Prologis UK Ltd

GSK SITE, STOCKLEY PARK, HILLINGDON

Transport Assessment

70060721-TA
JULY 2020

CONFIDENTIAL

Prologis UK Ltd

GSK SITE, STOCKLEY PARK, HILLINGDON

Transport Assessment

DRAFT (V1) CONFIDENTIAL

PROJECT NO. 70060721

OUR REF. NO. 70060721-TA

DATE: JULY 2020

WSP

Mountbatten House
Basing View
Basingstoke, Hampshire
RG21 4HJ

Phone: +44 1256 318 800

Fax: +44 1256 318 700

WSP.com

QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Draft for Client Review	Issue		
Date	29 June 2020	2 July 2020		
Prepared by	Rachel O'Boyle Elena Cristobal	Rachel O'Boyle Elena Cristobal		
Signature				
Checked by	Alex Smith	Alex Smith		
Signature				
Authorised by	Laura Bazley / Neil Findlay	Laura Bazley / Neil Findlay		
Signature				
Project number	70060721	70060721		
Report number	70060721-TA	70060721-TA		
File reference	\\uk.wspgroup.com\Central Data\Projects\700607xx\70060721 - Stockley Park - GSK - Transport\03 WIP\TP Transport Planning\05 Reports\02. Transport Assessment			

CONTENTS

1	INTRODUCTION	1
2	PROPOSED DEVELOPMENT INTRODUCTION	4
3	SITE AND SURROUNDINGS	9
4	LOCAL CONTEXT: ACTIVE TRAVEL ZONE ASSESSMENT	16
5	WIDER CONTEXT: IMPACT ON LONDON-WIDE NETWORK	24
6	MITIGATION AND SUPPORTING DOCUMENTS	36
7	SUMMARY AND CONCLUSIONS	39

TABLES

Table 2-1 – Proposed Development LBH's Policy Compliance 7
Table 3-1 – Car Parking Provision 13
Table 3-2 – Cycle Parking Provision 14
Table 4-1 – ATZ High Priority Key Destinations 18
Table 5-1 – Baseline Vehicular Trip Generation 25
Table 5-2 – Sensitivity Test - Baseline Vehicular Trip Generation 27
Table 5-3 – Walking, Cycling and Public Transport Baseline Trip Generation 27
Table 5-4 – Baseline Traffic Distribution 29
Table 5-5 – Prologis Park Heathrow, Vehicular Trip Rate per 100sqm 30
Table 5-6 – Forecast Vehicular Trip Generation (30,627sqm) 30
Table 5-7 – Walking, Cycling and Public Transport Forecast Trip Generation 31
Table 5-8 – Forecast Traffic Distribution 32
Table 5-9 – Net Vehicular Trip Generation 33
Table 5-10 – Forecast Net Vehicular Impact 33

Table 5-11 – Walking, Cycling and Public Transport Net Impact 34

FIGURES

Figure 1-1 - Site Location 1
Figure 2-1 - Healthy Streets Indicators 5
Figure 3-1 - Site PTAL 10
Figure 3-2 - Personal Injury Accident (PIA) Locations 11
Figure 4-1 - Map 1: Active Travel Zone and Potential Key Destinations 17
Figure 4-2 – Map 2.1: ATZ Journeys to Most Important Key Destinations 18
Figure 4-3 - Map 2.2: KSIs Along Routes to Key Destinations 19
Figure 4-4 - Public Transport Network 23
Figure 5-1 - Iron Bridge Road / Horton Road Roundabout Queue profile - AM period 25
Figure 5-2 - Iron Bridge Road / Horton Road Roundabout Queue profile - PM period 26

APPENDICES

APPENDIX A - SITE MASTERPLAN
APPENDIX B - TRANSPORT SCOPING REPORT
APPENDIX C - PUBLIC TRANSPORT ACCESSIBILITY LEVEL (PTAL) OUTPUTS
APPENDIX D - PIA DATA
APPENDIX E - ATZ MAPS
APPENDIX F - GSK SITE MCC OUTPUTS
APPENDIX G - TRICS OUTPUTS
APPENDIX H - TRAFFIC FLOW DIAGRAMS
APPENDIX I - PROLOGIS PARK HEATHROW SURVEY RESULTS
APPENDIX J - 24HR VEHICLE TRIP GENERATION PROFILE

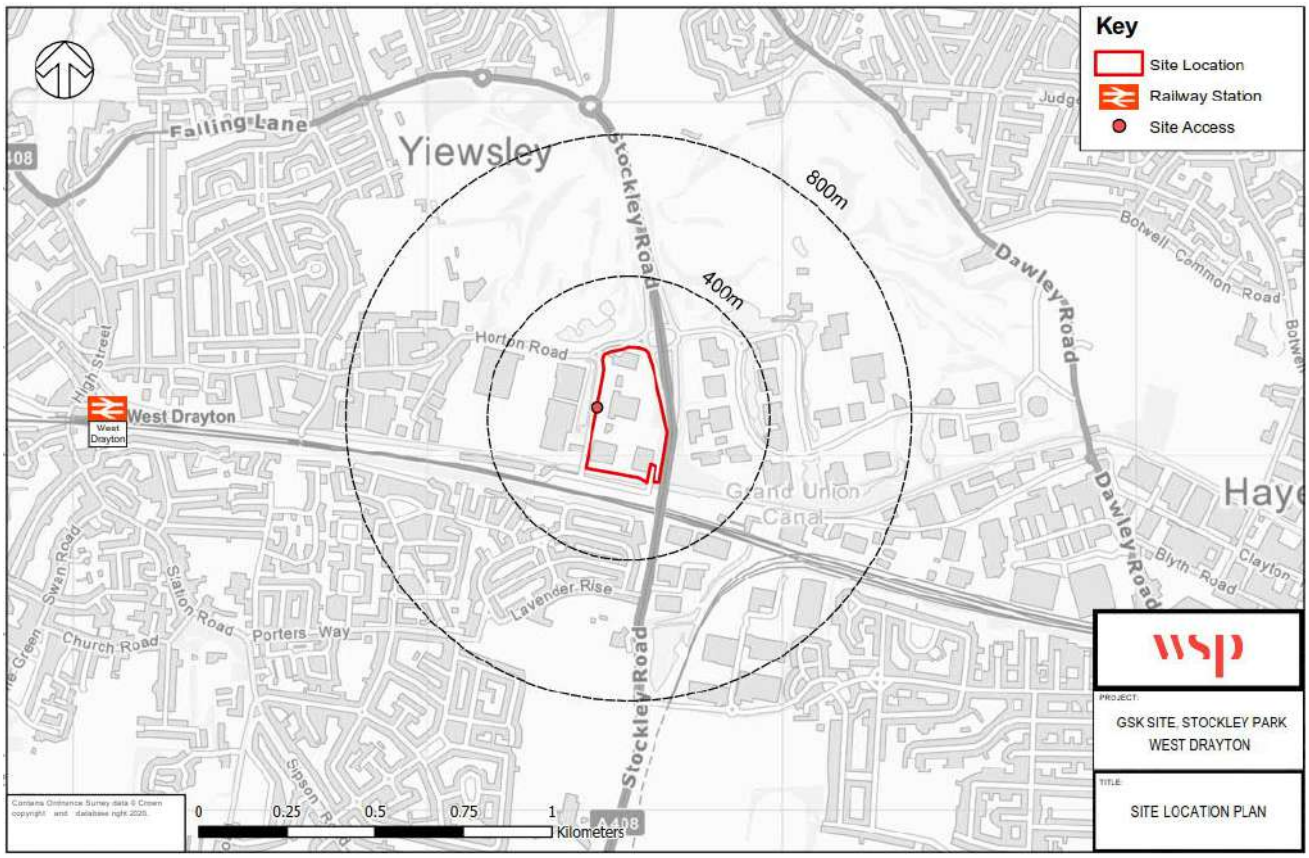
1 INTRODUCTION

1.1 PREAMBLE

1.1.1. WSP has been commissioned by Prologis UK Ltd to provide transportation and highways advice with respect to the proposed re-development of the current GSK office site on land at Iron Bridge Road North, Stockley Park, within the London Borough of Hillingdon (LBH). The Site is currently occupied by GSK, however it is expected to be fully vacant by January 2021.

1.1.2. As shown in **Figure 1-1** the Site forms part of the wider Stockley Business Park. It is west of the A408 Stockley Road, to the south of Horton Road and accessed off Iron Bridge Road North. In a wider context, the Site is located to the north of Drayton Garden Village and Heathrow Airport. Stockley Golf Club grounds are located to the north of the Site, and to the south, the Site is bordered by the Grand Union Canal, Iron Bridge Road South and the Great Western Mainline railway line that runs from Reading to London Paddington.

Figure 1-1 - Site Location



1.1.3. The Site currently includes three office buildings (use class B1(a)) with a combined GIA of approximately 28,000 m². The buildings are surrounded by surface level car parking, providing approximately 885 parking spaces, and a multi-storey car park in the south-eastern corner of the Site, with approximately 350 parking spaces. The site is also used as a park and shuttle bus facility for GSK employees to a second GSK office located in Brentford. The Site currently has one access junction, taken from Iron Bridge Road North. The Site is bordered by trees and landscaping along each of the boundaries, helping to screen the Site from the surrounding highways.

1.1.4. The Application is for the redevelopment of the site to provide two industrial units providing industrial floorspace (Use Class B1c/B2/B8) and ancillary officers together with associated parking, access arrangements, landscaping and infrastructure. The two units of B1c / B2 / B8 mixed land use will provide a total Gross Internal Area (GIA) of 30,627sqm. The two buildings will include ancillary offices and will be served by independent operational access points from Iron Bridge Road North, and two separate access points for each of the units for both staff and visitor vehicles taken off the same road. These proposals will herein be referred to as the Proposed Development, and the proposed masterplan can be found in **Appendix A**.

1.1.5. This TA has been produced to detail the existing transportation and highway conditions that give context to the Proposed Development, and to analyse and determine the changes to the current situation that are envisaged to take place should the Proposed Development be granted planning permission. This TA considers LBH's policy requirements alongside Transport for London's (TfL) new Healthy Streets approach for assessing the impact of new developments on London's streets.

1.2 BACKGROUND

1.2.1. A Transport Scoping Report (TSR) was produced by WSP to define the proposed level of assessment related to transport to be undertaken in support of the Proposed Development. This TSR can be seen in **Appendix B** at the end of this TA.

1.2.2. The TSR was issued to LBH on 26th February 2020 and supported the pre-application conversations with LBH. Following the submission of the TSR, a pre-application meeting between WSP and LBH took place on 10th March 2020. LBH's pre-application response (which can also be seen in **Appendix B**) was issued on 11th March 2020 by way of an email, requesting the following considerations to be included within this TA:

- LBH's Local Plan: Part 2 Development Management Policies (2020) and LBH's Local Implementation Plan III, including LBH's parking requirements;
- Access to the Grand Union Canal;
- Swept paths for refuse and HGV vehicles;
- Plans with refuse collection/delivery points clearly marked;
- Comparison of the Proposed Development and Prologis Park Heathrow (use/floor area etc) to confirm that the Prologis Park Heathrow site is an acceptable indicator of trip generation for the Proposed Development;
- For baseline trip generation analysis, provision of observed counts and comparison to the Site being entirely occupied with no park and shuttle bus facility;
- Include existing development number of car parking spaces;
- Include 5% motorcycle parking with anchor points; and
- Provide 20% parking spaces with active electric vehicle charging points (EVCP) with the remainder of the parking spaces being provided with passive EVCP.

1.2.3. Further pre-app meetings took place on the 11th May and 16th June 2020 with the wider team, although Transport was discussed at both, LBH re-iterated their requests above.

1.2.4. In addition to the pre-app meetings, WSP have obtained from LBH plans of a recently implemented traffic calming scheme on Iron Bridge Road North. The impact of the Proposed Development on this scheme is discussed later in Section 3.3 of this report.

1.3 REPORT STRUCTURE

1.3.1. The remainder of this TA is comprised of chapters as guided by "Healthy Streets TA Recommended Contents and Chapters" (TfL, June 2019) as follows:

- Chapter 2 - Proposed Development Introduction;
- Chapter 3 - Site and Surroundings;
- Chapter 4 - Local context: Active Travel Zone assessment;
- Chapter 5 - Wider context: impact on London-wide network;
- Chapter 6 - Mitigation, further analysis and supporting documents; and
- Chapter 7 - Summary and Conclusions.

1.3.2. TfL's Healthy Streets recommended structure suggests a specific chapter should be introduced which would deal with any additional analysis requested by LBH. However, as the Proposed Development will be primarily reviewed against LBH's policy, guidance and standards, the relevant LBH information will be considered in combination with regional strategy throughout the TA and supporting documents rather than within a separate chapter.

1.3.3. In addition to the above, it should be noted that the Transport Planning for People chapter that was formerly suggested to be introduced in all Healthy Streets TAs has been recently removed from TfL's requirements as advised by TfL via pre-application responses to other schemes across London, even though this has not yet formally been reflected in an updated version of '*Healthy Streets TA Recommended Contents & Chapters*'. Therefore, in order to follow the latest TfL advice, the Transport Planning for People chapter is not included within this TA.

2 PROPOSED DEVELOPMENT INTRODUCTION

2.1 INTRODUCTION

2.1.1. In accordance with TfL's '*Healthy Streets TA Recommended Contents & Chapters*' guidance, this chapter describes how transport planning has contributed to key decisions in the design of the Proposed Development, and how strategic and local transport policy objectives will be delivered.

2.2 TRANSPORT CONTRIBUTIONS TO THE PROPOSED DEVELOPMENT

2.2.1. The Site has been designated as a *'Locally Significant Employment Location'* within LBH's recently adopted Local Plan Part 2 (LPP2). In keeping with this employment allocation and in order to meet current market demands, the Proposed Development aims to change the current land use of the Site from offices to B1(c) / B2 / B8 industrial and logistics uses.

2.2.2. To serve the above purpose, the access, internal road layout, servicing strategy and parking strategy for the Proposed Development are the main transport contributions to the internal layout design of the Proposed Development. These strategies are outlined within Section 3.3 of this TA.

2.2.3. In a wider context, accessibility levels and the potential to optimise the use of sustainable transport modes by occupants of the Proposed Development have been considered throughout the design process, in which the transport discipline has determined the measures to be implemented to encourage sustainable travel (such as pedestrian and cycle facilities or electric vehicle charging infrastructure).

2.2.4. Additionally, mitigation measures, where required, have been identified and proposed as part of the transport deliverables in order to reduce any potential impacts arising from the Proposed Development. Additional transport documents including a Travel Plan, Construction Logistics Plan and a Delivery and Servicing Management Plan have been submitted alongside this TA and are summarised as part of Chapter 6.

2.3 TRANSPORT CONTRIBUTIONS TO POLICY OBJECTIVES

2.3.1. A summary of how the transport principles of the Proposed Development comply with the relevant transport policies is given herein.

Healthy Streets

2.3.2. TfL's Healthy Streets approach is one of the core themes of the Intent To Publish (ITP) version of the London Plan and the Mayor's Transport Strategy. Policy T2 Healthy Streets of the ITP London Plan outlines that:

> '*Development proposals should:*
>
> - *Demonstrate how they will deliver improvements that support the ten Healthy Streets indicators in line with TfL guidance.*
> - *Reduce the dominance of vehicles on London's streets whether stationary or moving.*
> - *Be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.'*

2.3.3. The ten Healthy Streets indicators are illustrated in **Figure 2-1** below.

Figure 2-1 - Healthy Streets Indicators

Source: Lucy Saunders

2.3.4. The Proposed Development considers the ten Healthy Streets indicators by providing a Site that is permeable to the adjacent cycle and pedestrian network and connects to public transport services. The Proposed Development is also envisaged to reduce the amount of traffic generated during the peak hours when compared to the existing land use of the Site.

2.3.5. Vehicular access to the development is key for operational reasons, which in principle could appear not to align with Healthy Streets indicators; however, access for staff using other travel modes such as walking and cycling have been an important factor when considering the site layout. The effects of vehicular use have also been compensated by introducing electric vehicle charging points (EVCP) to contribute to low emissions targets and noise reduction on London's highway network.

2.3.6. Also, a set of mitigation documents (specifically a Travel Plan and a Delivery and Servicing Management Plan) have been developed to reduce traffic as far as possible, to encourage sustainable transport, and in conclusion, to help meet the ten indicators around the Site and beyond.

Vision Zero

2.3.7. Vision Zero is a key and ambitious element of the Mayor's Transport Strategy (March 2018). With Vision Zero, the Mayor aims to eliminate all deaths and serious injuries on London's street network by 2041. This is an initiative being taken in major cities across the world and, within London, the following elements are the cornerstones of the Vision Zero Action Plan:

- **Safe speeds** – encouraging speeds appropriate to the streets of a busy and populated city through the widespread introduction of new lower speed limits.
- **Safe streets** – designing an environment that is forgiving of mistakes by transforming junctions, which see the majority of collisions, and ensuring safety is at the forefront of all design schemes.
- **Safe vehicles** – reducing risk posed by the most dangerous vehicles by introducing a world-leading Bus Safety Standard across London's entire bus fleet and a new 'Direct Vision Standard' for HGVs.
- **Safe behaviours** – reducing the likelihood of road users making mistakes or behaving in a way that is risky for themselves and other people through targeted enforcement, marketing campaigns, education programmes and safety training for cyclists, motorcycle and moped riders.
- **Post-collision response** – developing systematic information sharing and learning, along with improving justice and care for the victims of traffic incidents.

2.3.8. The Proposed Development is considered to assist in achieving the Vision Zero target by contributing to a reduction in traffic on the road network during peak hours where the interaction between vehicles and vulnerable users is most likely to occur.

2.3.9. Additionally, mitigation proposals to improve safety around the Proposed Development have been introduced in this TA as detailed in Chapter 4 and Chapter 6.

Mayor's Transport Strategy

2.3.10. The Mayor's Transport Strategy was produced in 2018 and incorporates both the Healthy Streets and Vision Zero approaches, aiming to achieve:

- Active, inclusive and safe travel choices;
- A more efficient use of the street network; and
- Improvements to air quality and the environment.

2.3.11. Good Growth is a key concept of the Mayor's Transport Strategy and involves ensuring that people have travel options other than driving. How the Proposed Development is envisaged to achieve each of the seven key transport principles of Good Growth is outlined as follows:

- **Access to public transport:** the Site benefits from a Public Transport Accessibility Level (PTAL) rating of 2 at the current access point. It is in close proximity to bus services on Horton Road and within cycling distance of London Overground and National Rail services (10-minute cycling distance).
- **People choose to walk and cycle:** the existing infrastructure around the Site lends itself to short journey distances on foot or by bicycle to / from public transport services and residential areas which can potentially be the origin of employees of the Site. The on-site cycling facilities (such as cycle parking, storage and showers) will further encourage cycling as a viable modal choice.
- **Car-free and car-lite places:** the Proposed Development will be provided with car parking in accordance with LBH's parking standards which align with TfL's standards as detailed within Chapter 3.
- **Inclusive, accessible design:** accessible car and cycle parking is proposed to be provided in accordance with ITP London Plan requirements. All elements of the offices within the Proposed Development will be wheelchair accessible at ground level, with lifts providing connections to first floors.

- **Carbon-free travel:** ITP London Plan policies and LBH's requirements regarding EVCP have been incorporated into the design. In particular, and in accordance with discussions with LBH, 20% of car parking spaces will be provided with active EVCP and the remaining 80% will be provided with passive provision. Additionally, all parking spaces for operational vehicles will be provided with active EVCP.
- **Efficient freight:** A Delivery and Servicing Management Plan has been prepared under a separate cover outlining measures to manage freight efficiently as summarised in Chapter 6.

LBH's Local Implementation Plan (LIP) and LPP2

2.3.12. A review of the pertinent transport policies included in LBH's LIP and recently adopted LPP2 has been undertaken within **Table 2-1** below.

Table 2-1 – Proposed Development LBH's Policy Compliance

Policy	Proposed Development Compliance
LIP objectives relate to: ▪ Improve condition of principal roads; ▪ Reduce negative impacts on air quality and noise; ▪ Promote healthy travel behaviour; ▪ Improve transport system safety incl. reducing number of collisions; ▪ Ensure transport system enables access to key facilities; ▪ Reduce LBH's transport contribution to climate change; and ▪ Improve journey time reliability and reduce congestion.	The Proposed Development will reduce the trip generation levels during peak hours, therefore contributing to reduced congestion when the highway network suffers from highest pressure. A series of measures provided by design and in documents have been included within the transport strategy which will help improve road conditions, safety, and promote healthy travel behaviour. Additionally, AADT / AAWT flows have been provided to allow Air Quality and Noise assessments to be undertaken.
LP DMT1 Managing Transport Impacts states that development proposals are required to meet the transport needs of the development and address its transport impacts in a sustainable manner. Also, it is noted that development proposals are required to undertake a satisfactory transport assessment and a travel plan.	The Site's proximity to cycle, pedestrian and public transport facilities is set out in Chapter 3 of this TA, addressing the transport needs of employees. Operational needs have also been covered by providing safe and adequate access points, service yards and parking areas, with EVCP being provided at a rate 20% active / 80% passive for staff parking and 100% for operational needs. A Travel Plan has been developed alongside this TA to support the transport strategy for the Proposed Development focusing on sustainable transport.
DMT2 Highways Impact highlights that development proposals must ensure that safe and efficient vehicular access to the highway network is provided, as well as satisfactory cycle and pedestrian accommodation. Additionally, distribution of trips is considered along routes and at junctions which are at capacity.	The Site's access strategy for vehicles, pedestrians and cyclists is considered within Chapter 3 of this TA. Alongside this, vehicular trip generation and distribution has been considered within Chapter 5 of this TA.

Policy	Proposed Development Compliance
DMT5 Pedestrians and Cyclists outlines that development proposals will be required to ensure safe, direct and inclusive access for pedestrians and cyclists.	This TA demonstrates the proximity of the Site to high quality pedestrian and cycle facilities as outlined in Chapter 3 and Chapter 4. In particular, the Grand Union Canal Walk ensures the Site is accessible to transport hubs and nearby neighbourhoods and services, with pedestrian and cycle facilities on the local highway network to the north of the Site providing additional connections.
DMT6 Vehicle Parking considers that development proposals must comply with the parking standards outlined by LBH. All car parks must also contain conveniently located reserved spaces for those with restricted mobility,	LBH's vehicular parking standards have been considered and discussed within the parking strategy developed for the Site as outlined in Chapter 3 of this TA.
DMT7 Freight states that development proposals will be required to demonstrate they are conveniently located to enable direct routing to the strategic road network as well as ensure there is no impact on residential areas, local air quality levels or the highway network.	Chapter 3 and Chapter 4 of this TA assess the local highway network and the ideal proximity of the Site to major roads and destinations. A Delivery and Servicing Management plan has also been produced in support of the Proposed Development alongside this TA and is briefly discussed in Chapter 6.

3 SITE AND SURROUNDINGS

3.1 INTRODUCTION

3.1.1. This chapter describes the immediate surroundings of the Site and the adjacent transport network envisaged to be used by all potential users of the Proposed Development such as staff, visitors and operators.

3.1.2. In accordance with TfL's '*Healthy Streets TA Recommended Contents & Chapters*' guidance, this chapter also describes the Proposed Development design on transport grounds so that this design can be easily assessed in the context of the area bordering the Site.

3.2 SITE LOCATION SURROUNDINGS

3.2.1. The Site sits within Stockley Park in LBH as illustrated in **Figure 1-1.** The Site is accessed from Iron Bridge Road North to the west and bordered by Iron Bridge Road South and the Grand Union Canal Walk to the south, Horton Road to the north and the A408 Stockley Road to the east.

Iron Bridge Road North

3.2.2. The key transport links in the area include Iron Bridge Road North, from which, the site takes its only access. It runs north to south along the western boundary of the Site.

3.2.3. Iron Bridge Road North is a two-way single carriageway road, approximately 8m in width, and subject to a 20mph speed limit with traffic calming measures including speed tables which have been recently implemented. The north of the road connects to Horton Road via a three-arm roundabout, and the southern end meets Iron Bridge Road South at a priority-controlled T-Junction. Iron Bridge Road South is then a cul-de-sac which provides access to other industrial sites such as the West Drayton ARC private railhead.

3.2.4. Iron Bridge Road North has single yellow line parking restrictions along both sides of the carriageway for the full extent of the road, with restrictions in place weekdays from 07:00-19:00. A footpath is provided on the eastern side, separated from the highway by a grass verge and a row of trees. Lighting is provided on the eastern side for the full length of the road.

Grand Union Canal Walk

3.2.5. The Grand Union Canal Walk can be accessed from Iron Bridge Road North and is located to the south of the Site. The Walk provides a continuous segregated route for both pedestrians and cyclists which connects the Site to several residential neighbourhoods and local facilities in Yiewsley, West Drayton and Hayes, including West Drayton and Hayes and Harlington rail stations.

Horton Road

3.2.6. Horton Road borders the site to the north and provides a connection between Iron Bridge Road and the A408 Stockley Road. For approximately 130 metres it is a dual carriageway road, separated by a central verge of trees. To the east where it meets Stockley Roundabout, Horton Road widens to three lanes. To the west of Horton Road roundabout, it reduces to a single carriageway. It has a 30mph speed limit.

3.2.7. Pedestrian infrastructure and lighting is provided on both sides of Horton Road. At the roundabout with Iron Bridge Road, uncontrolled pedestrian crossings are provided on the eastern and southern arms. These provide access to the bus stops on Horton Road located just to the north of the Site. These crossings are staggered, with tactile paving, dropped kerbs and good visibility for those who wish to cross.

A408 Stockley Road

3.2.8. The A408 Stockley Road runs north to south along the eastern boundary of the Site. In a wider context and to understand the nature of the road, it connects the Site to the M4 approximately 2km to the south and to residential communities such as Colham Green and Hayes End approximately 1.5km to the north. For its full length including the section bounding the Site, Stockley Road is a dual carriageway road subject to a speed limit of 50mph.

3.2.9. Footways along both sides of the carriageway vary in width between 1.0m and 1.5m and are periodically separated from the carriageway by a grass verge. The pedestrian facilities along the A408 Stockley Road can be accessed from the Site via either the Stockley Park Roundabout or Iron Bridge Road South. These connect to neighbourhoods such as Drayton Garden Village, Bourne Village and West Drayton to the south; and to Colham Green and Hayes End to the north.

Public Transport Accessibility Level

3.2.10. The Public Transport Accessibility Level (PTAL) methodology adopted by TfL represents a means of quantifying and comparing accessibility by public transport for a given site. The PTAL methodology is based on the assessment of the connectivity (or level of access) to the public transport services from a given location, combining walking time to the public transport network with the frequency of services. The PTAL assessment is undertaken using the AM peak period (07:00-10:00) operating patterns of existing public transport services.

3.2.11. **Figure 3-1** provides a snapshot of the WebCAT output with the full PTAL report included in **Appendix C**. This indicates that the Site is located on the boundary between areas with PTAL values of 1b (the southern half of the Site) and 2 (the northern half of the Site and where the current Site access is located). The result is based on a grading system between 0 and 6 where 0 is very poor and 6 is excellent. A score of 1b / 2 is considered an average score in terms of public transport accessibility.

Figure 3-1 - Site PTAL

Source: TfL's WebCAT

3.2.12. Details about the public transport networks accessible from the Site are given in Section 4.4 of this TA.

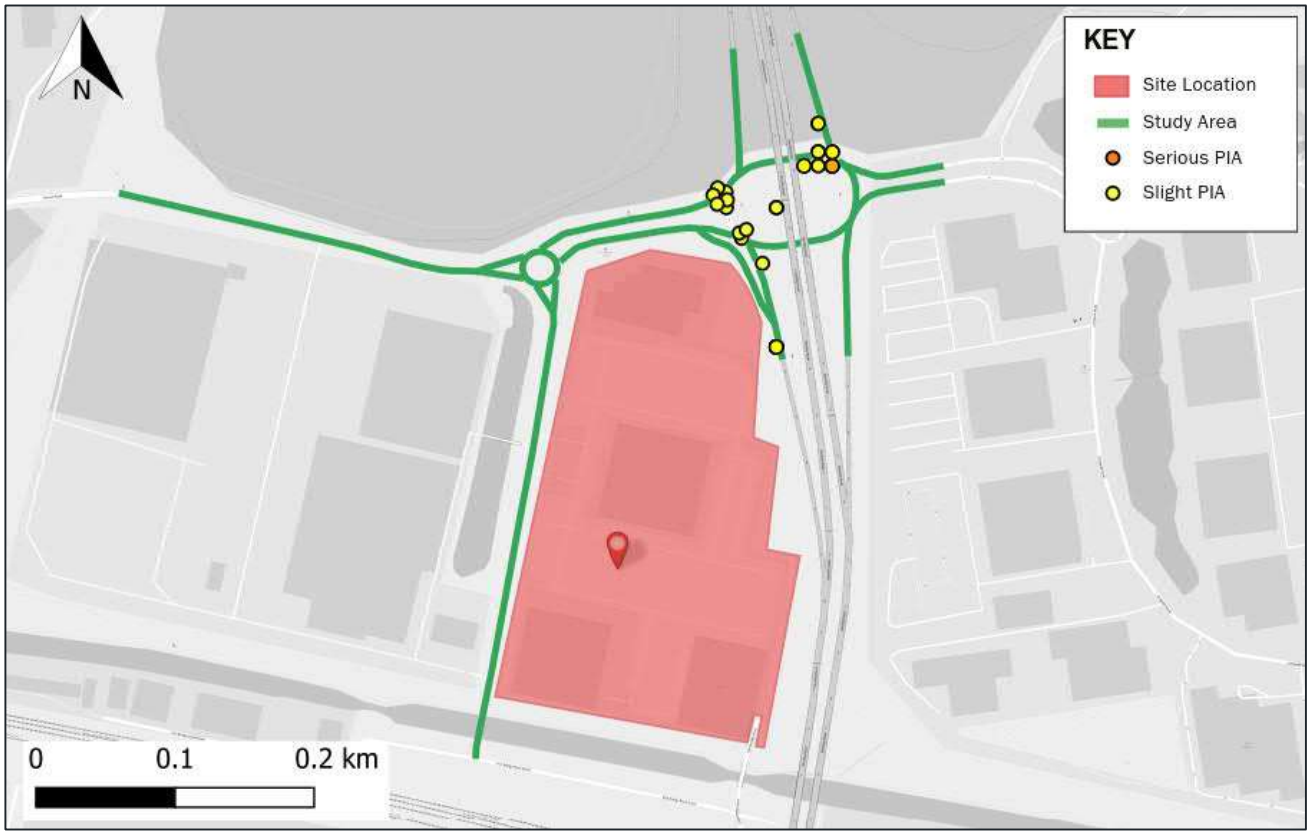
Highway Safety Conditions

3.2.13. A review of Personal Injury Accidents (PIA) recorded within the local highway network adjacent to the Site was undertaken using accident data obtained from TfL which can be seen in **Appendix D**. The review covered the area of focus as set out in the Transport Scoping report (TSR).

The review considered recorded PIAs which occurred during the latest available five-year period (1st August 2014 to 31st July 2019) along Iron Bridge Road North, Horton Road (along the north of the Site and to the west up to Weston Walk), and the Stockley Park roundabout.

3.2.14. **Figure 3-2** shows the extent of the area covered and the location and severity of accidents.

Figure 3-2 - Personal Injury Accident (PIA) Locations



3.2.15. A total of 28 accidents were recorded within the five-year period, 27 of which were slight, one serious, and none resulting in a fatality. All collisions occurred within the vicinity of Stockley Park Roundabout, with no accidents along Horton Road or Iron Bridge Road North.

3.2.16. Most of the collisions (21) occurred in daylight, on dry roads and with fine weather; the six accidents that did occur in adverse weather conditions do not have similar patterns. This suggests that adverse weather conditions were not the main cause of the accidents, and they may be as a result of other issues such as a lack of clear signage, highway layout and/or road surface treatments (e.g. anti-skid).

3.2.17. Of the collisions that occurred, there were seven accidents resulting in a rear end shunt on the approaches of the Stockley Park roundabout. When reviewing the causation data provided, these can

be attributed to drivers not looking ahead and following too closely. It is not considered that there is an underlying visibility issue as the accidents of this nature were not localised to any individual arm.

3.2.18. Eight of the accidents involved a pedal cycle, one of which was the single serious incident identified in the last 5-year period. Five of the eight pedal cycle accidents, including the serious one, occurred on the southbound off-slip from the A408 Stockley Road. These pedal cycle incidents occurred as a result of perceived vehicle user error such as “failure to give way” and “failed to accord precedence at junction”.

3.2.19. Only one of the incidents within the last 5-year period studied involved a pedestrian, and there were no accidents involving motorbike users. The information obtained from TfL provides no description of the incident involving the pedestrian. The accident occurred on the southbound off-slip from the A408 Stockley Road, within the same vicinity as the cyclist accidents.

3.2.20. The relatively high number of pedal cycle incidents and the inclusion of a pedestrian incident on the southbound approach to the roundabout is indicative that there is an underlying issue at this approach with regards to non-motorised users.

3.2.21. In summary, the accident data review demonstrates that there is an existing issue related to the southbound approach and interaction between pedestrians, cyclists and vehicles. This and the impact of the Proposed Development is explored further in Chapter 6 of the TA.

3.3 PROPOSED DEVELOPMENT

3.3.1. The Proposed Development is described as;

Redevelopment of the site to provide two industrial units providing industrial floorspace (Use Class B1c/B2/B8) and ancillary officers together with associated parking, access arrangements, landscaping and infrastructure

3.3.2. The Proposed Development will to comprise two new flexible units for Class B1(c) / B2 / B8 land use, with ancillary office space. It will deliver 30,627sqm of new internal floorspace indicatively spread over two units as illustrated in the Masterplan contained within **Appendix A**.

VEHICULAR ACCESS AND CIRCULATION

3.3.3. The main operational and servicing access points into the Site will be provided from Iron Bridge Road North as illustrated on the masterplan included in **Appendix A**. Each of the units will be provided with two access points that will separately serve operational / HGV traffic and the staff and visitor car parks.

3.3.4. As noted in Chapter 1, LBH have recently implemented some traffic calming measures along Iron Bridge Road in the form of a reduced speed limit (20mph), speed tables and extended double yellow lines to prevent vehicle parking. Currently, the location of the speed tables conflict with the proposed access points. LBH have been approached to discuss Prologis re-locating the speed tables to avoid this conflict. In addition, due to the types of vehicles predominantly using Iron Bridge Road (HGVs), speed cushions are considered more appropriate as larger vehicles can straddle the vertical elements, reducing impact to trailers. This amendment is also being explored with LBH.

3.3.5. WSP Drawing 70060721-SK-007 Rev A, at the end of this TA, shows a potential revised scheme. This relocates the two northern speed tables, replacing them with speed cushions and removes the southernmost speed table altogether to avoid conflict with the existing and proposed accesses.

3.3.6. All vehicles will therefore access the Site from Iron Bridge Road after leaving Horton Road, with no direct access proposed from the A408 Stockley Road or Horton Road. Visibility splays of 43m from 2.4m back from the give way line of each of the access points are demonstrated in WSP Drawing 70060721-SK-005 at the end of this TA.

3.3.7. Vehicular movements to access and egress each unit and manoeuvring around the car parks and servicing yards are shown in WSP Drawings 70060721-ATR-005, 70060721-ATR-006 at the end of this TA. Access and circulation plans for a Refuse Collection Vehicle and a Fire Tender are also shown in WSP Drawings 70060721-ATR-007 and 70060721-ATR-008 respectively.

PEDESTRIAN AND CYCLE ACCESS

3.3.8. Pedestrians / cycles will access Unit 1 via Iron Bridge Road North and the staff car park access. Unit 2 will have a segregated pedestrian and cyclist access at the north western corner of the Site which will follow desire lines from/to the bus stops at Horton Road. Access will also be possible from the staff car park entrance.

3.3.9. Internally, footpaths are provided around the two buildings which allow for direct access to the entrance of each building.

3.3.10. From the cycle parking areas, employees and visitors will be able to walk to the entrance of the buildings via the above footways which, as already mentioned, are segregated from the roads of the car parks.

CAR PARKING

3.3.11. The car parking strategy has been defined for each unit separately (as described above) and follows LBH's parking standards for employment uses in consideration with ITP London Plan requirements.

3.3.12. LBH standards state that for B1c / B2 / B8 uses a maximum of 2 spaces plus 1 per 50 – 100 sqm should be provided. The ITP London Plan states for B1(a) use classes (office) a maximum of 1 space per 100sqm should be provided, however, B2 and B8 uses should have regard to these office parking standards and take account of the lower employment densities in these developments.

3.3.13. **Table 3-1** below, sets out the car parking provision of each unit against the LBH's and London Plan ITP car parking requirements.

Table 3-1 – Car Parking Provision

Unit	London Plan ITP's Max Requirement	LBH's Max Requirement*	Proposed Provision**	Disabled Provision	
Unit 1	177	179	**131**	**13**	**10%**
Unit 2	130	132	**108**	**11**	**10%**
TOTAL	305	309	**239**	**24**	**10%**

* Considering 1 space per 100sqm of gross floorspace in the range 50-100 given by LBH's LLP2 car parking standards
**Including disabled parking provision. Source: MSA Drawing no. 30928-PL-201A, 23 June 2020

3.3.14. **Table 3-1** demonstrates the car parking provision for the Proposed Development is under the maximums from both TfL and LBH's standards. Additionally, 10% of employee car parking spaces will be designed under accessible standards, in accordance with Policy T6.5 and Table 10.6 of the ITP version of the London Plan and Appendix C, Table 1 of LBH's LPP2.

3.3.15. Motorcycle parking provision also aligns with London Plan ITP and LBH's requirements and it will be provided on a ratio of 5.3% and 5.6% of the car parking spaces for Unit 1 and Unit 2 respectively, equating to 7 and 6 motorcycle parking spaces. This aligns with the required minimum provision of 5% of car parking spaces as per LBH guidance.

3.3.16. EVCP provision has also been considered in accordance with the Proposed Development needs and has been determined as 20% active provision with the remainder passive. This level of EVCPs satisfies LBH's requirements in accordance with pre-application conversations and aligns with Policy T6 of the ITP version of the London Plan.

CYCLE PARKING

3.3.17. Policy T5 Cycling of the ITP version of the London Plan establishes that *"development proposals should help remove barriers to cycling and create a healthy environment in which people choose to cycle. This will be achieved through (…) securing the provision of appropriate levels of cycle parking which should be fit for purpose, secure and well-located".*

3.3.18. The ITP London Plan cycle parking standards are minimums and are different for B1(c) and B2 / B8. For B1(c) a minimum of 1 long term space per 250 sqm should be provided with a minimum of 1 short term space per 1000 sqm. For B2 / B8 this reduces to a minimum of 1 long term space per 500 sqm and a minimum of 1 short term space per 1000 sqm. However, whilst the LBH standards are similar for each use class, they are maximum numbers and they do not require the additional short term spaces. For this reason, it will not be possible to satisfy both ITP London Plan minimum standards and LBH maximum standards.

3.3.19. **Table 3-2** below sets out the minimum and maximum ITP London Plan and LBH cycle parking requirements for the development as well as the proposed provision.

Table 3-2 – Cycle Parking Provision

Unit	London Plan ITP's Minimum Requirements		LBH's Maximum Requirements	Proposed Provision***
	Long Stay	Short Stay		
Unit 1	71* - 35**	18	71* - 35**	**54**
Unit 2	52* - 26**	13	52* - 26**	**40**
TOTAL	61	31	61	**94**

*B1(c)
**B2 / B8
**Source: MSA Drawing no. 30928-PL-201A, 23 June 2020

3.3.20. **Table 3-2** shows that, in an attempt to comply with both the ITP London Plan and LBH standards, the proposed volume of cycle parking is above the ITP London Plan minimum standard for B2 / B8 uses and below the maximum LBH standards for B1(c) uses.

3.3.21. All cycle parking will be provided at ground level in close proximity to the two proposed building entrances. The cycle parking will take the form of covered Sheffield type stands, 1.2m apart. Access in front of and around these stands will be in accordance with the London Cycling Design Standards to ensure access for cycles of all types, including larger cycles.

SERVICING

3.3.22. A separate Outline Delivery and Servicing Plan (DSP) has been developed alongside this TA which describes the servicing strategy planned for the Proposed Development as well as waste storage and collection arrangements.

3.3.23. Servicing and operational vehicles will access the service yards of two units via separate access points as defined in the previous 'Vehicular Access' section.

3.3.24. The servicing yards have been evidenced to adequately serve operational and manoeuvring requirements in WSP Drawing 70060721-ATR-005 at the end of this TA.

3.3.25. Regarding recycling and refuse collection, it is envisaged that it will be undertaken by private operators as this is usual for commercial developments within LBH.

3.3.26. Recycling and refuse generated by the Proposed Development will be collected from the proposed service yards of Unit 1 and Unit 2 where access to bin storage areas are provided. Refuse vehicle access to the yards is also shown in WSP Drawing 70060721-ATR-007.

4 LOCAL CONTEXT: ACTIVE TRAVEL ZONE ASSESSMENT

4.1 ACTIVE TRAVEL ZONE DEFINITION

4.1.1. The Active Travel Zone (ATZ) assessment is a new analysis included in TfL's Healthy Streets Transport Assessment guidelines. The ATZ encompasses the area around the Proposed Development within a 20-minute cycle journey, which is shown in **Figure 4-1,** Map 1 below.

4.1.2. As detailed further within Chapter 5 of this report, the number of employees on site will reduce, therefore, the number of pedestrians, cyclists and public transport users accessing the site is expected to reduce. This, along with the site being situated within a '*Locally Significant Employment Location'*, means that it has been considered that a fully detailed ATZ assessment is not required. This chapter therefore describes the existing conditions around the Site area, focusing on 6 key routes, in combination with the characteristics of the immediate surroundings of the Proposed Development as detailed in Chapter 3.

4.1.3. For this bespoke ATZ assessment, the following has been considered within the above 20-minute cycling catchment area:

- 'ATZ key locations and services' illustrated on 'Map 1';
- 'ATZ most important journeys and neighbourhood safety' to the Site from high priority key origins illustrated on 'Map 2.1' and 'Map 2.2'; and
- 'ATZ neighbourhood healthy characteristics check' illustrated on 'Map 3'.

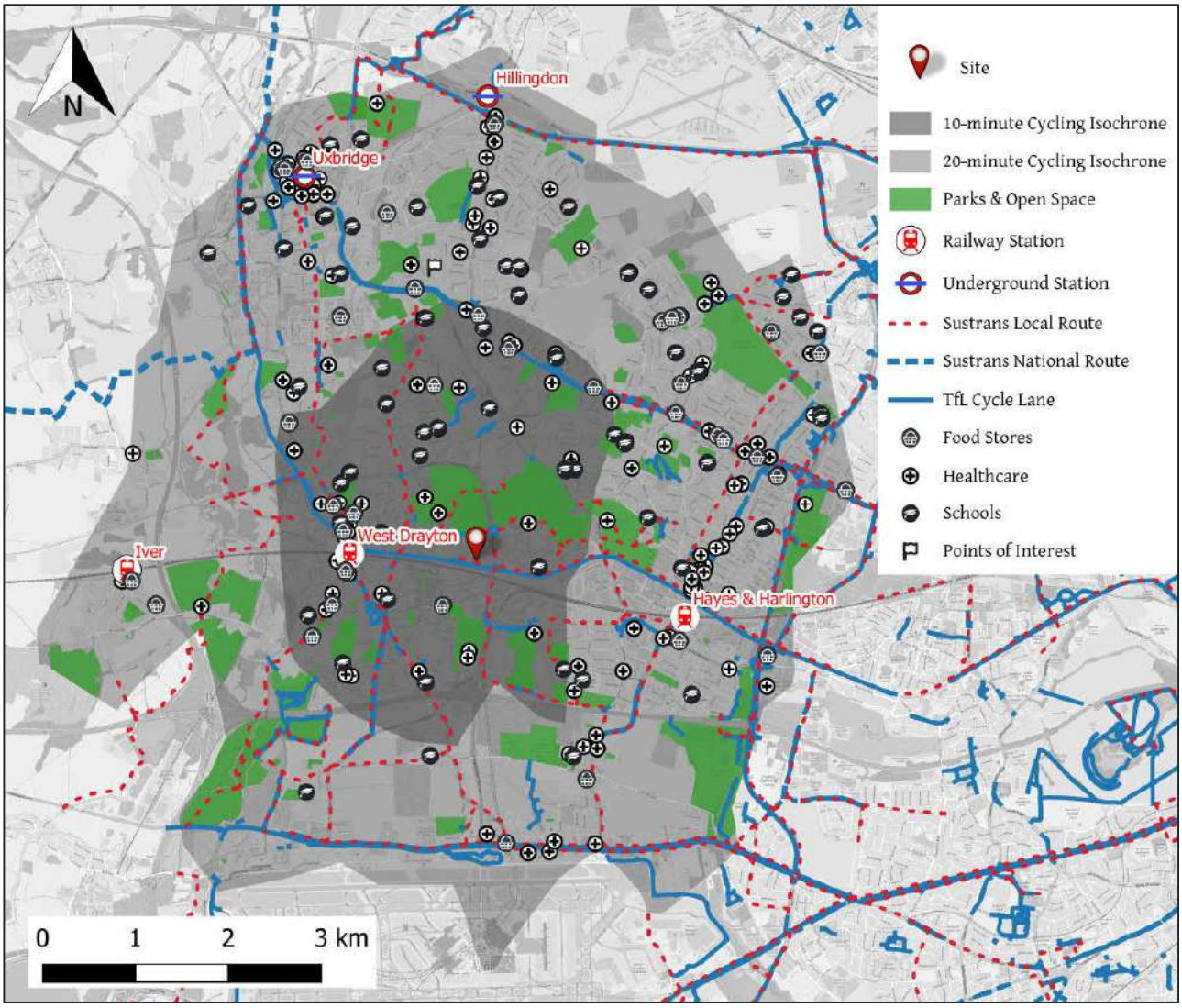
4.2 ATZ KEY LOCATIONS AND SERVICES

4.2.1. The potential key origins for future employees of the Proposed Development are assessed within this selection following the ATZ guidance, which divides them into seven types as follows:

- Public transport stops and stations;
- London's current and future London-wide strategic cycle network;
- Town Centres;
- Parks;
- Schools / colleges;
- Hospitals / doctors; and
- Places of Worship

4.2.2. The majority of the potential key locations within the ATZ of the Proposed Development have been identified on Map 1 shown in **Figure 4-1** below, which has also been included in full size in **Appendix E** along with all ATZ maps.

Figure 4-1 - Map 1: Active Travel Zone and Potential Key Destinations



4.2.3. Map 1 gives the context of the Site in relation to TfL's Healthy Streets recommended facilities, including railway stations, underground stations, food stores, healthcare facilities, schools, parks and open space along with the existing and proposed cycle network.

4.2.4. However, given the nature of the Proposed Development, it is considered that some of the facilities shown in Map 1 will not be key origins for employees (such as parks or hospitals), and therefore the potential key location types have been re-considered and grouped in the categories below for this assessment:

- **Public transport services**, including bus stops, London Underground stations and National Rail stations;
- **Cycle network**, including planned improvements;
- **Town centres;** and
- **Residential areas.**

4.3 ATZ MOST IMPORTANT JOURNEYS AND NEIGHBOURHOOD SAFETY

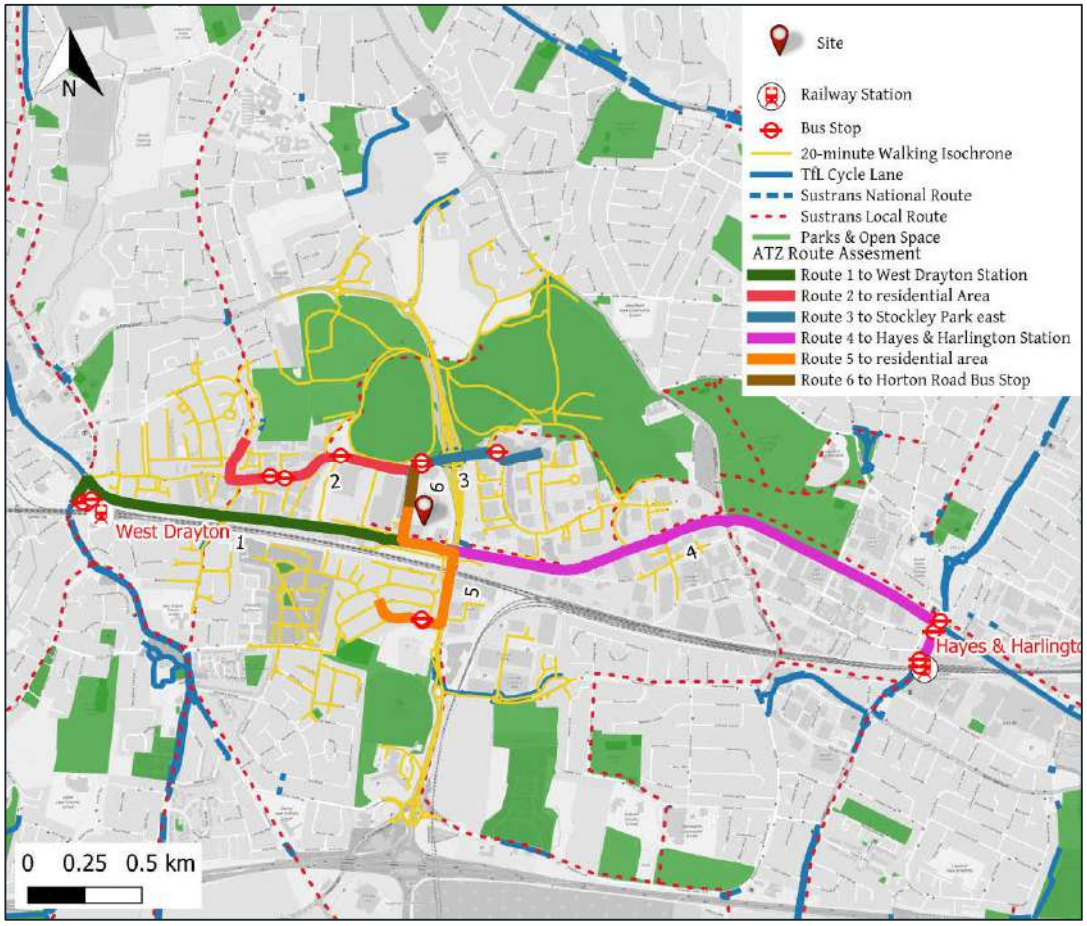
4.3.1. In accordance with TfL's step by step guidance and the above-listed key locations for future employees of the Proposed Development, the routes connecting the Site to the most important key locations are set out and assessed below, with potential improvements being outlined where necessary.

4.3.2. Considering the above, high priority key destinations have been listen in **Table 4-1** below and the routes to those destinations that have been assessed as part of the TA are shown in Map 2.1 which is illustrated in **Figure 4-2** and can be seen in more detail in **Appendix E**.

Table 4-1 – ATZ High Priority Key Destinations

Destination Detail	Distance from Proposed Development	Walking Distance	Cycling Distance
West Drayton Railway Station	1.3km	23 minutes	6 minutes
Harlington and Hayes Railway Station	2.3km	35 minutes	11 minutes
Horton Road Bus Stops A&K	200m	3 minutes	1 minute
Drayton Garden Village Residential Area	780m	15 minutes	7 minutes
Yiewsley Residential Area	770m	14 minutes	4 minutes
Stockley Park Business Park (East)	590m	9 minutes	3 minutes

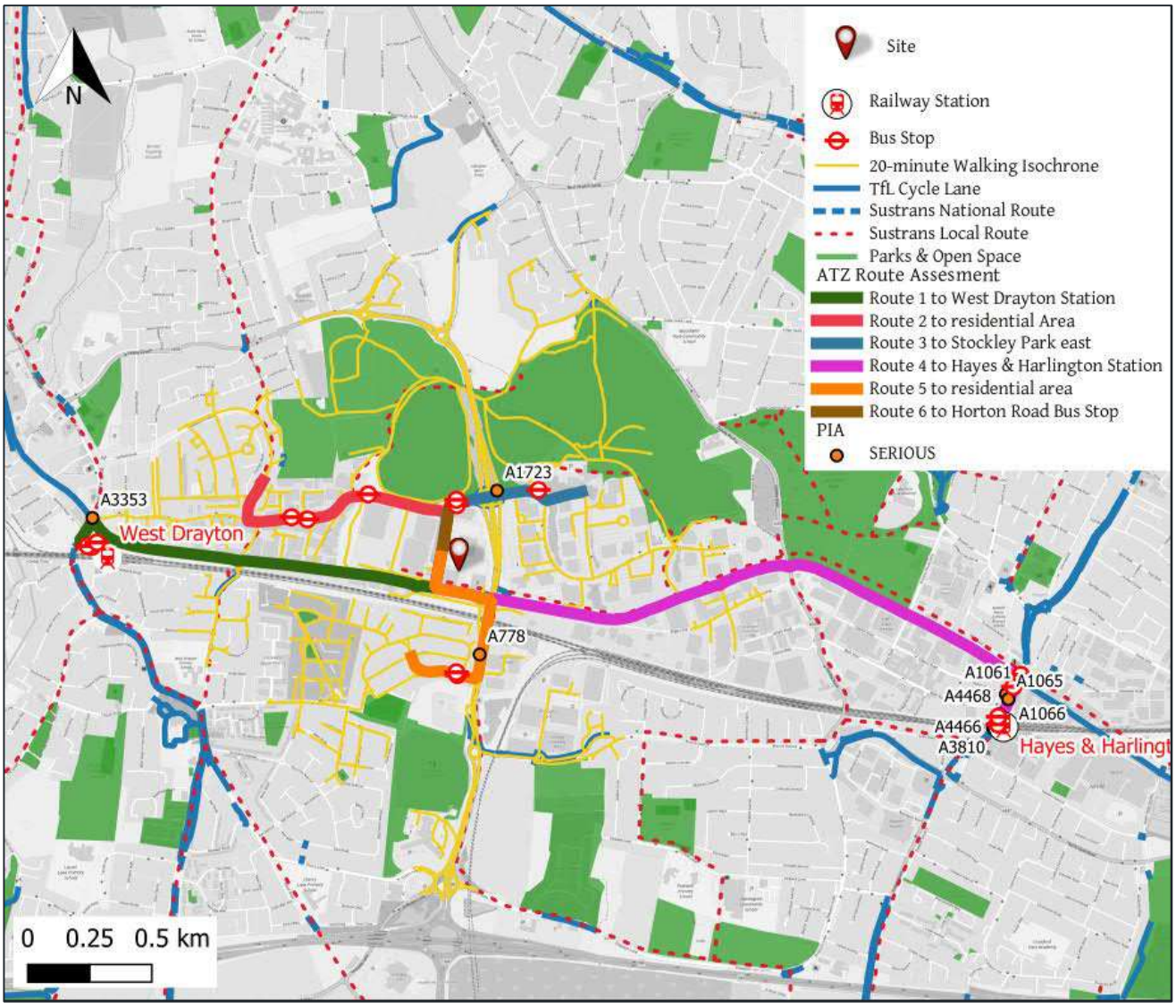
Figure 4-2 – Map 2.1: ATZ Journeys to Most Important Key Destinations



4.3.3. To understand the travel safety characteristics on journeys along the key routes, a PIA review has been undertaken using data obtained from TfL across the ATZ assessment for the latest available five-year period, from 1st August 2014 to 31st July 2019. Following the Healthy Streets guidance, the review focusses on KSI's (Killed or Seriously Injured) which have been overlaid onto Map 2.2.

4.3.4. It should be noted that this PIA assessment is addition to the more localised highway safety analysis undertaken within Chapter 3 at the Stockley Park Roundabout where the majority of vehicular traffic associated with the Proposed Development will occur. This assessment, therefore, focuses on understanding the existing safety conditions for vulnerable users along the defined routes to key locations from the Site which are expected to be used by future employees.

Figure 4-3 - Map 2.2: KSIs Along Routes to Key Destinations



4.3.5. In accordance with TfL's ATZ Step by Step guidance, *"for any clusters (meaning 1 or more killed and/or 2 or more serious injuries) along the key routes in the ATZ assessment, changes have to be suggested which would make the area safer using the Healthy Streets Approach".*

4.3.6. As identified within Chapter 3, there were no incidents on the local network resulting in a fatal casualty. In the interest of robustness all serious accidents along the route will be assessed, not just clusters of two or more.

4.3.7. **Figure 4-4** shows the KSI's that have occurred along four of the six routes within this assessment.

- **Route 1** to West Drayton station presented one serious incident at the junction where Horton Road meets Yiewsley's High Street. A vehicle was turning right out of Horton Road on to the High Street, and a second vehicle heading southbound collided with the driver's side. As this was the only accident at this junction there is no pattern of incidents and the accident can be attributed to driver error, rather than a highway issue.
- **Route 2** to the north-western residential area of Yiewsley has not had any KSI's that need reviewing within this analysis.
- **Route 3** to Stockley Park East has had one serious incident in the last five-year period and occurred at the southbound off slip from the A308 at Stockley Roundabout. The incident involved a cyclist. The data obtained from TfL provides no description of how the incident occurred, but it did occur in dark conditions with a wet road surface which could have contributed to the accident. Further description of this serious incident and the slight incidents within its proximity has been discussed in greater detail within Section 3.2 of this TA.
- **Route 4** to Hayes and Harlington Station had a cluster of six incidents occur within close proximity to the station entrance on Station Road. All six incidents involved a pedestrian. One incident was a result of an intoxicated pedestrian; however, we acknowledge the other five incidents do represent a pattern of threat to the safety of pedestrians. Four of the incidents occurred at the zebra crossing, with those crossing being struck by oncoming vehicles.
- **Route 5** to Drayton Garden Village residential area to the south of the Proposed Development has presented one serious incident. This incident involved a motorbike that lost control and struck the central reservation. This incident can be accredited to driver error as it was in dry conditions and was the only serious incident within the five-year period.
- **Route 6** to the Horton Road bus stops to the north of the Site has not had any KSI's that need reviewing within this analysis.

4.3.8. The majority of the routes indicate that there are no inherent issues or identified problems with regards to PIA's recorded that are directly attributable to highway issues. When reviewing in conjunction with the PIA analysis in Chapter 3, Route 3 has demonstrated that the Stockley Park Roundabout warrants further mitigation, as discussed in Chapter 5.

4.3.9. Route 4 has identified a cluster of accidents adjacent to the Hayes and Harlington Station entrance, indicating an existing issue. The proposed development will promote multi-modal use, however, due to the decrease in the number of employees on site, is unlikely to generate an increase in the number of users at this station to result in a material change in the risk. As such, no further detailed review of Route 4 has been undertaken.

4.4 MOST IMPORTANT JOURNEY ASSESSMENT

Route 1 to West Drayton Station

4.4.1. From the southern end of Iron Bridge Road North, it is possible for both pedestrians and cyclists to gain access to the newly upgraded Grand Union Canal Walk, which provides convenient and direct access to West Drayton High Street approximate 1.4km to the west and West Drayton Station.

4.4.2. West Drayton Station is served by the Great Western Mainline and the Crossrail Line between Paddington and Reading. These lines provide frequent and regular direct connections to many destinations across west London, Berkshire and south Oxfordshire such as Didcot Parkway, Reading, Slough and Paddington Station and in the future the services will be even greater with the full opening of Crossrail.

4.4.3. **Table 4-2** below outlines the current locations accessible by direct service from West Drayton Station.

Table 4-2 – Rail Services – West Drayton Station

Destination	Journey Time	Frequency (Mon-Fri)	First / Last Train
Didcot Parkway	1 hour 1 minute	2 per hour	01:02 / 23:36 inbound 03:54 / 00:13 outbound
Reading	37 minutes	4 per hour	00:17 / 02:24 inbound 00:13 / 00:54 outbound
Slough	6-9 minutes	4 per hour	00:17 / 02:24 inbound 00:13 / 00:54 outbound
Paddington	22-26 minutes	4 per hour	23:52 / 00:34 inbound 23:24 / 00:49 outbound

4.4.4. The table above indicates that West Drayton Station provides frequent and fast services which, by Route 1, can be easily accessed by employees of the Proposed Development to connect to wider destinations. The trains run throughout the day and night, with effectively 24-hour services to most destinations. This benefits the Proposed Development land use, as staff will be able to utilise the public transport network regardless of shift pattern.

Route 2 to Yiewsley Residential Area

4.4.5. From the north-western corner of the Site towards Yiewsley, Horton Road is a two-lane single carriageway road which passes Prologis Park West London before meeting Yiewsley's High Street via a priority junction.

4.4.6. On the western section of Horton Road from the Iron Bridge Road North roundabout, uncontrolled pedestrian crossings are also available at appropriate intervals with key destinations such as bus stops, site entrances and pedestrian footpaths such as Weston Walk.

4.4.7. Approximately 100m west of the Horton Road roundabout with Iron Bridge Road North, the southern footpath widens to a shared pedestrian cycle way, as indicated by on street marking, signs and wayfinding.

4.4.8. From there, adequate pedestrian and cycling facilities connect to Yiewsley Residential Area and other areas to the north and west where no safety issues have been identified.

Route 3 To Stockley Park East

4.4.9. From the Site, Stockley Park East is accessible for pedestrians and cyclists by making use of the facilities along Iron Bridge Road North, Horton Road, and the at-grade uncontrolled crossings on Stockley Park roundabout.

4.4.10. Thereafter, Bennetsfield Road provides the same facilities as Horton Road, with lit footpaths for pedestrians and a posted speed limit of 30mph which makes the road suitable for on-road cycling. This is also considered safe due to the lack of collisions with vulnerable pedestrians as detailed in Section 4.3 of this TA.

Route 4 To Hayes And Harlington Station

4.4.11. The Grand Union Canal Walk bordering the south of the Site forms Route 4 to Hayes and Harlington Station, and has already been described in Chapter 3. This 'quietway' links the Site to the wider West London Network spanning as far east as Southall Green, also connecting cyclists to locations such as Slough, Hayes End and Cranford.

4.4.12. Hayes and Harlington Station provides the same services as West Drayton i.e. frequent and fast services serving wider destinations.

Route 5 To Drayton Garden Village

4.4.13. Drayton Garden Village can be accessed from the Site via Iron Bridge Road South and footways along Stockley Road (as described in Chapter 3) or via the Grand Union Canal and Horton Bridge. This infrastructure connects the Site to southern neighbourhoods and quiet residential roads for cycling further afield.

4.4.14. This route is deemed to be safe and hence encourages walking and cycling, and as such is forecasted to be used by employees living in this area.

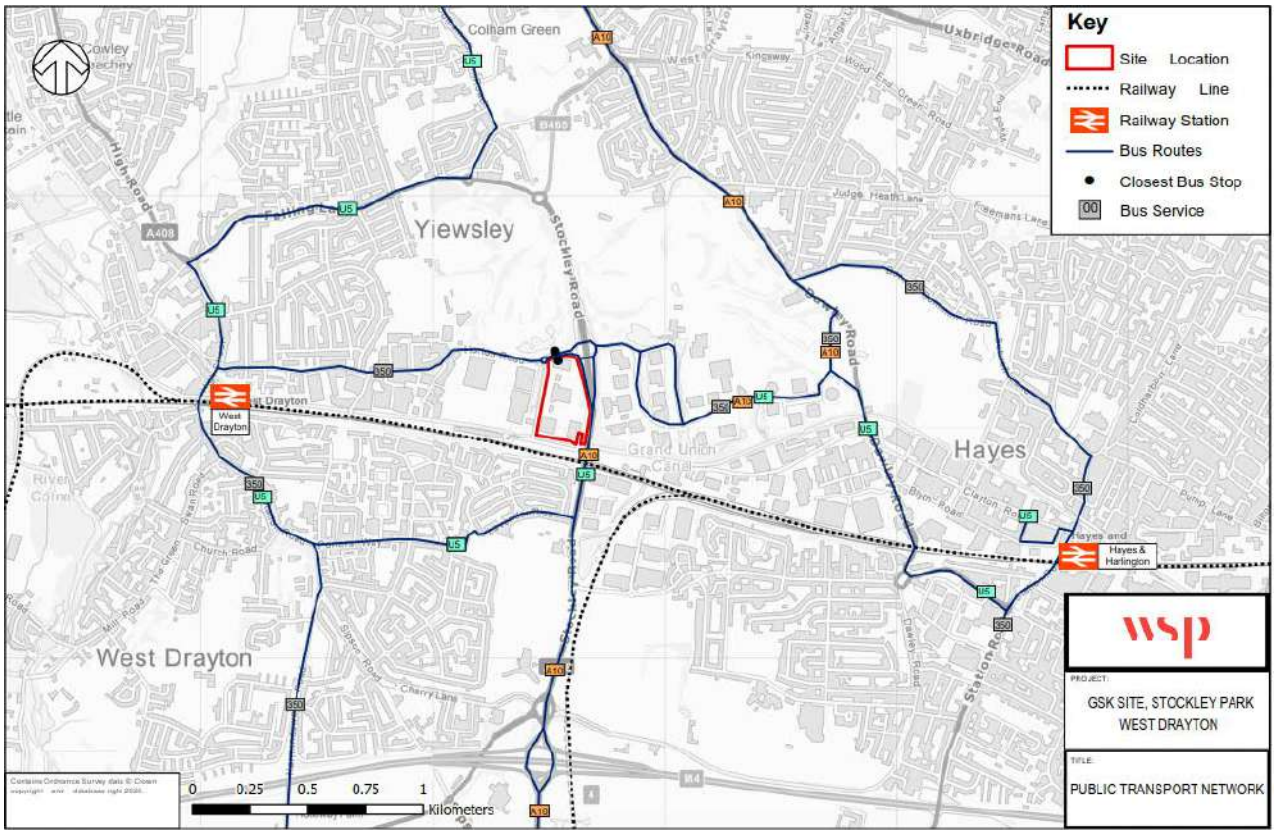
4.4.15. The section of Route 5 along Stockley Road can also be used to link to the southern residential areas of Hayes; approximately 250m to the south of Stockley Park roundabout, a staggered signalised pedestrian crossing, with dropped kerb arrangements and tactile paving, is provided over the A408 Stockley Road which decreases severance between Drayton Garden Village and the Hayes area.

Route 6 to Horton Road Bus Stops

4.4.16. This route from the Site to the closest bus stops on Horton Road has a length of 170m which equates to approximately a 2-minute walk along Iron Bridge Road North lit footpath and the uncontrolled pedestrian crossing on Horton Road.

4.4.17. These bus stops are served by services A10, U5 and 350 as shown in **Figure 4-5**, serving local areas such as Uxbridge, Yiewsley, Hayes Town and Longsford. These bus stops are equipped with a pole and a flag, timetable information and shelter.

Figure 4-4 - Public Transport Network



4.4.18. **Table 4-3** below shows that the number of buses serving this stop are frequent, running from early morning to midnight at approximately 20-minute intervals. This will serve the Site workers' shift patterns and ensure access to the Site via public transport can be attained at all necessary times given that there are negligible employee movements between midnight and 0400 hours.

Table 4-3 – Bus Services – Horton Road Bus Stops

Service Number	Route	Frequency (Mon – Fri)	First / Last Bus
A10	Uxbridge – Heathrow Central	Every 15 minutes between 07:00 and 20:00 and every 20 minutes at other times.	04:47 / 00:16 towards Heathrow 05:14 / 00:49 towards Uxbridge
U5	Uxbridge - Hayes and Harlington Station	Every 8-14 minutes between 06:00 – 21:00 and every 20 minutes at other times	05:26 / 00:30 towards Hayes and Harlington 05:23 / 00:21 towards Uxbridge
350	Hayes - Heathrow	Every 17-22 minutes until 20:00 then every 28-30 minutes	04:27 / 00:50 towards Hayes 03:37 / 00:08 towards Heathrow

5 WIDER CONTEXT: IMPACT ON LONDON-WIDE NETWORK

5.1 INTRODUCTION

5.1.1. Following the Healthy Streets TA guidance this chapter will set out the forecast trip generation assessment for the Proposed Development. The travel demand for the Proposed Development has been analysed in order to identify the likely change and scale of effects as a result of the Proposed Development. It is important to note that there is an existing office building on site, and as such the travel demand analysis will focus on the net effect of the Proposed Development.

5.2 BASELINE TRIP GENERATION AND DISTRIBUTION

5.2.1. As outlined in Chapter 1, the Site currently comprises three office buildings surrounded by ancillary surface level car parking and a multi-storey car park located in the south-eastern corner of the Site. Currently, only two of the office buildings are in operation and the site is temporarily being used as a park and shuttle bus facility for GSK employees to a second GSK office.

5.2.2. This section details the trip generation associated with the current land use of the Site and specifically looks at two scenarios: current level of occupation of the Site (as surveyed), and the Site in full occupation under its extant consent.

5.2.3. Multi-modal trip forecasts have also been estimated for the purpose of understanding all modes that may be generated by the Site and in particular to consider (in addition to vehicular trip generation) the trips associated with walking, cycling and public transport modes.

CURRENT SITE OPERATION TRAFFIC GENERATION

5.2.4. In order to understand the existing level of traffic generated by the Site, a Manual Classified Count (MCC) took place at the Site access for a 24hr period on the 19 / 20 June 2019 which recorded all vehicles accessing and egressing the Site. This is further discussed within the TSR in **Appendix B**.

5.2.5. It should be noted that, at the time of the survey, only two of the three office buildings on Site were in use; however, it is considered that the survey results present a robust scenario due to the presence of the park and shuttle bus facility. This service utilises the parking that would otherwise have been used by the third office building therefore, the trips generated by the staff park and ride facility act as a proxy for the trip generated by that building. To provide further comfort that the surveys are representative, a sensitivity test has been undertaken using TRIC's trip rate data, assuming all three buildings are operational.

5.2.6. The survey results revealed the number of vehicular trips generated by the current use of the Site and this is presented in **Table 5-1** below, which illustrates the type of vehicular movements captured during the survey.

Table 5-1 – Baseline Vehicular Trip Generation

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars + M/Cs	266	10	276	2	214	216	852	853	1,705
LGVs	1	1	2	0	1	1	20	20	40
HGVs + PSVs	2	3	5	4	4	8	34	34	68
Total Veh. Trips	269	14	283	6	219	225	906	907	1,813

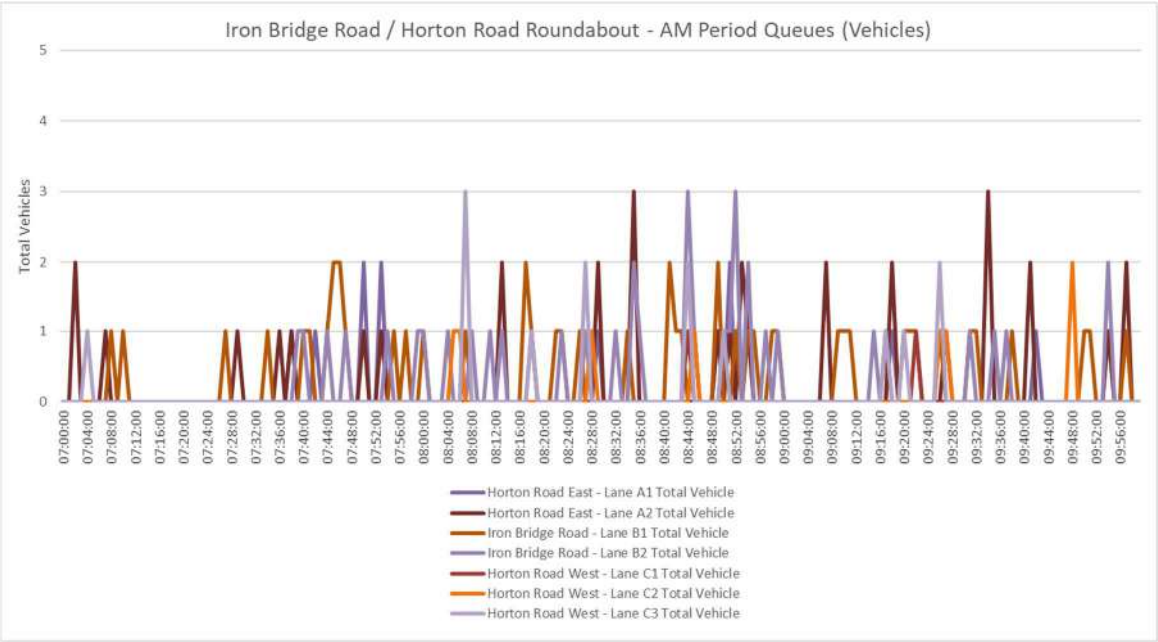
5.2.7. The MCC survey results outline that the Site generates 283 and 225 two-way vehicular movements across the AM and PM peak hours respectively. It should be noted that in the PM period, the time period 16:00h and 17:00h was generating the highest volume of traffic at the Site; however, the traditional commuting PM peak hour has been used for the review (i.e. from 17:00h to 18:00h) as it is the period where the wider highway network suffers from the highest pressure.

5.2.8. Daily, the Site has been recorded to generate 1,813 two-way trips, comprised of 68 HGVs trips, 40 LGVs trips, and 1,705 trips generated by cars and motorcycles.

5.2.9. To understand the current operation of the immediately adjacent highway network, queue lengths were also assessed as part of an additional MCC undertaken at the Iron Bridge Road North / Horton Road roundabout. The MCC indicated that the junction currently operates well, with maximum daily queues of four vehicles observed on the Horton Road West arm, taking place during the PM peak. The queue surveys were included within the appendices of the TSR, which is included in **Appendix B** of this Transport Assessment.

5.2.10. **Figure 5-1** and **Figure 5-2** below show the queue lengths recorded in each lane at each arm of the roundabout for the AM (07:00-10:00) and PM (16:00-19:00) periods respectively, with the number of vehicles and length of queue presented at four-minute intervals.

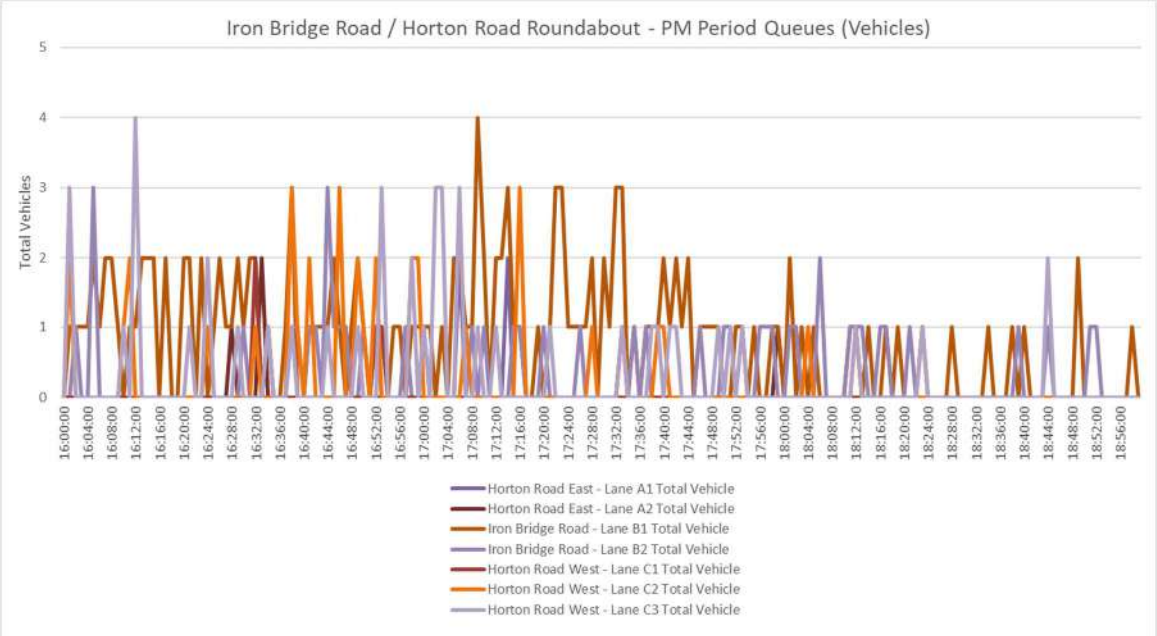
Figure 5-1 - Iron Bridge Road / Horton Road Roundabout Queue profile - AM period



5.2.11. In the AM period, the queue profiles show that a maximum queue of three vehicles was recorded on Horton Road west. As shown, the queues are not consistent and are indicative of a largely free flowing roundabout on all approaches. Any queues observed do not last for multiple minutes.

5.2.12. When reviewing the average queues across the AM period, all approaches and all lanes return an average queue of less than one vehicle.

Figure 5-2 - Iron Bridge Road / Horton Road Roundabout Queue profile - PM period



5.2.13. Similar to the AM peak, the queue profiles at the junction indicate that when queues do occur these are low in vehicle numbers and are quick clear. When reviewing the average queues across the PM period, all approaches and all lanes return an average queue of less than one.

5.2.14. The Figures above indicate that there are no existing queueing issues at this roundabout, with no pattern of substantial queueing within the peak periods.

5.2.15. As discussed in the sections below, the Proposed Development is likely to reduce traffic demand in the peak periods and will distribute traffic across the 24-hour operational period. It is therefore likely to alleviate any pressure on the roundabout within these peak periods.

BASELINE TRAFFIC GENERATION - SENSITIVITY TEST

5.2.16. As highlighted in the previous sub-section, this sensitivity test analyses the expected traffic generation associated with the permitted land use of the Site in full occupation, i.e. with the three office buildings (occupying a total 27,871m² of GIA) in operation.

5.2.17. To carry out this sensitivity test, TRICS V7.7.1 software has been used to analyse other sites considered comparable to the current use of the Site, under the following criteria:

- Land Use: Main land use employment – employment;
- Region: All regions;
- Location: Edge of town and edge of town centre;
- Area range: 6,000 – 40,000 sqm GFA; and
- Survey Period: between 01/01/2012 and 25/09/2019.

5.2.18. The TRICS outputs extracted from the sites found within the above criteria can be seen in **Appendix G** and revealed the trip rates and subsequent trip generation for the area of the three office buildings on Site, as shown in **Table 5-2** below:

Table 5-2 – Sensitivity Test - Baseline Vehicular Trip Generation

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Trip Rate per 100sqm	1.56	0.31	1.87	0.13	1.16	1.28	4.83	4.42	9.26
Trip Generation	435	85	520	35	322	357	1,346	1,233	2,579

5.2.19. **Table 5-2** demonstrates that the trip generation estimated for the Site at its maximum capacity by using TRICS, would be higher than the surveyed trip generation.

5.2.20. As such, it is considered that the surveyed trip generation, illustrated on **Table 5-1** and giving lower trip generation than the sensitivity test, will result in the most robust net change in trip generation when this is compared to the Proposed Development later in this chapter. Therefore, this will be the basis for the trip generation and impact analysis.

BASELINE WALKING, CYCLING AND PUBLIC TRANSPORT TRIP GENERATION

5.2.21. Since the vehicular survey undertaken at the Site access did not capture the current level of trips generated by pedestrians, cyclists and public transport users, multi-modal trip rates extracted from the TRICS analysis above have been used to factor out the expected relationship between vehicles and other modes.

5.2.22. A factor for each mode has therefore been calculated which equates to the relation between the TRICS-extracted vehicular trip rate and the trip rates for pedestrians, cyclists and public transport users.

5.2.23. This factor uses the two-way number of vehicles captured in the vehicular survey (as per **Table 5-1**) so that the recorded two-way trip generation reflects the potential number of walking, cycling and public transport trips that could be generated by the Site in June 2019. To calculate the number of arrivals and departures of each period (AM, PM and daily), the arrival / departure profile extracted from the TRICS trip rates for those same periods has been used.

5.2.24. **Table 5-3** below shows the number of walking, cycling and public transport trips expected to be generated by the Site in the baseline scenario in accordance with the above methodology.

Table 5-3 – Walking, Cycling and Public Transport Baseline Trip Generation

Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Walking	43	3	46	9	37	45	562	577	1139
Cycling	3	0	3	0	8	8	15	16	31
Public Transport	53	2	54	2	58	60	258	245	503

5.2.25. **Table 5-3** shows the Site is considered to generate 46, 3 and 54 two-way walking, cycling and public transport trips respectively during the AM peak hour; 45, 8 and 60 during the PM peak hour; and 1,139, 31 and 503 during a working day.

5.2.26. It should be noted that all public transport trips would complete their last or first part of the trip to the Site by walking and therefore public transport users will be assessed as pedestrians when analysing pedestrian demand along Iron Bridge Road North.

BASELINE VEHICULAR TRIPS DISTRIBUTION

5.2.27. The vehicular counts undertaken at the Site access along with the survey capturing movements at the Horton Road / Iron Bridge Road North roundabout have been used to distribute the traffic from the Site, particularly for eastern and western directions i.e. to / from Horton Road east of Iron Bridge Road North and to / from Horton Road west of Iron Bridge Road North.

5.2.28. To determine the turning proportions of vehicles associated with the existing Site on Stockley Park Roundabout, Census Travel to Work Data was analysed for the MSOA within which the Site lies.

5.2.29. In accordance with the above two sources of information, the distribution of traffic associated with the existing use of the Site is as follows:

- Horton Road West of Iron Bridge Road North: 11%
- Horton Road East of Iron Bridge Road North (towards/from Stockley Park Roundabout): 89%
  - North of Stockley Park Roundabout: 60%
  - South of Stockley Park Roundabout: 29%

5.2.30. The above percentages in conjunction with **Table 5-1** mean the level of traffic generated by the existing Site on Horton Road and Stockley Road is as shown in **Table 5-4** and on the baseline traffic flow diagram that can be seen in detail in **Appendix H**.

5.2.31. **Table 5-4** identifies the links considered as part of the assessments and shows the traffic distribution by direction depending on the links orientation. For clarity, arrivals are those travelling towards the site, with departures away from the site.

Table 5-4 – Baseline Traffic Distribution

Link	Type of Veh.	AM PEAK (0800-0900)			PM PEAK (1700-1800)			DAILY (24H)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Iron Bridge Rd North	Cars + M/Cs	266	10	276	2	214	216	852	853	1705
	LGVs + HGVs	3	4	7	4	5	9	54	54	108
	TOTAL	269	14	283	6	219	225	906	907	1813
Horton Rd East	Cars + M/Cs	237	9	246	2	190	192	758	759	1517
	LGVs + HGVs	3	4	6	4	4	8	48	48	96
	TOTAL	239	12	252	5	195	200	806	807	1614
Horton Rd West	Cars + M/Cs	29	1	30	0	24	24	94	94	188
	LGVs + HGVs	0	0	1	0	1	1	6	6	12
	TOTAL	30	2	31	1	24	25	100	100	199
Stockley Rd North	Cars + M/Cs	159	6	165	1	128	129	509	510	1019
	LGVs + HGVs	2	2	4	2	3	5	32	32	65
	TOTAL	161	8	169	4	131	134	541	542	1083
Stockley Rd South	Cars + M/Cs	78	3	81	1	63	63	249	249	499
	LGVs + HGVs	1	1	2	1	1	3	16	16	32
	TOTAL	79	4	83	2	64	66	265	265	530

5.3 FORECAST TRIP GENERATION AND DISTRIBUTION

FORECAST VEHICULAR TRIP GENERATION

5.3.1. Trip rates for the Proposed Development have been extracted from a traffic survey undertaken at the nearby Prologis Park Heathrow in December 2014, located approximately 850m to the south of the Site.

5.3.2. At the time of the survey Prologis Park Heathrow was occupied by the following businesses:

- Heathrow Airports Ltd (5,113sqm GIA) - a consolidation centre for Heathrow Airport;
- Gate Gourmet (6,298sqm GIA) – a transport catering business premises, operating on a 24-hour basis, primarily serving Heathrow Airport;

- Infinity (8,806sqm GIA) – information technology company; and
- City Link (6,874sqm GIA) – a parcel distribution company. City Link ceased trading on 25 December 2014; however, at the time of the survey, the site was fully operational.

5.3.3. In accordance with the above, the businesses operating at Prologis Park Heathrow at the time of the survey were a mix of B1c, B2 and B8 land uses and occupied a total of 27,091sqm against the 30,627sqm proposed for the Development. This means the Proposed Development and Prologis Park Heathrow sites are comparable in terms of size, land use, location and accessibility levels. Therefore, the trip rates calculated at the Prologis Park Heathrow site are considered to be appropriate to derive trip generation for the Proposed Development and as such will be used for this analysis.

5.3.4. A summary of the calculated vehicular trip rates based on the survey of Prologis Park Heathrow is shown below, with the forecast vehicular trip generation associated to the Proposed Development (comprised of 30,627sqm) shown thereafter. 2014 survey data and the resulting trip rates can be seen in **Appendix I.**

Table 5-5 – Prologis Park Heathrow, Vehicular Trip Rate per 100sqm

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars + M/Cs	0.04	0.03	0.07	0.01	0.11	0.12	2.31	2.32	4.63
LGVs	0.04	0.08	0.13	0.03	0.11	0.14	1.80	2.00	3.80
HGVs	0.08	0.03	0.11	0.07	0.10	0.17	1.50	1.52	3.02
Total Veh.Trip Rate	0.16	0.14	0.31	0.11	0.32	0.43	5.61	5.85	11.45

Table 5-6 – Forecast Vehicular Trip Generation (30,627sqm)

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars + M/Cs	12	8	20	3	33	36	708	711	1,419
LGVs	14	26	40	9	35	44	551	614	1,164
HGVs	24	10	34	20	32	52	459	466	925
Total Vehicular Trip Rate	50	44	94	33	99	132	1,717	1,791	3,508

5.3.5. In accordance with **Table 5-6**, the Proposed Development is envisaged to generate 94 and 132 two-way vehicular trips in the AM and PM peak hours respectively, with 3,508 two-way daily vehicular trips that are forecasted to be comprised of 1,164 LGVs, 925 HGVs, and 1,419 cars and motorcycles.

5.3.6. **Appendix J** provides a 24hr, hourly profile of the vehicle trip generation for the proposed development. For ease of review, Appendix J also contains the existing site 24hr hourly vehicular trip generation profile.

FORECAST WALKING, CYCLING AND PUBLIC TRANSPORT TRIP GENERATION

5.3.7. The traffic survey undertaken at the nearby Prologis Park Heathrow in December 2014 also captured pedestrians and cycles, so it has been used to determine the forecast trip rate of the Proposed Development for walking and cycling. It is noted that the walking trip rate also includes an element of public transport users starting or completing their journey by foot and this has been considered below.

5.3.8. **Table 5-7** shows the trip rate extracted from the Prologis Park Heathrow survey for cycling and walking (including public transport as explained above), and the forecast trip generation associated with the Proposed Development.

Table 5-7 – Walking, Cycling and Public Transport Forecast Trip Generation

Mode	Unit	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
		Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Walking & Public Transport	Trip Rate per 100sqm	0.03	0.04	0.08	0.00	0.00	0.00	0.84	0.68	1.52
	Trip Generation	10	14	24	1	0	1	258	207	465
Cycling	Trip Rate per 100sqm	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.03
	Trip Generation	0	0	0	0	0	0	6	2	8

5.3.9. **Table 5-7** shows that the Proposed Development is forecast to generate 24 walking and public transport trips during the AM peak, one during the PM peak, and 465 daily trips.

5.3.10. Regarding cycling, it appears from **Table 5-7** that very few trips will be generated by the development. However, it should be noted that this survey if from 2014. Since then, facilities in the area have improved and, using DfT count data, the volume of cyclists in the area has increased also. A Travel Plan has also been prepared for the Proposed Development to encourage sustainable modes of transport including cycling, and therefore it is considered that the number of cycling trips generated by the Proposed Development will be significantly higher than the level of trips shown in **Table 5-7**.

FORECAST VEHICULAR TRAFFIC DISTRIBUTION

5.3.11. To estimate the distribution of vehicular traffic associated with the Proposed Development, it has been considered that:

- Staff-generated traffic and Operational vehicles will follow the distribution observed at the Horton Road roundabout. At the Stockley Road Roundabout they will split north and south according to the distribution for the Prologis Park Heathrow site.

5.3.12. In accordance with the above considerations:

- Distribution calculations for Cars, motorcycles and LGVs are based on the Horton Road Roundabout survey and the Prologis Park Heathrow site which indicates 75% of cars and LGVs head towards the M4 and the remaining 25% head north; and
- Distribution calculations for OGVs have been based on the Horton Road Roundabout survey and the Prologis Park Heathrow site which indicates 90% of OGVs head towards the M4 and the remaining 10% head north.

5.3.13. This is reflected in **Table 5-8** and can be seen with more detail in **Appendix H** where traffic flow diagrams have been included.

Table 5-8 – Forecast Traffic Distribution

Link and Direction	Type of Veh.	AM PEAK (0800-0900)			PM PEAK (1700-1800)			DAILY (24H)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Iron Bridge Rd North All Directions	**Cars + M/Cs**	12	8	20	3	33	36	708	711	1,419
	LGVs + HGVs	37	36	73	29	67	96	1,010	1,080	2,089
	TOTAL	50	44	94	33	99	132	1,717	1,791	3,508
Horton Rd East	**Cars + M/Cs**	11	7	18	3	29	32	630	633	1,263
	LGVs + HGVs	33	32	65	26	59	86	898	961	1,859
	TOTAL	44	39	84	29	89	118	1,528	1,594	3,122
Horton Rd West	**Cars + M/Cs**	1	1	2	0	4	4	78	78	156
	LGVs + HGVs	4	4	8	3	7	11	111	119	230
	TOTAL	5	5	10	4	11	15	189	197	386
Stockley Rd North	**Cars + M/Cs**	3	2	5	1	7	8	157	158	316
	LGVs + HGVs	5	7	12	4	11	14	164	179	342
	TOTAL	**8**	**8**	**16**	**5**	**18**	**22**	**321**	**337**	**658**
Stockley Rd South	**Cars + M/Cs**	8	5	14	2	22	24	472	475	947
	LGVs + HGVs	28	25	54	22	49	71	735	782	1,517
	TOTAL	**36**	**31**	**67**	**25**	**71**	**95**	**1,207**	**1,257**	**2,464**

5.4 PROPOSED DEVELOPMENT IMPACT

VEHICULAR TRAFFIC

5.4.1. From Section 5.2 and Section 5.3 above, **Table 5-9** shows the net vehicular traffic generated by the Proposed Development when compared to the existing operation of the GSK site.

Table 5-9 – Net Vehicular Trip Generation

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars + M/Cs	-254	-2	-256	1	-181	-180	-144	-142	-286
LGVs	13	25	38	9	34	43	531	594	1,124
HGVs	22	7	29	16	28	44	425	432	857
Total Vehicular Trips	-219	30	-189	27	-120	-93	811	884	1,695

5.4.2. **Table 5-10** along with the traffic flow diagram which can be seen with more detail in **Appendix H** shows the difference in number of vehicular trips envisaged to be generated by the Proposed Development on each of the road links adjacent to the Site by comparing **Table 5-4** and **Table 5-8** i.e. baseline traffic (as surveyed) compared to the forecast traffic of the Proposed Development estimated from the Prologis Heathrow site patterns.

5.4.3. Building on **Table 5-9**, **Appendix J** includes a 24hr, hourly net impact vehicle trip generation profile for the Proposed Development.

Table 5-10 – Forecast Net Vehicular Impact

Link and Direction	Type of Veh.	AM PEAK (0800-0900)			PM PEAK (1700-1800)			DAILY (24H)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Iron Bridge Rd North	**Cars + M/Cs**	-254	-2	-256	1	-181	-180	-144	-142	-286
	LGVs + HGVs	34	32	66	25	62	87	956	1,026	1,981
All Directions	**TOTAL**	-219	30	-189	27	-120	-93	811	884	1,695
Horton Rd East	**Cars + M/Cs**	-226	-2	-228	1	-161	-160	-128	-126	-255
	LGVs + HGVs	31	29	59	23	55	78	850	913	1,763
	TOTAL	-195	27	-168	24	-106	-83	722	786	1,508
Horton Rd West	**Cars + M/Cs**	-28	0	-28	0	-20	-20	-16	-16	-31
	LGVs + HGVs	4	4	7	3	7	10	105	113	218
	TOTAL	-24	3	-21	3	-13	-10	89	97	186

Link and Direction	Type of Veh.	AM PEAK (0800-0900)			PM PEAK (1700-1800)			DAILY (24H)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Stockley Rd North	Cars + M/Cs	-156	-4	-160	0	-121	-121	-325	-351	-703
	LGVs + HGVs	3	4	8	1	8	9	131	146	278
	TOTAL	**-153**	**0**	**-153**	**1**	**-113**	**-112**	**-220**	**-205**	**-425**
Stockley Rd South	Cars + M/Cs	-69	2	-67	2	-41	-39	223	225	448
	LGVs + HGVs	27	24	52	21	47	68	719	766	1,485
	TOTAL	**-42**	**27**	**-16**	**23**	**7**	**29**	**942**	**992**	**1,934**

5.4.4. **Table 5-9** illustrates that the Proposed Development is forecast to decrease the level of vehicular movements generated by the current use of the Site during the AM and PM peak hours by 189 and 93 two-way trips respectively. This reduction in traffic during the peak hours, when the highway network is traditionally at its busiest, is anticipated to have a beneficial impact on the operation of local junctions, particularly on the Stockley Park Roundabout which connects Horton Road with the A408 Stockley Road.

5.4.5. Due to the expected beneficial impact from the forecast reduction in traffic during the peak hours, no junction capacity analysis is considered necessary on the surrounding highway network.

5.4.6. Despite the above decrease in traffic during the peak hours, there is a likely to be a daily increase in trips at the Site due to the nature of the Proposed Development operation (i.e. 24hr operation with regular vehicular movements throughout the day and night) compared to the existing operational times of the Site (day-time only). As these additional trips are likely to be on the network at times when the roads are quieter and have greater capacity, they will not have a detrimental effect on highway operation.

NET IMPACT ON WALKING, CYCLING AND PUBLIC TRANSPORT TRIPS

5.4.7. From **Table 5-3** and **Table 5-7** in the previous section (i.e. baseline and forecast trips generated by walking, cycling and public transport), **Table 5-11** below shows the net change in walking and cycling trips expected to be associated to the Proposed Development in comparison to the existing operation of the GSK offices, considering that walking trips will have an element of public transport.

Table 5-11 – Walking, Cycling and Public Transport Net Impact

Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (24h)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Walking & Public Transport	-85	9	-76	-9	-95	-104	-562	-615	-1,178
Cycling	-3	0	-3	0	-8	-8	-9	-13	-23

5.4.8. **Table 5-11** outlines that as expected, there is likely to be a reduction in trips generated by walking, cycling and public transport modes. This is reasonable considering the change in land use brought by the Proposed Development which will decrease the number of employees on site against the current situation.

5.4.9. In accordance with the above, it is considered that no further analysis is required regarding the likely impact of the Proposed Development on the pedestrian and cycling network, as well as on the public transport services and capacity.

6 MITIGATION AND SUPPORTING DOCUMENTS

6.1 HIGHWAY SAFETY ANALYSIS

6.1.1. As outlined within Section 3.2, the PIA review has highlighted a potential safety issue at the A408 southbound approach to the Stockley Park Roundabout. A pattern of accidents involving collisions between cyclists and motor vehicles has been noted within the 5-year study period.

6.1.2. The Proposed Development is expected to increase the volume of vehicles, and in particular, HGVs on this roundabout across a typical daily period compared to the current consented use which could increase the safety risk further. It is therefore considered appropriate for improvements to be made to mitigate the safety impact at the southbound approach on the Stockley Park Roundabout.

6.1.3. It is understood that LBH already have a proposed scheme of improvements in this location, which includes improved cycle provision round the roundabout. Such mitigation would directly improve the network for vulnerable road users while encouraging a mode shift away from private vehicles.

6.1.4. Due to the development impact at this junction as set out above and a need for improvements to mitigate this safety risk, it is appropriate for Prologis to contribute towards this scheme and fund the elements related to improved cycle and pedestrian provision. It is expected that an appropriate contribution for the cycle improvements would be secured via an S106 Agreement.

6.2 HIGHWAY IMPACT ANALYSIS

6.2.1. Once built out, the Proposed Development is envisaged to provide an improvement to the local area by reducing the level of vehicular traffic during the peak periods through the dispersion of trips over a 24-hour period. This has been detailed in Chapter 5 and concludes that the traffic generation and distribution of staff and site trips will not negatively impact the local highway network. As a result, no further vehicular impact analysis has been carried out.

6.2.2. In order to support the sustainability strategy and operation of the Proposed Development, a series of management plans have been developed in conjunction with this TA. These are listed below and further details on the approach to each document are summarised as follows:

- A **Framework Travel Plan** detailing the forecast travel patterns of future employees of the Proposed Development, and setting objectives, mode share targets, measures to be implemented, and monitoring methodology;
- An **Outline Construction Logistics Plan** which considers the construction programme and management measures to mitigate potential impacts associated with the construction of the Proposed Development as per TfL's methodology; and
- An **Outline Delivery and Servicing Plan** setting the principles for the management of delivery and servicing movements associated to the Proposed Development needs.

FRAMEWORK TRAVEL PLAN

6.2.3. This TA is supported by a Framework Travel Plan (FTP) which has been prepared in line with the relevant policies including LBH LPP2 as well as the NPPF. The FTP has also been prepared in line with TfL's Guidance for Travel Plans content.

6.2.4. The FTP demonstrates that the Proposed Development conforms to sustainable development principles. Furthermore, the FTP is intended to serve as a strategic management tool designed to accommodate the specific transportation needs of the Site by mitigating the transport demands of staff and visitors.

6.2.5. The FTP sets out the intentions of Prologis to encourage sustainable travel amongst staff and visitors particularly related to cycling, and details the various measures aimed to be built upon through its life cycle. Realistic and achievable measures have been tailored to reflect the nature of the Proposed Development and provide bespoke solutions to encouraging sustainable modes of travel.

6.2.6. The nearby Stockley Park currently benefits from a partnership with Easit who deliver their Travel Plan and sustainable transport options to staff. Prologis are currently in discussion with Stockley Park and Easit regarding extending their service to cover the Proposed Development when operational. This will ensure the efficient delivery of all proposed measures and a greater pool from which the Travel Plan can operate.

6.2.7. The FTP includes:

- A review of specific travel planning policy and guidance;
- The TP vision and objectives, connected to overarching aspirations as well as general Site-specific aspirations;
- The existing conditions in relation to existing opportunities for sustainable travel and accessibility to and from the Site;
- TP measures: realistic, achievable and appropriate measures have been identified to support existing opportunities and to encourage more trips by sustainable modes to and from the Site, particularly focused on cycling. This also includes a review of the Easit's initiatives identifying where these align with the Proposed Development;
- Targets: in line with national and local policy requirements, a commitment has been set out for appropriate targets to be set;
- Monitoring and review: the FTP also sets out the expected monitoring strategy for the Site. It is expected that any monitoring will comprise some travel behaviour surveys, although this will be agreed with LBH before surveys are undertaken; and
- Management, implementation and funding: implementation and funding will be in relation to timescales and phasing of measures. An Action Plan will identify potential measures, timescales and responsibilities.

OUTLINE CONSTRUCTION LOGISTICS PLAN

6.2.8. An Outline Construction Logistics Plan (CLP) has been created to address the design and construction phases of the development with the specific aim of improving construction freight efficiency by reducing accidents, carbon dioxide emissions and congestion. The Outline CLP will provide TfL and LBH with the detail and the logistics activity expected during the construction phase of the Proposed Development.

6.2.9. In line with TfL's guidance document entitled 'Construction Logistic Plan Guidance' for planners, this Outline CLP aims to achieve the following benefits:

- Improved air quality from reduced traffic and congestion;
- Raised standards of safety on the roads, with emphasis on vulnerable road users;
- Better highway efficiency by reducing the effects of construction activity through better delivery

management and access; and
- More cost-effective construction logistics activity.

6.2.10. The Outline CLP meets the following objectives:

- Identify surrounding constraints and opportunities for the delivery and operation of freight to the Site;
- Identify potential opportunities for reducing, re-timing or combining deliveries;
- Help minimise congestion on the surrounding highway network and ease environmental pressures;
- Improve the reliability of deliveries to the Site;
- Reduce the fuel costs of the freight operators;
- Identify the needs of a detailed CLP; and
- Demonstrate an understanding of the logistical needs of a modular construction project.

OUTLINE DELIVERY AND SERVICING MANAGEMENT PLAN

6.2.11. The Outline Delivery and Servicing Management Plan (DSP) focuses on the implementation of sustainable delivery initiatives in order to minimise their impact on the surrounding public highway.

6.2.12. The Outline DSP is intended to provide LBH with a commitment from Prologis to manage service vehicle trips to and from the Proposed Development in accordance with the strategy and measures set out herein.

6.2.13. A detailed DSP document is expected to be developed within a year of first occupation and once occupiers are known, so that the operational needs of the Proposed Development can be reflected, and bespoke measures can be proposed and implemented. In the meanwhile, the Outline DSP seeks to achieve the following objectives:

- Demonstrate that goods and services can be delivered to the Proposed Development, and waste removed, in a safe, efficient and environmentally-friendly way;
- Identify deliveries that could be reduced, re-timed or even consolidated, particularly during busy periods;
- Improve the reliability of deliveries to the Site;
- Reduce the operating costs of building occupants and freight companies; and
- Reduce the impact of freight activity on local residents and the environment.

7 SUMMARY AND CONCLUSIONS

7.1 SUMMARY

7.1.1. WSP has been commissioned by Prologis UK Ltd to provide transportation and highways advice with respect to the Proposed Development on land at Iron Bridge Road North, Stockley Park within LBH. The Site is currently occupied by GSK, however it is expected to be vacated by January 2021.

7.1.2. As shown in **Figure 1-1** in Chapter 1 the Site forms part of the wider Stockley Business Park, west of Stockley Road and, to the south of Horton Road. It is accessed from Iron Bridge Road North which is to the west of the site.

7.1.3. The Application is for the redevelopment of the site to provide two industrial units providing industrial floorspace (Use Class B1c/B2/B8) and ancillary officers together with associated parking, access arrangements, landscaping and infrastructure. The two units of B1c / B2 / B8 mixed land use will provide a total Gross Internal Area (GIA) of 30,627sqm. The two buildings will be served by independent operational access points from Iron Bridge Road North, and two separate access points for each of the units for both staff and visitor vehicles taken off the same road (as shown in the masterplan at **Appendix A**).

7.1.4. A Transport Scoping report was issued as part of the pre-application conversations with LBH, and defined the level of assessment related to transport for the Proposed Development; which is included in **Appendix B**. Recommendations made by LBH following from these conversations have been considered when preparing this TA and additional transport documentation, including the Framework Travel Plan, the Delivery and Servicing Plan and the Construction Logistics Plan, which all comprise the complete transport strategy of the Proposed Development.

7.1.5. This TA demonstrates:

- The accessibility context and the potential to optimise the use of sustainable transport modes by occupants of the Proposed Development have been considered throughout the design process, in which the transport discipline has determined the measures to be implemented to encourage sustainable travel;
- Consideration has also been made to relevant policy at national, regional and local level, demonstrating the Proposed Development is policy compliant and follows NPPF, Healthy Streets and LBH's LIP and LPP2 requirements and guidelines;
- A review of the Site's internal layout, immediate surroundings and the adjacent transport network intended to be used by all potential users of the Proposed Development has been carried out, demonstrating the access strategy, car and cycle parking provision and design of the service yards align with the infrastructure bordering the Site and will be able to adequately serve all type of expected vehicles, pedestrians and cyclists;
- The baseline assessment has identified highway safety concerns associated to vulnerable users (such as pedestrians and cyclists) using the Stockley Park roundabout; therefore, this has been reviewed and considered as part of the mitigation strategy (discussed further below);
- The six routes analysed as part of the ATZ assessment are considered to be adequate to connect the Proposed Development by walking and cycling with key destinations such as West Drayton Railway Station, Stockley Park East, Hayes and Harlington Station, Drayton Garden Village and Horton Road bus stops;

- The Proposed Development trip generation has been forecast using data from the existing Prologis Park Heathrow site. The assessment outlines that there would be a reduction in the level of vehicular traffic during the AM and PM peak hours when compared to the existing operation of the GSK offices currently on the Site. This represents a significant positive impact during the peak commuting periods where the highway network suffers from the highest congestion and demand;
- The Proposed Development is envisaged to increase the level of vehicular traffic across a typical 24-hour period due to operational needs associated with the proposed B1(c) / B2 / B8 land uses. **Appendix J** shows the 24hr vehicular traffic profiles for the proposed and existing sites. However, this does not result in any severe impact on the highway network as background traffic levels will be lower during the periods outside of the peak hours assessed;
- A safety mitigation strategy has been considered at Stockley Park Roundabout. Prologis are committed to providing appropriate contributions to LBH via an s106 agreement to allow them to deliver non-motorised user safety improvements at the roundabout;
- A Framework Travel Plan, Outline Construction Logistics Plan and a Delivery and Servicing Plan have been produced alongside this TA which will help optimise sustainable travel and manage traffic generated by the Site during the construction and operational phases of the Proposed Development.

7.2 CONCLUSION

7.2.1. In accordance with the summary above, it is considered the Proposed Development will not have a material impact on the highway network both adjacent to the Site and London-wide, including on pedestrian, cycle and public transport infrastructure.

7.2.2. As such, it is considered that the Proposed Development should not be refused on highways grounds in accordance with NPPF paragraph 109, which 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*".

Drawings

DO NOT SCALE

NOTES

1. THIS GENERAL ARRANGEMENT IS NOT TO BE USED FOR CONSTRUCTION. IT IS A COMPOSITE DRAWING SHOWING THE SPATIAL RELATIONSHIP BETWEEN THE PROPOSED AND EXISTING FEATURES. REFERENCE SHOULD BE MADE TO THE RELEVANT SPECIFIC CONSTRUCTION PLANS. GENERALLY SHOWN ON RP (ROAD PAVING) AND D (DRAINAGE) DRAWING.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTATION, DRAWINGS AND STANDARD DETAILS.
3. THE DESIGN HAS BEEN DEVELOPED & AGREED THROUGH CONSULTATION WITH THE THE RELEVANT AUTHORITIES (HIGHWAYS, SEWERAGE, PLANNING AND SAB).
4. IN ACCORDANCE WITH THE CDM REGULATIONS RESIDUAL RISKS OF SIGNIFICANCE ARE INDICATED ON THE GA DRAWING ONLY BY MEANS OF A HAZARD TRIANGLE WITH APPROPRIATE NOTE.
5. INFORMATION REGARDING THE LOCATION AND DEPTH OF EXISTING SERVICES CANNOT BE GUARANTEED BY THE STATUTORY UNDERTAKER.
6. THE CONTRACTOR SHALL CONDUCT THE WORKS WITH DUE REGARD TO THE ECOLOGICAL, ENVIRONMENTAL REQUIREMENTS OF THE SCHEME.
7. THE CONTRACTOR SHALL TAKE SUCH STEPS TO SAFEGUARD AGAINST CONTAMINATION OF LOCAL WATERCOURSES.
8. CONFLICTING INFORMATION SHOWN ON THE ENGINEER'S DRAWINGS OR DISCREPANCIES BETWEEN THE INFORMATION GIVEN BY THE ENGINEER AND THAT PROVIDED BY OTHERS MUST BE REFERRED TO THE ENGINEER BEFORE THE WORKS COMMENCE.
9. DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING. ALL DIMENSIONS SHOWN ARE IN METRES. DIMENSIONS MARKED 'DIMENSIONS TO BE SITE CHECKED' ARE SUBJECT TO CONFIRMATION BY THE CONTRACTOR BEFORE THE WORKS COMMENCE.
10. TEMPORARY WORKS DESIGN ASSOCIATED WITH THE CONSTRUCTION OF THE WORKS SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
11. CALCULATIONS AND DRAWINGS OF ALL CONTRACTOR DESIGNED ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR COMMENTS / APPROVALS NOT LESS THAN 10 DAYS PRIOR TO CONSTRUCTION. ANY COMMENTS MADE BY THE ENGINEER DO NOT ABSOLVE THE CONTRACTOR OF HIS DESIGN RESPONSIBILITIES.
12. THE CONTRACTOR SHALL MAINTAIN FREE AND OPEN ACCESS TO PUBLIC HIGHWAY AND ADJACENT LANDS AT ALL TIMES DURING THE COURSE OF THE WORKS UNLESS OTHERWISE AGREED IN WRITING WITH THE INTERESTED PARTIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TRAFFIC MANAGEMENT PROPOSALS & PHASING. SUCH DETAILS SHALL BE SUBMITTED TO THE LOCAL HIGHWAY AUTHORITY FOR APPROVAL PRIOR TO THE START OF THE WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS AND ORDERS.

KEY:

2.4 X 43m VIS SPLAY

REV	DATE	BY	DESCRIPTION	CHK	APP
A	NYI	RJ	FIRST ISSUE	ECC	LB

DRAWING STATUS: S2 - FOR INFORMATION

wsp
Mountbatten House, Basing View, Basingstoke, RG21 4HJ, UK
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT: PROLOGIS UK LTD

ARCHITECT: MICHAEL SPARKS ASSOCIATES

SITE/PROJECT: GSK SITE, STOCKLEY PARK, HILLINGDON

TITLE: ACCESS VISIBILITY SPLAYS

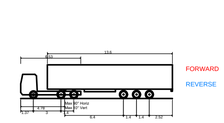
SCALE @ A1:	CHECKED:		APPROVED:
1:250	ECC		LB
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70060721	RJ	RJ	June 20

DRAWING No: 70060721-SK-005 REV: A

DO NOT SCALE

NOTES

1. THIS GENERAL ARRANGEMENT IS NOT TO BE USED FOR CONSTRUCTION. IT IS A COMPOSITE DRAWING SHOWING THE SPATIAL RELATIONSHIP BETWEEN THE PROPOSED AND EXISTING FEATURES. REFERENCE SHOULD BE MADE TO THE RELEVANT SPECIFIC CONSTRUCTION PLANS. GENERALLY SHOWN ON RP (ROAD PAVING) AND D (DRAINAGE) DRAWING.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTATION, DRAWINGS AND STANDARD DETAILS.
3. THE DESIGN HAS BEEN DEVELOPED & AGREED THROUGH CONSULTATION WITH THE THE RELEVANT AUTHORITIES (HIGHWAYS, SEWERAGE, PLANNING AND SAB).
4. IN ACCORDANCE WITH THE CDM REGULATIONS RESIDUAL RISKS OF SIGNIFICANCE ARE INDICATED ON THE GA DRAWING ONLY BY MEANS OF A HAZARD TRIANGLE WITH APPROPRIATE NOTE.
5. INFORMATION REGARDING THE LOCATION AND DEPTH OF EXISTING SERVICES CANNOT BE GUARANTEED BY THE STATUTORY UNDERTAKER.
6. THE CONTRACTOR SHALL CONDUCT THE WORKS WITH DUE REGARD TO THE ECOLOGICAL, ENVIRONMENTAL REQUIREMENTS OF THE SCHEME.
7. THE CONTRACTOR SHALL TAKE SUCH STEPS TO SAFEGUARD AGAINST CONTAMINATION OF LOCAL WATERCOURSES.
8. CONFLICTING INFORMATION SHOWN ON THE ENGINEER'S DRAWINGS OR DISCREPANCIES BETWEEN THE INFORMATION GIVEN BY THE ENGINEER AND THAT PROVIDED BY OTHERS MUST BE REFERRED TO THE ENGINEER BEFORE THE WORKS COMMENCE.
9. DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING. ALL DIMENSIONS SHOWN ARE IN METRES. DIMENSIONS MARKED 'DIMENSIONS TO BE SITE CHECKED' ARE SUBJECT TO CONFIRMATION BY THE CONTRACTOR BEFORE THE WORKS COMMENCE.
10. TEMPORARY WORKS DESIGN ASSOCIATED WITH THE CONSTRUCTION OF THE WORKS SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
11. CALCULATIONS AND DRAWINGS OF ALL CONTRACTOR DESIGNED ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR COMMENTS / APPROVALS NOT LESS THAN 10 DAYS PRIOR TO CONSTRUCTION. ANY COMMENTS MADE BY THE ENGINEER DO NOT ABSOLVE THE CONTRACTOR OF HIS DESIGN RESPONSIBILITIES.
12. THE CONTRACTOR SHALL MAINTAIN FREE AND OPEN ACCESS TO PUBLIC HIGHWAY AND ADJACENT LANDS AT ALL TIMES DURING THE COURSE OF THE WORKS UNLESS OTHERWISE AGREED IN WRITING WITH THE INTERESTED PARTIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TRAFFIC MANAGEMENT PROPOSALS & PHASING. SUCH DETAILS SHALL BE SUBMITTED TO THE LOCAL HIGHWAY AUTHORITY FOR APPROVAL PRIOR TO THE START OF THE WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS AND ORDERS.



Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	4.000m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

REV	DATE	BY	DESCRIPTION	CHK	APP
A	NYI	RJ	FIRST ISSUE	ECC	LB

DRAWING STATUS: S2 - FOR INFORMATION

wsp
Mountbatten House, Basing View, Basingstoke, RG21 4HJ, UK
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT: PROLOGIS UK LTD

ARCHITECT: MICHAEL SPARKS ASSOCIATES

SITE/PROJECT: GSK SITE, STOCKLEY PARK, HILLINGDON

TITLE: SERVICING YARDS
HGV SWEPT PATH ANALYSIS

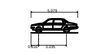
SCALE @ A1:	CHECKED:		APPROVED:
1:250	ECC		LB
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70060721	RJ	RJ	June 20

DRAWING No: 70060721-ATR-005 REV: A

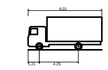
DO NOT SCALE

NOTES

1. THIS GENERAL ARRANGEMENT IS NOT TO BE USED FOR CONSTRUCTION. IT IS A COMPOSITE DRAWING SHOWING THE SPATIAL RELATIONSHIP BETWEEN THE PROPOSED AND EXISTING FEATURES. REFERENCE SHOULD BE MADE TO THE RELEVANT SPECIFIC CONSTRUCTION PLANS. GENERALLY SHOWN ON RP (ROAD PAVING) AND D (DRAINAGE) DRAWING.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTATION, DRAWINGS AND STANDARD DETAILS.
3. THE DESIGN HAS BEEN DEVELOPED & AGREED THROUGH CONSULTATION WITH THE THE RELEVANT AUTHORITIES (HIGHWAYS, SEWERAGE, PLANNING AND SAB).
4. IN ACCORDANCE WITH THE CDM REGULATIONS RESIDUAL RISKS OF SIGNIFICANCE ARE INDICATED ON THE GA DRAWING ONLY BY MEANS OF A HAZARD TRIANGLE WITH APPROPRIATE NOTE.
5. INFORMATION REGARDING THE LOCATION AND DEPTH OF EXISTING SERVICES CANNOT BE GUARANTEED BY THE STATUTORY UNDERTAKER.
6. THE CONTRACTOR SHALL CONDUCT THE WORKS WITH DUE REGARD TO THE ECOLOGICAL, ENVIRONMENTAL REQUIREMENTS OF THE SCHEME.
7. THE CONTRACTOR SHALL TAKE SUCH STEPS TO SAFEGUARD AGAINST CONTAMINATION OF LOCAL WATERCOURSES.
8. CONFLICTING INFORMATION SHOWN ON THE ENGINEER'S DRAWINGS OR DISCREPANCIES BETWEEN THE INFORMATION GIVEN BY THE ENGINEER AND THAT PROVIDED BY OTHERS MUST BE REFERRED TO THE ENGINEER BEFORE THE WORKS COMMENCE.
9. DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING. ALL DIMENSIONS SHOWN ARE IN METRES. DIMENSIONS MARKED 'DIMENSIONS TO BE SITE CHECKED' ARE SUBJECT TO CONFIRMATION BY THE CONTRACTOR BEFORE THE WORKS COMMENCE.
10. TEMPORARY WORKS DESIGN ASSOCIATED WITH THE CONSTRUCTION OF THE WORKS SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
11. CALCULATIONS AND DRAWINGS OF ALL CONTRACTOR DESIGNED ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR COMMENTS / APPROVALS NOT LESS THAN 10 DAYS PRIOR TO CONSTRUCTION. ANY COMMENTS MADE BY THE ENGINEER DO NOT ABSOLVE THE CONTRACTOR OF HIS DESIGN RESPONSIBILITIES.
12. THE CONTRACTOR SHALL MAINTAIN FREE AND OPEN ACCESS TO PUBLIC HIGHWAY AND ADJACENT LANDS AT ALL TIMES DURING THE COURSE OF THE WORKS UNLESS OTHERWISE AGREED IN WRITING WITH THE INTERESTED PARTIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TRAFFIC MANAGEMENT PROPOSALS & PHASING. SUCH DETAILS SHALL BE SUBMITTED TO THE LOCAL HIGHWAY AUTHORITY FOR APPROVAL PRIOR TO THE START OF THE WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS AND ORDERS.



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.264m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.261m
Track Width	2.064m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

REV	DATE	BY	DESCRIPTION	CHK	APP
A	NYI	RJ	FIRST ISSUE	ECC	LB

DRAWING STATUS: S2 - FOR INFORMATION

wsp
Mountbatten House, Basing View, Basingstoke, RG21 4HJ, UK
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT: PROLOGIS UK LTD

ARCHITECT: MICHAEL SPARKS ASSOCIATES

SITE/PROJECT: GSK SITE, STOCKLEY PARK, HILLINGDON

TITLE: CAR PARKING SWEPT PATH ANALYSIS

SCALE @ A1:	CHECKED:	APPROVED:
1:250	ECC	LB

PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70060721	RJ	RJ	June 20

DRAWING No: 70060721-ATR-006 REV: A

DO NOT SCALE

NOTES

1. THIS GENERAL ARRANGEMENT IS NOT TO BE USED FOR CONSTRUCTION. IT IS A COMPOSITE DRAWING SHOWING THE SPATIAL RELATIONSHIP BETWEEN THE PROPOSED AND EXISTING FEATURES. REFERENCE SHOULD BE MADE TO THE RELEVANT SPECIFIC CONSTRUCTION PLANS. GENERALLY SHOWN ON RP (ROAD PAVING) AND D (DRAINAGE) DRAWING.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTATION, DRAWINGS AND STANDARD DETAILS.
3. THE DESIGN HAS BEEN DEVELOPED & AGREED THROUGH CONSULTATION WITH THE THE RELEVANT AUTHORITIES (HIGHWAYS, SEWERAGE, PLANNING AND SAB).
4. IN ACCORDANCE WITH THE CDM REGULATIONS RESIDUAL RISKS OF SIGNIFICANCE ARE INDICATED ON THE GA DRAWING ONLY BY MEANS OF A HAZARD TRIANGLE WITH APPROPRIATE NOTE.
5. INFORMATION REGARDING THE LOCATION AND DEPTH OF EXISTING SERVICES CANNOT BE GUARANTEED BY THE STATUTORY UNDERTAKER.
6. THE CONTRACTOR SHALL CONDUCT THE WORKS WITH DUE REGARD TO THE ECOLOGICAL, ENVIRONMENTAL REQUIREMENTS OF THE SCHEME.
7. THE CONTRACTOR SHALL TAKE SUCH STEPS TO SAFEGUARD AGAINST CONTAMINATION OF LOCAL WATERCOURSES.
8. CONFLICTING INFORMATION SHOWN ON THE ENGINEER'S DRAWINGS OR DISCREPANCIES BETWEEN THE INFORMATION GIVEN BY THE ENGINEER AND THAT PROVIDED BY OTHERS MUST BE REFERRED TO THE ENGINEER BEFORE THE WORKS COMMENCE.
9. DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING. ALL DIMENSIONS SHOWN ARE IN METRES. DIMENSIONS MARKED 'DIMENSIONS TO BE SITE CHECKED' ARE SUBJECT TO CONFIRMATION BY THE CONTRACTOR BEFORE THE WORKS COMMENCE.
10. TEMPORARY WORKS DESIGN ASSOCIATED WITH THE CONSTRUCTION OF THE WORKS SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
11. CALCULATIONS AND DRAWINGS OF ALL CONTRACTOR DESIGNED ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR COMMENTS / APPROVALS NOT LESS THAN 10 DAYS PRIOR TO CONSTRUCTION. ANY COMMENTS MADE BY THE ENGINEER DO NOT ABSOLVE THE CONTRACTOR OF HIS DESIGN RESPONSIBILITIES.
12. THE CONTRACTOR SHALL MAINTAIN FREE AND OPEN ACCESS TO PUBLIC HIGHWAY AND ADJACENT LANDS AT ALL TIMES DURING THE COURSE OF THE WORKS UNLESS OTHERWISE AGREED IN WRITING WITH THE INTERESTED PARTIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TRAFFIC MANAGEMENT PROPOSALS & PHASING. SUCH DETAILS SHALL BE SUBMITTED TO THE LOCAL HIGHWAY AUTHORITY FOR APPROVAL PRIOR TO THE START OF THE WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS AND ORDERS.

Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.50s
Kerb to Kerb Turning Radius	9.500m

REV	DATE	BY	DESCRIPTION	CHK	APP
A	NYI	RJ	FIRST ISSUE	ECC	LB

DRAWING STATUS: S2 - FOR INFORMATION

wsp
Mountbatten House, Basing View, Basingstoke, RG21 4HJ, UK
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT: PROLOGIS UK LTD

ARCHITECT: MICHAEL SPARKS ASSOCIATES

SITE/PROJECT: GSK SITE, STOCKLEY PARK, HILLINGDON

TITLE: SERVICING YARDS
REFUSE VEHICLE SWEPT PATH ANALYSIS

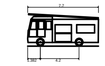
SCALE @ A1:	CHECKED:		APPROVED:
1:250	ECC		LB
PROJECT NO: 70060721	DESIGNED: RJ	DRAWN: RJ	DATE: June 20

DRAWING No: 70060721-ATR-007 REV: A

DO NOT SCALE

NOTES

1. THIS GENERAL ARRANGEMENT IS NOT TO BE USED FOR CONSTRUCTION. IT IS A COMPOSITE DRAWING SHOWING THE SPATIAL RELATIONSHIP BETWEEN THE PROPOSED AND EXISTING FEATURES. REFERENCE SHOULD BE MADE TO THE RELEVANT SPECIFIC CONSTRUCTION PLANS. GENERALLY SHOWN ON RP (ROAD PAVING) AND D (DRAINAGE) DRAWING.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTATION, DRAWINGS AND STANDARD DETAILS.
3. THE DESIGN HAS BEEN DEVELOPED & AGREED THROUGH CONSULTATION WITH THE THE RELEVANT AUTHORITIES (HIGHWAYS, SEWERAGE, PLANNING AND SAB).
4. IN ACCORDANCE WITH THE CDM REGULATIONS RESIDUAL RISKS OF SIGNIFICANCE ARE INDICATED ON THE GA DRAWING ONLY BY MEANS OF A HAZARD TRIANGLE WITH APPROPRIATE NOTE.
5. INFORMATION REGARDING THE LOCATION AND DEPTH OF EXISTING SERVICES CANNOT BE GUARANTEED BY THE STATUTORY UNDERTAKER.
6. THE CONTRACTOR SHALL CONDUCT THE WORKS WITH DUE REGARD TO THE ECOLOGICAL, ENVIRONMENTAL REQUIREMENTS OF THE SCHEME.
7. THE CONTRACTOR SHALL TAKE SUCH STEPS TO SAFEGUARD AGAINST CONTAMINATION OF LOCAL WATERCOURSES.
8. CONFLICTING INFORMATION SHOWN ON THE ENGINEER'S DRAWINGS OR DISCREPANCIES BETWEEN THE INFORMATION GIVEN BY THE ENGINEER AND THAT PROVIDED BY OTHERS MUST BE REFERRED TO THE ENGINEER BEFORE THE WORKS COMMENCE.
9. DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING. ALL DIMENSIONS SHOWN ARE IN METRES. DIMENSIONS MARKED 'DIMENSIONS TO BE SITE CHECKED' ARE SUBJECT TO CONFIRMATION BY THE CONTRACTOR BEFORE THE WORKS COMMENCE.
10. TEMPORARY WORKS DESIGN ASSOCIATED WITH THE CONSTRUCTION OF THE WORKS SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
11. CALCULATIONS AND DRAWINGS OF ALL CONTRACTOR DESIGNED ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR COMMENTS / APPROVALS NOT LESS THAN 10 DAYS PRIOR TO CONSTRUCTION. ANY COMMENTS MADE BY THE ENGINEER DO NOT ABSOLVE THE CONTRACTOR OF HIS DESIGN RESPONSIBILITIES.
12. THE CONTRACTOR SHALL MAINTAIN FREE AND OPEN ACCESS TO PUBLIC HIGHWAY AND ADJACENT LANDS AT ALL TIMES DURING THE COURSE OF THE WORKS UNLESS OTHERWISE AGREED IN WRITING WITH THE INTERESTED PARTIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TRAFFIC MANAGEMENT PROPOSALS & PHASING. SUCH DETAILS SHALL BE SUBMITTED TO THE LOCAL HIGHWAY AUTHORITY FOR APPROVAL PRIOR TO THE START OF THE WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS AND ORDERS.



FORWARD
REVERSE

Dennis Sabre Fire Tender (LWB)

Overall Length	7.700m
Overall Width	2.500m
Overall Body Height	3.410m
Min Body Ground Clearance	0.397m
Track Width	2.360m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m

REV	DATE	BY	DESCRIPTION	CHK	APP
A	NY|	RJ	FIRST ISSUE	ECC	LB

DRAWING STATUS: S2 - FOR INFORMATION

wsp

Mountbatten House, Basing View, Basingstoke, RG21 4HJ, UK
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT: PROLOGIS UK LTD

ARCHITECT: MICHAEL SPARKS ASSOCIATES

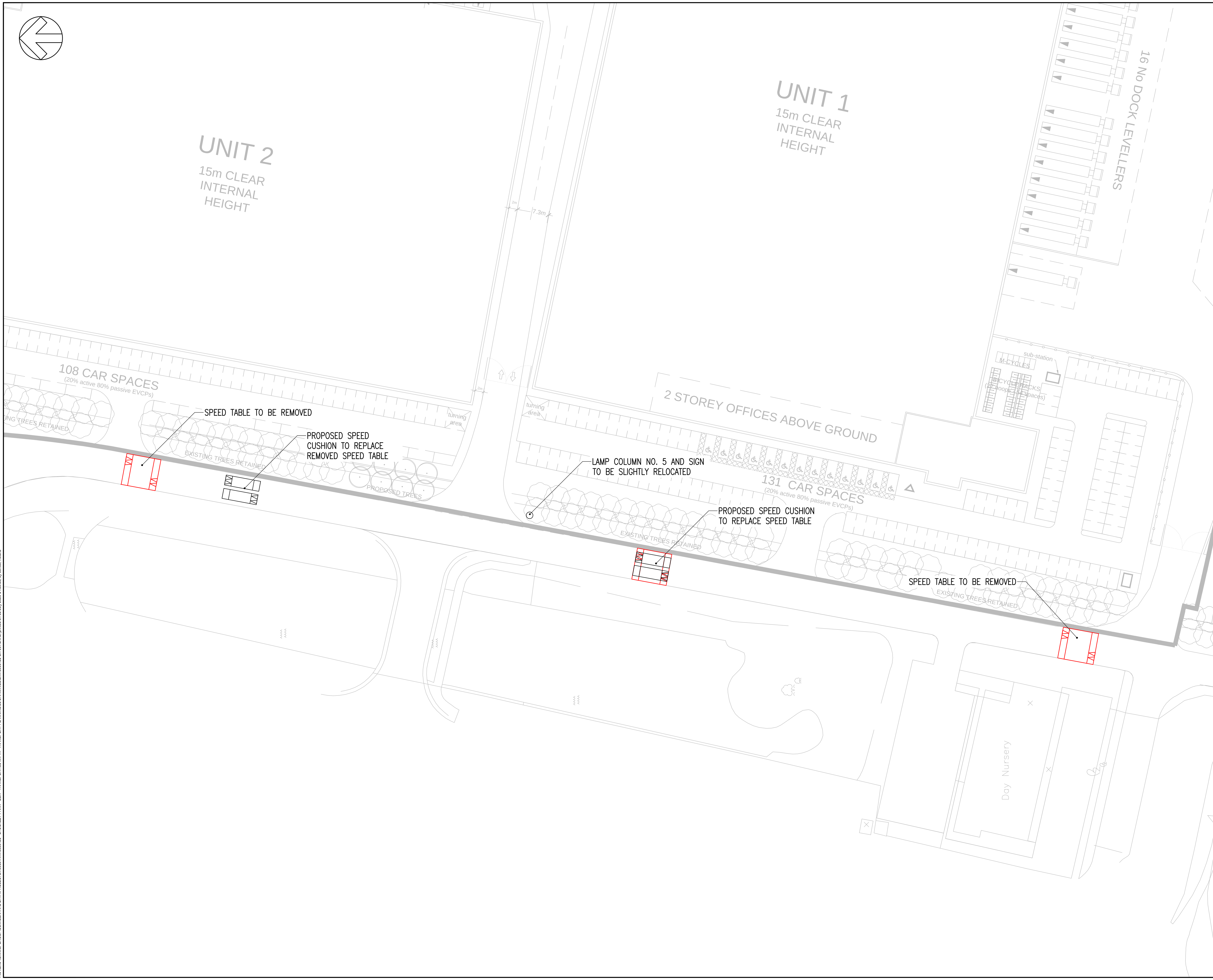
SITE/PROJECT: GSK SITE, STOCKLEY PARK, HILLINGDON

TITLE: FIRE TENDER SWEPT PATH ANALYSIS

SCALE @ A1:	CHECKED:	APPROVED:
1:250	ECC	LB

PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70060721	RJ	RJ	June 20

DRAWING No: 70060721-ATR-008 REV: A



DO NOT SCALE

NOTE:

1. POSITION/DESIGN OF SPEED TABLES TAKEN FROM LBH DRAWING 2826/001/01A REV B.

REV	DATE	BY	DESCRIPTION	CHK	APP
A	02/07/20	RJ	FIRST ISSUE	ECC	LB

DRAWING STATUS: S2 - FOR INFORMATION

wsp

Mountbatten House, Basing View, Basingstoke, RG21 4HJ, UK
T+ 44 (0) 1256 318 800, F+ 44 (0) 1256 318 700
wsp.com

CLIENT: PROLOGIS UK LTD

ARCHITECT: MICHAEL SPARKS ASSOCIATES

SITE/PROJECT: GSK SITE, STOCKLEY PARK, HILLINGDON

TITLE: IRON BRIDGE ROAD NORTH PROPOSALS

SCALE @ A1: 1:400	CHECKED: ECC		APPROVED: LB
PROJECT NO: 70060721	DESIGNED: RJ	DRAWN: RJ	DATE: July 20
DRAWING No: 70060721-SK-007			REV: A

File name:\\UK.WSPGROUP.COM\CENTRAL DATA\PROJECTS\70060XXX\70060721 - STOCKLEY PARK - GSK - TRANSPORT\03 WIP\TP TRANSPORT PLANNING\03 DRAWINGS\SK\70060721-SK-007.DWG, printed on 02 July 2020 14:30:36, by Jones, Roland

Appendix A

SITE MASTERPLAN

NOTES:

SUBJECT TO STATUTORY CONSENTS

SUBJECT TO SURVEY

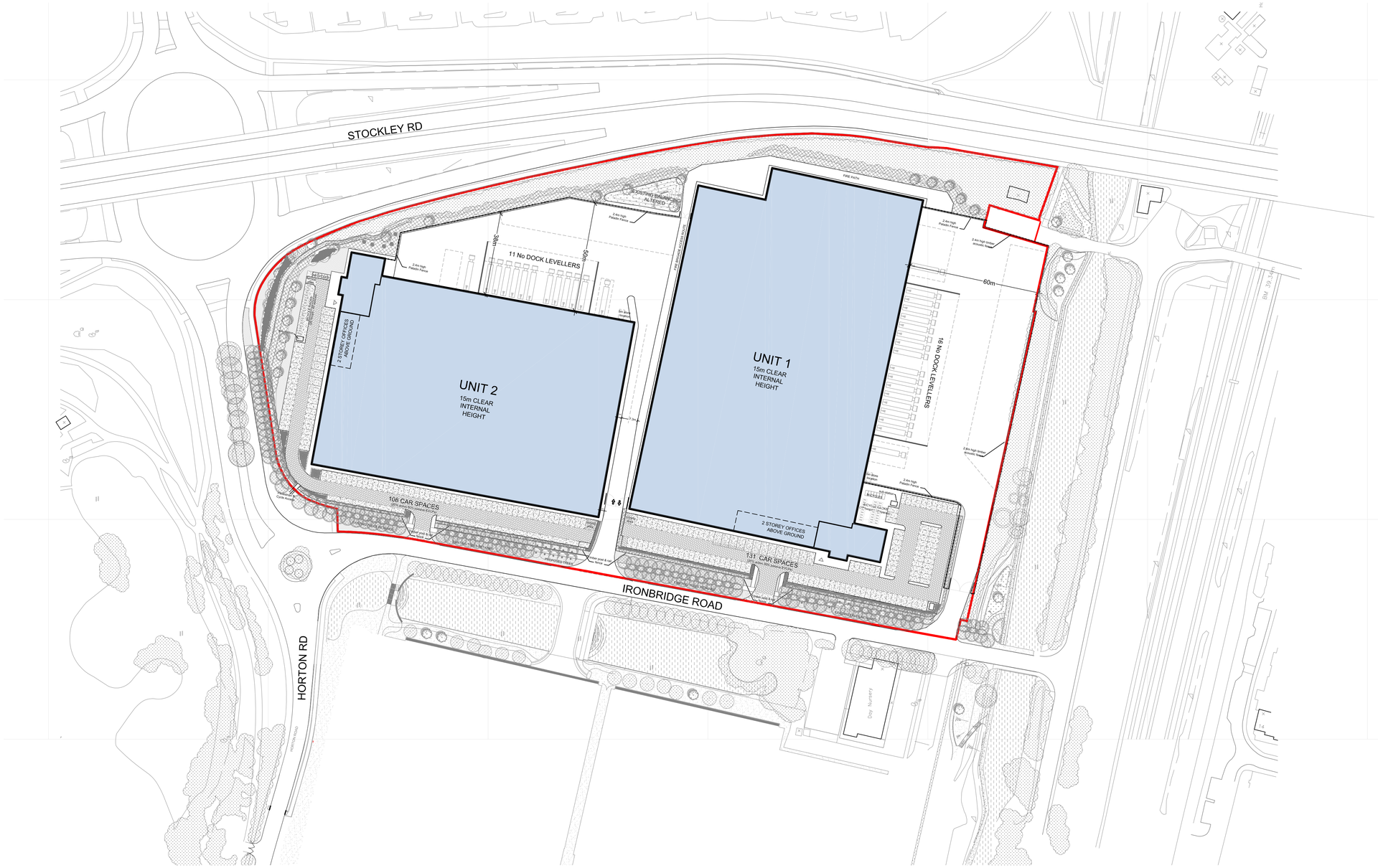
BASED ON OS MAP REPRODUCED BY PERMISSION OF CONTROLLER OF HM STATIONARY OFFICE (c) CROWN COPYRIGHT

DO NOT USE ELECTRONIC VERSIONS OF THIS DRAWING TO DETERMINE DIMENSIONS UNLESS SPECIFICALLY AUTHORISED BY MICHAEL SPARKS ASSOCIATES

IF USING AN ELECTRONIC VERSION OF THIS DRAWING FIGURED DIMENSIONS TAKE PRECEDENCE AND NOTIFY MICHAEL SPARKS ASSOCIATES OF ANY DISCREPANCIES

N

BASED ON GREENHATCH SURVEY
REF: 33865_T REV 0
DATED: 24.06.19



01/201 SITE LAYOUT
1:1000

0 25 50 100m

REV	DATE	NOTE	DRAW	CHCK
B	29.06.20	Landscaping, fencing & bin store locations added.	sd	ss/ms
A	23.06.20	Office areas amended.	sd	ss/ms

MICHAEL SPARKS ASSOCIATES
CHARTERED ARCHITECTS
11 PLATO PLACE
ST.DIONIS ROAD
LONDON SW6 4TU
TELEPHONE 020 7736 6162
www.msa-architects.co.uk

PROLOGIS

TITLE
IRONBRIDGE ROAD, HAYES

DRAWING
SITE LAYOUT PLAN

CLIENT
PROLOGIS UK LTD

DATE	SCALE	DRAWN
JUNE 2020	1:1000@A1	PF
	STATUS: PLANNING	CHECKED: MS/GZ/SD

DRAWING NUMBER
30928-PL-201B

Appendix B

TRANSPORT SCOPING REPORT

Prologis UK Ltd.

GSK SITE, STOCKLEY PARK, WEST DRAYTON

Transport Assessment Scoping Report

70060721-TSR
FEBRUARY 2020

PUBLIC

Prologis UK Ltd.

GSK SITE, STOCKLEY PARK, WEST DRAYTON

Transport Assessment Scoping Report

FINAL (V1) PUBLIC

PROJECT NO. 70060721

OUR REF. NO. 70060721-TSR

DATE: FEBRUARY 2020

WSP

Mountbatten House
Basing View
Basingstoke, Hampshire
RG21 4HJ

Phone: +44 1256 318 800

Fax: +44 1256 318 700

WSP.com

QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Draft for Client Review	Final		
Date	February 2020	26 February 2020		
Prepared by	Elena Cristobal	Elena Cristobal		
Signature				
Checked by	Alex Smith	Alex Smith		
Signature				
Authorised by	Laura Bazley	Laura Bazley		
Signature				
Project number	70060721	70060721		
Report number	70060721-TSR	70060721-TSR		
File reference	\\uk.wspgroup.com\Central Data\Projects\700607xx\70060721 - Stockley Park - GSK - Transport\03 WIP\TP Transport Planning\05 Reports\01. Transport Scoping Report\02. Reviewed from Clients Comments\200226_Stockley Park_Scoping Report_FINAL.docx			

CONTENTS

1 PREAMBLE 3

1.1 INTRODUCTION 3
1.2 REPORT STRUCTURE 4

2 PROPOSED DEVELOPMENT INTRODUCTION 5

2.1 TRANSPORT PRINCIPLES 5
2.2 POLICY CONTEXT 5

3 SITE SURROUNDINGS AND DEVELOPMENT PROPOSALS 9

3.1 INTRODUCTION 9
3.2 SITE LOCATION AND SURROUNDINGS 9
3.3 PROPOSED DEVELOPMENT TRANSPORT STRATEGIES 9
3.4 SUMMARY 11

4 LOCAL CONTEXT: EXISTING CONDITIONS AND ACTIVE TRAVEL ZONE ASSESSMENT 13

4.1 ACTIVE TRAVEL ZONE DEFINITION 13
4.2 ATZ KEY LOCATIONS AND SERVICES (MAP 1) 13
4.3 ATZ MOST IMPORTANT JOURNEYS AND NEIGHBOURHOOD SAFETY (MAP 2) 14
4.4 ATZ NEIGHBOURHOOD HEALTHY CHARACTERISTICS (MAP 3) 14

5 WIDER CONTEXT: IMPACT ON LONDON-WIDE NETWORK 15

5.1 INTRODUCTION 15
5.2 BASELINE TRAFFIC GENERATION 15
5.3 FORECAST TRAFFIC GENERATION 16
5.4 PROPOSED DEVELOPMENT IMPACT 17

6 MITIGATION, ADDITIONAL ANALYSIS AND SUPPORTING TRANSPORT DOCUMENTS 18

6.1 SUPPORTING ANALYSIS 18

6.2 FRAMEWORK TRAVEL PLAN 18

6.3 OUTLINE CONSTRUCTION LOGISTICS PLAN 20

6.4 OUTLINE DELIVERY AND SERVICING PLAN 21

7 SUMMARY AND CONCLUSION 23

7.1 SUMMARY 23

TABLES

Table 3-1 – LBH's Car Parking Standards 10

Table 3-2 – Cycle Parking Standards 11

Table 5-1 – Baseline Vehicular Trip Generation 15

Table 5-2 – Prologis Park Heathrow, Vehicular Trip Rate per 100sqm GIA 16

Table 5-3 – Forecast Vehicular Trip Generation (31,000sqm GIA) 16

Table 5-4 – Forecast Net Vehicular Impact 17

Table 7-1 – TA Scoping Report Summary table 23

FIGURES

Figure 1-1 – Site Location 3

Figure 2-1 - Healthy Streets Indicators 6

Figure 6-1 – Easit Travel Scheme Initiatives 19

APPENDICES

APPENDIX A

BASELINE PTAL REPORT

APPENDIX B

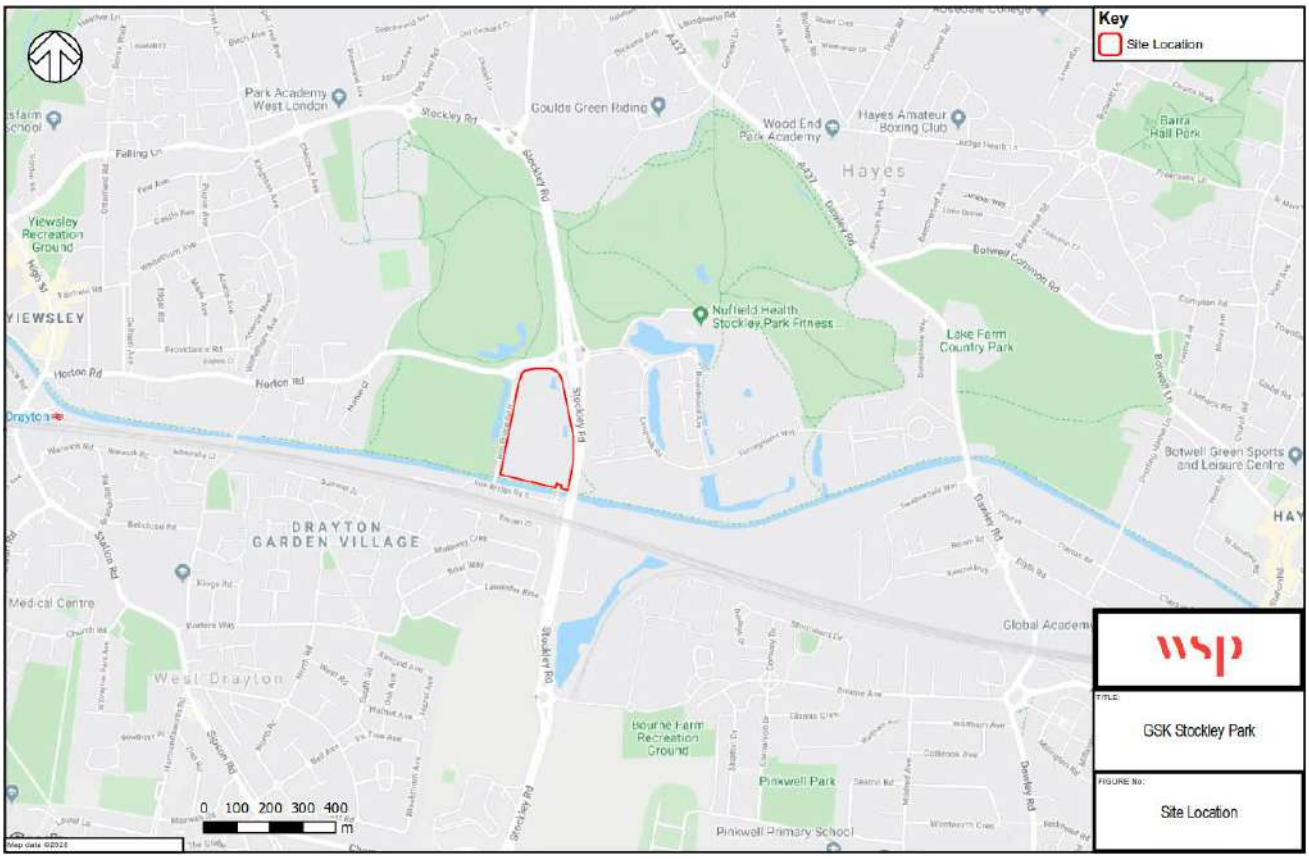
SITE ACCESS MCC RESULTS

1 PREAMBLE

1.1 INTRODUCTION

1.1.1. WSP have been appointed by Prologis UK Ltd ("Prologis") to provide transport and highways advice in relation to a site being considered for redevelopment on land at Iron Bridge Road North, within the London Borough of Hillingdon (LBH). The Site, currently occupied by GSK at the Stockley Park business unit shown in **Figure 1-1**, is being considered for redevelopment to change the use of the Site from B1(a) offices to a mixed B1(c) and B8 industrial land use, and will herein be referred to as the Proposed Development.

Figure 1-1 – Site Location



1.1.2. The Site currently comprises three large office buildings totalling approximately 31,575 sqm of Class B1(a) floorspace. The buildings are surrounded by surface level car parking and in the south-eastern corner of the Site there is also a multi-storey car park. The Site is bordered by trees and landscaping along each of the Site boundaries, helping to screen the Site from the surrounding highways. The Site is currently accessed from one vehicular and pedestrian access from Iron Bridge Road North.

1.1.3. This Transport Scoping Report (TSR) has been produced to define the level of assessment to be undertaken in support of the Proposed Development with regard to transport, considering LBH policy requirements alongside Transport for London's (TfL) new Healthy Streets approach for the structure to follow when assessing the transport impacts of a development within London.

1.1.4. This TSR is envisaged to support pre-application conversations with LBH and, if necessary, TfL, and in particular, regarding the potential impacts of the Proposed Development on the adjacent highway network as detailed in Chapter 5.

1.1.5. In accordance with the above, in order to ease pre-application conversations and to agree the transport key elements of the Proposed Development, this TSR sets out the principles to determine the scope and approach of the Transport Assessment (TA) that will be prepared in support of the Proposed Development.

1.2 REPORT STRUCTURE

1.2.1. The remainder of this TSR is comprised of chapters which reflect the proposed structure for the detailed TA, which has been guided following '*Healthy Streets TA Recommended Contents & Chapters*' (TfL, June 2019), as follows:

- Chapter 2 - Proposed Development Introduction;
- Chapter 3 - Site Surroundings and Proposed Development;
- Chapter 4 - Local context: Active Travel Zone assessment;
- Chapter 5 - Wider context: impact on London-wide network;
- Chapter 6 - Mitigation, further analysis and supporting documents; and
- Chapter 7 - Summary and Conclusions.

1.2.2. It should be noted that the Transport Planning for People chapter that was formerly suggested to be introduced in all Healthy Streets TAs has been recently removed from TfL's requirements, as advised by TfL via pre-application responses to other schemes across London, even though this has not yet formally been reflected in an updated version of '*Healthy Streets TA Recommended Contents & Chapters*'. Therefore, in order to follow latest TfL's advice, the Transport Planning for People chapter will not be included in the TA prepared in support of the Proposed Development.

1.2.3. TfL's Healthy Streets recommended structure suggests a specific chapter to be introduced which would deal with any additional LBH's analysis. However, as the Proposed Development will be primarily reviewed against LBH policy, guidance and standards in the first instance; relevant LBH information will be considered in combination with regional strategy throughout the TA and supporting documents.

2 PROPOSED DEVELOPMENT INTRODUCTION

2.1 TRANSPORT PRINCIPLES

2.1.1. Within LBH's recently adopted Local Plan Part 2 (LPP2) the Site has been designated as a 'Locally Significant Employment Location'. In keeping with this employment allocation and in order to meet current market demands as explained by Prologis, the Proposed Development aims to change the current land use of the Site from offices to industrial uses.

2.1.2. As outlined in Chapter 1, the Site is located on Iron Bridge Road North and is being considered for redevelopment to provide approximately 31,000sqm GFA (Gross Floor Area) of mixed B1(c) and B8 industrial land use. The Site location can be seen in **Figure 1-1**.

2.1.3. The access, internal road layout, servicing strategy and parking strategy for the Proposed Development are all still being developed in tandem with the expected future users' requirements. The development will seek to minimise the number of vehicles generated by considering LBH's Local Plan (as further detailed in the below sections), TfL's and the Mayor's transport objectives, and the Intend to Publish London Plan (December 2019) policies. How the Proposed Development will meet these strategies is explained in more detail within Chapter 3 of this TSR.

2.1.4. Following from the above, this section of the final TA will provide a detailed summary of the Proposed Development quantum and of the transport contributions to the Site masterplan.

2.2 POLICY CONTEXT

2.2.1. The TA will consider 'Travel Plans, Transport Assessment and Statements' from the Ministry of Housing, Communities and Local Government published in March 2014, the National Planning Policy Framework (NPPF) (February 2019), the Intend to Publish (ITP) version of the London Plan (December 2019), the Mayor's Transport Strategy (2018), and the recently published 'Healthy Streets TA Recommended Contents & Chapters' guidance produced by TfL (June 2019) as mentioned in Chapter 1.

2.2.2. In addition to the above national and regional policy, local policy will also be reviewed including:

- LBH's Local Plan Part 1 and Part 2, and
- LBH Local Implementation Plan.

2.2.3. The local policy will be given consideration so that the Proposed Development is in line with all policy objectives adopted for the area.

2.2.4. As such, this section of the TA will outline how the Proposed Development will support both LBH policy and TfL's Healthy Streets approach, which also includes consideration to the Vision Zero initiative and the Mayor's Transport Strategy.

2.2.5. A summary of envisaged principles that will be covered by the Proposed Development on the above grounds is given below.

Healthy Streets

2.2.6. TfL's Healthy Streets approach is one of the core themes of the ITP version of the London Plan and the Mayor's Transport Strategy.

2.2.7. Healthy Streets demonstrates the health benefits of more inclusive and healthier street environments which are aimed to encourage a more active lifestyle. According to Healthy Streets, the street environment should be pleasant and sustainable to enable people to safely walk, cycle and use public transport.

2.2.8. Policy T2 Healthy Streets of the ITP London Plan outlines that:

> '*Development proposals should:*
>
> - *Demonstrate how they will deliver improvements that support the ten Healthy Streets indicators in line with TfL guidance.*
> - *Reduce the dominance of vehicles on London's streets whether stationary or moving.*
> - *Be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.'*

2.2.9. The ten Healthy Streets indicators are illustrated in **Figure 2-1** below.

Figure 2-1 - Healthy Streets Indicators

Source: Lucy Saunders

2.2.10. The Proposed Development will consider the ten Healthy Streets indicators and will aim to achieve headline policy objectives.

Vision Zero

2.2.11. Vision Zero is a key and ambitious element of the Mayor's Transport Strategy (March 2018). With Vision Zero, the Mayor aims to eliminate all deaths and serious injuries on London's street network by 2041. This is an initiative being taken in major cities across the world and, within London, the following elements are the cornerstones of the Vision Zero Action Plan:

- **Safe speeds** – encouraging speeds appropriate to the streets of a busy and populated city through the widespread introduction of new lower speed limits.
- **Safe streets** – designing an environment that is forgiving of mistakes by transforming junctions, which see the majority of collisions, and ensuring safety is at the forefront of all design schemes.
- **Safe vehicles** – reducing risk posed by the most dangerous vehicles by introducing a world-leading Bus Safety Standard across London's entire bus fleet and a new 'Direct Vision Standard' for HGVs.
- **Safe behaviours** – reducing the likelihood of road users making mistakes or behaving in a way that is risky for themselves and other people through targeted enforcement, marketing campaigns, education programmes and safety training for cyclists, motorcycle and moped riders.
- **Post-collision response** – developing systematic information sharing and learning, along with improving justice and care for the victims of traffic incidents.

2.2.12. The Proposed Development will assist achieving the Vision Zero target by contributing to a reduction of traffic on the road network during peak hours where the highway network suffers from a higher pressure, as detailed further in Chapter 5.

Mayor's Transport Strategy

2.2.13. The Mayor's Transport Strategy was produced in 2018 and incorporates both the Healthy Streets and Vision Zero approaches, aiming to achieve:

- Active, inclusive and safe travel choices.
- A more efficient use of the street network.
- Improvements to air quality and the environment.

2.2.14. Good Growth is a key concept of the Mayor's Transport Strategy and involves ensuring that people have travel options other than driving. Indeed, Policy 21 states that:

> *'The Mayor, through TfL and the boroughs, and working with stakeholders, will ensure that new homes and jobs in London are delivered in line with the transport principles of Good Growth for current and future Londoners by using transport to:*
>
> *a) Create high density, mixed-use places, and*
>
> *b) Unlock growth potential in underdeveloped parts of the city.'*

2.2.15. There are seven key transport principles of Good Growth. How the Proposed Development is envisaged to achieve each of these is outlined as follows:

- **Access to public transport:** The Site benefits from a Public Transport Accessibility Level (PTAL) rating of 2 at the current access point. It is in close proximity to bus services and within cycling distance to London Overground and National Rail services (10-minute cycling distance).
- **People choose to walk and cycle:** The existing infrastructure around the Site lends itself to short journey distances on foot or by bicycle to / from public transport services and residential areas which can potentially be the origin of employees of the Site. The on-site cycling facilities (such as cycle parking, storage and showers) will further encourage cycling as a viable modal choice.
- **Car-free and car-lite places:** The Proposed Development is proposed to be car-lite as defined within ITP London Plan and further detailed in Section 3.3 of this TSR.
- **Inclusive, accessible design:** Accessible cycle parking is proposed to be provided in accordance with ITP London Plan requirements. All elements of the Proposed Development will be wheelchair accessible at ground level, with lifts providing connections to ancillary office on first floors.

- **Carbon-free travel:** ITP London Plan policies and LBH's requirements regarding electric vehicles charging points (EVCP) will be incorporated into the design.
- **Efficient freight:** A Delivery and Servicing Plan will be prepared outlining management measures to manage freight efficiently as detailed in Section 6.4.

London Borough of Hillingdon Local Plan Parts 1 and 2

2.2.16. A review of the pertinent transport policies included in LBH's recently adopted Local Plan will be undertaken within the TA. The policies to be reviewed (although the below is not an exhaustive list) are as follows:

- Policy DMT 1: Managing Transport Impacts;
- Policy DMT 2: Highways Impacts;
- Policy DMT 3: Road Safeguarding, although this policy is not considered relevant to the Site;
- Policy DMT 4: Public Transport;
- Policy DMT 5: Pedestrians and Cyclists;
- Policy DMT 6: Vehicle Parking; and
- Policy DMT 7: Freight; as outlined in the policy requirements, the application will include a Delivery and Servicing Management Plan and an outline Construction Logistics Plan as further detailed in Chapter 6 of this TSR.

2.2.17. It is noted that LBH's parking standards are based on those contained in the ITP London Plan with some variance to address local circumstances in terms of employment sites and residential uses. Appendix C of the LPP2 Development Management Policies documents includes the parking standards which are discussed further in Chapter 3 below.

3 SITE SURROUNDINGS AND DEVELOPMENT PROPOSALS

3.1 INTRODUCTION

3.1.1. This chapter of the TA will describe the immediate surroundings of the Site, their characteristics and the adjacent transport network for all potential users i.e. pedestrians, cyclists and vehicles (with respect to staff, visitors and operators).

3.2 SITE LOCATION AND SURROUNDINGS

3.2.1. As previously outlined, the Site sits within Stockley Park and is bordered by employment land uses and highway infrastructure, with access being gained from Iron Bridge Road North.

3.2.2. In this context, a review of the following will be made within this section of the TA:

- Local Highway network in the vicinity of the site, particularly focused on Iron Bridge Road North, Horton Road, and the A408 Stockley Road;
- Highway Safety: The Personal Injury Accident (PIA) records for the local area for the most recently available 5-year period will be purchased and reviewed. This area will cover Iron Bridge Road North, Horton Road between A408 and Horton Bridge Road and the A408 / Horton Road roundabout.
- Public transport accessibility with a view of the forecast PTAL rating of the Site. The baseline PTAL is currently 2, as outlined in Section 2.2 and, as can be seen in **Appendix A** where the baseline PTAL report is included; and
- Pedestrian and cycling infrastructure connecting the Site to adjacent residential locations and relevant public transport services.

3.3 PROPOSED DEVELOPMENT TRANSPORT STRATEGIES

3.3.1. The Proposed Development is envisaged to comprise two new flexible units for use within Class B1(c) and / or B8, with ancillary office space. It will deliver approximately 31,000sqm of new internal floorspace indicatively spread over two units with separate staff car parks. A flexible use is sought to meet the needs of a range of potential occupiers as end users are not yet confirmed.

3.3.2. Once the principles of the Proposed Development are fixed and a detailed design frozen, this section of the TA will detail the following:

Vehicular Access and Circulation Strategy

3.3.3. The main operational and servicing access into the Site will be provided from Iron Bridge Road North approximately in the location of the existing Site access. This access will primarily serve operational / HGV traffic only. Two additional vehicular accesses, one north and one south of the main Site access, are also being proposed from Iron Bridge Road North to provide separate access to staff and visitor car parking for each unit.

3.3.4. All vehicles would therefore access the Site from Iron Bridge Road after leaving Horton Road, with no direct access proposed from the A408 Stockley Road or Horton Road.

Car Parking Strategy

3.3.5. The car parking strategy will be defined in accordance with the vehicular access strategy independent to each unit (as described above) and will follow LBH's parking standards for employment uses in consideration with ITP London Plan requirements.

3.3.6. It should be noted that ITP London Plan states in Policy T6 that "*Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity. (…) Car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport, with developments elsewhere designed to provide the minimum necessary parking ('car-lite')".*

3.3.7. Policy T6.2 Office Parking continues and particularises on parking requirements for employment uses by confirming that:

- *"Car parking provision at Use Classes Order B2 (general industrial) and B8 (storage or distribution) employment uses should have regard to these office parking standards and take account of the significantly lower employment density in such developments. A degree of flexibility may also be applied to reflect different trip-generating characteristics. In these cases, appropriate provision for electric or other Ultra-Low Emission vehicles should be made.*
- *Operational parking requirements should be considered on a case-by-case basis. All operational parking must provide infrastructure for electric or other Ultra-Low Emission vehicles, including active charging points for all taxi spaces".*

3.3.8. According to Policy T6 of ITP London Plan and with regard to the Site location within LBH (Outer London), car parking should be provided at a ratio of up to one space per 100sqm of Gross Internal Area (GIA). Consideration will also be given to the PTAL of the Site as well as the minimum necessary parking requirements needed to satisfy operational needs, which will be defined on their own merits.

3.3.9. As noted above, LBH LPP2 Development Management Policies documents includes the parking standards to be applied and these align with ITP London Plan requirements. LBH's standards refer to maximum levels of provision and are summarised for the Proposed Development land uses in **Table 3-1**.

Table 3-1 – LBH's Car Parking Standards

Land Use	Car and Other Vehicles Parking (Maximum Requirement)
ALL OTHER B CLASS USES*	2 spaces plus 1 space per 50 – 100 sqm of gross floorspace

*Other than B1 Offices land use

3.3.10. EVCP provision will be considered within the TA in accordance with the Proposed Development needs, and to satisfy LBH's requirements also in accordance with Policy T6 of the ITP version of the London Plan.

3.3.11. Additionally, 5% of employee car parking spaces will be designed under accessible standards and an additional 5% will be enlarged so that they can become accessible parking spaces should demand arise, in accordance with Policy T6.5 and Table 10.6 of the ITP version of the London Plan. This approach aligns with LBH's requirement for 10% of inclusive parking provision.

3.3.12. The parking strategy will be detailed in the TA and will indicate how car parking provision will be designed and managed with reference to TfL's guidance on parking management and parking design.

Cycle Parking Strategy

3.3.13. Policy T5 Cycling of the ITP version of the London Plan establishes that *"development proposals should help remove barriers to cycling and create a healthy environment in which people choose to cycle. This will be achieved through (…) securing the provision of appropriate levels of cycle parking which should be fit for purpose, secure and well-located".*

3.3.14. The Proposed Development will include cycle parking for visitors and employees. **Table 3-2** outlines LBH's maximum cycle parking standards and compares it to ITP London Plan minimum cycle parking standards.

Table 3-2 – Cycle Parking Standards

Use Class	ITP London Plan Long-stay Provision Min. Requirement	ITP London Plan Short-stay Provision Min. Requirement	LBH's Bicycle Parking Max. Requirement
B1 Light Industry and Research and Development	1 space per 250sqm GEA	1space per 1,000sqm GEA	1 space per 250 sqm GFA
B2 and B8 Storage or Distribution	1 space per 500sqm GEA		1 space per 500sqm GFA

Source: Table 10.2 London Plan ITP and LBH's LPP2 Appendix C

3.3.15. **Table 3-2** demonstrates ITP London Plan requirements align with LBH's cycle parking standards. The long-stay cycle parking for employees will be provided at ground level within dedicated secured cycle storage facilities in close proximity or within the two buildings comprising the Proposed Development, whilst the short-stay cycle parking provision for visitors will be provided within easy access of the two separated buildings.

3.3.16. The masterplan will seek to adopt London Cycling Design Standards (TfL, 2016), where possible, and site long-stay cycle storage within each unit.

3.3.17. Should the planning application for the Proposed Development be made for a flexible land use, cycle parking standards will be reviewed and discussed with LBH so that appropriate rates are applied.

Servicing Strategy

3.3.18. A separate Outline Delivery and Servicing Plan will be developed alongside the TA and this is discussed further in Section 6.4. However, this section of the TA will summarise the servicing strategy planned for the Proposed Development, which will be divided between operational requirements (such as deliveries and other operations associated to the proposed land use of the Site) and waste storage and collection arrangements. This will also detail the freight parking strategy for the Site.

3.4 SUMMARY

3.4.1. This chapter has set out the envisaged transport strategies and principles of the Proposed Development which are proposed to be aligned with both TfL and LBH's requirements.

3.4.2. In line with the presented information, it would be appreciated if LBH, through provision of a pre-application response, would clarify whether the application of the above parking standards, including

the suggested EVCP provision related to staff, visitors and operational vehicles as set out above remains appropriate.

3.4.3. LBH's feedback will thereafter be used to complete the transport strategies of the Proposed Development which will be reflected in the TA.

4 LOCAL CONTEXT: EXISTING CONDITIONS AND ACTIVE TRAVEL ZONE ASSESSMENT

4.1 ACTIVE TRAVEL ZONE DEFINITION

4.1.1. The Active Travel Zone (ATZ) assessment is a new analysis included in the Healthy Streets Transport Assessment guideline. The ATZ should encompass an area around the Proposed Development within a 20-minute cycle journey.

4.1.2. However, the location of the Site within a 'Locally Significant Employment Location' and the nature of the Proposed Development should be taken into consideration to establish the level of the assessment required.

4.1.3. The level of pedestrians, cyclists and public transport users is expected to reduce against the current situation (as detailed further within Chapter 5), as the change in land use will result in significantly less employees on the Site with the result that the demand for all travel modes will be less when compared to the existing land use.

4.1.4. Therefore, following from the above, it is not considered that a detailed ATZ assessment is required to assess the impact of the Proposed Development on the local area.

4.1.5. However, to ensure that the Site is adequately examined, an assessment of routes from key origins i.e. public transport infrastructure such as bus stops and railway / over ground stations, and the closest adjacent residential areas, will be undertaken.

4.1.6. Particularly, should an ATZ assessment be required by LBH, the following will be considered within the above 20-minute cycling catchment area:

- 'ATZ key locations and services' to be illustrated as 'Map 1';
- 'ATZ most important journeys and neighbourhood safety' to the Site from high priority key origins to be illustrated as 'Map 2'; and
- 'ATZ neighbourhood healthy characteristics check' to be illustrated as 'Map 3' within the TA.

4.2 ATZ KEY LOCATIONS AND SERVICES (MAP 1)

4.2.1. Within this section of the TA, the key locations and services within the ATZ would be assessed in accordance to their potential relation to the Proposed Development, and following ATZ guidance which divides them into seven types as follows:

- Public transport stops;
- Public transport stations;
- London's current and future strategic cycle network;
- Town centres, Parks;
- Schools/colleges;
- Hospitals and doctors; and
- Places of worship.

4.3 ATZ MOST IMPORTANT JOURNEYS AND NEIGHBOURHOOD SAFETY (MAP 2)

4.3.1. In accordance with TfL's ATZ step by step guidance, the routes connecting the Site to the most important key locations for future employees should be defined and assessed with potential improvements to be outlined where necessary. It is worth noting, the Proposed Development is considered to result in a lower employee density due to the land uses being developed and therefore, a lower number of employees meaning, demand on the local facilities will be less.

4.3.2. The routes between the Site and the key locations as agreed with LBH and thereafter defined within the TA would be reviewed and cross-referenced against the Healthy Streets indicators.

4.4 ATZ NEIGHBOURHOOD HEALTHY CHARACTERISTICS (MAP 3)

4.4.1. The characteristics of a healthy neighbourhood include street density / permeability, access to green spaces and the number of public transport services within walking distance. A healthy neighbourhood should be highly permeable, with walking and cycling connections deviating from the desire line as little as possible. As part of the existing conditions review, the TA will outline the local walking / cycling and public transport networks and will identify any deficiencies.

5 WIDER CONTEXT: IMPACT ON LONDON-WIDE NETWORK

5.1 INTRODUCTION

5.1.1. The impacts of the Proposed Development within the wider context (i.e. London-wide network) have been determined by way of estimating the trip generation of the Proposed Development compared to the existing number of trips generated by the Site, as detailed further in this chapter.

5.1.2. It should be noted that, due to the proposed changing nature of the Site from offices to industrial and the associated lower employment density, it is assumed the number of public transport users, pedestrians and cyclists will decrease as a result of the Proposed Development being implemented (compared to existing uses). However, the estimated number of these trips associated to the Proposed Development will be included and analysed within the TA. This TSR therefore only focuses on vehicular trip generation to provide a summary of baseline and forecast traffic generation.

5.2 BASELINE TRAFFIC GENERATION

5.2.1. As outlined in Chapter 1, the Site currently comprises three office buildings surrounded by ancillary surface level car parking and with a multi-storey car park located in the south-eastern corner of the Site.

5.2.2. A Manual Classified Count (MCC) took place at the Site access for a 24hr period on the 19 / 20 June 2019 which recorded all vehicles accessing and egressing the Site to understand current vehicular traffic levels and timely arrival/departure patterns. This data has been attached to this TSR within **Appendix B** and will be used within the TA.

5.2.3. At the time of the survey two of the three office buildings at the Site were fully operational. Although the third office building was no longer in use, which had been the case for a few years, it should be noted that the Site was also being used for car parking for the nearby GSK Head Quarters with buses being used to transport employees between the two sites. As a result, it is considered that the survey results are robust and representative of the Site in full operation, and as such these have been used to estimate the level of vehicular impact associated to the Proposed Development.

5.2.4. The survey results revealed the number of vehicular trips generated by the current use of the Site and this is presented in **Table 5-1** below.

Table 5-1 – Baseline Vehicular Trip Generation

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars, M/Cs and LGVs	267	11	278	2	215	217
HGVs and PSVs	2	3	5	4	4	8
Baseline Total Vehicular Trips	269	14	283	6	219	225

5.2.5. In accordance with the MCC, the existing use of the Site generates 283 and 225 two-way vehicular movements across the AM and PM peak hours respectively. It should be noted that in the PM period, the time period 16:00h and 17:00h was captured generating the highest volume of traffic for the Site; however, the traditional commuting PM peak hour has been used for the review (i.e. from 17:00h to 18:00h).

5.2.6. To understand the current operation of the adjacent highway network, MCCs including queue lengths were also carried out at the Iron Bridge Road North / Horton Road roundabout. The MCCs indicated that the junction currently operates well with maximum queues of 4 vehicles observed on the Horton Road West arm in the PM peak.

5.3 FORECAST TRAFFIC GENERATION

5.3.1. Trip rates for the Proposed Development have been extracted from a traffic survey undertaken at the nearby Prologis Park Heathrow in December 2014, located approximately 850m to the south of the Site.

5.3.2. At the time of the survey Prologis Park Heathrow was occupied by the following businesses:

- Heathrow Airports Ltd (5,113sq.m GIA) - a consolidation centre for the Heathrow Airport;
- Gate Gourmet (6,298sq.m GIA) – a transport catering business premises, operating on a 24-hour basis, primarily serving Heathrow Airport;
- Infinity (8,806sq.m GIA) – information technology company; and
- City Link (6,874sq.m GIA) – a parcel distribution company. City Link ceased trading on 25 December 2014; however, at the time of the survey, the site was fully operational.

5.3.3. The land uses of the businesses operating at Prologis Park Heathrow at the time of the survey were a mix of B1c, B2 and B8. This means the Proposed Development and Prologis Park Heathrow sites are considered to be very comparable in terms of use, location and accessibility. Therefore, the trip rates calculated at the Prologis Park Heathrow site are considered to be appropriate for representing the envisaged trip generation for the Proposed Development.

5.3.4. A summary of the calculated vehicular trip rates based on the survey of Prologis Park Heathrow is shown below, with the forecast vehicular trip generation associated to the Proposed Development (comprised of 31,000sqm GIA) shown thereafter.

Table 5-2 – Prologis Park Heathrow, Vehicular Trip Rate per 100sqm GIA

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars, M/Cs and LGVs	0.085	0.111	0.196	0.221	0.262	4.108
HGVs	0.078	0.033	0.111	0.066	0.103	0.170
Total Vehicular Trip Rate	0.162	0.144	0.306	0.107	0.325	0.432

Table 5-3 – Forecast Vehicular Trip Generation (31,000sqm GIA)

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars, M/Cs and LGVs	26	34	61	13	69	81
HGVs	24	10	34	21	32	53
Total Vehicular Trip Generation	50	45	95	33	101	134

5.3.5. In accordance with **Table 5-3**, the Proposed Development is envisaged to generate 95 and 134 two-way vehicular trips in the AM and PM peak hours respectively.

5.4 PROPOSED DEVELOPMENT IMPACT

5.4.1. From Section 5.2 and Section 5.3 above, **Table 5-4** below shows the difference in number of vehicular trips envisaged to be generated by the Proposed Development.

Table 5-4 – Forecast Net Vehicular Impact

Time Period	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way
Cars, M/Cs and LGVs	-241	23	-217	11	-146	-136
HGVs	22	7	29	17	28	45
Total Vehicular Difference	-219	31	-188	27	-118	-91

5.4.2. **Table 5-4** shows the Proposed Development is forecasted to decrease the current level of vehicular movements generated by the current use of the Site during the AM and PM peak hours by 188 and 91 two-way trips respectively. This reduction in traffic during the peak hours, where the highway network is traditionally suffering from congestion, is anticipated to have a beneficial impact on the operation of local junctions, particularly on the Stockley Park Roundabout which connects Horton Road with the A408 Stockley Road.

5.4.3. Due to the expected beneficial impact from the forecast reduction in traffic, no junction capacity analysis will be undertaken on the surrounding highway network. The TA will consider the suitability of the Proposed Development accesses and the flow changes on Iron Bridge Road North / Horton Road roundabout; however, it is not envisaged that any capacity assessment (e.g. Junctions 9) will be required.

5.4.4. Despite the above decrease in traffic during the peak hours, there is likely to be a daily increase in trips at the Site due to the nature of the Proposed Development operation (i.e. 24hr operation with regular vehicular movements throughout the day) compared to the existing operational times of the Site (day time only). This will therefore be considered further by the TA.

6 MITIGATION, ADDITIONAL ANALYSIS AND SUPPORTING TRANSPORT DOCUMENTS

6.1 SUPPORTING ANALYSIS

6.1.1. Once built out, the Proposed Development is envisaged to provide an improvement to the local area by reducing the level of vehicular traffic during the peak periods.

6.1.2. In support of the above reduction in traffic, and to mitigate any identified increase in daily traffic as outlined at the end of Chapter 5, a series of management plans will be developed in conjunction with the TA to support the Proposed Development. These are listed below and further details on the approach to each document are summarised underneath:

- A **Framework Travel Plan** detailing the forecast travel patterns of future employees of the Proposed Development, and setting objectives, mode share targets, measures to be implemented, and monitoring methodology;
- An **Outline Construction Logistics Plan** which considers the construction programme and management measures to mitigate potential impacts associated with the construction of the Proposed Development as per TfL's methodology; and
- An **Outline Delivery and Servicing Plan** setting the principles for the management of delivery and servicing movements associated to the Proposed Development needs.

6.2 FRAMEWORK TRAVEL PLAN

INTRODUCTION

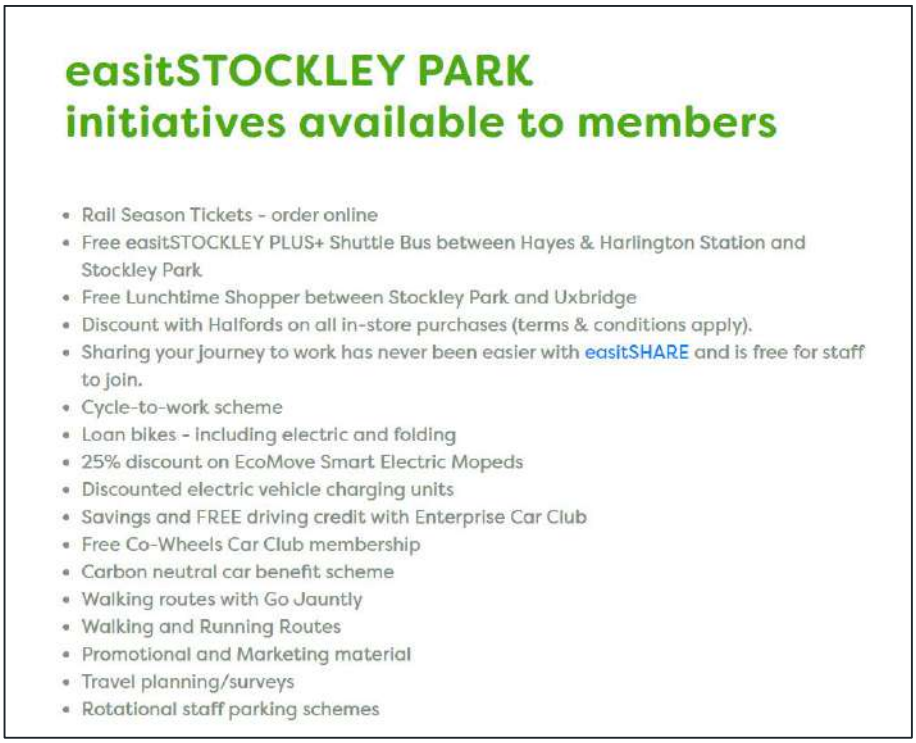
6.2.1. The TA will be supported by a Framework Travel Plan (FTP). The FTP will be prepared in line with the relevant policies including LBH LPP2 as well as the NPPF. The TA and FTP will also be prepared in line with TfL's Guidance for Travel Plans content. Confirmation from LBH of any further specific guidance to be considered is welcome.

6.2.2. The FTP will be prepared to accompany the planning application and will demonstrate that the Proposed Development will conform to sustainable development principles. Furthermore, the FTP is intended to serve as a strategic management tool designed to accommodate the specific transportation needs of the Site by mitigating the transport demands of staff and visitors.

6.2.3. Stockley Park currently benefits from a partnership with easit, delivering easitSTOCKLEY-PARK, which is a sustainable transport initiative designed to influence commuting travel behaviour by delivering sustainable transport options to staff. The Site, therefore already benefits from ta range of initiatives destined to promote sustainable travel and reduce reliance on private vehicle trips.

6.2.4. Measures available for Stockley Park and the Site's employees are shown in Figure 6-1 below.

Figure 6-1 – Easit Travel Scheme Initiatives



Source: https://www.easit.org.uk/network/easitSTOCKLEY%20PARK-14

6.2.5. In the context of the above already established commitment to sustainable travel, the FTP will set out the intentions of Prologis, as well as the various measures that will be aimed to implemented at the Site and built upon through the life of the Proposed Development to encourage sustainable travel amongst staff and visitors. Realistic and achievable measures will be tailored to reflect the nature of the Proposed Development and provide bespoke solutions to encouraging sustainable modes of travel.

6.2.6. It is expected that, once end occupiers are known, these will produce specific travel plans referencing the over-arching FTP as an umbrella document but tailoring the measures and actions to their own characteristics. It is also expected that the Site will consider continuing to be members of easitSTOCKLEY PARK moving forwards.

FTP STRUCTURE

6.2.7. The FTP will include:

- A review of specific travel planning policy and guidance;
- The TP vision and objectives, connected to overarching aspirations as well as general Site-specific aspirations;
- The existing conditions in relation to existing opportunities for sustainable travel and accessibility to and from the Site;
- TP measures: realistic, achievable and appropriate measures will be identified to support existing opportunities and to encourage more trips by sustainable modes to and from the Site. This will also include a review of the easit initiatives to see where these could potentially align with the development proposals;
- Targets: in line with national and local policy requirements, a commitment will be set out for appropriate targets to be set;

- Monitoring and review: the FTP will set out the expected monitoring strategy for the Site. It is expected that any monitoring will comprise some travel behaviour surveys, although this will be agreed with LBH before surveys are undertaken; and
- Management, implementation and funding: implementation and funding will be in relation to timescales and phasing of measures. An Action Plan will identify potential measures, timescales and responsibilities.

OBJECTIVES AND TARGETS

6.2.8. The overall objective of the FTP will be to encourage sustainable travel to the Site and to minimise single-occupancy private car journeys. Indicative targets will be set for employees to travel to the Site by sustainable travel modes. These initial and indicative targets will be set based on the existing travel patterns for journeys to work in the area surrounding the site and 2011 Census Data. It is expected that final targets for the full TP will be set out following a baseline monitoring survey.

6.3 OUTLINE CONSTRUCTION LOGISTICS PLAN

INTRODUCTION

6.3.1. The TA will be supported by an Outline Construction Logistics Plan (CLP). The Outline CLP will follow the latest TfL's CLP Guidance (2017) and will look to provide the following information if available:

Context, Considerations and challenges

6.3.2. The Outline CLP will provide a review of local access to the Site by road and access by sustainable travel modes.

Construction Programme and Methodology

6.3.3. If available, the Outline CLP will also provide details of the construction programme for the Proposed Development and the methodology of construction if a contractor has been identified.

Vehicle Routing and Site Access

6.3.4. The Outline CLP will provide details of routes which construction vehicles will take in order to reach the Site and methods which will be used to manage routing of vehicles and avoid local waiting of vehicle associated with the construction of the Proposed Development. If a contractor is appointed at the time of writing the Outline CLP, details will be provided of hoarding required for the Site and any closures to footways or paths required in order to maintain safety around the area.

Strategies to reduce impacts

6.3.5. The Outline CLP will identify strategies to reduce the impact of construction on the surrounding road network.

Estimated vehicle types and movements

6.3.6. It is expected that the appointed contractor will be able to provide information on the number of vehicles expected to and from the Site during the construction periods. If this information is not available, then an estimation of the types and number of construction vehicles required for the construction of the Proposed Development will be provided within the Outline CLP. The identification of vehicle types required for the construction of the Site will provide an indication of the access and routing considerations for particular vehicle types.

Implementing, monitoring and updating

6.3.7. The methodology and roles required for the management and implementation of the detailed CLP once the Outline CLP has been agreed will be detailed. The principal contractor will be responsible for appointing a Logistics Manager who will be responsible for liaison with LBH, local businesses, local residents and all other stakeholder groups.

6.4 OUTLINE DELIVERY AND SERVICING PLAN

6.4.1. The TA will be supported by an Outline Delivery and Servicing Plan (DSP). The Outline DSP will be prepared in accordance with relevant policies including TfL's guidance for delivery and servicing plans "Making Freight Work for You". Confirmation from LBH of any further specific local guidance which should be considered is welcomed.

6.4.2. The Outline DSP will be prepared to accompany the planning application and provide a strategy for the delivery and servicing arrangements for the day-to-day operational element of the Proposed Development, and in order to minimise the impact of delivery and servicing vehicles on the environment and the surrounding road network.

6.4.3. Considering the proposed end use of the Site likely being B1c and/or B8, the Proposed Development will be designed to cater for a number of logistic operations and various vehicle types. This will enable the Site to manage its deliveries alongside the commercial logistics and vehicles of the Site by efficiently using the loading bays and service yards on-site. The Outline DSP will therefore outline how the services and deliveries necessary for the Site will interact with the other vehicles that may be present.

DSP OBJECTIVES

6.4.4. The Outline DSP will seek to achieve a number of objectives in order to proactively manage deliveries and servicing trips, particularly in the network peak times, identify and promote areas where safe and legal loading can take place and select delivery companies who can demonstrate their commitment to following best practice such as the Freight Operator Recognition Scheme (FORS).

DELIVERIES AND SERVICING PROPOSALS

6.4.5. The Outline DSP will set out the expected number of delivery and servicing trips generated by the Proposed Development on a neutral weekday during expected servicing hours.

6.4.6. It is expected that, due to the nature of the Site, any servicing vehicles will be able to utilise the servicing bays and loading provision designed into the scheme. The Outline DSP will provide a review of the provision to demonstrate suitability of provision.

DELIVERY AND SERVICING MANAGEMENT

6.4.7. The Outline DSP will provide delivery and servicing management measures for the operation of the Proposed Development. The measures will include the following:

- Location of specific servicing bays or where shared use bays are to be used;
- Proposed routes for delivery and service vehicles, with consideration given to existing route restrictions and interaction with the proposed use of the site;
- Delivery scheduling;
- Communication of delivery restrictions;
- Enforcement of restrictions and scheduling; and

- Waste Removal, Management and Recycling.

ACTION PLAN

6.4.8. The Outline DSP will provide an action plan for the implementation of the various measures to be considered when setting out the Detailed DSP.

7 SUMMARY

7.1.1. This TSR has set out the intended analysis and information to be provided to support a detailed planning application for the Proposed Development at the GSK site, Stockley Park, as shown in **Figure 1-1**. The TSR has also outlined the scope of the supporting transport-related documents which are envisaged will accompany the planning application.

7.1.2. We trust that the above covers the required analysis and would welcome further discussions and agreement from LBH officers.

7.1.3. To finalise, **Table 7-1** provides a summary of the intended approach to assess the transport elements of the Proposed Development at Stockley Park.

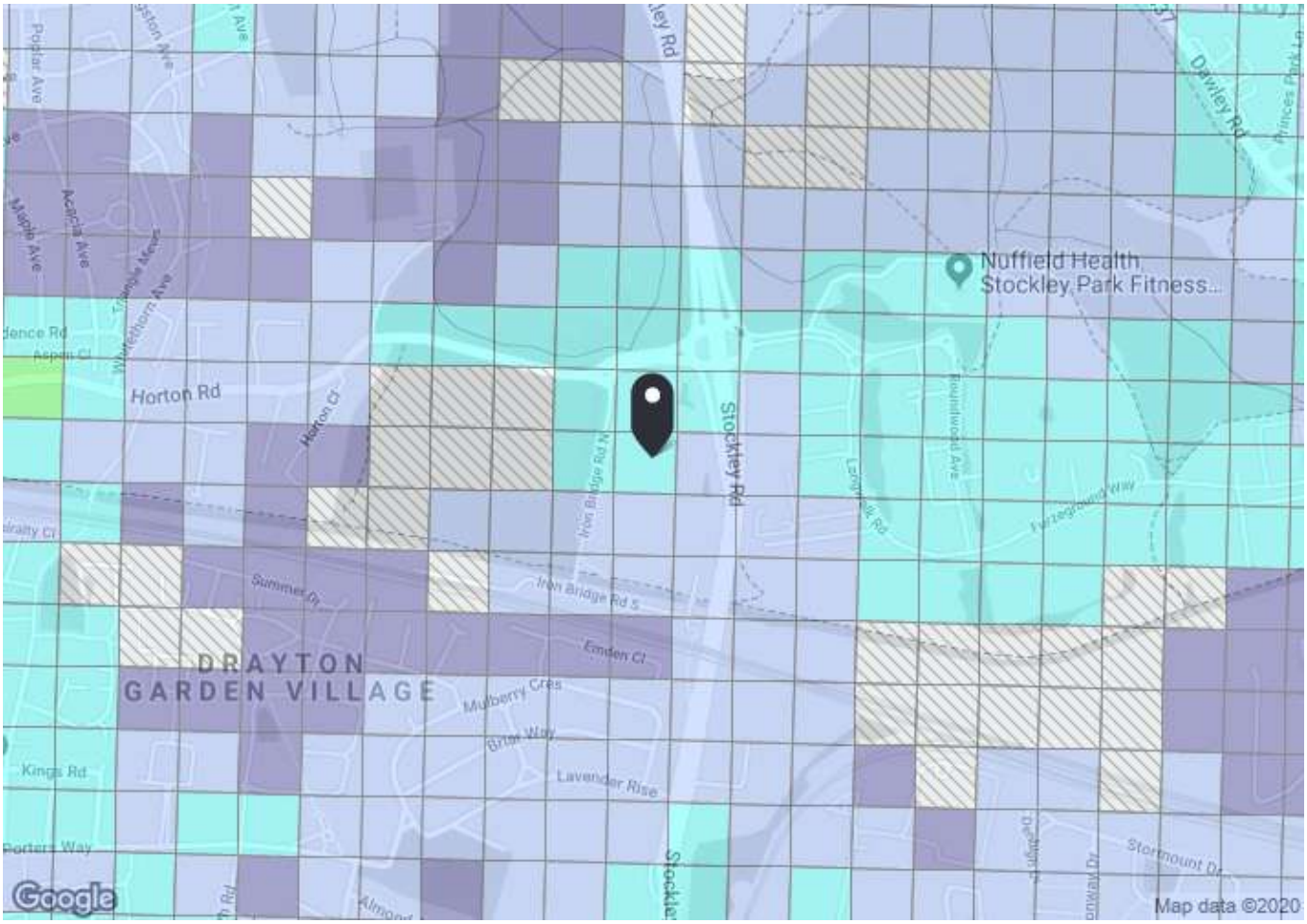
Table 7-1 – TA Scoping Report Summary table

Assessment	Key Transport impacts / issues	Solutions / Mechanisms
Site and surroundings	The TA will review the existing conditions and current traffic profiles. This will identify the current baseline on which assess the proposals against.	n/a
Active Travel Zone	The TA will review the key walking, cycling and public transport options for visitors and staff. This will align with the ATZ principles.	n/a
London Wide network	The TA will demonstrate that the proposals will have a beneficial impact on the surrounding network due to reduced traffic volumes in the peak periods. In addition, the TA will assess daily traffic generation levels expected.	n/a
Travel Plan	A FTP will be developed to accompany the application, which will include consideration of the current easitSTOCKLEY PARK measures.	The FTP will identify appropriate measures and targets.
Deliveries and Servicing	An Outline DSP will be developed to accompany the application.	The Outline DSP will outline the appropriate measures to manage freight movements at the Site which will thereafter be formalised within a Detailed DSP.
Construction	An Outline CLP will be developed to accompany the application.	The Outline CLP will outline the strategy for the construction programme which will be formalised within a Detailed CLP.

Appendix A

BASELINE PTAL REPORT

TRANSPORT FOR LONDON



PTAL output for Base Year
2

GlaxoSmithKline, West Drayton, Uxbridge UB11 1BT, UK
Easting: 507560, Northing: 180147

Grid Cell: 78591

Report generated: 27/01/2020

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	STOCKLEY PARK WEST	U5	274.39	5	3.43	8	11.43	2.62	0.5	1.31
Bus	STOCKLEY PARK WEST	350	274.39	5	3.43	8	11.43	2.62	1	2.62
Bus	STOCKLEY PARK WEST	A10	274.39	4	3.43	9.5	12.93	2.32	0.5	1.16
									Total Grid Cell AI:	**5.1**

Appendix B

SITE ACCESS MCC RESULTS

Intelligent Data Collection Limited
Stockley Park, West Drayton

Client:	WSP
Project Number:	ID04694
Site Number:	Site 2
Date of Survey:	19.06.2019-20.06.2019
Site Name:	GSK Access
Survey Type:	Two-way Link Count

Quality Assurance and Issue Record

Quality Assurance

Revision	Rev A			
Date	27.06.2019			
Prepared by	Brinda Basu Roy			
Signature				
Checked by	Luke Martin			
Signature				
Project Director	Paul O'Neill			
Signature				
Project number	ID04694			
File Ref	ID04694 Stockley Park, West Drayton - MCC Site 2 - 19.06.2019			

Issue Sheet

Issued to	Date			
	28.06.2019			
Alex Smith	E-mail			

Contents Page

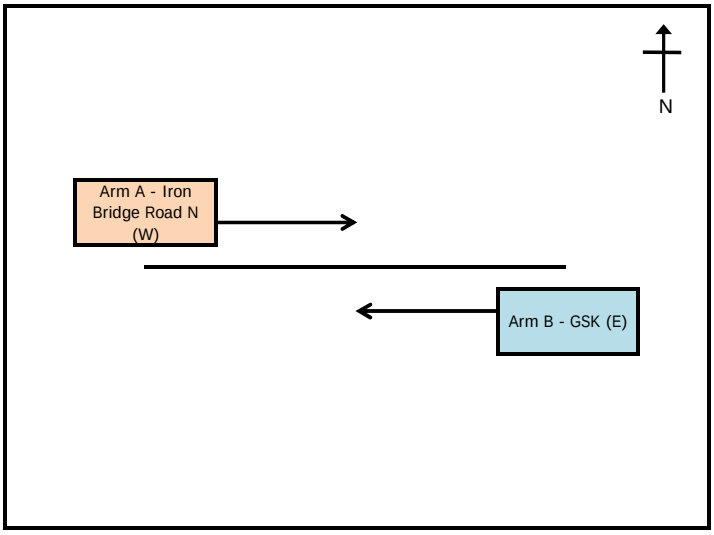
Location Plan & Summary
MCC Data
PCU Data
Movement Matrices

Intelligent Data Collection Limited

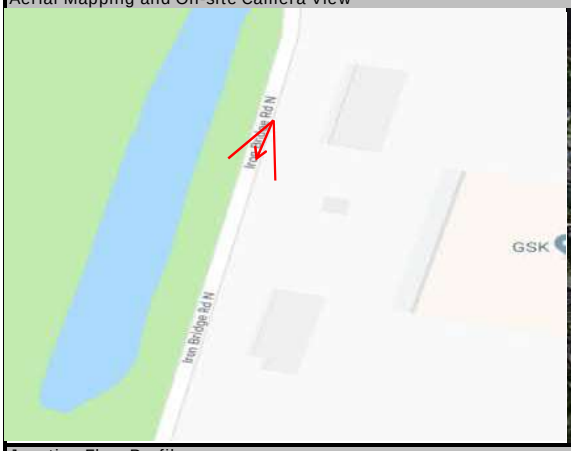
Client:	WSP	Date of Survey:	19.06.2019-20.06.2019
Project Number:	ID04694	Site Name:	GSK Access
Site Number:	Site 2	Survey Type:	Two-way Link Count

X Coordinate	Y Coordinate	Google Maps Link	
51.510289	-0.45257	Click Here	
AM Peak Conditions	**Inter-Peak Conditions**	**PM Peak Conditions**	
Cloudy	Showers	Showers	

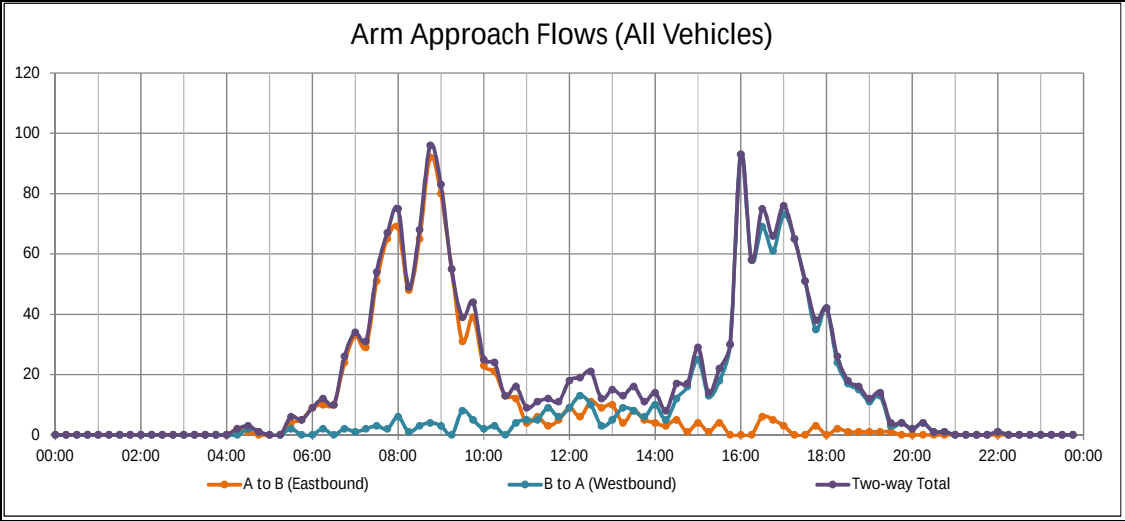
Junction Layout



Aerial Mapping and On-site Camera View



Junction Flow Profile



Additional Notes (Factors which may impact on survey results such as accidents, roadworks, special events):

Counts for 00:00 through to 03:30 are taken from 20.06.2019.

The yellow line on the screenshot represents the count location.

Intelligent Data Collection Limited

Client: WSP
Project Number: ID04694
Site Number: Site 2

Date of Survey: 19.06.2019-20.06.2019
Site Name: GSK Access
Survey Type: Two-way Link Count

Arm A: Iron Bridge Road N (W)
Arm B: GSK (E)

	A to B (Eastbound)								B to A (Westbound)								Two-way Total							
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
04:30	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	2	0	2	1	0	0	0	0	3
04:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	4	0	0	0	0	0	0	4	2	0	0	0	0	0	0	2	6	0	0	0	0	0	0	6
05:45	4	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	5
06:00	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
06:15	9	1	0	0	0	0	0	10	1	1	0	0	0	0	0	2	10	2	0	0	0	0	0	12
06:30	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10
06:45	24	0	0	0	0	0	0	24	2	0	0	0	0	0	0	2	26	0	0	0	0	0	0	26
07:00	30	2	0	0	1	0	0	33	0	1	0	0	0	0	0	1	30	3	0	0	1	0	0	34
07:15	27	1	0	0	0	0	1	29	1	0	0	0	1	0	0	2	28	1	0	0	1	0	1	31
07:30	50	0	0	0	1	0	0	51	3	0	0	0	0	0	0	3	53	0	0	0	0	1	0	54
07:45	62	0	0	0	2	0	1	65	2	0	0	0	0	0	0	2	64	0	0	0	2	0	1	67
08:00	66	0	0	0	0	1	2	69	4	0	0	0	2	0	0	6	70	0	0	0	2	1	2	75
08:15	47	0	0	0	1	0	0	48	1	0	0	0	0	0	0	1	48	0	0	0	1	0	0	49
08:30	63	0	0	0	0	0	2	65	3	0	0	0	0	0	0	3	66	0	0	0	0	0	2	68
08:45	89	1	0	0	1	0	1	92	2	1	0	0	1	0	0	4	91	2	0	0	2	0	1	96
09:00	77	1	0	0	1	1	0	80	2	0	0	0	1	0	0	3	79	1	0	0	2	1	0	83
09:15	52	1	1	0	1	0	0	55	0	0	0	0	0	0	0	0	52	1	1	0	1	0	0	55
09:30	30	0	0	0	0	0	1	31	4	1	1	0	2	0	0	8	34	1	1	0	2	0	1	39
09:45	35	1	1	0	1	0	1	39	4	0	1	0	0	0	0	5	39	1	2	0	1	0	1	44
10:00	22	0	0	0	1	0	0	23	1	1	0	0	0	0	0	2	23	1	0	0	1	0	0	25
10:15	21	0	0	0	0	0	0	21	2	0	0	0	1	0	0	3	23	0	0	0	1	0	0	24
10:30	9	3	0	0	1	0	0	13	0	0	0	0	0	0	0	0	9	3	0	0	1	0	0	13
10:45	12	0	0	0	0	0	0	12	1	2	0	0	1	0	0	4	13	2	0	0	1	0	0	16
11:00	3	1	0	0	0	0	0	4	5	0	0	0	0	0	0	5	8	1	0	0	0	0	0	9
11:15	4	1	0	0	1	0	0	6	3	2	0	0	0	0	0	5	7	3	0	0	1	0	0	11
11:30	3	0	0	0	0	0	0	3	7	0	0	0	1	0	1	9	10	0	0	0	1	0	1	12
11:45	3	1	0	0	0	0	1	5	6	0	0	0	0	0	0	6	9	1	0	0	0	0	1	11
12:00	7	1	0	0	1	0	0	9	9	0	0	0	0	0	0	9	16	1	0	0	1	0	0	18
12:15	5	0	0	0	1	0	0	6	11	1	0	0	1	0	0	13	16	1	0	0	2	0	0	19
12:30	9	0	2	0	0	0	0	11	8	0	1	0	1	0	0	10	17	0	3	0	1	0	0	21
12:45	9	0	0	0	0	0	0	9	2	1	0	0	0	0	0	3	11	1	0	0	0	0	0	12
13:00	9	0	0	0	1	0	0	10	5	0	0	0	0	0	0	5	14	0	0	0	1	0	0	15
13:15	3	0	0	0	1	0	0	4	8	0	0	0	1	0	0	9	11	0	0	0	2	0	0	13
13:30	7	1	0	0	0	0	0	8	6	1	0	0	1	0	0	8	13	2	0	0	1	0	0	16
13:45	5	0	0	0	0	0	0	5	5	1	0	0	0	0	0	6	10	1	0	0	0	0	0	11
14:00	3	0	0	0	1	0	0	4	8	1	1	0	0	0	0	10	11	1	1	0	1	0	0	14
14:15	1	1	0	0	1	0	0	3	5	0	0	0	0	0	0	5	6	1	0	0	1	0	0	8
14:30	5	0	0	0	0	0	0	5	11	1	0	0	0	0	0	12	16	1	0	0	0	0	0	17
14:45	1	0	0	0	0	0	0	1	10	0	0	0	0	0	0	16	17	0	0	0	0	0	0	17
15:00	3	0	1	0	0	0	0	4	24	0	1	0	0	0	0	25	27	0	2	0	0	0	0	29
15:15	1	0	0	0	0	0	0	1	12	0	0	0	1	0	0	13	13	0	0	0	1	0	0	14
15:30	3	0	0	0	1	0	0	4	18	0	0	0	0	0	0	18	21	0	0	0	1	0	0	22
15:45	0	0	0	0	0	0	0	0	29	0	0	0	1	0	0	30	29	0	0	0	1	0	0	30
16:00	0	0	0	0	0	0	0	0	89	1	0	0	1	1	1	93	89	1	0	0	1	1	1	93
16:15	0	0	0	0	0	0	0	0	58	0	0	0	0	0	0	58	58	0	0	0	0	0	0	58
16:30	2	1	1	0	2	0	0	6	66	1	1	0	1	0	0	69	68	2	2	0	3	0	0	75
16:45	5	0	0	0	0	0	0	5	60	0	0	0	1	0	0	61	65	0	0	0	1	0	0	66
17:00	1	0	0	0	2	0	0	3	71	0	0	0	0	0	2	73	72	0	0	0	2	0	2	76
17:15	0	0	0	0	0	0	0	0	64	0	0	0	1	0	0	65	64	0	0	0	1	0	0	65
17:30	0	0	0	0	0	0	0	0	48	1	0	0	1	0	1	51	48	1	0	0	1	0	1	51
17:45	1	0	0	0	2	0	0	3	31	0	0	0	2	0	2	35	32	0	0	0	4	0	2	38
18:00	0	0	0	0	0	0	0	0	41	0	0	0	0	0	1	42	41	0	0	0	0	0	1	42
18:15	1	0	0	0	1	0	0	2	20	0	0	0	2	2	0	24	21	0	0	0	3	2	0	26
18:30	1	0	0	0	0	0	0	1	16	0	0	0	0	1	0	17	17	0	0	0	0	1	0	18
18:45	0	0	0	0	1	0	0	1	14	0	0	0	0	0	1	15	14	0	0	0	1	0	1	16
19:00	1	0	0	0	0	0	0	1	10	0	0	0	1	0	0	11	11	0	0	0	1	0	0	12
19:15	1	0	0	0	0	0	0	1	13	0	0	0	0	0	0	13	14	0	0	0	0	0	0	14
19:30	0	0	0	0	1	0	0	1	2	0	0	0	1	0	0	3	2	0	0	0	2	0	0	4
19:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	4
20:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
20:15	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	4
20:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
20:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Rolling Hour							Total	Rolling Hour							Total	Rolling Hour							Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
03:45	0	2	1	0	0	0	0	3	0	1	1	0	0	0	0	2	0	3	2	0	0	0	0	5
04:00	0	2	1	0	0	0	0	3	0	2	1	0	0	0	0	3	0	4	2	0	0	0	0	6
04:15	0	2	1	0	0	0	0	3	0	2	1	0	0	0	0	3	0	4	2	0	0	0	0	6
04:30	0	1	0	0	0	0	0	1	0	2	1	0	0	0	0	3	0	3	1	0	0	0	0	4
04:45	4	0	0	0	0	0	0	4	2	1	0	0	0	0	0	3	6	1	0	0	0	0	0	7
05:00	8	0	0	0	0	0	1	9	2	0	0	0	0	0	0	2	10	0	0	0	0	0	1	11
05:15	17	0	0	0	0	0	1	18	2	0	0	0	0	0	0	2	19	0	0	0	0	0	1	20
05:30	26	1	0	0	0	0	1	28	3	1	0	0	0	0	0	4	29	2	0	0	0	0	1	32
05:45	32	1	0	0	0	0	1	34	1	1	0	0	0	0	0	2	33	2	0	0	0	0	1	36
06:00	52	1	0	0	0	0	0	53	3	1	0	0	0	0	0	4	55	2	0	0	0	0	0	57
06:15	73	3	0	0	1	0	0	77	3	2	0	0	0	0	0	5	76	5	0	0	1	0	0	82
06:30	91	3	0	0	1	0	1	96	3	1	0	0	1	0	0	5	94	4	0	0	2	0	1	101
06:45	131	3	0	0	1	1	1	137	6	1	0	0	1	0	0	8	137	4	0	0	2	1	1	145
07:00	169	3	0	0	3	1	2	178	6	1	0	0	1	0	0	8	175	4	0	0	4	1	2	186
07:15	205	1	0	0	2	2	4	214	10	0	0	0	3	0	0	13	215	1	0	0	5	2	4	227
07:30	225	0	0	0	3	2	3	233	10	0	0	0	2	0	0	12	235	0	0	0	5	2	3	245
07:45	238	0	0	0	3	1	5	247	10	0	0	0	2	0	0	12	248	0	0	0	5	1	5	259
08:00	265	1	0	0	2	1	5	274	10	1	0	0	3	0	0	14	275	2	0	0	5	1	5	288
08:15	276	2	0	0	3	1	3	285	8	1	0	0	2	0	0	11	284	3	0	0	5	1	3	296
08:30	281	3	1	0	3	1	3	292	7	1	0	0	2	0	0	10	288	4	1	0	5	1	3	302
08:45	248	3	1	0	3	1	2	258	8	2	1	0	4	0	0	15	256	5	2	0	7	1	2	273
09:00	194	3	2	0	3	1	2	205	10	1	2	0	3	0	0	16	204	4	4	0	6	1	2	221
09:15	139	2	2	0	3	0	2	148	9	2	2	0	2	0	0	15	148	4	4	0	5	0	2	163
09:30	108	1	1	0	2	0	2	114	11	2	2	0	3	0	0	18	119	3	3	0	5	0	2	132
09:45	87	4	1	0	3	0	1	96	7	1	1	0	1	0	0	10	94	5	2	0	4	0	1	106
10:00	64	3	0	0	2	0	0	69	4	3	0	0	2	0	0	9	68	6	0	0	4	0	0	78
10:15	45	4	0	0	1	0	0	50	8	2	0	0	2	0	0	12	53	6	0	0	3	0	0	62
10:30	28	5	0	0	2	0	0	35	9	4	0	0	1	0	0	14	37	9	0	0	3	0	0	49
10:45	22	2	0	0	1	0	0	25	16	4	0	0	2	0	1	23	38	6	0	0	3	0	1	48
11:00	13	3	0	0	1	0	1	18	21	2	0	0	1	0	1	25	34	5	0	0	2	0	2	43
11:15	17	3	0	0	2	0	1	23	25	2	0	0	1	0	1	29	42	5	0	0	3	0	2	52
11:30	18	2	0	0	2	0	1	23	33	1	0	0	2	0	1	37	51	3	0	0	4	0	2	60
11:45	24	2	2	0	2	0	1	31	34	1	1	0	2	0	0	38	58	3	3	0	4	0	1	69
12:00	30	1	2	0	2	0	0	35	30	2	1	0	2	0	0	35	60	3	3	0	4	0	0	70
12:15	32	0	2	0	2	0	0	36	26	2	1	0	2	0	0	31	58	2	3	0	4	0	0	67
12:30	30	0	2	0	2	0	0	34	23	1	1	0	2	0	0	27	53	1	3	0	4	0	0	61
12:45	28	1	0	0	2	0	0	31	21	2	0	0	2	0	0	25	49	3	0	0	4	0	0	56
13:00	24	1	0	0	2	0	0	27	24	2	0	0	2	0	0	28	48	3	0	0	4	0	0	55
13:15	18	1	0	0	2	0	0	21	27	3	1	0	2	0	0	33	45	4	1	0	4	0	0	54
13:30	16	2	0	0	2	0	0	20	24	3	1	0	1	0	0	29	40	5	1	0	3	0	0	49
13:45	14	1	0	0	2	0	0	17	29	3	1	0	0	0	0	33	43	4	1	0	2	0	0	50
14:00	10	1	0	0	2	0	0	13	40	2	1	0	0	0	0	43	50	3	1	0	2	0	0	56
14:15	10	1	1	0	1	0	0	13	56	1	1	0	0	0	0	58	66	2	2	0	1	0	0	71
14:30	10	0	1	0	0	0	0	11	63	1	1	0	1	0	0	66	73	1	2	0	1	0	0	77
14:45	8	0	1	0	1	0	0	10	70	0	1	0	1	0	0	72	78	0	2	0	2	0	0	82
15:00	7	0	1	0	1	0	0	9	83	0	1	0	2	0	0	86	90	0	2	0	3	0	0	95
15:15	4	0	0	0	1	0	0	5	148	1	0	0	3	1	1	154	152	1	0	0	4	1	1	159
15:30	3	0	0	0	1	0	0	4	194	1	0	0	2	1	1	199	197	1	0	0	3	1	1	203
15:45	2	1	1	0	2	0	0	6	242	2	1	0	3	1	1	250	244	3	2	0	5	1	1	256
16:00	7	1	1	0	2	0	0	11	273	2	1	0	3	1	1	281	280	3	2	0	5	1	1	292
16:15	8	1	1	0	4	0	0	14	255	1	1	0	2	0	2	261	263	2	2	0	6	0	2	275
16:30	8	1	1	0	4	0	0	14	261	1	1	0	3	0	2	268	269	2	2	0	7	0	2	282
16:45	6	0	0	0	2	0	0	8	243	1	0	0	3	0	3	250	249	1	0	0	5	0	3	258
17:00	2	0	0	0	4	0	0	6	214	1	0	0	4	0	5	224	216	1	1	0	8	0	5	230
17:15	1	0	0	0	2	0	0	3	184	1	0	0	4	0	4	193	185	1	0	0	6	0	4	196
17:30	2	0	0	0	3	0	0	5	140	1	0	0	5	2	4	152	142	1	0	0	8	2	4	157
17:45	3	0	0	0	3	0	0	6	108	0	0	0	4	3	3	118	111	0	0	0	7	3	3	124
18:00	2	0	0	0	2	0	0	4	91	0	0	0	2	3	2	98	93	0	0	0	4	3	2	102
18:15	3	0	0	0	2	0	0	5	60	0	0	0	3	3	1	67	63	0	0	0	5	3	1	72
18:30	3	0	0	0	1	0	0	4	53	0	0	0	1	1	1	56	56	0	0	0	2	1	1	60
18:45	2	0	0	0	2	0	0	4	39	0	0	0	2	0	1	42	41	0	0	0	4	0	1	46
19:00	2	0	0	0	1	0	0	3	29	0	0	0	2	0	0	31	31	0	0	0	3	0	0	34
19:15	1	0	0	0	1	0	0	2	21	0	0	0	1	0	0	22	22	0	0	0	2	0	0	24
19:30	0	0	0	0	1	0	0	1	12	0	0	0	1	0	0	13	12	0	0	0	2	0	0	14
19:45	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	11	0	0	0	0	0	0	11
20:00	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	8	0	0	0	0	0	0	8
20:15	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	6	0	0	0	0	0	0	6
20:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
20:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intelligent Data Collection Limited

Client:	WSP	Date of Survey:	19.06.2019-20.06.2019
Project Number:	ID04694	Site Name:	GSK Access
Site Number:	Site 2	Survey Type:	Two-way Link Count

Arm A: Iron Bridge Road N (W) Arm B: GSK (E)

	PCU Summary	
Time	A to B	B to A
00:00	0	0
00:15	0	0
00:30	0	0
00:45	0	0
01:00	0	0
01:15	0	0
01:30	0	0
01:45	0	0
02:00	0	0
02:15	0	0
02:30	0	0
02:45	0	0
03:00	0	0
03:15	0	0
03:30	0	0
03:45	0	0
04:00	0	0
04:15	3	0
04:30	1	3
04:45	0	1
05:00	0	0
05:15	0	0
05:30	4	2
05:45	4	0
06:00	9	0
06:15	10	2
06:30	10	0
06:45	24	2
07:00	35	1
07:15	28	4
07:30	50	3
07:45	67	2
08:00	67	9
08:15	50	1
08:30	63	3
08:45	93	6
09:00	81	5
09:15	57	0
09:30	30	12
09:45	41	6
10:00	25	2
10:15	21	5
10:30	15	0
10:45	12	6
11:00	4	5
11:15	8	5
11:30	3	10
11:45	4	6
12:00	11	9
12:15	8	15
12:30	13	12
12:45	9	3
13:00	12	5
13:15	6	11
13:30	8	10
13:45	5	6
14:00	6	11
14:15	5	5
14:30	5	12
14:45	1	16
15:00	5	26
15:15	1	15
15:30	6	18
15:45	0	32
16:00	0	93
16:15	0	58
16:30	10	71
16:45	5	63
17:00	6	71
17:15	0	67
17:30	0	52
17:45	6	36
18:00	0	41
18:15	4	26
18:30	1	16
18:45	3	14
19:00	1	13
19:15	1	13
19:30	3	5
19:45	0	4
20:00	0	2
20:15	0	4
20:30	0	1
20:45	0	1
21:00	0	0
21:15	0	0
21:30	0	0
21:45	0	0
22:00	0	1
22:15	0	0
22:30	0	0
22:45	0	0
23:00	0	0
23:15	0	0
23:30	0	0
23:45	0	0

Start Time	Rolling Hour	
00:00	0	0
00:15	0	0
00:30	0	0
00:45	0	0
01:00	0	0
01:15	0	0
01:30	0	0
01:45	0	0
02:00	0	0
02:15	0	0
02:30	0	0
02:45	0	0
03:00	0	0
03:15	0	0
03:30	3	0
03:45	4	3
04:00	4	4
04:15	4	4
04:30	1	4
04:45	4	3
05:00	8	2
05:15	17	2
05:30	27	4
05:45	33	2
06:00	53	4
06:15	79	5
06:30	97	7
06:45	137	10
07:00	180	10
07:15	213	18
07:30	234	15
07:45	247	15
08:00	272	19
08:15	287	14
08:30	294	13
08:45	261	22
09:00	209	22
09:15	153	20
09:30	116	24
09:45	101	12
10:00	72	12
10:15	52	15
10:30	38	16
10:45	27	25
11:00	19	26
11:15	25	30
11:30	25	39
11:45	35	42
12:00	40	39
12:15	41	35
12:30	39	31
12:45	34	28
13:00	30	31
13:15	24	37
13:30	23	31
13:45	20	34
14:00	16	44
14:15	15	59
14:30	12	68
14:45	12	74
15:00	11	90
15:15	7	157
15:30	6	201
15:45	10	254
16:00	15	285
16:15	21	263
16:30	21	272
16:45	11	252
17:00	12	226
17:15	6	196
17:30	10	155
17:45	11	120
18:00	7	98
18:15	8	69
18:30	6	56
18:45	7	44
19:00	5	34
19:15	4	24
19:30	3	15
19:45	0	11
20:00	0	8
20:15	0	6
20:30	0	2
20:45	0	1
21:00	0	0
21:15	0	1
21:30	0	1
21:45	0	1
22:00	0	1
22:15	0	0
22:30	0	0
22:45	0	0
23:00	0	0

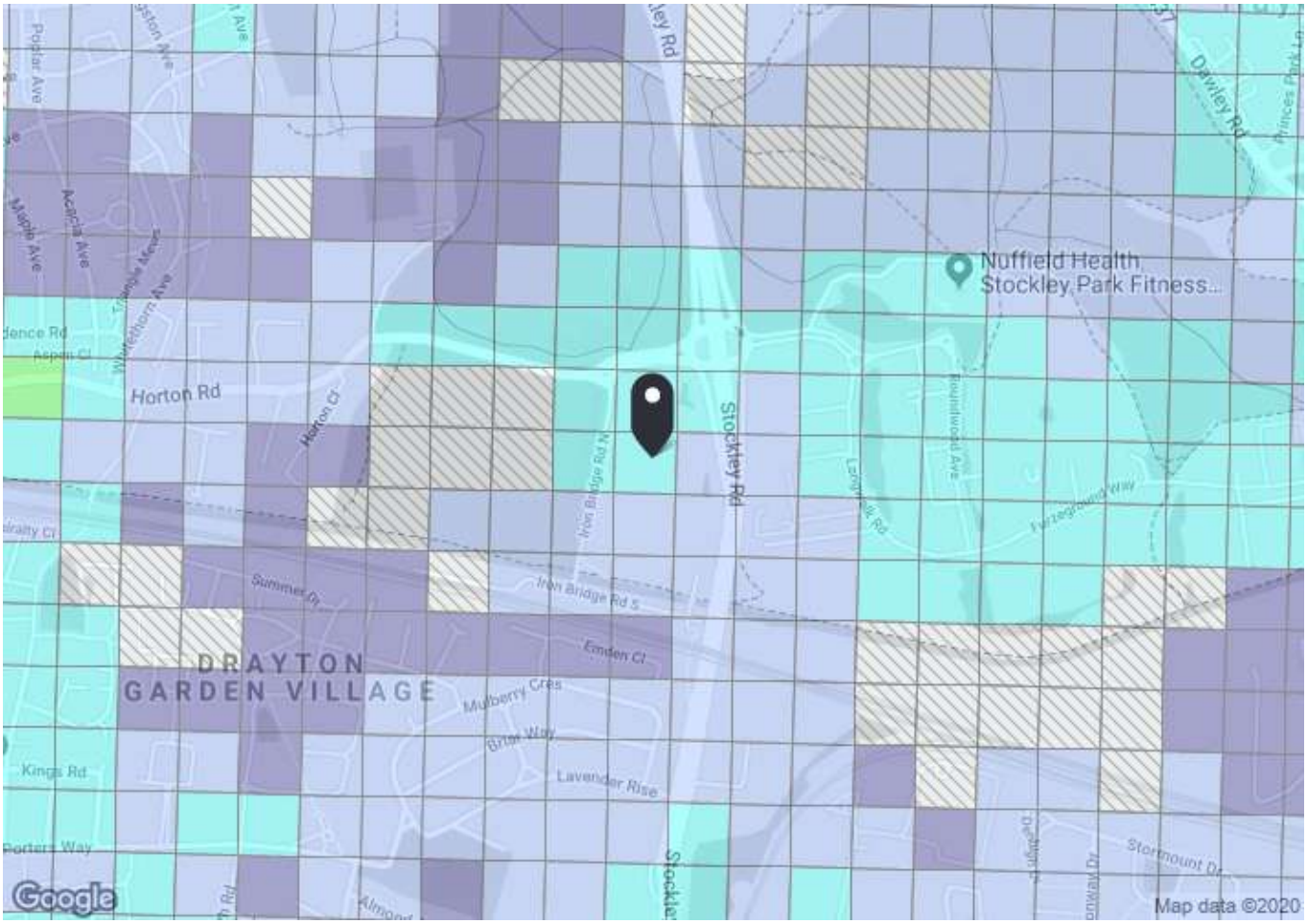
Mountbatten House
Basing View
Basingstoke, Hampshire
RG21 4HJ

wsp.com

Appendix C

PUBLIC TRANSPORT ACCESSIBILITY LEVEL (PTAL) OUTPUTS

TRANSPORT FOR LONDON



PTAL output for Base Year
2

GlaxoSmithKline, West Drayton, Uxbridge UB11 1BT, UK
Easting: 507560, Northing: 180147

Grid Cell: 78591

Report generated: 27/01/2020

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	STOCKLEY PARK WEST	U5	274.39	5	3.43	8	11.43	2.62	0.5	1.31
Bus	STOCKLEY PARK WEST	350	274.39	5	3.43	8	11.43	2.62	1	2.62
Bus	STOCKLEY PARK WEST	A10	274.39	4	3.43	9.5	12.93	2.32	0.5	1.16
									Total Grid Cell AI:	**5.1**

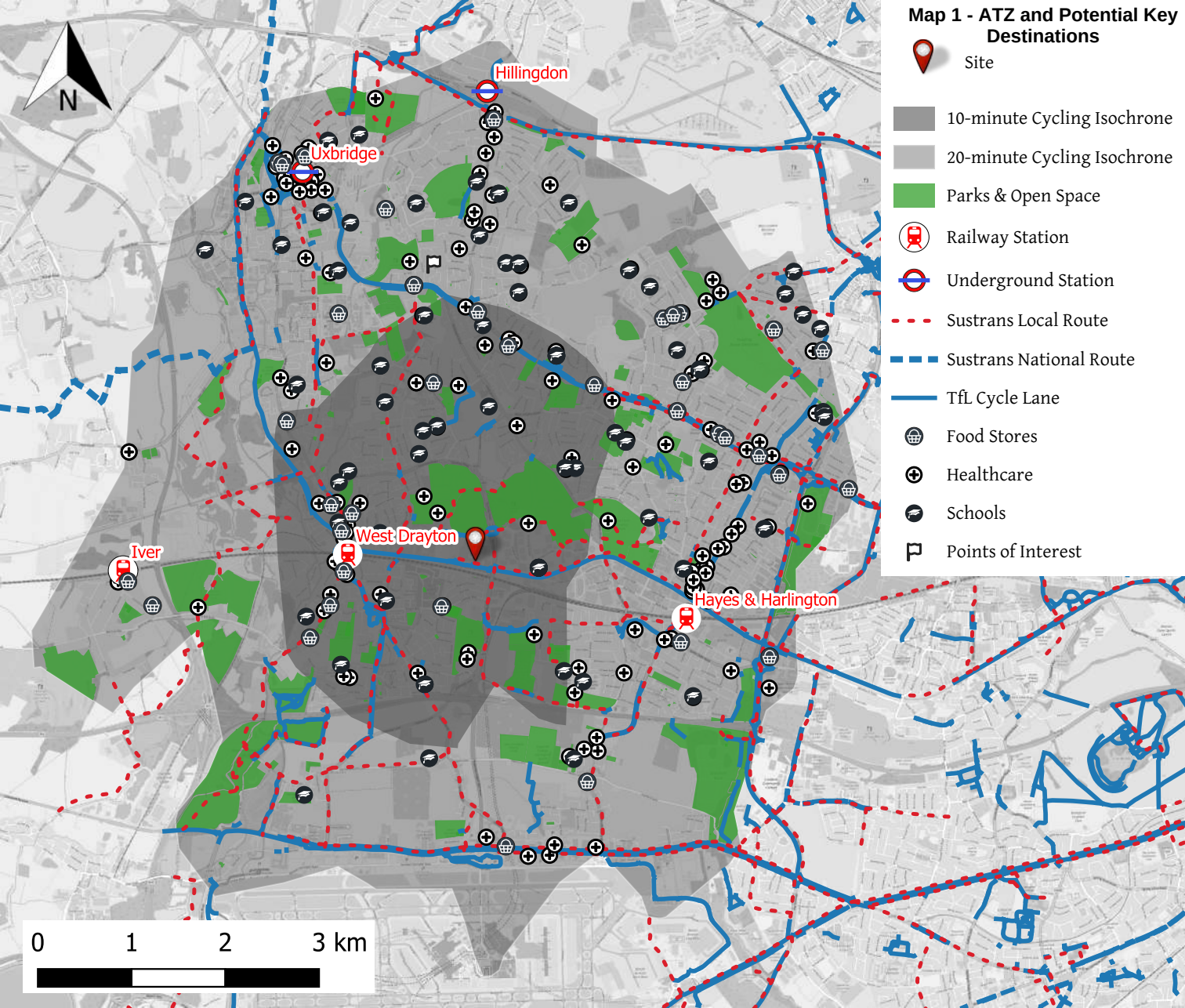
Appendix D

PIA DATA

ATZ Ref	AREFNO	YearNum	BOROUGH_NA	GEOCODE_OS	GEOCODE__1	ALOCLEAR	ADATES_FUL	ASEVACC_DE	AFACTORS	HWY_DECODE	ALIGHTB_DE	ARDSUR_DEC	AWEATHD	AJUNCNT_DE	AJUNDET_DE	ARDTYPE_DE	APEDCRS_DE	CREFNO	CAGE	AGEB2_DE	CSEVCAS_DE	CSEX_DECOD	CUSER_DECO	CCLASS_DEC	CETHNIC2_D	CSCHATT	CSEATB_DEC	PROCESSED_
A158	0114XH30782	2014	026 HILLINGDON	507614	180330	STOCKLEY ROAD, J/W HORTON ROAD	01/08/2014 08:59	3 SLIGHT	510,B,V001,405,A,V001,302,A,V001,602,A,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	3 DUAL CWY	0 NO XING FACILITY IN 50M	1	44	25-59	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER	W1 BRITISH		0 NOT APPLICABLE	V1 HAS FAILED TO GIVE WAY AT R/A & COLLIDED WITH V2 ALREADY ON R/A, KNOCKING V2 OFF THIER BIKE
A168	0114XH39232	2014	026 HILLINGDON	507690	180360	STOCKLEY RD J/W BENNETSFIELD RD	03/11/2014 09:15	3 SLIGHT	710,A,V002,302,A,V002,405,B,V002,403,A,V002	3 BOR	2 DAYLIGHT	2 ROAD-WET	2 RAINING	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	61	60+	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER	W1 BRITISH		0 NOT APPLICABLE	V2 TURNED LEFT ONTO ROUNDABOUT, COLLIDING WITH V1.
A777	0115XH30371	2015	026 HILLINGDON	507613	180340	HORTON RD J/W STOCKLEY RD	06/06/2015 12:40	3 SLIGHT	505,A,V001,602,A,V001,409,A,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	3 DUAL CWY	0 NO XING FACILITY IN 50M	1	26	25-59	3 SLIGHT	1 MALE	4 CAR	1 DRIVER/RIDER			4 UNKNOWN	V1 DELIBERATELY DROVE INTO THE N/S BARRIER AND A BOLLARD.
A782	0115XH30582	2015	026 HILLINGDON	507625	180308	STOCKLEY ROAD J/W HORTON ROAD	13/08/2015 07:45	3 SLIGHT	405,A,V001,307,A,V001,602,A,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	37	25-59	3 SLIGHT	1 MALE	4 CAR	1 DRIVER/RIDER	W1 BRITISH		4 UNKNOWN	V1 FAILED TO ACCORD PRECEDENCE AT JUNCTION AND HIT V2
A783	0115XH30134	2015	026 HILLINGDON	507625	180309	STOCKLEY RD J/W HORTON RD	27/02/2015 08:18	3 SLIGHT	302,A,V002,403,A,V002,405,A,V002,706,A,V002	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	31	25-59	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER	W1 BRITISH		0 NOT APPLICABLE	V2 TURNED LEFT ONTO ROUNDABOUT, COLLIDING WITH N/S OF V1.
A795	0115XH30456	2015	026 HILLINGDON	507650	180230	STOCKLEY ROAD 75M SOUTH J/W HORTON ROAD	03/07/2015 06:32	3 SLIGHT	405,B,V001,406,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO XING FACILITY IN 50M	1		U	3 SLIGHT	1 MALE	6 BUS OR COACH	2 PASSENGER			4 UNKNOWN	V1 COLLIDED INTO THE REAR OF V2
A796	0115XH30456	2015	026 HILLINGDON	507650	180230	STOCKLEY ROAD 75M SOUTH J/W HORTON ROAD	03/07/2015 06:32	3 SLIGHT	405,B,V001,406,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO XING FACILITY IN 50M	2		U	3 SLIGHT	2 FEMALE	6 BUS OR COACH	2 PASSENGER			4 UNKNOWN	V1 COLLIDED INTO THE REAR OF V2
A797	0115XH30456	2015	026 HILLINGDON	507650	180230	STOCKLEY ROAD 75M SOUTH J/W HORTON ROAD	03/07/2015 06:32	3 SLIGHT	405,B,V001,406,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO XING FACILITY IN 50M	3		U	3 SLIGHT	2 FEMALE	6 BUS OR COACH	2 PASSENGER			4 UNKNOWN	V1 COLLIDED INTO THE REAR OF V2
A798	0115XH30456	2015	026 HILLINGDON	507650	180230	STOCKLEY ROAD 75M SOUTH J/W HORTON ROAD	03/07/2015 06:32	3 SLIGHT	405,B,V001,406,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO XING FACILITY IN 50M	7	17	16-24	3 SLIGHT	1 MALE	6 BUS OR COACH	2 PASSENGER			4 UNKNOWN	V1 COLLIDED INTO THE REAR OF V2
A799	0115XH30456	2015	026 HILLINGDON	507650	180230	STOCKLEY ROAD 75M SOUTH J/W HORTON ROAD	03/07/2015 06:32	3 SLIGHT	405,B,V001,406,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO XING FACILITY IN 50M	4	30	25-59	3 SLIGHT	1 MALE	6 BUS OR COACH	2 PASSENGER	W1 BRITISH		4 UNKNOWN	V1 COLLIDED INTO THE REAR OF V2
A800	0115XH30456	2015	026 HILLINGDON	507650	180230	STOCKLEY ROAD 75M SOUTH J/W HORTON ROAD	03/07/2015 06:32	3 SLIGHT	405,B,V001,406,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO XING FACILITY IN 50M	5	35	25-59	3 SLIGHT	2 FEMALE	6 BUS OR COACH	2 PASSENGER			4 UNKNOWN	V1 COLLIDED INTO THE REAR OF V2
A801	0115XH30456	2015	026 HILLINGDON	507650	180230	STOCKLEY ROAD 75M SOUTH J/W HORTON ROAD	03/07/2015 06:32	3 SLIGHT	405,B,V001,406,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO XING FACILITY IN 50M	6	49	25-59	3 SLIGHT	1 MALE	6 BUS OR COACH	2 PASSENGER			4 UNKNOWN	V1 COLLIDED INTO THE REAR OF V2
A809	0115XH30895	2015	026 HILLINGDON	507690	180360	STOCKLEY ROAD, J/W BENNETSFIELD ROAD	14/12/2015 08:00	3 SLIGHT	104,B,V001,405,A,V001,302,A,V001,403,A,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	7 SLIP RD	0 NO XING FACILITY IN 50M	1	23	16-24	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER			0 NOT APPLICABLE	V1 HAS LOOKED RIGHT TO CHECK & NOT SEEN V2 IN CYCLE LANE ON R/A, V1 MOVED OFF & HIT V2
A1718	1160021286	2016	026 HILLINGDON	507680	180360	STOCKLEY PARK ROUNDABOUT JUNCTION WITH BENNETSFIELD ROAD	23/09/2016 07:30	3 SLIGHT		3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	39	25-59	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER			0 NOT APPLICABLE	V1 FAILED TO ACCORD PRECEDENCE AT JUNCTION AND HIT V2
A1719	1160021580	2016	026 HILLINGDON	507680	180370	STOCKLEY PARK ROUNDABOUT NEAR THE JUNCTION WITH BENNETSFIELD ROAD	01/09/2016 08:00	3 SLIGHT	406,A,V002	3 BOR	2 DAYLIGHT	1 ROAD-DRY	NE/HIGH WI	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	7 SLIP RD	0 NO XING FACILITY IN 50M	1	27	25-59	3 SLIGHT	1 MALE	4 CAR	1 DRIVER/RIDER			4 UNKNOWN	V2 HIT REAR V1
A1723	1160001110	2016	026 HILLINGDON	507690	180360	STOCKLEY PARK ROUNDABOUT J/W HORTON ROAD	11/11/2016 06:33	2 SERIOUS	405,A,V001,602,B,V001	3 BOR	1 DARK	2 ROAD-WET	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	7 SLIP RD	0 NO XING FACILITY IN 50M	1	43	25-59	2 SERIOUS	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER	W1 BRITISH		0 NOT APPLICABLE	NOT KNOWN HOW COLLISION OCCURRED
A2580	1170044143	2017	026 HILLINGDON	507610	180340	STOCKLEY PARK ROUNDABOUT J/W HORTON ROAD	05/06/2017 18:00	3 SLIGHT		3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	7 SLIP RD	9 UNKNOWN (S/R)	2	28	25-59	3 SLIGHT	1 MALE	4 CAR	2 PASSENGER			4 UNKNOWN	
A2581	1170044143	2017	026 HILLINGDON	507610	180340	STOCKLEY PARK ROUNDABOUT J/W HORTON ROAD	05/06/2017 18:00	3 SLIGHT		3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	7 SLIP RD	9 UNKNOWN (S/R)	1	49	25-59	3 SLIGHT	2 FEMALE	4 CAR	1 DRIVER/RIDER			4 UNKNOWN	
A2599	1170041396	2017	026 HILLINGDON	507650	180330	STOCKLEY ROAD J/W HORTON ROAD	06/06/2017 04:52	3 SLIGHT	501,A,V001	3 BOR	2 DAYLIGHT	2 ROAD-WET	2 RAINING	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	24	16-24	3 SLIGHT	1 MALE	4 CAR	1 DRIVER/RIDER	W1 BRITISH		2 WORN BUT NOT INDEPENDENTLY CONFIRMED	
A2600	1170041396	2017	026 HILLINGDON	507650	180330	STOCKLEY ROAD J/W HORTON ROAD	06/06/2017 04:52	3 SLIGHT	501,A,V001	3 BOR	2 DAYLIGHT	2 ROAD-WET	2 RAINING	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	2	28	25-59	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH		4 UNKNOWN	
A2604	1170056907	2017	026 HILLINGDON	507680	180370	STOCKLEY PARK ROUNDABOUT, STOCKLEY ROAD J/W BENNETSFIELD ROAD	01/09/2017 14:33	3 SLIGHT	406,A,V002,408,A,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	59	25-59	3 SLIGHT	2 FEMALE	4 CAR	1 DRIVER/RIDER	A1 INDIAN		2 WORN BUT NOT INDEPENDENTLY CONFIRMED	
A2605	1170061704	2017	026 HILLINGDON	507680	180390	STOCKLEY PARK ROUNDABOUT J/W HORTON ROAD	29/09/2017 06:50	3 SLIGHT	405,A,V001	3 BOR	1 DARK	2 ROAD-WET	2 RAINING	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	7 FOOTBRIDGE OR SUBWAY	1	29	25-59	3 SLIGHT	1 MALE	1 PEDESTRIAN	3 PEDESTRIAN	W9 OTHER WHITE		0 NOT APPLICABLE	
A3544	1180091359	2018	026 HILLINGDON	507612	180334	HORTON ROAD J/W STOCKLEY ROAD	20/02/2018 08:41	3 SLIGHT	405,A,V002,406,A,V001	3 BOR	2 DAYLIGHT	2 ROAD-WET	2 RAINING	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	38	25-59	3 SLIGHT	2 FEMALE	4 CAR	1 DRIVER/RIDER	A9 OTHER ASIAN		4 UNKNOWN	NOT KNOWN HOW COLLISION OCCURRED
A3545	1180091359	2018	026 HILLINGDON	507612	180334	HORTON ROAD J/W STOCKLEY ROAD	20/02/2018 08:41	3 SLIGHT	405,A,V002,406,A,V001	3 BOR	2 DAYLIGHT	2 ROAD-WET	2 RAINING	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	2	47	25-59	3 SLIGHT	1 MALE	4 CAR	2 PASSENGER	W1 BRITISH		2 WORN BUT NOT INDEPENDENTLY CONFIRMED	NOT KNOWN HOW COLLISION OCCURRED
A3547	1180142931	2018	026 HILLINGDON	507627	180312	STOCKLEY PARK ROUNDABOUT J/W HORTON ROAD	02/11/2018 07:39	3 SLIGHT	408,B,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	3	0-15	3 SLIGHT	1 MALE	6 BUS OR COACH	2 PASSENGER	W9 OTHER WHITE		4 UNKNOWN	NOT KNOWN HOW COLLISION OCCURRED
A3553	1180132692	2018	026 HILLINGDON	507640	180290	STOCKLEY PARK ROUNDABOUT J/W HORTON ROAD	14/09/2018 22:35	3 SLIGHT	405,A,V001	3 BOR	1 DARK	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	0 NO XING FACILITY IN 50M	1	49	25-59	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER			0 NOT APPLICABLE	NOT KNOWN HOW COLLISION OCCURRED
A3557	1180150859	2018	026 HILLINGDON	507670	180360	STOCKLEY ROAD 500M S OF J/W WEST DRAYTON ROAD THE NEAREST CLASSIFI	08/12/2018 20:15	3 SLIGHT	108,A,V001	3 BOR	1 DARK	2 ROAD-WET	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	0 NO XING FACILITY IN 50M	1	49	25-59	3 SLIGHT	1 MALE	4 CAR	1 DRIVER/RIDER			2 WORN BUT NOT INDEPENDENTLY CONFIRMED	NOT KNOWN HOW COLLISION OCCURRED
A3562	1180131751	2018	026 HILLINGDON	507690	180370	STOCKLEY ROAD J/W BENNETSFIELD ROAD	10/09/2018 17:07	3 SLIGHT	405,A,V001	3 BOR	2 DAYLIGHT	1 ROAD-DRY	1 FINE	4 GIVE WAY/UNCONTROLLED	01 ROUNDABOUT	1 ROUNDABOUT	8 CENTRAL REFUGE	1	59	25-59	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER	W9 OTHER WHITE		0 NOT APPLICABLE	NOT KNOWN HOW COLLISION OCCURRED

Appendix E

ATZ MAPS


Map 1 - ATZ and Potential Key Destinations
Site
10-minute Cycling Isochrone
20-minute Cycling Isochrone
Parks & Open Space
Railway Station
Underground Station
Sustrans Local Route
Sustrans National Route
TfL Cycle Lane
Food Stores
Healthcare
Schools
Points of Interest
Hillingdon
Uxbridge
West Drayton
Iver
Hayes & Harlington
N
0
1
2
3 km


Map 2.1 - ATZ Journeys to Most Important Key Destinations
Site
Railway Station
Bus Stop
20-minute Walking Isochrone
TfL Cycle Lane
Sustrans National Route
Sustrans Local Route
Parks & Open Space
ATZ Route Assesment
Route 1 to West Drayton Station
Route 2 to residential Area
Route 3 to Stockley Park east
Route 4 to Hayes & Harlington Station
Route 5 to residential area
Route 6 to Horton Road Bus Stop
N
West Drayton
Hayes & Harlingto
1
2
3
4
5
6
0 0.25 0.5 km


Map 2.2 - KSIs Along Routes to Key Destinations
Site
Railway Station
Bus Stop
20-minute Walking Isochrone
TfL Cycle Lane
Sustrans National Route
Sustrans Local Route
Parks & Open Space
ATZ Route Assesment
Route 1 to West Drayton Station
Route 2 to residential Area
Route 3 to Stockley Park east
Route 4 to Hayes & Harlington Station
Route 5 to residential area
Route 6 to Horton Road Bus Stop
PIA
SERIOUS
N
A3353
West Drayton
A1723
A778
A1061
A1065
A4468
A1066
A4466
A3810
Hayes & Harlingt
0
0.25
0.5 km


Map 3 - ATZ Neighbourhood
Healthy Characteristics Check
Site
Railway Station
Bus Stop
TfL Cycle Lane
Sustrans National Route
Sustrans Local Route
Parks & Open Space
ATZ Route Assesment
Route 1 to West Drayton Station
Route 2 to residential Area
Route 3 to Stockley Park east
Route 4 to Hayes & Harlington Station
Route 5 to residential area
Route 6 to Horton Road Bus Stop
Hayes Town Centre
Yiewsley Town Centre
Cycle Parking Demand at Stations 2026
N
West Drayton
Hayes & Harlingto
1
2
3
4
5
6
0
0.25
0.5 km

Appendix F

GSK SITE MCC OUTPUTS

Intelligent Data Collection Limited
Stockley Park, West Drayton

Client:	WSP
Project Number:	ID04694
Site Number:	Site 2
Date of Survey:	19.06.2019-20.06.2019
Site Name:	GSK Access
Survey Type:	Two-way Link Count

Quality Assurance and Issue Record

Quality Assurance

Revision	Rev A			
Date	27.06.2019			
Prepared by	Brinda Basu Roy			
Signature				
Checked by	Luke Martin			
Signature				
Project Director	Paul O'Neill			
Signature				
Project number	ID04694			
File Ref	ID04694 Stockley Park, West Drayton - MCC Site 2 - 19.06.2019			

Issue Sheet

Issued to	Date			
	28.06.2019			
Alex Smith	E-mail			

Contents Page

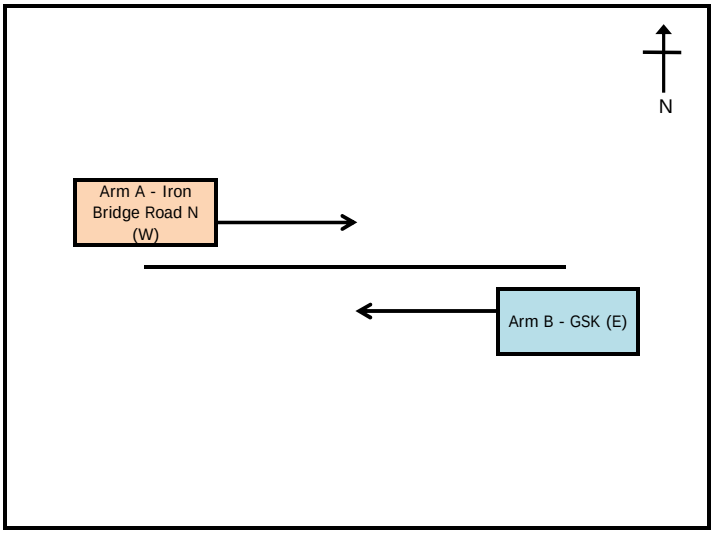
Location Plan & Summary
MCC Data
PCU Data
Movement Matrices

Intelligent Data Collection Limited

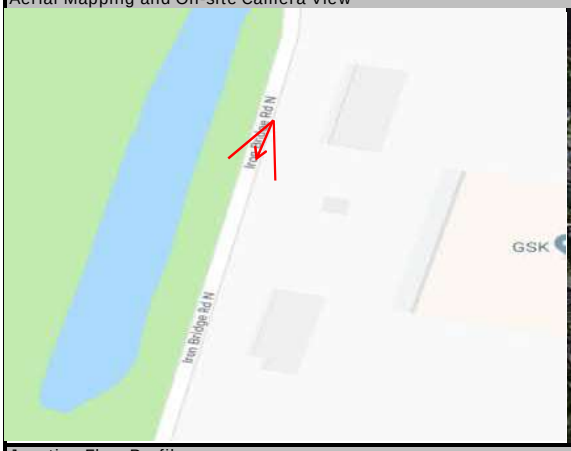
Client:	WSP	Date of Survey:	19.06.2019-20.06.2019
Project Number:	ID04694	Site Name:	GSK Access
Site Number:	Site 2	Survey Type:	Two-way Link Count

X Coordinate	Y Coordinate	Google Maps Link	
51.510289	-0.45257	Click Here	
AM Peak Conditions	**Inter-Peak Conditions**	**PM Peak Conditions**	
Cloudy	Showers	Showers	

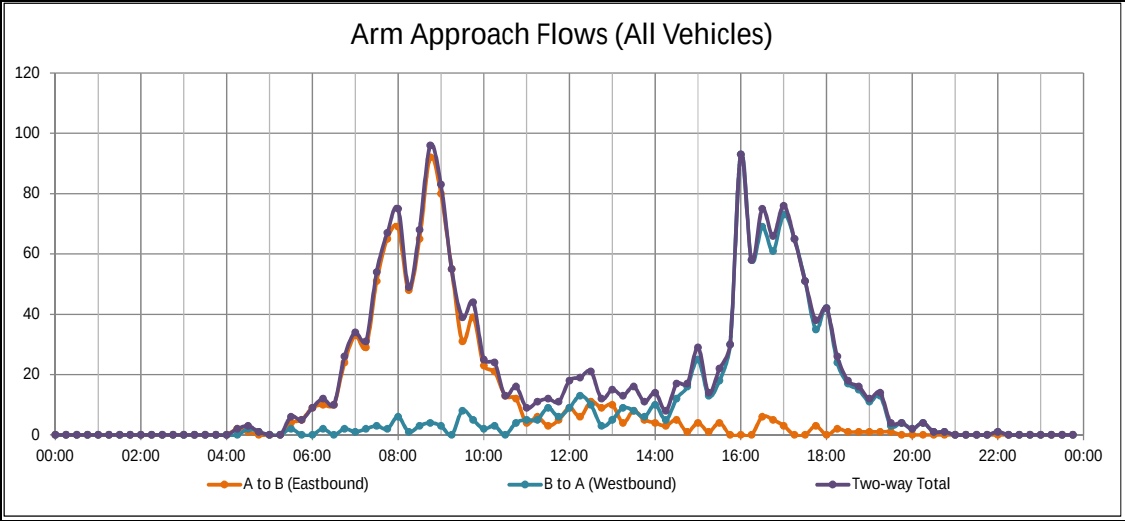
Junction Layout



Aerial Mapping and On-site Camera View



Junction Flow Profile



Additional Notes (Factors which may impact on survey results such as accidents, roadworks, special events):

Counts for 00:00 through to 03:30 are taken from 20.06.2019.

The yellow line on the screenshot represents the count location.

Intelligent Data Collection Limited

Client: WSP
Project Number: ID04694
Site Number: Site 2

Date of Survey: 19.06.2019-20.06.2019
Site Name: GSK Access
Survey Type: Two-way Link Count

Arm A: Iron Bridge Road N (W)
Arm B: GSK (E)

	A to B (Eastbound)								B to A (Westbound)								Two-way Total							
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
04:30	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	2	0	2	1	0	0	0	0	3
04:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	4	0	0	0	0	0	0	4	2	0	0	0	0	0	0	2	6	0	0	0	0	0	0	6
05:45	4	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	5
06:00	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
06:15	9	1	0	0	0	0	0	10	1	1	0	0	0	0	0	2	10	2	0	0	0	0	0	12
06:30	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10
06:45	24	0	0	0	0	0	0	24	2	0	0	0	0	0	0	2	26	0	0	0	0	0	0	26
07:00	30	2	0	0	1	0	0	33	0	1	0	0	0	0	0	1	30	3	0	0	1	0	0	34
07:15	27	1	0	0	0	0	1	29	1	0	0	0	1	0	0	2	28	1	0	0	1	0	1	31
07:30	50	0	0	0	1	0	0	51	3	0	0	0	0	0	0	3	53	0	0	0	0	1	0	54
07:45	62	0	0	0	2	0	1	65	2	0	0	0	0	0	0	2	64	0	0	0	2	0	1	67
08:00	66	0	0	0	0	1	2	69	4	0	0	0	2	0	0	6	70	0	0	0	2	1	2	75
08:15	47	0	0	0	1	0	0	48	1	0	0	0	0	0	0	1	48	0	0	0	1	0	0	49
08:30	63	0	0	0	0	0	2	65	3	0	0	0	0	0	0	3	66	0	0	0	0	0	2	68
08:45	89	1	0	0	1	0	1	92	2	1	0	0	1	0	0	4	91	2	0	0	2	0	1	96
09:00	77	1	0	0	1	1	0	80	2	0	0	0	1	0	0	3	79	1	0	0	2	1	0	83
09:15	52	1	1	0	1	0	0	55	0	0	0	0	0	0	0	0	52	1	1	0	1	0	0	55
09:30	30	0	0	0	0	0	1	31	4	1	1	0	2	0	0	8	34	1	1	0	2	0	1	39
09:45	35	1	1	0	1	0	1	39	4	0	1	0	0	0	0	5	39	1	2	0	1	0	1	44
10:00	22	0	0	0	1	0	0	23	1	1	0	0	0	0	0	2	23	1	0	0	1	0	0	25
10:15	21	0	0	0	0	0	0	21	2	0	0	0	1	0	0	3	23	0	0	0	1	0	0	24
10:30	9	3	0	0	1	0	0	13	0	0	0	0	0	0	0	0	9	3	0	0	1	0	0	13
10:45	12	0	0	0	0	0	0	12	1	2	0	0	1	0	0	4	13	2	0	0	1	0	0	16
11:00	3	1	0	0	0	0	0	4	5	0	0	0	0	0	0	5	8	1	0	0	0	0	0	9
11:15	4	1	0	0	1	0	0	6	3	2	0	0	0	0	0	5	7	3	0	0	1	0	0	11
11:30	3	0	0	0	0	0	0	3	7	0	0	0	1	0	1	9	10	0	0	0	1	0	1	12
11:45	3	1	0	0	0	0	1	5	6	0	0	0	0	0	0	6	9	1	0	0	0	0	1	11
12:00	7	1	0	0	1	0	0	9	9	0	0	0	0	0	0	9	16	1	0	0	1	0	0	18
12:15	5	0	0	0	1	0	0	6	11	1	0	0	1	0	0	13	16	1	0	0	2	0	0	19
12:30	9	0	2	0	0	0	0	11	8	0	1	0	1	0	0	10	17	0	3	0	1	0	0	21
12:45	9	0	0	0	0	0	0	9	2	1	0	0	0	0	0	3	11	1	0	0	0	0	0	12
13:00	9	0	0	0	1	0	0	10	5	0	0	0	0	0	0	5	14	0	0	0	1	0	0	15
13:15	3	0	0	0	1	0	0	4	8	0	0	0	1	0	0	9	11	0	0	0	2	0	0	13
13:30	7	1	0	0	0	0	0	8	6	1	0	0	1	0	0	8	13	2	0	0	1	0	0	16
13:45	5	0	0	0	0	0	0	5	5	1	0	0	0	0	0	6	10	1	0	0	0	0	0	11
14:00	3	0	0	0	1	0	0	4	8	1	1	0	0	0	0	10	11	1	1	0	1	0	0	14
14:15	1	1	0	0	1	0	0	3	5	0	0	0	0	0	0	5	6	1	0	0	1	0	0	8
14:30	5	0	0	0	0	0	0	5	11	1	0	0	0	0	0	12	16	1	0	0	0	0	0	17
14:45	1	0	0	0	0	0	0	1	10	0	0	0	0	0	0	16	17	0	0	0	0	0	0	17
15:00	3	0	1	0	0	0	0	4	24	0	1	0	0	0	0	25	27	0	2	0	0	0	0	29
15:15	1	0	0	0	0	0	0	1	12	0	0	0	1	0	0	13	13	0	0	0	1	0	0	14
15:30	3	0	0	0	1	0	0	4	18	0	0	0	0	0	0	18	21	0	0	0	1	0	0	22
15:45	0	0	0	0	0	0	0	0	29	0	0	0	1	0	0	30	29	0	0	0	1	0	0	30
16:00	0	0	0	0	0	0	0	0	89	1	0	0	1	1	1	93	89	1	0	0	1	1	1	93
16:15	0	0	0	0	0	0	0	0	58	0	0	0	0	0	0	58	58	0	0	0	0	0	0	58
16:30	2	1	1	0	2	0	0	6	66	1	1	0	1	0	0	69	68	2	2	0	3	0	0	75
16:45	5	0	0	0	0	0	0	5	60	0	0	0	1	0	0	61	65	0	0	0	1	0	0	66
17:00	1	0	0	0	2	0	0	3	71	0	0	0	0	0	2	73	72	0	0	0	2	0	2	76
17:15	0	0	0	0	0	0	0	0	64	0	0	0	1	0	0	65	64	0	0	0	1	0	0	65
17:30	0	0	0	0	0	0	0	0	48	1	0	0	1	0	1	51	48	1	0	0	1	0	1	51
17:45	1	0	0	0	2	0	0	3	31	0	0	0	2	0	2	35	32	0	0	0	4	0	2	38
18:00	0	0	0	0	0	0	0	0	41	0	0	0	0	0	1	42	41	0	0	0	0	0	1	42
18:15	1	0	0	0	1	0	0	2	20	0	0	0	2	2	0	24	21	0	0	0	3	2	0	26
18:30	1	0	0	0	0	0	0	1	16	0	0	0	0	1	0	17	17	0	0	0	0	1	0	18
18:45	0	0	0	0	1	0	0	1	14	0	0	0	0	0	1	15	14	0	0	0	1	0	1	16
19:00	1	0	0	0	0	0	0	1	10	0	0	0	1	0	0	11	11	0	0	0	1	0	0	12
19:15	1	0	0	0	0	0	0	1	13	0	0	0	0	0	0	13	14	0	0	0	0	0	0	14
19:30	0	0	0	0	1	0	0	1	2	0	0	0	1	0	0	3	2	0	0	0	2	0	0	4
19:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	4
20:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
20:15	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	4
20:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
20:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Rolling Hour							Total	Rolling Hour							Total	Rolling Hour							Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
03:45	0	2	1	0	0	0	0	3	0	1	1	0	0	0	0	2	0	3	2	0	0	0	0	5
04:00	0	2	1	0	0	0	0	3	0	2	1	0	0	0	0	3	0	4	2	0	0	0	0	6
04:15	0	2	1	0	0	0	0	3	0	2	1	0	0	0	0	3	0	4	2	0	0	0	0	6
04:30	0	1	0	0	0	0	0	1	0	2	1	0	0	0	0	3	0	3	1	0	0	0	0	4
04:45	4	0	0	0	0	0	0	4	2	1	0	0	0	0	0	3	6	1	0	0	0	0	0	7
05:00	8	0	0	0	0	0	1	9	2	0	0	0	0	0	0	2	10	0	0	0	0	0	1	11
05:15	17	0	0	0	0	0	1	18	2	0	0	0	0	0	0	2	19	0	0	0	0	0	1	20
05:30	26	1	0	0	0	0	1	28	3	1	0	0	0	0	0	4	29	2	0	0	0	0	1	32
05:45	32	1	0	0	0	0	1	34	1	1	0	0	0	0	0	2	33	2	0	0	0	0	1	36
06:00	52	1	0	0	0	0	0	53	3	1	0	0	0	0	0	4	55	2	0	0	0	0	0	57
06:15	73	3	0	0	1	0	0	77	3	2	0	0	0	0	0	5	76	5	0	0	1	0	0	82
06:30	91	3	0	0	1	0	1	96	3	1	0	0	1	0	0	5	94	4	0	0	2	0	1	101
06:45	131	3	0	0	1	1	1	137	6	1	0	0	1	0	0	8	137	4	0	0	2	1	1	145
07:00	169	3	0	0	3	1	2	178	6	1	0	0	1	0	0	8	175	4	0	0	4	1	2	186
07:15	205	1	0	0	2	2	4	214	10	0	0	0	3	0	0	13	215	1	0	0	5	2	4	227
07:30	225	0	0	0	3	2	3	233	10	0	0	0	2	0	0	12	235	0	0	0	5	2	3	245
07:45	238	0	0	0	3	1	5	247	10	0	0	0	2	0	0	12	248	0	0	0	5	1	5	259
08:00	265	1	0	0	2	1	5	274	10	1	0	0	3	0	0	14	275	2	0	0	5	1	5	288
08:15	276	2	0	0	3	1	3	285	8	1	0	0	2	0	0	11	284	3	0	0	5	1	3	296
08:30	281	3	1	0	3	1	3	292	7	1	0	0	2	0	0	10	288	4	1	0	5	1	3	302
08:45	248	3	1	0	3	1	2	258	8	2	1	0	4	0	0	15	256	5	2	0	7	1	2	273
09:00	194	3	2	0	3	1	2	205	10	1	2	0	3	0	0	16	204	4	4	0	6	1	2	221
09:15	139	2	2	0	3	0	2	148	9	2	2	0	2	0	0	15	148	4	4	0	5	0	2	163
09:30	108	1	1	0	2	0	2	114	11	2	2	0	3	0	0	18	119	3	3	0	5	0	2	132
09:45	87	4	1	0	3	0	1	96	7	1	1	0	1	0	0	10	94	5	2	0	4	0	1	106
10:00	64	3	0	0	2	0	0	69	4	3	0	0	2	0	0	9	68	6	0	0	4	0	0	78
10:15	45	4	0	0	1	0	0	50	8	2	0	0	2	0	0	12	53	6	0	0	3	0	0	62
10:30	28	5	0	0	2	0	0	35	9	4	0	0	1	0	0	14	37	9	0	0	3	0	0	49
10:45	22	2	0	0	1	0	0	25	16	4	0	0	2	0	1	23	38	6	0	0	3	0	1	48
11:00	13	3	0	0	1	0	1	18	21	2	0	0	1	0	1	25	34	5	0	0	2	0	2	43
11:15	17	3	0	0	2	0	1	23	25	2	0	0	1	0	1	29	42	5	0	0	3	0	2	52
11:30	18	2	0	0	2	0	1	23	33	1	0	0	2	0	1	37	51	3	0	0	4	0	2	60
11:45	24	2	2	0	2	0	1	31	34	1	1	0	2	0	0	38	58	3	3	0	4	0	1	69
12:00	30	1	2	0	2	0	0	35	30	2	1	0	2	0	0	35	60	3	3	0	4	0	0	70
12:15	32	0	2	0	2	0	0	36	26	2	1	0	2	0	0	31	58	2	3	0	4	0	0	67
12:30	30	0	2	0	2	0	0	34	23	1	1	0	2	0	0	27	53	1	3	0	4	0	0	61
12:45	28	1	0	0	2	0	0	31	21	2	0	0	2	0	0	25	49	3	0	0	4	0	0	56
13:00	24	1	0	0	2	0	0	27	24	2	0	0	2	0	0	28	48	3	0	0	4	0	0	55
13:15	18	1	0	0	2	0	0	21	27	3	1	0	2	0	0	33	45	4	1	0	4	0	0	54
13:30	16	2	0	0	2	0	0	20	24	3	1	0	1	0	0	29	40	5	1	0	3	0	0	49
13:45	14	1	0	0	2	0	0	17	29	3	1	0	0	0	0	33	43	4	1	0	2	0	0	50
14:00	10	1	0	0	2	0	0	13	40	2	1	0	0	0	0	43	50	3	1	0	2	0	0	56
14:15	10	1	1	0	1	0	0	13	56	1	1	0	0	0	0	58	66	2	2	0	1	0	0	71
14:30	10	0	1	0	0	0	0	11	63	1	1	0	1	0	0	66	73	1	2	0	1	0	0	77
14:45	8	0	1	0	1	0	0	10	70	0	1	0	1	0	0	72	78	0	2	0	2	0	0	82
15:00	7	0	1	0	1	0	0	9	83	0	1	0	2	0	0	86	90	0	2	0	3	0	0	95
15:15	4	0	0	0	1	0	0	5	148	1	0	0	3	1	1	154	152	1	0	0	4	1	1	159
15:30	3	0	0	0	1	0	0	4	194	1	0	0	2	1	1	199	197	1	0	0	3	1	1	203
15:45	2	1	1	0	2	0	0	6	242	2	1	0	3	1	1	250	244	3	2	0	5	1	1	256
16:00	7	1	1	0	2	0	0	11	273	2	1	0	3	1	1	281	280	3	2	0	5	1	1	292
16:15	8	1	1	0	4	0	0	14	255	1	1	0	2	0	2	261	263	2	2	0	6	0	2	275
16:30	8	1	1	0	4	0	0	14	261	1	1	0	3	0	2	268	269	2	2	0	7	0	2	282
16:45	6	0	0	0	2	0	0	8	243	1	0	0	3	0	3	250	249	1	0	0	5	0	3	258
17:00	2	0	0	0	4	0	0	6	214	1	0	0	4	0	5	224	216	1	1	0	8	0	5	230
17:15	1	0	0	0	2	0	0	3	184	1	0	0	4	0	4	193	185	1	0	0	6	0	4	196
17:30	2	0	0	0	3	0	0	5	140	1	0	0	5	2	4	152	142	1	0	0	8	2	4	157
17:45	3	0	0	0	3	0	0	6	108	0	0	0	4	3	3	118	111	0	0	0	7	3	3	124
18:00	2	0	0	0	2	0	0	4	91	0	0	0	2	3	2	98	93	0	0	0	4	3	2	102
18:15	3	0	0	0	2	0	0	5	60	0	0	0	3	3	1	67	63	0	0	0	5	3	1	72
18:30	3	0	0	0	1	0	0	4	53	0	0	0	1	1	1	56	56	0	0	0	2	1	1	60
18:45	2	0	0	0	2	0	0	4	39	0	0	0	2	0	1	42	41	0	0	0	4	0	1	46
19:00	2	0	0	0	1	0	0	3	29	0	0	0	2	0	0	31	31	0	0	0	3	0	0	34
19:15	1	0	0	0	1	0	0	2	21	0	0	0	1	0	0	22	22	0	0	0	2	0	0	24
19:30	0	0	0	0	1	0	0	1	12	0	0	0	1	0	0	13	12	0	0	0	2	0	0	14
19:45	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	11	0	0	0	0	0	0	11
20:00	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	8	0	0	0	0	0	0	8
20:15	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	6	0	0	0	0	0	0	6
20:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
20:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
21:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intelligent Data Collection Limited

Client:	WSP	Date of Survey:	19.06.2019-20.06.2019
Project Number:	ID04694	Site Name:	GSK Access
Site Number:	Site 2	Survey Type:	Two-way Link Count

Arm A: Iron Bridge Road N (W) Arm B: GSK (E)

	PCU Summary	
Time	A to B	B to A
00:00	0	0
00:15	0	0
00:30	0	0
00:45	0	0
01:00	0	0
01:15	0	0
01:30	0	0
01:45	0	0
02:00	0	0
02:15	0	0
02:30	0	0
02:45	0	0
03:00	0	0
03:15	0	0
03:30	0	0
03:45	0	0
04:00	0	0
04:15	3	0
04:30	1	3
04:45	0	1
05:00	0	0
05:15	0	0
05:30	4	2
05:45	4	0
06:00	9	0
06:15	10	2
06:30	10	0
06:45	24	2
07:00	35	1
07:15	28	4
07:30	50	3
07:45	67	2
08:00	67	9
08:15	50	1
08:30	63	3
08:45	93	6
09:00	81	5
09:15	57	0
09:30	30	12
09:45	41	6
10:00	25	2
10:15	21	5
10:30	15	0
10:45	12	6
11:00	4	5
11:15	8	5
11:30	3	10
11:45	4	6
12:00	11	9
12:15	8	15
12:30	13	12
12:45	9	3
13:00	12	5
13:15	6	11
13:30	8	10
13:45	5	6
14:00	6	11
14:15	5	5
14:30	5	12
14:45	1	16
15:00	5	26
15:15	1	15
15:30	6	18
15:45	0	32
16:00	0	93
16:15	0	58
16:30	10	71
16:45	5	63
17:00	6	71
17:15	0	67
17:30	0	52
17:45	6	36
18:00	0	41
18:15	4	26
18:30	1	16
18:45	3	14
19:00	1	13
19:15	1	13
19:30	3	5
19:45	0	4
20:00	0	2
20:15	0	4
20:30	0	1
20:45	0	1
21:00	0	0
21:15	0	0
21:30	0	0
21:45	0	0
22:00	0	1
22:15	0	0
22:30	0	0
22:45	0	0
23:00	0	0
23:15	0	0
23:30	0	0
23:45	0	0

Start Time	Rolling Hour	
00:00	0	0
00:15	0	0
00:30	0	0
00:45	0	0
01:00	0	0
01:15	0	0
01:30	0	0
01:45	0	0
02:00	0	0
02:15	0	0
02:30	0	0
02:45	0	0
03:00	0	0
03:15	0	0
03:30	3	0
03:45	4	3
04:00	4	4
04:15	4	4
04:30	1	4
04:45	4	3
05:00	8	2
05:15	17	2
05:30	27	4
05:45	33	2
06:00	53	4
06:15	79	5
06:30	97	7
06:45	137	10
07:00	180	10
07:15	213	18
07:30	234	15
07:45	247	15
08:00	272	19
08:15	287	14
08:30	294	13
08:45	261	22
09:00	209	22
09:15	153	20
09:30	116	24
09:45	101	12
10:00	72	12
10:15	52	15
10:30	38	16
10:45	27	25
11:00	19	26
11:15	25	30
11:30	25	39
11:45	35	42
12:00	40	39
12:15	41	35
12:30	39	31
12:45	34	28
13:00	30	31
13:15	24	37
13:30	23	31
13:45	20	34
14:00	16	44
14:15	15	59
14:30	12	68
14:45	12	74
15:00	11	90
15:15	7	157
15:30	6	201
15:45	10	254
16:00	15	285
16:15	21	263
16:30	21	272
16:45	11	252
17:00	12	226
17:15	6	196
17:30	10	155
17:45	11	120
18:00	7	98
18:15	8	69
18:30	6	56
18:45	7	44
19:00	5	34
19:15	4	24
19:30	3	15
19:45	0	11
20:00	0	8
20:15	0	6
20:30	0	2
20:45	0	1
21:00	0	0
21:15	0	1
21:30	0	1
21:45	0	1
22:00	0	1
22:15	0	0
22:30	0	0
22:45	0	0
23:00	0	0

Appendix G

TRICS OUTPUTS

WSP Development and Transportation Ltd Basing View Basingstoke Licence No: 100301

Filtering Summary

Land Use	02/A	EMPLOYMENT/OFFICE
Selected Trip Rate Calculation Parameter Range	6000-40000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	6630-11250 sqm GFA	
Date Range	Minimum: 01/01/12	Maximum: 25/09/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	1
	Tuesday	1
	Friday	1
Main Location Types selected	Edge of Town Centre	1
	Edge of Town	2
Population <1 Mile ranges selected	10,001 to 15,000	1
	25,001 to 50,000	2
Population <5 Mile ranges selected	125,001 to 250,000	2
	500,001 or More	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	1
	1.1 to 1.5	2
PTAL Rating	No PTAL Present	3

Calculation Reference: AUDIT-100301-200416-0441

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL VEHICLES

Selected regions and areas:

08	NORTH WEST		
	MS	MERSEYSIDE	1 days
10	WALES		
	SW	SWANSEA	1 days
13	MUNSTER		
	CR	CORK	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 6630 to 11250 (units: sqm)
Range Selected by User: 6000 to 40000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 25/09/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	1
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Development Zone	1
Built-Up Zone	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

B1	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	2 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	3 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

Site(1):	CR-02-A-01	Gross floor area:	8600 sqm
Development Name:	STATISTICS OFFICES		
Location:	CORK		
Postcode:		No of Employees:	451
Main Location Type:	Edge of Town	Survey Date:	23/06/14
Sub-Location Type:	No Sub Category	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	318
Site(2):	MS-02-A-02	Gross floor area:	11250 sqm
Development Name:	SCIENCE PARK OFFICES		
Location:	LIVERPOOL		
Postcode:	L3 5TF	No of Employees:	400
Main Location Type:	Edge of Town	Survey Date:	13/11/18
Sub-Location Type:	Built-Up Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	38
Site(3):	SW-02-A-01	Gross floor area:	6630 sqm
Development Name:	OFFICES		
Location:	SWANSEA		
Postcode:	SA1 8AG	No of Employees:	1221
Main Location Type:	Edge of Town Centre	Survey Date:	25/10/13
Sub-Location Type:	Development Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	184

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	1.042	3	8827	0.249	3	8827	1.291
08:00 - 09:00	3	8827	1.560	3	8827	0.306	3	8827	1.866
09:00 - 10:00	3	8827	0.865	3	8827	0.159	3	8827	1.024
10:00 - 11:00	3	8827	0.166	3	8827	0.102	3	8827	0.268
11:00 - 12:00	3	8827	0.208	3	8827	0.091	3	8827	0.299
12:00 - 13:00	3	8827	0.117	3	8827	0.249	3	8827	0.366
13:00 - 14:00	3	8827	0.219	3	8827	0.291	3	8827	0.510
14:00 - 15:00	3	8827	0.261	3	8827	0.140	3	8827	0.401
15:00 - 16:00	3	8827	0.079	3	8827	0.242	3	8827	0.321
16:00 - 17:00	3	8827	0.144	3	8827	0.869	3	8827	1.013
17:00 - 18:00	3	8827	0.125	3	8827	1.156	3	8827	1.281
18:00 - 19:00	3	8827	0.045	3	8827	0.570	3	8827	0.615
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.831			4.424			9.255

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	6630 - 11250 (units: sqm)
Survey date date range:	01/01/12 - 25/09/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	13

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.026	3	8827	0.026	3	8827	0.052
08:00 - 09:00	3	8827	0.030	3	8827	0.030	3	8827	0.060
09:00 - 10:00	3	8827	0.004	3	8827	0.004	3	8827	0.008
10:00 - 11:00	3	8827	0.004	3	8827	0.004	3	8827	0.008
11:00 - 12:00	3	8827	0.008	3	8827	0.008	3	8827	0.016
12:00 - 13:00	3	8827	0.008	3	8827	0.008	3	8827	0.016
13:00 - 14:00	3	8827	0.004	3	8827	0.004	3	8827	0.008
14:00 - 15:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
15:00 - 16:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
16:00 - 17:00	3	8827	0.008	3	8827	0.008	3	8827	0.016
17:00 - 18:00	3	8827	0.023	3	8827	0.023	3	8827	0.046
18:00 - 19:00	3	8827	0.008	3	8827	0.008	3	8827	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.123			0.123			0.246

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
08:00 - 09:00	3	8827	0.011	3	8827	0.011	3	8827	0.022
09:00 - 10:00	3	8827	0.008	3	8827	0.008	3	8827	0.016
10:00 - 11:00	3	8827	0.004	3	8827	0.004	3	8827	0.008
11:00 - 12:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
12:00 - 13:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
13:00 - 14:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
14:00 - 15:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
15:00 - 16:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
16:00 - 17:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
17:00 - 18:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
18:00 - 19:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.023			0.046

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.015	3	8827	0.000	3	8827	0.015
08:00 - 09:00	3	8827	0.023	3	8827	0.000	3	8827	0.023
09:00 - 10:00	3	8827	0.023	3	8827	0.000	3	8827	0.023
10:00 - 11:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
11:00 - 12:00	3	8827	0.008	3	8827	0.000	3	8827	0.008
12:00 - 13:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
13:00 - 14:00	3	8827	0.008	3	8827	0.008	3	8827	0.016
14:00 - 15:00	3	8827	0.000	3	8827	0.004	3	8827	0.004
15:00 - 16:00	3	8827	0.000	3	8827	0.004	3	8827	0.004
16:00 - 17:00	3	8827	0.000	3	8827	0.019	3	8827	0.019
17:00 - 18:00	3	8827	0.000	3	8827	0.045	3	8827	0.045
18:00 - 19:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.077			0.080			0.157

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	1.163	3	8827	0.083	3	8827	1.246
08:00 - 09:00	3	8827	1.741	3	8827	0.170	3	8827	1.911
09:00 - 10:00	3	8827	0.937	3	8827	0.136	3	8827	1.073
10:00 - 11:00	3	8827	0.193	3	8827	0.106	3	8827	0.299
11:00 - 12:00	3	8827	0.242	3	8827	0.094	3	8827	0.336
12:00 - 13:00	3	8827	0.144	3	8827	0.310	3	8827	0.454
13:00 - 14:00	3	8827	0.272	3	8827	0.366	3	8827	0.638
14:00 - 15:00	3	8827	0.298	3	8827	0.144	3	8827	0.442
15:00 - 16:00	3	8827	0.083	3	8827	0.268	3	8827	0.351
16:00 - 17:00	3	8827	0.155	3	8827	1.054	3	8827	1.209
17:00 - 18:00	3	8827	0.128	3	8827	1.461	3	8827	1.589
18:00 - 19:00	3	8827	0.042	3	8827	0.699	3	8827	0.741
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.398			4.891			10.289

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.181	3	8827	0.015	3	8827	0.196
08:00 - 09:00	3	8827	0.283	3	8827	0.019	3	8827	0.302
09:00 - 10:00	3	8827	0.151	3	8827	0.042	3	8827	0.193
10:00 - 11:00	3	8827	0.087	3	8827	0.060	3	8827	0.147
11:00 - 12:00	3	8827	0.072	3	8827	0.098	3	8827	0.170
12:00 - 13:00	3	8827	0.480	3	8827	0.763	3	8827	1.243
13:00 - 14:00	3	8827	0.740	3	8827	0.831	3	8827	1.571
14:00 - 15:00	3	8827	0.551	3	8827	0.408	3	8827	0.959
15:00 - 16:00	3	8827	0.185	3	8827	0.234	3	8827	0.419
16:00 - 17:00	3	8827	0.087	3	8827	0.110	3	8827	0.197
17:00 - 18:00	3	8827	0.049	3	8827	0.208	3	8827	0.257
18:00 - 19:00	3	8827	0.004	3	8827	0.155	3	8827	0.159
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.870			2.943			5.813

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.174	3	8827	0.004	3	8827	0.178
08:00 - 09:00	3	8827	0.347	3	8827	0.011	3	8827	0.358
09:00 - 10:00	3	8827	0.219	3	8827	0.030	3	8827	0.249
10:00 - 11:00	3	8827	0.094	3	8827	0.030	3	8827	0.124
11:00 - 12:00	3	8827	0.064	3	8827	0.030	3	8827	0.094
12:00 - 13:00	3	8827	0.106	3	8827	0.215	3	8827	0.321
13:00 - 14:00	3	8827	0.166	3	8827	0.136	3	8827	0.302
14:00 - 15:00	3	8827	0.053	3	8827	0.042	3	8827	0.095
15:00 - 16:00	3	8827	0.045	3	8827	0.072	3	8827	0.117
16:00 - 17:00	3	8827	0.038	3	8827	0.283	3	8827	0.321
17:00 - 18:00	3	8827	0.011	3	8827	0.332	3	8827	0.343
18:00 - 19:00	3	8827	0.000	3	8827	0.068	3	8827	0.068
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.317			1.253			2.570

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.038	3	8827	0.026	3	8827	0.064
08:00 - 09:00	3	8827	0.091	3	8827	0.053	3	8827	0.144
09:00 - 10:00	3	8827	0.076	3	8827	0.053	3	8827	0.129
10:00 - 11:00	3	8827	0.049	3	8827	0.034	3	8827	0.083
11:00 - 12:00	3	8827	0.026	3	8827	0.030	3	8827	0.056
12:00 - 13:00	3	8827	0.060	3	8827	0.060	3	8827	0.120
13:00 - 14:00	3	8827	0.079	3	8827	0.087	3	8827	0.166
14:00 - 15:00	3	8827	0.045	3	8827	0.038	3	8827	0.083
15:00 - 16:00	3	8827	0.042	3	8827	0.049	3	8827	0.091
16:00 - 17:00	3	8827	0.045	3	8827	0.076	3	8827	0.121
17:00 - 18:00	3	8827	0.079	3	8827	0.106	3	8827	0.185
18:00 - 19:00	3	8827	0.026	3	8827	0.026	3	8827	0.052
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.656			0.638			1.294

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.015	3	8827	0.011	3	8827	0.026
08:00 - 09:00	3	8827	0.030	3	8827	0.030	3	8827	0.060
09:00 - 10:00	3	8827	0.030	3	8827	0.023	3	8827	0.053
10:00 - 11:00	3	8827	0.015	3	8827	0.015	3	8827	0.030
11:00 - 12:00	3	8827	0.011	3	8827	0.011	3	8827	0.022
12:00 - 13:00	3	8827	0.008	3	8827	0.008	3	8827	0.016
13:00 - 14:00	3	8827	0.008	3	8827	0.011	3	8827	0.019
14:00 - 15:00	3	8827	0.015	3	8827	0.004	3	8827	0.019
15:00 - 16:00	3	8827	0.011	3	8827	0.019	3	8827	0.030
16:00 - 17:00	3	8827	0.008	3	8827	0.011	3	8827	0.019
17:00 - 18:00	3	8827	0.000	3	8827	0.008	3	8827	0.008
18:00 - 19:00	3	8827	0.004	3	8827	0.004	3	8827	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.155			0.155			0.310

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

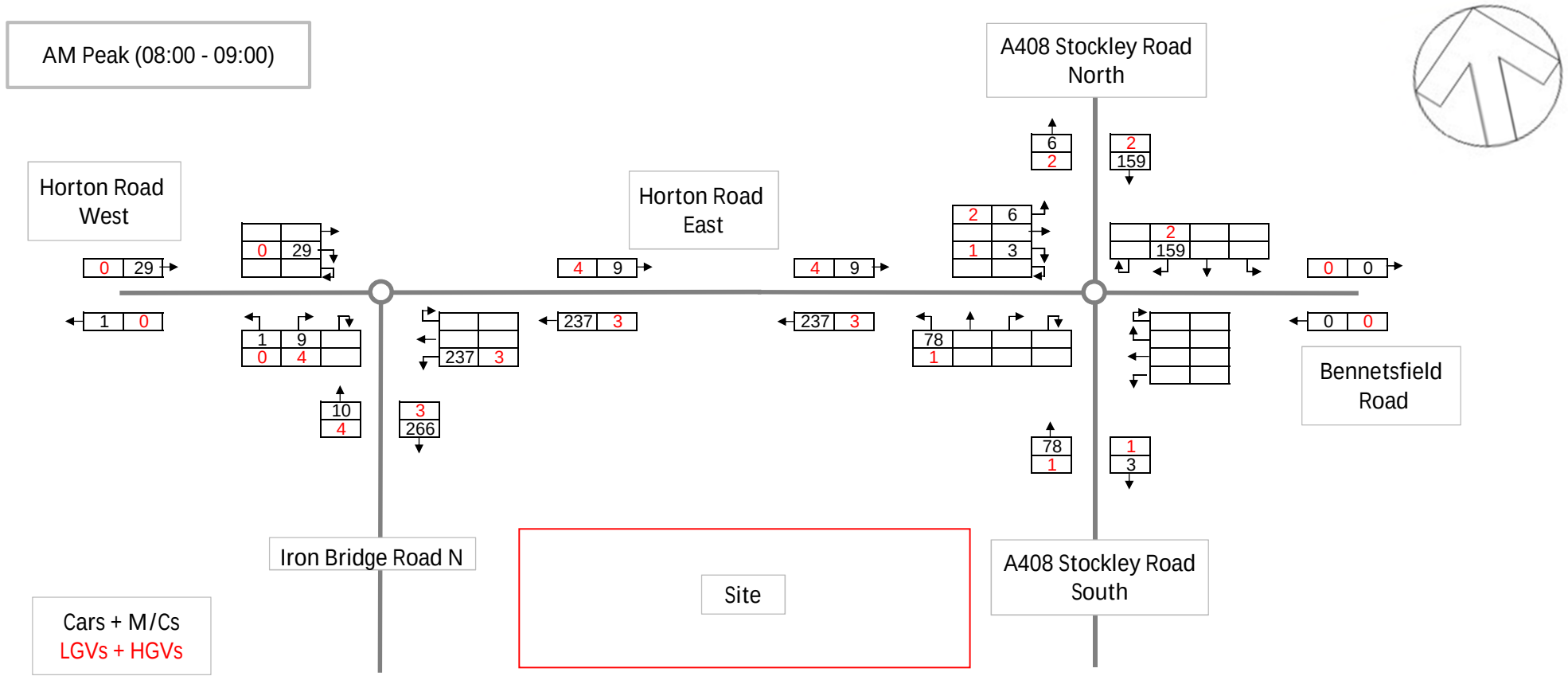
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8827	0.011	3	8827	0.000	3	8827	0.011
08:00 - 09:00	3	8827	0.004	3	8827	0.000	3	8827	0.004
09:00 - 10:00	3	8827	0.008	3	8827	0.000	3	8827	0.008
10:00 - 11:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
11:00 - 12:00	3	8827	0.004	3	8827	0.000	3	8827	0.004
12:00 - 13:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
13:00 - 14:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
14:00 - 15:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
15:00 - 16:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
16:00 - 17:00	3	8827	0.000	3	8827	0.004	3	8827	0.004
17:00 - 18:00	3	8827	0.000	3	8827	0.023	3	8827	0.023
18:00 - 19:00	3	8827	0.000	3	8827	0.000	3	8827	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.027			0.054

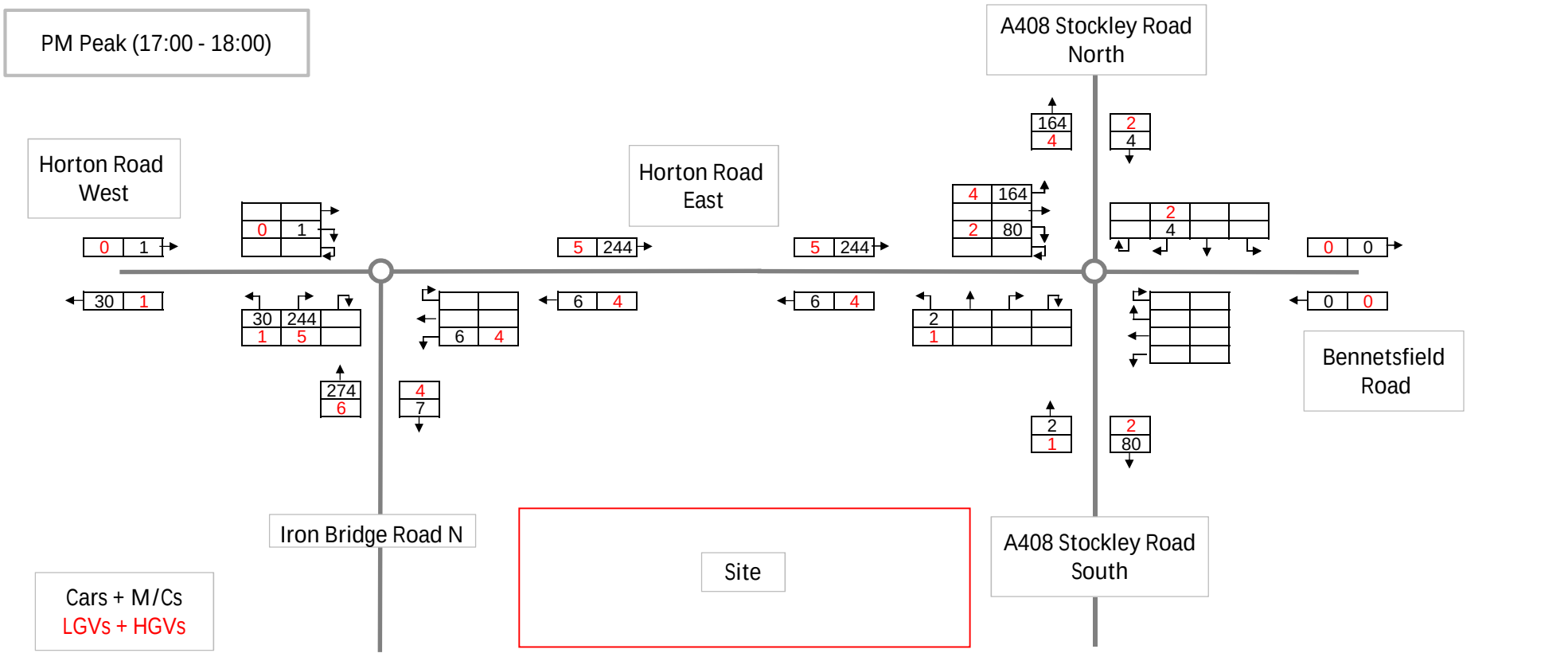
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

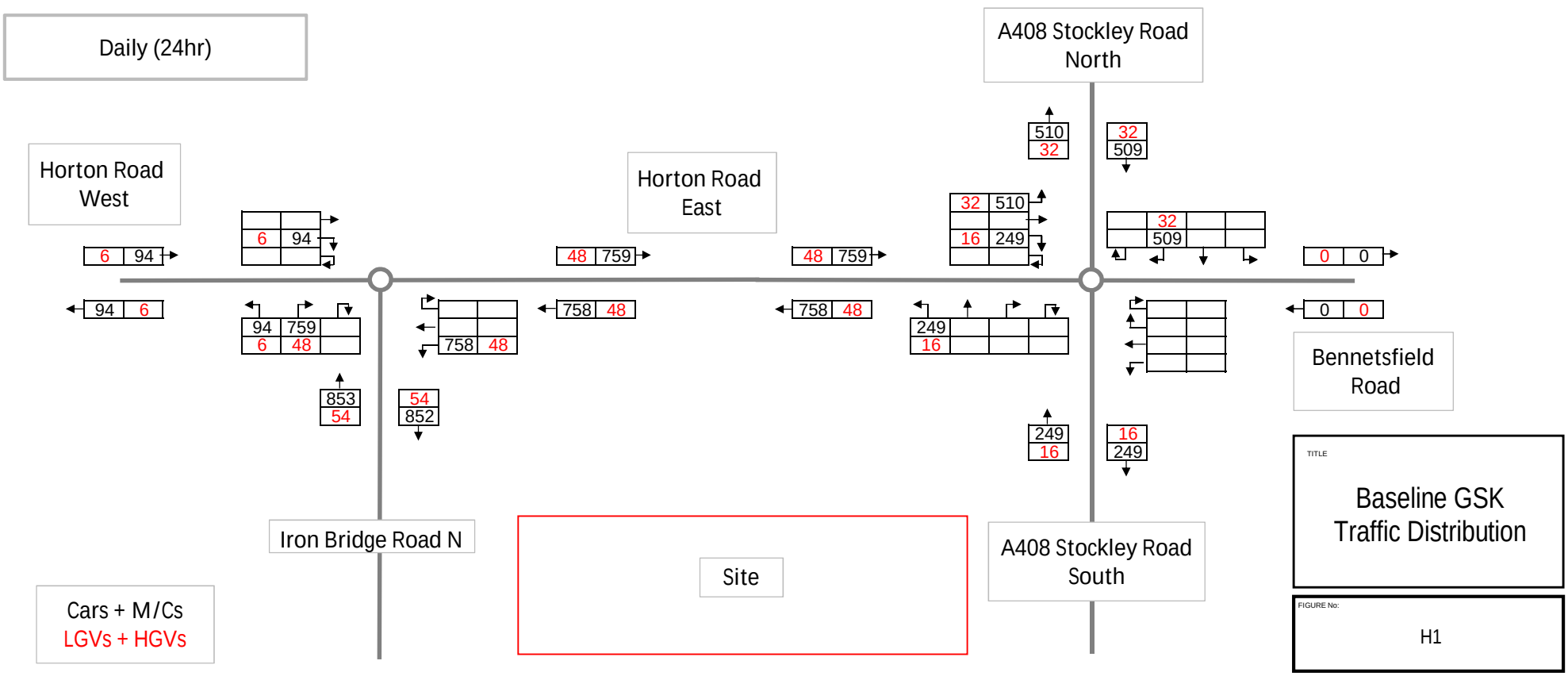
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

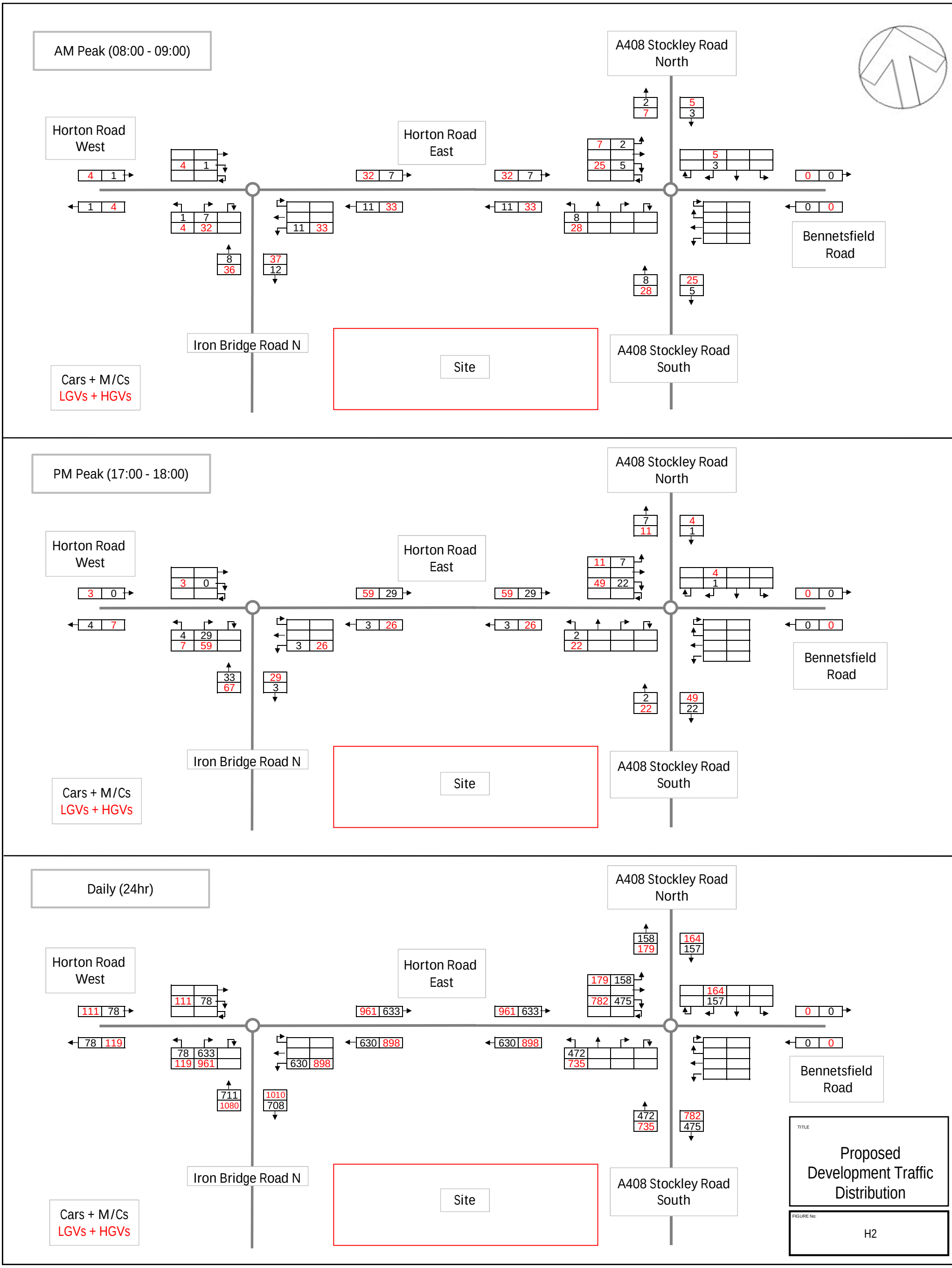
Appendix H

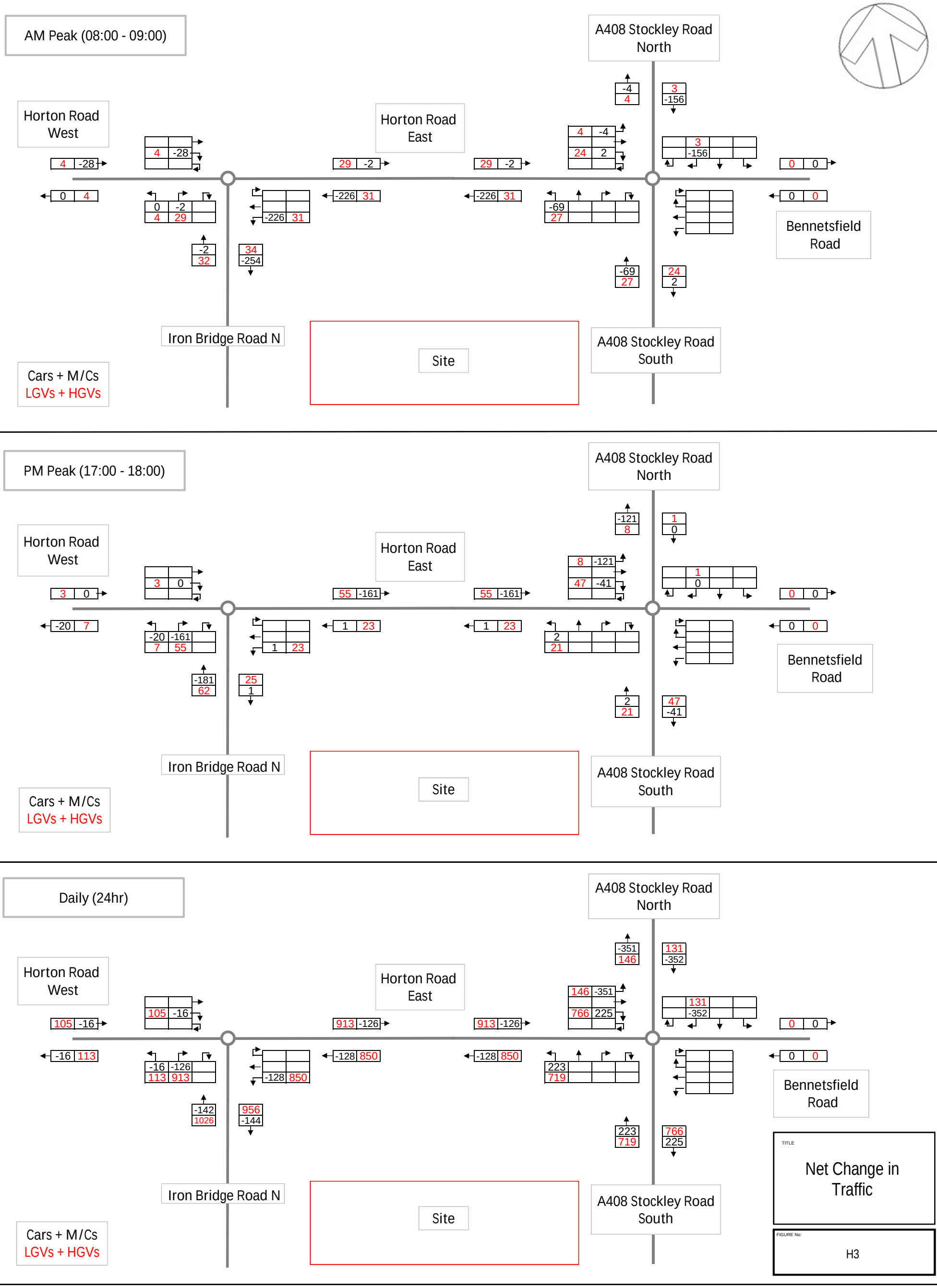
TRAFFIC FLOW DIAGRAMS


AM Peak (08:00 - 09:00)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs


PM Peak (17:00 - 18:00)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs


Daily (24hr)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs
TITLE
Baseline GSK Traffic Distribution
FIGURE No:
H1


AM Peak (08:00 - 09:00)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs
PM Peak (17:00 - 18:00)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs
Daily (24hr)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs
TITLE
Proposed Development Traffic Distribution
FIGURE No:
H2


AM Peak (08:00 - 09:00)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs
PM Peak (17:00 - 18:00)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs
Daily (24hr)
A408 Stockley Road North
Horton Road West
Horton Road East
Bennetsfield Road
Iron Bridge Road N
Site
A408 Stockley Road South
Cars + M/Cs
LGVs + HGVs
TITLE
Net Change in Traffic
FIGURE No:
H3

Appendix I

PROLOGIS PARK HEATHROW SURVEY RESULTS

Hillingdon - Manual Traffic Survey, Thursday 4th Decem

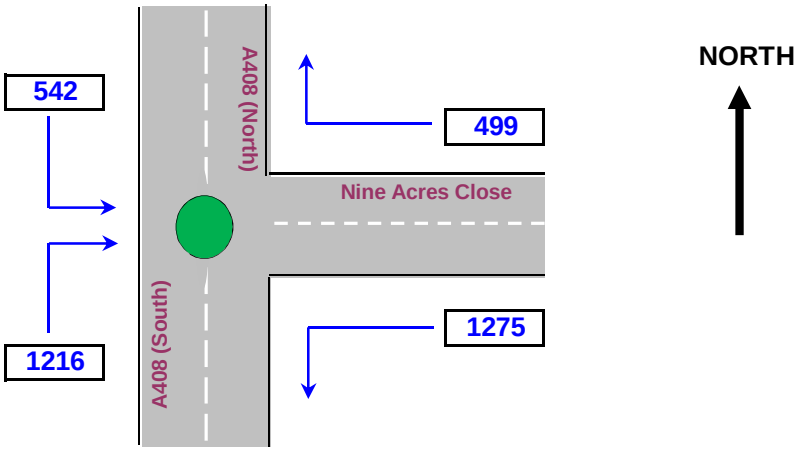
Junction: (2) A408 / Nine Acres Close

Vehicle Class: ALL CLASSES

Start Time: 1) 0000

End Time: 1) 2400

☐ **Peak Hour**



Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

Important Note: This spreadsheet & Interactive Vehicle Flow Diagram was produced based on specific parameters. Consequently, alteration to the spreadsheet format or it's properties may result in malfunction.

Hillingdon - Manual Traffic Survey, Thursday 4th December 2014

Junction: (2) A408 / Nine Acres Close

Approach: A408 (North)

	Left to Nine Acres Close								
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	PEDS	TOTAL
0000 - 0015	0	0	3	3	0	0	1	4	11
0015 - 0030	0	0	3	6	0	0	1	3	13
0030 - 0045	0	0	4	5	1	1	0	3	14
0045 - 0100	0	0	4	2	0	0	0	2	8
Hourly Total	**0**	**0**	**14**	**16**	**1**	**1**	**2**	**12**	**46**
0100 - 0115	1	0	3	3	1	0	0	2	10
0115 - 0130	0	0	3	2	1	0	0	2	8
0130 - 0145	0	0	3	4	0	0	0	3	10
0145 - 0200	0	0	4	3	1	0	0	3	11
Hourly Total	**1**	**0**	**13**	**12**	**3**	**0**	**0**	**10**	**39**
0200 - 0215	0	0	3	1	1	0	0	2	7
0215 - 0230	0	0	4	3	0	0	0	1	8
0230 - 0245	0	0	3	3	1	0	0	0	7
0245 - 0300	0	0	2	4	0	0	0	0	6
Hourly Total	**0**	**0**	**12**	**11**	**2**	**0**	**0**	**3**	**28**
0300 - 0315	0	0	3	1	2	1	0	0	7
0315 - 0330	0	0	2	3	0	0	0	0	5
0330 - 0345	0	0	0	2	0	0	0	0	2
0345 - 0400	0	0	2	0	0	0	0	0	2
Hourly Total	**0**	**0**	**7**	**6**	**2**	**1**	**0**	**0**	**16**
0400 - 0415	0	0	1	2	1	0	0	2	6
0415 - 0430	0	0	4	1	0	1	0	0	6
0430 - 0445	0	0	0	2	0	2	0	0	4
0445 - 0500	0	0	1	2	0	0	0	1	4
Hourly Total	**0**	**0**	**6**	**7**	**1**	**3**	**0**	**3**	**20**
0500 - 0515	0	0	0	1	0	0	0	2	3
0515 - 0530	0	0	2	0	1	0	0	2	5
0530 - 0545	0	0	0	2	2	0	0	0	4
0545 - 0600	0	0	3	0	0	0	0	6	9
Hourly Total	**0**	**0**	**5**	**3**	**3**	**0**	**0**	**10**	**21**
0600 - 0615	1	0	4	1	1	0	0	8	15
0615 - 0630	0	0	2	2	2	1	0	3	10
0630 - 0645	0	0	8	1	1	0	0	6	16
0645 - 0700	0	0	2	1	1	0	0	6	10
Hourly Total	**1**	**0**	**16**	**5**	**5**	**1**	**0**	**23**	**51**
0700 - 0715	0	0	3	0	0	0	0	0	3
0715 - 0730	0	0	1	0	0	0	0	0	1
0730 - 0745	0	0	0	1	0	0	0	0	1
0745 - 0800	0	0	1	2	0	0	0	1	4
Hourly Total	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**1**	**9**
0800 - 0815	0	0	0	0	0	0	0	1	1
0815 - 0830	0	0	1	1	0	0	0	1	3
0830 - 0845	0	0	1	0	1	0	0	6	8
0845 - 0900	0	0	0	0	1	0	0	1	2
Hourly Total	**0**	**0**	**2**	**1**	**2**	**0**	**0**	**9**	**14**
0900 - 0915	0	0	2	2	0	0	0	9	13
0915 - 0930	0	0	2	2	0	0	0	1	5
0930 - 0945	0	0	0	0	0	0	0	0	0
0945 - 1000	0	0	1	0	0	0	0	2	3
Hourly Total	**0**	**0**	**5**	**4**	**0**	**0**	**0**	**12**	**21**
1000 - 1015	0	0	1	2	0	0	0	1	4
1015 - 1030	0	0	0	3	0	0	0	2	5
1030 - 1045	0	0	0	4	0	0	0	4	8
1045 - 1100	0	0	0	1	0	0	0	0	1
Hourly Total	**0**	**0**	**1**	**10**	**0**	**0**	**0**	**7**	**18**
1100 - 1115	0	0	0	3	0	0	0	2	5
1115 - 1130	0	0	0	2	1	0	0	1	4
1130 - 1145	0	0	2	2	0	0	0	2	6
1145 - 1200	0	0	1	3	0	0	0	2	6
Hourly Total	**0**	**0**	**3**	**10**	**1**	**0**	**0**	**7**	**21**
1200 - 1215	0	0	0	2	0	0	0	1	3
1215 - 1230	0	0	0	0	0	0	0	2	2
1230 - 1245	1	0	1	0	0	0	0	0	2
1245 - 1300	0	0	1	3	0	0	1	0	5
Hourly Total	**1**	**0**	**2**	**5**	**0**	**0**	**1**	**3**	**12**
1300 - 1315	0	0	1	0	0	0	0	3	4
1315 - 1330	0	0	1	0	0	0	0	8	9
1330 - 1345	0	1	3	1	0	0	0	7	12
1345 - 1400	0	0	1	2	0	0	0	4	7
Hourly Total	**0**	**1**	**6**	**3**	**0**	**0**	**0**	**22**	**32**
1400 - 1415	0	0	0	0	0	0	0	4	4
1415 - 1430	0	0	0	3	0	0	0	1	4
1430 - 1445	0	0	1	4	0	0	0	7	12
1445 - 1500	0	0	3	0	0	0	0	7	10
Hourly Total	**0**	**0**	**4**	**7**	**0**	**0**	**0**	**19**	**30**
1500 - 1515	0	0	2	1	0	0	0	0	3
1515 - 1530	0	0	0	1	0	0	0	0	1
1530 - 1545	0	0	0	1	0	0	0	1	2
1545 - 1600	0	0	0	0	0	0	0	0	0
Hourly Total	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**1**	**6**
1600 - 1615	0	0	2	2	0	0	0	1	5
1615 - 1630	0	0	3	0	0	0	0	6	9
1630 - 1645	0	0	0	3	0	0	0	3	6
1645 - 1700	0	0	1	1	0	0	0	4	6
Hourly Total	**0**	**0**	**6**	**6**	**0**	**0**	**0**	**14**	**26**
1700 - 1715	0	0	1	2	0	0	0	1	4
1715 - 1730	0	0	1	1	0	0	0	0	2
1730 - 1745	0	0	1	1	0	0	0	0	2
1745 - 1800	0	0	0	1	0	0	0	0	1
Hourly Total	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**1**	**9**
1800 - 1815	0	0	0	1	0	0	0	0	1
1815 - 1830	0	0	0	0	0	0	0	0	0
1830 - 1845	0	0	0	1	0	0	0	0	1
1845 - 1900	0	0	0	2	0	0	0	0	2
Hourly Total	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**
1900 - 1915	0	0	0	0	0	0	0	0	0
1915 - 1930	0	0	0	0	0	0	0	0	0
1930 - 1945	0	0	0	1	0	0	0	1	2
1945 - 2000	0	0	0	2	0	0	0	1	3
Hourly Total	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**5**
2000 - 2015	0	1	0	4	0	0	0	0	5
2015 - 2030	0	0	0	1	0	0	0	0	1
2030 - 2045	0	0	0	1	0	0	0	0	1
2045 - 2100	0	0	0	0	0	0	0	0	0
Hourly Total	**0**	**1**	**0**	**6**	**0**	**0**	**0**	**0**	**7**
2100 - 2115	0	0	1	0	0	0	0	0	1
2115 - 2130	0	0	0	1	1	0	0	0	2
2130 - 2145	0	0	6	0	0	0	0	0	6
2145 - 2200	0	0	0	0	1	0	0	0	1
Hourly Total	**0**	**0**	**7**	**1**	**2**	**0**	**0**	**0**	**10**
2200 - 2215	0	0	0	0	0	0	1	0	1
2215 - 2230	0	0	7	0	1	0	0	23	31
2230 - 2245	0	0	2	0	0	0	1	6	9
2245 - 2300	0	0	9	2	0	0	1	2	14
Hourly Total	**0**	**0**	**18**	**2**	**1**	**0**	**3**	**31**	**55**
2300 - 2315	0	0	4	3	0	0	0	6	13
2315 - 2330	0	0	3	3	0	0	0	4	10
2330 - 2345	0	0	5	2	0	0	0	2	9
2345 - 2400	0	0	6	1	0	0	0	3	10
Hourly Total	**0**	**0**	**18**	**9**	**0**	**0**	**0**	**15**	**42**

TOTAL	**3**	**2**	**155**	**142**	**23**	**6**	**6**	**205**	**542**

Hillingdon - Manual Traffic Survey, Thursday 4th December 2014

Junction: (2) A408 / Nine Acres Close

Approach: Nine Acres Close

	Left to A408 (South)									Right to A408 (North)								
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	PEDS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	PEDS	TOTAL
0000 - 0015	0	0	5	8	5	1	0	0	19	0	0	2	0	0	0	0	4	6
0015 - 0030	0	0	7	4	5	1	0	0	17	0	0	0	0	1	0	0	1	2
0030 - 0045	0	0	3	5	1	1	0	0	10	0	0	0	2	0	0	0	2	4
0045 - 0100	0	0	5	4	3	3	0	0	15	0	0	1	0	0	0	0	2	3
Hourly Total	**0**	**0**	**20**	**21**	**14**	**6**	**0**	**0**	**61**	**0**	**0**	**3**	**2**	**1**	**0**	**0**	**9**	**15**
0100 - 0115	0	0	4	8	0	2	0	0	14	0	0	1	2	0	0	0	4	7
0115 - 0130	0	0	3	2	2	0	0	0	7	0	0	1	1	1	0	0	4	7
0130 - 0145	0	0	8	4	2	1	0	0	15	0	0	1	0	1	0	0	4	6
0145 - 0200	0	0	4	2	0	1	0	0	7	0	0	3	1	0	0	0	0	4
Hourly Total	**0**	**0**	**19**	**16**	**4**	**4**	**0**	**0**	**43**	**0**	**0**	**6**	**4**	**2**	**0**	**0**	**12**	**24**
0200 - 0215	0	0	3	2	1	1	0	0	7	0	0	0	2	0	0	0	3	5
0215 - 0230	0	0	3	8	3	1	0	0	15	0	0	0	1	0	0	0	3	4
0230 - 0245	0	0	5	0	0	1	0	0	6	0	0	0	3	0	0	0	3	6
0245 - 0300	0	0	5	1	1	5	0	0	12	0	0	1	3	0	0	0	3	7
Hourly Total	**0**	**0**	**16**	**11**	**5**	**8**	**0**	**0**	**40**	**0**	**0**	**1**	**9**	**0**	**0**	**0**	**12**	**22**
0300 - 0315	0	0	28	0	1	2	0	0	31	0	0	3	5	1	1	0	3	13
0315 - 0330	0	0	4	1	2	3	0	0	10	0	0	0	3	1	0	0	0	4
0330 - 0345	0	0	13	0	3	3	0	0	19	0	0	1	3	0	0	0	0	4
0345 - 0400	0	0	4	0	2	2	0	0	8	0	0	0	2	2	0	0	1	5
Hourly Total	**0**	**0**	**49**	**1**	**8**	**10**	**0**	**0**	**68**	**0**	**0**	**4**	**13**	**4**	**1**	**0**	**4**	**26**
0400 - 0415	0	0	1	1	4	2	0	0	8	0	0	0	2	0	0	0	1	3
0415 - 0430	0	0	1	2	1	2	0	0	6	0	0	2	3	2	0	0	1	8
0430 - 0445	0	0	3	1	0	2	0	0	6	0	0	1	1	0	1	0	2	5
0445 - 0500	0	0	4	0	1	2	0	0	7	0	0	1	1	0	0	0	1	3
Hourly Total	**0**	**0**	**9**	**4**	**6**	**8**	**0**	**0**	**27**	**0**	**0**	**4**	**7**	**2**	**1**	**0**	**5**	**19**
0500 - 0515	0	0	2	1	0	1	0	0	4	0	0	3	1	0	1	0	1	6
0515 - 0530	0	0	0	1	1	0	0	0	2	0	0	2	1	0	2	0	2	7
0530 - 0545	0	0	0	0	0	1	0	0	1	0	0	3	1	0	0	0	2	6
0545 - 0600	0	0	0	2	3	3	0	0	8	0	0	4	3	0	1	0	1	9
Hourly Total	**0**	**0**	**2**	**4**	**4**	**5**	**0**	**0**	**15**	**0**	**0**	**12**	**6**	**0**	**4**	**0**	**6**	**28**
0600 - 0615	0	0	2	3	1	3	0	0	9	0	0	3	2	0	1	0	3	9
0615 - 0630	0	0	0	4	1	0	0	0	5	0	0	2	1	0	1	0	0	4
0630 - 0645	0	0	0	3	0	1	0	0	4	0	0	3	1	1	0	0	1	6
0645 - 0700	0	0	0	2	1	0	0	0	3	0	0	1	1	0	0	0	2	4
Hourly Total	**0**	**0**	**2**	**12**	**3**	**4**	**0**	**0**	**21**	**0**	**0**	**9**	**5**	**1**	**2**	**0**	**6**	**23**
0700 - 0715	0	0	0	2	0	0	0	3	5	0	0	4	0	1	0	0	13	18
0715 - 0730	0	0	0	2	2	8	0	3	15	0	0	0	2	0	0	0	1	3
0730 - 0745	0	0	2	3	1	11	0	0	17	1	0	0	3	0	0	0	1	5
0745 - 0800	0	0	3	3	1	3	0	0	10	0	0	0	0	0	0	0	3	3
Hourly Total	**0**	**0**	**5**	**10**	**4**	**22**	**0**	**6**	**47**	**1**	**0**	**4**	**5**	**1**	**0**	**0**	**18**	**29**
0800 - 0815	0	0	0	3	2	1	0	1	7	0	0	1	2	0	0	0	2	5
0815 - 0830	0	0	1	4	1	0	0	0	6	0	0	2	1	0	0	0	3	6
0830 - 0845	0	0	0	4	2	0	0	2	8	0	0	1	2	0	0	0	1	4
0845 - 0900	0	0	1	6	2	1	0	0	10	0	0	1	1	0	0	0	3	5
Hourly Total	**0**	**0**	**2**	**17**	**7**	**2**	**0**	**3**	**31**	**0**	**0**	**5**	**6**	**0**	**0**	**0**	**9**	**20**
0900 - 0915	0	0	3	4	2	0	0	1	10	0	0	3	2	0	0	0	9	14
0915 - 0930	0	0	0	1	1	0	0	0	2	0	0	0	1	0	0	0	2	3
0930 - 0945	0	0	2	4	1	0	0	1	8	0	0	1	0	0	0	0	2	3
0945 - 1000	0	0	2	3	1	0	0	0	6	0	0	1	2	0	0	0	1	4
Hourly Total	**0**	**0**	**7**	**12**	**5**	**0**	**0**	**2**	**26**	**0**	**0**	**5**	**5**	**0**	**0**	**0**	**14**	**24**
1000 - 1015	0	0	5	4	5	0	0	1	15	0	0	3	1	0	0	0	0	4
1015 - 1030	0	0	0	2	6	0	0	0	8	0	0	1	0	0	0	0	4	5
1030 - 1045	0	0	3	2	1	0	0	0	6	0	0	3	0	0	0	0	4	7
1045 - 1100	0	0	6	1	2	0	0	0	9	0	0	4	2	0	0	0	3	9
Hourly Total	**0**	**0**	**14**	**9**	**14**	**0**	**0**	**1**	**38**	**0**	**0**	**11**	**3**	**0**	**0**	**0**	**11**	**25**
1100 - 1115	0	0	15	0	3	0	0	1	19	0	0	9	1	0	0	0	3	13
1115 - 1130	0	0	2	1	5	0	0	0	8	0	0	2	2	1	0	0	1	6
1130 - 1145	0	0	1	2	3	0	0	0	6	0	0	1	0	0	0	2	1	4
1145 - 1200	0	0	1	3	6	0	0	0	10	0	0	2	2	0	0	0	2	6
Hourly Total	**0**	**0**	**19**	**6**	**17**	**0**	**0**	**1**	**43**	**0**	**0**	**14**	**5**	**1**	**0**	**2**	**7**	**29**
1200 - 1215	0	0	6	3	3	0	0	0	12	0	0	2	0	0	0	0	1	3
1215 - 1230	0	0	1	4	2	4	0	1	12	0	0	0	0	1	0	0	0	1
1230 - 1245	0	0	1	2	4	1	0	0	8	0	0	0	2	0	0	0	4	6
1245 - 1300	0	0	0	0	3	1	0	0	4	0	0	1	0	0	0	0	2	3
Hourly Total	**0**	**0**	**8**	**9**	**12**	**6**	**0**	**1**	**36**	**0**	**0**	**3**	**2**	**1**	**0**	**0**	**7**	**13**
1300 - 1315	0	0	2	3	1	0	0	0	6	0	0	1	2	0	0	0	0	3
1315 - 1330	0	0	0	5	2	0	0	0	7	0	0	1	1	1	0	0	0	3
1330 - 1345	0	0	0	4	4	0	0	0	8	0	0	1	0	1	0	0	0	2
1345 - 1400	0	0	2	6	2	0	0	0	10	0	0	3	1	0	0	0	0	4
Hourly Total	**0**	**0**	**4**	**18**	**9**	**0**	**0**	**0**	**31**	**0**	**0**	**6**	**4**	**2**	**0**	**0**	**0**	**12**
1400 - 1415	0	0	5	9	6	1	0	0	21	0	0	0	2	0	0	0	0	2
1415 - 1430	0	0	1	10	4	0	0	0	15	0	0	0	1	0	0	0	0	1
1430 - 1445	0	0	4	8	6	0	0	2	20	0	0	0	3	0	0	0	1	4
1445 - 1500	0	0	2	20	2	0	0	0	24	0	0	1	3	0	0	0	1	5
Hourly Total	**0**	**0**	**12**	**47**	**18**	**1**	**0**	**2**	**80**	**0**	**0**	**1**	**9**	**0**	**0**	**0**	**2**	**12**
1500 - 1515	0	0	2	7	5	1	0	5	20	0	0	3	5	1	1	0	7	17
1515 - 1530	0	0	2	12	2	2	0	0	18	0	0	0	3	1	0	0	4	8
1530 - 1545	0	0	3	7	5	0	0	0	15	0	0	1	3	0	0	0	0	4
1545 - 1600	0	0	2	6	7	0	0	0	15	0	0	0	2	2	0	0	1	5
Hourly Total	**0**	**0**	**9**	**32**	**19**	**3**	**0**	**5**	**68**	**0**	**0**	**4**	**13**	**4**	**1**	**0**	**12**	**34**
1600 - 1615	0	0	2	5	4	0	0	0	11	0	0	0	2	0	0	0	0	2
1615 - 1630	0	0	2	5	4	1	0	0	12	0	0	2	3	2	0	0	0	7
1630 - 1645	0	0	2	9	6	0	0	0	17	0	0	1	1	0	1	0	0	3
1645 - 1700	0	0	1	7	5	0	0	0	13	0	0	1	1	0	0	0	0	2
Hourly Total	**0**	**0**	**7**	**26**	**19**	**1**	**0**	**0**	**53**	**0**	**0**	**4**	**7**	**2**	**1**	**0**	**0**	**14**
1700 - 1715	0	1	5	8	5	2	0	0	21	0	0	3	1	0	1	0	0	5
1715 - 1730	0	0	3	6	3	3	0	0	15	0	0	2	1	0	2	0	0	5
1730 - 1745	0	0	1	6	5	1	0	0	13	0	0	3	1	0	0	0	0	4
1745 - 1800	0	0	7	5	4	1	0	0	17	0	0	4	3	0	1	0	0	8
Hourly Total	**0**	**1**	**16**	**25**	**17**	**7**	**0**	**0**	**66**	**0**	**0**	**12**	**6**	**0**	**4**	**0**	**0**	**22**
1800 - 1815	0	0	15	5	4	1	0	0	25	0	0	3	2	0	1	0	0	6
1815 - 1830	0	0	12	3	1	2	0	0	18	0	0	2	1	0	1	0	0	4
1830 - 1845	0	0	13	3	3	0	0	0	19	0	0	3	1	1	0	0	0	5
1845 - 1900	0	0	10	9	1	0	0	0	20	0	0	1	1	0	0	0	0	2
Hourly Total	**0**	**0**	**50**	**20**	**9**	**3**	**0**	**0**	**82**	**0**	**0**	**9**	**5**	**1**	**2**	**0**	**0**	**17**
1900 - 1915	0	0	34	8	2	3	0	0	47	0	0	4	0	1	0	0	0	5
1915 - 1930	0	0	6	3	1	0	0	0	10	0	0	0	2	0	0	0	0	2
1930 - 1945	0	0	6	6	8	1	0	0	21	1	0	0	3	0	0	0	0	4
1945 - 2000	0	0	11	8	9	0	0	0	28	0	0	0	0	0	0	0	0	0
Hourly Total	**0**	**0**	**57**	**25**	**20**	**4**	**0**	**0**	**106**	**1**	**0**	**4**	**5**	**1**	**0**	**0**	**0**	**11**
2000 - 2015	0	0	12	8	3	0	0	0	23	0	0	1	2	0	0	0	0	3
2015 - 2030	0	0	3	3	3	0	0	1	10	0	0	2	1	0	0	0	0	3
2030 - 2045	0	0	14	4	4	0	0	0	22	0	0	1	2	0	0	0	0	3
2045 - 2100	0	0	7	5	4	0	0	0	16	0	0	1	1	0	0	0	0	2
Hourly Total	**0**	**0**	**36**	**20**	**14**	**0**	**0**	**1**	**71**	**0**	**0**	**5**	**6**	**0**	**0**	**0**	**0**	**11**
2100 - 2115	0	0	12	3	1	0	0	0	16	0	0	3	2	0	0	0	0	5
2115 - 2130	0	0	8	3	5	1	0	0	17	0	0	0	0	1	0	0	0	1
2130 - 2145	0	0	11	8	4	0	0	0	23	0	0	1	0	0	0	0	2	3
2145 - 2200	0	1	19	9	9	0	0	0	38	0	0	1	2	0	0	0	0	3
Hourly Total	**0**	**1**	**50**	**23**	**19**	**1**	**0**	**0**	**94**	**0**	**0**	**5**	**5**	**0**	**0**	**0**	**2**	**12**
2200 - 2215	0	1	6	5	2	2	1	0	17	0	0	3	1	0	0	0	3	7
2215 - 2230	0	0	6	5	2	0	0	0	13	0	0	1	0	0	0	0	0	1
2230 - 2245	0	0	6	7	4	0	0	0	17	0	0	3	0	0	0	0	0	3
2245 - 2300	0	0	4	3	5	1	0	0	13	0	0	4	2	0	0	0	2	8
Hourly Total	**0**	**1**	**22**	**20**	**13**	**3**	**1**	**0**	**60**	**0**	**0**	**11**	**3**	**0**	**0**	**0**	**5**	**19**
2300 - 2315	0	0	22	3	1	1	0	4	31	0	0	9	1	0	0	0	12	22
2315 - 2330	0	0	4	5	2	1	0	0	12	0	0	2	2	1	0	0	2	7
2330 - 2345	0	0	4	2	7	0	0	0	13	0	0	1	0	0	0	2	1	4
2345 - 2400	0	0	5	5	2	0	0	0	12	0	0	2	2	0	0	0	1	5
Hourly Total	**0**	**0**	**35**	**15**	**12**	**2**	**0**	**4**	**68**	**0**	**0**	**14**	**5**	**1**	**0**	**2**	**16**	**38**

TOTAL	**0**	**3**	**470**	**403**	**272**	**100**	**1**	**26**	**1275**	**2**	**0**	**156**	**140**	**24**	**16**	**4**	**157**	**499**

Hillingdon - Manual Traffic Survey, Thursday 4th December 2014

Junction: (2) A408 / Nine Acres Close

Approach: A408 (South)

	Right to Nine Acres Close								
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	PEDS	TOTAL
0000 - 0015	0	0	19	8	1	0	0	0	28
0015 - 0030	0	0	9	6	1	2	0	0	18
0030 - 0045	0	0	6	2	1	0	0	1	10
0045 - 0100	0	1	4	5	1	0	0	0	11
Hourly Total	**0**	**1**	**38**	**21**	**4**	**2**	**0**	**1**	**67**
0100 - 0115	0	0	6	4	1	0	0	1	12
0115 - 0130	0	0	5	7	4	1	0	0	17
0130 - 0145	0	0	4	1	8	0	0	1	14
0145 - 0200	0	0	4	1	3	1	0	0	9
Hourly Total	**0**	**0**	**19**	**13**	**16**	**2**	**0**	**2**	**52**
0200 - 0215	0	1	5	4	6	0	0	1	17
0215 - 0230	0	0	5	4	6	1	0	1	17
0230 - 0245	0	0	7	4	4	1	0	0	16
0245 - 0300	0	0	11	5	6	0	0	0	22
Hourly Total	**0**	**1**	**28**	**17**	**22**	**2**	**0**	**2**	**72**
0300 - 0315	0	0	6	2	3	0	0	0	11
0315 - 0330	0	0	3	6	3	0	0	0	12
0330 - 0345	0	0	7	4	5	0	0	0	16
0345 - 0400	0	0	8	1	6	2	0	0	17
Hourly Total	**0**	**0**	**24**	**13**	**17**	**2**	**0**	**0**	**56**
0400 - 0415	0	0	4	6	6	2	0	0	18
0415 - 0430	0	0	5	8	3	2	0	0	18
0430 - 0445	0	0	4	5	3	1	0	0	13
0445 - 0500	0	0	5	2	2	1	0	1	11
Hourly Total	**0**	**0**	**18**	**21**	**14**	**6**	**0**	**1**	**60**
0500 - 0515	0	0	2	4	5	1	0	0	12
0515 - 0530	0	0	3	5	5	0	0	0	13
0530 - 0545	0	0	8	3	4	0	0	0	15
0545 - 0600	0	0	9	6	7	0	0	0	22
Hourly Total	**0**	**0**	**22**	**18**	**21**	**1**	**0**	**0**	**62**
0600 - 0615	0	0	4	10	4	1	0	0	19
0615 - 0630	0	0	12	6	1	0	0	1	20
0630 - 0645	0	0	14	4	2	3	0	1	24
0645 - 0700	0	0	9	4	1	1	0	2	17
Hourly Total	**0**	**0**	**39**	**24**	**8**	**5**	**0**	**4**	**80**
0700 - 0715	0	0	2	6	3	0	0	0	11
0715 - 0730	0	0	4	5	1	1	0	0	11
0730 - 0745	0	0	4	6	5	0	0	0	15
0745 - 0800	0	0	3	2	1	0	0	0	6
Hourly Total	**0**	**0**	**13**	**19**	**10**	**1**	**0**	**0**	**43**
0800 - 0815	0	0	4	4	5	0	0	0	13
0815 - 0830	0	0	4	2	2	0	0	0	8
0830 - 0845	0	0	1	2	9	0	0	0	12
0845 - 0900	0	0	0	3	2	1	0	0	6
Hourly Total	**0**	**0**	**9**	**11**	**18**	**1**	**0**	**0**	**39**
0900 - 0915	0	0	1	4	6	1	0	0	12
0915 - 0930	0	0	3	1	1	1	0	0	6
0930 - 0945	0	0	2	3	2	1	0	0	8
0945 - 1000	0	0	1	7	3	0	0	0	11
Hourly Total	**0**	**0**	**7**	**15**	**12**	**3**	**0**	**0**	**37**
1000 - 1015	0	0	5	5	5	2	0	1	18
1015 - 1030	0	0	3	8	5	0	0	0	16
1030 - 1045	0	0	4	8	4	1	0	0	17
1045 - 1100	0	0	2	5	4	1	0	0	12
Hourly Total	**0**	**0**	**14**	**26**	**18**	**4**	**0**	**1**	**63**
1100 - 1115	0	0	2	4	2	0	0	0	8
1115 - 1130	0	0	2	4	4	1	0	0	11
1130 - 1145	0	0	2	5	7	1	0	1	16
1145 - 1200	0	0	7	5	0	0	0	0	12
Hourly Total	**0**	**0**	**13**	**18**	**13**	**2**	**0**	**1**	**47**
1200 - 1215	0	0	2	8	0	2	0	0	12
1215 - 1230	0	0	1	6	5	0	0	0	12
1230 - 1245	0	0	4	5	3	0	0	0	12
1245 - 1300	0	0	2	7	5	1	0	1	16
Hourly Total	**0**	**0**	**9**	**26**	**13**	**3**	**0**	**1**	**52**
1300 - 1315	0	0	0	4	3	0	0	0	7
1315 - 1330	0	0	2	4	3	0	0	0	9
1330 - 1345	0	0	1	2	5	1	0	0	9
1345 - 1400	0	0	3	6	8	3	0	0	20
Hourly Total	**0**	**0**	**6**	**16**	**19**	**4**	**0**	**0**	**45**
1400 - 1415	0	0	4	1	6	0	0	0	11
1415 - 1430	0	0	3	1	1	6	0	0	11
1430 - 1445	0	0	12	0	1	3	0	1	17
1445 - 1500	1	0	9	1	2	4	0	0	17
Hourly Total	**1**	**0**	**28**	**3**	**10**	**13**	**0**	**1**	**56**
1500 - 1515	0	0	2	2	1	2	0	0	7
1515 - 1530	0	0	1	0	1	2	0	0	4
1530 - 1545	0	0	1	0	2	3	0	0	6
1545 - 1600	0	0	1	1	1	3	0	0	6
Hourly Total	**0**	**0**	**5**	**3**	**5**	**10**	**0**	**0**	**23**
1600 - 1615	0	0	1	2	0	1	0	0	4
1615 - 1630	0	0	1	1	1	2	0	0	5
1630 - 1645	0	0	2	3	1	1	0	0	7
1645 - 1700	0	0	1	1	1	3	0	1	7
Hourly Total	**0**	**0**	**5**	**7**	**3**	**7**	**0**	**1**	**23**
1700 - 1715	0	0	0	2	1	3	0	0	6
1715 - 1730	0	0	0	0	2	2	0	0	4
1730 - 1745	0	0	0	1	1	5	0	0	7
1745 - 1800	0	0	0	0	1	3	0	0	4
Hourly Total	**0**	**0**	**0**	**3**	**5**	**13**	**0**	**0**	**21**
1800 - 1815	0	0	1	5	2	3	0	0	11
1815 - 1830	0	0	1	2	1	2	0	0	6
1830 - 1845	0	0	1	3	0	6	0	0	10
1845 - 1900	0	0	0	1	3	2	0	0	6
Hourly Total	**0**	**0**	**3**	**11**	**6**	**13**	**0**	**0**	**33**
1900 - 1915	0	0	0	2	3	1	0	0	6
1915 - 1930	0	0	0	3	2	0	0	0	5
1930 - 1945	0	0	0	1	0	0	0	0	1
1945 - 2000	0	0	3	2	1	0	0	0	6
Hourly Total	**0**	**0**	**3**	**8**	**6**	**1**	**0**	**0**	**18**
2000 - 2015	0	0	2	0	0	0	0	0	2
2015 - 2030	0	0	4	1	0	2	0	0	7
2030 - 2045	0	0	2	4	1	0	0	0	7
2045 - 2100	0	1	4	4	2	2	0	0	13
Hourly Total	**0**	**1**	**12**	**9**	**3**	**4**	**0**	**0**	**29**
2100 - 2115	0	0	3	1	1	0	0	0	5
2115 - 2130	0	0	11	3	3	0	0	0	17
2130 - 2145	0	0	12	5	3	0	0	0	20
2145 - 2200	0	0	5	1	2	0	0	0	8
Hourly Total	**0**	**0**	**31**	**10**	**9**	**0**	**0**	**0**	**50**
2200 - 2215	0	0	7	4	2	0	0	0	13
2215 - 2230	1	0	11	2	1	0	0	0	15
2230 - 2245	0	0	14	1	1	1	0	2	19
2245 - 2300	0	0	27	3	2	0	0	0	32
Hourly Total	**1**	**0**	**59**	**10**	**6**	**1**	**0**	**2**	**79**
2300 - 2315	0	0	13	4	6	1	0	1	25
2315 - 2330	0	0	6	6	0	2	0	1	15
2330 - 2345	0	0	14	4	5	0	0	2	25
2345 - 2400	0	0	28	9	3	2	0	2	44
Hourly Total	**0**	**0**	**61**	**23**	**14**	**5**	**0**	**6**	**109**

TOTAL	**2**	**3**	**466**	**345**	**272**	**105**	**0**	**23**	**1216**

	Arrivals								
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	PEDS	**TOTAL**
0000 - 0015	0	0	22	11	1	0	1	4	**39**
0015 - 0030	0	0	12	12	1	2	1	3	**31**
0030 - 0045	0	0	10	7	2	1	0	4	**24**
0045 - 0100	0	1	8	7	1	0	0	2	**19**
Hourly Total	**0**	**1**	**52**	**37**	**5**	**3**	**2**	**13**	**113**
0100 - 0115	1	0	9	7	2	0	0	3	**22**
0115 - 0130	0	0	8	9	5	1	0	2	**25**
0130 - 0145	0	0	7	5	8	0	0	4	**24**
0145 - 0200	0	0	8	4	4	1	0	3	**20**
Hourly Total	**1**	**0**	**32**	**25**	**19**	**2**	**0**	**12**	**91**
0200 - 0215	0	1	8	5	7	0	0	3	**24**
0215 - 0230	0	0	9	7	6	1	0	2	**25**
0230 - 0245	0	0	10	7	5	1	0	0	**23**
0245 - 0300	0	0	13	9	6	0	0	0	**28**
Hourly Total	**0**	**1**	**40**	**28**	**24**	**2**	**0**	**5**	**100**
0300 - 0315	0	0	9	3	5	1	0	0	**18**
0315 - 0330	0	0	5	9	3	0	0	0	**17**
0330 - 0345	0	0	7	6	5	0	0	0	**18**
0345 - 0400	0	0	10	1	6	2	0	0	**19**
Hourly Total	**0**	**0**	**31**	**19**	**19**	**3**	**0**	**0**	**72**
0400 - 0415	0	0	5	8	7	2	0	2	**24**
0415 - 0430	0	0	9	9	3	3	0	0	**24**
0430 - 0445	0	0	4	7	3	3	0	0	**17**
0445 - 0500	0	0	6	4	2	1	0	2	**15**
Hourly Total	**0**	**0**	**24**	**28**	**15**	**9**	**0**	**4**	**80**
0500 - 0515	0	0	2	5	5	1	0	2	**15**
0515 - 0530	0	0	5	5	6	0	0	2	**18**
0530 - 0545	0	0	8	5	6	0	0	0	**19**
0545 - 0600	0	0	12	6	7	0	0	6	**31**
Hourly Total	**0**	**0**	**27**	**21**	**24**	**1**	**0**	**10**	**83**
0600 - 0615	1	0	8	11	5	1	0	8	**34**
0615 - 0630	0	0	14	8	3	1	0	4	**30**
0630 - 0645	0	0	22	5	3	3	0	7	**40**
0645 - 0700	0	0	11	5	2	1	0	8	**27**
Hourly Total	**1**	**0**	**55**	**29**	**13**	**6**	**0**	**27**	**131**
0700 - 0715	0	0	5	6	3	0	0	0	**14**
0715 - 0730	0	0	5	5	1	1	0	0	**12**
0730 - 0745	0	0	4	7	5	0	0	0	**16**
0745 - 0800	0	0	4	4	1	0	0	1	**10**
Hourly Total	**0**	**0**	**18**	**22**	**10**	**1**	**0**	**1**	**52**
0800 - 0815	0	0	4	4	5	0	0	1	**14**
0815 - 0830	0	0	5	3	2	0	0	1	**11**
0830 - 0845	0	0	2	2	10	0	0	6	**20**
0845 - 0900	0	0	0	3	3	1	0	1	**8**
Hourly Total	**0**	**0**	**11**	**12**	**20**	**1**	**0**	**9**	**53**
0900 - 0915	0	0	3	6	6	1	0	9	**25**
0915 - 0930	0	0	5	3	1	1	0	1	**11**
0930 - 0945	0	0	2	3	2	1	0	0	**8**
0945 - 1000	0	0	2	7	3	0	0	2	**14**
Hourly Total	**0**	**0**	**12**	**19**	**12**	**3**	**0**	**12**	**58**
1000 - 1015	0	0	6	7	5	2	0	2	**22**
1015 - 1030	0	0	3	11	5	0	0	2	**21**
1030 - 1045	0	0	4	12	4	1	0	4	**25**
1045 - 1100	0	0	2	6	4	1	0	0	**13**
Hourly Total	**0**	**0**	**15**	**36**	**18**	**4**	**0**	**8**	**81**
1100 - 1115	0	0	2	7	2	0	0	2	**13**
1115 - 1130	0	0	2	6	5	1	0	1	**15**
1130 - 1145	0	0	4	7	7	1	0	3	**22**
1145 - 1200	0	0	8	8	0	0	0	2	**18**
Hourly Total	**0**	**0**	**16**	**28**	**14**	**2**	**0**	**8**	**68**
1200 - 1215	0	0	2	10	0	2	0	1	**15**
1215 - 1230	0	0	1	6	5	0	0	2	**14**
1230 - 1245	1	0	5	5	3	0	0	0	**14**
1245 - 1300	0	0	3	10	5	1	1	1	**21**
Hourly Total	**1**	**0**	**11**	**31**	**13**	**3**	**1**	**4**	**64**
1300 - 1315	0	0	1	4	3	0	0	3	**11**
1315 - 1330	0	0	3	4	3	0	0	8	**18**
1330 - 1345	0	1	4	3	5	1	0	7	**21**
1345 - 1400	0	0	4	8	8	3	0	4	**27**
Hourly Total	**0**	**1**	**12**	**19**	**19**	**4**	**0**	**22**	**77**
1400 - 1415	0	0	4	1	6	0	0	4	**15**
1415 - 1430	0	0	3	4	1	6	0	1	**15**
1430 - 1445	0	0	13	4	1	3	0	8	**29**
1445 - 1500	1	0	12	1	2	4	0	7	**27**
Hourly Total	**1**	**0**	**32**	**10**	**10**	**13**	**0**	**20**	**86**
1500 - 1515	0	0	4	3	1	2	0	0	**10**
1515 - 1530	0	0	1	1	1	2	0	0	**5**
1530 - 1545	0	0	1	1	2	3	0	1	**8**
1545 - 1600	0	0	1	1	1	3	0	0	**6**
Hourly Total	**0**	**0**	**7**	**6**	**5**	**10**	**0**	**1**	**29**
1600 - 1615	0	0	3	4	0	1	0	1	**9**
1615 - 1630	0	0	4	1	1	2	0	6	**14**
1630 - 1645	0	0	2	6	1	1	0	3	**13**
1645 - 1700	0	0	2	2	1	3	0	5	**13**
Hourly Total	**0**	**0**	**11**	**13**	**3**	**7**	**0**	**15**	**49**
1700 - 1715	0	0	1	4	1	3	0	1	**10**
1715 - 1730	0	0	1	1	2	2	0	0	**6**
1730 - 1745	0	0	1	2	1	5	0	0	**9**
1745 - 1800	0	0	0	1	1	3	0	0	**5**
Hourly Total	**0**	**0**	**3**	**8**	**5**	**13**	**0**	**1**	**30**
1800 - 1815	0	0	1	6	2	3	0	0	**12**
1815 - 1830	0	0	1	2	1	2	0	0	**6**
1830 - 1845	0	0	1	4	0	6	0	0	**11**
1845 - 1900	0	0	0	3	3	2	0	0	**8**
Hourly Total	**0**	**0**	**3**	**15**	**6**	**13**	**0**	**0**	**37**
1900 - 1915	0	0	0	2	3	1	0	0	**6**
1915 - 1930	0	0	0	3	2	0	0	0	**5**
1930 - 1945	0	0	0	2	0	0	0	1	**3**
1945 - 2000	0	0	3	4	1	0	0	1	**9**
Hourly Total	**0**	**0**	**3**	**11**	**6**	**1**	**0**	**2**	**23**
2000 - 2015	0	1	2	4	0	0	0	0	**7**
2015 - 2030	0	0	4	2	0	2	0	0	**8**
2030 - 2045	0	0	2	5	1	0	0	0	**8**
2045 - 2100	0	1	4	4	2	2	0	0	**13**
Hourly Total	**0**	**2**	**12**	**15**	**3**	**4**	**0**	**0**	**36**
2100 - 2115	0	0	4	1	1	0	0	0	**6**
2115 - 2130	0	0	11	4	4	0	0	0	**19**
2130 - 2145	0	0	18	5	3	0	0	0	**26**
2145 - 2200	0	0	5	1	3	0	0	0	**9**
Hourly Total	**0**	**0**	**38**	**11**	**11**	**0**	**0**	**0**	**60**
2200 - 2215	0	0	7	4	2	0	1	0	**14**
2215 - 2230	1	0	18	2	2	0	0	23	**46**
2230 - 2245	0	0	16	1	1	1	1	8	**28**
2245 - 2300	0	0	36	5	2	0	1	2	**46**
Hourly Total	**1**	**0**	**77**	**12**	**7**	**1**	**3**	**33**	**134**
2300 - 2315	0	0	17	7	6	1	0	7	**38**
2315 - 2330	0	0	9	9	0	2	0	5	**25**
2330 - 2345	0	0	19	6	5	0	0	4	**34**
2345 - 2400	0	0	34	10	3	2	0	5	**54**
Hourly Total	**0**	**0**	**79**	**32**	**14**	**5**	**0**	**21**	**151**

TOTAL	**5**	**5**	**621**	**487**	**295**	**111**	**6**	**228**	**1758**

	Departures								
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	PEDS	**TOTAL**
0000 - 0015	0	0	7	8	5	1	0	4	**25**
0015 - 0030	0	0	7	4	6	1	0	1	**19**
0030 - 0045	0	0	3	7	1	1	0	2	**14**
0045 - 0100	0	0	6	4	3	3	0	2	**18**
Hourly Total	**0**	**0**	**23**	**23**	**15**	**6**	**0**	**9**	**76**
0100 - 0115	0	0	5	10	0	2	0	4	**21**
0115 - 0130	0	0	4	3	3	0	0	4	**14**
0130 - 0145	0	0	9	4	3	1	0	4	**21**
0145 - 0200	0	0	7	3	0	1	0	0	**11**
Hourly Total	**0**	**0**	**25**	**20**	**6**	**4**	**0**	**12**	**67**
0200 - 0215	0	0	3	4	1	1	0	3	**12**
0215 - 0230	0	0	3	9	3	1	0	3	**19**
0230 - 0245	0	0	5	3	0	1	0	3	**12**
0245 - 0300	0	0	6	4	1	5	0	3	**19**
Hourly Total	**0**	**0**	**17**	**20**	**5**	**8**	**0**	**12**	**62**
0300 - 0315	0	0	31	5	2	3	0	3	**44**
0315 - 0330	0	0	4	4	3	3	0	0	**14**
0330 - 0345	0	0	14	3	3	3	0	0	**23**
0345 - 0400	0	0	4	2	4	2	0	1	**13**
Hourly Total	**0**	**0**	**53**	**14**	**12**	**11**	**0**	**4**	**94**
0400 - 0415	0	0	1	3	4	2	0	1	**11**
0415 - 0430	0	0	3	5	3	2	0	1	**14**
0430 - 0445	0	0	4	2	0	3	0	2	**11**
0445 - 0500	0	0	5	1	1	2	0	1	**10**
Hourly Total	**0**	**0**	**13**	**11**	**8**	**9**	**0**	**5**	**46**
0500 - 0515	0	0	5	2	0	2	0	1	**10**
0515 - 0530	0	0	2	2	1	2	0	2	**9**
0530 - 0545	0	0	3	1	0	1	0	2	**7**
0545 - 0600	0	0	4	5	3	4	0	1	**17**
Hourly Total	**0**	**0**	**14**	**10**	**4**	**9**	**0**	**6**	**43**
0600 - 0615	0	0	5	5	1	4	0	3	**18**
0615 - 0630	0	0	2	5	1	1	0	0	**9**
0630 - 0645	0	0	3	4	1	1	0	1	**10**
0645 - 0700	0	0	1	3	1	0	0	2	**7**
Hourly Total	**0**	**0**	**11**	**17**	**4**	**6**	**0**	**6**	**44**
0700 - 0715	0	0	4	2	1	0	0	16	**23**
0715 - 0730	0	0	0	4	2	8	0	4	**18**
0730 - 0745	1	0	2	6	1	11	0	1	**22**
0745 - 0800	0	0	3	3	1	3	0	3	**13**
Hourly Total	**1**	**0**	**9**	**15**	**5**	**22**	**0**	**24**	**76**
0800 - 0815	0	0	1	5	2	1	0	3	**12**
0815 - 0830	0	0	3	5	1	0	0	3	**12**
0830 - 0845	0	0	1	6	2	0	0	3	**12**
0845 - 0900	0	0	2	7	2	1	0	3	**15**
Hourly Total	**0**	**0**	**7**	**23**	**7**	**2**	**0**	**12**	**51**
0900 - 0915	0	0	6	6	2	0	0	10	**24**
0915 - 0930	0	0	0	2	1	0	0	2	**5**
0930 - 0945	0	0	3	4	1	0	0	3	**11**
0945 - 1000	0	0	3	5	1	0	0	1	**10**
Hourly Total	**0**	**0**	**12**	**17**	**5**	**0**	**0**	**16**	**50**
1000 - 1015	0	0	8	5	5	0	0	1	**19**
1015 - 1030	0	0	1	2	6	0	0	4	**13**
1030 - 1045	0	0	6	2	1	0	0	4	**13**
1045 - 1100	0	0	10	3	2	0	0	3	**18**
Hourly Total	**0**	**0**	**25**	**12**	**14**	**0**	**0**	**12**	**63**
1100 - 1115	0	0	24	1	3	0	0	4	**32**
1115 - 1130	0	0	4	3	6	0	0	1	**14**
1130 - 1145	0	0	2	2	3	0	2	1	**10**
1145 - 1200	0	0	3	5	6	0	0	2	**16**
Hourly Total	**0**	**0**	**33**	**11**	**18**	**0**	**2**	**8**	**72**
1200 - 1215	0	0	8	3	3	0	0	1	**15**
1215 - 1230	0	0	1	4	3	4	0	1	**13**
1230 - 1245	0	0	1	4	4	1	0	4	**14**
1245 - 1300	0	0	1	0	3	1	0	2	**7**
Hourly Total	**0**	**0**	**11**	**11**	**13**	**6**	**0**	**8**	**49**
1300 - 1315	0	0	3	5	1	0	0	0	**9**
1315 - 1330	0	0	1	6	3	0	0	0	**10**
1330 - 1345	0	0	1	4	5	0	0	0	**10**
1345 - 1400	0	0	5	7	2	0	0	0	**14**
Hourly Total	**0**	**0**	**10**	**22**	**11**	**0**	**0**	**0**	**43**
1400 - 1415	0	0	5	11	6	1	0	0	**23**
1415 - 1430	0	0	1	11	4	0	0	0	**16**
1430 - 1445	0	0	4	11	6	0	0	3	**24**
1445 - 1500	0	0	3	23	2	0	0	1	**29**
Hourly Total	**0**	**0**	**13**	**56**	**18**	**1**	**0**	**4**	**92**
1500 - 1515	0	0	5	12	6	2	0	12	**37**
1515 - 1530	0	0	2	15	3	2	0	4	**26**
1530 - 1545	0	0	4	10	5	0	0	0	**19**
1545 - 1600	0	0	2	8	9	0	0	1	**20**
Hourly Total	**0**	**0**	**13**	**45**	**23**	**4**	**0**	**17**	**102**
1600 - 1615	0	0	2	7	4	0	0	0	**13**
1615 - 1630	0	0	4	8	6	1	0	0	**19**
1630 - 1645	0	0	3	10	6	1	0	0	**20**
1645 - 1700	0	0	2	8	5	0	0	0	**15**
Hourly Total	**0**	**0**	**11**	**33**	**21**	**2**	**0**	**0**	**67**
1700 - 1715	0	1	8	9	5	3	0	0	**26**
1715 - 1730	0	0	5	7	3	5	0	0	**20**
1730 - 1745	0	0	4	7	5	1	0	0	**17**
1745 - 1800	0	0	11	8	4	2	0	0	**25**
Hourly Total	**0**	**1**	**28**	**31**	**17**	**11**	**0**	**0**	**88**
1800 - 1815	0	0	18	7	4	2	0	0	**31**
1815 - 1830	0	0	14	4	1	3	0	0	**22**
1830 - 1845	0	0	16	4	4	0	0	0	**24**
1845 - 1900	0	0	11	10	1	0	0	0	**22**
Hourly Total	**0**	**0**	**59**	**25**	**10**	**5**	**0**	**0**	**99**
1900 - 1915	0	0	38	8	3	3	0	0	**52**
1915 - 1930	0	0	6	5	1	0	0	0	**12**
1930 - 1945	1	0	6	9	8	1	0	0	**25**
1945 - 2000	0	0	11	8	9	0	0	0	**28**
Hourly Total	**1**	**0**	**61**	**30**	**21**	**4**	**0**	**0**	**117**
2000 - 2015	0	0	13	10	3	0	0	0	**26**
2015 - 2030	0	0	5	4	3	0	0	1	**13**
2030 - 2045	0	0	15	6	4	0	0	0	**25**
2045 - 2100	0	0	8	6	4	0	0	0	**18**
Hourly Total	**0**	**0**	**41**	**26**	**14**	**0**	**0**	**1**	**82**
2100 - 2115	0	0	15	5	1	0	0	0	**21**
2115 - 2130	0	0	8	4	5	1	0	0	**18**
2130 - 2145	0	0	12	8	4	0	0	2	**26**
2145 - 2200	0	1	20	11	9	0	0	0	**41**
Hourly Total	**0**	**1**	**55**	**28**	**19**	**1**	**0**	**2**	**106**
2200 - 2215	0	1	9	6	2	2	1	3	**24**
2215 - 2230	0	0	7	5	2	0	0	0	**14**
2230 - 2245	0	0	9	7	4	0	0	0	**20**
2245 - 2300	0	0	8	5	5	1	0	2	**21**
Hourly Total	**0**	**1**	**33**	**23**	**13**	**3**	**1**	**5**	**79**
2300 - 2315	0	0	31	4	1	1	0	16	**53**
2315 - 2330	0	0	6	7	3	1	0	2	**19**
2330 - 2345	0	0	5	2	7	0	2	1	**17**
2345 - 2400	0	0	7	7	2	0	0	1	**17**
Hourly Total	**0**	**0**	**49**	**20**	**13**	**2**	**2**	**20**	**106**
TOTAL	**2**	**3**	**626**	**543**	**296**	**116**	**5**	**183**	**1774**

GIA 27092 sqm

	Arrival Trip Rate per 100sqm					
	ALL VEH	CAR+M/C	LGV	HGV	PED	CYCLE
0000-0100	0.3691	0.1956	0.1366	0.0295	0.0480	0.0000
	0.0664			0.0074	0.0111	0.0037
	0.0849			0.0221	0.0074	0.0000
	0.0738			0.0295	0.0148	0.0000
	0.0627			0.0185	0.0111	0.0000
0100-0200	0.2879	0.1181	0.0923	0.0775	0.0443	0.0037
	0.0775			0.0258	0.0111	0.0000
	0.0849			0.0258	0.0074	0.0000
	0.0849			0.0221	0.0000	0.0000
	0.1034			0.0221	0.0000	0.0000
0200-0300	0.3507	0.1513	0.1034	0.0960	0.0185	0.0000
	0.0664			0.0221	0.0000	0.0000
	0.0627			0.0111	0.0000	0.0000
	0.0664			0.0185	0.0000	0.0000
	0.0701			0.0295	0.0000	0.0000
0300-0400	0.2658	0.1144	0.0701	0.0812	0.0000	0.0000
	0.0812			0.0332	0.0074	0.0000
	0.0886			0.0221	0.0000	0.0000
	0.0627			0.0221	0.0000	0.0000
	0.0480			0.0111	0.0074	0.0000
0400-0500	0.2805	0.0886	0.1034	0.0886	0.0148	0.0000
	0.0480			0.0221	0.0074	0.0000
	0.0591			0.0221	0.0074	0.0000
	0.0701			0.0221	0.0000	0.0000
	0.0923			0.0258	0.0221	0.0000
0500-0600	0.2695	0.0997	0.0775	0.0923	0.0369	0.0000
	0.0923			0.0221	0.0295	0.0037
	0.0960			0.0148	0.0148	0.0000
	0.1218			0.0221	0.0258	0.0000
	0.0701			0.0111	0.0295	0.0000
0600-0700	0.3802	0.2030	0.1070	0.0701	0.0997	0.0037
	0.0517			0.0111	0.0000	0.0000
	0.0443			0.0074	0.0000	0.0000
	0.0591			0.0185	0.0000	0.0000
	0.0332			0.0037	0.0037	0.0000
0700-0800	0.1882	0.0664	0.0812	0.0406	0.0037	0.0000
	0.0480			0.0185	0.0037	0.0000
	0.0369			0.0074	0.0037	0.0000
	0.0517			0.0369	0.0221	0.0000
	0.0258			0.0148	0.0037	0.0000
0800-0900	0.1624	0.0406	0.0443	0.0775	0.0332	0.0000
	0.0591			0.0258	0.0332	0.0000
	0.0369			0.0074	0.0037	0.0000
	0.0295			0.0111	0.0000	0.0000
	0.0443			0.0111	0.0074	0.0000
0900-1000	0.1698	0.0443	0.0701	0.0554	0.0443	0.0000
	0.0738			0.0258	0.0074	0.0000
	0.0701			0.0185	0.0074	0.0000
	0.0775			0.0185	0.0148	0.0000
	0.0480			0.0185	0.0000	0.0000
1000-1100	0.2695	0.0554	0.1329	0.0812	0.0295	0.0000
	0.0406			0.0074	0.0074	0.0000

	0.0517			0.0221	0.0037	0.0000
	0.0701			0.0295	0.0111	0.0000
	0.0591			0.0000	0.0074	0.0000
1100-1200	0.2215	0.0591	0.1034	0.0591	0.0295	0.0000
	0.0517			0.0074	0.0037	0.0000
	0.0443			0.0185	0.0074	0.0000
	0.0480			0.0111	0.0000	0.0037
	0.0738			0.0221	0.0037	0.0000
1200-1300	0.2178	0.0406	0.1144	0.0591	0.0148	0.0037
	0.0295			0.0111	0.0111	0.0000
	0.0369			0.0111	0.0295	0.0000
	0.0517			0.0221	0.0258	0.0000
	0.0849			0.0406	0.0148	0.0000
1300-1400	0.2030	0.0480	0.0701	0.0849	0.0812	0.0000
	0.0406			0.0221	0.0148	0.0000
	0.0517			0.0258	0.0037	0.0000
	0.0775			0.0148	0.0295	0.0000
	0.0701			0.0221	0.0258	0.0037
1400-1500	0.2399	0.1181	0.0369	0.0849	0.0738	0.0037
	0.0369			0.0111	0.0000	0.0000
	0.0185			0.0111	0.0000	0.0000
	0.0258			0.0185	0.0037	0.0000
	0.0221			0.0148	0.0000	0.0000
1500-1600	0.1034	0.0258	0.0221	0.0554	0.0037	0.0000
	0.0295			0.0037	0.0037	0.0000
	0.0295			0.0111	0.0221	0.0000
	0.0369			0.0074	0.0111	0.0000
	0.0295			0.0148	0.0185	0.0000
1600-1700	0.1255	0.0406	0.0480	0.0369	0.0554	0.0000
	0.0332			0.0148	0.0037	0.0000
	0.0221			0.0148	0.0000	0.0000
	0.0332			0.0221	0.0000	0.0000
	0.0185			0.0148	0.0000	0.0000
1700-1800	0.1070	0.0111	0.0295	0.0664	0.0037	0.0000
	0.0443			0.0185	0.0000	0.0000
	0.0221			0.0111	0.0000	0.0000
	0.0406			0.0221	0.0000	0.0000
	0.0295			0.0185	0.0000	0.0000
1800-1900	0.1366	0.0111	0.0554	0.0701	0.0000	0.0000
	0.0221			0.0148	0.0000	0.0000
	0.0185			0.0074	0.0000	0.0000
	0.0074			0.0000	0.0037	0.0000
	0.0295			0.0037	0.0037	0.0000
1900-2000	0.0775	0.0111	0.0406	0.0258	0.0074	0.0000
	0.0258			0.0000	0.0000	0.0000
	0.0295			0.0074	0.0000	0.0000
	0.0295			0.0037	0.0000	0.0000
	0.0480			0.0148	0.0000	0.0000
2000-2100	0.1329	0.0517	0.0554	0.0258	0.0000	0.0000
	0.0221			0.0037	0.0000	0.0000
	0.0701			0.0148	0.0000	0.0000
	0.0960			0.0111	0.0000	0.0000
	0.0332			0.0111	0.0000	0.0000
2100-2200	0.2215	0.1403	0.0406	0.0406	0.0000	0.0000
	0.0517			0.0074	0.0000	0.0000
	0.0812			0.0074	0.0849	0.0037

	0.0738			0.0074	0.0295	0.0000
	0.1624			0.0074	0.0074	0.0000
2200-2300	0.3691	0.2842	0.0443	0.0295	0.1218	0.0037
	0.1144			0.0258	0.0258	0.0000
	0.0738			0.0074	0.0185	0.0000
	0.1107			0.0185	0.0148	0.0000
	0.1809			0.0185	0.0185	0.0000
2300-0000	0.4798	0.2916	0.1181	0.0701	0.0775	0.0000

GIA 27092 sqm

	Departures Trip Rate per 100sqm					
	VEH	CAR+M/C	LGV	HGV	PED	CYCLE
0000-0100	0.2473	0.0849	0.0849	0.0775	0.0332	0.0000
	0.0627			0.0074	0.0148	0.0000
	0.0369			0.0111	0.0148	0.0000
	0.0627			0.0148	0.0148	0.0000
	0.0406			0.0037	0.0000	0.0000
0100-0200	0.2030	0.0923	0.0738	0.0369	0.0443	0.0000
	0.0332			0.0074	0.0111	0.0000
	0.0591			0.0148	0.0111	0.0000
	0.0332			0.0037	0.0111	0.0000
	0.0591			0.0221	0.0111	0.0000
0200-0300	0.1846	0.0627	0.0738	0.0480	0.0443	0.0000
	0.1513			0.0185	0.0111	0.0000
	0.0517			0.0221	0.0000	0.0000
	0.0849			0.0221	0.0000	0.0000
	0.0443			0.0221	0.0037	0.0000
0300-0400	0.3322	0.1956	0.0517	0.0849	0.0148	0.0000
	0.0369			0.0221	0.0037	0.0000
	0.0480			0.0185	0.0037	0.0000
	0.0332			0.0111	0.0074	0.0000
	0.0332			0.0111	0.0037	0.0000
0400-0500	0.1513	0.0480	0.0406	0.0627	0.0185	0.0000
	0.0332			0.0074	0.0037	0.0000
	0.0258			0.0111	0.0074	0.0000
	0.0185			0.0037	0.0074	0.0000
	0.0591			0.0258	0.0037	0.0000
0500-0600	0.1366	0.0517	0.0369	0.0480	0.0221	0.0000
	0.0554			0.0185	0.0111	0.0000
	0.0332			0.0074	0.0000	0.0000
	0.0332			0.0074	0.0037	0.0000
	0.0185			0.0037	0.0074	0.0000
0600-0700	0.1403	0.0406	0.0627	0.0369	0.0221	0.0000
	0.0258			0.0037	0.0591	0.0000
	0.0517			0.0369	0.0148	0.0000
	0.0738			0.0443	0.0037	0.0037
	0.0369			0.0148	0.0111	0.0000
0700-0800	0.1882	0.0332	0.0554	0.0997	0.0886	0.0037
	0.0332			0.0111	0.0111	0.0000
	0.0332			0.0037	0.0111	0.0000
	0.0332			0.0074	0.0111	0.0000
	0.0443			0.0111	0.0111	0.0000
0800-0900	0.1440	0.0258	0.0849	0.0332	0.0443	0.0000
	0.0517			0.0074	0.0369	0.0000
	0.0111			0.0037	0.0074	0.0000
	0.0295			0.0037	0.0111	0.0000
	0.0332			0.0037	0.0037	0.0000
0900-1000	0.1255	0.0443	0.0627	0.0185	0.0591	0.0000
	0.0664			0.0185	0.0037	0.0000
	0.0332			0.0221	0.0148	0.0000
	0.0332			0.0037	0.0148	0.0000
	0.0554			0.0074	0.0111	0.0000
1000-1100	0.1882	0.0923	0.0443	0.0517	0.0443	0.0000
	0.1034			0.0111	0.0148	0.0000

	0.0480			0.0221	0.0037	0.0000
	0.0332			0.0111	0.0037	0.0000
	0.0517			0.0221	0.0074	0.0000
1100-1200	0.2362	0.1218	0.0406	0.0664	0.0295	0.0000
	0.0517			0.0111	0.0037	0.0000
	0.0443			0.0258	0.0037	0.0000
	0.0369			0.0185	0.0148	0.0000
	0.0185			0.0148	0.0074	0.0000
1200-1300	0.1513	0.0406	0.0406	0.0701	0.0295	0.0000
	0.0332			0.0037	0.0000	0.0000
	0.0369			0.0111	0.0000	0.0000
	0.0369			0.0185	0.0000	0.0000
	0.0517			0.0074	0.0000	0.0000
1300-1400	0.1587	0.0369	0.0812	0.0406	0.0000	0.0000
	0.0849			0.0258	0.0000	0.0000
	0.0591			0.0148	0.0000	0.0000
	0.0775			0.0221	0.0111	0.0000
	0.1034			0.0074	0.0037	0.0000
1400-1500	0.3248	0.0480	0.2067	0.0701	0.0148	0.0000
	0.0923			0.0295	0.0443	0.0000
	0.0812			0.0185	0.0148	0.0000
	0.0701			0.0185	0.0000	0.0000
	0.0701			0.0332	0.0037	0.0000
1500-1600	0.3137	0.0480	0.1661	0.0997	0.0627	0.0000
	0.0480			0.0148	0.0000	0.0000
	0.0701			0.0258	0.0000	0.0000
	0.0738			0.0258	0.0000	0.0000
	0.0554			0.0185	0.0000	0.0000
1600-1700	0.2473	0.0406	0.1218	0.0849	0.0000	0.0000
	0.0960			0.0295	0.0000	0.0000
	0.0738			0.0295	0.0000	0.0000
	0.0627			0.0221	0.0000	0.0000
	0.0923			0.0221	0.0000	0.0000
1700-1800	0.3248	0.1070	0.1144	0.1034	0.0000	0.0000
	0.1144			0.0221	0.0000	0.0000
	0.0812			0.0148	0.0000	0.0000
	0.0886			0.0148	0.0000	0.0000
	0.0812			0.0037	0.0000	0.0000
1800-1900	0.3654	0.2178	0.0923	0.0554	0.0000	0.0000
	0.1919			0.0221	0.0000	0.0000
	0.0443			0.0037	0.0000	0.0000
	0.0886			0.0332	0.0000	0.0037
	0.1034			0.0332	0.0000	0.0000
1900-2000	0.4282	0.2252	0.1107	0.0923	0.0000	0.0037
	0.0960			0.0111	0.0000	0.0000
	0.0443			0.0111	0.0037	0.0000
	0.0923			0.0148	0.0000	0.0000
	0.0664			0.0148	0.0000	0.0000
2000-2100	0.2990	0.1513	0.0960	0.0517	0.0037	0.0000
	0.0775			0.0037	0.0000	0.0000
	0.0664			0.0221	0.0000	0.0000
	0.0886			0.0148	0.0074	0.0000
	0.1513			0.0332	0.0000	0.0000
2100-2200	0.3839	0.2067	0.1034	0.0738	0.0074	0.0000
	0.0775			0.0148	0.0111	0.0000
	0.0517			0.0074	0.0000	0.0000

	0.0738			0.0148	0.0000	0.0000
	0.0701			0.0221	0.0074	0.0000
2200-2300	0.2731	0.1255	0.0849	0.0591	0.0185	0.0000
	0.1366			0.0074	0.0591	0.0000
	0.0627			0.0148	0.0074	0.0000
	0.0591			0.0258	0.0037	0.0000
	0.0591			0.0074	0.0037	0.0000
2300-0000	0.3174	0.1809	0.0738	0.0554	0.0738	0.0000

GIA 27092.000 sqm

	Total Trip Rate per 100sqm					
	ALL VEH	CAR+M/C	LGV	HGV	PED	CYCLE
0000-0100	0.616	0.281	0.221	0.107	0.081	0.000
	0.129			0.015	0.026	0.004
	0.122			0.033	0.022	0.000
	0.137			0.044	0.030	0.000
	0.103			0.022	0.011	0.000
0100-0200	0.491	0.210	0.166	0.114	0.089	0.004
	0.111			0.033	0.022	0.000
	0.144			0.041	0.018	0.000
	0.118			0.026	0.011	0.000
	0.162			0.044	0.011	0.000
0200-0300	0.535	0.214	0.177	0.144	0.063	0.000
	0.218			0.041	0.011	0.000
	0.114			0.033	0.000	0.000
	0.151			0.041	0.000	0.000
	0.114			0.052	0.004	0.000
0300-0400	0.598	0.310	0.122	0.166	0.015	0.000
	0.118			0.055	0.011	0.000
	0.137			0.041	0.004	0.000
	0.096			0.033	0.007	0.000
	0.081			0.022	0.011	0.000
0400-0500	0.432	0.137	0.144	0.151	0.033	0.000
	0.081			0.030	0.011	0.000
	0.085			0.033	0.015	0.000
	0.089			0.026	0.007	0.000
	0.151			0.052	0.026	0.000
0500-0600	0.406	0.151	0.114	0.140	0.059	0.000
	0.148			0.041	0.041	0.004
	0.129			0.022	0.015	0.000
	0.155			0.030	0.030	0.000
	0.089			0.015	0.037	0.000
0600-0700	0.520	0.244	0.170	0.107	0.122	0.004
	0.078			0.015	0.059	0.000
	0.096			0.044	0.015	0.000
	0.133			0.063	0.004	0.004
	0.070			0.018	0.015	0.000
0700-0800	0.376	0.100	0.137	0.140	0.092	0.004
	0.081			0.030	0.015	0.000
	0.070			0.011	0.015	0.000
	0.085			0.044	0.033	0.000
	0.070			0.026	0.015	0.000
0800-0900	0.306	0.066	0.129	0.111	0.078	0.000
	0.111			0.033	0.070	0.000
	0.048			0.011	0.011	0.000
	0.059			0.015	0.011	0.000
	0.078			0.015	0.011	0.000
0900-1000	0.295	0.089	0.133	0.074	0.103	0.000
	0.140			0.044	0.011	0.000
	0.103			0.041	0.022	0.000
	0.111			0.022	0.030	0.000
	0.103			0.026	0.011	0.000
1000-1100	0.458	0.148	0.177	0.133	0.074	0.000
	0.144			0.018	0.022	0.000
	0.100			0.044	0.007	0.000
	0.103			0.041	0.015	0.000
	0.111			0.022	0.015	0.000
1100-1200	0.458	0.181	0.144	0.125	0.059	0.000
	0.103			0.018	0.007	0.000
	0.089			0.044	0.011	0.000
	0.085			0.030	0.015	0.004
	0.092			0.037	0.011	0.000
1200-1300	0.369	0.081	0.155	0.129	0.044	0.004
	0.063			0.015	0.011	0.000
	0.074			0.022	0.030	0.000
	0.089			0.041	0.026	0.000
	0.137			0.048	0.015	0.000
1300-1400	0.362	0.085	0.151	0.125	0.081	0.000
	0.125			0.048	0.015	0.000
	0.111			0.041	0.004	0.000
	0.155			0.037	0.041	0.000
	0.173			0.030	0.030	0.004
1400-1500	0.565	0.166	0.244	0.155	0.089	0.004
	0.129			0.041	0.044	0.000
	0.100			0.030	0.015	0.000
	0.096			0.037	0.004	0.000
	0.092			0.048	0.004	0.000
1500-1600	0.417	0.074	0.188	0.155	0.066	0.000
	0.078			0.018	0.004	0.000
	0.100			0.037	0.022	0.000
	0.111			0.033	0.011	0.000
	0.085			0.033	0.018	0.000
1600-1700	0.373	0.081	0.170	0.122	0.055	0.000
	0.129			0.044	0.004	0.000
	0.096			0.044	0.000	0.000
	0.096			0.044	0.000	0.000
	0.111			0.037	0.000	0.000
1700-1800	0.43	0.118	0.144	0.17	0.00	-
	0.159			0.041	0.000	0.000
	0.103			0.026	0.000	0.000
	0.129			0.037	0.000	0.000
	0.111			0.022	0.000	0.000
1800-1900	0.502	0.229	0.148	0.125	0.000	0.000
	0.214			0.037	0.000	0.000
	0.063			0.011	0.000	0.000
	0.096			0.033	0.004	0.004
	0.133			0.037	0.004	0.000
1900-2000	0.506	0.236	0.151	0.118	0.007	0.004
	0.122			0.011	0.000	0.000
	0.074			0.018	0.004	0.000
	0.122			0.018	0.000	0.000
	0.114			0.030	0.000	0.000
2000-2100	0.432	0.203	0.151	0.078	0.004	0.000
	0.100			0.007	0.000	0.000
	0.137			0.037	0.000	0.000
	0.185			0.026	0.007	0.000
	0.185			0.044	0.000	0.000
2100-2200	0.605	0.347	0.144	0.114	0.007	0.000
	0.129			0.022	0.011	0.000
	0.133			0.015	0.085	0.004
	0.148			0.022	0.030	0.000
	0.233			0.030	0.015	0.000
2200-2300	0.642	0.410	0.129	0.089	0.140	0.004
	0.251			0.033	0.085	0.000
	0.137			0.022	0.026	0.000
	0.170			0.044	0.018	0.000
	0.240			0.026	0.022	0.000
2300-0000	0.797	0.472	0.192	0.125	0.151	0.000
Daily	11.494	4.632	3.802	3.019	1.517	0.026

Appendix J

24HR VEHICLE TRIP GENERATION PROFILE

GSK Site 24hr Hourly Trip Generation

Existing GSK Office Site Trip Generation (From June 2019 Survey)

Time	ALL VEH.	Cars+M/C	LGVs	Buses / HGV
0000-0100	0	0	0	0
0100-0200	0	0	0	0
0200-0300	0	0	0	0
0300-0400	0	0	0	0
0400-0500	6	0	4	2
0500-0600	10	10	0	0
0600-0700	57	55	2	0
0700-0800	184	176	4	4
0800-0900	283	276	2	5
0900-1000	219	205	4	10
1000-1100	78	68	6	4
1100-1200	41	34	5	2
1200-1300	70	60	3	7
1300-1400	55	48	3	4
1400-1500	56	50	3	3
1500-1600	95	90	0	5
1600-1700	291	281	3	7
1700-1800	225	216	1	8
1800-1900	100	96	0	4
1900-2000	34	31	0	3
2000-2100	8	8	0	0
2100-2200	0	0	0	0
2200-2300	1	1	0	0
2300-0000	0	0	0	0

Daily	1813	1705	40	68

Proposed GSK Site Trip Generation (30,627sqm B1c/B2/B8)

Time	ALL VEH.	Cars+M/C	LGVs	HGV
0000-0100	187	86	68	33
0100-0200	150	64	51	35
0200-0300	164	66	54	44
0300-0400	183	95	37	51
0400-0500	132	42	44	46
0500-0600	124	46	35	43
0600-0700	159	75	52	33
0700-0800	115	31	42	43
0800-0900	94	20	40	34
0900-1000	90	27	41	23
1000-1100	140	45	54	41
1100-1200	138	55	44	38
1200-1300	112	25	47	40
1300-1400	111	26	46	38
1400-1500	173	51	75	47
1500-1600	128	23	58	47
1600-1700	114	25	52	37
1700-1800	132	36	44	52
1800-1900	154	70	45	38
1900-2000	155	72	46	36
2000-2100	132	62	46	24
2100-2200	185	106	44	35
2200-2300	192	125	40	27
2300-0000	242	145	59	38

Daily	3508	1419	1164	925

Net difference

Time	ALL VEH.	Cars+M/C	LGVs	Buses / HGV
0000-0100	187	86	68	33
0100-0200	150	64	51	35
0200-0300	164	66	54	44
0300-0400	183	95	37	51
0400-0500	126	42	40	44
0500-0600	114	36	35	43
0600-0700	102	20	50	33
0700-0800	-69	-145	38	39
0800-0900	-189	-256	38	29
0900-1000	-129	-178	37	13
1000-1100	62	-23	48	37
1100-1200	97	21	39	36
1200-1300	42	-35	44	33
1300-1400	56	-22	43	34
1400-1500	117	1	72	44
1500-1600	33	-67	58	42
1600-1700	-177	-256	49	30
1700-1800	-93	-180	43	44
1800-1900	54	-26	45	34
1900-2000	121	41	46	33
2000-2100	124	54	46	24
2100-2200	185	106	44	35
2200-2300	191	124	40	27
2300-0000	242	145	59	38

Daily	1695	-286	1124	857

Mountbatten House
Basing View
Basingstoke, Hampshire
RG21 4HJ

wsp.com