MOTT MACDONALD

keltbray

# Former MSD Facility, Breakspear Road South, Ickenham

## Transport Statement

September 2022

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# Former MSD Facility, Breakspear Road South, Ickenham

## Transport Statement

September 2022

# Issue and Revision Record

| Revision | Date | Originator | Checker | Approver | Description |
|---|---|---|---|---|---|
| P01 | 26/08/22 | GS | AK | MF | Draft for Project Team Review |
| P02 | 20/09/22 | AK | MF | MF | Revised draft |
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# 1 Introduction

## 1.1 Overview

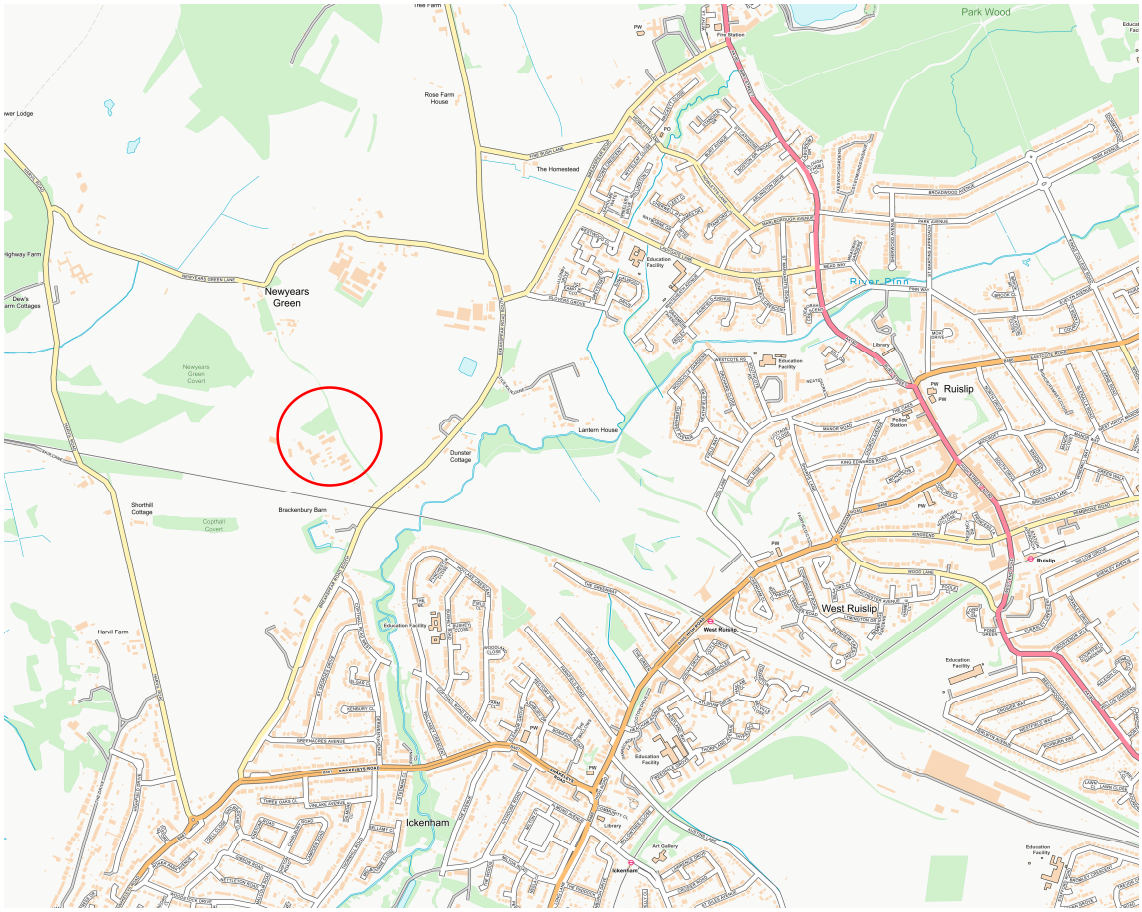
1.1.1 Mott MacDonald has been appointed to provide transport advice to Keltbray Developments Limited, part of the Keltbray Group, to inform a proposed planning application for a new storage yard (referred to subsequently as the "Proposed Development"). This is located on part of the former Merck Sharpe Dohme (MSD) Animal Health Site, to the west of Breakspear Road South near Ickenham in the London Borough of Hillingdon (LB Hillingdon).

1.1.2 The Keltbray Group are a leading UK sub-contractor and the yard is intended to support future construction projects in West and Central London for which the Keltbray Group will be a key member of the construction supply chain. The site would be focused on supporting Keltbray's wider activities to service and facilitate these future construction projects. The proposals are not going to be utilised as a commercial builder's merchant which would generate activity from trade contractors or members of the public.

## 1.2 Site Location

1.2.1 The proposed site is part of the former MSD Animal Health facility located to the west of Breakspear Road South, as identified in Figure 1-1.

**Figure 1-1: Indicative Site Location**

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1.2.2 The southern section of the former MSD facility currently forms part of the HS2 Breakspear Road Satellite Compound. The construction compound is accessed via the former MSD facility access road, with a new road and associated priority junction constructed in 2019 / 20 to the north, to allow for the ongoing use of the MSD facility.

## 1.3 Proposed Development

1.3.1 The Proposed Development will deliver approximately 7,650sqm GEA of building floorspace. An administration building will be provided, utilising an existing building on the site, with the remaining structures on the site demolished. Four independently operating storage facilities will be provided with associated yard space and access points onto an internal access road. Pedestrian facilities will be provided predominately along the northern side of the internal access road, with a crossing facility provided to connect to the proposed administration building. To facilitate the use of the occasional larger HGVs associated with such a storage yard, the access road and bellmouth with the junction of Breakspear Road South will be widened. Further details on the Proposed Development are provided in Section 4 of this report.

1.3.2 The site is not a commercial building yard where members of the public are able to buy construction-related materials. It will be an administrative and storage facility for Keltbray operations within London. The facility is intended to replace existing individual sites leased by Keltbray in Ashford, LB Hounslow and another on the edge of LB Hillingdon. In addition, it is expected that some staff will transfer from Keltbray's facility in Egham, Surrey, again due to proposed redevelopment.

1.3.3 The current programme involves construction commencing in 2023, with a nine month construction period currently forecast.

## 1.4 Report Structure

1.4.1 Pre-application discussions have been held with LB Hillingdon officers. Following a pre-application meeting held on the 12 May 2022 and subsequent formal feedback, a further meeting was held with the LB Hillingdon highways officer on the 14 July 2022. At the meeting new information was presented identifying the results of traffic surveys undertaken of existing Keltbray yards in West London and providing an updated forecast of the potential level of activity associated with the proposed site. At this meeting, it was agreed that a Transport Statement would be produced as part of the application. An email record of the meeting, including the agreed scope of the Transport Statement, is contained within Appendix A.

1.4.2 Furthermore, a separate Interim Travel Plan (TP) has been produced setting out a strategy for promoting sustainable travel for staff movements associated with the Site.

1.4.3 Following this introductory section, the TS has been set out as follows:

- Section 2 provides the policy context of the Proposed Development, considered against National, Regional and Local requirements
- Section 3 identifies the transport context for the Proposed Development by all modes of transport and includes a review of reported accidents in the area around the Site
- Section 4 sets out more details on the existing Site and the Proposed Development, including its intended use, access and parking arrangements
- Section 5 includes analysis of the potential trip generation associated with the existing Site, forecasts of activity linked to the Proposed Development and commentary on the scale of impact when considered against baseline activity
- Section 6 provides a summary of demand management measures, including the Interim TP
- Section 7 provides a summary and conclusions of the report.

# 2 Planning Policy

## 2.1 National Planning Policy

### National Planning Policy Framework 2021

2.1.1 The National Planning Policy Framework (NPPF) published in July 2021 sets out the Government's economic, social, and environmental planning policies for England and how these are expected to be applied in practice. The revised framework supersedes the official published document from March 2012, the revised report in July 2018 and the updated version from February 2019.

2.1.2 Section 9 of the 2021 NPPF focuses on promoting sustainable transport. Paragraph 104 states that:

*"Transport issues should be considered from the earliest stages of plan-making and development proposals."*

2.1.3 The framework suggests this policy is to be addressed in numerous ways such as by:

- Assessing the potential impacts of development on transport networks;
- Promoting more sustainable modes of travel such as walking, cycling and public transport;
- Identifying the potential environmental impacts from traffic and transport infrastructure;
- Approaching patterns of movement as an integral part of the design phase of development schemes; and,
- Creating opportunities from existing or proposed transport infrastructure and realise the changing transport technologies and their usage.

2.1.4 Paragraph 110 states that in assessing potential development sites, it is necessary to ensure that:

*"Opportunities for sustainable transport modes are promoted and specific to the type of development and its location;*

*Safe and suitable access to the site can be achieved for all users;*

*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,*

*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."*

2.1.5 Paragraph 111 states that:

*"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 would be severe".*

2.1.6 Paragraph 113 notes that planning applications for developments which generate significant amounts of movement would need to be supported by a transport statement or transport assessment and a travel plan.

### Planning Practice Guidance 2014

2.1.7 In March 2014 the Department for Communities and Local Government (DCLG) launched a website containing national planning practice guidance on a range of planning topics such as design, Local Plans, Neighbourhood Plans and Travel Plans / Transport Assessments.

2.1.8 The section on 'Travel plans, Transport Assessments and Statements in decision-taking' provides advice on when Transport Statements are required and what they should contain. This report has been produced in accordance with that guidance.

## 2.2 Regional Planning Policy

### The London Plan 2021

2.2.1 The London Plan 2021 is the Spatial Development Strategy for Greater London. It sets out a framework for how London will develop over the next 20-25 years and the Mayor's vision for Good Growth.

2.2.2 With regard to transport, policy builds upon the Mayor's Transport Strategy published in 2018, with a focus on rebalancing the transport system towards walking, cycling and public transport. This is in conjunction with the Mayor's policies for promoting Healthy Streets and achieving Vision Zero, with no deaths or serious injuries occurring on London's transport network.

2.2.3 Achieving this is expected to result in different outcomes in different places, including modal splits in Central, Inner and Outer London. The main objective surrounding strategic transport policy states that;

*"Development Plans should support, and development proposals should facilitate:*

1) *the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041*

2) *all development should make the most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London's transport networks and supporting infrastructure are mitigated"*

2.2.4 The London Plan emphasises the importance of ensuring the transport impacts relating to the capacity of the network at both the local and strategic level are appropriately assessed and mitigated. It notes that when required in accordance with national or local guidance, Transport Assessments / Transport Statements should be submitted which consider these potential impacts, with Travel Plans produced to help reduce any negative impacts identified.

2.2.5 The London Plan includes guidance on expected car and cycle parking. There are no specific standards for B8 uses, with it noted that for industrial sites, the role of parking will vary significantly on the individual location and nature of development. Provision should be justified on a case by case basis with a starting point being the standards for office provision. For Outer London, the office car parking maximum standards vary between 1 space per 50sqm (for locations identified through a local Development Plan requiring more generous parking provision) and 100sqm GIA. Within this, five percent of spaces are expected to be designated for disabled persons, with a further five percent enlarged bays.

2.2.6 Long-stay cycle parking for B8 use should be provided at a minimum of 1 space per 500sqm, with short-stay at 1 space per 1000sqm.

### London Borough of Hillingdon Local Plan 2020

2.2.7 The LBH Local Plan is split into two parts, with Part 1, initially adopted in November 2012, identifying strategic policies, setting out the overall level and broad location of growth up to 2026. Part 2 is formed by Development Management Policies, Site Allocations and Designations and the Policies Map, adopted in January 2020, which provide more detail on the delivery of this growth.

2.2.8 Part 1 of the Local Plan includes a core policy focused on transport and infrastructure. This promotes the use of sustainable forms of transport, with an overall aim of reducing private car dependency. Where development is reliant on the road network, this will be located at sites with good existing road access. New developments should be located where they will have a minimal impact on the transport networks and will be expected to have good walking and cycling provision. The Development Management Polices identified in Part 2 of the Local Plan include a section dedicated to transport and Aviation.

2.2.9 Policy DMT1 focusses on managing transport impacts of new development, including the requirements for documents to support planning applications. Developments should maximise safe, convenient and inclusive accessibility by sustainable travel modes, provide equal access for all people, include appropriate delivery, servicing and drop-off facilities and not have a significant adverse transport (or associated noise or air quality impact) on the local and wider environment. This notes the requirement for a Travel Plan or Local Level Travel Plan to be produced for major developments.

2.2.10 Policy DMT 2 sets out the need to ensure safe and efficient vehicular access to the highway network, including the provision of safe, secure and convenient access for cyclists and pedestrians. Impacts should be appropriately mitigated, and developments should not contribute to a worsening of air quality, noise or local amenity or safety of road users.

2.2.11 Policy DMT 6 requires parking for new developments to be in line with the standards identified in Appendix C of the document. For non-office B class use (employment uses based on the land use class order superseded in 2020), car parking is to be provide to a maximum of 2 spaces plus 1 space per 50-100sqm. Of these, 10% must be suitable for blue badge holders, with a minimum of 5% of total spaces having active electric vehicle (EV) charging provision and 5% having passive provision.

2.2.12 Cycle parking is to be provided at a minimum rate of one space per 500sqm for B2-B8 land uses.

# 3 Existing Site Accessibility

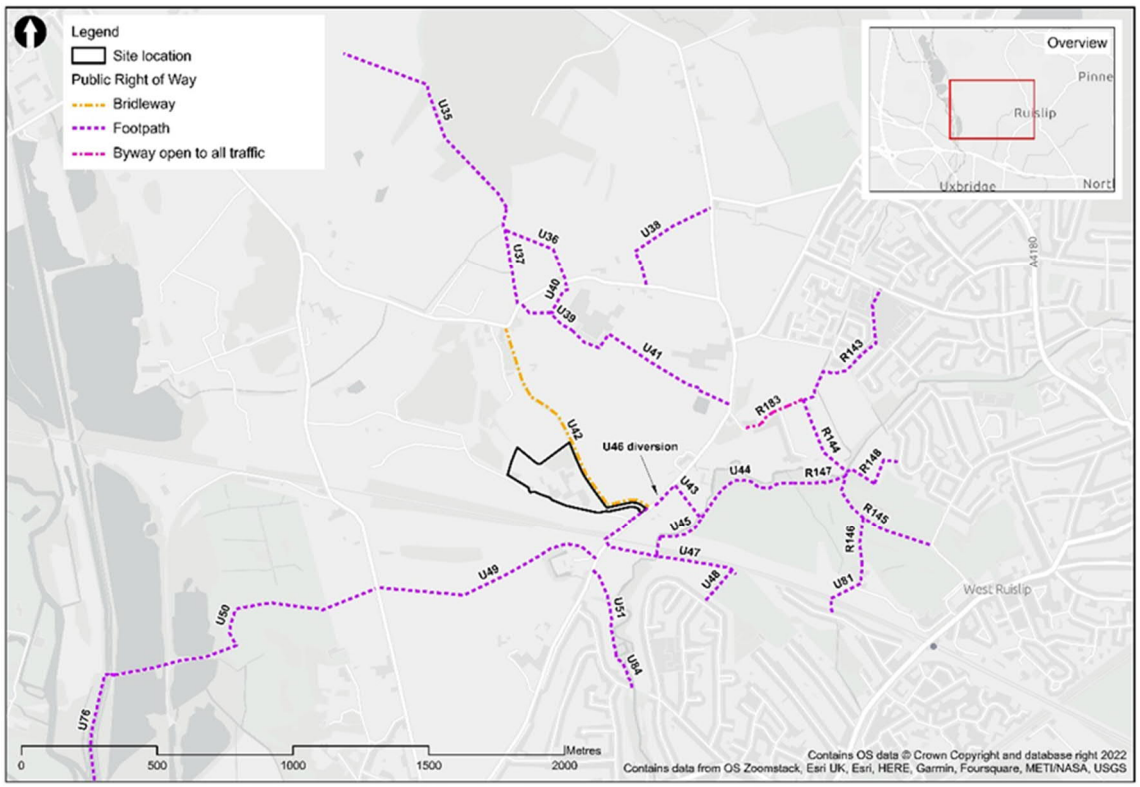
## 3.1 Pedestrian Network

3.1.1 Recent HS2 enabling and mitigation works have included the diversion of footpath U46, resulting in the provision of new footpaths / footways alongside Breakspear Road South in the vicinity of the site.

3.1.2 These provide connections via footpath U43 to a wider network of Public Rights of Way (PROW) towards West Ruislip and Ickenham. This provides access to the residential streets and associated footways within these settlements, with onward connections towards Ickenham London Underground (LU) station and West Ruislip LU and rail station. They also connect to the diverted U42 bridleway, which partially runs along the Site access road delivered as part of the HS2 construction enabling works, before connecting to its previous route alongside the eastern boundary of the site. Pedestrian connections beyond the area around the site and HS2 compound are limited to the PROW network, with no footways providing onward connections along Breakspear Road South.

3.1.3 Figure 3-1 shows the existing Public Rights of Way (PRoW) around the proposed site location in Ickenham, although noting that these remain subject to changing diversions while HS2 construction work is ongoing in the area.

**Figure 3-1: Public Rights of Way**




Note: Subject to change following completion of HS2 works

## 3.2 Cycling Accessibility and Network

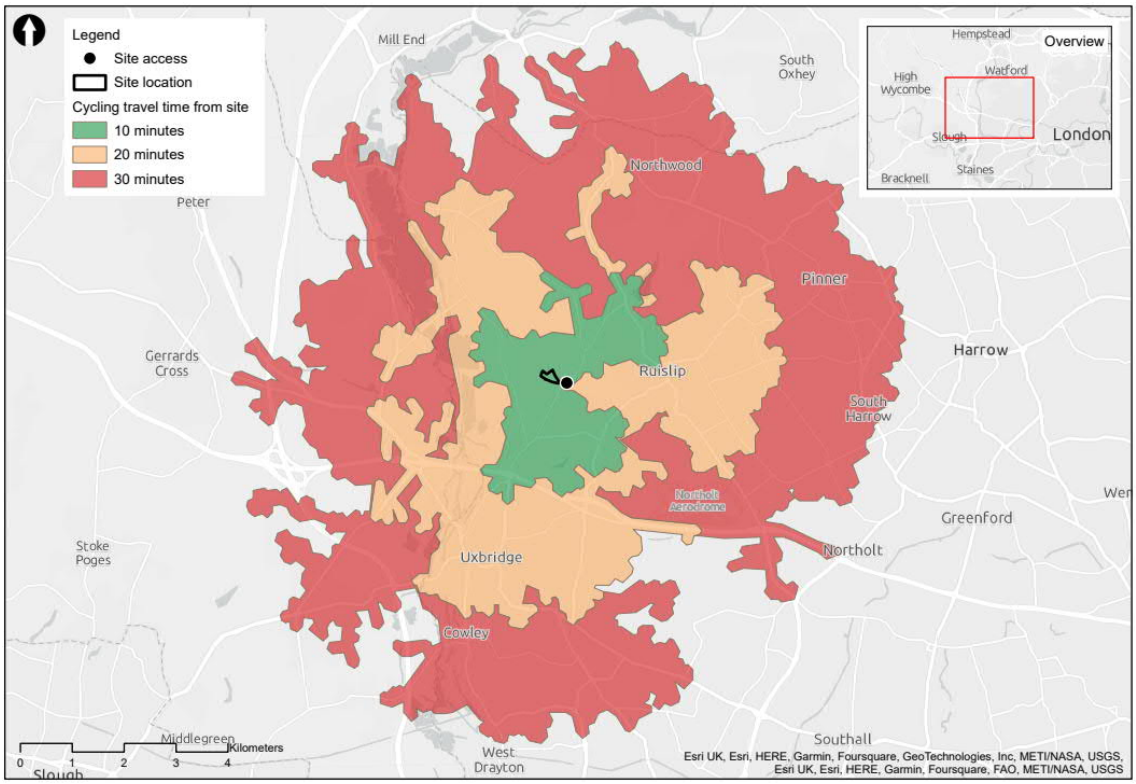
3.2.1 There are no dedicated cycle routes or associated infrastructure within the immediate vicinity of the Site, with cyclists required to utilise the standard carriageway. While there are no TfL

cycleways within this part of LB Hillingdon, National Cycle Network Route 6 runs along the Grand Union Canal towpath which is situated 1.5km as the crow flies to the west of the Site.

3.2.2 National Cycle Network (NCN) route 6 southernmost point begins just south of Uxbridge on Iver Lane following the Grand Union Canal towpath and continues around New Denham before reaching Denham Country Park where cyclist can turn off Route 6 and head towards Harvill Road near the site access point.

3.2.3 Figure 3-2 illustrates the areas that can be reached within a 10, 20 and 30-minute cycle distance from the site access point along Breakspear Road South using a cycling speed of 16kmph. The plan further identifies that both parts of NCN route 6 traffic free and on road zones are around a 20-minute cycle away from site.

**Figure 3-2: Cycling Accessibility**

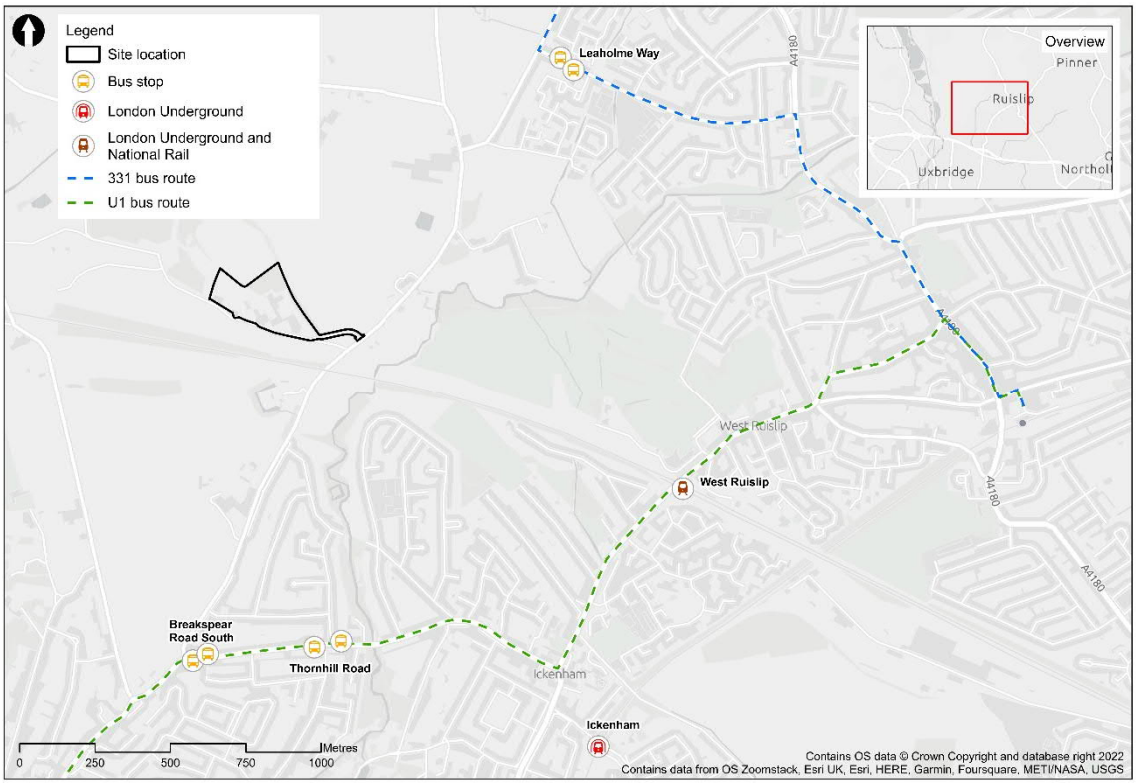



## 3.3 Public Transport Network

3.3.1 The Site has a Public Transport Accessibility Level (PTAL) of 0, reflecting a lack of stations and bus stops within 960m and 640m walk of the site respectively.

3.3.2 Figure 3-3 illustrates both the closest bus stop group and the nearest overground and underground train station locations. Further details of bus and train stops, services and frequencies are also described below.

**Figure 3-3: Public Transport Connections**




## Rail Services

3.3.3 West Ruislip is the nearest station to the site and is served by both Chiltern rail services and LU Central line services. The station is located on High Road in the southwest of Ruislip. The station is approximately 1.2km as the crow flies from the Site, or approximately a 2.2km walking distance using the local PRoW (U43 and the Celandine Route).

3.3.4 The Chiltern line through West Ruislip operates between Birmingham Snow Hill and London Marylebone. Between the morning hours of 6am and 10am eight services heading northwest serve West Ruislip (first train arriving at 06:27) with five services travelling eastbound towards London Marylebone during the same period. The first eastbound train arrives at 05:56. Between the afternoon hours of 4pm and 6pm three services head northwest and four services travel eastbound.

3.3.5 The number of services from West Ruislip station for the morning peak period of 0600-1000 and evening peak period of 1600-1800 (covering both the anticipated development peak and the wider network peak) has been summarised in Table 3-1 below.

**Table 3-1: West Ruislip Weekday National Rail Service Frequency**

| Trainline | Direction | Between 0600hrs and 1000hrs | Between 1600hrs and 1800hrs | Daily |
|---|---|---|---|---|
| Chiltern Mainline | Northbound | 8 | 3 | 29 |
| | Eastbound | 5 | 4 | 23 |
| **Total** | | **13** | **7** | **52** |

3.3.6 West Ruislip is a terminating point for Central line services and provides connections through Central London towards Epping and Hainault to the east. The number of services during different periods has been provided in Table 3-2.

**Table 3-2: West Ruislip Weekday London Underground Service Frequency**

| Line | Direction | Between 0600hrs and 1000hrs | Between 1600hrs and 1800hrs | Total trains during peak hours |
|---|---|---|---|---|
| Central | Eastbound | 28 | 18 | 46 |
| | Westbound (Arriving and terminating at West Ruislip) | 30 | 18 | 48 |
| **Total** | **-** | **58** | **36** | **94** |

3.3.7 Ickenham London Underground station is located on Glebe Avenue southeast of Ickenham High Street and is served by both the Metropolitan line and Piccadilly line. The station is approximately 1.7km as the crow flies from the site's location, or approximately a 2.0km travel distance (walk, cycle or taxi). The frequency of services is shown in Table 3-3.

**Table 3-3: Ickenham Weekday London Underground Service Frequency**

| Line | Direction | Between 0600hrs and 1000hrs | Between 1600hrs and 1800hrs | Total trains during peak hours |
|---|---|---|---|---|
| Metropolitan | Eastbound | 26 | 14 | 40 |
| | Westbound | 27 | 16 | 43 |
| **Total** | **-** | **53** | **30** | **83** |
| Piccadilly | Eastbound | 20 | 4 | 24 |
| | Westbound | 18 | 8 | 26 |
| **Total** | **-** | **38** | **12** | **50** |

### Bus Services

3.3.8 The closest bus stops to the site are associated with Route U1, with stops located along Swakeleys Road (B467) to the south and Route 331 along Ladygate Lane to the north.

3.3.9 The bus stops near Breakspear Road South are the closest on Route U1, approximately 1.3km walk from the site however these require passengers to walk in the carriageway along Breakspear Road South for at least part of the journey. The bus stops near Thornhill Road are a similar walking distance but are accessible via a combination of PROWs and local residential street footways. Both sets of bus stops include a bus flag with timetable and bus shelter. The U1 route which serves these bus stops services to West Drayton and Ruislip stations.

3.3.10 The 331 bus route provides services between Uxbridge and Ruislip stations. The closest bus stops are near Leaholme Way along Ladygate Lane, an approximately 1.3km to the north,

requiring passengers to travel along the Breakspear Road carriageway where there is no footway. The Leaholme Way bus stops consist of a bus flag with timetable.

3.3.11 A summary of the bus routes that serve these local bus services is provided in Table 3-4.

**Table 3-4: Local Bus Routes Weekday Service Frequency**

| Bus Service | Route | Monday to Friday |
|---|---|---|
| U1 (Stop: Breakspear Road South) (Northbound) | West Drayton Station – Ruislip Station | 4 services every hour<br>First Bus: 05:30<br>Last Bus: 00:56 |
| U1 (Stop: Breakspear Road South) (Southbound) | Ruislip Station – West Drayton Station | 4 services every hour<br>First Bus: 05:35<br>Last Bus: 01:17 |
| 331 (Stop: Leaholme Way (Northbound) | Uxbridge Station – Ruislip Station | 3 service every hour<br>First Bus: 06:39<br>Last Bus: 00:12 |
| 331 (Stop: Leaholme Way) (Southbound) | Ruilsip Station– Uxbridge | 3 service every hour<br>First Bus: 06:07<br>Last Bus: 23:36 |

## 3.4 Highway Network

3.4.1 Breakspear Road South is a single carriageway measuring approximately 6m in width by the site access. The B467/ Breakspear Road South three-arm roundabout lies to the south of the site. This junction provides access eastbound towards Ickenham town centre, northbound towards Ruislip (past the site) and southbound towards Uxbridge or the A40.

3.4.2 Additionally, the B467 / Harvill Road junction is further south which leads southbound towards the A40, northwest along Harvill Road towards Harefield or northbound along Breakspear Road South towards Ruislip. Further to the south travelling along the B467, Swakeleys roundabout allows vehicles to join the A40 and travel either eastbound towards London or northbound towards Birmingham.

3.4.3 The Breakspear Road South / Breakspear Road priority T-junction located to the north of the site access can take vehicles eastbound to Ruislip or northbound towards Harefield.

3.4.4 The Chiltern line railway travels over Breakspear Road South, across a low bridge (4.4m height restriction) which is located 50m south of the site access point. Following the start of HS2 works in the area, it is understood that there has been a significant increase in rail bridge strikes, anecdotally associated with queuing under the bridge linked to temporary traffic signals at the HS2 construction access. Therefore, as part of the preparation of the application, the applicant has been in discussion with HS2 and LBH regarding measures to reduce the number of bridge strikes. While discussions are ongoing, it has been suggested that HS2 supports the delivery of “goalposts” to the north and south of the bridge to provide an indication to higher load vehicles as to whether they may potentially cause a strike on the bridge. In the event that they strike these flexible goalposts, then these vehicles will be required to turn around and avoid the bridge, guided by appropriate signage. The potential use of the Proposed Development to facilitate the turning of vehicles approaching from the north has been discussed, and swept paths are shown in Appendix C identifying how larger vehicles may be able to turn into / out of the Proposed

Development from / to the north if required in such an emergency situation, assuming the implementation of the goalposts. Avoiding vehicle queuing under the bridge would obviously be beneficial too, so higher vehicles can position themselves in the centre of the carriageway as they did prior to the HS2 works. HS2 are looking to implement measures in the near future, which it is understood would be part of a separate future application.

3.4.5 A number of traffic surveys were commissioned to understand the baseline level of vehicular activity on the road network in the vicinity of the Site.

3.4.6 Two Automatic Traffic Counts (ATCs) were undertaken for a continuous seven-day period covering Saturday 21 May 2022 to Friday 27 May 2022. One loop was located on Breakspear Road South to the immediate north of the Site to record vehicle movements passing the site access. The other was located on Breakspear Road South to the south of the HS2 compounds and a short distance north of the residential access road running parallel to Breakspear Road South and linking to Copthall Road West. The traffic flows from these ATCs are presented in Figure 3-4 and Figure 3-5.

**Figure 3-4: Average Traffic Flow Data (All Vehicles) on Breakspear Road South by Site Access (21/05/22-27/05/22)**

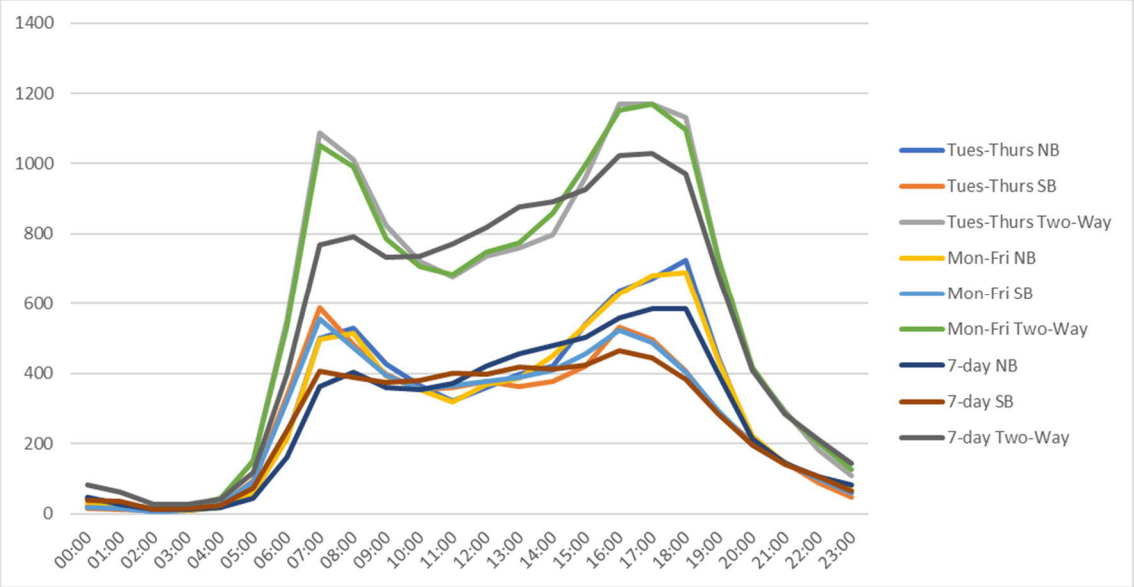
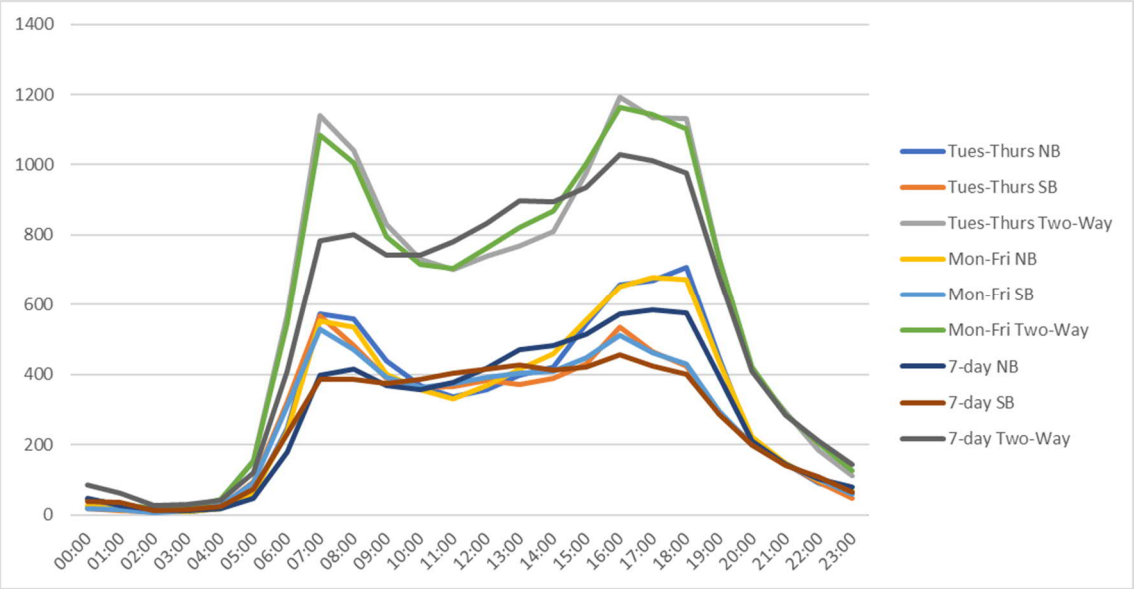


**Figure 3-5: Average Traffic Flow Data (All Vehicles) on Breakspear Road South to South of HS2 Compound (21/05/22-27/05/22)**




The data indicates the following trends:

- There is a close alignment between average hourly traffic flow for the Tuesday to Thursday and Monday to Friday periods, with the former being typically slightly greater during peak periods. This applies to both two-way and individual directional flow. Weekday flows quoted below are done in ranges to reflect both Tuesday to Thursday and Monday to Friday averages.
- During the typical morning and evening peak periods, weekday activity is greater than full week activity, although interpeak activity is greater at the weekend.
- The two-way morning peak hour during the week is 0700-0800. In the evening, there is a more spread peak between 1600-1900. Peak two-way flow is of the order of 1050-1090 vehicles in the AM peak hour and 1150-1170 vehicles in the PM peak hours past the Site access.
- Traffic flows are higher southbound in the morning peak hour than northbound with the opposite true in the PM peak, indicative of traffic heading towards the A40 in the morning and returning in the evening. The greatest single directional flows are identified to be northbound during 1800-1900 (690-725 vehicles by the site access).
- During the weekday morning period of 0600-1000, traffic flow northbound is greater south of the HS2 compounds than by the site access with the opposite true of southbound traffic. The level of difference is significantly greater northbound than southbound. This may be indicative of vehicles accessing the HS2 site in the morning, primarily approaching from the south. There is not a similar clear trend in the evening data.

3.4.7 In addition, manual turning count surveys for a three day period (Tuesday 24 May 2022 to Thursday 26 May 2022) were undertaken at the Breakspear Road / Breakspear Road South priority junction to the north of the site, and at the B467 / Breakspear Road South / Swakeleys Road roundabout to the south.

**Figure 3-6: Average Junction Flows by Approach (All Vehicles) at Breakspear Road / Breakspear Road South Junction (24/05/22-26/05/22)**

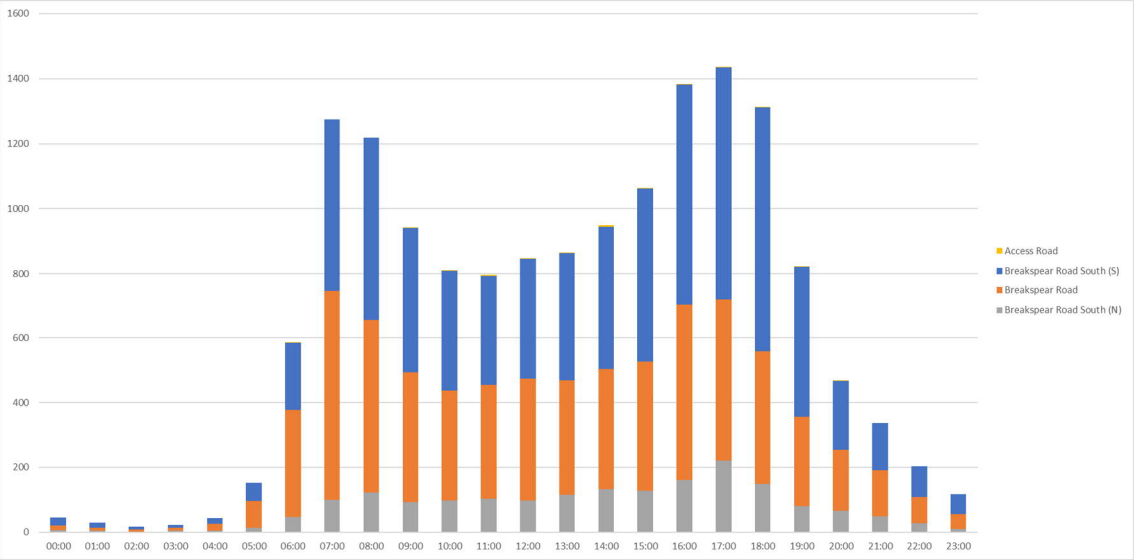
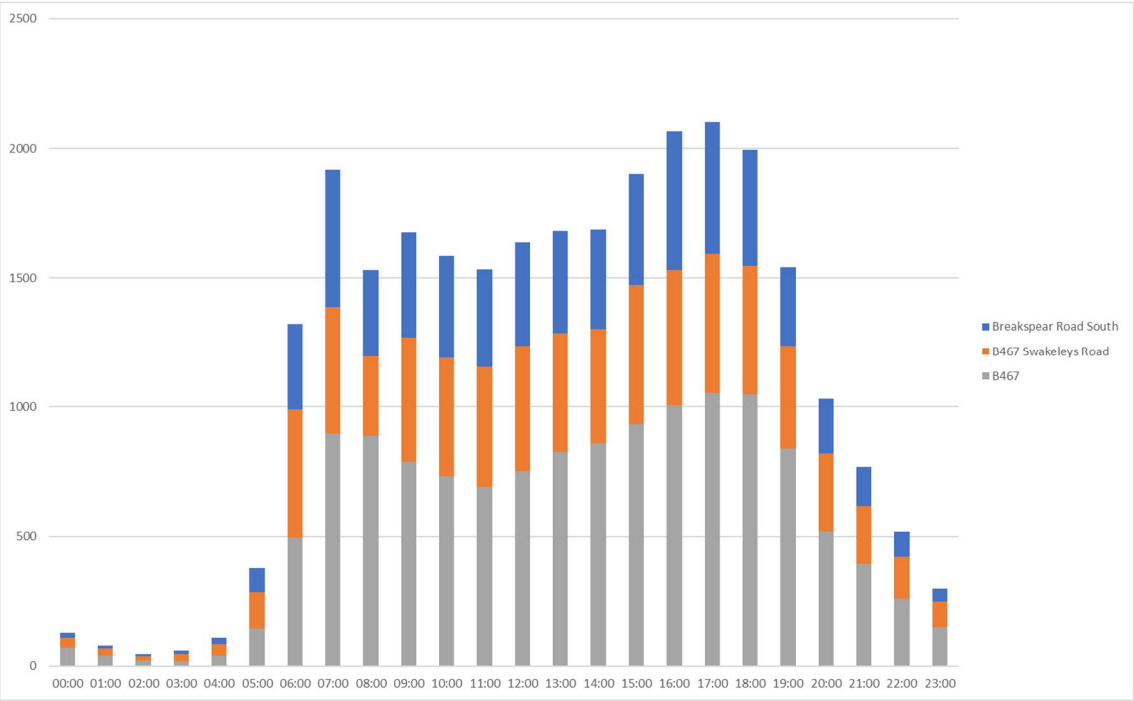



**Figure 3-7: Average Junction Flows by Approach (All Vehicles) at B467 / Breakspear Road South / Swakeleys Road Junction (24/05/22-26/05/22)**



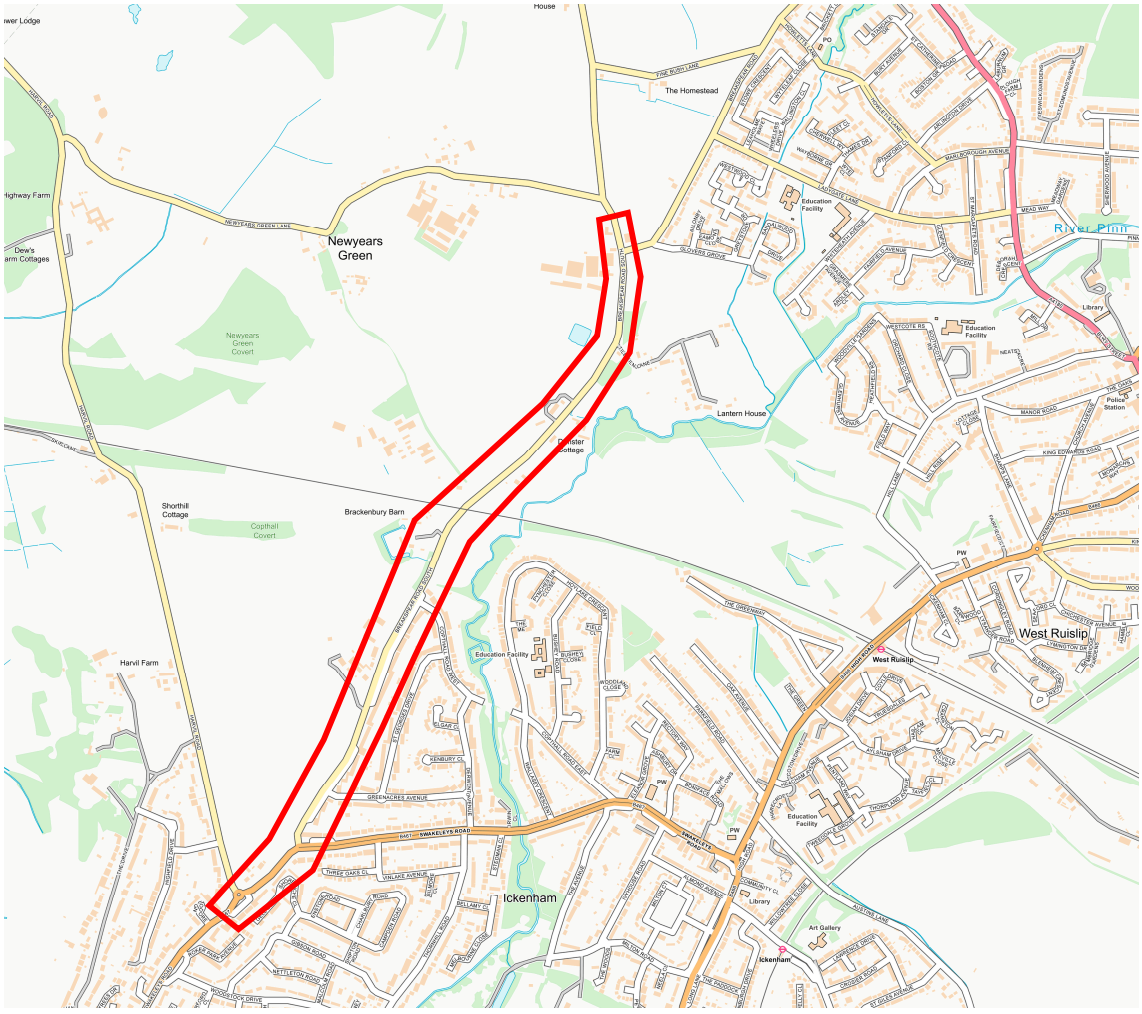

3.4.8 For the former junction, the profile of the average flows over the course of the three day period are presented in Figure 3-6. This identifies that peak activity at the junction in the morning peak is around 0700-0800 and in the evening peak at 1700-1800, although traffic flows are broadly consistent for the period 1600-1900. In the morning, the largest flow is on approach from Breakspear Road, with vehicle predominately turning left at the junction on to Breakspear Road South and heading southbound towards and beyond the site access. In the evening peak, the dominant approach and movement is reversed.

3.4.9 For the B467 / Breakspear Road / Swakeleys Road, the peaks are the same as that at the other junction. In the morning peak, the largest flow is on the B467 (northbound) approach, with traffic identified to head both towards the north and east, with a slight bias towards the former. The same trend is seen in the evening peak, with an increase in the proportion of vehicles heading straight northbound on to Breakspear Road.

## 3.5 Personal Injury Accident Analysis

3.5.1 Personal Injury Accident (PIA) data held on the TfL collision data website[1] has been reviewed for the most recent 5-year period up to 2022 for the area marked in Figure 3-8. The data is based on information obtained from the police about road traffic incidents resulting in injuries that occur on public roads. As such, this would not include any incidents such as bridge strikes where an individual is not reported injured.

**Figure 3-8: PIA Review Area**

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[1] Microsoft Power BI – TfL Road Danger Reduction Dashboard

3.5.2 The PIA data has been considered based on the severity of accident, location and the modes of travel associated with the PIA to understand if there are any trends or particular design issues which may contribute to these accidents.

3.5.3 Overall 21 accidents were reported between 2017 and 2022 (a period of 72 months) within the study area. Of these, one was fatal, two serious and the remaining accidents were classified as slight. The PIA data for this area is presented in Table 3-5.

**Table 3-5: Personal Injury Collision data by location, severity and casualty type**

| Location | Date | Severity | Casualty Types |
|---|---|---|---|
| Harvill Road / B467 | 29/06/2017 | Slight | Car Occupant |
| | 12/12/2018 | Serious | Car Occupant |
| | 08/08/2019 | Slight | Car Occupant |
| | 18/05/2020 | Fatal | Motorcyclist |
| | 07/04/2021 | Slight | Car Occupant |
| B467 / Breakspear Road South | 21/03/2017 | Slight | Car Occupant |
| | 04/05/2017 | Slight | Car Occupant |
| | 23/09/2019 | Slight | Car Occupant |
| | 13/09/2020 | Slight | Pedal Cyclist |
| Breakspear Road South (between B467 and Site) | 23/02/2019 | Slight | Car Occupant |
| | 22/09/2021 | Slight | Car Occupant |
| Breakspear Road South (between Site and Breakspear Road) | 23/02/2022 | Slight | Car Occupant |
| | 16/06/2019 | Slight | Car Occupant |
| | 13/01/2021 | Serious | Car Occupant |
| Breakspear Road South / Breakspear Road | 24/01/2017 | Slight | Motorcyclist & Car Occupant |
| | 27/05/2017 | Slight | Car Occupant |
| | 15/11/2017 | Slight | Car Occupant |
| | 06/01/2018 | Slight | Car Occupant |
| | 28/11/2018 | Slight | Car Occupant |
| | 08/04/2019 | Slight | Car Occupant |
| | 06/12/2019 | Slight | Car Occupant |

3.5.4 The majority of accidents reported involved injuries to car occupants, although one incident involved a pedal cyclist and two a motorcyclist, including the fatal incident reported at the Harvill Road / B467 junction. The focus of the accidents is at the three main junctions within the study area, with the junction of Breakspear Road South / Breakspear Road witnessing the greatest number (seven). There have however been no reported accidents at this junction since 2019. The level of incidents at the other two junctions is lower and the information available from the TfL website does not indicate that the accidents are taking place on a particular approach to either of these junctions. While five incidents were reported along Breakspear Road South, these are not clustered in a particular location

3.5.5 Overall, the accident record does not indicate a particular design or current safety issue within the vicinity of the site. Notwithstanding this, there have been a series of recent changes, implemented in April 2022[2], to the speed limits in the area, including a reduction in the speed limit along much of Breakspear Road South from 40mph to 30mph. These have been introduced to enhance road safety on these local roads and are aligned with the ongoing HS2 works in the area.

[2] https://ickresa.files.wordpress.com/2022/04/2022-no.-14-signed.pdf

# 4 Development Proposals

## 4.1 Existing Site

4.1.1 The Site formerly accommodated the MSD Animal Health facility, which is understood to have been focused on the production of animal vaccines. The site is now vacant.

4.1.2 To support the conversion of the southern section of the site to form the HS2 works compound, a number of buildings were demolished, the previous car park removed with 67 parking spaces re-provided on the northern section of the site, and a new access road to the northern part of the facility developed. The access road is typically 5.3-5.4m in width and connects to Breakspear Road South via a priority junction. A 2m footway / bridleway is provided along the northern side of the access road and this forms part of the diverted bridleway U42.

4.1.3 The remaining existing buildings on the site have a combined GIA of 6,710sqm, the majority of which is in the form of small office / industrial and warehouse buildings, with some additional separate plant and storage / barn space.

## 4.2 Proposed Development

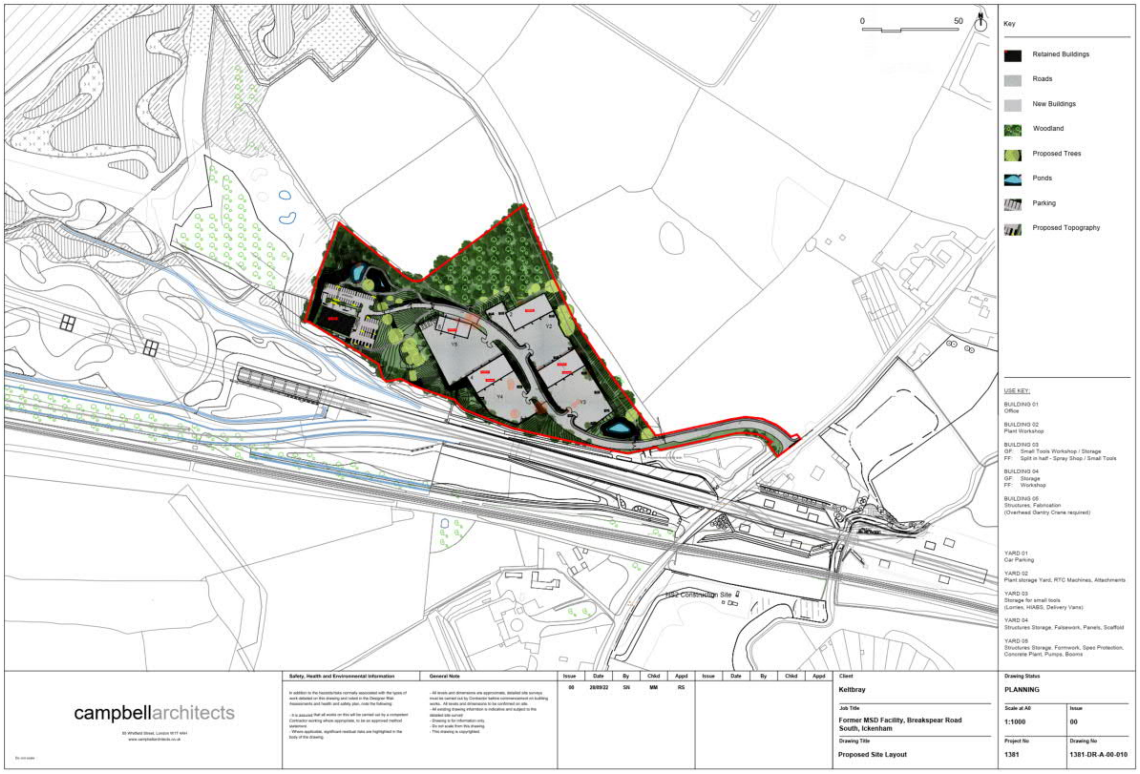
### Overview

4.2.1 The development is a storage yard facility to support construction projects in West and Central London for which the Keltbray Group will be a key member of the construction supply chain. The intention is for a site which allows for different construction projects to be simultaneously served by distinct separate yards. The site is not intended to be a commercial builder's merchant which would generate activity from trade contractors or members of the public.

4.2.2 Subject to planning, it is anticipated that the yard would become operational during 2023. The existing structures will be demolished except for one building located towards the western end of the site, which will be refurbished.

4.2.3 The proposed floorspace will fall under Use Class B8 with ancillary uses, and will comprise the storage and subsequent movement of goods (although to stress not in the context of selling to the trade / public). The site will be occupied by the Keltbray Group. The proposals involve up to 7,650sqm of building floor area across five buildings, with an office building (the building being retained and referenced as Building 1) which is ancillary to the four storage facilities. The proposed site layout is shown in Figure 4-1 below with a larger scale plan provided in Appendix B.

**Figure 4-1 Proposed Site Layout**




## Access & Parking

4.2.4 The Proposed Development will continue to be accessed from the new access road implemented as part of the HS2 enabling works.

4.2.5 As noted above, the access road is typically 5.3-5.4m in width and given the requirement to accommodate occasional larger HGVs, it is considered appropriate to widen the access road in places to provide suitable passing points and a slightly larger bellmouth. The widening is intended to allow a 16.1m low loader, anticipated to be the vehicle with the largest swept path requirement, to enter the site. While there may be longer vehicles which occasionally require access, these will generally have smaller turning circles associated with them due to smaller wheelbases or rear trailer steering and thus will be able to be accommodated within the improved junction bellmouth. The overall alteration to the bellmouth and subsequent visibility splays will be minor.

4.2.6 The incidence of larger vehicles needing to pass each other is low, as set out in the following section. However, it is considered prudent to provide additional space to allow for the worst case of a low loader entering the Site while another similarly sized vehicle is looking to egress. This is not practical or necessary at the bellmouth, as very good visibility is afforded to all approaching vehicles. Therefore a passing place on the access road prior to the junction is proposed.

4.2.7 On average, there would be expected to be fewer than 10 larger HGVs (OGV2 vehicles with 4+ axles including rigid and articulated vehicles which would cover larger tippers / low loaders etc) entering the site per day, with a low frequency of inbound and outbound movements of these vehicles occurring within the same hour. For these vehicles, the driver would be expected to call ahead to indicate they are approaching the site, as per standard Keltbray Group operating procedures, allowing any larger vehicles due to leave to wait in an appropriate passing place within the Site until the incoming vehicle has passed. A control gate will be provided on the access road, a short distance to the east of the first service yard which will help to ensure the security of the site as well as supporting the ability to control movements along the access road.

4.2.8 While the access road will be subject to localised widening, the 2m bridleway (U42) will be maintained along the northern extent of the access road up to the current connection heading north alongside the eastern side of the site boundary. A footway will continue from this connection beyond the control gate and into the main site, with alternative routes provided to a landscaped amenity area to the north-west of the site and a more direct route towards Building 1.

4.2.9 Following discussions with both LB Hillingdon officers and representatives of HS2, it has been identified that HS2 will require an ongoing vehicle access for maintenance purposes to the south of the Proposed Development. While HS2's initial preference was to provide a direct access onto Breakspear Road South in the vicinity of the existing construction compound access, the provision of such a permanent access has been rejected by LB Hillingdon officers on safety grounds given the proximity of the proposed new HS2 bridge to be located to the north of the existing Chiltern Mainline railway bridge and to the Site access road.

4.2.10 As such, it is proposed that the required maintenance access is provided directly from the Site access road. This would be gated and located immediately to the east of the proposed control gate, providing access to a small yard immediately south of the access road, with onwards connections to the railway embankment and adjacent attenuation pond. It is understood that there may be up to two vehicles per week that require access to this area, which will typically be small vans, with the occasional suction pump vehicle to support the maintenance of the attenuation pond.

4.2.11 Drawings showing the proposed realignment of the access road and the associated swept paths for different vehicle types / combinations are provided in Appendix C to this report.

4.2.12 It is proposed to provide a total of 65 car parking spaces on the site, located around Building 1. This provision is equivalent to one space per 118sqm of floorspace. LB Hillingdon standards indicate that the maximum level of parking should be in the range of two spaces plus one space per 50sqm to 100sqm. London Plan standards indicate that parking for B8 uses should be determined on a case by case basis, noting that as a starting point for Outer London, the office car parking maximum standards vary between 1 space per 50sqm (for locations identified through a local Development Plan requiring more generous parking provision) and 100sqm GIA. .

4.2.13 During pre-application discussions with LB Hillingdon and in the Council's subsequent pre-application advice letter, LB Hillingdon officers have noted that while noting the relevant maximum parking standards, in line with Local and London Plan policy the proposed parking provision should be reflective of the trip generating / operational characteristics of the development. In particular, it was noted that parking up to the maximum provision allowed for in the LB Hillingdon Local Plan would be unfeasible for the site and a compromise would be required noting the potential demand and operational requirements of the proposed development. This would need to reflect the location and the desire to protect the openness of the Green Belt while not providing additional land for unnecessary car parking.

4.2.14 The proposed provision, which is a slight reduction on that currently provided on the Site, is appropriate given that the facility is anticipated to have up to 60 members of staff on site associated with its day to day operation. In addition, there would be expected to be a requirement to accommodate visitors to the site, both external and associated with other Keltbray sites. The level of provision is therefore an appropriate compromise between ensuring suitable provision in the context of the site location, while not over-providing in the context of the operation of the site by meeting the maximum standards. While a TP has been produced to encourage sustainable travel, the nature of the facility, its location and the PTAL of the Site means that there may be limited opportunity to achieve a significant sustainable travel mode share. Further information on the importance of parking management is provided in Section 6 of this report.

4.2.15 Of the spaces provided, it is proposed that four are marked for blue badge users with a further four provided as enlarged spaces, suitable for further conversion. This is slightly above the

London Plan requirements of 5%. It is noted that the blue badge provision would be below LB Hillingdon's requirements for 10% of bays to be marked for disabled use, however it is considered an appropriate level of provision in the context of the activity on the site, with the potential for the enlarged bays to be formally converted to blue badge use in the event that demand requires this. Following discussions with LB Hillingdon, it is proposed that 13 spaces will be provided with active EV charging points to meet a 20% provision, considerably in excess of current LB Hillingdon standards, while passive provision will be provided for the remaining spaces. In addition, in line with LB Hillingdon's requirements, space for three motorcycles will also be provided.

4.2.16 In line with London Plan standards and in excess of LB Hillingdon policy, 24 cycle parking spaces will be provided, including 16 long-stay spaces to be provided in a secure, covered cycle hub and four Sheffield stands capable of accommodating up to eight cycles. This provision will be made around Building 1.

# 5 Trip Generation & Analysis

## 5.1 Existing Site Activity

5.1.1 As noted above, the site formerly accommodated the MSD Animal Health facility, which is understood to have closed during 2019. As part of the conversion of the southern section of the site to form the HS2 works compound, a number of buildings were demolished. The remaining existing buildings on the Site have a combined GIA of 6,710sqm, the majority of which is in the form of small office / industrial buildings, with some additional separate plant and storage / barn space.

5.1.2 It is understood that despite this identified need to re-provide car parking on the Site, the MSD facility had a limited trip generation, with focused periods of activity through the year linked to the production of specific animal vaccines.

5.1.3 While the buildings would potentially require some refurbishment, the existing Site retains a consent for office / industrial use and could be occupied in future without a new planning permission. Consideration has therefore been given to the potential trip generation associated with the Site in the event that it were to be reopened as a set of industrial units. For this exercise, it has been assumed that only the existing office / industrial buildings would be utilised, with the barn and storage building footprints excluded. This would provide a floor area of some 5,410sqm.

5.1.4 A TRICS exercise has been undertaken to identify the potential vehicular trip generation of the Site if it were to be reopened. Based on Edge of Town sites within the Industrial Estate sub-land use category (which will include a combination of office / light industrial / storage uses) in London and the South-East, five comparable sites have been identified, with the relevant TRICS outputs provided in Appendix D.

5.1.5 The vehicular trip rates for the local highway network peak hours of 0700-0800 and 1600-1700 and associated vehicular trip generation are presented in Table 5-1. This indicates that during these peak hours, the Site could generate 43 two-way vehicle trips during 0700-0800 and 71 two-way vehicle trips during 1600-1700. A review of the wider TRICS data indicates that such a land use would potentially generate between 34 and 94 two-way vehicle trips per hour and a total of approximately 850 two-way vehicle trips between 0700-1900.

**Table 5-1: Existing Site Potential Vehicular Trip Generation**

| | Trip Rate (Trips per 100sqm) | | | Trip Generation | | |
|---|---|---|---|---|---|---|
| **Period** | **In** | **Out** | **Total** | **In** | **Out** | **Total** |
| AM Peak (0700-0800) | 0.478 | 0.31 | 0.788 | 26 | 17 | 43 |
| PM Peak (1600-1700) | 0.597 | 0.709 | 1.306 | 32 | 38 | 71 |
| Daily (0700-2100) | 7.791 | 7.962 | 15.753 | 422 | 431 | 853 |

5.1.6 It is estimated that there would be 39 two-way movements each day made by HGVs.

## 5.2 Proposed Development - Construction Activity

It is anticipated that the construction of the site may take up to nine months to complete. Information provided by Keltbray has informed an indicative programme of works with associated on-site staff numbers on average each day, which is set out in Table 5-2.

**Table 5-2: Forecast Construction Staff Requirements by Month by Task**

| | Month | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Staff Task** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** |
| Site Team | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| Asbestos Removal | 5 | 5 | - | - | - | - | - | - | - |
| Demolition + Cut & Fill | - | 8 | 8 | - | - | - | - | - | - |
| Retaining Structures & Foundations | - | - | 6 | - | - | - | - | - | - |
| New Structures | - | - | - | 12 | 12 | 12 | 12 | 12 | 12 |
| **Total (Per Day)** | **7** | **15** | **16** | **14** | **14** | **15** | **15** | **15** | **15** |

5.2.1 Even assuming one inbound and one outbound car journey per member of staff, with inbound movements in a single hour in the morning and outbound in one hour in the evening, the additional vehicle flows would not be considered material in the context of the existing traffic flows on the local highway network.

5.2.2 Following discussions with Keltbray, it is estimated that at there could be an absolute maximum requirement for 40 HGVs to access the site on a single day. This is a potential but unlikely worst case scenario and typically the average HGV numbers per day over the course of the construction project will be significantly lower than this.

5.2.3 Nonetheless, these movements would be controlled and timed to minimise the number of vehicles travelling in a single hour. HGVs will be directed to relevant appropriate routes and a Construction Logistics Plan used to set out a methodology for minimising any effects associated with construction traffic.

5.2.4 Based on an average construction day of 10 hours, this worst case maximum would equate to only eight movements (four inbound and four outbound) in a single hour. This is not considered significant likely to result in a significant impact on the local highway network.

## 5.3 Proposed Development - Operational Site Activity

5.3.1 The Proposed Development is intended to primarily provide a new facility to replace Keltbray's existing storage yards located in Ashford in LB Hounslow and near West Drayton on the edge of LB Hillingdon.

5.3.2 Following initial discussions with Keltbray, it was agreed that surveys of these existing facilities would be undertaken, recording the number, type and timing of movements over the course of a number of days. Given the project programme, surveys were undertaken either side of the summer half-term (the week of the Jubilee bank holidays) with data collected for:

- 00:00 on Thursday 26 May 2022 to 24:00 on Friday 27 May
- 00:00 on Tuesday 7 June 2022 to 24:00 on Thursday 9 June 2022

5.3.3 The West Drayton site is made up of four plots on a private industrial estate, each accessed by the same cul-de-sac access road , which runs broadly north to south, with the connection to the wider public highway network located to the south. A review of the survey data and discussions with the site manager identified that there were a significant number of movements to and from each of the plots. These movements were not directly to or from the public highway but from another of the Keltbray plots on the estate. Inclusion of these movements, which reflect the nature of the estate and multiple Keltbray plots, would potentially result in a significant overestimation of the external activity associated with the new facility, and as such an adjustment has been made to remove these internal movements.

5.3.4 The Ashford facility has separate access points for its service yard and car park. A review of the turning movements indicated a minimal level of potential movement between the two and as such

no adjustment has been made for internal movements. It was identified that the camera recording activity at the access to the car park malfunctioned and did not collect data for the May surveys. To compensate for this, the average activity associated with the car park identified for the June surveys has been applied to the May surveys.

5.3.5 In addition, following discussions with Keltbray, it has been assumed that there may be some further activity currently associated with a further site in Egham which may also use the proposed development. The following has been assumed based on information provided by Keltbray:

- Three members of staff will transfer to Ickenham, two of which will use LGVs to travel and one their own car
- Each member of staff will generate two trips per day (one inbound, one outbound)
- There will be 10 deliveries (20 movements) by van, assumed to be LGV
- There will be 6 deliveries by HGV (12 movements), assumed to be OGV1

5.3.6 The arrival and departure profile of each group above will be in line with the surveyed West Drayton site data for the relevant vehicle type.

5.3.7 A breakdown of the subsequent combined activity by time period based on the survey data, with the adjustments described above to include allowance for Egham activity, are provided in Table 5-3 and Table 5-4. Two sets of data are provided, one derived from the average activity across the survey period, which is considered likely to represent typical activity associated with the proposed development, and one derived from the busiest day surveyed (Friday 27 May 2022). A more detailed set of data is provided in Appendix E.

**Table 5-3: Proposed Development Forecast Activity – Total Vehicles**

| Hour Starting | Typical Activity (Based on Average) | | | Peak Activity (Based on Friday 27/05/22) | | |
|---|---|---|---|---|---|---|
| | Inbound | Outbound | Total | Inbound | Outbound | Total |
| 00:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 1 | 2 | 1 | 1 | 2 |
| 05:00 | 2 | 1 | 3 | 1 | 3 | 4 |
| 06:00 | 27 | 3 | 30 | 32 | 5 | 37 |
| 07:00 | 18 | 9 | 27 | 21 | 7 | 28 |
| 08:00 | 5 | 8 | 13 | 5 | 8 | 13 |
| 09:00 | 8 | 7 | 16 | 8 | 6 | 14 |
| 10:00 | 12 | 8 | 21 | 23 | 14 | 37 |
| 11:00 | 8 | 7 | 15 | 7 | 11 | 18 |
| 12:00 | 7 | 9 | 16 | 12 | 9 | 21 |
| 13:00 | 8 | 5 | 13 | 15 | 10 | 25 |
| 14:00 | 8 | 11 | 19 | 7 | 12 | 20 |
| 15:00 | 6 | 6 | 12 | 6 | 8 | 13 |
| 16:00 | 9 | 16 | 26 | 12 | 16 | 28 |
| 17:00 | 5 | 27 | 31 | 4 | 25 | 30 |
| 18:00 | 3 | 3 | 5 | 1 | 2 | 3 |
| 19:00 | 4 | 4 | 8 | 0 | 2 | 2 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21:00 | 1 | 1 | 2 | 0 | 0 | 0 |

| Hour Starting | Typical Activity (Based on Average) | | | Peak Activity (Based on Friday 27/05/22) | | |
|---|---|---|---|---|---|---|
| | Inbound | Outbound | Total | Inbound | Outbound | Total |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **132** | **127** | **258** | **155** | **141** | **296** |

**Table 5-4: Proposed Development Forecast Activity – Heavy Goods Vehicles**

| Hour Starting | Typical Activity (Based on Average) | | | Peak Activity (Based on Friday 27/05/22) | | |
|---|---|---|---|---|---|---|
| | Inbound | Outbound | Total | Inbound | Outbound | Total |
| 00:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 | 0 | 1 | 1 | 0 | 1 | 1 |
| 06:00 | 1 | 1 | 2 | 1 | 1 | 2 |
| 07:00 | 2 | 4 | 6 | 2 | 4 | 6 |
| 08:00 | 1 | 3 | 4 | 0 | 3 | 3 |
| 09:00 | 2 | 2 | 3 | 1 | 2 | 3 |
| 10:00 | 1 | 1 | 2 | 3 | 2 | 5 |
| 11:00 | 2 | 1 | 3 | 2 | 1 | 3 |
| 12:00 | 2 | 2 | 4 | 5 | 5 | 9 |
| 13:00 | 2 | 1 | 3 | 6 | 2 | 7 |
| 14:00 | 3 | 3 | 6 | 5 | 4 | 9 |
| 15:00 | 1 | 1 | 2 | 1 | 1 | 2 |
| 16:00 | 3 | 0 | 3 | 4 | 2 | 6 |
| 17:00 | 1 | 1 | 3 | 0 | 0 | 0 |
| 18:00 | 1 | 0 | 1 | 0 | 0 | 0 |
| 19:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **22** | **22** | **44** | **29** | **26** | **56** |

5.3.8 The data indicates the following regarding the potential activity associated with the site:

- It is forecast that there will typically be in the region of 258 two-way (i.e. combined inbound and outbound) movements per day. The peak level of activity has been identified to be 296 two-way movements per day.
- Core activity is identified to be between 0600-1800, with minimal movements outside this period.
- The inbound morning peak occurs between 0600-0700 (outside the local highway peak) and outbound evening peak at 1700-1800. Even at these peak times, the level of overall trip generation is very limited, with approximately 30 movements in an hour based on typical activity and 37 movements an hour based on the peak day.

- On an average day, there are expected to be 22 HGVs (44 movements) accessing the site, with a maximum of six movements in a single hour. For the peak day, there are forecast to be of the order of 56 two-way movements with up to nine movements an hour.
- Further investigation of the surveys indicate that the level of larger HGVs (OGV2 classification[3]) will be very limited with eight vehicles accessing the site per day on average (16 movements). The peak day is forecast to have up to 24 two-way movements.

## 5.4 Analysis of Forecast Operational Traffic on the Local Network

5.4.1 Following discussions with LB Hillingdon highways officers, it was agreed that the potential impacts in terms of vehicle flows would be based on a comparison of the potential trip generation associated with the proposed site use against the baseline traffic activity identified in the May 2022 traffic surveys. This has been presented with reference to both typical day and peak day activity. It was also agreed that this should be considered in the context of the potential traffic generation associated with the existing site in the event that it was to be reoccupied.

5.4.2 The baseline traffic flows have assumed no traffic growth between 2022 and 2023. It is recognised that there is HS2 activity on the local highway network which would fluctuate over time and be present until at least 2024, and therefore will be present at the proposed opening of the Site. While adjustments have not been made to the baseline traffic flows to reflect any changes compared to the 2022 surveys linked to the HS2 construction programme, a commentary on this is provided at the end of the section.

5.4.3 The analysis has considered the relative traffic flows for the period 0600-2000, reflecting the forecast site activity but noting that data is not available for the 0600-0700 from the TRICS database for the existing site use. A comparison has been undertaken of the flows at the site access, on Breakspear Road to the south of the HS2 construction compound and at the junctions of Breakspear Road / Breakspear Road South and B467 / Breakspear Road South / Swakeleys Road. The baseline flows reflect the average Tuesday to Thursday flows recorded from the May 2022 surveys.

5.4.4 For the purposes of this analysis, it has been assumed that car, motorcycle and LGV activity (referenced as “light” in the following tables) associated with both the existing consent and proposed use of the site will be equally distributed to the north and south of the site access. This reflects the general traffic flow observed for the 0700-1000 period from the ATC located immediately to the north of the site and is considered to be a reasonable approximation for staff movements associated with the site, noting the relative residential areas accessible to both the north and south. It has been assumed for the purposes of this report that HGVs will be more likely to access the strategic highway network by the shortest route and have therefore been assigned to travel to / from the south and the A40.

5.4.5 As set out previously, the peak morning trip generation associated with the proposed development (0600-0700) does not coincide with the baseline traffic hours (0700-0900) on the local highway corridor. In the evening, the development and baseline peaks do coincide at 1700-1800 at the site access.

5.4.6 Table 5-5 and Table 5-6 set out the typical (average) and peak forecast daily activity compared to the activity recorded from the 2022 traffic surveys at the Site access junction on Breakspear Road South. Based on the average day, the percentage increase in total traffic flow is limited, with it being below 3% of baseline in all hours with the exception of 0600-0700, which has a percentage change of 5.4% but is when baseline traffic is significantly lower than the rest of the study period and thus unlikely to result in any worsening of network operation. As noted earlier in the section, the number of additional HGV movements will be very limited. For the peak activity

[3] OGV2 refers to vehicles with 4+ axle including rigid and articulated vehicles

scenario, the level of additional flow remains limited and while there are increased incidences of changes in flow of above 3%, these again take place at times of lower baseline activity and as such are considered not to have a material effect on the network.

**Table 5-5: Site Access Junction Activity (Average Development Activity)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 532 | 19 | 552 | 28 | 2 | 30 | 559 | 22 | 581 | 5.4% |
| 07:00 | 1056 | 30 | 1086 | 21 | 6 | 27 | 1074 | 39 | 1113 | 2.4% |
| 08:00 | 959 | 50 | 1009 | 9 | 4 | 13 | 967 | 55 | 1022 | 1.3% |
| 09:00 | 778 | 46 | 824 | 12 | 3 | 16 | 789 | 50 | 839 | 1.9% |
| 10:00 | 672 | 47 | 719 | 18 | 2 | 21 | 689 | 50 | 740 | 2.9% |
| 11:00 | 634 | 43 | 677 | 13 | 3 | 15 | 645 | 48 | 693 | 2.3% |
| 12:00 | 693 | 44 | 736 | 12 | 4 | 16 | 703 | 49 | 752 | 2.2% |
| 13:00 | 714 | 45 | 759 | 10 | 3 | 13 | 723 | 50 | 772 | 1.8% |
| 14:00 | 749 | 48 | 797 | 14 | 6 | 19 | 760 | 56 | 816 | 2.4% |
| 15:00 | 916 | 45 | 961 | 9 | 2 | 12 | 924 | 49 | 973 | 1.2% |
| 16:00 | 1143 | 26 | 1169 | 23 | 3 | 26 | 1164 | 30 | 1195 | 2.2% |
| 17:00 | 1148 | 18 | 1166 | 29 | 3 | 31 | 1177 | 21 | 1198 | 2.7% |
| 18:00 | 1113 | 19 | 1132 | 4 | 1 | 5 | 1117 | 20 | 1137 | 0.5% |
| 19:00 | 719 | 11 | 730 | 7 | 0 | 8 | 726 | 12 | 738 | 1.0% |

**Table 5-6: Site Access Junction Activity (Peak Development Activity)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 532 | 19 | 552 | 35 | 2 | 37 | 567 | 21 | 589 | 6.7% |
| 07:00 | 1056 | 30 | 1086 | 22 | 6 | 28 | 1078 | 37 | 1114 | 2.6% |
| 08:00 | 959 | 50 | 1009 | 10 | 3 | 13 | 968 | 54 | 1022 | 1.3% |
| 09:00 | 778 | 46 | 824 | 11 | 3 | 14 | 789 | 48 | 838 | 1.7% |
| 10:00 | 672 | 47 | 719 | 33 | 5 | 37 | 704 | 52 | 756 | 5.2% |
| 11:00 | 634 | 43 | 677 | 15 | 3 | 18 | 649 | 46 | 695 | 2.6% |
| 12:00 | 693 | 44 | 736 | 12 | 9 | 21 | 705 | 53 | 758 | 2.9% |
| 13:00 | 714 | 45 | 759 | 17 | 7 | 25 | 731 | 52 | 784 | 3.3% |
| 14:00 | 749 | 48 | 797 | 11 | 9 | 20 | 760 | 57 | 817 | 2.5% |
| 15:00 | 916 | 45 | 961 | 11 | 2 | 13 | 927 | 47 | 974 | 1.4% |
| 16:00 | 1143 | 26 | 1169 | 23 | 6 | 28 | 1166 | 31 | 1197 | 2.4% |
| 17:00 | 1148 | 18 | 1166 | 30 | 0 | 30 | 1178 | 18 | 1196 | 2.5% |
| 18:00 | 1113 | 19 | 1132 | 3 | 0 | 3 | 1117 | 19 | 1135 | 0.3% |
| 19:00 | 719 | 11 | 730 | 2 | 0 | 2 | 721 | 11 | 733 | 0.3% |

5.4.7 Table 5-7 shows that the trip generation associated with the consented development would result in a considerably greater level of movements at the site access junction compared to both the average and peak day development scenarios. This includes approximately double the number of movements in the AM network peak hour (0700-0800) and greater percentage impacts across the PM peak period. The forecast level of HGV movements would be lower than that associated with the proposed development, however given the scale of forecast activity, the differences are not considered material in the context of local highway capacity.

**Table 5-7: Site Access Junction (Consented Site Use)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 532 | 19 | 552 | 0 | 0 | 0 | 532 | 19 | 552 | 0.0% |
| 07:00 | 1056 | 30 | 1086 | 49 | 4 | 53 | 1105 | 34 | 1139 | 4.9% |
| 08:00 | 959 | 50 | 1009 | 82 | 4 | 86 | 1041 | 54 | 1095 | 8.5% |
| 09:00 | 778 | 46 | 824 | 84 | 5 | 89 | 862 | 51 | 912 | 10.8% |
| 10:00 | 672 | 47 | 719 | 94 | 4 | 98 | 765 | 51 | 817 | 13.6% |
| 11:00 | 634 | 43 | 677 | 82 | 3 | 85 | 716 | 46 | 763 | 12.6% |
| 12:00 | 693 | 44 | 736 | 74 | 4 | 77 | 766 | 47 | 813 | 10.5% |
| 13:00 | 714 | 45 | 759 | 72 | 5 | 77 | 786 | 50 | 836 | 10.2% |
| 14:00 | 749 | 48 | 797 | 70 | 3 | 73 | 819 | 51 | 870 | 9.2% |
| 15:00 | 916 | 45 | 961 | 69 | 4 | 73 | 985 | 49 | 1034 | 7.6% |
| 16:00 | 1143 | 26 | 1169 | 68 | 3 | 71 | 1211 | 29 | 1240 | 6.1% |
| 17:00 | 1148 | 18 | 1166 | 39 | 1 | 39 | 1187 | 19 | 1206 | 3.4% |
| 18:00 | 1113 | 19 | 1132 | 13 | 0 | 13 | 1126 | 19 | 1145 | 1.2% |
| 19:00 | 719 | 11 | 730 | 2 | 0 | 2 | 721 | 11 | 732 | 0.2% |

5.4.8 Table 5-8 and Table 5-9 illustrate the baseline and forecast development traffic for the average and peak day scenarios at the Breakspear Road South / Breakspear Road junction located north of the Site access. The change in traffic flow at this junction associated with the development will be lower than that at the Site access given the distribution of trips to the local highway network.

5.4.9 Both the average and peak day scenarios received the largest percentage increase between 0600-0700 at 2.4% and 3.0% equivalent to 14 and 18 extra vehicles respectively on the network within that particular hour, again noting the relatively lower baseline traffic flows at this time. During the local highway network AM peak hour, the change in flow would be less than 1% in both scenarios.

5.4.10 In both the average and peak day scenario, development traffic flows are typically below 10 movements an hour, while the 14-15 movements identified at 1700-1800 in each scenarios would equate to a change of only 1% of total traffic flow. There are no development HGVs forecast to use this junction.

**Table 5-8: Breakspear Road South / Breakspear Road (Average Development Activity)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 562 | 20 | 582 | 14 | 0 | 14 | 576 | 20 | 596 | 2.4% |
| 07:00 | 1237 | 33 | 1270 | 10 | 0 | 10 | 1247 | 33 | 1280 | 0.8% |
| 08:00 | 1179 | 35 | 1214 | 5 | 0 | 5 | 1184 | 35 | 1219 | 0.4% |
| 09:00 | 904 | 34 | 938 | 6 | 0 | 6 | 910 | 34 | 944 | 0.7% |
| 10:00 | 763 | 46 | 809 | 9 | 0 | 9 | 772 | 46 | 818 | 1.1% |
| 11:00 | 751 | 42 | 793 | 6 | 0 | 6 | 758 | 42 | 800 | 0.8% |
| 12:00 | 816 | 31 | 846 | 6 | 0 | 6 | 822 | 31 | 852 | 0.7% |
| 13:00 | 823 | 41 | 863 | 5 | 0 | 5 | 828 | 41 | 868 | 0.6% |
| 14:00 | 909 | 39 | 948 | 7 | 0 | 7 | 916 | 39 | 955 | 0.7% |
| 15:00 | 1029 | 33 | 1062 | 5 | 0 | 5 | 1034 | 33 | 1067 | 0.4% |
| 16:00 | 1361 | 21 | 1382 | 11 | 0 | 11 | 1372 | 21 | 1393 | 0.8% |
| 17:00 | 1423 | 8 | 1431 | 14 | 0 | 14 | 1437 | 8 | 1446 | 1.0% |
| 18:00 | 1305 | 4 | 1309 | 2 | 0 | 2 | 1307 | 4 | 1311 | 0.2% |
| 19:00 | 815 | 4 | 819 | 4 | 0 | 4 | 819 | 4 | 823 | 0.4% |

**Table 5-9: Breakspear Road South / Breakspear Road (Peak Development Activity)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 562 | 20 | 582 | 18 | 0 | 18 | 579 | 20 | 599 | 3.0% |
| 07:00 | 1237 | 33 | 1270 | 11 | 0 | 11 | 1248 | 33 | 1281 | 0.9% |
| 08:00 | 1179 | 35 | 1214 | 5 | 0 | 5 | 1184 | 35 | 1219 | 0.4% |
| 09:00 | 904 | 34 | 938 | 6 | 0 | 6 | 910 | 34 | 944 | 0.6% |
| 10:00 | 763 | 46 | 809 | 16 | 0 | 16 | 780 | 46 | 825 | 2.0% |
| 11:00 | 751 | 42 | 793 | 7 | 0 | 7 | 759 | 42 | 801 | 0.9% |
| 12:00 | 816 | 31 | 846 | 6 | 0 | 6 | 822 | 31 | 852 | 0.7% |
| 13:00 | 823 | 41 | 863 | 9 | 0 | 9 | 831 | 41 | 872 | 1.0% |
| 14:00 | 909 | 39 | 948 | 6 | 0 | 6 | 915 | 39 | 954 | 0.6% |
| 15:00 | 1029 | 33 | 1062 | 6 | 0 | 6 | 1035 | 33 | 1068 | 0.5% |
| 16:00 | 1361 | 21 | 1382 | 11 | 0 | 11 | 1372 | 21 | 1393 | 0.8% |
| 17:00 | 1423 | 8 | 1431 | 15 | 0 | 15 | 1438 | 8 | 1446 | 1.0% |
| 18:00 | 1305 | 4 | 1309 | 2 | 0 | 2 | 1307 | 4 | 1311 | 0.1% |
| 19:00 | 815 | 4 | 819 | 1 | 0 | 1 | 816 | 4 | 820 | 0.1% |

5.4.11 Table 5-10 shows that the consented site use would be anticipated to generate more movements each hour at the junction between 0700-1800 than both proposed development potential scenarios, although it is recognised that at network peak times this additional traffic would be relatively minimal both in absolute and percentage terms.

**Table 5-10: Breakspear Road South / Breakspear Road (Consented Site Use)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 562 | 20 | 582 | 0 | 0 | 0 | 562 | 20 | 582 | 0.0% |
| 07:00 | 1237 | 33 | 1270 | 25 | 0 | 25 | 1261 | 33 | 1295 | 1.9% |
| 08:00 | 1179 | 35 | 1214 | 41 | 0 | 41 | 1220 | 35 | 1255 | 3.4% |
| 09:00 | 904 | 34 | 938 | 42 | 0 | 42 | 946 | 34 | 980 | 4.5% |
| 10:00 | 763 | 46 | 809 | 47 | 0 | 47 | 810 | 46 | 856 | 5.8% |
| 11:00 | 751 | 42 | 793 | 41 | 0 | 41 | 793 | 42 | 835 | 5.2% |
| 12:00 | 816 | 31 | 846 | 37 | 0 | 37 | 852 | 31 | 883 | 4.3% |
| 13:00 | 823 | 41 | 863 | 36 | 0 | 36 | 859 | 41 | 899 | 4.2% |
| 14:00 | 909 | 39 | 948 | 35 | 0 | 35 | 944 | 39 | 983 | 3.7% |
| 15:00 | 1029 | 33 | 1062 | 34 | 0 | 34 | 1064 | 33 | 1096 | 3.2% |
| 16:00 | 1361 | 21 | 1382 | 34 | 0 | 34 | 1395 | 21 | 1416 | 2.5% |
| 17:00 | 1423 | 8 | 1431 | 19 | 0 | 19 | 1442 | 8 | 1451 | 1.3% |
| 18:00 | 1305 | 4 | 1309 | 6 | 0 | 6 | 1311 | 4 | 1315 | 0.5% |
| 19:00 | 815 | 4 | 819 | 1 | 0 | 1 | 816 | 4 | 820 | 0.1% |

5.4.12 Table 5-11 and Table 5-12 illustrate the baseline and forecast development traffic for the average and peak day scenarios at the Breakspear Road South / B467 / B467 Swakeleys Road roundabout junction located south of the site access. Both the average and peak scenarios witness the greatest percentage increase between 0600-0700 at 1.2% and 1.5% equivalent to only 16 and 20 additional vehicles respectively on the network within that particular hour. Throughout the day, the development in either scenario would be forecast to typically generate less than 20 vehicles an hour at this junction (with two exceptions to this in the peak activity scenario) and have a minimal impact on traffic flow. The forecast number of additional HGV movements per hour will be very limited.

**Table 5-11: Breakspear Road South / B467 / Swakeleys Road (Average Development Activity)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 1257 | 63 | 1320 | 14 | 2 | 16 | 1271 | 65 | 1336 | 1.2% |
| 07:00 | 1833 | 83 | 1916 | 10 | 6 | 16 | 1844 | 88 | 1932 | 0.8% |
| 08:00 | 1445 | 83 | 1528 | 5 | 4 | 9 | 1449 | 87 | 1536 | 0.6% |
| 09:00 | 1569 | 105 | 1674 | 6 | 3 | 9 | 1575 | 108 | 1683 | 0.6% |
| 10:00 | 1464 | 119 | 1583 | 9 | 2 | 12 | 1473 | 122 | 1595 | 0.7% |
| 11:00 | 1437 | 96 | 1533 | 6 | 3 | 9 | 1443 | 99 | 1542 | 0.6% |
| 12:00 | 1558 | 79 | 1637 | 6 | 4 | 10 | 1564 | 83 | 1647 | 0.6% |
| 13:00 | 1586 | 94 | 1680 | 5 | 3 | 8 | 1591 | 97 | 1688 | 0.5% |
| 14:00 | 1593 | 93 | 1686 | 7 | 6 | 12 | 1600 | 99 | 1699 | 0.7% |
| 15:00 | 1805 | 95 | 1900 | 5 | 2 | 7 | 1810 | 97 | 1907 | 0.4% |
| 16:00 | 2015 | 49 | 2064 | 11 | 3 | 15 | 2026 | 53 | 2079 | 0.7% |
| 17:00 | 2077 | 22 | 2099 | 14 | 3 | 17 | 2092 | 24 | 2116 | 0.8% |
| 18:00 | 1980 | 11 | 1991 | 2 | 1 | 3 | 1982 | 12 | 1994 | 0.2% |
| 19:00 | 1526 | 12 | 1538 | 4 | 0 | 4 | 1529 | 13 | 1542 | 0.3% |

**Table 5-12: Breakspear Road South / B467 / Swakeleys Road (Peak Development Activity)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 1257 | 63 | 1320 | 18 | 2 | 20 | 1275 | 65 | 1340 | 1.5% |
| 07:00 | 1833 | 83 | 1916 | 11 | 6 | 17 | 1844 | 89 | 1933 | 0.9% |
| 08:00 | 1445 | 83 | 1528 | 5 | 3 | 8 | 1449 | 86 | 1536 | 0.5% |
| 09:00 | 1569 | 105 | 1674 | 6 | 3 | 8 | 1575 | 107 | 1682 | 0.5% |
| 10:00 | 1464 | 119 | 1583 | 16 | 5 | 21 | 1480 | 124 | 1604 | 1.3% |
| 11:00 | 1437 | 96 | 1533 | 7 | 3 | 10 | 1444 | 99 | 1543 | 0.7% |
| 12:00 | 1558 | 79 | 1637 | 6 | 9 | 15 | 1564 | 88 | 1652 | 0.9% |
| 13:00 | 1586 | 94 | 1680 | 9 | 7 | 16 | 1594 | 101 | 1696 | 1.0% |
| 14:00 | 1593 | 93 | 1686 | 6 | 9 | 14 | 1599 | 102 | 1701 | 0.8% |
| 15:00 | 1805 | 95 | 1900 | 6 | 2 | 8 | 1811 | 97 | 1908 | 0.4% |
| 16:00 | 2015 | 49 | 2064 | 11 | 6 | 17 | 2026 | 55 | 2081 | 0.8% |
| 17:00 | 2077 | 22 | 2099 | 15 | 0 | 15 | 2092 | 22 | 2114 | 0.7% |
| 18:00 | 1980 | 11 | 1991 | 2 | 0 | 2 | 1981 | 11 | 1992 | 0.1% |
| 19:00 | 1526 | 12 | 1538 | 1 | 0 | 1 | 1527 | 12 | 1539 | 0.1% |

5.4.13 As with the other junctions considered, the vehicular activity associated with the consented use of the site would be greater than that associated with the proposed development for each hour across the time period 0700-1900.

**Table 5-13: Breakspear Road South / B467 / Swakeleys Road (Consented Site Use)**

| Hour Starting | Base | | | Development | | | Base + Development | | | Total Junction Percentage Change |
|---|---|---|---|---|---|---|---|---|---|---|
| | Light | HGV | Total | Light | HGV | Total | Light | HGV | Total | |
| 06:00 | 1257 | 63 | 1320 | 0 | 0 | 0 | 1257 | 63 | 1320 | 0.0% |
| 07:00 | 1833 | 83 | 1916 | 25 | 4 | 28 | 1858 | 86 | 1944 | 1.5% |
| 08:00 | 1445 | 83 | 1528 | 41 | 4 | 45 | 1486 | 87 | 1572 | 2.9% |
| 09:00 | 1569 | 105 | 1674 | 42 | 5 | 47 | 1611 | 110 | 1721 | 2.8% |
| 10:00 | 1464 | 119 | 1583 | 47 | 4 | 51 | 1511 | 123 | 1634 | 3.2% |
| 11:00 | 1437 | 96 | 1533 | 41 | 3 | 44 | 1478 | 99 | 1577 | 2.9% |
| 12:00 | 1558 | 79 | 1637 | 37 | 4 | 40 | 1595 | 82 | 1677 | 2.5% |
| 13:00 | 1586 | 94 | 1680 | 36 | 5 | 41 | 1622 | 99 | 1721 | 2.5% |
| 14:00 | 1593 | 93 | 1686 | 35 | 3 | 38 | 1628 | 96 | 1724 | 2.2% |
| 15:00 | 1805 | 95 | 1900 | 34 | 4 | 39 | 1839 | 99 | 1939 | 2.0% |
| 16:00 | 2015 | 49 | 2064 | 34 | 3 | 37 | 2049 | 52 | 2101 | 1.8% |
| 17:00 | 2077 | 22 | 2099 | 19 | 1 | 20 | 2097 | 23 | 2119 | 1.0% |
| 18:00 | 1980 | 11 | 1991 | 6 | 0 | 7 | 1986 | 11 | 1997 | 0.3% |
| 19:00 | 1526 | 12 | 1538 | 1 | 0 | 1 | 1526 | 12 | 1539 | 0.1% |

## 5.5 HS2 Activity

5.5.1 The HS2 compounds near the Site generate significant levels of HGV activity. As part of the HS2 construction management requirements, agreements are in place with LB Hillingdon to set a maximum level of heavy goods vehicles which may access the local HS2 works via the A40 Swakeleys Roundabout on an average each day. For 2022 this is up to 275 vehicles or 550 movements per day. Information provided by HS2 indicates that there may have been in the region of 270 HGVs or 540 movements on average per day at the time of the May traffic surveys. This would be equivalent to a little over 50% of the HGV activity recorded at the Breakspear Road / B467 / B467 Swakeleys Road roundabout for the period 0600-2000 at the time of the traffic surveys.

5.5.2 It is understood that revised maximum numbers for 2023 are being discussed between HS2 and LB Hillingdon. It is anticipated that the number of vehicle movements agreed will continue to be significantly in excess of that forecast to be generated by the Proposed Development, although noting that the maximum limits may not in turn be reached each day.

5.5.3 The construction works associated with HS2 are forecast to continue to at least 2024, which will cover both the construction period for the Proposed Development and the year of opening. The level of development activity in this context, and noting no allowance is made for HS2 staff movements within these figures, would be expected to be minimal and not materially affect the operation of the local highway network.

5.5.4 Once HS2 works are complete, the minimal ongoing maintenance activity associated with HS2 (estimated to be two vehicles a week) would be expected to mean a significant reduction in traffic flow, focused along the Breakspear Road / B467 corridor to the south of the Proposed Development. This would be anticipated to result in a significant reduction in local congestion at peak times, and the trip generation associated with the Proposed Development, given its absolute low hourly flow, would be considered to remain insignificant in the context of the local highway network operation.

## 5.6 Summary

5.6.1 This section identifies that the forecast trip generation associated with the Proposed Development, in terms of the activity associated with both an average day and a peak day, is anticipated to be very limited with low hourly flows , including of HGVs. Once assigned to the local highway network, the relative change in traffic flow compared to the observed survey flows would not be significant. Furthermore, morning peak activity associated with the site would be anticipated to take place prior to the local highway peak hour.

5.6.2 The consented use of the site would be expected to generate a significantly greater number of journeys on the highway network over the course of the day, including at highway network peak times, than the Proposed Development.

5.6.3 The local compounds associated with HS2 construction generate a significant level of HGV activity, which is reflected in the base traffic flows against which the Site operation has been considered. The level of vehicle activity forecast to be generated by the site is in both absolute and relative terms not considered material and would not be expected to have a significant impact on the operation of the highway network either during or post HS2 construction.

# 6 Demand Management

## 6.1 Introduction

6.1.1 While it has been identified in the previous section that the impact of the trip generation of the Proposed Development will not be significant, consideration has still been given to ways to further minimise any potential effects associated with the journeys to or from the Site. This includes a summary of the Interim Travel Plan which has been produced for the Site, including a strategy for the management of deliveries and servicing, and a Car Park Design and Management Plan.

## 6.2 Interim Travel Plan

### Overview

6.2.1 A separate Interim Travel Plan, setting out a strategy for encouraging sustainable transport behaviour associated with the use of the site, has been produced for submission as part of the planning application for the redevelopment. While acknowledging the limitations with promoting sustainable transport modes such as public transport, walking and cycling given the location and operation of the development, the Interim Travel Plan outlines a management process and measures to minimise the transport impact of the development on the local environment and transport networks.

6.2.2 It is anticipated that the Interim Travel Plan will be formalised with confirmed targets and measures following the undertaking of baseline travel behaviour surveys of staff following occupation of the development.

### Objectives, Targets & Monitoring

6.2.3 The location and nature of the site operation will mean that there are limits to what can be achieved in encouraging travel by sustainable modes. This reflects the poor PTAL of the site, early morning travel associated with some staff and the requirements to use Keltbray vehicles to travel to and from the site during the course of the day.

6.2.4 A core feature of the Travel Plan will therefore be considering was to encourage a reduction in single occupancy vehicle (SOV) trips where feasible, use of demand management to control when journeys are made and, support staff travelling by sustainable transport, where feasible.

6.2.5 Site specific objectives have been identified:

- Sub-objective 1: To implement the Travel Plan at the earliest possible opportunity;
- Sub-objective 2: To raise awareness of alternative modes of travel and the advantages they bring to Site users;
- Sub-objective 3: To introduce a package of physical and management measures that will reduce reliance on SOV trips;
- Sub-objective 4: to control activity at the site to minimise the number of trips which take place at peak times
- Sub-objective 5: Identify measures to minimise deliveries to / from the site

6.2.6 Ahead of the baseline travel behaviour survey and in line with the objectives, an interim target has been set of:

- Achieve a 5% reduction in car driver mode share by 2028 (five years post opening).

6.2.7 This will be reviewed following the baseline survey and progress against finalised target(s) will be monitored, principally through follow up travel behaviour surveys to be undertaken in Years 3 and 5 following occupation.

6.2.8 In addition to these surveys, Travel Plan progress will be continually monitored through the review of progress against measures identified for implementation. This could include uptake / participation of relevant measures or spot checks of car and cycle parking use for example.

### Travel Plan Measures

6.2.9 A series of potential measures reflecting both hard infrastructural and soft information, marketing and promotional initiatives have been identified. These include:

- Provision of cycle parking in line with London Plan standards and significantly in excess of anticipated initial demand for the Site.
- Provision of showering and changing facilities at the site
- A restrained level of car parking which will be below LB Hillingdon maximum parking standards but which is considered appropriate for the forecast use and demand for the site
- Appointment of a Travel Plan Co-ordinator to be responsible for the day-to-day implementation of the plan and monitoring of progress
- Promotion of the Travel Plan and provision of relevant travel information to staff and visitors to allow them to make informed decisions about their travel behaviour
- Promotion of a car sharing scheme amongst staff to reduce the number of single occupancy vehicle trips
- Investigation of the potential for Keltbray to provide interest-free loans to purchase bikes and associated equipment
- Consideration of ways to potentially reduce or spread the number of staff leaving the Site during the evening peak
- A strategy for managing deliveries and servicing (more detail provided below).

### Delivery and Servicing Strategy

6.2.10 The Proposed Development will in part replace two existing Keltbray yards, one in Ashford, LB Hounslow and one near West Drayton on the edge of LB Hillingdon. The consolidation of the two yards offers the opportunity to reduce potential deliveries to and from these sites in terms of:

- Goods deliveries from suppliers to be stored at the facility
- Movement of materials from the facility to Keltbray construction sites in London

6.2.11 Keltbray will work with suppliers to control the timing and frequency of deliveries to the Proposed Development, in particular focussing on deliveries taking place at off-peak times and being spread out to minimise the number of vehicles accessing the site at one time. Suppliers will be expected to pre-book delivery times which will be communicated to staff operating the gates on the site access road, who will then direct the vehicle to the relevant individual service yard (or administration building).

6.2.12 Suppliers will be expected to follow relevant best practice guidance, such as being a member of the Fleet Operator Recognition Scheme (FORS). Suppliers will also be clearly informed of the limitations associated with the height clearance of the Chiltern line bridge on Breakspear Road South and will be required to ensure only appropriately dimensioned vehicles / loads are used for deliveries.

6.2.13 In line with current practice, the movement of Keltbray vehicles between their storage facility and construction sites will be carefully managed, with an emphasis on minimising the number of deliveries, in particular during peak times, in line with common best practice set out in Construction Logistics Plans for construction sites. Keltbray staff will monitor the movement of their vehicles to minimise the incidence of multiple larger vehicles using the site access road and junction at the same time.

6.2.14 Keltbray are a well-established operator and have relevant accreditation / membership of, amongst others; FORS, the Construction Logistics and Community Safety (CLOCS) standard, and BS ISO 39001 – Road Traffic Safety Management. Movements of larger HGVs will be to pre-planned routes focused on the corridor towards the A40 Swakeleys Roundabout. All movements of larger HGVs will be pre-checked to ensure loads do not result in a strike on the Chiltern line bridge. Keltbray do operate some abnormal vehicles from their current yards at Ashford and West Drayton. A review of the vehicle fleet and associated loads will be carried out and where these are identified to potentially present a risk to the bridge, these vehicles will be relocated to other more suitable Keltbray yards, principally one located in LB Newham.

## 6.3 Car Parking Management Plan

6.3.1 It is proposed to provide a total of 65 car parking spaces on the site, located around Building 1. This provision a slight reduction of that associated with the current Site. Of these four will be provided for blue badge holders, with a further four enlarged spaces, capable of further conversion to dedicated blue badge provision if required at a future date. It is proposed that 20% of the parking spaces are provided with active electric vehicle charging provision from the outset, with passive provision made for the remaining spaces.

6.3.2 A carefully balance has needed to be struck between too many and too few spaces in the context of:

- LB Hillingdon maximum parking standards permitting car parking significantly in excess of likely staff numbers and associated demand
- The limited opportunities for sustainable travel given the site location and PTAL
- The significant impact that inappropriate parking, particularly on the access road through the Site, would have on the operation of the facility
- Minimising the amount of land which is dedicated to parking

6.3.3 Access to the site will be carefully controlled via a security gate. It is therefore not anticipated that there will be inappropriate parking associated with non-Keltbray operations within the Site.

6.3.4 The following key measures to manage parking have been identified:

- All staff to be informed that they may only park in appropriate marked bays and signage / line markings to be used to reinforce that parking is prohibited along the Site Access Road
- Blue badge parking to be regularly monitored to ensure appropriate use by blue badge holders only
- Monitoring of the demand for blue badge parking and the temporary / permanent redesignation of enlarged bays subject to demand
- Identification of dedicated car share spaces close to the building entrance (subject to investigation of potential car sharing demand)
- Monitoring of the demand for EV provision, with charging points introduced as demand dictates

6.3.5 Relevant monitoring would be undertaken by a member of the facilities management team based at the site.

# 7 Summary and Conclusions

7.1.1 Mott MacDonald has been appointed to provide transport advice to Keltbray Developments Limited to inform a proposed planning application for a new storage yard located on part of the former Merck Sharpe Dohme (MSD) Animal Health Site, to the west of Breakspear Road South near Ickenham in the London Borough of Hillingdon (LB Hillingdon).

7.1.2 The Keltbray Group are a leading UK sub-contractor and the yard is intended to support future construction projects in West and Central London for which the Keltbray Group will be a key member of the construction supply chain. The site would be focused on supporting Keltbray's wider activities to service and facilitate these future construction projects. The proposals are not going to be utilised as a commercial builder's merchant which would generate activity from trade contractors or members of the public.

7.1.3 The Proposed Development is based on the northern part of the former MSD facility. The southern section of the former MSD facility currently forms part of the HS2 Breakspear Road Satellite Compound. The construction compound is accessed via the former MSD facility access road, with a new road and associated priority junction constructed in 2019 / 20 to the north, to allow for the ongoing use of the MSD facility. However the MSD facility closed in 2020.

7.1.4 Recent HS2 enabling and mitigation works have included the diversion of footpath U46, resulting in the provision of new footpaths / footways alongside Breakspear Road South in the vicinity of the site. However, there are no footways beyond the area around the Site and the HS2 compound, with pedestrian connections limited to the PROW network, which provides access towards Ickenham and West Ruislip. The Site has a PTAL of 0, indicating a lack of stations and bus stops in close proximity to the Site.

7.1.5 The Site is accessed from Breakspear Road South, which provides access towards Ruislip in the north and Ickenham and the A40 to the south. The Chiltern line railway travels over Breakspear Road South, across a low bridge (4.4m height restriction) which is located 50m south of the site access point. Following the start of HS2 works in the area, it is understood that there has been a significant increase in rail bridge strikes, anecdotally associated with queuing under the bridge linked to temporary traffic signals. It has been suggested that HS2 supports the delivery of "goalposts" to the north and south of the bridge to provide an indication to higher load vehicles as to whether they may potentially cause a strike on the bridge. The proposed development will provide an opportunity for oversized vehicles from the north to turn around if they cannot fit through the goalposts. Drivers accessing the development site, who will be regular visitors, will be well briefed, and the size of vehicles arriving are well within the height limits of the bridge. Consequently the Proposed Development will not add to the incidence of bridge strikes and, indeed, could help in efforts to eliminate such strikes.

7.1.6 The Proposed Development will deliver approximately 7,650sqm GEA of building floorspace. An administration building will be provided, utilising an existing building on the site, with the remaining structures on the site demolished. Four independently operating storage facilities will be provided with associated yard space and access points onto an internal access road. Pedestrian facilities will be provided predominately along the northern side of the internal access road, with a crossing facility provided to connect to the proposed administration building. To facilitate the use of the occasional larger HGVs associated with such a storage yard, the existing site access road and bellmouth with the junction of Breakspear Road South will be widened. A gate will also be provided from the access road to an HS2 maintenance area, however the activity associated with ongoing HS2 maintenance is anticipated to be minimal (two vehicles per week).

7.1.7 The proposals include 65 parking spaces of which four would be marked for blue badge use and a further four would be enlarged bays. Twenty percent of the spaces would be provided with EV charging points at opening, with passive provision made for the remaining spaces. The overall level of car parking provision is below LB Hillingdon maximum standards but is considered an appropriate level of provision noting the forecast staff activity on the site and the desire to minimise the amount of land provided for car parking, noting the importance of maintaining the openness of the Green Belt, while ensuring sufficient provision is made in light of the site location and the impact that inappropriate parking would have on the operation of the Site.

7.1.8 The proposals include space to accommodate parking for three motorcycles in line with LB Hillingdon standards. Provision will also be made for 16 long-stay and 8 short-stay cycle parking spaces, in line with London Plan standards and in excess of LB Hillingdon minimum standards.

7.1.9 The Proposed Development is intended to primarily provide a new facility to replace Keltbray's existing storage yards located in Ashford, LB Hounslow and near West Drayton on the edge of LB Hillingdon. It may also include some activity associated with another Keltbray yard located in Egham.

7.1.10 Surveys were undertaken of the Ashford and West Drayton facilities to establish the potential level of activity associated with the Proposed Development. Analysis of these surveys and allowance for potential relocation of some Egham activity indicated the following:

- There will typically be in the region of 258 two-way (i.e. combined inbound and outbound) movements per day. The peak level of activity has been identified to be 296 two-way movements per day.
- Core activity is between 0600-1800, with minimal movements outside this period.
- The inbound morning peak occurs between 0600-0700 (outside the local highway peak) and outbound evening peak at 1700-1800. Even at these peak times, the level of overall trip generation is very limited, with approximately 30 movements in an hour based on typical activity and 37 movements an hour based on the peak day.
- On an average day, there are expected to be 22 HGVs (44 movements) accessing the site, with a maximum of six movements in a single hour. For the peak day, there are forecast to be of the order of 56 two-way movements with up to nine movements an hour.
- Further investigation of the surveys indicate that the level of larger HGVs will be very limited with eight vehicles accessing the site per day on average (16 movements). The peak day is forecast to have up to 24 two-way movements.

7.1.11 The forecast average and peak day trips were assigned to the local highway network and compared to existing traffic flow data obtained from surveys undertaken in May 2022. The subsequent analysis indicates that the level of vehicle trip generation would be insignificant in both absolute and percentage change terms. Activity associated with the construction of the Site would also be of a minimal level and not have a significant impact on the local highway network.

7.1.12 The forecast level of activity associated with the Proposed Development would be lower than that associated with the consented use of the Site.

7.1.13 The construction of HS2 generates a significant level of HGV movements, working within a cap of average daily movements agreed with LB Hillingdon. The activity associated with the Proposed Development is considered to be minimal in this context. Once HS2 works are complete, the minimal ongoing maintenance activity associated with HS2 (estimated to be two vehicles a week) would be expected to mean a significant reduction in traffic flow, focused along the Breakspear Road / B467 corridor to the south of the Proposed Development. This would be anticipated to result in a significant reduction in local congestion at peak times, and the trip generation associated with the Proposed Development, given its absolute low hourly flow, would be considered to remain insignificant in the context of the local highway network operation.

7.1.14 Notwithstanding this, a series of demand management measures have been identified to further minimise any potential effects associated with the Proposed Development activity. This includes the production of a Travel Plan to encourage sustainable travel behaviour, including a Delivery and Servicing Strategy, and the identification of a Car Parking Management Plan. Overall therefore, it is considered that the development proposals will have a minimal impact on the operation of the local transport networks and should be considered as acceptable on transport grounds.