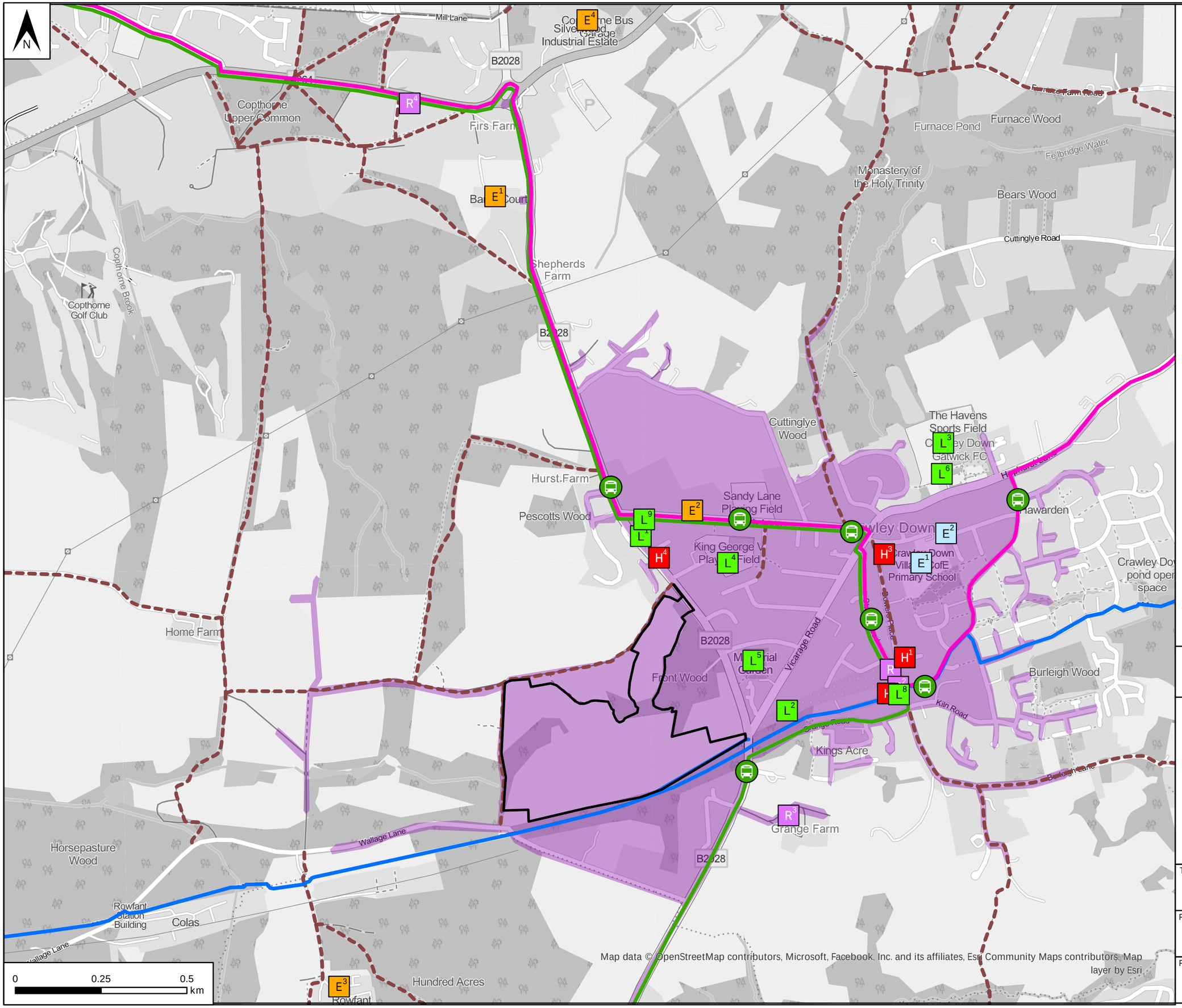
Title:

Site Location Plan

Project:

Land West of Turners Hill Road and South of Huntsland, Crawley Down

Project Number:	Figure Number:	Revision:
ITB9155	Figure 1	B



Key

- Site Boundary
- Bus Stop
- Bus Route 272
- Bus Route (281 & 291)
- Public Rights of Way
- Worth Way (NCN21)
- 1.6km Walking Catchment
- L1 Crawley Down Village Hall
- L2 Allotments at Vicarage Road
- L3 Crawley Down Gatwick Football Club
- L4 King George V Playing Field
- L5 All Saints Parish Church Crawley Down
- L6 The Haven Centre
- L7 Effingham Park Golf Course
- L8 The Carriage
- L9 Prizefighters Fish and Chips
- E1 Barns Court
- E2 Local Businesses, Sandy Lane
- E3 Rowfant Business Centre
- E4 Silverwood Industrial Estate
- H1 Elm House Dental Practice
- H2 Crawley Down Pharmacy
- H3 Crawley Down Health Centre
- H4 Crawley Down Dental
- R1 Co-op Food
- R2 Crawley Down Post Office
- R3 The Grange Farm Shop
- R4 Asda Express & Esso
- E1 Crawley Down Village CofE Primary School
- E2 Donkey Fields Pre-School

i-Transport

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Lakeside North Harbour Western Road,
Portsmouth, Hampshire, PO6 3EZ

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Title:

Accessibility Plan

Project:

Land West of Turners Hill Road and South of Huntsland, Crawley Down

Project Number:	Figure Number:	Revision:
ITB9155	Figure 2	B

Key

- Site Boundary
- Route 1
- Route 2
- Route 3
- Route 4
- Route 5
- Route 6
- Route 7
- Route 8

i-Transport

The Square, Basing View,
Basingstoke, Hampshire, RG21 4EB

Tel: 01256 898 366

www.i-transport.co.uk

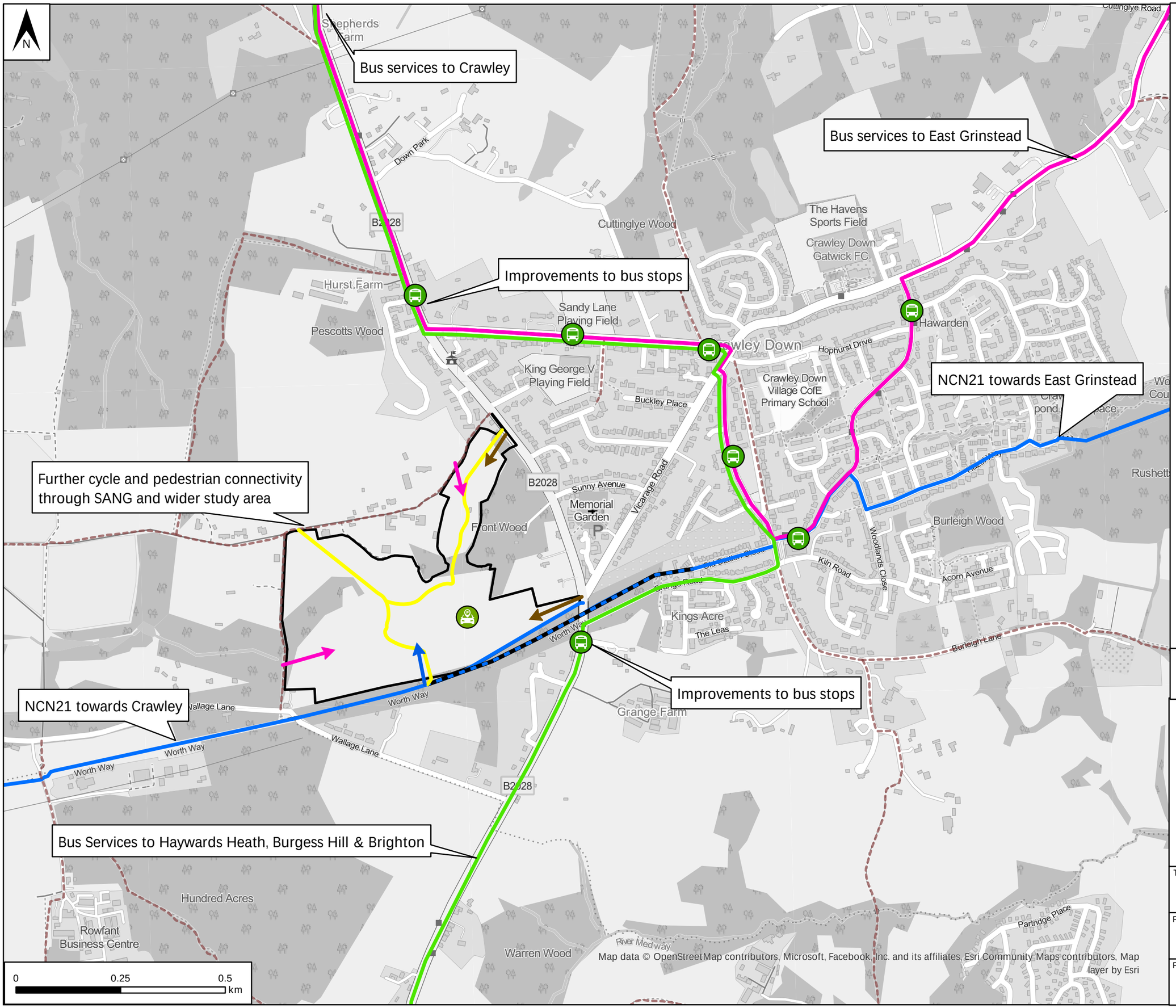
Title:

Healthy Streets Assessment Routes

Project:

Land West of Turners Hill Road and South of Huntsland, Crawley Down

Project Number:	Figure Number:	Revision:
ITB9155	Figure 3	B



Key

- Site Boundary
- Car Club
- Bus Stop
- Surfacing of Worth Way
- Bus Route 272
- Bus Route (281& 291)
- Public Rights of Way
- Worth Way (NCN21)
- Internal Walk and Cycleways
- Pedestrian Access
- Vehicle Access
- Pedestrian Cycle

i-Transport

Building 1000,
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Tel: 0331 6300366

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Title:
Local Connectivity Plan

Project:
Land West of Turners Hill Road and South of Huntsland, Crawley Down

Project Number:	Figure Number:	Revision:
ITB9155	Figure 4	B

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