Newland Farm, Arborfield

Transport Scoping Note

Client: Gleeson Land

i-Transport Ref: TW/JW/MK/ITB17371-010

Date: 23 May 2025

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SECTION 1 Introduction

1.1 Overview

1.1.1 i-Transport is appointed by Gleeson Land to provide transport and highways support for a planning application for up to 431 residential dwellings on land forming the southern part of the Loddon Garden Village (LGV), located in Arborfield, Wokingham (the site). The application will be in outline with access determined and details of the internal link road provided. The application will be subject to Environmental Impact Assessment (EIA).

1.1.2 The site falls within the administrative boundary of Wokingham Borough Council (WBC), who are both the Local Planning Authority (LPA) and Local Highway Authority (LHA).

1.2 Purpose of Note

1.2.1 The application submission will be supported by the following documents:

- Transport Assessment (TA);
- Framework Travel Plan (FTP); and
- Transport Environmental Statement (ES) Chapter.

1.2.2 This Transport Scoping Note (TSN) has been prepared to inform pre-application discussions with WBC to enable the TA and FTP to be prepared on an agreed basis. The ES Chapter is subject to a separate ES Scoping process and is not considered in detail in this TSN.

1.2.3 Regular discussions on transport matters have been held with WBC officers alongside representatives of the other LGV developers; University of Reading (UoR) and Hatch Farm Land. These discussions have informed the production of this Scoping Note and sought to provide a joined-up approach to development across the three land parcels. This is detailed further in Section 1.3.

1.3 Site Context

1.3.1 The site forms part of the wider LGV, a proposed strategic allocation (*Policy SS13 – Loddon Valley Garden Village*) within WBC's Local Plan Update to 2040. The site allocation boundary is illustrated in **Image 1.1**. At the time of writing this TSN, Reg. 19 consultation on the Local Plan has been completed, and the Local Plan is pending submission for examination.

Image 1.1: Site Allocation Boundary – Policy SS13 Loddon Garden Village

1.3.2 **Table 1.1** provides the primary land uses and quantum associated with Policy SS13.

Table 1.1: Loddon Garden Village Proposed Allocation Land Uses

Land Use	Quantum
Residential Dwelling	3,930
Research and Development	100,000m2
Primary School	2 x Form Entry
Secondary School	8 x Form Entry (Expandable to 12 Form Entry)
District Centre	1
Local Centre	2

Source: Policy SS13 – WBC Local Plan Update 2023 – 2040 Proposed Submission Plan

1.3.3 In addition to the land controlled by Gleeson Land, two other land holdings form part of the LGV allocation, these being controlled by the University of Reading (UoR) and Hatch Farm Land. Whilst each land holding will be subject to its own separate planning application, a collective transport strategy has been developed by all relevant parties in collaboration with WBC, to ensure a cohesive and harmonised movement and access strategy is delivered for LGV, which ties into the wider surrounding transport networks. The Transport Strategy comprises the following elements:

- An internal road network which will be designed in accordance with national and WBC guidance to ensure harmonised design and consistent character is provided across all land parcels.
- A comprehensive active travel network delivering LTN1/20 compliant infrastructure which will prioritise active travel across the site and connecting to existing and proposed routes (see Section 5).
- A public transport strategy which will see the provision of new bus infrastructure and services, providing connectivity to employment destinations such as Reading and Bracknell as well as Reading Railway Station (see Section 6).

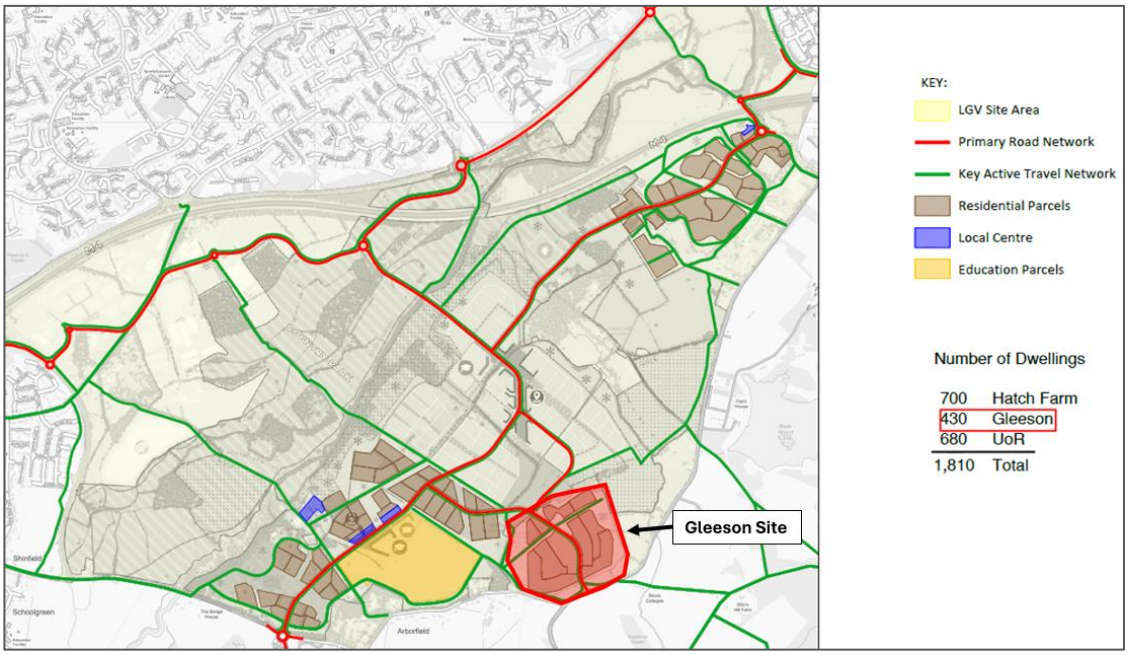
1.3.4 It is intended to deliver the development in phases with the site anticipated to be complete by 2033/34. At this stage, in addition to the site, it is estimated that 700 dwellings would be completed at Hatch Farm with a further 680 on UoR land, totalling approximately 1,810 units across the LGV. Further information on Phasing is given in Section 6.

1.4 Gleeson Land Development Proposal

1.4.1 The land under Gleeson Land's control is expected to contribute approximately 431 dwellings, forming the southern parcel of LGV. A point of access is proposed to the B3030 Mole Road, which would be in the form of a priority-controlled junction.

1.4.2 The location of the site and proposed access location in respect of the wider LGV masterplan is illustrated in **Image 1.2**.

Image 1.2: Indicative Loddon Garden Village Masterplan and Location of the Site



1.5 Planning Strategy

1.5.1 The site will be subject to a planning application in its own right. However, the proposal has been developed alongside the other LGV parcels to ensure a harmonised approach with the rest of the LGV.

1.5.2 Any planning application relating to the LGV will be required to adhere to the relevant design principles as set out in Draft Policy SS13. Those pertinent to transport and highways are set out below:

"Development proposals should devise and implement a comprehensive sustainable transport strategy that has been informed by a detailed Transport Assessment and;

a) Provides layouts, street designs and associated measures that are safe, suitable and convenient for all users, that prioritise active travel, and facilitates high quality public transport services both within and to key destinations beyond the garden village. This will include:

i. The phased delivery of active travel and public transport measures;

ii. An on-site dedicated network of segregated facilities for pedestrians and cyclists that integrate with active travel networks, including the Public Rights of Way network; and

iii. The provision of new and improved off-site connections for pedestrians and cyclists, providing safe, suitable and convenient access to the surrounding communities, facilities, services and employment opportunities including the Thames Valley Science and Innovation Park, Mereoak Park and Ride, Green Park, Green Park Station, Shinfield, Lower Earley, Winnersh and Winnersh Triangle Station.

b) Demonstrates that the design of the access arrangements and the associated highway improvements take into account all the planned development; and

c) Ensures that development will not have a severe adverse impact on the local and strategic highway networks, nor an unacceptable impact upon highway safety, following the inclusion of suitable measures to mitigate the impact."

1.6 Report Structure

1.6.1 This TSN has been structured as followed:

- **Section 2 – Policy and Guidance Context:** setting out the relevant national, regional and local policy and guidance documents which will be reviewed within the TA;

- **Section 3 – Baseline Highway Conditions:** reviewing the existing highway network in respect of flows and road safety, in addition to existing active travel and public transport infrastructure;
- **Section 4 – Sustainable Travel Context:** Detailing existing access by sustainable modes and proximity to local amenities and services;
- **Section 5 – Transport Vision and Approach:** Sets out the transport vision and future aspirations for the development;
- **Section 6 – Development Proposals:** Describing the proposals associated with the Gleeson Land site in respect of land use, access arrangements, parking provision and refuse, delivery and emergency access arrangements. This section will also provide a high-level summary of the proposals being delivered as part of the wider LGV;
- **Section 7 – Highways Impact Assessment:** Detailing the methodology for assessing the transport impacts arising from the development proposal;
- **Section 8 – Residential Travel Plan** – Proposed Scope
- **Section 9 – WCHAR –** Proposed Scope
- **Section 10 – Summary**

SECTION 2 Transport Policy and Guidance Context

2.1 Introduction

2.1.1 The following policy and guidance pertinent to transport will be reviewed within the TA:

2.2 National

- National Planning Policy Framework (NPPF) (December 2024);
- Planning Practice Guidance (March 2024);
- Department for Transport (DfT) Circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development (Updated December 2022); and
- DfT Local Transport Note (LTN) 1/20 Cycle Infrastructure Design (July 2020).

2.3 Local

- Wokingham Borough Core Strategy 2010 – 2026;
- Wokingham Borough Core Strategy Development Plan Document (January 2010);
- Wokingham Borough Local Plan Update 2023 – 2040 – Proposed Submission Plan;
- Wokingham Borough Council Local Transport Plan 3 (LTP3) 2011 – 2026;
- Wokingham Borough Council Draft Local Transport Plan 4 (LTP4);
- Wokingham Borough Council Local Cycling and Walking Infrastructure Plan (LCWIP) (March 2023);
- Wokingham Borough Council – Borough Design Guide – Supplementary Planning Guide (June 2012);
- Wokingham Borough Council – Living Streets: A Highways Guide for Developers in Wokingham (2019); and
- Parking Standards Calculation Document.

2.3.1 Confirmation is sought from WBC to agree the above policy scope.

SECTION 3 Baseline Highway Conditions

3.1 Local Highway Network

3.1.1 The TA will provide a thorough review of the existing local and strategic road networks. A summary of the local highway network is provided below and is illustrated in **Image 3.1**.

Image 3.1: Local Highway Network

3.1.2 The B3030 Mole Road is a two-way single carriageway road with a 50mph speed restriction. It is approximately 2.8km in length and forms a junction with King Street Lane and Bearwood Road to the north, and a junction with Sindlesham Road and Church Lane to the south. Mole Road does not have any existing footway provision or streetlighting.

3.1.3 The Shinfield Eastern Relief Road lies to the west of the site and comprises a high-standard 7.3m wide carriageway, as is the case with the A327 Arborfield Road which routes to the south. Hatch Farm Way (Winnersh Relief Road) provides connectivity to the east, with the B3270 Lower Earley Way routes to the north of the site, on the northern side of the M4 motorway.

3.1.4 Access onto SRN via the M4 can be achieved within a 13-minute drive from the site, providing access to destinations such as West London to the east and Bristol to the west.

3.2 Baseline Traffic Flows

3.2.1 The Transport Assessment which was produced by Stantec on behalf of WBC for their Local Plan Update to 2040 included a comprehensive set of traffic surveys which were commissioned as part of the Local Plan work. It is intended to assess the impacts of the development using WBC's Strategic Transport Model (WSTM), as set out later in this document.

B3030 Mole Road

3.2.2 An ATC survey was undertaken on Mole Road (as per **Image 3.1**), capturing continuous traffic data over a seven-day period between 18th March 2025 and 24th March 2025. A summary of the traffic flows and speeds is provided in **Table 3.1**.

Table 3.1: ATC Results – Mole Road (March 2025)

Link	Direction	Traffic Flows (Average Weekday)			85th Percentile Speeds (mph)
		Morning (08:00-09:00)	Evening (17:00-18:00)	24-Hour	
Mole Road (East)	Eastbound	562	450	5,097	46.9mph
	Westbound	470	518	4,954	45.1mph
	Bidirectional	**1,032**	**968**	**10,051**	**46.0mph**
Mole Road (West)	Eastbound	560	447	5,097	42.4mph
	Westbound	471	518	4,945	40.8mph
	Bidirectional	**1,031**	**965**	**10,042**	**41.6mph**

3.3 Personal Injury Collison Data

3.3.1 Personal injury collision (PIC) data will be requested from WBC for the latest available five-year period to understand existing safety conditions on the local highway network.

3.3.2 Key links and junctions to be reviewed comprise:

- Mole Road;
- Sindlesham Road;
- Church Road;
- Reading Road;
- A327 / Arborfield Road / Eastern Relief Road roundabout;
- A327 / Reading Road / Observer Way roundabout; and
- Arborfield Cross roundabout.

3.3.3 The proposed study area is illustrated in **Image 3.3**, and WBC's confirmation of the study area extent and review period is welcome.

Image 3.3: Proposed PIC Study Area

SECTION 4 Sustainable Travel Context

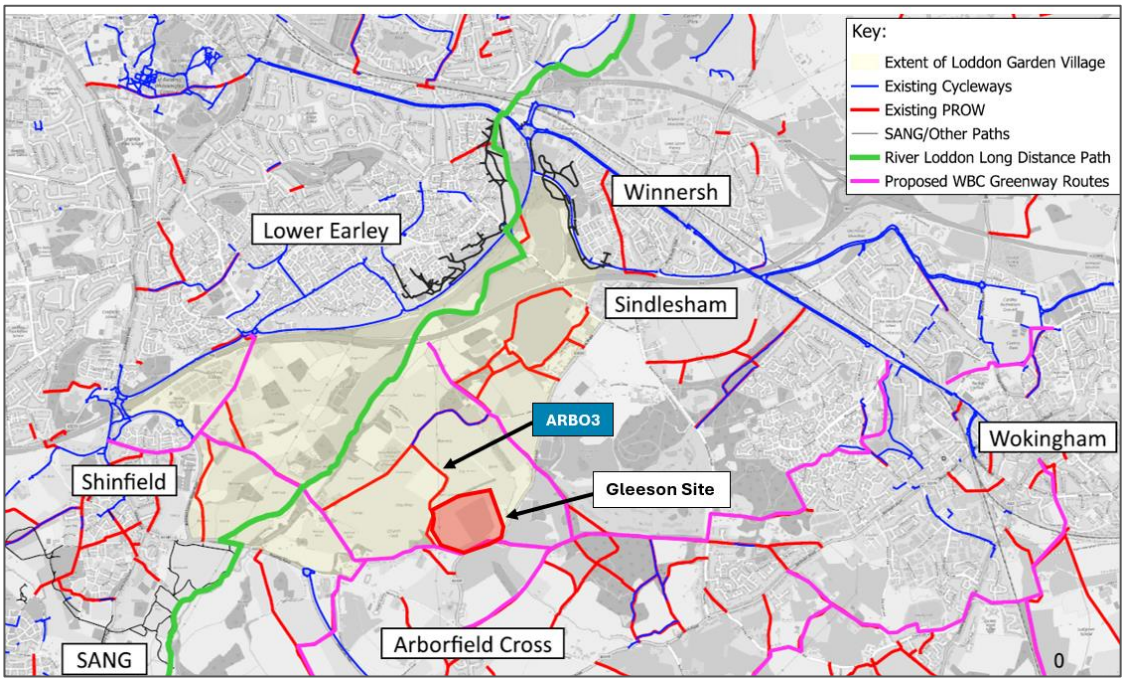
4.1 Active Travel

Existing Network

4.1.1 The TA will provide a detailed review of the accessibility of the site to surrounding sustainable travel infrastructure and local amenities. A summary of surrounding sustainable travel infrastructure is provided below.

4.1.2 The location of the Gleeson Site in respect of the surrounding active travel network is illustrated in **Image 4.1**.

Image 4.1: Existing Active Travel Network



Source: Abley Letchford Partnership – Loddon Garden Village – Active Travel Strategy

4.1.3 Both the site and wider LGV benefits from good connectivity to the Public Rights of Way (PRoW) network. A 'Byway open to all traffic' (BOAT) (Route ID – ARB03) routes along the western edge of the site, connecting with the wider network, in the form of footpaths and BOATs, to the north towards Sindlesham and Arborfield / Arborfield Cross to the south.

4.1.4 A Greenway (Route A) is proposed on Mole Road to the south of the site. This Greenway will extend west via Church Lane and connect to the north of Shinfield. To the east, the Greenway will route via Ellis's Hill, linking onto the wider Greenway network, providing access to Arborfield Cross and Woosehill. This is being considered in the emerging layout (see Section 6).

4.1.5 An additional BOAT is also located on Ellis's Hill which heads eastbound, before connecting with Barkham Road towards Wokingham.

4.1.6 A segregated cycleway is present on Observer Way which provides a traffic-free cycle route into Arborfield Cross. Arborfield Cross then provides regional cycleways which provide access to Crowthorne and Bracknell to the east, and Swallowfield and Beech Hill to the west.

4.1.7 A Walking, Cycling and Horse-Riding Assessment and Review (WCHAR) will be undertaken to provide an audit of non-motorised user routes between the site and key destinations and local facilities. A proposed scope for the WCHAR is provided in Section 9.

Planned Routes

4.1.8 WBC have produced a number of infrastructure improvement plans relating to active travel, which are summarised below. These documents have been considered in the development of both the wider LGV proposals and the strategy for the site. The overarching active travel strategy for LGV is given in Section 5.

WBC's Public Rights of Way Improvement Plan

4.1.9 WBC has prepared a Public Rights of Way Improvement Plan (2020) which details their strategy and prioritises the management and improvements of PRoW. This identifies several proposals for improving and enhancing the existing PRoW network, which would provide benefits to the site and also to the wider LGV.

4.1.10 Relevant improvements include aspirations for a new Loddon River Walk through the LGV site, whilst other nearby improvements include a new link between Shinfield Footpaths 5 and 6 which route to the west of the River Loddon.

4.1.11 Pertaining to the site, a new bridleway route (Greenway) along Mole Road and Church Lane is proposed (see paras 4.1.4 and 4.1.13), as well as a section along Sindlesham Road to the south.

WBC's Local Cycling and Walking Infrastructure Plan

4.1.12 WBC's Local Cycling and Walking Infrastructure Plan (LCWIP) has been produced to identify active travel schemes for the borough. Several of the proposed schemes are located in proximity to key corridors near to the site and LGV, particularly Shinfield, Lower Earley and Sindlesham. These will be considered by the TA and through the WCHAR.

WBC's Greenways Network

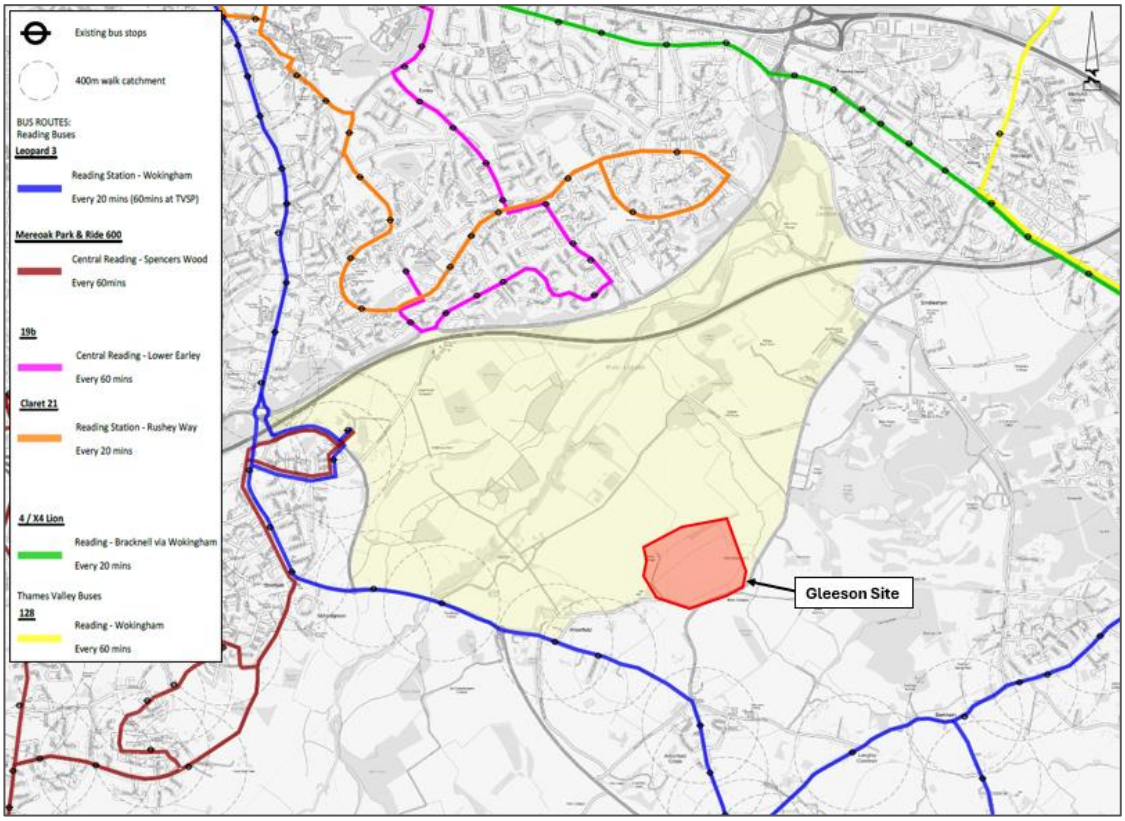
4.1.13 In addition to the existing PRoW network, WBC's Greenways Network aims to create a network of predominantly traffic-free routes that link the major site allocations within the borough with existing communities. These routes are intended to complement the existing footpath network, with the aim to provide 3.0m wide hard-surfaced routes to allow for use in all-weather by both pedestrians and cyclists.

4.2 Public Transport

Bus Services

4.2.1 The existing major bus services that operate within the vicinity of the site and the wider LGV are shown in **Image 4.2**. These routes are operated by Reading Buses and Thames Valley Buses, with a frequency of a least every 60-minutes.

Image 4.2: Existing Bus Provision (Major Services)

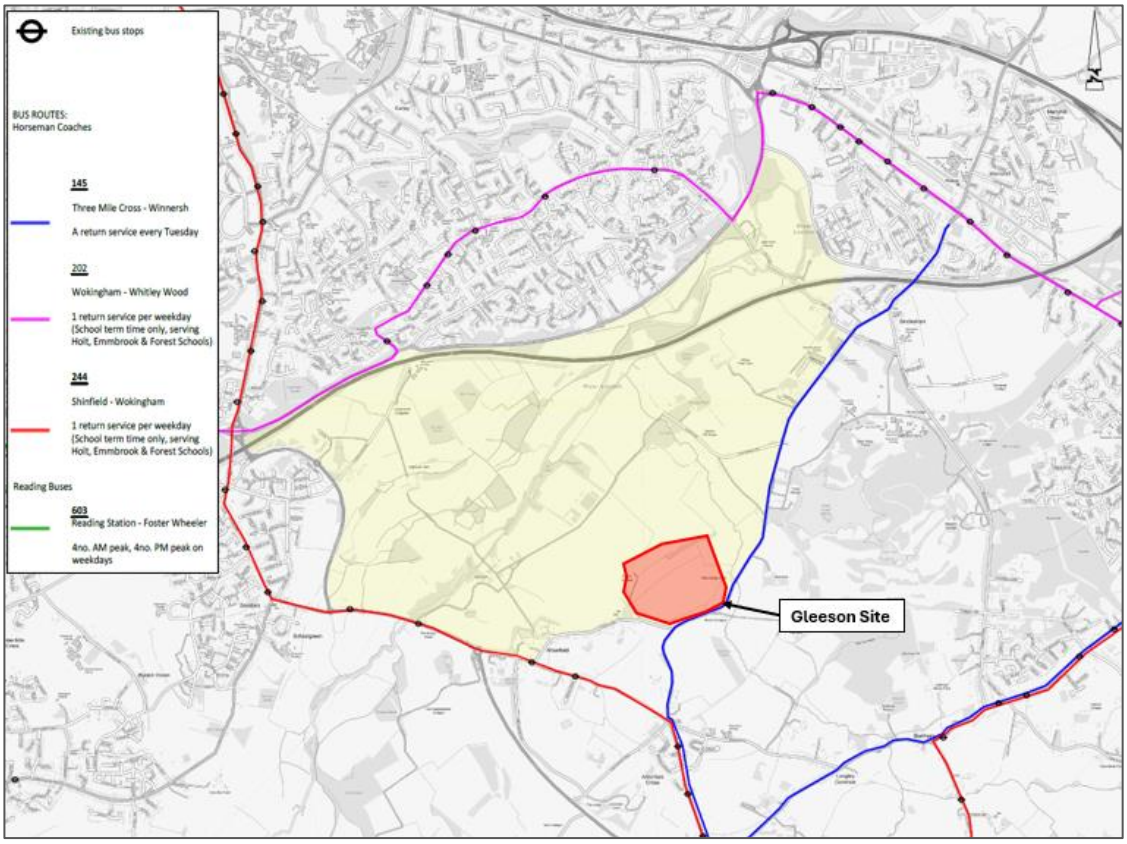


Source: Abley Letchford Partnership – Loddon Garden Village – Public Transport Strategy

4.2.2 The Leopard 3 service routes along the A327 Arborfield Road corridor, which runs immediately adjacent to the southern frontage of LGV. Buses operate at a 20-minute frequency throughout the day between Reading and Arborfield, serving key destinations within Reading, including the railway station, town centre, Royal Berkshire Hospital and the Whiteknights campus associated with the University of Reading. The nearest bus stops served by this route to the site are the Church Lane stops located on Reading Road, which are just over 1.0km (a 17-minute walk) away.

4.2.3 The major bus routes are supplemented by a series of minor services which operate at a lesser frequency. This includes the daily 244 service which runs along the A327 Arborfield Road at the southern frontage of the LGV, as well as the weekly 145 service which runs along Mole Road to the south. **Image 4.3** illustrates the minor bus services which operate within the vicinity of the LGV and the site.

Image 4.3: Existing Bus Provision (Minor Services)



Source: Abley Letchford Partnership – Loddon Garden Village – Public Transport Strategy

4.2.4 The public transport strategy for the LGV is set out in Section 5.

SECTION 5 Transport Vision and Sustainable Transport Approach

5.1 Context

5.1.1 The transport vision for the site is in-line with the NPPF (December 2024) and other current best practice approaches to transport planning for new development. These place emphasis on living locally and prioritising and adopting sustainable travel modes. This approach reflects the current need to both address climate change and meet the needs of a changing society.

Climate Emergency

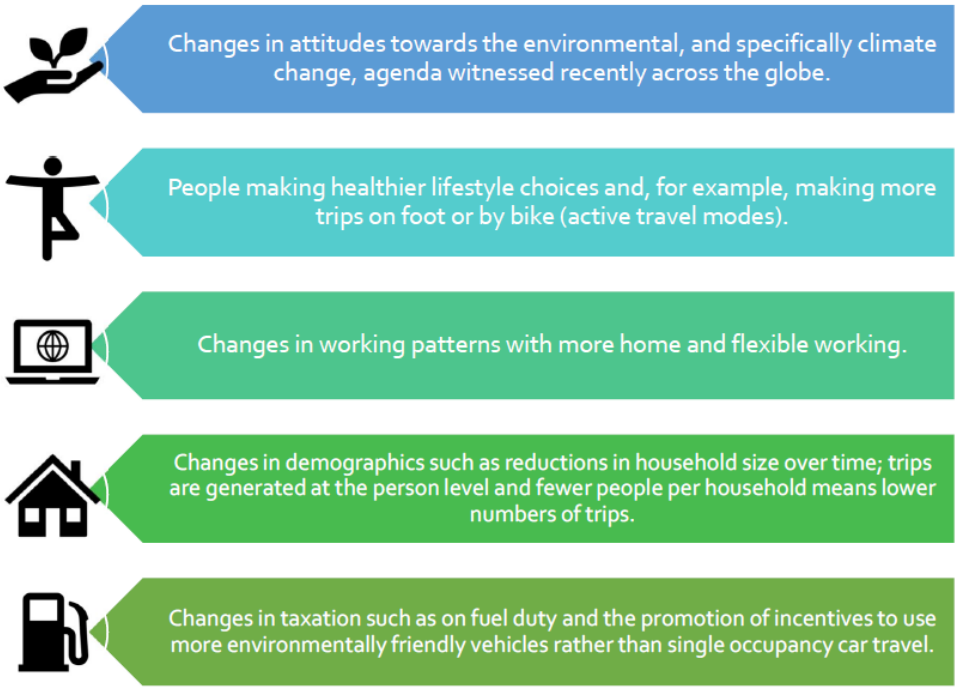
5.1.2 WBC declared a climate emergency in July 2019, and it is widely acknowledged that the transport sector contributes significantly to UK greenhouse gas emissions.

5.1.3 The need to address transport emissions sets the backdrop for the currently changing approach to transport planning. Of note, transitioning away from private car use and placing greater emphasis upon providing sustainable travel options.

Changing Societal Attitudes

5.1.4 Alongside growing environmental concerns, there are also several wider societal changes which are increasing public interest in sustainable travel and promoting change in how people travel, such as those illustrated in **Image 5.1.**

Image 5.1: Factors Influencing Travel Patterns

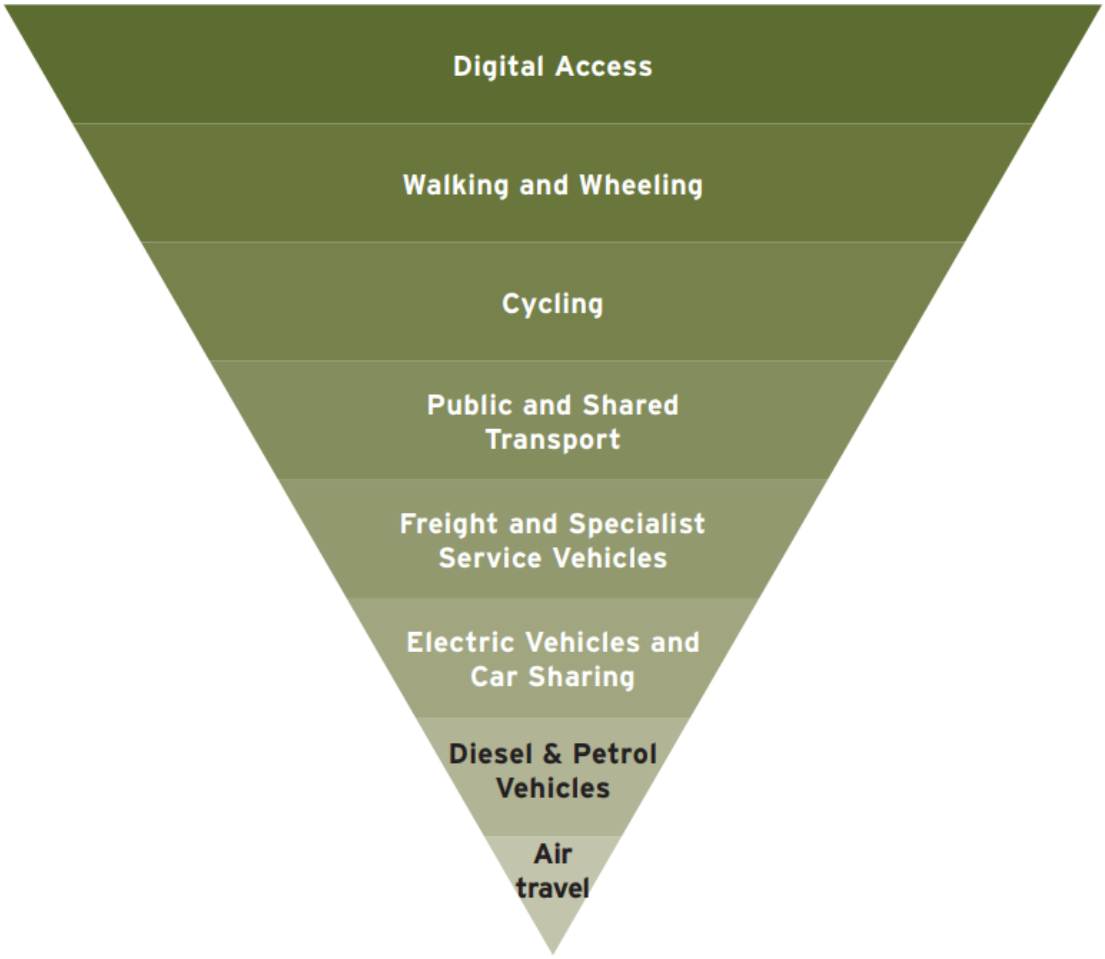


5.2 Setting the Vision Principles

5.2.1 The transport Vision for the site would seek to achieve a reality that directly accords with the wider aspirations of WBC and what they would seek to achieve with all forthcoming development. Key to this, would be establishing and bringing to fruition, a modal hierarchy which ultimately seeks to avoid trips where possible, with trips being made thereafter being made by sustainable modes, with private-car use being considered as one of the final options.

5.2.2 **Image 5.2** illustrates hierarchy of transport, taken from WBC's Local Transport Plan (LTP) 4. This hierarchy informs how placemaking must prioritise sustainable travel modes, instead of private car use.

Image 5.2: Hierarchy of Transport



Source: WBC Local Transport Plan 4

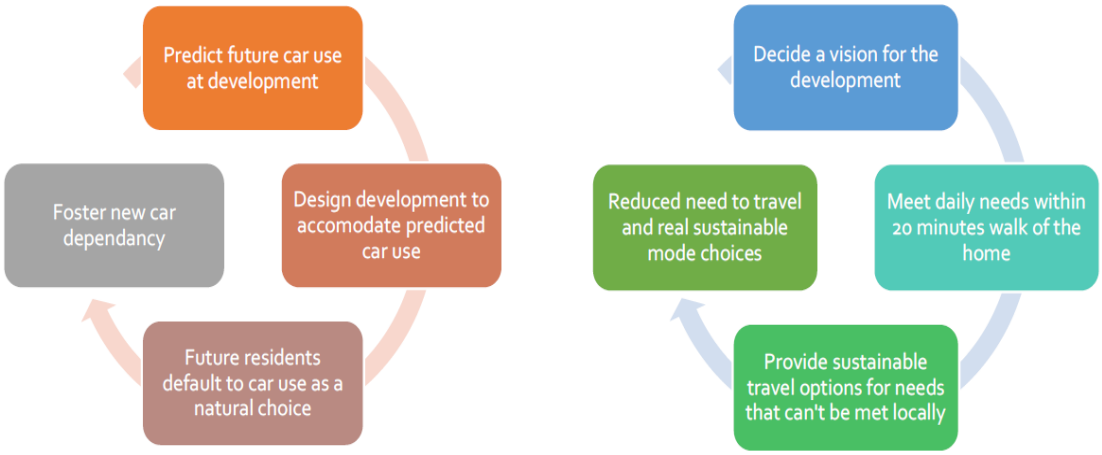
5.3 Change in Approach to Transport Planning

Vision-Led Assessments

5.3.1 Reflecting the need to move away from reliance on private car use, there is an increasing movement away from traditional 'predict and provide' based approaches to a more vision-led approach, commonly referred to as either 'decide and provide' or 'vision and validate'. This shift is taking place at both a national and local level, as set out in the NPPF and emerging local guidance across the country.

5.3.2 **Image 5.3** illustrates the key differences between the previous 'predict and provide' and the vision-led approach.

Image 5.3: Predict and Provide vs Vision-Led



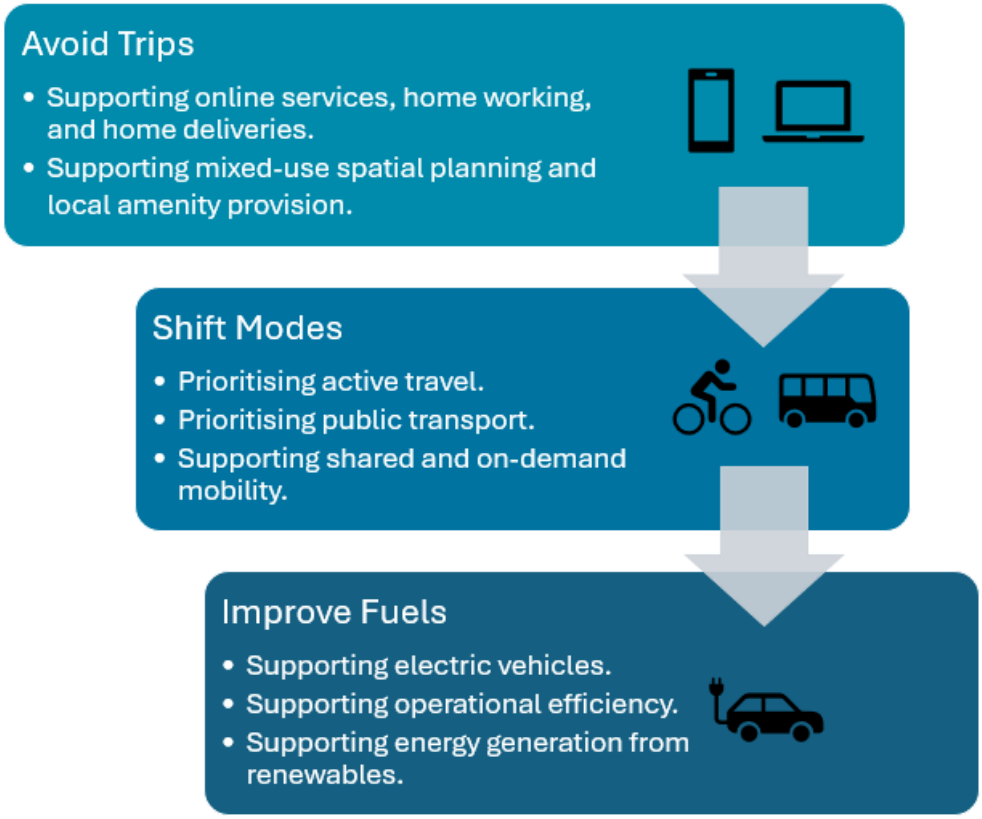
5.3.3 The vision-led approach places an increased importance on providing sustainable travel options to future residents, rather than anticipating private car use as inevitable and then designing places to accommodate this use.

Avoid, Replace and Improve

5.3.4 In forming the vision of a new development, best practice is to adhere to three underpinning principles, 'avoid, shift and improve'.

5.3.5 This approach concentrates firstly on avoiding unnecessary trips through digital access and connectivity. Then, when trips are made, these are to be made via sustainable modes instead of private car, and lastly, when car-based trips are to be made, these should be made via electric or hybrid-powered vehicles. The three underpinning principles (**Image 5.4**) support the realisation of WBC's modal hierarchy (**Image 5.2**).

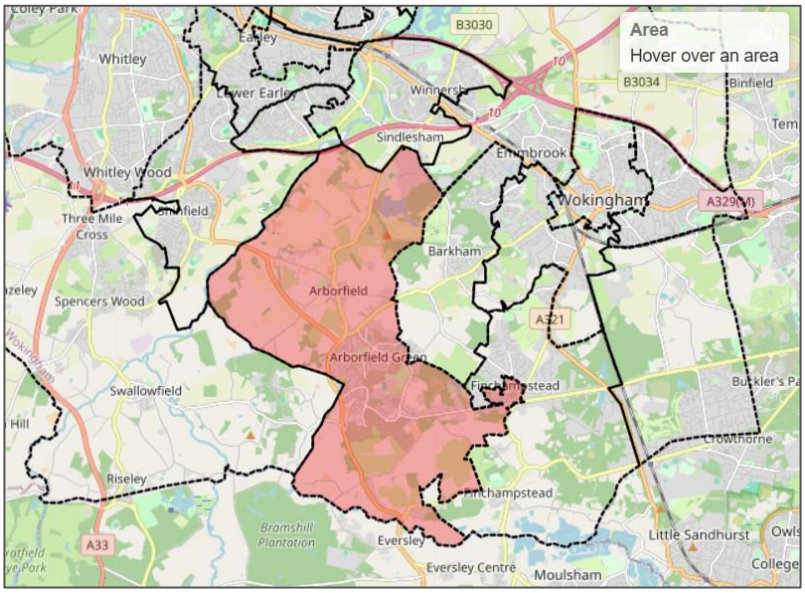
Image 5.4: Avoid, Shift, and Improve Principles



5.4 Existing Travel Conditions

5.4.1 Analysis of existing travel conditions has been based on the Wokingham Middle Layer Super Output Area (MSOA) 018 within which the site lies as shown in Image 5.5. This area includes Arborfield and the surrounding area.

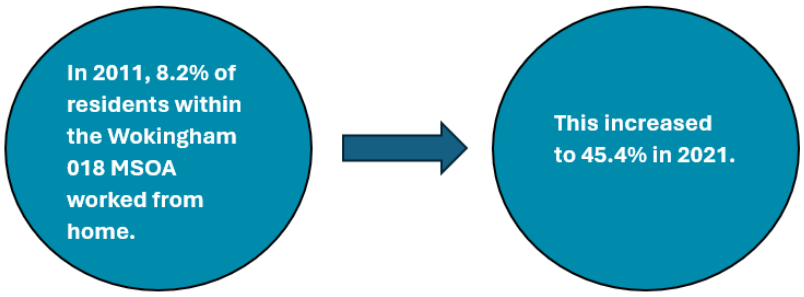
Image 5.5: Wokingham MSOA 018



Rise in Working from Home

5.4.2 **Image 5.6**, illustrates a 37.2% percentage point increase in residents in the Wokingham 018 MSOA who worked from home in 2021 compared to 2011. It is acknowledged that the 2021 Census was conducted at a time in which the UK was subject to lockdown restrictions associated with the COVID-19 pandemic. Therefore, this level of homeworking is unlike to be reflective of current working practices. Nevertheless, the legacy impacts associated with pandemic, particularly on hybrid working patterns, are still being felt. It is therefore reasonable to assume that the level of home working has increased significantly since the 2011 Census, particularly given the fact that a number of multinational / major technology companies have a presence in the surrounding areas.

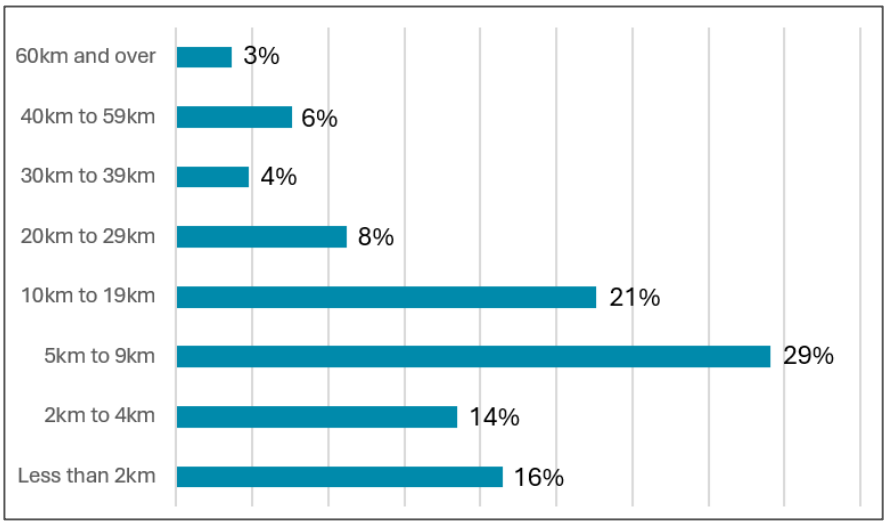
Image 5.6: Home Working – 2011 and 2021 Census



Distance Travelled to Work

5.4.3 **Image 5.7** shows distances that Wokingham 018 MSOA residents travel to their place of work.

Image 5.7: Distance Travelled to Work (Wokingham 018 MSOA)

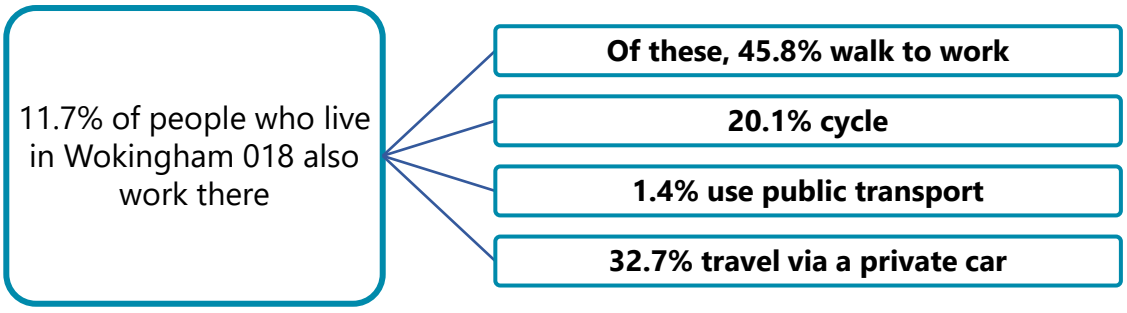


Source: 2011 Census Wokingham 018 MSOA

5.4.4 Census data suggests that 16% of residents travel less than 2km in order to reach their place of work, whilst a total of 59% of residents travel less than 10km. This would encompass major surrounding employment destinations such as Reading and Bracknell, which are both accessible via nearby bus services with Reading Railway Station providing additional frequent rail services to Bracknell.

5.4.5 11.7% of people who live in Wokingham 018 MSOA also work there, suggesting there is an element of existing employment opportunity within the local area. Of the 11.7% that work in the local area, just under 66% use active travel modes **Image 5.8**.

Image 5.8: Wokingham 018 MSOA – Residence and Workplace (JtW)



5.5 The Vision for the Site

5.5.1 Given the aspirations of the site and the wider LGV, a shared vision for the site has been developed which also correlates with WBC's aspirations for the borough. This vision is provided overleaf.

The Vision

"All development within Loddon Garden Village will be holistically planned, beautifully designed, and provide a sustainable community. It should be a place where people will want to live, where they feel healthy and happy, and which provides opportunities for communities to prosper and flourish."

"The University and Hall Farm have been an important part of the local community for more than a century. We want Loddon Garden Village to have a positive impact for local people and our environment, providing sustainable housing alongside the necessary facilities and infrastructure." - (University of Reading)

Together, we are aiming to create a vibrant place where people can enjoy working, living, and leisure activities. Our proposal provides much needed housing in the area whilst also opening up and restoring wildlife habitats and green and open spaces, including a country park, while protecting and enhancing the floodplain." - (Gleeson Land)

"The proposals will create generational change and benefit to the local community. Echoing the comments of the University, the Loddon Garden Village will also include significant investment in the local road network to address congestion, along with integrated plans to encourage active and safe travel." - (Hatch Farm Land Ltd)

5.6 Achieving the Vision

Full LGV

5.6.1 The overarching sustainable travel strategy for the LGV will reduce the need to travel via private vehicle. This would be supported through provision of ancillary land uses which would facilitate trip internalisation and contain trips within LGV, which would include:

- 2 no. Primary Schools;
- 1 no. Secondary School;
- 100,000sqm of additional employment use at Thames Valley Science Park;
- 1 no. food store;
- 3 no. Local Centres incorporating retail, community, and leisure uses; and
- Recreational use including leisure centre and sports pitches.

5.6.2 Significant discussion has been had with WBC over the location of the local centres and schools to ensure appropriate walking distances across the residential parcels (i.e. as far as possible residential parcels being within 800m of a local centre), and adhering to 'walkable neighbourhoods' principles as set out in DfT's Manual for Streets (MfS) and the Chartered Institute of Highways and Transportation's (CIHT) Planning for Walking guidance. Such an approach would also allow for the realisation of the '20-minute neighbourhood' concept (**Image 5.9**), in which services required to fulfil everyday needs can be accessed within recommended walking and cycling distances. The 20-minute neighbourhood concept is a key design measure which minimises the requirement to travel onto the wider transport networks.

Image 5.9: 20-Minute Neighbourhood Principles

Source: Town and Country Planning Association (March 2021)

5.6.3 Initial plans were prepared showing locations of the local centres and schools and were submitted to and discussed with WBC in late March 2025. Following these discussions the local centre and school locations have been adjusted and are now closer to the Gleeson parcel than previously shown. Updated plans are being prepared showing walking distances to these key facilities.

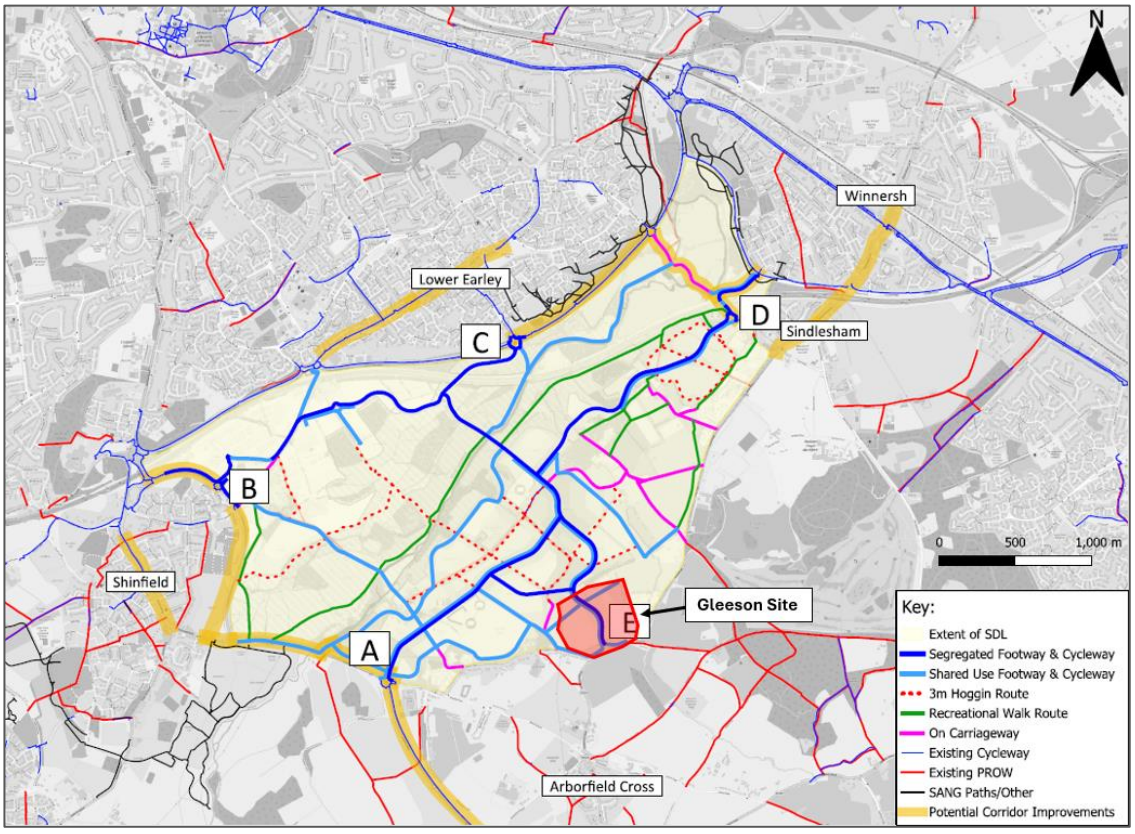
5.6.4 For the Gleeson site, these plans will demonstrate that the entire Gleeson Land parcel would be located within a 10-minute walk of a primary school, secondary school and local / district centre, ensuring that a range of everyday needs are met within a comfortable walking distance.

Active Travel Strategy

5.6.5 **Image 5.12** illustrates the emerging on-site active travel strategy associated with LGV, which from the perspective of the Gleeson site seeks to achieve:

- Direct walking and cycling links to facilities and services provided within the wider LGV including the primary and secondary schools, local centre and employment.
- Provision of WBC's proposed Greenway on Mole Road including a crossing of Ellis' Hill to connect the site to Wokingham for pedestrians and cyclists.

Image 5.12: Proposed Active Travel Strategy for LGV



Source: Abley Letchford Partnership – Loddon Garden Village – Public Transport Strategy

5.6.6 The Gleeson parcel will provide the following elements:

- Pedestrian and cycle infrastructure falling within the Gleeson Land area and connections to the wider LGV.
- Greenway connection and crossing of Mole Road.
- A financial contribution towards the wider infrastructure package, to be determined through ongoing discussions.

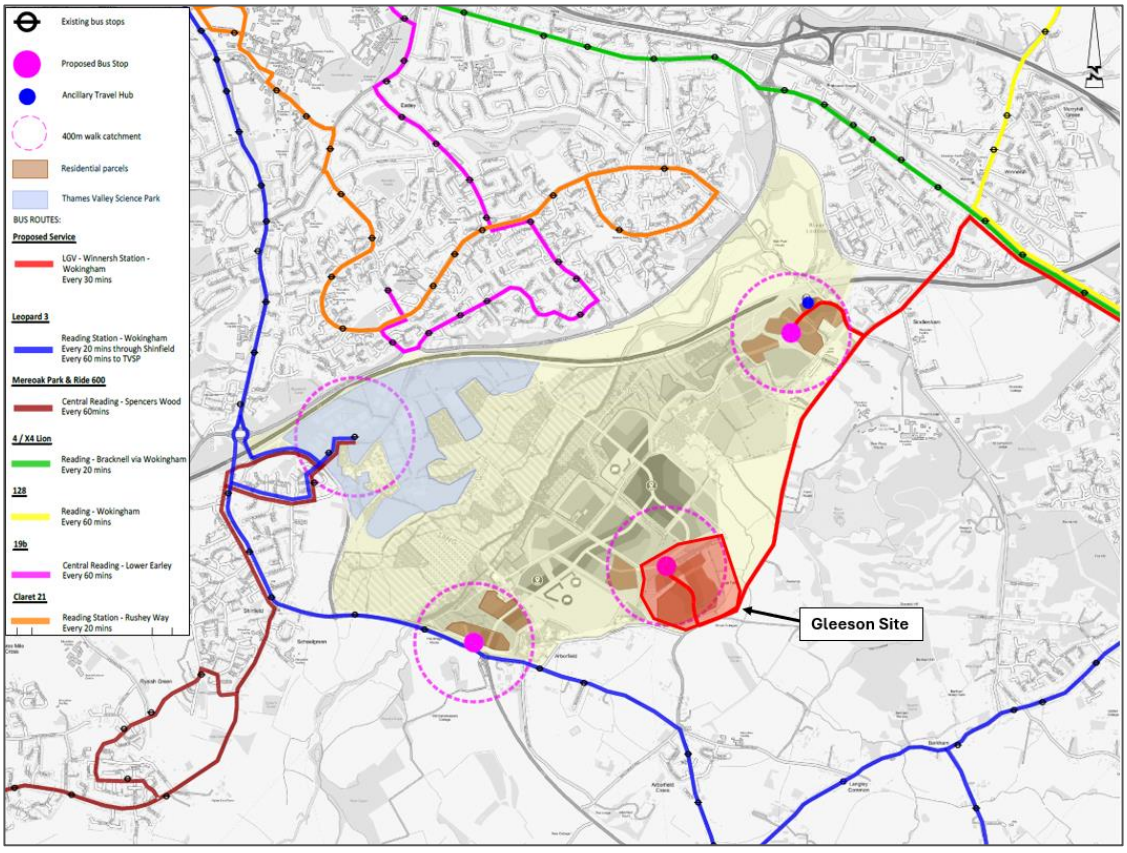
Public Transport Strategy

5.6.7 The emerging LGV public transport strategy includes introduction of a new service from the outset to cater for the development. The current proposal for Phase 1 includes a new 30-minute frequency service which would route between two development parcels via Mole Road, which would then provide a connection to Winnersh Railway Station, before continuing along the A329 Reading Road towards Wokingham Town Centre.

5.6.8 The provision of the new bus service would mean that the Gleeson Site would be located within a 400m walking distance of a new bus stop from the outset. Cycle parking would be provided at the bus stops to support sustainable multimodal travel. The new 30-minute service would significantly enhance bus provision in the local area.

5.6.9 The full Phase 1 public transport infrastructure is illustrated in **Image 5.13**.

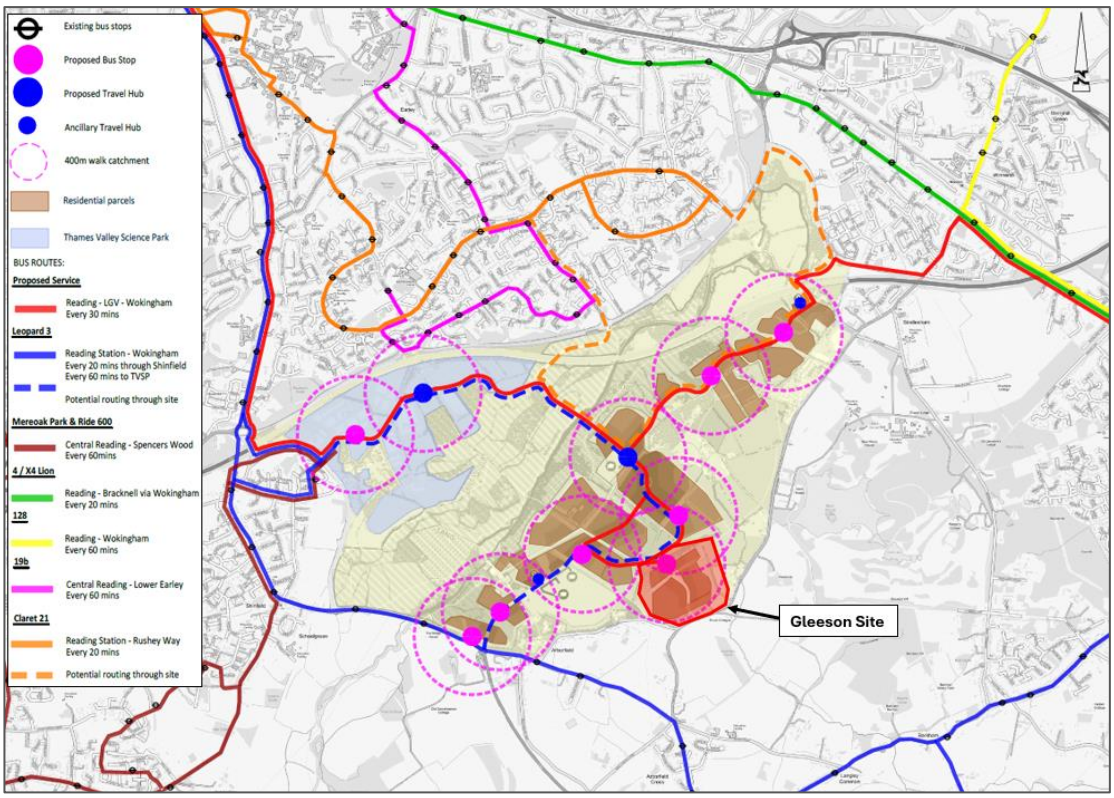
Image 5.13: Phase 1 Public Transport Infrastructure



Source: Abley Letchford Partnership – Loddon Garden Village – Public Transport Strategy

5.6.10 The emerging bus strategy for the full LGV is shown on **Image 5.14**. This bus service and associated bus stops would be within 400m of the Gleeson Site providing access to both Reading and Wokingham, via LGV.

Image 5.14: Full LGV Public Transport Infrastructure



Source: Abley Letchford Partnership – Loddon Garden Village – Public Transport Strategy

SECTION 6 Gleeson Land Development Proposal

6.1 Overview

6.1.1 The development proposal seeks to provide approximately 431 residential units on a southern land parcel located within the LGV allocation, with a proposed points of access with the B3030 Mole Road. It is envisaged that this development would be the first phase of the LGV.

6.1.2 The illustrative site layout is provided in **Image 6.1** and in **Appendix A**.

Image 6.1: Illustrative Site Layout

Source: Thrive Architects

6.2 Access

Vehicular Access Overview

6.2.1 Access to the site will be achieved from the B3030 Mole Road to the south and in Phase 1 will provide access to the Gleeson development only. With the full LGV development WBC are keen to limit the priority and role of the B3030 Mole Road access to an appropriate and proportionate extent. Appropriate traffic calming features are considered within the Masterplan spine road layout (see below).

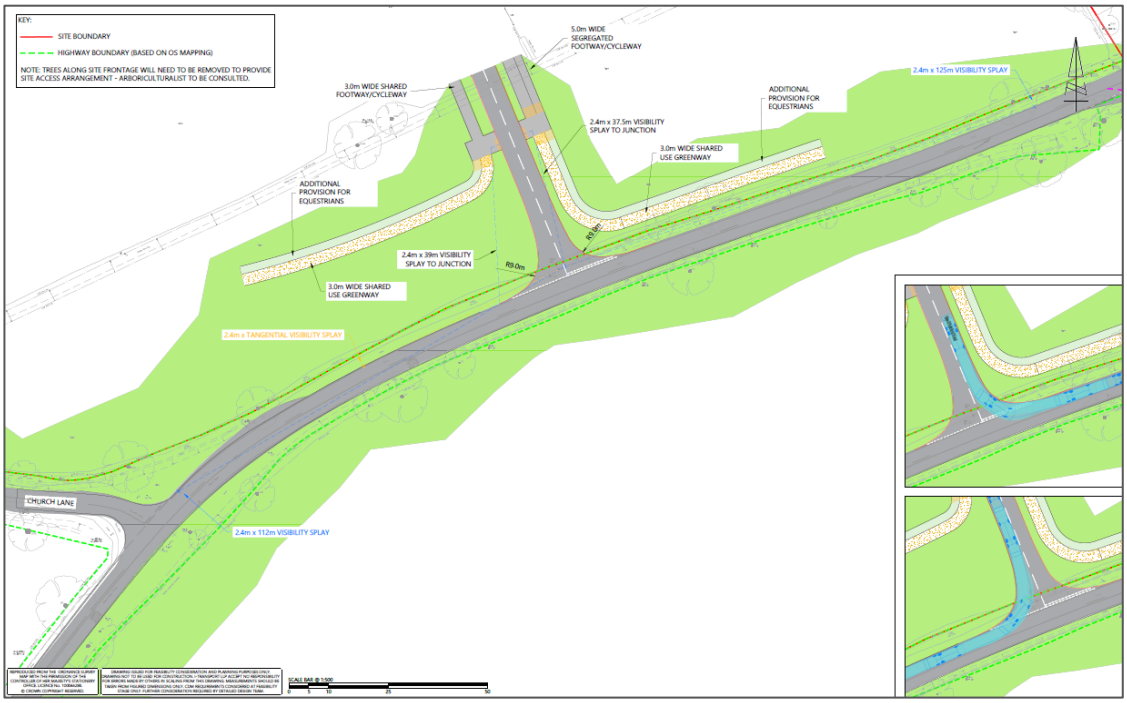
6.2.2 The speed limit of the B3030 Mole Road is 50mph meaning that design parameters from the Design Manual for Roads and Bridges (DMRB) will be adhered to for the access junction.

6.2.3 An extensive access optioneering process was undertaken by i-Transport in the form of a Technical Note (TN) (**ITB17371-007 TN**) which is contained within **Appendix B**. Following pre-application discussion with WBC it has been agreed to provide access via a simple priority junction which is consistent with the WSTM4 model assumptions. The location of the site access at this section of the B3030 Mole Road ensures there is a relatively straight alignment and provides the most appropriate location for achieving the required visibility splays.

6.2.4 The visibility splay requirements have been based on the traffic speeds surveys undertaken on Mole Road in March 2025 (**Table 3.1**). Based on the observed 85th percentile speeds, this would necessitate visibility splays of 2.4m x 125m to the left and 2.4m x 112m to the right, both of which are achievable within the public highway.

6.2.5 **i-Transport Drawing ITB17371-GA-009C** illustrates the design of the priority T-junction, with an extract provided in **Image 6.2**.

Image 6.2: Priority T-Junction Design

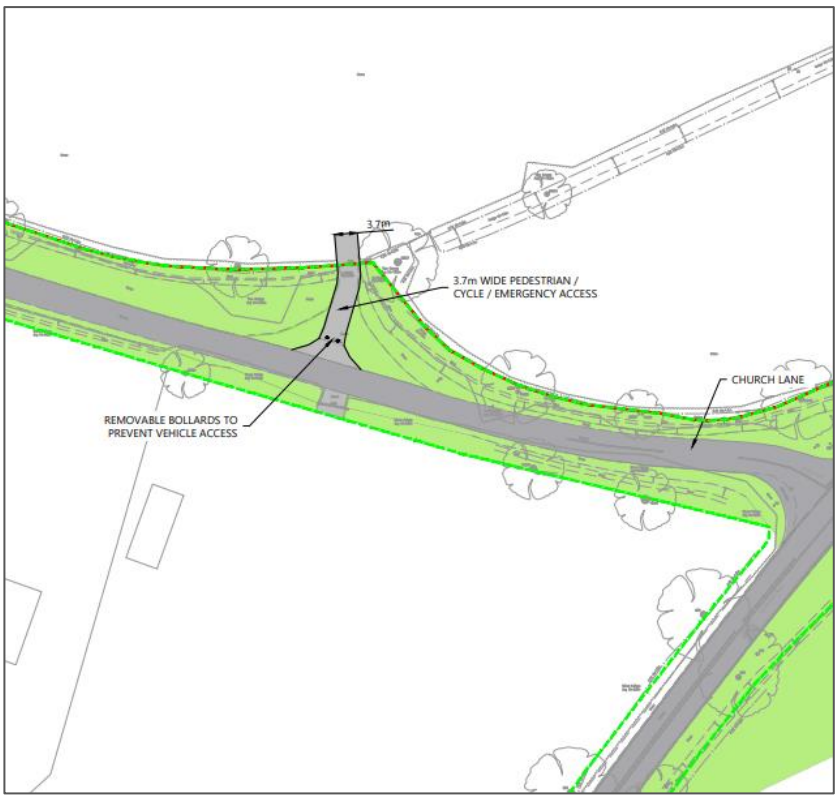


Source: i-Transport

Emergency Vehicle Access

6.2.6 Given the quantum of development proposed, it will be necessary to provide a separate emergency vehicle access. An emergency vehicle access with Church Lane will therefore be provided. **i-Transport Drawing ITB17371-GA-011A** illustrates the design of the emergency access, with an extract provided in **Image 6.3**.

Image 6.3: Proposed Emergency Access



Source: i-Transport

Pedestrian / Cycle Access

6.2.7 The access strategy seeks to achieve convenient and direct pedestrian and cycle access across the site, fitting with the active travel strategy for the wider LGV site. The following pedestrian/cycle accesses are proposed and marked on the masterplan:

- Incorporated at the main vehicular access to Mole Road
- At the emergency vehicle access to Church Lane
- To Mole Road in the vicinity of Ellis' Hill (facilitating the Greenway – see below)
- To Church Lane close to the western site boundary (facilitating the Greenway – see below)
- To the wider LGV at the northern end of the Gleeson spine road
- To the wider LGV on the western site boundary.

6.2.8 Feedback was obtained from WBC at a meeting in late April 2024, including comments on the directness of walking routes, pedestrian/cycle access points etc.

6.2.9 In particular, a direct walking route from the spine road, through the development parcel, to the pedestrian access on the western site boundary was requested by WBC to provide a direct walking route between Ellis' Hill and the proposed secondary school. The two options for achieving this route are shown on the sketch in **Image 6.4** below. The are two particular constraints that need to be considered in this area of the site, which include:

- A gas main and easement, which runs in a north-west to south east direction; and
- HV overhead wires and easement which run in a north-south direction.

6.2.10 These features affect the ability to plan development parcels in this area.

6.2.11 A route that runs on a diagonal through this development parcel would have a walking/cycling distance of 525m and the route running around the boundary has a walking/cycling distance of 575m. The difference in route length (50m / <1 mins walk) is therefore not significant.

6.2.12 Having regard to the various constraints, the architect's review has identified that inclusion of a diagonal link would create a poor quality / inefficient layout with awkward development parcels remaining that would not be conducive to good placemaking. The difference in the length of the perimeter walking route is not significant and would not deter people from making walking and cycling journeys either from within the site or through the site to the secondary school. Given these various considerations and impacts, on balance it is proposed to retain the route around the perimeter of the development.

Image 6.4: Options considered for walking route in south-western part of the site

Source: Thrive architects

Greenway Provision

6.2.13 The masterplan seeks to incorporate WBC's Greenway aspiration for Mole Road between Ellis' Hill and Church Lane. During pre-application discussions with WBC, it has been agreed to provide a crossing point on Mole Road to accommodate existing and future walking, cycling and equestrian movements. This controlled crossing would be located just west of Ellis's Hill. The following drawings have been submitted to WBC for consideration:

- ITB17371-GA-013 – Option 1A Signal Controlled crossing
- ITB17371-GA-016 – Option 1B Alternative Signal Controlled crossing
- ITB17371-GA-014 – Option 2 Uncontrolled Crossing
- ITB17371-GA-015 – Option 3 Uncontrolled Crossing Priority Working Arrangement

6.2.14 Initial discussions have identified that due to predicted future year flows on Mole Road WBC prefers a controlled crossing design. The initial design options for a controlled crossing are reprovided in this note and WBC's feedback is requested to assist with the development of the design.

6.2.15 **i-Transport Drawings ITB17371-GA-013** and **ITB17371-GA-016** illustrate the signalised Mole Road crossing options.

Spine Road

6.2.16 The application will be in outline with access from Mole Road and including the spine road through the Gleeson land from the Mole Road access up to the northern boundary with the UoR land. The layout provides a central spine road connecting from Mole Road to the south through to the wider LGV to the north.

6.2.17 The highway parameters are set out in WBC's '*Living Streets: A Highways Guide for Developers in Wokingham*'. The main road within the Gleeson Site will be designed as a 'Secondary Street' and following discussion with WBC and consideration of forecast daily traffic flows the following design parameters are proposed:

- 6.5m carriageway width.
- 25mph design speed.
- A segregated 2.0m footway with 3.0m two-way cycleway on the eastern side of the carriageway.
- A shared 3.0m foot/cycleway on the western side of the carriageway.

- Uncontrolled pedestrian/cycle crossing points.
- Traffic calming features (see below) to be spaced at 60-80m intervals.

6.2.18 It has further been agreed with WBC that there is a need to limit the 'attractiveness' of the spine road through the Gleeson Land parcel, to ensure that it is not used as a 'rat-run' by vehicles associated with the wider LGV. The design of the spine road will therefore incorporate speed control measures in the form of highway narrowings / crossing points and soft and hard landscaping to control vehicular speeds along the section of road within the Gleeson Land site. These features are shown indicatively on the Illustrative Masterplan.

6.2.19 A design for the proposed spine road and traffic calming will be further shared with WBC as the design progresses.

Road Safety Audit

6.2.20 A Stage One Road Safety Audit (RSA) will be undertaken for the proposed priority junction access, the emergency vehicle access and the proposed crossing of Mole Road. The Stage 1 RSA report and designers' response will be submitted as part the planning application and produced in accordance with DMRB's GG119 document.

Phasing of Wider Infrastructure

6.2.21 A degree of wider supporting infrastructure associated with the LGV will be delivered in tandem with the buildout of the Gleeson Land parcel. This would comprise the internal road network, active travel routes and ancillary land uses in addition to further residential development by the other land holders. Discussions are ongoing with WBC to agree the infrastructure delivery plan.

6.2.22 Discussions have been held with WBC on the existing traffic calming on Sindlesham Road. It has been agreed that the existing traffic calming will be removed as part of the interim phase of development. An alternative scheme is under development and will be shared with WBC for discussion.

6.3 Parking Provision

6.3.1 Although the exact parking provision is a reserved matter, car (including visitor) and cycle parking will be delivered in accordance with WBC's *"Parking Standards Study Report"* (October 2011) and the *"Parking Demand Calculation Spreadsheet."*

6.4 Refuse, Delivery and Servicing, and Emergency Access Arrangements

6.4.1 The detail of the internal layout is a reserved matter. However, the internal roads will be designed in order to accommodate refuse, delivery and servicing, and emergency vehicle access, and will adhere to the design principles set out in the below:

- WBC *"Waste Management Facilities in New Developments"* (November 2024); and
- *"The Building Regulations 2010 – Fire Safety – Approved Document B – 2022 Amendments."*

SECTION 7 Highway Impact Assessment

7.1 Assessment Overview

Use of the WSTM Model

7.1.1 The Wokingham Strategic Transport (WSTM) Model will be used to assess the traffic impacts generated by the full LGV.

7.1.2 Discussions on the following matters are ongoing with WBC:

- Multi-modal and Vehicular Trip Generation.
- Model Brief and Scope.

7.1.3 Given the vision for the site and the emphasis on sustainable travel, multimodal trips (including vehicular trips) will be established from these discussions. At the time of writing the most recent information includes:

- ALP document reference A392/R054/A Trip Generation Methodology dated 7 May 2025.
- WBC Model Brief Template dated 8 April 2025.
- ALP's Instructions for WSTM Model Assessments report dated 16th May 2025.

7.1.4 The outputs produced from the model run will allow for determining traffic generation and distribution associated with the site through analysis of zone loaders and select link analysis.

7.1.5 The model outputs will be assessed against the Forecast Base Scenario to establish the development impact.

Committed Development

7.1.6 Discussions are ongoing to agree the model Uncertainty Log which will set out the committed developments to be included.

Assessment Scenarios

7.1.7 The NPPF (December 2024) now makes explicit reference to "vision-led" assessment which should be tested as part of the transport assessment for new development.

7.1.8 The following scenarios will be tested:

- **Scenario A - WBC Parameters** – Based on trip rates and internalisation factors undertaken within the TA for the Local Plan Update; and

- **Scenario B - ALP Parameters –** Based on trip rates and internalisation factors set out in ALP's Trip Generation Note (A392/RO54A – Latest version dated 7 May 2025).

Assessment Years

7.1.9 The assessment years will be informed through application timescales and the scenarios within WBC's Local Plan. Therefore, the following assessments will be undertaken:

- Run A : 2040 'Forecast Base'
- Run B : 2040 'With Full Development' (Regulation 19 Parameters)
- Run C : 2040 'With Full Development' (Abley Letchford Parameters – Full Scenario with Internalisation)
- Run D: 2032 'Forecast Base'
- Run E: 2032 'With Development' (Abley Letchford Parameters Interim Scenario with Internalisation)

7.1.10 The 2032 Interim Year scenarios assumes the Gleeson Land site is operational with a proportion of LGV infrastructure in place, as per the phasing plan (Image 7.12).

7.1.11 The 2040 End of Local Plan scenarios assumes full LGV infrastructure and associated highway mitigation package is implemented.

7.1.12 Given the mixed of land uses being delivered by LGV, **Table 7.1** provides the land use assumptions for the 2032 and 2040 scenarios. It should be noted that the dwellings delivered by Gleeson Land (431) would be included within the residential housing numbers below.

Table 7.1: LGV Land Use Assumptions

Land Use	2032 Interim	2040
Residential Houses	1,300 units	3,340 units
Residential Flats	230 units	590 units
Community Uses	2,250sqm	4,750sqm
Foodstore	1,000sqm	3,500sqm
Local and District Centres	1,050sqm	4,650sqm
Primary School	630 pupils	1,260 pupils
Secondary School	900 pupils	2,160 pupils
Sports Pitch	-	6 pitches
Leisure Centre	-	1,190sqm
Research and Development	20,000sqm	105,000sqm

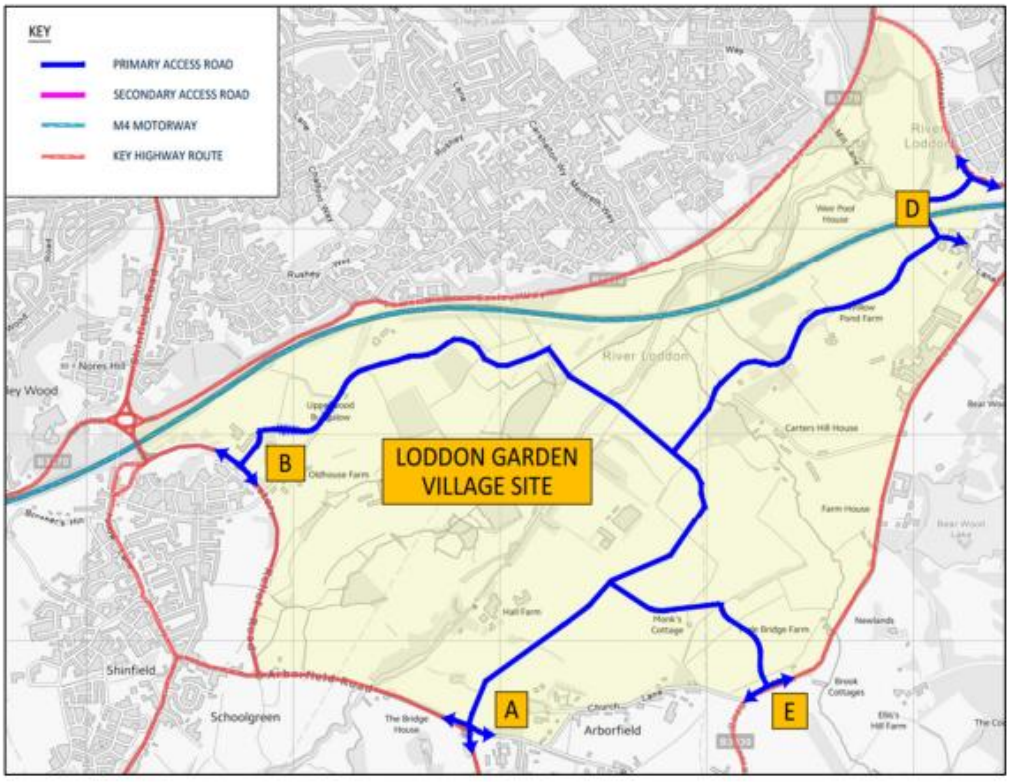
Highway Infrastructure Assumptions

2032 Interim Year With Development

7.1.13 In the 2032 interim year scenario, the following four access points would be in place for LGV as shown in Image 7.1:

- Promotion of 4th arm onto the A327 Arborfield Road / Observe Way roundabout.
- Improved Thames Valley Science Park / Shinfield Eastern Relief Road roundabout.
- New roundabout access onto Mill Lane at Sindlesham, new link road to Hatch Farm Way and closure of Mill Lane to vehicular traffic.
- New priority T-junction with Mole Road.

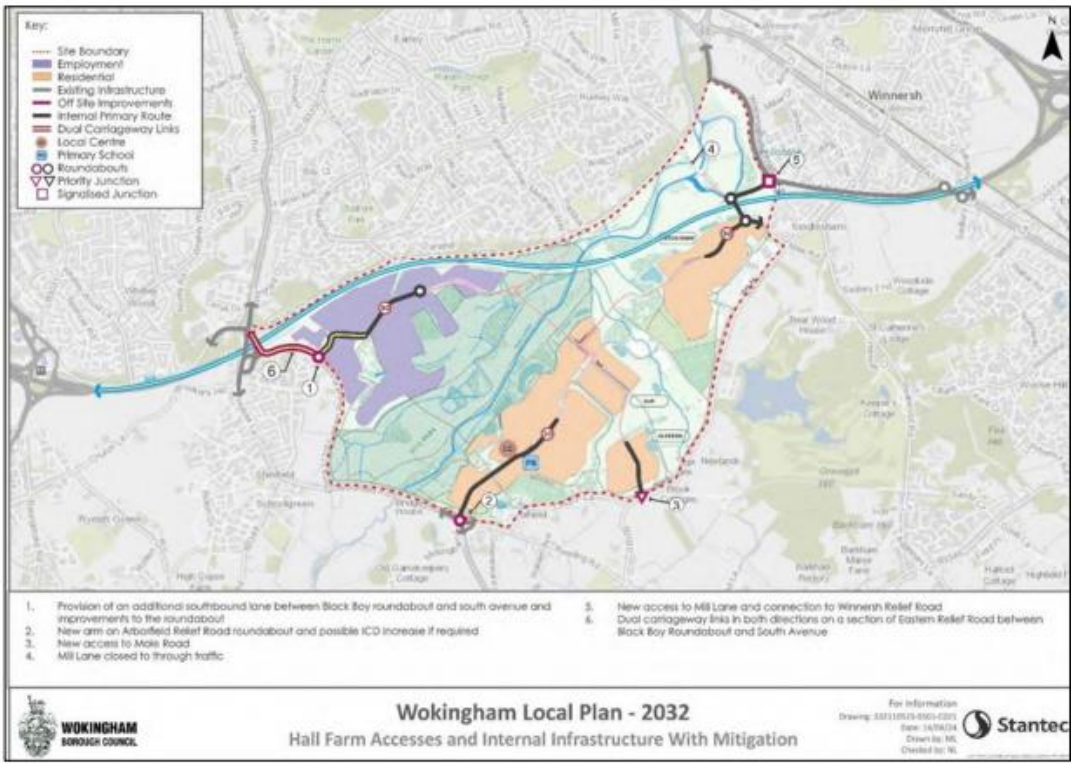
Image 7.1 – Access Points 2032 Interim Year



Source: ALP Model Report

7.1.14 In the 2032 interim year, part of the wider LGV highways works will be implemented, as illustrated in **Image 7.2**.

Image 7.2: LGV Infrastructure and Land Uses – 2032 Interim Year



Source: ALP Model Report

7.1.15 Emerging agreements for the off-site infrastructure provision for the interim and full scenarios is given in ALP's Model Scope report.

7.2 Trip Assignment

7.2.1 The assignment and distribution of vehicular trips onto the surrounding highway network will be established through WSTM outputs.

7.3 Assessment of Impacts

7.3.1 The proposed Mole Road access will be tested using the WSTM outputs from the with development scenarios (Scenario A and B) using JUNCTIONS 11 software.

7.3.2 Initial highway network impact appraisal will be undertaken by comparing the WSTM outputs from the with and without development scenarios (Scenario A and B) for the following junctions:

1 A327 / Reading Road / Observer Way roundabout;

2 A327 / Arborfield Road / Eastern Relief Road roundabout.

3 Arborfield Cross roundabout;

4 Mole Road / Mill Lane / New Road roundabout

5 Longdon Road / Hatch Farm Way / King Street Lane signalised junction;

6 Mill Lane / B3270 / Rushey Way roundabout;

7.3.3 **Image 7.3** illustrates the location of these junctions.

Image 7.3: Junction Assessment Study Area

7.3.4 Confirmation of the junctions to be assessed is sought from WBC.

7.3.5 The WSTM will also provide morning and peak hour link flows for each of the scenarios run. Commentary will be provided on the total number of vehicles and heavy goods vehicles for Scenarios A and B for the links within the study area identified above, i.e:

- B3030 Mole Road, north of proposed access.
- Sindlesham Road.
- Church Road.
- Reading Road, north of Arborfield Cross roundabout.
- B3030 Mole Road north of Mole Road / Mill Lane / New Road roundabout.
- Mill Lane.

SECTION 8 Residential Travel Plan

8.1.1 A Residential Travel Plan (RTP) will be prepared to support the planning application. The RTP will be prepared in accordance with national guidance as well as WBC's *'Residential Travel Planning Guidance' (2017)*.

8.1.2 The overarching purpose of the RTP will be to promote the development vision by informing future residents of the benefits and availability of sustainable travel modes. It will also detail the local active travel and public transport networks and the location of nearby amenities to compliment sustainable journeys.

8.1.3 The RTP will also provide a package of site-specific measures to ensure that sustainable journeys are made effectively and ensure the sustainable nature of the site is maintained. In particular measures will include bus taster tickets to promote use of the on-site public transport provision.

8.1.4 The RTP will contain the following sections:

- Introduction, purpose and context;
- Policy Context;
- Development and transport vision;
- Sustainable travel accessibility;
- Development proposals;
- Aims and objectives;
- Interim travel targets;
- Measures, funding and enforcement;
- Monitoring via SAM surveys. Review processes to include remedial/incentive measures if targets are not met to include for example further bus tickets, personalised journey planning etc.
- Action plan; and
- Summary.

SECTION 9 Walking, Cycling and Horse-Riding Assessment and Review

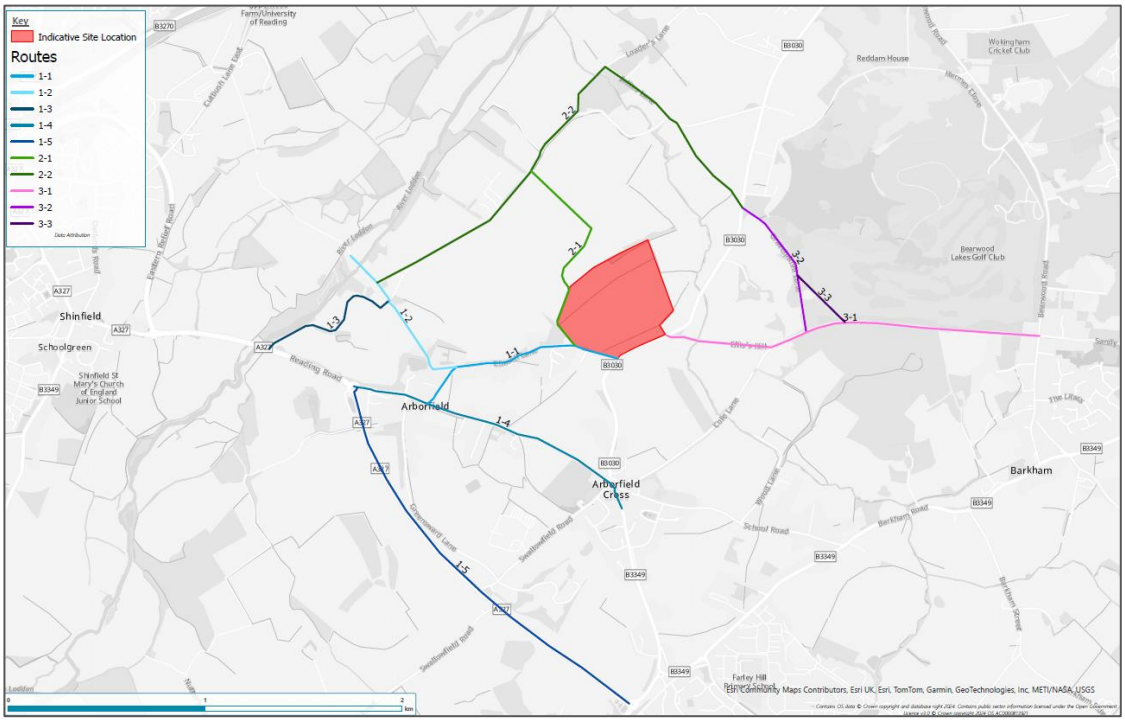
9.1.1 A Walking, cycling and horse-riding assessment and review (WCHAR) will be produced in accordance with GG 142 of DMRB.

Study Area

9.1.2 The study area has been defined based on identified non-motorised user (NMU) routes within the vicinity of the site, with focus on connectivity to surrounding destinations and local facilities.

9.1.3 Based on desire lines and the location of surrounding destination, the routes that will be assessed within the WCHAR are illustrated in **Image 9.1**.

Image 9.1: WCHAR Study Routes



Site Visit

9.1.4 A site visit was undertaken on 2nd April 2025 to assess the existing pedestrian, cycle and equestrian infrastructure within the surrounding area. Key routes and connections will be identified to nearby public transport, residential, commercial, educational, and leisure facilities.

9.1.5 Information obtained from this site visit will be used to inform the production of the WCHAR which will accompany the planning application.

Assessment Criteria

9.1.6 Each route will be assessed against the following criteria:

- **Convenience** – directness and connections between key destinations and local facilities;
- **Quality and Attractiveness** – surface quality, lighting and comfort;
- **Safety** – visibility, crossing facilities and interaction with motor vehicles;
- **Public Transport** – quality and accessibility of public transport infrastructure (bus stops etc);
- **Accessibility** – accessibility standards, gradients, barriers, surfacing, dropped kerbs and tactile paving. Barriers to those who are mobility impaired also identified; and
- **Consistency** – signage, surfacing and general quality of route.

SECTION 10 Summary

10.1 Overview

10.1.1 This Transport Scoping Note (TSN) has been prepared on behalf of Gleeson Land to provide transport and highways support in the respect of a planning application for up to 431 residential dwellings on land forming the southern part of the Loddon Garden Village (LGV), located in Arborfield, Wokingham.

10.1.2 The LGV is a proposed strategic allocation (Policy SS13 – Loddon Valley Garden Village) within WBC's Local Plan Update to 2040, with aspirations to deliver up to 3,750 new homes, strategic scale Research and Development (R&D) employment, film studio, primary and secondary education facilities and local centres, along with a public transport hub and corridor.

10.1.3 The content of this note is for discussion and agreement with WBC.

DRAWINGS

KEY:

SITE BOUNDARY

HIGHWAY BOUNDARY (BASED ON OS MAPPING)

NOTE: TREES ALONG SITE FRONTAGE WILL NEED TO BE REMOVED TO PROVIDE SITE ACCESS ARRANGEMENT - ARBORICULTURALIST TO BE CONSULTED.

5.0m WIDE SEGREGATED FOOTWAY/CYCLEWAY

3.0m WIDE SHARED FOOTWAY/CYCLEWAY

2.4m x 125m VISIBILITY SPLAY

ADDITIONAL PROVISION FOR EQUESTRIANS

2.4m x 37.5m VISIBILITY SPLAY TO JUNCTION

3.0m WIDE SHARED USE GREENWAY

ADDITIONAL PROVISION FOR EQUESTRIANS

R9.0m

2.4m x 39m VISIBILITY SPLAY TO JUNCTION

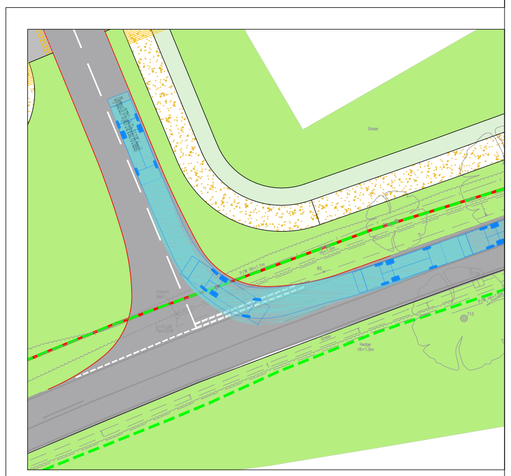
R9.0m

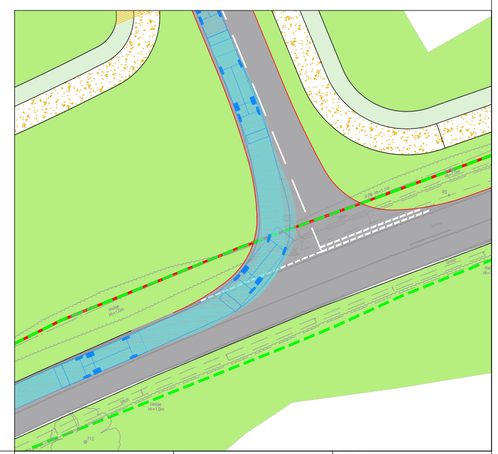
3.0m WIDE SHARED USE GREENWAY

2.4m x TANGENTIAL VISIBILITY SPLAY

CHURCH LANE

2.4m x 112m VISIBILITY SPLAY





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SCALE BAR @ 1:500

0 5 10 25 50

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Basingstoke, Hampshire, RG21 4EB

Tel: 01256 637940

www.i-transport.co.uk

REV	DATE	BY	DESCRIPTION	CHK	APD
C	21.05.25	JB	SITE ACCESS UPDATED	EP	EP
B	02.04.25	SH	VISIBILITY UPDATED	MK	EP
A	27.11.24	SH	NOTES UPDATED	JW	JW

STATUS: FOR INFORMATION

TITLE: PROPOSED SITE ACCESS ARRANGEMENTS - SIMPLE PRIORITY JUNCTION

PROJECT: NEWLAND FARM, ARBORFIELD

CLIENT: GLEESON STRATEGIC DEVELOPMENT

DRAWN:	CHECKED:	APPROVED:
MM	JW	TW
PROJECT No:	**SCALE @ A2:**	**DATE:**
ITB17371	1:500 & 1:1000	29.10.24
DRAWING No:		**REV:**
ITB17371-GA-009		C

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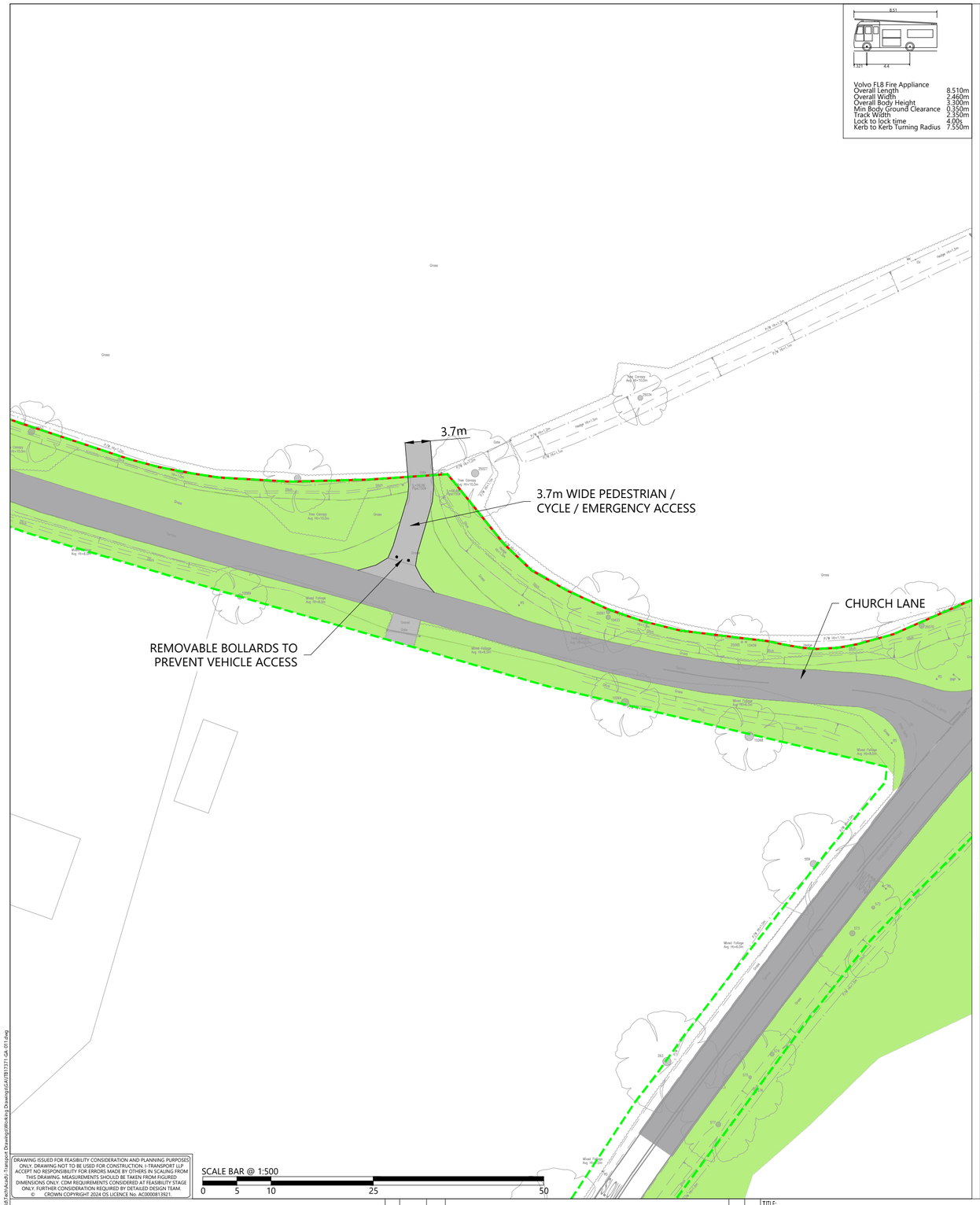
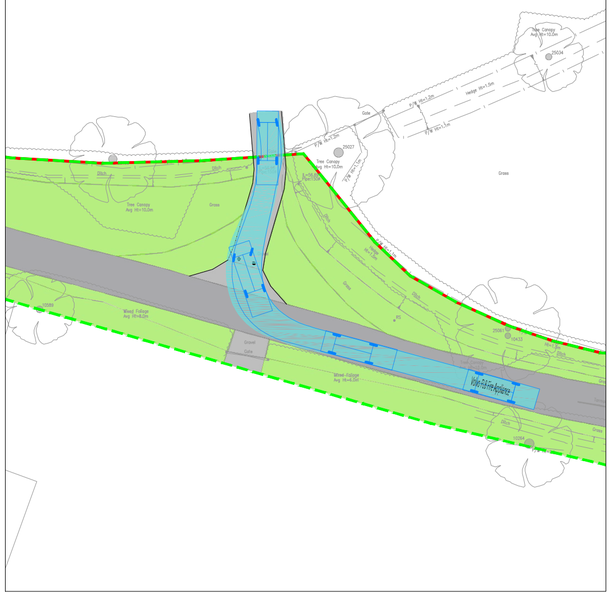


Volvo FL8 Fire Appliance

Overall Length	8.510m
Overall Width	2.460m
Overall Body Height	3.300m
Min Body Ground Clearance	0.350m
Track Width	2.350m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.550m

SWEPT PATH ANALYSIS -
FIRE TENDER TURNING RIGHT IN TO EMERGENCY ACCESS



SWEPT PATH ANALYSIS -
FIRE TENDER TURNING LEFT INTO EMERGENCY ACCESS

SWEPT PATH ANALYSIS -
FIRE TENDER TURNING RIGHT OUT OF EMERGENCY ACCESS

SWEPT PATH ANALYSIS -
FIRE TENDER TURNING LEFT OUT OF EMERGENCY ACCESS

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Tel: 01256 898366
www.i-transport.co.uk

REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

TITLE: PEDESTRIAN / CYCLE / EMERGENCY ACCESS - CHURCH LANE

PROJECT: NEWLAND FARM, ARBORFIELD

CLIENT: GLEESON LAND

DRAWN:	CHECKED:	APPROVED:
SH	EP	TW
PROJECT No:	SCALE @ A2:	DATE:
ITB17371	1:500	29.04.25
DRAWING No:		REV:
ITB17371-GA-011		

KEY:

SITE BOUNDARY

HIGHWAY BOUNDARY (BASED ON OS MAPPING)

NOTE: TREES ALONG SITE FRONTAGE WILL NEED TO BE REMOVED TO PROVIDE SITE ACCESS ARRANGEMENT - ARBORICULTURALIST TO BE CONSULTED.

160m FORWARD VISIBILITY TO PRIMARY SIGNAL HEAD

POTENTIAL LAND REQUIRED OUTSIDE OF BOAT ARBO8

POTENTIAL TREE IMPACT

PROPOSED EQUESTRIAN CROSSING

5.0m HOLDING AREA

PROPOSED PEDESTRIAN CROSSING

3.0m WIDE SHARED USE GREENWAY

EXISTING BOAT - ARBO8

EXISTING ACCESS TO ELLIS'S HILL TO BE RETAINED

2.0m WIDE GREENWAY CONNECTION TO ELLIS'S HILL

POTENTIAL TREE IMPACT

EXISTING GATED ACCESS TO BE RETAINED

3.0m WIDE GREENWAY CONNECTION TO ELLIS'S HILL

POTENTIAL TREE IMPACT

EXISTING DITCH TO BE CULVERTED TO PROVIDE GREENWAY

4.0m HOLDING AREA

POTENTIAL TREE IMPACT

132m FORWARD VISIBILITY TO PRIMARY SIGNAL HEAD

ELLIS'S HILL

Hunter's Point

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SCALE BAR @ 1:500

0 5 10 25 50

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REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

TITLE: MOLE ROAD PEDESTRIAN / EQUESTRIAN CROSSING: OPTION 1A - SIGNAL CONTROLLED CROSSING

PROJECT: NEWLAND FARM, ARBORFIELD

CLIENT: GLEESON LAND

DRAWN:	CHECKED:	APPROVED:
SH	EP	TW
PROJECT No:	SCALE @ A2:	DATE:
ITB17371	1:500	14.04.25
DRAWING No:		REV:
ITB17371-GA-013		

I:\Projects\17000 Series\17371ITB - Newland Farm, Arborfield\Draft\Audit\ Transport Drawings\Working Drawings\GA\ITB17371-GA-013.dwg

KEY:

SITE BOUNDARY

HIGHWAY BOUNDARY (BASED ON OS MAPPING)

NOTE: TREES ALONG SITE FRONTAGE WILL NEED TO BE REMOVED TO PROVIDE SITE ACCESS ARRANGEMENT - ARBORICULTURALIST TO BE CONSULTED.

150m FORWARD VISIBILITY TO PRIMARY SIGNAL HEAD

POTENTIAL LAND REQUIRED OUTSIDE OF BOAT ARBO8

PROPOSED EQUESTRIAN CROSSING

5.0m HOLDING AREA

PROPOSED PEDESTRIAN CROSSING

POTENTIAL TREE IMPACT

3.0m WIDE SHARED USE GREENWAY

EXISTING BOAT - ARBO8

EXISTING ACCESS TO ELLIS'S HILL TO BE RETAINED

2.0m WIDE GREENWAY CONNECTION TO ELLIS'S HILL

POTENTIAL TREE IMPACT

3.0m WIDE GREENWAY CONNECTION TO ELLIS'S HILL

EXISTING GATED ACCESS TO BE RE-PROVIDED

EXISTING DITCH TO BE CULVERTED TO PROVIDE GREENWAY

POTENTIAL TREE IMPACT

ELLIS'S HILL

Hunter's Point

132m FORWARD VISIBILITY TO PRIMARY SIGNAL HEAD

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SCALE BAR @ 1:500

0 5 10 25 50

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REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

TITLE: MOLE ROAD PEDESTRIAN / EQUESTRIAN CROSSING: OPTION 1B - SIGNAL CONTROLLED CROSSING

PROJECT: NEWLAND FARM, ARBORFIELD

CLIENT: GLEESON LAND

DRAWN:	CHECKED:	APPROVED:
SH	EP	TW
PROJECT No:	SCALE @ A2:	DATE:
ITB17371	1:500	14.04.25
DRAWING No:		REV:
ITB17371-GA-016		

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APPENDIX A. Illustrative Masterplan

A2

ENHANCED ECOLOGICAL FEATURES

STRONG SENSE OF PLACE

AREAS OF PLAY

RECREATIONAL ROUTES

BIODIVERSITY

N

0 100m

1:2500

- Application boundary
- Residential development blocks
- Primary access
- Connections with wider active travel routes
- Emergency access
- Segregated footway/cycleway
- Shared use path
- Potential route subject to agreement
- Greenway route (pedestrian/cycle/equestrian)
- Proposed orchard
- Play area (Locally Equipped Area for Play)
- Biodiversity planting
- Attenuation basin
- Indicative swale and meadow planting
- Indicative pumping station location (20m x 14m)
- Opportunity for narrowing at crossing point/ traffic calming
- Existing undergrowth, vegetation and large trees
- Proposed tree planting
- HV overhead wires and easement
- Gas main and easement

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Rev	Description	Date	Au	Ch
A	Issued for Planning	22.05.25	NJ/TM	NJ

Project	**Newlands Farm, Arborfield**
Drawing	**Framework Plan**
Client	**Gleeson Strategic Land**
Job no.	**GLEE250321**
Dwg no.	**FWP.01**
Date	**24.04.25**
Rev.	**A**
Author	**NJ/TM**
Checked	**NJ**
Scale	**1:2500@A2**
Status	**PLANNING**
Office	**Portishead**
Client ref.	-

thrive. architects

APPENDIX B. TN007 – Mole Lane Access Options

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Tel: 01256 898 366

LVGV – Mole Road Access Considerations

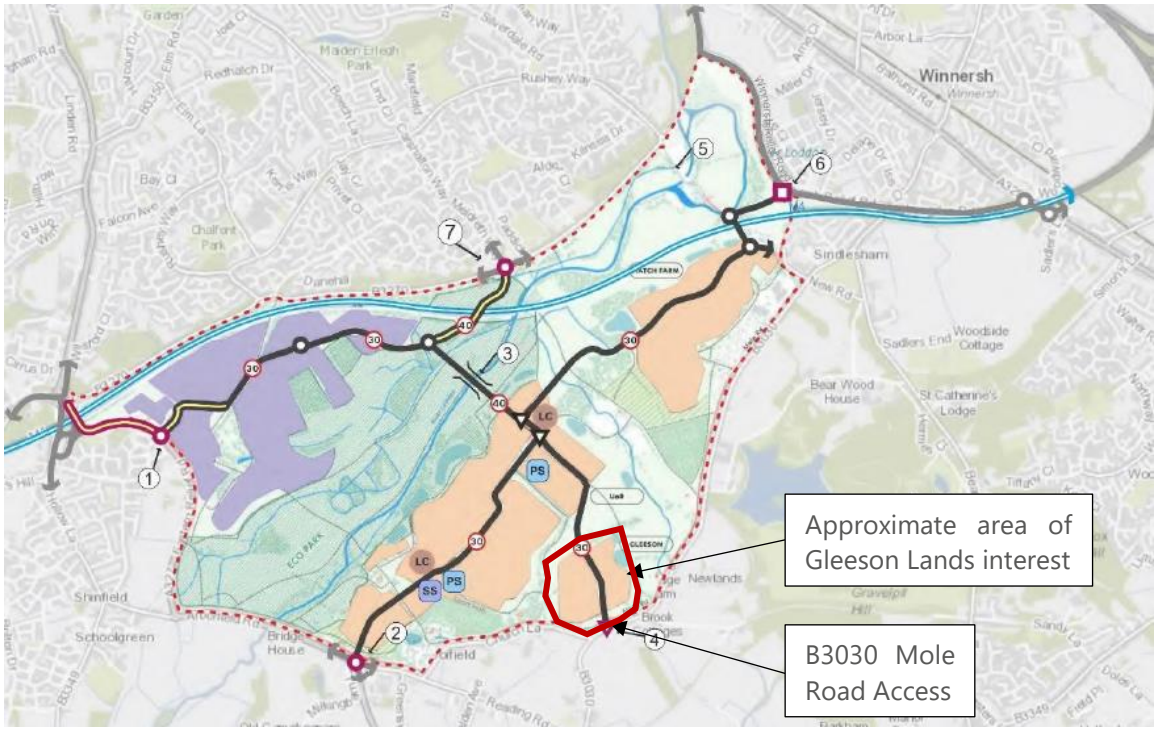
Project Title: Loddon Valley Garden Village
Title: Mole Road Access Option Appraisal
Ref: ITB17371-007b TN
Date: 13 January 2025

SECTION 1 Introduction

1.1.1 This Note has been produced to consider the form of access provision at the B3030 Mole Road, in the context of Gleeson Land in the southern part of Loddon Valley Garden Village (LVGV).

1.1.2 The LVGV is a proposed strategic allocation in the emerging Wokingham Growth Strategy which could deliver some 3,930 new homes, strategic scale (100,000sqm) employment land, primary and secondary education and local centres, along with a public transport hub and corridor. The Gleeson Land is expected to contribute around 450 dwellings forming the southern parcel fronting B3030 Mole Road.

Image 1: Indicative Masterplan and Highway Routing



1.1.3 Potential access to B3030 Mole Road has been considered taking account of future year 2038 traffic flows extracted from the Wokingham Strategic Transport Model (WSTM4), including the LVGV, which identifies a road connection from the wider LVGV through the Gleeson Land to B3030 Mole Road.

SECTION 2 Proposed Assessment Approach

2.1 Role of the Road through Gleeson Site

2.1.1 The WSTM4 WBC modelling forecasts that the road through the Gleeson Land from Mole Road would provide a connection into the wider LVGV which would carry development traffic as well as some wider network traffic when the connection to Earley is formed. The access to B3030 Mole Road is not intended by WBC to be a main access to the LGV and that WBC is keen to limit the priority and role of the B3030 Mole Road access to an appropriate and proportionate extent.

2.1.2 The latest modelling includes an amendment to the internal LVGV road network with the spine road allowing through traffic between A327 and Mill Lane – i.e. opening road connection through Hatch Farm. This modelling has been used to support the allocation of the site through the Local Plan. This amended link significantly reduces the traffic flows on the road through the Gleeson Land and at the Mole Road junction. The revised traffic flows are accounted for in this access option appraisal.

2.2 Traffic Data

2.2.1 The latest traffic flows, including the connection through Hatch Farm, at the B3030 Mole Road site access have been obtained from WBC who modelled the LVGV using the WSTM4. This included the LGV and its highway infrastructure (Scenario 1b) and the full development of the LVGV.

Image 2: Traffic Flows at the B3030 Site Access – Scenario 1b

AM Scenario 1B (actual flow, vehicles)

	A	B	C	Sum
A	0	115	100	215
B	37	0	621	658
C	215	694	0	909
Sum	252	809	721	1782

PM Scenario 1B (actual flow, vehicles)

	A	B	C	Sum
A	0	69	68	137
B	116	0	698	814
C	187	414	0	601
Sum	303	483	766	1552

2.2.2 The WSTM4 model includes a new access onto Mole Road, which has been modelled by WBC as priority T-junction, with flared approach to B3030 Mole Road, as shown below.

Image 3: WSTM2 Mole Road Access Arrangement

2.2.3 Critically, the WSTM4 assessments have included a 'throttle' within he LVGV District Centre to reduce the attractiveness of the connection from Mole Road to Earley. This is presented in the model as a simple priority connection in the centre, and which is forecast on the Mole Road approach to operate poorly, with delay of around 3 minutes. This forecast constraint has the expected effect in the modelling of reducing traffic flows between Mole Road and the LVGV. In placemaking terms, these conditions would not be acceptable and the LVGV District Centre junction would be designed to operate acceptably, meaning that the current WSTM4 model flows for the connection to Mole Road are likely to be underestimated when reconsidered in the future. These results need to be considered cautiously.

2.3 Access Constraints and Design

2.3.1 The site abuts both B3030 Mole Road and Church Lane. Access to the scheme has been considered to ensure it complies with the aspirations of the emerging LVGV strategy with access proposed to B3030 Mole Road for development access and wider connectivity.

2.3.2 Potential physical constraints to delivering access in this location include:

- Impact on frontage trees which should be retained if feasible
- Curvature of B3030 Mole Road and its impact on visibility and road alignment
- Impact on drainage ditches running on the site frontage

2.3.3 The speed limit of B3030 Mole Road is 50mph which means that the appropriate design guidance is taken from the Design Manual for Roads and Bridges (DMRB). MfS principles would be applied faithfully within the LVGV area itself, informed by a Design Code. Separate work to ensure that pedestrian and cycle access is prioritised is being developed in consultation with WBC.

2.3.4 WBC is keen to minimise the attractiveness of the connection to B3030 Mole Road as part of the LGV, to reduce impacts on areas south of the site, particularly Arborfield and Arborfield Cross.

2.4 Access Options

2.4.1 Three alternative access options are considered in this note, with drawings included in **Appendix A**:

- ITB17371-GA-009 – Simple priority T-junction with flared approach from the site access.
- ITB17371-GA-010 – Priority T-junction with ghost island right turn lane on Mole Road and with flared approach from the site access.
- ITB17371-GA-007 – 36m ICD roundabout, with single lane approaches, flaring to two lanes on entry to the roundabout on all arms.

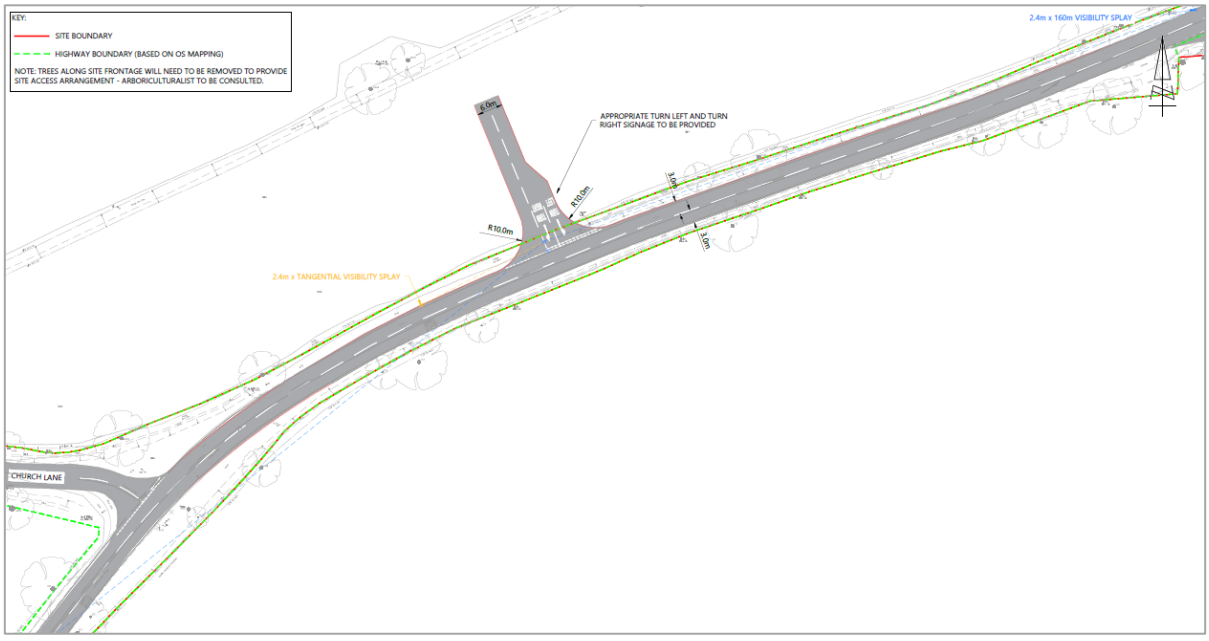
2.4.2 Pedestrian and cycle facilities would likely be integrated in line with the Active Travel Strategy.

Priority T-Junction

2.4.3 A simple priority T-junction is presented in **Drawing ITB17371-GA-009** on the B3030 Mole Road, consistent with the WBC Model assumptions. The location of the site access has been designed at this section of B3030 Mole Road as it is relatively straight and provides the most suitable location to ensure that necessary visibility can be achieved in line with DMRB for a design speed of 85kph (50mph).

2.4.4 The site access has been provided at 6.0m in width with a c.15m flared section, to allow right turning and left turning traffic out of the site to wait side-by-side, and 10m radii.

Image 4 – Priority Arrangement

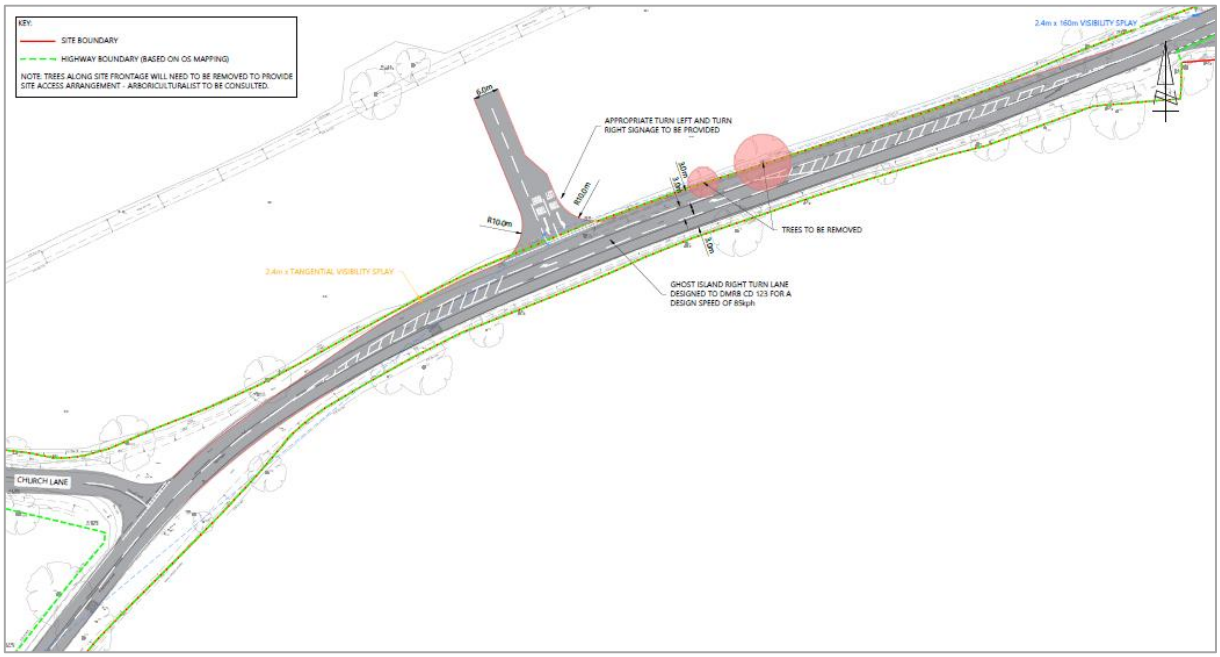


Ghost Island Junction

2.4.5 A ghost island priority junction has been considered along B3030 Mole Road situated centrally to Church Road and Ellis Hill and is presented in **Drawing ITB17371-GA-010**.

2.4.6 The ghost island priority junction has been designed in accordance with DMRB CD 123 for a design speed of 85kph with a 55m deceleration length (including a 15m direct taper) and a 10m queuing length. Lane widths have been provided at 3.0m for both the eastbound and westbound through lanes and right turn lane. This would comply with relevant standards. The access has been provided at 6.0m in width with 10m radii and a c.15m flared section, to separate left and right turning traffic.

Image 5 – Ghost Island Arrangement



Normal Roundabout

2.4.7 An alternative access option is also considered, comprising a 36m ICD 'normal' roundabout, presented in **Drawing ITB17371-GA-007**, designed in line with appropriate DMRB requirements.

2.4.8 This roundabout option includes single lane approaches on all arms, with a 6.5m wide arm on the site access, widening to two lanes on the entry to the roundabout. Forward visibility splays of 160m, required for 85kph design speeds, to the give-way lines are achievable.

Image 6 – Roundabout Arrangement

SECTION 3 Access Assessments

3.1 Capacity Assessments

3.1.1 Using the traffic flows from the WSTM4 the operation of the three access arrangements has been appraised using industry standard junction modelling software (TRL's Junctions 10 suite).

3.1.2 All models are run with a 'One Hour' profile which provides a peak within the peak, with the summary results presented showing the worst case 15-minute period within the peak hour, providing a robust assessment.

Priority T-Junction Arrangement

3.1.3 The assessment of the simple priority T-junction has been carried out and is summarised below.

Table 1: Simple Priority T-junction Arrangement

Approach	AM Peak Hour				PM Peak Hour			
	RFC	Queue	Delay (s)	LoS	RFC	Queue	Delay (s)	LoS
Site Access – Left	0.34	1	15	B	0.16	0	9	A
Site Access – Right	0.56	1	42	E	0.32	1	23	C
B3030 Mole Road	0.16	1	5	A	0.45	2	6	A

3.1.4 The assessment demonstrates that the simple priority T-junction would operate within capacity in the morning and evening peak hours (<1.0 RFC), with limited queuing on the site access arm. A queue of 2 vehicles is shown in the evening peak hour for vehicles turning right from B3030 Mole Road into the site and a queue of 1 vehicle in the morning peak hour. The right turning traffic out of the site access experiences some delays in the AM peak hour, with around 40 seconds on average for each vehicle which leads to the junction forecasting a level of service 'E'. This operation would be impacted when the District Centre throttle is addressed.

Ghost Island Priority Junction Arrangement

3.1.5 The operational assessment of the ghost island junction has been carried out and is summarised below.

Table 2: Ghost Island Junction Arrangement

Approach	AM Peak Hour				PM Peak Hour			
	RFC	Queue	Delay	LoS	RFC	Queue	Delay	LoS
Site Access – Left	0.34	1	15	B	0.16	0	9	A
Site Access – Right	0.56	1	42	E	0.32	1	23	C
B3030 Mole Road	0.09	0	9	A	0.24	0	9	A

3.1.6 The assessment demonstrates that this ghost island priority-controlled junction would operate within capacity in the morning and evening peak hours, with limited queuing on the site access arm and no queues shown for the right turning traffic from B3030 Mole Road. Similar to the priority arrangement, the right turning traffic out of the site access experiences some delays in the AM peak hour, which would likely be impacted by a reconsideration of traffic movements in the LVGV.

Roundabout Junction Arrangement

3.1.7 The operational assessment of the roundabout access junction option has been carried out and is shown to operate effectively, with limited queues and delays on all arms and operating with a level of service rating of A across all arms and time periods.

Table 3: Roundabout Junction Arrangement

Approach	AM Peak Hour				PM Peak Hour			
	RFC	Queue	Delay (s)	LoS	RFC	Queue	Delay (s)	LoS
B3030 Mole Road (East)	0.46	1	4	A	0.56	1	5	A
B3030 Mole Road (West)	0.56	1	5	A	0.38	1	3	A
Site Access	0.20	0	4	A	0.11	0	3	A

SECTION 4 Analysis and Recommendation

4.1.1 The section sets out the strengths and weaknesses of each of the site access junction arrangements and recommendations.

Priority T-Junction Arrangement

- Has the least impact on the site frontage, with no widening required.
- Is in line with the arrangement included in the Local Plan Evidence.
- Would limit additional through traffic from either the LGV development or reassigned background traffic onto Mole Road.
- Operates within capacity in both peak hours.
- Minor delays expected to vehicles turning right out of the site but resulting in a LoS of E.
- Some minor queues on Mole Road, which is subject to a 50mph speed limit, for right turning traffic into the site but these queueing vehicles will be visible to approaching traffic.

Ghost Island Priority Junction Arrangement

- Operates within capacity in both peak hours and results in no queues on B3030 Mole Road.
- Provides a higher standard junction to remove turning traffic from Mole Road
- Would limit additional through traffic from either the LGV development or reassigned background traffic onto Mole Road.
- Some delays expected to vehicles turning right out of the site and a level of service rating E.
- Widens to the north the carriageway which will impact on frontage vegetation.

Roundabout Junction Arrangement

- Operates well within capacity in both peak hours with limited delays expected, operating with a Level of Service rating 'A'..
- Forward visibility splays to the roundabout can be achieved within the existing highway boundary extents.
- Would require some existing trees on site frontage to be removed.
- Potential that the operation and limited delays could result in additional traffic using the B3030 Mole Lane site access from the wider LGV site.

4.1.2 Based on the information available at this time, all three access options can be achieved and offer potential solutions for accessing the southern part of the LVGV. A priority arrangement would best meet WBC expectations in the context of Mole Road.

4.1.3 However, the current WSTM4 modelling applies a throttle in the district centre which is likely to have the impact of artificially reducing demand flows to Mole Road. Given the sensitivity of the priority option operation on the Mole Road approach (both exhibiting poor Level of Service) an increase in traffic flows on this approach are likely to be detrimental to operation, and reassessment with an updated demand assessment from a re-run model assessment (removing the throttle) is needed to confirm the most appropriate access option.

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