

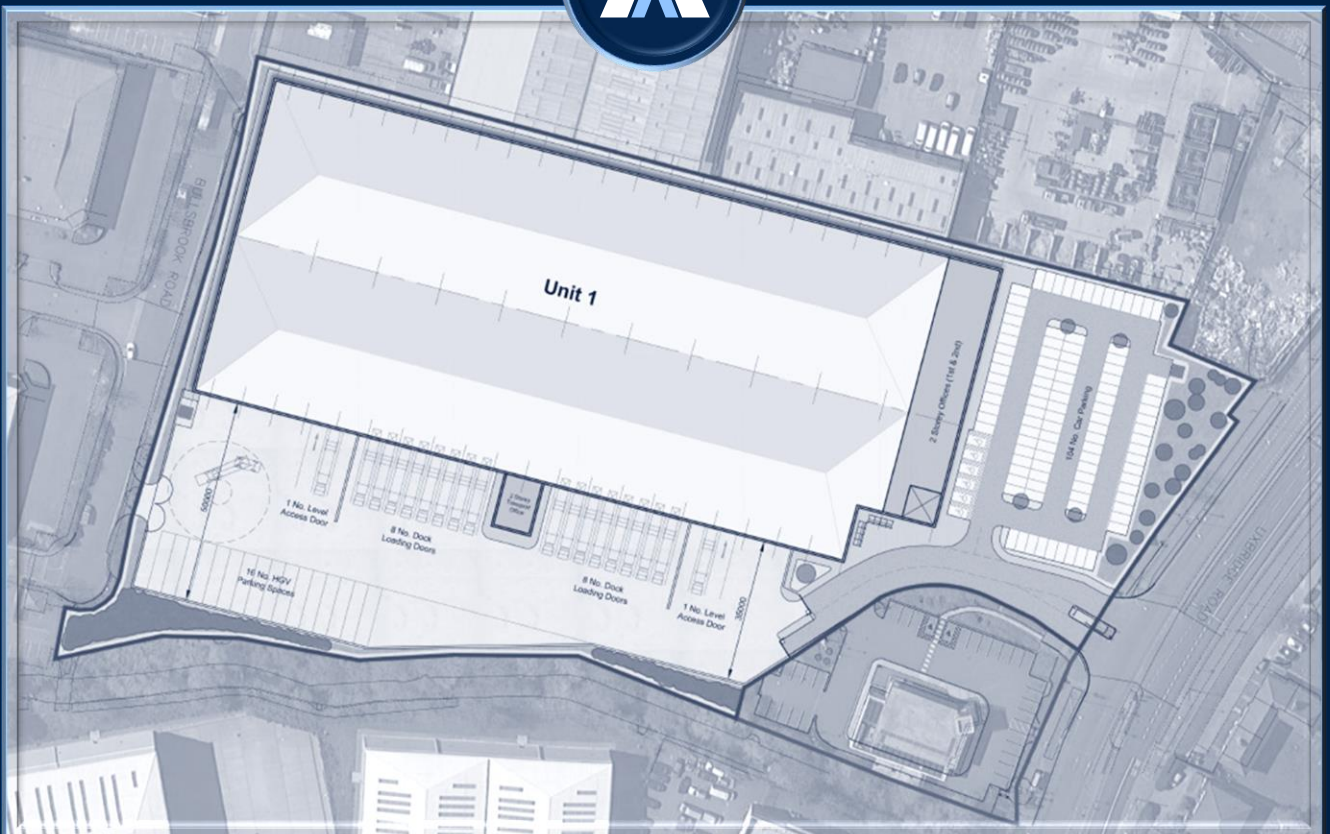
Hayes Bridge Retail Park

Transport Assessment

Client: OXW Hayes S.à.r.l.

09 May 2022

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REPORT DETAILS

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1. INTRODUCTION

1.1 Background

- 1.1.1 Apex Transport Planning Ltd ('Apex TP') has been commissioned to produce a Transport Assessment (TA) in relation to a proposed B2 / B8 warehousing development at the Hayes Bridge Retail Park, Uxbridge Road, Hayes.
- 1.1.2 The proposals comprise the demolition of existing buildings and the erection of a single commercial building for employment purposes Class E(g)iii, B2 and B8, along with ancillary offices, gatehouse, associated infrastructure including; service yard, car parking, drainage and hard and soft landscaping.
- 1.1.3 The application site ('the site') is located to the south of Uxbridge Road and north of Bullsbrook Road with access obtained from both locations. It is a brownfield site with an existing retail use with a number of buildings located on the site.
- 1.1.4 This TA provides an assessment of the sustainable connectivity and transport impacts of the proposed development and sets out details of the proposed parking and access arrangements. This TA has been produced to inform the London Borough of Hillingdon (LBH) as the Local Highway Authority (LHA) of the highways and transport implications of the proposals.

1.2 Scope of Report

- 1.2.1 An initial pre-application response has been provided by the LHA (dated 9 August 2021) and this has informed the suggested approach. The initial pre-application comments are provided in Appendix A.
- 1.2.2 The TA broadly includes the following:
 - Description of the existing site use, location and trip generation characteristics
 - Review of the existing conditions, including surrounding land uses, relevant planning applications, highway network characteristics, highway safety and existing travel behaviour
 - Review of the sustainable connectivity of the site including walking and cycling routes and public transport connections
 - Description of the development proposals, demonstrating safe and appropriate access by all modes, car and cycle parking and servicing and delivery arrangements
 - Forecast of vehicle trip generation in the peak hours and net change from the existing use
 - Consideration of the impact of the proposals on the local highway network

1.3 Relevant Planning Policies

- 1.3.1 The TA considers policies and guidance in the National Planning Policy Framework (NPPF), National Planning Policy Guidance (NPPG), the London Plan, The Mayor's Transport Strategy, Manual for Streets (MfS), Transport for London (TfL) Transport Assessment guidance and relevant guidance within LBH – the Local Plan and supporting documents.
- 1.3.2 The key policy documents promote development where there is a choice of sustainable transport modes such as walking, cycling, public transport and electric vehicles.
- 1.3.3 The London Plan sets out transport policies in Chapter 10. Policy T1 sets out that development proposals should facilitate the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041. The Plan also sets out minimum cycle parking standards and maximum car parking standards, which would be applicable to the development.

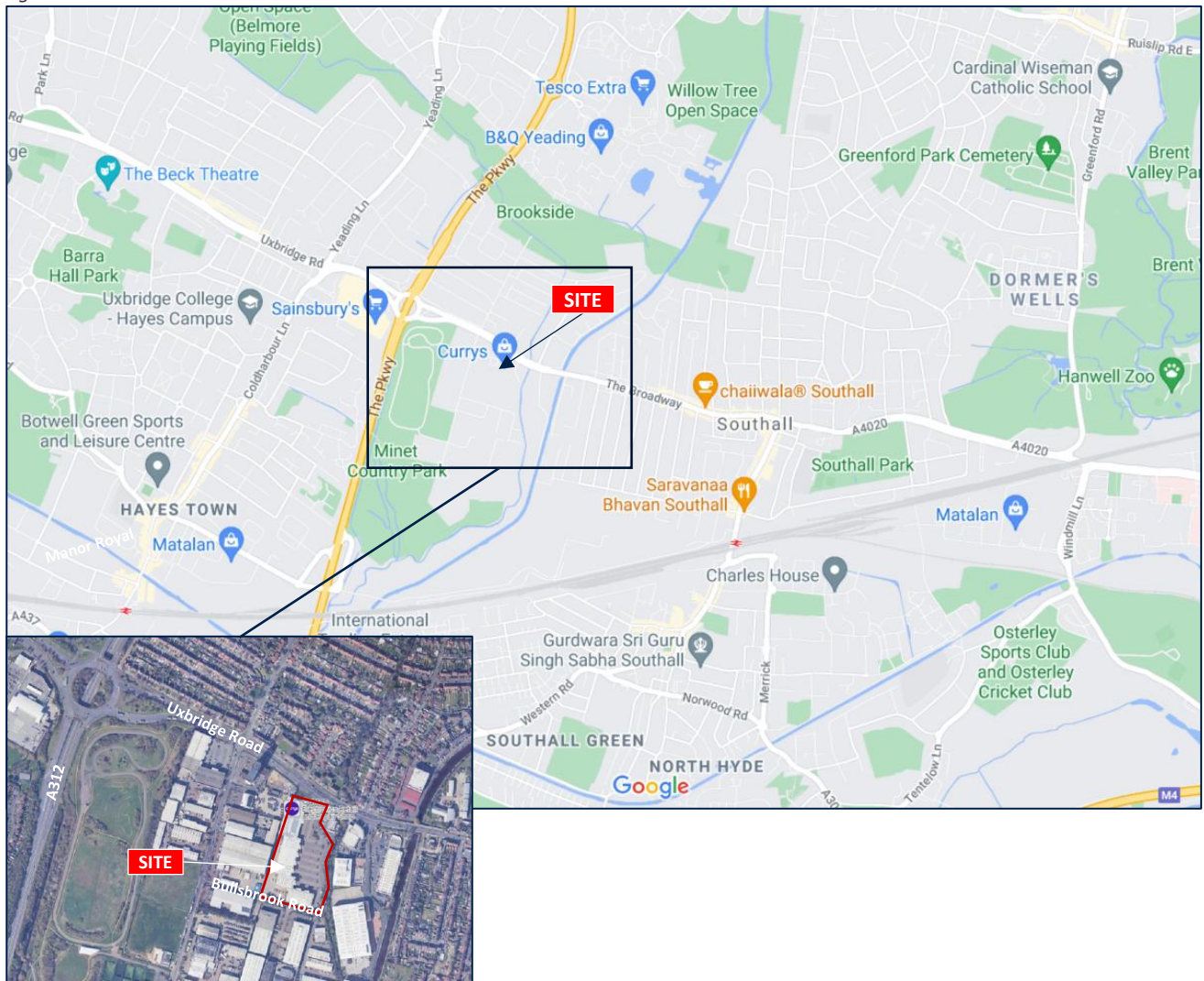
- 1.3.4 The LBH Local Plan Policy DMT1 states that proposals will be acceptable where they are accessible by public transport, walking and cycling and adequately address delivery, servicing and drop-off requirements. Policy DMT2 states that development proposals must ensure safe and efficient vehicular access to the highway network.
- 1.3.5 Hillingdon's parking standards are based on those contained in the London Plan with some variance to address local circumstances in terms of employment sites and residential uses. These are shown in Appendix C of the Local Plan.
- 1.3.6 In accordance with Policy DMT1 a separate Travel Plan has been produced which provides measures to encourage sustainable transport to and from the site.
- 1.3.7 The NPPF para 111 states that development should only be prevented or refused on transport grounds if there is an unacceptable impact on highway safety, or where the residual cumulative impacts on the road network are severe.

2. EXISTING CONDITIONS

2.1 Site Location and Context

- 2.1.1 The site is located approximately 1.2 km to the west of the centre of Southall High Street, to the south of Uxbridge Road and north of Bullsbrook Road. The existing use is as a retail park with a number of different occupiers and it is surrounded by other similar uses as well as industrial units. The site location is shown indicatively in Figure 2-1.
- 2.1.2 The site has an existing retail use and is occupied by a number of units including Tapi, AHF, Argos Extra, Staples, Dreams, Harveys, Halfords and Currys / PC World.

Figure 2-1: Indicative Site Location



Source: Google Maps

2.2 Existing Access and Parking

- 2.2.1 The site is accessed from Uxbridge Road to the north via a three armed signal controlled junction, but the retail park currently privately restricts HGV access from this junction. The site access arm has two lanes for separate left and right movements and has a right turning lane from the west which is approximately 65m long and can therefore accommodate c. 10 passenger car units (PCUs).

- 2.2.2 The service area is at the rear of the buildings and all HGVs access the site from the south via a priority junction onto Bullsbrook Road.
- 2.2.3 The site has 489 car parking spaces at the frontage of the units. These retail units with this level of parking would generate a significant level of traffic onto the local highway network (an estimate of the trip generation is set out in Section 5). As such, the site access onto Uxbridge Road and the surrounding network have accommodated movements from the existing uses over an extended period, including HGVs, and should therefore be suitable for accommodating movements associated with the proposed use.

2.3 Local Highway Network

- 2.3.1 The A4020 Uxbridge Road provides the main route connecting to the site and this is a dual carriageway road with two lanes in each direction within the vicinity of the site. It also incorporates bus lanes along some of its length including in an eastbound direction at the site access junction. To the west it connects with the A312 at a grade separated roundabout and to the east it connects with Southall High Street, West Ealing and Acton. Within the vicinity of the site it is subject to a 40mph speed restriction and has footways / cycleways on each side of the carriageway.
- 2.3.2 The A312 forms part of the TfL Red Route network and would form a key HGV route to and from the site. This links to the M4 to the south and the A40 to the north (which becomes the M40 at its western end). As such, this provides the key strategic route to and from the site. Within the vicinity of the A4020 Uxbridge Road the A312 is a two-lane dual carriageway road in each direction subject to speed restrictions of 40mph.
- 2.3.3 Springfield Road and Bullsbrook Road form the access route from the A4020 Uxbridge Road to the service area at the southern side of the site. Springfield Road forms one arm of a four armed crossroad signal controlled junction with the A4020 Uxbridge Road. Springfield Road is a single carriageway road subject to 30mph speed restrictions and provides access to numerous industrial and retail units as well as sports and leisure facilities. It has a carriageway width of c.7.3m and two queuing lanes at the junction with the A4020 Uxbridge Road at its northern end which extend for approximately 90m to the south. There are footways on each side of the carriageway.
- 2.3.4 Bullsbrook Road forms the minor arm of a priority junction with the A4020 Uxbridge Road and is a c.7.3m wide single carriageway road which provides access to service yards and industrial units for four sites (including the site itself). It is approximately 275 metres long, subject to 30mph speed restrictions, and a no through road terminating at the eastern boundary of the site. It provides access for HGV movements associated with the adjoining sites and can appropriately accommodate these movements.

2.4 Traffic Flows

- 2.4.1 A junction turning count survey has been undertaken by an independent specialist traffic data collection company (Auto Surveys Ltd) to record turning movements and queue lengths at the site access junction onto Uxbridge Road. This survey also recorded turning movements at the Uxbridge Road / Delamere Road junction to the east. The survey was undertaken on Thursday 21st October 2021 outside of school holiday times and recorded all movements by 15 minute period between 0700-1000 and 1600-1900. Queue lengths were recorded by 5 minute period.
- 2.4.2 The full results are set out in Appendix B.

2.4.3 The survey included movements into and out of the site access during network peak hours. Although some of these would be associated with the Metro Bank, which does not form part of the application, the majority would relate to the wider site. During the peak hours of movements, the two-way flows into and out of the site access were as follows:

- 07:00 – 08:00: 28 vehicle movements
- 17:00 – 18:00: 152 vehicle movements

2.4.4 As such, there is a significant number of movements, in particular during the PM peak hour, in relation to the existing site use.

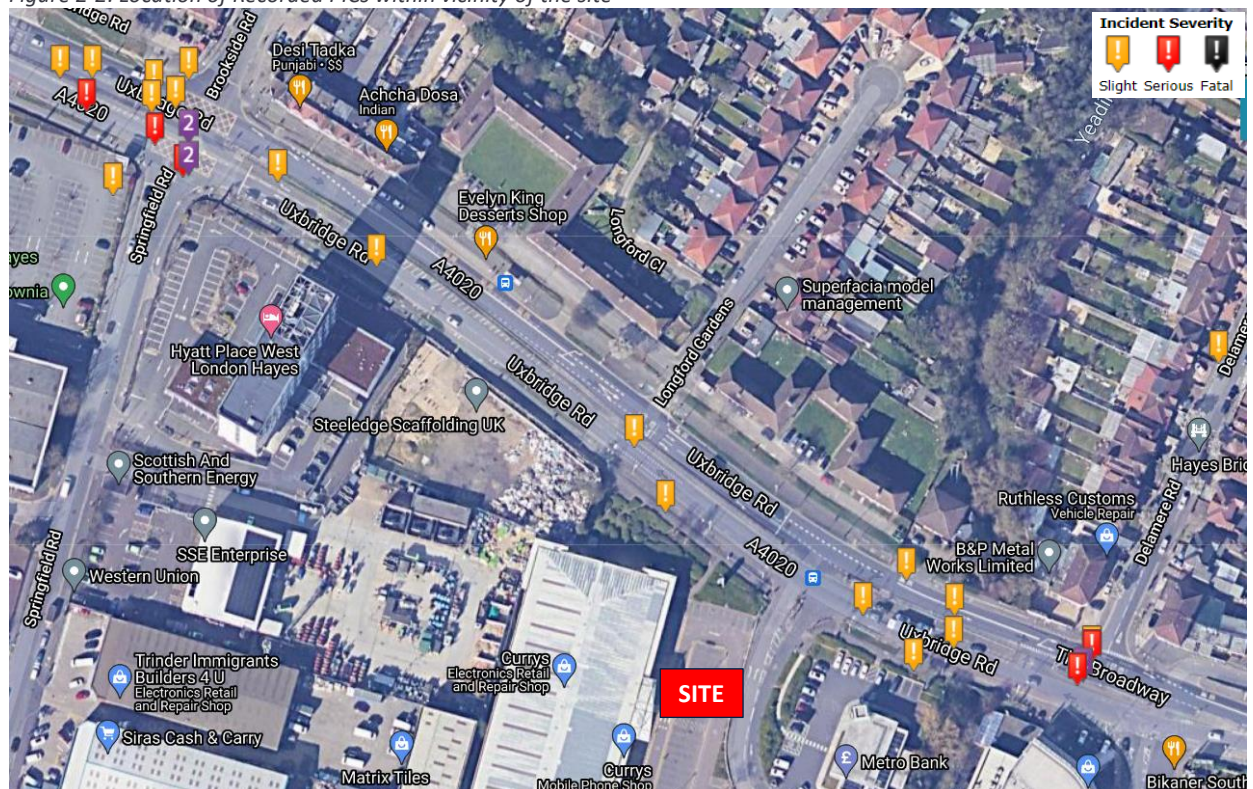
2.4.5 The queue lengths recorded indicate that the existing site access / Uxbridge Road signal controlled junction does not block back to upstream junctions.

2.5 Road Safety

2.5.1 Personal Injury Collision (PIC) data has been obtained from road safety data published annually by the Department for Transport (DfT). The statistics provide PIC data which has been recorded using the STATS19 accident reporting form. The annual dataset is typically released in the summer each year. As such, the most recently available five-year dataset covers between 1st January 2016 and 31st December 2020.

2.5.2 The study area considered within the analysis covers the local highway network within the vicinity of the site, including the site access and the two key junctions either side of this, with the entire study area shown in Figure 2-2.

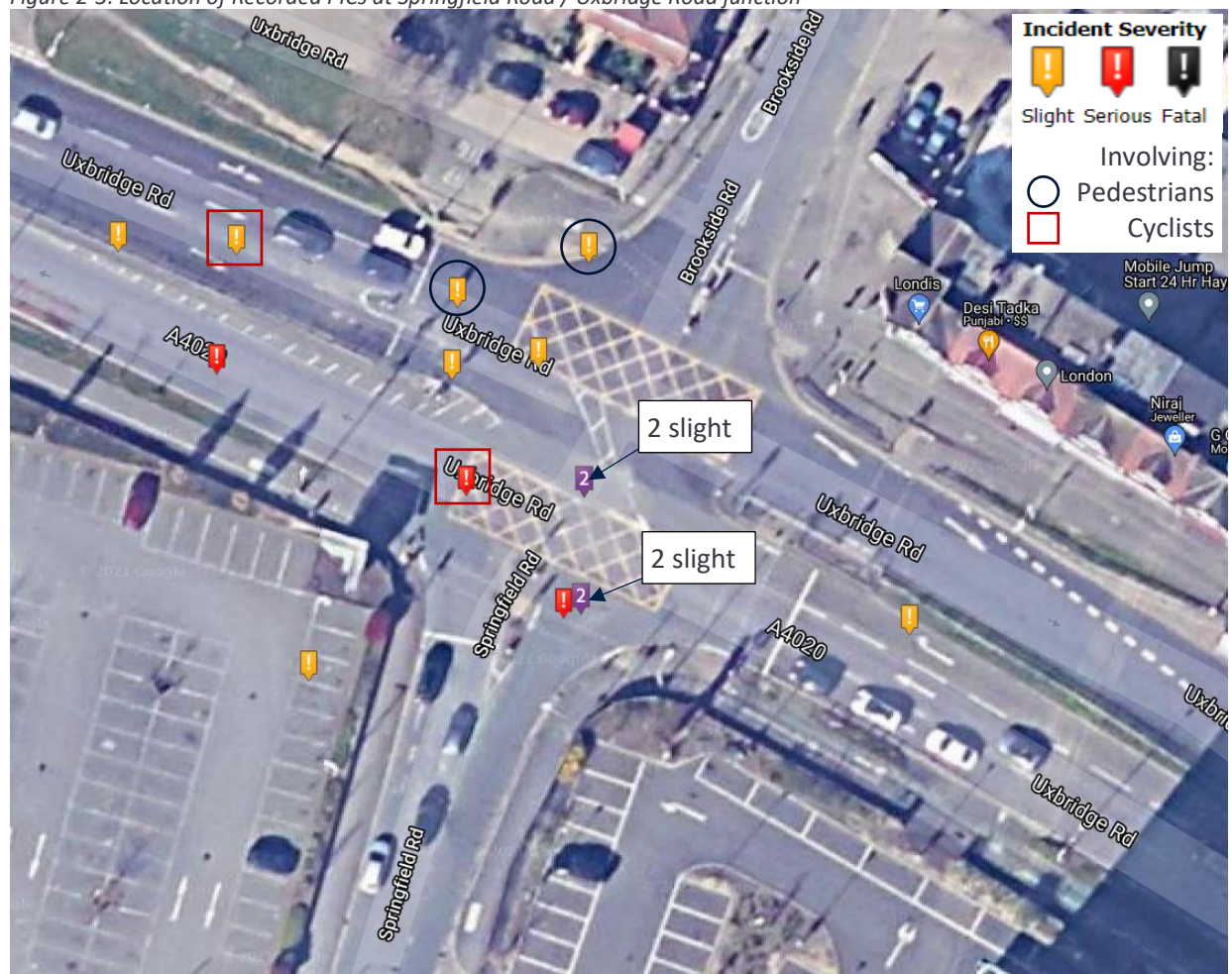
Figure 2-2: Location of Recorded PICs within vicinity of the site



Source: Crashmap

- 2.5.3 Over the five year period, within the study area, a total of 29 PICs occurred. Five of these were classified as serious injury collisions and the remainder classified as slight injury collisions. There were no fatal PICs recorded within the study period.
- 2.5.4 Four of the PICs involved pedestrians, all of which resulted in slight injuries and these occurred at different locations. Three of the PICs involved cyclists, with two of these classified as slight injury collisions and one being a serious injury collision. Three of the PICs involved HGVs, all of which resulted in slight injury accidents. Based on this, there is no evidence of a specific cycle, pedestrian or HGV road safety issue within the study area.
- 2.5.5 Two of the PICs occurred at the site access, both of which resulted in slight injuries. 15 PICs occurred at the Springfield Road / Uxbridge Road / Brookside Road junction. These are shown in Figure 2-3.

Figure 2-3: Location of Recorded PICs at Springfield Road / Uxbridge Road junction



Source: Crashmap

- 2.5.6 The 15 PICs at the Springfield Road / Uxbridge Road / Brookside Road junction comprised of 3 serious PICs and 12 slight PICs. Two of the PICs involved pedestrians (both slight and at different locations) and two involved cyclists, one slight and one of which was serious. The serious cyclist PIA occurred opposite Springfield Road on the westbound lane of Uxbridge Road and involved a cyclist only at 23:00 and does not indicate a specific issue for cyclists, particular considering the off-carriageway infrastructure in place either side of the carriageway.
- 2.5.7 There were two other serious PICs, one of which occurred to the west of Springfield Road on the A4020 and was the result of a rear end shunt between two cars travelling westbound. The remaining

serious PIC occurred opposite the entry arm into Springfield Road and related to a westbound vehicle slowing on approach to the junction and travelling westbound on the A4020, no other vehicles were involved. All three serious PICs occurred in 2016 and no further PICs have occurred since then within the available data.

- 2.5.8 The PICs occurred across all arms of the junction and no entry arms or locations had four or more PICs occurring in the same place. Although five PICs occurred on the alignment of the turn from Springfield Road from Uxbridge Road not all of these relate to vehicles turning as some were incidents relating to vehicles travelling westbound on the A4020. In addition, the proposals would reduce the level of vehicle movements turning into and out of Springfield Road from the existing service area, which may provide a slight benefit in road safety terms on the turn into Springfield Road.
- 2.5.9 As such, although all incidents are regrettable, the PIAs that occurred do not indicate a specific pattern or issue with the geometry of the highway for pedestrian, cyclist or HGV movements that would be exacerbated by the proposals, particularly given the existing operation of the site generates these movements on the network.

2.6 Modal Share

- 2.6.1 The site is located within the Hillingdon 026 middle layer super output area (MSOA). Census 2011 data has been analysed for the Hillingdon 026 MSOA to establish the journey to work modal split for the workplace population. This has been compared with the data for the entire of LBH. This analysis is shown in Table 2-1.

Table 2-1: Journey to Work Mode Split (Census 2011)

Mode	Hillingdon 026 %	Hillingdon %
Public Transport	26.9%	22.4%
Car Driver	55.4%	65.4%
Car Passenger	4.9%	3.3%
Motorcycle	0.4%	0.9%
Bicycle	1.6%	1.5%
On Foot	9.9%	5.8%
Other	0.9%	0.7%
Total	100.0%	100.0%

- 2.6.2 Table 2-1 shows that 27% of existing employees travel to work to this MSOA by public transport, 10% travel on foot, 2% by cycle and 5% as a car passenger. A total of 55% travel as a car driver and less than 1% by motorcycle.
- 2.6.3 The data shows that there is a higher proportion of sustainable travel in this area than across the wider LBH area, which reflects the sustainable connectivity and proximity to residential areas.
- 2.6.4 The data shows that employees in this area have a high level of travel by sustainable modes, particularly by public transport, which is reflective of the sustainable location of the site. As such, this demonstrates that there is excellent potential for walking, cycling and public transport trips to be made to and from the site and that these movements already occur in this area (including for the existing site use).

3. SUSTAINABLE CONNECTIVITY

3.1 Introduction

- 3.1.1 The site has an existing use for a retail park which generates sustainable movements onto the network. In addition, the site is surrounded by other industrial and employment uses. As such, the sustainable transport links are considered appropriate for this existing retail use and surrounding employment uses and therefore should remain appropriate for the proposed use.
- 3.1.2 This accessibility to sustainable transport networks will be helpful for minimising the vehicle movements on the network and encouraging sustainable travel, therefore assisting to reduce the impact of the scheme on the network.
- 3.1.3 Further details of the sustainable travel modes available are set out in this section.

3.2 Walking

- 3.2.1 Walking is the most important mode of travel at a local level and offers the greatest potential to replace short car journeys.

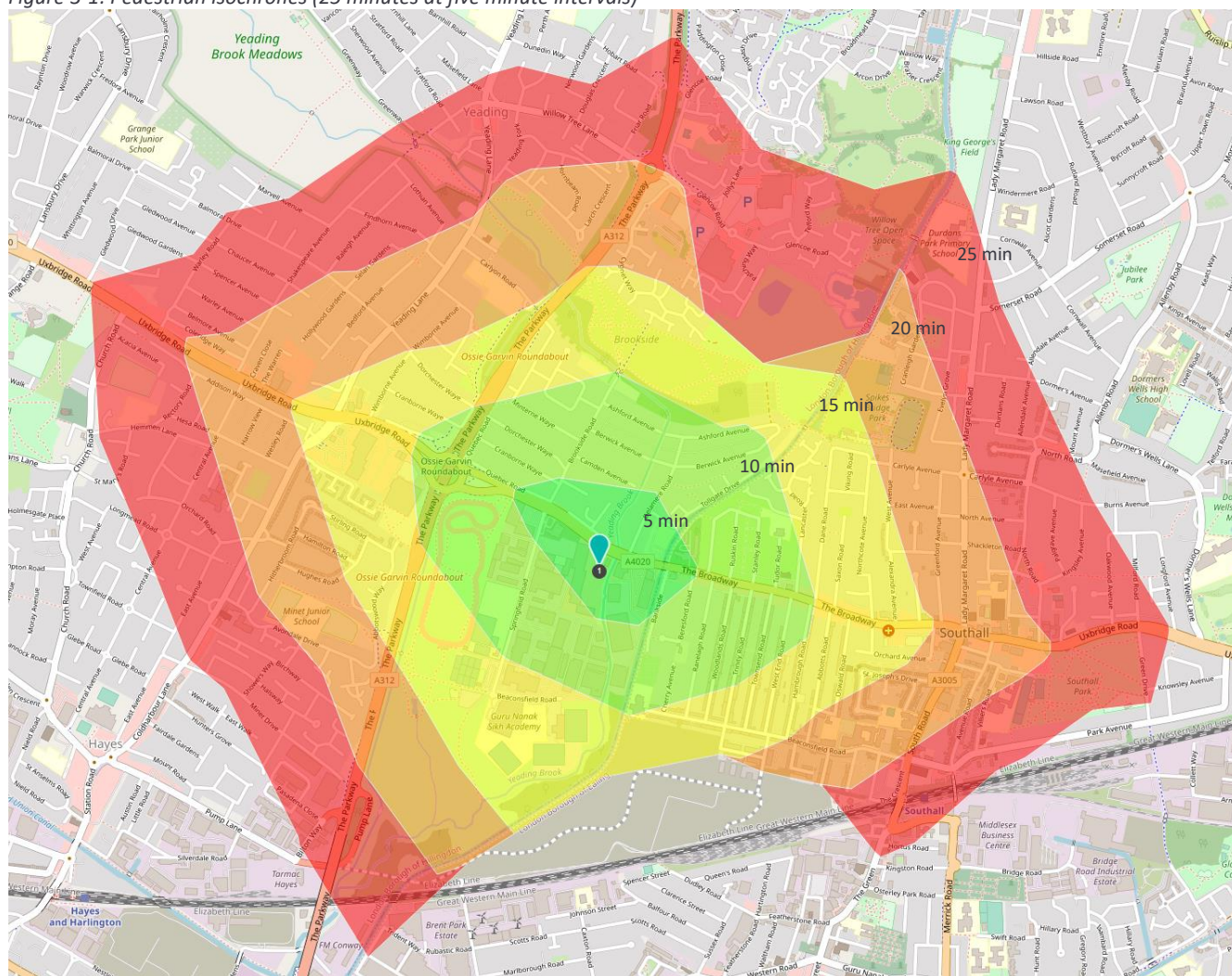
Infrastructure

- 3.2.2 The site is well connected by good pedestrian routes and facilities and is within a well-established industrial and retail area, adjacent to existing residential areas.
- 3.2.3 The surrounding streets have footways (and cycleways) on both sides, as would be expected in an existing urban area. There are continuous walking routes in all directions which connect to residential areas, facilities and public transport stops. There are also signal controlled pedestrian crossings at the site access junction with Uxbridge Road to enable crossing to eastbound bus routes and the residential areas to the north of Uxbridge Road. There is also a signal controlled crossing over the site access itself to enable movements from east to west. The crossings are staggered with pedestrian refuge islands provided in the centre of the carriageway.
- 3.2.4 On the southern side of Uxbridge Road to the west of the site access, there is a segregated footway / cycleway with the footway approximately 2m wide and the cycleway approximately 3m wide. There is a similar arrangement on the northern side of the carriageway, although to the west of the site this becomes a shared arrangement in places. To the east of the site access is a c.3m wide footway on the southern side of the carriageway and a shared footway / cycleway which connects to Delamere Road on the northern side of the carriageway. To the east of Delamere Road are wide footways on both sides of Uxbridge Road.
- 3.2.5 The footways adjacent to Uxbridge Road connect to South Road and other routes to the south which link to Southall Rail Station.
- 3.2.6 The gradients are relatively flat on the routes surrounding the site which is conducive for walking.
- 3.2.7 As such, there are suitable and continuous pedestrian routes linking the site to the closest bus stops and rail station. At all crossing points, there is good visibility between vehicles, HGVs, pedestrians and cycles and the accident data did not show any specific road safety issues for pedestrians crossing at the site access or on the key routes to public transport stops.
- 3.2.8 As such, the site is well situated to encourage walking for potential employees and visitors.

Distances

- 3.2.9 To enable an assessment of the viability of walking between the site and residential areas, it is appropriate to establish the maximum distance that people are generally prepared to walk for work purposes.
- 3.2.10 There are a number of publications which suggest guidance for appropriate and acceptable walking distances. For reference, these have been summarised as follows.
- CIHT - Guidelines for Providing for Journeys on Foot (2000): suggests preferred maximum distances for commuting are up to 2km.
 - Department for Transport (DfT) – Manual for Streets (2007): MfS states that ‘*walkable neighbourhoods*’ are typically characterised by having a range of facilities within 10 minutes walking distance (c. 800 metres) – i.e. this would include employment uses. MfS also acknowledges that this is not an upper limit and references previous planning policy guidance in that it is generally acknowledged that walking offers the greatest potential to replace short car trips, particularly under 2km.
 - CIHT (2015) – Planning for Walking: In relation to shorter trips in particular, (section 2.1) states that across Britain about ‘*80% of journeys shorter than 1 mile (1.6km) are made wholly on foot*’.
 - DfT – National Travel Survey 2016 Report (NTS2016)– This suggests on page 16 that 80% of all trips under 1 mile (1.6km) were made by walking.
 - DMRB – Although recently superseded by CD143, TA91/05 Provision for Non-Motorised Users provided useful guidance on walking and cycling distances, which remains helpful in this regard. Paragraph 2.2 of TA91/05 states that 2 miles (3.2km) is ‘*a distance that could easily be walked by the majority of people*’. Paragraph 2.3 also continues by stating that ‘*Walking is used to access a wide variety of destinations including places of work, normally within a range of up to 2 miles*’ (3.2km).
- 3.2.11 As such, based on guidance, it is considered that suitable walking distances could be up to 3.2km. This equates to around a 40-minute walk travelling at 3mph (4.8kph). However, distances of 2km are considered more likely for walking journeys and residential areas within 800 metres are considered to be within ‘walkable neighbourhood’ distances.
- 3.2.12 Openroute Service has been used to generate pedestrian isochrones at five minute (c.400m) intervals from the site access, as shown in Figure 3-1. This is based on walking speeds of 5km per hour (c. 3mph) via the road network. It demonstrates a significant proportion of Southall, Hayes and Yeading are accessible within a 25 minute walk from the site (c. 2km).
- 3.2.13 The analysis within Openreach also suggests that c.48,500 people live within a 25 minute walk. This shows that potential employees could be situated within a suitable walking distance of the site. As such, there is a good potential for employees (and visitors) to travel to the site on foot and this would be an attractive option.

Figure 3-1: Pedestrian Isochrones (25 minutes at five minute intervals)



Source: Openroute Service

3.2.14 Travelling to the site by walking is considered a feasible and realistic option for employees of the site and visitors. As shown in Section 2, there are already journeys made by walking for work purposes in this area.

3.3 Cycling

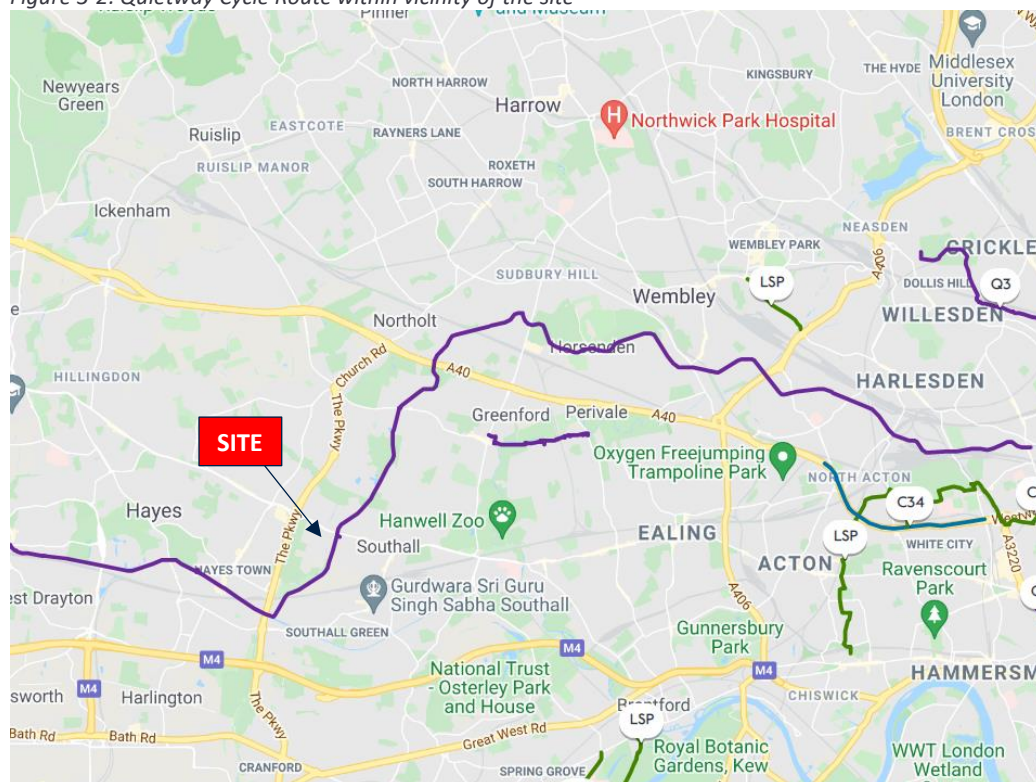
Routes

3.3.1 A segregated footway / cycleway routes to the west of the site on Uxbridge Road which connects to Hayes End to the west. To the east of the site access, this is provided as an advisory on-carriageway cycle lane which connects to Southall to the east. This route also connects to a quietway link which runs north to south between Hayes and Sudbury Hill along the Paddington Arm Canal towpath. This forms an attractive off-carriageway route for cyclists travelling from a number of areas.

3.3.2 As such, the site is well connected to the local cycle network and this would provide a feasible travel option for employees.

3.3.3 The quietway cycle link along the towpath within the vicinity of the site is shown in Figure 3-2.

Figure 3-2: Quietway Cycle Route within vicinity of the site



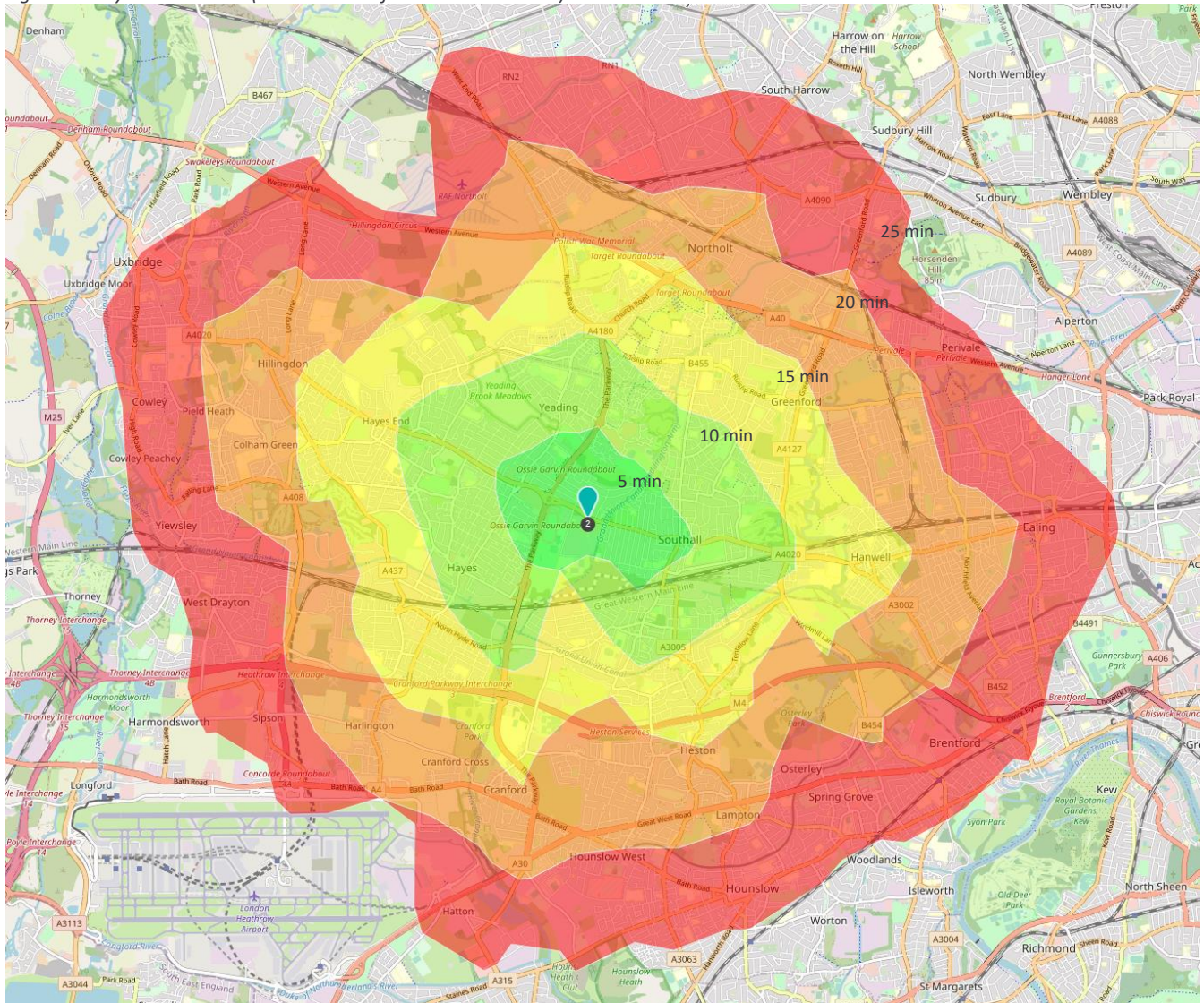
Source: TfL

Distances

- 3.3.4 There are a number of publications which suggest guidance for appropriate and acceptable cycling distances for commuting purposes. Two of the key guidance documents have been summarised as follows.
- DfT – LTN1/20 Cycle Infrastructure Design (paragraph 2.2.2) – states that “Two out of every three personal trips are less than five miles in length, an achievable distance to cycle for most people” (c.8km).
 - Although recently superseded by CD143, TA91/05 states (paragraph 2.11) that ‘Cycling is used for accessing a variety of different destinations, including places of work, up to a range of around 5 miles.’ At paragraph 2.9, TA91/05 states that 5 miles (c.8km) is a distance ‘that could easily be cycled by the majority of people’.
- 3.3.5 As such, based on guidance, it is considered that journeys of up to 8km are within an acceptable cycling distance. A cycling journey of 8km would equate to approximately a 25 minute trip.
- 3.3.6 The Openroute Service has been used to generate cycle isochrones at five minute intervals up to a total of 25 minutes using roads and cycle routes (i.e. not straight line distances) from the site access. This has been shown in Figure 3-3.
- 3.3.7 The isochrones are generated based on speeds dependent on the surface and highway type. The majority (if not all) of the routes used would be paved and as such would be subject to an 18kph speed based on the parameters in the software. A five minute isochrone would therefore cover a distance of c. 1.5km, with a 25 minute isochrone covering a distance of c.7.5km. As such, this is broadly in accordance with the relevant design guidance (indeed, cycle journeys to the site could originate from slightly greater distances, up to 8km from the site).

- 3.3.8 The isochrones show significant areas of west London are accessible within an appropriate cycling distance including Uxbridge, Northolt, Ealing, Brentford, Hounslow, Hayes, Cranford and Hillingdon. Based on the analysis within Openroute Service, this would equate to approximately 219,500 people within a 15 minute cycling distance and just under 600,000 people within a 25 minute cycling distance. A number of residential areas can be accessed by suitable and recommended cycling routes.

Figure 3-3: Cycle Isochrones (25 minutes at five minute intervals)



Source: Openroute Service

- 3.3.9 Travelling to the site by cycle is considered a feasible and realistic option for employees and visitors. As shown in Section 2, there are already journeys made by cycle for work purposes in this area.

3.4 Public Transport

Bus

- 3.4.1 The closest bus stops are adjacent to the site on Uxbridge Road. These stops are served by bus services 207 and 427 which link to Acton, White City, Hayes and Uxbridge. These have a high frequency of service with between 6 and 12 services per hour for each service.
- 3.4.2 In addition, further stops are available on Uxbridge Road at Trinity Road within a 550 metre walk from the site. Service 607 routes to these stops. This provides services between White City and Uxbridge.

- 3.4.3 From the bus stops it is c.7 minutes to Uxbridge, c. 10 minutes to Hayes End, c.12 minutes to Hanwell, c.20 minutes to Christchurch, c.30 minutes to Acton, c. 45 minutes to Shepherds Bush and c.50 minutes to White City.
- 3.4.4 A summary of the services within the vicinity of the site is provided in Table 3-1. These are shown in a single direction, with the other direction providing the same frequency of service.

Table 3-1: Local Bus Services

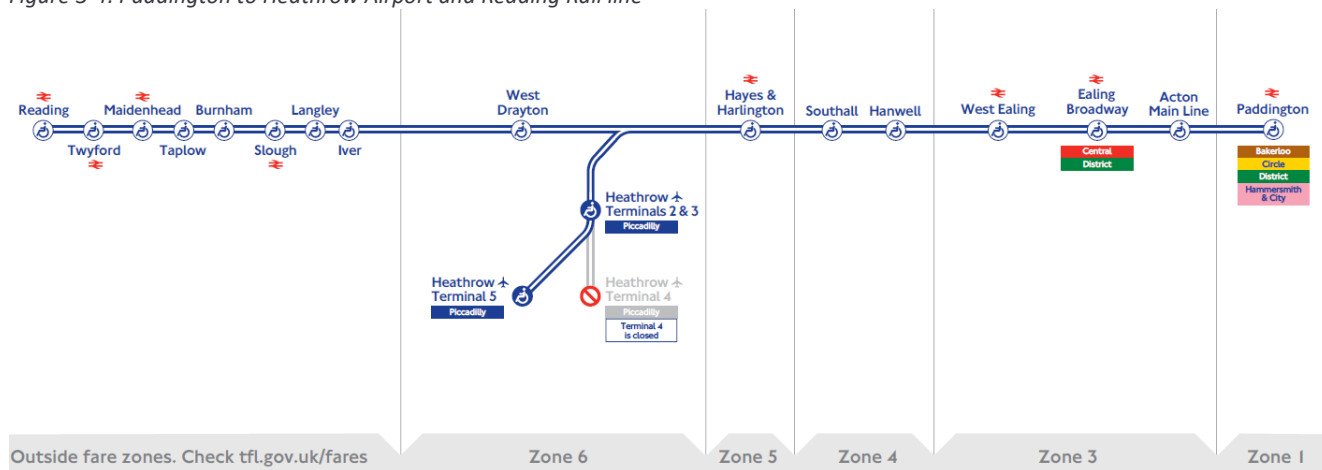
No.	Route Summary	Frequency		
		Monday-Friday	Saturday	Sunday
207	Hayes to White City	Every 5-8 minutes First Bus: 06:33 Last Bus: 00:40	Every 5-9 minutes	Every 7-11 minutes
427	Uxbridge to Acton High Street	Every 6-8 minutes First Bus: 05:13 Last Bus: 00:14	Every 7-10 minutes	Every 9-13 minutes
607	White City to Uxbridge	Every 8-11 minutes First Bus: 06:38 Last Bus: 22:40	Every 9-12 minutes	Every 11-13 minutes

- 3.4.5 The site has excellent connections by frequent bus services to a variety of destinations. This includes services which operate for the majority of the day on a weekday and are therefore suitable for employees' working shifts.
- 3.4.6 As such, travelling by bus would be suitable and very attractive mode for commuting journeys to and from the site by employees, as well as for visitors.

Rail

- 3.4.7 Southall Rail Station is situated approximately a 1.9km walk to the southeast of the site and is located on the Paddington to Heathrow Airport and Reading line. This can be accessed on foot by continuous footways linking to the site. This provides connections to London Paddington, Reading, Hayes & Harlington and Heathrow with approximately 12 trains per hour throughout the day. Southall Rail Station is situated within Zone 4 and connects with Ealing Broadway and Paddington which offer extensive interchange opportunities to the underground network (Central, District, Bakerloo, Circle, and Hammersmith & City lines) and other connecting overground services.
- 3.4.8 The stations served directly by Southall Rail Station are shown in Figure 3-4.

Figure 3-4: Paddington to Heathrow Airport and Reading Rail line



3.4.9 As such, travelling by rail and (and walking) to the site provides a reasonable alternative for some employees of the site, particularly those travelling longer journeys to the site.

3.5 Public Transport Accessibility Level (PTAL)

3.5.1 Public Transport Accessibility Levels (PTALs) are a measure of accessibility from a point of interest at a site to the local public transport network. The measure takes into account the walk access time to a station or stop as well as the wait time and reliability of local public transport services.

3.5.2 A site specific PTAL or Accessibility Index (AI) has been ascertained through using the TfL calculation methodology and this demonstrates how accessible the site is by public transport services. The calculation includes all services to bus stops within 640m and rail stations within 960m of the site.

3.5.3 A summary of all bus services within these distances by stop is set out in Table 3-1. All rail services are situated outside of 960m of the site and have therefore been excluded from the calculation. A summary of the bus services and frequencies is set out within Table 3-2. The frequency shown is the number of services in one direction in the morning period of 8.15am to 9.15am.

Table 3-2: Accessibility Index / PTAL Calculation - Buses

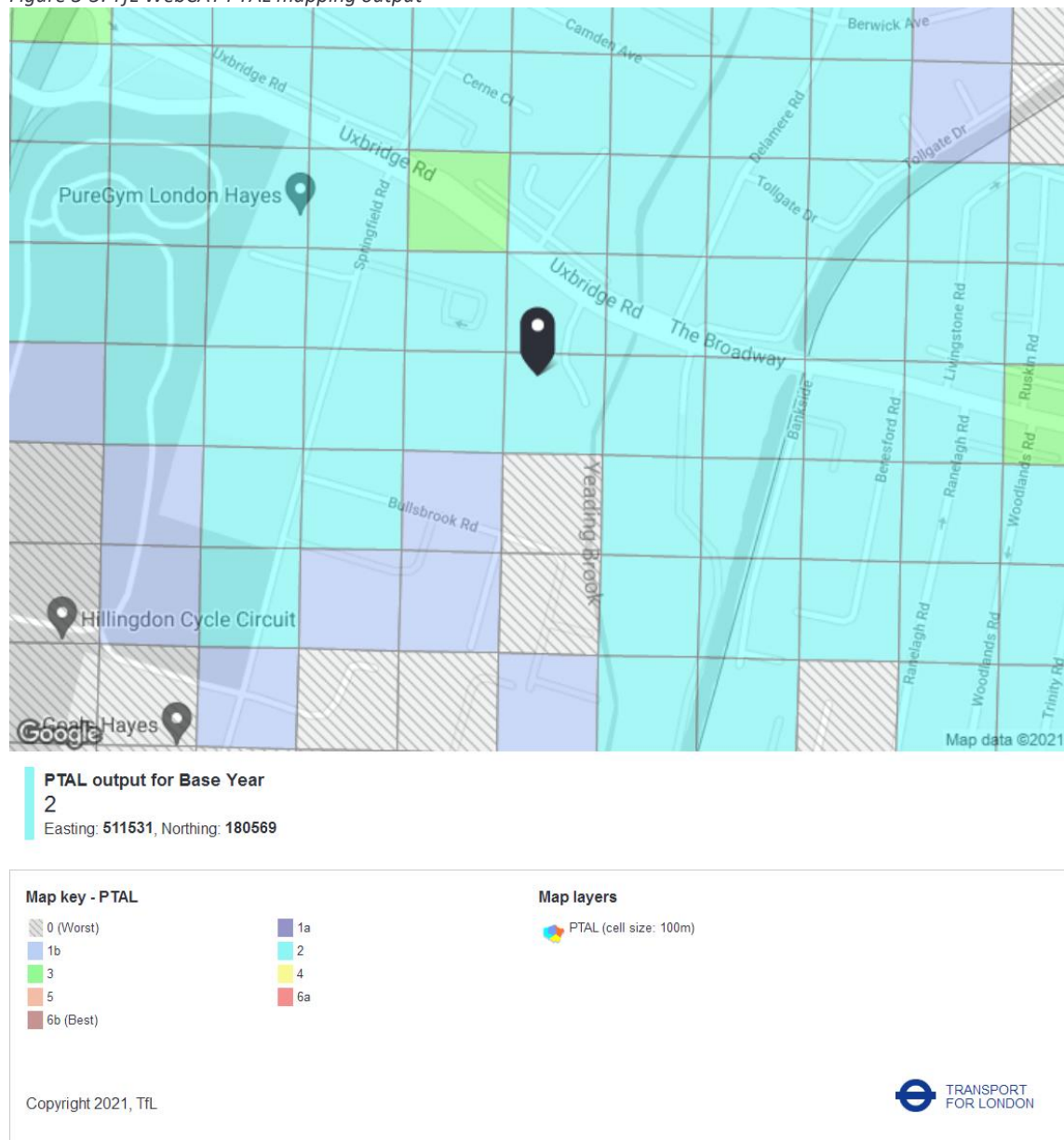
Stop	Route	Distance (metres)	Frequency (v/h)	Weight	Walk Time (mins)	Service Wait Time (SWT) (mins)	Access Time (mins)	Equivalent Doorstep Frequency (EDF)	Accessibility Index
Delamere Road	207	50	9	1.0	0.63	5.33	5.96	5.03	5.03
Delamere Road	427	50	9	0.5	0.63	5.33	5.96	5.03	2.52
Trinity Road	607	550	7	0.5	6.88	6.29	13.16	2.28	1.14
Total									8.69

* Calculated based on TfL calculation criteria in Section 2.5 of 'Assessing transport connectivity in London'

3.5.4 The Public Transport AI score is 8.69 which is classified as a PTAL of 2.

3.5.5 This is consistent with the PTAL score of 2 which is shown on the TfL WebCAT system, which is reproduced in Figure 3-5.

Figure 3-5: TfL WebCAT PTAL mapping output



Source: TfL

- 3.5.6 Although the PTAL score is 2, it is considered that the proximity of the site to bus stops would offer an attractive alternative for potential future employees and visitors. There are a significant number of public transport services within a short walking distance of the site which provide regular services to a variety of destinations.
- 3.5.7 The PTAL score also does not consider the rail services which are within a walkable distance via good quality and continuous pedestrian routes.
- 3.5.8 The PTAL ratings also do not take into consideration the walking and cycling opportunities from a site or the proximity to residential areas and potential employees. The site is situated in a location which is accessible by walking and cycling links which connect to the surrounding residential areas, which will encourage active travel from these locations.

3.6 Summary

- 3.6.1 The site is situated in a sustainable location, as would be expected for an existing retail use situated in an area surrounded by established retail and employment uses. It is well suited to accommodate the proposals, being connected by good quality existing pedestrian, cycle and public transport networks offering a choice of travel modes.
- 3.6.2 There is an attractive and realistic choice of modes of travel for all journey purposes, which will assist in constraining the level of vehicle generation from the site and minimise the impact of the development.
- 3.6.3 The site location will encourage and promote sustainable travel behaviour, attract employees who choose to travel by sustainable modes and is fully in accordance with sustainable transport policies in the London Plan, the Mayors Transport Strategy, the LBH Local Plan and NPPF.

4. DEVELOPMENT PROPOSALS

4.1 Overview

4.1.1 The proposals are for demolition of existing buildings and the erection of a single commercial building for employment purposes Class E(g)iii, B2 and B8, along with ancillary offices, gatehouse, associated infrastructure including; service yard, car parking, drainage and hard and soft landscaping.

4.1.2 In summary, the scheme consists of the following:

Warehouse Area (GIA)	14,067 sqm
Ancillary Office Two Storeys (GIA)	1,782 sqm
Ancillary Transport Office (GIA)	319 sqm
Total GIA	16,168 sqm
Car Parking Spaces	128 (inc. 6 accessible)
Cycle Spaces	50
Dock Loading Doors	16
Level Access Doors	2
HGV Parking	17
Site Area	2.88 Ha

4.1.3 Although there are offices within each unit, these are ancillary to the main B2/B8 warehousing use.

4.1.4 The site layout plan is provided within Appendix C.

4.2 Site Layout

4.2.1 The site layout has been designed to accommodate HGV traffic and separate pedestrians and light vehicles from operational vehicle movements. The site would use the existing access road which links to the signal controlled junction with Uxbridge Road at its northern end. This junction can accommodate all vehicle movements in all directions appropriately.

4.2.2 The car park is situated at the northern end of the proposed building and the HGV / operational entrance would be at the southern end of the access road to separate operational vehicles and light vehicles.

4.2.3 The aisle widths within the car park and the service yard area are appropriate to accommodate all movements. Swept path analysis is provided in Appendix D to demonstrate movements can be undertaken safely.

4.3 Access

4.3.1 The vehicular access into the site will be obtained from the existing signal controlled junction onto Uxbridge Road. This can accommodate all movements safely and suitably. All HGV movements would travel to and from the west to connect to the TfL network which will minimise the impact of larger vehicle movements to the east of the site. Swept path analysis demonstrates that HGVs can be accommodated at this junction and this is shown in Appendix E.

4.3.2 A further emergency site access is provided from the southern end of the site directly into the service yard area from Bullsbrook Road. This can accommodate an articulated vehicle, if needed, as shown in the swept path analysis in Appendix D. The emergency access provides appropriate visibility along Bullsbrook Road to the west, with at least 43m achievable to the nearside kerb and this can be accommodated within the site or the adopted highway, which is contiguous with the site boundary.

- 4.3.3 The access arrangements have accommodated a high level of vehicle movements to and from the site over an extended period and would remain appropriate for the proposed development. Vehicle movements along the site access road would be slow due to the cul-de-sac nature of the road and its alignment.
- 4.3.4 Pedestrians would access the site from the Uxbridge Road signal controlled junction and link to the building via the footways either side of the access road. Dropped kerbs and a signal controlled crossing is provided at the northern end of the access road, allowing access to the footway on the west side of the access road which connects to the building entrance. Dropped kerb crossings will also be provided at the car park entrance and visibility is appropriate in both directions for pedestrians to enable safe crossing to the building on the site.
- 4.3.5 Pedestrians accessing the building from the car parking area will connect to the entrance separately from operational traffic, with the main entrance at the northern end of the building adjacent to the car park and the cycle parking area. Pedestrians can therefore be accommodated appropriately and safely away from large vehicle movements.

4.4 Parking

Car Parking Provision

- 4.4.1 The parking standards within LBH are provided within the Local Plan Development Management Policies Appendix C (Jan 2020). For B2-B8 uses the standards are suggested as two spaces plus 1 space per 50 – 100 sqm of GFA.
- 4.4.2 Applying the standards to the proposed development (16,168 sqm) would equate to a maximum requirement for between 162 and 324 spaces.
- 4.4.3 The proposals are for 128 car parking spaces, which is well within the maximum LBH levels.
- 4.4.4 However, the London Plan was adopted after the Local Plan, in March 2021, and sets out revised car parking standards and these have been referenced by LBH within their initial pre-application response.
- 4.4.5 The London Plan suggests parking standards of up to 1 space per 100 sqm for office use in an Outer London borough (there are no specific B2 / B8 standards). Applied to the floorspace of 16,168 sqm, this equates to a provision of 162 car parking spaces. However, these standards are based on an office use. In relation to industrial sites the London Plan states:
- “The role of parking – both for workers and operational vehicles – varies considerably depending on location and the type of development proposed. Provision should therefore be **determined on a case-by-case basis**, with the starting point for commuter parking being the standards in Table 10.4 with differences in employment densities taken into account.”*
- 4.4.6 The London Plan therefore notes that the location and type of development can have a significant impact on the level of parking and this should therefore be judged on a case by case basis.
- 4.4.7 London Plan policy T6 (part B) also specifically reference the ‘minimum necessary parking’. Based on the operation of a B2 / B8 site with shift working outside of ‘typical’ hours, and extensive experience of other schemes, the applicant considers the proposed level of parking to be the minimum necessary to ensure that the scheme is viable for an operator in this specific Outer London location.
- 4.4.8 As a starting point for considering provision, the London Plan recommends considering employment densities, albeit this does not consider the site specific use, shift patterns, location or PTAL which is suggested in the London Plan. The parking policy does not require provision to be reduced in relation

to employment density, this is the starting point, following which flexibility will be applied and the location and type of development proposed also need to be considered (i.e. on a case by case basis in accordance with 10.6.7).

- 4.4.9 It suggests utilising the Homes and Communities Agency Employment Density Guide 3rd Edition (2015) to adjust the office use parking standards for industrial uses. Based on the values shown within Section 4 of this guide, this suggests an employment density of;
- One employee per 12 sqm NIA for professional services office use.
 - One employee per 36 sqm GIA for a B2 industrial and manufacturing use.
 - One employee per 70 sqm GEA for a B8 use (using the lowest figure of the three provided).
- 4.4.10 Applying the employment density figures to the proposed unit would result in the following:
- 444 employees if the site was occupied for a B2 industrial and manufacturing use.
 - 229 employees if the site was occupied for a B8 warehousing use.
- 4.4.11 If the site were to accommodate 444 employees (which also does not include drivers who would not be included in this number), A provision of 138 parking spaces would equate to spaces for 28.8% of employees, if none of the spaces were used for visitors (which is unlikely). As shown in Section 2, this modal split is significantly below the level of car driver modal split in the surrounding area (55.4% in Hillingdon 026).
- 4.4.12 This modal split calculation also does not factor in the additional demand which is generated at staff shift changeover times. Industrial employment shift patterns require increased parking demand at shift changeover, as well as the greater difficulty in travelling by sustainable modes at shift changeover times (for example at 02:00). Staff would be travelling to and from the site during the hours of darkness, when other modes would be less available and/or less attractive.
- 4.4.13 The Mayor of London *Land for Industry and Transport* SPG (2012) recognises this by stating in paragraph 5.23 that the *“implementation of London Plan parking policy should take into account local circumstances, to ensure that there is adequate provision for work force parking recognising that many major industrial areas have poor public transport particularly to support late/early shift patterns and where businesses operate 24 hours.”*
- 4.4.14 This supports the applicants view and outlines that when implementing London Plan policy there should be adequate provision for work force parking, based on shift working patterns.
- 4.4.15 The applicant considers the proposed level of parking to be the minimum required to ensure the site is operationally viable and this is in accordance with the view of the Industry SPG produced by the Mayor of London.
- 4.4.16 The level of modal split would also be in accordance with the targets for car use in Outer London in the Mayor’s Transport Strategy (25%), given there are additional drivers being employed, spaces would be vacant in association with the changeover in shifts and some spaces would be occupied by visitors.
- 4.4.17 Considering the level of potential employees, the PTAL of 2, the existing modal split of vehicles and the shift working nature of the site, the proposed level of parking is considered appropriate for the potential use and location and still well below the maximum level in the parking standards within the LBH Local Plan.
- 4.4.18 The proposed car parking provision is also a significant reduction from the existing use of the site. This potentially demonstrates that the proposals would generate a significant reduction in vehicle

movements generated to and from the site compared with the existing use, particularly considering the existing uses would have a shorter length of stay and more turnover of spaces.

Car Parking Design and Management

- 4.4.19 All car parking spaces have dimensions of 2.4m x 4.8m in accordance with the LBH standards and vehicles can enter and exit in forward gear, as shown in the swept path analysis in Appendix D.
- 4.4.20 Car parking will be managed through a permit scheme, for example by all employees providing number plates to the site manager, to ensure that only employees are able to park on the site. In addition, all visitor spaces will be required to be booked through reception and number plates provided in advance. This will ensure that members of the public do not use the car park. Private car park signage will also be provided at the car park entrance.
- 4.4.21 In addition, all employees and visitors will be informed of the parking provision and encouraged to travel by sustainable modes through measures set out within the Travel Plan. This will minimise the demand for parking on the site and ensure the provision is appropriate and does not lead to overspill onto the highway.

Disabled Parking

- 4.4.22 The site provides six disabled parking bays, which is 5% of the total provision. The spaces allow for an additional 1.2m hatched area around the side and rear of the space to enable safe access to vehicles for people with mobility impairments. The spaces are situated close to the building entrance and will have step free access from the spaces to the building entrance.
- 4.4.23 The disabled parking provision is therefore considered to be acceptable.

Electric Vehicle Charging

- 4.4.24 The LBH standards require electric vehicle charging to be provided at a minimum of 5% of the total car parking provision (equating to 5 spaces) with an additional 5% providing passive provision (an additional 5 spaces). The site provides 13 electric vehicle charging points which is in excess of 10% of the overall provision, and in excess of the LBH standards.

Cycle Parking

- 4.4.25 The cycle parking standards are also provided in the LBH Local Plan Development Management Policies Appendix C. For B2-B8 uses the standards are suggested as one space per 500 sqm of GFA.
- 4.4.26 Applying the standards to the proposed development (16,168 sqm) would equate to a minimum requirement for 32 spaces.
- 4.4.27 The London Plan suggests the same provision for long stay parking and additionally suggests short stay parking for visitors at 1 space per 1000 sqm, which would equate to an additional 16 cycle parking spaces. This would equate to a total of 48 spaces.
- 4.4.28 The proposals are for 40 secure and covered cycle parking spaces, in 'standard' cycle shelters. Additionally a larger cycle shelter will be provided which can accommodate four adaptive cycles. There will also be 3 Sheffield Stands provided for short stay use. This would therefore total 50 cycle spaces overall, which is in accordance with the minimum standards for a B2 / B8 use in LBH and the London Plan.
- 4.4.29 The type of cycle parking will be provided in accordance with the guidance contained in the London Cycling Design Standards, including where provision is made for adapted cycles for disabled people.

4.5 Servicing

- 4.5.1 The site has been designed to accommodate service vehicles appropriately. Vehicles are able to reverse against each proposed service bay throughout the site and turning circles are provided, where required. Swept path analysis has been provided in Appendix D to demonstrate the suitability of the layout. In addition there are 17 HGV parking spaces within the service yard to appropriately accommodate vehicles on the site without overspill onto the access road or onto the highway network.
- 4.5.2 The servicing arrangements are in accordance with the LBH standards which state that *“sufficient space for the standing and manoeuvring of all goods and service vehicles likely to serve the development at any one time is essential.”* And that *“Development layouts should allow all vehicles to load/unload and enter and leave the site in a forward gear.”*
- 4.5.3 Within the servicing area, in accordance with the London Plan, a rapid electric vehicle charging point will be provided for operational vehicles.

5. TRIP GENERATION AND TRAFFIC IMPACTS

5.1 Introduction

- 5.1.1 The change in vehicle trip generation between the existing use against the proposed industrial / warehouse use has been considered through analysis of the Trip Rate Information Computer System (TRICS). The TRICS database has been analysed for sites with similar characteristics in terms of scale and location.
- 5.1.2 The analysis considers the trip generation during network peak hours on a weekday. These have been assumed as 07:00 to 08:00 and 08:00 to 09:00 in the AM peak and 16:00 to 17:00 and 17:00 to 18:00 in the PM peak. It also considers the daily trip generation and trips made by HGVs.
- 5.1.3 In addition, the estimated existing site trip generation from TRICS has been compared to the movements recorded into and out of the site access within the site access traffic survey (as detailed in Section 2).
- 5.1.4 It should also be noted that the existing site use would generate a significant level of vehicle movements on a weekend which would be well in excess of that generated by the proposed use. Although the proposals would provide a significant betterment in this regard, for the purposes of this assessment, only the weekday network peak hours have been considered.

5.2 Existing Trip Generation

- 5.2.1 The existing site comprises of a retail park with a number of units on the site. The footprint of the units is c.10,000 sqm, assuming all units have one level only (which is unlikely to be the case as some units will have mezzanine levels). As such, the existing trip generation analysis is likely to be an underestimate and is considered robust for the purposes of a comparison within the proposals.
- 5.2.2 There are no comparable survey sites of sites in London and as such the following search criteria have been applied in TRICS to obtain surveys of similar sites to the existing use:
- 01 – Retail/K – Retail Park (Excluding Food)
 - Surveys from Monday to Friday
 - Sites with a total GFA of 30,000 sqm or less
 - Vehicle surveys carried out since 2000
 - Comparable location and public transport services
- 5.2.3 The above search criteria resulted in the identification of five similar sites. The forecast vehicle and HGV trip rates per 100sqm GFA and trip generation are set out in Table 5-1 and Table 5-2. The full TRICS reports are included in Appendix F.

Table 5-1: Existing Retail Use – Vehicle Trip Generation

Time Period	Trip Rates (per 100m2 GFA)			Trip Generation (10,000 sqm)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.633	0.297	0.930	63	30	93
PM Peak (17:00-18:00)	1.370	1.459	2.829	137	146	283
12 Hour (07:00-19:00)	17.46	15.998	33.458	1746	1602	3348

Table 5-2: Existing Retail Use – HGV Generation

Time Period	Trip Rates (per 100m2 GFA)			Trip Generation (10,000 sqm)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.005	0.002	0.007	1	0	1
PM Peak (17:00-18:00)	0.005	0.015	0.020	1	2	3
12 Hour (07:00-19:00)	0.157	0.168	0.325	18	19	37

- 5.2.4 The existing use is estimated to generate 93 two-way vehicle movements in the AM network peak hour and 283 two-way vehicle movements in the PM network peak hour. Over a daily (12 hour) period, the existing use could generate 3,348 two-way vehicle movements.
- 5.2.5 This level of movements is higher than those observed on the network within the traffic survey at the site access, as set out in Section 2.
- 5.3 **Proposed Trip Generation**
- 5.3.1 The following search criteria have been applied in TRICS to obtain surveys of similar uses to the proposals:
- 02 – Employment/F - Warehousing (commercial)
 - Located in South East England and Greater London
 - Surveys from Monday to Friday
 - Units with a GFA of between 5,000sqm and 20,000sqm
 - Vehicle surveys carried out since 2006
 - Manual removal of sites in a non-comparable location
- 5.3.2 The above search criteria resulted in the identification of six similar sites. The forecast vehicle and HGV trip rates per 100sqm GFA and trip generation are set out in Table 5-3 and Table 5-4. The full TRICS reports are included in Appendix G.

Table 5-3: Proposed Warehouse development – Vehicle Trip Generation

Time Period	Trip Rates (per 100m2 GFA)			Trip Generation (16,168 sqm)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.309	0.101	0.410	50	16	66
PM Peak (17:00-18:00)	0.108	0.295	0.403	17	48	65
12 Hour (07:00-19:00)	2.160	2.242	4.402	349	362	711

Table 5-4: Proposed Warehouse development – HGV Trip Generation

Time Period	Trip Rates (per 100m2 GFA)			Trip Generation (16,168 sqm)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.047	0.036	0.083	8	6	14
PM Peak (17:00-18:00)	0.027	0.035	0.062	4	6	10
12 Hour (07:00-19:00)	0.563	0.501	1.064	91	81	172

- 5.3.3 The proposed warehouse / industrial use is forecast to generate 66 two-way vehicle trips in the AM network peak hour and 65 two-way vehicle trips in the PM network peak hour. Over a daily (12 hour) period, the site is forecast to generate around 711 two-way vehicle movements.

5.4 Net Change

- 5.4.1 The net change in vehicle movements between the existing use and the proposed use has been considered in Table 5-5.

Table 5-5: Net Change in Two-Way Vehicle Generation

Time Period	Existing Retail Use			Proposed Warehouse Use			Net Change		
	Arrivals	Depart	Two-way	Arrivals	Depart	Two-way	Arrivals	Depart	Two-way
AM Peak (08:00-09:00)	63	30	93	50	16	66	-13	-14	-27
PM Peak (17:00-18:00)	137	146	283	17	48	65	-120	-98	-218
12 Hour (07:00-19:00)	1746	1602	3348	349	362	711	-1397	-1240	-2637

- 5.4.2 The trip generation analysis demonstrates that the proposals are forecast to generate a significant reduction in vehicle movements in comparison to the existing use. The proposals would also generate

a reduction in peak hour movements in comparison to the obtained traffic survey over the combined two peak periods as set out in Section 2.

- 5.4.3 As such, the development would not have a material impact on the capacity at the Site Access / Uxbridge Road signal controlled junction and detailed operational assessments are not required.
- 5.4.4 All trips generated by the proposed development can be suitably accommodated by existing highway infrastructure within the well-established employment and retail area surrounding the site, particularly given the proposals will reduce movements to and from the site.
- 5.4.5 The traffic generated by the proposals would not have an unacceptable impact on road safety or a severe impact on the highway network.

5.5 Parking Accumulation

- 5.5.1 An analysis of the parking accumulation based on the arrival and departure profile for the proposals showed a maximum demand for 94 vehicles parked on site. This would also include any operational traffic. The accumulation analysis is shown in Table 5-6.
- 5.5.2 As such, the site can comfortably accommodate the likely demand, whilst allowing for any peak demand periods, and would not result in an overspill of parking onto the local highway network. The level of parking proposed would be appropriate to encourage sustainable travel without being an overprovision.

Table 5-6: Parking Accumulation Analysis

Time Period	Arrive	Depart	Two-Way	Accumulation *
07:00-08:00	39	18	57	41
08:00-09:00	50	16	66	75
09:00-10:00	38	22	60	91
10:00-11:00	27	24	51	94
11:00-12:00	31	34	65	91
12:00-13:00	31	33	64	89
13:00-14:00	35	31	66	93
14:00-15:00	24	36	60	81
15:00-16:00	22	31	53	72
16:00-17:00	21	36	57	57
17:00-18:00	17	48	65	26
18:00-19:00	14	33	47	7

* Assumes 20 vehicles parked before survey start period

6. MITIGATION

6.1 HGV routing

- 6.1.1 All HGV traffic will be routed to and from the west of the site to connect with the A312 to avoid the high street in Southall and to ease movements for HGVs into and out of the signal junction with Uxbridge Road.

6.2 Travel Plan

- 6.2.1 A Framework Travel Plan has been produced and submitted separately with the application to encourage travel by sustainable modes. This demonstrates the commitment of the applicant to encourage sustainable travel in accordance with the London Plan.
- 6.2.2 This will also include measures to manage car parking on the site.

7. SUMMARY AND CONCLUSIONS

7.1 Summary

- 7.1.1 Apex Transport Planning has been commissioned to produce a Transport Assessment (TA) to accompany a full planning application in relation to a proposed B2 / B8 warehousing development at the Hayes Bridge Retail Park, Uxbridge Road, Hayes.
- 7.1.2 The proposals comprise the demolition of the existing buildings and erection of a B2/B8 warehouse unit with ancillary offices and associated external service yard and car parking. The site would be accessed from Uxbridge Road at the existing signal controlled junction that serves the retail park.
- 7.1.3 This TA has been produced to inform the local highway authority, London Borough of Hillingdon (LBH), of the highways and transport implications of the proposals.
- 7.1.4 The site is a brownfield site with an existing retail use and is occupied by a number of units including Tapi, AHF, Argos Extra, Staples, Dreams, Harveys, Halfords and Currys / PC World. The site is also surrounded by industrial and retail uses and therefore the location is acceptable for accommodating the uses proposed. The proposals would be situated within an area suitable for industrial use and on a site which currently generates HGV movements, as well as a significant number of light vehicle movements.
- 7.1.5 The existing site has 489 car parking spaces at the frontage of the units. The proposals are for 128 car parking spaces, which is a significant decrease from the existing levels and in accordance with the guidance in the London Plan and LBH standards. The level of parking is appropriate for the potential number of staff and the forecast vehicle demand. The parking includes a provision of 6 disabled parking bays and 10% of spaces accommodating electric vehicle charging. Cycle parking is provided in accordance with the standards in the London Plan to further encourage travel by this mode.
- 7.1.6 The proposals can accommodate service and delivery vehicles appropriately and these vehicles can enter and exit the site in forward gear. The servicing arrangements are in accordance with the LBH standards. HGVs can enter and exit the site safely from the existing signal controlled access with Uxbridge Road and would travel to and from the west and via the A312.
- 7.1.7 The site is well connected to existing walking and cycling routes. It is also a short walk from the closest bus stops which provide a high frequency of service to key residential areas, as well as connecting to key rail and underground stations. The services from the closest stops operate for the majority of the day.
- 7.1.8 The site is also within walking distance of the closest rail station which provides frequent services throughout the day and offers connections to further transport routes (underground and overground). The surrounding area also has a high level of sustainable travel, as would be expected in an existing and established urban area, and at a higher level than the entire of LBH.
- 7.1.9 As such, the site is well suited to accommodate the proposals, being located in a well-established industrial and retail area. The location will encourage and promote sustainable travel behaviour and attract employees who choose to travel by sustainable modes. This will assist in constraining the level of vehicle generation from the site and minimise the impact of the site on the highway network and the potential for overspill parking.
- 7.1.10 Road safety data has been analysed and there is no evidence of a highway safety issue within the vicinity of the site which would be exacerbated by the proposals.

- 7.1.11 The proposals are forecast to reduce total vehicle movements across morning and evening peak hours and significantly reduce movements over a daily period in comparison with the existing use. As such, the proposals would not have a severe impact on highway capacity or an unacceptable impact on highway safety.
- 7.1.12 A Travel Plan has been produced which sets out measures to encourage sustainable transport which will further minimise vehicle use.

7.2 Conclusions

- 7.2.1 The proposals offer a choice of travel options and represent sustainable development in line with the requirements of the NPPF, London Plan, Mayors Transport Strategy and Local Plan.
- 7.2.2 The proposed parking provision is appropriate and acceptable and is in accordance with the London Plan as well as the objectives for encouraging sustainable travel and reducing car use as set out in London Plan and the Local Plan.
- 7.2.3 The development proposals will not have a severe impact on the operation of the surrounding highway network or an unacceptable impact on road safety and are therefore in accordance with the NPPF as well as the London Plan and Local Plan. No mitigation is required to appropriately accommodate the development.
- 7.2.4 As such, the analysis presented within this report should allow the highway authority to provide a positive recommendation on the planning application.

Appendix A Pre-Application Consultation Response



MEMO

To: Planning Authority
For the Attention of Michael Gavin

Ref: 51509/PRC/2021/159

From: Transport Planning and Development – Senober Khan

Date: 9 August 2021

Address: UNIT 1 HAYES BRIDGE RETAIL PARK, 1-3, UXBRIDGE ROAD, HAYES

Proposal: Erection of a building for use classes E(g), B2 and B8 along with ancillary development.

Brief Description of Proposed Development:

Erection of a building for use classes E(g), B2 and B8 along with ancillary development.

Highways Comments:

The London Plan adopted March 2021 sets the new maximum car parking standards on the London Boroughs and which came into immediate effect by further reductions in car parking provisions (with exceptions to very low PTAL areas/opportunity areas). Where no standard is provided, the level of parking should be determined on a case-by-case basis taking account of Policy T6 Car parking, current and future PTAL and wider measures of public transport, walking and cycling connectivity.

The PTAL rating of the site is 2, indicating a “poor” level of public transport accessibility.

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.

The TA will be required to demonstrate that there are no adverse highway implications arising from the proposed development at the site.

The development should attempt to encourage improved pedestrian links and the use of public transport, as well as bicycle to minimise vehicular movements. It will also ensure car parking provision does not exceed the London Plan or the minimum set in DMT6. A full transport study will be required to ensure the junction of the access road with Uxbridge Road is capable of handling the traffic implications of the scheme.

For industrial sites, the role of parking – both for workers and operational vehicles – varies considerably depending on location and the type of development proposed. Provision should



therefore be determined on a case-by-case basis, with the starting point for commuter parking being the standards in Table 10.4 with differences in employment densities taken into account. Flexibility may then be applied in light of site-specific circumstances as above. Operational parking should be considered and justified separately.

A Parking Design and Management Plan should be submitted alongside all applications which include car parking provision, indicating how the car parking will be designed and managed, with reference to Transport for London guidance on parking management and parking design.

Swept path track drawings will be needed to be submitted to support the proposed parking layout and arrangement both inside and outside of the site.

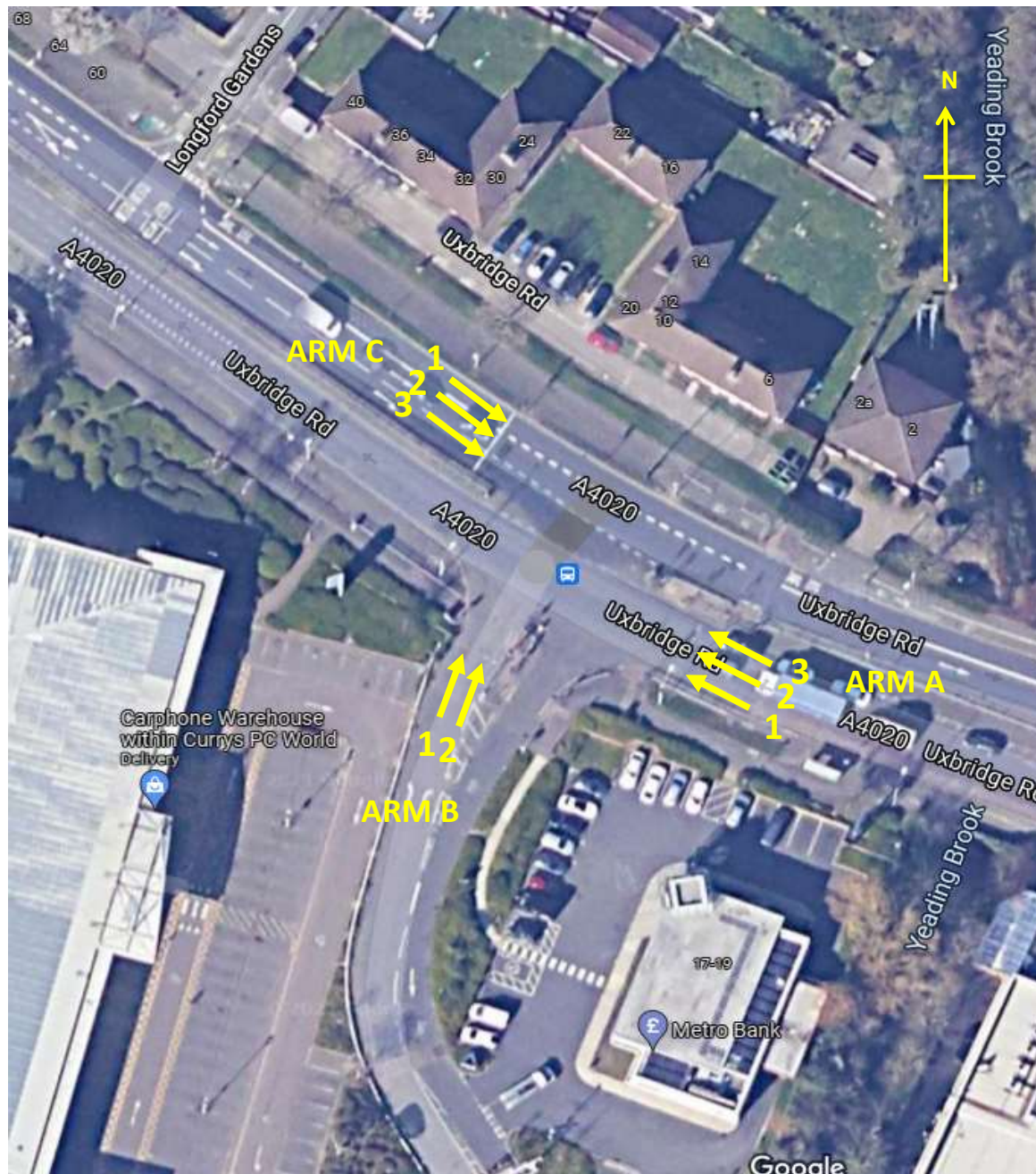
Cycle parking should be at least in accordance with the minimum standards set out in the London Plan/DMT6 for all uses proposed on site. Cycle parking should be designed and laid out in accordance with the guidance contained in the London Cycling Design Standards.¹⁸² Development proposals should demonstrate how cycle parking facilities will cater for larger cycles, including adapted cycles for disabled people.

In line with The Hillingdon Local Plan: Part 2 Development Management Policies (2020) Policy DMT 6: there is also a requirement for an Electric Vehicle Charging Point (EVCP) provision.

In the London Plan there is a requirement for the provision of rapid electric vehicle charging points for freight vehicles. Also to support carbon-free travel from 2050, the provision of hydrogen refuelling stations and rapid electric vehicle charging points at logistics and industrial locations is supported.

Appendix B Traffic Survey Results

SITE: 1		DATE: 21ST OCTOBER 2021
LOCATION: THE BROADWAY / HAYES RETIL PARK / UXBRIDGE RD		DAY: THURSDAY



JOB TITLE: HAYES	JOB NUMBER: 10843
------------------	-------------------

QUEUE LENGTHS

JOB REF: 10843

JOB NAME: HAYES

SITE: 1



DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane

TIME	ARM A THE BROADWAY			ARM B HAYES RETAIL PARK		ARM C UXBRIDGE RD (W)			TIME	ARM A THE BROADWAY			ARM B HAYES RETAIL PARK		ARM C UXBRIDGE RD (W)		
	LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 1	LANE 2	LANE 3		LANE 1	LANE 2	LANE 3	LANE 1	LANE 2	LANE 1	LANE 2	LANE 3
07:00	0	4	2	0	0	0	22	1	16:00	0	10	1	3	0	1	22	2
07:05	1	3	2	0	0	1	16	0	16:05	0	4	11	2	0	0	11	0
07:10	0	7	6	0	0	0	21	0	16:10	1	2	6	2	0	2	17	3
07:15	1	3	1	0	0	2	17	0	16:15	0	6	5	4	0	1	12	0
07:20	0	3	4	0	0	2	23	1	16:20	0	7	9	1	0	0	16	1
07:25	0	4	6	0	0	1	18	0	16:25	0	8	3	1	1	0	14	1
07:30	0	5	5	0	0	0	24	1	16:30	2	6	3	1	1	0	21	4
07:35	1	5	6	0	1	1	28	1	16:35	1	7	5	0	1	0	21	1
07:40	0	9	4	0	1	1	21	0	16:40	0	9	8	1	1	0	23	1
07:45	0	2	1	0	0	1	20	0	16:45	1	2	3	1	0	1	15	1
07:50	0	10	11	0	0	3	31	0	16:50	1	2	0	1	0	0	10	4
07:55	0	3	2	1	0	1	31	0	16:55	0	13	6	2	0	0	20	1
08:00	0	5	4	1	1	1	30	0	17:00	0	5	5	3	0	0	21	0
08:05	0	3	1	0	0	1	19	0	17:05	0	9	6	4	0	1	19	0
08:10	0	5	3	1	0	1	21	0	17:10	2	4	5	3	2	0	17	2
08:15	0	4	2	0	0	1	33	1	17:15	0	4	6	3	0	0	8	2
08:20	0	7	2	0	0	0	24	0	17:20	0	7	7	4	1	0	25	0
08:25	0	4	2	0	0	2	26	0	17:25	0	9	5	1	0	0	20	2
08:30	1	7	5	0	1	0	24	0	17:30	0	3	6	2	0	0	24	1
08:35	1	4	4	0	0	0	28	3	17:35	2	5	7	2	0	2	19	0
08:40	0	0	0	0	0	0	26	0	17:40	1	5	7	1	0	2	19	1
08:45	0	5	6	0	1	0	12	1	17:45	1	4	6	4	0	0	24	0
08:50	0	0	2	0	0	0	7	0	17:50	2	4	4	3	2	0	17	1
08:55	1	7	5	0	0	0	12	0	17:55	0	8	5	1	0	0	22	4
09:00	1	7	6	0	0	0	19	1	18:00	0	7	7	1	1	1	23	0
09:05	0	4	5	0	0	0	20	0	18:05	0	10	10	1	3	2	22	2
09:10	1	6	4	0	0	0	13	2	18:10	0	5	4	2	0	1	20	2
09:15	2	8	3	1	0	1	16	0	18:15	0	5	4	5	0	0	21	1
09:20	1	4	4	2	1	0	20	0	18:20	0	4	4	1	0	0	20	5
09:25	0	4	6	1	0	1	27	1	18:25	1	0	16	0	1	0	22	0
09:30	0	4	8	1	0	1	17	2	18:30	1	6	10	2	0	0	15	1
09:35	0	4	1	1	0	0	13	2	18:35	0	11	7	0	1	1	18	2
09:40	0	3	4	1	0	1	15	4	18:40	0	4	3	2	2	1	17	2
09:45	1	5	6	0	0	1	24	1	18:45	0	7	7	3	0	1	33	0
09:50	0	7	2	1	1	0	13	2	18:50	2	5	7	3	0	0	19	1
09:55	1	7	3	3	1	0	23	2	18:55	1	3	10	0	0	1	14	0

MANUAL CLASSIFIED COUNTS

JOB REF: 10843

JOB NAME: HAYES

SITE: 1

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)



DATE: 21/10/2021

DAY: THURSDAY

TIME	A TO B							
	FROM THE BROADWAY TO HAYES RETAIL PARK							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	1	0	0	0	0	0	1
07:15	1	0	0	0	0	0	0	1
07:30	6	0	0	0	0	0	0	6
07:45	1	2	0	0	0	0	0	3
H/TOT	8	3	0	0	0	0	0	11
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	2	0	0	0	0	0	0	2
08:45	3	0	0	0	0	0	0	3
H/TOT	5	0	0	0	0	0	0	5
09:00	7	0	0	0	0	0	0	7
09:15	10	3	0	0	0	0	0	13
09:30	4	0	0	0	0	1	0	5
09:45	7	0	0	0	0	0	0	7
H/TOT	28	3	0	0	0	1	0	32
P/TOT	41	6	0	0	0	1	0	48

	A TO C							
	FROM THE BROADWAY TO UXBRIDGE RD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
132	29	9	2	9	0	0		181
139	23	6	2	10	2	1		183
185	32	8	1	3	3	4		236
201	23	4	0	11	1	3		243
657	107	27	5	33	6	8		843
129	25	6	1	5	1	0		167
146	28	0	1	4	2	2		183
132	23	4	4	10	0	0		173
160	17	7	3	7	1	0		195
567	93	17	9	26	4	2		718
126	18	3	1	6	3	0		157
123	31	7	2	7	6	1		177
127	26	8	2	6	5	0		174
114	36	8	3	6	4	2		173
490	111	26	8	25	18	3		681
1714	311	70	22	84	28	13		2242

MANUAL CLASSIFIED COUNTS

JOB REF: 10843

JOB NAME: HAYES

SITE: 1

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)



DATE: 21/10/2021

DAY: THURSDAY

TIME	A TO B							
	FROM THE BROADWAY TO HAYES RETAIL PARK							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	10	1	0	0	0	0	0	11
16:15	8	1	0	0	0	0	0	9
16:30	9	2	0	0	0	0	0	11
16:45	12	2	0	0	0	1	0	15
H/TOT	39	6	0	0	0	1	0	46
17:00	9	1	0	0	0	0	0	10
17:15	14	0	0	0	0	0	0	14
17:30	10	0	0	0	0	0	0	10
17:45	8	2	0	0	0	0	0	10
H/TOT	41	3	0	0	0	0	0	44
18:00	5	1	0	0	0	0	0	6
18:15	6	1	0	0	0	0	0	7
18:30	4	0	0	0	0	0	0	4
18:45	4	0	0	0	0	0	0	4
H/TOT	19	2	0	0	0	0	0	21
P/TOT	99	11	0	0	0	1	0	111

A TO C							
FROM THE BROADWAY TO UXBRIDGE RD (W)							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
182	23	5	3	5	11	0	229
149	28	8	2	7	3	1	198
210	31	4	1	8	7	2	263
203	28	5	1	5	16	0	258
744	110	22	7	25	37	3	948
195	19	3	1	6	9	1	234
190	21	4	0	6	8	1	230
196	19	3	0	6	9	4	237
190	17	2	0	8	1	1	219
771	76	12	1	26	27	7	920
194	23	3	2	8	9	1	240
202	21	5	0	5	11	1	245
209	23	2	0	5	12	1	252
211	22	1	0	3	7	1	245
816	89	11	2	21	39	4	982
2331	275	45	10	72	103	14	2850

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

TIME	B TO A							
	FROM HAYES RETAIL PARK TO THE BROADWAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	0	0	0	0	0	0	0
07:15	2	0	0	0	0	0	0	2
07:30	4	0	0	0	0	0	0	4
07:45	2	0	0	0	0	0	0	2
H/TOT	8	0	0	0	0	0	0	8
08:00	0	1	0	0	0	0	0	1
08:15	0	0	0	0	0	0	0	0
08:30	3	0	0	0	0	0	0	3
08:45	1	0	0	0	0	0	0	1
H/TOT	4	1	0	0	0	0	0	5
09:00	1	0	0	0	0	0	0	1
09:15	9	0	0	0	0	0	0	9
09:30	5	1	0	0	0	0	0	6
09:45	4	0	0	0	0	0	0	4
H/TOT	19	1	0	0	0	0	0	20
P/TOT	31	2	0	0	0	0	0	33

	B TO C							
	FROM HAYES RETAIL PARK TO UXBRIDGE RD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	0	1	0	0	0	0	0	1
07:15	1	0	0	0	0	0	0	1
07:30	10	1	1	0	0	0	0	12
07:45	5	1	0	0	0	0	0	6
H/TOT	16	3	1	0	0	0	0	20
08:00	3	0	0	0	0	0	0	3
08:15	1	0	0	0	0	0	0	1
08:30	4	0	0	0	0	0	0	4
08:45	5	0	0	0	0	1	0	6
H/TOT	13	0	0	0	0	1	0	14
09:00	7	2	0	0	0	0	0	9
09:15	12	1	0	0	0	0	0	13
09:30	11	2	1	0	0	0	0	14
09:45	9	1	0	0	0	0	0	10
H/TOT	39	6	1	0	0	0	0	46
P/TOT	68	9	2	0	0	1	0	80

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

TIME	B TO A							
	FROM HAYES RETAIL PARK TO THE BROADWAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	5	0	0	0	0	0	0	5
16:15	8	0	0	0	0	0	0	8
16:30	8	1	0	0	0	0	0	9
16:45	1	1	0	0	0	1	0	3
H/TOT	22	2	0	0	0	1	0	25
17:00	4	2	0	0	0	0	0	6
17:15	12	0	0	0	0	0	0	12
17:30	5	0	0	0	0	0	0	5
17:45	12	0	0	0	0	2	0	14
H/TOT	33	2	0	0	0	2	0	37
18:00	9	1	0	0	0	1	0	11
18:15	3	0	0	0	0	0	0	3
18:30	6	1	0	0	0	0	0	7
18:45	4	0	0	0	0	1	0	5
H/TOT	22	2	0	0	0	2	0	26
P/TOT	77	6	0	0	0	5	0	88

	B TO C							
	FROM HAYES RETAIL PARK TO UXBRIDGE RD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
25	1	1	0	0	0	0	0	27
19	2	0	0	0	0	1	0	22
12	2	0	0	0	0	0	0	14
13	3	0	0	0	0	1	0	17
69	8	1	0	0	0	2	0	80
23	3	0	0	0	0	1	0	27
34	2	0	0	0	0	0	0	36
26	2	0	0	0	0	0	0	28
22	1	0	0	0	0	1	0	24
105	8	0	0	0	0	2	0	115
17	1	0	0	0	0	0	0	18
20	2	0	0	0	0	0	1	23
19	1	0	0	0	0	0	0	20
16	2	0	0	0	0	0	0	18
72	6	0	0	0	0	0	1	79
246	22	1	0	0	0	4	1	274

MANUAL CLASSIFIED COUNTS

JOB REF: 10843

JOB NAME: HAYES

SITE: 1

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)



DATE: 21/10/2021

DAY: THURSDAY

TIME	C TO A							
	FROM UXBRIDGE RD (W) TO THE BROADWAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	152	33	1	2	9	1	3	201
07:15	143	42	9	2	3	0	0	199
07:30	146	24	7	3	8	0	0	188
07:45	127	19	2	5	7	1	2	163
H/TOT	568	118	19	12	27	2	5	751
08:00	154	23	11	0	7	3	2	200
08:15	135	13	4	3	7	4	2	168
08:30	159	16	6	1	5	7	1	195
08:45	133	18	6	2	7	2	1	169
H/TOT	581	70	27	6	26	16	6	732
09:00	142	30	6	4	6	1	0	189
09:15	143	24	4	5	6	6	2	190
09:30	154	28	7	1	5	3	0	198
09:45	136	29	4	2	8	4	0	183
H/TOT	575	111	21	12	25	14	2	760
P/TOT	1724	299	67	30	78	32	13	2243

	C TO B							
	FROM UXBRIDGE RD (W) TO HAYES RETAIL PARK							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
1	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	2
12	1	1	0	0	0	0	0	14
6	0	0	0	0	0	0	0	6
21	1	1	0	0	0	0	0	23
2	0	0	0	0	0	0	0	2
5	0	0	0	0	0	0	0	5
8	0	0	0	0	0	0	0	8
8	0	0	0	0	0	1	0	9
23	0	0	0	0	0	1	0	24
10	0	0	0	0	0	0	0	10
13	1	0	0	0	0	0	0	14
12	1	1	0	0	0	0	0	14
18	1	0	0	1	1	1	0	21
53	3	1	0	1	1	1	0	59
97	4	2	0	1	2	0	0	106

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

TIME	C TO A							
	FROM UXBRIDGE RD (W) TO THE BROADWAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	128	13	4	1	8	9	1	164
16:15	160	7	4	0	5	14	1	191
16:30	182	20	3	1	3	5	3	217
16:45	187	10	2	1	9	10	2	221
H/TOT	657	50	13	3	25	38	7	793
17:00	182	17	8	2	7	10	4	230
17:15	168	18	2	1	5	8	2	204
17:30	185	23	6	0	4	13	2	233
17:45	195	16	2	0	4	5	0	222
H/TOT	730	74	18	3	20	36	8	889
18:00	184	19	4	0	9	9	1	226
18:15	182	21	3	1	5	7	0	219
18:30	164	22	0	1	5	6	1	199
18:45	165	20	1	1	5	8	1	201
H/TOT	695	82	8	3	24	30	3	845
P/TOT	2082	206	39	9	69	104	18	2527

	C TO B							
	FROM UXBRIDGE RD (W) TO HAYES RETAIL PARK							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
18	2	1	0	0	0	0	0	21
15	1	0	0	0	0	2	0	18
25	0	0	0	0	0	1	0	26
27	5	0	0	0	0	1	0	33
85	8	1	0	0	0	4	0	98
15	3	0	0	0	0	2	0	20
22	2	0	0	0	0	0	0	24
9	1	0	0	0	0	0	0	10
18	2	0	0	0	0	0	0	20
64	8	0	0	0	0	2	0	74
15	0	0	0	0	0	1	0	16
10	0	0	0	0	0	0	0	10
14	1	0	0	0	0	0	0	15
14	0	0	0	0	0	1	0	15
53	1	0	0	0	0	2	0	56
202	17	1	0	0	0	8	0	228

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

TIME	TO ARM A THE BROADWAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	152	33	1	2	9	1	3	201
07:15	145	42	9	2	3	0	0	201
07:30	150	24	7	3	8	0	0	192
07:45	129	19	2	5	7	1	2	165
H/TOT	576	118	19	12	27	2	5	759
08:00	154	24	11	0	7	3	2	201
08:15	135	13	4	3	7	4	2	168
08:30	162	16	6	1	5	7	1	198
08:45	134	18	6	2	7	2	1	170
H/TOT	585	71	27	6	26	16	6	737
09:00	143	30	6	4	6	1	0	190
09:15	152	24	4	5	6	6	2	199
09:30	159	29	7	1	5	3	0	204
09:45	140	29	4	2	8	4	0	187
H/TOT	594	112	21	12	25	14	2	780
P/TOT	1755	301	67	30	78	32	13	2276

FROM ARM A THE BROADWAY							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
132	30	9	2	9	0	0	182
140	23	6	2	10	2	1	184
191	32	8	1	3	3	4	242
202	25	4	0	11	1	3	246
665	110	27	5	33	6	8	854
129	25	6	1	5	1	0	167
146	28	0	1	4	2	2	183
134	23	4	4	10	0	0	175
163	17	7	3	7	1	0	198
572	93	17	9	26	4	2	723
133	18	3	1	6	3	0	164
133	34	7	2	7	6	1	190
131	26	8	2	6	6	0	179
121	36	8	3	6	4	2	180
518	114	26	8	25	19	3	713
1755	317	70	22	84	29	13	2290

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

TIME	TO ARM A THE BROADWAY							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	133	13	4	1	8	9	1	169
16:15	168	7	4	0	5	14	1	199
16:30	190	21	3	1	3	5	3	226
16:45	188	11	2	1	9	11	2	224
H/TOT	679	52	13	3	25	39	7	818
17:00	186	19	8	2	7	10	4	236
17:15	180	18	2	1	5	8	2	216
17:30	190	23	6	0	4	13	2	238
17:45	207	16	2	0	4	7	0	236
H/TOT	763	76	18	3	20	38	8	926
18:00	193	20	4	0	9	10	1	237
18:15	185	21	3	1	5	7	0	222
18:30	170	23	0	1	5	6	1	206
18:45	169	20	1	1	5	9	1	206
H/TOT	717	84	8	3	24	32	3	871
P/TOT	2159	212	39	9	69	109	18	2615

FROM ARM A THE BROADWAY								TOT
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
192	24	5	3	5	11	0		240
157	29	8	2	7	3	1		207
219	33	4	1	8	7	2		274
215	30	5	1	5	17	0		273
783	116	22	7	25	38	3		994
204	20	3	1	6	9	1		244
204	21	4	0	6	8	1		244
206	19	3	0	6	9	4		247
198	19	2	0	8	1	1		229
812	79	12	1	26	27	7		964
199	24	3	2	8	9	1		246
208	22	5	0	5	11	1		252
213	23	2	0	5	12	1		256
215	22	1	0	3	7	1		249
835	91	11	2	21	39	4		1003
2430	286	45	10	72	104	14		2961

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

TIME	TO ARM B HAYES RETAIL PARK							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	1	1	0	0	0	0	0	2
07:15	3	0	0	0	0	0	0	3
07:30	18	1	1	0	0	0	0	20
07:45	7	2	0	0	0	0	0	9
H/TOT	29	4	1	0	0	0	0	34
08:00	2	0	0	0	0	0	0	2
08:15	5	0	0	0	0	0	0	5
08:30	10	0	0	0	0	0	0	10
08:45	11	0	0	0	0	1	0	12
H/TOT	28	0	0	0	0	1	0	29
09:00	17	0	0	0	0	0	0	17
09:15	23	4	0	0	0	0	0	27
09:30	16	1	1	0	0	1	0	19
09:45	25	1	0	0	1	1	0	28
H/TOT	81	6	1	0	1	2	0	91
P/TOT	138	10	2	0	1	3	0	154

FROM ARM B HAYES RETAIL PARK							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
0	1	0	0	0	0	0	1
3	0	0	0	0	0	0	3
14	1	1	0	0	0	0	16
7	1	0	0	0	0	0	8
24	3	1	0	0	0	0	28
3	1	0	0	0	0	0	4
1	0	0	0	0	0	0	1
7	0	0	0	0	0	0	7
6	0	0	0	0	1	0	7
17	1	0	0	0	1	0	19
8	2	0	0	0	0	0	10
21	1	0	0	0	0	0	22
16	3	1	0	0	0	0	20
13	1	0	0	0	0	0	14
58	7	1	0	0	0	0	66
99	11	2	0	0	1	0	113

MANUAL CLASSIFIED COUNTS

JOB REF: 10843

JOB NAME: HAYES

SITE: 1

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)



DATE: 21/10/2021

DAY: THURSDAY

TIME	TO ARM B HAYES RETAIL PARK								FROM ARM B HAYES RETAIL PARK							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	28	3	1	0	0	0	0	32	30	1	1	0	0	0	0	32
16:15	23	2	0	0	0	2	0	27	27	2	0	0	0	1	0	30
16:30	34	2	0	0	0	1	0	37	20	3	0	0	0	0	0	23
16:45	39	7	0	0	0	2	0	48	14	4	0	0	0	2	0	20
H/TOT	124	14	1	0	0	5	0	144	91	10	1	0	0	3	0	105
17:00	24	4	0	0	0	2	0	30	27	5	0	0	0	1	0	33
17:15	36	2	0	0	0	0	0	38	46	2	0	0	0	0	0	48
17:30	19	1	0	0	0	0	0	20	31	2	0	0	0	0	0	33
17:45	26	4	0	0	0	0	0	30	34	1	0	0	0	3	0	38
H/TOT	105	11	0	0	0	2	0	118	138	10	0	0	0	4	0	152
18:00	20	1	0	0	0	1	0	22	26	2	0	0	0	1	0	29
18:15	16	1	0	0	0	0	0	17	23	2	0	0	0	0	1	26
18:30	18	1	0	0	0	0	0	19	25	2	0	0	0	0	0	27
18:45	18	0	0	0	0	1	0	19	20	2	0	0	0	1	0	23
H/TOT	72	3	0	0	0	2	0	77	94	8	0	0	0	2	1	105
P/TOT	301	28	1	0	0	9	0	339	323	28	1	0	0	9	1	362

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

TIME	TO ARM C UXBRIDGE RD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	132	30	9	2	9	0	0	182
07:15	140	23	6	2	10	2	1	184
07:30	195	33	9	1	3	3	4	248
07:45	206	24	4	0	11	1	3	249
H/TOT	673	110	28	5	33	6	8	863
08:00	132	25	6	1	5	1	0	170
08:15	147	28	0	1	4	2	2	184
08:30	136	23	4	4	10	0	0	177
08:45	165	17	7	3	7	2	0	201
H/TOT	580	93	17	9	26	5	2	732
09:00	133	20	3	1	6	3	0	166
09:15	135	32	7	2	7	6	1	190
09:30	138	28	9	2	6	5	0	188
09:45	123	37	8	3	6	4	2	183
H/TOT	529	117	27	8	25	18	3	727
P/TOT	1782	320	72	22	84	29	13	2322

FROM ARM C UXBRIDGE RD (W)							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
153	33	1	2	9	1	3	202
145	42	9	2	3	0	0	201
158	25	8	3	8	0	0	202
133	19	2	5	7	1	2	169
589	119	20	12	27	2	5	774
156	23	11	0	7	3	2	202
140	13	4	3	7	4	2	173
167	16	6	1	5	7	1	203
141	18	6	2	7	3	1	178
604	70	27	6	26	17	6	756
152	30	6	4	6	1	0	199
156	25	4	5	6	6	2	204
166	29	8	1	5	3	0	212
154	30	4	2	9	5	0	204
628	114	22	12	26	15	2	819
1821	303	69	30	79	34	13	2349

MANUAL CLASSIFIED COUNTS



JOB REF: 10843

JOB NAME: HAYES

SITE: 1

DATE: 21/10/2021

LOCATION: THE BROADWAY / HAYES RETAIL PARK / UXBRIDGE RD (W)

DAY: THURSDAY

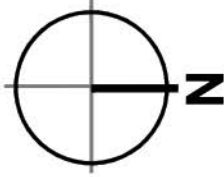
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	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	207	24	6	3	5	11	0	256
16:15	168	30	8	2	7	4	1	220
16:30	222	33	4	1	8	7	2	277
16:45	216	31	5	1	5	17	0	275
H/TOT	813	118	23	7	25	39	3	1028
17:00	218	22	3	1	6	10	1	261
17:15	224	23	4	0	6	8	1	266
17:30	222	21	3	0	6	9	4	265
17:45	212	18	2	0	8	2	1	243
H/TOT	876	84	12	1	26	29	7	1035
18:00	211	24	3	2	8	9	1	258
18:15	222	23	5	0	5	11	2	268
18:30	228	24	2	0	5	12	1	272
18:45	227	24	1	0	3	7	1	263
H/TOT	888	95	11	2	21	39	5	1061
P/TOT	2577	297	46	10	72	107	15	3124

FROM ARM C UXBRIDGE RD (W)							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
146	15	5	1	8	9	1	185
175	8	4	0	5	16	1	209
207	20	3	1	3	6	3	243
214	15	2	1	9	11	2	254
742	58	14	3	25	42	7	891
197	20	8	2	7	12	4	250
190	20	2	1	5	8	2	228
194	24	6	0	4	13	2	243
213	18	2	0	4	5	0	242
794	82	18	3	20	38	8	963
199	19	4	0	9	10	1	242
192	21	3	1	5	7	0	229
178	23	0	1	5	6	1	214
179	20	1	1	5	9	1	216
748	83	8	3	24	32	3	901
2284	223	40	9	69	112	18	2755

Appendix C Site Layout



- Dimensions are in millimeters, unless stated otherwise.
- Scaling of this drawing is not recommended.
- It is the recipient's responsibility to print this document to the correct scale.
- All relevant drawings and specifications should be read in conjunction with this drawing.



SCHEDULE OF ACCOMMODATION

Gross Internal Area (GIA)

Unit 1			
Warehouse Area	-	151,415 ft ²	(14,067m ²)
2 Storey Office	-	19,181 ft ²	(1,782m ²)
Transport Office	-	3,433 ft ²	(319m ²)
<hr/>			
Total Area	-	174,030 ft ²	(16,168 m ²)

Key

- Application Boundary 7.11 Ac (2.88 Ha)
- Ownership Boundary 7.84 Ac (3.17 Ha)

rev	amendments	by	ckd	date
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Bridge Retail Park, Hayes

Proposed Site Layout



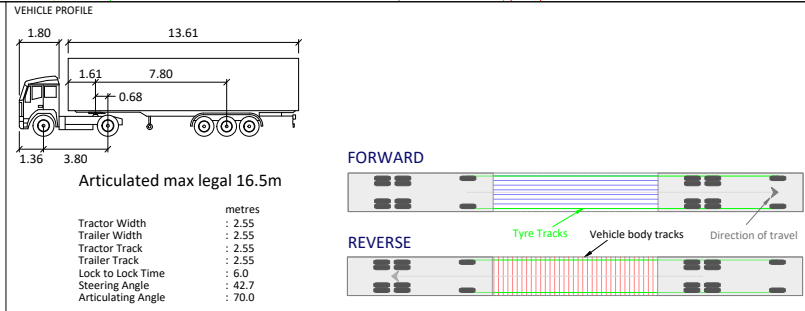
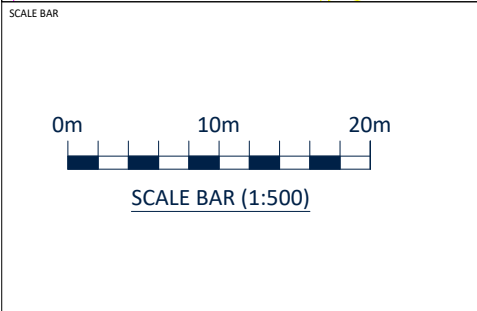
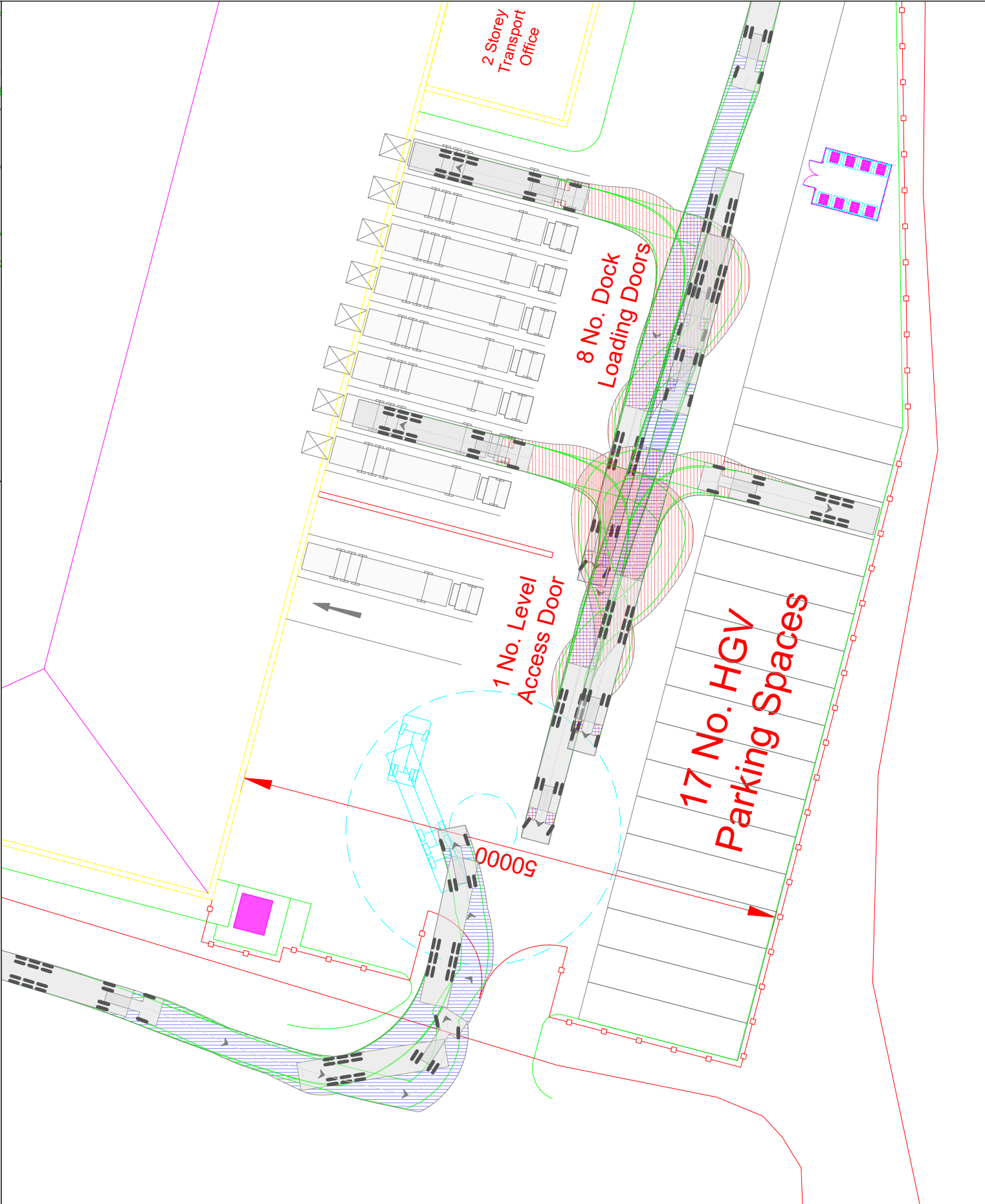
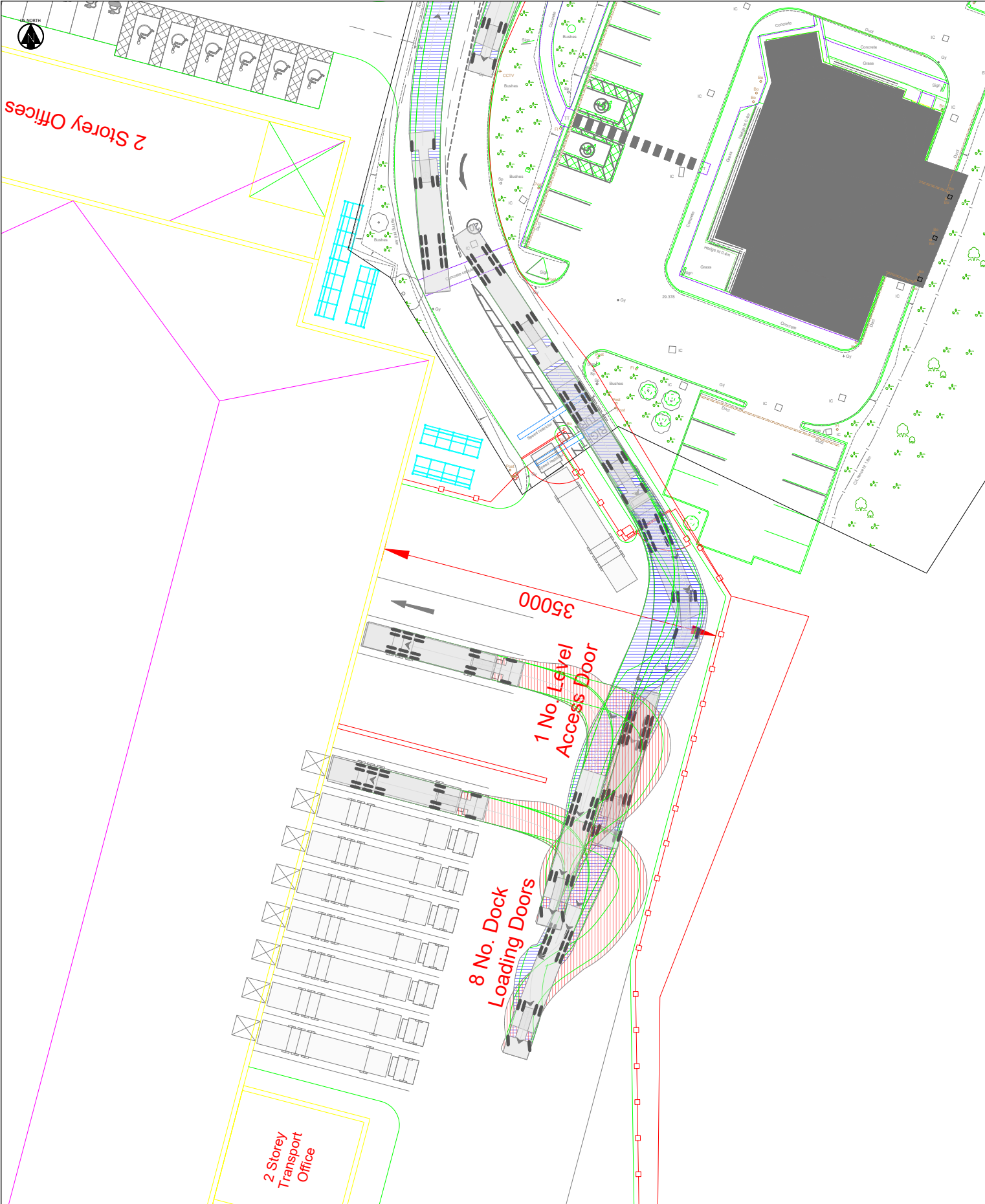
GRAFTONGATE



Newark Beacon, Cafferata Way, Newark, Nottinghamshire NG24 2TN
t: +44 (0)1636 653027 e: info@umcarchitects.com

Drawing Status:	Preliminary
Drawn / Checked:	jrh / AJL
Date:	01/12/2021
Scale:	1:500 A1
Drawing no:	Revision:
21048 P0001	A

Appendix D Swept Path Analysis – Site Layout



NOTES

Background mapping utilising topographical survey from Greenhatch Group - November 2021. Drawing No: 42047_T

Site layout plan using UMC Architects Drawing Number 21048 P0001 Rev A.

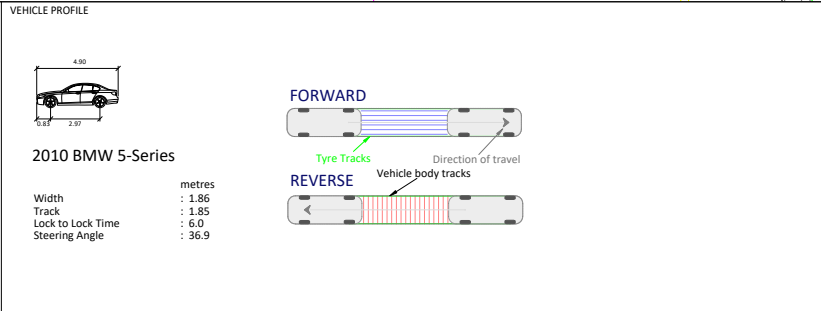
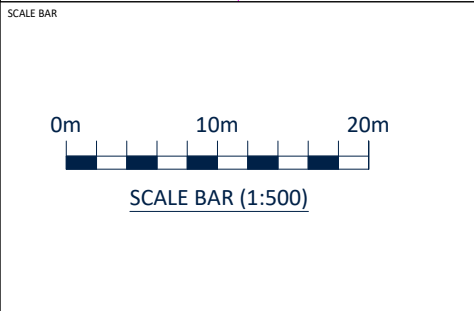
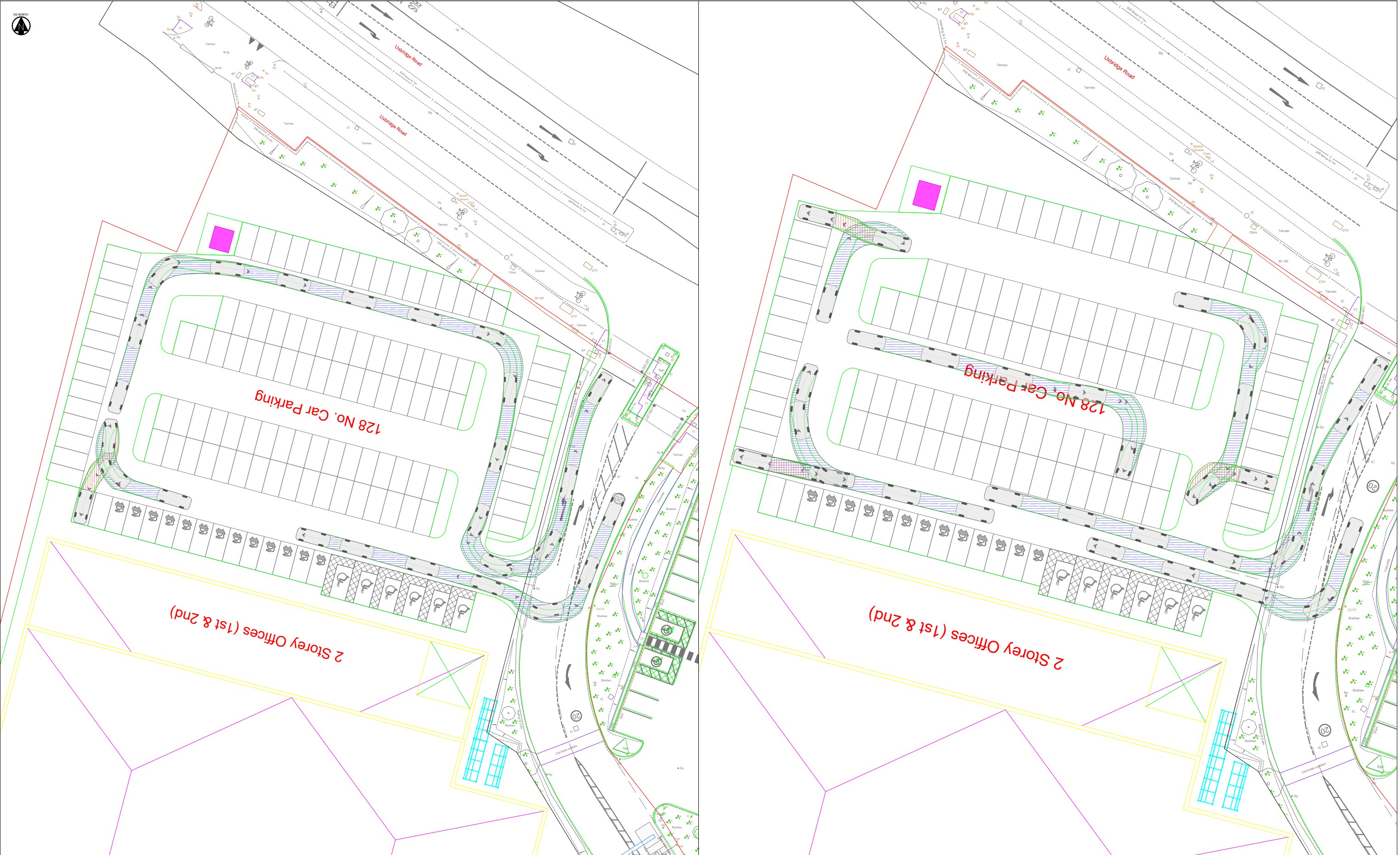
REVISIONS			
PO2	09/05/22	Second Issue: Revised Site Layout	DC DC
PO1	14/11/21	First Issue.	DC DC
Rev	Date	Description	By App

23-24 PARK PLACE
CARDIFF
CF10 9BA
t: 02920 619 361
e: info@apextp.co.uk

CLIENT
OXW Hayes S.à.r.l.

PROJECT
HAYES BRIDGE RETAIL PARK

TITLE SWEPT PATH ANALYSIS - ARTICULATED VEHICLE		
PROJECT NO. C21096	SCALE @ A3 1:500	
STATUS DESCRIPTION INFORMATION		STATUS S2
DRAWING NO. C21096-ATP-DR-TP-002		



NOTES

Background mapping utilising topographical survey from Greenhatch Group - November 2021. Drawing No: 42047_T

Site layout plan using UMC Architects Drawing Number 21048 P0001 Rev A.

REVISIONS				
Rev	Date	Description	By	App
PO2	09/05/22	Second Issue. Revised Site Layout	DC	DC
PO1	14/11/21	First Issue.	DC	DC

Apex
TRANSPORT PLANNING

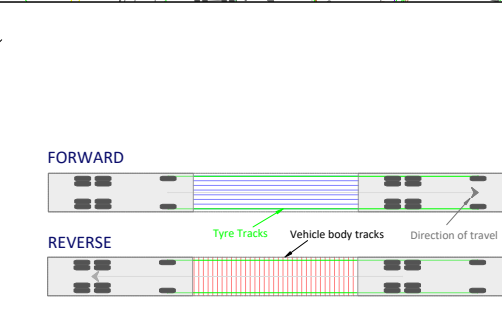
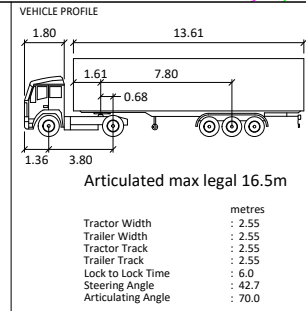
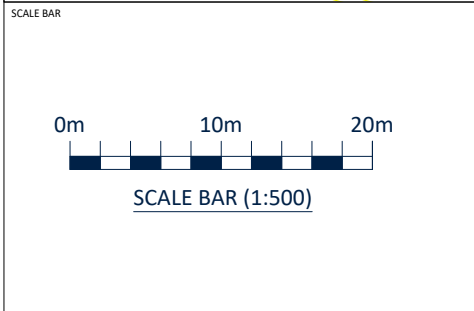
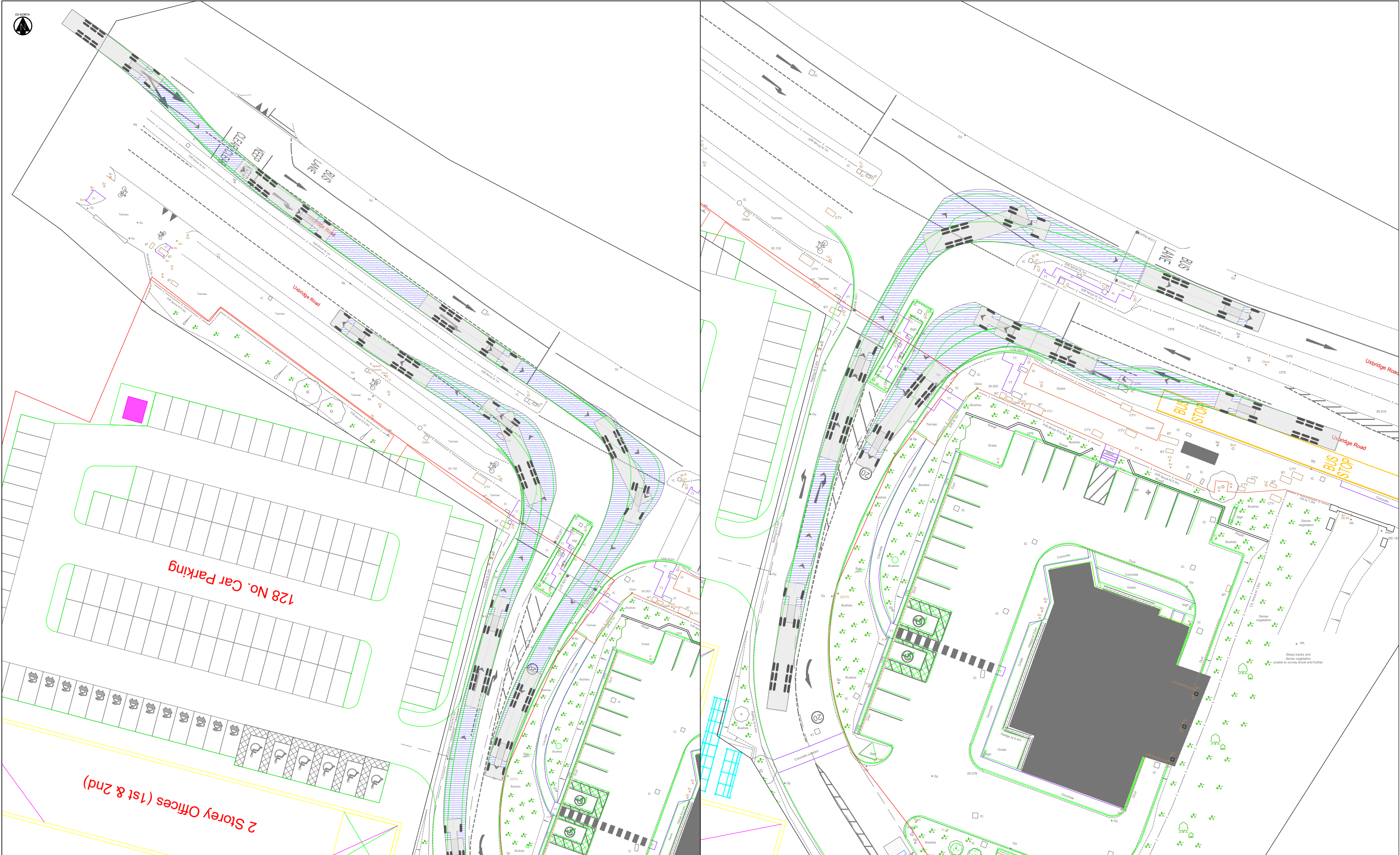
23-24 PARK PLACE
CARDIFF
CF10 9BA
t: 02920 619 361
e: info@apexp.co.uk

CLIENT
OXW Hayes S.à.r.l.

PROJECT
HAYES BRIDGE RETAIL PARK

TITLE SWEEP PATH ANALYSIS - LARGE CAR		
PROJECT NO. C21096	SCALE @ A3 1:500	
STATUS DESCRIPTION INFORMATION		STATUS S2
DRAWING NO. C21096-ATP-DR-TP-003		

Appendix E Swept Path Analysis – Uxbridge Road junction



NOTES

Background mapping utilising topographical survey from Greenhatch Group - November 2021. Drawing No: 42047_T

Site layout plan using UMC Architects Drawing Number 21048 F0003 Rev F.

REVISIONS				
P02	09/05/22	Second Issue.	DC	DC
P01	14/11/21	First Issue.	DC	DC
Rev	Date	Description	By	App

23-24 PARK PLACE
CARDIFF
CF10 9BA
t: 07920 619 361
e: info@apexp.co.uk

CLIENT

OXW Hayes S.à.r.l.

PROJECT

HAYES BRIDGE RETAIL PARK

TITLE		
SWEPT PATH ANALYSIS - ARTICULATED VEHICLE		
PROJECT NO.	SCALE @ A3	
C21096	1:500	
STATUS DESCRIPTION	STATUS	
INFORMATION	S2	
DRAWING NO.		
C21096-ATP-DR-TP-001		

Appendix F TRICS – Existing Retail Use

Calculation Reference: AUDIT-502501-211125-1149

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : K - RETAIL PARK - EXCLUDING FOOD
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	KC KENT	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WM WEST MIDLANDS	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	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: 6758 to 15750 (units: sqm)
 Range Selected by User: 1968 to 30000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 17/10/20

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:

Thursday	3 days
Friday	2 days

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

Selected survey types:

Manual count	5 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 undertaken using machines.

Selected Locations:

Edge of Town	4
Neighbourhood Centre (PPS6 Local Centre)	1

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:

Industrial Zone	1
Residential Zone	1
Retail 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:

E(a) 5 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®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	2 days
20,001 to 25,000	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:

50,001 to 75,000	1 days
75,001 to 100,000	1 days
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	3 days
1.1 to 1.5	1 days
2.1 to 2.5	1 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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	5 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

Not Known	3 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	5 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	ES-01-K-04 THE DROVE NEWHAVEN	RETAIL PARK		EAST SUSSEX
	Edge of Town Industrial Zone Total Gross floor area:		6758 sqm	
	Survey date: THURSDAY		03/07/03	Survey Type: MANUAL
2	GM-01-K-14 SNIPE WAY ASHTON-UNDER-LYNE	RETAIL PARK		GREATER MANCHESTER
	Edge of Town Retail Zone Total Gross floor area:		7350 sqm	
	Survey date: THURSDAY		22/10/15	Survey Type: MANUAL
3	KC-01-K-01 MAIDSTONE ROAD CHATHAM HORSTED	RETAIL PARK		KENT
	Edge of Town Residential Zone Total Gross floor area:		15568 sqm	
	Survey date: THURSDAY		08/06/00	Survey Type: MANUAL
4	ST-01-K-04 SILKMORE LANE STAFFORD QUEENSVILLE	RETAIL PARK		STAFFORDSHIRE
	Edge of Town No Sub Category Total Gross floor area:		15750 sqm	
	Survey date: FRIDAY		08/09/00	Survey Type: MANUAL
5	WM-01-K-01 HARBORNE LANE BIRMINGHAM SELLY OAK Neighbourhood Centre (PPS6 Local Centre) Built-Up Zone Total Gross floor area:	RETAIL PARK	9740 sqm	WEST MIDLANDS
	Survey date: FRIDAY		16/06/00	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DL-01-K-02	Ireland
GM-01-K-16	not comparable location
GS-01-K-01	not comparable location
GS-01-K-02	not comparable location
WA-01-K-02	Ireland
WO-01-K-01	not comparable location

TRIP RATE for Land Use 01 - RETAIL/K - RETAIL PARK - EXCLUDING FOOD

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	11550	0.121	2	11550	0.035	2	11550	0.156
08:00 - 09:00	5	11033	0.633	5	11033	0.297	5	11033	0.930
09:00 - 10:00	5	11033	1.358	5	11033	0.808	5	11033	2.166
10:00 - 11:00	5	11033	1.642	5	11033	1.349	5	11033	2.991
11:00 - 12:00	5	11033	1.791	5	11033	1.628	5	11033	3.419
12:00 - 13:00	5	11033	1.947	5	11033	1.751	5	11033	3.698
13:00 - 14:00	5	11033	1.929	5	11033	1.929	5	11033	3.858
14:00 - 15:00	5	11033	1.849	5	11033	1.829	5	11033	3.678
15:00 - 16:00	5	11033	1.671	5	11033	1.747	5	11033	3.418
16:00 - 17:00	5	11033	1.532	5	11033	1.631	5	11033	3.163
17:00 - 18:00	5	11033	1.370	5	11033	1.459	5	11033	2.829
18:00 - 19:00	5	11033	1.617	5	11033	1.535	5	11033	3.152
19:00 - 20:00	5	11033	0.897	5	11033	1.854	5	11033	2.751
20:00 - 21:00	3	10947	0.277	3	10947	0.533	3	10947	0.810
21:00 - 22:00	1	15750	0.248	1	15750	1.130	1	15750	1.378
22:00 - 23:00	1	15750	0.013	1	15750	0.165	1	15750	0.178
23:00 - 24:00									
Total Rates:			18.895				19.680	38.575	

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.

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Parameter summary

Trip rate parameter range selected:	6758 - 15750 (units: sqm)
Survey date range:	01/01/00 - 17/10/20
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	6

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 shown. 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 01 - RETAIL/K - RETAIL PARK - EXCLUDING FOOD

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	11550	0.009	2	11550	0.009	2	11550	0.018
08:00 - 09:00	5	11033	0.005	5	11033	0.002	5	11033	0.007
09:00 - 10:00	5	11033	0.022	5	11033	0.024	5	11033	0.046
10:00 - 11:00	5	11033	0.009	5	11033	0.015	5	11033	0.024
11:00 - 12:00	5	11033	0.020	5	11033	0.015	5	11033	0.035
12:00 - 13:00	5	11033	0.018	5	11033	0.024	5	11033	0.042
13:00 - 14:00	5	11033	0.022	5	11033	0.015	5	11033	0.037
14:00 - 15:00	5	11033	0.016	5	11033	0.015	5	11033	0.031
15:00 - 16:00	5	11033	0.016	5	11033	0.016	5	11033	0.032
16:00 - 17:00	5	11033	0.015	5	11033	0.013	5	11033	0.028
17:00 - 18:00	5	11033	0.005	5	11033	0.015	5	11033	0.020
18:00 - 19:00	5	11033	0.000	5	11033	0.005	5	11033	0.005
19:00 - 20:00	5	11033	0.002	5	11033	0.004	5	11033	0.006
20:00 - 21:00	3	10947	0.000	3	10947	0.009	3	10947	0.009
21:00 - 22:00	1	15750	0.000	1	15750	0.000	1	15750	0.000
22:00 - 23:00	1	15750	0.000	1	15750	0.000	1	15750	0.000
23:00 - 24:00									
Total Rates:			0.159	0.181			0.340		

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 01 - RETAIL/K - RETAIL PARK - EXCLUDING FOOD

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	11550	0.000	2	11550	0.000	2	11550	0.000
08:00 - 09:00	5	11033	0.004	5	11033	0.002	5	11033	0.006
09:00 - 10:00	5	11033	0.000	5	11033	0.000	5	11033	0.000
10:00 - 11:00	5	11033	0.004	5	11033	0.004	5	11033	0.008
11:00 - 12:00	5	11033	0.000	5	11033	0.000	5	11033	0.000
12:00 - 13:00	5	11033	0.002	5	11033	0.002	5	11033	0.004
13:00 - 14:00	5	11033	0.000	5	11033	0.000	5	11033	0.000
14:00 - 15:00	5	11033	0.004	5	11033	0.002	5	11033	0.006
15:00 - 16:00	5	11033	0.004	5	11033	0.004	5	11033	0.008
16:00 - 17:00	5	11033	0.000	5	11033	0.000	5	11033	0.000
17:00 - 18:00	5	11033	0.000	5	11033	0.002	5	11033	0.002
18:00 - 19:00	5	11033	0.002	5	11033	0.002	5	11033	0.004
19:00 - 20:00	5	11033	0.000	5	11033	0.002	5	11033	0.002
20:00 - 21:00	3	10947	0.000	3	10947	0.000	3	10947	0.000
21:00 - 22:00	1	15750	0.000	1	15750	0.000	1	15750	0.000
22:00 - 23:00	1	15750	0.000	1	15750	0.000	1	15750	0.000
23:00 - 24:00									
Total Rates:			0.020			0.020			0.040

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 01 - RETAIL/K - RETAIL PARK - EXCLUDING FOOD
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	11550	0.000	2	11550	0.000	2	11550	0.000
08:00 - 09:00	5	11033	0.002	5	11033	0.002	5	11033	0.004
09:00 - 10:00	5	11033	0.004	5	11033	0.004	5	11033	0.008
10:00 - 11:00	5	11033	0.004	5	11033	0.009	5	11033	0.013
11:00 - 12:00	5	11033	0.000	5	11033	0.004	5	11033	0.004
12:00 - 13:00	5	11033	0.004	5	11033	0.004	5	11033	0.008
13:00 - 14:00	5	11033	0.009	5	11033	0.002	5	11033	0.011
14:00 - 15:00	5	11033	0.004	5	11033	0.005	5	11033	0.009
15:00 - 16:00	5	11033	0.007	5	11033	0.015	5	11033	0.022
16:00 - 17:00	5	11033	0.018	5	11033	0.020	5	11033	0.038
17:00 - 18:00	5	11033	0.005	5	11033	0.007	5	11033	0.012
18:00 - 19:00	5	11033	0.005	5	11033	0.007	5	11033	0.012
19:00 - 20:00	5	11033	0.004	5	11033	0.009	5	11033	0.013
20:00 - 21:00	3	10947	0.000	3	10947	0.012	3	10947	0.012
21:00 - 22:00	1	15750	0.000	1	15750	0.000	1	15750	0.000
22:00 - 23:00	1	15750	0.000	1	15750	0.000	1	15750	0.000
23:00 - 24:00									
Total Rates:			0.066			0.100			0.166

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 G TRICS – Proposed Warehousing Use

Calculation Reference: AUDIT-502501-211118-1150

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : F - WAREHOUSING (COMMERCIAL)
 TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	EN ENFIELD	1 days
	HD HILLINGDON	1 days
	HO HOUNSLOW	1 days
02	SOUTH EAST	
	EX ESSEX	1 days
	HC HAMPSHIRE	1 days
	KC KENT	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: 6560 to 13500 (units: sqm)
 Range Selected by User: 5000 to 20000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/06 to 14/03/19

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:

Wednesday	2 days
Thursday	2 days
Friday	2 days

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

Selected survey types:

Manual count	6 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	3

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:

Industrial Zone	4
Commercial Zone	1
Residential Zone	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:

n/a	2 days
B8	4 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®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	1 days
50,001 to 100,000	1 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	3 days
500,001 or More	3 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	2 days
1.1 to 1.5	3 days
1.6 to 2.0	1 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	2 days
No	4 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	4 days
1b Very poor	1 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1	EN-02-F-01	WAREHOUSING	ENFIELD
	OAKTHORPE ESTATE		
	ENFIELD		
	PALMERS GREEN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	13251 sqm	
	Survey date: WEDNESDAY	19/11/08	Survey Type: MANUAL
2	EX-02-F-01	SPORTS SUPPLEMENTS	ESSEX
	BRUNEL WAY		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	6560 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
3	HC-02-F-02	LOGISTICS	HAMPSHIRE
	RUTHERFORD ROAD		
	BASINGSTOKE		
	Suburban Area (PPS6 Out of Centre)		
	Commercial Zone		
	Total Gross floor area:	13200 sqm	
	Survey date: THURSDAY	16/06/16	Survey Type: MANUAL
4	HD-02-F-01	FOOD DISTRIBUTOR	HILLINGDON
	NINE ACRES CLOSE		
	HAYES		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	8673 sqm	
	Survey date: THURSDAY	27/09/18	Survey Type: MANUAL
5	HO-02-F-01	LOGISTICS AND FREIGHT	HOUNSLOW
	ASCOT ROAD		
	FELTHAM		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	13500 sqm	
	Survey date: WEDNESDAY	23/11/16	Survey Type: MANUAL
6	KC-02-F-02	COMMERCIAL WAREHOUSING	KENT
	MILLS ROAD		
	AYLESFORD		
	QUARRY WOOD		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	11200 sqm	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
NW-02-F-01	not comparable location
WY-02-F-02	not comparable location

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	6	11064	0.241	6	11064	0.113	6	11064	0.354
08:00 - 09:00	6	11064	0.309	6	11064	0.101	6	11064	0.410
09:00 - 10:00	6	11064	0.237	6	11064	0.137	6	11064	0.374
10:00 - 11:00	6	11064	0.167	6	11064	0.151	6	11064	0.318
11:00 - 12:00	6	11064	0.191	6	11064	0.209	6	11064	0.400
12:00 - 13:00	6	11064	0.193	6	11064	0.202	6	11064	0.395
13:00 - 14:00	6	11064	0.218	6	11064	0.191	6	11064	0.409
14:00 - 15:00	6	11064	0.146	6	11064	0.223	6	11064	0.369
15:00 - 16:00	6	11064	0.136	6	11064	0.194	6	11064	0.330
16:00 - 17:00	6	11064	0.128	6	11064	0.224	6	11064	0.352
17:00 - 18:00	6	11064	0.108	6	11064	0.295	6	11064	0.403
18:00 - 19:00	6	11064	0.086	6	11064	0.202	6	11064	0.288
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.160			2.242			4.402

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.

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Parameter summary

Trip rate parameter range selected:	6560 - 13500 (units: sqm)
Survey date range:	01/01/06 - 14/03/19
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	2

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 shown. 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/F - WAREHOUSING (COMMERCIAL)

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	6	11064	0.000	6	11064	0.000	6	11064	0.000
08:00 - 09:00	6	11064	0.002	6	11064	0.002	6	11064	0.004
09:00 - 10:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
10:00 - 11:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
11:00 - 12:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
12:00 - 13:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
13:00 - 14:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
14:00 - 15:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
15:00 - 16:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
16:00 - 17:00	6	11064	0.003	6	11064	0.003	6	11064	0.006
17:00 - 18:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
18:00 - 19:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.005			0.010

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/F - WAREHOUSING (COMMERCIAL)

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	6	11064	0.035	6	11064	0.042	6	11064	0.077
08:00 - 09:00	6	11064	0.047	6	11064	0.036	6	11064	0.083
09:00 - 10:00	6	11064	0.056	6	11064	0.036	6	11064	0.092
10:00 - 11:00	6	11064	0.072	6	11064	0.047	6	11064	0.119
11:00 - 12:00	6	11064	0.060	6	11064	0.056	6	11064	0.116
12:00 - 13:00	6	11064	0.065	6	11064	0.036	6	11064	0.101
13:00 - 14:00	6	11064	0.054	6	11064	0.065	6	11064	0.119
14:00 - 15:00	6	11064	0.050	6	11064	0.056	6	11064	0.106
15:00 - 16:00	6	11064	0.032	6	11064	0.039	6	11064	0.071
16:00 - 17:00	6	11064	0.036	6	11064	0.036	6	11064	0.072
17:00 - 18:00	6	11064	0.027	6	11064	0.035	6	11064	0.062
18:00 - 19:00	6	11064	0.029	6	11064	0.017	6	11064	0.046
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.563			0.501			1.064

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/F - WAREHOUSING (COMMERCIAL)

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	6	11064	0.000	6	11064	0.000	6	11064	0.000
08:00 - 09:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
09:00 - 10:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
10:00 - 11:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
11:00 - 12:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
12:00 - 13:00	6	11064	0.003	6	11064	0.003	6	11064	0.006
13:00 - 14:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
14:00 - 15:00	6	11064	0.002	6	11064	0.002	6	11064	0.004
15:00 - 16:00	6	11064	0.002	6	11064	0.002	6	11064	0.004
16:00 - 17:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
17:00 - 18:00	6	11064	0.005	6	11064	0.003	6	11064	0.008
18:00 - 19:00	6	11064	0.000	6	11064	0.002	6	11064	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

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/F - WAREHOUSING (COMMERCIAL)

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	6	11064	0.005	6	11064	0.000	6	11064	0.005
08:00 - 09:00	6	11064	0.012	6	11064	0.000	6	11064	0.012
09:00 - 10:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
10:00 - 11:00	6	11064	0.000	6	11064	0.000	6	11064	0.000
11:00 - 12:00	6	11064	0.003	6	11064	0.002	6	11064	0.005
12:00 - 13:00	6	11064	0.002	6	11064	0.000	6	11064	0.002
13:00 - 14:00	6	11064	0.003	6	11064	0.003	6	11064	0.006
14:00 - 15:00	6	11064	0.008	6	11064	0.003	6	11064	0.011
15:00 - 16:00	6	11064	0.000	6	11064	0.005	6	11064	0.005
16:00 - 17:00	6	11064	0.009	6	11064	0.017	6	11064	0.026
17:00 - 18:00	6	11064	0.003	6	11064	0.012	6	11064	0.015
18:00 - 19:00	6	11064	0.005	6	11064	0.006	6	11064	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.050			0.048			0.098

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.